

30

Is there a connection between TB and HIV/AIDS?



The Canadian HIV/AIDS Clearinghouse, a program of the Canadian Public Health Association (CPHA), provides information resources on HIV prevention, care and treatment as well as a range of other HIV/AIDS information.

These resources are provided primarily to individuals and organizations working in the areas of HIV/AIDS health and education, as well as those infected and affected by HIV/AIDS. We do not endorse, recommend or advocate any specific approach to HIV treatment. This material is not intended as a substitute for the advice of a health professional. Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV-related illness and the treatment in question. While we update our material regularly, users should be aware that information changes rapidly. Material obtained through the Clearinghouse may not necessarily be the most current information available. The resources could include technical inaccuracies or typographical errors. Changes are periodically added to the information herein: these changes will be incorporated into new editions of the publication. We recommend that you see your health professional for advice on specific questions relating to your health. We urge users to consult a broad range of information and/or contact us at 1-877-999-7740 for more details. Users relying on this information do so entirely at their own risk. The Clearinghouse and CPHA do not accept any responsibility for damage that may result from the use or misuse of this information.

The views expressed herein are solely those of the authors and do not necessarily reflect the official policies or positions of the Canadian HIV/AIDS Clearinghouse, the Canadian Public Health Association or Health Canada.



Funding for this publication was provided by Health Canada.

Tuberculosis (TB) is a disease caused by certain bacteria and can be spread through the air from person to person. A person can easily contract TB when the immune system is weak. As HIV destroys the body's immune system in HIV positive people, they become highly vulnerable to TB. It is estimated that about one third of the 34.4 million people living with HIV worldwide are co-infected with TB

How do HIV and TB infections affect each other?

Up to 50% of people living with HIV develop TB. Also, HIV is considered the leading risk factor for reactivation of latent (dormant) TB infections. HIV infected people who become newly infected with TB progress rapidly to active TB. In addition to the adverse effects of HIV on TB, studies show that immune response to TB actually enhances HIV replication and might accelerate the natural progression of HIV infection.

Are there medication problems?

It can be difficult to take drugs for both TB and HIV at the same time. Many anti-HIV drugs have an affect on the drugs used to fight TB, and vice versa. Drugs like rifampin or rifabutin, commonly used to fight TB, can decrease the levels of HIV drugs in the blood to a level too low to control HIV. HIV drugs can increase the levels of TB drugs high enough to cause serious side effects. If you are being treated for both TB and HIV, you will need to work with your doctor or health care provider to follow special guidelines.

What are the differences between TB infection and TB disease?

TB infection:

Most people who inhale TB bacteria and become infected are able to fight the bacteria and stop them from causing disease. People with TB infection usually have no symptoms, do not feel sick, and cannot spread TB to others. Because these bacteria are not active and can later become active, people with TB infection can develop TB disease if their immune system is, or becomes weak, due to illness or age. But, most people who have TB infections never develop TB disease.

TB disease:

TB bacteria can become active and start to grow if the immune system cannot keep them under control. Some individuals may develop TB disease soon after becoming infected, before their immune system can fight the bacteria. Others may get sick later, when their immune system becomes weak for some reason, like illness or age. People infected with HIV are at high risk for TB infection and TB disease due to their weakened immune systems.

How is TB spread?

TB is spread from person to person through the air. When a person with pulmonary (lung) or laryngeal (throat) TB coughs or sneezes, droplets containing the bacteria are released into the air. These tiny particles can stay in the air for several hours. If another person inhales air containing these particles, transmission of TB may occur.

The bacteria can then settle in the lungs for many years, or for life. They can begin to multiply and can spread through the blood stream to cause disease in other parts of the body, such as the lymph nodes, kidneys, spine and brain.

Persons at the highest risk of becoming infected with TB are close contacts—persons who often spend time with someone who has infectious TB, like family members, roommates, friends, or co-workers.

For more information, contact your local AIDS service organization or health care practitioner.

For more copies of this fact sheet or other documents on HIV/AIDS, contact the Canadian HIV/AIDS Clearinghouse, 400-1565 Carling Avenue, Ottawa, ON K1Z 8R1
☎ 877-999-7740 ☎ 613-725-1205 ✉ aidssida@cpha.ca www.clearinghouse.cpha.ca
Published by the Canadian HIV/AIDS Clearinghouse, a program of the Canadian Public Health Association.
March 2002. Permission is granted for non-commercial reproduction for educational purposes.

For more information on HIV/AIDS or for local services, contact: