Tuberculosis (TB) Fact Sheet

Key points

- Tuberculosis (TB) is a disease caused by infection with the bacteria Mycobacterium tuberculosis.
- TB most commonly affects a person's lungs, but can also affect other parts of the body. It can cause serious illness.
- The disease can be cured with specific antibiotics.

How is it spread?

- TB is spread through the air when a person with TB disease of the lungs or throat coughs, sneezes, sings or speaks, sending germs into the air
- When other people breathe in these germs, they can become infected
- Most people get TB germs from someone they spend a lot of time with, such as a family member or close friend
- TB is NOT spread by household items (for example cutlery, plates, drinking glasses, sheets, clothes or phones), so it is not necessary to use separate household items.

What is the difference between TB infection and TB disease?

In most people with TB infection, the body’s defences control the germs. However the germs may stay alive in a dormant or inactive state. This is called ‘latent’ TB infection (LTBI).

- While the TB germs are inactive, they cannot do any damage, and a person is not sick
- For most people, these TB germs will always stay inactive
- People with LTBI are not infectious - they cannot spread TB to others
- LTBI can be detected by a positive result to a Tuberculin Skin Test (also known as a Mantoux Test) or a special blood test (‘interferon gamma release assay’ also known as QuantiFERON TB Gold-Plus®).

In some people, TB germs overcome the immune system defences, resulting in progression from TB infection to TB disease. Some people develop TB disease soon after infection, while others develop TB disease years later when their immune system becomes weakened. This may be due to ageing, serious illness, stressful event, drug or alcohol misuse, HIV infection, cancer or other conditions.

- When inactive TB germs become active, TB disease can develop
- Only about 10 per cent of people with TB infection will ever get TB disease
- People with TB disease of the lungs or throat can be infectious to others
- In most cases, after two weeks of taking appropriate medication, people with TB disease will no longer spread TB germs.
- People with TB in parts of the body other than their lungs or throat (for example, TB in lymph nodes or a bone) are not infectious.

What are the symptoms?

TB can cause disease in any part of the body, but the lungs are the most common site. Some people with TB disease may only have mild symptoms. People with TB may have some or all of the following symptoms:

- A cough that lasts for more than three weeks, and is not improving
- Coughing up blood-stained sputum
- Fevers
- Sweating during the night
- Unexplained weight loss
- Always feeling tired
- Loss of appetite
- Pain or swelling in the affected area (such as a lymph node in the neck or under the jaw).

**Who is at risk?**
- People who have spent long periods in close contact with a person with infectious TB
- People born in, or who have spent long periods of time, in countries with a high burden of TB
- People who take medication that affects the immune system, e.g. immunotherapy, corticosteroids or chemotherapy
- People who have a chronic illness that affects their immune system, including HIV.

**How is TB prevented?**
- People with infectious TB are kept isolated until they are no longer infectious (usually about two weeks on treatment)
- People diagnosed with latent TB infection may be offered a course of preventive treatment
- BCG vaccination gives protection against severe forms of TB in young children, and is offered to children under 5 who will be travelling to countries where TB is common; however, BCG vaccine is not routinely given in NSW.

**How is TB disease diagnosed?**
For TB in the lungs:
- A chest x-ray can show whether TB has affected the lungs
- A sputum test shows whether TB germs are present in coughed up sputum
- If the person cannot cough up sputum, other tests may be needed.

For TB outside the lungs, tests such as a needle biopsy, wound swab, surgical specimen or urine sample can help to diagnose other types of TB.

**How is it treated?**
**Latent TB infection:** the doctor may prescribe a course of tablets (preventive therapy), or follow up with regular chest x-rays.

**TB disease:** is treated with a combination of specific antibiotics for at least six months. A chest clinic nurse will supervise treatment to provide support and education, to check for any side effects, and to ensure treatment is successfully completed.
- People with TB should take all their TB medicines without missing doses or stopping early
- People with TB can be cured if they complete their treatment
- People with TB can return to normal activities while on treatment when they are no longer infectious.

**Multi-drug resistant TB (MDR-TB)**
Multi-drug resistant TB (MDR-TB) occurs when TB bacteria are not killed by at least two of the important TB drugs (isoniazid and rifampin). Drug resistant TB is spread in the same way as other TB.
- People with MDR-TB require longer antibiotic treatment, for up to 24 months, and usually need regular injections (into the vein or muscle) for the first 6 to 8 months
- People with MDR-TB should take all their TB medicines exactly as prescribed until the end of the treatment course, without missing doses or stopping early.

**For more information**
- Contact your local Chest Clinic or see your family doctor
- A Medicare card or a referral from a doctor is **NOT** needed to attend a chest clinic.
- All TB investigations and treatment are provided free and confidentially at chest clinics

For further information please call your local Public Health Unit on 1300 066 055 or visit the New South Wales Health website [www.health.nsw.gov.au/tuberculosis](http://www.health.nsw.gov.au/tuberculosis)