

### **What is HIV infection?**

HIV infection is a communicable disease caused by the human immunodeficiency virus (HIV) which damages the body's immune system, the system that fights infections. Without the immune system's protection, the body is defenseless against serious and potentially life-threatening diseases which can lead to the development of Acquired Immune Deficiency Syndrome (AIDS), the later stage of HIV infection.

### **How is HIV transmitted?**

HIV is transmitted through contact with infected body fluids such as blood, semen, vaginal secretions, and breast milk. It is spread by sexual contact with an infected person, and by sharing needles and/or syringes (primarily for drug injection) with someone who is infected. Very rarely, HIV is transmitted through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breastfeeding after birth.

HIV is not transmitted by mosquitoes or through casual contact such as shaking hands, social kissing and hugging, coughing, sneezing, swimming in a pool; by sharing bathrooms, eating utensils, food, office equipment or furniture; or from drinking from a water fountain. However, sharing razors or toothbrushes with an infected person could spread HIV.

### **How can a person learn if they have HIV infection?**

The only way for a person to learn if they have HIV infection is through testing of blood or other body fluids such as oral fluids or urine. Tests most commonly used to diagnose HIV infection detect HIV antibodies produced by the body to fight HIV. Most people develop detectable antibodies within 3 months after infection. In rare cases, it can take up to 6 months. Persons can be tested by their physicians or at clinics specializing in sexually transmitted diseases, family planning services, and agencies providing publicly funded HIV counseling and testing services.

### **What are the signs and symptoms of HIV infection?**

Some individuals experience an acute phase of HIV infection with short-term (one to two weeks) flu-like symptoms (fever, head, malaise, enlarged lymph nodes in the neck or groin) within one or two months after becoming infected. Most individuals do not have any symptoms for many years. Over time, however, the body's immune system weakens and a person may become vulnerable to other viruses and infections including certain pneumonias; several forms of cancer; nervous system damage; and extreme weight loss. A very small number of persons with HIV infection remain symptom-free even though they are able to transmit the virus to others.

### **Who should be tested for HIV?**

- Men who had unprotected sex (sex without a condom) with another man.
- Persons who shared needles for injecting drugs, tattooing, or body piercing.
- Persons who had several sex partners.
- Persons who had any sexually transmitted disease (STD), e.g. gonorrhea, herpes, chlamydia, venereal warts, or any other STD.
- Persons who received a blood transfusion or blood product between 1978 and mid-1985.
- Persons who had unprotected sex with any of the persons described above.
- Persons who had unprotected sex with a person infected with HIV.
- All pregnant women as well as infants born to HIV-infected mothers.
- Persons who were significantly exposed to another person's blood or other body fluids (e.g., someone's blood coming in contact with open lesions on another person's hand).

### **For how long can an infected person carry HIV?**

Persons infected with HIV remain contagious for their entire life--even after an HIV test no longer detects the virus in a person who previously tested positive.

### **Are there treatments for HIV infection?**

There several effective HIV antiviral medications. Early treatment with antiviral and other related medications can slow the progression of HIV disease and the development of AIDS. Persons with HIV infection usually take a combination of two or more HIV drugs to prevent disease progression. Because there is no medication that rids HIV from the body, most infected persons will need to take HIV medications their entire lives. HIV-infected pregnant women who take HIV medications can decrease the risk of transmitting HIV to a fetus/newborn infant during pregnancy or delivery.

### **How can the spread of HIV be prevented?**

The only sure way to avoid becoming infected or infecting others with HIV is to not have sex and to not share needles; however

- Persons who are sexually active should:
  - Limit the number of sexual partners and avoid sex with people whose sexual history is unknown.
  - Always use condoms when having sex (vaginal, oral, or anal). A dental dam (a sheet of latex) or a male condom cut open can be used for oral sex on a woman.
  - Avoid the use of alcohol and other drugs that might cloud thinking and lead to high-risk behavior.
- Persons who inject drugs should:
  - Not share needles or injection drug equipment with others.
  - Use only clean needles and works.
  - Enter a treatment program.

Staff in a local health department can provide information on how to obtain clean needles (e.g., through needle exchange or a local pharmacy) and how to enter a drug treatment program.

Pregnant women who are infected with HIV can reduce the risk of transmitting HIV to their unborn child when they take special HIV medications.