Western Cape Government
Education
FOR YOU

Tuberculosis

Tuberculosis (TB) is an infectious disease caused by the bacteria Mycobacterium tuberculosis. It usually attacks the lungs, but can attack almost any part of the body. It is a very common infection worldwide, but particularly in sub-Saharan Africa.

The bacteria that causes TB is spread from person- to-person in the air. Someone with TB exhales or coughs the bacteria into the air and someone else inhales it. Only about 10% of people who inhale the TB bacteria actually develop the disease.

Those who are more at risk of developing TB infection include people with suppressed immunity (HIV positive people, diabetics, people on chemotherapy), people living in areas with high incidence of TB, residents of long-term care facilities (nursing homes, prisons, some hospitals), people who are malnourished, alcoholics and drug users, and people living in crowded, confined spaces.

TB symptoms can include an ongoing cough (dry or wet), tiredness, weight loss, loss of appetite, fever, coughing up blood, night sweats, chest pain and symptoms from other systems (brain, kidneys, liver, etc.) if the TB has spread.

TB tests include:

- **Chest X-ray.** On its own, this is not enough to make a diagnosis.
- **Skin testing.** A small prick in the skin causes swelling. The test shows whether your immune system is fighting TB. This test is ineffective in someone with AIDS.
- **Sputum (mucous).** Mucous that has been coughed up is sent to a laboratory for assessment. The test may need to be repeated several times to find TB.
- **Bone marrow biopsy.** A sample of marrow from the hip bone can be assessed for TB in those with widespread TB.
- **Blood culture.** TB is grown from a blood sample and this takes at least six weeks. It is useful for those where all other tests have been negative.

Treatment depends on the site in the body affected by TB, whether it is the first time it is being treated and if there is resistance to TB drugs. Treatment usually consists of a combination of two to four drugs used for a minimum of six months.

First time TB treatment is known as 'first-line' treatment. Those who have been previously treated, or where the first-line drugs don't work, receive 'second-line' treatment. Hospitalisation is only needed when the person is very ill. Most people can return to work within a few weeks.

Some types of TB have become resistant to TB medications. This type of TB is very hard to treat and may require long stays in hospital.

Most people receive the BCG vaccine at birth and then again at three months of age. Unfortunately the TB vaccine does not prevent against TB entirely; it does however prevent children from getting more severe forms of TB like TB meningitis.