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 and can cause serious illness
- The disease can be cured with 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, like a family member or friend
- TB is **not** spread by household items (for example by cutlery, crockery, drinking glasses, sheets, clothes or telephone) 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 which can stay alive in a dormant or inactive state. This is sometimes called latent TB infection.

- While the TB germs are inactive, they cannot do any damage, and a person is not sick
- For most people TB germs will always be inactive
- People with TB infection are **not** infectious and cannot spread TB to others
- Infection can be detected by a positive result to a Tuberculin Skin Test (or Mantoux Test) or a blood test (interferon gamma release assay or Quantiferon TB Gold-Plus).

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

- When inactive TB germs become active, TB disease can develop
- Only about 10 per cent of people with TB infection will 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 other parts of the body (other than their lungs or throat) are **not** infectious.

What are the symptoms?

TB can cause disease in any part of the body, but the lungs are the most common. 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
- Blood-stained sputum
- Fevers
- Night sweats
- Unexplained weight loss
- Always feeling tired

- Loss of appetite
- Pain and / or swelling in the affected area.

Who is at risk?

- People who have spent long periods in close contact with a person with infectious 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 the spread of TB prevented?

- People with infectious TB are isolated until they are no longer infectious
- People diagnosed with TB infect ion may be offered a course of preventive treatment
- BCG vaccination gives protection against life-threatening forms of TB in young children who will be travelling to countries where TB is common, but it is not routinely given in NSW.

How is it diagnosed?

For TB in the lungs:

- A chest x-ray can show whether TB disease has affected the lungs
- A sputum test shows if 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 fine needle biopsy, wound swab, surgical specimen or early morning urine sample can assist in diagnosing TB.

How is it treated?

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 your treatment to provide you with support, education and check for any side effects to ensure treatment is successfully completed.

- People with TB should take all their TB medicines exactly as prescribed, until the end of the treatment course, without missing doses or stopping early
- People with TB can be cured if they complete treatment
- People with TB can return to normal activities, while on treatment, as long as they are no longer infectious.

Multidrug resistant TB (MDR-TB)

Multidrug resistant TB (MDR-TB) occurs when TB bacteria are resistant to at least isoniazid and rifampin, the two most powerful TB drugs. Drug susceptible TB and drug resistant TB are spread in the same way.

- People with MDR-TB require longer antibiotic treatment for up to 24 months, and some people need regular injections into the vein for the first 6-8 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
- All TB investigations and treatment are provided free and confidentially at chest clinics
- A Medicare care or a referral from a doctor is **not** needed to attend a chest clinic.

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