HIV Hurts the Immune System

People who are HIV positive have been tested and found to have signs of the human immunodeficiency virus in their blood. HIV destroys part of the immune
5 (say: ih-**myoon**) system. Specifically, it affects a type of white blood cell called the T lymphocyte (say:**lim**-fuh-site), or T cell. T cells are one type of "fighter" cell in the blood that help the body fight
10 off all kinds of germs and diseases.

After HIV enters the body, it piggybacks onto a T cell and works its way inside of that cell. Once inside, the virus completely takes over the T cell
15 and uses it as a virus-making factory to make a lot of copies of itself. The newly made viruses then leave the T cell and go on to infect and destroy other healthy T cells as they continue to
20 multiply inside the body. T cells invaded by the virus can no longer properly fight infections.

Someone who is infected with the virus is called HIV positive. But it may take
25 years for the virus to damage enough T cells for that person to get sick and develop AIDS. Although the HIV-positive person may feel fine, the virus is silently reproducing itself and
30 destroying T cells.

However, thanks to new medications, someone infected with HIV can stay relatively healthy and symptom-free for many years. These medications are
35 very expensive and not available to everyone in the world.

When the person's immune system has weakened and more of the blood's T cells have been destroyed by the virus,
40 the person can no longer fight off infections. This is when he or she gets very sick. A doctor diagnoses someone with AIDS when the person has a very low number of T cells or shows signs of
45 a serious infection.

Our goal is to find out how HIV and AIDS hurts our immune system.

Sally 121

explain what happens to T-cells

Why can someone feel healthy, but still have HIV?

At what point does a doctor say that HIV is now AIDS?

next steps

lexile level 890

Standards RST.6-8.1, RI.6.1, RI.6.2