

Mantoux Test (Tuberculin Skin Test)

Why do a Mantoux test (tuberculin skin test)?

Sometimes people can become infected with tuberculosis (TB) germs without getting the actual disease. The Mantoux test (tuberculin skin test) can show if the person has ever been infected by TB germs. TB infection does not mean the person has the disease, but if someone has been infected there is a chance they might get sick with TB in the future.

Who needs a Mantoux test?

- Recent contacts of someone who has active TB disease. This could be family members, friends, or co-workers.
- People who have a chest X-ray with findings suggesting they have had untreated TB disease in the past.
- People who have lowered immunity such as with HIV infection or medical conditions e.g. renal failure, cancers of the head and neck or blood and lymphatic cancer and diabetics.
- Patients before they start steroids or other immunosuppressive drugs.
- People who are required to be tested for employment reasons or as part of a school screening program (provided they have not had a previous positive Mantoux test or active TB).
- People about to undergo organ donation.
- People donating an organ.
- People travelling to a high risk TB country.
- Children 0 to 5 years being considered for a BCG vaccine (See [NT Health BCG fact sheet](#)).

The Mantoux test

A Mantoux test is a simple and safe test. A small amount of tuberculin purified protein derivative (Tubersol®) is injected just under the top layer of skin on a person's arm using a small sterile needle and syringe. The skin reaction (lump) is measured 2 to 3 days later and the result recorded.

Possible side effects

Side effects are uncommon. However, a person who has been exposed to TB germs may occasionally have a sizeable reaction, which may cause some discomfort. This swelling should disappear in about 2 weeks.

The reaction can get itchy. It is best not to scratch the arm – a cold compress can help relieve any itching.

What does a negative result mean?

If the lump is below a certain size the result of the test is negative. Usually this means that the person has not been infected with TB germs. However, under some circumstances it can be negative or non-reactive even when someone has been infected. This can happen if the exposure to TB has been in the last few weeks and the body has not had time to develop a reaction or if the body's defences are weakened and unable to react to the skin test. In these situations the test may need to be repeated, interpreted differently or sometimes a further test is done.

What does a positive test mean?

A positive test indicates that the person is infected by TB bacteria, but does not mean that he or she has TB disease. A Mantoux positive person cannot pass TB onto anyone else unless there is progression at some stage to active pulmonary TB disease.

How can a person be infected and not have TB disease?

After TB bacteria enter the body, in most cases, body defences control it by building a wall around the bacteria, similar to the way a scab forms over a cut. The TB bacteria can stay alive inside these walls for years in an 'inactive' or latent state. This is referred to as latent tuberculosis infection (LTBI). People with LTBI have TB that are inactive and are not causing disease.

What is TB disease?

Tuberculosis is an infectious disease which usually affects the lungs but can affect other parts of the body. It is spread from person to person through the air by droplet infection. It is possible to get TB disease within months after it has entered the body, if body defences are weak. It is also possible for the inactive TB bacteria referred to as LTBI to become active when body defences are weakened. This may be years later due to ageing, a serious illness, developing diabetes, kidney disease, certain cancers, drug or alcohol abuse, or HIV infection.

Why should a person know if they have latent TB infection (LTBI)?

It is important to know if an individual has LTBI because there is the opportunity to treat the LTBI and greatly reduce any risk of future progression to active TB disease.

What happens after the Mantoux skin test is read?

If the test is negative, no further testing is needed at this time, but you may need another test a few months later, depending on the reason for the test.

If the test is positive, a chest X-ray and physical examination will be needed to ensure there is no sign of active disease. If there are no signs of active TB the doctor will discuss the indications for taking medication to prevent the development of TB disease in the future. The benefits of taking the medication depend on the person's age, health and underlying risk of TB disease.

Other tests are available to test for latent TB infection. These blood tests are called interferon gamma release assays (IGRAs). While the Mantoux is the preferred test IGRAs are sometimes used or are a supplemental test.

Related information

- [Guidelines for the control of Tuberculosis in the Northern Territory](#)
- [Tuberculosis profile page on NT health and resources](#)

Contact

For more information contact the Public Health Unit's [Centre for Disease Control](#) in your region.

Location	Address	Phone	Fax	Email
Darwin	Ground Floor, Building 4 Royal Darwin Hospital Rocklands Drive Tiwi NT 0810	(08) 8922 8044 1800 008 002	(08) 8922 8310	CDCSurveillance.DARWIN@nt.gov.au
Katherine	O'Keefe House Katherine Hospital Gorge Road Katherine NT 0850	(08) 8973 9049	(08) 8973 9048	CDC.Katherine@nt.gov.au
Tennant Creek	Schmidt Street Tennant Creek NT 0860	(08) 8962 4259	(08) 8962 4420	CDC.Barkly@nt.gov.au
Alice Springs	Disease Control Unit Lower Ground Floor Eurilpa House, 25 Todd Street Alice Springs NT 0870	(08) 8951 7540	(08) 8951 7900	CDC.alicesprings@nt.gov.au
Nhulunbuy	Corner Mathew Flinders Way and Chesterfield Court Nhulunbuy NT 0880	(08) 8987 0357	(08) 8987 0500	CDCGove.DoH@nt.gov.au