## Information about dormant (latent) tuberculosis infection

### What is dormant tuberculosis infection (LTBI)?

A tuberculosis infection is called dormant or latent, when a person has been infected with tuberculosis, but the tuberculosis bacteria are "asleep", they remain dormant in the body. The person has no symptoms, is not sick, and cannot transmit the disease to other people.

One-fourth of the world's population has a dormant tuberculosis infection. Most of them live in countries where tuberculosis is common (almost all of Asia, Africa, South and Central America, and a big part of Eastern-European countries). Tuberculosis was common in Finland in earlier times. This is why many of the people born in Finland before 1950 have been infected with tuberculosis in their childhood or youth.

#### Why should we treat dormant tuberculosis infection?

The treatment is aimed at eliminating the dormant tuberculosis bacteria in one's body in order to prevent falling ill.

Dormant tuberculosis infection can develop into an active tuberculosis disease at a later date, even decades after having been infected. In this case, a person develops symptoms, and may transmit tuberculosis to those around them. This usually happens within the first year or two after the initial infection. After this, falling ill is due to the temporary or permanent weakening of the immune system.

# Screening for dormant tuberculosis infection is targeted at persons who have the greatest risk of falling ill

Among those exposed to tuberculosis, persons nearest to the patient, such as people living in the same household as the person with TB disease are at the highest risk. The health care authorities determine the people to be screened. Only one-third of the people exposed become infected.

- Of every hundred people with a tuberculosis infection, about ten develop active TB disease. About half of them do so within two years and the rest during the rest of their lives.
- One of every two under-one-year-old children and one of every four 1-to-5-year-olds may fall ill after having been infected. Teenagers and young adults also have a higher risk of developing the disease than older adults. This is why screening is targeted to those under-35-year-olds who have been exposed.
- The immune system is a crucial factor as far as the risk of falling ill is concerned. The screening is indicated regardless of an exposed person's age if they have certain conditions that weaken the immune system.

# The diseases, medications, and treatments that weaken the immune system and indicate screening:

- HIV infection
- Silicosis
- Planned organ transplant
- Progression of chronic kidney failure to a stage that requires dialysis
- Planned start of a biological medical treatment or JAK inhibitors



### How is dormant tuberculosis infection screened?

Adults are screened with the IGRA (Interferon Gamma Release Assay) blood test while children under 7 years of age can also be screened with the Mantoux skin test.

#### How is dormant tuberculosis infection treated?

Before the start of the treatment, it is made sure that the person has no symptoms of tuberculosis and that the chest radiograph (x-ray) is normal. Sputum samples will be collected if needed. Blood tests for haemoglobin, white blood cells, liver and kidney function, and possible HIV will be checked.

The treatment decision is based on an individual assessment. The treatment is only given if the person is willing and committed to treatment. The treatment is initiated and monitored in public healthcare (a hospital or a health centre). All tests and treatments are free of charge in accordance with the Act on Social and Health Care Client Fees.

Anti-tuberculosis medicines are used in the treatment. The doctor in charge of the treatment selects the best-suited medicine or combination of medicines on a case-by-case basis. The treatment lasts from 3 to 9 months depending on the situation and combination of medicines. The treatment can have adverse effects. Find out more about them in the separate patient instructions.

#### How effective is the medical treatment?

Medical treatment can prevent the development of tuberculosis disease in the majority of those who have complete the treatment.

#### May I undergo the medical treatment during pregnancy?

If a pregnancy is only being planned at the time, it is reasonable to undergo the treatment before the beginning of the pregnancy.

The mother's risk of hepatitis increases somewhat during pregnancy. Because of this, the treatment is preferably initiated about 3 months after giving birth. The treatment decision is always made individually after careful consideration. Anti-tuberculosis medicines cause no danger to the foetus.

#### Take care of yourself!

You can strengthen your immune system through your lifestyle. So take care of yourself! Eat well, exercise and get enough sleep. Stop smoking and use alcohol in moderation. Avoid stress. Take vitamin D: people with light skin need it at least during the dark season from October to April while people with a darker skin should take it throughout the year.

Contact a doctor in case of prolonged cough, sputum, phlegm, loss of appetite, loss of weight, intense fatigue, or night sweats.

Read more about tuberculosis on www.tuberkuloosi.fi.