

## Respiratory medicine

# Frequently asked questions about tuberculosis (TB)

### What is tuberculosis?

Tuberculosis (often called TB) is an infection caused by a type of bacterium (germ) called *Mycobacterium tuberculosis* (or tubercle bacterium).

It usually affects the lungs, but can affect other parts of the body such as the lymph nodes (glands), brain and bones.

Only TB of the lungs or throat are usually infectious, but anyone who has TB in other parts of their body will be very carefully checked to see if they are infectious to their close and prolonged contacts.

### How common is it in the UK?

TB used to be very common in the UK. With changes in living conditions and the development of effective antibiotic treatments and testing, it became much rarer.

Since 1989, for several reasons, the numbers of people who have been exposed to TB or are infected with it have increased again (especially in London and the larger cities).

Now TB is a public health priority again - but an individual remains at a low risk of catching it.

### What are the symptoms of TB?

TB develops slowly in the body. It usually takes several months for any symptoms to appear. Any of the following symptoms can mean you have TB, but they can also be found in other illnesses:

- A cough that lasts for weeks;
- Coughing up blood;
- Fever (high temperature);
- Sweating, especially at night;
- Unexplained weight loss;

- Fatigue (lack of energy)
- Swollen glands.

## How can I catch TB?

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

## Is everyone who has TB infectious?

TB of the lungs and/or throat are the most infectious types of TB - the live bacteria can be found in the sputum (called sputum-smear positive) or 'open TB'.

Even if someone is sputum-smear positive, only those in **close and prolonged contact** with them will be at risk of infection. Also, people who are sputum-smear positive generally stop being infectious after two weeks of treatment.

## Can anyone get TB?

Anyone can get TB, but **it is difficult to catch** - you need to have **close and prolonged contact** with someone who has the infectious stage of TB. Some people are, however, more at risk (see below).

## Who is most at risk of TB infection?

Those most at risk of catching TB are those living in the same house/flat as someone who has TB - this is because they have close and prolonged contact with them.

Where you live in the world affects your chances too - the UK has lower rates of TB than parts of the developing world because of the differences in living conditions and access to effective testing and treatments.

The following groups of people have a greater chance of becoming ill with TB, if they are exposed to it - this is because their defences to the infection are lowered:

- Children and elderly people;
- People who have diabetes;
- People taking steroids and/or medicines that affect the body's defence system (for example: immunosuppressives);
- People who have AIDS or are HIV-positive;
- People living in overcrowded/poor housing;
- People who are dependent on drugs/alcohol;
- People who have poor diets;

- People who have chronic poor general health.

## **Can I become a carrier of TB?**

People **cannot** be carriers of TB - the disease needs to develop in the lungs before a person becomes infectious to others. However, in most cases, TB is slow to develop and cannot be detected immediately. During this time someone might not know they have TB and will be infectious to those in close and prolonged contact.

## **Can I be protected against TB using a vaccine?**

There is a vaccine against TB called BCG (Bacillus Calmette Guerin). This is an attenuated (weakened) form of the TB germ that doesn't cause TB. It is not perfect because it probably only prevents TB about 80% of the time. It works by encouraging the body to fight the infection. Researchers are busy working to develop more effective vaccines for use worldwide.

In the UK, the BCG vaccine was routinely offered to all secondary children between the ages of 10 and 14 years. This programme was stopped in June 2005. Now BCG vaccination is being offered to all babies whose families come from high incidence countries, as these babies are at greatest risk of being exposed to TB.

The BCG vaccine is usually only given once during the life of an individual. If you are travelling to a country with a high incidence of TB, seek advice from your GP or travel clinic to see if BCG will help protect you. If your doctor or nurse thinks the BCG vaccine will benefit you, you will be given detailed information about what to expect and how to look after the skin that has been vaccinated.

## **How do you test/screen for TB?**

We use a simple skin test to test someone for TB (see below). We usually test six to eight weeks after a known exposure to a person infected with TB. If we suspect a TB infection, we can take a chest X-ray to look for lung disease. We can also take a specimen of phlegm to look for the TB bacteria.

TB screening is part of the employment screening for our clinical staff and students.

## **Can TB be cured?**

We have effective antibiotic treatments for TB. If we find that someone has TB, we prescribe a course of two or more antibiotics, which lasts for at least six months.

To avoid the TB germ developing resistance to the antibiotics, it is very important that the complete course of antibiotics is taken. For this reason, we monitor our patients carefully during their treatment. Sometimes, patients will need a stay in hospital to work out what is wrong with them - when we know they have TB; usually their treatment can be continued as an outpatient.

After the first two weeks of antibiotic treatment, someone who has TB of the lung/throat generally stops being infectious to their close and prolonged contacts.

## **What is contact tracing and screening?**

We aim to protect the health of anyone who might have been in close and prolonged contact with the person who has been diagnosed with TB. For this reason, we try to identify (trace) those who might be most at risk and test (screen) them.

We will contact them direct and offer them an appointment to test them for exposure to TB. They might also be offered a chest X-ray and sputum test. Usually, we can find out quite quickly whether they are at risk of TB. If they are infected, we can offer them effective treatments.

The chances of that individual being infected are very low but this is an important and effective public health measure to control TB in the community.

## **I need to have a skin test - what should I expect?**

There is one skin test to screen for exposure to TB. Exposure can be either from a previous vaccination with BCG or because you have a current or past infection with TB. The test stings a little, but is not usually sore for too long.

The **Mantoux test** is a single spot of the protein injected into the top level of your skin. It is usually read two to three days later.

If you have the Mantoux skin test, you will be given further instructions at the time about what to expect and how to look after the area of skin being tested.

## **What does a positive skin test mean?**

A trained healthcare professional will 'read' your skin test at the correct time - judging the raised area of redness in the test site. They will explain to you the result and the next steps, which might include having a chest X-ray or blood test.

## What does a negative test mean?

If your test is negative it might mean you are 'in the clear for TB infection' but it might also mean that you have been tested too early to find any reaction to the TB protein in the test.

It will usually mean that you have not been vaccinated recently with the BCG vaccine – so you might be offered a BCG vaccine.

Sometimes, you will be offered repeat testing in a few weeks time - to double check that you are free of TB.

## What should I do if I've been in contact with someone who has TB?

If you have been a close and prolonged contact of someone who has TB, you should receive a letter or phone call from the chest clinic in your area to arrange a check-up appointment. If you are not contacted and are worried, contact your GP or chest clinic. If it will benefit you, an appointment will be offered.

If you are contact traced and screened, you will be given further information about what to expect. While you are waiting for your check-up or results, there is no reason to stop any of your usual day-to-day activities - you only have a small chance of having caught TB and will be given lots of advice and support.

## For further information:

- **TB Alert** - a charity that raises the awareness of TB in the UK and supports the work of the NHS by providing information to patients. It produces some useful leaflets including '*Contact Tracing and Screening for Tuberculosis (TB)*'; '*Tuberculosis - your questions answered*'; '*Tuberculosis skin test*'; '*BCG vaccination against tuberculosis (TB) for older children and adults*'. Contact: 22 Tiverton Rd, London NW10 3HL Tel: 020 8969 4830 E-mail: [helping@tbalert.org](mailto:helping@tbalert.org) Website: [www.tbalert.org](http://www.tbalert.org)
- **NHS Direct** can provide information about tuberculosis and what you should do if you are worried about it. Phone them 0845 4647 or check out their website [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)
- **Health Protection Agency** (formerly PHLS) website [www.hpa.org.uk/](http://www.hpa.org.uk/)
- **National electronic Library of Infection** website [www.nelcd.co.uk/](http://www.nelcd.co.uk/)

Please ask if you require this information in other languages, large print or audio format:  
01223 216032 or [patient.information@addenbrookes.nhs.uk](mailto:patient.information@addenbrookes.nhs.uk)

Potete chiedere di ottenere queste informazioni in altre lingue, in stampato grande o in audiocassetta.

## Italian

若你需要本信息的繁體中文、大字體或音訊格式的版本，請要求索取。

## Cantonese

तमने आ माळिती बीछ भाषाओमां, मोटा अक्षरोमां अथवा सांभजी शकाय जेवा माध्यम  
(ओडीओ इमेज)मां जेठती छोय तो कृपा करीने पूछो.

## Gujarati

تکایہ پرسیار بکے نہ گھر نہ وزانیاریہت دہوی بہ زمانیکی تر , بہ بیٹی گہورہ یانیش بہ شیوہی دہنگ

## Kurdish

آگر آپ کو یہ معلومات دوسری زبانوں میں، بڑے الفاظ کی اشاعت میں یا آڈیو ٹیپ پر درکار ہوں تو براۓ مہربانی اس کیلئے درخواست کریں۔

## Urdu



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## Document history

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