



*"When you can't breathe...
nothing else matters"*TM

Tuberculosis

What is tuberculosis?

Tuberculosis or TB is an illness caused by a germ called "*Mycobacterium tuberculosis*".

The lung is most commonly infected. However, the germ may occasionally spread from the lung to infect the lymph glands, bones and joints, kidneys and many other parts of the body.

How do you catch tuberculosis?

TB is caught by breathing in the tiny drops coughed up or sneezed by a person who has TB. These drops are invisible and may contain TB germs. Once inhaled, the germs invade the lungs and slowly multiply. At this stage, the body's own defences may fight off the infection. This often happens during childhood in countries where TB is common. Such TB infection may cause no symptoms or result in no more than a mild "flu" like illness. Only 10-20% of people infected in this way ever develop TB disease, mostly within one to two years. In the remainder, the germ may then cause no further trouble. However, in a small percentage, it may become active later in adult life when other illness or increasing age results in a weakening of the body's natural defences.

Who gets tuberculosis?

About 1200 new cases of TB are found and treated in Australia each year. Newly arrived immigrants and refugees, who caught the infection prior to arrival in Australia, are at increased risk. A person who is infected is more likely to develop TB disease if they also have low resistance to infection, poor nutrition, severe illness, or drink alcohol excessively. In these people, disease may occur many years later when the immune defences are weakened. However, the TB germ most commonly causes disease in people who are otherwise in good health and often in the first few years after migration.

What are the symptoms of tuberculosis?

The most common symptom of TB is a persistent cough, lasting for more than three weeks. Other symptoms of TB include fever, loss of energy, sweats, particularly at night, and weight loss. The cough may produce phlegm and sometimes blood. The symptoms are often mild at first and develop slowly. TB is usually first suspected when changes are seen on a chest x-ray.

How is tuberculosis diagnosed?

TB can only be diagnosed with certainty if the TB germ is found in a body fluid e.g. in the phlegm or urine, or in organ tissue such as lymph glands removed at surgery. Finding the germ allows the laboratory to carry out tests to find out which drugs will be most effective in treating the TB germ.

A Mantoux skin test is sometimes used to test if people have been exposed to the germ. This simple test involves an injection into the skin of the forearm and examination of the injection site after 48-72 hours for swelling. These signs indicate past or present TB infection. However, it is important to remember that this only indicates exposure, not disease. Further investigation is required to determine whether or not disease is present.

A negative reaction can still mean TB germs are in the body in some people who have diminished immunity, so such tests are only used to test for exposure, not for disease. There is also a blood test called QuantiFERON to test for exposure. This has the same limitations as the Mantoux skin test in that it only tests for exposure, not for disease. The National Tuberculosis Advisory Committee of Australia advises that the Mantoux skin test should remain the standard test for testing for TB exposure.

How is tuberculosis treated?

TB is treated with three or four antibiotics taken together. Unlike other infections, which often only need a week or so of antibiotics, TB requires many months of continued treatment to be certain of a cure. The exact length of time varies and depends on many factors, but is at least six months for established disease. Stopping or not taking your medicine can allow resistant TB germs to develop and increases the risk of relapse. When this occurs, the disease can be much more difficult or even impossible to cure. Properly taken, TB treatment has an almost 100% cure rate.

Whilst being treated for TB, it is essential to receive regular follow-up from your treating doctor. Side effects of TB drugs occur occasionally and are usually only temporary. Your doctor will want to keep you under close supervision, especially during the first few weeks of treatment. Blood tests or x-rays may be needed at times during these visits. Medications used in the treatment of TB may have an effect on your other medications, so it is important to ensure your treating doctor is aware of all the medications you take, including those available without a prescription.

Is tuberculosis infectious?

Generally, only those TB patients who have germs in their phlegm are at risk of infecting others. Not all people with TB are infectious; some have the germs deep in the body but do not cough them out. Treated patients mostly become non-infectious within a few weeks of starting TB treatment. During the first few weeks of treatment when a person may still be infectious, care should be taken to cough into a tissue and to take the advice of your doctor as to whether you can go to school or work. After this time, no risk is posed to family, friends or contacts.

Government rules

After a diagnosis of TB is made, it is a legal requirement for the doctor to notify the Department of Health who will arrange skin tests and chest x-rays for close contacts. These tests may identify those people to whom the TB germ has already been passed onto. If contacts in your family or workplace are found to have been infected, they will have an opportunity to take treatment that prevents the possibility of future TB disease in them.

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This brochure is one in a series produced by Lung Foundation Australia to provide information on lung disease, its treatment and related issues. The information published by Lung Foundation Australia is designed to be used as a guide only, is not intended or implied to be a substitute for professional medical treatment and is presented for the sole purpose of disseminating information to reduce lung disease.

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Please consult your family doctor or specialist respiratory physician if you have further questions relating to the information contained in this leaflet. For details of patient support groups in Australia please call 1800 654 301.