

Tuberculosis

What is tuberculosis?

Tuberculosis (TB) is a disease caused by a bacteria called *Mycobacterium tuberculosis*.

Anyone can catch TB by breathing in TB bacteria. These bacteria are in microscopic droplets in the air coughed out by people with TB in their lung. If you breathe in TB bacteria your immune system – your body's natural defence - usually **kills** all the bacteria and you don't get ill.

If you become ill, which can happen weeks, months or even years after you breathe in TB bacteria, this is called **active TB**.

In most people, the body's immune system controls the TB bacteria, which stay in the body at a low level. You won't get ill and you're not infectious. This is called **latent TB**.

In about five to ten out of every 100 people with latent TB, the infection can start to multiply again or reactivate and lead to symptoms of active TB.

You're most at risk of developing active TB if your immune system isn't working well. For example, you may have a condition like diabetes or HIV. These are usually tested for if TB is confirmed. Or you may have had an organ transplant or treatment for conditions like cancer and rheumatoid arthritis.

What are the symptoms?

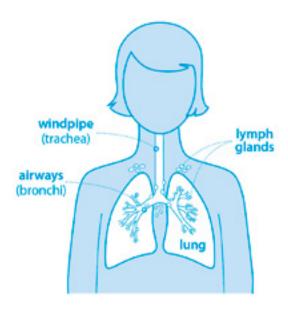
If you develop TB symptoms, this is **active TB**.

In the UK, TB affects the lung in just over half of people with active TB. The most common symptom is a persistent **cough**. You might cough up **phlegm**, also called **sputum**, and it may have blood in it.

TB can affect any part of your body such as the lymph glands, bones, abdomen and brain. The second commonest site of TB infection is in the lymph glands, often those in the neck. Lymph glands are small areas in your body that contain white blood cells that can swell up if they're infected.

Other possible symptoms are:

- losing weight
- losing your appetite
- a fever with sweating, particularly at night



How is TB diagnosed?

Your doctor may refer you to a TB specialist for testing and treatment if they think you have TB.

Diagnosing active TB of the lungs can be difficult and you will usually need several tests. The most important tests are a chest X-ray and examining a sample of your phlegm.

If you might have active TB in another part of your body, you will usually have a small sample taken from the part affected. For example, if you have enlarged lymph glands in your neck, your doctor will take a sample using a small needle, often guided by an ultrasound machine. It's not painful – you'll have a local anaesthetic. You'll also have a chest X-ray to see if you have TB in your lungs as well.

If you have been in contact with someone who has TB in their lungs, you might be offered tests to see if you have latent or active TB. Tests include:

- a simple skin test called the Mantoux test. Find out more at: www.nhs.uk/Conditions/Tuberculosis/ Pages/Diagnosis.aspx
- a blood test called an interferon gamma release assay (IGRA) that tests if your immune system has been exposed to TB bacteria
- a chest X-ray

Can I infect other people?

If you have active TB in your lungs, you will be infectious.

How infectious you are depends on:

- if you are coughing
- how much of your lung is affected
- how many TB bacteria are in your phlegm

If your specialist health care professional says you have **sputum smear positive TB**, you have a lot of TB bacteria in your phlegm and you are very infectious.

Your specialist will tell you how infectious you are and how to reduce the risk of infecting other people.

Simple advice is to cover your mouth with a tissue when you cough, then wash your hands and dispose of your tissues carefully. You may be asked to stay at home and have no new visitors. This is usually for two weeks. After two weeks of effective treatment you are usually no risk to other people. But you should not return to work, school or college until your specialist confirms you are no longer infectious.

As TB bacteria is spread by breathing in droplets with TB bacteria, there is no need to use separate dishes or cutlery.

You'll be asked for details of people you live with and other people you spend a lot of time with so they are offered testing for active or latent TB. Sometimes your work colleagues may be offered tests to see if they have TB. It is important to give this information to reduce the risk of other people getting unwell. Your details will not be shared with your contacts by your health care professionals.

If you have active TB but it is not in the lungs or you have latent TB, you are not infectious.

The BCG vaccination

The BCG vaccination helps your body's defences to fight off TB. It doesn't protect you completely from TB. It is most effective at protecting young children from the severest forms of TB. Its protective effect wears off as you get older. It is only given once.

There is currently a global shortage of BCG for vaccination. In the UK, highest priority is to vaccinate:

- all infants (aged 0-12 months) or previously unvaccinated children aged one to five years with a parent or grandparent born in a country with a lot of TB
- all infants (aged 0-12 months) living in areas of the UK with a lot of TB

How is TB treated?

Active TB can be completely cured if you take a course of antibiotics against TB for at least six months. Very occasionally, the TB bacteria may be resistant to one or more of the usual antibiotics so you might have treatment for longer.

At the beginning of your treatment, you'll need to take lots of tablets – make sure you know how to take them correctly. It's important not to miss any of your tablets. You may be offered support to take your medication either directly from the clinic, or in your home or community by outreach workers. If you have **latent TB**, you may be offered a shorter course of treatment with fewer tablets. This aims to reduce your risk of developing active TB. Your specialist nurses and doctors will discuss the benefits with you.

Treatment for TB in the UK is free for everyone, regardless of immigration status.

Remember:

- It's best to take most TB tablets half an hour before eating.
- Try not to miss taking your tablets. If you do forget them in the morning, take them later in the day.
- Don't run out of tablets. Always get a new supply before they are finished.

TB can be cured completely but only if you take your tablets regularly and keep taking them for the whole course. Don't stop just because you are feeling well again. Only stop when your doctor tells you it is safe to do so. TB can become resistant to treatment if you stop taking your drugs too soon.

What are the side effects of TB medication?

TB medication does not usually cause serious problems.

One of the medications commonly used to treat TB, called **rifampicin**:

- will give your urine an orange-red colour this happens to everyone who takes it
- might permanently discolour soft contact lenses
- will make the oral contraceptive pill less effective. If you're taking the pill, ask your doctor about other methods of contraception while you have TB treatment

Another drug called **ethambutol** can - very rarely - affect your eyes causing blurring or the way you see colour. So tell your doctor or nurse about any changes in your vision.

An important possible side effect with some of TB medication is inflammation of the liver. You should tell your doctor or nurse immediately if you start vomiting or develop yellowness around your eyes or skin. This could be a sign of jaundice.

Help to stop smoking

If you smoke, stopping will help. The NHS offers a free stop smoking service – your GP can refer you. Find out more at **blf.org.uk/smoking**

How long does treatment last?

You'll have to visit the clinic until your treatment is finished - and sometimes a little longer. This usually takes six months.

At the beginning of your treatment, you may need to visit the clinic every two to four weeks to make sure:

- you are taking your treatment
- you are on the correct tablets
- you have no side effects with your treatment
- you are getting better

Once it's clear you're on the correct treatment, you'll go to the clinic less often.

Returning to work

If you have active TB in the lung, your specialist doctors and nurses will tell you when you are considered not infectious so you can return to work. Public Health England require an assessment by occupational health teams or local health protection teams to decide if people you work with need to be tested for latent or active TB. This is all done in strict confidence.

If you do not have infectious TB, you can return to work as soon as you feel well enough.

Get in touch with us to find support near you.

Helpline: 03000 030 555

Monday to Friday, 9am-5pm

Ringing our helpline never costs more than a local call and is usually free, even from a mobile.

helpline@blf.org.uk

blf.org.uk

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Code: FL28 Version: 4

Last medically reviewed: September 2017 **Due for medical review:** September 2020

We value feedback on our information. To let us know your views, and for the most up to date version of this information

and references, call the helpline or visit blf.org.uk