MIDDLESEX-LONDON HEALTH UNIT

FACT SHEET fact sheet

Tuberculosis

What is Tuberculosis (TB)?

TB is an illness caused by the germ *Mycobacterium tuberculosis.* TB usually attacks the lungs but can also attack other parts of the body. In most cases, TB germs do not make a person sick because the body's immune system is able to control the infection. The TB germs remain in the person's body, but are inactive and not growing. People with inactive TB are not sick and cannot spread TB to others.

If a person's immune system cannot stop the TB germs from growing, they will develop active TB. Active TB is infectious and can spread to other people if the germs are found in the lungs or airways. A person can have active TB in other areas of the body but those people cannot spread TB to others

1 out of 3 people in the world has inactive TB

Can inactive TB turn into active TB?

Yes, inactive TB can turn into active TB if a person's immune system cannot stop the germs from growing. About 5% of people with inactive TB will get sick with active TB in the first 2 years after they are exposed. After that, there is a 5% chance of getting active TB in the rest of a person's lifetime.

The following people with inactive TB are most likely to get active TB:

- Very young children
- Elderly people
- People who have a lot of stress
- People that do not have a good immune system
- People with certain medical conditions

On average, 1600 people get active TB in Canada each year

What are the symptoms of active TB?

Symptoms of active TB can be:

- cough
- coughing up blood or sputum (phlegm)
- fever
- night sweats
- weight loss
- tiredness

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How is TB spread?

TB is spread through the air when a person with active TB coughs, sneezes, or talks and someone else breathes the germ into their lungs.

To catch TB, a person must spend a lot of time with someone who is sick with active TB.

How can I get tested for TB?

A test can be done to see if you have the TB germ in your body. This test is called a TB skin test. When you have a TB skin test, a small amount of liquid, called tuberculin, is injected under the skin on your forearm. Two to three days later, you must return to have your arm checked. If there is a reaction (induration), it will be measured to see if it is considered positive for TB

What does a positive skin test mean?

A positive TB skin test usually means that you have been infected with the TB germ at some time in your life. Both inactive and active TB will cause a positive TB skin test reaction. A doctor will do further tests such as a chest x-ray and sputum testing, to make sure you do not have active TB

Why do some people get the TB blood test?

The Interferon Gamma Release Assay (IGRA), also known as QuantiFeron-TB Gold blood test, is another test that can be used to find out if someone has the TB germ in their body. This test is not for everyone, but for some, it may be better than the TB skin test. For example, the blood test may be better for people who had more than one BCG vaccine or got the BCG vaccine after 1 year of age. Generally, the blood test is not recommended for people needing repeat or serial testing for TB. The blood test is not covered by OHIP. The QuantiFeron-TB Gold costs $90.00 and is only available at Gamma Dynacare Medical Laboratories with a requisition. Ask your doctor for more information and to see if this test is right for you.

How is TB treated?

Active TB: Treatment for active TB can take up to two years (average is 6 months). Up to four different kinds of medicines must be taken daily. You may need to be isolated and stay away from other people for a while so you do not spread TB to others.

Inactive TB: Your doctor may suggest that you take one or more medicines every day for up to 9 months to help prevent you from developing active TB in the future.

Do I have to take TB medicine?

Active TB: Medicines **must** be taken to get better and to stop the spread of TB to others.

Inactive TB: Taking medicine is **not** mandatory, but it is usually a good idea because it can lower the risk of you getting sick with active TB in the future. Certain long term medical conditions make the chances of you getting sick with active TB much higher. This makes taking medicine to prevent active TB even more important.

TB is preventable, treatable and curable

Medicine for inactive TB is very important for:

People who have:

- any medical condition that affects their immune system (e.g. HIV or Diabetes)
- been recently exposed to someone with active TB

People who:

- are immigrants, refugees or travelers from areas with lots of TB
- work at, or are residents of, health care facilities, homeless shelters, or correctional facilities
- are taking medication that can weaken the immune system (e.g. corticosteroids) or are underweight (weigh less than 90% of ideal body weight)

Should people who have had a BCG vaccine take medicine for inactive TB?

BCG (Bacille Calmette-Guérin) is a TB vaccine that is often given to people who are born in countries where there is a lot of TB. Sometimes this vaccine can make your TB skin test positive. However, medicine for Inactive TB should still be considered even if you had the BCG vaccine in the past. It is more likely that your positive TB skin test is from breathing in TB germs from someone sick with active TB than from your BCG vaccine.

What are the side effects of medicines taken for inactive TB?

Isoniazid and Rifampin are the medications most often used to treat inactive TB. Like all medicines, allergic reactions and side effects may occur. Most people taking these medicines do not have major side effects and allergic reactions are very rare. Headache, muscle aches, and upset stomach are the most common side effects and normally only last a few weeks.

These medicines may affect your liver. Your doctor will ask you about side effects and test your blood regularly to make sure you do not have any liver problems.

For more information about medication side effects, talk to your doctor.

Important information about taking medicine:

- It is important to take this medicine as ordered by your doctor.
- You should not drink alcohol while taking this medicine. It could damage your liver.
- You should tell your doctor if you are taking any other medicines.
- It is best not to get pregnant or breastfeed while on this medicine. Talk to your doctor about birth control.

All TB medication is free. Your doctor can order these medicines from the Health Unit

What are the differences between inactive and active TB?

Inactive TB	Active TB
• TB germs in your body are not growing	• TB germs in your body are growing
• Positive TB skin test	• Positive TB skin test
• No TB symptoms	• May be sick with TB symptoms
• Chest X-ray shows no active TB	• Abnormal chest X-ray or CT scan
• No TB germs in sputum test	• Sputum test shows TB germs
• **NOT** contagious. People cannot catch TB from you	• Contagious if TB germs are found in lungs or airway
• Medication **can** be taken to prevent Inactive TB from becoming active TB	• Many medications **must** be taken to stop symptoms and the spread of TB

What happens if I have TB and HIV?

HIV is a virus that weakens the immune system and makes fighting TB infection more difficult. TB is the leading cause of death among people living with HIV in the world. Therefore, people with TB and HIV need to be educated about these diseases and be treated as soon as possible.

What is drug resistant TB?

Drug resistant TB is kind of TB that does not get better when you take the most commonly used TB medicines or drugs. When a person with active TB does not take their medicines properly, the TB germs can become resistant to the medicines. This means the TB medicines will not work and then the person may spread the drug resistant TB germs to others. There are different types of drug resistant TB found throughout the world. Some of these can be very hard to treat. Therefore, it is very important to take all TB drugs as prescribed by your doctor.

If you have any questions or concerns, please contact the Infectious Disease Control Team at 519-663-5317 ext. 2330 or go to www.healthunit.com

References:

Public Health Agency of Canada and the Canadian Lung Association/Canadian Thoracic Society. (2013). *Canadian Tuberculosis Standards* (7th ed.)

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