

Tuberculosis

What is tuberculosis?

Tuberculosis (TB) is caused by a bacteria called *Mycobacterium tuberculosis*. It usually affects the lungs (pulmonary TB) but can also spread to other parts of the body like bones, joints and kidneys (extrapulmonary TB).

TB remains a serious global health issue, with an estimated 1.6 million deaths worldwide in 2021. In Australia, around 1,300 people get TB each year. The good news is that TB is **curable and preventable**.

How is tuberculosis spread?

Only people with TB disease (active TB) can spread the disease to other people.

TB is transmitted from tiny droplets from coughing, talking, or yelling. TB bacteria are contagious while in the air but can't survive on surfaces. This means you don't need to do any extra cleaning if someone with active TB has been in a room.

TB (caused by bacteria) usually only spreads after close and long contact with someone with TB, like living with them or being in the same room for more than 8 hours. People who spend less time together, or who meet outside or in open workspaces, have a low chance of catching TB.

What is the difference between tuberculosis infection and tuberculosis disease?

There are two main types of TB – TB infection (also called latent or sleeping TB infection) and TB disease (also called active TB).

TB infection (latent or sleeping TB) means the person has TB bacteria in their body, but their immune system is keeping it under control. They feel well, don't have symptoms and can't pass TB to others. Treatment is important as TB infection can turn into TB disease in the future, especially if the immune system becomes weaker.

TB disease (active TB) means the TB bacteria is active in the body and can cause symptoms. Symptoms may be a cough, weight loss, fever or night sweats. People with TB disease in the lungs or throat can spread the bacteria to others. TB disease needs urgent treatment.

What are the common symptoms of tuberculosis disease?

The most common symptoms of TB in the lungs include:



A cough lasting longer than 2 or 3 weeks



Coughing up blood



Chest pain



Fever or chills



Night sweats



Feeling tired or weak



Weight loss and loss of appetite

If TB is in other parts of the body, the symptoms will depend on which area is affected. For example, TB in the lymph nodes may cause swelling or lumps, while TB in the spine may cause back pain.

How is tuberculosis diagnosed?

If someone is experiencing symptoms of TB or has been exposed to someone with TB, they should see a health professional. They'll ask about symptoms, check for risk factors, and perform a physical examination.

To diagnose TB disease, tests like a chest X-ray and sputum samples are typically required. In some cases, other tests may be needed such as a CT scan, ultrasound, or biopsy, depending on which part of the body is affected. These tests help confirm whether active TB disease is present and guide the best treatment.

Tests like the Interferon Gamma Release Assay (IGRA) or the tuberculin skin test (TST) are used to detect TB infection (latent/sleeping TB), not active disease. These tests can help identify people who have been infected with TB in the past, especially if they have no symptoms.

Tuberculosis is curable

Treatment involves taking antibiotics for a long period of time, usually between 3 and 12 months. Health professionals will work with each person to decide on the most suitable treatment plan. The type and length of treatment can depend on:

- Whether the person has TB infection or TB disease
- Age
- Overall health and how strong the immune system is
- Whether the TB strain has antimicrobial resistance (AMR), where bacteria survive certain antibiotics and require different treatment.

It's important to take TB medicines exactly as prescribed for the full treatment period, even if symptoms improve. Completing the full course of treatment is key to curing TB and prevents AMR. Because this is important, many TB programs offer support like supervised treatment through Directly Observed Therapy, in person or via digital platforms.

In all Australian states and territories, TB treatment is provided free of charge through public health TB services. These services also provide clinical care, contact tracing, education, and support throughout the treatment journey. Local health services or Aboriginal Community Controlled Health Organisations (ACCHOs) may also provide additional support.

Public health notification and contact tracing

In Australia, TB disease is a notifiable disease, and the diagnosing doctor must notify the relevant state or territory health department. This helps to protect both the person with TB and the wider community.

After someone is diagnosed with TB, specialist TB

services will work with the person to identify and check in with people who might be at risk of catching TB (contact tracing). This could be family, roommates, co-workers, or others who have spent a lot of time together indoors. This helps make sure everyone stays healthy and gets any care they might need.

If any of these contacts are found to have TB infection, they may be offered preventive treatment to stop them from developing TB disease in the future.

All testing, support, and treatment for TB are provided free of charge through public health TB services.

Supporting Aboriginal and Torres Strait Islander peoples

In Australia, Aboriginal and Torres Strait Islander peoples are disproportionately affected by tuberculosis compared with non-Indigenous Australians. In some regional and remote communities, factors such as overcrowded housing, limited access to culturally safe healthcare, and systemic barriers can contribute to increased risk of TB transmission and delays in diagnosis and treatment.

Strengthening TB care in the community requires culturally safe, community-led approaches to ensure that Aboriginal and Torres Strait Islander peoples are effectively supported. Public health TB services are encouraged to work closely with Aboriginal and Torres Strait Islander health professionals and ACCHOs to support early diagnosis, treatment, and prevention.

What should I do if I think I have tuberculosis?

Anyone with symptoms of TB, or who has been in close contact with someone with TB, should see a health professional. They can arrange testing and, if needed, connect you to local public health TB services. With proper treatment and support, TB can be cured.

FURTHER INFORMATION AND SUPPORT

Each state and territory has a dedicated TB program. For advice, referrals, or support, contact the local TB service or public health unit. Interpreter services are available, and care is always provided confidentially and without cost.

For additional TB information for Aboriginal and Torres Strait Islander peoples, visit: ahcwa.org.au

Lung Foundation Australia also provides information and support services. A mailing list is available for regular updates and the latest news.

Lung Foundation Australia services:

- Information and support line
- Lung cancer support nurse
- Lung health and disease information resources
- Education seminars and webinars
- Support groups
- Peer-to-peer connections
- Information about accessing pulmonary exercise programs
- Newsletter