# Information Regarding the Transmission of and Exposure to HIV, Hepatitis B & C and Tuberculosis

# What Is Hepatitis B?

Hepatitis B is a serious disease caused by the Hepatitis B virus (HBV). Infection with this virus can cause scarring of the liver, liver failure, liver cancer, and even death.

Hepatitis B is spread by infected blood and other bodily fluids such as semen, vaginal secretions, saliva, open sores, and breast milk.

## What Happens to People with Hepatitis B?

In most cases (90%-95%), Hepatitis B causes limited infection. Usually people manage to fight off the infection successfully within a few months, developing an immunity that lasts a lifetime. (This means you will not get the infection again.) Blood tests show evidence of this immunity, but no signs of active infection.

However, some people do not get rid of the infection. If you are infected with Hepatitis B for more than 6 months, you are considered a carrier, even if you have no symptoms. This means that you can transmit the disease to others by having unprotected sex, deep kissing, or sharing food or drinks. Being a carrier also means that your liver is more prone to injury. For unknown reasons, the infection eventually goes away in a very small percentage of carriers.

Some carriers go on to develop chronic Hepatitis B. Chronic Hepatitis is an ongoing infection of the liver that can lead to cirrhosis. Cirrhosis, or hardening of the liver, causes liver tissue to scar and stop working.

If you are carrying the virus you should not donate blood, plasma, body organs, tissue, or sperm. Tell your doctor, dentist, and sex partner that you are a Hepatitis B carrier.

#### **How Common Is Hepatitis B?**

Nearly 300,000 Americans contract Hepatitis B each year, making infection with this virus much more common than infection with HIV, the virus that causes AIDS. Approximately 5%-10% of people with Hepatitis B infection go on to develop chronic infection.

Approximately 1 million people in the U.S. are carriers of the Hepatitis B virus.

## How Can I Avoid Becoming Infected, or Infecting Others?

Get vaccinated (if you have not already been infected). And:

- Use condoms every time you have sex.
- Wear gloves when touching or cleaning up body secretions on personal items, such as bandages/band aids, tampons, and linens.
- Cover all open cuts or wounds.
- Do not share razors, toothbrushes, manicuring tools, or pierced earrings with anyone.
- Do not share chewing gum or pre-chew food for a baby.
- Make certain that any needles for drugs, ear piercing, or tattooing are properly sterilized.
- Clean areas with blood on them with one-part household bleach and ten parts water.

## What is hepatitis C?

**A:** Hepatitis C is infection of the liver by the Hepatitis C virus. Hepatitis C is less common than Hepatitis A and B, but it is receiving more attention as a health problem today.

## Q: What are the signs and symptoms of Hepatitis C?

**A:** Hepatitis C infection typically has no symptoms for a long time, often a period of years. Without treatment, the infected liver becomes progressively damaged. This damage can eventually become irreversible, leading to liver failure (cirrhosis) or liver cancer. Some people do have symptoms, which may include tiredness, loss of appetite, nausea or abdominal discomfort. Unfortunately, many people do not see a doctor for these nonspecific discomforts.

## Q: How do people get Hepatitis C?

**A:** The Hepatitis C virus is carried in the blood and transmitted by "blood-to-blood" contact between persons. Until better screening of donated blood became available, blood transfusions were the most common cause. Today, the most common way people get Hepatitis C is by sharing equipment for injecting drugs. Hepatitis C is not transmitted by day-to-day social contact, such as kissing or hugging, sharing food or drinks, or using the same bathroom facilities.

## Q: Is there a test for Hepatitis C?

**A:** Most cases of Hepatitis C are identified when people have liver tests and the virus is discovered or when they have Hepatitis C antibody tests before donating blood. It is important to know that a positive Hepatitis C antibody test does not mean the person has a serious form of the disease. However, treatment is usually indicated to prevent more serious infection and liver damage.

## Q: How is Hepatitis C treated?

**A:** The usual treatment is with doses of interferon, a naturally occurring antiviral protein developed for use as a drug therapy. Treatment is more effective if the disease is detected at an early stage.

# What is AIDS?

AIDS is short for Acquired Immune Deficiency Syndrome. AIDS is a disease that slowly destroys the body's immune system. Without these important defenses, a person with AIDS cannot fight off germs and cancers.

HIV is the virus that causes AIDS. It kills an important kind of blood cell -- the CD4 T lymphocyte, or T cell. These T cells are the quarterbacks of the immune system. As they die off, the body becomes more and more vulnerable to other diseases. Germs take this opportunity to invade the body. The diseases they cause are called opportunistic infections (OIs for short). When people with HIV get these infections -- or when their CD4 T-cell levels get too low -- they have AIDS.

Usually it takes many years for HIV to weaken the body's immune system to the point of AIDS. Anti-HIV drugs help prevent this. Even when a person already has AIDS, the drugs can help a person get better.

Anti-HIV drugs let many people with HIV live healthy lives. Combinations of these powerful medicines work very well, but they often have serious side effects, such as vomiting, diarrhea, and fatigue. And people with HIV have to keep taking these drugs every day for the rest of their lives. Ask anyone who's taking these "drug cocktails" -- it's best to avoid getting HIV in the first place.

AIDS is a worldwide epidemic. Most cases are in Africa, but the disease is spreading most rapidly in Eastern Europe and Asia. Even if a cure were found tomorrow, AIDS will be the most deadly disease ever to plague mankind.

#### What Causes It?

HIV -- human immunodeficiency virus -- causes AIDS. HIV infection is for life. There is no cure, but anti-HIV drugs keep HIV in check. Unfortunately, 95% of the world's HIV infected people cannot afford this medicine.

There are a few people who say HIV does not cause AIDS. Some are scientists, but none of them are AIDS experts. They offer only false hope and no answers. Overwhelming medical and scientific evidence shows that HIV is the AIDS virus. Every major health organization in the world says that HIV is a killer.

There are two main types of HIV -- HIV-1 and HIV-2. HIV-2 is rare outside Africa.

You cannot catch HIV unless another person's body fluids -- blood, semen, or vaginal secretions -- enter your bloodstream. This can happen through the tip of the penis, through the vagina, through the rectum, or through an open wound.

## HIV is spread:

- By having sex without a condom. Vaginal and anal sex carry a high risk. The risk of getting HIV from oral sex is low.
- By sharing needles and/or syringes to inject drugs or steroids.
- From a mother to her infant during pregnancy, delivery, or breastfeeding.
- By getting a tattoo or piercing from a dirty needle.
- By transfusions, blood products, or organ transplants. This kind of transmission no longer happens in developed countries, which test all donated blood and organs for HIV.

You cannot get HIV from a toilet seat or from touching an infected person. You cannot get HIV from being sneezed or coughed or spit on by an infected person. You cannot get HIV from kissing (although there is a theoretical risk from very deep "French" kissing). You cannot get HIV from a mosquito, flea, or tick bite.

# What is tuberculosis?

Tuberculosis (TB) is a disease caused by bacteria. TB bacteria can attack any part of your body, but they usually attack the lungs.

## How is TB spread?

TB is spread through the air when a person with TB disease coughs or sneezes. People that spend a lot of time with an infected person may breathe in these bacteria and become infected.

#### What is TB infection?

In most people who become infected, the body is able to fight the infection. The bacteria are alive but inactive.

Sometimes, medicine is given to keep the infection from turning into TB disease. If you are infected, be sure to know the symptoms of TB disease and call your doctor right away if you have them.

## What is TB disease?

TB bacteria become active if the body cannot stop them from growing. Some conditions that increase the risk that TB infection will progress to TB disease are HIV, cancer, diabetes, and malnutrition.

## What are the symptoms of TB disease?

Symptoms of TB depend on where in the body the TB bacteria are growing. TB bacteria usually grow in the lungs and may cause:

- productive cough, especially bloody sputum (phlegm)
- cough lasts longer than one month
- fever
- night sweats
- fatigue
- weight loss, without dieting

## How do I know if I have TB infection?

A TB skin test is the only way to find out if you have TB infection.

## Who should get tested for TB?

You should have a Mantoux skin test for TB if you:

- have spent time with a person with infectious TB
- have TB infection or another condition that puts you at high risk for TB disease
- are from a country where TB disease is very common (Latin America, Caribbean, Africa, Asia)
- inject drugs
- live in U.S. where TB disease is common (shelters, migrant camps, prisons, jails, nursing homes)

## How is TB disease treated?

TB disease can almost always be cured with drugs taken for at least 6 months.

For more information please contact the Putnam County Health Department at 419-523-5608. Information provided by WebMD.