



Dennis M. Walcott
Chancellor

HIV / AIDS

C U R R I C U L U M

2012 Edition

A Supplement to a
Comprehensive
Health Curriculum



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9/12

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Table of Contents

<i>Message from the Deputy Chancellor</i>	VII
<i>Acknowledgments</i>	IX
<hr/>	
Introductory Section	
Introduction.....	XIII
New York State Standards for Health, Physical Education and Family and Consumer Sciences	XV
Regents Policy Statement on HIV/AIDS Instruction.....	XV
New York State Commissioner’s Regulations, Subchapter G, Part 135, Health, Physical Education, and Recreation.....	XVI
Skills-Driven Curricula: Navigate by the Stars.....	XVIII
Examples of Skill Building for Adolescents.....	XIX
Guidelines for Teachers and Administrators.....	XX
Guidelines for Implementation	XX
Citywide Advisory Councils	
Summary of the New York City Department of Education’s HIV/AIDS Curriculum Guide for Grades K-12	
Sensitive and Personal Issues	
Confidentiality	
Abstinence	
Sexuality	
Types of Sexual Intercourse	
Sexually Transmitted Infections (STIs) or Sexually Transmitted Diseases (STDs)	
Condoms	
Birth Control	
Child Sexual Abuse	
Related In-School Courses (sexual health education mandate)	
Classroom Resources.....	XXIII
“Opt Out” Prevention Lessons.....	XXV
How to Use This Curriculum Guide.....	XXVI
Explanation of New York City Public Schools’ Condom Availability Program	XXIX
Responding to Students’ Questions	XXX
Facts About HIV Infection, Prevention, and Treatment.....	XXXII
Description of HIV Infection and AIDS	
Spectrum and Course of HIV Infection and Disease	
Transmission	
Prevention	
Role of HIV Testing & Treatment	
HIV/AIDS Is a Global Issue	
Advances in Treatment	
The Role of Schools and Communities	
HIV/AIDS in Children and Adolescents	
Psychosocial Development of Adolescents	
Skill Building for Adolescents	
HIV Resources for Adolescents	
Various Effects of Sexual Activity in Youth	XL
HIV/AIDS in New York City, the United States, and Worldwide	XLI

HIV/AIDS Curriculum Grades K-12 Lesson Guide

KINDERGARTEN

1. What Does It Mean to Be Healthy?	3
2. What Does It Mean to Be Sick?	4
3. How Do We Stay Healthy?	5
4. How Do People Get Sick? What Is HIV? What Is AIDS?	6
5. Who Helps Us When We Are Sick?.....	7

GRADE 1

1. How Can We Stay Healthy?	11
2. How Are Diseases Passed from One Person to Another?	12
3. What Are Viruses? How Do They Enter the Body to Cause Disease?	13
4. How Do Our Bodies Fight Viruses? Why Can't Our Bodies Fight HIV?	14
5. When We Are Sick, What Can We Do to Get Better?	15

GRADE 2

1. What Are Some Healthy Choices Children Make?	19
2. What Happens When We Get Sick?	20
3. What Causes and Prevents the Spread of Illness?	25
4. What is the Immune System's Role in Fighting Illnesses? How Does HIV Affect the Immune System?	26
5. How Do People Feel When They Are Sick? How Do Other People Feel About Them?	27

GRADE 3

1. How Do We Catch Germs That Make Us Sick?.....	31
2. How Does the Body Fight Disease?	32
3. How Does HIV Affect the Immune System?	34
4. What Are Healthy Choices That People Can Make?	35
5. How Can We Get Help When We Have a Problem?	36

GRADE 4

1. What Causes Disease? How Does the Immune System Protect the Body from Disease?	41
2. How Does the Body Fight Disease? How Does HIV Affect the Immune System?	45
3. What Are Common Myths and Facts About HIV Transmission?	49
4. How Can We Help Each Other Make Healthy Choices?.....	52
5. How Can We Find Information and Help in the Community?	54

GRADE 5

1. How Does the Body Protect Itself from Disease?	59
2. How Is HIV Transmitted?.....	62
3. How Can We Reduce Our Risk Behaviors?	65
4. How Has HIV/AIDS Affected Society?	67
5. What Resources Provide HIV/AIDS Information and Help?.....	69

GRADE 6

1. How Does the Immune System React When a Virus Enters the Body?	73
2. How is HIV Transmitted?	76
3. How Do Our Peers Affect the Way We Choose to Live?.....	79
4. How Has HIV/AIDS Changed Our Society?	84
5. How Can We Prevent HIV Infection?.....	86

GRADE 7

1. How Does HIV Impair the Immune System?	89
2. How Is HIV Transmitted?	94
3. How Do We Avoid Risk for Acquiring HIV?	103
4. How Can We Protect Ourselves from Sexual Transmission of HIV and Other STIs?	110
5. How Can People Express Love and Affection and Be Sexually Abstinent?	114
6. What Makes Parents/Guardians/Caregivers Important Sexuality Educators in a Young Person's Life?	118

GRADE 8

1. How Does HIV Affect the Immune System?	125
2. How is HIV Transmitted?	128
3. How Can Abstaining from Alcohol and Other Drugs Prevent HIV Transmission?	133
4. How Can People Distinguish Among the Desires for Emotional Intimacy, Physical Intimacy, and Sexual Intercourse?	138
5. How Can One Prevent Sexual Transmission of HIV?	141
6. What Role Can Each Person Take in Preventing the Spread of HIV Infection?	145

GRADE 9

1. How Does HIV Impair the Immune System?	153
2. How is HIV Transmitted?	161
3. How Can Young People Set Limits and Make Healthy Decisions About Sexual Activity and Abstinence?	169
4. How is Abstinence from Sexual Intercourse Both a Health Decision and a Reflection of a Person's Values?	174
5. How Can Abstaining from Drugs, Including Alcohol and Steroids, Reduce the Risk of HIV Infection?	179
6. How Can Sexual Transmission of HIV Be Prevented?	183

GRADE 10

1. How is the Immune System Affected When HIV Enters the Body?	191
2. What Are the Facts About HIV Transmission?	197
3. How Can We Improve Our Communication Skills When Talking About Risk Behaviors That Can Transmit HIV/STIs?	201
4. What Are the Advantages of Sexual Abstinence?	207
5. How Can We Reduce Our Risk of Acquiring HIV or Other STIs?	211
6. What Community Resources Are Available for HIV-Positive Individuals, Their Families, and Their Support Networks?	218

GRADE 11

1. What Happens When HIV Infects the Body?	225
2. How is HIV Transmitted?	231
3. How Can We Avoid Behavior That Can Lead to HIV Infection?	236
4. How Can We Reduce Our Risk of Getting or Transmitting HIV Infection or Other STIs?	241
5. What is the Role of Abstinence in Preventing Infection with HIV and Other Sexually Transmitted Infections (STIs)?	248
6. How Can School and Community Resources Help Educate Adolescents and Their Families About HIV Infection?	255

GRADE 12

1. What Happens When HIV Infects the Body?	263
2. How is HIV Transmitted?	268
3. How Can We Learn to Make Effective Decisions?	275
4. What Factors Must Adolescents Consider Before Taking an HIV Antibody Test?	280
5. How Can We Avoid Behavior That Can Lead to HIV Infection?	289
6. What Are the Social and Economic Issues Related to HIV?.....	295

Optional Vocabulary and Concept-Building Strategies for Secondary School

Illuminating HIV/AIDS with Words: An HIV/AIDS Acrostic	301
Creating an HIV/AIDS Protection “Backpack”	302
HIV/AIDS Word Search	303
HIV/AIDS Word Search – Teacher’s Answer Sheet	304
Create an HIV/AIDS Haiku	305
Finding People to Help: Write HIV/AIDS Help-Wanted Ads.....	306
Connecting Concepts to Vocabulary: Semantic Associations	307
Expanding Vocabulary Through Brainstorming: Semantic Mapping with HIV/AIDS Focus Words.....	308
Optional Activities	309

Appendices

A. Student Guide to HIV Antibody Testing.....	313
B. Classroom Teaching Tips.....	315
C. “The Condom Challenge” Activities: Male and Female (for classrooms)	322
Condom Demonstration Guidance (for Health Resource Room)	331
D. Teachers’ Glossary	334
E. Resources for More Information and/or Counseling	345
F. Information on Sexually Transmitted Infections (STIs).....	346
G. Information on Hepatitis A, B, and C.....	350
H. HIV/AIDS Medication Chart.....	355
I. Sample Parent Notification Letters: A, Standalone; B, HIV/AIDS and Sexual Health Education.....	357
J. HIV/AIDS Curriculum Feedback	359



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September 2012

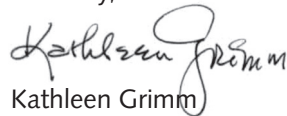
Dear New York City educators and families:

HIV/AIDS continues to be an enormous problem for New York City. More than 110,000 New Yorkers are infected with HIV. The United States Centers for Disease Control and Prevention (CDC) estimates that half of all new infections are acquired before age 25. We know from the CDC Youth Risk Behavior Survey (<http://www.cdc.gov/HealthyYouth/yrbs/index.htm>) that almost 40 percent of our high school students engage in behaviors that put them at risk for acquiring HIV. We also know that researchers have made great strides in understanding the disease, and in developing new ways to prevent and treat it.

The NYC Department of Education's *HIV/AIDS Curriculum* provides our students with the age-appropriate, comprehensive, and up-to-date education they need to stay healthy and safe. Lessons cover the nature of the disease, methods of transmission and methods of prevention, while teaching students how to make clear and thoughtful decisions about their health. Abstinence is emphasized as the only 100 percent effective means of avoiding sexually transmitted infections. In accordance with the New York State Education Department regulations, parents or legal guardians have the right to withdraw their children from specific lessons that deal with methods of prevention in order to provide this information at home. More information about opting out of certain lessons is provided on page xxv. The 2012 edition of the *HIV/AIDS Curriculum* incorporates the latest medical research and HIV testing laws to help ensure that students have the most current information about this important topic.

Schools do not replace what is learned at home when it comes to values. As public educators, we can and must reinforce the valuable lessons learned at home with medically accurate and age-appropriate information. Together, we are all called upon not only to educate, but to model behaviors for staying healthy and safe in all areas of our lives. I encourage you to review what is covered in this curriculum and use it as we work together to keep New York City students safe and healthy.

Sincerely,


Kathleen Grimm

Acknowledgments

The *HIV/AIDS Curriculum, 2012 Edition*, is a revision to the *2005 HIV/AIDS Curriculum*. This edition has been updated to reflect recent medical developments since the *HIV/AIDS Curriculum* was last published. The curriculum updates were completed by the New York City Department of Education's (DOE) Office of School Wellness Programs in collaboration with experts from the New York City Department of Health and Mental Hygiene (NYC DOHMH).

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Additional support was provided from DOHMH, including: Adriana Andaluz, Marie Antoinette Bernard, M.D., Susan Blank, M.D., Blayne Cutler, M.D., Nirah Johnson, Deborah Kaplan, Aileen Langston, M.D., Anne Lifflander, M.D., Jennifer Medina Matsuki, Julie Myers, M.D., Vicki Peters, M.D., Meighan Rogers, Eric Rude, Colin Shepard, M.D., M. Monica Sweeney, M.D., Lorraine Tiezzi, Benjamin Tsoi, M.D., Wendy Wilcox, M.D.

Tobey Hartman and Christopher Sgarro from the Office of Instructional Publications prepared the manuscript for publication.

The DOE offers a special thanks to the Centers for Disease Control and Prevention for the generous grant (5U87DP001200) which supported the *HIV/AIDS Curriculum, 2012 Edition* update.

Acknowledgments below are from the previous edition of the *HIV/AIDS Curriculum* (2005).

This update, begun by the Health Education Unit of the Office of School Health, was prepared under the supervision of Betty Rothbart, Director, Office of Health Education and Family Living, Division of Teaching and Learning, who was also chief writer and editor of the original Curriculum Guides. The update was initiated under the supervision of Dr. Fred Kaeser, former director, Health Education Unit, with additional leadership by Comprehensive Health Coordinators Julia Choe and Eric Pliner. Other key participants in this update included Victoria Bennington, Michael Buscemi, and Randy Sheiner, Comprehensive Health Coordinators, and Anita Stromsvold. The Hunter College Center for Community and Urban Health provided an initial draft of the update. The original Curriculum Guides included contributions by field staff under the supervision of Iris Lopez and Martha Morales, and with the participation of the following Comprehensive Health Coordinators: Brenda Dressler, Bruce Groneveldt, William Molbert, Jody Stoll, and Dolores Witherspoon-Cozier.

Additional reviewers from NYCDOE included Regional Superintendents, Deputy Chancellor Carmen Fariña, Laura Kotch, and Brian Osborne. Reviewers from NYC DOHMH included Dr. Thomas Frieden, Commissioner; Dr. Mary Bassett, Division of Health Promotion and Disease Prevention; Dr. Roger Platt and Julia Choe, Bureau of School Health; Anna Caffarelli; and Christina Chang. Reviewers from the Bureau of HIV/AIDS Prevention and Control, included Dr. Scott Kellerman, Assistant Commissioner; Beth Cohen-Barusk; Matt Henn; Maureen Malave; Maureen Miller; Tamar Renaud; Judy Sackoff; and Kent Sepkowitz. From the Bureau of STD Control, DOHMH, Kate Washburn reviewed. We thank NYCDOE's HIV/AIDS Advisory Council Members:*

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INTRODUCTORY

SECTION

Introduction

HIV is a very different disease today than it was when this curriculum was last published in 2005. There is still neither a vaccine to prevent HIV nor a cure for the disease, and the number of people in NYC living with HIV has exceeded 110,000. However, advances in HIV testing, treatment, and care have turned HIV into a chronic, treatable long-term condition. New laws, policies, and data have changed the way we see and think about this virus. HIV continues to affect our young people, who have a right to understand the risks that can threaten their health, and know the steps they must take to stay safe and support their peers in staying safe. We are eager to share important medical updates with our teachers in this 2012 Edition so that they can continue to teach our students the most current, relevant information about HIV, which includes:

- **Dramatic improvements in HIV treatment:** The most important advance since 2005 is that people infected with HIV are living longer, healthier lives. Antiretroviral therapy (ART), a combination of medications that stops the virus from replicating and from infecting new cells, has succeeded in keeping people's viral load low and immune system strong, keeping people healthier longer. A low viral load also helps prevent transmission of HIV to someone else.
- **New citywide recommendations for HIV treatment:** On World AIDS Day, December 1, 2011, NYC Department of Health and Mental Hygiene (NYC DOHMH) Commissioner Thomas Farley, MD, MPH, recommended that anyone infected with HIV begin ART immediately upon diagnosis, regardless of CD4 count. Many HIV experts think this is the single most important way to improve health outcomes for someone who is infected and to reduce community viral load enough to end this epidemic.
- **New State HIV testing law:** A New York State law was passed in 2010 requiring primary care providers to offer an HIV test to all patients ages 13-64. The NYC DOHMH launched several campaigns to increase HIV testing: The Bronx Knows; Brooklyn Knows; and NYC Knows campaigns spread the word that everyone in NYC who is sexually active should be tested for HIV.
- **HIV home test kit approved:** On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to: <http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>
- **Required sexual health education in NYC middle and high schools:** In August 2011, NYC Department of Education (NYCDOE) Chancellor Dennis Walcott made sexual health education a required component of the required comprehensive health education course for middle and high school students.
- **First medication to prevent HIV:** On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making a new virus as it enters the body. When used consistently, Truvada has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to <http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>.
- **More access to HIV Prevention:** High school students have improved access to condoms through high school Condom Availability Programs, which now offer a wider variety of condoms, including female condoms. In addition, 311 and social media make it simple for all New Yorkers to identify free condom distribution sites available in most areas of New York City. That instruction is in addition to the mandated HIV/AIDS lessons that must be provided K-12 every year in every school in New York City.

Changes to the Curriculum

New “opt out” prevention lessons: This curriculum is required for all students in grades K-12, every year. Parents have always had the option to opt their children out of the “prevention” lessons. For consistency and clarity, the criteria that now identify “opt out” prevention lessons for the comprehensive health education (including sexual health education) course taught in middle school and high school will be applied to the HIV/AIDS Curriculum. For grades 6-12, “opt-out” prevention lessons are those that “teach about barrier methods used to prevent the sexual transmission of HIV/STD, or about not sharing syringes/needles.” Parents and legal guardians may not opt their children out of lessons that teach about the human body, sexuality, or abstinence. The “opt out” prevention lessons for elementary school remain the same. These lessons are identified on page xxv.

Updated parent notification letters: NYCDOE continues to recommend, but not require, principals to send parent notification letters home prior to teaching the HIV/AIDS lessons. Because middle and high schools are required to inform parents prior to teaching required sexual health education lessons, we encourage schools to use a combined notification letter in those cases (See Appendix I for both letters).

New York State Standards for Health, Physical Education and Family and Consumer Sciences

Standard 1: Personal Health and Fitness

Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.

Standard 2: Safe and Healthy Environment

Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

Standard 3: Resource Management

Students will understand and be able to manage their personal and community resources.

Throughout this curriculum, teachers and administrators can see which skills and standards are being focused on in the lesson margins. Also included in the margins are necessary materials and vocabulary words used in the lesson.

For further information on the New York State Standards for Health Education, as well as skills-driven health education, go to:

New York State Education Department
www.nysed.gov/

Navigate by the Stars
www.emsc.nysed.gov/sss/Presentations/Navigate-EditedForWEB.ppt

Regents Policy Statement on HIV/AIDS Instruction

At its July 25, 1991, meeting, the Board of Regents adopted the following explanation of the Commissioner's Regulation (8 NYCRR 135.3 (C)(2)).

<http://www.p12.nysed.gov/sss/schoolhealth/schoolhealtheducation/CR135.pdf>

1. The requirement that HIV/AIDS instruction must "stress abstinence as the most appropriate and effective premarital protection against AIDS" means that written and oral instruction on [HIV] AIDS prevention must devote substantially more time and attention to abstinence than to other means of avoiding HIV infection. It also means that such instruction must always make it clear that no other method of prevention can provide the same 100 percent protection against infection as abstinence can.
2. Among other things, the requirement that HIV/AIDS instruction must "provide accurate information... concerning... methods of prevention" means that any written or oral instruction relating to condoms must fully and clearly disclose the various risks and consequences of condom failure.

Teacher Note: Since this policy was written, the terminology has changed from "AIDS prevention" and "protection against AIDS" to "HIV prevention" and "protection against HIV" because HIV is the virus that is transmitted, that can progress to AIDS.

NEW YORK STATE COMMISSIONER'S REGULATIONS
SUBCHAPTER G, Part 135:
HEALTH, PHYSICAL EDUCATION, AND RECREATION

Section 135.1 Definitions

- (j) *Health education* means instruction in understandings, attitudes, and behavior in regard to the several dimensions of health. This instruction relates to alcohol, tobacco, and other drugs, safety, mental health, nutrition, dental health, sensory perception, disease prevention and control, environmental and public health, consumer health, first aid, and other health-related areas.

Section 135.3 Health Education

- (a) *Provision for health education.* It shall be the duty of the trustees and boards of education to provide a satisfactory program in health education in accordance with the needs of pupils in all grades. This program shall include, but shall not be limited to, instruction concerning the misuse of alcohol, tobacco, and other drugs.
- (b) *Health education in the elementary schools.*
1. The elementary school curriculum shall include a sequential health education program for all pupils, Grades K-6. In the kindergarten and primary grades, the teacher shall provide for pupil participation in planned activities for developing attitudes, knowledge and behavior that contribute to their own sense of self-worth, respect for their bodies and ability to make constructive decisions regarding their social and emotional, as well as physical, health. Personal health guidance shall also be provided according to the individual needs of pupils. This guidance shall include the development of specific habits necessary to maintain good individual and community health. In addition to continued health guidance, provision shall be made in the school program of Grades 4-6 for planned units of teaching, which shall include health instruction through which pupils may become increasingly self-reliant in solving their own health problems and those of the group. Health education in the elementary school grade shall be taught by the regular classroom teachers.
 2. All elementary schools shall provide appropriate instruction concerning the Acquired Immune Deficiency Syndrome (AIDS) as part of the sequential health education program for all pupils, Grades K-6. Such instruction shall be designed to provide accurate information to pupils concerning the nature of the disease, methods of transmission, and methods of prevention; shall stress abstinence as the most appropriate and effective premarital protection against AIDS; and shall be age appropriate and consistent with community values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a written request that the pupil not participate in such instruction, with an assurance that the pupil will receive such instruction at home. In public schools, such instruction shall be given during an existing class period using existing instructional personnel, and the board of education or trustees shall provide appropriate training and curriculum materials for the instructional staff who provide such instruction and instructional materials to the parents who request such materials. In public schools, the board of education or trustees shall establish an advisory council which shall be responsible for making recommendations concerning the content, implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of parents, school board members, appropriate school personnel, and community representatives, including representatives from religious organizations. Each board of education or trustees shall determine the content of the curriculum and approve its implementation, and shall be responsible for the evaluation of the district's AIDS instruction program.

continued

(c) *Health education in the secondary schools.*

1. The secondary school curriculum shall include health education as a constant for all pupils. In addition to continued health guidance in the junior high school grades, provision shall also be made for a separate one-half year course. In addition to continued health guidance in the senior high school, provision shall also be made for an approved one-half unit course. Health education shall be required for all pupils in the junior and senior high school grades and shall be taught by teachers holding a certificate to teach health. A member of each faculty with approved preparation shall be designated as health coordinator, in order that the entire faculty may cooperate in realizing the potential health-teaching values of the school programs. The health coordinator shall insure that related school courses are conducted in a manner supportive of health education, and provide for cooperation with community agencies and use of community resources necessary for achieving a complete school-community health education program.
2. (i) All secondary schools shall provide appropriate instruction concerning the Acquired Immune Deficiency Syndrome (AIDS) as part of required health education courses in Grades 7-8 and in Grades 9-12. Such instruction shall be designed to provide accurate information to pupils concerning the nature of the disease, methods of transmission, and methods of prevention; shall stress abstinence as the most appropriate and effective premarital protection against AIDS; and shall be age appropriate and consistent with community values. No pupil shall be required to receive instruction concerning the methods of prevention of AIDS if the parent or legal guardian of such pupil has filed with the principal of the school which the pupil attends a written request that the pupil will receive such instruction at home. In public schools, such instruction shall be given during an existing class period using existing instructional personnel, and the board of education or trustees shall provide appropriate training and curriculum materials for the instructional staff who provide such instruction and instructional materials to the parents who request such materials. In public schools, the board of education or trustees shall establish an advisory council which shall be responsible for making recommendations concerning the content, implementation, and evaluation of an AIDS instruction program. The advisory council shall consist of parents, school board members, appropriate school personnel, and community representatives, including representatives from religious organizations. Each board of education or trustees shall determine the content of the curriculum and approve its implementation, and shall be responsible for the evaluation of the district's AIDS instruction program.

(ii) Boards of education or trustees that make condoms available to students as part of the district's AIDS instruction program shall:
 - a. submit a condom distribution policy to the advisory council for consideration;
 - b. make condoms available only to students who participate in an appropriate AIDS instruction program as defined in this section;
 - c. provide each student receiving condoms with accurate and complete health guidance as to the risks of disease that may result from the student's use or misuse of such product, which appropriately takes into account the child's age;
 - d. assure that such personal health guidance is provided by health service personnel or school personnel trained and supervised by competent health professionals or health educators; and
 - e. submit for approval by the commissioner a plan for the training of health service personnel, as defined in subdivision (c) of section 136.1 of this Part, or school personnel who will provide such personal health guidance. Such plan shall be approved upon a finding of the commissioner that the training is adequate to prepare such personnel or school personnel to provide the required personal health guidance in an effective manner.

Skills-Driven Curricula: Navigate By the Stars

The New York State Education Department has implemented a health education curriculum and assessment leadership initiative titled Navigate by the Stars. Wherever possible, this curriculum has attended to the ten Navigational Stars. The Stars are guidelines for curriculum development and implementation, published in A Guidance Document for Achieving the New York State Standards in Health Education. They indicate that teaching and learning in a curriculum should be:

- **Skills-Driven:** Students learn, practice, and apply seven health education skills.
- **Standards-Based:** Students achieve benchmarks and learning standards.
- **Scientifically-Based:** Schools identify effective theory-based health education programs that integrate promising strategies that are likely to improve health behaviors; “use what works.”
- **Learner-Centered:** Students apply relevant health information facilitated by the health educator.
- **Strength-Based:** Students build on their prior knowledge, skills, and strengths.
- **Authentic:** Students apply real life learning experiences and skills.
- **Integrated into the Total Educational Program:** Schools provide a sound comprehensive health education program.
- **Taught by Qualified and Skilled Teachers:** Schools provide health educators with professional development and other effective professional mentoring.
- **Part of a Coordinated School Health Approach:** Schools provide related health services, physical education, food service, counseling and guidance
- **Supported by School and Community:** Schools provide parents, school staff and the community ways to support students through family and community based initiatives.

Skills-driven health education is that aspect or domain of education that has been, until now, neglected by most health curricula. Cognitive and affective approaches, though effective at teaching facts and concepts and helpful in shaping healthful attitudes, have not produced the desired effects, those of adaptive behavior changes that promote health. It is widely believed that behavior change requires learning and practicing the skills necessary to form or reshape behavior patterns in addition to cognitive learning and attitude formation. The seven Health Education Skills as outlined by the New York State Education Department and the Navigate by the Stars initiative are:

1. **Self-Management** Practicing healthful personal habits.
2. **Relationship Management** Behaving in ways that promote mutual or group benefit.
3. **Stress Management** Recognizing and modifying stress reactions.
4. **Communication** Skills of both transmitting and receiving messages.
5. **Planning and Goal Setting** Projecting needs and wants and establishing tasks.
6. **Decision Making** Choosing in healthful ways based on actual wants and needs.
7. **Advocacy** Acting assertively for one's beliefs.

Examples of Skill Building for Adolescents

Adolescents need both to understand risk-reduction strategies and to develop the decision-making and communication skills to use them.

Decision Making

Young people need to know the steps to effective decision making, including:

- Define the problem and state it clearly.
- Investigate information; make sure you have all the facts you need. Ask advice and consult with others as necessary.
- List all the possible choices in writing.
- Evaluate and write down the pros and cons of each choice, taking into consideration:
 - What is the impact of each choice on your health and well-being?
 - What is the impact on the health and well-being of family, friends, and others involved?
 - Is the choice legal and responsible?
 - Does the choice help or hinder your goals?
 - Is the choice consistent with your family's religious or moral values?
- Decide which choice seems best.
- Outline the steps to take to act on the decision.
- Evaluate the outcome of your decision and make changes, if necessary.

Communication Skills

Young people need to know how to communicate with others about the decisions they have made, by using such skills as:

- *Assertiveness* – the ability to state a positive view and to maintain that view when opposed or pressured to change it. Assertiveness techniques may include:
 - Stating a strong refusal (expressing a clear no).
 - Giving a good reason (justifying the no).
 - Offering an alternative (presenting a different choice).
 - Taking a caring approach (describing why the no is better for everyone).
 - Stepping back (buying time by delaying a decision).
- *Limit-setting* – the ability to delineate behaviors in which one is and is not willing to participate. Assertively “offering an alternative” can involve limit-setting. (“I am willing to hug and kiss you; I am not willing to have sexual intercourse with you.”)
- *Negotiation* – the ability to confer constructively with another person so as to attain an agreement that is consistent with one's goals and values. (“I want to keep seeing you, but I can only do so if you respect my decision to abstain from sexual intercourse” or “I will have sexual intercourse with you, but only if we use a latex condom every time.”)
- *Refusal* – the ability to say no firmly and consistently in response to someone else's proposal of behaviors that are inconsistent with one's goals and values. (“I do not take drugs, and that's final.”)

Decision-making and communication skills, like all skills, improve with practice. Provide classroom time and activities that will give students an opportunity to practice these skills. Role-plays, reacting to actual or fictitious scenarios and small group discussions, can be especially helpful. (See “How to Use Role-Plays in the Classroom” in Appendix B.)

Guidelines for Teachers and Administrators

In September 1987, the New York State Board of Regents adopted new regulations requiring instruction about Acquired Immune Deficiency Syndrome (AIDS) in grades K-12 (see page XV). This curriculum guide was developed in response to those regulations. Its purpose is to assist teachers in providing young people with the knowledge, motivation, ability and skills to carry out responsible decisions related to behaviors that could put them at risk for Human Immunodeficiency Virus (HIV) infection, and to help prepare students to effectively address the impact of HIV/AIDS on their world, today and in the future. The New York City Department of Education (NYCDOE) and the New York City Department of Health and Mental Hygiene (NYC DOHMH) have completed this medical/technical update of the 2005 edition of the HIV/AIDS Curriculum, now the 2012 edition of the HIV/AIDS Curriculum.

Guidelines for Implementation

CITYWIDE ADVISORY COUNCILS

Implementing an HIV/AIDS curriculum requires consideration of many viewpoints, a thorough knowledge of content, and a deep understanding of our city's diverse cultural values and beliefs. The regulations adopted by the New York State Board of Regents require local boards of education or trustees to establish an advisory council that will be responsible for making recommendations concerning the content, implementation, and evaluation of an HIV/AIDS instructional program. The advisory council, representing a cross-section of the population, should consist of parents, school board members, appropriate school personnel, and community representatives (including representatives from religious organizations, health organizations, and HIV/AIDS service groups). Youth members should be encouraged to be a part of the advisory council. It is strongly suggested that the advisory councils take a comprehensive health approach, examining HIV in the context of the entire health instructional program as well as the health needs and resources available in the community.

An Advisory Council was convened during the development of the HIV/AIDS Curriculum that was published in December, 2005. This 2012 edition of the HIV/AIDS Curriculum focused on updating the medical, legal and epidemiological breakthroughs since 2005, and was completed by content experts at NYC DOHMH and NYCDOE.

SUMMARY OF THE NEW YORK CITY DEPARTMENT OF EDUCATION'S HIV/AIDS CURRICULUM GUIDE FOR GRADES K-12

HIV/AIDS education in New York City (NYC) public schools begins in Kindergarten and continues through Grade 12. Responsibility for implementing the HIV/AIDS Curriculum for every child, every year, rests with the principal of each school.

In the curriculum for Kindergarten through Grade 3, children contrast being healthy and being ill. They learn to recognize that people—even young children—make choices that affect their health, and to distinguish between healthy and unhealthy choices. They identify how diseases are transmitted, learn how the immune system works and describe how loved ones and medical caregivers help people get well.

In Grades 4 to 12, the same concepts are emphasized, and students gain a more in-depth understanding of how the immune system works and how HIV affects it. It is recommended that the students in 4th and 5th grades learn comprehensive health education, including puberty lessons, prior to the HIV/AIDS lessons, in which students learn how HIV is and is not transmitted, and how to protect themselves against it. All NYC elementary school teachers have free access to the [healthteacher.com](http://schools.nyc.gov/wellness) online comprehensive health education curriculum. Please check our website, <http://schools.nyc.gov/wellness>, for registration information and other health education resources.

Beginning in 4th grade, abstinence from sexual intercourse and drug use is stressed as the only method of prevention with 100 percent effectiveness and that it is the most appropriate choice for young people. Students explore how peer pressure can influence behavior. They identify ways to support each other's healthy choices and to reject pressures to make unhealthy choices. In addition to recognizing the responsibilities and support associated with family, friends, and school, students learn how to locate and utilize community resources for HIV/AIDS information. HIV/AIDS is presented as a reality that affects all of society, and students are encouraged to understand that people with HIV/AIDS should be treated with the same respect and empathy afforded to others living with a chronic illness.

In August, 2011, Chancellor Walcott announced that, beginning in the second semester of the 2011-12 school year, middle and high schools will be required to include sexual health education as part of comprehensive health education. Comprehensive health education includes lessons on violence and injury prevention, emotional and mental health, physical activity and nutrition, alcohol, tobacco and other drug prevention, HIV/AIDS and sexual health. In middle and high schools, health education teachers are encouraged to teach the required HIV/AIDS lessons after teaching the lessons about sexual health.

SENSITIVE AND PERSONAL ISSUES

HIV/AIDS education deals with issues of interpersonal relationships, sex, drugs, morbidity and mortality. The teacher's capacity to listen non-judgmentally, with empathy, and to demonstrate a comfortable attitude in dealing with students' beliefs and feelings associated with HIV/AIDS is crucial to the curriculum's successful implementation. Students come to the classroom with many different values, cultural and religious beliefs, and ideas about these topics. Teachers should keep in mind that because their students come from many backgrounds and traditions, some may have difficulty sharing ideas and discussing these issues with their peers. Children may come from a variety of familial constructions including those of a mother, father, and children; a single parent or guardian of either sex; step-parents; grandparents; half- or step-siblings; same-gender parents; foster parents; and/or other members of the extended family.

More than one percent of New York City's population is estimated to be living with HIV, but the concentration of HIV varies from neighborhood to neighborhood. Many students have been affected by HIV, some students might be infected, and others will be infected at some point in their lives. Similarly, some students or their family members and/or acquaintances may be HIV positive, may be living with AIDS, or may have died of AIDS. For these students, the issues of bereavement and grieving are real. It is not unusual for students to deny the issue of death in their lives and/or to act out their feelings, sometimes in negative ways. Before beginning the HIV/AIDS lessons, identify a support person who can assist you if there is a crisis with one of your students. Students should be informed about available school resource people, such as a guidance counselor, when instruction begins.

Also, as with any peer group, do not assume that all students are heterosexual. Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to <http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm> or search for "Respect for All Resources" on the NYCDOE Principals' Portal. When discussing modes of HIV transmission, focus on risk behaviors (e.g., high-risk sexual activities) rather than on groups of people at higher risk. Avoiding generalizations and stereotyping can help every student in the classroom. Establish a tone and ground rules that affirm all students, regardless of race, nationality, age, gender, sexual identity or sexual orientation, and assure that students speak respectfully of each other. HIV/AIDS education offers an opportunity to help reduce the problems of racism and bigotry associated with this disease.

Confidentiality: Students diagnosed with HIV or AIDS have a right to privacy, a free public education, and are entitled by law to confidentiality about: their HIV/AIDS status; HIV-related illness or AIDS; or information that can reasonably be used to identify an individual as having HIV or AIDS. Disclosure of HIV and AIDS information is governed by the New York State Public Health Law, which went into effect in 1989 (i.e., Section 2782, Confidentiality and Disclosure, and Section 2783 Penalties; Immunities). Willful commission of an unauthorized act of disclosure is a misdemeanor and punishable accordingly; a person is also subject to a civil penalty not to exceed five thousand dollars (\$5,000) for each occurrence of unauthorized disclosure. No disclosure of confidential HIV-related information involving a student shall be made without first obtaining the informed written consent of the student (if he/she has the capacity to consent to such disclosure) or his/her parent or guardian on the form approved by NYC DOMHM (www.health.ny.gov/forms/doh-2557.pdf).

Abstinence: Refraining from sexual intercourse and injection drug use is emphasized throughout this curriculum and the NYCDOE-recommended comprehensive health education curricula as the only 100 percent effective protection against the transmission of HIV, STDs and teen pregnancy. Students need to know that, at this stage of their lives, abstinence is the safest choice and most effective method of avoiding the sexual transmission of HIV, other STIs, and unplanned pregnancies. Students should be given strategies for abstaining from and resisting pressure to engage in sexual activities.

The teacher should not make assumptions about the students' sexual experience or lack thereof. Rather, the teacher should stress that whether it means deferring the onset of sexual activity or halting it once it has started, abstinence is the only 100 percent sure way to avoid sexual transmission of HIV and other STIs. In 2011 the Youth Risk Behavior Survey data indicated that 38 percent of NYC high school students have had sexual intercourse, and the percentage of sexually active 9th graders is lower than their peers in 12th grade. Use this information to reinforce the positive social norm of abstinence, and correct student stereotypes that "all kids are doing it" because it's simply not true. (<http://www.cdc.gov/healthyyouth/yrbs/index.htm>) Many students incorrectly do not consider oral or anal sex as intercourse (and may therefore consider themselves "virgins" and not sexually active or not at risk for HIV or other STIs) because neither puts them at risk for pregnancy.

Sexuality: Care must be taken to distinguish between “sexuality” and “sexual intercourse.” Sexuality is a natural and healthy part of life. It is integral to people’s identities as males or females; as family members; as participants in relationships; as members of society. Sexuality can be affirmed, even as abstinence from sexual intercourse is emphasized as the most effective means of protection against sexually transmitted HIV. It is important for teachers to emphasize “what a person does” versus “who a person is” when discussing disease transmission. Remember too that “sex” does not always equal “sexual intercourse.” Kissing and hugging are ways that some young people choose to express sexual feelings and young people can learn to protect themselves by setting limits on their sexual behavior. To assess their own behavior, students need to know what activities will or will not put them at risk. Be prepared to answer questions about sex. Always emphasize that students’ bodies are their own and that they should not do anything with which they are uncomfortable or for which they are not ready. Also note that like everyone, students with physical or developmental disabilities have sexual desires. Teachers should be prepared to discuss sexual feelings and challenges students with special needs may have with communicating limits and protecting themselves. (See Instructional Program for Special Education, below.)

Types of Sexual Intercourse: HIV can be transmitted through three types of sexual intercourse: anal, vaginal, and oral. This curriculum guide recommends that, in high school, the teacher should initiate discussion of these three types. Parents or legal guardians should be alerted that they have the right to ask that their child not participate in the lessons dealing with methods of prevention. “Opt out” prevention lessons are those that teach about barrier methods used to prevent the sexual transmission of HIV/STD, or about birth control. Parents may not opt their children out of lessons that teach about the human body, sexuality, or abstinence. A “Teacher Note” following the first mention of sexual intercourse in each lesson that includes the term provides information for the teacher on why it is important to explain types of sexual intercourse.

Sexually Transmitted Infections (STIs) or Sexually Transmitted Diseases (STDs): While the primary focus of this curriculum guide is HIV/AIDS, it is important for students to know that HIV is only one of a number of sexually transmitted infections (STIs). Students may be familiar with some STIs and unfamiliar with others. Students should be aware that:

- Many STIs can be cured, but early diagnosis and treatment are crucial, just as they are for HIV. Some STIs can be difficult to diagnose early because they may be asymptomatic (i.e., they present no symptoms) in some individuals. For example, gonorrhea and chlamydia are asymptomatic in most women and some men. HIV infection is associated in a majority of cases with a flu-like illness concurrent with seroconversion, or the point at which someone who has been exposed to HIV develops HIV antibodies, about three weeks to three months after infection. This passes and the person with HIV may experience some symptoms associated with fighting infection: swollen glands, night sweats, fatigue. These could easily be mistaken for minor ailments or illnesses. The more serious symptoms of HIV associated with AIDS may not appear for ten years or more even when HIV is untreated. The CDC estimates that 1.2 million people in the U.S. are HIV positive and that approximately one in five of those people are unaware of their infection. It is not possible to tell if someone is HIV-positive just by looking at him or her, and not everyone will accurately report their testing history, their results, or all risk behaviors since their last HIV test. This means someone who is infected with HIV could have potentially and unknowingly infected others and, without being tested, he or she did not benefit from ART, treatment that could have delayed the progression of HIV to AIDS.
- STIs can be transmitted to sexual partners even if an infected person has no symptoms of disease. STIs can be transmitted through anal, vaginal, or oral intercourse.
- Some STIs can cause infertility. For example, chlamydia is often symptom-free. If untreated, it can “silently” damage women’s and men’s reproductive organs, causing infertility.
- STIs that cause sores, rashes, blisters, or lesions can increase the risk of HIV infection by presenting openings in the skin through which HIV could pass. Examples of such STIs are herpes and syphilis.
- STIs can be transmitted to a fetus during pregnancy or to an infant during childbirth. HPV (human papillomavirus), gonorrhea, herpes, non-gonococcal urethritis, and syphilis can all be passed from an infected woman to her baby during childbirth; HIV can be transmitted in the womb, during childbirth, or by breastfeeding. It is important to know that treatments for mother and child and procedures before and during birth have made perinatal transmission of HIV in the US quite rare.
- Some STIs, such as herpes, HPV and HIV have no cure. The Centers for Disease Control and Prevention now recommends HPV vaccination for pre-teen boys and girls <http://www.cdc.gov/vaccinesafety/Vaccines/HPV/index.html>.
- Although some STIs can be cured, they can also cause severe damage and even death if not treated or if treatment is delayed. For example, untreated gonorrhea can cause heart disease, skin disease, arthritis, and blindness; untreated syphilis can cause brain damage, blindness, and death.

Condoms: For people who are sexually active, using condoms correctly and consistently is the best way to prevent HIV infection. HIV-positive people can infect their sexual partner(s) even if they do not look sick. In fact, people living with HIV may appear and feel healthy for several years but, HIV is still present in their bodies, and can still be transmitted to others. Using a latex or polyurethane male condom or a synthetic nitrile female condom every time protects sexually active people from infection and helps give them peace of mind. Only latex or polyurethane male condoms, or synthetic nitrile female condoms should be used.

Consistent and correct condom use is the most effective way to prevent HIV transmission among sexually active people. The primary reason that condoms fail to protect against HIV is improper use; for example, putting the condom on too late or incorrectly. Students who engage in vaginal sex are encouraged to use dual protection: male or female condom with hormonal method of contraception. It is very important for sexually active youth to learn when and how to put on a condom. High school teachers are encouraged to review the male and female condom demonstration instructions and review the Condom Challenge activity in Appendix C. This curriculum refers high school students to their school's Health Resource Room(s) for a condom demonstration and for free condoms through the Condom Availability Program, <http://schools.nyc.gov/Offices/Health/OtherHealthForms/HealthResource.htm>.

Birth Control: Unprotected sexual vaginal intercourse is a risk factor for teen pregnancy as well as the transmission of HIV. Condoms can prevent HIV as well as teen pregnancy. Yet teen pregnancy rates in NYC are high – as much as 15 percent per year in some NYC neighborhoods, and although most NYC teens report using a condom last time they had sex (YRBS, 2011), very few also use a hormonal method of birth control to prevent pregnancy. The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Child Sexual Abuse: HIV/AIDS education is important for all students and may be especially relevant for students who have experienced some form of sexual abuse. Such abuse may put students at risk for HIV infection. Listen carefully to comments and questions, as they may signal sexual abuse. Lessons on abuse are part of New York City's comprehensive health education program. If you suspect that a student is being sexually abused, you are legally required by the state of New York (see Article 6, Title 6, Section 413 of the New York Social Services Law, <http://public.leginfo.state.ny.us/menu.fcgi>) and by the New York City Department of Education to report it (see Chancellor's Regulation A-750 at <http://schools.nyc.gov/NR/rdonlyres/381F4607-7841-4D28-B7D5-0F30DDB77DFA/97056/A750120201FINAL.pdf>).

Related In-School Courses: In addition to the required HIV/AIDS lessons in every grade, New York State requires that students receive health education instruction in elementary, middle, and high school. Health education is a high school graduation requirement. Now, NYC public middle and high school students are required to receive sexual health education lessons during the semester health education course in both middle and high school. The NYCDOE is committed to ensuring that middle school and high school students are exposed to valuable information so they can learn to keep themselves safe before, and when, they decide to have sex. For more information, visit <http://schools.nyc.gov/Academics/FitnessandHealth/StandardsCurriculum/sexeducation.htm>.

Classroom Resources

Audiovisuals: If audiovisuals are being planned for classroom presentation, choose and review materials at least 72 hours in advance, and follow NYCDOE policies. **Large auditorium or gym presentations should be avoided** since they do not lend themselves to effective discussion and processing of the sensitive issues covered in this curriculum.

Guest Speakers: Guest speakers from community agencies can be a valuable resource for the classroom instructional program. When considering the involvement of community agencies, schools should receive complete assurance that the presentation will be made in an accurate and objective manner and will respect the religious and cultural values of pupils in the class. Teachers must obtain approval from their principal before inviting a guest to speak about HIV/AIDS or related topics. They should meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level, and examine all materials with the principal at least 72 hours prior to the presentation.

Presentations by People Living with HIV/AIDS: Inviting people living with HIV or AIDS into the classroom can be an effective teaching strategy. Do not refer to people living with HIV or AIDS (PLWHA) as victims. Victims are generally regarded as powerless, and it is important to respect the importance of using one's personal experiences and power to educate others. If a PLWHA is invited to the classroom, it should not be to sensationalize the illness or scare students. PLWHAs should emphasize the hope as well as the challenges of living with HIV/AIDS, an approach that will help students who may have relatives with HIV infection or AIDS, or are infected themselves. Again, always preview the workshop and the materials before the classroom presentation as per NYCDOE policies.

Students should be informed of available school resource people, e.g., guidance counselors, social workers, health professionals (nurses, health aides), or substance abuse prevention and intervention specialists (SAPIS).

Parent Workshops: Parent workshops can be extremely helpful in developing a better understanding of the HIV/AIDS education program. These workshops should involve parents or legal guardians in open and supportive discussions; provide parents with accurate information; and help parents communicate their own values about drugs and sexuality more clearly and effectively to their children. Open communication between parents or legal guardians and children can help students make informed decisions about their behavior.

Parental Excuse from Prevention Instruction: Schools are encouraged to notify parents or legal guardians before the HIV/AIDS lessons are taught. Parents have the right to exempt their children from “opt-out” prevention lessons which are lessons that teach about barrier methods used to prevent the sexual transmission of HIV, or about not sharing syringes/needles. Parents may not opt their children out of lessons that teach about the human body, sexuality, or abstinence. A parent notification letter is required for parents of students who are enrolled in the comprehensive health education course for middle and high school.

To remove a child from the “opt out” prevention lessons, the parent or legal guardian must file a written request with the school principal asking for the student to be exempted from those lessons, and assure that such instruction will be provided at home. Parents are welcome to request curriculum materials to assist with home instruction. Sample HIV/AIDS education notification letters are provided in Appendix I.

“Opt Out” Prevention Lessons

“Opt Out” prevention lessons in grades 6-12 are those that teach about barrier methods used to prevent the sexual transmission of HIV/STD, or about not sharing syringes/needles. In grades K-5, the “Opt Out” prevention lessons are the same as they were in the 2005 edition.

GRADE, LESSON	LESSON TITLE
K, 4	How Do People Get Sick? What Is HIV? What Is AIDS?
1, 3	What Are Viruses? How Do They Enter the Body to Cause Disease?
2, 3	What Causes and Prevents the Spread of Illness?
3, 4	What Are Healthy Choices That People Can Make?
4, 4	How Can We Help Each Other Make Healthy Choices?
5, 3	How Can We Reduce Our Risk Behaviors?
6, 5	How Can We Prevent HIV Infection?
7, 4	How Can We Protect Ourselves from Sexual Transmission of HIV and Other STIs?
8, 5	How Can One Prevent Sexual Transmission of HIV?
8, 6	What Role Can Each Person Take in Preventing the Spread of HIV Infection?
9, 2	How Is HIV Transmitted?
9, 5	How Can Abstaining from Drugs, Including Alcohol and Steroids, Reduce the Risk of HIV Infection?
9, 6	How Can Sexual Transmission of HIV Be Prevented?
10, 5	How Can We Reduce Our Risk of Transmission of HIV or Other STIs?
11, 4	How Can We Reduce Our Risk of Getting or Transmitting HIV Infection or Other Sexually Transmitted Infections (STIs)?
12, 2	How Is HIV Transmitted?
12, 3	How Can We Learn to Make Effective Decisions?
12, 4	What Factors Must Adolescents Consider Before Taking an HIV Antibody Test?
12, 5	How Can We Avoid Behavior That Can Lead to HIV Infection?

How to Use This Curriculum Guide

New York State public schools are mandated to provide a minimum of five HIV/AIDS lessons per year to students in Grades K-6 and six HIV/AIDS lessons per year to students in Grades 7-12. Each of this guide's six lessons for Grades 7-12 comply with the New York State Education Commissioner's Regulations requiring that students be taught about the nature of HIV/AIDS, the methods of transmission, and the methods of prevention, and that abstinence be stressed as the most effective and appropriate method of prevention. These lessons also focus on risk reduction skill building, on HIV/AIDS resources and services, and on the impact of the HIV/AIDS epidemic in our society. Please note that some lessons may be taught over more than one class period.

Magnify the impact of the lessons by giving students ample opportunities for review, reinforcement, reflection, and practice of risk-reduction skills. To help you expand your HIV/AIDS instructional program, this guide includes additional optional lessons (including information on peer education), teaching strategies, and vocabulary and concept-building activities, as well as classroom guides and a teacher's glossary.

Instructional Program for Special Education

The Office of School Wellness Programs (OSWP) has produced the film "Vulnerable and Capable: Adapting HIV/AIDS Lessons for Students with Disabilities," as well as additional video and print resources, all available on a single disc. Created and distributed by OSWP, this work responds to the citywide—and national—need for professional development materials that enable administrators and teachers to identify and respond to special education students' need for targeted HIV/AIDS education.

"Vulnerable and Capable" is a professional development film on HIV/AIDS education adaptation and best practices for teachers of physically, developmentally, and emotionally challenged students. The film features classroom lessons led by three teachers within District 75, the citywide special education district, interspersed with interviews on adapting and modeling lessons from the curriculum. The disk also includes adaptations for hearing impaired and visually impaired students, adaptations using assistive technologies, lesson plans from the three featured teachers and more.

These resources are available to the public at no charge. For the film go to <http://schools.nyc.gov/Academics/FitnessandHealth/StandardsCurriculum/VC-Intro.htm>. OSWP offers free professional development training specifically for special education teachers on ways they can adapt the lessons for their students. Teachers receive a copy of the Vulnerable and Capable DVD. For more information on receiving a copy of the DVD or attending a special education training, send an email to wellness@schools.nyc.gov.

Some people with developmental disabilities have cognitive limitations that require a multi-sensory mode of learning. They may not understand abstract concepts; rather, concepts must be concretized. The materials used need to be modified to the cognitive levels of these students, and the lessons must include their active participation. With this in mind, examine the lessons carefully before attempting to teach students with disabilities. Such preparation will help ensure that students will understand how to protect themselves from HIV infection.

How to Reinforce HIV/AIDS Lessons All Year Long

Because HIV/AIDS prevention is so important for students, a teacher may reinforce HIV/AIDS lessons beyond the required number of lessons. Some ways to do this are:

- Teach these lessons in conjunction with the health education lessons (in elementary school, lessons are taught throughout the year. In middle and high, the OSWP recommends teaching the required health education course, including the mandated sexual health education content, in 6th or 7th grade for middle school, and in 9th or 10th grade for high school. This sequence assures that students learn about human sexuality prior to learning about the risks associated with sexual behaviors.
- Teach one or more of the optional lessons, strategies, and activities in this guide.
- Review HIV/AIDS facts with periodic question-and-answer games, myth-fact activities, and quizzes followed by discussion, and student-generated questions.
- Have a question box in the classroom so that students can submit questions anonymously. Periodically, share questions with students and ask them to answer when appropriate. Review questions privately and prepare answers prior to going through them with the class. Rephrase questions for clarity, if inappropriate language is used, or if a student's phrasing may breach the student's or someone else's confidentiality.

- Ask students to bring in HIV/AIDS-related newspaper and magazine articles, advertisements, and anecdotes to promote discussion of sexual choices. Encourage students to discuss why abstinence is the safest and most appropriate choice young people can make and to support one another in that decision.
- Have students engage in role-playing and other expressive activities that teach and reinforce decision-making and assertiveness skills. Opportunities to use such skills confront students every day. Students need ample practice and support to strengthen these vital skills. Utilize appropriate, effective videos that reinforce abstinence, discuss risk-reduction methods, and promote attitudes and values for positive behavior

Teacher Note: Role-playing is an effective way to help students internalize and express risk-reduction concepts. See Appendix B, “Classroom Teaching Tips,” for guidance on processing role-plays.

- Have students make a year-long dynamic project of a bulletin board display or mural about medical advances in treating HIV/AIDS. Especially for students who have a relative with HIV/AIDS or who are themselves infected, this can be an ongoing source of hope.
- Establish a productive relationship with a qualified community-based organization that helps people living with HIV/AIDS (PLHWA). Invite its representatives to speak to your students about community resources. (See Appendix B, “Classroom Teaching Tips.”) In turn, work with the organization to involve students in an ongoing volunteer project, such as visiting PLHWA. Not only can such activities give students the satisfaction of helping others, they can also acquaint students with resources in their own community that could be valuable to their own families and friends.
- Keep students in touch with current local, national, and international events pertaining to HIV/AIDS. Encourage students to discuss, debate, and write letters to officials about such issues as HIV testing, abstinence, condom availability in high schools, and the need for increased funding of drug rehabilitation programs and HIV/AIDS support programs.
- Encourage students to educate their peers about HIV by creating theater pieces, posters, or classroom presentations. Peer education can be a powerful way to harness peer pressure as a positive force. In fact, young people who teach their peers are more likely to modify their own behavior to avoid HIV.
- Have students read poems, articles, or stories that deal with HIV/AIDS issues to enhance their knowledge, interest and concern.
- Have students write their own poems, articles, stories, stage or radio plays, songs, etc.
- Assign HIV/AIDS Vocabulary and Concept-Building Strategies (see special section following lesson plans) for homework or as in-class or small-group activities, either in conjunction with HIV/AIDS lessons or to reinforce HIV/AIDS concepts throughout the school year.

Teachers Can Help Save Lives

Teaching students about HIV/AIDS can be one of a teacher's most valuable contributions to their lives. Especially during a time when many young people may be, or are likely to become, sexually active, teachers can help them to challenge the assumption that having sex signifies maturity, and to affirm that learning to behave responsibly is the key to maturity. Whatever teachers' personal feelings are, they should recognize that HIV/AIDS education is not only necessary, but can be a positive learning experience.

Abstinence, because it protects students from HIV, other sexually transmitted infections, and unintended pregnancy, is the most responsible choice for young people. Reinforce the fact that most high school students are not having sexual intercourse. Let students know that even if they have had sexual intercourse, they can choose to be abstinent. Similarly, help students understand that avoiding alcohol and other drugs is crucial to healthy living and avoiding pregnancy as well as infection with HIV or other STIs.

The HIV/AIDS epidemic touches all students' lives. Use this guide to help them make sense of an important health issue and to help prevent them from becoming infected themselves. Request further training, assistance, or copies of HIV/AIDS-related regulations from the New York City Department of Education's Office of School Wellness Programs. See our website at: <http://schools.nyc.gov/wellness>.

Please share comments and suggestions on this curriculum guide to facilitate revision of future editions. Write to:

wellness@schools.nyc.gov

or

The New York City Department of Education
Office of School Wellness Programs
HIV/AIDS Curriculum
52 Chambers Street, Room 209
New York, NY 10007

Explanation of New York City Public Schools' Condom Availability Program

NOTE: Condom Availability is for *High Schools Only*

Since 1987, New York State Education Commissioner's Regulations have required every school district in the state to provide instruction to students in every grade about the nature of HIV infection, methods of transmission, and methods of prevention. The information must be accurate, age-appropriate, and consistent with the community's values. Abstinence from sexual intercourse must be stressed as the most appropriate and effective protection against HIV infection. Schools are encouraged to inform parents or legal guardians that the HIV lessons will be taught. Parents or legal guardians can file a written request with the principal to exempt their children from the lessons on methods of prevention if they agree to give their children such instruction at home.

In Kindergarten through Grade 6, students are given five lessons on HIV/AIDS each year. All junior and senior high schools in New York City must teach at least six HIV/AIDS lessons in every grade.

Since 1991, New York State Regulations have also permitted school districts to set up programs to make condoms available to students who participate in the instructional program, once they ensure that students have been provided with comprehensive guidance about their personal health risks in using condoms and that condoms are provided by trained and adequately supervised school or health service personnel. In February 1991, in response to statistics showing that New York City teenagers were at high risk of being infected with HIV, the New York City Board of Education approved a policy to expand and improve its HIV/AIDS education program. The expanded program included a comprehensive new HIV/AIDS curriculum for all grades; an HIV/AIDS education team in every high school, which included students, parents/guardians, and faculty; an HIV/AIDS information session for parents/guardians of high school students; and a condom availability program for high school students.

Condoms are made available in every high school by trained male and female volunteer staff members in "Health Resource Rooms" (designated rooms in the school open ten or more periods each week at set times). Parents or legal guardians have the right to request that their children be exempted from the condom availability program. Their children's identification numbers are placed on a list (names are not included) to ensure that they will not participate. For all other students, the program is confidential and students are not required to identify themselves by name or to prove that they have permission from their parents to use the resource room.

Health information, counseling and referrals are provided to any student who accepts them when offered or who asks for them. All students are eligible to receive these health resource room services. Students are not required to receive counseling in order to receive condoms. When students request condoms, they can request a condom demonstration or written instructions on correct condom use. For more information, visit the Condom Availability Program at <http://schools.nyc.gov/Offices/Health/OtherHealthForms/HealthResource.htm>.

Responding to Students' Questions

- Listen carefully.
- Provide direct, honest, and age-appropriate answers.
- Check back with the student: "Does that make sense to you?" "Does that answer your question?" It is legitimate to say the following and be sure to always follow through:
 - "I'm not sure. I will find out and get back to you."
 - "Let's talk about this after class so that I can have enough time to explain it to you."
- Check back again: "Let's see if I explained that well. Can you answer the question for us now?"
- If you hear students telling derogatory jokes or ridiculing people with HIV/AIDS, or the concept of AIDS in general, intervene quickly and consistently to make clear to students that harmful language is not tolerated. Emphasize that jokes about HIV/AIDS stigmatize and hurt people with the disease. In order to maintain a safe and positive classroom environment, refer to the classroom ground rules (one of which should be "no put-downs allowed. See Appendix B.) Speak with the person who made the comment privately to explain the comment was inappropriate. If the behavior does not stop, issue a warning about expected behavior; consider disciplinary options, including involving a parent or guidance counselor to address the behavior. For more information, go to the NYC Department of Education's (NYCDOE) Citywide Standards of Intervention and Discipline Measures at <http://schools.nyc.gov/NR/rdonlyres/3BE58537-D746-43B6-A7E7-BBF90B27C395/0/DiscCode2012English.pdf>
- The topic of HIV/AIDS often brings up issues of sexual orientation. In accordance with the NYCDOE's Statement of Policy on Multicultural Education and Promotion of Positive Intergroup Relations, remind students that all people deserve respect and to be treated fairly. Remind students that a bias against lesbian, gay, bisexual, transgender, and questioning people is just as serious and damaging to society as a racial, ethnic, or religious bias, and that expression of harassment or discrimination of any kind will not be tolerated in school. For additional materials, principals and teachers may go to <http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/default.htm>
- The topic of HIV/AIDS often brings up issues related to injection drug use. It is important to stress the danger of injection and non-injection drug use in relation to HIV/AIDS and to a student's general physical and mental health. At the same time, it is important to keep in mind the social factors that lead people to drug use. Stress that individuals who are drug-dependent are in great need of ongoing treatment and societal support to deal successfully with their drug-dependence problems. They need to be supported and encouraged as they learn to make more life-affirming choices and to avoid destructive behaviors.

Answers to Questions Students May Ask About HIV

Q: How do people "catch" HIV?

A: HIV is not the kind of virus that people easily "catch." HIV, the virus that causes AIDS, is present in blood, semen, vaginal fluids, and breast milk of people who are infected. The only way the virus can spread from one person to another is if these infected fluids get into another person's body. The virus can be transmitted through sexual intercourse with an infected partner; through the sharing of needles, syringes/works/skin-popping equipment with an infected person during use of drugs (including steroids); and from an infected pregnant woman to her fetus or to her child during childbirth (perinatal) or through breast milk. However, the possibility of transmission from these different methods varies greatly. Although once an efficient mode of transmission, the incidence of perinatal transmission has been drastically lowered through treatment and advising HIV-positive women against breastfeeding.

Q: Can you get HIV if someone coughs on you?

A: No. HIV is not spread through the air or casual contact. It is not spread by coughing, sneezing, sitting near someone, sharing food or drink with someone, shaking hands, hugging, or touching something an HIV-positive person has touched.

Q: Will I get HIV?

A: Although anyone engaging in high-risk behaviors can get HIV, we are all capable of stopping the spread of HIV. The purpose of HIV education is to provide you with the facts so that you can keep yourself healthy. (After hearing about transmission, if a student is still concerned that he or she has HIV, the student should talk to a parent, teacher, counselor, or doctor.)

Q: What is the difference between HIV and AIDS?

A: HIV (Human Immunodeficiency Virus) is a virus that attacks and weakens the body's immune system, making infected people potentially vulnerable to other diseases. An HIV-positive person may have a brief flu-like illness starting soon after infection. He or she may have other general symptoms of infection (night sweats, swollen glands, fatigue) once in a while. However, many people have few or mild symptoms for as long as ten years or more, even if untreated. AIDS (Acquired Immune Deficiency Syndrome) is not a specific disease, but rather is a collection of related bodily signs and symptoms (syndrome) that occurs in the advanced phase of HIV infection. AIDS is defined by a series of clinical criteria formulated by the Centers for Disease Control and Prevention. These criteria include a diagnosed HIV infection and the presence of one or more of 26 opportunistic infections and clinical conditions, or a T-cell/CD4 cell count below 200 per cubic millimeter of blood. Unless an HIV-positive person shows symptoms that meet these criteria, he or she does not have AIDS. People with HIV infection develop AIDS over varying lengths of time.

Q: If I have friends with HIV, can I still hang out with them?

A: Yes. You cannot get HIV from casual contact with an infected person. You can hug, touch, and kiss your friends. You can eat meals with them. You can talk with them, hang out with them, play games with them, and go to the movies. Sometimes people with HIV/AIDS feel very alone. Friends and family are very important to all of us.

Q: Does everyone who has HIV/AIDS die from it?

A: No. While currently there is no cure, new medical treatments for HIV infection have significantly reduced the amount of HIV in an infected person's body. This means that many people with HIV infection and some people with AIDS can live normal lives for many years. Indeed, these new medications mean that for many people, infection with HIV is becoming a more manageable long-term illness.

Q: Can I get HIV from a blood transfusion?

A: Today, although the blood testing process is not infallible, the chances of anyone becoming infected from a blood transfusion in the United States are remote. Since 1985, the hospital blood supply in New York City has been carefully screened for HIV antibodies and donors screened for risk behaviors. In 1999, many blood banks in the United States began screening blood for the presence of virus (rather than antibodies). Still, some people who are scheduled for elective surgery choose to donate their own blood so that they can receive it should a transfusion be necessary during their operation.

Q: Can I get HIV from a healthcare provider?

A: The risk of becoming infected from contact with an HIV-positive healthcare provider is remote. The CDC (Centers for Disease Control and Prevention) has recommended the use of universal precautions by healthcare workers to minimize the risk of transmitting many diseases, including HIV and Hepatitis. These precautions include general infection control methods (e.g., hand washing), use of a barrier (e.g., latex gloves), proper disposal of "sharps" (e.g., syringes), and other methods that prevent the contact of potentially infectious agents from one person with the skin or mucous membranes of another. The risk of transmission from patient to healthcare worker is far greater than from worker to patient.

Q: How can I help in the fight against HIV?

A: Students can play very important roles. The most important is that they educate themselves as much as possible about how HIV is transmitted and how it is not transmitted. They should personally choose to abstain from sexual intercourse and drug use, and encourage others to do the same, or at least to practice risk-reduction methods. They can initiate discussions with parents, legal guardians, and other caregivers, and share what they have learned. They can fight bias against people with HIV/AIDS by treating them with respect, recognizing that while some may have special needs, all are people trying to live their lives as normally as possible. They might also volunteer to help a person with HIV/AIDS and his or her family. They can work with other young people in peer-education programs that educate young people about HIV/AIDS. They can volunteer their time with community-based HIV/AIDS service organizations or go into the helping professions (education, health, etc.).

Facts About HIV Infection, Prevention, and Treatment

This brief overview provides general information on HIV infection and AIDS, and should be supplemented as needed with other texts on the subject. Since knowledge about the disease and its effects on individuals is continually being updated, administrators and teachers should periodically review and update this information to ensure that it is accurate. The New York City Department of Health and Mental Hygiene (DOHMH) at www.nyc.gov/health provides New York City data, and the New York State Department of Health www.health.ny.gov provides data for New York State. Both offer many resources on prevention and treatment designed for the general public. (See also “Resources” in Appendix E.)

Certain terms used in this overview may be unfamiliar to some readers. While some terms are defined here, readers should also consult Appendix D, “Teachers’ Glossary,” for further explanation or for explanation of terms not defined here.

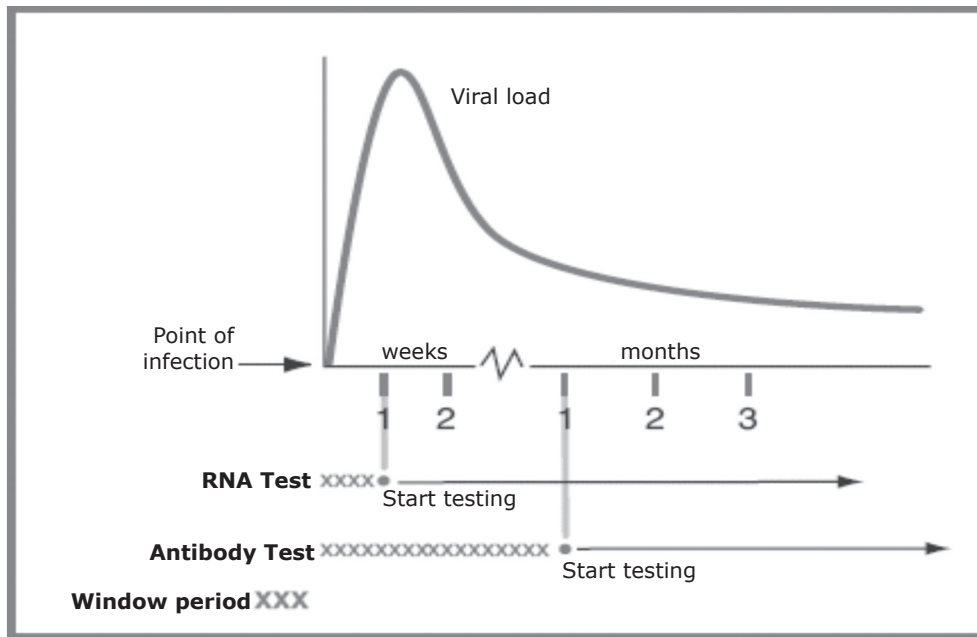
Description of HIV Infection and AIDS

- HIV (Human Immunodeficiency Virus) is a virus that impairs the body's immune system (the body's internal defense against diseases). It primarily targets certain white blood cells (called T-lymphocytes, Helper T-cells, or CD4 cells) that are a specific part of the immune system. If untreated, HIV can advance to AIDS (see below). Illnesses that may occur during AIDS may affect every organ system and impair the central nervous system.
- HIV infection is the condition of being infected with HIV.
- AIDS (Acquired Immune Deficiency Syndrome) is the advanced phase of HIV infection. It is not a specific disease itself, but rather a syndrome or collection of bodily conditions or health problems caused by HIV, and defined by a series of clinical criteria formulated by the Centers for Disease Control and Prevention (CDC). These criteria include a diagnosed HIV infection and the presence of one or more of 26 opportunistic infections (see next bullet) and clinical conditions, or a T-cell/CD4 cell count below 200 per cubic millimeter of blood. If left untreated, people with HIV may eventually develop AIDS.
- The immune system of people with AIDS has been severely weakened. Therefore, people with AIDS are vulnerable to specific diseases that rarely affect healthy adults. These are called opportunistic infections and include illnesses such as pneumocystis pneumonia (PCP), severe yeast infections, cytomegalovirus, herpes zoster, tuberculosis, toxoplasmosis, other parasitic infections, and certain cancers, such as Kaposi's sarcoma.

Spectrum and Course of HIV Infection and Disease

Untreated HIV infection passes through a series of phases. Phases are:

- Acute Phase (Primary HIV Infection) – from exposure and infection to development of antibodies, often accompanied by flu-like symptoms.
- Asymptomatic Phase – literally means “without symptoms”, though the person may experience a few symptoms, such as fatigue, swollen glands, and night sweats, and other signs that accompany most infections.
- Symptomatic Phase – vulnerability to common illnesses (like colds) and additional symptoms (like weight loss, diarrhea). Person may experience first hospitalization.
- AIDS – accompanied by symptoms due to the direct effects of HIV infection, such as wasting syndrome, along with symptoms from opportunistic infections.



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<http://www.kingcounty.gov/healthservices/health/communicable/hiv/publications/infograms/RNAtesting.aspx>

Individuals vary considerably in how quickly they pass through these phases. In any phase, treatment can halt the progress of the disease considerably. In 1996, the introduction of highly active antiretroviral therapy (HAART) changed the lives of many people with HIV or AIDS because it dramatically slowed the progression toward AIDS and decreased the death rate. It is for this reason that HIV is now considered to be a manageable long-term condition.

Because the symptoms after infection are fleeting or vague, many people with HIV are unaware they are infected. The CDC estimates one in five people with HIV are unaware of their infection; and one in four who test positive find out that they have already progressed to AIDS at the time of their first diagnostic test for HIV. The time from infection to appearance of significant symptoms or HIV-related illnesses varies significantly from person to person. HIV is infectious throughout its course. Individuals infected with HIV are capable of infecting others, even if they have no symptoms. This means that all people should take appropriate precautions to protect themselves and others from potential HIV transmission.

Transmission

Unlike flu or measles viruses, HIV is not transmitted through the air. To cause infection, HIV must be transmitted directly into the bloodstream or through a mucous membrane from an infected person to a non-infected person. For this reason, HIV-positive people do not pose a risk to others through any form of casual contact. There is no evidence that HIV is contracted through coughing, sneezing, food preparation, mosquito bites, drinking fountains, toilet seats, or other day-to-day contact.

- HIV is found primarily in the following four body fluids of an infected person:

1. Blood, including menstrual blood.
2. Semen and preseminal fluid, the clear fluid that appears on the penis after it is erect but prior to ejaculation. (This is sometimes referred to by the slang term "pre-cum." Encourage students to use correct terminology.)
3. Vaginal fluid.
4. Breast milk.

Other body fluids, including tears and saliva of an infected person, may contain scientifically detectable traces of the virus but do not contain enough of the virus to transmit it from one person to another.

- HIV can be transmitted from one person to another by any route that brings one of the above four body fluids into contact with the blood or mucous membranes of another person. The three major transmission routes are:
 1. Sexual intercourse: penile/anal, penile/vaginal, and oral (mouth to penis or mouth to vagina). Sexual transmission of HIV occurs by absorption of infected semen, blood, or vaginal fluid through mucous membranes and abrasions (tiny scratches or tears in delicate tissues during sexual intercourse).

Within the category of sexual transmission, there are differences in likelihood of transmission during any unprotected sexual act. Anal intercourse is the highest risk sexual behavior, meaning that it is the most likely mode of sexual transmission, whether it occurs between a man and a woman or between a man and a man. Because the anal mucosa is fragile, tissue tearing and bleeding frequently occur, although they may not always be noticed. These microscopic tears provide potential points of entry for HIV virus. Lymphatic tissue occurs all along the digestive tract, thus there are concentrations of T-cells, one of HIV's favorite targets, near the anus. Vaginal/penile intercourse poses risk to both men and women, but it has been documented that women are more at risk than men because of the more delicate tissue in the vaginal area, especially younger women (whose cervixes are not fully formed) and older, postmenopausal women (who may have experienced some thinning of the vaginal lining).

2. Exposure to infected blood. This occurs primarily through the sharing of equipment for the injection of drugs whether intravenously, intramuscularly, or under the skin. HIV can be transmitted by an infected person during use of syringes or needles or other equipment used by injectors (cotton, cookers, drug solution, and water) for drug injection. When people inject drugs, including steroids or hormones, small amounts of blood can remain in the needles, syringes, or other paraphernalia used in drug preparation. If these are then used by another person, HIV-infected blood can be injected into the next user's bloodstream.

Though much less likely, transmission may also occur through contact with open sores or cuts.

3. Perinatally, from an infected woman to her child(ren) during pregnancy, childbirth, or breastfeeding. However, transmission from an HIV-positive woman to her child through pregnancy, childbirth, or breastfeeding can be prevented. If a pregnant woman is under a doctor's care, the doctor should see that she gets counseling and testing for HIV. If she is HIV-positive, the doctor will see that she reduce the potential for HIV transmission to her child by taking medication during her pregnancy and delivering the child via Caesarean section (C-section). The infant should also receive medications after he or she is born, and is usually given formula instead of being breastfed, as there is a possibility of transmission through breast milk. In fact, in some countries where breastfeeding is common, one-third of the mother-to-child transmission is through breastfeeding, posing difficult choices, especially in countries where there are few supplements with the nutritional and protective value of breast milk.

Preventing transmission from HIV-positive women to their children is one of the "success stories" of HIV prevention in the U.S. In New York City in 1990 there were 321 cases of perinatal transmission. In 2008, there were fewer than ten cases.¹

Prevention

With the advent of effective treatment, people with HIV are living longer and the number of AIDS diagnoses and deaths are lower. But the availability of treatment may lull people into believing that preventing HIV infection is no longer important. While scientists are researching prevention methods such as vaccines and microbicides, these are years from availability.

Prevention remains critical. Major current prevention efforts and recommendations include:

- Preventing sexual transmission.
 - Abstinence from behaviors that can transmit HIV provides the surest protection against transmission of HIV and other STIs.
 - Consistent and correct use of a barrier method from beginning to end for each sexual act that can transmit HIV. Recommendations include the use of a male latex or polyurethane male condom or an FC2 condom ("female" or "insertive" condom), as a barrier against exchange of body fluids. Lambskin condoms should not be used, as the skin contains tiny pores through which potentially infected fluid can pass.

- On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved Truvada, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making a new virus as it enters the body. When used consistently, Truvada has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as correct and consistent condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to <http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>.
- Preventing transmission through exposure to blood.
 - Abstaining from illegal drug use, especially from practices that can transmit HIV and other bloodborne infections.
 - Seeking counseling or treatment for drug use, in order to cease or minimize drug use.
 - If continuing to inject drugs, using practices to reduce risk. These include:
- Using a new, sterile syringe for every injection. Sterile syringes may now be purchased without prescription in pharmacies in New York State, and syringe exchange programs throughout NYC provide them free of charge.
- If syringes must be re-used, they must be sterilized before use.

Using universal precautions during contact with or cleaning of blood or infectious materials in medical and household settings, including the use of latex gloves, disposable syringes, and disinfectant, and other infection control procedures, such as masks and sterilization equipment as necessary.

- Preventing perinatal transmission.

Seeking prenatal care so that pregnant HIV-positive women can be identified. They can then be offered treatment that will prevent transmission to the child and can be encouraged to use formula to prevent transmission via breast milk.

- Treatment as prevention.

Providing antiretroviral treatment to HIV-positive people early in their infection has been shown to dramatically decrease the chance that they will transmit the virus to their uninfected partners. NYC DOHMH now recommends that health care providers offer antiretroviral therapy to any person living with HIV, regardless of the person's CD4 count, both to benefit the individual's health and the health of their partners.

Prevention in all areas increasingly recognizes the role of individuals in taking responsibility not only for themselves but also for their partners.

Role of HIV Testing & Treatment

As effective treatment has evolved, the importance of HIV testing has increased. Only by knowing their HIV status can people seek treatment early in the course of HIV infection. Upon infection with HIV, the virus replicates itself very quickly, so there is a spike in the amount of virus in the blood (viral load). The increase in viral load makes the person more infectious, increasing the likelihood that the infected person can transmit the virus to a partner. HIV antibody tests have become more sensitive and are able to detect HIV sooner, although the window period is still three months.

Starting in September 2010, New York State Law requires that people from 13 to 64 years of age be offered HIV testing while seeking medical services in emergency departments, hospital inpatient settings, or outpatient primary care locations.ⁱⁱ Additionally, in November 2011, the American Academy of Pediatrics recommended that pediatricians offer routine HIV screening to all adolescents at least once by 16 to 18 years of age in health care settings.ⁱⁱⁱ The test is voluntary; before ordering or conducting an HIV test, a provider must first obtain a patient's verbal, and in some cases written, informed consent.

In New York City, HIV testing is widely available and is governed (in all settings) by specific New York State Law and New York State Department of Health regulations. New York State Law protects the confidentiality and privacy of all persons who test positive for HIV. A record of the test and the results are placed in the person's medical chart and providers are required to report HIV positive test results to the NYC DOHMH. This information is maintained under strict privacy regulations. Anonymous testing, in which the person's name is not linked to the HIV test result, is available only at select NYC DOHMH locations. Private providers and most city testing sites must follow named reporting requirements.

Because of the complexities of testing, adolescents should be encouraged to make careful and informed decisions about whether, when, and how to be tested and disclose results. If possible, they should seek out a testing facility where the staff is experienced with adolescents. There is no specific age of consent for HIV testing in New York State. Rather, the person administering the test must assess the person's "capacity to consent" individually.

Home HIV Test: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to: <http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

Many options are available for HIV testing. They involve using different types of specimens, methods of collection, and waiting time to receive results.

- ELISA (enzyme-linked immunosorbent assay or EIA) test is the most commonly used HIV screening test; it detects antibodies that the body produces to fight HIV. Improvements in the ELISA test have made it more sensitive and able to detect infections sooner, however, the test cannot detect whether the infection is acute or chronic. The test is completed by testing a blood or oral fluid (inner cheek/gum) specimen for antibodies to the virus, not the virus itself. It can be offered as a standard blood test or oral rapid HIV test, where specimens can be processed in 20 minutes. If the results of either type of ELISA test are positive (HIV antibodies are found in the sample) then a confirmatory test must be completed.
- Western blot (enzyme immunoassays) or IFA (immunofluorescence assay) tests are confirmatory antibody tests that are more specific, resulting in fewer false positive tests than the ELISA. The Western Blot is most commonly used to confirm HIV positive ELISA tests.
- Virologic (antigen) tests (not antibody tests)
 - NAAT (HIV nucleic acid amplification testing), e.g., polymerase chain reaction [PCR] test. These tests detect the RNA of the virus or the HIV DNA in white blood cells infected with the virus. They are sensitive and can identify new infections sooner than other tests. However, they are expensive and require more technical skills, so they are less commonly used. Certain RNA tests can also detect the amount of virus in the body, and are also known as viral load tests.^{iv, v}

COMPARISON OF RNA AND ANTIBODY TESTS FOR HIV

	RNA/PCR/NAAT TEST	ANTIBODY TEST
Looks for	actual HIV virus	antibodies to HIV
Window period	1-2 weeks	1-3 months
Options for testing	blood, no rapid	blood, oral, rapid
Wait time for results	1-3 weeks	1 week, 20 minutes for rapid

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<http://www.kingcounty.gov/healthservices/health/communicable/hiv/publications/infograms.aspx>

- “4th generation” combination antibody/antigen HIV diagnostic assay. In 2010, the FDA approved the first HIV diagnostic assay that simultaneously detects both antigen and antibodies. “This test can be useful in extending diagnosis in earlier, acute phase (recent) infection with HIV, prior to the emergence of antibodies produced by the infected patient, effectively reducing the window period – that period after initial infection and before the detection of infection based on formation of detectable antibodies. The median detection time was demonstrated to be 7 days earlier (range 0 to 20 days) compared to 3rd generation enzyme immunoassay antibody tests to which they were compared.”^{vi}
- HIV infection diagnosed by a physician or qualified medical-care provider based on the laboratory criteria and documented in a medical record. Oral reports of prior laboratory test results are not acceptable.

CD4 count: The CD4 count is an important laboratory indicator of immune function in people who have HIV infection. It is a strong predictor of disease progression and survival. (See “Spectrum and Course of HIV Infection and Disease”)

Viral Load testing: (Plasma HIV RNA testing) is the most important indicator of response to antiretroviral therapy (ART). It is important for people with HIV to receive viral load tests on a regular basis.

HIV/AIDS Is a Global Issue

HIV/AIDS has affected every continent, and looms over countries that once imagined that they might be immune to its devastation. All people are equally vulnerable, and equally in need of knowledge about how to avoid infection and how to care for those who are already infected. Everywhere, the behaviors that put people at risk are the same: injection or transfusion of infected blood (outside the U.S., in countries where the blood supply may not be adequately protected), sexual intercourse with an infected partner, and being born to or receiving breast milk from an infected mother.

The populations with burden of HIV infection are in Sub-Saharan Africa; the fastest growing HIV epidemic is in India, and South and Central Asia. Eastern Europe and the former Soviet Union also are reporting rising rates of HIV diagnoses. The spread of the epidemic has created major global challenges of loss of human life, disruption of families, loss of the workforce, poor access to HIV treatment, and lack of prevention resources.

Advances in Treatment

There is no readily available “cure” for HIV; the infection remains in the body indefinitely. However, since the mid-1990’s, antiretroviral therapy or ART, has revolutionized the treatment of HIV infection. ART strengthens the immune system by stabilizing or increasing the number of CD4 cells and also by significantly reducing the ability of HIV to copy itself (that is, to replicate) within an infected person’s body. Nowadays, treatment is safe and well-tolerated, causing fewer side effects. The NYC DOHMH now recommends starting treatment upon diagnosis with HIV infection, regardless of the CD4 count. The recommendation is based on evidence that ART can both improve the health of people infected with HIV, and prevent transmission from an HIV-infected person to an uninfected sexual partner. To ensure that treatment remains effective, people with HIV need to be seen regularly by a medical provider with experience managing ART, who can also support their lifelong commitment to ART.

Antiretroviral therapy has extended life expectancy of many people being treated for HIV infection, making a diagnosis with HIV comparable to some other chronic diseases that require treatment and monitoring, but allow for higher quality of life. As a long-term disease affecting all areas of life, living with HIV is dramatically improved by a variety of supportive services that assure access to treatment, and support with adherence to ART. Special programs and providers ensure that access to HIV care and ART are available to low-income, underinsured, and uninsured people.

Although adolescents are legally allowed to consent for HIV testing in New York State, they are only allowed to consent for HIV treatment under certain circumstances:

- If they are legally emancipated
- For emergency care
- When parental involvement is impossible or could cause harm or
- When the minor is sufficiently mature to follow the treatment regimen

The Role of Schools and Communities

Schools can be an effective setting for educational and support services around HIV prevention and treatment. By stimulating awareness, providing factual information, training students in decision making and negotiating, reducing stigma, and helping students learn to educate themselves and others, schools can be powerful influences not just on students, but indirectly on their entire communities.

The future of HIV depends on both students and their communities. Much of the history of fighting HIV was created by individuals concerned about themselves and others, who organized grassroots efforts to lobby for research, treatment, and improved services. This tradition continues in the form of the many community-based organizations that provide prevention and treatment assistance.

HIV/AIDS in Children and Adolescents

Adolescence is a period of intense physical and psychosocial changes, usually beginning and ending in the second decade of life.... [T]he changes of puberty are a marvel of nature and a testimony to the intricacies and wonders of the human hormonal system.^{vii}

Adolescence is sometimes likened to infancy: During no other times in a person's life is growth so rapid and transforming. Adolescents (sometimes defined as individuals aged 13 to 21 years) often seem to veer between childhood naiveté and adult-like maturity. Some seem not to be in a hurry to grow up, while others yearn to take on the responsibilities and privileges of adulthood. Some adolescents, perhaps lacking a protective family structure, feel they have no choice but to grow up fast and take care of themselves. Adolescents often feel concerned or confused about whether body changes and related emotional turbulence are normal.

The "tasks" of adolescence include learning to be independent of parents, developing strong relationships with peers, becoming comfortable with one's transforming body, developing sexual and vocational identities, and defining one's character and personality.

Adolescents seeking to define themselves often experiment with new behaviors. Their series of trials (and sometimes errors), along with parental and teacher guidance and peer input, shape the adults they will become. While exploring the world can be an exciting and rewarding part of growing up, engaging in risky sexual activity and using alcohol and other drugs can lead to HIV infection, STIs, or problems associated with substance use. Adolescents need to learn not only the risks involved with these behaviors, but also the skills (decision making, assertiveness, etc.) that will help them withstand negative peer pressure and make healthier choices.

ⁱ Pediatric HIV/AIDS Surveillance Update (June 2010).

ⁱⁱ <http://home2.nyc.gov/html/doh/downloads/pdf/ah/ch308.pdf> (Accessed 2.4.2012)

ⁱⁱⁱ Adolescents and HIV Infection: The Pediatrician's Role in Promoting Routine Testing. *Pediatrics*, 128(5),1023-1029

^{iv} <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5846a3.htm>

^v <http://www.fda.gov/ForConsumers/ByAudience/ForPatientAdvocates/HIVandAIDSactivities/ucm216409.htm> (Accessed 1.17.2012)

^{vi} <http://www.fda.gov/ForConsumers/ByAudience/ForPatientAdvocates/HIVandAIDSactivities/ucm216409.htm>

^{vii} Lawrence S. Neinstein, M.D. *Adolescent Health Care: A Practical Guide*, 2nd edition. Urban & Schwarzenberg, Baltimore-Muviinich, 1991.

Psychosocial Development of Adolescents¹

TASK	EARLY ADOLESCENCE	MIDDLE ADOLESCENCE	LATE ADOLESCENCE
Independence	Less interest in parental activities	Peak of parental conflicts	Integration of parents' advice and values
Body image	<ul style="list-style-type: none"> • Preoccupation with self and pubertal changes • Uncertainty about appearance 	<ul style="list-style-type: none"> • General acceptance of body • Concern over making body more attractive 	Acceptance of pubertal changes
Peers	Intense relationships	<ul style="list-style-type: none"> • Peak of peer involvement • Conformity with peer values • Increased sexual activity and experimentation 	<ul style="list-style-type: none"> • Peer group less important • More time spent in sharing intimate relationships
Identity	<ul style="list-style-type: none"> • Increased cognition • Increased fantasy world • Idealistic vocational goals • Increased need for privacy • Lack of impulse control 	<ul style="list-style-type: none"> • Increased scope of feelings • Increased intellectual ability • Feelings of omnipotence • Risk-taking behavior 	<ul style="list-style-type: none"> • Practical, realistic vocational goals • Refinement of moral, religious, and sexual values • Ability to compromise and to set limits

Skill Building for Adolescents

Adolescents are continuously developing complex social and cognitive skills. Adolescents need to not only be able to identify risk, but to understand risk-reduction strategies, and to develop and practice the decision-making and communication skills to use them. These skills include effective decision-making, limit-setting, assertive communication, negotiation, and refusal.

HIV Resources for Adolescents

HIV testing is encouraged for every sexually active person. Programs like "The Bronx Knows" and "Brooklyn Knows" have effectively resulted in many thousands more people being tested for HIV in New York City. State law (Chapter 308 of the laws of 2010) states that all persons aged 13-64 who seek healthcare in hospital emergency departments, inpatient units or outpatient primary care clinics/private practices will be offered an HIV test at least once.

More adolescents know that HIV testing is available. Adolescents need to know where to go to obtain counseling and comprehensive health care, both preventive and therapeutic. Some teens have access to school-based clinics and independent multi-service centers dedicated to adolescent care, and many health care service providers outside of school offer free or low-cost services.

By increasing adolescents' awareness of both wellness and health risks, schools can help guide them toward a lifelong practice of healthier behaviors. Additionally, informed adolescents can become educated consumers of healthcare, learning how to ask the right questions and how to obtain the services they need and to which they are entitled.

Improvements in adolescent treatment for HIV (antiretroviral therapy or ART) have made it easier for young people to tolerate the medications and have allowed teens to stay healthier longer. Young people should see a specialist who is an expert in HIV and also in working with adolescents. (See Appendix E for "Resources and More Information.")

¹ Lawrence S. Neinstein, M.D., *Adolescent Health Care: A Practical Guide*, 2nd Edition. Urban & Schwarzenbag. Baltimore-Munich, 1991.

Various Effects of Sexual Activity In Youth

2011 New York City Youth Risk Behavior Survey Data (reported by students)¹

- A quarter of public high school students surveyed have had sexual intercourse in the past three months. Many report behaviors that put them at risk for HIV infection.
- 39 percent of all New York City public high school students surveyed reported having had sex.
- Approximately one in five public high school students surveyed drank alcohol or used drugs before the last time they had sex.
- 12 percent of high school students reported having had four or more sex partners.
- More than one in three high school students who were sexually active did not use a condom during their last sexual intercourse.

New York City Youth Pregnancy Statistics²

Age	BIRTHS			TERMINATIONS (Spontaneous and Induced)			PREGNANCIES		
	< 15	< 18	18-19	< 15	< 18	18-19	< 15	< 18	18-19
2010	102	2,295	5,014	431	4,992	7,578	559	7,686	13,166
2003	122	2,991	5,840	542	6,087	9,047	664	9,078	14,887
2000	202	3,813	6,987	623	7,307	9,726	825	11,120	16,713

Local and National Statistics on Sexually Transmitted Infections (STIs) and Youth

- Every year 4 million people under 20—about one in four sexually experienced teens—acquire an STI, including herpes, HPV (genital warts and precancerous lesions), chlamydia, gonorrhea, and HIV.³
- Chlamydia rates were higher among women ages 15 to 19, and 20 to 24, than in any other age-gender group reported in New York City in 2010.⁴
- Gonorrhea rates were higher among women ages 15 to 19, and men ages 20 to 24, than among other age-gender groups reported in New York City in 2010.⁴
- The rate of new infections for herpes and HPV—both viral STIs—is typically highest during the late teens and early twenties.⁵
- Human papillomavirus (HPV), commonly known as genital warts, affects approximately 20 million people.⁶ Certain types of HPV are associated with cervical cancer.
- Nationwide, at least 45 million people ages 12 and older, or one out of five adolescents and adults, have had genital herpes (HSV) infection.⁶ Though herpes treatment is available, recurrent, painful outbreaks may occur for life.

¹ Centers for Disease Control, Youth Online: High School YRBS, New York City, NY 2009, accessed online November 25, 2011: <http://apps.nccd.cdc.gov/youthonline/App/Results.aspx?TT=G&OUT=0&SID=HS&QID=QQ&LID=NYC&YID=2009&LID2=XX&YID2=2009&COL=&ROW1=&ROW2=&HT=QQ&LCT=&FS=1&FR=1&FG=1&FSL=&FRL=&FGL=&PV=&C1=NYC2009&C2=XX2009&QP=G&DP=1&VA=CI&CS=N&SYID=&EYID=&SC=DEFAULT&SO=ASC&pf=1&TST=True>.

² New York City Department of Health and Mental Hygiene Bureau of Vital Statistics. *Summary of Vital Statistics 2010: The City of New York*. December 2011.

³ American Social Health Association. *Sexually Transmitted Diseases in America: How Many Cases and at What Cost?* Menlo Park, CA: Kaiser Family Foundation, 1998.

⁴ New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Disease Control. *Quarterly Report*. 2011; Vol.9, No. 2.

⁵ Stone KM, Karem, KL, Sternberg, MR. Seroprevalence of human papillomavirus type 16 infection in the United States. *J Infectious Dis*. 2002; 186:1396-402.

⁶ http://www.cdc.gov/std/HealthComm/fact_sheets.htm.

HIV/AIDS In New York City, the United States, and Worldwide

HIV in New York City (NYC)^{1,2,3}

- The first cases of HIV were identified in 1981.
- Just over 100,000 New Yorkers have died of AIDS since 1981.
- As of September 2011, 110,736 New Yorkers had been diagnosed with HIV and presumed to be living with HIV or AIDS.
- In 2010, 3,481 people were newly diagnosed with HIV in NYC.
 - 76.6 percent of new diagnoses were among men.
 - 23.4 percent of new diagnoses were among women.
 - 48.3 percent of new diagnoses were among men who have sex with men (MSM).
 - 21.4 percent were among persons reporting heterosexual transmission risk.
 - 78.6 percent of new diagnoses were among blacks and Hispanics.
 - 35.1 percent of new HIV diagnoses were in people under age 29.
- 1.4 percent of New York City's population is HIV-positive.
- In June of 2000, New York State implemented a 1998 law that mandates named reporting of HIV infection and HIV-related laboratory and clinical events, which enables the NYC Department of Health and Mental Hygiene to better estimate the number of New Yorkers living with HIV or AIDS.
- Males account for 71 percent of people living with HIV or AIDS as of 2010.
- Among men (13+ years), sex with men accounted for 63.1 percent of new HIV diagnoses in 2010. Heterosexual contact accounted for 5.4 percent, and injection drug use accounted for 4.7 percent.
- Among women (13+ years), heterosexual contact accounted for 73.8 percent of new HIV diagnoses in 2010 and injection drug use accounted for 4.8 percent.
- Blacks constitute 47.7 percent of reported cases in NYC; Hispanics 30.9 percent; Whites 18.3 percent; Asian/Pacific Islanders 2.7 percent; and Multiracial/Unknown 0.3 percent.
- Cumulatively, through 2009, more than 4,000 children (less than 13 years of age) in NYC have been diagnosed with HIV/AIDS.
 - 97 percent of these children were infected during pregnancy, labor, delivery, or breastfeeding.
 - About 2,500 of these children are still living with HIV or AIDS.
 - Perinatal transmission (mother-to-child) has diminished significantly. In NYC from 1990-1995, there were 1,951 cases of perinatal transmission and in 2010 there were 9 cases.

¹ New York City HIV/AIDS Surveillance Statistics. New York City Department of Health and Mental Hygiene, 2011. Updated January 4, 2012. Accessed 6/18/12 <http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2010-tables-all.pdf>

² New York City Pediatric HIV/AIDS Surveillance Update. New York City Department of Health and Mental Hygiene, 2011. Updated June 2011. Accessed 6/18/12 http://www.nyc.gov/html/doh/downloads/pdf/dires/ped_annual_rpt_2011.pdf

³ New York City HIV/AIDS Surveillance Statistics. New York City Department of Health and Mental Hygiene, 2011. Updated January 4, 2012. Accessed 6/18/12 <http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2010-trend-tables>.

United States^{4,5,6,7}

The Centers for Disease Control and Prevention (CDC) estimates

- 1.2 million people in the United States were living with HIV infection at the end of 2008, and one out of five are unaware of their infection.⁴
- 47,129 new HIV infections in the United States in 2010.⁵
- The rate of new infections in the U.S. has remained relatively stable. More people are living with HIV/AIDS; while there are new infections each year, fewer people die from AIDS each year.⁴
- In 2008, HIV-related disease (including but not limited to AIDS) remained the sixth leading cause of death among males and females of all races aged 25-44.⁶
- HIV disproportionately affects certain populations; men who have sex with men (MSM), blacks/African Americans, and Hispanic/Latinos are the groups most affected by HIV infection.⁴
- MSM represent approximately 2 percent of the U.S. population but accounted 61percent of new diagnoses in 2010.^{4,5}
- HIV incidence for people young people (aged 13-29) increased 21 percent from 2006-2009, driven by a 34 percent increase in young MSM. There was a 48 percent increase among young black/African MSM.⁷
- Blacks/African Americans are the racial group most affected by HIV/ Blacks/African Americans represented approximately 14 percent of the U.S. population, but accounted for an estimated 44 percent of new infections in 2009.⁴
- From 2007 through 2010, the diagnosis of HIV infection rates among persons aged 15–19 and 20–24 increased.⁵
- Males accounted for 79 percent of all diagnoses of HIV infection among adults and adolescents; the number of diagnosed HIV infections attributed to male-to male sexual contact increased.⁵
- 217 children under 13 years of age were diagnosed with HIV.⁵

⁴ HIV in the United States: An Overview. National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2012. Accessed 6.18.2012. http://www.cdc.gov/hiv/topics/surveillance/resources/factsheets/pdf/HIV_overview_2012.pdf

⁵ HIV Surveillance Report, 2010. Vol 22. Accessed 6/18/2012 http://www.cdc.gov/hiv/surveillance/resources/reports/2010report/pdf/2010_HIV_Surveillance_Report_vol_22.pdf#Page=17

⁶ Centers for Disease Control: National Vital Statistics Reports, Volume 60, Number 6. National Center for Health Statistics. Health, United States, 2010. March 16, 2011 http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_06.pdf http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_06.pdf

⁷ Prejean J, Song R, Hernandez A, Ziebell R, Green T, et al. (2011) Estimated HIV Incidence in the United States, 2006-2009. PLoS ONE 6(8):e17502.doi:10.1371/journal.pone.0017502.

Worldwide^{8,9}

- 30 years into the HIV/AIDS epidemic, HIV remains one of the world's most serious health and development challenges.^{8,9}
- The HIV epidemic has claimed almost 30 million lives and another 34 million people are currently estimated to be living with HIV/AIDS worldwide.^{8,9}
- New HIV infections have declined by more than 20 percent since their peak in 1997.^{8,9}
- During 2010, an estimated 2.7 million people became newly infected with HIV or more than 7,000 new infections per day.^{8,9}
- 1.8 million people died of AIDS in 2010. HIV is a leading cause of death worldwide and the number one cause of death in Africa.^{8,9}
- Access to medication to treat HIV (ART or antiretroviral therapy) has become much more widely available; In 2001, less than 500,000 people received treatment. That number rose to 6.6 million in 2010.⁹
- Almost all those living with HIV (97 percent) reside in low- and middle-income countries, particularly in sub-Saharan Africa.^{8,9}
- Sub-Saharan Africa was home to 67 percent (22.9 million) of people living with HIV/AIDS but only about 12 percent of the world's population.^{8,9}
- In Swaziland has the highest HIV prevalence in the world; 26 percent of the adult population is infected.^{8,9}
- In 2010, an estimated 5 million people in Asia were living with HIV/AIDS.^{8,9}
- Only 47 percent of the 14.2 million people who were eligible for treatment were receiving it by the end of 2010.^{8,9}

⁸ UNAIDS. World AIDS Day Report: 2011.

⁹ Kaiser Family Foundation, HIV/AIDS Policy Fact Sheets. (<http://www.kff.org/hiv/aids/factsheets.cfm>)

LESSON GUIDE

GRADE K

What Does It Mean to Be Healthy?

Performance Objective

Students will be able to describe what it means to be healthy and feel good.

Motivation

Use a large picture depicting children of varied racial and ethnic groups at play. Then ask,

- Who wants to tell us about this picture?
- How do you think these children feel?
- Let's list the words that tell us about these children.
- Write the words on board/newsprint.

From these words, develop a definition of "healthy," e.g., "Healthy means... feeling great, eating nutritious foods, feeling energetic," etc.

Procedure/Development

- Discuss the picture with the class.
- Ask, "What makes you healthy?" In responding to children's answers, affirm both their uniqueness and the things they may have in common with others.

Assessment

Tell children, "Draw a picture of yourself doing something that helps you feel and be healthy." Have children share their pictures and describe why this makes them healthy.

KINDERGARTEN Lesson

1

NEW YORK STATE LEARNING STANDARDS 1

SKILLS

Self-Management

MATERIALS

Crayons

Drawing Paper

Markers

Board/Newsprint

Picture of Children at Play

VOCABULARY

Energetic

Healthy

Nutritious

SKILLS

Communication
Decision Making
Relationship Management

MATERIALS

Crayons
Drawing Paper

VOCABULARY

Clinic
Doctor
Drugstore
Hospital
Nurse
Pharmacist
Sick
Unhealthy

What Does It Mean to Be Sick?

Performance Objective

Students will be able to distinguish between being sick and healthy.

Motivation

- Ask, “Can you tell us about a time when you didn’t feel well?”
- Ask, “How do you feel when you are sick?”

Procedure/Development

- Ask for volunteers to role-play a visit to the clinic or doctor’s office.
 - Roles: child, mother, father, guardian or other responsible adult, doctor, nurse, pharmacist

Teacher Note: If children habitually refer to medical caregivers as “he,” point out that women as well as men are medical caregivers.

Teacher Note: Teachers should be sensitive to the fact that students come from a variety of economic, ethnic, and cultural backgrounds. Not all students will have a private pediatrician and may utilize clinics and emergency rooms as a source of primary care, while other students may utilize alternative healing practices.

- Facilitate the flow of the story through these scenes:
 - (a) Onset of symptoms; child tells parent(s) about symptoms.
 - (b) Child and parent(s) visit clinic or doctor’s office and describe symptoms.
 - (c) Clinician examines child.
 - (d) Child and parent(s) follow clinician’s advice, e.g., they go to a drugstore to fill a prescription for medication, and/or child goes home, has soup and juice, rests.
- Class discussion:

Say, “Sometimes we don’t visit a clinic or doctor’s office when we are sick. What do we do?”

Assessment

Have children draw a picture of themselves when they do not feel well. Have them include in the picture at least one person who helps them. Have them describe how this person helps them when they are sick.

Ask, “If someone you love is sick, what would you do to make that person feel better?”

How Do We Stay Healthy?

Performance Objective

Students will learn ways to maintain good health.

Motivation

Either as a classroom exercise or for homework the day before this lesson, have students cut out pictures of children engaging in healthy behaviors.

Sing, “If you’re happy and you know it, clap your hands...”

Procedure/Development

- Introduce a similar song: “If you’re healthy and you know it...”
- Ask students for ideas on how to adapt the song to the topic of being healthy and what gestures to use.

Example: “If you’re healthy and you know it, wash your hands.” Briefly discuss each child’s suggestion and how to act it out, and write suggestions on board/newsprint. Use the song as a year-round activity, keeping the suggestions posted. Collect pictures that show the healthy behaviors/images listed below and use them to help in creating the song lyrics.

- The song should include the following healthy behaviors:
 - Wash your hands.
 - Eat your veggies.
 - Eat your fruits.
 - Eat your grains.
 - Take a nap/get your sleep.
 - Wear a seat belt/use your car seat.
 - Wear sunscreen.
 - Take a bath.
 - Brush your teeth.
 - Drink water.
 - Exercise.
 - Wear warm clothes (in winter).
 - Use an umbrella.

Assessment

Have children discuss one thing they will do this week to maintain good health.

KINDERGARTEN Lesson

3

NEW YORK STATE LEARNING STANDARDS 1

SKILLS

Planning and Goal Setting

Self-Management

MATERIALS

Drawing Paper

Markers

Board/Newsprint

Pictures of the Listed
Healthy Behaviors

VOCABULARY

Grains

Seat Belt

Sunscreen

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Communication

Decision Making

Relationship Management

VOCABULARY

AIDS

Clinic

Doctor

Drugstore

HIV

Hospital

Illness

Microscope

Nurse

Pharmacist

Sick

Unhealthy

Virus

How Do People Get Sick? What Is HIV? What Is AIDS?

Performance Objective

Students will learn:

- The difference between illnesses that can be easily passed, are hard to pass, and cannot be passed from one person to another.
- The terms HIV and AIDS.
- That HIV and AIDS are hard to get.

Motivation

- Say, "Some illnesses can be passed from one person to another. These illnesses are caused by germs. Germs are very, very tiny, and can only be seen with a microscope. A microscope is a tool that you look through that makes everything look much bigger than it actually is." Discuss how germs can be passed from one person to another (e.g., via sneezing, coughing, touching) and can cause illness.
- Say, "Some illnesses CANNOT be passed from one person to another and are not caused by germs." (Examples that students may be familiar with include asthma, diabetes.)
- Germs that can be passed from one person to another come in two types:
 - EASY to pass germs can be passed from one person to another through coughing, sneezing, and touching (flu, strep throat, cold).
 - HARD to pass germs cannot be passed to someone else through coughing, sneezing, or touching (HIV).

Procedure/Development

- HIV/AIDS. Define HIV: a virus (a kind of germ) that lives in the blood and can lead to AIDS. Define AIDS: a group of illnesses caused by HIV that makes it hard for people to get well once they are sick.
- Tell the children, "HIV is not easy to get. One way it can be passed from one person to another is if blood from a person with HIV gets into the blood inside of another person's body. A general health rule is to bandage all cuts to help prevent anything from getting into the blood inside your body."

Assessment

Have children pick a partner. Have one play a doctor and the other a patient. Have the "doctors" explain to the patients why HIV is hard to get. When done, ask several "patients" to explain what their doctor said to them.

Teacher Note: Remind children that they are not to touch each other or remove any clothing. The activity will just involve speaking with the other student.

Who Helps Us When We Are Sick?

Performance Objective

Students will learn to identify people who can help them when they are sick.

Motivation

Ask, “Who helps us when we are sick?” Brainstorm a list as a large group.

Procedure/Development

- List or sketch on separate word cards the people that children named during the brainstorm on who helps when we are sick. During the discussion, elicit the following points:
 - Usually the first person who helps is a parent, guardian, or caregiver. Often that help is enough to help the sick person get well.
 - Sometimes we need professional medical care. When is such care needed and who provides it? (Answers might include: doctor, nurse, a pharmacist who recommends over-the-counter medication, etc.) List various health caregivers. Discuss their roles.
 - Sometimes we need emergency medical care. Who provides such care? (Answers might include: firefighters, police, hospital emergency room staff, etc.)

Teacher Note: If children habitually refer to medical caregivers as “he,” point out that women as well as men are medical caregivers.

Teacher Note: Teachers should be sensitive to the fact that students come from a variety of economic, ethnic, and cultural backgrounds. Not all students will have a private pediatrician and may utilize clinics and emergency rooms as a source of primary care, while other students may utilize alternative healing practices.

- Put the word cards in a box. (Pictures on these word cards may be helpful.)
- Have children take turns pulling a card out of the box for a game of charades. Other children must guess what type of caregiver they are.

Assessment

Distribute magazines. Have children find pictures of family and professional medical caregivers. Cut and paste to create a class collage.

Teacher Note: Use magazines that depict people of varied racial and ethnic groups.

KINDERGARTEN Lesson

5

NEW YORK STATE LEARNING STANDARDS 1, 3

SKILLS

Relationship Management

Self-Management

MATERIALS

Box for Word Cards

Magazines

Paper or Cardboard for Collage

Paste

Pictures of Health Caregivers, etc.

Scissors

Word Cards

VOCABULARY

Caregiver

Collage

Emergency

Over-the-Counter

LESSON GUIDE

G R A D E 1

How Can We Stay Healthy?

Performance Objective

Students will be able to identify good health practices.

Motivation

Ask, “What do you do to stay healthy?” (Anticipated responses: get enough sleep, eat healthy foods, exercise, wear a coat in cold weather, etc.) You should reintroduce the concept of health and what it means to be healthy.

Procedure/Development

- With children, create a healthy practices chart like the one below.

THINGS TO DO IN SCHOOL/AT HOME TO STAY HEALTHY:

- Wash hands (after blowing your nose, coming inside after riding a subway or bus, coming in after playing outside, after petting an animal, using the bathroom and before eating or preparing food).
- Brush and floss teeth. (Show a floss kit to children. Since some may be unfamiliar with the practice, try to get samples from a neighborhood drug store or dentist’s office for students to take home.)
- Exercise.
- Get enough sleep so you are energetic and alert. How many hours is enough? According to the CDC, children aged 5-10 should get between 10 and 11 hours of sleep each night.
- Get the right shots from the doctor or clinic that can help you to avoid disease (immunization). Examples are getting vaccinated for the flu or chicken pox.
- Participate in recreational, fun activities.
- Eat nutritious foods like fruits, vegetables, cereal, fish, cheese, and chicken. Avoid eating too many non-nutritious foods [Examples are desserts such as cakes, cookies and ice cream; and fast foods such as hamburgers, French fries, fried chicken and fried rice].
- Drink milk (if you can digest it) and pure juices (in moderation). Avoid non-nutritious drinks (sodas and fruit punch).
- Express feelings (laughing, crying, telling people what bothers you and what pleases you, etc.).
- Follow safety practices (tying shoelaces so you don’t trip, crossing streets carefully, lining up and not pushing others, not playing with matches or in traffic, etc.).
- Do not share combs or brushes.
- Dress for the weather.
- Limit television and video games.

- Have children make a collage showing good health habits.

Assessment

Have children make a list of personal health goals and health habits that they are going to work on. Children may need to draw pictures to illustrate their personal health goals and health habits.

GRADE 1

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Planning and Goal Setting

Self-Management

MATERIALS

Floss Kit (Optional)

Magazines

Markers

Board/Newsprint

Paper or Cardboard for Collage

Paste

Scissors

VOCABULARY

Goals

Habit

Health Habits

Immunization

Nutritious

Prevent

Protect

Vaccination

SKILLS

Relationship Management

Self-Management

MATERIALS

Bulletin Board

Tacks

Word Cards

VOCABULARY

AIDS

Allergies

Asthma

Cancer

Chickenpox

Contagious

Flu

HIV

Poison Ivy

Ringworm

Treatment

Virus

How Are Diseases Passed from One Person to Another?

Performance Objective

Students will be able to distinguish between diseases that can be passed from one person to another easily and those that are passed with greater difficulty, as well as diseases that cannot be passed from one person to another.

Motivation

Brainstorm: "What are some illnesses or sicknesses?" (e.g., flu, cold, HIV, asthma, cancer, ringworm, poison ivy, allergies, diabetes). Make word cards by writing answers on cards.

Procedure/Development

- Count the word cards. Ask volunteers to come to the front of the class; give each volunteer a word card to hold.
- Ask volunteers to find ways to group themselves according to diseases that go together. Discuss ways to group diseases: by diseases' characteristics, e.g., those that cause a physical change (rash, fever), or by children's experiences, e.g., diseases that children in the class have had (asthma, ringworm, colds). Discuss certain types of diabetes and how someone may not feel any symptoms.
- Then teach them to classify diseases this way:
 - a) Easy to Pass – diseases or sicknesses that we can share with or get easily from another person through coughing, sneezing, and touching (cold, flu, chickenpox);
 - b) Hard to Pass – disease or sicknesses that are harder to share with or get from other people (HIV); and
 - c) Cannot Pass – diseases or sicknesses that we do not get from or pass on to other people (cancer, diabetes).
- Explain that contagious (easily transmissible) diseases can be passed to others by: breathing in someone's sneeze or cough, touching someone's hand when the person has just wiped his nose, touching ringworm. Refer to previous lesson.
- Regarding HIV, assure students that HIV is a virus (a type of germ) that people cannot pass on in the same ways they can pass on a cold or sore throat (by breathing in someone's sneeze or cough), or other infections such as ringworm (by touching them). Rather, someone can get HIV only when body fluids such as blood from a person with HIV gets into the blood inside of her or his body.

Assessment/Homework

Have the children work cooperatively to post the word cards in three columns on a bulletin board or in pocket folders: Easy to Pass, Hard to Pass, Cannot Pass. Assist the children with this activity. The activity should be reviewed periodically. Say, "On a sheet of paper, write down what you would tell your best friend who is worried about getting HIV from someone."

What Are Viruses? How Do They Enter the Body to Cause Disease?

Performance Objective

Students will be able to:

- Define viruses as types of germs that can cause illness.
- List three ways in which viruses can enter the body.

Motivation

- Ask, “How can people enter a building?” (Anticipated answers: through doors and windows.)
- Confirm: “People look for openings through which they can enter.”
- Establish the comparison between people entering a building and viruses entering a body: “Viruses are tiny germs that can cause disease. They look for openings through which they can enter the body.”

Procedure/Development

- Draw a house or apartment building with many doors and windows on the board/newsprint. Ask children to circle openings where people could get in.
- Draw a person and point to different parts of the body. As you point to each part, ask the children if a virus can get in through these parts. If the answer is yes, circle that body part. Be sure to point at body openings, such as the eyes, ears, nose, and mouth.
- Ask, “Why didn’t I circle the knee?” (Children will say it is not a body opening.) Discuss: “Cut skin becomes a body opening through which viruses and other germs can enter the blood. Cuts should be cleaned and covered to protect them from infection.”
- Review previous lesson: germs breathed in through the nose or mouth (two body openings) can carry contagious (easy to pass) viruses, such as the flu. Germs that are transmissible but hard to get from other people are not breathed in; they must enter the bloodstream.

Assessment/Homework

Have students draw a picture of something they can do to keep germs from entering their bodies or the bodies of others. For example, they may draw someone who washes hands, cleans and bandages a cut, or covers the mouth when sneezing or coughing.

GRADE 1
Lesson

3

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Self-Management

MATERIALS

Markers

Board/Newsprint

VOCABULARY

Contagious

Disease

Germ

Infection

Transmissible

Virus

SKILLS

Self-Management

MATERIALS

Drawing Paper
Markers/Crayons

VOCABULARY

Cure
Dangerous
HIV
HIV-Positive
Immune System
Medicine
Vaccine
Virus

How Do Our Bodies Fight Viruses? Why Can't Our Bodies Fight HIV?

Performance Objective

Students will be able to:

- Describe the function of the immune system.
- Describe how HIV keeps the immune system from working properly.

Motivation

- Review the concept of the previous lesson: viruses enter the body through openings.
- Discuss what happens when something dangerous appears. (Answer: We try to run away or fight it off.)
- Say, "When a virus enters our body we cannot run away, but the body does have a way to fight it off. This is the job of the immune system."

Procedure/Development

Tell the following story and have children dramatize it:

- Compare the immune system to a superhero who rushes in to stop the virus from causing illness.
- Explain that HIV is an especially dangerous virus because it attacks the immune system and takes away its power. Without a strong immune system, lots of viruses and other germs can get in. They cannot be "caught" by the immune system.
- Point out that sometimes medicines can help the immune system fight illnesses. If HIV attacks, some medicines can help the immune system get back its super powers. The treatments sometimes make a person who is HIV-positive feel better. But they do not get rid of HIV altogether. Doctors are still working on finding a cure or a "shot" (vaccine) for HIV.

Teacher Note: Remember some students may have or have had a friend or family member with HIV. While there is currently no cure, there are treatments that often help people to live healthy, full, and productive lives for many years.

Assessment/Homework

Say, "Your friend finds out her uncle is HIV-positive. What could you say or do to help your friend better understand what is happening to her uncle's immune system?"

Draw a picture portraying the immune system as a superhero fighting illness, and write what is happening in the picture.

When We Are Sick, What Can We Do to Get Better?

Performance Objective

Students will be able to:

- Describe the proper use of medicine.
- Understand the importance of family care and support at times of illness.

Motivation

Discuss with the children how they feel when they are sick, and how their families help them, e.g., take child's temperature; give feverish child a cool bath, water to drink, medicine to bring down a fever; give child extra blankets, tissues; encourage child to rest, stay home from school; take child to clinic or doctor's office.

Procedure/Development

- Ask, "Sometimes when people are sick, they take medicine to feel better. How do you feel about taking medicine?"
- Ask, "What are medicines for?" "Who should give them to us?" (Only a parent or guardian or other responsible adult, such as a grandparent, nurse, doctor.)
- Ask, "Why should people not take a medicine prescribed for someone else?" (Some medicines have to be ordered by a doctor, who writes a prescription. If people take medicines prescribed for someone else, they could get sick.)
- Ask, "If you were a parent, which of these would you allow your child to eat or drink?" Make a list of the following words on the board/newsprint and read aloud: a banana, unwrapped lollipop (say it was found on the sidewalk), cough medicine, coffee, half-eaten sandwich (say it was left over in a restaurant by someone else), candy bar.
- Ask, "Why should students not eat or drink an unknown substance?" (It could make them very sick.)
- Note that HIV is not passed through eating food that was shared with an HIV-positive person, or by taking medicine prescribed for an HIV-positive person. Review the fact, discussed in Lesson 2, that HIV can be passed but is hard to get; HIV must actually get into the blood inside of our bodies in order to make us sick. Be sure to stress that it is never good to take someone else's medicine.
- Role-play a child telling a parent he or she is sick. What happens? Add a role-play of a doctor giving a prescription for an appropriate illness (e.g., strep throat) or a doctor not giving a prescription for an illness like the flu and prescribing bed rest, "TLC" (tender loving care), and fluids, etc.

GRADE 1 Lesson 5

NEW YORK STATE
LEARNING STANDARDS
1, 3

SKILLS

Communication
Decision Making
Relationship Management
Self-Management

MATERIALS

Markers
Board/Newsprint

VOCABULARY

Medicine
Prescription

Assessment

Have children role-play or discuss the following situations:

- When Juanita visits Tanya, Tanya suggests they taste some good-tasting medicine in the medicine cabinet. What should Juanita do?
- Tony doesn't feel well. He remembers that there is medicine left over that had been prescribed for his sister. His sister says she thinks it would be okay for Tony to take it. What should Tony do?

Teacher Note: Be sensitive to the fact that students come from a variety of economic, ethnic, and cultural backgrounds. Not all students will have a private pediatrician and some may utilize clinics and emergency rooms as a source of primary care, while other students may utilize alternative healing practices.

IMPORTANT NOTE: Teachers are mandated reporters of child abuse, including sexual abuse. If you suspect that a student is experiencing abuse or neglect, report it immediately to your guidance counselor, social worker, or principal, who is required to report the suspected abuse to the New York Statewide Central Register Child Abuse and Maltreatment Hotline (1-800-342-3720).

LESSON GUIDE

G R A D E 2

What Are Some Healthy Choices Children Make?

Performance Objective

Students will be able to identify healthy and unhealthy choices.

Motivation

Tell the following story:

Leslie wakes up late one morning and hurries to get ready for school. It is a cold, rainy day in November. Leslie puts on her favorite T-shirt, shorts, and sandals.

She hears her little brother sneezing and coughing. He is in bed with the flu. She says, "Good morning, Bobby" and gives him a hug and a kiss to make him feel better.

Leslie slurps some vanilla pudding for breakfast. It gives her a funny white moustache. She brushes her teeth but skips the toothpaste, and does not bother combing her hair. She grabs her schoolbooks but leaves her homework on the kitchen table. She is in a rush and she forgets a raincoat or umbrella. She steps right into a big puddle on the sidewalk. The water feels cold on her bare toes.

"Oh, well," says Leslie. "That's one way to get clean!"

Procedure/Development

- Have the class sit in a storytelling circle or cluster around you. Discuss the concept of choices. Review Leslie's story, having children dictate what Leslie's choices were. List the choices on the board/newsprint, entitling the list "Menu of Choices." Have children tell you what unhealthy choices Leslie made. Say, "What healthy choices could she have made?" Mark them with a star.
- Going around the circle, direct the children to continue Leslie's story by telling of another choice Leslie makes as she continues her day. Tell them they may choose to have Leslie make healthy or unhealthy choices. During the storytelling, pass the paper plate "face" around. The child whose turn it is to be the storyteller tells of Leslie's choice; the child next to him or her shows the happy face if the storyteller has Leslie make a healthy choice, and the frowning face if Leslie's choice is unhealthy.
- Each child should participate, until the story takes Leslie through the day and on to bedtime (or into the next day if necessary). Intervene from time to time to discuss alternative choices and repeat the "Menu of Choices" exercise.

Assessment/Homework

Have children write a brief story about a time when they made a healthy choice. Read the stories aloud and have the class identify why it was a healthy choice.

GRADE 2

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Markers

Board/Newsprint

Two Paper Plates,
Stapled Back to Back
(one side shows a smiling face;
the flip side shows a frowning face)

VOCABULARY

Medicine

Prescription

SKILLS

Self-Management

MATERIALS

Activity Sheet 1:
Healthy Again!

Activity Sheet 2:
Later Will I Be Well?

Crayons

Markers

Board/Newsprint

VOCABULARY

Diagnose

Heal

HIV

Immunization

Pharmacist

Prescription

Prevent

Recover

Report

Symptoms

Treatment

What Happens When We Get Sick?

Performance Objective

- Define prevention, symptoms, diagnosis, and treatment of illness.
- Identify what people can do to prevent and treat illness.

Motivation

Have children brainstorm ways people take care of their health. Then review good and poor health choices Leslie made in the story in Grade 2, Lesson 1.

Procedure/Development

- On the board/newsprint write "Illness: 5 Things to Think About:"
 1. Prevent (stop) illness.
 2. Report (tell) symptoms (signs) of illness.
 3. Diagnose illness.
 4. Treat illness.
 5. Prevent further illness.
- Review the list with the children. Then discuss:
 - What are ways to prevent sickness?
Eat well, get enough sleep, wash your hands with warm water and soap before preparing food and eating, coughing, playing, sneezing, petting animals, riding the subway or bus, and after using the bathroom. Don't get too close to someone with a cold, don't let anyone else's blood touch your body, get the right immunization shots from the doctor or clinic.
 - What are examples of symptoms (bodily signs) of illness?
Differentiate between mild symptoms (a runny nose) or more serious symptoms (high fever, severe pain, rash).
 - When symptoms are serious, what should people do?
Only doctors or nurses are qualified to diagnose serious illness, i.e., tell what is really wrong.
 - When symptoms are serious, why should people not treat themselves?
Only doctors can prescribe the correct medications. Define "prescribe." Explain that some medicines have to be ordered by a doctor, who writes a prescription telling the patient when and how much to take.
- Distribute and read aloud the poem "Healthy Again!" Have children discuss the poem, mark the poem, and draw a picture as directed.
- Say, "The poem 'Healthy Again!' describes a child who is ill; we do not know what the illness is, but based on the poem we may assume that it is curable. The child experiences symptoms, diagnosis, treatment, and healing. By the end of the poem, the child can resume normal activities."

- Have the children read the poem “Later Will I Be Well?” about a child who is infected with HIV, as a contrast to “Healthy Again!” Ask the children the following questions (see teacher’s answer guide below):
 1. How does HIV affect a child who becomes ill?
 2. What does the poem’s title (name) mean?
 3. Who wants to tell us what the first line in the fourth stanza means? It says, “For now, I do recover.”
 4. Who wants to tell us what the last line in the fourth stanza means? It says, “Will HIV put my life on the line?”
 5. What are some ways to be a good friend to a child who has HIV?

Teacher Note: The poem “Later Will I Be Well?” describes the experience of a child infected with HIV. Unlike the sickness described in the poem “Healthy Again!,” HIV is a virus that does not go away. If left untreated, HIV makes one susceptible to serious illnesses, infections, and cancers. And because of the stigma sometimes associated with HIV, children with HIV are sometimes ostracized by peers and even by some adults. New treatments, called ART are very effective in preventing perinatal transmission, so few young children are currently infected in NYC.

The first four stanzas of this poem explain effects of HIV and the apprehension an HIV-positive person feels when illness strikes. This encourages empathy. The poem’s last stanza, however, addresses the issue of stigma. The poem’s narrator asks to be treated like a child who happens to have HIV, instead of being “labeled” an “HIV case.”

This poem can also be used with older children and adolescents.

Teacher’s Guide to Answers to Questions about the Poem, “Later Will I Be Well?”

1. The immune system helps stop germs from making us ill. But HIV prevents the immune system from doing its job. Therefore germs are able to make an HIV-positive person more ill than when they infect someone who does not have HIV, and it takes longer for an HIV-positive person to get better.
2. HIV is a serious infection that does not have a cure. Many people with HIV may get very sick or even die from serious illnesses they can get. In the fourth stanza, the poem’s narrator is wondering if and when an illness may prove to be “the big one” from which he or she will not be able to recover. The title reflects the hopes and fears of the HIV-positive child. The child is probably questioning a doctor, a parent, or a guardian.
3. “For now” means that at this point in HIV infection, the immune system is still able to give some protection against germs.
4. “Will HIV put my life on the line?” refers to the child’s awareness that HIV-related infections and cancers can be fatal. Every time a child with HIV gets very sick with an HIV-related illness, he or she may have his or her “life on the line,” or be in serious danger of dying.
5. The poem’s narrator reminds the reader that HIV-positive children like to laugh and play, just as all children do. Most of the time, we do not know who has HIV; we can’t tell by the way a person looks. Information about someone’s infection with HIV is confidential (private). Therefore:
 - Try to be friendly toward all children.
 - Talk with a child who is ill and ask if you can help (e.g., by telling an adult).
 - If you are ill, try to keep from spreading the illness to other people: cover your mouth when you cough or sneeze, explain that you are ill, and wash your hands frequently so no one can catch anything from you.
 - If you have questions about HIV, ask your parents, guardians, doctor, or teachers.
 - Remember that you cannot get HIV by playing or eating with a child who has HIV.

Assessment/Homework

Have students share a time they were ill using the discussion of illness reviewed in the earlier part of the lesson.

Teacher Note: Students diagnosed with HIV have a right to privacy and a free appropriate public education. They are entitled by law to confidentiality about their HIV status, about HIV -related illness, or information that can reasonably be used to identify them as having HIV.

Disclosure of HIV and AIDS information is governed by the New York State Public Health Law that went into effect in 1989 (i.e., Section 2782, Confidentiality and Disclosure, and Section 2783 Penalties; Immunities). Willful commission of an unauthorized act of disclosure is a misdemeanor and punishable accordingly; a person is also subject to a civil penalty not to exceed five thousand dollars (\$5,000) for each occurrence of unauthorized disclosure.

No disclosure of confidential HIV-related information involving a student shall be made without first obtaining the informed written consent of the student (if he/she has the capacity to consent to such disclosure) or his/her parent or guardian on the New York City DOHMH-approved form (<http://www.health.ny.gov/forms/doh-2557.pdf>).

Healthy Again!

by Betty Rothbart

I eat good food
And sleep enough
But some diseases
Are very tough.

So things I do
To stop disease
Don't always work.
Achoo! I sneeze.

My throat is sore,
I'm chilled and hot.
A red rash spots
My skin with dots!

I go to a doctor
Who says what's wrong
And prescribes medicine
That's awfully strong.

But I drink it down
And stay in bed,
Get plenty of rest
Like the doctor said.

Ta-da! I'm better!
I can play with friends.
I'm so relieved
When sickness ends.

Directions:

- In red crayon, underline what this child does to prevent illness.
- In green, underline the child's symptoms.
- In blue, underline where the doctor diagnoses illness.
- In purple, underline treatment for the child's illness.
- Draw a picture of the child in the poem.

Activity Sheet 2

Later Will I Be Well?

by Betty Rothbart

In my body, just like yours,
Are muscles, blood, and bones,
A beating heart, and a sweet tooth
That loves ice cream cones.

But in my blood is something extra.
I have a virus, HIV.
It keeps my body from stopping germs,
And lets illnesses linger in me.

So you get sick, I get sick.
But you might get well in a week,
While I lie in bed even still,
Feeling miserable and weak.

For now, I do recover.
How great! Like you, I am fine.
But I worry about the next bout with germs.
Will HIV put my life on the line?

I want to be like other kids,
To play, and daydream, and race.
I want to be your friend, and you to be mine.
I'm a kid with HIV, not an "HIV case."

What Causes and Prevents the Spread of Illness?

Performance Objective

Students will be able to:

- Distinguish between diseases that can be passed and those that cannot.
- Identify how germs are shared or passed to cause disease.

Motivation

- Ask, “Where do diseases come from?” (germs)
- Ask, “How do germs get passed from one person to another?” (Anticipated responses: sneezing, coughing, sharing food.)

Teacher Note: Teachers should complete a list of modes of transmission, e.g., eating an unwashed apple, sharing a drink with someone sick, not washing your hands before eating/after using the restroom.

- Say, “When something is passed from one person to another, it’s also called transmission.”

Procedure/Development

- Explain, “Germs have several ways they can be shared or passed from one person to another: through air, skin-to-skin, through saliva, through blood.”
 - Ask, “Which way of sharing germs is the easiest way for disease to spread?” (Airborne: something that is carried through the air; skin-to-skin.)
- Say, “Think of examples of diseases that can be passed or shared easily and how they are passed.” (Examples: flu, cold—germs that move through the air are easier to transmit.)
 - “Which way is hardest?” (Bloodborne: something that is carried through the blood.)
- Say, “One bloodborne virus that can be passed or shared is HIV. This means that the only way you can contract HIV is if blood or other body fluids from a person with HIV gets into the blood inside of your body, through a body opening or a break in your skin. This makes it hard to contract. HIV may lead to AIDS, a sickness that we will discuss in the next lesson.”
- Explain, “Some diseases that cannot be passed from one person to another are diabetes, allergies, and asthma.”
- Brainstorm with the class a thorough list of ways they can prevent or reduce transmission of germs (covering your mouth when coughing/sneezing, washing your hands, not sharing cups and utensils, cleaning and covering open wounds, taking care of our skin, etc.).

Assessment/Homework

Have students write sentences that use the new vocabulary.

- Say, “Write a story using as many of the vocabulary words as you can, describing prevention and the spread of illness.”

GRADE 2

Lesson

3

Prevention

**NEW YORK STATE
LEARNING STANDARDS
1, 2**

SKILLS

Decision Making

Relationship Management

Self-Management

MATERIALS

Markers

Board/Newsprint

VOCABULARY

Airborne

Bloodborne

Contract

Saliva

Transmission

Transmit

Virus

SKILLS

Self-Management

MATERIALS

Crayons

Markers

Board/Newsprint

VOCABULARY

AIDS

HIV

Immune System

Resist

Virus

What Is the Immune System's Role in Fighting Illnesses? How Does HIV Affect the Immune System?

Performance Objective

Students will be able to:

- Describe the immune system.
- Describe how HIV weakens the immune system.
- Understand that if HIV progresses it breaks down the immune system, allowing other illnesses to harm us.
- Explain that if a person with HIV takes medicine, that person can live a long, healthy life.

Motivation

- Ask, "What happens when a virus enters the body?" (Anticipated response: "It makes you ill.")
- Explain, "Viruses often enter our bodies and do not make us ill. That is because our body has an immune system that fights the virus so that it can't make us ill."

Procedure/Development

- Explain, "A virus is like an invader and the immune system is like a group of crime fighters that halt the virus from causing illness."
- Explain, "HIV weakens the immune system so that it cannot fight the virus. When the immune system isn't working properly, more disease-causing invaders can make a person sick because the body cannot resist disease."
- Tell students that while there is currently no cure for HIV, there are many effective treatments for the infection. The medicines make the immune system strong enough to kill disease-causing invaders and to keep the body healthy. By taking care of his/her body and taking medicine correctly, a person with HIV can live a long, healthy life.

Assessment/Class Project

Divide students into small groups. Distribute materials and ask groups to draw a picture contrasting the immune system's response to a flu virus and HIV.

How Do People Feel When They Are Sick? How Do Other People Feel About Them?

Performance Objective

Students will be able to:

- Say how sickness affects people.
- Say how other people can help sick people feel better.

Motivation

- Display two pictures:
 - A person in bed with a thermometer, unhappy expression.
 - A person in bed with flowers and cards nearby and person taking care of him/her.
- Ask children to describe each picture. Ask, “How do you think the person in bed feels?”

Procedure/Development

- Ask children, “How do you feel when you are sick or when someone in your family gets sick (e.g., parents)?” List “feeling words” on the board/newsprint.
- Divide children into three groups and have groups think of ways the following can help people who are ill:
 - Parents, step-parents, guardians, grandparents, aunts, uncles, etc.
 - Healthcare system (nurse, doctor, clinic, hospital).
 - Friends.
- Have groups share their thoughts with the class.
- Stimulate a class discussion about what is most important to children when they don’t feel well.

Assessment/Homework

Have children interview a parent or guardian and ask what they remember about when they were sick during childhood. The interview may be recorded in the parents’ native language. Have children write or draw a picture about their parent or guardian’s memories. The students can share their families’ memories with the class.

GRADE 2
Lesson

5

NEW YORK STATE
LEARNING STANDARDS
1, 3

SKILLS

Relationship Management

Self-Management

MATERIALS

Markers

Board/Newsprint

Pictures Described in Motivation

VOCABULARY

“Feeling Words” About Illness
Contributed by Children
(e.g., Afraid, Bored, Lonely,
Nervous, Relieved, Scared, Upset)

Thermometer

LESSON GUIDE

G R A D E 3

How Do We Catch Germs That Make Us Sick?

Performance Objectives

Students will be able to identify:

- How germs enter the body and cause sickness.
- Ways to keep from getting sick.

Motivation

Ask, “How do people know when they are sick?” Encourage the children to discuss physical and emotional symptoms (signs), e.g., sneezing, coughing, fever, earache, runny nose, sore throat, tiredness, feeling sad, or worried.

Procedure/Development

- Say, “Have you ever had the flu (influenza)? How do people get the flu?”
- Write children’s answers on the board/newsprint. (Anticipated answers: being sneezed on, drinking from someone’s glass, using someone’s towel, kissing someone who has the flu, something was “going around,” germs got into body.)
- Explain, “Many sicknesses are caused by germs that get into people’s bodies through body openings. Germs are so small they can only be seen with a microscope.”
- Explain, “Viruses are types of germs that can be spread or transmitted in many ways.” Elicit from children some ways that viruses can be transmitted. List their answers on the board/newsprint.
- Say, “List ways people can protect themselves from viruses entering their bodies” (e.g., don’t get too close to people with a cold or the flu; don’t share glasses or silverware or eat from same plate; wash hands; get the right immunization shots from the doctor or clinic—these vaccines prevent people from getting certain diseases).
- Explain, “By keeping our bodies strong and healthy and keeping viruses away from our bodies, we are less likely to get sick.”

Assessment/Homework

Have each child write a story about a time when he/she had a cold or the flu, including things he/she did to get well and to keep from passing the sickness to other people.

GRADE 3

Lesson

1

NEW YORK STATE
LEARNING STANDARDS
1, 2

SKILLS

Decision Making

Self-Management

MATERIALS

Markers

Board/Newsprint

VOCABULARY

Flu (Influenza)

Hygiene

Immunization

Microscope

Symptoms

Transmit

Vaccine

Virus

SKILLS

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

AIDS

Airborne

Antibodies

Bloodborne

Cilia

HIV

Immune System

Mucus

Pathogens

Virus

Wax

How Does the Body Fight Disease?

Performance Objectives

Students will be able to:

- Recognize how the body fights disease.
- Classify HIV as an infection that attacks the body's immune system.
- Recognize that AIDS is an advanced phase of HIV.

Motivation

- Draw the outline of a human body on the board/newsprint.
- Say, "In the last class we discussed how germs can get into body openings and cause disease. Today we will discuss ways the body protects itself from germs by keeping them out [point to outside of body] or by stopping them if they do get inside [point to inside of body]."

Procedure/Development

- Brainstorm how the body keeps out germs:
 - The skin protects the body.
 - Eyelashes and blinking keep dust and germs from eyes; tears clean eyes.
 - Cilia, tiny hair-like structures, and mucus found in the nose catch some pathogens and sweep them back out of the body.
 - Wax and cilia protect the ears.
 - The lining of the mouth and throat are wet and often trap germs so they cannot infect the rest of the body.
- Explain, "If germs do enter the body, the body's immune system acts to stop them from causing disease. Antibodies are specially designed tools that our bodies make for each type of germ. Anti means against; body refers to the live germ that entered the person. Antibodies try to prevent germs from causing disease in that person. If a person still gets sick, a doctor can sometimes prescribe medication to help the person get well."
- Say, "Some diseases are easy to get, such as a cold or the flu. They are easy to get because they are airborne. Airborne diseases are caused by germs that travel from one person to another in a sneeze or cough or by touch. There are other diseases that are hard to get, such as diseases that are bloodborne."
- Write HIV on the board/newsprint. Ask the children what they know or have heard about HIV. Write their answers on the board/newsprint.

- Explain, “HIV is a virus that makes it hard for the body to fight off other diseases.” Spell out and explain the term HIV (Human Immunodeficiency Virus). “
- Say, “HIV weakens the body’s ability to protect itself from infections and other diseases. After a time, the body is so weak it cannot fight. If the body’s immune system reaches a very low point other infections take advantage of the weak immune system, and attack the body. When this happens, the person is said to have AIDS. There is currently no cure for HIV or AIDS (like some cancers or diabetes), but there are very effective medicines that prevent the virus from attacking the body, help slow HIV infection from progressing, and help people who have HIV live healthy, full, and productive lives for many years.”
- Say, “Even with medicine people infected with HIV can still pass the infection to someone else.”
- Explain, “However, HIV is hard to contract. The virus cannot stay alive in the air and can’t be transmitted by sneezing or coughing. HIV lives inside the blood; when infected blood enters another person’s body, that person may get HIV.”
- Refer to the list on the board/newsprint of what children know or have heard about HIV. Ask, “Now that you have heard what HIV and AIDS are, should any of the information be corrected?”
- Consider inviting one or more of the following to visit the class to answer questions the children may have and to address how children can prevent infection and transmission of HIV:
 - A doctor or nurse.
 - An HIV educator.
 - Other school resources.

Teacher Note: Remember to obtain approval from your principal before inviting a guest to speak about HIV/ or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- Say, “If you have further questions, go to a school nurse, or health aide, an adult you trust, you can speak with me privately, or ask them now.”

Assessment/Homework

Have students role-play how they would teach a family member about what happens when HIV enters the body, including how it can evolve into AIDS. Alternately have students role-play how they would teach their cousin or little sibling about what happens when HIV enters the body, including how it can evolve into AIDS.

How Does HIV Affect the Immune System?

NEW YORK STATE
LEARNING STANDARDS
1

Performance Objective

Students will understand the difference between the functioning of a healthy immune system and the functioning of the immune system of a person infected with HIV.

SKILLS

Self-Management

Motivation

Say, "In our last lesson, we talked about the immune system. Imagine that you are going to read a book about the immune system. What would you see in the book?" List their responses on the board/newsprint.

MATERIALS

Crayons/Markers and/or Paints

Board/Newsprint

Paintbrushes

VOCABULARY

Antibodies

Treatment

They should include:

1. Germs that invade the body.
2. The immune system, which protects against germs.
3. Specialized cells that work in our immune system with antibodies to protect us from germs and diseases.
4. Antibodies, tools used by the immune system to protect against germs.
5. HIV, a virus that weakens the immune system by making these specialized cells lose their powers and by decreasing their number.
6. Medicines/treatments developed to interfere with HIV and keep the immune system functioning well longer.

Procedure/Development

Divide the class into five groups. Give each group a piece of paper, crayons, markers, and/or paints. Say, "Write your subject number and subject title at the top of the paper before you begin. Then imagine and draw what your assigned subject might look like."

Subject 1: Germs enter the body.

Subject 2: The immune system is alerted to an attack by germs such as bacteria or viruses.

Subject 3: Specialized cells target the bacteria or viruses, find them and help to destroy them before they can cause infection.

Subject 4: Antibodies are tools that protect the body. The immune system designs a special antibody for each germ.

Subject 5: HIV is a virus that weakens the immune system and keeps it from being able to protect the body.

Subject 6: Scientists are working hard to find a cure for HIV, more treatments for the diseases that people with HIV get, and more treatments to help our immune system stay strong even with HIV. (Magazine pictures showing scientists at work may be used to stimulate students' thinking.)

Assessment

Write a story to go along with the pictures in the book.

What Are Healthy Choices That People Can Make?

Performance Objective

Students will be able to distinguish between healthy and unhealthy choices.

Motivation

On the board/newsprint write the following sayings and ask the children to discuss their possible meanings.

1. "An apple a day keeps the doctor away."
2. "Milk does a body good." (However, some children cannot digest cow's milk.)
3. "Safety starts between the ears."
4. "Cover the sneeze, prevent disease."
5. "The first wealth is health."
6. "Early to bed, early to rise, makes us healthy, wealthy, and wise."
7. "Moderation in all things."
8. "One who has health has hope, and one who has hope has everything."
9. "A strong body makes a strong mind."

Procedure/Development

- Say, "Many of the sayings on the board/newsprint present ideas about staying healthy. As a class, we will compile our own list of health rules. We're going to play a game that will help us develop our list."
- Distribute an index card to each child.
- Say, "On your index card, write a health rule that should go on our list, or an unhealthy rule that absolutely should not go on our list. When you are finished, I will read the health rules aloud and we will decide together which are health rules we want on our list, and which are unhealthy rules." (Some children may come up with silly or funny rules that the class will enjoy weeding out.)
- Conduct the game as described above, writing the list on the board/newsprint.

Assessment

Have students write a story about themselves carrying out a health rule from the list. Share selected student stories and have students explain why it's a health rule.

GRADE 3
Lesson

4

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Decision Making
Self-Management

MATERIALS

Index Cards
Markers
Board/Newsprint

VOCABULARY

Health Rule
Moderation

SKILLS

Advocacy
Communication
Decision Making
Relationship Management
Self-Management
Stress Management

MATERIALS

Markers
Board/Newsprint
Poem,
“Later Will I Be Well?”
(Activity Sheet 2 from Grade 2,
Lesson 2)

VOCABULARY

AIDS
Assistance
Confidential
HIV
Resources

How Can We Get Help When We Have a Problem?

Performance Objectives

Students will be able to:

- Identify where children can go to get help.
- Practice getting help in different situations.

Motivation

- Tell the following story:

Samantha and Susie were playing tag with other children in the school yard. Susie tripped on her shoelaces and accidentally bumped into Samantha. Samantha fell down, cut her knee, and started to bleed. She yelled at Susie for pushing her down. The other children crowded around them.

- Have the students suggest ways children can be helpful in this situation. Write the children’s problem-solving strategies on the board/newsprint (e.g., comfort Samantha, help Samantha understand that Susie did not push her, support Susie, and get an adult with a first aid kit to help).
- Make sure children understand that neither Susie nor the other children should touch Samantha’s blood. Children need to ask an adult for help.

Procedure/Development

- Have children volunteer to act out the following situations in front of the class. After children act out the situations, discuss alternative ways of solving the problems.
- In addition to discussing alternative ways of solving the problems, discuss the problem of not seeking help due to fear. With the children’s participation, write a list of resources on the board/newsprint—people or places children can turn to for help (use the list below).

Resources: Parent or guardian, teacher, neighbor, counselor, friend, library, doctor, police officer, 311, hospital, etc.

1. Jonelle is in school and suddenly feels dizzy. She sits down in the middle of the crowded hall. How can other children help her?
2. Mae is in a store with her mother. She wanders off to look at some comic books, then looks around for her mother and cannot find her. How can she get help?
3. Anton and his friends play ball in the schoolyard. They leave their jackets by the fence. After the game, Anton reaches into his jacket pocket and finds that his harmonica is gone. The next day, he sees Frank with a harmonica just like the one Anton lost. He accuses Frank of stealing it. Frank insists the harmonica is his own. The boys argue. Anton threatens to have his brother beat up Frank. How can other children help?

4. Tanya and Maria are playing jump rope when an older boy from down the street runs past them, grabs the jump rope, and runs off with it. They shout for him to give it back, but he just keeps on running and laughing. How can they get their jump rope back? Whom could they ask for help?

Continue the activity by having children act out these HIV-specific situations. Mention issues of confidentiality and disclosing of someone's medical history/situation.

Teacher Note: Students diagnosed with HIV have a right to privacy and a free appropriate public education. They are entitled by law to confidentiality about their status, about HIV- or AIDS-related illness, or information that can reasonably be used to identify them as having HIV.

Disclosure of HIV is governed by the New York State Public Health Law that went into effect in 1989 (i.e., Section 2782, Confidentiality and Disclosure, and Section 2783 Penalties; Immunities). Willful commission of an unauthorized act of disclosure is a misdemeanor and punishable accordingly; a person is also subject to a civil penalty not to exceed five thousand dollars (\$5,000) for each occurrence of unauthorized disclosure.

No disclosure of confidential HIV-related information involving a student shall be made without first obtaining the informed written consent of the student (if he/she has the capacity to consent to such disclosure) or his/her parent or guardian on the New York City DOHMH-approved form (<http://www.health.ny.gov/forms/doh-2557.pdf>).

5. Children in a school hear that Tina has HIV. Some children begin to tease Tina and refuse to play with her or sit next to her. How can other children help Tina?

To help children better understand the experience of a child with HIV, have them read and discuss the poem, "Later Will I Be Well?" (Grade 2, Lesson 2). Also point out that "hearing" that someone has HIV does not necessarily mean that the person is HIV-positive. Discuss the harm in believing and spreading rumors. Point out that information about whether someone has HIV is confidential.

6. Billy's mother has HIV. Some children call Billy names and insult his mother. How can other children help Billy?

Assessment

Have children write a continuation of a situation above, describing how they would use at least two resources from the list to get help. Share selected stories with the class.

LESSON GUIDE

G R A D E 4

What Causes Disease? How Does the Immune System Protect the Body from Disease?

Performance Objective

Students will be able to describe a chain of infection.

Motivation

Ask students to guess what the phrase “chain of infection” means. Record their answers on the board/newsprint.

Procedure/Development

- Distribute Activity Sheet 1, “Vocabulary,” for use in addressing vocabulary words as they come up in the lesson.
- Distribute and discuss Activity Sheet 2, “Chain of Infection for Measles.” Explain that some infections are transmitted (passed from one person to another) through airborne viruses (e.g., measles). Transmission of HIV, a virus that is not airborne, will be discussed in Lesson 3.
- Distribute and discuss Activity Sheet 3, “How Immunization Affects the Chain of Infection for Measles.” Explain that vaccines are available for some viruses (e.g., measles) but not for all. Researchers are trying to develop vaccines for a variety of viruses, including HIV.
- Discuss the vocabulary words that appear on Activity Sheet 3. Have students relate the vocabulary to the chain of infection for measles.
- Record selected students’ sentences on the board/newsprint for review as another strategy for developing and reinforcing the vocabulary.

Teacher Note: While the measles virus can live in the air for two hours, HIV can only survive for a few minutes outside the body except in special laboratory conditions or in body fluids such as a pool of blood. HIV can also be transmitted by sharing needles and syringes with someone who is infected. No cases of HIV transmission through contact with a non-living surface (such as a toilet seat) have been reported.

Homework

Have students write a story about what happens to their bodies when they get sick, and then when they get well. Students should refer to the “Chain of Infection for Measles” Activity Sheet.

GRADE 4

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Self-Management

MATERIALS

Activity Sheet 1:
Vocabulary

Activity Sheet 2:
Chain of Infection for Measles

Activity Sheet 3:
How Immunization Affects the Chain of Infection for Measles

Board/Newsprint

VOCABULARY

Antibody

Antigen

Chain of Infection

Host

Immune System

Immunity

Immunization

Infectious Agent

Method of Entry

Mode of Transmission

Organism

Activity Sheet 1

Vocabulary

Directions: Read each definition. Then use each vocabulary term in a sentence.

Antibody

A substance produced by the immune system in response to an antigen (a micro-organism such as a virus or bacteria) that enters the body. The body produces a unique antibody for every antigen. Antibodies help the immune system protect us from getting sick.

Antigen

A foreign substance, such as a virus or bacteria, that enters the body and stimulates the production of antibodies.

Host

Any living organism (usually a person or animal) in which an infectious agent can live and multiply.

Immune System

The bodily system, made up of organs (like the skin) and cells (like T-cells) that protects us from foreign substances.

Immunity

The body's ability to resist disease. Immunity can be enhanced by previous exposure and vaccines.

Immunization

Method of producing resistance to an infectious disease, usually by vaccination (or inoculation), which leads to the production of antibodies by the immune system.

Infectious Agent

An organism (virus, bacterium, etc.) that is capable of producing infection or infectious disease.

Method of Entry

The way or place in which organisms, including infectious agents, enter the host's body.

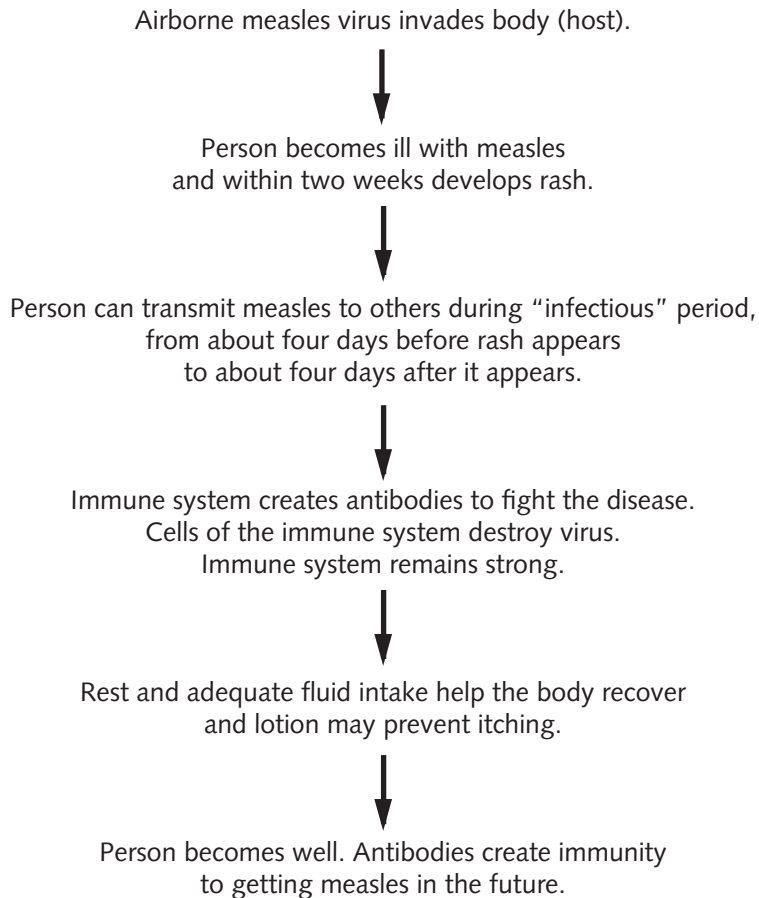
Mode of Transmission

Manner in which an infectious agent is transmitted from one person to another. For measles, the measles virus can live in airborne droplets for about two hours. People can get measles by breathing in air that has the droplets.

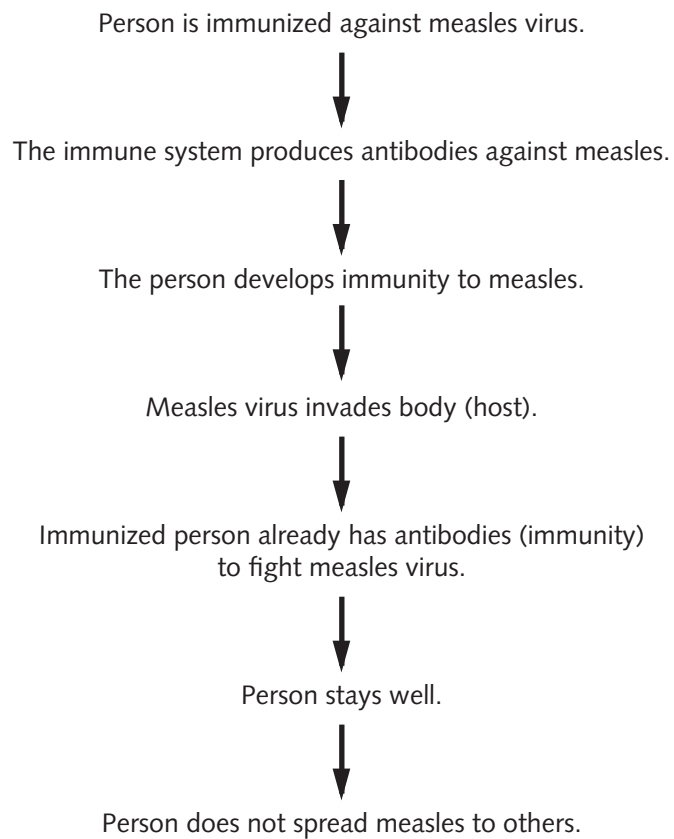
Organism

Any living thing, including germs such as viruses and bacteria.

Chain of Infection for Measles



How Immunization Affects the Chain of Infection for Measles



How Does the Body Fight Disease? How Does HIV Affect the Immune System?

Performance Objective

Students will be able to explain the immune system and how HIV affects it.

Motivation

Say, “The immune system is a bodily system that fights diseases in our bodies. The immune system is made up of cells, tissues, chemicals, and organs working together to keep us healthy. The virus HIV weakens the immune system so that it cannot do its job properly.”

Procedure/Development

- Distribute and discuss vocabulary words. Explain how the immune system functions: “The largest organ in the immune system is your skin. Healthy, unbroken skin protects your body from infection. But sometimes foreign organisms (or invaders) get inside your body. Some examples of invaders are bacteria and viruses. One way these can get into your body is through a cut or scrape.”
“If an invader gets into your body, white blood cells from your bloodstream surround the invader and work to destroy it. The white blood cells create millions of antibodies, which capture the invader. Once an antibody has caught an invader, a message is sent to other white blood cells, called T-cells, to kill the invader. Many different cells and chemicals must work together for the immune system to function at its best. Some white blood cells have a memory, so that if the same virus enters the body again, they will send out already made antibodies to help identify it and help cells of the immune system destroy it.”
- Optional: Distribute diagram, “How the Immune System Reacts to Infection.” Explain how HIV affects the immune system.
- Write on the board/newsprint:
HIV = Human Immunodeficiency Virus
AIDS = Acquired Immune Deficiency Syndrome
 - Have students define each word.
- Explain that the course of HIV—without treatment—is as follows:
 - HIV gets past the body’s defenses.
 - The virus makes copies of itself before the body’s disease fighting cells (part of the immune system) can respond.

SKILLS

Self-Management

MATERIALS

Handout 1:
Vocabulary

Handout 2:
*How The Immune System
Reacts to Infection*

Board/Newsprint

VOCABULARY

AIDS (Acquired Immune
Deficiency Syndrome)

Antibodies

B-Cells

HIV
(Human Immunodeficiency Virus)

Immune System

Lymphocytes

Opportunistic Infection

Syndrome

T-Cells

Tissues

Virus

White Blood Cells

- Within the first few weeks after infection, some people with HIV show flu-like symptoms. This occurs during the body's initial response against the virus. During this time, a person may show symptoms such as headaches, body aches, fevers, and fatigue. The symptoms last for a week or so, then go away by themselves. Not everyone who gets HIV has these symptoms.
- The body's immune system begins to fight against the infection and starts to create antibodies (3 to 12 weeks after initial infection) to kill the virus.
- The antibodies kill some of the virus, but HIV is not eliminated from the body.
- Since HIV destroys immune system cells (e.g., T-cells), the body has fewer disease fighting cells and the person gets sick more easily. The person gets illnesses that people who do not have HIV are usually able to fight off, such as certain kinds of cancer, tuberculosis, pneumonia, and other disorders. This is called AIDS (Acquired Immune Deficiency Syndrome). AIDS begins, on average, 10 years after infection.

Also:

- People with HIV are vulnerable to infections that would not be serious or fatal in a person with an intact immune system.
- While there is currently no cure for HIV, there are treatments that help people with HIV/AIDS manage their illness and live healthy, full and productive lives.

Teacher Note: Antiretroviral medications have virtually transformed HIV infection from what was once a life-threatening condition into a chronic disease that, with successful adherence to a medication regimen, can keep a person healthy and grant a lifespan similar to that of a person who does not have HIV.

Assessment/Homework

Have students:

- Write a fact sheet on how HIV affects the immune system.
- Look in newspapers, magazines, the library, and/or the Internet to find articles about HIV/AIDS to bring to class for sharing and discussion. Give examples of kinds of articles (news, research, personal stories, etc.). Allow for follow-up time to reflect and process homework.

Vocabulary

AIDS

The initials for Acquired Immune Deficiency Syndrome, the most advanced phase of infection with the Human Immunodeficiency Virus (HIV). HIV weakens the body's immune system, making it vulnerable to opportunistic illnesses, including infections. People who have HIV and who are very sick have AIDS. Some opportunistic illnesses associated with AIDS are certain kinds of cancer, tuberculosis, pneumonia, and other disorders.

Antibody

A substance produced by the immune system in response to an antigen (a microorganism such as a virus or bacteria) that enters the body. The body produces a unique antibody for every antigen. Antibodies help the immune system protect us from getting sick.

HIV

The initials for Human Immunodeficiency Virus. HIV is a retrovirus that attacks the body's immune system, making an infected person potentially vulnerable to other infections and diseases. A person who has HIV in his/her blood is said to be "HIV-positive," or "HIV+." HIV may eventually lead to AIDS by weakening the body's immune system, leaving the body less protected against infections, some kinds of cancer, and other disorders.

Immune System

The immune system is a complex system of cells, tissues, chemicals, and organs. Its mission is to protect against invading organisms and disease.

Lymphocytes

White blood cells made in the bone marrow. Some of these cells develop as T-cells, and play a major role in carrying out the activities of the immune system by recognizing and stopping organisms that can cause disease.

Opportunistic Infection

An infection that is generally not a serious threat to a healthy immune system, but causes serious illness when the immune system is weakened.

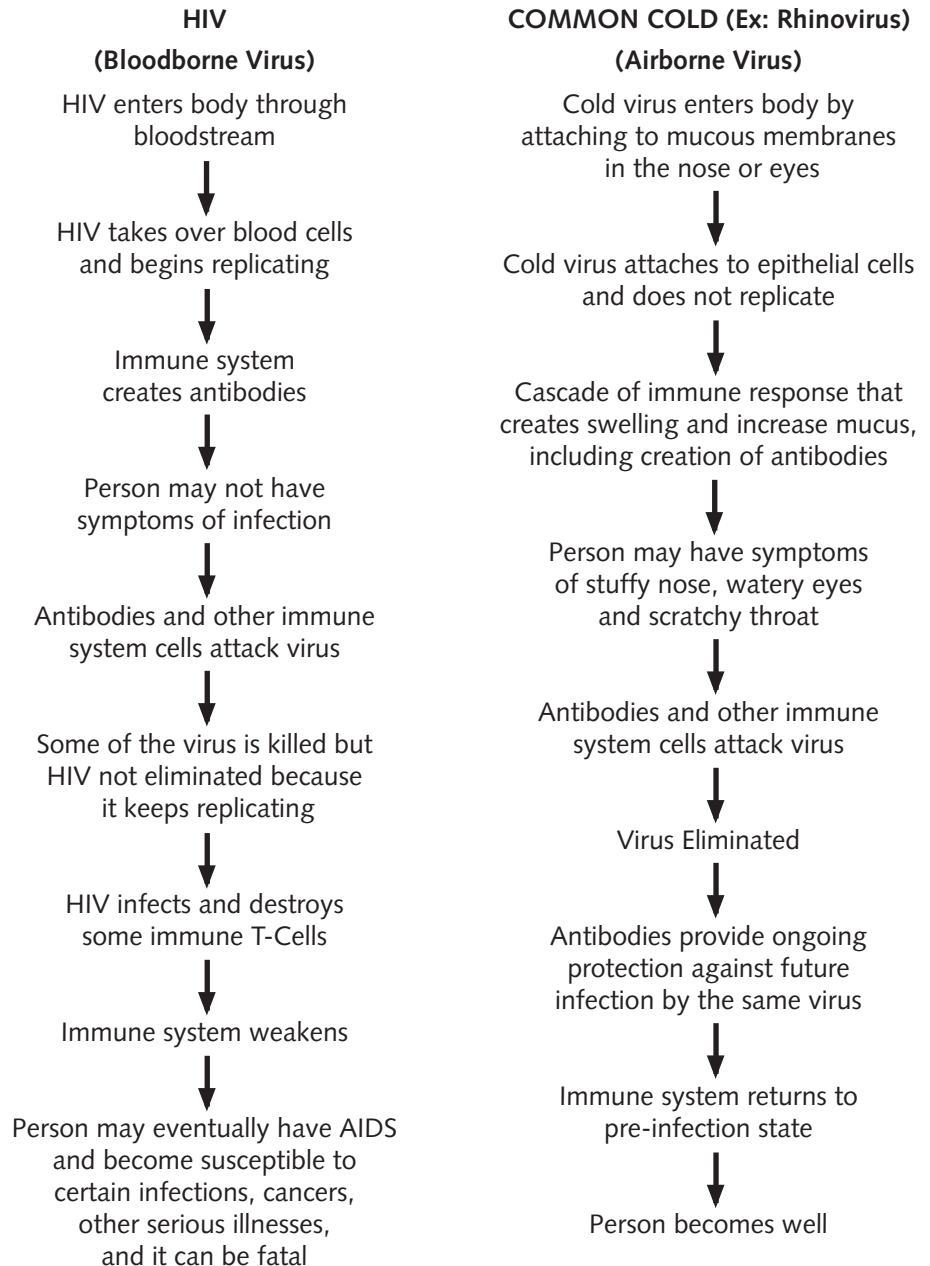
Syndrome

A set of related health problems, bodily signs or symptoms with one underlying cause.

Virus

A microscopic organism that can cause infection.

How the Immune System Reacts to Infection The Course of Two Infections Without Treatment



What Are Common Myths and Facts About HIV Transmission?

Performance Objective

Students will be able to:

- Identify how HIV is and is not transmitted.
- Describe how myths about HIV transmission can be harmful.

Motivation

Teacher Note: Teachers be advised that the “Myth or Fact” sheet contains the first reference to sexual contact in the curriculum. Fourth grade teachers are encouraged to teach puberty lessons prior to teaching about the potential risks associated with sexual contact.

Distribute the “HIV/AIDS Myth or Fact Sheet.” Have students write TRUE next to those statements that are true, and FALSE next to those statements that are false.*

Procedure/Development

- Say, “With each addition of an ingredient in a recipe, the mixture changes. Sugar makes cake batter sweet; chocolate makes it brown, and so on. If you add in a cup of salt by mistake, the batter would get very salty. You can remove some of the salt if you haven’t stirred it in yet, but you cannot remove all the salt. When HIV enters a person’s body, the ‘mixture’ that is the person’s body cells changes. Just as the salt in the cake batter cannot all be removed, neither can all of the virus in the body’s cells be removed. There are some effective treatments that slow the way HIV reproduces or enters cells and thus slow progress from HIV infection to AIDS. There are also treatments for HIV- and AIDS-related illnesses. But there currently is no way to rid the body completely of HIV. That is why we all need to know how HIV is transmitted—so we can know how to avoid getting it.”
- Review the answers to the “HIV/AIDS Myth or Fact Sheet.”* Explain that HIV is hard to get. It also is not an easy disease to transmit, like measles or the flu. HIV is in some bodily fluids, like blood, and not in others, like sweat, tears, and saliva. HIV can only be transmitted through contact with one of these infected bodily fluids, although even then there may not be 100 percent chance of transmission.
- Review with students the chain of infection. (See Grade 4, Lesson 1, Activity Sheet 2, “Chain of Infection for Measles”)
- Explain that it is impossible to tell by looking at someone whether that person has HIV. An HIV-positive person may not feel or look ill. When first infected with the virus, most people have hardly any noticeable symptoms, and these symptoms can also appear in people without HIV (e.g., swollen glands).

* Answers to HIV/AIDS Myth or Fact Sheet: 1. False; 2. False; 3. False; 4. False; 5. True; 6. False; 7. True; 8. True; 9. True; 10. True; 11. True; 12. True; 13. True.

SKILLS

Relationship Management

Self-Management

MATERIALS

Activity Sheet:
HIV/AIDS Myth or Fact Sheet

Board/Newsprint

VOCABULARY

Breast Milk

Contract

Myth

Transmit

- Explain that this early phase of HIV infection can last 10 years or more. Now many treatments slow or prevent progression to AIDS. HIV is an unusual disease because a person is infectious (can transmit HIV) throughout the course of HIV and AIDS. Currently in the United States, 21 percent or about one in five people who are infected with HIV do not know it because they have not been tested for it.
- Explain that HIV can be transmitted by:
 - Using needles and other injection equipment that an infected person has used. (Note that some people need to inject medicine, such as insulin for diabetics. They always need to use sterile needles and equipment and never share them.)
 - An infected mother passing it to her baby before or during birth, or through breastfeeding. Now, most women are tested during their pregnancy and if they are HIV positive, they are placed on medication so that there is a very good chance that their baby will not be infected with HIV.
 - Sexual contact with an infected person. Say, “When you are older you will learn more about how sexual contact can transmit HIV.”
- Note that alcohol and other drugs interfere with a person’s ability to make responsible decisions and avoid risk behavior.
- On the board/newsprint, list myths about how HIV is transmitted. Make sure students understand the word “myth.”
 - Myths about methods of transmission include: touching, hugging, kissing, sneezing, sharing food, using public toilets, using public swimming pools, sitting next to an HIV-positive person, going to school with someone who has HIV/AIDS.
- List ways to express affection that are safe (e.g., hugging, holding hands, kissing).
- Ask students how myths can harm others. Explain that such myths have made people needlessly afraid, and caused discrimination and hysteria, isolating some people with HIV/AIDS because people were afraid to associate with them. Emphasize the need for compassion, love, support, and acceptance of people living with HIV/AIDS.

IMPORTANT NOTE: Teachers are mandated reporters of child abuse, including sexual abuse. If you suspect that a student is experiencing abuse or neglect, report it immediately to your guidance counselor, social worker, or principal, who is required to report the suspected abuse to the New York Statewide Central Register Child Abuse and Maltreatment Hotline (1-800-342-3720).

Assessment/Homework

Imagine that a friend tells you that she is upset because she ate dinner with her uncle who is HIV-positive, and now she is afraid that she might be HIV-positive, too. Write down how you would explain to your friend how HIV is transmitted, and why she can’t become HIV-positive from having dinner with her uncle.

HIV/AIDS Myth or Fact Sheet

Directions: Write TRUE next to those statements that are true, and FALSE next to those statements that are false.

TRUE OR FALSE?

1. People can get HIV by being in the same room with a person who has AIDS.
2. There is a vaccine to prevent HIV.
3. HIV is transmitted by sneezing.
4. A person can get HIV by giving blood.
5. HIV is a transmissible disease.
6. People can get HIV from sharing a soda.
7. Community resources are available to help people with HIV/AIDS.
8. AIDS is caused by a virus.
9. HIV affects the body's immune system.
10. People who inject drugs should protect themselves and others by never sharing needles or other items used to prepare and inject drugs. Sharing these could get blood from an infected person into another person's body and infect that person with HIV.
11. AIDS is an advanced or later phase of HIV.
12. One reason drinking alcohol and using other drugs should be avoided is that they make us forget what we have learned about HIV/AIDS.
13. Abstaining from sexual contact is the best way to avoid sexual transmission of HIV.

How Can We Help Each Other Make Healthy Choices?

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Advocacy
Communication
Decision Making
Relationship Management
Self-Management

MATERIALS

Index Cards Printed with
Skit Situations
Board/Newsprint

VOCABULARY

Abstain
Consequences
Long-Term
Negative Peer Pressure
Peer
Positive Peer Pressure
Risk Behaviors
Short-Term

Performance Objective

Students will be able to:

- Identify ways to give support to one another about healthy choices.
- Say “no” to negative peer pressure.

Motivation

Elicit class discussion by saying, “In the morning, when you decide what to wear to school, are you considering only what you like, or what children in the class will think of what you wear?”

Ask the class to list:

1. Decisions children make according to their own opinion only.
2. Decisions they make according to both their own opinions and those of their friends.

Write their answers on the board/newsprint (e.g., in which list would they put choice of friends, whether to attend a party, whether to join a school club, whether to befriend a new student in school, what shampoo to use, what hairstyle to wear, etc.).

Procedure/Development

- Say, “All students in this room are peers.” Define “peer.”
- Ask students to define the term “peer pressure.”
- Ask students to provide examples of negative and positive peer pressure.
- Define “healthy behaviors” and ask students to identify some, e.g., getting enough rest, getting enough exercise, eating fruits and vegetables, riding in a car with a seat belt, riding a bicycle or skateboard or motorcycle with a helmet, studying and doing homework
- Discuss why someone might do these things, and what might be the short-term and long-term consequences. Define these terms.
- Define “positive risk behaviors” – those that may make a person nervous or scared, but could lead to good outcomes, e.g., trying out for a play or sports team, cooking a new food, initiating a new friendship, or telling a teacher that you are confused about something you are studying and need help. Define these terms.
- Define “negative risk behaviors” and ask students to identify some, e.g., smoking cigarettes, drinking alcoholic beverages, using other drugs, riding in a car without a seat belt, climbing over sharp fences, riding a bicycle or skateboard or motorcycle without a helmet, dropping out of school..
- Discuss why someone might do these things, and what might be short-term and long-term consequences.
- Divide students into small groups. Give each group an index card describing one of the following situations. Have groups discuss and dramatize the situation for the class.

Skit Situations

1. Jennifer and Juan are good friends. Lately Jennifer has started smoking cigarettes and wants Juan to join her. He doesn't want to, but Jennifer pressures him and says he is not being a good friend if he doesn't. How can Juan keep Jennifer as a friend but not start smoking cigarettes himself?
 2. Jacina and Ramon have been good friends since kindergarten, but lately Ramon has been using swear words a lot, and Jacina doesn't like it. What should she do?
 3. Lucinda's family is vegetarian. For lunch she packs only vegetarian food, including tofu and vegetable salad. Stefan and Luis tease her and tell her to eat "normal" food. What should Lucinda do?
 4. Reggie's mother has set an 8:00 P.M. curfew for him, but several of his friends—Tomas, Christopher, and Rita—hang out together until 11:00 P.M. or 12:00 midnight. They make fun of him because of the early curfew. What should Reggie do?
 5. At a party, Jose urges Maria to drink beer with him that he brought from home. She knows it is illegal for people their age and that it is not good for them. But Maria doesn't want to reject Jose. What should she do?
 6. Kim's friend Andrew has started smoking marijuana. Kim is concerned about him. When she tells him she is concerned, Andrew says he has it under control, but Kim is still worried. What should she do?
 7. Lekeisha's friend Kenia found her grandmother's pain medication that she was prescribed after her surgery, Kenia told Lakeisha that her older brother Kevin said that the medicine "makes you feel really good" and that she should try some. Kenia is hesitant but wants to try it and wants Lakeisha to take some too. What should Lakeisha do?
- After each skit, discuss assertiveness techniques used in the skit that children can use to encourage friends or themselves to make healthy choices and discourage negative choices. Say, "Which ones were not as effective?" (Speak in "I" phrases; use broken record technique, i.e., repeat position over and over; stay calm; enlist others to help support your position.)
 - Have students list ways children can encourage each other to do healthy things. (Read selected lists to class.) Develop a class "contract," e.g., "Some ways to build good physical and emotional health are: abstain from alcohol and other drugs, including cigarettes; eat well; get enough rest; learn to cope with stress; do homework in a timely manner and get assignments done early; keep a sense of humor, etc."

Assessment/Homework

- Discuss how people can avoid unwise or dangerous choices. (Plan to abstain from behaviors that could risk our health. Set goals for our future. Stay healthy and drug-free so we can create the kinds of lives we want for ourselves.)
- Discuss how parents or guardians can help children attain these health goals and how children can ask parents or guardians for their help.

SKILLS

Advocacy

Communication

Decision Making

Planning/Goal Setting

Self-Management

MATERIALS

Handout:

Resources:

*Where Do We Go to Get
Information and Help?*

Board/Newsprint

VOCABULARY

Community

Resources

How Can We Find Information and Help in the Community?

Performance Objective

Students will be able to:

- Identify resources for information and help.
- Identify barriers to accessing resources and ways to overcome these barriers.

Motivation

Say, "When you want information about something, what do you do?"

List responses on board/newsprint.

Procedure/Development

- Say, "You have listed several excellent ways to get information. Examples may be: ask a parent/guardian, ask a friend, go to a library, ask a librarian, search the Internet. It is often easiest simply to ask someone you think will know what you need to know. But information is communicated in many ways. Here are some other options."
 - Distribute the Handout "Resources: Where Do We Go to Get Information and Help?" Discuss with children the resources described in the activity sheet.
 - Say, "The good news is that there are many places we can go for help. The sad news is that people sometimes need information, but do not use these resources. Why?" (They don't know about them, they're shy; they have no one to go with; they're nervous about trying something new; they cannot read well and have not gotten the help they need to read better...)
 - It is important to address the issue of "quality of information." It is important that the information that students receive is scientifically accurate. This is particularly problematic with regard to the Internet and the health myths created by it. Stress the importance of using reliable sources of information (governmental websites, NYC Department of Health and Mental Hygiene, major medical centers, universities, etc.).
 - Emphasize that librarians (in school or public libraries) are well informed about how to identify reliable sources of information. Encourage students to go to librarians for help. Also mention library phone information lines and homework hotlines as a source of help.
 - Say, "There are many resources for information and help, both for people who have HIV/AIDS and for their families and friends. Write a story in which a friend needs information about HIV/AIDS." Have the children identify three community resources from the activity sheet. (Explain that people often need information from more than one source.)

Assessment/Homework

Assign students different health topics or questions to find an answer so that they can experience the process firsthand. Allow time for follow-up. (Give examples of topics: tuberculosis (TB), cancer, HIV medications, HIV treatments, etc.)

Resources: Where Do We Go to Get Information and Help

- Ask a parent, guardian, caregiver, teacher, or another adult with whom you are close and whom you trust.
- Ask a doctor, nurse, school counselor, or social worker.
- Call 311, New York City's Helpline for government resources, such as the NYC Department of Health and Mental Hygiene (NYCDOHMH).
- Go to the school or public library. Ask the librarian for help.
- Call a hotline or a library information line.
- Use the Internet. Make sure you are using a reliable source, such as a government website. Helpful websites are maintained by the NYC DOHMH (www.nyc.gov/html/doh/html/ah/ahbasic.shtml) and the U.S. Centers for Disease Control and Prevention (www.cdc.gov). Ask a librarian for assistance.
- Read a book; ask a librarian or teacher for recommendations.
- Read a newspaper or magazine; ask a librarian or teacher for recommendations.
- Look at signs or posters, such as subway ads from the NYC Department of Health and Mental Hygiene.
- Read bulletin boards in school, at health clinics, and at libraries.
- Attend a school assembly program.
- Watch a high quality television program (check listings).
- Listen to radio programs that discuss health issues.
- Call, visit, or write to a public service agency.

LESSON GUIDE

GRADE 5

How Does the Body Protect Itself from Disease?

Performance Objective

Students will be able to:

- Describe how the immune system works.
- Explain how HIV affects the immune system.
- Articulate the difference between HIV and AIDS.

Motivation

- Say, “It is a fact of life that there are things we have to protect ourselves from. We learn to expect these possibilities and prepare for them. We look both ways before crossing the street because we know that some drivers cannot be depended upon to look out for us. We lock our doors because we know thieves can take advantage of people who leave doors unlocked.”
- Say, “The human body also expects dangers and prepares for them. Germs can cause disease and are part of life. So our bodies are designed to keep germs out and to fight them if they do get inside.”

Procedure/Development

- Ask, “What are some of the body’s ways to keep germs out?”
- Explain, “The skin is one of the body’s most important means of protection. Eyelashes keep dust out of eyes. Tears cleanse eyes. Dirt and germs are caught and swept out of the body by cilia (tiny hair-like structures) and mucus in the nose and wax in the ears.”
- Say, “The body expects that some germs will enter the body. So inside the body there is more protection against germs: the organs and cells of the immune system.”

Review the functions of the immune system and discuss these terms:

Antigen: A foreign substance, such as a virus or bacterium, that enters the body and stimulates the production of antibodies.

Antibodies: When an antigen such as a virus enters the body, cells in the immune system respond by producing antibodies. An antibody is used by the immune system to identify and help neutralize foreign objects like bacteria and viruses. Each antibody recognizes and responds to a specific antigen.

Immunity: Some antibodies stay in your blood to protect you if you are exposed to the same antigen again. This is called immunity. If you get measles, the measles antibodies that form in your blood will protect you from developing measles if the measles virus ever enters your body again.

GRADE 5

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Acquired

Antibodies

Antigen

Bacterium /Bacteria

Cilia

Immune System

Immunity

Inherited

Mucus

Mutation

Neutralize

Syndrome

Vaccine

Virus

Vaccines: Vaccines are substances containing weakened or dead viruses or bacteria known to cause certain diseases. When a person is vaccinated or immunized, these substances are injected into the body or are taken orally. The body develops antibodies to these harmless viruses or bacteria as if they were alive and dangerous. These antibodies stay in the body and protect the person in case any live versions of these viruses or bacteria enter his/her body in the future.

- Ask students to name some diseases they can be vaccinated against (smallpox, diphtheria, measles, mumps, rubella, chickenpox [varicella virus], and hepatitis A and B and influenza). Ask them to name what diseases they cannot be vaccinated against (colds, HIV). Record responses on the board/newsprint. If students do not name HIV, tell them that no vaccination protects against HIV. Scientists are working on developing HIV vaccines.
- Ask, “What would happen if the body’s immune system could not work properly?” (The body would not have a defense against antigens that invade it.)
- Write out “HIV: Human Immunodeficiency Virus” and explain that HIV and AIDS are related, but different, and that you will discuss what the terms stand for, how they are related, and how they are different.

WHAT IS HIV?

HIV stands for *Human Immunodeficiency Virus*. The best way to understand what this means is to take it one word at a time.

Human refers to people. HIV can infect humans but not animals. HIV does not infect mosquitoes, cats (cats can get their own acquired immune deficiency syndrome, but from a different virus), dogs, hamsters, or fish.

Let’s separate “immunodeficiency” into two words:

Immune is defined as protected and invulnerable. Things that are immune cannot be hurt or defeated. Our bodies have an immune system. It is the job of the immune system to protect us from disease by fighting diseases like colds, the flu, and others. Sometimes, even though our immune systems are working, we may still get sick, but our immune systems continue to fight and we get better. The immune system works by creating antibodies to fight the source of the disease that is in us. The immune system is what prevents us from getting sick all the time.

Deficiency means a shortage or not enough of something. For example, people eat nutritious foods every day to prevent vitamin deficiency (a lack of vitamins in their body.) When we talk about HIV, we put the two words immune and deficiency together. If someone is immune deficient, it means the immune system is not able to fight germs and diseases the way it is supposed to. When this happens, the body is vulnerable to various germs and diseases, some of them very serious, and the person gets sick from diseases that people with healthy immune systems would not get.

A **virus** is a microscopic organism that causes disease. Viruses cause illnesses such as measles, chickenpox, the flu, and colds.

So, HIV is a virus that only infects humans, that weakens or compromises the immune system, and that may cause AIDS.

WHAT IS AIDS?

AIDS stands for *Acquired Immune Deficiency Syndrome*.

AIDS is a more advanced stage of HIV. AIDS is “**acquired**” because a person can only get it from another person who has HIV. The underlying infection, HIV, weakens the body’s ability to protect itself from diseases (**immune deficiency**). AIDS is a **syndrome** (group of related symptoms), that is defined by a specific list of symptoms, in addition to the presence of the HIV infection. This list of symptoms is compiled and reviewed regularly by the U.S. Department of Health and Human Services’ Centers for Disease Control and Prevention. The same list of symptoms is used all over the U.S. to define cases of AIDS. In order to have AIDS, the immune system of an HIV positive person has been damaged to the point where there are fewer than 200 T-cells per millimeter of blood or the person has an opportunistic infection. An infection that would normally not harm a person takes advantage of the compromised immune system of an HIV infected person, sometimes making the person very sick.

- Terms used in today’s lesson should be written on the board/newsprint so they can be reviewed.

Assessment/Homework

Students should write letters to their bodies thanking them for helping to protect them against germs and disease. They should thank three to five separate parts of their bodies, and explain how each of those body parts protects them. Students can also write three ways that they will help protect their bodies against germs and disease.

Remember that some students may be HIV-positive, and the ways that their bodies support them in staying generally healthy will be different from the ways that other students’ bodies protect them from disease.

Teacher Note: Students diagnosed with HIV infection or AIDS have a right to privacy and a free appropriate public education and are entitled by law to confidentiality about their HIV/AIDS status, HIV-related illness or AIDS, or information that can reasonably be used to identify an individual as having HIV or AIDS.

Disclosure of HIV and AIDS information is governed by the New York State Public Health Law which went into effect in 1989 (i.e., Section 2782, Confidentiality and Disclosure, and Section 2783 Penalties; Immunities). Willful commission of an unauthorized act of disclosure is a misdemeanor and punishable accordingly; a person is also subject to a civil penalty not to exceed five thousand dollars (\$5,000) for each occurrence of unauthorized disclosure.

No disclosure of confidential HIV-related information involving a student shall be made without first obtaining the informed written consent of the student (if he/she has the capacity to consent to such disclosure) or his/her parent or guardian on the New York City DOHMH-approved form.

SKILLS

Advocacy

Communication

Self-Management

MATERIALS

Handout:

HIV and AIDS – Fact Sheet

Board/Newsprint

VOCABULARY

Abstain/Abstinence

Injection Drug Use (IDU)

IV/Intravenous

Transfusion

Transmission

How Is HIV Transmitted?

Performance Objective

Students will be able to:

- Identify how HIV is transmitted.
- Understand myths and facts about HIV transmission.
- Explain why HIV is hard to get.

Teacher Note: You may wish to invite a health educator or HIV educator to visit your classroom to explain about modes of transmission. *Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.*

Motivation

Say, “You have heard many things about HIV. How do you think HIV gets transmitted from one person to another?” List students’ answers on the board/newsprint.

Possible answers may include:

- Sexual intercourse (most common mode of transmission).
- Sharing of infected needles or syringes or other equipment for injecting drugs.
- Blood transfusions from an infected person.
- From an infected pregnant woman to her baby.

Procedure/Development

- After listing students’ comments about HIV transmission, ask them to mention everything else they know about HIV and AIDS.

Record these comments on the board/newsprint.

- Develop a key, using circles and squares or underlining words with different colors, to represent the following categories:
 - Medical terms.
 - Modes of transmission.
 - Feeling words.
 - Prevention.
- Have students codify the list according to the key.
- Explain modes of transmission. For example, exposure to HIV-infected fluids can occur through:
 - **Sexual intercourse with an HIV-positive person.**
Abstinence from sexual intercourse is the safest and only 100 percent effective way to prevent the sexual transmission of HIV.

- **Needle-sharing** for drugs, steroids, vitamins, or prescription medications; **sharing of other drug equipment**; or **sharing of other sharp objects** that could be infected, such as razors, pins, and scissors.
- **Pregnancy, childbirth, breastfeeding.** In the U.S., transmission of HIV from a woman to her infant has been dramatically reduced by testing women during their pregnancy and giving antiretroviral therapy or medicines (ART) to HIV-positive women during pregnancy and delivery. ART is also given to the infants of HIV-positive mothers in the first weeks of life. It is recommended that the infants of HIV-positive mothers be given formula, because HIV can be transmitted through breast milk.
- **Blood transfusions with HIV-infected blood.** The U.S. blood supply has been routinely tested for HIV antibodies since 1985, and donors are screened for potential risk behaviors. This mode of transmission is highly unlikely, though not impossible.
- Explain that there is no evidence that HIV can be transmitted through the sharing of utensils and meals, using the same toilet seat, etc.
- Divide students into small groups. Distribute the Handout “HIV and AIDS – Fact Sheet.” Have students take turns reading the facts aloud—then instruct the groups to determine which entries on the board/newsprint are inaccurate. Reconvene the full class. Ask a representative from each group to share his or her group’s findings. Revise the list on the board/newsprint, and add to it any additional facts learned from the activity sheet. Emphasize that abstinence from drug use and other risk behaviors is a sure way to prevent HIV infection.
- Ask, “How will having the correct information about HIV/AIDS reduce some of the fears people may have about HIV and AIDS?” Emphasize that many fears come from not having correct information about how it is transmitted.
- Emphasize that HIV/AIDS elicits many reactions from people. If the following have not been listed on the board/newsprint, bring them up for discussion:
 - *Fear* of getting HIV, often because of ignorance or myths (define terms).
 - *Worry* that someone you know has or might get HIV.
 - *Misinformation* that HIV and AIDS are the same thing.
 - *Sadness* because a loved one is infected.
 - *Prejudice* against members of certain groups that have been hardest hit by HIV, such as gay men and people who inject drugs. Stress that HIV infection results from engaging in risk behaviors, not from being a member of a particular group of people.
- “Hanging out” with people who are practicing unsafe behaviors, such as using drugs, may be risky because they may persuade you to join in these behaviors. Have compassion for them; at the same time have compassion for yourself and choose companions who share your beliefs, values, and interests.

Assessment/Homework

Have students interview a friend or family member about how HIV is transmitted, and the difference between HIV and AIDS. Have students record their responses.

Then have students make a list of the ways a person can and cannot get HIV (identify common misconceptions such as kissing, saliva transmission from cups, sharing silverware, being in the same room as an infected person, etc.), and compare this list with their interviewee’s responses, correcting any misinformation.

Have students bring findings back to the class, and share responses. Discuss how personal ideas and myths about HIV can affect how people living with HIV/AIDS are treated.

HIV and AIDS – Fact Sheet

1. AIDS is caused by a virus called HIV.
2. HIV weakens the immune system.
3. A person can look and feel healthy but still be infected with HIV.
4. HIV is not transmitted in the air.
5. HIV is not transmitted by sneezing.
6. Anyone who has sexual intercourse with an HIV-positive person can get the virus, even if that person looks and feels healthy.
7. Anyone who shares needles, syringes, or other drug equipment with an infected person can get the virus, even if the infected person looks and feels healthy. Needle and syringe sharing is risky whether used for drugs, steroids, hormones, or tattoos. Taking drugs is dangerous for many reasons and risk of getting HIV is just one of those risks.
8. HIV can be transmitted through exchange of blood. Since blood supplies are now tested for HIV and anyone with risk for HIV is discouraged from donating blood, blood transfusion is highly unlikely, though not impossible, to transmit infection.
9. HIV can be passed from an HIV-positive woman to her baby during pregnancy, childbirth, or through breastfeeding. However, in the U.S., transmission of HIV from mother to baby has been dramatically reduced with the use of antiretroviral therapy during pregnancy, childbirth, and in the first weeks of the newborn's life, and through avoidance of breastfeeding.
10. There is no cure for HIV, but there are many treatments for HIV infection and HIV-related illnesses.
11. Abstaining from the use of alcohol and other drugs will help a person avoid risk behaviors.
12. HIV is a transmissible virus.
13. HIV can affect all people who engage in risk behaviors, regardless of their race, ethnicity, color, gender, age, sexual orientation, or economic status.
14. Many forms of affection—hugging, touching, etc.—carry no risk of transmitting HIV from one person to another.
15. There is no vaccine that effectively prevents infection with HIV.

How Can We Reduce Our Risk Behaviors?

Performance Objective

Students will be able to:

- Identify risk behaviors and their consequences (positive and negative).
- Identify ways to support a friend’s positive health behaviors.

Motivation

Ask students to define the terms risk, positive risk, and negative risk. (Positive risk can result in a beneficial consequence that can improve someone’s life and help a person to grow. Negative risk can result in a harmful consequence that can impair or endanger someone’s life.)

Procedure/Development

- Brainstorm reasons people take positive and negative risks (experimentation, adventure, peer pressure, triumph over fear or nervousness, curiosity, to get attention, to gain someone’s approval, to prove something, to feel grown-up, to act on a dare, etc.).
- Have students identify risks for HIV infection.

Possible answers may include:

- Sexual intercourse with an infected person.
 - Sharing of infected needles or syringes or other injection drug equipment with an infected person.
 - Receiving a blood transfusion from an infected person. (Since 1985 the blood supply in the United States has been routinely tested for HIV, and donors are screened for potential risk behaviors, so that this mode of transmission is now highly unlikely, though not impossible.)
 - Being born to or breastfed by an infected mother. (In the U.S., the transmission of HIV from mother to baby has been dramatically reduced through the use of antiretroviral medications and emphasis on not breastfeeding. Antiretroviral medications are given to the woman during pregnancy and delivery, and given to the child of an HIV-positive mother in the first weeks of life.)
- Distribute the Activity Sheet “Risks.”
 - Discuss each situation’s type of risk (positive or negative) and possible consequences. You may want students to write their own “risk” scenarios.

Activity/Assessment

Divide the class into small groups. Assign each group to explore a positive or negative risk behavior. Ask each group to identify a specific risk behavior. Have them develop a skit showing how they would decide whether to proceed with the behavior, and how friends could help with the decision-making process. Groups must document “pro and con” lists, assessing short- and long-term consequences of this behavior.

GRADE 5

Lesson

3

Prevention

NEW YORK STATE
LEARNING STANDARDS
1, 2

SKILLS

Advocacy

Communication

Decision Making

Planning and Goal Setting

Relationship Management

Self-Management

MATERIALS

Activity Sheet:

Risks

Board/Newsprint

VOCABULARY

Abstain/Abstinence

Beneficial Consequence

Harmful Consequence

Negative Risk

Positive Risk

Activity Sheet

Risks

Identify whether the following risks are positive risks or negative risks and what their short-term and long-term consequences could be.

1. Darnell skips school at least one day a week and hangs out with friends.
2. Two of Julio's friends smoke cigarettes and offer them to him, but he decides not to start smoking.
3. Antonio's parents are out of town. He decides to have a party and arranges for an older friend to bring beer.
4. Nina sees an ad in the newspaper for a volunteer for an animal shelter. She has never gone to that part of the city before but decides to ask a parent/guardian for permission to go there and apply for the volunteer job.
5. Ernesto's friend Tyrone is HIV-positive. Ernesto's other friends say they will not hang out with him if he continues to be friends with Tyrone. Ernesto decides to continue the friendship with Tyrone and tells his other friends that they have no right to demand he stop seeing his friend.
6. Mark and Bobby have been friends for a year. Mark has started using drugs, and Bobby tells him he must choose between him and drugs.

How Has HIV/AIDS Affected Society?

Performance Objective

Students will be able to evaluate the impact of HIV/AIDS on various aspects of society.

Motivation

- Ask, “How has HIV/AIDS changed the world? How has it affected our communities?” Write answers on the board/newsprint. (Possible answers: people are more careful about their choices; there has been more awareness of risk behaviors; there are changed attitudes toward certain groups, like gay and lesbian people, who are sometimes unfairly blamed for HIV; many people have been infected and died.)
- Remind students that HIV is not a “gay” or “lesbian” disease, and that all people who engage in risk behaviors can become HIV-positive, regardless of who they are. Mislabeling of HIV as a “gay” disease has increased bias against gay and lesbian people. HIV is transmitted based on behavior, not on who one is. (If students ask, clarify limited definitions. Gay men are men who feel attracted to other men, and lesbians are women who feel attracted to other women.)

Teacher Note: As of December 2010, The Joint United Nations Impact Programme on HIV/AIDS (UNAIDS) more people than ever are living with HIV, largely due to greater access to treatment. At the end of 2010, an estimated 34 million people (31.6 million–35.2 million) were living with HIV worldwide, up 17 percent from 2001. This reflects the continued large number of new HIV infections and a significant expansion of access to antiretroviral therapy, which has helped reduce AIDS-related deaths, especially in more recent years.

http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216_WorldAIDSday_report_2011_en.pdf.

In NYC, as of December, 2010, 110,736 people were reported to be living with HIV or AIDS (PLWHA).

<http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2010-tables-all.pdf>

HIV can affect anyone who engages in risk behaviors that may expose them to the virus. The vast majority of HIV transmissions worldwide occur as a result of sexual contact where one person is infected with HIV.

Teacher Note: One strategy for getting youth to think about risk behaviors rather than risk groups is to ask, “Does the virus care how it is transmitted? The virus never does an interview before it infects someone.”

GRADE 5
Lesson

4

NEW YORK STATE
LEARNING STANDARDS
1, 3

SKILLS

Advocacy

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Impact

Procedure/Development

Select from the following activities:

- Invite a speaker to discuss the impact of HIV on an individual's life or on society. The speaker may be a teen or adult with HIV/AIDS, a representative of a service organization, or a healthcare worker who works with people with HIV/AIDS.

Teacher Note: Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- Have students brainstorm a list of how they and others can be helpful to people with HIV/AIDS (e.g., raise funds, visit, send cards, volunteer).

Teacher Note: To help children better understand the experience of a child with HIV, have them read and discuss the poem, "Later Will I Be Well?" included in Grade 2, Lesson 2.

Assessment/Homework

Have children draw a poster or design a public service announcement that depicts (a) ways that they and their friends can avoid HIV risk, and (b) ways that they and their friends and family can be supportive of people with HIV/AIDS.

What Resources Provide HIV/AIDS Information and Help?

Performance Objective

Students will be able to identify individual, family, and community resources that provide HIV/AIDS information and help.

Motivation

Say, “Education about how HIV is and is not transmitted is the greatest asset we have in stopping the spread of this disease. An epidemic is a widespread outbreak of an infectious disease, affecting many people in a short amount of time. If young people broke the chain of infection by abstaining from risk behaviors, then the number of HIV-positive people would drop dramatically. For example, young people should abstain from sexual intercourse and drug use. The more people who know the scientific facts about HIV transmission, the sooner its spread can be stopped.” Have the class brainstorm how people can get information about HIV/AIDS. Record their responses on the board/newsprint.

Procedure/Development

- Review students’ list. Add resources they may not have listed, such as: HIV/AIDS service organizations; clinics; counselors; doctors; public agencies, such as health departments; libraries; hospitals; television; books, magazines, and newspapers; radio; the Internet; telephone hotlines. Have students copy the list.
- Say, “Each of you is a resource, too. You now know more about HIV/AIDS than many people, so you can serve as a resource by helping to educate others.”
- Have students sit in a circle. Tell them the child sitting next to them is their partner. Pass around the box of “HIV/AIDS Questions/Statements,” activity sheets* and have each pair take one. Give the pairs a minute to confer about what is the correct answer. Then have one member of the pair read their question aloud and the other member give the answer. If the answer is incorrect or incomplete, ask other students to correct or add to the answer.

Assessment/Homework

Have children take home their “HIV/AIDS Questions/Statements” activity sheets and ask one parent, guardian, caregiver, or older sibling and one friend the questions. Children should write down the responses and indicate if they are correct or incorrect.

* Answers to HIV/AIDS Questions/Statements: 1. A; 2. True; 3. To defend the body against organisms that cause disease; 4. False; 5. True; 6. False; 7. True; 8. Drug users who share needles, syringes, or other drug equipment used by injectors risk infection with HIV. People who use alcohol or other drugs are more likely to engage in risk behaviors than those who do not because alcohol or other drugs may affect their judgment; 9. A widespread outbreak of an infectious disease affecting many people in a short amount of time; 10. True; 11. False; 12. False; 13. True; 14. In New York City call 311 for information, find out at the library, read an HIV/AIDS information brochure, ask a trusted adult; many other possibilities. 15. How is HIV spread? How is it treated? Many other possibilities; 16. False; 17. False.

GRADE 5

Lesson

5

NEW YORK STATE LEARNING STANDARDS 1, 2, 3

SKILLS

Advocacy

Communication

Decision Making

Planning and Goal Setting

Self-Management

MATERIALS

Activity Sheet:
*HIV/AIDS Questions,
Cut Into Strips*

Box

Board/newsprint

VOCABULARY

Hotline

Epidemic

Resource

HIV/AIDS Questions/Statements

1. The virus that may lead to AIDS is called:
a) HIV b) AIV c) IHV
2. True or False: HIV attacks the immune system, and affects every system in the body.
3. The role of the immune system is _____.
4. True or False: You can get HIV if you hug someone who has the disease.
5. True or False: A pregnant woman who has HIV may pass the virus to her child during pregnancy or childbirth if she doesn't get the proper treatment.
6. True or False: All people who use drugs have HIV.
7. True or False: A person can be infected with HIV for many years without knowing it.
8. Why is a person who uses alcohol or other drugs at special risk for getting HIV?
9. Define the word "epidemic."
10. True or False: Abstaining from sexual intercourse and use of alcohol and other drugs can protect you against HIV infection.
11. True or False: A person can get immunized against HIV.
12. True or False: Gay men are the only men who are at risk for getting HIV.
13. True or False: Donated blood is tested for HIV antibodies.
14. How do you get the phone number for an HIV/AIDS hotline?
15. Name two questions an HIV/AIDS hotline can answer.
16. True or False: You can get HIV from sitting on a bus next to someone who has AIDS.
17. True or False: HIV is a disease found only in the United States.

LESSON GUIDE

G R A D E 6

How Does the Immune System React When a Virus Enters the Body?

Performance Objectives

Students will be able to:

- Identify how the immune system fights disease.
- Explain the difference between how HIV and measles affect the immune system.
- Develop a class bulletin board that includes facts and resources about HIV and AIDS.

Motivation

Say, “Imagine a castle. An intruder manages to sneak in. But an alarm system in the castle lets the soldiers know what the intruder looks like and where the intruder is hiding. This information lets the soldiers know exactly what kinds of weapons are capable of hurting the intruder and which ones are not. The soldiers create the right weapons, rush to the intruder, and surround it before it has time to cause too much damage. The intruder surrenders. If any other intruders of that same type enter the castle, the soldiers already have the right weapons to prevent them from doing any damage at all.”

Distribute, read aloud, and discuss the poem, “Through the Human Wall.”

Teacher Note: This lesson contains the first mention of “semen”, “vaginal secretions” and breast milk in the context of bodily fluids that contain HIV. It is recommended that students are taught comprehensive health education, including sexual health education prior to teaching this lesson.

Procedure/Development

- Say, “Our bodies are like the castle. Germs, such as viruses, are intruder-like substances called antigens. When they enter our bodies, our immune system (our soldiers) gears up for action. Germs sneak into our bodies just like the intruder sneaks into the castle. This is called ‘Mode of Transmission.’”
- Ask students if they remember how germs enter the body.
Answers: breathing in germs when someone has sneezed or coughed, through cuts on the skin, through touching, through contact with blood or bodily fluids. Be sure to remind them, though, that not all germs enter the body in all these different ways.
- Say, “Antibodies created by the immune system are the weapons that fight disease. When antigens (for example, viruses) first enter our bodies, they sometimes have time to cause disease before the antibodies are created and deployed. But the antibodies that the healthy immune system can create are ‘custom-made’ for that specific type of virus, a perfect match to destroy the virus.”
- Say, “Sometimes antibodies create lifelong resistance to a virus (otherwise known as immunity) so that if the same type of this virus enters the body, it will not cause disease.”

GRADE 6

Lesson

1

NEW YORK STATE
LEARNING STANDARDS

1

SKILLS

Self-Management

MATERIALS

Activity Sheet:

Through the Human Wall

Board/newsprint

VOCABULARY

AIDS

Antibody

Antigen

HIV

Immune System

Immunity

Incubation

Intruder

Mode of Transmission

T-Cells

Virus

Teacher Note: Students may inquire as to why people may get sick with the flu or a cold more than once, even if they have been vaccinated. Explain that sometimes viruses develop different strains, which are like close relatives. These strains belong to the same family, and so they cause the same general illness. Antibodies, though, are created for specific family members, so the antibodies that were created for the virus that caused the flu last year might not work on the one a person will get this year.

- Remind students that what happens to a flu virus when it enters the body is not the same as what happens to HIV, the virus that causes AIDS.
- Say, “A flu (influenza) virus is airborne. A person who is infected has symptoms of the flu (headaches, body aches, fever, fatigue). The immune system creates antibodies, which eventually destroy the virus. The person becomes well. The immune system stays strong. Antibodies create immunity to that particular flu virus.”
- Say, “HIV is very different. HIV stands for Human (affects only people) Immunodeficiency (impairs the immune system) Virus. HIV is transmitted through blood and other body fluids, such as semen, vaginal secretions and breast milk. (A later lesson will address transmission.) The infected person may have flu-like symptoms after being infected; those symptoms go away. The person may not show any further visible symptoms for as long as ten years or more. But during that time the virus is damaging the immune system and the person can still transmit the virus to others.”
- Say, “The immune system creates antibodies, but unlike the flu virus, HIV is not destroyed. Instead, HIV attacks T-cells, which are a type of white blood cell that are essential for combating viral infections. HIV takes over the T-cells, and begins reproducing. The immune system breaks down. Certain medications can help slow down this process by preventing HIV from attacking the immune system and protecting against opportunistic infections (diseases that people with intact immune systems are unlikely to get).”
- Say, “Some people with HIV are able to fight off opportunistic infections longer, while others become less and less able to fight off infections and eventually develop AIDS, or Acquired Immune Deficiency Syndrome, which is a group of related diseases that people with advanced HIV infection sometimes get. Sometimes these diseases are fatal, and sometimes the person who has AIDS recovers, even though his or her immune system is still quite weak.”
- Say, “Another difference between flu viruses and HIV is that flu vaccines help keep people from getting the flu, but there is no vaccine to prevent HIV.”

Assessment

Say, “You have been chosen to write a short PSA (explain what a Public Service Announcement is) that explains how the immune system works to fight HIV. It will be aired during a commercial break for your favorite show. Be sure to include how HIV is different from other viruses.”

Homework

As a class project, make a bulletin board entitled “HIV and AIDS: Facts and Resources.”

Have students bring in:

- Pictures, headlines, and articles from newspapers and magazines.
- Creative writing.
- Factual pamphlets.
- Resource lists of people, places, and telephone hotlines that can provide information about HIV and AIDS.
- Other information, poems, stories, or drawings students wish to contribute.

Through the Human Wall

by Betty Rothbart

Skin keeps insides in
so blood won't spill.
It keeps germs out
so you won't get ill.

But skin can get cut
and germs can sneak in,
infecting the body,
causing havoc within.

White blood cells are the soldiers in blood.
With antibodies, custom-made,
soldiers stop dangerous
germs that invade.

But soldiers can fail
to halt an attack
if germs are fierce
and fight them back.

Germs can wrestle soldiers
and sap their strength,
then spread disease
through the body's length.

Yet medical advances
limit germs' chances.
Antibiotics banish bacteria.
Virile vaccines zap virulent viruses.
Both of these surprise and protect.
They're the secret weapons
That germs don't expect.

SKILLS

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Abstinence

Infectious

Injection Drug Use

How Is HIV Transmitted?

Performance Objectives

Students will be able to:

- Identify ways HIV can be transmitted.
- Identify ways HIV cannot be transmitted.
- Develop class health guidelines.

Motivation

Read the following letter to the students. Ask them to imagine that this letter is from a friend.

My best friend just returned from the clinic. She just found out she is HIV-positive. She invited me to dinner. What should I do? Should I go? What do I say to her and her family? Can I eat food that she cooks or has touched? Will she be all right?

Have students write a response to the above letter. Have them include the reasons for their advice.

Procedure/Development

- List selected student responses on the board/newsprint and evaluate the suggestions:

- Ask, “What kinds of feelings might the person with HIV be having?”

Answers should include: fear, sadness, and worry. Then ask students to elaborate as to what the person might be afraid/sad/worried about. Answers should include: being sick, managing a complicated illness, money, their future, rejection, isolation, dying.

- Ask, “What kinds of things could the loved ones, friends, and family of someone with HIV be worried about?”

Answers should include: the health of their loved one, helping them get into care and stay healthy, financial concerns, concerns about their own risk/safety, concerns about discrimination, etc.

- Ask, “How can we help someone we know who has HIV?”

Most people with HIV are receiving medical treatment and have learned to live with a chronic condition. A person with HIV may need emotional support and acceptance and to continue to live the fullest life possible. We should continue to be a good friend, etc.

- Ask, “How can we help people we know who are close to someone with HIV?”

Help them get an appointment with a special doctor who treats patients with HIV; tell him or her to encourage his/her partner to get tested for HIV; let them talk; ask them if they need any help; be their friend.

Teacher Note: Be aware and sensitive to the fact that some of your students may have a friend or family member with HIV or AIDS, or may have HIV or AIDS themselves; emphasize the importance of a continued close relationship with a loved one who has HIV or AIDS and with those whose loved ones have HIV or AIDS.

- Using the board/newsprint, develop a list of how HIV can and cannot be transmitted according to the students' responses. Be sure to include these:

Ways HIV Can Be Transmitted

- By sexual intercourse with an infected partner.
- By sharing unclean needles, syringes, other injection drug-use equipment, and sharp objects that can transfer blood from one person to another. Some people need to inject medicine, such as insulin for diabetics. They always need to use sterile needles and never share them.
- From an infected pregnant woman to the child she is carrying, and through an infected mother breastfeeding a baby.
- By transfusion of HIV-infected blood. Since 1985 the blood supply in the U.S. has been carefully tested for HIV. This mode of transmission is highly unlikely now, but not impossible.

Ways HIV Cannot Be Transmitted

- Sneezing, coughing, kissing.
 - Sharing towels and utensils.
 - Using public toilets.
 - Using public telephones.
 - Being in the same room as someone with HIV.
 - Eating with someone who has HIV.
 - Holding hands or having other forms of “casual contact” with someone who has HIV.
 - Mosquito bites.
- Say, “Not having sex (abstinence) is the most effective way to avoid the sexual transmission of HIV and other sexually transmitted infections (STIs) as well as to protect against unintended pregnancy. Abstinence is the safest choice young people can make to prevent HIV infection.”
“Activities like kissing, hugging, and touching that entail no contact with semen, vaginal fluids, or blood are not ways that HIV can be transmitted.”

Teacher Note: To initiate discussion of what casual contact is, ask:

- Can HIV be transmitted by shaking hands?
- Can HIV be transmitted by sharing a meal?
- Can HIV be passed from one person to another during a hug?
- Can HIV be transmitted by using the same bathroom as a person who has the virus?
- Can one get HIV from swimming with infected people?

Make sure students understand that the answer to each question is no. Ask students what other things they have heard about ways that you can become infected with HIV and correct any myths or misconceptions.

- Have students develop a list of behaviors the class can adopt that will promote good physical and emotional health. These should include:
 - Avoiding use of alcohol, tobacco, and other drugs.
 - Practicing personal safety.
 - Practicing responsible decision making and abstaining from sexual intercourse.
 - Adopting infection control practices.
 - Practicing good nutrition.
 - Getting enough sleep.
 - Expressing feelings.
 - Fostering supportive relationships with family and friends and others to whom they are close.
 - Choosing friends who also cultivate good health habits.
- Post these lists on a class HIV/AIDS information bulletin board.

Assessment

Ask students to write down everything they did since they awakened in the morning. Ask them to evaluate the health aspect of their behaviors, giving an “A” rating to good health practices; “F” to totally unhealthy behaviors; and “B,” “C,” and “D” for behavior in between.

How Do Our Peers Affect the Way We Choose to Live?

Performance Objectives

Students will be able to:

- Define peer pressure.
- Identify ways peers can be supportive of one another.

Motivation

- Discuss TV and print ads for sneakers. Some people believe that such ads irresponsibly encourage teenagers to purchase expensive shoes to attain status. Ask the class to define peer pressure (influencing or being influenced by people of similar ages, e.g., pressure to wear certain clothes or wear hair a certain way or to engage in certain activities that “everyone else seems to be doing.” Sometimes people fear being left out or thought “uncool” if they don’t do what peers are doing).

Teacher Note: Throughout this lesson distinguish between positive and negative peer pressure. Positive peer pressure influences students to do meaningful, constructive things, like striving to do well in school, trying out for a team, or raising money for a school trip. Negative peer pressure influences students to do things that may be harmful to themselves or others, such as bullying, smoking cigarettes or using alcohol or other drugs.

- Have the students give examples of the types of peer pressure they’ve encountered. Ask them to be as specific as possible about situations in which they or someone they know did not want to go along with the crowd. What happened to that person? Write the examples on the board/newsprint.

Procedure/Development

- Ask the class: “During the last couple of lessons, we have discussed HIV and AIDS. What does peer pressure have to do with that?”
- If the class does not come up with the following explanation, say, “Two primary ways in which HIV is transmitted are through sexual intercourse and through sharing injection drug use equipment. These are two activities that some people may engage in due to peer pressure. Young people your age are best off if they abstain from sexual relationships. Young people are sometimes pressured to have sex by peers, or especially older adolescents or teens. It is not right for a person to persuade, pressure, or coerce someone to have sex. If this happens, say no and tell a parent, guardian, teacher, counselor, or other trusted adult.”

GRADE 6

Lesson

3

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Activity Sheet:
Complete the Story
(Parts A, B, C)

Board/Newsprint

VOCABULARY

Aggressive

Assertive

Nonverbal

Peer

Peer Pressure

Verbal

“However, some young people begin sexual relationships because they believe everyone else is sexually active and they should be, too. In fact, there is often more talk than action, and the impression that ‘everyone else is having sex’ is mistaken. Most young people your age abstain from sexual relationships. People also sometimes begin to drink alcohol or to take drugs because friends pressure them to try them. Alcohol and other drugs impair judgment and lead to risk behaviors, (e.g., unsafe sex).”

- Say, “Peer pressure can be either verbal or nonverbal.” Ask class for examples of verbal and non-verbal peer pressure. (Verbal pressure is spoken: “Come on, try it, everybody else is.” Nonverbal pressure is conveyed through expressions, gestures, or actions, e.g., rolling eyes, turning away, laughing at someone.)
- Say, “With that said, peer pressure can be a powerful influence on how people behave. So far, we’ve only discussed how it can be a negative influence for people to act in unhealthy ways and we’re going to talk more in a minute about that. But, because it’s so powerful, it’s important to know that peer pressure can also be used positively to encourage people to act in healthy ways.”

Ask for examples of positive peer pressure (encouraging a friend to exercise and eat healthfully; to abstain from sex before they are ready; encouraging a friend to do well in school).

- Now write the word “assertiveness” on the board/newsprint and ask the class to define it.
Possible Answers: To assert or stand up for one’s right to make one’s own choices, without putting someone down who makes different choices. Assertiveness means speaking in “I” statements, and being calm and clear about one’s choices (for example, “I don’t want to do that”; “I don’t think that’s healthy”) even if it means repeating them over and over or walking away from the situation if the other person keeps pushing.
- Choose one of the examples of peer pressure situations from the board/newsprint and plan out with the class how it can be dramatized. Have students volunteer for roles and act it out for the class.
- Divide the class into four or five small groups. Have each group develop a role-play, illustrating a student responding with assertive behavior to one of the peer pressure examples on the board/newsprint. Give the groups five to ten minutes to develop the role-plays, and then have them perform them in front of the class. Follow each role-play with a discussion, clarifying what verbal and nonverbal negative peer pressure and assertiveness behaviors were illustrated in the role-play.

Teacher Note: Role-playing risk-related scenarios is also an effective strategy and helps build important coping and decision-making skills. (See Appendix B, “Classroom Teaching Tips.”)

Assessment/Homework

Distribute Activity Sheets 1A, 1B, and 1C. Have students complete the stories “The Power to Persuade,” “Love Show,” and “Drugs That Divide” in class. Have students share their completed stories with the class and give their own story ideas.

Complete the Story

Directions

Following are the beginnings of three stories, "The Power to Persuade," "Love Show," and "Drugs That Divide." Complete the stories by showing how Enrico, Yolanda, and Michael can resist negative peer pressure by acting assertively, not aggressively.

Marijuana is an illegal drug that can be smoked or eaten.

The Power to Persuade

Enrico admired Sam and his friends. He liked the way they dressed, the way they spoke, the way they seemed so confident. Sam, especially, was a real leader. He was popular and always seemed to know about parties that were going on during the weekend. One Saturday evening Enrico was on his way home from a movie when he saw Sam and his friends in the park. He walked over to say hello and noticed that they were smoking marijuana. Sam greeted Enrico and offered him a joint. Enrico had never smoked marijuana and didn't want to try it.

Enrico said: " _____."

Sam replied: " _____."

Enrico said: " _____."

Sam said: " _____."

Then Enrico said: " _____"

_____."

Activity Sheet 1-B

Love Show

Yolanda had looked forward to Brenda's party all week because she knew Mario would be there. He was several years older, good-looking, and a terrific dancer. Brenda's party would be a great opportunity to get to know him better.

Sure enough, they hit it off right away. Yolanda and Mario laughed and danced together all evening. After the party, Mario walked her home. Near her building was a park. He kissed Yolanda and asked her to go into the park with him. She liked Mario, but did not want to do anything more than kiss. She thought that Mario wanted to be sexually involved. Going into the park did not feel safe. She would feel vulnerable if he pressured her.

Yolanda said: " _____."

Mario replied: " _____."

Yolanda said: " _____."

Mario said: " _____."

Then Yolanda said: " _____"

_____."

Activity Sheet 1-C

Drugs That Divide

Michael and Bill are close friends. Bill has started to drink beer pretty often. Michael cares for Bill and is worried about him. Bill has been pressuring Michael to drink beer with him.

Michael said: "_____."

Bill replied: "_____."

Michael said: "_____."

Bill said: "_____."

Then Michael said: "_____

_____."

How Has HIV/AIDS Changed Our Society?

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS
Advocacy

Self-Management

MATERIALS
Markers
Board/Newsprint

VOCABULARY
People Living with
HIV/AIDS (PLWHA)
Society
Timeline

Performance Objectives

Students will be able to:

- Describe how HIV/AIDS is both a personal and social issue.
- Explain three reasons that HIV/AIDS is a major public health concern.
- Discuss HIV/AIDS from a historical perspective, its current status, and what could happen in the future.

Motivation

Have students sit in a circle.

- Say, “Think for a moment of a person with HIV or AIDS. What picture comes to mind?” Have students discuss their concept of a person with HIV or AIDS.
- Say, “Most people living with HIV or AIDS look no different than anyone else.” Tell the class that you will use the phrase “People Living with HIV/AIDS (PLWHA).”

Procedure/Development

- Say, “One thing that PLWHAs all have in common is that they became infected with HIV, even if they became infected in different ways. Some of them knew how to protect themselves from becoming infected and didn’t do so, and some of them were not able to protect themselves.” (You may want to point out that until doctors identified HIV and how it is acquired, HIV infections occurred in people who had no way of knowing that HIV existed or how to protect themselves. Also persons that are infected at birth or through breastfeeding have no ability to protect themselves.)
- Ask, “What needs to be done in the future so that people no longer become infected?”

Write students’ responses on board/newsprint. Student ideas might include:

- People need to remember that HIV transmission is preventable.
- People have to be better educated about the ways HIV can be transmitted so that transmission can be reduced and eventually eliminated.
- People have to be better educated about how they can protect themselves from HIV infection.
- People need to be educated about the differences between HIV and AIDS.
- New treatments for HIV/AIDS must continue to be developed.
- A cure and a vaccine for HIV/AIDS must be found.

- Educate people regarding the importance of HIV testing and knowing their HIV status, so they can protect themselves and others. In 2009, over 1.2 million people in the United States were living with HIV infection and 1 out of 5 people were unaware of their infection.
- Healthcare for PLWHA needs to be improved.
- PLWHA need to be able to receive appropriate medications, regardless of their ability to pay for them.
- Drug users need to get into treatment.
- People need to be educated that anyone who practices risk behaviors is susceptible to HIV infection. Prejudice against PLWHA and from communities hit hard by HIV and AIDS needs to be fought.
- People need to understand that HIV infection and AIDS can be chronic illnesses (manageable and not necessarily life-threatening) with treatment and the maintenance of good health practices.

Assessment

- Have students write a description of how they think HIV/AIDS has changed our society. (For example, it has made people more careful about sex and drugs, confirmed that abstinence is a healthy choice at any age, highlighted deficiencies in the healthcare system, and unfairly intensified prejudice against various groups in our society.)
- Have students write a description of how the presence of HIV/AIDS in society has affected their communities.
- Ask for volunteers to read their descriptions.

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Advocacy
Communication
Decision Making
Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Latex Condoms
Polyurethane Condoms

How Can We Prevent HIV Infection?

Performance Objective

Students will be able to:

- Describe how to prevent the spread of HIV.

Teacher Note: This lesson contains the first mention of “condoms” as an effective method of preventing HIV and other STDs. It is recommended that students are taught comprehensive health education, including sexual health education prior to teaching this lesson.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvc/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Motivation

- Ask, “What have you heard about ways to prevent HIV infection? Write students’ answers on the board/newsprint.
- Ask, “Do you think these are myths or facts?”

Procedure/Development

- Circle answers that are myths and underline the ones that are facts. Students should identify the following as methods of prevention:
 - Abstaining from alcohol and other drug use, which impair decision making and may lead to risk behaviors that can transmit HIV.
 - Abstaining from sharing sharp objects, such as needles, razors, pins, or scissors that might be used on someone’s skin and lead to exchange of blood if someone else uses them, too. For example, some young people use sharp items to become “blood brothers” or “blood sisters.” This may put them at risk of HIV or other infection.
 - Abstaining from sexual intercourse as the healthiest, most appropriate choice for young people. If anyone pressures them to have sexual intercourse, they should say no and tell a parent, guardian, teacher, counselor, or other trusted adult.
 - Young people who do have sexual intercourse should know that correct and consistent use of latex or polyurethane condoms will reduce but not eliminate their risk of infection with HIV and other sexually transmitted infections.
 - Stay informed and make sure you and your friends know the facts about HIV infection and practice good decision making.

Assessment/Homework

Create a poster or write a song, rap, poem, or short story about how to prevent HIV infection.

LESSON GUIDE

G R A D E 7

How Does HIV Impair the Immune System?

Performance Objectives

Students will be able to:

- Describe how the immune system responds to HIV.
- Clarify the difference between HIV and AIDS.

Do Now

Define briefly: *defense, deficiency, immune system.*

Teacher Note: Answers to the “Do Now:”

Defense – self-protective reaction.

Deficiency – a shortage; lack of something necessary.

Immune system – a set of defenses within the body that protects against disease.

Teacher Note: If students need to review the immune system you may want to distribute the Example Illustrations 1 or 2, “How the Immune System Works.” It may be helpful to make an overhead transparency or use an interactive whiteboard.

Motivation

- Ask, “How many of you had a cold last year? How long did it take you to get better?”
- Say, “Most people need only a week for their immune systems to get rid of the germs responsible for the sneezing, coughing, and tiredness that come from a cold. During this time the immune system builds defenses that eventually rid the body of the infection.”

Procedure/Development

- Ask, “What would happen to you if you had a damaged immune system, but you got sick?” Answer: If you had a damaged immune system, your body could not fight off the germs that cause colds or other diseases. If you got a cold, your body would not be able to fight the infection, and you would not get better for a long time, if at all.
- Say, “Germs are also called pathogens.”
- Ask, “What are some types of pathogens?”
Answer: Viruses (very tiny infectious agents that make copies of themselves within the cells of the body they invade), bacteria (single-celled organisms), fungi (a class of vegetable organisms that has been on the earth a long time), and parasites like worms and protozoa (a group of one-celled animals, most of which live in water).

GRADE 7

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Self-Management

MATERIALS

Board/Newsprint

Example Illustrations 1, 2:

How the Immune System Works

VOCABULARY

Antigen

B-Cell

Bacteria

CD4 Count

Defense

Deficiency

Fungi

Immune System

Lymphokines

Macrophage

Opportunistic Diseases

Pathogen

Parasite

Protozoa

Replication

T-Cell

Virus

- Ask, “Can you think of some diseases caused by these pathogens?” Answers may include:
Viruses cause colds, flu, chickenpox, hepatitis, and measles.
Bacteria cause strep throat, pneumonia, tetanus, and gonorrhea.
Fungi cause athlete’s foot and ringworm.
Parasites:
 - Protozoa cause malaria and amoebic dysentery.
 - Worms, for example, hookworm and tapeworm.

Teacher Note: Refer to Example Illustration 1 “How the Immune System Works.”

- Say, “There are various ways the immune system functions. It has:
 - Barriers like skin.
 - Innate or inborn immune responses (for example, stomach acid kills lots of pathogens).
 - A special response for each invader which your immune system uses the next time it encounters the invader.”
- Say, “If a pathogen gets into the body, this is how a healthy immune system works:
 1. When an invader enters the body, it gets engulfed by macrophages (meaning ‘big eater’– macrophages are big cells that protect against infection) that are close to the skin or mucous membranes.
 2. The macrophage breaks down the pathogen and reveals its antigens. Each invader has its own antigens which act as an ‘identification card’ for the immune system to recognize. The Helper T-cell (also called CD4 cell) reads and recognizes the antigen. The Helper T-cell sends a message out to the B-cells and to other cells, by releasing lymphokines, to come help to destroy the invader, directing the immune system.
 3. The activated B-cells produce millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated. Antibodies and antigens fit together like a lock and a key. For example, a measles antibody will only attach itself to a measles virus.
 4. Once an antibody has ‘caught’ an invader, a signal is sent to the macrophages and to other cells (like T-cells) that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding your body of the pathogen or invader.”
- Say, “By the time you feel miserable with a cold, the virus that caused it is already under attack by macrophages, T-cells, and B-cells. The B-cells have a memory, so that if that very same virus enters the body again, the B-cells will send out already made antibodies to help identify it and help lots of the cells of the immune system to destroy it.”
- Ask, “How many of you have heard of HIV?”
- Ask, “What does HIV stand for?”
 Answer: Human Immunodeficiency Virus. HIV is a virus that infects only humans. It weakens the immune system and can lead to the development of AIDS.
- Ask, “What happens when HIV infects the body?”
- Say, “The process of HIV infection is as follows:
 1. A person is exposed to HIV. (Note that a person cannot be exposed via casual contact such as shaking hands, sharing drinks, or sneezing, and that the methods of transmission will be covered in the next lesson).
 2. The virus enters the body and attacks the CD4 cell, also called the Helper T-cell.

3. The virus enters the Helper T-cells (and uses them to multiply or make copies of itself). This process is called replication.
 4. When the virus is finished using the Helper T-cell to copy itself, the T-cell may die. The virus may make many copies and burst out of the cell, or the cell is identified as infected, and is destroyed by the immune system. Because the Helper T-cell signals other cells what to do—make antibodies, attack HIV—as the Helper T-cells die off, the immune system doesn't work as well. With appropriate treatment, the immune system can remake CD4 cells.
 5. As HIV infection progresses in the body, the number of CD4 cells decreases. Healthy individuals have between 500 and 1500 CD4 cells per cubic millimeter of blood. As the disease progresses in a person with HIV, the CD4 count gets lower, and the person is more likely to become ill.
 6. As the CD4 count continues to decrease, the body becomes susceptible to opportunistic diseases. These are illnesses that normally do not occur in people with healthy immune systems. They are called opportunistic because they take advantage of the opportunity presented to them by the weakened immune system of the person with HIV.”
- Ask, “How is HIV (Human Immunodeficiency Virus) different from a virus that causes the common cold?”

Possible Answers: A cold virus is airborne and easy to catch—the body can fight off the cold within days or weeks. HIV is bloodborne and harder to get. HIV infects some cells of the immune system. HIV stays in the body and doesn't completely go away. HIV has longer lasting and much more serious effects. Tell the class that the transmission of HIV (how the virus is passed from one person to another) will be covered in another lesson.

- Ask, “How many of you have heard of AIDS?”
- Ask, “What does AIDS stand for?”

Answer: Acquired Immune Deficiency Syndrome. Explain that the last two steps in the process we just learned are crucial in defining AIDS. A person, already infected with HIV, is said to have AIDS when the CD4 count falls below 200 cells or the person has one or more of the opportunistic infections on a special list created by the Centers for Disease Control and Prevention. AIDS, then, is not a specific disease but rather a specific group of related bodily symptoms and health problems with HIV as the underlying cause.

Teacher Note: The list of illnesses and opportunistic infections associated with AIDS can be found at <http://www.cdc.gov> with a description of each illness.

- Ask, “What is the difference between HIV and AIDS?”
Explain that HIV is the virus that can lead to AIDS. AIDS is an advanced phase of HIV infection.

Homework

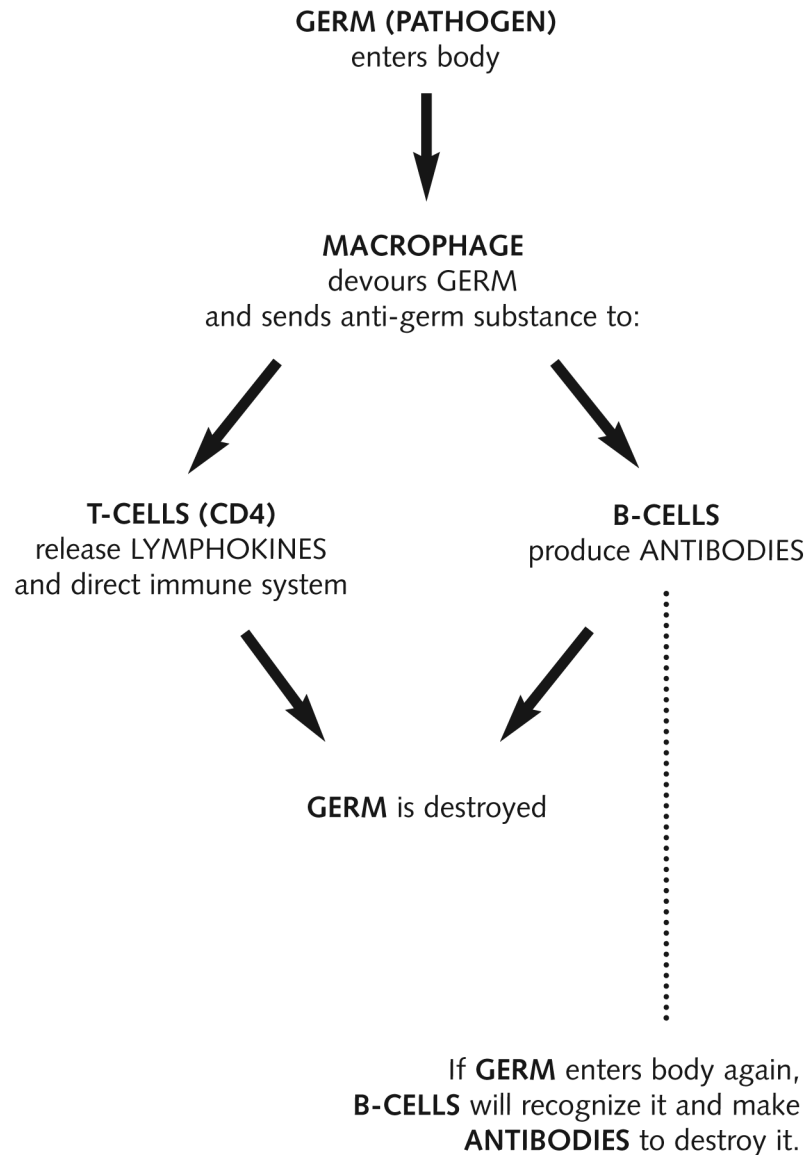
Ask your parents or other adults who are responsible for you to show you your record of immunizations. Make a list of

- a) required immunizations for your age group and describe the diseases they prevent.
- b) all the vaccines you have received, when you had them, and the diseases they prevent. If you do not have a record of immunizations, your doctor or clinic may have it, and you can ask about it next time you have an appointment.

Students who do not have their records should access the New York City Department of Health and Mental Hygiene Website (<http://www.nyc.gov/html/doh/downloads/pdf/scah/scah-med-req.pdf>) or call 311 to obtain their immunization record from the Citywide Immunization Registry.

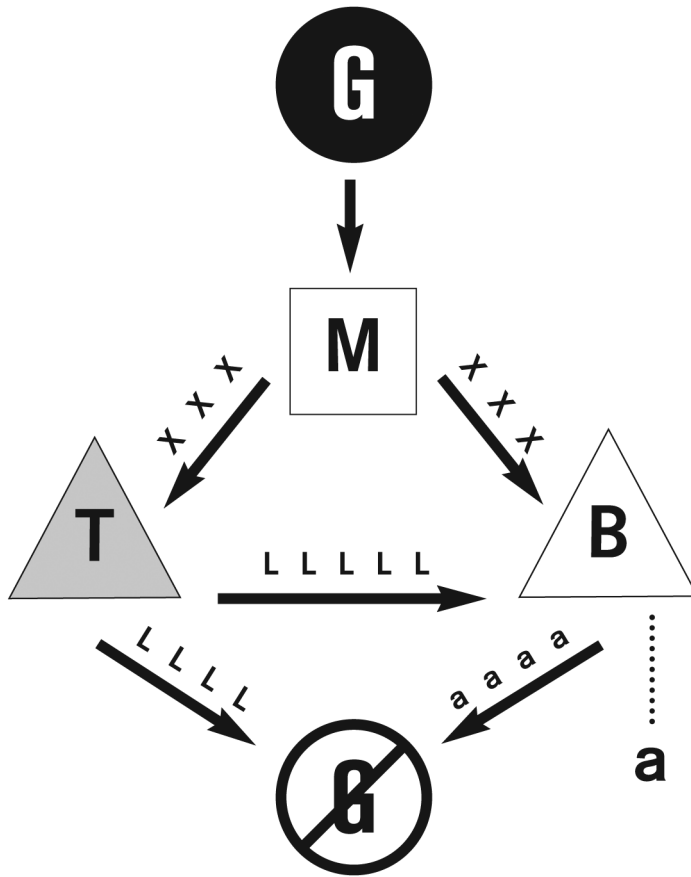
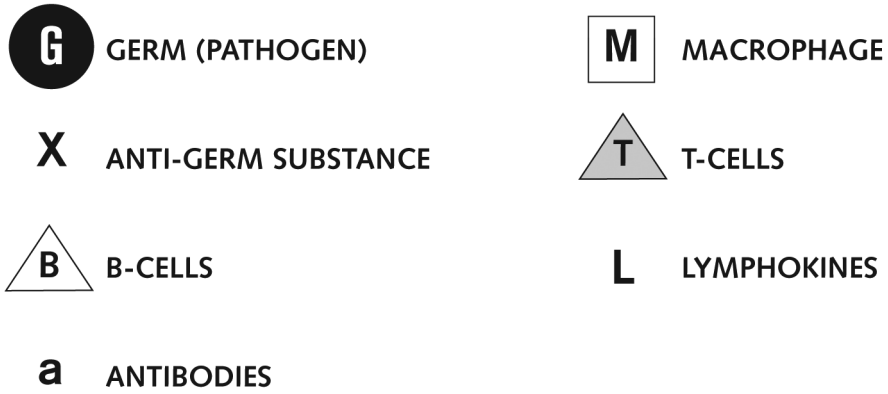
Example Illustration 1

How the Immune System Works



How the Immune System Works

Example Illustration 2



SKILLS

Decision Making
Relationship Management
Self-Management

MATERIALS

Activity Sheet:
"Some People Say..."
Board/Newsprint

VOCABULARY

Antiretroviral Therapy (ART)
Cervical Cells
Cervix
Mucous Membrane
People Living with HIV/AIDS
(PLWHA)
Perinatal
Preseminal Fluid
Sexually Transmitted Infections
(STIs)
or
Sexually Transmitted Diseases
(STDs)
Theoretical
Transfusion
Transmission

How Is HIV Transmitted?

Performance Objectives

Students will be able to:

- Define transmission and identify how HIV is transmitted.
- Identify the body fluids that can transmit HIV from an infected person to an uninfected person.
- Understand that anyone who practices risk behaviors can become infected with HIV, regardless of age, race or ethnicity, gender, or sexual orientation/identity, economic status, country of origin, etc.

Motivation

- Provide students with the following basic information regarding the current state of HIV.*

HIV in the United States (U.S.)

- The U.S. Centers for Disease Control and Prevention (CDC) estimates 1.2 million people in the U.S. are currently living with HIV/AIDS infection and 1 in 5 are unaware of their infection.
- As of December 2010, New York City had 110,736 people living with HIV/AIDS. During 2001-2009, 1,090 males and 534 females 13-19 years of age were diagnosed with HIV infection.
- AIDS reporting began in 1981. Cumulatively, through 2009, over a million (1,108,611) persons were diagnosed with AIDS in the U.S., of whom 165,805 were diagnosed in New York City (the city with the highest cumulative number of AIDS cases in the U.S. and almost three times the number of AIDS cases as Los Angeles, the second hardest hit city in the U.S.)
- CDC estimates that 594,500 persons in the U.S. have died of AIDS through 2008, of whom 98,030 were diagnosed in New York City.
- In 2009, about 42,000 persons were diagnosed with HIV infection in the U.S. (based on reporting from 40 states) of whom 20 percent were among youth and young adults under the age of 25 years. In 2009, 3,669 persons were newly diagnosed with HIV infection in New York City; 33 percent were youth and young adults less than 30 years of age, most of whom were infected through sexual activity.

The Global HIV Epidemic:

- UNAIDS estimates that at the end of 2010, an estimated 34 million people were living with HIV, approximately 30 percent of whom were 15-24 years old. In 2010, there were about 2.7 million new HIV cases globally, including 390,000 among children <15 years of age. The prevalence among young persons, 15-24 years of age is 0.3 percent for males and 0.6 percent for females.
- Ask, "Why is it essential that people your age learn about HIV and AIDS?"

Students' answers may include:

- “If we are educated now about HIV/AIDS, we can take steps to prevent HIV transmission.”

* The latest data are available from multiple sources, including the CDC at <http://www.cdc.gov/hiv/topics/surveillance/basic.htm#ddaids>;

from the Kaiser Family Foundation Data Foundation at <http://www.statehealthfacts.org>;

from the New York City Department of Health and Mental Hygiene at <http://www.nyc.gov/html/doh/html/dires/hivepi.shtml>;

and from UNAIDS at <http://www.unaids.org/en/>.

The data are subject to reporting lags so the most current data available are from prior years.

- “Learning about how HIV is transmitted may encourage young people to abstain from drug use and sexual intercourse.”
- “There is a lot of misinformation about HIV/AIDS. People need to know the facts.”
- “Understanding HIV/AIDS and how HIV is transmitted helps young people to be more compassionate and less prejudiced towards people living with HIV/AIDS.”

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Procedure/Development

- Ask students to define the term transmission.

Answer: When something is passed from one person to another, such as a message, illness, germs, etc.

- Say, “Remember, HIV is not spread through casual contact (for example, touching) but through specific bodily fluids that are capable of carrying the virus.”

Teacher Note: To initiate discussion on defining casual contact, ask:

- Can HIV be transmitted by shaking hands?
- Can HIV be transmitted by sharing a meal or a drink?
- Can HIV be passed from one person to another during a hug?
- Can HIV be transmitted by using the same bathroom as a person who has the virus?
- Can one get HIV from swimming with infected people?
- Can HIV be transmitted through insect bites?

Make sure students understand that the answer to each question is No. Ask students what other things they have heard about ways that people can become infected with HIV. Correct any myths or misconceptions.

- Ask, “What have you heard are some ways HIV can be transmitted?” Be sure to correct misconceptions. Possible answers include:
 1. Sexual intercourse with an infected person.
 2. Sharing needles, syringes, and other equipment used to inject drugs with an infected person.
 3. From an infected woman to her child during birth, or breastfeeding.‡
 4. Blood transfusions.‡
- Ask, “What do all these have in common?”

Answer: They all involve the transfer of certain HIV-infected body fluids from one person to another.
- Ask, “Which body fluids may be transferred during each of these modes of transmission?”

Answers, respectively:

 1. Semen, preseminal fluid (“pre-cum”), vaginal fluids, blood, and/or menstrual blood.
 2. Blood.
 3. Blood, vaginal fluids, breast milk.
 4. Blood.

Teacher Note: Saliva, tears, and sweat do not contain amounts of HIV large enough to transmit the virus.

- Say, “Let’s make a list of body fluids where HIV is present.”

Students’ answers should include: blood, semen, preseminal fluid (“pre-cum”), vaginal fluids, menstrual blood, and breast milk.
- Say, “Let’s clarify the meaning of these terms, specifically:

Semen – the fluid, which contains sperm that is ejaculated from the penis during sexual activity and orgasm.

Preseminal fluid (“Pre-cum”) – the small amount of clear fluid that appears at the tip of the penis when it becomes erect prior to orgasm.

Vaginal fluids – the natural wetness, also called secretions, in a woman’s genitals.

Menstrual blood – blood that leaves the body through the vagina during a woman’s menstrual period.

Breast milk – the nutritious fluid produced by a mother for feeding her baby.

Teacher Note: Many students use other terms to describe these body fluids and other matters relating to sexuality. As with all HIV/AIDS education, it is important that students understand the terms used in the classroom, use them correctly, and relate them to their own experience and language. If students use different terms to refer to body fluids, make sure they understand the relationship between both sets of terms. Encourage students to use the correct terminology.

If students seem uncomfortable during discussion of body fluids and HIV transmission, acknowledge that such a response is natural. Because we do not often discuss such matters in public, it is understandable that some people may feel embarrassed. Nevertheless, it is important to know the facts.

- Ask, “How is HIV transmitted from one person to another if these [point to list] are the only body fluids in which HIV is found in an infected individual?”
- Write on board/newsprint: “Sexual Intercourse or Sexual Activity.” Have students define these terms.

Teacher Note: HIV can be transmitted through anal, vaginal, or oral intercourse with a person who is infected. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students' questions. (In Grades 9-12, the teacher should initiate such discussion.) When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

- Say, "During sexual intercourse, infection can be transmitted or contracted by anyone regardless of age, race or ethnicity, sexual orientation/identity, gender, gender identity, country of origin or economic status."

Teacher Note: If students ask about methods of prevention, tell them that you will discuss methods of prevention in detail during the course of these HIV/AIDS lessons.

- Say, "In addition to presenting a risk of HIV infection, sexual intercourse can also lead to infection with other sexually transmitted infections (STIs)."
- Ask, "Can you name some sexually transmitted infections?"
Answers: Some of the most common are hepatitis B and C, gonorrhea, syphilis, chlamydia, herpes, human papillomavirus (HPV or genital warts).
- Say, "STD and HIV rates have been increasing among 15-19 year olds. In 2010, the chlamydia rate among women in NYC aged 15-19 years was 3,378 cases per 100,000—almost double the rate reported in 1999."¹

Teacher Note: Adolescents may be more likely than adults to become infected when exposed to HIV and certain STIs such as chlamydia and human papillomavirus (HPV) because their reproductive tracts are not fully mature.

A female adolescent's reproductive system requires five to seven years to mature fully after her first menstrual period. During this developmental phase, she may be more susceptible to infection from HIV or other STIs. As she goes through puberty, the cells on her cervix shift. (The cervix is the structure that connects the vagina and the uterus.) In the immature adolescent, cervical cells that are more vulnerable to infection are located toward the outside of the cervix (toward the vagina), where they are exposed to male genital contact during sexual intercourse. Over time, these cells gradually shift to the inner portion of the cervix (toward the uterus), so they are no longer exposed during sexual intercourse. Also, immature vaginal walls are thinner and secrete less fluid than later in development, so they are more vulnerable to tearing and abrasions. In the fully mature woman, thicker vaginal walls and heavier concentrations of vaginal and cervical fluids offer greater protection against the passage of bacteria or viruses through the mucous membrane that lines the vagina.

- Say, "A person with an STI is more susceptible to HIV infection because sores, rashes, etc., may provide routes through which HIV can be transmitted and reach the bloodstream."
- Ask, "What is the only 100 percent effective way to avoid sexual transmission of HIV?"
Answer: Abstinence from sexual intercourse.
- Write on the board/newsprint: "Sharing needles/syringes/works/skin-popping equipment."
- Say, "This refers to needles and other items that people share for injecting drugs, including steroids, hormones, insulin or any other purpose. Sharing needles/syringes/works/skin-popping equipment that have not been properly sterilized is considered a highly efficient mode of transmission because it involves blood-to-blood contact. Even microscopic quantities of blood may remain in the needle, syringe, etc., and can then enter the bloodstream of the next user."

¹ The New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Disease Control Quarterly Report Vol. 9, No. 2 June 2011.

- Write on the board/newsprint: “Blood transfusion.”
- Say, “This mode of transmission is highly unlikely but not impossible. Since 1985, donated blood in the United States has been tested for HIV antibodies. Any blood found to contain HIV antibodies is not used, and the possibility of receiving HIV-infected blood is remote. Most blood used for transfusions in the United States is free of HIV. In addition to testing donated blood for HIV antibodies, potential donors are screened and those engaging in behaviors considered high risk for HIV infection are discouraged from donating. Other countries may not have rules about blood donation that are as strict.”
- Say, “It is important to distinguish between receiving a blood transfusion and donating blood. Donating blood is 100 percent safe. It is also important to know that donors whose blood is found to be infected are asked to return to the blood center to discuss results of tests that were conducted on their blood. As with all other HIV testing in New York State, the person receives counseling about the diagnosis of HIV from trained counselors and is referred for treatment.”

Teacher Note: Some students may say that healthcare providers have to be careful. Explain: “Doctors, nurses, dentists, technicians, and other healthcare workers are required to use ‘universal precautions.’ Universal precautions—sterilizing equipment, using masks, gloves, and disposable equipment, disposing of syringes and other sharp equipment properly—are designed to protect the patient and the healthcare worker from transmission of any infectious disease, including HIV. That’s why they are called ‘universal.’”

- Write on the board/newsprint: “Mother to child (perinatal transmission).”
If a pregnant woman tests positive for HIV, she will be put on special anti-HIV medications during part of her pregnancy and delivery; special procedures will be used during delivery (for example, delivery by cesarean-section), and the newborn will be given medications during the first few weeks of life. As a result, a dramatic reduction has been made in the number of cases of perinatal transmission of HIV. In New York City in 1996, there were 227 cases of perinatal transmission, but under the new guidelines in 2010 there were 12 cases.²
HIV is found in breast milk and can be transmitted from an HIV-infected woman to her child through breastfeeding. HIV-infected mothers are therefore instructed not to breastfeed.
- Say, “Now that we have learned about how HIV is transmitted, can you tell me who is at greatest risk of HIV infection?”
Answer: Anyone who practices risk behaviors can become infected with HIV, regardless of age, race, economic status, country of origin, gender, gender identity, or sexual orientation/identity. If people do not practice risk behaviors, they greatly reduce their chances of being at risk of HIV infection.

Homework

Give students the Activity Sheet “Some People Say.” Have them answer the questions. Make sure you review the answers at the beginning of the next class.

² New York City Annual Surveillance Statistics. New York: New York City Department of Health and Mental Hygiene, 2011. Updated January 4, 2012. Accessed 3.27.12 at <http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2010-tables-all>.

“Some People Say...”

Directions

Below are things that “some people say” about HIV/AIDS. Circle “T” if you think it is true and “F” if you think it is false.

- | | | |
|---|---|---|
| 1. Some people say that only gay and bisexual men are likely to be infected with HIV. True or false? Why? | T | F |
| 2. Some people say that only people with multiple sexual partners are likely to be infected with HIV. True or false? Why? | T | F |
| 3. Some people say that you can get HIV from donating blood. True or false? Why? | T | F |
| 4. Some people say that alcohol and illicit drug use can make people vulnerable to HIV infection when they share needles/syringes/works/skin popping equipment. True or false? Why? | T | F |
| 5. Some people say that you can contract HIV by sharing a drink with someone who has HIV. True or false? Why? | T | F |
| 6. Some people say that having other sexually transmitted infections (STIs) can make it more likely that you’ll get HIV. True or false? Why? | T | F |
| 7. Some people say you can tell if someone has HIV by looking at him or her. True or false? Why? | T | F |

Activity Sheet (continued)

- | | | |
|--|----------|----------|
| 8. Some people say you can get HIV from insect bites. True or false? Why? | T | F |
| 9. Some people say that tears transmit HIV. True or false? Why? | T | F |
| 10. Some people say it is rare to get HIV from a blood transfusion in the United States. True or false? Why? | T | F |
| 11. Some people say the risk of HIV transmission from a healthcare provider (doctor, dentist, nurse, technician) is small. True or false? Why? | T | F |

Answers to “Some People Say...”

1. **Q.** Some people say that only gay and bisexual men are likely to be infected with HIV. True or false? Why?

A. False. Worldwide, the HIV/AIDS epidemic primarily has been spread through heterosexual intercourse although in the U.S. the epidemic first took hold among gay and bisexual men. Here and abroad the virus has also stricken a great many injection drug users, their male and female sexual partners, and their babies. At this point, there is also a rising spread among heterosexuals, non-drug users, adolescents, and adults alike. HIV's rule is: it's what you do, not who you are. That means that HIV does not discriminate—it will infect anyone of any race, religion, age, gender, or sexual orientation—if that person engages in a risk behavior, such as sharing needles/syringes/works/skin-popping equipment for drug injection.
2. **Q.** Some people say that only people with multiple sexual partners are likely to be infected with HIV. True or false? Why?

A. False. Anyone who has engaged in sexual intercourse with an infected person, or who has engaged in sharing needles/syringes/works/skin-popping equipment, or who has been the sexual partner of someone who has engaged in these behaviors may be infected. However, it is true that having multiple partners increases risk, because it increases the odds of being with someone who is HIV-positive.
3. **Q.** Some people say that you can get HIV from donating blood. True or false? Why?

A. False. Sterile, disposable equipment is used each time blood is drawn, and is then discarded.
4. **Q.** Some people say that alcohol and illicit drug use can make people vulnerable to HIV infection when they share needles/syringes/works/skin popping equipment. True or false? Why?

A. True. Sharing needles/syringes/works/skin-popping equipment is the most direct drug-related route to HIV infection.
5. **Q.** Some people say that you can catch HIV by sharing a drink with someone who has HIV. True or false? Why?

A. False. There is no exchange of the body fluids that transmit HIV by sharing a drink. There is no documentation of HIV transmission through casual contact.
6. **Q.** Some people say that having other sexually transmitted infections (STIs) can make it more likely that you'll get HIV. True or false? Why?

A. True. Certain STIs cause genital sores or rashes that make it easier for HIV to enter the bloodstream. However, sores or cuts need not be present for HIV infection to occur since HIV can be transmitted directly into the bloodstream through the mucous membranes that line the rectum, vagina, and mouth.

7. **Q.** Some people say you can tell if someone has HIV by looking at him or her. True or false? Why?
- A.** False. A person can be infected with HIV but look and feel healthy. While some people infected with HIV get some symptoms of disease within a year or two, many remain relatively symptom-free for as long as ten years or more. Anyone infected with HIV can transmit HIV throughout the course of the illness.
8. **Q.** Some people say you can get HIV from insect bites. True or false? Why?
- A.** False. Mosquitoes and other insects do not ingest enough blood to spread HIV and do not spread blood to people they subsequently bite. HIV is human immunodeficiency virus. HIV does not infect insects such as mosquitoes.
9. **Q.** Some people say that tears transmit HIV. True or false? Why?
- A.** False. There is not enough HIV in tears to transmit it. In the epidemic to date, no case of transmission through tears has ever been documented.
10. **Q.** Some people say it is rare to get HIV from a blood transfusion in the United States. True or false? Why?
- A.** True. Today, the blood supply in the United States is very safe. Donated blood is thoroughly screened, making the chances of anyone becoming infected from a blood transfusion remote. Since 1985, the hospital blood supply in New York City has been screened carefully for HIV using HIV antibody tests. In 1999, additional screening for the presence of the actual virus in blood was put into place. Still, some people who are scheduled for elective surgery choose to donate their own blood so that they can receive it if a transfusion should be necessary during their operation.
11. **Q.** Some people say the risk of HIV transmission from a healthcare provider (doctor, dentist, nurse, and technician) to a patient is small. True or false? Why?
- A.** True. The risk of becoming infected from contact with an HIV-positive healthcare provider is indeed remote. The Centers for Disease Control and Prevention (CDC) have recommended the use of universal precautions by healthcare providers to minimize the risk of transmitting many infectious diseases, including hepatitis and HIV. The risk of transmission from patient to healthcare provider is far greater than from provider to patient.

How Do We Avoid Risk for Acquiring HIV?

Performance Objectives

Students will be able to:

- Understand that alcohol and other drug use may lead to unsafe sexual behaviors.
- Understand that sharing needles/syringes for drugs, including steroids, or for other purposes, such as tattooing or body piercing can result in HIV and other disease transmission.
- Respond assertively in order to be able to resist peer pressure.

Do Now

Have the students define the following terms:

injection drug use *peer pressure* *risk*
peer *rebuttal* *transmission*

Teacher Note: Depending on the level of the students and the time available, you may wish to have students select only two or three terms to define in the “Do Now.”

Answers to the “Do Now:”

Injection drug use – use of drugs injected into a vein, muscle, or under the skin, by means of a needle/syringe.

Peer – an individual of the same age or status as oneself.

Peer pressure – the strong influence, expressed verbally or nonverbally, of others in one’s age group.

Rebuttal – an effective answer to a persuasive question.

Risk – a chance of danger, loss, or defeat.

Transmission – the passing of infectious agents from one person to another.

Motivation

- Review the “Some People Say...” homework activity from the previous lesson.
- Say, “We have already learned that sharing needles, syringes, works, and skin-popping equipment for injecting drugs are risk factors for acquiring HIV and other diseases. How do you think using non-injected drugs and alcohol can indirectly lead to transmission?”

Answer: Alcohol and other drugs can impair people’s ability to make sound, well-thought-out decisions, so they are more likely to engage in high-risk behaviors that can lead to the transmission of HIV and other diseases.

GRADE 7

Lesson

3

NEW YORK STATE LEARNING STANDARDS 1, 2

SKILLS

Communication

Decision Making

Self-Management

MATERIALS

Activity Sheet:

Drug, Alcohol, and Steroid Risk... and Rebuttal

Newsprint

VOCABULARY

Hormones

Injection Drug Use

Peer

Peer Pressure

Rebuttal

Risk

Steroid

Transmission

Teacher Note: Young people often underestimate alcohol’s potential for adversely affecting one’s judgment and health. It is important to emphasize to students that alcohol is a drug. By impairing one’s judgment, it can lead to risk behaviors that can result in HIV or another sexually transmitted infection.

- Ask, “What are some drugs that some young people use?”
List students’ answers on the board/newsprint. Make sure the list includes alcohol, marijuana, inhalants, tobacco (nicotine), etc.
- Ask, “Which of these drugs impair judgment?”
Answer: All, with the exception of tobacco. (However, tobacco is known as a “gateway drug,” meaning that young people who smoke cigarettes may be more likely to try other drugs, too.)
- Ask, “What kinds of alcoholic beverages do people drink?”
Answer: Beer, wine, wine coolers, whiskey, mixed drinks, such as piña coladas, margaritas, daiquiris.
- Ask, “Which of these drinks can affect judgment?”
Answer: All.
- Say, “Let’s talk about some common beliefs people have about alcohol; tell me whether these are myths or facts.”
 - “Wine coolers can’t get you drunk.”
Answer: Myth.
 - “One drink is okay and doesn’t really affect you.”
Answer: Myth.
 - “Beer has less alcohol, so it is less intoxicating.”
Answer: Myth. It does have less alcohol, but is often served in larger quantities; when this is the case, it is just as intoxicating as other forms of alcohol. In fact, the amount of alcohol in a can of beer, a glass of wine, or a shot of straight liquor is about the same.
 - “Alcohol is not a drug.”
Answer: Myth. It is the most commonly used “drug” in the United States. Although it is legal for people age 21 and over in New York and other states, alcohol is still a drug and a powerful one.
- Ask, “Besides impairing judgment and the ability to make good decisions, what are some of the other effects of alcohol?”
Answers:
 - Alcohol impairs coordination (one “walks funny,” can’t drive safely).
 - Alcohol impairs speech (one “talks funny” and cannot express oneself clearly).
 - Alcohol poisoning, which can be fatal, can result from excessive drinking, including binge drinking.
 - Alcohol over a sustained period of time can injure the liver and other body systems.
- Ask, “How can alcohol and other drugs put people at risk of infection from HIV and other STIs?”
Answer: There are two ways:
 - One is that injected drug use can lead to using the same needles/syringes or other equipment (filters, mixing containers, water) that someone else used to inject drugs. There is risk even if drugs are not injected into a vein, but into a muscle or skin, because traces of infected blood can still make their way into the body. These risks exist in any injection with a non-sterile syringe, even if it is of substances we do not usually think of as drugs. These may include steroids, hormones, and vitamins.
 - The second way is by affecting thought processes and feelings and judgment in a way that could lead to other risk behaviors.

- Say, “Today we will have the opportunity to develop and practice some of the skills necessary to abstain from using alcohol and other drugs.”
- Divide the class into five small groups*. Appoint a leader and recorder for each group or have each group select its own leader and recorder. Distribute the Activity Sheet “Drug, Alcohol, and Steroid Risk... and Rebuttal.” Assign each group six statements that attempt to persuade someone to use alcohol or other drugs (persuasive statements) and have them prepare one or more rebuttals for each statement. Explain that a rebuttal is an effective response that explains why that person has chosen not to engage in such behavior. The recorder writes down the group’s rebuttals.
- Have the class form a circle. Have the recorder from the first group read one of the “persuasive statements,” then ask classmates from another group for a rebuttal. After the second group has responded, have the first group’s recorder state the rebuttal that group wrote. Discuss the rebuttals: how they were similar, how they were different, what did or did not make them effective. Continue until all statements and rebuttals have been completed (or as many as possible, depending on the time available).
- Ask, “How can practicing rebutting persuasive statements help you?”
Answer: Practicing responses can help one become more confident and assertive, feel more prepared for situations one might encounter, and feel more in control.
- Ask, “How can you practice rebutting persuasive statements?”
Answer: You can do on your own, or with someone to whom you are close, just what we did in class. The more you practice before a situation arises, the better prepared you’ll be.

Homework

Write at least four other persuasive statements people might use to try to convince you to use alcohol or other drugs and an effective rebuttal for each statement.

* See “How to Organize into Groups” in Appendix B, “Classroom Teaching Tips.”

Drug, Alcohol, and Steroid Risk... and Rebuttal

Directions

Develop effective rebuttals to the following persuasive statements.

1. Grow up! Take a drink!

2. You don't become an alcoholic from one little drink.

3. Just try a sip.

4. Come on. You can't know whether you like alcohol unless you try it.

5. People like you better if you join them for a drink.

6. It's just a beer—no hard stuff.

7. Don't you trust me? I'm not going to get you drunk.

8. Drinking is the best way to have a good time.

9. Let's see who can drink more, you or me.

10. I dare you to drink the whole bottle!

11. Drugs give you a great high. You should try them at least once.

12. Drugs take you into a whole other world!

13. Try it! You'll like it!

14. Just try it. You won't get addicted.

15. If you're my friend, you'll join me.

16. You won't get HIV. Don't worry.

17. How do you know you don't want drugs if you haven't tried any?

18. Come on! It's just marijuana!

19. You're a strong person. You can keep yourself from being addicted.

20. They're just pills. Don't be a wimp. Try them!

21. Hey, your parents used this stuff too!

22. If you want to be a good athlete, you have to use steroids.

23. If you want to compete, you have to do what your competitors do—take steroids.

24. Won't your family be proud if you're a terrific athlete?

25. If you take steroids, you show you really want our team to win.

26. Injecting steroids isn't the same as injecting drugs.

27. Here, just use my needle.

28. I take steroids, and look at me. Don't you want to look good?

29. Take a chance! Maybe steroids won't cause problems for you.

30. Sure, steroids might cause health problems in the future—but don't you want to be a success now?

31. By the time we reach our twenties, there will probably be a cure for any health problems we get.

32. HIV? It can't happen to us!

Prevention

NEW YORK STATE
LEARNING STANDARDS
1, 2

SKILLS
Self-Management

MATERIALS
Board/Newsprint

VOCABULARY
Barrier
Condom
Female Condom (FC2)
Sexual Abstinence

How Can We Protect Ourselves from Sexual Transmission of HIV and Other STIs?

Performance Objectives

Students will be able to:

- Explain the risk factors for infection by HIV and other STIs in sexual activities.
- Describe ways to avoid or reduce the risk of infection by HIV and other STIs.

Do Now

Have the students define:

abstinence *sexual abstinence*
risk *transmission*

Teacher Note: Answers to the “Do Now:”

Abstinence – refraining from an activity or behavior.

Risk – a chance of danger, loss, or defeat.

Transmission – the passing of something from one person to another.

Sexual abstinence – refraining from sexual intercourse.

Motivation

- Ask, “How many of you ride a bicycle? Did you ever notice that some people ride a bike without wearing a bike helmet and others do wear helmets? Assuming for a moment that both groups of people can afford to buy a bike helmet, on what other basis are they making the decision?”

Answer: They weigh the perceived advantages of wearing a helmet—“The helmet will protect me against head injuries if I fall”—against the perceived disadvantages—“I am more comfortable not wearing a helmet, and my friends don’t wear helmets.”

- Say, “Sometimes people’s peers may try to pressure them into doing something that may be unhealthy or even dangerous.”

Teacher Note: HIV can be transmitted through anal, vaginal, or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students’ questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

Procedure/Development

- Ask, “What are some things people can do to eliminate or reduce the risk of infection, through sexual intercourse, of HIV and other STIs?”
Answers: Abstain from sexual intercourse; use latex or polyurethane condoms as a barrier.
- Ask, “Which of these options completely eliminates the risk of sexual transmission?”
Answer: Abstaining from sexual intercourse.
- Ask, “Which of these options reduces the risk of sexual transmission?”
Answer: Correctly and consistently using a latex or polyurethane condom.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Teacher Note: Make sure students understand that although properly used latex or polyurethane condoms can help reduce the risk of HIV transmission (see following information), female condoms (FC2) are also effective at reducing the risk of HIV transmission, and that lambskin condoms are not effective because they contain pores (tiny holes) that are larger than the virus. Abstaining from sexual intercourse is the only 100 percent effective method of preventing sexual transmission. Stress that many people are not tested for HIV/STIs, and the best, most appropriate choice for young people is abstinence.

- Ask, “What are some things people do that increase the risk of infection from HIV and other STIs?”
Answers:
 - Having sexual intercourse without using a male or female condom, using a male condom that is not latex or polyurethane, or using a condom incorrectly.
 - Using the same needles/syringes or other equipment for injection of drugs, including steroids.
 - Using drugs, including alcohol, that can impair judgment and lead to risk behaviors that could result in infection from HIV and other STIs.
- Say, “Our focus today is on reducing the risk of sexual transmission.”
- Ask, “What is a barrier?”
Answer: An obstacle that separates two things or prevents access.
- Ask, “What is a condom?”
Answer: A sheath that fits over the erect penis; semen goes into the reservoir, the space at the tip of the condom.
- Ask, “What is a female condom (or FC2)?”
Answer: A polyurethane pouch placed inside the vagina before sex to prevent semen from entering.
- Ask, “How do condoms help prevent transmission of HIV and other STIs?”
Answer: As a barrier method, condoms are used to prevent semen and preseminal fluid (“pre-cum”) from entering the partner’s body and to prevent the partner’s body fluids from entering the penis through the urethra. Condoms help prevent pregnancy as well as transmission of HIV and other STIs.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Teacher Note: Abstinence from sexual intercourse is discussed and emphasized throughout the curriculum. It is also important for students to know that condoms can protect them from HIV and other STDs so they can make informed choices and lead a healthier life.

- Say, “For people who are sexually active, using condoms is the best way to prevent HIV infection. However, condoms must be used properly to prevent infection. It is therefore very important to learn when and how to put on a condom. Men should use only FDA-approved latex or polyurethane condoms. Lambskin condoms should never be used as the skin has tiny pores through which body fluids can travel, which increases the possibility of infection of either partner by HIV or other STIs.
- Say, “Female condoms are made of synthetic nitrile. They are also effective in preventing HIV infection and pregnancy.”

“Many people think they can tell if a partner has HIV. But most people who are HIV-positive do not look sick and one in five people living with HIV in the United States today do not even know that they are infected. Because it is not possible to tell if someone is HIV-positive just by looking at him or her, it is important to use a condom every time you have sex with someone who has not been tested in the past three months. Yet it is also true that not everyone will report accurately about testing results or about any risk behaviors since testing occurred. Using condoms every time protects you from infection and helps give you peace of mind.”
- Ask, “Why do male condoms sometimes fail?”

Answer: When people use condoms incorrectly, they sometimes fail. These are some of the ways that people use condoms incorrectly:

 - Not using the condom from start to finish.
 - Improperly putting on or removing a condom.
 - Using an oil-based lubricant, which damages latex condoms, instead of a water-based lubricant.
 - Using a lambskin condom instead of a latex or polyurethane one.
 - Having inadequately lubricated intercourse, especially anal, during which friction can stress and break the condom.
 - Inadvertently tearing the condom on fingernails or jewelry or when opening the packet.
 - Using a condom that has been stored near a heat source (greater than 80°F).
 - Using a condom after the expiration date on the packet.
 - Reusing a condom.
- Ask, “Why do female condoms sometimes fail?”

Answer: When people use female condoms incorrectly, they sometimes fail. These are some of the ways that people use female condoms incorrectly:

 - Not using the condom from start to finish.
 - Improperly putting in or removing the FC2.
 - Inserting the penis in between the condom and the woman’s vagina instead of through the center of the ring.
 - Using a female condom with a male condom. Choose one or the other.
 - Inadvertently tearing the condom on fingernails or jewelry or when opening the packet.
 - Using a condom that has been stored near a heat source (greater than 80°F).

- Using a condom after the expiration date on the packet.
- Reusing a condom.
- Ask, “What are the health risks of abstaining from sexual intercourse?”
Answer: None.
- Ask, “What are some advantages of abstaining from sexual intercourse?” Students’ responses may include:
 - One can focus energy on achieving other goals.
 - One can avoid the emotional stress that may accompany sexual intercourse.

Teacher Note: If time permits, or as an activity during another class period, review the step-by-step method of making decisions:

- (1) State the problem.
- (2) List alternative solutions.
- (3) List the pros and cons of each possible choice.
- (4) Make a decision.
- (5) Evaluate the outcome.

As a class, apply the method to decision making about risk behaviors.

Role-playing risk-related scenarios is also an effective strategy and helps build important coping skills. (See Appendix B, “Classroom Teaching Tips.”)

Homework

Make a list of ways a young person can maintain the decision to abstain from sexual intercourse.

Students’ responses may include:

- Focus energy on achieving other goals.
- Be with people who respect you and your decisions.
- Socialize with groups of people who support your values.
- Only be alone with a date with whom you have discussed your choice to abstain from sexual intercourse and whom you trust.
- Practice effective rebuttals to peer pressure.

SKILLS

Communication
Relationship Management
Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Affection
Confidences
Infatuation
Nonsexual Romance
Sexual Health

How Can People Express Love and Affection and Be Sexually Abstinent?

Performance Objectives

Students will be able to:

- Describe how people express their love to significant people in their lives.
- Describe how a couple can express affection and have fun together while being sexually abstinent.
- Identify resources in their community that can help them enjoy friendships in nonsexual ways.

Do Now

Have the students define:

affection *infatuation* *romance* *sexual health*
confidences *nonsexual* *sexual abstinence*

Teacher Note: Answers to the “Do Now:”

Affection – fond or tender feeling.

Confidences – secrets someone trusts to someone else.

Infatuation – a feeling of foolish or extravagant love or admiration.

Nonsexual – not involving sex or gender.

Romance – a relationship characterized by feelings or fantasies of ardent love.

Sexual abstinence – abstaining from sexual intercourse.

Sexual health – well-being of one’s reproductive organs.

Motivation

- Ask, “What are some ways we can show love and affection in our families?” List students’ answers on the board/newsprint. The following examples show how the resulting chart may evolve.

Teacher Note: HIV can be transmitted through anal, vaginal, or oral intercourse. This curriculum guide recommends that in Grades 7 and 8; teachers should mention types of sexual intercourse in response to students’ questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions.

HIV can be transmitted through anal, vaginal, and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

PEOPLE WE LOVE: HOW WE MAKE THEM AWARE OF OUR LOVE

Parents, Guardians, and Other Care-giving Adults

- Tell them you appreciate and love them.
- Communicate and cooperate with them.
- Help them (e.g., do errands, help clean the home, do dishes, and other chores).
- Give flowers or other gifts you make or buy.

Younger Brothers and Sisters

- Tell them you appreciate and love them.
- Show them how to do things.
- Praise them when they do well.
- Encourage them to make healthy choices, e.g., abstain from alcohol and other drugs, attend school, wear a bike helmet, wear a seat belt in a car, and abstain from sexual intercourse.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both—or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

- Ask, “What are some of the ways friends show love and affection for each other?” Continue the chart by writing students’ responses on the board/newsprint. Note that, as additional ideas are expressed, some may also apply to the categories above, and some of the above ideas may also apply to the following categories:

Friends

- Be loyal and trustworthy.
- Show concern.
- Spend time together.
- Listen to each other’s problems.
- Encourage them to make healthy choices, (e.g., abstain from alcohol and other drugs, attend school, wear a seat belt in a car, and abstain from sexual intercourse.)
- Go places together.
- Do favors for each other.
- Remember each other’s birthdays.
- Keep confidences.

- Ask, “What are some of the ways people your age who are dating or seeing each other in a relationship show affection and love for one another?”
- Check off those items on the above lists that apply also to couples. Students may also list such items as:

Boyfriend/Girlfriend

- Be supportive of each other’s goals.
- “Be there” when needed, and feel you can express your own needs too.
- Go out together.

- Ask, “What is the difference between a relationship with a friend and a dating relationship?”
Answer: A dating relationship may include feelings of romance, physical attraction, chemistry, or emotional intimacy.

Procedure/Development

- Ask, “How can couples who are dating make each other aware of their affection and feelings while abstaining from sexual intercourse?” List students’ answers on the board/newsprint, noting that many of the ways should be similar to how friends show their love for one another: by being loyal and trustworthy, by showing concern, by spending time with each other, listening, etc.
- Elicit from students how a couple can express their love without having sexual intercourse: kissing, hugging, holding hands, or walking arm-in-arm. Maintaining respect for a partner’s decision to be abstinent is also a way of showing love.
- Ask, “What are some reasons that some young people choose to have sexual intercourse?” Students’ answers may include:
 - They feel adventurous.
 - They are infatuated or think they are in love.
 - They feel curious.
 - They want to feel connected to their partner.
 - They are alone and unsupervised, start “fooling around,” and get carried away.
 - They want to impress their friends.
 - They feel pressured to show their love to their boyfriend/girlfriend.
 - They feel lonely.
- Have students discuss the pros and cons of these reasons.
- Say, “Researchers show that in the U.S. sexually transmitted infections (STIs) among teens are of epidemic proportions. Abstaining from sexual intercourse helps safeguard sexual health.”
- Ask, “Let’s do a quick review: what are the names of some STIs?” Answer: HIV, gonorrhea, syphilis, chlamydia, and herpes.
- Ask, “What are some ways of effectively responding to someone who wants to pressure you into sexual activities?” Students’ answers may include:
 - Do not be alone with that person.
 - State your feelings directly and openly.
 - Be specific about what you will and will not do. (“Let’s just hold hands now, that’s all.”)
 - Remember that facial expressions, eye contact, body language, tone of voice, and choice of words convey messages. Make sure that body language is consistent with one’s words.
 - If you are still pressured, leave.

Teacher Note: When possible, have students “practice” responding assertively to pressure by having them do role-plays or give assertive answers (rebuttals) to persuasive lines. (See “How to Process Role-Plays” in Appendix B, “Classroom Teaching Tips.”)

- Let students practice the following ways to say “no”:
 - Just plain “no!” (A strong statement all by itself, especially if you don’t let yourself get drawn into a discussion of why you said no).
 - No with a reason. (“No. Taking drugs is unhealthy.”)
 - No with a feeling. (“No. I don’t like the idea of taking drugs.”)
 - No with an alternative. (“No. Let’s go to the movies instead.”)
 - No with caring. (“No. I don’t want either of us to take health risks.”)
 - No and go. (“No. I’m going home now.”)

- Say, “Let’s review ways that a couple who are dating can express their love for each other and not have sexual intercourse.”

Students’ answers may include:

- Set limits (e.g., holding hands).
- Spend time together doing activities you both enjoy, such as swimming, movies, etc., with friends in a group.
- Write poems or letters to each other.

Homework

- Imagine a couple who are dating. They decide to abstain from sexual intercourse. Research fun and interesting places they can go and things they can do. Resources:
 - Daily and weekly newspapers and magazines.
 - Bulletin boards.
 - Library.
 - Museums.
 - Movies.
 - The Internet.
 - Youth centers.

Teacher Note: Have students research and create a bulletin board display or poster that describes things a couple can do (especially free or low-cost) on a date. Include information numbers, addresses, etc.

- Alternate assignment: have students write a short story about a couple who practices abstinence and the activities they do.

What Makes Parents/Guardians/ Caregivers Important Sexuality Educators in a Young Person's Life?

Performance Objectives

Students will be able to:

- Describe how parents/guardians/caregivers communicate values about sexuality.
- Identify techniques for effective communication with parents/guardians/caregivers.
- Produce a values survey that will facilitate communication with parents/guardians/caregivers.

Do Now

Have students define:

communicate *sexuality* *values*

Teacher Note: Answers to the “Do Now:”

Communicate – to exchange information or opinions.

Sexuality – pertaining to people’s identities as men or women, as participants in relationships, as members of society.

Values – cherished beliefs.

Motivation

- Ask, “Where do young people get their information about sexuality?” List students’ responses on the board/newsprint, e.g.: peers; teachers; media, including TV, movies, radio, the Internet, newspapers, magazines; religion; etc. Mention parents/guardians/caregivers if the students do not.
- Ask, “What problems might exist when young people receive information from TV, friends, movies, radio, the Internet, and magazines?”

Answers: Information may be incorrect or misleading. Because sex is often used to entice viewers or to sell products, the risks and responsibilities associated with sexual behaviors are often not addressed. Neither are the real-life concerns that people have about relationships.

- Ask, “Why is it said that parents/guardians/caregivers are children’s primary sexuality educators, even if they never talk about sex?”

Possible answers include:

- These are the adults with whom children often have the most contact.
- These adults are teachers by example.
- These adults verbally or nonverbally communicate attitudes.

- These adults teach the skills for communicating about sex, about decision making, and about values when they talk about sex openly and honestly.
- These adults teach how not to communicate about sex, about decision making, and about values when they don't talk about sex openly and honestly.
- Ask, "Why do some parents/guardians/caregivers talk with their children about sex openly and honestly?"

Students may respond:

- They want to help their children.
- They want to give their children guidelines, so they can make healthy and responsible choices.
- They want to protect their children.
- They want their children to do the right thing.
- Ask, "Why don't some parents/guardians/caregivers talk with their children about sex openly and honestly? Or not at all?"

Students may respond:

- They may be embarrassed.
- They may be afraid that they don't have all the answers.
- They may not want to give their children ideas.
- They may think children don't need the information until they are older and/or married.
- They may be perpetuating the lack of communication they had as children.
- Ask, "Why don't some young people talk to their parents/guardians/caregivers about sex?"

Students may respond:

- They may be embarrassed.
- They may find it difficult to imagine that the adults are sexual.
- They may not be aware of what they might need to know.
- They may believe parents/guardians/caregivers do not have the information about sexuality.
- They may not regard their parents/guardians/caregivers as appropriate sexual role models, e.g., if these adults have multiple partners, are unhappy with their partner choices, are abusive or neglectful, etc.
- They may have experienced abuse and/or may not feel safe in discussing sexual issues.

Teacher Note: As you know, not all home environments are safe for young people to initiate discussions of sex; be aware that if a student is experiencing or is at risk of sexual abuse, this lesson may produce feelings of anxiety, distress, or vulnerability.

IMPORTANT NOTE: Teachers are mandated reporters of child abuse, including sexual abuse. If you suspect that a student is experiencing abuse or neglect, report it immediately to your guidance counselor, social worker, or principal, who is required to report the suspected abuse to the New York Statewide Central Register Child Abuse and Maltreatment Hotline (1-800-342-3720).

Website for New York State Office of Children and Family Services (OCFS):
<http://www.ocfs.state.ny.us/main/cps/>

Procedure/Development

- Ask, “What are some ways young people can begin a conversation with their parents/guardians/caregivers about sex?” Students may respond:
 - Share an article from a newspaper or magazine and ask for parents’/caregivers’ reactions.
 - Watch a TV movie or show dealing with issues of sexuality and discuss the story.
 - Tell parents/caregivers something about HIV/AIDS that you learned in school. Ask for their opinions.
 - Share a problem a friend may be having that has to do with sex or sexuality and ask the parent/guardian/caregiver for advice.
 - Ask about what things were like when they were growing up: was sex talked about as much as it is today?
 - Point out an ad that uses sex to sell a product and ask how parents/guardians/caregivers feel about it.
 - Listen together to a song or watch a music video that has strong attitudes toward sex and ask your parents’/guardians’/caregivers’ reactions.
 - Have a friend ask them for advice with a problem.
 - Say you are taking a survey on attitudes about sex and sexuality.
 - Ask them if they have spoken yet about sex with a younger or older brother or sister.
 - Ask them, “How do you feel about teenage pregnancy?”
 - Ask them, “How do you feel about how HIV affects youth?”
 - Say, “However you begin such a conversation, remember that it may be as difficult for your parent/guardian/caregiver as it is for you. Try to make the conversation a comfortable experience for everyone.”
 - Ask, “How can a young person keep the conversation going?” Students may respond:
 - “And then what?”
 - “Tell me more.”
 - “Please keep talking.”
 - “I don’t understand.”
 - “Can you explain that?”
 - Repeat what parents said: “So you’re saying that...”
- Do not put down parents with such remarks as:**
- “Boy, that’s dumb!”
 - “You’re so old-fashioned.”
 - “No wonder we don’t understand each other.”
- Do not cut off conversation with such comments as:**
- “You just don’t trust me.”
 - “You think I’m a baby!”
 - “I’m more grown-up than you think.”
- Other suggestions:**
- Don’t interrupt.
 - Do not let their answers anger you.
 - Keep lines of communication open.

Homework

Students should either:

Initiate a conversation about HIV/AIDS, or about sexuality and values, with a parent/guardian/caregiver, as discussed in class, and write a brief description of the conversation.

Or:

Bring in a newspaper or a magazine article about HIV/AIDS that they think would be a good conversation starter and write a brief description of why they chose it.

LESSON GUIDE

G R A D E 8

How Does HIV Affect the Immune System?

Performance Objectives

Students will be able to:

- Describe how HIV impairs the immune system.
- Clarify the difference between HIV and AIDS.
- Explain why it is important to avoid HIV infection.

Do Now

Have the students define:

deficiency *opportunity* *susceptible*

Teacher Note: Answers to the “Do Now:”

Deficiency – a shortage; lack of something necessary.

Opportunity – a favorable combination of circumstances, time, and place (e.g., a pathogen may have the opportunity to cause illness when it infects an individual at the time when that person’s immune system is deficient).

Susceptible – having insufficient resistance to illness.

Motivation

Review the components and functions of the immune system. Have students brainstorm words or phrases that relate to the immune system. Refer to Grade 7, Lesson 1, “Example Illustrations 1 and 2: How the Immune System Works.”

Procedure/Development

- Say, “HIV stands for Human Immunodeficiency Virus: a virus that damages the immune system of an infected individual, making it deficient, or weak. When a person has HIV, he or she is ‘HIV-positive.’

“HIV attacks the very cells that should be attacking the virus, T-cells (like the CD4 cells [Helper T-cells]). Since the Helper T-cells serve as master control of the immune system, over time HIV will weaken the immune system by eliminating and disabling these T-cells.

“In turn, other immune system cells, such as B-cells, Killer T-cells and macrophages, cannot fulfill their functions in protecting us specifically from HIV. An immune system that has been weakened by HIV is called deficient. When the immune system is deficient, pathogens (germs) that would ordinarily be destroyed by the immune system now have an opportunity to cause serious or fatal infections. These are called opportunistic infections, because they take the opportunity presented by the weakened immune system to harm the body.

GRADE 8

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Communication

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

AIDS

Antibodies

Antigen

Asymptomatic

B-cells

Body System

CD4 Cells

Deficiency

HIV

Immune System

Macrophage

Mucous Membranes

Opportunistic Infection

Opportunity

Organs

Pathogen

Susceptible

T-Cells

Teacher Note: The list of illnesses and AIDS-defining conditions can be found at <http://www.cdc.gov>

“HIV can lead to AIDS: Acquired Immune Deficiency Syndrome. To ‘acquire’ means to ‘get’ something someone is not born with; we’ve just discussed immune deficiency; and ‘syndrome’ means a group of related signs, symptoms, and health problems (e.g., opportunistic infections to which people with HIV/AIDS are susceptible) with one underlying cause.

“One way we measure the effects of HIV is by checking how many CD4 (Helper T-cells) a person has; this is called the CD4 count. In individuals with healthy immune systems there are usually between 500 and 1500 CD4 cells per cubic millimeter (about a drop) of blood.

“When there is a known HIV infection, plus an AIDS defining condition or a CD4 cell count below 200 (which means the body is very susceptible to opportunistic infections), the person is diagnosed with AIDS.”

- Say, “The systems of the body can be compared to the parts of a car: each system, or part, has its own job to do. HIV infection can lead to impairment of the immune system, particularly the adaptive immune function, thereby making one vulnerable to (or more likely to have) problems affecting one or more body systems.”
- Ask, “Can you name other body systems that HIV infection can affect?”

Teacher Note: Depending on the level of your students, you may wish to discuss only the body systems, and not the specific diseases.

Possible answers could include:

- *Respiratory system* – pneumonia such as pneumocystis pneumonia (PCP), tuberculosis.
- *Gastrointestinal system* – diarrhea, wasting.
- *Skin* – Kaposi’s sarcoma.
- *Reproductive system* – recurrent vaginal yeast infections, cervical cancer.
- *Nervous system* – dementia.
- Ask, “How does skin protect people from HIV?”
Answer: The skin does a good job as a wall against HIV—unless there is a cut, rash, or sore, or if the skin is punctured, such as with a needle during injected drug use.

Teacher Note: You may also wish to inform students that the mucous membranes that line the mouth or the body openings of the genitals or anus may not act as a wall; intact mucous membranes retard the transmission of HIV, but are not a guarantee, since HIV may pass through cuts or tears of the oral, vaginal, or rectal mucosa.

- Ask, “How does HIV infect the body?”
- Write: “HIV infection occurs when HIV enters the body; HIV impairs the immune system.”

Teacher Note: If students ask questions about HIV transmission or prevention, tell them that these topics will be discussed in later lessons, and keep the focus on this lesson only.

- Write: “A person can be infected with HIV for years and not know it.”
- Ask, “How can a person be infected for so long and not know?”
Answer: Some individuals get infected with a powerful strain of the virus, which weakens the immune system quickly. In others, HIV can take a long time to have negative effects on the immune system. Some individuals are able to fight back against the virus longer than others. A person may experience flu-like symptoms in the first weeks after becoming infected with HIV, but these symptoms, such as swollen glands, night sweats and fatigue, are often mistaken for a common flu. It is during this phase that the infected person is most infectious (most able to infect another person) because the virus rapidly makes copies of itself. This is one reason why is important for people who may have been exposed to HIV to get tested.
- Write: “Anyone with HIV can infect other people through risk behaviors, even if the infected individual feels healthy.”

Teacher Note: The next lesson provides further information about risk behaviors that can lead to HIV transmission.

- Ask, “Why is HIV more difficult to prevent than some other illnesses?”
Answer: “HIV is infectious throughout its entire course. In every phase of illness, the person with HIV could transmit HIV infection to others. Not all infectious diseases are like this. Most people don’t know for a long time that they are infected. Once a person is diagnosed, he or she would know to take steps to get treatment, to adopt good health practices, and to avoid infecting others.”
- Write: “There is no known vaccine or cure for HIV infection.”
- Ask, “Until a vaccine and a cure are found, what should people concentrate on most?”
Answer: Preventing transmission and infection.

Assessment

Have students write a fact sheet explaining at least three ways that HIV infection can affect the body. Also, explain the difference between HIV and AIDS.

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students’ questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

SKILLS

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Antiretroviral Therapy (ART)

Epidemic

Pandemic

Perinatal Transmission

Theoretical

Window Period

How Is HIV Transmitted?

Teacher Note: Depending on the level of your class and the time available, you may wish to teach this lesson over two class periods.

Performance Objective

Students will be able to:

- Understand that infection with HIV can lead to AIDS.
- Identify which body fluids can transmit HIV from an infected person to an uninfected person.
- Understand that it is the exposure to body fluids containing HIV that make certain activities risky.
- Identify activities and behaviors through which HIV can be transmitted.
- Explain the “window period” for HIV antibodies and its implications for HIV testing.
- Understand that anyone who engages in risk behavior can become infected with HIV, regardless of age, race, gender, sexual orientation/ identity, country of origin, or economic status.

Do Now

Write the following on the board/newsprint:

“Define: *epidemic, pandemic, transmission.*”

Teacher Note: Answers to the “Do Now:”

Epidemic – An outbreak of an infectious disease that spreads widely and rapidly.

Pandemic – A widespread outbreak of an infectious disease affecting a large part of the population worldwide.

Transmission – The passing of infectious agents from one person to another.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvc/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Motivation

- Ask, “What do young people need to learn about HIV and AIDS?”

Students’ answers may include:

- How people get infected/How HIV is transmitted. (Have students explain how they defined the word transmission in “Do Now.”)
- How people can prevent infection and reduce the risk of transmission.
- That HIV/AIDS is a public health matter that affects everyone. (Have students explain how they defined the words epidemic and pandemic.)
- There is a lot of misinformation about HIV/AIDS. People need to know the facts.
- Understanding about HIV, including how HIV is transmitted, helps young people to be more compassionate and less prejudiced toward people living with HIV/AIDS (PLWHA).

Procedure/Development

- Ask, “What does HIV stand for?”

Answer: Human Immunodeficiency Virus.

- Ask, “Can people get HIV by standing next to someone who is infected? By eating together? By touching or hugging that person?”

Answer: No. HIV is *not* spread through casual contact.

- Ask, “Why is HIV *not* spread through casual contact?”

Answer: HIV is not an *airborne* disease.

- Ask, “If HIV is not airborne, how does HIV get transmitted?”

Answer: Body fluids containing the virus have to enter one’s body. This happens when certain fluids (see below) from an infected person’s body enter another person’s body.

- Ask, “Which body fluids from an infected person may contain HIV?”

Students’ answers should include the following (write them on the board/newsprint):

blood *preseminal fluid* *menstrual blood*
semen *vaginal fluids* *breast milk*

Teacher Note: Although HIV has been found in lesser concentrations in other body fluids such as saliva (see below), in the body fluids listed above HIV is present in sufficient concentrations to cause infection if such fluids from a person who is infected with HIV enter another person’s body.

- Say, “Let’s be sure we all know the meaning of these terms.”

Semen – the fluid, which contains sperm, that is ejaculated from the penis during sexual activity and orgasm.

Preseminal fluid (“*pre-cum*”) – the small amount of clear fluid that appears at the tip of the penis when it become erect prior to orgasm.

Vaginal fluids – the natural wetness, also called secretions, in a woman’s genitals.

Menstrual blood – blood that leaves the body through the vagina during a woman’s menstrual period.

Breast milk – the nutritious fluid secreted by a mother for feeding her infant.

Teacher Note: Many students use other terms to describe these body fluids and other matters related to sexuality. As with all HIV/AIDS education, it is important that students understand the terms used in the classroom, use them correctly, and relate them to their own experience and language. If students use different terms to refer to body fluids, make sure they understand the proper terms.

If students seem uncomfortable during discussion of body fluids and HIV transmission, acknowledge that such a response is natural. Because we do not often discuss such matters in public, it is understandable that some people may feel embarrassed. Nevertheless, it is important to know the facts.

- Ask, “What are some behaviors that can transmit HIV?”
Students will probably respond, “Sexual intercourse and sharing needles/syringes for drug injection.”
- Say, “Behaviors that increase one’s risk of HIV infection or other health problems are called ‘risk behaviors.’” Write “RISK BEHAVIORS” on board/newsprint.
- Ask, “Why can sexual intercourse be a risk behavior?”
Answer: Infected semen, preseminal fluid (“pre-cum”), vaginal fluids, or blood can be exchanged.
- Say, “During sexual intercourse, infection can be transmitted or contracted by a man or a woman regardless of race or ethnicity, sexual orientation/identity, or economic status. Sexual partners may be unaware that small scratches, internal tearing and/or bleeding occurred. If small scratches, tearing, or bleeding occurs during sexual activity, the risk of HIV transmission is increased.”
- Ask, “What is the only 100 percent effective way to avoid sexual transmission of HIV or other sexually transmitted infections (STIs) (also known as sexually transmitted diseases (STDs))?”
Answer: Abstinence from sexual intercourse. If one doesn’t have sexual intercourse, one cannot contract HIV.
- Say, “In addition to presenting a risk of HIV infection, sexual intercourse can also lead to infection with other STIs.”
- Ask, “Can you name some STDs?”
Answers: Gonorrhea, syphilis, chlamydia, herpes, human papillomavirus (HPV), etc.

Teacher Note: Individuals may be unaware of cuts, abrasions, or ulcers of the vulva, vagina, penis, anus, rectum, or mouth; such cuts, abrasions or ulcers increase the risk of contracting or transmitting HIV.

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students’ questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

Teacher Note: The Centers for Disease Control and Prevention documented one case of transmission of HIV through deep kissing. However, both persons had severe gum disease accompanied by bleeding. This case illustrates the need for sound principles about transmission and common sense.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principal’s Portal.

- Say “According to the United States Centers for Disease Control and Prevention 2010 statistics, Young people represent 25 percent of the sexually experienced population in the United States, but account for nearly half of new STDs. The long-lasting health effects are particularly serious for young people.”¹
“Adolescents may be more likely than adults to become infected when exposed to HIV and certain STIs such as chlamydia and human papillomavirus (HPV) because their reproductive tracts are not fully mature.”

Teacher Note: You can explain that female adolescents’ reproductive systems require five to seven years after their first menstrual period to mature fully. During this developmental phase, the female reproductive system may be especially susceptible to HIV/STI infection. As a teenage female goes through puberty, the cells on her cervix shift. (The cervix is the structure that connects the vagina and the uterus.) In the immature adolescent, cervical cells that are more vulnerable to infection are toward the outside of the cervix (toward the vagina), where they are exposed to male genital contact during sexual intercourse. Over time, these cells gradually shift to the inner portion of the cervix (toward the uterus) so they are no longer exposed during sexual intercourse. Also, immature vaginal walls are thinner and secrete less fluid than later in development, so they are more vulnerable to tearing and abrasions. In the fully mature woman, thicker vaginal walls and heavier concentrations of vaginal and cervical fluids may offer protection against the passage of bacteria or viruses through the mucous membrane that lines the vagina.

- Say, “A person with an STI may be more susceptible to HIV infection because sores, rashes, etc., may provide routes through which HIV can reach the bloodstream.”

Teacher Note: Tell students that in a later lesson you will discuss how to reduce the risk of sexual transmission of HIV.

- Ask, “In what other ways can HIV be transmitted?”

Write responses on the board/newsprint. Make sure they include the following:

- Sharing needles/syringes: This refers to those used for injecting drugs, including steroids and insulin. Explain that sharing these items, when they are not properly sterilized, is considered a mode of transmission because it involves blood-to-blood contact. Even microscopic quantities of blood may remain in the needle, syringe, etc., and can then enter the bloodstream of the next user. Some people need to inject medicine. For example, some diabetics must inject insulin. They always need to use sterile needles and equipment and never share them. It is not the type of drug that may infect someone with HIV; it is the used needles/syringe that may contain the virus, so any sharing of needles and/or syringes is highly risky.
- Blood transfusion: Explain that this mode of transmission is highly unlikely but not impossible. Since 1985, blood in the United States has been tested for HIV antibodies. Any blood found to contain them is not used. In addition to testing donated blood for HIV antibodies, potential donors are screened and those engaging in behaviors considered high risk for HIV infection are discouraged from donating. Other countries may not have rules about blood donation that are as strict.
- Say, “Once exposed to HIV, the body usually produces HIV antibodies in 3 weeks to 12 weeks. The time between exposure to HIV and the body’s production of antibodies is known as the *window period*. The most common HIV test checks for the presence of HIV antibodies. A person who is infected with HIV will test negative for HIV antibodies during the window period, even though he or she is capable of transmitting the virus to others.”
- Ask, “Can HIV be transmitted through other medical procedures? Surgery? Dental procedures?”
Answer: Some students may say that healthcare providers have to be careful.
- Explain by saying, “Doctors, nurses, dentists, technicians, and other healthcare workers are required to use ‘universal precautions.’ Universal precautions—sterilizing equipment, using disposable equipment, disposing of syringes and other sharp equipment properly, washing hands, wearing masks/gloves, etc.—are designed to protect the patient and the healthcare worker from transmission of any infectious disease, including HIV. That’s why they are called ‘universal.’”

¹ Centers for Disease Control and Prevention. (Nov 17, 2011). STD Trends in the United States: 2010 National Data for Gonorrhea, Chlamydia, and Syphilis. In 2010 Sexually Transmitted Diseases Surveillance. Retrieved 2/11/2012, from <http://www.cdc.gov/std/stats10/trends.htm>.

- Write on the board/newsprint: “Perinatal transmission” and say, “Perinatal transmission is when HIV is passed from an infected woman to her child during birth or breastfeeding”.

In the second decade of the epidemic, one of the greatest advances in HIV prevention was the drastic reduction in HIV transmission from mother to child. If a pregnant woman is found to be HIV-positive, she will be given anti-HIV medications during part of her pregnancy and delivery, special procedures will be used during delivery (for example, cesarean section), and the newborn will be given medications during the first few weeks/months of life. As a result of these protocols, a dramatic reduction has been made in the number of cases of perinatal transmission of HIV. In New York City in 1990, there were 321 cases of perinatal transmission, but under the new guidelines in 2010 there were fewer than 10 cases. HIV can be found in breast milk and an HIV-positive woman can transmit HIV to her child through breastfeeding; therefore, HIV-positive mothers are encouraged to feed their infants formula.

- Say, “Now that we have learned about how HIV is transmitted, can you tell me who is at risk of HIV infection?”

Answer: Anyone who practices risk behavior can become infected with HIV, regardless of age, race or ethnicity, economic status, country of origin, gender, or sexual orientation/identity.

- Say, “In 2010, what law HIV testing law was passed in New York State?”

Answer: As of September, 2010, NYS law requires that people from 13 to 64 years of age be offered HIV testing while seeking medical services in emergency departments, hospital inpatient settings, or outpatient primary care locations. This encourages all people who are potentially at risk to be tested. In December 2011, NYC Health Commissioner, Thomas Farley M.D., M.P.H., announced that NYC now recommends that people who test positive for HIV should begin treatment immediately regardless of their CD4 count.

Homework

Have students read Appendix A, “Student Guide to HIV Testing,” then answer the following questions:

1. What are some reasons people decide to get HIV testing, which reveals infection with HIV?
2. Why do some people decide not to get tested for HIV infection?
3. Often people get tested because they have engaged in behaviors that may transmit HIV. List these behaviors.
4. Do you think HIV testing should be mandatory (required) for everyone? Clearly explain the reasons for your answer.
5. What are some statements you could make to persuade someone who has engaged in risk behavior to get tested for HIV?

Additional Research Project (Optional)

Have students locate, summarize, and be prepared to discuss a newspaper or magazine article on one of the following topics:

- Babies/children with HIV/AIDS.
- HIV/AIDS among injection drug users.
- HIV/AIDS research in the United States.
- Community-based organizations, healthcare professionals, and other caregivers who work with people with HIV/AIDS.
- Major infections to which people with HIV or people with AIDS are particularly vulnerable.
- A child with HIV or AIDS attending school.
- The United States Centers for Disease Control and Prevention (CDC) reports on HIV/AIDS.
- The United Nations report on the global effects of the epidemic.
- How an individual or community has responded to help control the spread of HIV.

How Can Abstaining from Alcohol and Other Drugs Prevent HIV Transmission?

Performance Objective

Students will be able to:

- Understand that sharing needles/syringes and other equipment used for injecting drugs can cause transmission of HIV.
- Describe how alcohol and other drug use may lead to unsafe sexual behavior, sharing of needles/syringes, and HIV/STI infection.
- Understand the stages of alcohol and other drug use and corresponding risks of HIV/STI infection.

Do Now

Write on the board/newsprint:

- What kind of medical injections do some people receive? What do these injections do?
- Should people receiving medical injections be concerned about contracting HIV? Why or why not?

Teacher Note: Answers to the “Do Now:”

- *What kind of medical injections do some people receive? What are these injections for?*

Answers include: Insulin (diabetes), penicillin (to treat bacterial infections); flu shots (to prevent influenza); immunizations (to prevent other specific diseases); some treatments for hepatitis or HIV; prescribed hormones or vitamins.

- *Should people receiving medical injections be concerned about contracting HIV? Why or why not?*

Answer: No. Doctors and nurses in the U.S. use disposable needles and syringes. People who administer their own injections get prescriptions for sterile, disposable syringes. In addition, New York State law now allows people over 18 to purchase up to ten (sterile, disposable) syringes at a registered pharmacy, without a prescription.

Motivation

Discuss the answers to “Do Now.”

- Ask, “Why are so many people who inject drugs infected with HIV?”

Answer: One way people get HIV is by sharing needles or syringes. It’s also possible for people to get HIV by sharing other equipment (such as cotton, water, or cookers) that may be used to inject drugs. An infected person’s blood can get into these items, and HIV, hepatitis, and other disease-causing organisms can be passed on to the next user.

GRADE 8

Lesson

3

NEW YORK STATE
LEARNING STANDARDS

1

SKILLS

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Abstinence

Blackout

Bloodborne

Dependency

Drug-Treatment Program

Experimentation

Impaired Judgment

Inhibition

Injection Drug Use

Needle/Syringes

Preoccupation

Self-Control

Steroid

Suppression (of Immune System)

Teacher Note: Studies have documented that HIV transmission can occur through sharing of drug equipment used by injectors (cotton, cookers, water, drug solution) infected with HIV, as well as sharing “dirty” needles. If two injectors have drawn up drug solution from the same source, even a “clean” needle can transmit HIV. There may be some “backwash” of infected blood into the drug solution if someone had drawn up drug solution twice, for example. The next person who drew up from the drug solution—even if they used a clean syringe—could draw up infected blood along with the drug.

The term “sharps” has also been mentioned to expand thinking to razors, pins, scissors, etc.—anything that can draw blood. The CDC has documented one or two cases of household transmission of HIV involving sharps. The real danger of sharps, however, is for hepatitis B and C. These two bloodborne viruses are much easier to get than HIV. In fact, sharing of straws for “snorting” is a risk factor for hepatitis C.

In New York, transmission by injection drug users has been dramatically reduced by fostering the use of clean drug equipment through needle exchange programs pharmacies.

- Ask, “Is injecting the only way drugs can lead to HIV infection?”
Answer: No.
- Ask, “What other ways of taking drugs can lead to HIV infection?”
Answer: Using alcohol and other non-injected drugs such as crack or marijuana could indirectly lead to HIV infection. Such drugs can impair judgment and make it difficult to avoid other ways in which HIV is transmitted. In addition, use of some drugs may eventually progress to injecting them, which is a direct way that HIV can be transmitted. It is important to know that home tattooing and body piercing also pose a risk of blood to blood contact.

Teacher Note: Young people often underestimate alcohol’s potential for adversely affecting their judgment and health. It is important to emphasize to students that even though alcohol is legal for people who are of legal drinking age, alcohol is a drug. By impairing one’s judgment, it can lead to risk behaviors that can result in HIV/STI infection.

- Ask, “What kinds of alcoholic beverages do people drink?”
Possible answers: Beer, wine, wine coolers, whiskey, rum, gin, and vodka.
- Ask, “Which of these drinks can affect a person’s judgment?”
Answer: All can impair a person’s judgment and ability to make healthy and responsible decisions. Alcohol also affects a person’s reaction time and coordination.

Procedure/Development

Say, “Let’s figure out which situations put a person at risk of HIV infection:”

- Person A injects steroids five times.
- Person B injects heroin one time with an older friend.
- Person C has had four drinks and is “fooling around” with a girl/boyfriend at a party.

Answer: All of the situations present a potential risk of infection. Engaging in a risk behavior even once can result in HIV infection.

Teacher Note: You may wish to flip a coin to show the probability that eventually it will land on a certain side. Alternatively, you can use a deck of cards to demonstrate the probability that eventually a card of a certain suit (hearts, spades, clubs, or diamonds) will be selected.

- Say, “Let us create a chart on the board/newsprint and examine how injected drugs and non-injected drugs and alcohol can put people at risk of HIV infection. We will call these reasons ‘risk factors.’”
- Ask students for risk factors and write them in Column 1 on the left. If they do not list the following, make sure they do so. Then discuss to which of the three columns the risk factors apply. The completed chart should look something like this:

HOW INJECTED DRUGS, NON-INJECTED DRUGS, AND ALCOHOL CAN LEAD TO HIV INFECTION

RISK FACTORS	INJECTED DRUGS	NON-INJECTED DRUGS	ALCOHOL
Sharing needles, syringes, works, or other equipment during injection of drugs, including steroids.	X		
Impaired judgment and/or ability to communicate/ negotiate with partner.	X	X	X
Impulsive decision to have sexual intercourse without considering possible risk.	X	X	X
Lowered inhibition + less self-control = greater chance of risk behaviors.	X	X	X
Blackouts = possibility of loss of control that may lead to unintended sexual intercourse.	X	X	X
Suppression of the immune system = greater chance of infection.	X	X	X
Being with peers who engage in high-risk behavior may subject a person to negative peer pressure to join in this behavior.	X	X	X

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students’ questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

Teacher Note:

Supplemental, Optional Activity

To enhance students' understanding of drug/alcohol use, you may wish to use the following activity.

- Ask: "How does a person who experiments with alcohol or other drugs progress to becoming an alcoholic or drug addicted?"

Draw a "Stages of Alcohol or Other Drug Use" line on the board/newsprint. Have students brainstorm the different categories (levels) of drug use, from zero use (abstinence) to addiction (dependency). Write their answers on the board/newsprint so the chart looks like the one on the following page.

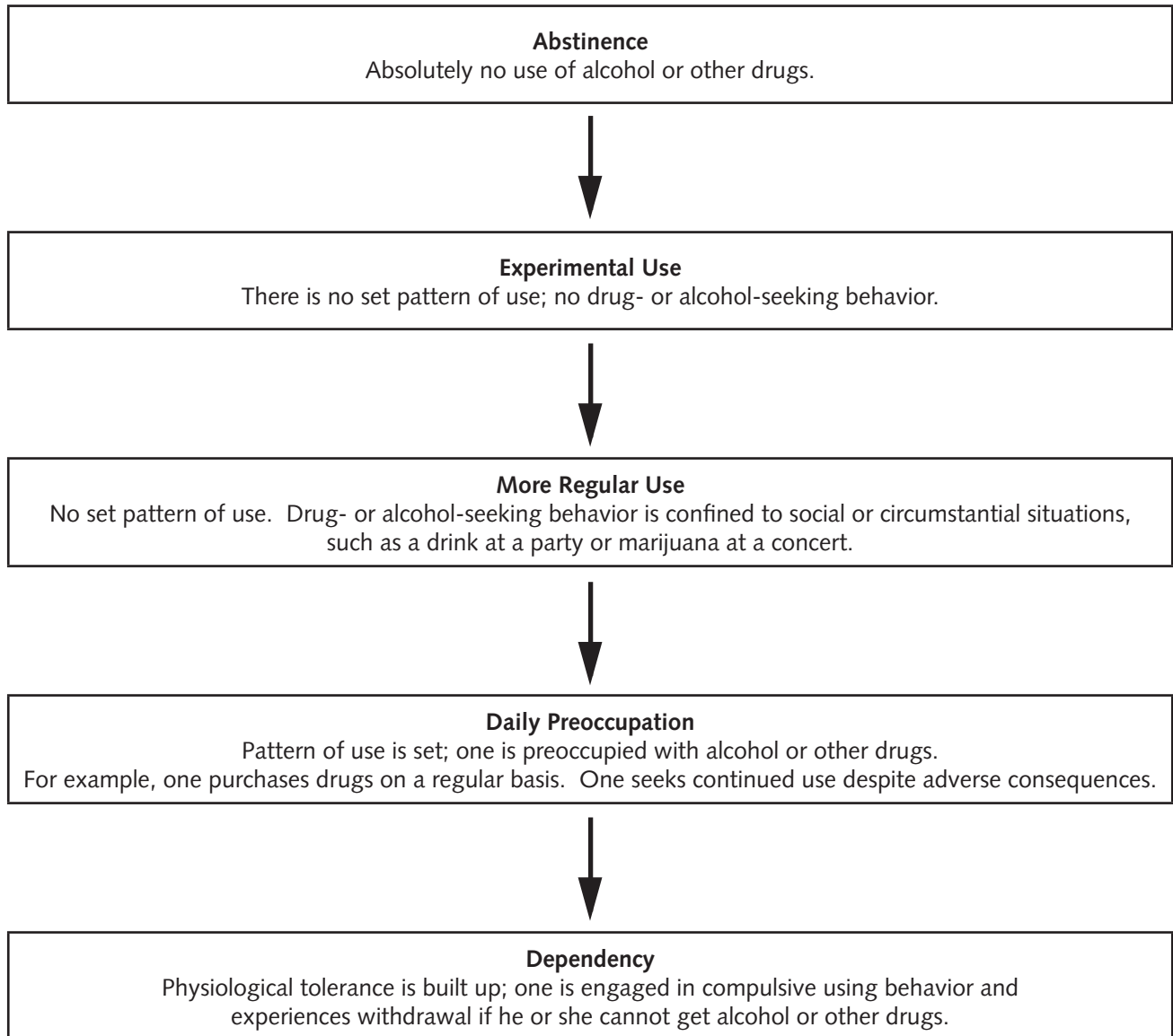
- Ask, "Why is abstinence from alcohol and other drugs a safer choice?"
Answer: No matter how often a person uses alcohol or other drugs, it only takes one exposure to HIV/STIs to become infected.
- Ask, "What are some ways that people who use alcohol or other drugs can work toward returning to abstinence?"
 - Get help from family, teachers, school counselors, substance abuse prevention and intervention specialists, and/or medical caregivers.
 - Attend support groups.
 - Enroll in an alcohol/drug treatment program.
- Ask, "What makes abstinence from drugs, including alcohol, safer?" List answers on the board/newsprint.
Answers may include that a person:
 - Can think clearly (judgment is not impaired).
 - Can communicate clearly.
 - Is less likely to be talked into risk behaviors.
 - Avoids risks of sharing needles/syringes, and other equipment used to inject drugs.

Assessment/Homework

- Ask students to create posters that show the link between alcohol/other drugs and the risk of HIV/STI infection. Posters should include the names and phone numbers of at least two community-based service organizations to which young people can turn for help with alcohol and other drug use or alcohol/drug use in their family.
Posters may advise young people to:
 - Abstain from alcohol and drug use.
 - If one is using alcohol or other drugs, enter a treatment program or, at a minimum, reduce the frequency of one's use.
 - Not experiment with injecting steroids or drugs.
 - Support organizations like Alcoholics Anonymous or Narcotics Anonymous.
 - Spend time with people who also abstain from alcohol and other drugs.
 - Abstain from sexual intercourse.

Stages of Alcohol or Other Drug Use

THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE DEFINES THE STAGES OF ALCOHOL AND OTHER DRUG USE AS FOLLOWS:



Drugs such as alcohol, marijuana, tobacco, and some pills are sometimes referred to as “gateway drugs,” because some believe that they may lead to use of hard drugs such as crack, other cocaine, PCP, crystal methamphetamine, and heroin.

SKILLS

Communication
Decision Making
Relationship Management
Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Emotional Intimacy
Intimacy
Physical Intimacy
Promiscuous
Sexual Abstinence
Sexual Intercourse

How Can People Distinguish Among the Desires for Emotional Intimacy, Physical Intimacy, and Sexual Intercourse?

Performance Objectives

Students will be able to:

- Understand the fundamental human need for emotional intimacy.
- Understand that one can be emotionally intimate with another person without having sexual intercourse.
- Contrast the desire for physical intimacy and the desire for sexual intercourse.
- Distinguish between the desire for sexual intercourse and the decision to act upon that desire.
- Define abstinence.
- Understand the benefits of abstaining from sexual intercourse.

Do Now

Write on the board/newsprint:

- Define: *intimacy*, *sexual abstinence*, *sexual intercourse*.

Teacher Note: Answers to the “Do Now:”

Intimacy – closeness.

Emotional intimacy – feeling close and trusting.

Physical intimacy – physical expression of closeness, e.g., hugs; not necessarily sexual or including sexual intercourse.

Promiscuous – having frequent casual sexual relations with different partners.

Sexual abstinence – refraining from sexual intercourse.

Sexual intercourse – see Appendix D, “Teacher’s Glossary.”

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students' questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

Motivation

- Ask, "How many of you have a close friend?"
- Ask, "Why is it important to be close with another person? How does it affect your life?"
Students' responses may include:
 - You have someone who understands you.
 - You have someone to whom you don't have to be afraid to show your feelings.
 - You have someone you can count on.
 - You have someone with whom you can be honest and who is honest with you.
 - You have someone with whom you can think aloud and share ideas.
 - You have someone to go to when things are rough.
- Have students review their definitions from "Do Now." Help them distinguish between emotional intimacy and physical intimacy.

Procedure/Development

- Ask, "Why do some young people have sexual intercourse?"
Students' responses may include:
 - Sexual intercourse can be an expression of love.
 - Young people may feel pressured to have sexual intercourse.
 - Young people may be curious and want to experiment.
- Ask, "How can sexual intercourse affect a young person's life?"
Students' responses may include:
 - One may feel sexual intercourse expresses physical and/or emotional intimacy.
 - One may contract HIV or another STI.
 - Sexual intercourse may cause pregnancy.
 - One may experience negative judgment by peers (e.g., name calling: "loose," "easy," "promiscuous").
- Ask, "Some people seem to use sexual intercourse as a substitute for emotional intimacy. Why?"
Students' responses may include:
 - They don't know other ways to show feelings. They're afraid to share feelings.
 - They fear that if someone really got to know them they would not love them. They think having sexual intimacy will prove they are grown up.
 - This is what young people see in the media.

- Ask, “How can a person have an emotionally intimate relationship with someone without having sexual intercourse?”

Students may respond that a couple can:

- Talk.
- Do fun things together.
- Share.
- Write letters, poems, or songs to each other.

Teacher Note: You may wish to have students create a poster that incorporates their responses.

- Ask, “What happens if a couple is emotionally intimate, feels the desire for sexual intercourse, but one member of the couple wants to be sexually abstinent?”

Make sure that students’ responses include the following point:

- The couple may naturally have the desire for emotional intimacy and for touch. By discussing the situation of one or both desiring genital contact, they can continue to be abstinent, but increase their emotional intimacy by facing the situation together. Failing to discuss it can promote misunderstandings and may lead to a sexual experience that will leave neither of them happy.

Teacher Note: This explicit “setting of limits” may be quite unfamiliar to students—as it is even to many adults. Discuss how the HIV/AIDS epidemic has highlighted the need for people to make and articulate clear decisions about their desired level of sexual activity.

Homework

Choose a TV show and describe how one couple’s emotional and physical relationship is portrayed.

Follow-Up Activities

Choose one or more of the following:

- Risk behavior role-plays: Using brainstorming techniques, have students describe risk scenarios. Then have student volunteers role-play and find ways to resolve the scenarios. You might suggest scenarios such as being asked to drive with someone who is not sober, being offered alcohol or other drugs, or being invited to an unsupervised party. (See “How to Use Role-Plays in the Classroom” in Appendix B of this guide.)
- Critique a book about HIV/AIDS. Have groups of students review books, articles, or pamphlets on HIV/AIDS for teenagers. (Books, articles, and pamphlets should be in the library.)
- Watch an approved video about HIV/AIDS. Have the class review and discuss one or more videos on HIV/AIDS made for teenagers.
- Have students write a letter to a government official or to a friend regarding concerns about the HIV/AIDS epidemic.

Assessment

Have students make a plan of ten things they (or a friend) could do on a date that would be intimate, but not involve sexual intimacy.

How Can One Prevent Sexual Transmission of HIV?

Performance Objective

Students will be able to:

- Explain how abstaining from sexual intercourse is the only 100 percent effective method of preventing sexual transmission of HIV and other STIs, as well as pregnancy.
- Describe how, even if one has already had sexual intercourse, it is never too late to start protecting oneself and one's sexual partner by abstaining from sexual intercourse or by practicing a risk-reduction method.
- Understand that when latex or polyurethane male condoms or synthetic nitrile female condoms are used correctly, they will reduce but not eliminate the chance of transmission of HIV or other STIs, or causing pregnancy.
- Understand that sexual intercourse without a condom presents a much higher risk of causing sexual transmission of HIV or other STIs than does sexual intercourse with correct use of a latex or polyurethane condom or a female condom.

Do Now

Review what has been learned about the sexual transmission of HIV:

- Ask, "How can HIV be transmitted sexually?"
Answer: HIV is present in an infected person's blood and semen/preseminal fluid ("pre-cum") or vaginal fluids. Sexual intercourse could provide an opportunity for infected fluids to enter an uninfected person's body, resulting in HIV infection.

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students' questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

- Ask, "What is the best protection against sexual transmission of HIV?"
Answer: Abstaining from sexual intercourse is the best protection.

GRADE 8

Lesson

5

Prevention

NEW YORK STATE
LEARNING STANDARDS

1

SKILLS

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Barrier

Condom

Female condom

Monogamous

Motivation

- Ask, “Why is abstaining from sexual intercourse the best protection against the sexual transmission of HIV?”

Students’ responses may include:

- Abstaining from sexual intercourse prevents another person’s body fluids from entering one’s body and possibly causing HIV infection.
 - It is not possible to tell by looking at a person if he or she is infected with HIV. For some people infected with HIV, symptoms of disease appear in a year or so after infection, but many people with HIV may remain symptom-free for as long as 10 years or more. They are infectious and may unknowingly transmit the virus.
 - In some of these cases, people may know that they are HIV+ (and that they are infectious) but may not disclose their status to a partner. They may not have been asked about their status. Or they may not have been truthful in responding. It is not safe to assume that a potential sexual partner is uninfected.
- Say, “One can’t always know whether a person, or that person’s previous partner(s), engaged in such risk behaviors as having sexual intercourse or sharing needles/syringes, or other drug injection equipment with an infected person. Abstaining from sexual intercourse enables one to have a close relationship with a person without worrying about whether he or she is infected.”
 - Abstaining from sexual intercourse prevents pregnancy and transmission of other sexually transmitted infections (STIs) as well as HIV. Having another STI increases the risk of becoming infected with HIV.
- Ask, “If you had a friend who decided to have sexual intercourse, what would you say to persuade your friend to wait?”

Students’ answers may include:

- “Why rush to have sexual intercourse? There are many advantages to abstaining.”
- “If you have sexual intercourse, you might be at risk of HIV infection or other STIs or pregnancy.”
- “If you wait to have sexual intercourse, you will feel more free from having to worry about the consequences of sexually transmitted infections and pregnancy, free to grow and develop without the burdens of those concerns.”
- “Wait until you are older and ready to enter in a committed, long-term, mutually monogamous relationship.”

Teacher Note: Make sure students know the meaning of monogamous: to have sexual relations with only one person by mutual agreement –over a period of time.

- “Discuss with your parents, a teacher or counselor, or another trusted adult the decision about whether to have sex. Take the time to make the right decision.”
- Ask, “If you could not persuade your friend to abstain from sexual intercourse, how would you suggest your friend reduce the risks for infection of HIV or other STIs associated with having sexual intercourse?”

Teacher Note: Make sure students know the meaning of monogamous: to have sexual relations with only one person by mutual agreement –over a period of time.

- Say, “If and when a person decides to have sexual intercourse, he or she must learn the correct way to use condoms.”

- Ask, “What is a condom?”
Answer: A condom is a covering, or sheath, that fits over the erect penis or in the vagina. Semen goes into the reservoir or space at the tip of the male condom or inside the female condom.
- Ask, “What is a female condom?”
Answer: A female condom is a synthetic nitrile pouch that is inserted into the vagina to create a barrier between the male penis and the vagina during intercourse. Semen is deposited into the pouch.
- Say, “A condom is called a barrier method of protection.”
- Say, “Define barrier.” Answer: An obstacle that separates two things or prevents access.
- Ask students for examples of barriers.
Examples may include:
 - Skin is a barrier that helps keep pathogens from entering the body and causing disease.
 - Doctors, nurses, and dentists wear masks and latex gloves as barriers during examinations, procedures, and surgery.
- Ask, “Why is a condom called a barrier method?”
Answer: It holds the semen/preseminal fluid (“pre-cum”) and prevents partners’ body fluids from coming into contact.
- Say, “The goal of HIV prevention is to keep one person’s potentially infected fluids from entering another person’s body. Abstaining from sexual intercourse and drug use accomplishes this; a condom can be effective in doing this—or it may not be effective, depending on whether the right kind of condom is used, and on whether the condom is used correctly.”
- Ask, “What are condoms made of?”
Answer: Male condoms may be made of latex, polyurethane, or lambskin.
- Ask, “Which of these is more effective?”
Answer: HIV can pass through lambskin condoms, and therefore they should not be used. HIV is highly unlikely to pass through latex condoms, so they are much more effective. Polyurethane condoms are an option, but scientists have done the most tests on latex condoms. People should use latex condoms manufactured in the United States because they are safety tested.
- Ask, “What are female condoms made of?”
Answer: Female condoms may be made of polyurethane or synthetic nitrile.
- Ask, “Which of these is more effective?”
Answer: It is expected that the two types of female condoms, the original polyurethane and the newer, less expensive FC2 made of synthetic nitrile are both effective.
- Ask, “Assuming that a condom is not defective, it still might fail if it is not used correctly, especially by people who do not have experience in how to use a condom correctly. Adolescents may not be regular, experienced, and knowledgeable condom users; therefore, their failure rate may be higher than that of adults.
- Say, “If a condom is not used correctly, it can break, tear, leak, or slip off. If any of these things happen, the condom no longer functions as a barrier. It is important for anyone who uses a condom to understand that condom failure can occur if:
 - The condom tears on fingernails or jewelry or when the packet is opened.
 - The condom is stored near a heat source (over 80°F).
 - The condom is used after the expiration date on the package.
 - The condom is reused (a new condom must be used each time, and never reused).
 - The condom is put on after preseminal fluid (“pre-cum”), which may contain sperm, HIV, or other STI-causing agents, has already been in contact with the partner.

- One or both partners have used alcohol or other drugs, and are unable to coordinate using the condom correctly.
- A condom from a broken packet is used.
- Intercourse is physically stressful and there is not enough lubrication, thereby causing a condom to break.
- An oil-based lubricant (such as Vaseline or baby oil) is used instead of a water-based lubricant on a male latex condom. An oil-based lubricant can destroy the latex condom.
- Say, “Use of water-based lubricants with latex condoms is important. Lubricants reduce friction, so they may help prevent a condom from breaking.”
- Say, “A condom may not offer full protection against HIV transmission if either partner has a lesion (associated with an STI or otherwise), that is on an area not covered by the condom.”
- “Many people think they can tell if a partner has HIV. But most people who are HIV-positive do not look sick and one in five people living with HIV in the United States today do not even know that they are infected. Because it is not possible to tell if someone is HIV-positive just by looking at him or her, it is important to use a condom every time you have sex with someone who has not been tested in the past three months. Yet it is also true that not everyone will report accurately about testing results or about any risk behaviors since testing occurred. Using condoms every time protects you from infection and helps give you peace of mind.”
- Say, “Correctly used condoms reduce but do not eliminate the risk. Abstaining from sexual intercourse is clearly the safest choice.”

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Summary

Have students briefly list the most important things they learned from today’s lesson.

Homework

Have students develop a persuasive argument, including five reasons that young people might use against having unprotected sexual intercourse.

What Role Can Each Person Take in Preventing the Spread of HIV Infection?

Performance Objective

Students will be able to:

- Identify high-risk behaviors in which HIV infection could occur.
- Identify situations in which high-risk behaviors could occur.
- Identify the consequences of high-risk behaviors.
- Identify the characteristics of abstinent behavior.
- Learn how students can help stop the HIV/AIDS epidemic.

Teacher Note: This lesson may be taught over several class periods, or may be adapted as time limits require. This lesson requires some advance preparation with regard to bringing into class examples of how the media use sex to sell products. See activities under “Procedure/ Development.”

Do Now

Have students define:

media *provocative*

Teacher Note: Answers to the “Do Now:”

Media – channels of communication, e.g., Internet, TV, radio, newspapers, magazines, books, movies, etc.

Provocative – exciting or arousing.

Tell students that these definitions will be referred to later in the lesson.

Write on the board/newsprint: “HIGH RISK”

Say, “Let’s list some high-risk behaviors and situations in which HIV infection could occur. Why are they considered high-risk?”

GRADE 8

Lesson

6

Prevention

NEW YORK STATE
LEARNING STANDARDS

1

SKILLS

Communication

Decision Making

Self-Management

MATERIALS

Activity Sheet:

We Can Help Stop HIV/AIDS

Board/Newsprint

Optional Materials:

Lyrics, Print or Other Ads

(See “Procedure/Development”)

VOCABULARY

Behaviors

High-Risk

Media

Provocative

- Have students discuss their answers regarding high-risk behaviors and situations. Write their answers on the board/newsprint, creating a chart that will look like this:

BEHAVIORS AND SITUATIONS THAT CAN LEAD TO HIV INFECTION

BEHAVIOR/SITUATION	WHY IT'S HIGH RISK
Sharing needles, syringes, and related equipment (including cotton, drug solution, etc.) for injection of drugs or other substances, including steroids or hormones.	HIV-infected blood from one person may remain on the needle, in the syringe, etc., and enter the body of the next person.
Having sexual intercourse without effective use of a latex or polyurethane male condom or a synthetic nitrile female condom (FC2).	If one of these condoms is not used, or if it breaks or leaks, HIV-infected preseminal fluid, semen, vaginal fluids, or blood could enter one's body.
Having unprotected intercourse while having a sexually transmitted infection (STI) or with someone who has an STI.	Some STIs produce sores or lesions, sometimes very small, which may increase the chance that HIV could enter one's body.
Using alcohol or other drugs.	Alcohol and other drugs, including marijuana, can impair judgment, causing one to engage in a high-risk behavior that can lead to transmission of HIV or other STIs.
Having unprotected intercourse with multiple partners.	The greater the number of one's sexual partners, the greater the odds of being with someone who is infected with HIV or another STI.

- Say, "Even one time of engaging in a high-risk behavior, such as sexual intercourse with an HIV-infected person, puts one at risk."

Teacher Note: This curriculum guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse (anal, vaginal, oral) in response to students' questions. (In Grades 9-12, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal, and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include anal and oral, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for "Respect for All Resources" on the NYCDOE Principals' Portal.

Motivation

- Write in large capital letters on the board/newsprint:

WE CAN HELP PREVENT HIV INFECTIONS!

- Ask, “How can young people help others to prevent HIV?”
Students’ responses may include:
 - By helping to give others accurate information about HIV.
 - By being a role model for abstinence from all high-risk behaviors.
 - By encouraging students who are having sexual intercourse to stop. Help them think through the advantages of abstinence. Unfortunately, some young people believe that once they have had sexual intercourse, they no longer have the option to abstain. Students must understand that abstinence is always an option. Having been sexually active in the past does not deprive one of the right or opportunity to make different sexual decisions now and/or in the future. At the same time, individuals who decide to become abstinent must take responsibility for past sexual decisions. They must acknowledge the possibility that they may have placed themselves at risk of causing pregnancy or becoming pregnant or contracting a sexually transmitted infection such as HIV. One cannot be a “virgin” again, but it is never too late to apply what one has learned and to make the safest and most developmentally appropriate choice, which is abstinence.
 - By encouraging people to recognize that abstinence from sexual intercourse, alcohol, and other mind-altering drugs is the most effective way to protect against HIV infection.
 - By educating people about the fact that if they do have sexual intercourse, they can reduce but not eliminate their risk of HIV infection by using latex (or polyurethane or synthetic nitrile - FC2) condoms correctly each time, and by reducing their number of sexual partners.
 - By encouraging people who do use drugs to refrain from sharing needles/syringes and other injection equipment (cotton, drug solution, cookers, water) and to enter a drug-treatment program.

Procedure/Development

- Ask, “Why do some young people have sex or use alcohol or other drugs, two activities that put them at risk?”
Students’ answers should include:
 - They think the behaviors seem exciting.
 - They think the behaviors will make them feel grown up.
 - They are bored.
 - They feel unhappy.
 - They feel alone.
 - They are influenced by the attitude of sexual conquest in the media.
 - They want to prove their feelings to their partner and/or friends.
 - They think the behaviors feel good.
 - They want to escape.
 - They feel confused.
 - They feel peer pressure.
 - They feel good in the moment, regardless of the consequences.
- Ask, “How do the media affect young people’s decisions regarding high-risk behavior?”

Teacher Note: You and/or students may wish to bring in magazine or newspaper advertisements, lyrics from popular music, and videos or written descriptions of television commercials that use sexual images, innuendo, or situations to sell products.

In addition, for in-class discussion, if time permits, or as a homework assignment, choose two of the following categories: family, friends, school, religion. Ask: “How do these affect young people’s decisions regarding high-risk behaviors?”

- Ask, “Why do you think people urge others to experiment with risk behavior?”
Answers: They want company; they like to feel powerful enough to influence someone else, etc.

Summary

- Ask, “How can we prevent ourselves from becoming infected with HIV?”
Students’ answers should include:
 - By deciding in advance not to have sex, and sticking to that decision.
 - By avoiding alcohol and other drug use.
 - By being aware that, since alcohol and other drug use may lead one to have unprotected sex, it is especially important to avoid alcohol and other drug use in situations where we are likely to make decisions about sex.
 - By thinking about the consequences of what you do before you do it.
 - By avoiding people, places, and things that may lead to high-risk behaviors (alcohol and other drugs, sexually provocative situations, friends who engage in high-risk behaviors).
 - By being aware of the risks of sexual intercourse and by limiting any sexual activities to those that do not involve the exchange of blood, preseminal fluid (“pre-cum”), semen, or vaginal fluids.
 - By seeking treatment for use of alcohol and other drugs.
- Say, “Sometimes it can be hard to say ‘no’ to risk behaviors or situations. Let’s brainstorm some ways of saying ‘no.’”
Students’ responses should include:
 - Just plain “No.” (A strong statement all by itself, but don’t let yourself get drawn into arguments about why you said no.)
 - “No” with a reason. (“No. Taking drugs is unhealthy.”)
 - “No” with a feeling. (“No. I don’t like the idea of taking drugs.”)
 - “No” with an alternative. (“No. Let’s go to the movies instead.”)
 - “No” with caring. (“No. I don’t want either of us to get in trouble.”)
 - “No” and go. (“No. I’m going home now.”)

Assessment

- Have students suggest scenarios in which one person must say “no” to another. Then have students role-play the scenarios, practicing the various ways of saying no.” (See “How to Use Role-Plays in the Classroom” in Appendix B, “Classroom Teaching Tips.”)
- Ask, “What are examples of things that can make it hard to say ‘no’?”

Teacher Note: Be sure to discuss conflicting feelings, e.g., the knowledge that one should say “no” versus the reluctance to confront others or to be different.

- Have students brainstorm ways to counteract the feelings that make it hard to say “No.”

Make sure answers include:

- If one fears losing friends by declining to participate in risk behaviors, one solution may be to limit the circumstances in which one will get together with those friends.
- Another problem may be that one is not used to saying “no.” It is important to plan in advance how to say no and to practice how one will say it.

Homework

Distribute the Activity Sheet, “We Can Help Stop HIV/AIDS,” and ask the students to write what they think is an effective way of saying “no” to each high-risk behavior.

We Can Help Stop HIV/AIDS

Directions

Write what you believe would be an effective way of saying “no” to each of these invitations to high-risk behaviors or situations.

1. Come over to my house. My parents are out and I just got an X-rated, pornographic video.

2. Come on, have a drink. It will make you feel good and help you to relax.

3. This stuff will make you feel like you’re special!

4. What’s the matter? What are you waiting for? Everybody else is doing it!

5. You would if you loved me. Don’t hurt my feelings.

LESSON GUIDE

G R A D E 9

How Does HIV Impair the Immune System?

Performance Objectives

Students will be able to:

- Describe how the body’s immune system works.
- Clarify the difference between HIV and AIDS.
- Describe how HIV impairs the immune system.
- Identify treatments for HIV infection.

Teacher Note: Before participating in the following lesson on how HIV affects the immune system, students should have a basic understanding of how the immune system works. Refer to Example Illustrations 1 and 2, Grade 7: “How the Immune System Works.”

Advance and/or Homework Assignments:

The following are assignments that you may wish to assign in advance of the lesson (to generate interest in the immune system) and/or as homework assignments following the lesson (to reinforce and expand on what students learned in the lesson):

Advance/Homework Assignment #1: Assign five of the vocabulary words included with this lesson to each row or group of students. Have each student prepare three “what,” “why,” and “how” questions using the vocabulary words, and two additional questions about the nature of HIV/AIDS or the immune system.

Advance/Homework Assignment #2: Give students the list of vocabulary words. Have them write the definitions and use each word in a sentence.

Do Now

- If advance assignments were given and time permits, have students divide into small groups to review their questions or definitions.
- If advance assignments were not given and time permits, have students divide into small groups. Give each group several words from the vocabulary list. Have them write definitions for those words they understand. Have them attempt definitions for the words that they don’t understand.
- Alternatively, if advance assignments were not given and there is no time for small-group discussion, have students define five vocabulary words of their choice from the list.

GRADE 9

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Self-Management

MATERIALS

Activity Sheet 1:

Game Questions

Activity Sheet 2:

*The Immune System:
How it Works*

VOCABULARY

AIDS

Acute HIV Infection (AHI)

Antibodies

Antigen

Antiretrovirals (ART)

B-cells

Bacteria

Blood

Cilia

HIV

Macrophage

Microbes

Mucous Membranes

NAAT

(Nucleic Acid Amplification Test)

Opportunistic Infection

Pathogen

Post-exposure prophylaxis (PEP)

Saliva

Stomach Acid

T-cells:

Helper T-cells

Killer T-cells

Suppressor T-cells

Vaccine

Virus

Motivation

- Say, “For several years you have had lessons on HIV/AIDS. As first-year high school students, you can help educate others about HIV/AIDS by discussing the topic with your peers, family, and other members of your communities. When you do this, you are helping to prevent the transmission of HIV and to reduce the stigma and prejudice associated with HIV/AIDS.”
- Say, “First, let’s review what the terms ‘HIV’ and ‘AIDS’ mean.” Write the terms on the board/newsprint. Have students spell out what they stand for: Human Immunodeficiency Virus; Acquired Immune Deficiency Syndrome. Circle Immunodeficiency and Immune Deficiency.
- Ask, “What does immune deficiency mean?”
Answer: The immune system is impaired or compromised.
- Ask, “What is the immune system?”
Answer: The immune system is a group of organs and cells that work together to protect a person from the pathogens—“germs”—that can cause disease.
- Ask, “If the immune system is deficient (or compromised), what happens?”
Answer: The body has difficulty resisting disease and getting well from diseases.
- Ask, “What is the difference between HIV and AIDS?”
Answer: When someone is first infected with HIV, he/she may initially have “flu-like” symptoms or a bad cold or may not feel sick at all. The person gets better in about one to two weeks and generally appears to be healthy and feels healthy. This is because the virus has not yet had time to impair or compromise the immune system. If the person gets a common infection he/she will get well without too much difficulty. When someone has had an HIV infection for quite some time, his/her immune system may become seriously impaired or compromised and the person may get very sick with specific illnesses. This is called AIDS, which is a group of bodily signs, symptoms, and diseases that a person can get when his/her immune system has become seriously impaired or compromised by HIV infection. HIV infection may eventually lead to AIDS.
- Ask: “What is acute HIV Infection (AHI)”
- Answer: AHI is the very early period of infection with the HIV virus. It begins approximately 7-28 days after a person becomes infected. Although some people have no signs or symptoms during this time, others may have a sore throat, swollen glands, fever, rash, cough, muscle aches, or other flu-like symptoms. In the first weeks after infection, an HIV test may be negative, but the virus replicates rapidly making the person highly infectious (able to spread HIV to someone else through sex or contact with blood).

Procedure/Development

- Ask, “What are some of the natural defense mechanisms of the human body?”
- Write students’ answers on the board/newsprint. They should include the answers listed below.
 - *Skin* keeps pathogens out of the body. The skin does a good job as a wall against HIV—unless there is a cut, rash, or sore, or if the skin is punctured with a needle, such as during injected drug use.
 - *Mucous membranes* trap pathogens. However, the mucous membranes that line the body openings of the genitals or anus may not act as a wall. Intact mucous membranes retard the transmission of HIV but are not a guarantee, since HIV may pass through cuts or tears or sores (if the person has another infection, such as a sexually transmitted infection) of the rectal, vaginal, or anal mucosa.
 - *Cilia* are tiny hair-like structures that cover some cells. In the nose and ears, cilia catch some pathogens and “sweep” them back out of the body.
 - *Saliva* is a liquid in the mouth that contains enzymes that break down food and destroy some pathogens.
 - *Stomach acid* is a harsh liquid in the stomach that breaks down food and destroys some pathogens.

- Sweat (perspiration) is a liquid produced by the skin that traps some pathogens.
- Tears are liquids produced by the eyes that trap some pathogens and contain enzymes that kill bacteria.
- Macrophages are a type of white blood cell that engulf or surround pathogens. Macro means “big;” phage means “to eat.”
- B-cells are a type of white blood cell that manufactures antibodies.
- Antibodies are protein complexes used by the immune system to identify and help neutralize foreign objects like bacteria and viruses. Each antibody recognizes and fights against a specific antigen, a piece of a pathogen. Antibodies also have some direct action against pathogens (e.g., blocking them from entering cells) and signal other parts of the immune system, such as macrophages, to attack pathogens.
- T-cells are a type of white blood cell; some “command” the immune system and some attack pathogens:
 - > Killer T-cells (also called cytotoxic T-lymphocytes: cyto means cell; toxic means poisonous.) kill pathogens by interfering with the life cycle of the pathogen or signaling the pathogen to self-destruct by chemical signals.
 - > Suppressor T-cells (also called CD8 cells) detect when pathogens are destroyed, and tell macrophages and Killer T-cells when to stop attacking them.
 - > Helper T-cells (also called CD4 cells) assist other T-cells and macrophages to destroy pathogens by giving them the signal to start the attack.
- Say, “Everyone is exposed to pathogens every day, but a healthy immune system prevents pathogens from causing disease and enables us to get well in a reasonable amount of time. What can we do to help our immune system to protect us?”

Answers should include: getting plenty of sleep/rest, eating nutritious foods (fruits, vegetables, whole grains, etc.), hand washing, covering cuts and scrapes with bandages and keeping them clean, getting all immunizations (shots) on time, reducing stress, etc. However, a person infected with HIV can eventually lose the ability to fight off pathogens.

- Ask, “How does HIV impair the immune system?”

Answer: “HIV weakens the immune system by eliminating and disabling its T-cells, like CD4 (Helper T-cells) cells. That means that Helper T-cells cannot command the immune system to work, and thus Killer T-cells do not attack pathogens that would ordinarily be destroyed by the immune system. Someone who has a lot of HIV in his or her system will have very few CD4 cells, and these pathogens therefore have the opportunity to cause serious or fatal infections. This is why they are called opportunistic infections.

Teacher Note: A list of illnesses and opportunistic infections associated with AIDS can be found at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a2.htm>.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

“HIV goes inside CD4 cells and uses them to make copies of itself. Sometimes it destroys the CD4 cell by making lots of copies and bursting out. Sometimes the infected CD4 cells are destroyed because other immune cells have been signaled to go out and destroy cells infected with HIV. This includes the infected CD4s.”

- Ask, “How long does it take for HIV to weaken the immune system, i.e., for symptoms of disease to appear?”

Answer: Although the progress of HIV infection varies a great deal from person to person, if treated, most people who are infected live healthy lives for many years. Within 12 weeks of infection, the body develops antibodies to fight off the virus.

Effective drugs that fight HIV, called antiretroviral therapy (ART), interfere with the virus’s ability to make copies of itself and its ability to weaken the immune system. If HIV infection is not treated and allowed to progress, the CD4 count will continue to decrease until the immune system is compromised enough to allow an opportunistic infection to appear. The person then qualifies for a diagnosis of AIDS. With a low T-cell count, the person is susceptible to serious illnesses caused by microbes in the environment. It is important to note, however, that although this is the natural course of HIV, some people progress faster from HIV to AIDS, some slower, and some may not progress to AIDS at all.

- Ask, “Why is it important to know that people who have become infected with HIV may only have few and vague symptoms that they don’t recognize as HIV?”

Answer: Many people who are infected do not know they have been infected unless they have had an HIV antibody test. In 2011, the CDC estimated that one out of five HIV-positive people in the US does not know it. Some people are not tested because they do not feel sick or because they do not think they had been in contact with someone who was sick. Some people only request medical tests after they have been sick for a while. This means some people receive an HIV diagnosis along with an AIDS diagnosis, when the disease has progressed, and they have been infectious since they became infected—sometimes for years.

Because of the delay between exposure to HIV and development of antibodies, and because the most common diagnostic test is meant to detect HIV antibodies, not the virus itself, if a person has had a recent risk and tests negative for HIV the first time, the person should engage in no risk behaviors for three months after the first test and then test again. The person may also ask a doctor or health care provider for a special blood test, called NAAT (Nucleic Acid Amplification) that can detect parts of the virus in their blood. On December 1, 2011, the New York City Department of Health and Mental Hygiene recommended that antiretroviral therapy (ART) begin immediately after a person’s positive HIV test is confirmed. That is why it is so important for anyone who has engaged in behaviors that might put them at risk for HIV infection to be tested for HIV.

Teacher Note: In September 2010, New York State Law began requiring that people from 13-64 years of age be offered HIV testing while seeking medical services in emergency departments, hospital inpatient settings, or outpatient primary care locations. (For more information on HIV counseling and testing, refer to Appendix A, Student Guide to HIV Antibody Testing. You may also refer students to your school’s Health Resource Room.

- Say, “In the next lesson on HIV transmission, we will discuss how people get infected with HIV. Let’s speak now, however, about the bodily signs and symptoms, and the opportunistic illnesses that may occur during the advanced phase of HIV infection called AIDS. What have you heard are the illnesses and symptoms that people with AIDS may have?”

Students’ responses may include:

- Pneumonia (e.g., pneumocystis pneumonia [PCP]).
 - Diarrhea.
 - Wasting (becoming very thin).
 - Kaposi’s sarcoma (skin and/or internal lesions).
 - Recurrent vaginal yeast or candida infections.
 - Meningitis.
 - Cervical cancer.
 - Dementia.
 - Diminished T-cell count.
 - Tuberculosis.
- Say, “All of these infections sometimes strike people without HIV, but are particularly common and dangerous in people with HIV because their immune systems (the body’s defenses against illness) are damaged, and their bodies cannot fight infections off easily. When there is a known HIV infection, plus a diagnosed opportunistic infection or a very low count of CD4 cells per cubic millimeter of blood (about a drop), which means the body is very susceptible to opportunistic infections, the person is diagnosed with AIDS, the most serious phase of HIV.”
 - Students may have questions about treatment of HIV and living with HIV / AIDS.
Tell students, “Currently, there is no cure for HIV or any vaccine to prevent it. However, in the late 1990s and 2000s, new drugs were discovered to decrease the effects of HIV on the immune system. A variety of drugs called antiretrovirals (ART or antiretroviral therapy) interfere with the virus’s ability to make copies of itself and the virus’s ability to weaken the immune system. As a result, people are living longer with HIV; the progression from HIV to AIDS is much slower; and HIV is becoming a chronic illness that people live with and manage for many years. While people do still die from it, the death rates have dropped significantly from the 1980s. However, it is still very important for young people to protect themselves from becoming infected with HIV by avoiding high-risk behaviors and by staying healthy.”

Assessment

- Divide the class into two teams. Explain that the class will play a game using the format of the “Jeopardy” TV game show. Students are given the answer (from Activity Sheet 1) and must come up with the question.
- Read one answer at a time. Each team takes turns responding to a different answer. The team will get a point if they respond correctly. If the team responding does not know the correct question, the other team can respond. If both teams do not know the correct question, the teacher provides it. Keep score on the board/newsprint and correct any misinformation that may arise during the game.

Answer/Question Game Questions

A. This is the body's largest organ—an important barrier to germs.
Q. WHAT IS SKIN?

A. These are the soft, wet tissues that line certain body openings.
Q. WHAT ARE MUCOUS MEMBRANES?

A. This is the name for germs that can cause disease.
Q. WHAT ARE PATHOGENS?

A. This is another word for pathogen.
Q. WHAT IS A GERM? (OR, WHAT IS AN ANTIGEN?)

A. These are tiny hair-like structures that cover some cells. In the nose and ears, these structures catch some pathogens and “sweep” them back out of the body.
Q. WHAT ARE CILIA?

A. This liquid in the mouth contains enzymes that break down food and destroy some pathogens.
Q. WHAT IS SALIVA?

A. This harsh liquid in the stomach breaks down food and destroys some pathogens.
Q. WHAT IS STOMACH ACID?

A. This liquid, produced by the skin, traps some pathogens.
Q. WHAT IS SWEAT (OR, WHAT IS PERSPIRATION)?

A. These liquids, produced by the eyes, trap some pathogens and contain enzymes that kill bacteria.
Q. WHAT ARE TEARS?

A. This is the sticky coating of the membranes that line body openings such as the nostrils (nose).
Q. WHAT IS MUCUS?

A. This large white blood cell devours some pathogens.
Q. WHAT IS A MACROPHAGE?

A. This type of white blood cell manufactures antibodies to help the body resist disease-bearing germs.

Q. WHAT ARE B-CELLS?

A. This category of white blood cells has many cells that regulate the immune system.

Q. WHAT ARE T-CELLS?

A. These proteins, which are manufactured by B-cells, latch onto specific pathogens, identify them as pathogens, and help prevent them from causing harm.

Q. WHAT ARE ANTIBODIES?

A. This type of T-cell assists other T-cells and macrophages to destroy pathogens by giving them the signal to start.

Q. WHAT ARE HELPER T-CELLS? (OR, WHAT ARE CD4 CELLS?)

A. This type of T-cell tells other T-cells and macrophages when to stop attacking pathogens.

Q. WHAT ARE SUPPRESSOR T-CELLS (OR, WHAT ARE CD8 CELLS)?

A. These substances, which are either injected or taken by mouth, prevent a person from becoming ill with certain diseases.

Q. WHAT ARE VACCINES?

A. These are medicines for diseases caused by certain bacteria.

Q. WHAT ARE ANTIBIOTICS?

A. This is a type of pathogen. It cannot be treated with antibiotics.

Q. WHAT IS A VIRUS?

A. These are medicines used to stop HIV from making copies of itself and attacking the immune system.

Q. WHAT ARE ANTIRETROVIRALS?

A. This is a virus that eventually impairs the immune system.

Q. WHAT IS HIV?

A. This is a group of bodily signs and symptoms and illness that people whose immune systems have been seriously impaired or compromised by HIV infection/disease sometimes get.

Q. WHAT IS AIDS? (OR, WHAT ARE OPPORTUNISTIC INFECTIONS?)

A. This is a kind of cancer to which people with AIDS are susceptible. It can cause lesions on the skin or internally.

Q. WHAT IS KAPOSI'S SARCOMA?

Activity Sheet 2

The Immune System: How It Works

The immune system is a complex system or network (a system of things that are interrelated) of cells, tissues, chemicals, and organs. Its mission is to protect us against harmful organisms and substances. The biggest organ of the immune system is your skin. Healthy, unbroken skin is the body's main defense against infection. The immune system has the ability to recognize something as self (belonging to the body) or non-self (invader), and it tries to get rid of anything that is an invader. Invaders of the body are microbes (microscopic organisms, sometimes also called "germs") and include fungi (athlete's foot), bacteria (strep throat), viruses (the flu), and parasites such as protozoa (malaria) and worms (pinworm). Many different cells and chemicals must be coordinated for the immune system to function at its best.

There are various ways the immune system functions. It has:

1. barriers like skin;
2. innate or inborn immune responses (for example, stomach acid kills many pathogens); and,
3. a special response ("adaptive immune system") for each invader; it uses that response the next time it encounters the invader.

If a pathogen gets into the body, this is how a healthy immune system works:

1. When an invader enters the body, it gets engulfed by macrophages ("big eaters") that are close to the skin or mucous membranes.
2. The macrophage takes the pathogen apart and reveals its antigens. Each invader has its own antigens, which act as "identification cards" for the immune system to recognize. The Helper T-cell—also called CD4 cell—reads and recognizes the antigens. The CD4 cell sends a message out to the B-cells and to other cells to come help destroy the invader.
3. The activated B-cell produces millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated. Antibodies and antigens fit together like a lock and a key.
4. Once an antibody has "caught" an invader, a signal is sent to the macrophages and to other cells (Killer T-cells and others) that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding your body of the pathogen or invader.

By the time you feel miserable with a cold, the virus that caused it is already under attack by macrophages, T-cells, and B-cells. The B-cells have a memory, so that if that same virus enters the body again, the B-cells will send out ready-made antibodies to help identify it and help cells of the immune system destroy it.

How Is HIV Transmitted?

Teacher Note: Depending on the level of your class and the time available, you may wish to teach this lesson over two class periods.

Performance Objective

Students will be able to:

- Identify which body fluids can transmit HIV from an infected person to another person.
- Identify behaviors and activities through which HIV can be transmitted from an infected person to another uninfected person.
- Explain how anyone who practices risk behaviors can become infected with HIV, regardless of age, race or ethnicity, gender, sexual orientation/identity, country of origin, or economic status.
- Describe how all people in our society have the right to be treated fairly regardless of HIV status, race, ethnicity, gender, country of origin, economic status, or sexual orientation/identity, and are obliged to treat others fairly in return.

Teacher Note: Because of media discussion of the HIV/AIDS epidemic, young people may have the mistaken impression that HIV is caused by or transmitted as a result of sexual attraction or sexual orientation/identity. This lesson provides an important opportunity to emphasize that risk behaviors, not sexual attraction or sexual identity, can put people at risk of HIV infection or STIs. While the first part of the lesson discusses modes of transmission, the latter part of the lesson emphasizes that it is not who one is, but rather what one does that affects one's level of risk of HIV infection or STIs.

Many young people have questions about the nature of sexual attraction. They struggle with questions about how to distinguish a "boyfriend" or "girlfriend" from a "friend," and how to demonstrate their own masculine or feminine identities. Some young people have feelings of romantic attraction, while for others feelings of attraction have not yet emerged. Sometimes young people have a range of feelings of attraction that can be confusing as they struggle to discover who they are. Having a close friendship with someone of the same sex or the opposite sex does not indicate/define one's sexual orientation.

GRADE 9
Lesson

2

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Do These Behaviors Lead to HIV Transmission

Appendix A:

Student Guide to HIV Antibody Testing

VOCABULARY

Bisexual

Heterosexual

Homosexual

Sexual Identity

Transgender

Teacher Note: Internal or peer pressures to define their identities sometimes lead young people to demonstrate prejudice against people they perceive as “different” in an effort to make it clear that, in contrast, they are “okay.” Unfortunately, gay and lesbian people are sometimes the targets of prejudice and violent behavior. Students should understand that all people in our society have the right to be treated fairly and the obligation to treat others fairly.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Do Now (for use during lesson; not to be collected)

- Write the following on the board/newsprint:
“List three ways that people can become infected with HIV, the virus that causes AIDS.”

Motivation

- Ask, “When was AIDS first identified as a disease?”
Answer: 1981.
- Ask, “So how old is the epidemic?”
- Ask, “In 1981, the disease was not named AIDS; HIV was not yet identified as a virus; and no one knew how people got the disease. What have we learned since then?”
Answer: We have learned that HIV is transmitted through the exchange of specific bodily fluids (blood, semen, preseminal fluid (pre-cum), vaginal fluids, and breast milk) that can carry HIV. Certain behaviors/activities can lead to the exchange of these bodily fluids. No one group (e.g., injection drug users, homosexuals, heterosexuals, or people from a specific region or country) is responsible for the HIV epidemic. AIDS is an advanced phase of HIV infection.
- Say, “Using your answers from the “Do Now,” let’s make a list of how we think people might get infected. You can also list what you’ve heard other people say.”

Procedure/Development

- During the ensuing discussion, begin to make a chart listing students’ ideas about transmission.
- After all of the behaviors are listed and after the discussion of body fluids, go through the list with students and have them identify which behaviors can, in fact, lead directly or indirectly to HIV infection.
- Review the Activity Sheet, “Do These Behaviors Lead to HIV Transmission?” Place an X in the columns the students indicate.
- Say, “Let’s tie in what we have just discussed with some basic facts about how HIV is and is not transmitted.”
- Write on the board/newsprint: “Body Fluids.”
- Ask, “What are examples of body fluids that can transmit HIV from an infected person?” Write students’ answers on the board/newsprint. They should include the following:
blood preseminal fluid (“pre-cum”) menstrual blood
semen vaginal fluids breast milk

- Define the terms as follows:
Semen – the fluid that contains sperm that is ejaculated from the penis during sexual activity and orgasm.
Preseminal fluid (“pre-cum”) – the small amount of clear fluid that appears at the tip of the penis when it becomes erect prior to orgasm.
Vaginal fluids – the natural wetness, also called secretions, in a woman’s genitals.
Menstrual blood – blood that leaves the body through the vagina during a woman’s menstrual period.
Breast milk – the nutritious fluid secreted by a mother for feeding her baby.

Teacher Note: Many students use other terms to describe these body fluids and other matters related to sexuality. As with all HIV/AIDS education, it is important that students understand the terms used in the classroom, use them correctly, and relate them to their own experience and language. If students use different terms to refer to body fluids, make sure they understand the relationship between both sets of terms. Always encourage students to use the correct terminology.

If students seem uncomfortable during discussion of body fluids and HIV transmission, acknowledge that such a response is natural. Because we do not often discuss such matters in public, it is understandable that some people may feel embarrassed. Nevertheless, it is important to know the facts.

Teacher Note: HIV has been found in lesser concentrations in other body fluids, such as saliva, but not in sufficient concentrations to cause infection. If body fluids such as vomit, urine, and feces contain blood, they can be a source of HIV transmission. HIV is also transmissible if a person has an open lesion from another STD, like syphilis, on their genitals.

- Say, “HIV can only be transmitted if one of these infected body fluids enters a person’s body.”
- Ask, “Can HIV be transmitted when a person stands next to someone with HIV?”
 Answer: No.
- Ask, “Why not?”
 Answer: HIV is not an airborne virus and is not spread through casual contact.
- Say, “Behaviors that increase one’s risk of HIV infection or other health problems are called risk behaviors.”
- Write on the board/newsprint:
 RISK BEHAVIORS: Behaviors that allow HIV-infected body fluids to enter a person’s body.
 - At this point, return to the list of behaviors on the board/newsprint and review the list with students. Have them identify which behaviors are “risk behaviors” and why. (A behavior is a risk behavior if it may let HIV-infected body fluids enter a person’s body.)
- Ask, “Why can unprotected sexual intercourse be a risk behavior?”
 Answer: Infected semen, preseminal fluid, vaginal fluids, and blood are exchanged. This exchange can be prevented by using a latex or polyurethane male condom or a synthetic nitrile (FC2) female condom each time a person has sexual intercourse. Using condoms correctly and consistently reduces, but does not eliminate, the risk of HIV transmission.
- Say, “During sexual activities in which a partner’s semen/preseminal fluid, vaginal fluids, or blood can enter another person’s body, there is a risk of HIV infection. Infection can be transmitted or contracted by a man or a woman who is infected, regardless of race or ethnicity, sexual orientation/identity, country of origin, or economic status. Many people who have HIV may not know they are infected. Sometimes sexual partners are unaware that any small scratches, internal tears, or bleeding have taken place. If internal bleeding or tears take place (for example, during anal intercourse, where the thin lining of the rectum is prone to small tears and scrapes), the risk of HIV transmission is increased.”

Teacher Note: This is especially true when anal penetration occurs. It is not clear whether it is due to the nature of the cellular lining in the rectum or because of the high risk for abrasions. However, we do know that anal sex presents the highest risk for HIV transmission.

Teacher Note: If, in the course of this lesson, students raise the issue of prevention, stress that only abstinence provides 100 percent protection against the sexual transmission of HIV. Inform students that later lessons will address condom use as a means of risk reduction.

Teacher Note: Female adolescents' reproductive systems require five to seven years to mature fully after their first menstrual period. During this developmental phase, the female reproductive system may be more susceptible to HIV/STI infection via vaginal sex. As a teenage female goes through puberty, the cells on her cervix shift. (The cervix is the structure that connects the vagina and the uterus.) In the immature adolescent, cervical cells that are more vulnerable to infection are toward the outside of the cervix (toward the vagina), where they are exposed to male genital contact during sexual intercourse. Over time, these cells gradually shift to the inner portion of the cervix (toward the uterus) so that they are no longer exposed during sexual intercourse. Also, immature vaginal walls are thinner and secrete less fluid than later in development, so they are more vulnerable to tearing and abrasions. In the fully mature woman, thicker vaginal walls and heavier concentrations of vaginal and cervical fluids may offer protection against the passage of bacteria or viruses through the mucous membrane that lines the vagina.

- Ask, "How can we reduce the risk of the sexual transmission of HIV?"

Answer: The correct and consistent use of condoms during sexual activity (penile/anal, penile/vaginal, and oral/penile) will help to decrease the risk of sexual transmission of HIV. The most certain way to eliminate the sexual transmission of HIV is to abstain from sexual activity.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to

<http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>.

- Ask, "To protect themselves, why can't people just ask a sexual partner if he or she is infected?"
Answer: Many people do not know if they are infected because they have not been tested for HIV or because they engaged in risk behaviors after being tested. Furthermore, some people do not tell the truth about being HIV-positive.
- Ask, "If a partner has been tested and found to be negative, then is it safe to have sexual intercourse with him or her?"

Answer: No, it is not. The most common test for HIV detects antibodies to the HIV virus. A person who is infected may not form antibodies for three to twelve weeks after they are infected, so their test may be negative even though they have the virus. The time between infection with HIV and the production of antibodies is known as the window period. A person who is infected with HIV will test negative for HIV antibodies during the window period, but is HIV-positive and capable of transmitting the virus to others. Therefore, if a person's blood is tested during this window period, the most common HIV tests, which test for HIV antibodies, will not reveal HIV antibodies, even if he or she is infected. There are tests that can detect parts of the virus in a person's blood. Nucleic Acid Amplification (NAATs) tests are expensive and will only be done if a person requests the test from their doctor.

Emphasize: In order to be sure that a partner's negative test results are accurate, one should be sure that two HIV tests were done at least three months apart, with no risk behavior between tests.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

- Make sure students understand that people may not always be willing to disclose (tell another person) that they have been tested or are infected. They may think that because they had a blood test, they were tested for HIV.
- Say, "Now that we have learned how HIV is transmitted, explain who is at risk of HIV infection."
Answer: Anyone who practices risk behavior can become infected with HIV, regardless of age, race or ethnicity, gender, sexual orientation/identity, country of origin, or economic status.
- Say, "Why is it so important that people understand that sexual activity, not sexual identity, may put a person at risk of infection?"
Answer: Some people incorrectly believe that anyone who is gay, lesbian, bisexual, or transgender is infected with HIV and, conversely, that anyone who is heterosexual or "straight" is immune to HIV. Because of these incorrect beliefs, individuals may put themselves unnecessarily at risk for HIV infection or discriminate against gay, lesbian, bisexual, or transgender people. It is important to distinguish between sexual attraction or identity (how a person feels and/or labels him/herself) and sexual activity (what a person does). Some people who identify themselves as straight still engage in same-sex sexual behavior and are not always open about it with partners of the opposite sex.
- When people have feelings of sexual attraction, they can choose whether or not to act on those feelings. All people are at risk of HIV infection and STIs if they practice risk behaviors. All people should learn the benefits of abstinence from sex and the importance of not using drugs or sharing drug injection equipment. Those who do decide to engage in sexual activity must understand the methods of prevention (to be discussed in a subsequent lesson).

Homework

- Have students read Appendix A, Student Guide to HIV Antibody Testing, then answer the following questions:
 1. Imagine a friend is thinking about getting an HIV test, and comes to you for advice. What are some questions you should ask about his/her behaviors? List the questions. What responses would prompt you to recommend HIV testing?
 2. Do you think HIV testing should be mandatory (required) for everyone? Clearly explain the reasons for your answer.

An in-class debate may be set up where students are randomly assigned to take a position on whether testing should be mandatory or voluntary.

Do These Behaviors Lead to HIV Transmission?

BEHAVIOR	May Lead to HIV Infection	Cannot Transmit HIV
Standing next to someone who has HIV.		
Having unprotected sexual intercourse with someone who has HIV.		
Being born to a woman who has HIV.		
Having unprotected sexual intercourse with someone who has a Sexually Transmitted Infection (STI).		
Sharing needles, syringes, works, or skin-popping equipment during drug use.		
Shaking hands with someone from a country highly affected by HIV.		
Getting a transfusion with HIV-infected blood.		
Being gay or lesbian.		
Being bitten by a mosquito.		
Hugging someone with HIV.		
Kissing someone.		
Being near someone with HIV who sneezes.		
Playing basketball with someone with HIV.		
Helping someone with a nosebleed, and getting that person's blood into a cut in your own skin.		

Do These Behaviors Lead to HIV Transmission?

BEHAVIOR	May Lead to HIV Infection	Cannot Transmit HIV
Standing next to someone who has HIV.		X
Having unprotected sexual intercourse ¹ with someone who has HIV.	X	
Being born to a woman who has HIV. ²	X	
Having unprotected sexual intercourse with someone who has a Sexually Transmitted Infection (STI). ³	X	
Sharing needles, syringes, works, or skin-popping equipment during drug use. ⁴	X	
Shaking hands with someone from a country highly affected by HIV.		X
Getting a transfusion with HIV-infected blood. ⁵	X	
Being gay or lesbian. ⁶		X
Being bitten by a mosquito. ⁷		X
Hugging someone with HIV.		X
Kissing someone. ⁸		X
Being near someone with HIV who sneezes.		X
Playing basketball with someone with HIV.		X
Helping someone with a nosebleed, and getting that person's blood into a cut in your own skin. ⁹	X	

Activity Sheet
Answer Key

Teacher Note: Make sure students' focus remains on the proven modes of transmission through blood, semen or preseminal fluid, vaginal fluids, and breast milk.

The Centers for Disease Control and Prevention documented one case of transmission of HIV through deep kissing. However, both persons had severe gum disease accompanied by bleeding. This case illustrates the need for sound principles about transmission and common sense.

- HIV can be transmitted through anal, vaginal, or oral intercourse. Teachers should follow their principal's guidance regarding how to respond to questions, and whether and when to initiate discussion on the types of sexual intercourse. This Curriculum Guide recommends that in Grades 7 and 8, teachers should mention types of sexual intercourse in response to students' questions. (In Grade 9, the teacher should initiate such discussion.) The following information can help you to respond if students ask questions:

HIV can be transmitted through anal, vaginal, or oral intercourse with a person who is infected. Anal intercourse means one partner's penis in the other partner's anus, vaginal sex means the penis penetrates the vagina, and oral sex means one partner's mouth or tongue is placed in, on or around the other partner's penis, anus, vulva or vagina. When sexual intercourse is not clearly defined to include anal, vaginal, and oral sex, students may fail to recognize their risk and not take appropriate action to protect themselves or others.
- One of the greatest advances in HIV prevention was the discovery that treating HIV positive women with antiretrovirals during pregnancy and treating their infants with antiretrovirals upon birth prevented transmission from mother to child. As a result, the number of newborns in NYC has dramatically decreased from 300 cases in 1995 to fewer than 10 cases in 2010. Since HIV has been found in breast milk, HIV-positive mothers are encouraged to use formula.
- STIs are more common among sexually active adolescents than among sexually active people in any other age group. A person with an STI may be more susceptible to HIV infection because sores, rashes, etc., may provide transmission routes through which HIV can reach the bloodstream.
- Sharing needles/syringes/works/skin-popping equipment for injection of drugs, including steroids or hormones, or sharing needles or other sharp objects that have not been properly and adequately sterilized is a highly efficient mode of transmission of HIV and other STIs because it involves blood-to-blood contact. Even microscopic quantities of blood may remain in the needle, syringe, etc., and can be passed on to the next user(s).
- Explain that this mode of transmission is highly unlikely but not impossible. Since 1985, blood has been tested for HIV antibodies. Any blood found to contain HIV antibodies is not used, and the blood donor is notified that his or her blood indicated possible health problems. In addition, potential donors are screened for risk behaviors that put them at risk of HIV infection. Donors engaging in such behaviors are generally discouraged from donating. In addition, in 1999, many blood banks began using screening tests that detect actual HIV as well as antibodies. Most blood for transfusions is free of HIV, as are donated organs and sperm when they are procured through licensed facilities. Donating blood using sterile equipment is 100 percent safe.
- It is crucial that students understand that risk behaviors can lead to HIV infection. Sexual attraction and orientation/identity do not.
- Years of experience with HIV in Africa, where mosquitoes are very common, support the fact that mosquitoes do not transmit HIV, since virtually all HIV-positive people who were studied acquired HIV through blood, sexual exposure, or perinatal transmission. HIV doesn't live in insects; it is a human immunodeficiency virus.
- Saliva itself contains very low quantities of HIV, and contact with saliva has never shown to result in transmission of HIV. However, if blood is present (due to gum disease, oral infection, or vigorous tooth brushing), deep kissing with an HIV-positive person poses a theoretical risk of HIV transmission. That means transmission is possible but not probable.
- Discuss universal precautions and the need to handle any blood spill carefully.

How Can Young People Set Limits and Make Healthy Decisions About Sexual Activity and Abstinence?

Performance Objectives

Students will be able to:

- Identify qualities that enable a person to stick to a decision, even if others challenge it.
- Identify important reasons to abstain from sexual intercourse.
- Understand why people set limits on sexual activity.
- Know and practice the steps to successful limit setting.

Do Now

- Make a private list (not to be collected) of activities and behaviors that make you feel good about yourself and another list of those that make you feel uncomfortable. This should be a quiet exercise, an opportunity for introspection.

For example, think of a time when:

- You worked very hard at something and accomplished it.
- You did something that made a close friend or family member feel good.
- You intervened in a situation and helped someone else.
- Someone pressured you to do something that you felt was wrong.
- You did something that made you feel sorry later.
- Something seemed like a good idea at the time, but later you realized it did not make sense.

Motivation

- Ask students to brainstorm how they can tell whether a decision is positive and healthy.

Students' answers may include:

- Feeling pretty sure an activity is right for you. (It is important to think for oneself.)
- Not feeling apprehensive. (A feeling of anxiety can be a valuable warning signal that a decision may be wrong for you.)
- Not feeling pressured into doing something you believe is wrong. (Feeling pressured is a warning signal.)
- Feeling okay about a parent/guardian/caregiver/close friend knowing about the decision. (Feeling ashamed if they knew is another warning signal.)
- Feeling clear that you thought through the decision. (Writing down the pros and cons of a decision is often helpful.)

GRADE 9

Lesson

3

NEW YORK STATE
LEARNING STANDARDS
1, 2

SKILLS

Communication

Decision Making

Planning and Goal Setting

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Design the Outcome

VOCABULARY

Advance Planning

Effective Responses

Introspection

- Thinking about the consequences for you and the other person(s) involved. (Play out the scene in your mind and imagine how you will feel when it is over.)
- Feeling that you are prepared to carry out the decision responsibly. (When you decide to abstain from sexual intercourse, be clear with your partner and do not lead him or her on.)

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Procedure/Development

- Ask, “How can thinking about what you believe is right or wrong help you make decisions about sexual activity?” Students’ answers may include:
 - You can think in advance about what you will or won’t do on a date, at a party or while hanging out.
 - You can remember other times when you felt out of control and not let that happen again.
 - You can think for yourself.
 - You can explain to friends that if an activity goes against your principles or makes you feel uncomfortable, you will not do it.
 - You can stay focused on your goals. For example, many young people choose abstinence so they can:
 - > Focus on personal development, schoolwork, sports, or other activities, and building friendships.
 - > Stay healthy by avoiding HIV/STIs.
 - > Avoid pregnancy.
- Say, “Let’s talk about learning to set limits.”

Teacher Note: It is important for students to understand that HIV/AIDS education involves not only physical health but also emotional health—a feeling of strong self-esteem (respect for self and others) and the ability to make healthy, responsible decisions.

- Say, “Successful limit setting involves three steps:
 - Step 1: Introspection.
 - Step 2: Advance Planning.
 - Step 3: Practicing Effective Responses.”
- Say, “Let’s begin with Step 1, Introspection.”
 - Ask, “What qualities do you have that make you feel physically and emotionally healthy?”

Teacher Note: If students focus primarily on physical health (“big muscles” or “eat lots of vegetables”), ask them to identify signs of emotional health. For example:

- Being honest with oneself and others.
- Respecting their bodies.
- Not getting high on drugs or drinking alcohol.
- Having goals for the future.
- Thinking positively.
- Doing only what reflects one’s personal convictions.
- Being able to set and adhere to limits.
- Knowing that doing something wrong or uncomfortable will make one upset later.

- Say, “These qualities enable young people to gravitate toward positive situations and to steer clear of engaging in behaviors that feel wrong, uncomfortable, or unhealthy.”
- Say, “The following activity addresses Step 2, Advance Planning, and Step 3, Practicing Effective Responses.”
- Ask, “What are some difficult situations in which young people might feel pressured or tempted to engage in risk behaviors?” Write students’ answers on the left side of the board. After they complete the list, have them brainstorm effective advance planning and responses; write their answers on the right. The resulting chart might look like the one following:

AVOIDING POTENTIALLY NEGATIVE SITUATIONS

SITUATION	ADVANCE PLANNING / RESPONSES
Being alone with a friend, boyfriend or girlfriend when parents or other adult family members are not home.	<ul style="list-style-type: none"> • Ask in advance who will be home. Avoid being alone if you may be pressured or tempted to engage in risk behaviors. • Choose to be together in a group of friends who share your values rather than alone. • Let your partner know your limits, and discuss situations that make you uncomfortable.
Being at a party where people are drinking or doing other drugs.	<ul style="list-style-type: none"> • Ask in advance what the party will be like. • Avoid going to the party if you anticipate trouble or, if you are not sure what the party will be like, arrange to be able to call a parent/guardian/caregiver, sibling, friend, or taxi or car service to pick you up if you want to leave early.
Being in a car driven by someone who has been drinking or doing other drugs.	<ul style="list-style-type: none"> • Be observant. Don’t ride in a car being driven by anyone who is drunk or high. • Arrange a “no-questions-asked” plan with a parent/guardian/caregiver so you feel comfortable calling any time to be picked up. • Bring money with you.

- Ask, “What qualities does it take to stick to any decision?”
Students’ responses may include:
 - Strength of character.
 - The will to stand firm in a decision that has been carefully and thoughtfully made.
 - The courage to defend or stand up for what you believe is right.
 - Commitment.
 - Belief in yourself.
 - Support from people who matter to you.
 - Ignoring people who criticize or belittle you.
- Ask, “When someone makes a decision to be abstinent, how might this reflect his or her self-esteem? What are some important reasons for young people to be sexually abstinent?”
Students’ responses may include:
 - They have the courage and wisdom to do what is right for them.
 - They do not feel ready to engage in sex.
 - They have respect for their parents’ ethical, moral, and/or religious values.
 - They have the patience to wait until they are older to have sex.
 - They have self-respect.
 - They know they can be respected and liked by others without having sex.
 - They do not confuse the need for closeness with the need for sex.
 - They decide to use their energies for other things at this time of their lives.

Homework

Have students complete the Activity Sheet, “Design the Outcome,” using separate sheets of paper. Discuss the activity sheet during a subsequent class.

Design the Outcome

Directions

Read the following situations. On separate sheets of paper, write scenes that complete each one. You can write dialogues, expand situations, bring in additional characters, use different settings, and have characters confront one another or otherwise interact. These situations are what you make them. You can give them positive or negative outcomes.

Situation 1:

Chris is at a party. A lot of the kids are drinking beer. Chris had been getting friendly with some of these kids, but this is the first time Chris knew they drank beer. Chris still thinks the kids are nice, but is not sure about staying at the party and keeping these friends. Chris leaves the party early and asks you for advice.

Situation 2:

Lee is asked to go to the movies by Pat, a popular student. Lee is flattered. But there are rumors that Pat has slept around a lot. Lee agrees to go out with Pat but wonders if this was the right decision. Lee asks you for advice.

Situation 3:

Theo and Elena have been going out for a while. He has started to pressure her to have sex. She likes him a lot and thinks she may even love him, but she's not sure she's ready to have sex. She asks you how to talk to Theo.

SKILLS

Communication
Decision Making
Planning and Goal Setting
Relationship Management
Self-Management

MATERIALS

Board/Newsprint
Paper
Pencils

VOCABULARY

Abstinence
Ethical
Intimacy
Personal Values
Sexually Transmitted Infections
(STIs)
Step-by-Step Plan

How Is Abstinence from Sexual Intercourse Both a Health Decision and a Reflection of Personal Values?

Performance Objectives

Students will be able to:

- Describe how choosing to abstain from sexual intercourse reflects both personal values and health considerations.
- Identify reasons teens have sexual intercourse.

Do Now (not for collection)

Write examples of benefits of abstaining from sexual intercourse.

Motivation

- Ask, “Why do young people have sexual intercourse?” Have students brainstorm answers.

For example, they might respond:

- It’s fun and feels good.
- Curiosity.
- Sexual desire.
- Desire to strengthen a shaky relationship.
- Peer pressure.
- Reassurance that one is “normal.”
- To feel grown up.
- Desire for intimacy.
- To express love.
- To experience pleasure.
- They are pressured by a person they are dating.
- They are forced against their will.
- They are coerced by someone for food, clothes, drugs, money, shelter, jewelry, a ride, a better grade.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Teacher Note: To help students distinguish between personal/ethical values and health decisions, you might do the following exercise before proceeding with the lesson:

- Say, “In a minute, I am going to ask you why many teens are abstinent. But first, let me change the subject and ask you, why do some people decide to be vegetarians?”

Write students’ answers on the board/newsprint. They might include:

- They want a healthier diet.
 - They do not want to hurt animals.
 - They love animals.
 - They have certain religious reasons.
 - They believe that eating animals is less ecologically healthy for the planet.
 - They want to lower their cholesterol.
- Say, “These reasons can be divided into two categories: personal/ethical values and health reasons.” Have students classify the reasons into two categories. Circle the health reasons and underline the ethical reasons.

Procedure/Development

- On the board/newsprint, write “Personal/Ethical Values” and “Health Reasons.”
- Ask, “Why do many teens choose abstinence?” Have students list reasons that have to do with personal/ethical values and reasons that have to do with health. For example, the students’ list may look like this:

WHY MANY TEENS CHOOSE ABSTINENCE

PERSONAL / ETHICAL VALUES	HEALTH REASONS
<ul style="list-style-type: none"> • Religious values. • Parents, guardians, or care givers don't approve. • Wish to wait until marriage. • Oppose society's emphasis on sex. • Avoid emotional turmoil. • Family's values. • Want to wait for the right person. • Want time to grow up. • Responsibility to partners. • Want to preserve future options. 	<ul style="list-style-type: none"> • Avoid sexually transmitted infections (STIs). • Avoid unwanted pregnancy. • Avoid HIV. • Avoid emotional stress. • Preserve future fertility by remaining free of STIs.

Teacher Note: If students cannot seem to identify reasons to abstain from sexual intercourse, or if they scoff at the notion of choosing abstinence, use this opportunity to discuss the peer pressure many teens feel, as well as the emphasis on sex in the media (TV, radio, films, Internet, magazines, newspapers) and in conversations among teens.

Let students know that in the fall of 2011 7,033 NYC high school students participated in the Youth Risk Behavior Survey (YRBS). This national survey of students showed that in NYC, 75 percent of 9th graders report that they have not had sexual intercourse. It's important for teachers to use these data to reinforce for students that "not everyone is doing it" and that this is an individual decision that should not be made without being a lot of thought. It is possible to analyze YRBS data for different boroughs of students, by grade, by gender, etc. For more information about the survey, see <http://www.nyc.gov/html/doh/html/episrv/episrv-youthriskbehavior.shtml>. To analyze data for students in NYC, go to <https://a816-healthpsi.nyc.gov/EpiQuery/YRBS/index.html>.

Emphasize that although many teens do choose abstinence, some don't always say so openly. Students are most likely to respond openly to this activity if they feel a strong rapport with the teacher and if the classroom environment feels emotionally safe. Promote such an atmosphere by having students use the "Ground Rules" in Appendix B, Classroom Tips, and by modeling their use.

Students may be attracted to and date members of the opposite sex or of the same sex, or both—or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, click [here](#) or search for Respect for All resources on the NYCDOE website.

- Ask, "What are the sources of people's personal values?"
Answers: Parents, religion, media, school, friends, and cultural heritage.
- Ask, "How can people make a plan to support a decision they have made?" As an example, ask the class to draw up a step-by-step plan on how a student might improve his or her physical appearance. The plan might look like this:

PHYSICAL APPEARANCE IMPROVEMENT PLAN

- Wash and moisturize your face/body more often and drink plenty of water.
- Exercise 3 to 4 times per week. Eat a well-balanced diet. Wear clothes that flatter your body. Change your hairstyle or hair color.
- Make sure your nails are clean and manicured.
- Shave on a regular basis.
- Visit a dentist, dermatologist, and or optometrist.

- As a class activity, if there is time, or as homework, have students prepare a plan for supporting the decision to resist sexual pressures. The plan might look like this:

A PLAN FOR RESISTING SEXUAL PRESSURES

- Write down your beliefs about what is sexually right for you and why.
 - Talk with parents, caregivers, or legal guardians about sexual decision making. Often they had similar questions or ideas when they were adolescents.
 - Talk with another adult you trust, such as an aunt or uncle, grandparent, member of the clergy, guidance counselor, healthcare worker, youth leader, neighbor, or coach.
 - Talk with friends about sexual decision making. Support friends in a decision to withstand pressures, and ask for support from them. For example, discuss that sexual intercourse may cause emotional stress, and involves the risks of pregnancy and sexually transmitted infections STIs. STIs may impair health, increase vulnerability to HIV infection because of open sores/lesions, cause infertility, and—as is sometimes true, in the case of HIV infection—prove to be fatal.
 - Prepare in advance how you might answer someone who tries to pressure you to have sex. Write down a list of things you can say.
 - Practice using these responses by role-playing a pressure situation with other students.
- To assist students with role-playing pressure situations, you may wish to share the following ways of saying “no”:
 - Just plain “No!” (A strong statement all by itself, but don’t get drawn into an argument about why you said no.)
 - “No” with a reason. (“No. Having intercourse can be dangerous.”)
 - “No” with a feeling. (“No. I don’t feel that I am ready for sex.”)
 - “No” with an alternative. (“No. Let’s go to the movies instead.”)
 - “No” with caring. (“No. I wouldn’t like either of us to get hurt by this.”)
 - “No” and go. (“No. I’m going home now.”)
 - Have students practice these assertiveness statements by role-playing risk scenarios, and/or have them draw up a list of ways they can respond to someone who tries to pressure them to engage in sexual intercourse or another risk behavior. (See “How to Use Role-Plays in the Classroom” in Appendix B.)
 - Emphasize that abstaining from sexual intercourse is not only the safest decision physically, but abstinence also helps safeguard the emotional well-being of a young person who is experiencing emotional conflict and concerns about relationships and sexual involvement.

Teacher Note: Emphasize that emotional turmoil is not limited to decisions about whether to have sexual intercourse. Emotional ups and downs are normal for all young people (and for people of all ages). For example, many young people experience emotional conflict about whether they should join a gang, “snitch” on a peer who has done something wrong, shoplift with friends or reveal how smart they really are.

- Attraction to someone of a different race, religion, national origin, or ethnic background. Young people may feel torn between their strong feelings of attraction and the potential disapproval of family and friends.
- Same-sex attraction. Feelings of same-sex attraction may or may not indicate that individuals are gay, lesbian, or bisexual. Some students may question their attractions. All students should be offered emotional support. An atmosphere of acceptance is crucial to students, some of whom may feel isolated and feel that they need to hide their feelings.
- Gender identity. Some students question whether their sense of their own maleness or femaleness is indicated by or is different from their physical and biological sex at birth. Some eventually identify as “transgender.” Students should be offered all possible emotional support and referral to specialized resources as appropriate.
- Attraction to someone of a different age. Young people may feel strongly drawn to younger or older individuals. Age disparity can create many problems. For example, attraction to someone significantly older may distress parents, and the older individual is likely to be more experienced in many ways. The younger person may want to please or emulate the older one, and may participate in activities for which he or she is not ready.
- Attraction to someone of a different economic status. Any close relationship between two people of different economic statuses can be difficult for the person of lesser means, because he or she cannot afford to do things that the wealthier person can do; for the person of greater means, because he or she might feel “held back” or guilty for having greater means. Feelings of resentment can build on both sides regarding ability to pay or being seen in the community. For young people, these feelings can easily be magnified, especially when they feel the need to belong to a group that may not accept them because they dress, talk, or act differently.

Young people may find it difficult to talk about these “forbidden desires” with adults or peers. Sometimes class discussion about such issues can help reassure them and help them recognize that they are not alone in their feelings of confusion. Such discussions should be of a general nature. To protect students’ privacy, strongly discourage personal disclosure in the large group. But do encourage students to share their questions or concerns privately with parents/guardians/ caregivers, teachers, counselors, or other trusted adults.

Homework

Have students identify an area of their lives they would like to improve and prepare a step-by-step plan for doing so.

How Can Abstaining from Drugs, Including Alcohol and Steroids, Reduce the Risk of HIV Infection?

Performance Objectives

Students will be able to:

- Explain how use of drugs, including alcohol, may impair judgment and lead to high-risk behaviors that can result in HIV infection.
- Describe how sharing needles/syringes/works/skin-popping equipment for drugs, including steroids, or for other purposes can cause transmission of HIV and other diseases.
- Understand that even if a person has already had sexual intercourse, it is never too late to start abstaining from sexual intercourse.
- Demonstrate skills that enable young people to say “no” to alcohol and other drugs.

Do Now

Write on board/newsprint: “How can the use of alcohol and other drugs lead to HIV infection?”

Motivation

Review the “Do Now” exercise. Write students’ answers on the board/newsprint. Make sure that all of the following points are included and discussed. Help students distinguish between how alcohol and other drugs can directly and indirectly lead to HIV infection.

How Drug Use Can Lead to HIV Infection?

Answer: HIV can be transmitted when sharing needles, syringes, etc., during injection drug use.

- Have students define injection drug use: injection of drugs into a vein or muscle or under the skin by means of a needle and syringe.
- Have students explain why sharing injection equipment can result in HIV infection: If people share injection equipment, HIV-infected blood from one person may remain on the needle, syringe, etc., and enter the body of the next person to use it. Even a small amount of blood can contain a relatively large amount of HIV, compared to other body fluids (semen and preseminal fluid, vaginal fluids, breast milk) that can transmit HIV.
- Have students explain what injection equipment is: Injection equipment includes needles, syringes, or anything used for injection (such as filters, mixing containers, drug solution, water) that could transfer one person’s blood into another person’s body, even in a very small amount.

GRADE 9

Lesson

5

Prevention

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Advocacy

Communication

Decision Making

Planning and Goal Setting

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Assertive

Coordination

Impair

Impaired Judgment

Injection Drug Use

Non-injection Drug Use

Steroid

Verbal Peer Pressure

- Have students discuss instances in which people may share needles, syringes, etc. For example, use of various illicit substances of unknown origin and content can be harmful. Injecting those substances with syringes and needles that may have been used by someone else adds the additional risk of HIV infection. Some of these substances include injection of drugs such as heroin and cocaine; injection of steroids to improve athletic performance; and injection of hormones to create a more masculine or feminine appearance.
- Clarify that sharing needles, etc. is a direct way that drug use leads to HIV infection, as well as to other bloodborne infections (such as hepatitis B and hepatitis C) and the risk of heart, skin, and muscle infections.

Teacher Note: Syringe/Needle exchange programs are available in NYC for people who inject drugs. Students need to be aware of this option since they may be in contact with people using injection drugs even if they are not and do not plan to. A list of syringe exchange programs is available at the NYC Department of Health and Mental Hygiene’s website or at http://www.nyc.gov/html/doh/downloads/pdf/basas/syringe_exchange.pdf.

In New York State, it’s legal to purchase needles and syringes at participating pharmacies without a prescription. Syringe exchange programs are an example of harm reduction. The harm caused by sharing needles and syringes is a method of reducing the potential harm from their injection drug use (it’s possible to recover from drug abuse, but there is no cure for HIV).

- HIV can be transmitted when impaired judgment associated with drugs or alcohol causes one to engage in high-risk behaviors.
 - Have students give examples of non-injection drugs (such as crack and marijuana).
 - Have students discuss the meaning of “impaired judgment” And discuss the possible consequences of impaired judgment. Examples include: saying something that is hurtful to a friend (alcohol lowers inhibitions), motor vehicle and pedestrian accidents, getting in a fight, not meeting school and family responsibilities, having unplanned sexual intercourse that results in pregnancy.
 - Have students name types of alcoholic beverages (wine, beer, malt liquor, wine coolers, whiskey, vodka, rum, gin, etc.).
 - Clarify that the use of alcohol and other drugs can lead to HIV infection by impairing people’s ability to make sound, well thought-out decisions, thereby making them more likely to engage in high-risk behaviors that can lead to HIV infection.
 - Make sure students discuss the fact that alcohol is a drug. Young people often underestimate alcohol’s potential for adversely affecting one’s judgment and health. Like other drugs, alcohol can impair one’s judgment and lead to risky behaviors that can result in HIV infection.
- Alcohol and other drugs can impair coordination, making correct condom use difficult and increasing the possibility of condom failure and HIV infection.

Procedure/Development

- Say, “We have discussed how drugs, including alcohol, can impair one’s judgment and lead to high-risk behaviors and situations that can cause HIV infection.”
- Ask, “What are examples of risk behaviors/situations?” Make sure all of the answers listed in the chart below are discussed.

BEHAVIORS AND SITUATIONS THAT CAN LEAD TO HIV INFECTION

BEHAVIOR / SITUATION	WHY IT’S HIGH RISK
Sharing needles, syringes, and other equipment (cotton, cookers, drug solution, water), or skin popping equipment for injection of drugs, including steroids and hormones.	HIV-infected blood from one person may remain on the needle, syringe, etc., and enter the body of the next person.
Anal or vaginal intercourse without effective use of a latex or polyurethane male condom or a synthetic nitrile female condom.	If a latex or polyurethane male condom or an FC2 female condom is not used or if it breaks or leaks, HIV-infected semen, preseminal fluid, vaginal fluids, or blood could enter another person’s body.
Anal, vaginal, or oral sexual intercourse while having a sexually transmitted infection (STI) or with someone who has an STI.	Some STIs produce sores or lesions, sometimes very small, which may increase the chance that HIV could enter one’s body.
Using drugs, including alcohol.	Drugs, including alcohol, can impair judgment, causing one to engage in a high-risk behavior that can lead to HIV infection.
Having anal, vaginal, or oral sexual intercourse with multiple partners.	The greater the number of one’s sexual partners, the greater the likelihood of being with someone who is infected with HIV or another STI.
Being alone with a partner when no clear limits have been set and agreed to.	The situation may lead to getting “carried away” and to having anal, vaginal, or oral sexual intercourse without effective use of a latex condom and/or to another high-risk behavior.

Teacher Note: Every time one repeats high-risk behaviors, one adds to or increases the likelihood of contracting HIV. But even one time of engaging in a high-risk behavior, such as unprotected sexual intercourse with an HIV-positive person, puts one at risk of contracting HIV.

- Ask, “What are some examples of situations involving drugs/alcohol that students may have to face during their high school years?”
Students’ answers may include:
 - Learning how to handle the pressure to experiment.
 - Learning how to respond in an uncomfortable situation so that one says “no” to drugs but does not alienate friends.
 - Having to convince a friend not to drink and drive.

- If there is time, divide the class into five groups.* Appoint a leader and recorder for each group, or have each group select its own leader and recorder. Give each group one of the “Risky Situations” listed below. Ask the groups to suggest how young people can avoid risk behaviors in the situation. Have each group share its situation and solution with the class.

Teacher Note: During the class discussion, have the students identify effective words and actions that enable a young person to deal with these situations. Discuss how students can resist verbal and nonverbal peer pressure to use drugs, including alcohol and steroids.

Teacher Note: HIV can be transmitted through anal, vaginal or oral intercourse. This curriculum guide recommends that in Grades 9-12, teachers should initiate discussion of types of sexual intercourse. HIV can be transmitted through anal, vaginal and oral intercourse with a person who is infected. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

- Alternatively, if there isn’t time for small-group activity, discuss (as a class) solutions to the “Risky Situations” listed below.

RISKY SITUATIONS

- “Everyone’s drinking at the party. I don’t like to feel different. How can I keep myself from taking a drink?”
- “My friend, boyfriend, or girlfriend wants me to relax and smoke marijuana together in the car before we go to the party, and says it’s no big deal and would be good for our relationship. I don’t really want to use marijuana. What should I do?”
- “Although I’ve decided not to have sex, I have a harder time saying ‘no’ when I’ve had a couple of drinks. How do I avoid drinking when my friends bring out the beer?”
- “My friend wants us to shoot-up drugs together and says I can’t get HIV that way. How can I say no to my friend and help my friend understand that a person can get infected with HIV by sharing needles?”
- “My friend has started using steroids and suggests that I use them, too. He has a needle and syringe we can share. I would like to be a better athlete and look good. How can I stay away from steroids and convince my friend that we don’t need steroids to look good or be better athletes?”

Homework

- Say, “Planning ahead and practicing what to say are valuable problem-solving tools that can help one become more confident and assertive, feel better about oneself, and feel more in control.”
- Prepare a plan for what to do and say when coping with these situations:
 - “I’m invited to a party. My friend’s parents will not be home. There will be beer and marijuana. I don’t drink or smoke, but I want to go to the party. What should I do?”
 - “Jessica and I have been dating for three months. Jessica doesn’t like to drink alone and always asks me to have a drink, too. Lately I’ve been having more than one. The other night I lost consciousness. I’m afraid. What should I do?”
 - “The people I hang out with are always shooting up. How can I avoid using drugs, and either convince these people that shooting up is dangerous or find friends who do not use drugs at all?”

* See “How to Organize into Groups” in Appendix B, Classroom Teaching Tips.

How Can Sexual Transmission of HIV Be Prevented?

Performance Objectives

Students will be able to:

- Understand that abstaining from sexual intercourse is the only 100 percent effective method of preventing sexual transmission of HIV and/or of preventing pregnancy.
- Understand that even if one has already had sexual intercourse, it is never too late to start protecting oneself and one's sexual partner by abstaining from sexual intercourse or by practicing a risk-reduction method.
- Explain how sexual intercourse without a condom presents a much higher risk of causing sexual transmission of HIV or other STIs than sexual intercourse with correct use of a latex or polyurethane male condom or a female condom (FC2).
- Understand that correctly using latex or polyurethane male condoms or synthetic nitrile female condoms is crucial to enhancing condom effectiveness and reducing the risk of condom-user failure.
- Understand that when properly used, latex or polyurethane condoms will reduce but not eliminate the chance of transmitting HIV or other STIs and of causing pregnancy.
- State where and when the Condom Availability Program is open for students to request condoms and/or condom demonstrations

Do Now

On the board or newsprint, write the following two sentences:

- Identify the body fluids that can transmit HIV from an infected person. (Answer: blood, including menstrual blood; semen/preseminal fluid; vaginal fluids; breast milk.)
- What behaviors can lead to HIV infection? (Answer: HIV can be transmitted through behaviors that cause HIV-infected blood, semen/preseminal fluid, vaginal fluids, or breast milk to enter one's body.)

Motivation

- Briefly review the answers to the "Do Now."
- Say, "Today we will be focusing on how to protect against sexual transmission of HIV."

Procedure/Development

Ask, "How does a person's choice of sexual partner affect the chances of becoming infected with HIV?"

Teacher Note: HIV can be transmitted through anal, vaginal, or oral intercourse with a person who is infected. When sexual intercourse is not defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves or others.

Prevention

NEW YORK STATE
LEARNING STANDARDS
1, 2, 3

SKILLS

Communication

Decision Making

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Body Fluids

Non-Occupational Post Exposure
Prophylaxis (nPEP)

Risk Behaviors

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Teacher Note: Risk behaviors include having sexual intercourse or sharing needles/syringes/works/skin-popping equipment with an infected person. An HIV-positive woman can pass HIV to her child through pregnancy or breastfeeding, although the risks of this occurring have greatly decreased as new medical treatments have almost eliminated incidences of mother-child (perinatal) transmission. HIV can also be transmitted through HIV-infected blood or blood products or donated semen or organs but this is also increasingly rare. (See Grade 9, Lesson 2.)

- Students' answers should include:
 - It is not possible to tell by looking at a person if he or she is infected with HIV.
 - Some people infected with HIV may not know that they have it because there are often no symptoms, or symptoms could be vague, fleeting, or associated in their minds with flu or other common disorders. Yet people with HIV remain infectious throughout the course of their illness.
 - HIV antibody testing, done in most clinics, detects HIV 3-12 weeks after infection, and may not detect a very early infection. This period (called Acute HIV Infection or AHI) is when a person is most likely to transmit the virus via risk behaviors.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

Teacher Note: It is important for sexually active New Yorkers to get tested for HIV. Many people are infected and do not know it. For more information, see the "Get Tested for HIV" Health Bulletin, available at <http://www.nyc.gov/html/doh/downloads/pdf/hb/dohmhnews5-01.pdf>.

- Unless a person has been appropriately tested and re-tested for HIV, and reports the test results reliably, it is not safe to assume that a person is uninfected.
 - Asking a person whether he or she is HIV-positive may not give one an accurate answer.
 - A person who does know that he or she is infected may decide not to tell.
 - A person may believe that his or her previous sexual partner(s) had not participated in risky behaviors that can transmit HIV. Even if that is true, those partners' previous partner(s) may have engaged in such behavior and became infected. One might be at risk for acquiring any infection that a partner might have gotten from somebody else.
- Ask, "Why is abstaining from sexual intercourse the healthiest choice?" Students' responses may include:

- Abstaining from sexual intercourse enables one to have a close relationship with a person without worrying about whether he or she is infected.
- Abstaining from sexual intercourse is the only 100 percent effective way to avoid sexual transmission of HIV.
- Abstaining from sexual intercourse prevents pregnancy and transmission of other sexually transmitted infections (STIs) as well as HIV. Because open sores/lesions may be present, having another STI increases the risk of becoming infected with HIV.

Teacher Note: If time permits, the following two questions may be discussed as a small-group activity.

- Ask, “If you want to persuade a friend to delay having sexual intercourse, what might you say?” Students’ answers may include:
 - “Why rush to have sex (sexual intercourse)? There are many advantages to waiting.”
 - “If you have sexual intercourse, you might be at risk of getting HIV or an STI, and you could get pregnant.”
 - “If you wait to have sexual intercourse, you won’t have to worry about HIV/STIs or pregnancy. You will be able to concentrate on friendships, schoolwork, and other interests.”
 - “Consider waiting until you are older and ready to enter into a long-term relationship, where both people are monogamous.”
 - “Before deciding to have sex, talk with your parent(s)/caregiver(s)/guardian(s), a teacher or counselor, or another trusted adult. Take the time to make the safest decision.”
- Ask, “If people decide not to abstain, how can they reduce the risks of exposure to HIV-infected body fluids during sexual intercourse?”

Teacher Note: Students will probably say that they should use condoms. The remainder of this lesson focuses on how correct and consistent use of latex or polyurethane male condoms or synthetic nitrile female condoms is crucial to enhancing effectiveness and reducing the risk of condom failure.

- Ask, “What is a condom?”

Answer: A male condom is a covering, or sheath, that fits over the erect penis. Semen and preseminal fluid go into the reservoir or space at the tip of the condom. The condom prevents body fluids from entering a partner’s body. A female condom is a synthetic nitrile pouch that is inserted into the vagina up to 8 hours prior to intercourse.

For people who are sexually active, male and female condoms (FC2) are the best tools for preventing HIV infection. However, they must be used properly to protect from infection. It is, therefore, very important to learn when and how to put on a condom. Although you might think that you know if a person is infected with HIV, most people who are HIV-positive do not look sick, and one in five people living with HIV in the United States today do not know that they are infected. In addition, many people who are infected fear being rejected by their friends and family and may hide their infection. For this reason, it is important to use either a latex or polyurethane male condom or a synthetic nitrile female condom every time you have intercourse with someone who has not been tested in the past three months. Only FDA-approved condoms should be used.

Teacher Note: Consider using “The Condom Challenge” Activities: Male and Female in Appendix C to discuss the steps to properly using a male or a female condom.

- Say, “Because using a condom incorrectly can cause it to fail, it is important to realize that anyone who uses a condom has to know how to use it correctly. Correct use can keep the condom from breaking, tearing, leaking, or slipping off.”
- Make sure to review the following before doing the “The Condom Challenge” Activities: Male and Female in Appendix C.

The male condom:

- The condom packet must be opened carefully so the condom does not tear. Never use a sharp object to open the package.
- Condoms should not be stored near a heat source (over 80° F).
- Condoms should not be used after the expiration date on the package.
- Condoms should never be reused.
- Male condoms should be put on before the penis has any contact with the partner’s body, so that neither semen nor preseminal fluid, which may contain sperm, HIV, or other STI-causing agents, touches the partner. In other words, condoms must be used from the beginning to the end of sexual activity. Female condoms (FC2) can be inserted up to 8 hours prior to sexual intercourse.
- Using drugs, including alcohol, may make it difficult to coordinate using a condom correctly.
- If intercourse is physically stressful and there is not enough lubrication, a condom may break.
- Only water-based lubricants should be used on latex condoms. Use of water based lubricants with condoms can reduce friction, so they may help prevent a condom from breaking. Oil-based lubricants (such as Vaseline or baby oil) should never be used because they can destroy the latex. Any type of lubricant (oil- or water-based) can be used with a polyurethane condom or with a synthetic nitrile female condom (FC2).
- A condom may not offer full protection if either partner has a lesion (associated with an STI or otherwise), that is on an area not covered by the condom.

The female condom (FC2) is a pouch made of synthetic nitrile that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (silicone-based) and can be inserted hours before intercourse, without male participation. The female condom has been reported as having similar rates of effectiveness in preventing STIs and pregnancy as the male condom when used correctly and consistently. FC2 is the name of the second generation of female condom because the synthetic nitrile appears to be as effective as its predecessor that was made of polyurethane, but the price has been drastically reduced. Female condoms are available throughout New York City and through the NYCDOE’s high school condom availability programs.

Correct condom use for the female condom means:

- Practicing insertion. This can help the users feel more comfortable and confident.
- Making sure the package is not damaged or torn and that the expiration date has not passed.
- Inserting the female condom before there is any contact with the penis.
- NOT using a male condom and female condom together because this can:
 - > Increase friction and reduce the effectiveness of both.
 - > Cause slippage and displacement if they stick to each other.
- NEVER reusing any condom—male or female.
- Following all of the manufacturer’s directions on or with the female condom package. These include:
 1. Tear open the package carefully along the notched edge. Do not use anything sharp (teeth, scissors, etc.) to open it.
 2. Squeeze the inner (closed-end) ring between your thumb and forefinger (or middle finger), making it long and narrow.

3. After finding a comfortable position for insertion (squatting, lying down, etc.), insert the inner ring into the vagina and feel it move into place.
 4. Using your index finger, push it in as far as it will go. Be sure the sheath is not twisted. The open-ended ring should rest outside of the vulva.
 5. You are now ready to use the female condom with your partner. Be careful to guide the penis into the pouch THROUGH the outer ring, not outside it.
 6. To remove the condom, twist the outer ring and pull it out gently.
 7. Dispose of the condom in the trash, not the toilet.
- Ask, “Is there a place where you can get free condoms in this school?”
Say, “Yes, the Condom Availability Program, CAP, housed in the Health Resource Room, is the place to get free condoms and request a condom demonstration.”
 - Make sure to mention the following:
 - The schedule and location(s).
 - Which teachers or other staff operate the program.
 - Any additional services such as referrals that are available in the Health Resource Room or the school-based health clinic.

Teacher Note: Teach students about the Condom Availability Program (CAP), which is required in all high schools, with few exceptions. CAP should be open 10 periods per week and should be staffed by a male and female staff member during the course of the week. Invite one of the staff who runs the program to your class to discuss the services that are available in the Health Resource Room that houses CAP. Also, note that condom demonstrations are allowed only in the Health Resource Room, and not in the classroom.

For more information about CAP, go to <http://schools.nyc.gov/Offices/Health/OtherHealthForms/HealthResource.htm>

Ask, “What can a person who was exposed to HIV do?”

- Recent studies have found that a person who was exposed to HIV can decrease their chances of becoming infected if they start taking antiretroviral medicines within 36 hours of being exposed. This is called Non-occupational Post-Exposure Prophylaxis (nPEP)
- nPEP must be prescribed by a doctor, must be taken for a month, and may have very unpleasant side effects.
- The doctor will help the exposed patient assess the risk of becoming infected with HIV and will determine if nPEP is the best option.
- nPEP is not a substitute for abstinence or protection with condoms.
- The table below describes types of contact that put a person at high risk for getting HIV.

What Types of Risk Exposure Warrant nPEP?

Types of Exposures that DO NOT Warrant nPEP	Types of Exposures that Warrant Consideration of nPEP
<ul style="list-style-type: none"> • Kissing • Oral-to-oral contact without mucosal damage (mouth-to-mouth resuscitation) • Human bites not involving blood • Exposure to needles or sharps not in contact with an HIV-infected or at-risk person • Mutual masturbation without skin breakdown • Oral-anal contact • Receptive* penile-oral contact without ejaculation • Insertive penile-oral contact • Oral-vaginal contact without blood exposure 	<ul style="list-style-type: none"> • Unprotected receptive and insertive* vaginal or anal intercourse with a person who is HIV-infected or at risk for HIV infection • Unprotected receptive penile-oral contact with ejaculation with a source that is HIV-infected or at risk for HIV infection • Oral-vaginal contact with blood exposure • Needle sharing with a source known to be HIV-infected or at risk for HIV infection • Injuries with exposure to blood from a source known to be HIV-infected or at risk for HIV infection (including needlesticks, human bites, accidents)

* Insertive intercourse refers to the penis being placed in the anus, vagina or mouth. Receptive contact refers to the person whose anus, vagina, or mouth the penis is put into.

Source: Adapted from “HIV Prophylaxis following non-occupational exposure including sexual assault,” NYSDOH AIDS Institute: www.hivguidelines.org

For more information about nPEP and teen-friendly doctors and clinics where nPEP is available in NYC, go to: <http://pep411.com>

Homework

Have students write up the following:

Say, “A friend comes to you and tells you that he/she is sexually active, but is concerned about HIV/STIs. What are the ways your friend can reduce or eliminate the risk of HIV/STI transmission? If your friend decided to use condoms, what does he/she need to know about using them effectively?”

LESSON GUIDE

GRADE 10

How Is the Immune System Affected When HIV Enters the Body?

Performance Objective

Students will be able to:

- Describe how the immune system works.
- Describe how HIV affects the immune system.
- Clarify the difference between HIV and AIDS.
- Identify how treatments for HIV infection work.

Advance Homework

Have students read the Handout, “The Immune System: How It Works,” as homework before this lesson, and write out three main ideas that they can share at the beginning of class. Write them on the board/newsprint.

Examples:

- The immune system is a network of cells and organs that communicates with each other to keep out or destroy pathogens.
- The immune system distinguishes between natural parts of the body (self) and invaders from outside (non-self).
- The immune system recognizes invaders by their antigens and uses antibodies to attach to antigens for removal by macrophages and other immune cells.

Motivation

- Ask, “How many of you have had the flu?” Elicit the symptoms they experienced and how long they were ill.
- Say, “While you were experiencing the effects of the flu, which system in your body helped you fight off the virus that caused the flu, so that you got better? Let’s see how this system works.”
- Explain that the immune system is the body’s defense against pathogens (substances that cause disease). Major types of pathogens include viruses (the flu), bacteria (strep throat), fungi (athlete’s foot), and parasites such as worms (pinworms) and protozoa (malaria). The healthy immune system usually overcomes the pathogens and removes them from the body. The immune system also has specific antibodies that can recognize and prevent future infections by similar pathogens.

GRADE 10

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Resource Management

Self-Management

MATERIALS

Board/Newsprint

Handout:

The Immune System: How it Works

VOCABULARY

Antibodies

Antigens

Antiretroviral Therapy (ART)

Asymptomatic

B-cell

Helper T-cell or CD4 Cell

HIV-Positive

Immune System

Killer T-cell

Macrophages

Network

Pathogens

Prophylactic

- Ask, “If this is true, then why have some of us had the flu more than once?” Elicit that there are different strains (types) of flu viruses. Each time the body encounters a different virus or strain of virus, a person can get sick again. Also explain that there are some pathogens that are too strong for the immune system to fight on its own. These may require a person to take medication to control or get rid of the pathogen. And some pathogens are so strong that the body cannot get rid of them, even with the help of medication; their effects can only be controlled.

Procedure/Development

- Explain to students that a healthy immune system is made up of several defenses against pathogens.

“The immune system can organize many different responses to attack specific invader organisms. We will learn about the one led by the Helper T-cell (often known as the CD4 cell), because that is the one most affected by HIV. The Helper T-cell acts like the leader of the response to the invasion by the pathogen and tells the other cells what they have to do. When the Helper T-cells aren’t around, the other cells don’t know what they should be doing.

“When an invader enters the body, it gets engulfed by macrophages (“big eaters”) that are close to the skin or mucous membranes, and the invader is taken into the lymph system where T-cells are stored. The macrophage takes the pathogen apart and reveals its antigens. Each invader has its own antigens. Antigens are proteins specific to each microorganism and act as “identification cards” that the immune system recognizes. Once the macrophage reveals the invader’s antigens, the Helper T-cell, or CD4 cell, reads and recognizes the antigen. The CD4 cell sends a message out to the B-cells and to Killer T-cells to come help to destroy the invader.

“The activated B-cell produces millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated.

“Antibodies and antigens fit together like a lock and a key. For example, a measles antibody will only attach itself to a measles virus. Once an antibody has ‘caught’ an invader, a signal is sent to the macrophages and Killer T-cells that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding the body of the infectious agent.”

Teacher Note: It is important for sexually active New Yorkers to get tested for HIV. Many people are infected and do not know it. For more information, see the “Get Tested for HIV” Health Bulletin, available at <http://www.nyc.gov/html/doh/downloads/pdf/hb/dohmhnews5-01.pdf>.

What is HIV?

- Say, “The most important thing to remember is the difference between HIV and AIDS. HIV stands for human immunodeficiency virus. HIV is the microorganism or “germ” that causes HIV infection. AIDS stands for “Acquired Immune Deficiency Syndrome,” and refers to specific types of illnesses and conditions that persons who are infected with HIV can get if they are not treated, and when they are at an advanced phase of the illness.”
 - Ask, “Why does this specify ‘human’?” Human refers to people. HIV can infect humans but not animals. HIV does not infect mosquitoes, cats (cats do get their own acquired immune deficiency syndrome, but from a different virus), dogs, hamsters, or fish. Evidence suggests that the first human infections came from a mutation of a virus that affected chimpanzees (SIV, simian immunodeficiency virus). Mutation means change; the SIV mutated so it could affect humans. When humans hunted the chimpanzees for meat in Africa, they likely became infected when they came in contact with infected blood from a chimpanzee. But mutations occur rarely, so while there are now many strains of human immunodeficiency virus, people acquire HIV only from other people.

- Ask, “What is immunodeficiency?” If people are immunodeficient, it means their immune system is not able to fight germs and diseases the way it is supposed to. When this happens, their bodies are more vulnerable.
- Ask, “What is a virus?” A virus is a microscopic organism (or pathogen) that causes disease. Viruses cause illnesses like measles, chickenpox, the flu, and colds.
- What is AIDS?
Say, “AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is a syndrome, a group of related symptoms or health problems that combine to create a particular condition and which has one underlying cause. AIDS is a syndrome that is defined by a specific list of symptoms and specific infections (in addition to the presence of HIV infection).” This list of symptoms is compiled and reviewed regularly by the United States Department of Health and Human Services’ Centers for Disease Control and Prevention

What Does HIV-Positive Mean?

- Say, “When a person becomes exposed to HIV, his or her body produces antibodies against the virus. The most common and least expensive blood tests for HIV detect the presence of antibodies, not of the virus. A person who has the antibodies for HIV is called HIV-positive. This means the person has been infected with HIV. In the early phases of HIV, which can last years, an infected person may have no symptoms or may experience only minor health problems associated with HIV (some swollen glands, night sweats, fatigue). However, if HIV is not treated and allowed to progress into AIDS, HIV-positive people almost always become ill, and may eventually die as a result of their HIV infection.

How Does HIV Make The Immune System Deficient?

- Say, “Once HIV enters a person’s bloodstream, the virus begins to multiply. Its favorite target cell is the CD4 cell. HIV makes copies of itself inside the CD4 and may destroy the cell as the many copies burst out. This usually goes on for around 4 weeks before the body forms antibodies. After the antibodies are formed, infected cells may be destroyed by the body’s own immune system. This means some infected CD4 cells are destroyed. Since CD4 cells organize much of the body’s immune response, the immune system becomes weakened.”
 - Ask, “How soon after acquiring HIV do you think an HIV-infected person can infect others?” Almost immediately. This is especially important because rapid replication of HIV occurs soon after infection, creating a spike in “viral load” or the amount of infection in the blood, which increases infectiousness. HIV infection cannot be detected immediately after it is acquired. Even if the most sensitive tests are used, the virus is usually not detectable in the bloodstream for 7-10 days after exposure. If standard HIV antibody tests are used, it typically takes up to twelve weeks before HIV antibodies can be detected.
 - Say, “Many HIV-positive individuals stay healthy for years after becoming infected. However, during this time the virus can still damage the immune system. Doctors (or other health care professionals) can measure the amount of damage to the immune system by counting the number of CD4 cells a person has.”
 - Ask, “How many T-cells (or CD4 cells) do you think a healthy person has?” Healthy people have a CD4 count between 500 and 1500 cells per cubic millimeter of blood. An HIV-positive person will have fewer T-cells than healthy individuals. As the CD4 count goes down, he or she may start to have signs of HIV, such as diarrhea, fever, and weight loss, while swollen lymph nodes, fatigue, and night sweats may continue.
 - Say, “Doctors rely on CD4 counts and a measurement of viral load to understand how much damage is being done to the immune system. As of December 1, 2011, the New York City Department of Health and Mental Hygiene recommends that antiretroviral therapy (ART) begin as soon as a person’s positive HIV test is confirmed. If HIV infection is not treated and allowed to progress, the CD4 count will continue to decrease until the immune system is compromised enough to allow an

opportunistic infection to appear. While opportunistic infections can also appear in people who are immuno-compromised for other reasons (for example, the elderly or someone whose immune system has been purposely comprised so the person can accept a transplanted organ), their appearance in someone who is HIV-infected generally means that the person's HIV illness is very advanced.

Teacher Note: Visit <http://www.cdc.gov/hiv/pubs/brochure/livingwithhiv.htm> for examples of opportunistic infections on the Centers for Disease Control and Prevention's list of AIDS-defining illnesses. This site also provides more information about the difference between HIV and AIDS.

- Say, "Currently, there is no cure for HIV nor is there any vaccine to prevent it. However, drugs have been discovered to decrease HIV's effects on the immune system."
 - Drugs that fight HIV, called antiretroviral therapy (ART), interfere with the virus's ability to make copies of itself and its ability to weaken the immune system. As a result, in the United States, people with HIV are living longer, the progression of HIV is much slower, and HIV has become a chronic illness that people live with and manage for years. While people do still die from it, the death rates have dropped significantly. On World AIDS Day, 2011, The NYC Department of Health and Mental Hygiene Commissioner Thomas Farley announced his recommendation that anyone with a confirmed HIV diagnosis should begin ART without regard to CD4 count. The recommendation is based on evidence that ART can both improve the health of people infected with HIV, and prevent transmission from an HIV-infected person to an uninfected sexual partner.
Even though effective treatments are keeping people infected with HIV healthier longer, they can still transmit HIV to others. It is important to avoid getting infected with HIV by avoiding high-risk behaviors and by staying healthy. However, it is still very important for young people to protect themselves from becoming infected with HIV.
- Say, "We know that there is no cure for HIV. The body cannot completely get rid of it and there is no medication that will do this. So, when a person has HIV, what can treatment accomplish?"

Have students brainstorm what goals a person with HIV might have for treatment. After listing the following goals, give them (or elicit from them) examples of treatments that correspond to each goal:

- *Goal: Suppress replication of HIV.*
Example: Several types of medicines effectively prevent HIV from reproducing itself in the body. Recent improvements in antiretroviral therapy (ART) are easier to tolerate and have fewer side effects. If students do not know what "side effects" means, explain to them that these medications can keep CD4 counts high yet affect the body in other ways—for example, a person can feel nauseated or dizzy, might have to eat certain foods, etc.
- *Goal: Prevent opportunistic infections.*
Example: Suppressing HIV, or decreasing its numbers until they are so small that HIV can't be detected, protects the immune system so that it can continue to fight off infections. Thus taking medicine that keeps HIV from multiplying prevents opportunistic infections. If HIV is present for a long time before a person gets diagnosed and sees a doctor for treatment, then he or she might need to take prophylactic—or preventive—medicines in order to prevent opportunistic infections. These medicines must be taken until the HIV-infected person can take ART long enough for the virus to stop multiplying and the immune system repairs itself. One example of a prophylactic medication for an opportunistic infection is pentamidine, which is given in an aerosolized form so the person can breathe it in. Pentamidine can prevent pneumocystis pneumonia (PCP), a type of lung infection that killed many of the first people reported to have AIDS when the epidemic was first discovered in the early 1980s. Now that medicines to suppress HIV are widely available, immune systems of HIV-infected persons do not often deteriorate to the point where pentamidine is required for prophylaxis.

- *Goal: Strengthen the immune system and boost overall health.*

Example: Medicines called immunostimulants boost the immune system to help fight opportunistic infections. Boosting overall health through increased rest, improved diet, exercise, and avoiding drugs and alcohol are non-medicinal ways to strengthen the immune system, as are reducing stress by avoiding or learning to cope better with anxiety-producing situations and/or by practicing yoga, meditation, or deep-breathing techniques.

Homework

Have students research and write a brief paper (one to two pages long) on one of the following:

1. a type of treatment for HIV, or
2. one of the opportunistic infections to which people with highly advanced HIV infection are particularly vulnerable, and which meets the CDC criteria for AIDS. Students may research their papers by contacting an HIV service organization, calling an HIV hotline, or locating information from an organization on the Internet. Government agencies such as the Centers for Disease Control and Prevention and the New York City Department of Health and Mental Hygiene have useful websites. If students do not have a computer with Internet access in their homes, a librarian at a New York City public libraries can help them access HIV information on the Internet.

The Immune System: How It Works

The immune system is a complex system or network (a system of things that are interrelated) of cells, tissues, chemicals and organs. Its mission is to protect us against foreign organisms and substances. The biggest organ in the immune system is your skin. Healthy, unbroken skin is the body's main defense against infection. The immune system has the ability to recognize something as self (belonging to the body) or non-self (invader) and it tries to get rid of anything that is an invader. Invaders of the body are microbes (microscopic organisms, also called pathogens or germs) and include fungi (athlete's foot), bacteria (strep throat), viruses (the flu), and parasites such as protozoa (malaria) and worms (pinworms). Many different cells and chemicals must be coordinated for the immune system to function at its best.

There are various ways the immune system functions. It has:

1. barriers, like skin;
2. innate or inborn immune responses (for example, stomach acid kills many pathogens); and,
3. a special response ("adaptive immune system") for each invader; it uses that response the next time it encounters the invader.

The adaptive immune system is composed of various types of white blood cells, which work together to identify and then destroy specific bacteria, viruses, or any other pathogens which enter the body.

If a pathogen gets into the body, this is how a healthy immune system works:

1. When an invader enters the body, it gets engulfed by macrophages ("big eaters") that are close to the skin or mucous membranes.
2. The macrophage takes the pathogen apart and reveals its antigens. Each invader has its own antigens, which act as "identification cards" that the immune system recognizes. The Helper T cell—also called CD4 cell—reads and recognizes the antigen. The CD4 cell sends a message out to the B-cells and to other cells to come help to destroy the invader.
3. The activated B-cell produces millions of antibodies. The antibodies will outnumber the invaders and help get rid of them by attaching themselves to specific antigens and then allowing both themselves and the antigens to be eliminated. Antibodies and antigens fit together like a lock and a key. For example, a measles antibody will only attach itself to a measles virus.
4. Once an antibody has "caught" an invader, a signal is sent to the macrophages and to other cells (Killer T-cells and others) that it is ready to be eaten or destroyed with its capture. When a macrophage gets the message, it comes along and eats the antibody-antigen complex, ridding the body of the pathogen or invader.

By the time you feel miserable with a cold, the virus that caused it is already under attack by macrophages, T-cells, and B-cells. The B-cells have a memory, so that if the same virus enters the body again, the B-cells will send out already made antibodies to help identify it and help the cells of the immune system destroy it.

What are the Facts About HIV Transmission?

Performance Objective

Students will be able to:

- Describe the course (natural history) of HIV.
- Identify the body fluids that can transmit HIV.
- Describe the most common modes of HIV transmission.
- Identify how HIV is not transmitted.
- Understand treatments available for HIV infection.

Motivation

- Say, “Imagine that you have a cousin who is one or two years younger than you who has just moved here from another state and has questions about how a person can get HIV. You want to be sure that you give accurate information. How can you obtain accurate information to explain HIV transmission to your cousin?”

Elicit the following responses: health class, HIV workshops, the Health Resource Room in the school, the New York City Department of Health and Mental Hygiene (NYC DOHMH), a local hospital, community-based HIV organizations, local libraries, school clinics, health professionals, and websites (especially the Centers for Disease Control and Prevention (CDC) and NYC DOHMH).

Procedure/Development

- Ask, “What would a person who knew very little about HIV want to know?” Have the class brainstorm questions and write them on the board/newsprint.
(Alternatively or additionally, ask the class to bring in questions they prepared as homework.) You may wish to “model” some questions. For example, you might say, “If I didn’t know much about HIV, I might want to know how most people who have it became infected.”
- Distribute the Handout, “Facts About HIV Transmission.” After three minutes, read the students’ questions aloud. Elicit answers based on the information on the fact sheet. Continue the process until the class has fully covered the body fluids in which HIV can be transmitted, (blood, including menstrual blood; semen, including preseminal fluid; vaginal fluids; breast milk), all the most common modes of transmission (the following types of sexual intercourse: vaginal/penile, oral—including mouth to vagina and mouth to penis, and anal/penile); sharing needles, etc.; HIV-positive mother to child, and common misconceptions about HIV.

GRADE 10
Lesson

2

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Advocacy

Communication

Self-Management

MATERIALS

Board/Newsprint

Handout:

Facts About HIV Transmission

VOCABULARY

Mode

Transmission

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact with an HIV-positive person. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

The modes of transmission of HIV are often discussed in terms of personal risk. It is important to emphasize being protective of oneself and others.

- Ask, “Is there any information on your fact sheet that has not been discussed that you would like to discuss?”

Teacher Note: Some students might be too shy or embarrassed to ask. For many young men, research has shown there is often an opposite problem—they often think they are supposed to know all about sex, so they feel if they ask questions they will be ridiculed. Therefore, you may wish to set up a “Question Box” in advance and periodically ask all the students to anonymously write down a question that they have regarding HIV or write “I have no question” to insure anonymity. Students should fold the piece of paper and the teacher should collect them and place them all in the Question Box. That way whenever the teacher pulls out a question from the box, the question-asker will be unknown, and students can find out information anonymously.

Assessment/Homework

- Do a quick “go-round” (oral review) to elicit from students the modes of HIV transmission and the body fluids that can carry the virus.
- Have students create a poster that targets teens and explains how HIV is transmitted. They must include the body fluids (blood, preseminal fluid/semen, vaginal fluid, breast milk) that can transmit the virus. Tell them to use at least four facts from the fact sheet in their posters.

Facts About HIV Transmission

What is the course of HIV Infection?

Once a person is infected with HIV, he or she must see a doctor who specializes in HIV. Medical treatment (ART or antiretroviral therapy) is very effective at keeping CD4 counts high and at lowering the viral load (amount of HIV in the blood). However, if a person does not receive medical treatment, over time HIV is likely to replicate and continue to attack the immune system. If HIV compromises the immune system, the person will be more susceptible to “opportunistic infections,” some of which are serious and potentially fatal.

A person with untreated HIV typically goes through the following phases:

Acute Phase (Primary HIV Infection) – from exposure and infection to development of antibodies, often accompanied by flu-like symptoms;

Asymptomatic Phase – literally means “without symptoms,” though the person may experience a few symptoms, such as fatigue, swollen glands and night sweats, and other signs that accompany most infections;

Symptomatic Phase – vulnerability to common illnesses (like colds) and additional symptoms (like weight loss, diarrhea). Person may experience first hospitalization;

AIDS – accompanied by symptoms due to the direct effects of HIV infection, such as wasting syndrome, along with symptoms from opportunistic infections.

There is no “cure” for HIV. However, HIV is a treatable disease. Antiretroviral therapy (ART), a very effective therapy that suppresses the virus, has been available since 1996. In 2011, the NYC Department of Health and Mental Hygiene (NYC DOHMH) recommended that all people infected with HIV begin treatment, regardless of CD4 count. ART has decreased the amount of HIV in the blood, keeping the immune system strong and able to fight off opportunistic infections longer. For persons who are not diagnosed until their immune system has suffered serious damage due to HIV, other medications, called prophylactic medications, must be taken to prevent the occurrence of common opportunistic infections. People with HIV who receive ART and monitor their health often live productive and healthy lives for decades.

How Do We Know Who Has HIV?

- One can't tell if a person has HIV by looking at him or her.
- HIV can have many different symptoms, and these are often symptoms of other, unrelated sicknesses. Only a laboratory diagnostic test for HIV—usually an HIV antibody test—can confirm the presence of HIV infection. In fact, most people with HIV feel healthy and therefore don't know that they have it until they are tested. That is one reason that sometimes people don't get tested until they have serious symptoms. The CDC estimates that 1 in 5 of people in the United States who are infected with HIV do not know it. In September, 2010, New York State passed a law requiring all persons aged 13-64 who seek healthcare in hospital emergency departments, inpatient units or outpatient primary care clinics/private practices to be offered an HIV test (Chapter 308 of the Laws of 2010).

Handout (continued)

- Occasionally, it is possible to have a negative HIV antibody test and still be HIV-positive. There is a “window” of about three months after infection when HIV may not be detected by the HIV antibody tests that are most commonly used for diagnosis. That is because it takes most people up to twelve weeks to develop detectable antibodies to HIV after infection. NAAT (nucleic acid amplification tests) or antigen tests detect the presence of HIV in the blood, rather than detecting HIV antibodies that fight the infection. These tests are not often used because they are more complicated and expensive. And even if a healthcare provider uses antigen tests, there is a window period of up to 10 days when even these tests cannot detect the presence of infection after it is acquired.

Some Ways HIV Can Be Transmitted

Sexual Intercourse: Sexual Behaviors That Can Transmit HIV

“Sexual intercourse” refers to sexual activity that involves vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact. Most HIV infections are transmitted through sexual intercourse. HIV is transmitted during sex when the body fluids of one person come into contact with places on the other person’s body through which the virus can enter that person’s body.

No matter what a person’s sexual orientation (whether that person is attracted to people of the same or different gender), sexual intercourse can put him or her at risk of HIV infection. Of these, penile/anal intercourse is most risky, and oral intercourse least risky for HIV transmission. In addition to being risky for HIV transmission, sexual intercourse also carries a risk of transmission of other STIs besides HIV. Several common STIs can increase one’s vulnerability to HIV infection if they are present during sex. This is because open sores or lesions in the male or female genitalia may be present, and this interruption of skin integrity breaks down one of the body’s natural defenses to infection – the skin. In penile/vaginal intercourse, women are at higher risk than men, for many reasons, though both partners are still at risk.

[Note: methods of prevention will be discussed in a subsequent lesson.]

People do not usually become infected with HIV through kissing, even deep kissing. The exception may be if blood can be exchanged, such as when one or both persons have bleeding gums or cuts in the mouth.

Drug Use

HIV can be transmitted through the sharing of needles, syringes, and other equipment (such as “cottons” or filters, “cookers” or mixing containers, drug solutions and water or other liquids) used to prepare drugs or other substances for injection. HIV can be transmitted because sharing these items allows blood or other body fluids from one person to be transferred to another.

HIV (and some types of hepatitis) can be transmitted through any type of drug use that allows body fluids to come in contact with another person’s blood or a damaged mucous membrane.

HIV transmission is possible if equipment is shared, regardless of what substance is injected. Most commonly, people share equipment to inject illegal drugs (for example, heroin or cocaine), but sometimes it is to inject other substances (such as steroids, hormones, vitamins or prescription medications).

Use of alcohol or other drugs can be dangerous because they can diminish a person’s ability to make healthy decisions about behavior, possibly putting the person in danger of risk behaviors that can lead to HIV/STI transmission.

Pregnancy, Childbirth, or Breastfeeding

HIV can be transmitted from an HIV-positive pregnant woman to her child during delivery and breastfeeding. In the U.S., the transmission of HIV from mother to child has been dramatically reduced through the use of antiretroviral medications (ART), delivery through C-section, and having HIV-positive mothers not breastfeed their infants. Antiretroviral medications are given to the woman during pregnancy and delivery, and given to the infant of an HIV-positive mother in the first weeks to months of life.

How Can We Improve Our Communication Skills When Talking About Risk Behaviors That Can Transmit HIV/STIs?

Performance Objectives

Students will be able to:

- Identify effective communication skills that can help teens avoid risk behaviors that could lead to infection with HIV or other STIs.
- Recognize obstacles to effective communication, including cultural diversity and gender roles.
- Identify and appreciate the importance of assertiveness as a communication tool.
- Recognize that it is important for both partners to be responsible for communicating and deciding about sexual activity.
- Demonstrate how communication skills affect one's level of risk of infection for HIV or other STIs.

Motivation

- Say, "Imagine that a person is dating someone who is pressuring him or her to have sex, but for any number of reasons, the person does not want to have sex. What are some of the reasons that it might be difficult to tell the partner this?"

Students' answers may include:

- The person is afraid of hurting the partner's feelings.
- The person wants to be in control of the sexual decision, but not alienate the partner.
- The person is afraid that the partner might get angry and want to break up.
- The person does not want to seem naive about sex.
- The person doesn't want to feel pressured, but doesn't want to seem "uncool" either.
- The person feels that it isn't appropriate to discuss such things.
- The person is not sure of exactly what the partner wants.

GRADE 10
Lesson

3

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Scenarios for Role-Playing

VOCABULARY

Aggressive

Assertive

Cultural Diversity

Gender Roles

Goal

Material

Non-Material

Value

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm> or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Procedure/Development

- Say, “The first step in figuring out how to communicate is deciding what you want to say. To know that, you need to look inside yourself and consider who you are, what you value, and what you want out of life. Then what you say can really be an expression of who you are, what you value, and what your goals are.”
- Ask, “What are some non-material things that teens may value?” (Make sure students understand the term ‘non-material.’ Write students’ ideas on the board/newsprint labeled “goals,” as shown below. Then have the class fill in the right column—objectives— to show how values dictate actions.)
Students’ responses may include:

GOALS (What You Value)	OBJECTIVES (How will you achieve these values?)
strong family relationships	develop good communication with family; learn to talk about any problems
trusting, honest friendships	identify and develop potential friendships, meet appropriate people
education, achievement	complete high school, consider higher education, job training, apprenticeship
financial independence	get an after-school or weekend job
creativity	explore creative outlets (visual or performing arts, inventing, designing, writing)
romance	get to know individuals you might want to date, go out together or with friends; in the future have a committed relationship (such as marriage or other long-term relationship)
cultural identity	identify and maintain values and behaviors that are important to your culture and to you, attempt to find ways to practice them in new situations and with people who may not be like you
independence, controlling one's own life	be friends with people who respect you and don't pressure you to betray your beliefs; avoid unintended pregnancy; develop self reliance and responsibility; learn how to make healthy judgments
health	avoid behaviors that could lead to HIV/STI infection, pregnancy, stress; identify and seek help with these behaviors; practice behaviors that make you physically and emotionally stronger
fun	engage in relaxing or challenging activities you enjoy and avoid those that cause stress or worry

- Ask, “When people say that they want to know how to tell partners “no” to sexual activities without hurting their feelings, what values and actions are they expressing?” Students’ responses may include:

GOALS	OBJECTIVES
friendship: considerate communication, respect	preserving friendship and harmony even when there are disagreements; learning how to work through disagreements so that all parties feel good about each other
independence: being in control of their own sexual decisions	learn to resist pressure by others, and not to put pressure on others
health	avoid the risks (transmission of HIV, other STIs, unwanted pregnancy) that can occur with sexual activity
healthy sexual behavior	make and maintain decisions about sexual activity and abstinence based on own values, as well as respect for others and their values and decisions

- Ask, “Why is it sometimes hard to say no?” Students’ responses may include:
Partners may:
 - Not take no for an answer.
 - Threaten them.
 - Try to persuade them.
 - Pressure them.
 - Make fun of them.
 - Reject them.
 - Lie about their feelings.
- Ask, “What does the word ‘sex’ mean? What does the word ‘virgin’ mean? What does the word ‘sexuality’ mean?” Ask students to list as many answers as possible, and write up their responses.
- Ask, “What are some of the reasons that people might have different opinions about the meanings of these words?” Be sure to elicit the responses and explanations in the box below, among others that students offer:

1. **Cultural identity.** People (especially in New York City) come from many different countries, backgrounds, or cultures. People from different cultures may have different ways of communicating (even if they speak the same language), and different ideas about what is appropriate to talk about, based on cultural expectations and norms within their communities of origin or local communities. Sometimes these expectations are influenced by religious beliefs or practices.
2. **Language and vocabulary.** People from different backgrounds, and sometimes from the same background, use the same words to mean different things. For example, people may mean different things by words like “abstinence,” “celibacy,” “chastity,” “virginity,” and even “sex” or “sexual intercourse.”
3. **Gender roles.** People of different genders learn to behave and communicate differently, especially about issues of sex and sexuality. For example, some people think it is appropriate for a boy to know and talk more about sexual activity than a girl. Transgender students may find that discussion of sex and sexuality does not include their experiences.
4. **Sexual orientation.** Lesbian, gay, and bisexual students may recognize that their personal experiences and behaviors are ignored or defined differently from cultural norms for straight students. What a gay teen considers to be “sex” may or may not be different from what a straight teen considers to be “sex.”

- Write on the board/newsprint: ASSERTIVE COMMUNICATION.
- Ask, “What does it mean to be assertive?” (Answer: To state in a positive way what one feels and what one wants, while attempting not to hurt or offend other people.)
- Say, “Being assertive is not the same thing as being aggressive. People who are assertive say what they feel and want, but don’t attack or belittle other people who think differently. People who are aggressive attack or belittle those who think differently.”
- Say, “It’s not always easy to be assertive, or to deal with someone’s resistance to what you want. So there are ‘assertiveness techniques’ that people can learn. These techniques help people stay positive and firm about saying what they feel and want and what they don’t want, while not hurting or offending other people.”
- Ask, “What do you think are some of the characteristics of assertive communication?”
- Make sure students’ responses include those listed in the left column of the chart below. If students have difficulty proposing responses, ask them what poor communication skills are and write the more effective characteristics opposite them, making a chart like the following.

ASSERTIVENESS SKILLS	POOR / INEFFECTIVE COMMUNICATION
Identify what is being discussed. (“You seem to be talking about having [a particular kind of sexual activity].”)	“Huh?”
Decide what you feel and want and state it clearly. (“I enjoy your company and want to keep seeing you. And I want you to understand and respect my decision not to express my feelings that way.”)	Be dishonest about how you really think or feel. (“I don’t like it.”)
Use body language and nonverbal communication that expresses your feelings and confidence in what you are communicating. Make sure your body language and nonverbal communication are consistent with your words.	Communicating one thing with body language while saying another.
Choose words carefully; consider how the listener will receive them.	Blurt words without thinking about them first; use insulting or vulgar language to express disapproval or refusal.
Use “I” statements, which communicate your feelings without seeming judgmental. “I like you, but I am not ready for sex at this time in my life.”	Use “you” statements, which can sound accusatory. (“You’d better back off... you keep pressuring me... the only thing you think about is sex.”)
Listen carefully and respectfully: hear the other person out before responding.	Interrupt; “tune out” when the other person is speaking; jump to conclusions before the other person has had a chance to express his/her point of view.
Paraphrase what you heard the other person say to check that you understood correctly: e.g., “Are you saying that you need to...?”	Dismiss the other person’s point of view and avoid letting the other person know you have listened and considered his/her point of view. (“You don’t know what you’re talking about.”)
Reiterate what you want, as many times as necessary, to make sure the other person hears you and to enable yourself to withstand pressure. This is called the “broken record” technique.	Allow yourself to be trapped by someone else’s “persuasive arguments”—and lose sight of what you want.

- Ask, “Why is assertiveness so important with regard to HIV or other STIs?” (Answer: Certain behaviors can transmit HIV or other STIs. Clearly stating one’s own limits reduces the likelihood of getting talked into risky behaviors or doing something because you don’t know how to say no without seeming hurtful or feeling ashamed. It also reduces pressure on your partner by making it clear where you stand and why.)
- Say, “The easiest relationships are often those in which a friend’s values and goals are in sync with one’s own. But when people have different values and goals, one is not necessarily ‘right’ and the other ‘wrong.’ They can still have a good relationship if they respect each other and ‘agree to disagree.’”
- Say, “Assertiveness skills are effective, and like all skills, they need to be practiced so you can feel comfortable, confident, and prepared. Like any communication technique, assertiveness doesn’t always work, so sometimes you have to be prepared to walk away, or set a cooling-off period.”

Assessment/Homework

- Have students role-play one or more of the brief scenarios on the following page, demonstrating assertive responses to pressure situations. After each role-play, have the class point out the assertiveness techniques that were used, or propose responses that could have been tried. (See “How to Use Role-Plays in the Classroom” in Appendix B.) Alternatively, if time is short, postpone this activity for the next class session or choose one or two for the group as a whole to discuss. Also, you may use these scenarios throughout the HIV lessons to refresh students’ skills.
- Have students write a dialogue based on one of the scenarios that you do not get to in class. Have them identify the assertiveness skills used.

Scenarios for Role-Playing

In the weight training room, some football players are doing strengthening exercises. Clinton comes out of the shower room. He whispers to Frazier that Steve, the team captain, has a syringe of steroids and is offering some of the guys on the team a shot. Clinton says, "Maybe this is what we need to win the championship." Frazier knows that sharing a syringe and needle can transmit HIV and hepatitis. He also knows that steroids have dangerous side effects. He refuses.

Danette and Tyrone have been dating for six months, and Danette is pressuring Tyrone into sexual activity. Tyrone is not ready for sex right now, and wants simply to enjoy Danette's company and high school activities, and not even think about having sexual activity until later. But Danette is unrelenting in the pressure, and Tyrone is fed up with the non-stop debate.

Jana's family came here from their home country when she was in elementary school. They are unfamiliar with the ways young men and women meet and associate with each other here, since in their country, "dating" or any sexual activity before marriage are frowned upon. They have allowed Jana to see Dean, a young man she met at school because his family is from the same country as Jana's. Dean, who was born in New York, has begun to suggest his interest in sexual activity to Jana, but she is not sure what is appropriate for her, and has difficulty asking her parents or even older sister for advice. How does she discuss her confusion and reluctance with Dean?

Alex and Carey have been seeing each other off and on. Carey has begun to use slang terms to suggest what they might do sexually. Alex doesn't know what a lot of these words mean, and is embarrassed to ask Carey. How does Alex find out what Carey is talking about, and then communicate a decision?

Pat and Lee have been close friends for years. Recently, Lee has started to have romantic feelings toward Pat. Although Lee thinks Pat might feel the same way, Lee is unsure of how Pat feels. Lee does not want to insult Pat or risk losing their friendship. Yet, Pat can't stop imagining how wonderful it would be if Lee shared these special feelings. What are some ways Lee can discuss this with Pat?

What Are the Advantages of Sexual Abstinence?

Performance Objectives

Students will be able to:

- Define sexual abstinence in terms of HIV prevention.
- Understand how teens feel pressured, both internally and externally, to engage in sexual behavior that can transmit HIV or other STIs.
- Differentiate between abstinence and virginity, in terms of behavior that can transmit HIV or other STIs.
- Understand how teens, even those who have been sexually active in the past, can commit to abstinence.
- List the benefits associated with abstinence.
- Set goals and develop realistic negotiation and refusal techniques that will help them become or remain abstinent.

Motivation

Ask, “What kinds of influences persuade some teens that it is appropriate for them to be sexually active?” Possible responses may include:

- Teens like and admire people they know who say they have had sexual experiences during adolescence.
- TV and movies portray sexually active teens as glamorous, popular, and typical.
- Ads and mass marketing directed at teens use sexual images with teens portrayed in seductive, semi-nude embraces with members of the same or different gender.
- Popular music and music videos have strongly sexual messages; they often glorify sex as the ultimate thrill, and stress living for the pleasure of the moment.
- Peer pressure; teens often encourage other teens to become sexually active, usually by sending messages that signal some form of rejection, such as:
 - “You’re not a man (or woman) until you’ve done it.”
 - “Even if you don’t do it, he/she will say you did.”
 - “Real women (or men) like sex. What are you afraid of?”
 - “It’s your body; do what feels good.”
 - “Everyone’s doing it.”
 - “If you don’t do it, he/she will just do it with someone else.”
 - “Show me you love me.”
 - “I love you. I want to be close to you.”

GRADE 10
Lesson

4

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Communication

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Strategies for Choosing and/or Maintaining Abstinence

VOCABULARY

Abstinence

Influence

Negotiation

Pressure

Teacher Note: Students should understand that being able to identify the benefits of abstaining from sexual activity can help them withstand the considerable pressures described above.

Procedure/Development

- Say, “These are outside pressures.”
- Ask, “Why do some teens succumb to these outside pressures and choose to become sexually active?” Possible responses may include that some teens become sexually active because:
 - They want to be loved and accepted.
 - They are curious.
 - They want to have a baby.
 - They want to feel powerful and in control.
 - They want to feel grown up.
 - Sex feels good and is fun.
- Say, “All people have sexual feelings; adolescents become more aware of these feelings as they get older. While teens HAVE these feelings, they can make choices about how to EXPRESS them.”
- Say, “We all have thoughts and fantasies in many areas of our lives. Think about how chaotic the world would be if we acted out every one of them. In our fantasies we get to decide how things turn out. That doesn’t always happen in real life. In real life we have to think about the consequences of our actions, and we get real experience from our actions. You probably already do this many times a day. Now let’s think about what we consider when we think about activities that have to do with relationships and sex.”
- Ask, “Are the expectations that young people have about sex always fulfilled?”
- Say, “In reality, many teens who are asked say that their early sexual experiences left them feeling disappointed and did not lead to the lasting relationships, better feelings, or higher self-esteem they desired.”
- Say, “Teens may have felt that if they waited to be sexually active they would be off schedule for the ‘norms’ they’ve heard about. But when they act according to an external rather than internal clock, often things don’t feel right. In reality, everyone takes different time and experiences to be ready for complicated relationships. Many teens try to hurry experiences, including the decision of whether or not to have sex.”
- Ask, “Can someone who has had sex decide to become abstinent?”
Answer: “Yes. The two are not tied together. Someone who has done something in the past can make a different decision in the future. For example, someone who has had sexual intercourse in the past can decide to abstain from sexual activity in the present and future, until he or she feels emotionally ready to take on the responsibility of being sexually active once again.”
- Write on the board: “What are some of the benefits associated with abstinence?” Ask students to respond. Students’ responses may include:
Abstaining means:
 - Not worrying about getting or giving a sexually transmitted infection, including HIV.
 - Not worrying about the risk of becoming pregnant or causing pregnancy.
 - Not worrying about parenthood, abortion, or adoption.
 - Not worrying that HIV/STI infection or unintended pregnancy will interfere with educational, career, or financial goals.
 - The chance to experience a loving relationship without having to perform sexually.

- Summarize: “If a teen has already been sexually active but wants to stop, he or she has the right to do so any time. Both abstinent and sexually active teens can work toward the goal of postponing sexual activity that can transmit HIV or other STIs.”
- Ask, “What strategies can teens use to work toward the goal of abstinence?” Review the Activity Sheet, “Strategies for Choosing and/or Maintaining Abstinence.”
- Say, “In some cases, when a behavior a person suggests is dangerous, illegal, or unethical, it may be necessary to end a relationship. However, in most cases, you can use assertive communication skills to say no without ending the relationship.”

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through unprotected vaginal/penile, anal/penile, oral/vaginal, and oral/penile contact with an HIV-positive person. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

Assessment/Homework

Write an essay describing the values people take into consideration when assessing their feelings about abstinence. How might feelings and values conflict with or support each other?

Teacher Note: Set aside 10 to 15 minutes in a subsequent class for volunteers to share and process their writing.

Strategies for Choosing and/or Maintaining Abstinence

1. Identify your long-term goals and personal values. Such goals may include: completing high school, getting a job, getting an apartment, going to college, getting married or forming a life partnership, or becoming financially independent. Values that underlie these goals may include: emotional self-sufficiency, deciding what constitutes personally appropriate behavior, the importance of focusing on education.
2. Focus on these goals and values. Don't jeopardize long-term goals and important values for short-term pleasure or excitement.
3. Understand that young people are most likely to be successful with abstinence if they set limits in advance. Sexual arousal generally increases as a couple increases their level of physical intimacy. Sexually active young people often say, "One thing led to another... we got carried away." Such sexual activity as fondling, for example, may progress into genital contact and eventually lead to sexual intercourse and risky activity, unless limits are set in advance. In reality, once started, arousal can be stopped.

Therefore young people can limit themselves to such activities as holding hands, hugging, a goodnight kiss, and not permit these expressions to progress further. Even such activities as prolonged kissing can stop there and don't have to lead further. Teens who have been sexually active always have the option to set limits from this time on, and choose abstinence.

4. Plan activities and settings that will enable you to maintain the limits you have set for yourself, and avoid those that would make doing so difficult.

For example:

- DO:**
- Double date with someone who shares your values—plan ahead.
 - Socialize within a group who share your values and beliefs; check in advance.
 - Go to someone's home, but only when responsible adults are present.
 - Plan assertive communication strategies to use if you need them, and practice them beforehand.

- DON'T:**
- Use alcohol or other drugs.
 - Go to places where drugs or alcohol are being used.
 - Go home with a date when no RESPONSIBLE adults are present.

5. Ask a trusted friend to help you safeguard your goals and values by encouraging you to remain firm, especially when you feel pressured to surrender your values for short-term sexual gratification.
6. Practice and use assertive communications skills to develop realistic responses to other people's pressure tactics.

How Can We Reduce Our Risk of Acquiring HIV or Other STIs?

Performance Objectives

Students will be able to:

- Explain why abstinence from behaviors that can transmit HIV or other STIs is the most effective way of eliminating the risk of the sexual transmission of these infections.
- Explain how “risk reduction” differs from “elimination of risk” in the context of the transmission of HIV or other STIs.
- Identify types of risk reduction behaviors.
- Understand how male and female condoms are designed to be used; why they may fail or be used incorrectly; and what the consequences are of failing to use a condom properly.
- Identify STIs other than HIV.

Motivation

- Say, “There is a lot of talk about abstinence from sexual behaviors that can transmit HIV. Let’s look at this more closely.”
- Write on the board/newsprint: “By choosing to remain sexually abstinent, young people can be free from...” Elicit responses and write them on the board. Possible student responses include freedom from:
 - Guilt, doubt, worry.
 - Sexually transmitted infections (STIs, also known as sexually transmitted diseases or STDs).
 - Pregnancy and its associated consequences.
 - Exploitation by others.
 - Loss of reputation.
 - Having to ask a partner to wear a condom.
 - Family reactions to behavior.
 - Pressure to marry or have a child early.
 - Having to perform sexually.
 - Having to get condoms.
 - Pressure to get more serious.

GRADE 10
Lesson

5

Prevention

NEW YORK STATE
LEARNING STANDARDS
1, 3

SKILLS

Self-Management

MATERIALS

Board/Newsprint

Handout:

*HIV is an STI—
But Not the Only One*

VOCABULARY

Chlamydia

Condom

Female condom

Genital Warts

Gonorrhea

Hepatitis B and C

Herpes

HPV or Human Papillomavirus

Risk Reduction

Sexually Transmitted Disease (STD)
or
Sexually Transmitted Infection (STI)

Syphilis

Procedure/Development

- Say, “There is another reason for abstinence, and that relates to health. Abstinence is the only 100 percent sure way of eliminating the risk of sexual transmission of HIV or other STIs.” A person who abstains from vaginal/penile intercourse has no risk of pregnancy. A person who abstains from anal/penile, vaginal/penile, and oral (including mouth-to-vagina and mouth-to-penis) sexual intercourse has no risk of sexual transmission of HIV, and may also avoid other physical, emotional, social, and family problems that may be associated with sexual activity.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Teacher Note: Make sure students understand that HIV can be transmitted through body fluids of several kinds and through unprotected anal/penile, vaginal/penile, and oral (including mouth to vagina and mouth to penis) intercourse with an HIV-positive person. When sexual intercourse is not clearly defined to include anal and oral, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

- Ask, “What does it mean to reduce the risk of transmission of HIV or other STIs?” Possible responses include:
 - Decrease the chances.
 - Make it less likely.
 - Lower the odds.
- Say, “Reducing risk is not the same as eliminating risk. Reducing risk means there is still some risk of becoming infected with HIV or other STIs, and we do not always know how great that risk is. That is why abstinence from sexual behavior that can transmit HIV or other STIs eliminates the risk of infection, and is the safest and most appropriate choice for young people.”
- Ask, “With which body fluids does contact during sexual intercourse create a risk for the transmission of HIV?” Record students’ responses on the board/newsprint. Make sure they include:
 - Blood, including menstrual blood.
 - Semen and preseminal fluid (“pre-cum”).
 - Vaginal fluids.
 - Breast milk.

- Ask, “What are some of the other STIs that can be transmitted during sexual intercourse?” Make sure responses include syphilis, gonorrhea, chlamydia, herpes, human papillomavirus (also known as genital warts or HPV), and hepatitis B and C. Many of these diseases produce no visible symptoms. Gonorrhea and chlamydia can lead to sterility. Herpes, HPV, and hepatitis, like HIV, are viral and have no cure; they can only be treated to prevent and relieve symptoms.
- Say, “The U.S. Centers for Disease Control and Prevention state that the correct and consistent use of latex or polyurethane condoms during penile/anal, penile/vaginal, or oral/penile intercourse can reduce the risk of transmission of HIV and other STIs.”

Teacher Note: Consider using the Condom Challenge Activity in Appendix C to help students learn the correct steps for using male and female condoms.

Most high schools are required to have a Condom Availability Program. Let students know that they can receive condom demonstrations and free condoms at the program. Free condoms are also available in thousands of locations citywide. Students can call 311 to request a location near them.

- Ask, “What does ‘correct and consistent’ condom use mean?” Make sure answers include:
 - Consistent condom use means using a condom during every act of penile/anal, penile/vaginal, or oral/penile intercourse, from the time of erection throughout the entirety of sexual contact.

The male condom is a barrier device used to cover the penis during sexual intercourse in order to prevent the transmission of preseminal fluid, semen, blood, or vaginal fluids. Use of latex or polyurethane condoms is a method to protect against infection with HIV or other sexually transmitted infections (STIs). They also help to prevent pregnancy. Lambskin condoms should not be used, as the skin has small pores through which HIV or the germs that cause other STIs can pass.

Correct condom use for the male condom means:

 - Making sure the condom package is not damaged or torn, and that the expiration date has not passed.
 - If using a latex condom, being sure that the condom has been stored where heat cannot damage the latex.
 - If using a lubricant with a latex condom (which is recommended, to reduce friction and improve the likelihood of a condom’s effectiveness), use only water-based lubricants. Check the lubricant package to see if it says “water-based” or “safe to use with condoms.” Do not use oil-based lubricants, such as baby oil, Vaseline, or other petroleum jelly, as they can damage a latex condom.
 - Never reusing condoms. Use a new one for each sexual act.
 - Not using the male condom with a female condom.
 - Following all of the manufacturer’s directions on or with the condom package, which include:
 1. Tear the package open along the notched edge while being careful not to damage the condom. Never use a sharp object to help open the package.
 2. Pinch the tip to allow room for preseminal and seminal fluid.
 3. Be sure that the condom is right-side up (tip up), roll the condom down on the erect penis to the base.
 4. Smooth out any air bubbles. Use a water-based lubricant if needed to reduce friction.
 5. When finished, hold the base of the condom and withdraw the penis while it’s still erect.
 6. It is now safe to remove the condom, carefully.
 7. Tie a knot in the end of the condom. Discard the used condom in the trash, not in the toilet.

The female condom (FC2) is a pouch made of synthetic nitrile that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (silicone-based) and can be inserted hours before intercourse, without male participation. The female condom has been reported as having similar rates of effectiveness in preventing STIs and pregnancy as the male condom when used correctly and consistently. FC2 is the name of the second generation of female condom because the synthetic nitrile appears to be as effective as its predecessor that was made of polyurethane, but the price has been drastically reduced. Female condoms are available throughout New York City and through the NYCDOE's high school condom availability programs.

Correct condom use for the female condom means:

- Practicing insertion. This can help the user feel more comfortable and confident.
 - Making sure the package is not damaged or torn and that the expiration date has not passed.
 - Inserting the female condom before there is any contact with the penis.
 - NOT using a male condom and female condom together because this can:
 - > Increase friction and reduce the effectiveness of both.
 - > Cause slippage and displacement if they stick to each other.
 - NEVER reusing any condom—male or female.
 - Following all of the manufacturer's directions on or with the female condom package. These include:
 1. Tear open the package carefully along the notched edge. Do not use anything sharp (teeth, scissors, etc.) to open it.
 2. Squeeze the inner (closed-end) ring between your thumb and forefinger (or middle finger), making it long and narrow.
 3. After finding a comfortable position for insertion (squatting, lying down, etc.), insert the inner ring into the vagina and feel it move into place.
 4. Using your index finger, push it in as far as it will go. Be sure the sheath is not twisted. The open-ended ring should rest outside of the vulva.
 5. You are now ready to use the female condom with your partner. Be careful to guide the penis into the pouch THROUGH the outer ring, not outside it.
 6. To remove the condom, twist the outer ring and pull it out gently.
 7. Dispose of the condom in the trash, not the toilet.
- Say, "Condoms can reduce but not eliminate the risk of transmission of HIV and other STIs. What are the factors that affect how effective a condom is in reducing that risk?" Categorize responses on the board/newsprint.

Correct and consistent use of a condom during sexual intercourse dramatically lowers the risk of HIV transmission, because it prevents the bodily fluids of the HIV-infected person from coming into contact with another person during sex. When latex or polyurethane condoms are used consistently and correctly during sexual intercourse, it is called "protected" sex. When condoms are not used consistently and correctly during sexual intercourse, this is called "unprotected" sex. For sex to be considered "protected" a male or female condom must be used for penile/anal sex or penile/vaginal sex, and a male condom must be used for oral/penile sex.

Condoms must be used consistently and correctly to protect against HIV because HIV is present in several body fluids, including semen and preseminal fluid of men who are HIV-positive, and vaginal fluids of women who are HIV-positive.

Inconsistent/Incorrect use: For people who are sexually active, using condoms is the best way to prevent HIV infection. However, condoms must be used properly to protect from infection. It is therefore very important to learn when and how to put on a condom. The Health Resource Room's Condom Availability program offers condoms to students who need them.

Many people think they can tell if a partner has HIV. But most people who are HIV-positive do not look sick, and one in five people living with HIV in the United States today does not even know that he/she is infected. Because it is not possible to tell if someone is HIV-positive just by looking at him or her, it is important to use a condom for every time act of sexual intercourse. Some people may not disclose their HIV test results to a partner. Some people are not truthful about sex they might have had outside the relationship or any other risk behaviors they might have engaged in recently. Using condoms every time protects partners from infection and promotes peace of mind.

Manufacturing Defects: The FDA requires condom manufacturers to test condoms rigorously for strength, holes, and leaks. Only FDA-approved condoms should be used.

Use of oil- or petroleum-based lubricants on male latex condoms: Oil-based lubricants (such as Vaseline, baby oil, cooking oil, other oils) can damage a latex condom and cause breakage. Use only water-based lubricants such as K-Y Jelly on latex condoms. However, oil-based lubricants can be used with polyurethane condoms.

Limitations: Male condoms do not cover the area around the genitals. Some STIs can be transmitted skin-to-skin (for example, herpes and HPV).

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to

<http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>

HIV Is an STI—But Not the Only One

A *sexually transmitted infection*, or an STI, is transmitted through sexual contact. Some STIs are well known, such as HIV, gonorrhea, syphilis, and herpes. Other potentially serious STIs include chlamydia, hepatitis B (HBV), and human papillomavirus (HPV).

Some STIs can be cured, but early diagnosis and treatment are crucial.

Some STIs can be asymptomatic, meaning they have no symptoms. Infected people may be unaware that they need medical advice and treatment. For example, chlamydia produces no symptoms in 70-75 percent of women and 50 percent of men. HIV can be relatively asymptomatic for months or even years after infection. Even without symptoms, HIV and other STIs can damage the immune system and other bodily organs. An STI-infected person without symptoms can still transmit the STI to sexual partners through intercourse.

If left untreated, some STIs can lead to other serious long-term diseases.

For example: gonorrhea and chlamydia can lead to pelvic inflammatory disease (PID), which can cause infertility in women. Hepatitis B can lead to chronic or fatal liver disease. HIV infection can lead to serious illness and death. Untreated gonorrhea can cause heart disease, skin disease, arthritis, and blindness. Untreated syphilis can cause brain damage, blindness, and death. HPV may lead to cervical cancer.

Having an STI can increase a person's chance of contracting another STI, including HIV because of open sores, rashes, and swollen or irritated skin and tissue.

These openings in the skin can provide a direct route for viruses and bacteria into the bloodstream. For example, a person with herpes or syphilis sores is more vulnerable to HIV infection.

Some STIs can be passed on from an infected pregnant or breastfeeding woman to her child.

HIV, HPV, gonorrhea, herpes, and syphilis are STIs that can be transmitted through the placenta during pregnancy, sores and lesions during birth, and breastfeeding. Pregnant women can be treated with drug therapies to help reduce the risk of transmission. HIV-positive mothers are encouraged to use formula instead of breastfeeding.

Bacterial STIs (chlamydia, gonorrhea, syphilis) can be treated and cured, though a person can contract them repeatedly. However, they can cause severe damage and even death if left untreated. Symptoms from viral STIs (HPV, herpes, HIV, HBV) can be treated, but not cured.

Abstaining from all forms of sexual intercourse is the best prevention against HIV and other STIs.

People who do not abstain can reduce, though not completely eliminate, their risk of infection through correct and consistent use of latex or polyurethane condoms.

It is important for anyone who suspects that he or she might have an STI to visit a doctor or clinic such as the free and confidential New York City Department of Health and Mental Hygiene STD clinics. For more information, call 311 or visit www.nyc.gov/html/doh/html/std/std.shtml. Minors do not need parental consent for examination and treatment. Additionally, avoid transmitting the STI to anyone else. By avoiding STIs or getting treated as early as possible, people can protect their health and fertility, as well as the health and fertility of others.

SKILLS

Advocacy

Communication

MATERIALS

Board/Newsprint

Computer with Internet Access
(where available)

CBO Brochures

Phone Book(s)

Community Newspapers

VOCABULARY

Community-Based Organization
(CBO)

School Health Resource Room

What Community Resources Are Available for HIV-Positive Individuals, Their Families, and Their Support Networks?

Performance Objectives

Students will be able to:

- Identify at least three HIV community resources, including governmental and community-based organizations.
- List ways that family, friends and others can help individuals living with HIV.
- Identify the location, hours of operation, and services offered at the school's Condom Availability Program and Health Resource Room.

Motivation

- Write the following questions on the board for students to respond to aloud:
 1. How do people receive or obtain information?
 2. What do you do when you need to find information about a topic?
 3. How can you evaluate your information to ensure that it is accurate and reliable?
 4. What can friends do to obtain information to support people with HIV?
- Divide the class into groups of four or five students who will share and discuss their answers to the above questions with each other. Each group will select a reporter/recorder. After five minutes, have the groups report the results of their discussion to the class, while you write their responses on the board. Have students copy the list from the board. Possible responses to each of these questions include:
 1. From other people (including family, friends, teachers, and other educators), from the media (including the Internet, TV, newspapers, magazines, books, etc.).
 2. Ask parents, friends, teachers, librarians, experts, etc.; read books, journals, etc.; watch television; listen to the radio; Government agencies such as the Centers for Disease Control and Prevention and the New York City Department of Health and Mental Hygiene have useful websites. Students can look up information on the Internet. If students do not have a computer with Internet access in their homes, a librarian at a New York City public libraries can help them access HIV information on the Internet.

3. Ask yourself the following questions to assist in judging accuracy and reliability: Is the source trustworthy (e.g., a governmental agency, sponsored by a university, a qualified adult)? Does a book or article cite reliable sources and do other sources make reference to it? Does the source discuss its own limitations and qualify its information (e.g., this was true in a certain year or for a certain population)? Is the information specific or does it consist of sweeping generalities? Does it support or contradict other sources?
 4. Go to the library; consult a doctor or other health professional, community leaders, members of the religious community, youth leaders, or counselors; go to the high school Health Resource Room, the school counselor, a teacher; visit an HIV service organization.
- Say, “Each of you can be a resource for other people if you know where to go to get information and resources. How can you help others become aware of the facts about HIV?” Write responses on the board. Possible responses include:
 - Educate myself about what community resources are available.
 - Find accurate and up-to-date sources of information.
 - Speak with or write to others about HIV.
 - Try to clarify misconceptions when I hear them.
 - Advise people to seek HIV testing, counseling and other professional help when necessary.
 - Say, “When seeking information about sexual health, including HIV and other STIs, many people wish to seek information privately.”

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

Procedure/Development

- Say, “All New York City public high schools are required to have a Health Resource Room. The Health Resource Room is a designated area in the school with staff trained to provide health-related information and assistance to students in a safe, confidential, familiar setting, including personal instruction and counseling on the correct and consistent use of condoms. You can also receive referrals to appropriate school resources and outside agencies.” Inform students of the location and hours of the site(s) in your school. Note that male and female condoms are routinely made available to high school students and that the staff in the resource room can demonstrate proper condom use.
- Say, “Many government organizations publish health information. Some potential sources of information are the New York City Department of Health and Mental Hygiene, the New York City Department of Education, the New York State Department of Health, the Centers for Disease Control and Prevention, the National Institutes of Health, and the World Health Organization. Each of these organizations maintains a website full of information for the public. Websites also contain links to additional organizations and sources of information.”
- Ask, “If you don’t have a computer with Internet access at home, where could you go to get information and to access the Internet?” Possible answers include: school library, public library.

- Invite the coordinator or a staff member of the school Health Resource Room, or a speaker from a community-based organization (CBO), to make a brief presentation to the class on local CBOs and government agencies such as the New York City Department of Health and Mental Hygiene (NYDOHMH) that provide services for people with HIV or for persons who are at risk for STIs. As there will be class activities to follow that are based upon this presentation, be sure to speak with the person making the presentation a week in advance to ensure that the following questions are covered:
 - What is a community-based organization (CBO)?
 - What are some different kinds of CBOs?
 - Do all communities have CBOs?
 - Do some CBOs specialize in HIV services for a particular group?
 - Can anyone go to a CBO, even if it is not in the neighborhood where he or she lives?
 - Do CBOs like yours provide referrals to other services?
 - How would someone find out about your CBO and others like it?

Teacher Note: Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- After the presentation, divide the class into groups of three to five students, each to develop lists of CBOs that provide HIV/AIDS information or services in the community in which the school is located. Distribute the materials brought in by the speaker. Have students within each group assign roles, e.g., recorder, investigator, reporter. Have each group focus on one of the following types of services when making their lists:
 - Case management.
 - Counseling and testing services.
 - General information.
 - Medical services.
 - Prevention and education programs.
 - Referral services.
 - Services for lesbian, gay, bisexual, and transgender people.
 - Services for runaways and/or other homeless teens.
 - Services for women.
 - Services for youth.
 - Substance abuse services.
- Have groups present the results of their work to the class for discussion. Be sure that the following topics/questions are covered:
 - Which CBOs offer more than one type of HIV/AIDS-related service?
 - How can these CBOs help people with HIV/AIDS, their families, and their support networks?
(Possible responses include: educate, provide counseling, develop strategies for dealing with illness, provide financial support, etc.)

- Ask, “How else can family members or friends help the HIV-positive people in their lives?” Possible responses include:
 - Keep them company; provide companionship.
 - Provide them with moral, emotional, and financial support, as needed.
 - Encourage them to talk about their fears and feelings.
 - Encourage them to take their medications and see their doctors regularly.
 - Encourage them to educate themselves about HIV and living with HIV.
 - Help fill out forms and access insurance and benefit programs.
 - Treat them with respect and compassion.
 - Encourage them to seek out support groups or other people with HIV to share experiences.
 - Encourage and help family members to learn more about HIV and treatment.
 - Help plan outings, favorite activities, and fun things to do.
 - Help support family members and friends.
- Ask, “As a community institution, what roles can the school play in providing help and information on HIV?” Possible responses include:
 - Educate about abstinence, risk reduction, testing, treatment, and living with HIV.
 - Provide counseling and support.
 - Staff the Health Resource Room and provide accurate information in a confidential, nonjudgmental manner; they provide HIV/STI prevention materials, demonstrate proper condom use, and provide free condoms to students.
 - Provide Internet access and other means of seeking information.
 - Offer workshops for parents, teachers, and students.

Homework

Based on their research and what they have learned in class, have students create a poster that lists hotline services and other organizations and resources (namely, government agencies or approved organizations that visited the class) that provide information and/or help regarding HIV/AIDS. The completed posters should be displayed in a public information area in the school or the community.

LESSON GUIDE

GRADE 11

What Happens When HIV Infects the Body?

Performance Objectives

Students will be able to:

- Describe the sequence of HIV infection in the body.
- Understand what different types of HIV testing measure.
- Clarify the difference between HIV and AIDS.
- Describe basic aspects of antiretroviral therapies (ART) to treat HIV infection.

Motivation

- Say, “A large number of people in New York City are infected with HIV for months or years before they take an HIV test and find out they are HIV-positive. Many people who discover they are HIV-positive are shocked and surprised about the fact. Why do you think that is so?” Students’ responses may include:
 - They never thought it could happen to them.
 - They couldn’t believe their partner(s) could be infected.
 - This doesn’t happen to people “like me.”
 - They didn’t believe what others had told them about taking precautions.
 - They thought they took precautions all the time.
 - They didn’t feel or look sick.

Procedure/Development

- Distribute the Activity Sheet “Testing Positive.” Divide class into small groups, and give each group one of the case studies. Direct students to read the case studies and answer these questions:
 1. What do these individuals need to know about HIV transmission and treatment? What questions should they ask?
 2. What information might the family members of these individuals need to know about HIV transmission and treatment? What questions should they ask?
 3. What do they need to know about what is happening and what might happen in their bodies? What questions should they ask?

Teacher Note: The following definitions and concepts were discussed in greater detail in Grade 10. If you require further clarification, or if students did not attend the Grade 10 sessions, please refer to the Information Sheet at the end of this lesson. If students ask about HIV testing, refer to Grade 12, Lesson 4, and to Appendix A, “Student Guide to HIV Testing” for more information.

GRADE 11

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Communication

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Testing Positive

Fact Sheet:

*Questions and Answers
About HIV and AIDS*

VOCABULARY

Antiretroviral Therapy (ART)

Asymptomatic

CD4 Count

Chronic

Microorganism

Opportunistic Infection

Prophylaxis

Replication

Viral Load

- Elicit responses to the questions and write them on the board or chart. Initiate a class discussion of important concepts about HIV, using these responses. Some new or review questions may come up. Below are some questions that students may ask, along with responses. Address any concepts that are listed below that students do not raise. Be sure to review these concepts briefly with students at an appropriate level, building on their learning in prior years' lessons.

What is HIV?

The Human Immunodeficiency Virus is a bloodborne retrovirus that damages the immune system and may eventually lead to AIDS.

What is AIDS?

A diagnosis of Acquired Immune Deficiency Syndrome (AIDS) is made when an individual is infected with HIV and meets certain criteria established by the Centers for Disease Control and Prevention (CDC). These criteria include specific measures of damage to the immune system, and particular diseases that occur as a result of this damage.

How does HIV infect the body? What does HIV do in the body?

HIV enters the body through the transfer of body fluids from an infected individual. The body fluids that transmit HIV include preseminal fluid, semen, vaginal fluids, blood, and breast milk.

Once inside the body, HIV tries to make copies of itself via a process called replication. The virus cannot do this without the help of a living cell. HIV infects the CD4 cell, a particular type of immune system T-cell. HIV takes over the cell and uses it to reproduce thousands of copies of itself. This process is known as the HIV life cycle. During this early period of infection (when the level of virus in the blood is very high), the person may have about 2 weeks of flu-like symptoms, such as fever, sore throat, rash and a number of other symptoms. Approximately 50-90 percent of individuals with early HIV infection have these symptoms. But it is important to note that HIV can't be diagnosed by symptoms alone. An HIV test is always necessary.

Unfortunately, when the replication process is finished, the CD4 T-cell dies but the virus does not. Since this process occurs on a huge scale with many T-cells involved, the number of T-cells in the infected person's body begins to decline. The CD4 count measures this decline. Healthy people without HIV usually have a CD4 count between 500 and 1500 cells per cubic millimeter (mm³) of blood. As HIV infection progresses, the CD4 count decreases.

How do doctors measure the phase of HIV in infected people once they have tested positive for HIV?

It is important to know how strong the immune system is because this is a major factor in planning a treatment regimen and monitoring the person's health carefully. People with HIV are advised to see their doctors regularly, even if they do not have symptoms or do not feel sick, so that the progress of the infection can be monitored through CD4 counts and viral load. These two basic types of blood tests—CD4 count and viral load—will provide important data in tracking the progression of the HIV infection:

1. *CD4 (T-cell) counts* indicate how damaged the immune system is by estimating how many CD4 cells have been destroyed, and how vulnerable the body is to infections.
2. *Viral load tests* measure the amount of actual HIV (as a "number of copies") in each drop of blood.

What happens to someone when the T-cell, or CD4, count decreases?

Someone with HIV may feel and look fine for many years and have no symptoms at all. If the person does not receive treatment, the virus continues to replicate and destroy CD4 T-cells. As the CD4 count goes down and the body loses its ability to fight infection, the person may start to have diarrhea, fever, weight loss, swollen lymph nodes and night sweats. These and other symptoms mark the symptomatic phase of HIV.

At some point, the person may get an opportunistic infection (OI). These are one of a series of specific infections that sometimes affect people without HIV, but are particularly common and dangerous in people with HIV because their immune systems are damaged, and their bodies cannot easily fight off the infections. When there is known HIV infection and a diagnosed opportunistic infection or a CD4 cell count below 200 (which means the body is very susceptible to opportunistic infections), the person is diagnosed with AIDS, the most serious stage of HIV.

What is an opportunistic infection?

Our bodies carry microorganisms (bacteria, fungi, protozoa, and viruses) all the time. Some are always there; others are acquired at a specific time from other people, animals, or the environment. Most microorganisms do not make us sick because our immune system protects us. But when the immune system is weakened by HIV, these microorganisms can cause health problems. This is why they are called opportunistic: they take advantage of the “opportunity” offered by the weakness of the immune defenses. These illnesses do not happen only to people with HIV, but they are relatively rare in those with a healthy immune system. (Opportunistic infections show up not only with HIV, but with other conditions where the immune system is weak, such as after some cancer treatments, or after organ transplants where the immune system was intentionally weakened to help the person accept the “foreign” organ.) Some examples of opportunistic infections are Kaposi’s sarcoma, recurrent pneumonia, tuberculosis, invasive cervical cancer, HIV-related encephalopathy, and pneumocystis jiroveci pneumonia, or pneumocystic pneumonia, (formerly known as pneumocystis carinii pneumonia or PCP). These infections such as tuberculosis (TB) are treatable.

Teacher Note: Visit <http://www.cdc.gov/hiv/pubs/brochure/livingwithhiv.htm> for examples of opportunistic infections.

What are some ways to treat HIV and the conditions associated with it?

On World AIDS Day, (December 1), 2011, the New York City Department of Health and Mental Hygiene (DOHMH) made the recommendation that healthcare providers offer antiretroviral therapy (ART) to any person living with HIV, regardless of the person’s CD4 count. DOHMH made this new recommendation for two reasons: to benefit those living with HIV and to benefit their partners. Evidence indicates that ART benefits the health of people with early HIV and recent research has demonstrated that effective HIV treatment prevents HIV transmission.

HIV is a complex disease. It attacks the immune system, can leave the body susceptible to many other diseases, and can eventually produce symptoms. ART, a highly effective treatment for HIV, consists of medications that interrupt the life cycle of the virus. These drugs can block the virus from entering cells or interrupt the process of viral replication. By preventing HIV from multiplying and destroying the immune system, these drugs enable the body to fight off life-threatening infections and cancer and prevent HIV from progressing. Although anti-HIV medications can’t cure HIV, the medications can reduce the viral load so that it is not detectable in the blood (non-detectable), and so that the risk of transmitting the virus to someone else is drastically reduced. We can now think of HIV infection as a chronic or long-term disease, rather than one that is fatal – at least for people who are fortunate enough to obtain and tolerate the medications (not always the case in many parts of the world). “Living with HIV” is something that HIV-positive people on medication learn to do.

Antiretroviral drugs have some side effects and patients must make a commitment to take medications daily for the rest of their lives. ART should be prescribed and monitored by providers with experience in managing ART and support should be made available to all who need it in order to maximize retention in care and treatment adherence to ensure successful treatment outcomes. A great deal of information about the newest antiretroviral drugs is usually available free at HIV service organizations, facilities that treat HIV, and some drugstores. (See Appendix E.)

Multifaceted approaches to health can often add to the quality of life of people with HIV infection. Exercise, adequate sleep, healthy diet, and overall wellness are all important. Some people also like to try massage, acupuncture, stress reduction, yoga, or meditation; others try natural products as well. But all treatments and diet/exercise plans should always be used in consultation with the healthcare provider. Natural products, in particular, can interact with drugs used in the treatment of HIV infection and make them less effective. Importantly, avoidance of alcohol and other drugs (including tobacco) can also contribute to overall health.

Summary Activity

Review immune system compromise with the class. Say, “Imagine that two friends go out to dinner, Person A, who is HIV-negative, but who has a cold (resulting from a viral infection), and Person B, who has AIDS (resulting from HIV infection). What health risks does each of the two people pose to one another while they are at dinner?” ANSWER: Person B, who has AIDS, does not pose a health risk to Person A at dinner. However, Person A, who has a cold, poses a threat to Person B, whose immune system is compromised due to AIDS, and may not be able to fight off the infection from Person A’s cold (caused by a virus that is easily transmitted).

For a quick review at the end of the lesson, have students answer the following questions:

- How does HIV affect a person’s body?
- What is the difference between HIV and AIDS?
- How long might it take from the time a person is infected with HIV to the time the person has symptoms of illness?
- What are some ways people with HIV can take care of themselves?

Testing Positive

Dean and Carla

Dean and Carla have been together for almost three years. Shortly before Carla got pregnant, Dean began having a sexual relationship with someone he met at the gym. Dean didn't really want to lose Carla, so he ended the relationship with the person at the gym and never told Carla about it. The prenatal HIV test Carla took during this pregnancy was negative, and the baby was HIV negative. After the baby was born, Dean applied for life insurance to provide financial security for the growing family. The insurance company required that Dean consent to a blood test for the HIV antibody. The test revealed infection with HIV.

Jamie and Robert

Jamie is a new student at Forest High School who has moved three times in the last year, making it difficult to make friends at school. In the past, Jamie tried to earn the love and approval of some classmates by having sex with them. All that changed when Jamie met Robert and they fell in love. Robert told Jamie that he wanted to wait to have sex. Jamie was very happy with life until about six weeks ago when several painful genital sores developed that the doctor said were from the herpes virus. Because Jamie had an STD, the doctor recommended taking an HIV test. Robert was out in the doctor's waiting room when the doctor broke the news that the HIV test was positive.

Alex

Alex is a popular high school senior, with many friends and good grades. Alex has always liked challenges in life, and has been very involved in sports and working out. As a sophomore, Alex occasionally experimented with injecting steroids that another student was using. Close to graduation, Alex decided to pursue the opportunities and challenges of a career in the military. One of the requirements was a thorough physical examination by a military doctor, including an HIV test. Though Alex was otherwise strong and healthy, the test for HIV was positive.

Kim

Kim, who is 19, is still uncertain about many things in life. Since about the age of 15, Kim has had several different sexual partners; some have been women, a few have been men. One day, Kim's grandmother, who lived up the street, was on her way through the park and saw a health fair, including a van that advertised free HIV testing right there, with immediate results. When she got home, she suggested that "just to be on the safe side," perhaps Kim should have some of the free tests, and Kim agreed to please her. Kim's HIV test came back positive.

Questions and Answers About HIV and AIDS

What is AIDS?

AIDS stands for *Acquired Immune Deficiency Syndrome*.

Acquired refers to things that are not inherited. Diseases like the measles or chickenpox are acquired, because people do not inherit them. AIDS develops from HIV, and HIV is not hereditary; it is only transmitted from person to person by specific means. Even if a baby is born HIV-positive, it has acquired, but not inherited, the virus from its mother.

Immune is defined as protected and invulnerable. Things that are immune cannot be hurt or defeated. Our bodies have an “immune system.” Its job is to protect us by fighting infections like colds or the flu. Even if a person gets sick, the immune system continues to fight so the person gets better. The immune system creates antibodies to fight the source of infection, preventing people from getting sick all the time.

Deficiency means a shortage or not enough of something. If someone is immune deficient (or immunodeficient), the immune system is not able to fight diseases the way it is supposed to. Immunodeficiency makes the body vulnerable to various diseases.

A **syndrome** is a group of symptoms that combine to create a particular condition or disease. AIDS has a specific list of symptoms that (in addition to the presence of HIV infection) define it. This list of symptoms is compiled and reviewed by the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention (www.cdc.gov/hiv/pubs/brochure/index/htm).

So, AIDS refers to syndrome that people get because they are infected with HIV, a virus that weakens the body's ability to protect itself from diseases.

What is HIV?

HIV stands for *human immunodeficiency virus*. HIV is a bloodborne retrovirus that damages the immune system and may eventually lead to AIDS.

Human refers to human beings. HIV can infect humans but not animals. HIV does not infect mosquitoes, cats (cats do get their own acquired immune deficiency syndrome, but from a different virus), dogs, hamsters, or fish. People can only acquire HIV from other people. Evidence suggests that the first human infections came from a mutation of a virus that affected chimpanzees (SIV, simian immunodeficiency virus). Mutation means the virus changed (mutated) and evolved so it could infect humans. Now there are many strains of human immunodeficiency virus.

You have already learned how to define immunodeficiency. A virus is a microscopic organism that causes disease. Viruses cause illnesses such as measles, chickenpox, the flu (influenza), and colds.

How Is HIV Transmitted?

Performance Objectives

Students will be able to:

- Explain ways HIV can be transmitted.
- Explain ways HIV cannot be transmitted.
- List the four body fluids that transmit HIV.
- Explain the ways HIV can be transmitted to young people and children, including infants.
- Understand that the sexual behaviors that put young people at risk for HIV also put them at risk for other sexually transmitted diseases (STDs).

Motivation

- Write the following on the board/newsprint:
Your older sibling or friend has come home and tells you that, today at work, guest speakers talked about HIV. One of the speakers has an HIV-positive child who is 14 years old.
- Ask, “How could this young person have become HIV-positive? What are all the possible ways? Are some more likely than others?” Have students brainstorm possible answers. (See below for possible answers.)

Procedure/Development

- Write students’ responses on the board/newsprint under the heading “Ways HIV Can Be Transmitted.” Answers that students may suggest include:
 - Sexual intercourse including anal, vaginal, or oral intercourse (but primarily anal or vaginal) with a person of a different gender or of the same gender, whether voluntary or not. (Transmission from intimate oral sexual contact is less common.)
 - HIV-positive mother to child during childbirth or via breastfeeding.
 - Sharing needles, syringes, or other equipment (such as filters or “cottons,” mixing containers or “cookers,” drug solutions, and water or other liquids) used to prepare drugs or other substances for injection. HIV can be transmitted because sharing these items allows blood or other body fluids from one person to be transferred to another.
 - Other activities (accidental or deliberate) that involve contact with body fluids. Rare examples might include healthcare workers becoming infected after being stuck accidentally with needles containing HIV-infected blood or when infected blood comes in contact with a worker’s open cut or eyes. In the U.S., it is also possible to become infected through exposure to infected blood, transfusions of infected blood, blood products or organ transplantation, but this risk is very, very low because of rigorous testing of the blood supply and donated organs.

GRADE 11

Lesson

2

NEW YORK STATE LEARNING STANDARDS 1

SKILLS

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:
HIV Transmission

VOCABULARY

Organ Transplant

Preseminal Fluid

Semen

Sperm Donor

Transfusion

Transmission

- Define and discuss HIV. Remind students that “HIV” stands for human immunodeficiency virus. HIV attacks the body’s immune system (the body’s natural defense system), making HIV-positive people vulnerable to serious and sometimes fatal illnesses, including infections, certain cancers, and neurological disorders.
- Define and discuss the word transmission as meaning something being passed from one person to another.
- Discuss why some infections are easy and some are hard to transmit. Ease of transmission depends on mode of transmission (e.g., airborne is generally easier to transmit than bloodborne); the condition of the person who may get the infection (i.e., a person whose immune system is already weakened by illness is more likely to contract a new illness); the strength or virulence of the infectious agent (e.g., even though both are bloodborne, hepatitis C is easier to acquire than HIV); the dose or amount of the infectious agent transmitted; and environmental factors (e.g., sanitation, crowding, travel, uncirculated air) that may facilitate transmission.

Teacher Note: Be sensitive to the fact that some students may themselves be HIV-positive, or have friends, family members, or relatives who became infected in ways you will discuss. Many young people who were infected perinatally (from mother to child during childbirth) are now in or entering their teen years. As of December, 2010, 2,477 people in NYC who were perinatally infected with HIV were living with HIV or AIDS.

<http://www.nyc.gov/html/doh/downloads/pdf/ah/surveillance2010-table1.1.pdf>

- Distribute the activity sheet for this lesson, and ask students to complete the first section.
- After several minutes, ask students to share their responses. Review and list responses on the board/newsprint under the heading “The Body Fluids that Transmit HIV.”
- Be sure to elicit these correct responses:
 1. Blood, including menstrual blood.
 2. Semen and preseminal fluid (“pre-cum”).
 3. Vaginal fluids.
 4. Breast milk.
 5. Other body fluids containing blood (although transmission by these fluids would be a very rare occurrence).
- Note that some other ways that HIV may be transmitted are possible (as they do involve body fluid contact), but highly unlikely. These include:
 - Blood transfusions or organ transplants. (In the U.S., cases of HIV transmission from receipt of infected blood or infected organs are extremely rare because donated blood and organs are thoroughly tested.)
 - Receiving anonymous donated sperm. This is highly unlikely, as most sperm donations are screened, and (like blood donations), potential donors who are at high risk of being HIV-positive are generally prohibited from donating.
- Instruct students to complete the second section of the worksheet by circling those behaviors that can put one at risk of HIV infection. After several minutes, review and list responses on the board/newsprint under the heading “Risk Behaviors for HIV Infection.” Correct any misconceptions students may have about HIV transmission and risk.
- Instruct students to write the numbers from the labeled body fluids on the activity sheet next to the circled activities with which they are associated.

- Review the correct answers to the third section of the Activity Sheet.
- Ask, “What do you notice about the relationships between body fluids and behaviors?” Elicit that body fluids can correspond to more than one behavior, that behaviors that involve contact with body fluids are riskier than those with no contact with body fluids and that behaviors that involve contact of the penis with the anus or the vagina are riskier than those with only oral contact.

Emphasize that although any behavior or activity involving contact with these four fluids can transmit HIV, there are large differences in how likely this is to happen. These differences depend on the type of body fluid and the type of contact.

Teacher Note: For more information on methods of HIV transmission, go to

<http://www.cdc.gov/hiv/resources/qa/transmission.htm#10>

Assessment/Homework

Write a story about a week in the life of a teenager who is HIV-positive. Include at least three ways that this person avoids risk behaviors or other behaviors that could transmit HIV to another person.

At the beginning of a subsequent class period, have volunteers share their stories, and ask fellow students to correct any misinformation about methods of HIV transmission.

Activity Sheet

HIV Transmission

A person infected with HIV has the virus in his or her body fluids. In order to have the potential to transmit HIV from one person to another, infected body fluids have to get inside another person's body. If body fluids just get ONTO (not INTO) someone else's skin, they are very unlikely to cause HIV infection unless the skin is broken, cut, or irritated, because that makes it easier for the body fluid to penetrate through to the bloodstream. Otherwise, the skin is generally an effective barrier to HIV (and many other pathogens). Infected body fluids may also get through mucous membranes (like the lining of the vagina or the lining of the anus), especially if there are sores or irritations.

To find out how much you know about HIV transmission, take the following quiz.

Directions

1. Circle each ACTIVITY OR BEHAVIOR that could allow body fluid(s) from an infected person to enter someone else's body and cause infection.
2. Next to each circled ACTIVITY OR BEHAVIOR, write the number (or numbers) of the body fluid(s) that are associated with that behavior.

BODY FLUIDS	ACTIVITIES OR BEHAVIORS	
1. Blood	<input type="checkbox"/> Holding Hands	<input type="checkbox"/> Sharing Needles, Syringes, or Other Injection Drug Equipment
2. Saliva	<input type="checkbox"/> Breastfeeding	<input type="checkbox"/> Sharing Headphones or Telephones
3. Semen	<input type="checkbox"/> Hugging	<input type="checkbox"/> Anal Intercourse
4. Urine	<input type="checkbox"/> Vaginal Intercourse	<input type="checkbox"/> Organ Transplant
5. Blood Products	<input type="checkbox"/> Kissing	<input type="checkbox"/> Sharing a Toilet
6. Feces	<input type="checkbox"/> Dancing	<input type="checkbox"/> Holding Hands
7. Tears	<input type="checkbox"/> Oral Intercourse	<input type="checkbox"/> Eating in a Restaurant
8. Vaginal Fluids	<input type="checkbox"/> Blood Transfusion	<input type="checkbox"/> Visiting a Hospital
9. Breast Milk	<input type="checkbox"/> Sharing a Sandwich	
10. Sweat		
11. Preseminal Fluid		
12. Vomit		

HIV Transmission

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2. Next to each circled ACTIVITY OR BEHAVIOR, write the number (or numbers) of the body fluid(s) that are associated with that behavior.

BODY FLUIDS	ACTIVITIES OR BEHAVIORS	
1. Blood	_____ Holding Hands	<u>1,5</u> Sharing Needles, Syringes, or Other Injection Drug Equipment
2. Saliva	<u>9</u> Breastfeeding	
3. Semen	_____ Hugging	_____ Sharing Headphones or Telephones
4. Urine	<u>1,3,8,11</u> Vaginal Intercourse	
5. Blood Products	_____ Kissing	<u>1,3,6,11</u> Anal Intercourse
6. Feces	_____ Dancing	<u>1,5</u> Organ Transplant
7. Tears	<u>3,8,11</u> Oral Intercourse	_____ Sharing a Toilet
8. Vaginal Fluids	<u>1,5</u> Blood Transfusion	_____ Holding Hands
9. Breast Milk	_____ Sharing a Sandwich	_____ Eating in a Restaurant
10. Sweat		_____ Visiting a Hospital
11. Preseminal Fluid		
12. Vomit		

SKILLS

Communication
Relationship Management
Self-Management

MATERIALS

Board/Newsprint
Activity Sheet:
Refusal Techniques

VOCABULARY

Strategies
Techniques

How Can We Avoid Behavior That Can Lead to HIV Infection?

Performance Objectives

Students will be able to:

- Develop communication techniques that will enable them to avoid a variety of behaviors that might lead to HIV infection.
- Articulate communication skills useful in many situations, including assertiveness, limit-setting, negotiation, refusal, and stepping back.

Motivation

- Divide students into groups of three. Two will be actors in a role-play, while the third will be an observer who should take notes. Tell students they will have three minutes to role-play the following situation. Ask the observers to jot down arguments or rebuttals that seem particularly effective or noteworthy.

You and a friend are at your home. Your friend wants to go shopping for shoes. Your friend also wants to “borrow” some money from the small “emergencies” cash your parents keep at home for you to use to fix dinner for you and your baby sister when they aren’t able to make it home on time. You have very little money of your own right now, and your parents have not given permission to use this money for anything but family emergencies.

Procedure/Development

- After the role-play, ask observers to give examples of arguments or rebuttals that the actors used in the role-play. Write these on the board/newsprint in two columns: one for arguments, and the other for rebuttals. An example follows:

Arguments

- “They’ll never know the difference, and you won’t need the money for weeks.”
- “You’re just chicken.”
- “If you don’t lend me the money, I’ll tell everybody about that secret you told me.”
- “Come on, you have to take some chances in life!”

Rebuttals

- “You can’t tell what will happen. I could need it to buy today’s baby food for my sister.”
- “Come on, don’t get into name-calling.”
- “Why are you threatening me? Is the money more important to you than our friendship?”
- “Let’s fix a snack and just get our minds off this for a while.”

- Say, “There are many communication techniques that people can use to cope with this kind of pressure. Sometimes we just use a polite excuse (“I wish I could, but there’s not enough money left to ‘borrow’ from”), but developing other communication techniques is important so that we are prepared and not caught off guard when others try to influence us. What are some of the techniques used in these rebuttals?” Possible responses include:

TECHNIQUE	EXPLANATION	EXAMPLE
State a strong refusal.	Give a clear “no.”	“I’m not taking the money no matter how many times you ask me!”
Give a good reason.	Justify the “no.”	“If I show my parents I can’t be trusted, they will never let me anywhere near the family grocery money. Your parents would be furious if they found out from my parents that the money was taken while we were here.”
Offer an alternative.	Present a different choice.	“Let’s pool the money we do have and do something other than shopping. Or let’s wait until your parents get home and ask one of them to loan us a little.”
Step back.	“Buy time” by delaying a decision; state the need for more time to think about it.	“I need some time on this. Let’s slow down and think it through.”
Take a caring approach	Describe why “no” is better for everyone.	“I like you too much to get you into trouble,” or “I don’t want your family to get angry with me.”

- Say, “Each technique probably has a different effect. Let’s discuss how the different effects can lead to very different outcomes.”

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm>

or search for “Respect for All Resources” on the NYCDOE Principal’s Portal.

- Split the class into small groups of no more than five. Say, “Now, in your small groups, I want you to design a scenario that you could use to teach refusal skills about sexual behavior. When you’re finished, you’ll present it to our class.” Have students design a scenario, and ask each group to present their scenario and three possible refusal techniques to the class. After each scenario is presented, ask the rest of the class to identify what the risk behavior is and to give examples of additional effective refusal techniques that would fit with the scenario.
- Ask, “Which refusal strategies or techniques would help avoid behavior that could lead to HIV infection?” Write students’ responses on the board/newsprint under “Avoiding Risk.” Possible responses include:
 - Giving alternatives.
 - Giving reasons.
 - Taking a caring approach.
 - Taking a strong position.
 - Taking a step back.
- Ask students: “How can we apply these strategies to avoid possible HIV infection through sexual intercourse?” Come up with responses for each of the techniques. Write students’ replies on the board/newsprint under “Application.” Possible responses include:

TECHNIQUE	EXPLANATION	APPLICATION
State a strong refusal.	Give a clear “no.”	“I don’t want to.” “I really don’t feel like it.” “It’s not right for me.” “I just don’t do that kind of thing.” “Stop being selfish.” “If everybody is really doing it, you’ll have no trouble finding someone else.” “Please leave.” “Please stop.” “Please don’t do that.”
Give a good reason.	Justify the “no.”	“My parents would be very disappointed in me.” “I don’t want to get that involved.” “My religion doesn’t allow that.” “I don’t like feeling pressured.” “Think about what could happen, like infections or pregnancy; it’s just too risky.” “I like you but I’m not sure we’re that close.” “I’m not sure we’re old enough for the responsibility.” “That’s just for older people.” “I’m flattered by your interest, but I’m not ready for it.” “I’m not letting you talk me into something I don’t really want.” “One thing can lead to another too easily.” “It might make me feel bad.”

TECHNIQUE	EXPLANATION	APPLICATION
Offer an alternative.	Present a different choice.	<p>“Let’s go somewhere else instead.”</p> <p>“Let’s go to the library and work on homework instead.”</p> <p>“Let’s go somewhere and have a snack and talk.”</p> <p>“If you want to talk more privately, text me or call me later.”</p> <p>“I know you care about me, but maybe we don’t have to show it that way. Instead…”</p> <p>“Could I have a big hug instead?”</p>
Step back.	“Buy time” by delaying a decision; state the need for more time to think about it.	<p>“I need some time on this. It’s a big decision.”</p> <p>“I need to think about how I feel about spending time with you.”</p> <p>“We need to think about what kind of relationship this is.”</p> <p>“I’m not ready.”</p> <p>“I need to be sure I’m comfortable with this.”</p>
Take a caring approach.	Describe why “no” is better for everyone.	<p>“I like you too much to take a chance of messing up our relationship.”</p> <p>“It may not be good for us.”</p> <p>“I’m not sure I’m ready for that kind of commitment.”</p> <p>“There are a lot of things going around, and I care about our health and safety.”</p> <p>“Neither of us is ready.”</p> <p>“One thing can lead to another, and we need to be ready.”</p> <p>“I care about and respect you, so please respect my choices and feelings.”</p>

Assessment/Homework

Pass out the “Refusal Techniques” blank Activity Sheet. Ask students to complete the activity. Read aloud the following instructions, which are also on the worksheet:

Think of a situation that you’ve been in, that one of your friends has been in, or that you can imagine a student your age being in, where there is pressure to engage in unwanted sexual activity. Write up the situation (without using real names), and fill in the Refusal Techniques worksheet with each of the different kinds of possible rebuttals for the situation that you’ve come up with.

Activity Sheet

Refusal Techniques

Think of a situation that you've been in, that one of your friends has been in, or that you can imagine a student your age being in, where there is pressure to engage in unwanted sexual activity. Write up the situation (without using real names), and fill in this Refusal Techniques worksheet with each of the different kinds of possible rebuttals for the situation that you've come up with.

SITUATION:

TECHNIQUE	EXPLANATION	APPLICATION
State a strong refusal.	Give a clear "no."	
Give a good reason.	Justify the "no."	
Offer an alternative.	Present a different choice.	
Step back.	"Buy time" by delaying a decision; state the need for more time to think about it.	
Take a caring approach	Describe why the "no" is better for everyone.	

How Can We Reduce Our Risk of Getting or Transmitting HIV Infection or Other Sexually Transmitted Infections (STIs)?

Performance Objectives

Students will be able to:

- Understand that there are some sexual behaviors that put people at risk for getting sexually transmitted infections (STIs) or diseases (STDs) including HIV.
- Define “risk behavior,” and clarify how risk behaviors relate to HIV infection or infection with other STDs.
- Assess acceptable risk versus unacceptable risk.
- Understand that anyone can get or transmit HIV.
- Understand that the same unprotected sexual act can transmit HIV or other STDs, that many STDs are more common and easier to acquire than HIV, and that the presence of another STD greatly increases the risk of being infected with HIV.
- Understand how risk for sexual transmission of HIV and some other STDs can be avoided completely by abstinence.
- Understand the correct and consistent use of latex, polyurethane, or female synthetic nitrile condoms (FC2) can reduce (but not eliminate) risk of transmission of HIV or other STDs.
- Clarify individual concepts of risk and responsibility for oneself and others as it relates to sexual behavior.

Teacher Note: The terms “sexually transmitted disease (STD)” and “sexually transmitted infection (STI)” are used interchangeably. See the glossary in Appendix D for details.

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to

<http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>

GRADE 11

Lesson

4

Prevention

NEW YORK STATE
LEARNING STANDARDS

1

SKILLS

Decision Making

Planning and Goal Setting

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

Abstain

Risk

Risk Behavior

Sexually Transmitted Disease (STD)
or
Sexually Transmitted Infection (STI)

Barrier Method

Condom

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students including those who may be lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to

<http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm> or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

Motivation

- Ask, “How do we define risk? By this we mean risk of harm.”
Answer: A risk is something that creates or increases a likelihood that some type of harm will occur. The nature and seriousness of the harm can differ, and so can the likelihood that the harm will occur.
- Say, “Some risks are totally avoidable, others are not. If a risk is not avoidable, the ‘acceptable’ level of risk depends on the nature of the harm that remains after all possible measures have been undertaken to reduce the risk.”
- Say, “For example, crossing the street in New York City can be risky business. If you cross a busy street in the crosswalk when the sign says “WALK,” there is a small risk that you might be hit by a car. If you cross when the sign says “DON’T WALK,” you have an increased risk of being struck by a passing vehicle. If you cross against the light, in the middle of the street, at night, wearing dark clothing, your risk of being injured or killed would increase with each additional factor. You also risk endangering the people in the cars who swerve to avoid hitting you.”
 - Ask, “How is it possible to eliminate risk of being hit by a car in a crosswalk?”
(Answer: The only way to totally eliminate the risk of ever being hit by a car is never to cross a street that has cars.)
 - Ask, “How is it possible to reduce risk of being hit by a car in a crosswalk?”
(Answer: When you are ready to cross the street, you follow all traffic and safety rules.)
- Ask, “What is an ‘acceptable’ level of risk?”
Say, “An acceptable level of risk is one that does not unreasonably endanger a person’s life or health. People’s ideas of “unreasonable” depend on their values and their decisions about what is important to them.”
- Ask, “How do we define “risk behavior”?”
Say, “Behavior is something people do, an activity. Risk behavior is any behavior that leads to a risk, such as a risk of transmitting HIV or another STD (generally, the same behavior carries risk of both HIV and other STD transmission, and may also include risk of pregnancy).”
- Ask, “Can anyone engage in ‘risk behavior’?”
Say, “Yes, it is an activity, not a characteristic of the person. People may differ in the exact types of risk behavior they are most likely to be involved in. These differences will depend on factors such as their age, gender, sexual orientation, community, family. But risk behavior is something we do, not an aspect of who we are, like our race or our gender. That means we have some control over risk, and can make some choices about risks we take and ways to protect ourselves.”
- Ask, “How can we protect ourselves from risk?”
Say, “There are two ways to protect ourselves from risk. One is to avoid any exposure to the risk. The other is to take some risk, but use the best available precautions to reduce it.”

Procedure/Development

- Say, “We all take risks in life. Let’s divide into small groups. I will give the class a story. As a group, read the story, and then identify the risks faced by the characters. Have one group member take notes.”
- Give each group the following story:

NIKKI AND JAVIER

Nikki and Javier are both 17 years old and classmates who have been seeing each other for a few months. They sometimes meet up with friends and have a few drinks before going home. The alcohol has been increasing their desire to have sex. Nikki is sure that Javier will want to have sex the next time they are alone together, especially if Javier drinks beer or maybe even uses drugs with friends from the neighborhood. The only thing Nikki has ever heard Javier say about condoms is that some people don't like using condoms. Nikki knows that lots of people use them after finding out that they or their partner have a sexually transmitted disease (STD), or to prevent getting HIV or other STDs in the first place.

Neither Nikki nor Javier has been to a doctor lately. They don't know if either has an STD now, but Nikki had an STD in the past that she got from someone she dated before Javier. This means that they also do not know if one of them has one of the STDs that can be transmitted from skin-to-skin contact with each other's genital areas, like human papillomavirus (HPV, or genital warts), herpes, or syphilis. (Some of these have few symptoms at first, and the site of the infection can be outside the area covered by a condom.)

What are the risks faced by Nikki and Javier?

- With the following question, resume discussion as a whole class. Ask, “If Nikki and Javier have some type of sexual intercourse or activity, are they at risk of the sexual transmission of HIV?” List the specific risk factors that are involved for each person. Record students’ responses on the board/newsprint, making sure they include the following:
 - Both Nikki and Javier do not know their own or each other’s HIV status, so both are potentially at risk for HIV infection.
 - Nikki has had an STD in the past. We don’t know whether she was cured or whether she is still infected (either because the STD was treated but recurred or whether it is a chronic STD like herpes). Regardless, this could place Javier at risk of acquiring an STD. It also increases Nikki’s risk of HIV infection because sores/lesions from different STDs can be entry points for the virus into the body. Also, if Nikki is already HIV-infected, having an STD can increase the risk of transmitting her HIV to Javier.
 - Both partners do not know the complete drug, STD, or sexual history of their own partners let alone one another’s previous partners, so both are at risk.
 - Unprotected sex puts both at risk transmitting infection by bringing potentially infected body fluids into contact with the partner’s mucous membranes.
 - Javier has been using drugs; if that includes injecting, especially sharing needles, syringes, or other injection equipment with an HIV-infected person, Javier and Nikki are both at risk because Javier could be HIV-infected and could pass the virus on to Nikki.
 - Both Javier and Nikki are at increased risk when they drink alcohol and/or take other drugs because drugs, including alcohol, can impair their judgment, making it more likely for them to practice risk behaviors, such as sexual intercourse without using a male latex or polyurethane condom, or a female condom (FC2), or without using a condom correctly.
 - Even one episode of risk behavior may be enough to transmit HIV or another STD.
- Ask, “Given these facts, would you consider Javier and Nikki to be at risk for sexual transmission of HIV if they engage in sexual activity? The students should conclude that for all the reasons listed, Javier and Nikki are at risk of transmitting/contracting HIV/STD. This can endanger their health and affect their lives.

- Ask, “How can Javier and Nikki eliminate or reduce their risk of HIV infection?” Answer: abstain from sexual intercourse and find other ways to express their feelings for each other (to eliminate their risk of sexual transmission of HIV). If they decide to be sexually active, they should use a male latex or polyurethane condom or a female condom (FC2) correctly and consistently to reduce risk of sexual transmission of HIV. They can also reduce their risk by avoiding alcohol and other drugs, and by not having sex if they do use alcohol/drugs.
- Ask, “Would it make any difference if Javier and Nikki were both men? If they were both women?” The students should conclude that some risk is involved in any contact of infected body fluids or mucous membranes (e.g., of vagina, anus/rectum, or throat) no matter what the gender of the partners is. (The exact type of risk and the likelihood of it will differ according to the activity and type of fluid involved, not by the gender of each of the two people involved. However, in general, female-to-female transmission of HIV appears to be a rare occurrence.)
- Ask, “What is a condom?” Answers should include “a specific type of barrier method; a device which, if used consistently and correctly, is designed to reduce (but not eliminate) the risk of pregnancy and infection with many STDs, including HIV. There are male and female condoms.”
- Ask, “What do we know about the effectiveness of condoms?” Elicit students’ answers. Fill in gaps in students’ knowledge with the following information:
 - For people who are sexually active, using condoms is the best way to prevent HIV infection. However, condoms must be used properly to protect from infection. It is very important to learn when and how to put on a condom. Only latex or polyurethane condoms should be used.
 - Many people think they can tell if a partner has HIV. But most people who are HIV-positive do not look sick, and one in five people living with HIV in the U.S. today does not even know he/she is infected. Because it is not possible to tell if someone is HIV-positive just by looking at him/her, it is important to use a condom every time one has sex with someone who is HIV-infected or who does not know his or her own status. It is also true that not everyone will report accurately about testing results or about any risk behaviors since testing. Using a condom every time offers a high level of protection and helps provide peace of mind.
- Ask, “What kinds of condoms are there and how are they used correctly?” Answers should include: male latex or polyurethane condoms and male or FC2 (also known as “female” or “insertive”) synthetic nitrile condoms; (Latex is a form of rubber; polyurethane is a form of plastic.)
 - There are many different types of condoms with different lubricants, tips, textures, and colors.
- Ask, “What does ‘correct and consistent’ condom use mean?” Make sure all answers include:
 - Consistent condom use means using a condom during every act of penile/anal, penile/vaginal, or oral/penile intercourse, from the time of erection throughout the entirety of sexual contact.

Teacher Note: Consider implementing the “Condom Challenge” activity in Appendix C to reinforce correct use of male and female condoms. Condom demonstrations are not to be done in classrooms; they are done in the Condom Availability Program, CAP, housed in the Health Resource Room, where students can also get free condoms.

The male condom is a barrier device use to cover the erect penis before and during sexual intercourse in order to prevent the transmission of preseminal fluid, semen, blood, or vaginal fluids. Use of latex or polyurethane condoms is a method to protect against infection with HIV or other sexually transmitted infections (STIs and pregnancy). Latex condoms can only be used with water-based lubricants or silicone-based lubricants. They should not be used with oil-based lubricants such as petroleum jelly. Polyurethane condoms are made from plastic and can be used with any type of lubricant. Theses condoms are just as strong as latex condoms. Someone who is allergic to latex (or whose partner is allergic to latex) should use polyurethane condoms.

- Correct condom use for the male condom means:
 - > Make sure the condom package is not damaged or torn, and that the expiration date has not passed.
 - > Be sure that latex condoms have been stored where heat cannot damage the latex.
 - > Using a lubricant with a latex or polyurethane condom is recommended, to reduce friction and improve the likelihood of a condom’s effectiveness. Use only water-based or silicone lubricants can be used with latex condoms. Check the lubricant package to see if it says “water-based” or “safe to use with condoms.” Do not use oil-based lubricants, such as baby oil, Vaseline, or other petroleum jelly, as they can damage a latex condom. Any lubricant can be used with a polyurethane condom.
 - > Avoid using a male condom and a female condom together (See detailed description, below.)
 - > Never reuse condoms; use a new one for each sexual act.
 - > Follow all of the manufacturer’s directions. These include:
 1. Tear the package open along the notched edge while being careful not to damage the condom. Never use a sharp object to help open the package.
 2. Pinch the tip to allow room for preseminal fluid and semen.
 3. Being sure that the condom is right-side up (tip up), roll the condom down on the erect penis to the base.
 4. Smooth out any air bubbles. Use lubricant if needed to reduce friction.
 5. When intercourse is finished, hold the base of the condom and withdraw the penis while it’s still erect. It is now safe to remove the condom.
 6. Tie a knot in the end of the condom. Discard the used condom in the trash, not in the toilet.

The female condom (FC2) is made of a synthetic nitrile (not latex) sheath that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (silicone-based) and can be inserted before intercourse, without an erection or male participation. The female condom has been reported as having similar rates of effectiveness in preventing STDs and pregnancy as the male condom when used correctly and consistently. However, rates of correct and consistent use with the female condom appear to be lower than with the male condom. This may be due to inexperience with proper insertion and usage. The use of synthetic nitrile instead of polyurethane in the manufacture of female condom has significantly reduced the price.

- Correct condom use for the female condom means:
 - > Practice insertion to feel more comfortable and confident.
 - > Make sure the package is not damaged or torn and that the expiration date has not passed.
 - > Insert the “female condom” before there is any contact with the penis. This can be done up to eight hours before intercourse.
 - > Avoid using a male condom and female condom together; this can:
 - Increase friction and reduce the effectiveness of both,
 - Break down the latex because of the oil-based lubricant on the female condom, and/or
 - Cause the condoms to stick to each other resulting in slippage/displacement.
 - > Never reuse a condom—male or female.

- > Follow all of the manufacturer’s directions. These include:
 1. Tear open the package carefully along the notched edge. Do not use anything sharp (teeth, scissors, etc.) to open it.
 2. Squeeze the inner (closed-end) ring between your thumb and forefinger (or middle finger), making it long and narrow.
 3. After finding a comfortable position for insertion (squatting, lying down, etc.), insert the inner ring into the vagina and feel it move into place.
 4. Use the index finger, push it in as far as it will go. Be sure the sheath is not twisted. The open-ended ring should rest outside of the vulva.
 5. Be careful to guide the penis into the pouch through the outer ring, not outside the condom.
 6. To remove the condom, twist the outer ring and pull it out gently.
 7. Dispose of the condom in the trash, not the toilet.
- Ask, “If Nikki and Javier decide to have sex using a latex or polyurethane condom, will that put them at an “acceptable” level of risk for the sexual transmission of HIV, assuming that all the other facts in their story remain the same?”

Answers may include:

- No, their health may still be endangered to some extent because:
 - > It is unlikely that they will use a condom correctly or consistently if they have been drinking or using drugs.
 - > A condom will not cover all areas that human papilloma virus (HPV, or genital warts), herpes, and other STDs transmitted by skin-to-skin contact. Some of these can have few or no symptoms at first. Male condoms, whether latex or polyurethane, do provide some protection for the areas covered. Yet Nikki and Javier could have an undiagnosed skin-to-skin STD. If either of them did, they could transmit it and in turn be at greater risk of transmitting or acquiring HIV infection because of having an STD. Female polyurethane condoms have not been as well tested as male condoms, but they do provide greater coverage of the area outside the vagina, thus offering some additional protection against the STDs transmitted by skin-to-skin contact.
- Students may also correctly respond that as a drug user, Javier is at risk for the nonsexual transmission of HIV, particularly if drugs are injected, regardless of sex with Nikki.

Teacher Note: In developing the concept of “acceptable risk,” point out to students that as long as there is any possibility of STDs, including HIV, sexual intercourse (even with the correct and consistent use of a condom) is never a risk-free choice for a young person to make.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Teacher Note: Starting in September 2010, New York State Law requires that people from 13 to 64 years of age be offered HIV testing while seeking medical services in emergency departments, hospital inpatient settings, or outpatient primary care locations.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

- Ask, “Is there something Nikki and Javier can do to eliminate the risk of acquiring HIV from each other sexually?” Answers should conclude:
 - The only way Nikki and Javier can eliminate the risk entirely is to abstain from sexual intercourse in any form, and express their closeness in some way that does not involve exposing each other to potentially infected body fluids (blood, semen and preseminal fluid, and vaginal fluid). This kind of abstinence is the only one hundred percent effective way to eliminate the risk of the sexual transmission of HIV.
 - Nikki and Javier can safely do other activities to express their feelings for each other. These include hugging, touching, holding each other, and kissing.

Assessment/Homework

Many sexually active young people do not realize they are putting themselves at any risk of HIV. Have students create two poems, raps, or public service messages. The first should encourage young people to break the chain of HIV infection by abstaining from sexual intercourse (and include other options for safe intimacy with partners), and the second should review the steps for using a condom correctly and consistently for teens who are sexually active.

SKILLS

Communication
Decision Making
Planning and Goal Setting
Relationship Management
Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

The Decision-Making Process

Handout:

Reasons to Abstain From Sex

VOCABULARY

Abstinence
Obstacle
Peer Pressure

What Is the Role of Abstinence in Preventing Infection with HIV and Other Sexually Transmitted Infections (STIs)?

Performance Objectives

Students will be able to:

- Recognize how abstinence from sexual intercourse (specifically, behavior that can transmit HIV and other sexually transmitted diseases) and abstinence from alcohol and other drug use can help to reduce the risk of infection with HIV or other STDs.
- Discuss alternative means of expressing intimacy and affection.
- Identify factors affecting personal decisions about current and possible future sexual behavior, and about alcohol and other drug use.

Motivation

Say, “The only 100 percent effective way to prevent the transmission of HIV and other STDs is abstinence from drug use and from sexual intercourse, especially risk behavior that can transmit HIV or other STDs.” Ask students how they feel about that statement, and discuss their reactions.

Procedure/Development

Teacher Note: In formulating the definition for abstinence in the following discussion, make sure all students understand that abstinence from sex and drugs, including alcohol, requires them to delay gratification (say “no”) in order to protect their health and focus their energies on other priorities in their lives.

- Ask, “What do you think ‘abstinence’ means?” Write responses on the board/newsprint and use them to formulate a definition of abstinence.

Possible subjective responses that students might give include:

- Not having sexual contact of any kind.
- Not engaging in types of sexual behavior that can bring infected body fluids into contact with a partner’s body fluids or mucous membranes.
- Waiting until you’re married to “do it.”
- Waiting for the right person or right relationship.
- Avoiding sexual activity with people you don’t know well.
- Not “going all the way.”

- Not having vaginal (penis to vagina) or anal (penis to anus/rectum) sex.
- Not having oral (mouth to penis or vagina) sex.
- Not using drugs, including alcohol.
- Not using “hard” drugs.
- Not injecting drugs.
- Not using illegal drugs.

Teacher Note: If students do not mention drug use, introduce that topic into the discussion. Discussions of drug use should address not only alcohol and other drugs, but also tobacco. Tobacco is often a “gateway” to use of other drugs; like alcohol and other drugs; tobacco is addictive and is illegal for young people. You may wish to provide students with “The Decision-Making Process” chart that appears at the end of this lesson.”

- Ask, “What are some of the characteristics and skills that a young person needs to have or to develop in order to abstain from sex and drugs including alcohol, particularly from behavior that could transmit HIV or other STDs?” Possible responses include:
 - Self-control.
 - Understanding oneself.
 - Understanding the nature of sexual behavior.
 - Understanding one’s own sexual interests and choices and those of others.
 - Appreciating the relationship between sexual behavior and health.
 - Ability to get information.
 - Ability to learn and interpret information.
 - Understanding the limits of risk reduction.
 - Ability to balance the risks or costs vs. benefits of behavior.
 - Communication skills.
 - Respect for the well-being and health of self and others.
 - Respect for others’ choices and values.
 - Courage (to stand up for oneself and defend decisions).
 - Wisdom (to be guided by the advice of parents, teachers, and other trusted adults).
 - Unselfishness (willing to put the best interest of others ahead of one’s own wants or desires).
- Ask, “What are some reasons for abstaining from sex, especially sexual activity that can transmit HIV or other STDs? List responses on the board/newsprint, perhaps putting them under the categories of “health,” “personal choices and identity,” “relationships,” and “values.” The Handout on the following page indicates some possible responses:

Reasons to Abstain from Sex (Especially Sexual Behavior that Can Transmit HIV or Other STDs)

Health Reasons

- To completely avoid any possible health consequences, including HIV, STDs, unplanned pregnancy.
- There is no other absolute protection from HIV, STDs, unplanned pregnancy.

Personal Choices and Identity

- I feel good about myself and don't want/need to have sex.
- I'm not sure I'm ready for the kind of relationship having sex might require.
- I have a lot of other things to do.
- I don't trust my own emotions.
- I need more information before I do things.
- I'm not the kind of person who always "follows the crowd."
- I want to be able to choose to have sex when I want to, not because I feel I have to.

Relationships

- I want to know that my partner is dating me for who I am, not just for sex, and is willing to wait, or respect my choices.
- It would disappoint my family.
- I'm just having fun; I'm not that serious about my partner.
- I'm not ready for a serious relationship.
- People might talk about it.
- I don't want to take the chance that I will feel exploited or used.
- It might change the nature of our relationship.

Values

- I place a value on my body and the importance of reserving sexual intimacy for a long-term commitment such as marriage.
- It's against my religious beliefs, or those of my family.

- Emphasize that regardless of other reasons (including personal, family, and community values and beliefs), abstinence from behaviors that can transmit HIV or other STDs is the safest thing from a health standpoint, as it means abstinent individuals are not exposed to the risks of transmission.
- Say, “Let’s talk about abstaining from use of alcohol and other drugs. We usually think of drugs that are illegal, such as cocaine, marijuana, or heroin. But sometimes people misuse or overuse prescription drugs or other legal drugs for non-medical purposes. These drugs might include tranquilizers, painkillers, hormones, or steroids. Also, alcohol and nicotine (in tobacco) are drugs. Although they are legal, they can have consequences for health and well-being.”
- Ask, “What are some reasons for abstaining from alcohol and other drugs?” List responses on the board/newsprint, perhaps putting them under the categories of “health,” “personal choices and identity,” “relationships,” and “values.” The following box indicates some possible responses:

REASONS TO ABSTAIN FROM USING ALCOHOL OR OTHER DRUGS

Relationships and Society

- I don’t want people—especially people who are important to me, like my family and loved ones—looking down on me.
- My family would be disappointed and not trust me.
- Most drugs are illegal, and using them can have consequences that include jail time and fines.
- Since many drugs are illegal, getting and using them brings us into contact with illegal activities and sometimes violence.
- There may be other legal or educational consequences (such as arrest, school suspension).

- Ask, “Since abstaining from sexual activity and from alcohol and other drugs is the best and most successful way to prevent the spread of HIV, what keeps young people from remaining or becoming abstinent?” The following box outlines some possible responses:

Reasons Given for NOT Abstaining from Sexual Activity

- My feelings of sexual desire are strong.
- I think that everyone is sexually active.
- I am experiencing peer pressure.
- I believe that sex is fun and/or cool.
- It’s difficult to keep under control when I’m in a sexual situation.
- I don’t know about or forget about the risks associated with sexual activity.
- I think that being sexually active will show my partner how much I care about him/her.
- I want to hold on to a partner who I think might leave me if I’m not sexually active.
- I am in love.
- I want to feel good.
- I want to have a baby.
- I want to feel closeness and intimacy with someone that I care about.
- I’m lonely.
- It’s a part of growing up.
- I want to experiment and try new things.
- I want to find out more about myself sexually.
- I want to explore my own sexuality.

Reasons Given for NOT Abstaining from Alcohol and Other Drug Use

- I am curious and want to experiment.
- I believe that everyone uses drugs.
- I am experiencing peer pressure.
- Using drugs can't be as bad as some people say, or so many people wouldn't do it.
- Using is fun and cool.
- Drugs are easily and readily available.
- I can't socialize without running into drug use.
- Using makes it easier to be around people.
- I get caught up in a situation and forget about the risks.
- I'm lonely, and it's an easy way to connect with other people.
- Using is part of being an adult.
- I want to experiment.
- Using is relaxing and/or gives me energy.
- I like the effects (how I feel) when I use.
- Using makes sex a lot more fun.
- There's not much else to do around here.
- Ask, "What are the difficulties young people may face as a result of decisions based on these reasons? What are some realities young people may discover as a result of making decisions based on those reasons?"
- Ask, "What are some of the resources that would support us and our friends if we wish to remain abstinent?"
 - Family.
 - Teachers.
 - Guidance counselors.
 - Friends with same belief system.
 - Religious leaders.
 - Health Resource Room staff.
 - Staff of recreation centers or other agencies.
 - Peer leadership groups.
 - Treatment services or support groups.
 - Family service or youth-service agencies.
- Say, "Let's see how we might respond to some difficult situations."
- Ask for volunteers to improvise in the following role-playing situations, or break the students into small groups to act out the scenarios, discuss what happens, discuss their reactions, and brainstorm alternative ways of responding to the situations.

Teacher Note: For tips on facilitating role-plays, refer to “How to Use Role-Plays in the Classroom” in Appendix B.

Role-Playing Situation #1 (Alcohol or Other Drug Use)

Imagine that you get together with your friend and her older sister to go to a movie. A long time ago, you and your friend decided that together, you didn't want to use any alcohol or other drugs. Your friend's older sister sometimes gets high. While waiting at the movie line, your friend's sister shows you a few drinks that she's going to take into the theater to have there. Act out what you would do.

Role-Playing Situation #2 (Sex)

Jamie and Sam have been dating for three months. For the past month, Jamie has been pressuring Sam to have sex, but Sam has decided to remain abstinent for many reasons including fear of contracting HIV. Sam has very strong feelings for Jamie, but feels that if Jamie continues the pressure, their relationship may be in danger of ending. Jamie knows how Sam feels about this. One person should play Sam, and the other should play Jamie. Act out how you feel they might resolve the situation.

- After each role-play, ask each character how he or she felt about the situation. Ask the audience about their reactions to the role-play.
- Ask, “What decisions that each character made did you agree with? What would you say or do differently?” List on the board/newsprint the strategies the class thinks were persuasive.

Summary

- Ask, “How can refusing to drink alcohol help one avoid getting infected with HIV or some other STD?” Elicit that alcohol impairs a person's judgment and ability to make decisions not to engage in risk behaviors.
- Ask, “What can couples like Jamie and Sam do to avoid becoming infected with HIV or some other STD?” Elicit these responses:
 - Communicate their feelings and fears openly and honestly with each other.
 - Respect each other's decisions.
 - Refrain from pressuring the other person to do something that he/she believes is wrong or doesn't want to do.
 - Think of other ways to express their affection for each other.

Homework

Pass out “The Decision-Making Process” Activity Sheet. Students should choose one to three reasons from the list of reasons for not abstaining from sexual intercourse and not abstaining from alcohol and other drug use that might be convincing to them or their friends.

Then complete the following using “The Decision-Making Process” Activity Sheet:

- Develop a scenario with two or more characters based on those reasons. Write it up in a few sentences.
- Analyze the person's options.
- Pinpoint what makes his/her decision to abstain or not abstain difficult.
- Describe the safest desirable outcome.
- Identify the steps needed to achieve that outcome.
- Plan the steps to achieve the desirable outcome.
- Anticipate the consequences of that plan of action, and possible responses to each consequence.

THE DECISION-MAKING PROCESS

IDENTIFY THE DECISION TO BE MADE.

LIST THE POSSIBLE CHOICES.

Option 1:

Option 2:

Option 3:

EVALUATE THE CONSEQUENCES.

	Positive Consequences	Negative Consequences
Option 1:		
Option 2:		
Option 3:		

MAKE A CHOICE.

EVALUATE YOUR CHOICE.

How Can School and Community Resources Help Educate Adolescents and Their Families About HIV Infection?

Performance Objective

Students will be able to:

- Identify at least two types of HIV community resources.
- Identify at least two local HIV community resources.
- List ways people can help family members or other people close to them who are living with HIV/AIDS.
- Discuss the benefits of having a Health Resource Room and Condom Availability Program.
- Locate information about at least one HIV/AIDS service organization on the Internet or in the neighborhood.
- Recognize the need for HIV/AIDS programs in their schools and in their communities.

Motivation

- Distribute the Activity Sheet “John’s Story.” Allow five to ten minutes (depending on students’ reading ability) for students to read the story.
- Have the students identify problems John and his family are facing.

Teacher Note: Be aware that many adolescents have immediate family members, extended family or friends with HIV/AIDS. Some adolescents may have HIV themselves. The following discussion should raise an awareness of the difficulties HIV-affected families are facing. The focus should be on the way the HIV/AIDS programs could address the needs of John and his family.

Procedure/Development

- Ask, “What problems are John and his family facing?” List responses on the board/newsprint. The list should include some from the following general categories (each of these problems may be experienced by Marie, John, or other family members):
 1. Lack of Information
 - what it means that Marie has HIV
 - how Marie may have gotten HIV
 - how being HIV-positive is different from having AIDS
 - Marie’s health issues and possible future issues
 - what kind of life Marie can expect to lead with HIV
 - how her life will be different as a person living with HIV

GRADE 11

Lesson

6

NEW YORK STATE
LEARNING STANDARDS
1, 3

SKILLS

Advocacy

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

John’s Story

VOCABULARY

AIDS Service Organizations (ASO)

Community-Based Organization (CBO)

Health Resource Room

HIV/AIDS Service Organization

Person Living With HIV/AIDS (PLWHA)

- what the available treatments are, how they work, and how they are given
- how to find accurate information, and to ensure its accuracy
- how to find information that will help Marie take care of herself
- what forms of protection exist to prevent or reduce possible transmission to others from Marie
- whether others in the family should be tested for HIV

2. Fears and Feelings

- Feeling depressed and hopeless.
- Feeling angry.
- Feeling isolated.
- Feeling afraid to tell friends and relatives.
- Fears of discrimination.
- Not knowing how to support Marie.

3. Getting Help and Services

- Where to find treatment services for Marie.
 - Not knowing what kinds of other services and resources might be helpful.
 - Finding services and resources in their home language, or from people who understand their specific circumstances, if needed.
 - Finding services and resources that are convenient for them.
 - Finding services and resources where they can protect their privacy.
 - Managing finances, insurance, medical bills, and legal issues.
- Ask, “If John were a student in this school, where could he go for help at the school?” Possible answers include the guidance counselor; faculty member, Health Resource Room, HIV/AIDS team and peer leadership program.

Teacher Note: The Condom Availability Program (CAP), located in one or more Health Resource Room locations in your school, offers health information, referrals, condom demonstrations and free condoms. Find out when the CAP is open and share the location and hours of operation with your students.

- Discuss: “Why do we have Health Resource Rooms in high schools?”
- Explain that all New York City public high schools are required to have a Health Resource Room that provides students with the opportunity to speak with an adult in a safe, confidential, familiar setting where they can receive accurate information and referrals to appropriate school resources and outside agencies. The Health Resource Room is also the site where male and female condoms are made available, along with instruction by trained staff on their correct and consistent use.
- Ask, “How can an effective educational HIV program address the needs of John and his family?” Possible responses include:
 - It can help the family figure out what resources they might need.
 - It can provide access to school and community resources and referrals.
 - It can provide accurate and updated information on HIV issues, such as:

- > Community-based organizations (CBOs). These are organizations that are neither hospitals nor part of the government. They may use a combination of government funding, private donations, paid staff and volunteers to provide different services. Depending on the organization, CBOs may offer help with benefits, support and social services, education and information, advocacy, and other services. CBOs may be based in a religious community; some are designed for people of a particular ethnic or cultural identity (such as Latino or Asian people), language, social identity (such as gay, lesbian, bisexual, transgender people), or for people with a particular need (injection drug users, homeless people, people in need of family services). CBOs that focus on HIV/AIDS services are usually referred to as HIV agencies or AIDS Service Organizations (ASOs).
- Ask, “How can John’s family start finding out more about the resources available to them?”
 - Call 311; the New York State Department of Health at 800-541-AIDS (English) or 800-233-SIDA (Spanish).
 - Ask Marie’s healthcare providers or see a social worker at the clinic, hospital or doctor’s office that Marie attends.
 - Call local HIV organizations for more information.
 - Look at resources online; there is a large amount of information on the Internet. To start from a reliable base, they should begin with a website provided by a government agency, such as the (federal) Centers for Disease Control and Prevention (www.cdc.gov); the NYS Department of Health AIDS Institute (www.hivguidelines.org); or New York City Department of Health and Mental Hygiene (<http://www.nyc.gov/html/doh/html/home/home.shtml>). If John and his family do not have a computer with Internet access in their home, many librarians in New York City public libraries have been specially trained to help people access HIV information privately and comfortably on the Internet at public libraries.
- Ask, “How can John and his parents help and support Marie?” Possible answers include:
 - Help Marie with her practical needs, such as: transportation, going to the clinic, finding resources, filling out forms.
 - Show her love and companionship, and assure her that she will not face the illness alone.
 - Educate themselves about HIV/AIDS, encourage her to do the same, and provide any assistance that she needs to do this.
 - Assure Marie and themselves that with the proper care and treatment, it is possible for her to live a healthy life for many years to come.
 - Encourage her and each other to make use of available services and support.
 - Help her to form a partnership with her medical care providers.
 - Recognize that Marie may go through periods of fatigue or troublesome side effects with her medications.
 - Listen to Marie as she talks through her experiences. She may have emotional ups and downs as she faces and deals with each new challenge in managing her illness. Help her plan activities to provide positive emotional experiences—outings, visits, favorite activities. Join groups (such as community support groups) that will help the family find their own answers so they can understand some of the problems Marie will face, as well as problems that they themselves will face.

Summary

Review and summarize how the school, community, and family could work together to address the needs of John and his family.

Assessment/Homework

Have students research the HIV/AIDS services in their community. Students should select one specific agency (school, hospital or clinic, health department, CBO), find and research it by contacting the organization, and write one page about the kinds of services it offers. The student may want to visit the organization. Have the students be prepared to do a two-minute presentation on what they found out about the organization and its services, particularly how those services could be helpful to John's family.

Teacher Note: Be aware that, because of persisting HIV stigma, many community AIDS Service Organizations (ASOs) have chosen names without HIV or AIDS in their titles. They have done this so that people from the community can access the services of their programs and still maintain confidentiality.

John's Story

One day, John, a senior in high school, went to school feeling alone and confused. Marie, his 28-year-old sister, was recently admitted to the hospital because she had a persistent and severe cough. While she was being treated, the doctors suggested that she be tested for HIV, the virus that may lead to AIDS. Marie told John and their parents that she tested positive for HIV at the hospital. Looking back, Marie believes that she was infected about ten years ago, when she was a senior in high school.

Everyone at John's house was worried. John needed to talk to someone, but he was afraid to tell his friends. He wasn't sure what their reaction would be. As he walked down the hall at school, he noticed a sign on the door of the Health Resource Room. The sign said that anything said in the room would be kept confidential. Thinking, "I have nothing to lose," John entered the room.

The Health Resource Room staff helped John identify places he and his family could go for help and support. For example, he learned that there were agencies that had people on staff who could speak to his family in their home language. John started to feel better because he knew that his parents would feel comfortable speaking with someone who understood their language and culture. John found out that some of the hospitals near his home had support groups for families with members who have HIV or AIDS.

John also remembered a student in his health class who had once shared his experiences volunteering in a special HIV project through a community-based organization. John decided to look up this student and ask him a few questions.

LESSON GUIDE

GRADE 12

What Happens When HIV Infects the Body?

Performance Objectives

Students will be able to:

- Describe how the immune system works.
- Describe how HIV affects the immune system.
- Explain what the HIV antibody test results can mean.
- Recognize the phases in the progression of HIV infection, and identify factors that may affect the progression of HIV to AIDS.
- Identify opportunistic infections related to AIDS.
- Identify some of the health challenges of living with HIV.

Motivation

- Give the following story as a Handout for students to read and react to:

Sam and Hao met last year and occasionally bought and used drugs together. Hao had just started injecting, and didn't always buy new syringes at a drugstore or get some from the syringe exchange. A few times, Sam allowed Hao to use a syringe Sam had already used. Hao eventually decided to stop using drugs, sought help through a treatment program, and lost touch with Sam. Recently, Hao ran into Sam on the street. Hao noticed that Sam seemed to have lost weight, but didn't think about it. As they sat in a donut shop, Sam mentioned being bothered by swollen glands and occasional attacks of sweating at night. Through the syringe exchange, Sam had been referred to a community clinic that, because of his symptoms and history of drug injection, had recommended an HIV antibody test. Hao was upset to hear that Sam's test had been positive. The clinic doctor said that Sam may have been infected several years before beginning to use drugs with Hao.

- Ask, "What might Hao do now?"

Procedure/Development

- Tell the class that Sam was asymptomatic when sharing works with Hao. Explain that "asymptomatic" means "without presenting symptoms of illness." People can be infected with HIV but have no visible changes in their body or notice any changes in their body functions for many years.
- Ask, "Should Hao be concerned, even though Sam had no symptoms at the time they were using drugs together?"
Answer: Yes. People can transmit HIV even if they are asymptomatic.
- Ask, "What can be done to find out Hao's HIV status?"
Elicit: Get tested for HIV infection

GRADE 12

Lesson

1

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Decision Making

Self-Management

MATERIALS

Board/Newsprint

VOCABULARY

AIDS-Defining Condition

Acute (Primary) HIV Infection

Antiretroviral Medication

Asymptomatic

EIA/ELISA Test

Endocytosis

False Negative

False Positive

Langerhans Cells

Lymphocyte

Macrophage

Opportunistic Infection

Pneumocystis jiroveci pneumonia

Replication

Seroconversion

Symptomatic

Viral Load

CD 4 Cell

Western Blot Test

Window Period

- Ask, “What does an HIV antibody test detect?”

Answer: An HIV antibody test is a blood or oral fluid test that detects the antibodies specific to HIV infection produced by the immune system. An antibody is a type of protein produced by the body to help fight disease. The presence of antibodies can show that a person is fighting a certain type of germ.

- Ask, “How is HIV different from some other infections that create immune responses?”

Answer: Some other infections will eventually leave the body, with only the antibodies that the body produced to fight the infection remaining as signs that the infection was there. In contrast, once someone is infected with HIV, their immune system cannot totally rid the body of all of the virus.

- Say, “Suppose Hao got tested tomorrow morning and one week later got the results that said Hao was HIV negative. What could that indicate about Hao’s HIV status?” Elicit:

- No antibodies to HIV infection were detected in Hao’s blood.
- Hao is not HIV infected.
- Hao is infected, but his immune system has not yet made antibodies to HIV.

- Ask, “Can anyone tell me about the ‘window period’?”

- Say, “It takes time for the body to make antibodies to HIV. The amount of time depends on the person’s immune system and on the quantity of the virus that the person received.”

- Say, “Some people develop antibodies by two or four weeks after infection; nearly everyone develops antibodies within three months after infection. The time period between acquiring infection and manufacturing detectable antibodies is called the window period. An HIV antibody test taken during the window period may not detect antibodies, and therefore will give false negative results (indicating that a person who actually is HIV infected appears not to be). There are several different HIV antibody tests. Some can detect antibodies earlier than others. There are other tests that detect the virus rather than antibodies. Viral load tests measure the amount of virus in the blood. A viral load test can be used to detect very recent HIV infection, often called acute HIV infection. Acute HIV infection is a highly infectious phase of disease that lasts for approximately the first 2 months after acquiring HIV, when the body has typically not yet made HIV antibodies. It is characterized by nonspecific clinical symptoms (often flu-like) that can go unrecognized by those who experience them and sometimes by health providers. “

- Say, “If there can be false negatives, you might think there can be false positives. You are right. HIV is such a serious diagnosis that for any test turning out positive, a second confirmatory test is done. The first test is usually an antibody test (conventional EIA/ELISA or point-of-care ‘rapid’ test). A second, confirmatory test is performed if the first test is positive (this test can be either a Western Blot, immunofluorescence assay (IFA) or HIV viral load test). “

- Ask, “What do you think Hao should do to find out for sure if he has HIV?”

Answer: Get re-tested in three months at a medical facility. And, during the three month window period, make sure not to engage in any risk behavior that could lead to a new infection and, thus, a new window period.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months. Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

- Briefly remind students how the immune system works. Refer to following note as needed.

Teacher Note: Explain the workings of the immune system.

The immune system has three levels of response:

- 1) External barriers such as skin and mucous membranes
- 2) Innate, or non-specific, response to any pathogen regardless of type, e.g., macrophages near mucous membranes and skin. This line of defense goes into operation wherever any kind of foreign material enters the body.
- 3) The adaptive, or specific, response, that is, production of a response to a particular pathogen, such as HIV (e.g., B-cells, antibodies, T-cells)
 - The adaptive immune system is composed of various types of white blood cells (lymphocytes and macrophages), which work together to identify and then destroy specific bacteria, viruses, or any other pathogens that enter the body.
 - During the innate or nonspecific part of the immune response, chemical signals, such as histamine are released, and macrophages (non-specific defenders) will engulf some pathogens and carry some of them to the lymph nodes where certain lymphocytes (T-cells) begin to orchestrate the specific response to the specific pathogen.
 - One type of T-cell that particularly helps fight infections located in cells (or helps with what is called 'cell-mediated immunity') is the CD4 helper T-cell. The CD4 helper cells (there are anywhere from 500 to 1500 CD4 cells per cubic millimeter of blood in a person whose immune system is intact) evaluate the situation, and send signals to other components of the immune system, including another type of lymphocyte, B-cells.
 - The B-cells have a receptor (like a docking station) that binds an antigen, which is a piece of the pathogen. The B-cell digests the antigen into fragments. A CD4 T-cell docks at another part of the B-cell and stimulates the B-cell chemically to create proteins called antibodies. The antibodies are like little copies of the B-cell antigen docking site and thus can latch onto pathogens, identifying them.
 - The CD4 T-cells then signal other cells. They signal a specific kind of T-cells (cytotoxic T-lymphocytes) specialized in destroying cells already infected with HIV and signal more macrophages to attack any HIV virus particles that may be circulating in the body. Other cells are called to help as well (e.g., NK Killer cells, part of the innate immune system; these cells are neither B- nor T-cells, but, like cytotoxic T-cells, they destroy infected cells). HIV infects CD4 T-cells so that it is CD4 cells that are destroyed by what is usually an effective immune response.
 - In every illness, all of these white blood cells combine to destroy the pathogen. If they are successful, the body recovers. On the other hand, if the body does not destroy the pathogen, the infection becomes permanent in the body. In the case of HIV, after antibodies are formed, the immune system holds HIV in check for a while. But then the immune system weakens over years. We call the process of antibody formation in HIV seroconversion. (Note the words, "sero" for blood, "conversion" for change; the blood now has HIV antibodies.)

- Ask, "How does HIV affect the immune system?" Explain:
 - When the virus enters the body, the immune system tries to work as usual (e.g., cells called Langerhans cells begin to engulf the virus by a process called 'endocytosis'), but there is a major difference between HIV and other pathogens: HIV directly attacks the immune system itself, by infecting the CD4 (Helper T) cells, using the CD4 cells to make copies of itself (known as replication), and sometimes destroying the CD4 cell as multiple copies of HIV burst out of the cell.
 - As a result, the infected CD4 (Helper T) cells can no longer reliably signal the other components of the immune system to respond to the HIV virus.

- As the disease progresses, the amount of HIV in the blood (known as viral load) increases while the number of healthy CD4 (Helper T) cells decreases. In some people, this process can be rapid while in others it is gradual.
- Explain that Sam’s blood contains the antibodies to HIV, indicating that Sam is HIV-positive, and has seroconverted (from previous HIV-negative status), and will be permanently HIV infected unless a cure is developed. Elicit that he is in the symptomatic phase, meaning he already has symptoms.
- Ask, “What are Sam’s symptoms?” (Revisit the story in the “Motivation” section to find out.)
- Write student responses on the board/newsprint under the heading “Symptoms of HIV Infection.” Possible answers include:
 - Night sweats.
 - Persistent and recurring swollen glands.
 - Weight loss (which was, as Sam could tell us, rapid and significant).
- Ask, “What other symptoms might Sam experience, even if he has not yet done so?” Add student responses to the list.
 - Diarrhea.
 - Thrush (a type of mouth infection).
 - Persistent dry cough.
 - Persistent fever.
 - Profound fatigue.
 - Rash/skin lesions.
 - Higher likelihood of getting sick with common illnesses.
- Ask, “How can we explain the progression of Sam’s condition from being asymptomatic to being symptomatic?” Draw a continuum on the board to illustrate.

ACUTE (PRIMARY) HIV INFECTION → WINDOW PERIOD → ASYMPTOMATIC → SYMPTOMATIC → AIDS

- Explain that for years, Sam’s immune system (T-cells and antibodies) helped hold down the amount of HIV in his body. During this time, the asymptomatic phase, Sam experienced few, if any, symptoms. After this time, Sam’s body began to lose the CD4 T-cells and antibodies that protect against HIV and against other diseases. As the virus made more copies of itself, Sam began to experience more of the effects of being infected with HIV and lowered resistance to illness during this symptomatic phase. Even during the asymptomatic and symptomatic phases, the virus was actively multiplying and damaging the cells of the immune system. Sam could have transmitted HIV to other people at any time since he was initially infected.
- Explain the difference between HIV and AIDS. HIV infection is when the virus enters someone’s body and begins to replicate. A person with HIV infection may be either asymptomatic or symptomatic, and can appear healthy while at the same time be healthy or not seriously ill.
- Ask, “What would have to happen to Sam, who is HIV-positive, for him now to progress to a late stage of HIV infection called AIDS?”
- Tell students that AIDS is the most advanced phase of HIV infection. It is defined by the U.S. Centers for Disease Control and Prevention (CDC) as:
 - Laboratory confirmation of HIV infection (a confirmed positive HIV test)
 - AND
 - a CD4 helper T-cell count of fewer than 200 per cubic millimeter of blood (the approximate size of a small drop of blood);
 - AND / OR
 - the presence of an ‘AIDS-defining condition.’

- Ask, “What is an ‘AIDS-defining condition’ or an ‘opportunistic infection’?”
- Explain that CDC recognizes more than 20 ‘AIDS-defining’ conditions. Many of these infections or cancers can be more severe or become life-threatening in people with HIV (particularly those who are not on antiretroviral medicines), because of their weakened immune systems. People with healthy immune systems can usually fight off many of these infections.

Give examples of some opportunistic infections/AIDS-defining conditions:

- Pneumocystis pneumonia, also known as PCP (formerly called Pneumocystis carinii Pneumonia): a lung infection caused by a fungus that is very serious in persons with weak immune systems.
 - Kaposi’s sarcoma: a form of cancer that appears as purple blotches on the skin; it can also affect internal organs.
 - Cervical cancer: a cancer of the cervix, more common in women with HIV than in those who are not infected.
- Ask, “What could possibly help Sam delay the progression of the disease?” Elicit:
 - Seek the care of an HIV healthcare provider and start and adhere to antiretroviral medication. This is the single most important thing someone with HIV can do to delay progression of HIV.
 - Have other healthcare needs addressed, including substance use and mental health needs.
 - Reduce the risk of re-infection with a different strain of HIV, or with hepatitis or another STI that would damage the immune system further by abstaining from sexual behavior that could transmit HIV.
 - Avoid use of alcohol and other drugs, which may interact with medications, lead to other health problems or lower inhibitions, allowing choices that might increase risk behaviors.
 - Discuss HIV status and treatment with trusted family and friends who can provide social and emotional support. Consider attending a support group for PLWHA (people living with HIV/AIDS).
 - Investigate use of social services and financial resources that can provide support for adherence and living with HIV.
 - Research information about HIV and AIDS so that any decisions that need to be made can be as fully informed as possible. Support overall health by such measures as reducing stress, eating a nutritious diet, getting adequate sleep, and exercising.

Assessment/Homework

- Have them label the phases of HIV infection and identify the characteristics of each phase.

Teacher Note: It is crucial to emphasize to students that these are estimates. The progression of HIV infection varies among individuals, and not all individuals with HIV infection progress to AIDS, although most people who are untreated do, eventually, progress to AIDS. (*See Facts About HIV Infection, Prevention, and Treatment.*)

- Have students define the following terms and show the progression of HIV infection on a timeline: acute HIV, asymptomatic phase (no symptoms), symptomatic phase (night sweats, weight loss, persistent fever, persistent swollen glands, persistent diarrhea), and AIDS (HIV+, fewer than 200 CD4 cells, opportunistic infection—e.g., Pneumocystis pneumonia, cervical cancer, Kaposi’s sarcoma).

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Decision Making

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

*Possible Routes of HIV
Transmission*

Handout:

An HIV Story

VOCABULARY

Assumption

Epidemiology

Higher Risk

Lower Risk

Perinatal Transmission

Prevention

STI

How Is HIV Transmitted?

Performance Objectives

Students will be able to:

- Identify specific modes of HIV transmission.
- Identify body fluids that can transmit HIV.
- Use that knowledge to understand why some types of behavior are more likely than others to transmit HIV.
- Understand the ways scientists learn about HIV transmission, and understand how this knowledge can be used to prevent HIV.
- Recognize the major ways HIV is spread in the United States and New York City, and how it affects the students and their communities.

Motivation

- Say, “What do you know about HIV transmission? How do people get HIV infected?” List students’ responses on board or newsprint. Possible responses include:
 - HIV is a virus.
 - HIV is in the blood, including menstrual blood, of an infected person.
 - HIV is in the semen and preseminal fluid (“pre-cum”) of an infected man.
 - HIV is in the vaginal fluids of an infected woman.
 - HIV is in the breast milk of an infected woman.
 - A woman with HIV can pass HIV to her fetus during pregnancy or her newborn during childbirth. (Make sure that students understand that in the US the risk of perinatal [woman to child] transmission has been dramatically reduced through the use of routine HIV screening of pregnant women and, if positive, starting antiretroviral medications during pregnancy, as well as certain delivery procedures, and medication of the newborn).
 - A person can get HIV through unprotected anal, vaginal, or oral (mouth to penis or vagina), intercourse. Unprotected anal intercourse confers the greatest risk, although all sexual acts confer some risk. Only abstinence confers no risk for HIV acquisition.
 - A person can get HIV by using the same needles, syringes, or other injection equipment as an infected person, even if the equipment is used for hormones, steroids, or insulin. HIV-infected blood, even in tiny amounts, may remain in the equipment and be passed efficiently to the next user.
 - Consistent, correct use of latex or polyurethane male condoms, or synthetic nitrile female condoms (FC2) can reduce the risk of HIV transmission.
 - A person can’t get HIV from being around someone with HIV/AIDS.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

- Ask, “What are the body fluids that can transmit HIV?” List on board or newsprint:
 - blood, including menstrual blood
 - semen and preseminal fluid (“pre-cum”)
 - vaginal fluid
 - breast milk

Teacher Note: What can we say about transmission risks due to sexual behaviors? Scientists sometimes classify practices as:

- High risk (large numbers of cases reported due to these behaviors, especially to the person receiving the potentially infected fluid):
 - Anal sex without correct use of a condom.
 - Vaginal sex without correct use of a condom.
 - Anal sex is the riskiest sexual form of intercourse for HIV transmission. Several factors likely play an important role in contributing to the higher risk of anal sex: the lining of the rectum is thin and may allow the virus to enter the body during anal sex. Anal sex can also cause abrasions, disrupting the normal external barrier.
- Lower risk
 - Oral sex.
 - It is important, however, to remember that other STIs (e.g., herpes) can be transmitted relatively easily (to the mucous membranes of the throat or genitals) through oral sex.
- No risk
 - Hugging, holding, and other practices that do not bring body fluids into contact.
 - Kissing.*

However, if a person contracts HIV through a “lower risk” behavior, such as oral sex, then for that person it has proven to be a high risk behavior.

* The CDC has reported extremely rare cases of HIV transmission through deep, open mouth kissing, but in each case, infected blood was exchanged due to bleeding gums or sores in the mouth. This case illustrates why knowing the principles of transmission and using common sense are important to HIV prevention. The CDC reports that there is no risk of transmission from closed mouth kissing. Read more CDC reports at cdc.gov

Teacher Note: Make sure students understand that HIV can be transmitted through anal, vaginal, or oral intercourse with an infected person. When sexual intercourse is not clearly defined to include anal and oral, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to

<http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>

- Have students read and discuss the Handout, “An HIV Story,” then discuss the following questions:
 - How would you trace the possible routes of HIV transmission in this group of people?
 - Which body fluids would carry HIV in each instance described?
 - By what means or behavior might each person transmit the virus to another person?
 - Does what people say about themselves (or what we assume about them) always tell us about their behavior, especially behaviors that can transmit HIV?
 - Does what people say about themselves (or what we assume about them) always tell us about their HIV status?
 - Do we know which characters are infected with HIV? Do the characters know about their own HIV status? Other people’s HIV status? Why is it important for them to know their status?
 - If we did know which characters had HIV, could we tell for sure how each one got it?

Teacher Note: In leading the discussion of the Handout, “An HIV Story,” it is important to accomplish three goals:

1. To use knowledge of HIV and body fluids to map potential routes of transmission;
2. To acknowledge that the exact route of transmission in a particular person is often not traceable;
3. To point out that we may not know everything about our partners that we think we know, that we assume we know, or that we might hope to know. Therefore, it is our own job to protect ourselves from HIV and to get tested so that if we test positive for HIV, we can seek health care and take steps to prevent the spread of HIV to others.

Teacher Note: You may want to display the Activity Sheet “Possible Routes of HIV Transmission” on a whiteboard or overhead projector to use with the class. Also note: these are only the behaviors that were revealed by each character. Explore the fact that individuals often don’t share all information about their risky behaviors.

GOAL #1: HELP STUDENTS TRACE THE POSSIBLE ROUTES OF HIV TRANSMISSION AMONG THE CHARACTERS IN THE STORY

Possible routes of HIV transmission in “An HIV Story” include:

Miguel	<ul style="list-style-type: none"> • Shared needles/syringes/works with Shenequa and John, and • Had unprotected sexual intercourse with Mary and Shirley.
Shirley	<ul style="list-style-type: none"> • Had unprotected sexual intercourse with Miguel and José, and • Gave birth to Jennifer.
Mary	<ul style="list-style-type: none"> • Had unprotected sexual intercourse with Miguel and Mark.
Shenequa	<ul style="list-style-type: none"> • Shared needles/syringes/works with Miguel and John.
John	<ul style="list-style-type: none"> • Shared needles/syringes/works with Miguel and Shenequa, and • Had unprotected sexual intercourse with Mark.
Mark	<ul style="list-style-type: none"> • Had unprotected sexual intercourse with John and Mary.

GOAL #2: HELP STUDENTS REALIZE THAT THE STORY, LIKE LIFE, CONTAINS MANY UNKNOWN. ALTHOUGH SCIENTISTS TRY TO ESTIMATE THE NUMBERS INFECTED BY DIFFERENT ROUTES, THE ROUTE OF HIV TRANSMISSION IN ANY PARTICULAR CASE IS OFTEN NOT TRACEABLE.

Process this story to elicit critical thinking skills. One cannot “tell” whether another person has HIV, and the risk of transmission presented by any given individual depends not only on that individual’s history of risk behaviors, but also on the history of other people with whom he or she has engaged in such behaviors.

What is known for certain in this story, and what is simply an assumption or a possibility?

- The characters do not ask or tell each other about all their possible (current or past) risk behaviors. The story does not describe the behaviors of other people with whom any of the characters may have had sex or shared syringes, or the behavior of any of the partners of those people. Therefore it does not cover all possible transmission possibilities. For example, maybe Shirley did not become infected by Miguel, but by another lover she had prior to being with José. Maybe Mark had other male or female sexual partners in addition to John and Mary, or also shared equipment when injecting drugs, either currently or in the past.
- The story also does not describe the exact nature of their risk behaviors.
- It also does not describe risk reduction measures that any of the characters may have practiced. For example, maybe Miguel correctly and consistently used latex condoms with Shirley and/or Mary, thus preventing possible sexual transmission of HIV to them (if indeed he was infected with HIV).
- The only person in the story who was revealed to have HIV was Shirley. It is possible that none, one, some, or all of the others have HIV, or if one or more of the other characters does, none, one, some, or all of them know it. (Students should distinguish among *known information*, *assumptions*, and *possibilities that may or can happen*).

- Ask, “How did this exercise help you to understand how HIV became such a serious health problem.”
- Lead the class in a discussion that focuses on the idea that HIV was initially spread, and continues to be spread, by:
 - People who are unaware of the risks (to themselves and their partners) involved in their behavior.
 - People who are unaware of their own HIV status and/or that of their partners.
 - People who engage in high-risk sex and drug use because they don’t know, or are not seriously concerned, that HIV infection can often result from such activity.
 - People who do not take measures to reduce the risk of possible transmission to themselves and/or their partners.

Assessment/Homework

- Say, “Based upon the exercise we did today using “An HIV Story,” what messages did you get that could have an impact on the decisions you make in your life?”
- Have students pretend they are an advice columnist for a teen website. Write a response to a letter from a teenager who is having unprotected sex with her boyfriend and is afraid she might become infected with HIV as a result. She writes that he has used drugs, although she is not sure about which ones. His last girlfriend broke up with him when she developed an STI. What does she need to know about her risk of HIV infection during sexual activity, including unprotected sexual intercourse?

An HIV Story

Miguel never thought he would become addicted to heroin. He had intended only to experiment with it once in a while, but he found himself “experimenting” more and more. Eventually he no longer just “felt like” doing heroin. He felt that he had to have it.

Heroin cost money, and Miguel, a senior in high school, didn't earn much from the odd jobs he was able to get after school. So when he went to shoot drugs in the back room of John's Deli, where several of his friends hung out, he couldn't always scrape together enough money to buy both heroin and stuff to shoot it with.

“Don't worry about it,” said Shenequa. “Share mine.” Shenequa, Miguel, and John, the owner of the deli, often passed her needle, syringe, and works around. Miguel appreciated Shenequa's willingness to share her equipment with him.

John could have afforded his own equipment, but he never really thought about getting any. If Shenequa was willing to share hers, he thought to himself, why bother buying his own?

When Shenequa shared her equipment with Miguel, she was just being friendly to this high school kid. But when she shared with John, she was really trying to get him to feel close with her. John was very handsome and Shenequa was so attracted to him that sometimes she even dreamed about him at night. Yet although John seemed to like her, there was just no chemistry between them. One day Shenequa realized why. Arriving at the deli just as John was about to close up for the night, Shenequa noticed a man in a tan coat standing outside, waiting for John.

“Who's that?” Shenequa asked John.

John grinned at her.

“He's the man of my dreams,” he said.

Shenequa blushed, thinking to herself that John was the man of her dreams.

“So that's why you never asked me out!” Shenequa said.

John replied, “You're a lovely lady, Shenequa, but I've just never been attracted to women.”

Shenequa walked outside with John. After he locked the deli's security gate, he introduced her to the man in the tan coat, Mark, then the two men walked away. Shenequa stood there for a moment, looking at them, and was surprised when Mark turned around to look back at her. She had the feeling that he was checking her out—but then she thought she must be mistaken. After all, he was gay, wasn't he?

In fact, Mark didn't think of himself as gay. He thought of himself as a straight guy who sometimes liked to have sex with other guys. He never told John that he had a 17-year old girlfriend, Mary, with whom he had a sexual relationship. Nor did Mark tell Mary about John. He didn't see any reason to tell her. They were considering becoming engaged when she graduated from high school in June, and he had always wanted children. Anyway, Mark figured, what he did with John was private. Surely, he thought, a man has a right to a secret or two.

Mary would have been shocked to learn that Mark had sex with John—and upset that they never used a condom. She and Mark never used a condom, either. She used birth control pills and thought that Mark had no other lovers and that there was no need to use a condom to protect against sexually transmitted infections.

Before her relationship with Mark, Mary had only had sex with one other guy. His name was Miguel, and he went to school with her. She had really cared for Miguel, and became upset when he started using drugs. She stayed with him, though, trying to convince him to stop shooting heroin—until she found out that he was also having a sexual relationship with Shirley, a woman several years older than they were. Miguel had met Shirley when she had hired him to put up some bookshelves in her apartment. Shortly after Miguel began his affair with Shirley, Mary broke up with him. Within a couple of months she met Mark, a devoted man whom she hoped to marry.

Shirley and Miguel's relationship didn't last long. Shirley was attracted to this muscular, sweet-natured young man until she noticed the tracks on his arm. She gave him an ultimatum: choose her or drugs. Miguel was addicted to heroin by then. He couldn't stop by himself, and refused to get treatment.

For a while Shirley was deeply upset, until she met José. He was a considerate, charming man, whose wife had died in an auto accident shortly after giving birth to their son, Bobby. Now Bobby was four years old, and when José brought him to register at the nursery school where Shirley worked, José and Shirley hit it off immediately. By the end of the school year, they were married, and six months after that Shirley learned that she was pregnant.

Shirley, José, and Bobby were overjoyed. For Bobby, having his nursery school teacher become his stepmother was thrilling, and now the idea of having a new baby in the family was bliss. He drew many pictures to hang over the new baby's crib, and when little Jennifer was born, Bobby proudly announced to everyone he met that he was a big brother now.

There had been a surprise, however. While getting prenatal care during her pregnancy, Shirley had taken an HIV test and discovered that she was infected. Because of treatment she had received during pregnancy, and that Jennifer had received after birth, Jennifer does not have HIV. But Shirley now knows she is living with HIV.

Possible Routes of HIV Transmission

GOAL #1: HELP STUDENTS TRACE THE POSSIBLE ROUTES OF HIV TRANSMISSION AMONG THE CHARACTERS IN THE STORY

Possible routes of HIV transmission in "An HIV Story" include:

Miguel	
Shirley	
Mary	
Shenequa	
John	
Mark	

How Can We Learn to Make Effective Decisions?

Performance Objectives

Students will be able to:

- Analyze how effective decisions can be made.
- Recognize the steps used in a decision-making model and practice using a decision-making model.
- Apply the use of a decision-making model to behaviors that can transmit HIV.

Motivation

- Say, “I’m going to read a scenario. Please listen carefully. Afterwards you will have two minutes to ‘free write’ what you would do and why you would do it in this particular situation.”

Teacher Note: “Free write” means that students write about a specific idea or topic for several minutes. The purpose is to generate ideas. Work is not collected or evaluated.

Teacher Note: Students may be attracted to and date members of the opposite sex or of the same sex, or both – or neither. Make sure that discussions are inclusive and affirming of all students who are lesbian, gay, bisexual, transgender or questioning (LGBTQ). For more information on DOE inclusion policies and trainings, go to <http://intranet.nycboe.net/DOEPortal/Principals/FamSvcs/YouthDevelopment/KeyLinks/Respect+for+All.htm> or search for “Respect for All Resources” on the NYCDOE Principals’ Portal.

- Read the following scenario to the students:

Jamie and Kim are classmates who feel attracted to each other and start going out. One day, while doing homework at the library, Jamie invites Kim home to continue working on it. Jamie also talks about feelings for Kim, and wanting some time alone while there is no one else home, to express those feelings.

Kim was sexually involved with someone previously, but had decided to wait for a more permanent relationship before having sex again. But Kim is strongly attracted to Jamie both physically and emotionally, and does not want to lose or hurt Jamie.

Procedure/Development

- Ask students, “Do we know Jamie or Kim’s biological sex or gender identity or sexual orientation? Does it matter? How does it affect this scenario?” Remind students that regardless of biological sex, gender identity, or sexual orientation, anyone who engages in risk behaviors can be exposed to HIV.

GRADE 12

Lesson

3

Prevention

NEW YORK STATE LEARNING STANDARDS

1

SKILLS

Decision Making

Relationship Management

Self-Management

MATERIALS

Board/Newsprint

Activity Sheet:

Steps to a Decision;

The Decision-Making Process

VOCABULARY

Decision-Making Model

Factors

Options

Risk Reduction

Biological Sex

Gender Identity

Sexual Orientation

Ulcerated

- Have students brainstorm the reasons Kim would decide to accept or reject Jamie’s invitation. List students’ answers on the board/newsprint. Possible answers may include:

Reasons to Decline:

- Kim does not want to have sex.
- Kim does not want to feel sorry later.
- Distrust of Jamie’s motives.
- To avoid being accused of some type of unwanted sexual contact (such as assault, rape).
- To avoid being thought of as “easy.”
- Parents/guardians would not approve.
- To avoid the possibility of being infected with an STI, including HIV.
- To avoid the possibility of an unintended pregnancy.
- Not prepared for risk reduction; condoms or other appropriate barriers not available.
- Not sure exactly what behavior Jamie has in mind.
- Does not want to complicate or damage a good relationship.
- Does not want to risk getting in trouble if either family finds out.

Reasons to Accept:

- They care for each other; it’s okay.
- This time it would be different than with the previous partner.
- Doesn’t want to hurt Jamie’s feelings.
- Doesn’t want to be rejected by Jamie.
- Maybe nothing would happen.
- Is prepared for risk reduction; condoms or other appropriate barriers are available.
- It would be enjoyable.
- Everybody does it.
- Family and friends would not find out.

- Ask, “Is this a difficult situation for Kim? What could help Kim make the best decision?” Possible answers include:

- Review original reasons for deciding to postpone sex. Figure out how to say “no,” preferably without hurting Jamie’s feelings.
- Step back from the situation and let Jamie know that Kim needs time to think and then discuss the situation before taking action.
- Find a way to explain the decision in terms of their relationship.

- Say, “Let’s see how a decision-making model could help us make decisions we would feel good about later.” Distribute and discuss the attached Activity Sheet “Steps to a Decision” and “The Decision-Making Process” with the class. Then read the above scenario again and elicit further responses from the students. Be sure to have them discuss the advantages of abstinence from behavior that could transmit HIV or another STI or cause unintended pregnancy. Possible student responses about the benefits of abstinence may include:

- Be more in control of your life.
- Respect for self.
- Have greater trust in relationship and partner.
- Focus energy on establishing and achieving current and longer term goals in life.
- Less anxiety.

- Maintain personal, religious, family, or community values.
- Avoid gossip about others.
- Freedom from the risk of getting or giving a sexually transmitted infection, including HIV.
- Freedom from the risk of an unintended pregnancy and its consequences.
- Freedom from the need to use condoms or other devices to reduce the risk of infections and/or an unintended pregnancy.
- Freedom to experience a loving relationship without becoming sexually active.
- Ask, “How can Kim use the decision-making model to decide whether or not to become sexually active again, this time with Jamie?”
- Say, “Let’s see what points we came up with when we worked through the decision-making process model. How might they help Kim make this decision?” Possible answers include:
 - Making sure what the choices really are, what Kim really wants.
 - Showing the need to look at all of the implications of the various choices.
 - Providing more time to think about the decision so that all options and their possible effects can be considered.
 - Seeing the possible positive and negative consequences of either decision.
- Ask, “What actions could Kim take to maintain the decision?” Elicit from students:
 - Put the decision in writing.
 - Communicate the reasons for the decision to Jamie; be willing to deal with Jamie’s reactions.
 - Avoid people and situations that could weaken the decision.
 - Make long-term goals and work toward them.
 - Get encouragement from a parent/guardian or other supportive person whom Kim respects.
 - Accept the reality of the past experience and the consequences, but recognize that the future can be different.
 - Seek friends who share the same values and commitments.
 - Develop hobbies and interests.
 - Set limits on expressions of affection that could weaken the decision.
 - Develop nonsexual ways to show caring and affection.

Homework

Have students write a paragraph about a decision they once made that they thought was the right one. Use the decision-making process as a model to help. See Appendix B.

Steps to a Decision

Background

A person infected with HIV has the virus in his or her body fluids. In order to have the potential to transmit HIV from one person to another, infected body fluids have to get inside another person's body. If body fluids just get onto (not into) someone else's skin, they are very unlikely to cause HIV infection unless the skin is broken, cut, ulcerated or irritated. Only when the skin is broken, cut, ulcerated or irritated can the infected body fluid penetrate into another person's bloodstream. Otherwise, the skin is generally an effective barrier to HIV (and many other pathogens), although some STDs (herpes, HPV) can be transmitted through skin-to-skin contact. Infected body fluids may also get through mucous membranes (like the lining of the anus/rectum, vagina, or mouth), especially if there are sores or irritations.

THE DECISION-MAKING PROCESS

1. Know what the specific problem is and state it clearly. (It may be helpful to ask if it relates to the present or future or both and, if it is a general problem or specific to a situation or person. This helps define the context of the problem.)
2. Make sure you have as many facts as you can gather about the important pieces of the problem, recognizing that decisions about most human problems are made under conditions of incomplete information.
3. List all the possible choices.
4. Evaluate each possible choice, taking into consideration possible positive and negative consequences:
 - a. What is its impact on your health and well-being?
 - b. What is its impact on others' health and well-being?
 - c. Are there laws or important rules (school, etc.) about it?
 - d. Does it help or hinder your other goals?
 - e. Is it consistent with your personal, religious, family or community values?
5. Decide which choice seems best and state clearly why.
6. Outline the steps that you need to take to help remain firm in the decision taken.
7. Evaluate and review the outcome of the decision.

The Decision-Making Process

1. State the problem clearly:

2. List all the possible choices (add more letters if necessary):

- a.
- b.
- c.
- d.
- e.

3. Consider each alternative and list all the things that might happen—pros and cons—if that alternative were chosen and acted on. (Add more letters if necessary, and save room within each letter to add more information from Step 4.)

PROS	CONS
a.	a.
b.	b.
c.	c.
d.	d.
e.	e.
f.	f.
g.	g.

4. Think of all the values about right and wrong that you have learned. Think of how family, friends and other people you care about will be affected by your decision. Add to the list above.

5. Decide on the alternative that seems best. Write it out and explain why it seems best:

6. Outline the steps that need to be taken to act on that decision (add more numbers if necessary).

- 1)
- 2)
- 3)
- 4)
- 5)

7. Evaluate the possible outcomes of the decision.

Prevention

NEW YORK STATE
LEARNING STANDARDS
1

SKILLS

Self-Management

Decision Making

MATERIALS

Board

Activity Sheet 1:

A Question of Testing

Activity Sheet 2:

*An Adolescent May Be Concerned
About HIV Testing If...*

Activity Sheet 3:

Poem

Appendix A:

*Student Guide to HIV
Antibody Testing*

VOCABULARY

Anonymous Testing

Antibody Test

Confidential Testing

Consent to Testing

EIA/ELISA Test

False Positive

Fingerstick

Oral Swab

Partner Notification

Poem

Pre- and Post-Test Counseling

Viral Load Test

Venipuncture

Voluntary Testing

Western Blot Test

Routine HIV Screening

What Factors Must Adolescents Consider Before Taking an HIV Antibody Test?

Performance Objectives

Students will be able to:

- Identify reasons individuals should consider getting an HIV antibody test.
- List issues to consider before taking the HIV antibody test.
- Locate an HIV testing site, and describe what to expect.
- Explain the nature of consent and confidentiality in HIV testing, especially as they affect young people and adolescents.
- List the advantages of taking an HIV test.

Motivation

- In 2010, a new law in New York State requires healthcare providers in primary care clinics/private practices, emergency departments and inpatient hospital units to offer HIV testing to all people, aged 13-64, with limited exceptions. Also, it is important to know that teens do not need parental consent for an HIV test in New York State, nor do they need to sign a separate consent form.
- Remind students that they have learned three important things about HIV that might make them want to consider HIV testing, now or at a later point in their lives. These things are:
 1. HIV transmission occurs through specific behaviors, not because of membership in particular groups.
 2. Many people are at risk of HIV infection, and often do not know that they are at risk.
 3. While there is no “cure,” effective treatments for HIV are now available and have made living with HIV far more manageable and successful, with a lifespan nearly equal to that of someone without HIV, as long as an infected person stays in medical care and takes anti-HIV medication as prescribed.
- Being able to protect oneself and others from HIV transmission, as well as getting treatment if infected, depends on one knowing one’s HIV status. This lesson explores some of the major issues involved with HIV testing.
- Give students the attached Activity Sheet 1, “A Question of Testing,” and have them read the story.

Procedure/Development

Teacher Note: Any discussion about HIV testing must address both facts and feelings. Class activities should be interactive and provide opportunities for students to express themselves. Brainstorming and small and/or large class discussions may be utilized in achieving classroom objectives.

In addition to having students read the story, you may want to have them dramatize it, taking the part of characters in the story. After discussion, students may want to expand on the role-play. Characters can discuss their situations, and new characters can be introduced. For example, role-plays may include friends and parents and other adults whom they might ask for advice. See “How to Use Role-Plays in the Classroom” in Appendix B at the back of their curriculum guide.

Discussion

- Ask students for their reactions to the story and to the variety of feelings the characters exhibit. List responses on the board or on newsprint. Point out that such feelings are normal and often surface when addressing HIV testing and other issues related to HIV infection.
- Ask students to highlight the advantages of being tested, and the impact of waiting. Expand the discussion to include reasons that the other characters would consider getting tested. (Distribute Appendix A, “Student Guide to HIV Testing,” for information.)
- Ask students to comment on what they would do if they were the characters in the story.
- Say HIV testing is increasingly becoming a routine part of primary medical care.
- Ask the students, “Sexually active students are encouraged to be tested for HIV every six months so that they know their status. What are some of the specific reasons people might think about getting tested?” Answers should include:
 - Had unprotected sexual activity that might transmit HIV.
 - Both partners agreed to be tested together before having sex.
 - They are pregnant or got someone pregnant.
 - Recent diagnosis with an STI.
 - Used drugs in ways that could transmit HIV, for example using a syringe or other equipment that was used by someone else, or used drugs or drank alcohol and then had unprotected sex—forgetting to use a condom.
 - Uncertainty about the possibility of HIV infection.
- Ask, “The CDC estimates that one out of five people infected with HIV do not know their HIV status. Why is this? What are some of the reasons people who should consider getting tested for HIV might not get tested?”

Answers might include:

 - Fear of dying, fear of being sick.
 - Fear of the unknown.
 - Not knowing about available treatment; thinking “why bother, there’s no cure?”
 - Fear of what others will think (stigma).
 - Belief that they are not at risk and/or they look and feel healthy.
 - Fear of being unable to get treatment.
 - Fear of having to explain getting tested (or results) to family, partner, friends.
 - Don’t know how to get tested (where; costs; what it will be like).
 - Worried about confidentiality; who will find out; having test in records.
 - Not sure they can do it or are able to consent.

- Lack of health benefits and coverage and/or not having a regular medical provider.
- Denial of risk behaviors.
- Fear that the stigma of the diagnosis would result in discrimination by health providers, insurance companies, at school, at work, in housing, etc.
- Distribute Appendix A, “Student Guide to HIV Testing.”
- Review the “Student Guide to HIV Testing,” making sure that students understand the key concepts.
- Ask students “What can you tell me about the 2010 New York State HIV testing law?”
- Ask students: “Where are some places a person might go to get an HIV test?”

Answers should include:

- One’s regular medical provider.
- Health clinics, including school-based health clinics.
- Hospital teen clinics (often called “Adolescent Medicine” or “Adolescent Health”).
- STI clinics run by the New York City Department of Health and Mental Hygiene.
- Clinics at hospitals.
- Family planning clinics, OB/GYN, and urology clinics.
- Community-based organizations.
- Teen organizations.
- At home.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months.

Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

- Ask, “What are some reasons that a person might be concerned about HIV testing?” Distribute the Activity Sheet, “An Adolescent May Be Concerned About HIV Testing If....” Have students work individually or in small groups to brainstorm problem-solving suggestions to help an adolescent with concerns about HIV testing.
- Make sure students have covered the points that are on the answer sheet.

Teacher Note: Link here for testing locations. The Health Department provides free and confidential clinics that test for HIV and other sexually transmitted diseases.

- Bronx: <http://www.nyc.gov/html/doh/html/std/std2.shtml#bronx>
- Brooklyn: <http://www.nyc.gov/html/doh/html/std/std2.shtml#br>
- Manhattan: <http://www.nyc.gov/html/doh/html/std/std2.shtml#mn>
- Queens: <http://www.nyc.gov/html/doh/html/std/std2.shtml#qs>
- Staten Island: <http://www.nyc.gov/html/doh/html/std/std2.shtml#si>

A Question of Testing

by Betty Rothbart

Katherine left the clinic feeling full of confusion. She wasn't surprised when Dr. Halevi had said she was pregnant—she had expected that news. What shocked her was the doctor's suggestion that she get tested for HIV.

"An HIV test? I don't have HIV. I feel fine. A little morning sickness, but otherwise..."

Dr. Halevi had put her hand on Katherine's shoulder.

"A person can feel okay but still be infected with HIV, the virus that causes AIDS. And you told me that you and your boyfriend both had other sexual partners before you started going together."

"Yes, but—"

"If you have HIV, it would be good to know for two reasons: your health, and your baby's."

Your baby. Katherine didn't even know if she wanted a baby, let alone an HIV test. She felt like she was looking into shadowy mirrors that revealed her in strange new ways. Katherine, pregnant. Katherine, faced with enormous decisions that she felt too young to make.

"Think about it," Dr. Halevi said. "If the test is positive, there are some treatments that can help you stay healthy longer and protect your baby from infection."

The clinic was just down the street from the high school, and Katherine and her boyfriend, Brian, had arranged to meet there. Brian was sitting on the school steps, leaning back on his elbows and staring up at the sky. She sat next to him and rested her head on his shoulder.

"Well?" he asked softly.

"I'm pregnant," she said, "and I'm scared. I don't know what to do."

"We talked about this, Katherine," said Brian. "We're both graduating in a few months. Maybe we could get married, have the baby. I'd get a job, you could work part-time. We'd get by."

"I don't know, Brian. Dr. Halevi mentioned something we never thought about. What if I have HIV? What if the baby were born with it?"

"HIV? Katherine, that's impossible."

"Is it, Brian? We're both had other partners. One of us—or both of us—could have gotten infected. Dr. Halevi thinks I should get tested."

Brian frowned. "If you get tested, and you're infected, then I might find out that I'm infected, too," he said.

Activity Sheet 1 (continued)

"Yes, but Brian, if our tests come back negative, that means we're not infected. All three of us would be okay."

"All three of us," mused Brian. "Sounds weird. When you put it that way, I don't know if I want to celebrate—or run."

"I know," said Katherine. "Getting pregnant, getting tested, getting married, having a baby... it's too much to think about. I don't want to think about it."

"I don't either," Brian replied. "But time's moving on, Katherine. Somehow, we have to figure out how to deal with all this."

A car pulled up in front of the school. Their friends Janis, Kim, and Peter got out and ran up the steps toward them.

"I can't believe school's out and you're still hanging around here!" said Kim. "We're on our way to the park. There's a free concert there tonight, want to go?"

"I don't think so," said Katherine. "We have a lot to talk about. I just came from the clinic and—"

"Let me guess," said Peter. "You're pregnant!"

"Yes, I am."

"Hey, wait a minute," said Peter. "I was just kidding. I didn't think you – really? You're really pregnant? Oh, what are you going to—"

"We don't know what we're doing," said Katherine.

"Come on," said Janis. "So you'll have a baby! Everything will work out."

"The doctor wants me to have an HIV test," said Katherine.

"HIV!" exclaimed Janis, "None of us has to worry about that."

"Don't we?" said Katherine.

Everyone froze as they thought about Katherine's question. Brian finally broke the silence.

"Look, we've all been friends for a long, time," Brian said slowly. "And none of us can sit here and say we don't have to worry about HIV or other STIs, for that matter."

"You mean, most of us have probably had sex without condoms," said Kim.

"I haven't," said Janis. "But when I had that problem with drugs last year, I shared needles and works."

"I've done some partying," admitted Peter. "Got drunk, had sex, no condom. We were just fooling around, we weren't thinking about HIV or STIs."

"I never thought much about them either," said Brian. "But now we have to. Katherine has to decide whether to get tested—"

"We all have to make that decision," said Peter. "We have all been in risky situations. Maybe one of us does have HIV."

"Or some of us," said Janis.

"Or none of us," added Kim.

"We can't know for sure without a test," said Katherine. "But I don't know whether I want to know. I just want time to stop. I don't want to think about this."

Brian took her in his arms. "Time won't stop," he said. "Eventually, one way or another, you'll find out. We'll all find out. Positive or negative, we'll move on with our lives."

Activity Sheet 2

AN ADOLESCENT MAY BE CONCERNED ABOUT HIV TESTING IF...	PROBLEM-SOLVING SUGGESTIONS
He or she is not prepared to be told of the results (e.g., states “I’ll kill myself if I test positive”).	HIV testing can be an emotional experience for virtually everyone. When a young person feels a great deal of panic, supportive pre-test counseling may help, and a friend or family member should go to offer support. Supportive counseling is always provided for persons who test positive.
He or she fears that test results appear in medical records, complicating insurance, etc.	The young person needs to know that HIV results from confidential testing cannot be released to anyone besides the young person, except under specific circumstances (the counselor will list and explain these), or if the person who is being tested signs a specific release. Additionally, anonymous HIV testing is offered at NYC DOHMH STD clinics.
He or she does not have family support.	Family support is vitally important, but many young people also benefit from support groups. Staff of youth-centered HIV testing sites may be able to help youth talk to family and seek family support.
His or her life situation is in crisis.	Waiting for a calmer time may seem like a good idea. However, the stress of not knowing one’s HIV status can also be considerable. Relief if one is found to be HIV-negative may help relieve stress, and this gives the young person another opportunity to discuss strategies to stay safe after a negative test. Reinforce the message that getting a negative HIV test result is not like dodging a bullet and it is not, in and of itself, HIV prevention. Discuss strategies to STAY HIV negative.
He or she does not understand the implications of a positive test (e.g., confuses it “With a death sentence”) or of a negative test (e.g., thinks it means that she or he is “immune” to contracting HIV).	The person being tested is not required to name partners, although working with a healthcare provider to discuss strategies to help sex and/or needle-sharing partners learn about his or her exposure anonymously and get tested as well, is important. This would likely be discussed if the person had a positive result. Testing staff are not authorized to report results to partners without the young person’s permission. If the young person wants help in notifying partners, there is a voluntary program available that the test staff can help him or her with.

AN ADOLESCENT MAY BE CONCERNED ABOUT HIV TESTING IF..	PROBLEM-SOLVING SUGGESTIONS
He or she feels that knowing that he or she is infected would be a burden that would best be dealt with in silence, alone.	The young person needs to know that support groups are available to help young people deal with their test results.
He or she doesn't have access to medical care and/or other entitlements.	<p>Choose a test site where social services are available. An agency social worker may be able to help the young person get the medical care and services to which he or she is entitled. The NYC DOHMH website has a list of teen-friendly sites, New York City HIV Care Coordination Programs</p> <p>http://www.nyc.gov/html/doh/downloads/pdf/ah/cc-referral-resource-guide.pdf</p> <p>and Designated AIDS Centers (DACs)</p> <p>http://www.health.ny.gov/diseases/aids/testing/dac_clinic_contacts.htm</p>
The young person is not yet 18.	The young person needs to know that there is no specific age required for consent to testing in New York State. Teens do not need parental consent for an HIV test. The testing provider assesses a young person's ability to understand the procedure. Parents or guardians are not informed that the test has been performed, or of the results. The young person may wish to tell them, and may be able to seek help in doing so.

AN ADOLESCENT MAY BE CONCERNED ABOUT HIV TESTING IF..	PROBLEM-SOLVING SUGGESTIONS
He or she fears that others might cause results to appear in medical records, complicating insurance, etc.	
He or she is not prepared to be told of the results (e.g., states "I'll kill myself if I test positive").	
He or she does not have family support.	
His or her life situation is in crisis.	
He or she does not understand the implications of a positive test (e.g., confuses it "With a death sentence") or of a negative test (e.g., thinks it means that she or he is "immune" to contracting HIV).	
The young person is concerned that partners will find out.	
He or she feels that knowing that he or she is infected would be a burden that would best be dealt with in silence, alone.	
He or she doesn't have access to medical care and/or other entitlements.	
The young person is not yet 18.	

Poem

Do Not Go Gentle Into That Good Night

by Dylan Thomas

Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light.

Though wise men at their end know dark is right,
Because their words had forked no lighting they
Do not go gentle into that good night.

Good men, the last wave by, crying how bright
Their frail deeds might have danced in a green bay
Rage, rage against the dying of the light.

Wild men who caught and sang the sun in flight,
And learn, too late, they grieved it on its way,
Do not go gentle into that good night.

Grave men, near death, who see with blinding sight
Blind eyes could blaze like meteors and be gay,
Rage, rage against the dying of the light.

And you, my father, there on the sad height,
Curse, bless, me now with your fierce tears, I pray;
Do not go gentle into that good night.
Rage, rage against the dying of the light.

(1951, 1952)

How Can We Avoid Behavior That Can Lead to HIV Infection?

Performance Objectives

Students will be able to:

- Explain how they can help break the chain of HIV infection by practicing safer sex, avoiding drugs and alcohol (especially before or during sex) and, if HIV-positive, adhering to treatment.
- Describe how consistent and correct use of latex or polyurethane condoms can reduce, but not eliminate, the risk of the sexual transmission of HIV.
- Evaluate how risk reduction strategies compare with abstinence as a method of breaking the chain of HIV infection.
- Describe where to access condoms at the school's Condom Availability Program (CAP).

Motivation

- Tell students this story:

Jordan and Alex are playing basketball in the park with friends. Alex is accidentally knocked forcefully to the ground. Getting up, everyone notices blood pouring from an elbow wound where broken glass on the ground has made a deep cut. Jordan holds a bandana to Alex's arm, but his arm and Jordan's hands are quickly covered with blood. In the meantime, one of the other players has gone to get someone to drive Alex to the hospital. Alex and Jordan jump into the back of the car and arrive at the hospital emergency room. As Jordan waits, a doctor wearing latex gloves and a mask uses a disposable needle to place six stitches in Alex's arm. While the doctor works, an orderly wearing latex gloves comes by to clean up the blood from the floor, using a large disposable pad and a cleaner that contains bleach. The orderly disposes of the bloody bandana and the gauze pads used by the doctor in a red plastic garbage bag marked "infectious waste." The doctor disposes of the used needle in a special red bin marked "sharps disposal." Unknown to Alex, their friends, or to the healthcare providers, Alex is HIV-positive because he inconsistently used condoms while having sexual intercourse with an infected partner.

- Ask, "Who is at risk for transmission of HIV in this story? Why?" Students should answer that Jordan is at risk of infection because he had contact with Alex's infected blood. While intact skin is normally a good barrier, there can be open cuts or breaks in the skin. Therefore, some risk exists since Jordan did not use a barrier that could prevent transmission.
 - The emergency room staff could be at risk because of the contact with blood, but their risk is minimized by using what are called "universal precautions."

GRADE 12
Lesson

5

Prevention

NEW YORK STATE
LEARNING STANDARDS
1, 2, 3

SKILLS

Decision Making

Self-Management

MATERIALS

Board/Newsprint

Disposable Latex Gloves

VOCABULARY

Barrier Method

Latex Condom

Polyurethane Condom

Universal Precautions

- Say, “The emergency room personnel in this story did some things to protect against getting infected with HIV. What are some of the precautions they took?” Write students’ answers on the board/newsprint.
 - After they provide the list, add any precautions that they did not mention.
- Universal Precautions against HIV Infection**
- Wear disposable latex gloves before handling blood or bloody fluids.
 - Make sure that the injured person is given appropriate care by knowledgeable personnel.
 - Soak up spilled blood with clean materials or paper towels. Dispose of the materials used to soak up the blood in a sealed plastic bag.
 - Clean up blood spills on floor or other surfaces thoroughly, using soap and water.
 - Use bleach to disinfect the area where blood spilled.
 - Remove latex gloves by turning them inside out. Avoid touching self or others with soiled gloves. Dispose of gloves and any other soiled materials in a sealed plastic bag.
 - Dispose of the plastic bag in accordance with any rules on disposal of infectious material.
 - Used “sharps” (surgical needles, or syringes) should not be re-capped or broken, but should be placed in hard plastic containers (specially marked “sharps” bins, or plastic bottles such as bleach bottles for household use) where their points cannot be easily touched by accident.
 - Wash hands thoroughly with soap and water.
- Hospitals and health workers have additional Universal Precautions (wearing masks under certain conditions) because these rules apply not only for prevention of HIV, but for all infectious disorders. The ones listed here are most pertinent to HIV, and hepatitis B and C, which are all bloodborne infections.

Teacher Note: A small but growing number of people, including healthcare providers, are allergic to latex. While latex gloves and condoms are by far the most commonly used, gloves and condoms made of alternative materials such as polyurethane are also available for those with these allergies.

Teacher Note: Materials used to control transmission may be shown or just described as: disposable latex gloves, paper towels, plastic bags with seals or “twist ties,” bleach and gauze pads or adhesive bandages for minor first aid.

- Say, “These methods of protection are called universal precautions. They are called “universal” because they are used by and with all people and all types of body fluids for all types of infectious diseases. The reason for this is that any person could be HIV-positive or have another infectious condition. Any person who comes into contact with infected body fluids could become HIV-positive or develop another infectious condition. Therefore there is a need to practice specific precautions consistently, correctly, and universally to reduce the risk of HIV transmission, as well as the risk of transmission of other diseases such as hepatitis and bacterial blood infections.” Note that universal precautions protect both healthcare providers and all people who are treated by these workers in the healthcare setting.

- Say, “The same general principles of protecting ourselves from risk apply in other areas. We can avoid any exposure to risk by abstaining from behavior that may place us at risk. If that is not possible, we can reduce the risk by taking precautions. To protect ourselves and others against contact with potentially infected body fluids, we need the right tools and need to know how to use them correctly and consistently every time we are exposed to risk. How can we think of prevention as “universal precautions” in other areas?”
- Ask, “What could Jordan have done differently when he saw Alex bleeding?” Generally, the answers should include a way of putting a barrier between him and Alex’s blood—using something that wouldn’t soak through as easily as a small bandana.
- Ask, “According to our story, what could Alex have done differently to reduce, but not eliminate the risk of becoming HIV infected from sexual behavior that can transmit HIV?” Students’ answers should include: “Alex should have used a latex condom consistently and correctly.” This would also have reduced the risk of Alex transmitting HIV to partners.
- Remind students that preventing the transmission of HIV depends on preventing the contact of possibly infected body fluids (blood, preseminal fluid and semen, vaginal fluids, breast milk) with areas where they can enter the body: through blood or mucous membranes.
- Consistent means “every time,” with every partner, for any sexual activity that can transmit HIV by bringing our blood or mucous membranes into contact with possibly infected body fluids from our partner. Ask students what some of the reasons are that people might not use a condom each and every time. These should include:
 - they didn’t know a particular practice could transmit HIV or another STI.
 - they didn’t think to have condoms with them, or forgot.
 - they were embarrassed to purchase them in a pharmacy or other store, or to request them through the Condom Availability Program in the high school’s Health Resource Room.
 - they were worried about what their partner might think if they suggested using a condom.
 - they might they had another partner or that their partner might think they were gay.
 - they didn’t want to seem to have planned ahead for sex.
 - parents or family members might find the condoms and ask what they were for.
 - they didn’t think this partner would have any kind of infection.
 - they didn’t think they themselves could possibly have HIV or another STI and transmit it to someone else.
 - they didn’t think they themselves could possibly get HIV or another STI.
 - the partner told them they were ‘clean,’ or didn’t have any infection (didn’t have HIV or an STI).
 - the partner ‘looked good,’ was well groomed, etc.
 - the partner refused to have sex with them if they wore a condom.

Teacher Note: Consider using the “Condom Challenge” activity in Appendix C to reinforce correct use of male and female condoms.

The Male Condom

Correct condom use for the male condom means:

- Using a new condom “from start to finish” with each act of anal, vaginal, or oral sex.
- Never reusing a condom.
- Making sure the condom package is not damaged or torn and that the expiration date has not passed.
- Do not use the condom if the expiration date has passed or if the package is torn. Use a new one instead. Also, don’t use a condom that seems damaged—i.e., a condom that appears dry, sticky, stiff or has even a tiny tear or hole.
- Being sure that the condom has been stored where heat cannot damage the latex.
- If using a lubricant with a latex condom (which is recommended, to reduce friction and improve the likelihood of a condom’s effectiveness), use only water-based lubricants. Check the lubricant package to see if it says “water-based” or “safe to use with condoms.” Do not use oil-based lubricants, such as baby oil, Vaseline, or other petroleum jelly, as they can damage a latex condom.
- Don’t use two male condoms at the same time to cover the penis—it can make the condoms slip off or break.
- Never use a male and a female condom (FC2) at the same time—it makes friction that can cause slipping or tearing.
- Following all of the manufacturer’s directions on/or with the condom package. These include:
 1. Tear the package open along the notched edge while being careful not to damage the condom. Never use your teeth, scissors, or other sharp objects to help open the package.
 2. Pinch the tip to allow room for preseminal fluid and semen.
 3. Be sure that the condom is right-side up (tip up). Put on the condom after the penis is erect, but before any sexual contact. Roll the condom down on the erect penis to the base of the penis.
 4. Smooth out any air bubbles. Use a water-based lubricant if needed to reduce friction.
 5. After sex, but before the penis becomes soft, hold the base of the condom (where the ring is) and withdraw the penis while it’s still erect, so nothing spills.
 6. Carefully slide off the condom, wrap it in a tissue (if available) and throw it in the trash (condoms can clog toilets).
 7. If you put a condom on the wrong way by mistake, throw it out and use a new one. Teacher Note: Explain that preseminal fluid and semen will now be on the tip of the condom and therefore it needs to be replaced with a new one.

The Female Condom (or FC2)

The female condom (or FC2) is a synthetic nitrile (not latex) sheath that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated on the inside of the condom (silicone based) and can be inserted before intercourse, without an erection or male participation.

Correct condom use for the female condom means:

- Using a new condom “from start to finish” with each act of vaginal sex.
- Practicing insertion can help users feel more comfortable and confident.
- Not using the female condom if the expiration date has passed or if the package is torn. Use a new one instead. Also, don’t use a female condom that seems damaged—i.e., a condom that appears dry, sticky, stiff or has even a tiny tear or hole.
- Inserting the “female condom” before there is any contact with the penis.
- Not using a male condom and female condom together; this can:
 - increase friction and reduce the effectiveness of both,

- break down the latex of the male condom because of the oil-based lubricant on the female condom, and/or
- the two condoms can stick to each other and can cause slippage/displacement.
- Never reusing a condom.
- Following all of the manufacturer’s directions on/or with the condom package. These include:
 1. Tear open the package carefully along the notched edge. Do not use anything sharp (teeth, scissors, etc.) to open it.
 2. Hold the condom at the closed end; squeeze the inner (closed-end) ring between your thumb and forefinger (or middle finger), making it long and narrow.
 3. After finding a comfortable position for insertion (squatting, lying down, etc.), insert the inner ring into the vagina far enough so that it won’t fall out.
 4. Using your index finger inside the condom, push the inner ring into the vagina, like a tampon, as far as it will go. Be sure the sheath is not twisted. The open-ended ring should rest outside of the vulva, about an inch outside the vagina.
 5. You are now ready to use the female condom with your partner. Be careful to guide the penis inside the pouch through the middle of the outer ring, not outside the condom, and not between the condom and the vagina.
 6. To remove the condom, twist the outer ring and pull it out gently (so semen stays inside).
 7. Dispose of the condom in the trash, not the toilet.
- Say, “A study that reviewed 13 condom studies found that people who said they never used condoms were 6 times more likely to get HIV than those who said they always used condoms when having sex with HIV-positive people. The reason these studies do not add up to 100 percent effectiveness is that they measure how often people use condoms when they have sex. They do not measure how correctly people put condoms on. It is therefore very important to learn when and how to put on a condom. Condoms are one of the best prevention tools that sexually active people have for preventing HIV infection.”

To prevent contact with body fluids that may be infected with HIV or another STI, a dental dam or an unlubricated male condom that is cut open and flattened can be used during oral sex (cunnilingus).

Teacher Note: Consider implementing the “Condom Challenge” activity in Appendix C to reinforce correct use of male and female condoms. Condom demonstrations are not to be done in classrooms; they are done in the Condom Availability Program, CAP, housed in the Health Resource Room, where students can also get free condoms.

Teacher Note: Make sure students understand that HIV can be transmitted through anal, vaginal, or oral intercourse with an infected person. When sexual intercourse is not clearly defined to include oral and anal, people may fail to recognize their risk and not take appropriate action to protect themselves and others.

- Say, “In our story, we learned how healthcare providers broke the chain of HIV infection while handling Alex’s blood by using Universal Precautions. We have also discussed how Alex could have reduced, but not eliminated the risk of the sexual transmission of HIV through the correct and consistent use of latex condoms.
- Ask, “What is the only 100 percent effective way for Alex to have eliminated his risk of becoming HIV infected during sex?”
- Answer: Alex could have abstained from all forms of sexual behavior that can transmit HIV.

Teacher Note: It must be stressed that abstinence from all forms of sexual intercourse is the only 100 percent effective and most appropriate way for young people to eliminate their risk of HIV. They need to know that it is possible for them to break the chain of HIV infection by taking personal responsibility for their sexual behavior. Impress upon students that the best and healthiest choice for an uninfected couple is to delay sexual intercourse until ready for a mutually faithful, lifelong relationship. While reduced risk is better than high risk, no risk is the best choice for optimal health outcomes.

Assessment/Homework

- Have students create a checklist with pictures or symbols for the Universal Precautions for blood clean-up, suitable for posting in the school gym or classroom, listing the materials needed and the steps to be followed in an easy-to-read format.
- Research a local clinical or non-clinical agency providing HIV risk reduction and prevention services, including HIV testing, and report back. Questions could include: What kinds of services are provided, to whom, and how do they aim to prevent HIV transmission?

What Are the Social and Economic Issues Related to HIV?

Performance Objectives

Students will be able to:

- Explain how some of the social and economic effects of HIV on our society.
- Identify how our government is responding to HIV.
- Describe how other sectors of our society are providing support for those infected with HIV, what has been accomplished to date, and where challenges remain.
- Formulate ideas on what governments and citizens can do in response to HIV.

Motivation

- Reproduce the following quotes on an overhead transparency, in a photocopy, or on the board/newsprint, and read them aloud to the class:

Look to your health, and if you have it... value it next to a good conscience; for health is the second blessing that we mortals are capable of, a blessing that money cannot buy.

— Izaak Walton, from “The Complete Angler”

The health of nations is more important than the wealth of nations.

— Will Durant, from “What is Civilization?”

- Ask, “What do these quotes tell us about how we should regard our personal health and that of our fellow human beings?”

Possible responses may include:

- Health is precious and valuable.
- We should consider good health a blessing or a gift.
- We should protect and safeguard health.
- Good health is priceless.
- Good health is more important than money or wealth.
- Society needs healthy citizens to be strong and productive.
- Governments should consider the health of their citizens a top priority.
- The sickness of others affects everyone.
- We all need to promote good health practices and help prevent sickness for the good of everyone.

SKILLS

Advocacy

Decision Making

Self-Management

MATERIALS

Board/Newsprint

Quotes as Handout
or
Overhead Transparency

VOCABULARY

AIDS Drug Assistance Program
(ADAP)

Community-Based Organization
(CBO)

Discrimination

Microbicide

Peer Educator

Ryan White CARE Act

Vaccine

- Ask, “In what ways has our society responded to the needs created by HIV/AIDS?”
- Write the following table outline, on the board/newsprint, so students’ answers can be categorized:

GOVERNMENT/PUBLIC HEALTH AGENCIES	HEALTH CARE/ MEDICINE	EDUCATION	COMMUNITY-BASED/ ORGANIZATIONS
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- Students’ answers may include:

Government

- Government at the federal, state and local level has passed laws making it illegal to discriminate against people who have HIV.
- Local laws providing routine HIV screening for pregnant women, with treatment if positive, have helped to nearly eliminate mother-to-child transmission of HIV in NYS.
- Government has invested in HIV research, training, prevention, care, service and treatment, both in the U.S. and abroad.
- Making treatment for HIV available to all who need it, even those who cannot afford it, is a major accomplishment. Two major programs ensure that no one goes without treatment because of financial issues:
 1. The Ryan White CARE Act (1990) is a federally funded program that provides grants to state and local governments, hospitals, and community-based organizations to provide specialized HIV services (primary health care and support services) for those who do not have insurance or do not have other resources.
 2. The AIDS Drug Assistance Program (ADAP) is funded by federal grants to the states. It provides people without insurance a way to afford the most up-to-date drugs for HIV.

Health Care/Medicine

- Hospitals have established HIV primary care clinics to outpatient medical care, as well as a range of other co-located services to help people live with HIV.
- Medical research has helped us to better understand the nature of HIV and of its transmission.
- Medical research has developed many drugs and treatments that promote fuller, healthier lives for those living with HIV and have saved or extended the lives of many people living with HIV.

Education

- Public and private school systems provide classes and resources on HIV awareness and HIV testing (in school-based health clinics, for example).
- Colleges and universities train students for careers in fields that contribute to services and solutions to HIV prevention and care.
- Colleges and universities provide training to healthcare and other service providers to improve the quality and availability of HIV prevention and care.

Community-based organizations (CBOs)

- Provide meals, transportation, companionship, and other services for people with HIV.
- Provide support groups for people with HIV and their families.
- Provide referrals to a wide range of services, assist individuals with HIV in accessing financial, medical, support, and other social services.
- Provide culturally sensitive and community-based testing, and educational services.

- Say, “There are also community-based organizations that provide services in other countries, both in countries where governments cannot afford or will not provide many services for their citizens who have HIV and in countries where governments do not provide many services, but seek additional expertise in providing services to their citizens who have HIV.”

Media and the Internet:

- Information and social networks have developed worldwide bringing the latest developments and resources to those who need them and who have Internet or mobile technology access. Many websites and other mobile applications provide information to researchers, treatment providers, and all members of the community.
- Media have helped develop educational materials and social marketing campaigns around HIV prevention and awareness.
- Many celebrities and other public figures (for example, Lady Gaga, Alicia Keys, Elton John, Bono, Fergie, Bill and Melinda Gates and Magic Johnson) have helped to publicize the importance of HIV prevention and treatment.

Individual citizens in society:

- Have promoted the idea of partnership with the healthcare system to prevent and treat HIV, based on the model that people can and should be involved in their own care.
- Have formed organizations to develop and provide services for people with HIV and their families and support networks, and have attempted to influence government policy.
- Have volunteered in prevention services.
- Have raised or contributed money to organizations that are involved in HIV work.
- Have advocated for funding and services for HIV prevention, research, treatment.
- Ask, “Since HIV infection can be prevented, what can society and individuals (especially young people) do now to prevent HIV-related illness while a cure is being sought?” Answers could be developed to include:
 - Take responsibility for engaging in behavior that will prevent transmission of HIV and encourage others to do so.
 - Get tested for HIV and encourage peers to do so. If positive, access teen-friendly health care; if negative, take necessary steps to stay negative.
 - Encourage pregnant women to seek out prenatal care for the sake of their own health and that of the child, and to prevent possible transmission of HIV to the child.
 - Use the media, education, religious, and other social institutions to support abstinence as the only 100 percent effective choice for HIV transmission prevention.
 - Educate themselves and others about HIV prevention and treatment.
 - Become a “peer educator” (either informally or through a formal program) to educate other young people about HIV in a way that others will accept from peers.
 - Advocate within their communities, religious institutions, and governments for more resources and attention to HIV.
 - Support attempts by people who use drugs to get treatment and to reduce their risk from using drugs.
 - Try to combat stigma and discrimination around HIV by encouraging discussion and action where appropriate.
 - Find ways to support those family, friends, or community members living with HIV.

- Say, “An appropriate personal and compassionate response to those among us who are living with HIV, just like those of us who are living with any chronic medical condition, can ease the burden for them and their families. Let’s brainstorm ways in which this class can offer support to men, women, and children living with HIV in our own community and maybe even in this school or classroom. ” (Break up the class into groups that can carry out various aspects of a project, including investigating what is needed and obtaining the prior consent of a targeted agency.)

Teacher Note: If students are unable to identify resources in the community, share with them the Resources Guide in the appendices at the back of this curriculum guide. Provide students with information regarding the School Based Clinic and the Health Resource Room.

Assessment/Homework

- Have students write a one-page essay titled, “Why I Care About HIV/AIDS, and How I Can Help.”
- Have students find out what a “peer educator” is and report back.
- Have students write a one-page essay on one of the programs or problems listed in this lesson.

OPTIONAL VOCABULARY and CONCEPT-BUILDING STRATEGIES FOR SECONDARY GRADES

These additional strategies can be used as in-class activities, homework assignments, and/or student-peer projects in order to reinforce or expand upon the lessons.

Creating an HIV Protection “Backpack”

Teacher Note: This activity should only be used in conjunction with an “Opt Out” Prevention Lesson.

Directions

- Tell the class to imagine an “HIV Protection Backpack” filled with tangible and intangible ways to protect against HIV infection. Have the class define: tangible (referring to a thing one can touch) and intangible (referring to an idea or trait).
- Have the class brainstorm about what could go into the imaginary backpack that would enable one to abstain from sexual intercourse and alcohol and other drug use. Draw the following diagram on the board. Record students’ answers in the appropriate columns.

AN ABSTINENCE “BACKPACK” FOR HIV PROTECTION

TANGIBLE	INTANGIBLE
Photos of parents, family members (reminders of people who support abstinence decisions).	Assertiveness, self-confidence, and the courage to avoid risk behaviors.
Community resource list.	Good decision-making skills.
An address book—a reminder that you have friends who share your values.	Religious/ethical beliefs that promote abstinence.
A list of things you can say to peers who try to convince you to do risky things.	The sensitivity not to pressure others to engage in risk behaviors—and the self-esteem to say “no” to risk behaviors.

- Have the class brainstorm about additional contents of the backpack that could enable one to protect against HIV if one does not abstain from sexual intercourse. The second part of the backpack chart may look like the one below.

A RISK-REDUCTION “BACKPACK” (ADDITIONS TO THE ABSTINENCE “BACKPACK”)

TANGIBLE	INTANGIBLE
Male latex or polyurethane condoms (to use correctly, every time).	The wisdom to choose a partner who shares your commitment to reducing risk.
Female condom (FC2- to use correctly, every time)	The self-esteem to refuse to have sexual intercourse unless condoms and other risk-reduction measures are used.
Instructions on using condoms correctly.	The awareness that, even if you have had sexual intercourse, you always have the right to choose abstinence in the future.
Water-based lubricant.	The awareness that even if you have had sexual intercourse without a condom in the past, it is never too late to start protecting yourself and your partner by using one.

HIV/AIDS Word Search

Find the following words in the HIV/AIDS Word Search. The words may appear horizontally, vertically, or diagonally, and may be spelled backwards. A single letter may be used in more than one word.

- | | | | | |
|----------------|------------|---------------|-----------|-------------|
| ABSTINENCE | AIDS | ANTIBODY | B-CELLS | BEHAVIOR |
| BLOOD | COMPASSION | CONDOM | DECISION | DRUGS |
| HIV | IMMUNE | INFECTION | INJECT | INTERCOURSE |
| JUDGMENT | MACROPHAGE | OPPORTUNISTIC | PREGNANCY | RISKY |
| SEMEN | STI | T-CELLS | TESTING | TRANSMIT |
| VAGINAL FLUIDS | VIRUS | | | |

Q A L V P O N I A L F X U I P S A V B T I A B C D K
 C N A M B H I L N O P P O R T U N I S T I C P D S I
 R T E S T I N G P F H E A L L A Z R X T X N T I T Y
 L I V O E E W A C F E G R I P P Y U D R C P J R K T
 Z B S T O P B B R K H C S J O Y S S N A R T Y E I S
 R O G L V C P L R P I I T S G C E D T N F F E S C F
 E D R L E O H P O V C A D I F N E I O S S O S C X T
 A Y D L G O A S E O C A L L O A E S A M T V O T Y T
 L I L Z B A G I N T D D S M M N A M E I R Y S X S O
 I S R A D S E D T R D S K A M G A E L T X T R U Y R
 T T E S M I O T A A I T C C X E A K R I X I P Y T S
 E A A M T M M E T N S R Y R S R T S R P R Y C R K S
 I J B T E S X I N G O B T O I P I I O I C O O S I D
 M U S N A N T I B P L E I P A P T T I E M B M U P I
 M D T O L L E I H D A N F H I C Y P V P R A R E T U
 U G I I C R A A H E A L G A T P R R A H S S A I P L
 N M G S Q U G M A C R O V G S K P S H K I O S D P F
 E E L I F E L T H O S D I A Q I S R E T O T I R T L
 A N A C R E L H R J D R H U G I S E B A U R O A A A
 C T A E G X E N O I K E J C O C I S P E I P N P S N
 H L F D R U G S O Q S S A N O E S R U O C R E T N I
 B E H A V E O O P Q I K K R P K S U T U J H R U P G
 U X C E L M P E D O U N Y U N T P T T S T I J L E A
 T C E L L S D E I I B C E A B S T I N E N C E G O V

HIV/AIDS Word Search

Teacher's Answer Sheet

ABSTINENCE

AIDS

ANTIBODY

B-CELLS

BEHAVIOR

BLOOD

COMPASSION

CONDOM

DECISION

DRUGS

HIV

IMMUNE

INFECTION

INJECT

INTERCOURSE

JUDGMENT

MACROPHAGE

OPPORTUNISTIC

PREGNANCY

RISKY

SEMEN

STI

T-CELLS

TESTING

TRANSMIT

VAGINAL FLUIDS

VIRUS

Q A L V P O N I A L F X U I P S A V B T I A B C D K
 C N A M B H I L N O P P O R T U N I S T I C P D S I
 R T E S T I N G P F H E A L L A Z R X T X N T I T Y
 L I V O E E W A C F E G R I P P Y U D R C P J R K T
 Z B S T O P B B R K H C S J O Y S S N A R T Y E I S
 R O G L V C P L R P I I T S G C E D T N F F E S C F
 E D R L E O H P O V C A D I F N E I O S S O S C X T
 A Y D L G O A S E O C A L L O A E S A M T V O T Y T
 L I L Z B A G I N T D D S M M N A M E I R Y S X S O
 I S R A D S E D T R D S K A M G A E L T X T R U Y R
 T T E S M I O T A A I T C C X E A K R I X I P Y T S
 E A A M T M M E T N S R Y R S R T S R P R Y C R K S
 I J B T E S X I N G O B T O I P I I O I C O O S I D
 M U S N A N T I B P L E I P A P T T I E M B M U P I
 M D T O L L E I H D A N F H I C Y P V P R A R E T U
 U G I I C R A A H E A L G A T P R R A H S S A I P L
 N M G S Q U G M A C R O V G S K P S H K I O S D P F
 E E L I F E L T H O S D I A Q I S R E T O T I R T L
 A N A C R E L H R J D R H U G I S E B A U R O A A A
 C T A E G X E N O I K E J C O C I S P E I P N P S N
 H L F D R U G S O Q S S A N O E S R U O C R E T N I
 B E H A V E O O P Q I K K R P K S U T U J H R U P G
 U X C E L M P E D O U N Y U N T P T T S T I J L E A
 T C E L L S D E I I B C E A B S T I N E N C E G O V

Create an HIV/AIDS Haiku

Directions

- Have students write a haiku expressing ideas, thoughts, and feelings about HIV/AIDS. A haiku is a three-line poem with 17 syllables, as follows: first line—five syllables; second line—seven syllables; third line—five syllables.
- Post haikus on an HIV/AIDS bulletin board.

Example:

If Only

By Betty Rothbart

I wish this virus
were a work of fiction and
I could close the book.

Finding People to Help: Write HIV/AIDS Help-Wanted Ads

Directions

Have students brainstorm types of jobs in the HIV prevention and treatment fields. Write the list on the board. Individually or in small groups, have students write “help-wanted ads” that name the position, the job description, and the qualifications needed.

Example

The list may include:

- HIV counselor/tester.
- Drug counselor.
- Condom manufacturer.
- Doctor.
- Health educator.
- Activist.

The “help-wanted ad” may read as follows:

Needed: HIV counselor/tester in large city hospital in NYC. Offer HIV antibody testing to all eligible people who are seen in the emergency department. Inform them about HIV before testing, answer any questions, and obtain informed consent. Draw blood or administer rapid (saliva) test and give test results. Refer HIV-positive people to medical and supportive services so that they can begin antiretroviral therapy (ART), and discuss the importance of avoiding behaviors that can infect others. Guide HIV-negative people in thinking about ways they can avoid contracting HIV in the future or refer them for prevention services. Qualifications: Must be well-informed, compassionate, supportive, and a good listener; must respect confidentiality.

Connecting Concepts to Vocabulary: Semantic Associations

Directions

- Semantic associations help students expand vocabulary by building on words that share a common feature. The activity can be done as a class or individually, but always have it conclude with full-class discussion.
- Select a word or words related to HIV/AIDS issues.
- Write the word(s) on the board; for example: infection, treatment.
- Ask half the students to write as many things as they can think of that are related to “infection;” the other half will do the same with “treatment.” Students can work alone or in groups.
- Write the students’ lists on the board, compiling all associations under the headings “infection” and “treatment.”
- Have students use six of these words in sentences.
- Discuss any words that are new to any of the students.

Expanding Vocabulary Through Brainstorming: Semantic Mapping with HIV/AIDS Focus Words

Content Area Note: This strategy can be used to assist English language learners, special education students, and others to understand HIV/AIDS concepts.

Directions

Select an “HIV/AIDS focus word:” a word pertaining to a key concept that you would like students to think about. This activity can also be used to prepare students for reading an essay, story, or article about HIV/AIDS.

Examples

Virus, abstinence, prevention, decision making, Person Living With HIV/AIDS (PLWHA)

- Write the focus word on the board/newsprint.
- Have students list on paper as many words as possible that are related to the focus word.
- Then have students share their words. Write them on the board/newsprint, grouping them into categories as you write.
- Number the categories and have students title them. Use any disagreement about defining or categorizing words to spark discussion.

Optional Activities

- **Coordinate an HIV/AIDS information fair.**

Have students plan an HIV/AIDS information fair, for which they would create lessons, presentations, and exhibits about HIV/AIDS for families and other students. With approval from the school principal, and in accordance with New York City Department of Education policies, students may invite representatives of appropriate community-based organizations, such as youth-assisting hospitals or agencies that care for PLWHA, to participate. Alternatively, students can develop HIV/AIDS activities for their classes in the school.

- **Design an HIV/AIDS community resource map.**

Have students draw a map of their own community identifying agencies or institutions that could be resources for people with HIV/AIDS concerns. They may also design a brochure that incorporates the map, listing and describing each resource.

- **Express feelings about HIV/AIDS through art.**

Have students construct an AIDS quilt or collage, commemorating those who have died of AIDS. Students also can make posters about HIV/AIDS. Display the quilt, collage, or posters in the school or in the community, e.g., at a community center, post office, bank. Offer them as gifts to a community health facility.

- **Raise money to help people with HIV/AIDS.**

Conduct a fund-raising talent show, dance marathon, bake sale, sports event, or auction of AIDS quilts, collages, and posters. (Check with the school principal about how to do so.) Donate money to a community HIV/AIDS project or clinic.

- **Assess society's response to HIV/AIDS.**

Research and critique efforts to control the epidemic over the last decade. What successes and failures have occurred?

- **Invite a guest speaker who is HIV-positive or living with AIDS to class.**

Obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- **Invite a scientist, doctor, or other health provider who can describe the advances in treatment for HIV.**

Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine appropriateness for the grade level. Examine all materials with your principal at least 72 hours prior to the presentation.

- **Learn through interviewing.**

Have students interview someone with expertise in HIV/AIDS-related issues. To prepare, review interviewing techniques and have students practice by interviewing each other. Discuss how to interview with respect, compassion, and empathy.

- **Stage a debate.**

Have students conduct a debate on comprehensive sexual health education. For example: discuss a situation where sexual health education is a part of the health education curriculum for middle and high schools. Some parents believe that educating teens about sexuality sends young people a message that it's okay to have sex; others believe that sexuality is a natural part of every person's development and that students need to be informed about the risks and taught how to protect themselves if and/or when they decide to become sexually active.

- **Debate the issues.**

Have students engage in a formal debate on another topic related to HIV/AIDS.

- **Lobby the legislators.**

Define the term lobby. Have students identify their legislators' names and addresses, and write letters expressing their views on an HIV/AIDS issue. They may write to the President, a senator, a representative, a state assembly member, or a city council member. The letter-writing activity will be especially effective if students first explore legislators' views and voting records on HIV/AIDS-related issues. Their letters can then be tailored to individual legislators. Alternatively, students can write to support or oppose a specific bill that is coming up for vote.

- **Discuss how much of the federal budget should go to HIV/AIDS.**

Have students enact a scenario in which they are members of the Senate Budget Committee. They must decide how to divide tax money to meet the nation's needs. Have students:

- List ten budget categories (e.g., defense; education; housing; highway, bridge, and tunnel construction and repair; development of a national health insurance plan; Social Security; public assistance; HIV/AIDS prevention, treatment, and research; teen pregnancy prevention programs; drug prevention and rehabilitation programs; etc.).
- Begin with a theoretical budget of \$100 million for each category.
- Consider a request by HIV/AIDS activists to increase the HIV/AIDS funding and the reasons for such a request.
- Assign priorities to budget categories, and consider whether and how to increase HIV/AIDS programs' allocated amount.

- **Write about HIV/AIDS.**

Give students opportunities to express thoughts and feelings about HIV/AIDS in writing. For example, students can:

- Write an editorial on an HIV/AIDS social issue recently mentioned in the newspaper.
- Write poems. (See other writing activities in this section.)
- Write short stories or essays.
- Write and produce public service announcements for radio and TV.
- Write reviews of books, films, or TV shows about HIV/AIDS.

- **Create a peer theater program.**

Have students develop theatrical scripts and productions about young people coping with HIV-related decisions and situations. Theatre programs can be performed in classrooms, in an assembly, and perhaps in other schools or community sites as well.

- **Organize volunteer projects.**

With approval from your principal and in accordance with Department of Education policies, arrange for students to volunteer at HIV/AIDS service agencies.

APPENDICES

APPENDIX A:

Student Guide to HIV Antibody Testing

1. Who may wish to get tested?

People who:

- Have been sexually active since their last HIV test, or who have had anal, vaginal, or oral sex and never been tested.
- Are pregnant or have a partner who is pregnant.
- Have recently been diagnosed with another sexually transmitted infection (STI).
- Used drugs in ways that could transmit HIV, for example, using a syringe or other injection equipment that was used by someone else.
- Were born to an HIV-positive mother.

2. If there is no cure for HIV, why get tested?

- If a person has engaged in high-risk behavior but is found not to be infected, he or she can:
 - Learn how to avoid infection or reduce chances of becoming infected.
- If a person is infected with HIV, or HIV positive, he or she can:
 - Receive immediate medical care and treatment, such as antiretroviral medications, as well as other services that can help the HIV infected person live a longer, healthier life. The NYC DOHMH now recommends starting antiretroviral treatment (ART) upon diagnosis, regardless of the person's CD4 count. The recommendation is based on evidence that ART can decrease the amount of virus in a person's blood (viral load). This can improve the health of an HIV-infected person while also reducing the likelihood of transmission from that person to an uninfected partner.
 - Inform sexual partners about any exposure to HIV and the need for HIV testing.
 - Learn how to prevent transmitting HIV to others.

3. How does HIV antibody testing work?

- An EIA/ELISA test processes either blood taken from a vein or oral fluid from the mouth (not saliva but a swab of the inside cheek or gums). If the test detects antibodies to HIV, a follow-up test, such as a Western Blot, is done to confirm the results. The blood or oral fluid specimens are sent to a laboratory for processing. It may take three to ten days for someone to receive their results. In a rapid EIA/ELISA testing option, a small sample of blood or oral fluid is tested for antibodies to HIV. This technology can produce an ELISA test result in twenty minutes. A preliminary positive result must still be confirmed with a Western Blot. A negative ELISA test is very accurate, unless the person tested may have been exposed to HIV within the last 12 weeks, during the "window period."
- There is a window period from the time of infection to the time when antibodies can be detected in the blood or oral fluid. During the window period, a person with an HIV infection could have a negative HIV antibody test. This window period is usually three to twelve weeks.
- For this reason, a person who receives a negative test result can only be certain of its accuracy if he or she:
 - Repeats the HIV test three months after the most recent possible exposure, has not had unprotected anal, vaginal, or oral sex, and has not shared injecting equipment since the time of the first test.

4. Do I have to be tested if I don't want to be tested?

Starting in September 2010, New York State law requires that people ages 13-64 be offered HIV testing while seeking medical services in emergency departments, hospital inpatient settings, or outpatient primary care locations. HIV testing is a voluntary personal choice. Even if a person visits a testing site, he or she can think about the decision to test and can choose not to be tested. A medical provider cannot order or conduct an HIV test without a patient's consent.

5. Where do I go to get tested?

Many agencies and/or organizations provide HIV testing services in New York City. The New York City Department of Health and Mental Hygiene's (DOHMH) STD clinics provide rapid HIV testing free of charge. The clinics' locations can be found at: www.nyc.gov/html/doh/html/std/std2.shtml, or by calling 311. To find other locations for HIV testing, call 311 or visit <http://hivtest.org/>.

6. What is the difference between anonymous and confidential testing?

- New York State law protects the confidentiality and privacy of anyone who has been tested for HIV. In New York, HIV testing is voluntary and may be either anonymous or confidential.
- In anonymous testing, the person who has come for testing does not give his or her name. The person is identified only through the use of a code number. Anonymous testing is only available at select NYC DOHMH test sites.
- In confidential testing, the counselor, personal physician or agency knows the name of the person being tested, and is bound by law to keep the test results confidential. The results are maintained in confidential medical records, and positive results are reported confidentially to the NYC DOHMH.

Although for adults no test result can be revealed to others without the person signing a release form, this is not always true for adolescents, such as youth in foster placement, incarcerated youth, etc. Their parents or guardians may sign a release form on their behalf but without their consent.

Teacher Note: On July 3, 2012, the Food and Drug Administration (FDA) approved a rapid self-administered over-the-counter HIV test kit for individuals ages 17 and over. The test uses oral fluid to check for antibodies to HIV Type 1 and HIV Type 2. The kit can provide an HIV test result within 20 to 40 minutes. A positive result with this test does not mean that an individual is definitely infected with HIV but rather that additional testing should be done in a medical setting to confirm the test result. Additionally, a negative test result does not mean that an individual is definitely not infected with HIV, particularly when an individual may have been exposed within the previous three months.

Recommendations on its use are forthcoming. For more information go to:

<http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/PremarketApprovalsPMAs/ucm310436.htm>

APPENDIX B:

Classroom Teaching Tips

Establishing Classroom Ground Rules

There are several ways to establish classroom ground rules. Ground rules help create a safe and comfortable classroom atmosphere for learning together, solving problems, and communicating feelings and ideas. Three ways to generate classroom ground rules are:

- Preferred: Have the students generate the ground rule list. This process empowers them and gives them ownership of the list. Ask them to think about what is needed to ensure a safe environment where students can feel comfortable discussing challenging and sensitive topics. If students have difficulty coming up with ground rules, or do not come up with a particular ground rule you feel is important, provide prompts or add to the list and ask for consensus.
- Alternative: List ground rules you commonly use in class, then ask students for feedback and any additional ground rules. When a student proposes a new ground rule, ask the rest of the class if they agree to it. If most do, add it to the list.
- Alternative: List ground rules and ask whether all rules are agreeable.

Sample Classroom Ground Rules

The following sample ground rules will help students feel connected with their peers and confident about expressing themselves during classroom discussions and group work.

We will:

1. Listen to questions actively and respect others when they are talking. There are no “stupid” questions.
2. Honor privacy; avoid disclosing private matters or eliciting private information from others. Speak from the third person, e.g., “people say” and “What if someone who....” instead of divulging one’s own or anyone else’s personal experience. Because there can be no guarantee of confidentiality in a classroom, we will never share any confidential information about ourselves or anyone else in a classroom setting.
3. Participate actively in classroom discussions and activities and have the option to “pass.”
4. Use correct terminology at all times during classroom discussions and activities, including role-plays.
5. Ask questions for clarification if confused.
6. Take turns speaking.
7. Use the anonymous classroom “Question Box.”

Teacher Note: It is important to set a ground rule for how classroom questions and discussions will be managed. Do you prefer that students raise their hands so you can call on them? Or would you like students to “pass the microphone” by speaking only when they are holding a designated object, such as a stuffed animal or other safe object. Thus when students have a question or want to share an opinion they ask for the object.

The “Question Box” is optional but recommended. It is a place where students can place anonymous questions they might be fearful or hesitant to ask in class. It also gives teachers time to think about or research answers to challenging questions. To create a Question Box, cut a slot in the lid of a shoebox. It’s nice to decorate the box (e.g., with wrapping paper, newsprint, comic strips, etc.) or ask for a student volunteer to decorate it. Display the Question Box in the classroom and inform students that they can drop anonymous questions in there at any time. If you have space in your classroom for multiple Question Boxes, you can label them accordingly, e.g., Question Box for Period 7, Ms. Smith. To encourage questions, you may wish to distribute index cards periodically to all students and ask each to write a question, fold the card, and place it in the box. Any students who don’t have questions should write “One thing that is important to know about [the topic being covered] is...” Thus all students contribute something to the discussion. It is helpful to tell students a day or so in advance that you will be asking for questions so they can think about what they want to write. Before the next class, sort the questions and consider how you want to handle them. Instead of answering all questions yourself, consider reading some of the questions aloud and asking the class how they would respond.

Classroom Management Strategies for Reinforcing Ground Rules

1. Post the ground rules where students can see them during the entire class period. Use newsprint or large poster paper so that students can refer to the list.
2. Number ground rules so you can refer to them quickly: “Number 7!” This concise reminder saves time and prompts students to check back to the ground rules list.
3. Model the ground rules with the class. For example, ask students to raise sample questions using ground rule #2 for clarification. Be certain that students understand, practice and adhere to using third person statements for all questions and classroom discussions.
4. Adhere to the ground rules consistently. If you don’t, it may be difficult to enforce them later.
5. If ground rules are routinely broken, review the list with the class for understanding. If a student asks an inappropriate question (e.g., one that discloses personal information), allow the student to rephrase. However, if the behavior persists, have a private conversation with the student and follow the school’s ladder of referral in adherence to the *Discipline Code*.
6. Revisit the ground rules occasionally and add any new items to the list as necessary.

How to Host Guest Speakers

Guest speakers bring current events to life by telling students about their experiences, agencies, or programs. They should supplement not supplant your HIV/AIDS lessons. Students get the chance to talk to a person they might not otherwise get to meet, and to gain more insight into the issues they are studying. Guest speakers can be especially valuable during HIV/AIDS instruction. Guest speakers can enrich grade/age/developmentally appropriate instruction by addressing the following topics:

- A sexuality education professional can talk about why abstinence is the best protection against HIV.
- A teenager or adult can tell what it is like to live with HIV/AIDS.
- An HIV/AIDS counselor can report on how people with AIDS and their families cope and can introduce the class to an HIV/AIDS resource in the community.
- An HIV/AIDS activist can describe the process and experience of working for greater HIV/AIDS awareness, advocacy, and resources, and discuss how students can become involved.
- A doctor, nurse, or medical researcher can provide insight into the progress of HIV/AIDS treatment.

Inviting Guest Speakers

Identify and invite speakers by:

- Calling or writing to HIV/AIDS resources. (See Appendix E, “Resources for More Information and/or Counseling.”)
- Visiting HIV/AIDS resources in the school community, such as a clinic, hospital, or HIV/AIDS support group.
- Suggesting people featured in newspapers or magazines, on the Internet, or on TV or radio shows.
- Compiling a list of possible speakers. If possible, involve students in deciding whom to invite.

Teacher Note: Remember to obtain approval from your principal before inviting a guest to speak about HIV/AIDS or related topics. Meet or talk by phone with the guest speaker in advance to determine the appropriateness for the grade level. Examine presentation materials (e.g., outlines, slides, films, videos, brochures, handouts) with your principal at least 72 hours prior to the presentation.

Encourage Students to Participate by...

- Making Phone Calls: When a student calls an organization, hospital, clinic, or other HIV/AIDS resource, instruct him or her to:
 - State briefly, “I am a student at [name of school]. I am calling to request a guest speaker for my class.” Some organizations have an established “speakers program,” while others are not as accustomed to requests for a guest speaker.
 - Be polite but persistent. If you need help finding the right contact person, ask to be connected with the office of the organization’s director.
 - Follow the “five Ws” described below to help guide the conversation.
- Writing an Email or Letter to Guest Speakers: When students write an email or letter inviting a guest to speak to the class, instruct them to remember the “five Ws” of writing:
 - Who: Identify who you are. (“My name is _____. I am a student at _____ school in the ____ grade. My teacher, _____, is teaching us about HIV/AIDS.”)
 - Why: Why are you writing? (“I would like to invite you to speak to our class.”) Why did you choose this speaker? (“You have been a courageous example of how to live with HIV,” or “A representative of your agency can help us understand how an HIV antibody testing site works.”)
 - What: What do you want the speaker to do? What HIV/AIDS topic(s) should the speaker address? (“We would like you to speak about _____, and then answer students’ questions. If you have materials such as handouts, films, etc., please forward them via email at least 72 hours before your presentation so that our faculty advisor can review them.”)
 - When: When do you want the speaker to come? By what date should the speaker respond? (“Our class meets every Wednesday from 1:30 to 2:15 PM. Would you be available to speak to us one Wednesday next month? Please call or email [teacher’s name, phone number, and email address] as soon as possible.”)
 - Where: Type all letters, using school letterhead or including the school’s name, address, and phone number at the top of the page. Use clear email subject lines, e.g., Invitation to Speak at [Name of School]. Carefully proofread and spell-check letters and emails. Copy the principal on all emails or letters.

- Preparing for the Guest Speaker’s Visit:
 - Inform the speaker that you need to review his or her speech and presentation materials (e.g., outlines, slides, films, videos, brochures, handouts) at least 72 hours in advance of the visit, according to school and New York City Department of Education policies. You also need advance notice of any equipment needed (TV/DVD player, computer with LCD projector, etc.). Ask if the speaker needs directions or information about public transportation or parking.
 - Ask students to anticipate what the guest speaker will discuss, and research and prepare questions in advance.

When the Guest Speaker Arrives

Assign a student to greet the speaker at the main office, have the speaker sign the school guest book, and escort him or her to the classroom.

Instruct the class to:

- Listen carefully to the speech and add new questions to those they have already prepared.
- Listen to other students’ questions and the speaker’s answers, so they do not repeat a question that was already asked, and so they can expand upon the discussion.
- Be sensitive to the speaker’s feelings. Even if they disagree with a speaker or find the speaker uninteresting, they should be polite and considerate.

Teacher Note: The teacher should never leave the class unattended and must always be present during the guest speaker’s planned activities. Show the guest speaker the classroom ground rules, and express the expectation that everyone will honor them. For example, correct terminology should be used at all times, including role-plays.

Follow-Up

- Discuss the presentation and have students offer their opinions about what the speaker said.
- Explain anything that was not clear.
- Have students write a thank-you letter or email mentioning one or two things in particular that impressed them about the presentation.
- Consider inviting the speaker to return. Sometimes it is a good idea to invite a speaker back to discuss how things have changed in the intervening time, or to respond to specific questions.

Teacher Note: While these Classroom Teaching Tips are primarily for teachers’ use, they may also be photocopied for students’ use in student-peer leadership activities, projects involving student presentations, small-group work, debates, panel discussions, and special projects, especially those involving guest speakers and role-plays.

How to Brainstorm

Brainstorming = Letting Your Brain Rain Ideas

Brainstorming is a great way to tackle a problem by coming up with lots of possible solutions. Brainstorming frees the mind to be creative by letting all ideas come out, whether they seem sensible or silly, offbeat or predictable. During brainstorming, write down all the ideas without judging them, and talk about them later.

Too many ideas are killed by the words, “it can’t work.” Brainstorming takes students into the world of the imagination, where anything is possible.

How to Organize into Groups

Some activities require dividing students into two or more groups. Instead of dividing students by gender, try the following methods:

- Count off by twos, threes, or fours.
- Choose group assignments from a hat. On slips of paper write “Group 1,” “Group 2,” and so on. Or use stickers or drawings.
- Divide the class by alphabet. Form two groups of last names that begin with A-K and L-Z, respectively, or divide into smaller groups.
- Divide by birthday seasons to get four groups (1. December/January/February; 2. March/April/May; 3. June/July/August; 4. September/October/November).
- Divide by what color people are wearing (something blue, something red, both, or neither).
- Divide by odd-month and even-month birthdays. To form four groups, further divide by birthdays on odd and even days.
- Use a deck of cards to form four groups (hearts, spades, clubs, and diamonds). Or assemble by Aces, Jacks, Queens, and Kings.

How to Use Role-Plays in the Classroom

Prepare the Participants for Role-Plays

- State and explain the role-play goals and objectives.
- Align role-play ground rules to classroom discussion ground rules so that role-plays are done in a safe and supportive setting. For example, add to ground rules, “We will respect each other’s personal space while playing an assigned character or role, and refrain from physical contact.”
- Demonstrate role-play techniques and skills. For example, explain cues such as, “curtain, action, cut, freeze, rewind, pause, fast forward, etc.”
- Assign scenarios to groups and/or have students create role-play scenarios. Screen and approve the students’ scenarios, or request modifications.
- Specify that role-plays should culminate in a positive, healthy resolution.
- Assign roles for the participants.
- Give “audience” members a way to record their observations during the role-play. For example, the observers can complete a rubric on specific skills, interactions or responses to look for, and then use that to provide feedback after the role-play. Have students write questions they want to ask the actors at the end of the role-play, or have them ask questions of the characters as actors stay “in role.”
- Allow participants to practice their role-plays.
- Set a time limit. Role-plays should be brief to allow time for processing and feedback, and to assure that other groups can demonstrate their role-plays. For example, allow students four to seven minutes to demonstrate role-plays, plus three to five minutes for processing.

Implement the Role-Plays

- Set the scene and arrange the classroom and chairs so that everyone can see and hear the role-play.
- Involve as many students as possible. For example, have one student act as “narrator” to set the scene before the role-play, and have observers take notes as described above.
- Review communication goals and make certain that the actors are clear about their roles. For example, review delay tactics/refusal skills, using “I” messages, using assertive language, etc.
- Remind students that role-play is playing a character. Actors should use fictitious names for characters, not their own names or the names of anyone in the class.
- Begin the role-play with the word “curtain” (referring to a curtain rising on a stage) and say “end” when the role-play is over. Using these words will establish the role-play’s boundaries.
- Stop the role-play at any point; discuss and restart, if necessary. For example, freeze the role-play and model some skills for students, ask the characters to take a different path, or ask for a volunteer from the group to carry on where a character left off.
- End the role-play at the set time limit to allow time for processing/debriefing.
- Have students shake arms and legs after the role-play as if to “shake off the character” symbolically.

Process the Role-Plays

During the processing phase or class discussion, refer to characters in the third person. For example, ask actors how their characters felt or how they felt playing the character, rather than asking, “How did you feel?” In addition, ask the observers to describe what occurred during the role-play, assess the interaction between the characters, list learning points, and ask open questions to the whole class. First have observers and actors focus on what went well during the role-play. Elicit positive highlights and hold your own comments for after the actors and observers have expressed their feedback.

Sample general classroom processing questions are as follows:

Teacher Note: Role-playing is an effective way to help students internalize and express concepts of risk reduction. Ask another teacher for assistance if you are not comfortable or experienced with facilitating role-plays.

- Ask the actors and other class members such questions as:
 - What worked well in this role-play?
 - Which statements or strategies were most persuasive?
 - What are some other ways the characters could have responded?
 - What effect might additional characters have on this scene, e.g., parents, teachers, friends, police officers, younger children, community members?
 - What alternative choices could the characters have made?
- In addition to class discussion, other ways to follow up on role-plays are:
 - As an in-class activity or as a homework assignment, have students write a “sequel” to the role-play. This might be in the form of a paragraph, a dialogue involving the same and/or new characters, a soliloquy for one of the characters, a short story, a “news interview” of one or more characters by a fictitious reporter, etc.
 - With the authors’ permission, share the “sequels” with the class, e.g., stories can be read aloud, dialogues acted out, etc. Follow up with class discussion.
 - In subsequent class sessions, have students suggest other situations involving the characters; the same actors can recreate their roles, or other students can be given a chance to perform.

THE DECISION-MAKING PROCESS		
IDENTIFY THE DECISION TO BE MADE.		
LIST THE POSSIBLE CHOICES.		
Option 1:		
Option 2:		
Option 3:		
EVALUATE THE CONSEQUENCES.		
	Positive Consequences	Negative Consequences
Option 1:		
Option 2:		
Option 3:		
MAKE A CHOICE.		
EVALUATE YOUR CHOICE.		

APPENDIX C:

“The Condom Challenge” Activities: Male and Female

**FOR HIGH SCHOOL STUDENTS ONLY (GRADES 9-12);
NOT FOR NINTH-GRADE STUDENTS IN JUNIOR HIGH SCHOOLS**

Teacher Note: “Opt out prevention” Activity: This activity qualifies as a part of an “opt out prevention” lesson. Parents or legal guardians should be advised that they have the right to remove their children from “opt out” prevention lessons. For more information, see “Guidance for Teachers and Administrators” in the Introductory Section and Appendix I for sample parent notification letters.

Condom demonstration policy: This activity teaches the steps of correct male and female condom use; it is not a condom demonstration. Condom demonstrations are not to be done in classrooms; however they do take place in the Health Resource Room Condom Availability Programs (CAP). Every high school (with a few exceptions) is required to have a CAP. Find out when yours is open and share that information with your students. Let them know that at CAP, they can receive a condom demonstration, free condoms, lubricant and female condoms, as well as receive referrals to health care, if needed. For more information, go to

<http://schools.nyc.gov/Offices/Health/OtherHealthForms/HealthResource.htm>.

Note the CAP opt-out form is different from the HIV parent notification form. Some parents may opt their children out of CAP and not out of the HIV “opt out” prevention lessons. The CAP staff is required to check a student’s eligibility before making condoms available.

The activity can help reinforce students’ knowledge and skills of the correct way to use a condom. Students will learn to list the correct steps for male and female condom use, understand that consistent and correct use of latex or polyurethane condoms can reduce, but not eliminate the risk of HIV infection, clarify the differences between the male and female condom, and explain why it is important to avoid HIV infection. The teacher will facilitate the activity and help students to understand risk reduction strategies and to develop the decision-making and communication skills to use them. Decision making and communication skills, like all skills, improve with practice.

Teacher Note: If time permits, provide classroom time to implement the “Condom Challenge” activity to reinforce an “Opt Out” prevention lesson. For example, the activity can accompany the following lessons: Grade 9, Lesson 6; Grade 10, Lesson 5; Grade 11, Lesson 4; and Grade 12, Lesson 5.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

THE CONDOM CHALLENGE: STEPS FOR CORRECT MALE CONDOM USE

Teacher Note: The following activity is only for high school students. Do not use this activity with ninth graders in middle schools.

Common Condoms: Latex condoms are made from rubber (hence, also called “rubbers”). Latex condoms can only be used with water-based lubricants or silicone-based lubricants. They should not be used with oil-based lubricants such as petroleum jelly. Polyurethane condoms are made from plastic and can be used with any type of lubricant. These condoms are a good alternative to latex condoms, especially for anyone who is allergic to latex (or whose partner is allergic to latex).

Directions: To complete the male “Condom Challenge,” divide students into groups and give each group a scrambled set of the condom steps (see below), printed on paper and cut into individual steps or written on index cards. Challenge your teams to arrange the condom steps in the right order and see which team gets it right first. Alternatively, ask groups of students or volunteers to each take one of the steps (written on large paper) and physically line up the proper order.

Teacher Note: The following tips should be reviewed with students after completing the Condom Challenge. The bullet points can be posted in the health resource room as the “Condom Use Rules.”

- Use a new condom from “start to finish” with each act of anal, vaginal, or oral sex.
- Never use two condoms at the same time.
- Never use any condom more than once.
- Condoms should be stored in a cool dry place under 80 degrees (not wallets, or near heaters/direct sunlight, and back pockets).
- Never use a male condom with a female condom.
- Open the condom package carefully to avoid damaging it with fingernails, teeth, or other sharp objects.
- Check to see which way the condom unrolls. If condom is placed on the penis incorrectly it will not roll down smoothly. Discard it and get a new one.
- Put on the condom before the penis comes in contact with the partner’s anus, vagina or mouth.
- Never use oil-based lubricants like cold cream, mineral oil, cooking oil, petroleum jelly, body lotions, massage oil, or baby oil that can damage latex condoms. Only use water-based lubricants (i.e., K-Y Jelly).
- Check the expiration date or manufacture date on the box or individual package of condoms (i.e., expiration dates are marked as “Exp;” and the manufacture date is marked as “MFG.”)
- Never use a condom that shows signs of brittleness, stickiness, or discoloration.
- Smooth air bubbles; make sure enough space is in reservoir for ejaculation.

**Buy a latex or polyurethane condom or obtain a free condom from the Health Resource Room.
Check the expiration date.**

**Get a water-based lubricant such as K-Y Jelly.
(Also available in the Health Resource Room.)**

**Check to make sure the condom package has an air bubble.
(If there is no air bubble, throw it out and get another condom.)
Check the expiration date.**

**Carefully tear open package where the ridges are and remove condom.
To prevent breakage, do not unwrap package
with fingernails, jewelry or teeth.**

**Check to see which way the condom unrolls.
(If condom is placed on incorrectly it will not roll down smoothly.
Do not flip condom over. Discard it and get a new one.)**

**Gently squeeze the tip of the condom between your thumb and index finger.
This presses out any trapped air, leaving space for semen.**

Place the condom over the tip of the erect penis.

**Unroll the condom onto the erect penis all the way to the base,
leaving a space at the tip for semen, and smoothing out air bubbles
to prevent breakage.**

**After ejaculation, hold onto the base of the condom
and carefully withdraw the penis.**

**Wrap the condom in a tissue or piece of paper and discard it in the trash.
(Do not flush or reuse condom.)**

THE CONDOM CHALLENGE: STEPS FOR CORRECT FEMALE CONDOM USE

The activity can help reinforce students' knowledge of the correct way to use a female condom.

Teacher Note: The following activity is only for high school students. Do not use this activity with ninth graders in middle schools.

Directions: To complete the female "Condom Challenge," divide students into groups and give each group a scrambled set of the condom steps, printed on paper and cut into individual steps or written on index cards. Challenge your teams to arrange the condom steps in the right order and see which team gets it right first. Alternatively, ask groups of students or volunteers to each take one of the steps (written on large paper) and physically line up the proper order.

Teacher Note: Most female condoms (FC2) or 2nd generation female condoms are now made from synthetic nitrile. They are stronger and less expensive than their predecessors, which were made from polyurethane.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms or synthetic nitrile female condoms to prevent HIV and other STDs.

Teacher Note: The following tips should be reviewed with students after completing the "Condom Challenge."

- Use a new condom from "start to finish" with each act of vaginal sex.
- Always store condoms in a cool, dry place.
- Avoid storing condoms in a pocket or wallet.
- Never use two condoms at the same time.
- Never use any condom more than once.
- Never use a male condom with a female condom.
- Open the condom package carefully to avoid damaging it with fingernails, teeth, or other sharp objects.
- Check the expiration date or manufacture date on the box or individual package of condoms (i.e., expiration dates are marked as "Exp;" and the manufacture date is marked as "MFG").
- Insert the female condom up to eight hours before sexual intercourse.

**Buy a synthetic nitrile female condom (FC2)
or obtain one free from the Health Resource Room.
Check the expiration date.**

**Remove condom from package, being careful
not to tear it with fingernails, jewelry or teeth.**

**Choose a comfortable position to insert condom inside the vagina.
Squat, raise one leg, sit, or lie down.**

**Squeeze the inner ring (closed end) of the female condom between
your thumb and index finger. Gently insert it into the vagina.
The female condom can be inserted up to eight hours
before sexual intercourse.**

Use a finger to push the inner ring as far as it will go. It should sit above your pubic bone and feel comfortable.

Make sure the outer ring is outside the vagina and the female condom is not twisted. If the condom is twisted, remove it and reinsert it.

**When ready to have intercourse add a few drops of lubricant to the penis or the inside of the female condom.
Remember: do not use a male condom with a female condom.**

Make sure the penis enters the center of the outside ring. If the penis is inserted underneath or alongside the condom, withdraw it immediately.

After ejaculation, withdraw the penis and then gently remove the female condom by twisting the outer ring (to keep the semen inside) and gently pulling the condom out.

Wrap the condom in a tissue or piece of paper and discard it in the trash. (Do not flush or reuse condom.)

Condom Demonstration Guidance for Health Resource Room

(NOT FOR USE IN THE CLASSROOM)

FOR HIGH SCHOOL STUDENTS ONLY (GRADES 9-12);

NOT FOR NINTH-GRADE STUDENTS IN JUNIOR HIGH SCHOOLS

Teacher Note: Condom demonstrations are to be done for high school students only (not for ninth-graders in junior high schools). Parents or legal guardians and students should be advised that they have the right to ask that their child not participate in the lessons dealing with methods of prevention, including this condom demonstration. Condom demonstrations are not to be done in classrooms; however they are done in the Condom Availability Programs (CAP), Health Resource Room. For more information, go to <http://schools.nyc.gov/Offices/Health/OtherHealthForms/HealthResource.htm>.

Teacher Note: Every high school (with a few exceptions) is required to have a CAP. Find out when yours is open and share that information with your students. Let them know that at CAP, they can be given a condom demonstration; receive free condoms, lubricant and female condoms; and that they can receive referrals to health care, if needed. Note the CAP opt-out form is different from the HIV parent notification form for teaching the HIV/AIDS lessons. Some parents may opt their children out of CAP. The CAP staff is required to check a student's eligibility before making condoms available.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

How to Demonstrate Correct Male Condom Use

The male condom is a sheath used to cover the penis during sexual intercourse in order to prevent the transmission of preseminal fluid, semen, blood, or vaginal fluids. Condoms are barrier methods used to protect against infection with HIV or other sexually transmitted infections (STIs). They also help to prevent pregnancy. Condoms come in a variety of materials. Latex is a material that prevents passage of HIV and does not break as easily as other materials. People who are allergic to latex should use polyurethane condoms instead. Lambskin condoms should not be used as the skin has small pores through which HIV or the germs that cause other STIs can pass.

Correct male condom use means:

- Using a new condom from “start to finish” with each act of anal, vaginal, or oral sex.
- Never using two condoms at the same time.
- Never using a condom more than once.
- Checking to see which way the condom unrolls. If condom is placed on incorrectly it will not roll down smoothly. Discard it and get a new one.
- Condoms should be stored in a cool dry place under 80 degrees (not wallets, or near heaters/direct sunlight, and back pockets).
- Never using a male condom with a female condom.
- Opening the condom package carefully to avoid damaging it with fingernails, teeth, or other sharp objects.
- Putting on a condom before the penis comes in contact with the partner's anus, vagina or mouth.

- Never using an oil-based lubricant like cold cream, mineral oil, cooking oil, petroleum jelly, body lotions, massage oil, or baby oil that can damage latex condoms. Only use water-based lubricants (i.e., K-Y Jelly).
- Checking the expiration date or manufacture date on the box or individual package of condoms (i.e., expiration dates are marked as “Exp;” and the manufacture date is marked as “MFG”).
- Never using a condom that shows signs of brittleness, stickiness, or discoloration.
- Smoothing air bubbles, and making sure enough space is in reservoir for ejaculation (preseminal fluid and semen).

Male Condom Demonstration: Steps to Correct Male Condom Use

- Check the expiration date or manufacture date on the box or package. Open the condom along the side of the packet where the ridge is, so that it is easier to open. Tear open the package carefully. Do not use fingernails, teeth, or anything that can damage the condom.
- Remove latex or polyurethane condom from the package. Show students how a condom properly unrolls. If it is placed on the penis inside out, preseminal fluid and semen may be on the tip of the condom. They should discard the condom and start with a new one.
- Stretch a condom to illustrate its elasticity and that “one size fits all.” Please be sure to tell students that condoms should not be stretched out before actual use—this activity is strictly for demonstration purposes only. Emphasize that condoms are strong, but must be handled carefully, since long or sharp fingernails, jewelry or teeth, can damage them and compromise their effectiveness.
- Show how to put on a condom by rolling it over two fingers of your hand or by using an anatomical model. Squeeze the reservoir tip to eliminate any air pockets and leave space for semen. Unroll the condom all the way down the base of the fingers and smooth out any air bubbles.

Teacher Note: Make sure that all students (including students with learning disabilities) understand that a condom goes on the erect penis, and not on the fingers as demonstrated.

- Equally important, show how to remove the condom. After ejaculation, a man should withdraw his penis while it is still erect. He must hold onto the base of the condom so it does not slip off or leak. Keep penis and condom away from partner when taking the condom off. Wrap the condom in a tissue or a piece of paper, and discard properly into a trash can. Do not flush the condom down the toilet. Never use a condom more than once.
- Encourage the student to demonstrate proper condom use by following the steps using his/her fingers or an anatomical model.

How to Demonstrate Correct Female Condom Use

The female condom (FC2) is a pouch made of synthetic nitrile that loosely lines the vagina and covers the outside vaginal area. It has thin, flexible rings at either end. The inner ring anchors the female condom behind the pubic bone and the outer ring lies outside of the vagina. It comes pre-lubricated (silicone-based) and can be inserted hours before intercourse, without male participation. The female condom has been reported as having similar rates of effectiveness in preventing STIs and pregnancy as the male condom when used correctly and consistently. FC2 is the name of the second generation of female condom made of synthetic nitrile, which appears to be as effective as its much pricier polyurethane predecessor. Female condoms are available throughout New York City and through the NYCDOE’s high school condom availability programs (CAP). Teachers may link to the CAP website for further information about female condoms. <http://www.health.ny.gov/publications/9571.pdf>

Correct female condom use means:

- Using a new condom from “start to finish” with each act of vaginal sex.
- Always storing the condom in a cool, dry place.
- Practicing inserting the female condom. This helps the user feel more comfortable and confident.
- Checking the expiration date or manufacture date on the box or individual package of condoms (i.e., expiration dates are marked as “Exp”; and the manufacture date is marked as “MFG”).
- Opening the condom package carefully to avoid damaging it with fingernails, teeth, or other sharp objects.
- Inserting the female condom before there is any contact with the penis.
- Never using a female condom with a male condom. This causes friction and reduces the optimal effectiveness of both condoms.
- Never reusing a condom.

Female Condom Demonstration: Steps to Correct Female Condom Use

1. Check the expiration date or manufacture date on the box or package. Tear open the package carefully along the notched edge. Do not use fingernails, teeth, or anything that can damage the condom.
2. Remove the condom from the package. Show students how the female condom unfolds and demonstrate that the condom is long and narrow, and has an open-end (outer ring) and a closed-end (inner ring). Explain that the FC2 condoms are pre-lubricated with silicone and that any type of additional lubricant can be added to the inside of the condom prior to insertion.
3. Squeeze the inner (closed-end) ring between your thumb and /index finger (or middle finger). Show students how the inner ring of the condom is held prior to insertion. Explain that it’s easiest to insert if sitting, squatting, or lying down in a comfortable position; it is similar to inserting a tampon.
4. Explain that the inner ring is inserted into the vagina as far as possible. Next, show by inserting the index or middle finger inside the pouch, how the inner ring, has to be pushed further into the vagina. Explain that this becomes easier with practice.
5. Explain that the sheath must not be twisted. The open-ended (outer ring) should rest outside of the vaginal opening. Tell students to be careful to guide the penis through the outer ring into the pouch, not outside it.
6. Show how to remove the condom by twisting the outer ring to seal in the fluid and pulling it out gently. Explain that preseminal fluid and semen will be inside of the pouch; therefore carefully removing the condom is important.
7. Tell students to place the used condom in a tissue or in the empty package and throw it in the trash, not the toilet.

Teacher Note: Consider implementing the “Condom Challenge” activity in Appendix C to reinforce correct use of male and female condoms. Condom demonstrations are not to be done in classrooms; they are done in the Condom Availability Program, CAP, housed in the Health Resource Room, where students can also get free condoms.

Teacher Note: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

Teacher Note: It must be stressed that abstinence from all forms of sexual intercourse is the only 100 percent effective and most appropriate way for young people to eliminate their risk of HIV and pregnancy. They need to know that it is possible for them to break the chain of HIV infection by taking personal responsibility for their sexual behavior. Impress upon students that the best and healthiest choice for an uninfected couple is to delay sexual intercourse until ready for a mutually faithful, lifelong relationship. While reduced risk is better than high risk, no risk is the best choice for optimal health outcomes.

APPENDIX D:

Teachers' Glossary*

Abstinence: Refraining from an activity, often used in reference to any type of sexual intercourse and/or drug/alcohol use.

Acquired Immune Deficiency Syndrome (AIDS): The most advanced phase of infection with HIV (human immunodeficiency virus) in which the immune system is weakened. The person becomes more susceptible to a variety of infections (called opportunistic infections) and other conditions such as cancer. A diagnosis of AIDS is made based on clinical criteria and/or the results of blood tests. Specifically, AIDS is diagnosed when a person infected with HIV has a CD4 count less than 200 cells/mm³ or has an AIDS-defining condition.

Acute Human immunodeficiency virus (HIV) Infection (AHI): is a highly infectious phase of disease that lasts approximately 2 months after infection, and usually has no identifiable symptoms (although it sometimes causes flu-like symptoms). AHI contributes disproportionately to HIV transmission because rapid HIV replication can create a spike in viral load, increasing infectiousness. During this time, a typical HIV antibody screening test will be negative.

Addiction: Habitual/compulsive use of a substance (like prescription or illicit drugs) that continues even though it is causing the addicted person physical, psychological, or social harm.

AIDS-defining condition/illness: One of 26 conditions or diseases listed by the U.S. Centers for Disease Control and Prevention (CDC) whose occurrence, together with evidence of HIV infection, indicates a person has progressed to AIDS (see Acquired Immune Deficiency Syndrome). Among these conditions are certain pneumonias, cancers, brain and nerve diseases, and AIDS wasting syndrome.

AIDS Drug Assistance Program (ADAP): Funded by federal grants to the states, it allows people without insurance to afford the most up-to-date drugs to treat HIV infection.

AIDS wasting syndrome: The involuntary weight loss of 10 percent of baseline body weight plus either chronic diarrhea (two loose stools per day for more than 30 days) or chronic weakness and documented fever (for 30 days or more, intermittent or constant) when in the absence of a concurrent illness or condition other than HIV infection that would explain the findings. With the advances in medications for HIV/AIDS, AIDS wasting syndrome is not currently common in the United States, but it is still a major concern in developing countries.

Airborne pathogen: An infectious agent that is carried by or through the air. Disease transmission occurs through the lungs after breathing in the agent. Examples include measles and tuberculosis.

Anal sex: A type of sexual intercourse in which the penis is inserted into the partner's anus. Also see Oral sex and Vaginal sex.

Anonymous HIV test: A test for HIV where only a number identifies the person being tested; the person's name is not placed in any records of the test or in any test results, and no one will ever know the name of the person being tested. Most people receive a confidential HIV test.

Anterograde amnesia: See Blackout

Antibodies: Substances in the blood produced by the body's immune system to identify and protect the body against organisms or toxins that may be harmful to the body. In most cases, a person who is infected with HIV will develop antibodies within twelve weeks of exposure.

Antigen: Any molecule that stimulates the production of an immune response (either antibodies, or sensitized cells manufactured as a consequence of the immune response) after it enters the body.

Antiretroviral therapy (abbreviated as ART): Treatment with drugs designed to control HIV. Antiretroviral therapy often uses three or more drugs in combination (called HAART, or highly active antiretroviral therapy), each of which has a slightly different action against HIV. This form of treatment has been very successful in preventing opportunistic infections, and enabling people infected with HIV to lead longer, healthier lives in which HIV-infection is a manageable, long-term (chronic) illness. Because ART is successful in reducing the amount of virus in the blood (viral load), it has been successful in reducing the possibility that an infected person will transmit HIV to sexual or drug use partners, or that an HIV-infected pregnant or breastfeeding woman will transmit HIV to her fetus or child.

Antiretroviral: Means “against retrovirus”; HIV is a retrovirus. An antiretroviral is a drug that controls the retrovirus.

Antiviral: Means “against virus”; drugs that destroy or weaken a virus.

Asymptomatic: The condition of having no visible symptoms of an illness (such as HIV infection), even though an individual has that illness. The only way a person who is asymptomatic will know if he or she has HIV is to take an HIV test.

Bacteria: A group of microscopic organisms that is responsible for decay, fermentation, nitrogen fixation, and many plant and animal diseases. Some opportunistic infections are caused by bacteria.

B-cells: White blood cells that produce antibodies.

Barrier method: A device that prevents the exchange of body fluids during sexual intercourse. Condoms are a barrier method used to prevent semen from entering the partner’s body and to prevent the partner’s body fluids from entering the penis through the urethra. Condoms, made of latex or polyurethane, and female condoms (FC2), made of synthetic nitrile, are the most effective barriers against HIV. Dental dams are a barrier method for risk associated with cunnilingus.

Bisexual: A person who is attracted physically, sexually, romantically, and emotionally to both males and females.

Blackout (Anterograde amnesia): An interval of time for which a person cannot recall key details of events, or even entire events. It is a period of amnesia. Large quantities of alcohol, especially when consumed quickly and on an empty stomach, can produce a blackout. Certain drugs can also have this consequence. (See Rohypnol.)

Bloodborne pathogen: Microorganisms that are present in human blood and can cause disease in humans. Viruses such as hepatitis B, hepatitis C, and HIV are examples. Some pathogens can also be transmitted by other body fluids, such as semen and vaginal fluids.

Body fluids: Fluids found in the human body, including blood, semen, preseminal fluid (also known by the slang “pre-cum”), vaginal fluids, menstrual blood, breast milk, urine, saliva, sputum, and tears. Blood, semen, preseminal fluid, vaginal fluids, menstrual blood, and breast milk can transmit HIV from an infected person, although they do not always do so. HIV cannot be transmitted through other body fluids such as urine, saliva, sputum, or tears unless they contain blood.

Bone marrow: A soft, highly vascular tissue that occupies the cavities of most bones. It occurs in two forms: (a) a whitish or yellowish bone marrow consisting chiefly of fat cells and predominating in the cavities of the long bones; and (b) a reddish bone marrow that is the primary location for red blood cell formation and for the formation of lymphocytes, which are a crucial part of the body’s immune response.

Carrier: A person who harbors a specific infectious agent, in the absence of clinical disease (i.e., is not visibly ill with the infection), and who serves as a potential source of infection for other people.

Casual contact: The usual daily interaction between people at work, in school, in social situations, or at home. HIV cannot be transmitted through casual contact.

CD4 cells: See T-cells.

CD4 count: The number of CD4 or T-cells in a cubic millimeter of blood. In healthy people it is usually between 500 and 1500 cells.

CDC (U.S. Centers for Disease Control and Prevention): A federal agency that is part of the United States Department of Health and Human Services. The CDC develops and applies disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

Cervix: The narrow lower outer end of the uterus; the upper end of the vagina.

Cilia: Tiny hair-like structures that cover some cells. In the nose and ears, cilia catch some pathogens and “sweep” them back out of the body.

Communicable disease: A disease that can be transmitted directly or indirectly from one person to another. It is caused by bacteria, viruses, fungi and other organisms.

Community-based organization (CBO): A service organization that provides social services at the local level, primarily to members of a specific community. There are many community-based AIDS Service Organizations (ASOs) in New York City.

Condom: A barrier device used to cover the penis during sexual intercourse in order to prevent the transmission of preseminal fluid, semen, blood, or vaginal fluids. Use of latex or polyurethane condoms is a method to protect against infection with HIV or other sexually transmitted infections (STIs). They also help to prevent pregnancy. Lambskin condoms should not be used, as the skin has small pores through which HIV or the germs that cause other STIs can pass. Also see Female Condoms (FC2).

Condom Availability Program: See Health Resource Room.

Confidential HIV test: An HIV test in which a record of the test and of the results is placed in the person’s medical chart. If the test is positive for HIV, then the medical provider must report that case of HIV to the New York City Department of Health and Mental Hygiene for surveillance purposes. The identity of all people who test positive for HIV is maintained under strict privacy regulations.

Confirmatory test: A highly specific test that detects the presence of HIV antibodies. It is used to confirm the positive results of a previously administered HIV screening test. The most commonly used confirmatory HIV test is the Western Blot. Now NAAT tests that detect the virus itself (antigen tests) can also be used to confirm the presence of HIV.

Contagious: Transmissible by direct or casual contact. Certain viruses (such as the ones that cause the common cold) and most kinds of influenza (the virus that causes the flu) are very contagious. HIV is not very contagious, although it is transmissible under certain specific circumstances.

Dental Dam: A thin sheet of latex rubber, originally used in dentistry, which can be placed over the vulva or anus to protect against the transmission of HIV and other STDs. See Oral sex.

Diabetes: A condition caused by an imbalance of the hormone insulin which controls body glucose. Type 1 diabetes occurs because the insulin-producing cells of the pancreas are destroyed by the immune system. People with type 1 diabetes produce no insulin and must use insulin injections to control their blood glucose.

Drugs of abuse: Substances that are capable of producing addiction. They include both legal drugs (both prescription and over-the-counter medications) and illegal drugs (that cannot be obtained through legal means or for legitimate medical purposes).

Dual protection: The NYC Health Department recommends that for maximum protection against unwanted pregnancy, females who have vaginal sex should use a hormonal birth control method in addition to using latex or polyurethane condoms to prevent HIV and other STDs.

EIA/ELISA test: The Enzyme Immune Assay/Enzyme-Linked Immunosorbent Assay test detects HIV antibodies. This is the most common form of testing for HIV. However, because the EIA/ELISA it is not very specific, a positive result must always be followed by a confirmatory test (most often the Western Blot Test) to ensure that the positive result is not a false positive. Also, because there is usually a three-week to three-month lag time between infection with HIV and the production of HIV antibodies (the “window period”), a person may test negative for HIV antibodies but still be infected with HIV. Therefore, it is strongly urged that a person who obtains a negative EIA/ELISA test result who suspects recent exposure to HIV be tested for acute infection using NAAT, which detects the presence of the virus itself (and not the antibodies produced by the body). If NAAT testing is not possible, the person should avoid risk behaviors and repeat the ELISA test in 3 months.

Endocytosis: The process by which the cells of the body engulf and absorb molecules.

Epidemic: An outbreak of an infectious disease that spreads widely and rapidly.

False negative: A negative result from an HIV antibody test (rapid or EIA/ELISA) that falsely indicates that the person is not HIV-positive when he or she actually is. False negatives are rare, but do occur.

False positive: A positive result from the HIV antibody test (rapid or EIA/ELISA) that falsely indicates that the person does have HIV when, in fact, he or she does not. False positives are rare, but do occur, so HIV antibody tests must be confirmed with a Western Blot or other confirmatory test.

FC2 (Female condom, 2nd generation): A female condom made of synthetic nitrile, a stronger, less expensive alternative to the original polyurethane female condoms. Female condoms are inserted into the vagina up to 8 hours before vaginal intercourse to help prevent HIV, STIs and pregnancy. They should not be used in combination with a male condom.

Fetus: An organism that develops from an embryo (fertilized egg) at the end of about seven weeks of pregnancy and receives nourishment through the placenta (a vascular organ that joins the woman to the fetus and provides oxygen, water, and nutrients from the woman’s blood).

Flunitrazepam: See Rohypnol.

Fourth generation HIV test: Combination antibody/antigen test approved by the FDA in 2010 that can detect HIV earlier than antibody testing alone.

Fungus (plural fungi): A parasitic plant lacking chlorophyll, leaves, true stems, and roots. A fungus reproduces primarily by forming spores. Fungi include molds, mildews, mushrooms, and yeasts.

Gay: An acceptable, everyday term used to refer to a person who is physically, emotionally, romantically, and sexually attracted to people of the same sex. “Gay” usually refers to men, but is sometimes used as an umbrella term for lesbian, gay, bisexual, and transgender people, as in “the gay community.”

Gender: An individual’s internal and external sense of him/herself as a male or female. Gender is NOT necessarily the same as “sex” (see below). Man, woman, transgender, boy, and girl are all examples of genders.

Gender identity: How one thinks of oneself relative to male or female, which may not correspond to the person's designated sex at birth.

Gender expression: A person's presentation of characteristics and behaviors that are socially defined as either masculine, feminine, or neutral, such as dress and mannerisms.

Gender role: The collection of social expectations, indicated by such factors as behavior and dress, associated with one's biological sex, sometimes referred to as "masculinity" and "femininity."

HAART: Highly active antiretroviral therapy, now commonly referred to as ART (see Antiretroviral therapy).

Harm reduction: Actions designed to reduce (rather than eliminate) the harm to oneself or others in health-risk situations, such as substance use or certain sexual behaviors that put someone at risk for possible HIV transmission/acquisition. For example, while it is preferable for injection drug users to enter treatment programs to stop using drugs, needle exchange programs enable injection drug users who have not yet entered treatment programs to avoid sharing needles, thus reducing the harm from their injection drug use. (Sharing needles that contain HIV-infected blood is a highly efficient mode of HIV transmission.)

Health Resource Room: High schools in New York State are mandated to make condoms available to students. NYC high school health resource rooms house the Condom Availability Programs, where trained staff makes condoms and condom demonstrations available to students. Students can also receive information about a variety of health issues and request referrals to health care.

Hepatitis: Viral infections that affect the liver. See Appendix G: Information on hepatitis A, B, and C.

Heterosexual: A term used to refer to a person who is attracted physically, sexually, romantically, and emotionally to people of the opposite sex and/or gender, sometimes referred to as "straight."

HIV: Human Immunodeficiency Virus. HIV is a retrovirus that attacks the body's immune system, making infected people potentially vulnerable to other infections and diseases. If untreated with antiretroviral medications, HIV can progress to AIDS (see above). People with either HIV or AIDS can lead healthy lives if they receive ART and appropriate routine medical care.

HIV antibody test: The most common test used to diagnose HIV infection. It does not test for the presence of HIV, but for the presence of antibodies against the virus. The test can be conducted with a blood sample or oral fluid (cheek or gum swab). Urine tests are also available but are not as effective at detecting antibodies. Typical antibody test results are available in about a week; rapid HIV antibody test results are available within half an hour. In July 2012, the FDA approved the first over-the-counter home HIV test kit. See also EIA/ELISA.

HIV antigen test: (also known as nucleic acid amplification testing (NAAT) or (DNA or RNA tests) are tests that detect the presence of the HIV virus itself. HIV antigen tests can detect the presence of acute HIV infection within days (instead of weeks of infection for antibody testing) See window period, viral load.

HIV-infected or HIV-positive: A term used to refer to a person who has contracted HIV and has it present in his/her blood.

HIV life cycle: A series of cellular changes that result in new HIV reproduction.

Homeopathic: A complementary disease treatment system. Products used in homeopathy treat disease with minute doses of drugs that would produce symptoms in a healthy person similar to those of a disease.

Homophobia: Fear and/or hatred of lesbian, gay, bisexual, and/or transgender people or those who are perceived to be lesbian, gay, bisexual, or transgender.

Homosexual: A person who is physically, sexually, romantically, and emotionally attracted to people of the same sex and/or gender. This term is considered clinical; “gay” and “lesbian” are more common and appropriate everyday terms.

Hormones: Chemical substances produced in the body and carried by the bloodstream to another part of the body to effect physiological activity, such as growth or metabolism.

Host: Any person or other organism in which an infectious agent can live and multiply, whether or not that person shows signs or symptoms of disease associated with that infectious agent.

Immune deficiency: A breakdown of the body’s immune system or an inability of certain parts of the immune system to function. This breakdown makes a person more susceptible to diseases that a healthy immune system would not allow to develop.

Immune system: A body system that helps fight off invading organisms (such as infectious agents) and disease.

Immunity: Resistance to a disease because the body has developed defenses against it. Immunity can occur naturally or be acquired through vaccines, exposure to disease, or breast milk. There is no immunity against HIV.

Immunization: A method of producing resistance (also called immunity) to an infectious disease, usually by vaccination or inoculation, which puts a small amount of an infectious agent into a person’s body – not enough for the person to get very sick, but enough to cause the development of antibodies that will fight future exposures to that infectious agent.

Incubation period: The time period between becoming infected by an infectious agent and appearance of the first visible signs or symptoms of the disease in question.

Infected partner: Individual in a sexual relationship who has an illness such as HIV or other STIs, whether or not he or she knows it or is showing visible signs or symptoms of infection. A person who is infected with HIV or another STI who practices risky behaviors may transmit the infection to others.

Infectious agent: An organism (virus, bacterium, fungus, etc.) that is capable of producing infection or disease.

Injection drug user: An individual who injects drugs intravenously (“into veins”), intramuscularly (“into muscles”), or via skin-popping, which is subcutaneous or placement (“under the skin”).

Intravenous drugs: Drugs that are administered through a needle and/or a syringe and injected directly into a vein and thus into the bloodstream.

Kaposi’s Sarcoma (KS): A cancer or tumor of the blood and/or lymphatic vessel walls. It usually appears as blue-violet to brownish skin blotches or bumps. It is one of the more common cancers that occur in immunodeficient individuals. KS is considered to be an AIDS defining illness by the CDC, though not all people with AIDS develop KS.

Langerhans cell: A type of white blood cell present in the skin and mucous membranes that helps regulate the body’s immune response and fight infections.

Lesbian: An acceptable, everyday term used to refer to a woman who is physically, sexually, romantically, and emotionally attracted to other women.

Lubricants: Viscous substances used to reduce friction during sexual intercourse, thereby making intercourse more comfortable and reducing the likelihood of breaks or tears in condoms and/or skin (which would increase the likelihood of HIV or other STI transmission). Only water-based lubricants, such as K-Y jelly, should be used with latex condoms. Oil-based lubricants, such as mineral oil, baby oil, vegetable oil, shortening, cold cream, or petroleum jelly, while safe for use with a polyurethane condom, can damage a latex condom, and thus increase the chances of transmission of HIV and other STIs. Lubricants made of silicone can be used with any type of condom.

Lymph: An almost colorless fluid that contains mostly white blood cells and circulates through the lymphatic system. Lymph removes bacteria and some proteins from the tissues, transports fat from the small intestine, and supplies mature lymphocytes to the blood.

Lymph nodes: Gland-like structures in the lymphatic system that act as filters and help to prevent the spread of infection.

Lymphatic system: A system concerned with trapping organisms that have escaped from cells and tissues and returning them to the blood system, where they can be destroyed by white blood cells. It is a crucial part of the body's immune system, and consists primarily of the thymus, spleen, tonsils, lymph, lymph nodes, lymphatic vessels, lymphocytes, and bone marrow.

Lymphocyte: A type of white blood cell that is produced in the bone marrow and that fights disease. Lymphocytes include T-cells and B-cells. HIV attacks T-cells and reduces their number, thus limiting the body's ability to fight disease.

Macrophage: A large immune cell that acts as a microbe-devouring phagocyte ("cell swallower").

Method of entry: Manner in which organisms enter the host's body.

Mode of transmission: Manner in which an infectious agent is passed from an infectious source to a susceptible host. In HIV, both the infectious source and the susceptible host are people.

Monogamous: Having sexual intercourse with the same individual, and no others, over a period of time. Monogamy itself is not sufficient protection from HIV and other STDs since a partner may have been infected by a past partner and not know it. Although monogamous relationships between partners who have both been tested and know and share their status and agree upon consistent and appropriate use of protection can increase the partners' safety, in general, adolescents who have sexual intercourse should use condoms consistently even when in monogamous relationships to help prevent unintended pregnancy as well as HIV and other STDs.

Mucous membrane: The lining of the canals and cavities of the body, such as the gastrointestinal tract, the respiratory tract, and the genitourinary tract.

NAAT (Nucleic Acid Amplification Test): A test that detects the presence of HIV in the blood, rather than detecting HIV antibodies. One specific technique is called PCR or Polymerase Chain Reaction. (See Facts about HIV Infection, Prevention and Treatment in the Introductory Section of this curriculum.)

Needles, syringes, and works: Equipment used to prepare and inject drugs directly into the vein, a muscle, or under the skin and thus into the bloodstream. The sharing of used needles, syringes and works with another person is an efficient method of transmitting HIV and other bloodborne pathogens.

Night sweats: Excessive sweating during sleep. A person may develop night sweats upon first becoming HIV-positive or if HIV has progressed to AIDS. Night sweats are not, in and of themselves, indicators of HIV infection; they often accompany a wide variety of infections and conditions and indicate the body is trying to fight illness, at least in part, through fever (raising body temperature).

Noninfectious or nontransmissible disease: A disease that cannot be passed from person to person (for example, cancer).

nPEP (non-occupational post-exposure prophylaxis): HIV antiretroviral medications taken less than 72 hours after exposure to HIV to reduce the chance of becoming infected. For example, a person who has engaged in a high-risk behavior with an infected person should seek a doctor's advice on whether to take nPEP.

Opportunistic infection (OI): An infection in a person with a weakened immune system caused by a microorganism that rarely causes disease in persons with a healthy immune system. (For list of all CDC-defined OIs, go to <http://m.aids.gov/feature/hiv-aids-basics/staying-healthy-with-hiv-aids/potential-related-health-problems/opportunistic-infections/>)

Oral sex: A type of sex where the mouth comes into contact with, or stimulates the vagina, the penis or the anus. Also see Vaginal sex and Anal sex.

Organism: Any living thing, such as a virus, a bacterium, an animal (including a human), a plant, etc.

Pandemic: A widespread outbreak of an infectious disease affecting a large part of the population in several countries or continents.

Pathogen: Any disease-producing microorganism.

Pneumocystis pneumonia: Also called pneumocystis jiroveci pneumonia and formerly called pneumocystis carinii pneumonia (or PCP). A common, life-threatening opportunistic infection diagnosed in people with HIV, caused by a fungus. It is included in the CDC's list of AIDS-defining illnesses.

PCR test (Polymerase Chain Reaction test): See NAAT.

PEP (post-exposure prophylaxis or occupational post-exposure prophylaxis): HIV antiretroviral medications taken less than 72 hours after possible exposure to HIV to reduce the chance of infection (becoming HIV positive). For example, a hospital worker who is stuck by a needle should seek a doctor's advice on whether to take PEP.

Perinatal: Occurring in the period during pregnancy, during birth, or just after birth. Perinatal transmission of HIV is the transmission of HIV from woman to child during pregnancy, birth, or breastfeeding. It has been largely eliminated via mandatory testing of pregnant women and antiretroviral medications for those who are infected.

Phagocyte: A cell (such as a white blood cell) that engulfs and consumes foreign material (such as microorganisms) in the blood system.

PLWHA: Person (or People) living with HIV and/or AIDS.

Polyurethane condom: A condom made of a plastic product called polyurethane.

Pregnancy: The condition of having a developing embryo or fetus in the body.

PrEP (Pre-exposure prophylaxis): Medication that is taken to prevent HIV transmission. In July 2012, the U.S. Food and Drug Administration (FDA) approved the first drug shown to reduce HIV transmission in people at high risk of becoming infected. It is not intended to be used in isolation, but rather in combination with safer sex practices such as consistent and correct condom use. The drug, TRUVADA®, was previously used to treat people already infected with HIV.

Preseminal fluid: The fluid secreted by the penis prior to secretion of semen. Preseminal fluid can transmit HIV. Also known by the slang "pre-cum."

Prophylaxis: A treatment intended to prevent the occurrence of disease.

Protozoa: A group of one-celled animals, a few of which cause human disease.

Rapid HIV test: A test to detect HIV antibodies that can be collected and processed in a short time (about 20 minutes). Rapid HIV Tests are used in all New York City Department of Health and Mental Hygiene STI clinics, and do not require the person being tested to return to pick up test results at another time. People learn their test results in as little as 20 minutes. HIV positive results must be confirmed by a Western Blot or IFA test. In July 2012, the FDA approved the first over-the-counter home HIV test kit. See also EIA/ELISA.

Receptor: Special molecule located on the surface of cells that serves as a binding site for antibodies or antigens.

Replication (of viruses): Unlike a cell that has all the equipment it needs to replicate itself, a virus has to force the cell it infects to replicate the virus. As a result of this replication, many new viruses are made.

Resistance: Reduction in a pathogen's sensitivity and/or response to a particular drug.

Retrovirus: Viruses that contain RNA and produce a DNA version of their RNA in order to make copies of themselves. HIV is a retrovirus. (See also "Antiretroviral therapy.")

Risk behavior: Activity that makes a person more susceptible or more likely to be exposed to harm. Because different activities have different levels of risk, activities are often called either high-risk or low-risk.

Risk factor: Characteristic that makes a person more susceptible or more likely to be exposed to harm.

Rohypnol (flunitrazepam): Commonly called the date rape drug because it can cause anterograde amnesia or "blackouts"

Ryan White Care Act: A federally funded program that provides grants to state and local governments, hospitals, and community-based organizations to provide specialized HIV services (primary healthcare and support services) for those who do not have insurance or do not have other resources. It was named for a child who had been infected with HIV and was a spokesman for HIV research and compassion and understanding.

Semen: The fluid containing sperm that is released (or "ejaculated") from the penis during sexual activity. Semen can transmit HIV.

Seroconversion: The point at which someone who has been exposed to HIV develops HIV antibodies.

Sex: (n) A set of biological, chromosomal, hormonal, and anatomical factors (identified by primary and secondary sex characteristics, such as genitalia and/or distribution of body fat and body hair). Individuals can be male, female or intersex, if there is a discrepancy between the external and internal genitals.

Sexual abstinence: Not having sexual intercourse with any person.

Sexual intercourse: Physical contact between individuals that involves sexual penetration of a person's body openings. Examples include penile/vaginal intercourse, oral/penile intercourse, oral/vaginal intercourse, and penile/anal intercourse.

Sexual orientation: Describes the gender(s) of the person(s) to whom someone is physically, sexually, romantically, and emotionally attracted. This attraction can fall along a continuum from exclusive attraction to a person of the other sex to exclusive attraction to someone of the same sex and is not necessarily the same throughout one's lifetime. Heterosexual, homosexual, gay, lesbian, bisexual, and straight are all examples of sexual orientation.

Sexuality: The interplay of gender, sexual attraction, sexual behavior, and social norms, and the identities associated with them.

Sexually transmitted disease or infection (STD or STI): Any disease or infection that is transmitted primarily through sexual contact.

Susceptible host: A person not possessing sufficient resistance against a particular organism to prevent from contracting an infection when exposed to the organism.

Syndrome: A group of related signs and symptoms that occur together and have the same underlying cause. For example, AIDS is not one specific disease, but rather a syndrome (whose underlying cause is infection with HIV).

T-cells: A class of immune system cells that play a major role in carrying out the activities of the immune system. Some T-cells are called Helper T-cells (or CD4 cells).

Thymus: A gland located between the neck and the chest where T-lymphocytes (T-cells) multiply and mature. It is part of the lymphatic system.

Transgender: A person whose gender identity, gender expression, or gender attribution (see “Gender”) is different from societal expectations for the person’s biological, chromosomal, and/or physical sex.

Transmissible or infectious disease: A disease that can be passed directly or indirectly from one person to another. Airborne diseases are diseases that are easily transmissible. HIV and other bloodborne pathogens are less easily transmissible.

Transmission: The spreading or passing of infectious agents from an infectious source to a susceptible host.

Tuberculosis (TB): A highly infectious, airborne disease that is caused by the tubercle bacillus (a bacterium) that affects the lungs, but may spread to other areas through the bloodstream (e.g., kidneys, vertebrae). The CDC identifies TB as one of the AIDS-defining opportunistic infections.

Undetectable viral load: When there is so little virus in an HIV-infected person’s blood that it cannot be measured by viral load tests. An undetectable viral load is associated with better long-term health. The person is still HIV positive, and although the risk of infection is lower, the person is still capable of transmitting the virus to a sexual or needle sharing partner.

Ulcerated: From “ulcer,” a wound or open sore in the skin or other bodily surface area. An ulcerated area has a break or opening that is due to infection or other cause and may further admit infection.

Universal precautions: Measures that prevent the transmission of all infectious diseases, including HIV. Protection against infection can be achieved through general infection control methods (e.g., hand washing, sterilization), through use of barriers (e.g., latex gloves), through proper disposal of “sharps” (e.g., syringes), and other methods that prevent the contact of potentially infectious agents from one person with the skin or mucous membranes of another person.

Urethra: Duct (or canal) through which urine is discharged in most mammals and that serves as the male genital duct for semen as well.

Uterus (womb): Hollow, muscular, pear-shaped organ in females in which the fetus develops.

Vaccine: A product that produces immunity therefore protecting the body from the disease. A vaccine can be comprised of the entire infectious agent which has been killed (“inactivated”) or weakened (“attenuated”). It stimulates the immune system to produce antibodies, and thus immunity, against a specific disease.

Vaginal fluids: The natural wetness within the vaginal tract.

Vaginal sex: A type of sex in which the penis is inserted into the partner’s vagina. See Anal sex, Oral sex.

Vertical transmission: In pregnancy, blood transfer occurs between the woman and fetus through maternal/fetal circulation.

Viral load: A measure of HIV in the blood. Nucleic acid amplification test (NAAT) tests for viral load, not for the presence of HIV antibodies.

Virus: A microscopic organism that can cause infection. A virus has no metabolism and cannot reproduce the way other cells and bacteria can. A virus relies on and destroys its host cell in order to replicate. (See Replication.)

White blood cells: Blood cells that are part of the body's immune system and fight off disease. T-cells are one of many types of white blood cells.

Window period: The time from exposure to HIV until the production of detectable HIV antibodies. In most cases, an infected person will develop detectable quantities of antibodies within twelve weeks after exposure. A person who is newly infected with HIV may test negative for HIV antibodies with the typical ELISA/Western Blot test during the window period, and still be capable of transmitting the virus to others. The presence of HIV can usually be detected with an NAAT or PCR test within days after infection (see HIV antigen test).

Western Blot: The most common test used to confirm the presence of HIV antibodies in blood already deemed HIV-infected by the EIA/ELISA test. The Western Blot test can more effectively distinguish HIV antibodies from other antibodies, and can rule out most false positive ELISA tests.

* Most definitions were excerpted from the New York City Department of Health and Mental Hygiene's website, the Centers for Disease Control and Prevention's website, Some definitions that were originally excerpted from the revised HIV/AIDS Instructional Guide, K-12, issued by the New York State Education Department, June 1992 have not changed.

APPENDIX E:

Resources for More Information and/or Counseling

The following is a listing of key resources. Your own community may have additional resources. **If you are experiencing a medical emergency, are in danger, or are feeling suicidal, call 911 immediately.**

NYC Phone and Online Resources

311 – Call 311, or visit 311online, New York City’s main source of government information, search features and links to medical and health service providers, social services, and other information including:

- HIV testing for teens – free and confidential
- Family planning services, emergency contraception, and reproductive healthcare
- Many other services

LIFENET: Call 1-800-LIFENET (1-800-543-3638) A free, confidential, multi-lingual, mental health and substance abuse information, referral, and crisis prevention hotline available to anyone at any time. Your call will be answered by a trained behavioral health professional.

NYC TEEN – Search “NYC TEEN” Online resource where teens can learn about dealing with peer pressure, bullying and dating violence as well as depression, and anger. Do you have questions about preventing pregnancy or sexually transmitted infections? Learn the facts so you can decide what to do as well as where to find free and low-cost clinics for health care, including sexual health care.

HITE (Health Information Tool for Empowerment) <http://hitesite.org>. Referral information for hundreds of social and medical service agencies throughout the city.

GLSEN (Gay, Lesbian & Straight Education Network) Search “GLSEN.” Online educational resources from organization that strives to assure that each member of every school community is valued and respected regardless of sexual orientation or gender identity/expression.

Safe Haven: Call 1-877-796-HOPE (1-877-796-4673) Abandoned baby prevention services. Confidential. It is legal to leave your unharmed baby at a Safe Haven. www.amtchildrenofhope.com

Telephone Hotlines (toll-free)

Centers for Disease Control and Prevention (CDC), National STD/AIDS Hotline

English: 1-800-CDC-INFO (1-800-232-4636)

Spanish: 1-800-344-7432

New York State HIV Counseling Hotline

1-800-872-2777

New York State HIV Information Hotline

English: 1-800-541-2437

Spanish: 1-800-233-SIDA

NYC Department of Health AIDS Helpline

1-800-TALK-HIV or 311

APPENDIX F:

Information on Sexually Transmitted Infections (STIs) or Sexually Transmitted Diseases (STDs)

DISEASE	HOW YOU GET IT	SYMPTOMS	TREATMENT	PARTNERS
<p>Chlamydia</p> <p>Infection of mucous membranes lining the genitals, throat, or rectum; can lead to pelvic inflammatory disease in women and infertility in men and women.</p>	<p>By having unprotected anal, vaginal, or oral, sex with someone who has the infection; from mother to child (eye and lung infections).</p>	<p>Women and men may have no symptoms. Women may have pain with sexual intercourse, lower abdominal pain, or change in menstruation pattern. Men may have clear, watery discharge from penis, pain when urinating.</p>	<p>Antibiotics</p>	<p>Recent sexual partners need to be tested and treated if positive. Doctors can prescribe or give medication to patients to give to their partners. This is called Expedited Partner Therapy (EPT). Current health recommendations advise no sex until the infection has been treated. If one does have sex, he or she must use a condom.</p>
<p>Gonorrhea</p> <p>Bacterial infection of genitals, throat, or rectum; can lead to infertility in both men and women. In rare cases can cause fever, arthritis and rash.</p>	<p>By having unprotected anal, vaginal, or oral sex with someone who has the infection; from mother to child.</p>	<p>Women usually have no symptoms, but may have pain with sex, vaginal discharge, and lower abdominal pain. Men may have no symptoms, or may have a thick, yellow discharge from penis, pain in testicles, or pain when urinating. Men or women who have anal sex may have discharge from rectum and pain with bowel movements.</p>	<p>Antibiotics. Some types of gonorrhea may be resistant to treatment so it is important to tell the doctor if the symptoms do not get better after treatment.</p>	<p>Recent sexual partners need to be tested and treated if positive. Current health recommendations advise no sex until the infection has been treated. If one does have sex, he or she must use a condom.</p>
<p>Syphilis</p> <p>Bacterial infection entering the body through breaks in the skin or linings of the genital area; can damage internal organs (heart, brain, spinal cord) at late stage.</p>	<p>By having unprotected anal, vaginal, or oral sex with someone who has the infection; from mother to child across placenta during pregnancy (causes congenital syphilis with mental retardation and physical deformities of the child).</p>	<p>Painless ulcer (chancere) usually on genitals, but can be in the rectum or mouth. Ulcer heals and is followed by swollen glands, rash (often on palms of hands and soles of feet), and/or hair loss. If untreated, it stays in the body and can cause nervous system, heart disease, and other problems years later.</p>	<p>Antibiotics with follow-up blood tests</p> <p>Often treated with penicillin. Other treatment available for people allergic to penicillin.</p>	<p>Recent sexual partners need to be tested and treated if positive. Current health recommendations advise no sex until the infection has been treated. If one does have sex, he or she must use a condom.</p>

DISEASE	HOW YOU GET IT	SYMPTOMS	TREATMENT	PARTNERS
<p>Genital Herpes</p> <p>Herpes simplex virus causes cold sore-like infection usually on the mouth and lips (cold sores), or on the genitals.</p>	<p>Close contact with skin or mucous membranes with someone with the virus; from mother to child. Herpes can be transmitted even if the infected partner does not have a sore or lesion.</p>	<p>Painful, red blisters, little sores or ulcers, flu-like symptoms, and sometimes a discharge.</p>	<p>Not curable. Anti-herpes drug to promote healing, shorten the length of an outbreak, and to suppress subsequent outbreaks, and pain relief.</p>	<p>Partners may or may not become infected with herpes. Do not have sex when open sores are present. Condoms provide some protection.</p>
<p>Human Papillomavirus (HPV)/Genital Warts</p> <p>HPV is the most common STD.</p>	<p>Through all kinds of sex, including skin-to-skin contact.</p> <p>HPV is preventable with a vaccine that protects against the two most serious types of HPV. Vaccine is recommended for females, ages 11-26, and males ages 11-21. Ask your doctor or health care provider or call 311 for a clinic where you can get a free vaccine.</p>	<p>Small warts around the vulva and vagina, penis and/or anus.</p> <p>HPV can cause cancer of the vulva, vagina, and cervix (the entrance to the uterus) in women, penile cancer in men, and anal or throat cancers in women or men.</p>	<p>90 percent of people who get HPV clear the virus from their body without treatment.</p> <p>Genital warts can be removed by a doctor or health care provider. People who are having sex should see a doctor or health care provider to be checked for HPV or other STDs.</p>	<p>Not everyone with HPV has warts or signs of infection. Even without symptoms they can still pass the virus to a partner.</p>
<p>Non-Gonococcal Urethritis (NGU)</p> <p>Infections that cause inflammation of the urethra; variety of bacteria, viruses or other organisms.</p>	<p>By having unprotected anal, vaginal, or oral sex.</p>	<p>Women usually have no symptoms. Men may have discharge from penis or pain or tingling when urinating, but often have no symptoms.</p>	<p>Antibiotics</p>	<p>Recent sexual partners need to be tested and treated if positive. Current health recommendations advise no sex until the infection has been treated. If one does have sex, he or she must use a condom.</p>
<p>Trichomoniasis Vaginalis</p> <p>A small parasitic organism causes irritation in the vagina in women and can cause non-specific urethritis in men.</p>	<p>By having vaginal sex without a condom.</p>	<p>Women may have no symptoms or there may be a yellowy-green frothy vaginal discharge, sometimes malodorous. Men usually have no symptoms until non-specific urethritis develops.</p>	<p>Antibiotics</p>	<p>Recent sexual partners need to be tested and treated if positive. Current health recommendations advise no sex until the infection has been treated. If one does have sex, he or she must use a condom.</p>

DISEASE	HOW YOU GET IT	SYMPTOMS	TREATMENT	PARTNERS
<p>Hepatitis A Virus (HAV)</p> <p>Viral infection that affects the liver. It is a temporary infection only and once a person has recovered, natural immunity develops.</p> <p>Hepatitis A can be dangerous if someone is medically fragile or has liver disease.</p> <p>(See Appendix G).</p>	<p>Mainly through fecal contaminated food or water in developing countries with poor sanitation systems.</p> <p>Can be transmitted through contact with feces during sex. It is not passed from person to person through sexual fluids or blood.</p>	<p>Often no symptoms in children. Some children, adolescents and many adults may have flu-like symptoms including vomiting, diarrhea or abdominal pain, and sometimes dark urine, and yellowing of skin and whites of eyes.</p>	<p>The hepatitis A Vaccine is provided in 2 doses and is the most effective way to prevent infection.</p> <p>During the active phase of the infection, rest, water and avoidance of alcohol are recommended. Check with a medical provider before taking any over-the-counter or prescribed medications.</p>	<p>Household and sexual partners should be vaccinated.</p> <p>The infected person should be very careful to practice good hygiene (wash hands) and not allow anyone to come in contact with their feces through sexual practices or personal care.</p>
<p>Hepatitis B Virus (HBV)</p> <p>People with strong immune systems can usually fight off hepatitis B infection during the acute phase (first 6 months) and then develop natural immunity.</p> <p>People with undeveloped immune systems (infants, small children) or weak immune system (HIV+ or other serious medical condition) have a harder time fighting off hepatitis B and can develop chronic (lifelong) infection.</p> <p>Chronic hepatitis B can cause scarring of the liver tissue, serious liver damage, liver failure, and liver cancer, and can be fatal.</p> <p>(See Appendix G).</p>	<p>Hepatitis B is transmitted through blood and sexual fluids (semen, vaginal fluids).</p> <p>Most chronically infected people in the world got hepatitis B from their mother during childbirth.</p> <p>Transmitted through sex (vaginal or anal); sharing of injection drug use equipment; or sharing of personal care items that may have blood or sexual fluids on them (razors, clippers, toothbrushes, tattoo or piercing equipment, sex toys)</p>	<p>Often no symptoms. If there are symptoms, they may include: flu-like illness or vomiting, fatigue, abdominal pain, dark urine, and yellowing of skin and whites of the eyes. Approximately 15-25 percent of people with hepatitis B may progress to chronic hepatitis, cirrhosis or liver cancer.</p>	<p>The hepatitis B vaccine, provided in 3 doses, offers the best protection.</p> <p>People infected with hepatitis B should find a liver medical specialist and go to medical appointments to monitor the liver 2 times a year.</p> <p>There are medications to treat hepatitis B; antiviral therapy if progresses to chronic hepatitis.</p> <p>Avoid Alcohol.</p>	<p>Household members and sexual partners of people infected with hepatitis B should get the full vaccine series and also get tested to ensure the vaccine was effective.</p> <p>Ensure others do not come in contact with infected person's' blood or sexual fluids by practicing safer sex (condoms) and harm reduction (never sharing any drug use equipment). Do not share personal care items (razors, clippers, toothbrushes, tattoo or piercing equipment)</p>

DISEASE	HOW YOU GET IT	SYMPTOMS	TREATMENT	PARTNERS
<p>Hepatitis C Virus (HCV)</p> <p>Viral infection that affects the liver.</p> <p>Most people who are infected with hepatitis C will develop chronic infection.</p> <p>Chronic hepatitis C can cause scarring of the liver tissue, serious liver damage, liver failure, or liver cancer, and can be fatal.</p> <p>(See Appendix G).</p>	<p>Hepatitis C is transmitted through blood.</p> <p>Highest risk is sharing of injection drug use equipment.</p> <p>Other possible risks are sharing tattoo or piercing equipment; sex involving blood or tearing of skin (rough or anal sex); fighting where blood is drawn; and sharing of personal care items (razors, straight edge blades).</p>	<p>Painful, red blisters, little sores or ulcers, flu-like symptoms, and sometimes a discharge.</p>	<p>Not curable. Anti-herpes drug to promote healing, shorten the length of an outbreak, and to suppress subsequent outbreaks, and pain relief.</p>	<p>Partners may or may not become infected with herpes. Do not have sex when open sores are present. Condoms provide some protection.</p>
<p>Pubic Lice - Crabs</p> <p>Small lice that live in the pubic hair; can cause irritation and secondary infections.</p>	<p>By close body contact usually during sex with an infected person; can be spread via infected bedding and clothing.</p>	<p>Intense itching in the pubic area, small nits (eggs) on pubic hair.</p>	<p>Special shampoo, cream, or spray applied to pubic area. Wash all clothing and bed linen.</p>	<p>Sexual partners in the three months prior to diagnosis should be treated in the same way at the same time.</p>
<p>Scabies</p> <p>Small mites that burrow into the skin and cause irritation.</p>	<p>By close body contact sometimes during sex; can be spread by sharing clothes or bedding.</p>	<p>Itching that is worse at night, and a rash on the body.</p>	<p>Special lotion, cream or ointment. Wash all clothing and bed linen.</p>	<p>Sexual partners in the three months prior to diagnosis should be treated in the same way at the same time.</p>
<p>Bacterial Vaginosis</p> <p>Overgrowth of certain bacteria in the vagina changes the pH of the vagina and causes a discharge.</p>	<p>It may be brought on by anything that changes the balance in the vagina, e.g., menstruation, douching, use of feminine hygiene products, new sexual partners, increased sexual activity.</p>	<p>Grayish white, smelly vaginal discharge.</p>	<p>Antibiotics</p>	<p>No treatment indicated for partners.</p>

APPENDIX G:

Information on Hepatitis A, B, and C

Hepatitis A Virus (HAV)

What is hepatitis A?

Hepatitis A (also called “hep A” and abbreviated HAV) is a viral infection that affects the liver. It is a temporary infection that can last from several weeks to several months. Most people infected with hepatitis A recover with no lasting liver damage. Once a person has recovered, natural immunity develops, and the person is unlikely to be reinfected with HAV. Hepatitis A can be dangerous if an infected person is medically fragile or has liver disease.

How is hepatitis A spread?

Hepatitis A is spread when a person ingests fecal matter—even in microscopic amounts—from contact with objects, food, or drinks contaminated by the feces or stool of an infected person. The virus can be carried on an infected person’s hands and can be spread by direct contact, or by consuming food or drink that has been handled by the infected person. Hepatitis A can also be spread through sexual activity in which feces enters the mouth, or intimate personal care (changing diapers, bed pans or washing). It is sometimes spread by drinking water that is contaminated with fecal matter.

Who gets hepatitis A?

Anyone can get hepatitis A. It is most common in developing countries with poor sanitation systems.

- Household members/caregivers of an infected person
- Men who have sex with men
- Sexual contacts of an infected person
- Users of injection and non-injection illegal drugs
- Travelers to countries with high or intermediate endemicity of HAV infection

What are the symptoms of hepatitis A?

Hepatitis A infection is not always symptomatic. If symptoms do appear, they may include flu-like symptoms such as fatigue, poor appetite, fever, diarrhea and vomiting. Urine may become darker in color, and then jaundice (a yellowing of the skin and whites of the eyes) may appear. The disease is rarely fatal and most people recover in a few weeks without any complications, and sometimes without many symptoms. Infants and young children tend to have very mild symptoms and are less likely to develop jaundice than are older children and adults.

How soon do symptoms appear?

The symptoms commonly appear within 15 to 50 days after exposure, with an average of 28 days. Symptoms usually last less than 2 months, although 10 percent–15 percent of symptomatic persons have prolonged or relapsing disease for up to 6 months.

For how long is an infected person able to spread the virus?

The contagious period begins about a week or two before the symptoms appear and is minimal the week after the onset of jaundice.

Does past infection with hepatitis A make a person immune?

Yes. Once an individual recovers from hepatitis A, he or she is immune for life and is not infectious to others.

What is the treatment for hepatitis A?

There is no special treatment for hepatitis A. Rest, water and avoidance of alcohol are generally recommended. If secondary symptoms such as vomiting and diarrhea are severe, treatment may be needed for those symptoms.

How can hepatitis A be prevented?

The most important way to prevent hepatitis A is through proper hygiene such as careful hand washing after using the toilet, changing diapers, and before preparing or handling food. A vaccine to prevent hepatitis A is administered in two doses six months apart. Temporary protection is available from immune globulin shots, effective before and up to two weeks after exposure to hepatitis A.

For more information:

www.cdc.gov/hepatitis/A/index.htm

www.liverfoundation.org/abouttheliver/info/hepatitisa/

Hepatitis B Virus (HBV)

What is hepatitis B?

Hepatitis B (also called “hep B” and abbreviated HBV) is a viral infection that affects the liver. It can range in severity from a mild illness lasting a few weeks (acute infection) to chronic or long-term infection.

Acute infection: In the USA, an estimated 40,000 people are infected with HBV every year. Most people recover from acute hepatitis B infection. A person with a fully developed and strong immune system can often fight off hepatitis B within a few months and become immune for life. Some people with acute HBV infection develop chronic HBV infection.

Chronic infection: People who continue to test positive for hepatitis B for six months (10 percent) have chronic hepatitis B infection. The chronic form of hepatitis B is a serious lifelong illness that increases the risk for liver damage, liver cancer, or liver failure, and can be fatal. Each year, about 2,000-4,000 people in the U.S. die from liver illness that was caused by HBV. With proper care, most people with chronic hepatitis B feel healthy their entire lives.

How is hepatitis B spread?

In the United States, hepatitis B is most commonly spread by sexual contact. HBV is spread when the blood or sexual fluids (semen, vaginal fluids) of a person infected with the hepatitis B virus enters the body of someone who is not infected through punctures in the skin or mucosal membranes (nose, genitals). In addition to sexual intercourse it can be spread through contact with another person’s blood or sexual fluids (sharing needles, syringes, or other drug-injection equipment, razors, toothbrushes, tattoo or piercing equipment). Unlike hepatitis A, hepatitis B can easily be passed from an infected mother to her baby at birth. Hepatitis B is not spread through casual contact (holding hands, sharing food).

Who gets hepatitis B?

Modes of transmission are like HIV, but hepatitis B is much more infectious. Anyone can get hepatitis B, but those at greater risk include:

- Infants born to mothers who have hepatitis B
- People who have sexual contact (vaginal or anal) with someone who is infected with HBV.
- People who have sex with multiple partners.
- People who have sex with someone with a sexually transmitted disease.
- Men who have sex with men.
- Injection drug users who share needles.
- Healthcare workers and public safety workers.

- Household members of an infected person.
- People with chronic liver disease

What are the symptoms of hepatitis B?

Hepatitis B often has no symptoms until liver damage is severe which can take 20-30 years. If there are symptoms, they usually appear within three months, but can appear between two to six months after exposure. Symptoms are uncommon in young children. If there are symptoms, they may be flu like symptoms including fatigue, poor appetite, fever, vomiting, diarrhea, joint pain, hives, or rash. Urine may become darker in color, and stool may appear clay-colored. Jaundice (a yellowing of the skin and whites of the eyes) may also occur.

For how long is a person able to spread the virus?

Once someone is infected with hepatitis B, that person can pass the virus to others. If a person clears the virus during the acute phase (does not develop chronic infection) they are not infectious to others. People who have chronic HBV can infect others, even if they have no symptoms and do not know they are infected. It is important to get tested to determine if the virus has been successfully cleared.

What is the treatment for hepatitis B?

A person who has been exposed to hepatitis B can go to their medical provider or Emergency Room within 24 hours to get the “HBIG” (hepatitis B immune globulin) vaccine/shot to prevent infection. There is no specific treatment for acute hepatitis B. Several anti-viral medications are available to treat chronic hepatitis B infection. Hepatitis B infected people should be monitored for liver disease progression by a liver specialist (hepatologist) and should receive follow-up medical care twice a year. Alcohol increases the risk of liver damage and progress faster and should be avoided.

How can hepatitis B be prevented?

A vaccine to prevent hepatitis B is recommended for all infants at birth and is required to enter school in NYC. It is recommended for all adults at risk (see above) and is given in three to four doses over a 6-18-month period. A person who is at high risk (sexual partner of someone with hepatitis B) should be tested to ensure the vaccine was effective. Correct and consistent condom use and avoiding contact with blood or sexual fluids (injection drug use equipment, tattoo or piercing equipment, razors, toothbrushes, and anything that may be contaminated with blood or other body fluids) can help prevent transmission. All pregnant women should be tested for HBV to prevent mother to child transmission.

For more information:

www.cdc.gov/hepatitis/B/index.htm

www.liverfoundation.org/abouttheliver/info/hepatitisb/

Hepatitis C Virus (HCV)

What is hepatitis C?

Hepatitis C (also called “hep C” and abbreviated HCV) is a highly contagious viral infection that affects the liver. There is no vaccine against hepatitis C. It is not possible to be immune to hepatitis C and people who are infected with hepatitis C are also susceptible to hepatitis A and B.

Acute infection: Acute hepatitis C infection is a short-term illness that occurs from several weeks to several months after exposure. Most people who are newly infected do not experience symptoms and clear the virus on their own.

Chronic infection: Chronic hepatitis C develops in 75-85 percent of the people who are infected with the virus. Chronic HCV is a serious, lifelong illness that increases the risk for liver damage, liver cancer, or liver failure and can be fatal. An estimated 3.2 million people in the U.S. have chronic hepatitis C. Most people who are infected with hepatitis C do not know they are infected; yet, they can infect others.

How is hepatitis C spread?

Hepatitis C is transmitted through blood. It is spread when the blood of a person infected with the hepatitis C virus enters the body of someone who is not infected through punctures in the skin. Most people become infected from sharing needles, syringes or other equipment used to inject drugs. Others are infected when they are stuck with needles in healthcare settings. Children born to mothers who are infected with HBV can be infected. Hepatitis C is not spread through casual contact (holding hands, sharing food).

Who gets hepatitis C?

Anyone can get hepatitis C. Common risks are:

- Injection drug use (even one time)
- Blood transfusion before 1992 in the U.S.
- Poor infection control in health care (rare in the U.S., but common in developing countries)
- Sex where blood is present and passed from one person to another
- Mother to child during childbirth
- Other blood exposure: sharing tattoo or piercing equipment; sharing razors, toothbrushes or other personal care items; or fighting where blood is drawn.

What are the symptoms of hepatitis C?

Hepatitis C often has no symptoms until liver damage is severe. This can take 20-30 years. A person who is infected with hepatitis C may experience flu-like symptoms, including fatigue, poor appetite, fever, vomiting, diarrhea, joint pain, hives, or rash. Urine may become darker in color, and stool may appear clay-colored. Jaundice (a yellowing of the skin and whites of the eyes) may also occur.

How soon do symptoms occur?

If symptoms occur, the average time is 6–7 weeks after exposure, but this can range from 2 weeks to 6 months.

For how long is a person able to spread hepatitis C?

Someone who is infected with hepatitis C, either acute or chronic infection, can pass it along to others. A person who clears the virus naturally during the acute phase or is successfully treated and cured is not infectious to others.

What is the treatment for hepatitis C?

Medical treatment is available for hepatitis C. If hepatitis C is treated during the acute phase, there is a very good chance the person will not go on to develop chronic infection. A screening test for chronic hepatitis C can detect the virus, and in some cases the person may be treated with antiretroviral drugs. Treatment has rapidly improved for chronic hepatitis C. It is important to see a liver specialist (hepatologist) semi-annually to assure that liver health is monitored. Alcohol increases the risk of liver damage and should be avoided.

How is hepatitis C diagnosed?

There are two tests to determine if someone is currently infected with hepatitis C. The first test is usually the hepatitis C anti-body test which determines if a person was ever infected with hepatitis C. The second test (HCV-PCR) confirms diagnosis of hepatitis C infection and determines if the virus is currently in the body.

What's the relationship between hepatitis C and HIV?

HIV and hepatitis C can both be transmitted through injection drug use, which increases blood exposure and transmission of many infections. Approximately 30 percent of people with HIV also have hepatitis C. Infection with both diseases increases stress on the liver and can cause the liver disease to progress faster. Treating both diseases at the same time can be challenging, so it is important to find a medical provider who is experienced in treating HIV/HCV co-infection.

How can the spread of hepatitis C be prevented?

There is no vaccine against hepatitis C and a person is never immune. Hepatitis C can be prevented through safer sex (using condoms correctly and consistently), harm reduction (never sharing drug use equipment and taking steps to recover from injection drug use and other high risk practices that may include blood contact); and infection control in health care. People who have had hepatitis C should minimize the chances that others be exposed with their blood and should explore treatment which may significantly reduce the amount of virus the body, and therefore reducing transmissibility to others.

For more information:

www.cdc.gov/hepatitis/C/index.htm

www.liverfoundation.org/abouttheliver/info/hepatitisc/

APPENDIX H:

HIV/AIDS Medication Chart

FDA-Approved Medications to Treat HIV Infection*

Anti-HIV medications (also called Antiretroviral Therapy or ART) do not kill HIV. They are used to block the virus from replicating and infecting new cells. ART is a combination of different types or classes of HIV medications that stop the virus in different ways. Although these medications do not cure HIV, individuals who take them as prescribed can keep their immune systems strong, greatly reduce the progression of HIV, and decrease their risk of transmitting HIV to others.

DRUG TYPE	DESCRIPTION	DRUG NAMES Generic Name (Brand Name)
Nucleoside Reverse Transcriptase Inhibitors (NRTIs)	NRTIs are faulty versions of building blocks that HIV needs to make more copies of itself. When HIV uses an NRTI instead of a normal building block, reproduction of the virus is stalled.	Abacavir (Ziagen®) Didanosine (Videx®, ddl) Emtricitabine (Emtriva®, Coviracil®, FTC) Lamivudine (Epivir®, 3TC) Stavudine (Zerit®, d4T) Tenofovir DF (Viread®) Zidovudine (Retrovir®, AZT, ZDV) Fixed-Dose Combination Abacavir + Lamivudine (Epzicom®) Abacavir+Lamivudine+Zidovudine (Trizivir®) Emtricitabine (Emtriva®, FTC) Emtricitabine + Tenofovir DF (TRUVADA®) Lamivudine + Zidovudine (Combivir®)
Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)	NNRTIs bind to and disable reverse transcriptase, an enzyme that HIV needs to make more copies of itself.	Delavirdine (Rescriptor®) Efavirenz (Sustiva®) Etravirine (Intelence®) Nevirapine (Viramune®) Rilpivirine (Edurant®)
Protease Inhibitors (PIs)	PIs disable protease, an enzyme that HIV needs to make more copies of itself.	Atazanavir (Reyataz®) Nelfinavir (Viracept®) Darunavir (Prezista®) Ritonavir (Norvir®) Foramprenavir (Lexiva®) Saquinavir (Invirase®) Indinavir (Crixivan®) Tipranavir (Aptivus®) Lopinavir+Ritonavir (Kaletra®)

*As of July 2012

DRUG TYPE	DESCRIPTION	DRUG NAMES Generic Name (Brand Name)
Fusion Inhibitors	Fusion Inhibitors prevent HIV entry into cells.	Enfuvirtide (Fuzeon®, T-20)
CCR5 Antagonists	CCR5 entry inhibitors block CCR5, a protein on the CD4 cells that HIV needs to enter the cells.	Maraviroc (Selzentry®)
Integrase Inhibitors	Integrase inhibitor block HIV integrase, an enzyme HIV needs to make copies of itself.	Raltegravir (Isentress®)
Multi-Class Combination Products	Multi-class combination tablets contain three or more anti-HIV medications from one or more drug classes.	Efavirenz, emtricitabine, and tenofovir (Atripla®) Emtricitabine, rilpivirine, and tenofovir (Complera®)



Information from: http://aidsinfo.nih.gov/contentfiles/ApprovedMedstoTreatHIV_FS_en.pdf
A Service of the U.S. Department of Health and Human Services

Teacher Note: On July 16, 2012, the U.S. Food and Drug Administration (FDA) approved TRUVADA®, a drug previously only used to treat HIV, for daily oral use to help prevent HIV. The use of HIV medications as a preventive measure, to reduce the risk of becoming infected with HIV, is a strategy known as pre-exposure prophylaxis (PrEP). The recently approved pill contains medicines that prevent HIV from making new a virus as it enters the body. When used consistently, TRUVADA® has been shown to reduce the risk of HIV infection among gay and bisexual men and heterosexual men and women who are at high risk for HIV infection. It is not intended to be used in isolation, but rather in combination with safer sex practices, such as consistent and correct condom use. Guidelines on its use from national health agencies are forthcoming. For more information, go to <http://www.fda.gov/downloads/NewsEvents/Newsroom/FactSheets/UCM312279.pdf>.

APPENDIX I:

Sample Parent Notification Letters

Letter A: Sample letter notifying parents about HIV/AIDS lessons; for grades K-12.

Dear Parent or Guardian:

HIV/AIDS is one of the most serious health problems Americans have ever faced. Advances in medicine have made tremendous strides in keeping people infected with HIV healthy for many years. Still, it has no cure, and education is the only way we can help our students protect themselves from becoming infected.

The New York State Education Department and the New York City Department of Education (NYCDOE) require that HIV/AIDS education be provided for all students in kindergarten through grade 12. The *HIV/AIDS Curriculum* that NYCDOE developed for NYC students is age and developmentally appropriate. For example, in kindergarten, students learn how people get sick and how to get better. In 7th grade, children learn how HIV affects the immune system, the risks of alcohol and drug use, and the importance of communicating with parents/guardians or caregivers. High school lessons teach students to avoid behaviors that put them at risk for HIV, STDs and unintended pregnancy.

As a parent or legal guardian, you have the right to excuse your child from certain HIV/AIDS lessons that teach about methods of HIV/STD prevention. These “opt out” prevention lessons are identified in the *HIV/AIDS Curriculum*, which is online at

<http://schools.nyc.gov/Academics/FitnessandHealth/StandardsCurriculum/HIVAIDScurriculum>

If you would like your child to be excused, you must write a letter to me stating that:

- Your child should not be in the classroom during the “opt out” prevention lessons; and
- You will teach your child about prevention at home.

Encourage your child to speak with you about HIV/AIDS. Doing so can help you reinforce your child’s awareness of how HIV is transmitted, and present opportunities for you and your child to discuss how abstaining from sexual intercourse is the most important and effective way for children to protect their health and their future.

We welcome your involvement on our School Wellness Council or to coordinate PTA presentations about HIV/AIDS. Speak to your child’s teacher, parent coordinator, or me about how you can support the lessons. If you have any questions regarding this program, please call me at _____.

Sincerely,

Principal

APPENDIX I:

Sample Parent Notification Letters (continued)

Letter B: Sample letter notifying parents about HIV/AIDS and sexual health education; for middle and high school grades only.

Sexual health education is a mandatory component of the comprehensive health education course in middle and high school. Parents must be notified prior to sexual health education instruction. In the semester that middle and high school students receive their health education course, this letter can be used to notify parents about both sexual health and HIV lessons.

Dear Parent or Guardian:

Your child's health is important to us. In New York City public schools, we provide health education classes that include age-appropriate lessons about family health, sexuality and HIV/AIDS, in addition to other important health topics.

Statistics show that we have students who are having sex before the age of 13; students who have had multiple sexual partners; and students who aren't protecting themselves against sexually transmitted diseases and HIV/AIDS. We have an important role to play with regard to educating our children about sex and the potential consequences of engaging in risky behavior. We must provide our students with accurate information and communication skills to help them make decisions that can keep them healthy and safe. To that end, the required one-semester, comprehensive health education course in both middle and high school must also include age-appropriate sexual health education, as well as the HIV/AIDS lessons that are required each year for students in grades K-12.

We understand that our students and their families have a range of beliefs, cultures and customs. As a parent/guardian, you have the right to keep your child out of some sexual health and HIV/AIDS lessons about birth control and methods of HIV/STD prevention. However, you cannot remove your child from abstinence or other sexual health education lessons. If you have questions about which lessons you may opt your child out of, please check with your child's teacher, parent coordinator, or me. You can also view the entire NYCDOE HIV/AIDS Curriculum online at

<http://schools.nyc.gov/Academics/FitnessandHealth/StandardsCurriculum/HIVAIDScurriculum>.

If you would like your child to be excused from birth control and HIV/STD prevention lessons, you must write a letter to me stating that:

- Your child should not be in the classroom during lessons about birth control and methods of HIV/STD prevention; and
- You will provide instruction on prevention to your child in your home.

As in all areas, parents and guardians are a child's first and most influential teachers. Parents, guardians and schools share a common goal: we want students of all ages to be healthy in all aspects of their lives. When it comes to talking with students about sex, our shared goal is to delay sexual activity in school-age youth. We encourage you to ask your child what he or she is learning in health education class and to make sure your child knows what you believe are the best ways to lead a healthy life. Conversations you have with your child about sexual health will place the information they are receiving in health class in the context of your family's values. Again, if you have any questions about health education or would like to review our school's health education curriculum, please contact your child's teacher or me.

Sincerely,

Principal

APPENDIX J:

HIV/AIDS Curriculum Feedback

Date: _____ School: _____

Name: _____

Title/Position: _____ What grade(s) do you teach? _____

Email: _____ Phone: _____

The Office of School Wellness Programs is preparing to further revise the curriculum . We welcome your specific feedback, comments, and recommendations. Thank you for taking the time to respond.

Please return this form to:

New York City Department of Education
Office of School Wellness Programs
52 Chambers Street, Room 209
New York, New York 10007
or email wellness@schools.nyc.gov

1. Were you able to teach all lessons for your grade? If not, which lesson were skipped and why?

2. Did you modify the lessons in any way?

Yes No Not Sure

If so, which lessons were changed, why were they changed, and how were they changed?

3. What do you consider to be this curriculum's overall strengths?

Explain: _____

4. What do you consider to be this curriculum's overall weaknesses?

Explain: _____

5. Is there sufficient emphasis on health education skills (e.g., communication, decision making, planning and goal setting, self management, stress management, relationship management, and advocacy)?

Yes No Not Sure

Explain: _____

6. What specific changes would improve the curriculum?

Changes to

- format/organization. Please specify: _____
- graphics. Please specify: _____
- activities. Please specify: _____
- integrate with website. Please specify: _____
- materials. Please specify: _____
- training on how to use the curriculum: _____
- a specific lesson or section of the curriculum (please specify): _____

7. What DOE support would help you improve your implementation of the *HIV/AIDS Curriculum*?

- Professional development. Please explain. _____
- Assistance with scheduling. Please explain. _____
- Assistance with differentiated instruction. Please explain. _____

- Assistance with making lessons LGBTQ inclusive. Please explain. _____

- Assistance with adapting lessons to meet the cognitive and linguistic needs of my students. Please explain. _____
- Other _____

8. Would you be interested in participating in an advisory committee? If so, please send an email to wellness@schools.nyc.gov.

9. Any other comments? Please describe here or send email to wellness@schools.nyc.gov.

Thank you!

We appreciate your feedback.