



Tuberculosis (TB) factsheet

What is TB?

Tuberculosis (TB) is a disease caused by a germ called the tubercle bacterium or *Mycobacterium tuberculosis*. TB usually affects the lungs, but can affect other parts of the body. Only some people infected with the TB germ go on to develop TB disease. TB is curable with a full course of treatment.

What is the difference between TB disease and TB infection?

In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. The bacteria become inactive, but they remain alive in the body and can become active later. This is called TB infection.

People with TB infection: have no symptoms, don't feel sick, can't spread TB to others and usually have a positive skin test reaction. Most people who have TB infection will never develop TB disease.

In these people, the TB bacteria remain inactive for a lifetime without causing disease, but in other people (for example those who have weak immune systems), the bacteria may become active and cause TB disease.

What are the symptoms?

TB disease develops slowly in the body and it usually takes several months for symptoms to appear. Although TB can affect any part of the body, any of the following symptoms may suggest TB disease:

- persistent cough getting worse and lasting more than 3 weeks
- weight loss for no obvious reason
- excessive sweating, especially at night
- loss of appetite
- general and unusual tiredness and feeling unwell
- coughing up blood

How do you catch it?

The TB germ is usually spread in the air. It is caught from another person who has TB of the lungs. The germ gets into the air when that person coughs or sneezes.

Only some people with TB in the lungs are infectious to other people. Such cases are called 'sputum smear positive' (or 'open' TB). Even then, you need close and prolonged contact with them to be at risk of being infected. Sputum smear positive cases stop being infectious usually after a couple of weeks of treatment.

Can anyone get it?

Anyone can get TB but it is difficult to catch. You are most at risk if someone living in the same house as you catches the disease, or a close friend has the disease. If you had TB before you can still get it again.

How is TB treated?

TB can be cured by taking a course of specific antibiotics (usually tablets) for around six months.

How important is treatment?

Treatment is vital. If you have TB disease, or if you have been infected with the germ but have not yet become unwell, you must take the treatment as directed. It is very important to complete the full course of treatment, as it will stop you being infectious and will remove the risk of you developing drug-resistant TB. We must not forget that TB used to kill many people before we had modern treatments.

Can TB be prevented?

Yes it can. Most important is early detection, especially of infectious cases, and complete treatment of those cases to prevent spread.

What should I do if I think I might have TB?

Visit your family doctor or call NHS Direct/111 for advice.

What tests are used to diagnose TB?

When someone is diagnosed with TB a team of specialist health professionals will make an assessment of the infection risk to others and their close contacts will be investigated to identify others who may have been infected.

TB is diagnosed by a number of tests including chest X-ray, skin test, samples of phlegm, a good clinical assessment or a blood test. Which test needs to be done will be assessed by the clinical team.

If you are identified as a contact at risk from TB then you will be routinely invited for screening. The tests used for screening can include a Mantoux skin test (see below), blood test (IGRA – see below) or chest X-ray.

People who have evidence of TB infection found from the blood test, skin test or chest X-ray, or those who are unwell, will be referred to a specialist doctor for further assessment and a possible treatment course of anti-TB medication. A positive screening result does not mean a person has TB but they will need further assessment.

What is the Mantoux test?

The skin test used for screening some close contacts is called the Mantoux test. It is used to determine if your immune system recognises TB. It is a safe test that involves a small, almost painless injection into the skin of the forearm. You must return 2 days later to show the injection site to the specialist nurse who will interpret the result.

People who have had the BCG vaccine will often have mildly positive skin tests, this does not mean that they have TB it just means that their immune system recognises TB.

Chest X-ray

A Chest X-ray (CXR) may be used to detect abnormalities in the lungs suggestive of active TB disease. CXR examination is used as a screening test for older contacts (usually those older than 35 years) to help identify active disease.

What is the interferon gamma release assay test (IGRA)?

This is a blood test that can be used to help in the diagnosis of TB. It may be used in the diagnosis of TB infection or TB disease. The test involves taking a single specimen of blood. Results will be available after 1-2 weeks. A positive result means that infection with TB is likely. A negative result means that infection with TB is unlikely.

Where can I get more information about TB?

More information on TB is available from TB Alert: <http://www.tbalert.org> and NHS Direct: www.nhsdirect.nhs.uk or by visiting the PHE website: www.gov.uk/phe and looking at the Health Protection A to Z section.