OOSH BULLETIN

Human Immunodeficiency Virus (HIV)
Acquired Immuno-Deficiency Syndrome (AIDS)

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What is HIV?

HIV is the Human Immunodeficiency Virus, the virus that causes AIDS. HIV attacks the immune system, the body's natural defense against disease. HIV destroys a type of white blood cell called T-cells also known as the helper cells. As the number of T-cells decreases, damage to health increases.

How is HIV Transmitted?

- Unprotected sexual contact
- Intravenous drug use
- From HIV-infected mothers to their infants before, during, and after birth (breastfeeding)
- Blood to blood contact

HIV is also found in body fluids such as:

- Blood
- Semen
- Vaginal fluids
- Breast milk
- Other body fluids containing blood
- In needles and syringes used by people who are infected with HIV

Current research shows that HIV is NOT spread by casual contact. For example, it is not spread by nonsexual, everyday contact such as:

- Touching, hugging or shaking hands
- Breathing, coughing and sneezing
- From toilets, telephones, drinking fountains, swimming pools etc.
- From sharing cutlery i.e. forks and spoons
- Donating blood – all donors are carefully screened and donors' blood and blood products are tested before being used.

What are the effects of HIV on the Body?

HIV may be present in the body for many years before there are any signs of illnesses. As HIV weakens the immune system, signs and symptoms may appear. People may have:

- Swollen lymph glands in the neck, underarm, and groin area
- Recurrent fever, including "night sweats"
- Rapid weight loss for no apparent reason
- Constant fatigue
- White spots or unusual blemishes in the mouth
- Other illnesses

People infected with HIV can't fight off a number of serious illnesses without medical treatment. One common illness of this type is Pneumocystis carinii pneumonia (PCP), usually a rare lung infection. Symptoms include fever, cough, and shortness of breath.

Scientific research also shows that HIV can damage the brain and spinal cord. Signs of damage may include memory loss, indifference, inability to make decisions, partial paralysis, loss of coordination, and other problems in controlling the body.

What is AIDS?

AIDS (acquired immune deficiency syndrome) is a serious illness. AIDs is the end stage of HIV infection. The same virus that causes HIV causes AIDS. Damage to the immune system leaves the body vulnerable to secondary illnesses that can be fatal. There is still no known cure for AIDs, but effective treatments are not available.

What causes AIDS?

A healthy immune system includes special kinds of white blood cells called B cells and T cells, and depends on a balance of certain kinds of T cells. "Helper" T cells assist B cells in fighting disease. "Suppressor" T cells call off the attack when the invading disease has been stopped. HIV apparently destroys the helper cells without affecting suppressor cells proportionately. When suppressor cells outnumber helper cells, the immune system fails.

One common illness of this type is Pneumocystis Carinii Pneumonia (PCP), usually a rare lung infection. Symptoms include fever, cough, and shortness of breath. The virus damages the immune system and leaves the body vulnerable, to secondary illnesses. For instance, cold, flu, pneumonia, or other diseases may be fatal if you are infected.

A simple blood test performed by a health care provider can determine a person's HIV status. Although there is currently no cure or vaccine, there many drugs and treatments that can increase or maintain a good quality of life for those living with HIV and/or AIDS.

Protect Yourself from HIV/AIDS

In the workplace:

- **Practice Universal Precautions** – an approach that assumes all human blood and certain body fluids are infectious. Wear gloves or other protective barriers when handling blood or other potentially infectious materials (OPIM).
- **Cover** all cuts, nicks, burns, acne sores, abrasions, and dermatitis**.**
- **Wash hands** - Hand washing is the single most effective method for reducing the spread of infectious disease.
- **Wash skin and flush mucous membranes** with water after contact with blood or OPIM.
- **Report** all needle sticks and exposures to blood and OPIM to your supervisor.

Outside the workplace

- **Avoid risky behavior.**
  - Sharing needles
  - Having unprotected sex with multiple partners who also have multiple partners.
  - Limit your number of sexual partners.
  - Having sex with anyone who has ever used intravenous drugs
- **Get tested**. HIV testing and counseling are available free of charge at many clinics and centers.

Need more information?

More information about the Department of Education's Bloodborne Pathogens program may be found in your worksite's Bloodborne Pathogens Exposure Control Plan.

Other sources of information:

- Centers for Disease Control and Prevention (CDC)
- National Institutes of Health (NIH)
- New York State Department of Health
- New York City Department of Health

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