

Tuberculosis (TB)

What is it?

- TB is an infection caused by a bacterium called *Mycobacterium tuberculosis*. It enters your body through the air you breathe. TB infection usually affects the lungs, but can affect any part of the body (e.g. kidneys, brain, or spine).

How is it spread?

- TB is spread person to person through the air. TB bacteria are expelled into the air when a person with active TB of the lungs or throat coughs, talks, sneezes or sings. TB is most often spread to people who spend a lot of time with the person who has the disease. People at highest risk are those living in the same household or setting (e.g. long-term care home, shelter, jail) and close non-household contacts who are very young (<5 years) or have a weak immune system e.g. someone with cancer or diabetes.

What is TB Disease?

When TB bacteria are actively growing in the body and causing symptoms, a person has TB disease. This person can spread TB to others if the TB infection is in the lungs or throat. The symptoms can be mild to severe including:

- Cough (lasting longer than 2-3 weeks)
- Coughing up blood
- Fever/chills/night sweats
- Feel tired
- Unexplained weight loss/loss of appetite

What are the tests for TB?

- **Tuberculin Skin Test (TST)** –A TST only detects the presence of TB bacteria in the body. A TST is not used to diagnose active TB disease.
- **Interferon Gamma Release Assay (IGRA):** IGRA is a blood test that can also detect the presence of TB bacteria in the body. However, the use of this blood test is not recommended for diagnosis of active TB in adults. IGRA testing is currently not covered by OHIP and is at the patient's expense. Currently not available within our district.
- **Chest x-ray/CT Scan/MRI:** Radiology can detect some of the abnormalities associated with TB and might give an indication of disease progression. These tests would not be used alone for diagnosis but in combination with other tests.
- **Sputum Smear and Culture:** At least three sputum specimens should be collected and tested. Smear means the specimen is examined under a microscope to look for

TB bacteria. The result can usually be obtained in one or two days. However, a smear result can't be used for diagnosis. Every sputum specimen that is sent for smear is also set up for culture at the lab. Culture is the "gold standard" for TB diagnosis and it can take 2-8 weeks for a result.

- **Biopsy** – A biopsy may be necessary if TB is suspected to be in another part of the body (e.g. lymph nodes, kidneys, bladder, spine, etc.) A small piece of tissue is tested for the presence of TB bacteria.

How is TB treated?

- TB is treated with specific medications that are provided **free** of charge by the Health Unit.
- TB treatment takes a very long time (up to one year) to kill all of the TB bacteria. Some people might want to stop taking the medications when they start to feel better. However, if someone stops taking their medications too soon it can cause the TB to become stronger and harder to kill, and in some cases, resistant to TB medications.
- The goal of TB treatment is to take 100% of the prescribed doses of medication for the entire length of time they were prescribed.
- **Note:** You must get an assessment and a prescription from a health care practitioner prior to the health unit dispensing TB medications free of charge.

For further information, please contact the Communicable Disease Control Program staff at 705-474-1400 or 1-800-563-2808, ext 2229.

References:

Canadian Thoracic Society (CTS) of the Canadian Lung Association (CLA); Public Health Agency of Canada (PHAC). (2014). Canadian Tuberculosis Standards. 7th edition.

Ontario. 2011. Tuberculosis Prevention & Control Guidance Document. Toronto. ON: MOHLTC

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