

Sputum Sample

Sputum is the phlegm that you cough out of your lungs or throat. If you have symptoms of TB in the lungs, several samples of your sputum will be taken and sent to the laboratory. They will then be looked at under a microscope to check if TB germs can be seen.

If the germs can be seen under the microscope, this is called *sputum smear positive TB* and you are more likely to pass on the infection to others when you cough or sneeze.

If the germs cannot be seen under the microscope, but other tests show that you have active TB, this is called *sputum smear negative TB*. This means that you are less likely to pass on the infection to others.

Culture Test

If you have a sputum test, the laboratory will also try to see if TB germs can be grown from the sample. This is called a *culture test*.

If it's thought you have active TB in another part of your body other than the lungs or throat, a small sample of tissue (called a *biopsy*) may be taken from the area of the body where the TB is thought to be, or a small amount of cells or fluid may be taken using a needle. This will then be sent to the laboratory to see if TB germs can be grown from the sample (*culture*).

Because the TB germ grows and multiplies quite slowly, the culture test may take up to 8 weeks before a result can be given. If active TB is found in a part of your body other than the lungs, you should be offered a chest x-ray, to check the TB is not also in your lungs.

About TB Alert

TB Alert is a unique charity, raising awareness in the UK of Tuberculosis worldwide. We support projects in the UK and in developing countries ensuring that more patients receive proper information and treatment. With your support we can make a positive, worldwide impact on Tuberculosis and save more lives.

Protect your family and friends from TB

Remember the TB Nurse is here to help and advise you.

Your TB Nurse is:

Your Hospital Doctor is:

Contact no:

Email:



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For further information or copies of this leaflet, please contact 01273 234770 (office hours only).

To make a donation or volunteer to help TB Alert, please contact 01273 234784 (office hours only).

Or go to our website at www.tbalert.org

If you have TB and would like to know more about it from someone who has had the disease, there is a book called *The Tuberculosis Survival Handbook* by Paul Mayho (Second Edition). The book costs £14.95 and is available through local bookshops, Gazelle book services and www.amazon.co.uk, or directly from the publishers, Merit Publishing International website www.meritpublishing.com or email merituk@aol.com. The reference number to order the book is ISBN 1 873413 14 9.

Website www.tbsurvivalproject.org

Information given in this leaflet regarding tests and the diagnosis of Tuberculosis is intended to give general information about the subject. It is not intended as a substitute for the knowledge, skill and judgement of your nurse/doctor or other healthcare professionals. None of the information contained in this leaflet is intended to be used for decisions on diagnosis or treatment. Questions and concerns regarding diagnosis and treatment should be directed to a health care professional.



Tuberculosis (TB) and its Diagnosis



What is TB?

Tuberculosis (TB) is a bacterial infection, mostly found in the lungs but which can affect any part of the body. This is called *active TB*. Active TB is curable with a course of medicines lasting at least six months. Only TB of the lungs or throat may be infectious and most people will not be infectious within two weeks of starting to take the medicine.

It is also possible to have *latent TB*, or *TB Infection*. This means you have the germs inside you but your body is keeping them under control and stopping you from becoming unwell. People with latent TB do not have any symptoms and cannot pass the infection onto others.

How is TB caught?

When someone with TB of the lungs or throat coughs or sneezes, the germs can get into the air in small droplets and other people can breathe them in. People most likely to catch TB are those who have spent a lot of time with the person with TB (usually partners and other people in the same household, or rarely close work colleagues). TB is not spread by spitting or sharing objects.

What are the symptoms of TB?

The most common symptoms of TB in the lungs are:

- ⦿ **A cough that lasts for more than three weeks.** This may start as a dry irritating cough, which may be no different from that in any chest infection. The cough of tuberculosis will continue for weeks or months getting progressively worse.
 - ⦿ **Loss of weight for no obvious reason.**
 - ⦿ **Fever and heavy night sweats.** Temperatures which accompany the disease often occur at night causing the patient to sweat profusely, so badly that it may be necessary to change all the bed clothes in the middle of the night.
 - ⦿ **A general and unusual sense of tiredness and being unwell.**
 - ⦿ **Loss of appetite.**
- All of these symptoms may also be signs of other problems.

How do I find out if I have TB?

If you have three or more of these symptoms, you should see your GP (although any of them may indicate another condition to check with your GP). If they think TB is a possibility, they will then refer you to the local chest or TB clinic, where tests will be carried out.

If you know someone with infectious TB, the doctors will have asked that person about who they've spent a lot of time with. The health services will then contact everyone they think may be at risk of catching the infection and ask them to come for tests.

The different tests are:

The Skin test (Mantoux)

The skin test shows whether your body has ever been exposed to TB germs. You could have been exposed through having the BCG vaccination (which contains a safe form of the germ), or through breathing in the TB germ. It is called the *Mantoux* test and involves having a small amount of liquid, called *Tuberculin* injected directly into the very top layer of your skin with a small needle and syringe. It may sting a little but is not painful for long. The test site is read 2-3 days later.

If the test is positive, a raised red area will appear. You should not cover the spot with a plaster, scratch or rub it, or put any oils, creams or cosmetics on the spot. You can wash it as normal with soap and water. There are different grades of size and redness. The doctor or nurse in the clinic will examine the test and explain the results to you.

What does a positive skin test mean?

A positive skin test can mean several things: You have had the BCG vaccination. If you have, a small reaction is expected and is normal. You may have latent TB. You may be asked to have a blood test to confirm latent infection. You may have active TB and will need to be seen by a doctor for further tests.

What does a negative skin test mean?

This means you probably have not been exposed to TB germs before. But it could also mean that you have been tested too early or that your body is unable to react to the test.

The test may need to be repeated in 6 weeks time. A negative result does not always mean that you do not have TB.

If you do not have TB but are thought to be at higher risk than most people of catching it because of where you live or the work you do, you may be offered the BCG vaccination. If you are very immuno-compromised (such as people with HIV or transplant patients) you won't be offered BCG, as the risk of live vaccine in these cases is too high.

Blood Test

There is a special blood test for TB. If your skin test is positive and you've been in contact with someone with infectious TB (but you do not have any symptoms), you may be asked to have this test to check whether you have latent TB. If the result of the blood test is positive, you may be given further tests to check you do not have active TB.

People with latent TB who are under 35 years old may be offered a course of treatment lasting three or six months. People who are over 35 and do not have HIV infection will not be offered treatment because there is a higher risk of liver damage from the anti-TB drugs. People with HIV infection are always offered treatment, whatever their age, because the latent TB may activate more easily and will then accelerate the HIV disease.

Chest x-ray

If you have symptoms of TB, you will be sent for a chest x-ray. This will show the doctors whether there is or has been any TB in your lungs.