

SAPT Interim Services

Human Immunodeficiency Virus (HIV)

HIV is a lentivirus (a subgroup of retrovirus) that causes the acquired immunodeficiency syndrome (AIDS), a condition in humans in which progressive failure of the immune system allows life-threatening e transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells.

HIV infects vital cells in the human immune system such as helper T cells, macrophages, and dendritic cells. HIV infection leads to low levels of T cells through a number of mechanisms, including apoptosis of uninfected bystander cells, direct viral killing of infected cells, and killing of infected T cells by CD8 cytotoxic lymphocytes that recognize infected cells.¹ When T cell numbers decline below a critical level, cell-mediated immunity is lost, and the body becomes progressively more susceptible to opportunistic infections.

Member is referred to for HIV Treatment Services: _____

Tuberculosis (TB)

TB is spread through the air from one person to another. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. People nearby may breathe in these bacteria and become infected. Tuberculosis may infect any part of the body, but most commonly occurs in the lungs. General signs and symptoms include fever, chills, night sweats, loss of appetite, weight loss, and fatigue. Significant nail clubbing may also occur. In the past also called phthisis, phthisis pulmonalis, or consumption, is a widespread, and in many cases fatal, infectious disease caused by various strains of mycobacteria, usually *Mycobacterium tuberculosis*. Tuberculosis typically attacks the lungs, but can also affect other parts of the body. It is spread through the air when people who have an active TB infection cough, sneeze, or otherwise transmit respiratory fluids through the air. Most infections do not have symptoms, known as latent tuberculosis. About one in ten latent infections eventually progresses to active disease which, if left untreated, kills more than 50% of those so infected.

The classic symptoms of active TB infection are a chronic cough with blood-tinged sputum, fever, night sweats, and weight loss. Infection of other organs causes a wide range of symptoms. Diagnosis of active TB relies on radiology (commonly chest X-rays), as well as microscopic examination and microbiological culture of body fluids. Diagnosis of latent TB relies on the tuberculin skin test (TST) and/or blood tests. Treatment is difficult and requires administration of multiple antibiotics over a long period of time. Social contacts are also screened and treated if necessary. Antibiotic resistance is a growing problem in multiple drug-resistant tuberculosis (MDR-TB) infections. Prevention relies on screening programs and vaccination with the bacillus Calmette-Guérin vaccine.

One-third of the world's population is thought to have been infected with *M. tuberculosis*, with new infections occurring in about 1% of the population each year. In 2007, an estimated 13.7 million chronic cases were active globally, while in 2010, an estimated 8.8 million new cases and 1.5 million associated deaths occurred, mostly in developing countries. The absolute number of tuberculosis cases has been decreasing since 2006, and new cases have decreased since 2002. The rate of tuberculosis in different areas varies across the globe; about 80% of the population in many Asian and African countries tests positive in tuberculin tests, while only 5–10% of the United States population tests positive. More

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people in the developing world contract tuberculosis because of a poor immune system, largely due to high rates of HIV infection and the corresponding development of AIDS.

Member is referred to for TB Treatment Services: _____

Pregnant Women

Drinking alcohol during pregnancy can cause Fetal Alcohol Syndrome (FAS). FAS is the name given to a combination of mental and physical defects that can be present at a baby's birth and continue throughout a child's life. One of the most serious defects is mental retardation. In addition to mental retardation, FAS can also result in one or more of the following: miscarriage, brain damage that can't be repaired, growth problems such as shorter size, trouble gaining weight, small head, and other physical problems and differences, abnormal facial features, heart and kidney problems and serious lasting behavior problems.

Member is referred to for Prenatal Care: _____

Risks of needle sharing

- Injecting drugs carries the most risks as it bypasses the body's natural filtering mechanisms against disease and bacteria.
- Scarring the veins, collapsed veins, abscessing of arteries, ulcers, tetanus, septicemia, and thrombosis are issues and complications of IV drug users.
- Using unclean or sharing injecting drug equipment is one of the most efficient ways of transmitting HIV. The risk of developing TB is estimated to be between 20-37 times greater in people living with HIV than among those living without HIV infection.
- Reusing a needle or syringe is not the only risk; sharing other injecting equipment such as filters and water can also transmit HIV. Risks of transmission to sexual partners and infants.
- The spread of Hepatitis B and C occurs by the contamination of bodily fluids such as blood, which can occur through needle sharing.

Transmission to Sexual Partner / Fetus

- HIV positive mother's can transmit HIV to their babies in 3 ways: during pregnancy, during vaginal childbirth or through breastfeeding.
- An HIV positive mother who is not being treated for her HIV during pregnancy, labor and delivery as a 35% chance of passing the virus to her baby.

Steps to Ensure Transition Does Not Occur

- Encourage your HIV-positive partner to get on and stay on antiretroviral therapy (ART)
- Use condoms consistently and correctly
- Choose less risky sexual behaviors
- Talk to your doctor about pre-exposure prophylaxis (PrEP)
- Talk to your doctor about post-exposure prophylaxis (PEP) if you think you have had a possible exposure to HIV within 3 days of the potential exposure.
- Get tested for HIV.
- Get tested and treated for other STDs and encourage your partner to do the same.
- Keep the lines of communication open with your partner.
- Antiretroviral drugs can protect unborn babies from the HIV infection during pregnancy, labor and delivery. Chances of passing on the virus to the baby drop from 25% to 2%.