

Infection Prevention and You



Tuberculosis: Find it and treat it

Tuberculosis (TB) is an ancient disease, yet remains a worldwide problem. In 2013, more than 9 million people had active TB worldwide, leading to 1 million deaths. The United States reported nearly 10,000 people with TB, meaning about 3 in every 100,000 persons was affected.

How is TB spread?

TB is caused by a bacterium called *Mycobacterium tuberculosis* that is spread from person to person through the air when a person with active disease speaks, coughs, or sneezes.

What could happen if I come in contact with someone who has TB?

Two conditions can happen if someone inhales enough TB germs to become infected – latent TB and active TB.

In most cases, a person's immune system is able to contain the TB germ and not cause any illness. This is called latent TB infection (LTBI). These people are not contagious and do not have any symptoms. But since the germ can stay inactive in the body, TB can become active and cause illness later in life.

Approximately 10 percent of people who become infected with TB develop active TB disease, which means they have symptoms of TB.

Who is most at risk for developing active TB disease?

Certain people are more likely to develop active TB. For example, people with weakened immune systems because of disease or medications, the very young and the very old, people who are diabetic, or substance abusers are more at risk.

How does TB affect the body?

TB can infect many organs of the body, including the lymph nodes, spine, and kidneys; but TB of the lungs (pulmonary TB) is the most common form.

What are the symptoms of TB?

- A cough that doesn't go away
- Coughing up sputum which may be bloody
- Weakness
- Weight loss
- Fever
- Sweating at night

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People with symptoms of TB or those who are exposed to TB should be checked. This can be done through a blood test or a tuberculin skin test (TST). The TST involves a small injection of fluid on the person's forearm. These tests will only tell if the person has been infected, not if they have active disease. Persons who test positive from either of these tests receive further evaluations including chest x-rays and possibly sputum collection.

How is TB treated?

Persons with active TB need medicines to cure the disease. These drugs will also make the person non-contagious in a relatively short time; however, to fully cure the person, the drugs must be taken for 6 – 9 months.

Some cases of TB are resistant to antibiotics and stronger medications must be taken for longer time periods. Regular contact with the healthcare provider and the Department of Health are very important to ensure that the treatment is completed.

Persons with LTBI should also take medication to reduce the chance of letting the germs grow in the body and leading to active disease. This treatment is much simpler, usually only one drug for 4 – 9 months.

Is there a vaccine to prevent TB?

Currently, there is no universally effective vaccine against TB. BCG [bacilli Calmette- Guerin] vaccine is given in some foreign countries that have a high caseload of TB. It has been shown to reduce TB meningitis in children. It is not a routine vaccine in the United States.

TB screening is still recommended for people who had the BCG vaccine. According to the CDC, “the presence of a TST reaction in persons who have been vaccinated with BCG does not predict whether BCG will provide any protection against TB disease.”

If you think you have been exposed to TB in your community, through your job or while travelling, get a TB screening test. This service is often free of charge at your health department.

Each year, World TB Day is recognized to help remind us that TB can be cured.

Additional resources

American Lung Association–Tuberculosis <http://www.lung.org/lung-disease/tuberculosis/>

APIC consumer alert–Tuberculosis: Considerations for an old threat

http://www.apic.org/Resource_/TinyMceFileManager/for_consumers/IPandYou_Bulletin_Tuberculosis.pdf

APIC Infection Prevention and You–Drug-resistant tuberculosis <http://professionals.site.apic.org/bugs-and-outbreaks/drug-resistant-tuberculosis/>

CDC TB–Patient and general public materials http://www.cdc.gov/tb/education/patient_edmaterials.htm

Stop TB USA <http://stoptbusa.org/>

World TB Day <http://www.cdc.gov/tb/events/worldtbdays/>

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