

# Tuberculosis – what is it?



Read more about TB



- Tuberculosis (TB) is a disease caused by a bacterium called *Mycobacterium tuberculosis*.
- It is spread from person to person through the air.
- TB usually affects the lungs.
- The disease may also affect other parts of the body such as the lymph nodes, the abdominal area, bones or the brain.

What are the symptoms of TB?

### The most common symptoms of TB disease of the lungs:

- a cough for several weeks
- coughing up sputum (phlegm from deep in the lungs)
- coughing up sputum and blood

### Other symptoms:

- fever
- intense night sweats
- weight loss
- fatigue
- loss of appetite
- feeling weak and tired

There can be other symptoms if TB disease is located in other parts of the body.

Common symptoms in children include irritability, tearfulness, apathy, poor appetite, and slow growth. In adults, symptoms usually develop slowly.

### How is TB transmitted?

TB is spread through the air from one person to another. In practice, only TB of the lungs is spread to other people. When a person who has TB disease of the lungs coughs or talks, TB bacteria are spread in the air. The bacteria can float in the air for several hours. Other people who are staying in the same room for a longer time (classroom, flat, work space, a car), may breathe into their lungs these bacteria and become infected.

TB is not easily transmitted. Only a part of those people who have been exposed become infected.



People living in the same household are at highest risk.

Opening windows and doors reduces the amount of bacteria in the indoor air. Outdoors there is practically no risk of transmission. TB is not spread through dishes, drinks, food, clothing, surfaces, handshaking, kissing or through sex.

### Who gets ill with TB disease?

When a person has become infected, he or she has TB bacteria in the body. If the bacteria remain sleeping, the person is not sick. Such a person does not have symptoms and cannot spread the disease to others (latent tuberculosis infection). If the bacteria become active and begin to multiply, the infected person gets ill with TB disease. In this case there are usually symptoms of TB disease. The disease can also be spread to others.

- About one third of those who are exposed to TB bacteria get infected.
- Only about 1 in 10 infected adults will get ill with TB disease.
- Small children under 5 years of age, young adults, the elderly and people with a weak immune system are more likely to become ill with TB disease.

A child under five years of age without vaccination can become ill a few weeks or months after being infected, and the disease may progress quickly. A part of adults develop TB disease within a few years of infection. However, a person can develop TB disease even decades later.

### How is TB examined?

If you are suspected to have TB disease of the lungs, you need to have a chest x-ray and give sputum samples for analysis. If you have

TB disease outside lungs, you need to have special examinations, for example imaging techniques and samples from the infected part of the body. Your examinations will start at the health station. You may need further examinations at a hospital.

### Can TB be cured?

Yes, TB can be treated and cured with medicines. Medicines can destroy TB bacteria. Treatment starts in the hospital with 4–5 medicines. Treatment lasts for at least six months. Examinations for TB, medicines, hospital care and follow-up visits are free of charge to the patient.

It is important that you take all medicines regularly throughout the treatment. If you stop taking medicines too early, you can get ill with TB disease again. If you take medicines irregularly, TB bacteria can become resistant to these medicines (drugs). It is more difficult to treat a drug-resistant disease and it usually lasts for 1.5–2 years.

It is possible to cure TB if the disease is detected early enough and if the patient takes all medicines as long as necessary.

### Who gets protection from TB vaccination?

BCG (Bacillus Calmette–Guerin) vaccine best protects infants and small children against serious forms of TB disease. In Finland, since 2006, the vaccine is given only to under seven-year-old children, who are considered to be at increased risk for catching TB. The vaccine is usually given to them soon after birth. The vaccine is free-of-charge. The vaccine does not protect adults as well as children and so adults are not vaccinated.

### What does contact tracing mean?

It is possible that some other people who have spent a lot of time with the patient have been infected with TB or have got TB disease. The health staff interview the patient to find out who these people may be.

People who have been exposed to TB are invited to a health station for examinations. Children are examined in a hospital. If TB disease is detected, these people start taking TB medicines. In some cases people with latent TB infection start a preventive treatment course. Some exposed people need a follow-up for 1–2 years. If they later start having symptoms of TB, they should go to a medical examination at a health station at their own initiative.

Contact tracing aims to stop the spread of the disease. Contact tracing is regulated by the Finnish Communicable Diseases Act. All examinations and treatment given because of TB exposure are free-of-charge for the patient.

