

How is TB diagnosed?

UHD TB Service **Patient information**

telephone: **0300 019 4570** Website: **www.uhd.nhs.uk**

What is tuberculosis (TB)

- TB is an infection caused by bacteria called Mycobacterium Tuberculosis (TB).
- TB can affect many different parts of the body. Half of TB cases involve the lungs (pulmonary TB) and can be infectious to others.
- Nearly all cases of TB can be cured by taking the full course of treatment using a combination of antibiotics for at least six months.
- Cases of drug resistant TB may require a longer course of treatment.

Why am I being investigated for TB?

TB is a potential diagnosis that needs to be excluded as a possible cause for your recent ill health.

You may have been referred to the TB Service if:

- you have symptoms that are commonly seen in TB
- a recent x-ray or CT scan has shown an abnormality that could be TB
- a sample result, usually a sputum or tissue sample, may have indicated possible TB
- the cause of your infection/ill health is not known and there is a need to rule out TB.

Is TB infectious?

Certain types and stages of TB can be infectious. This means the person with TB can infect others through coughing, laughing, or singing.

The TB team will advise whether you need to temporarily stay away from public and work areas to minimise the risk of your TB passing to others. We call this 'isolation' and it is usually only needed for a short period of time. Sputum tests are often used to measure how infectious you are. Drug resistant TB and not taking TB medicines as prescribed can lead to longer periods of infectivity (being infectious) and the need to isolate for longer. Your TB team will advise you when isolation can stop.

If you are in hospital you may be moved to a side-room. If this occurs, the door and windows must remain closed and fans should not be used as these will blow TB bacteria into the main ward areas.

What tests are involved?

Chest x-ray

X-rays are usually carried out in a hospital and may be requested by your GP, consultant, or TB Team. X-rays are used to look for signs of active TB disease or old TB scarring from a previous infection.

Sputum testing

If you have a productive cough, you may be asked to provide three samples of your sputum (phlegm), one sample each day for three days. Samples need to be sent to either the pathology reception at your nearest hospital, or your GP. The samples will be sent to a hospital laboratory where they are prepared and looked at under the microscope. If bacteria are seen, this indicates you could be infectious. You will be informed and given any further information about this as necessary.

Any samples with bacteria are then grown in a culture for up to six weeks - this is to identify the bacteria and their sensitivity to antibiotics.

If you are unable to produce a sputum sample, a simple procedure called a bronchoscopy may be performed as an outpatient. You will be given more information about this procedure if you need to have one.

Blood tests

Blood tests may also be used to see whether you have been exposed to TB in the past. We currently use the IGRA T'Spot TB test. This test does not differentiate between latent and active TB, but can still be helpful in specific circumstances.

Additional blood tests to check how your liver and kidneys are working and to check whether you have been exposed to viruses such as HIV and Hepatitis B and C may also be undertaken. Your TB team will be happy to discuss the need for blood tests with you.

Mantoux testing

A Mantoux test is when a liquid called Tuberculin is injected just under the skin usually on the left forearm. The test is rarely used but the TB team may advise you to have it as an additional test to check for previous TB exposure.

What happens if TB is confirmed?

TB is usually curable with a course of prescribed TB antibiotics taken for at least six months. Treatment is commonly split into two periods: The first or intensive phase requires four different antibiotics and a vitamin to be taken every day for two months. At the end of the two months, patients usually start the second 'continuation' phase of treatment taking four months of daily treatment with two antibiotics and a vitamin. Sometimes treatment needs to be extended for longer depending on the severity of disease and the patient's response to

treatment. Your TB Team will provide you with support and advice throughout the treatment and help you manage any side-effects you may experience. **All TB medications will be prescribed by the TB team and are not available from your GP.**

Your TB team will also inform you if your family, friends or work colleagues need to be screened for TB and will arrange this if required. Screening is usually only required when the person with TB was thought to have been infectious. Identifying and screening people who have been in contact with someone with TB is important to prevent the development and spread of TB to others. Patient confidentiality is maintained during any screening process.

The Royal Bournemouth Hospital, Castle Lane East, Bournemouth, Dorset, BH7 7DW

Author: **Suzanne Barrett** Date: **November 2022** Version: **One** Review date: **November 2025** Ref: **147/22**

t: 0300 019 4570 w: www.uhd.nhs.uk : @UHD_NHS : @UHDTrust : @uhd_nhs