

Tuberculosis



What is Tuberculosis (TB)?

Tuberculosis (TB) is caused by a *Mycobacterium*. It is a bacterial infection spread through inhaling tiny droplets from the coughs or sneezes of an infected person. TB can affect any part of the body, including the lymph nodes, bones, brain and nervous system. It is only infectious if it is found in the lungs (pulmonary TB), mouth or larynx.

What are the symptoms of TB?

The symptoms of TB depend on where the infection occurs. TB usually develops slowly and symptoms might not begin until months or even years after an individual was initially exposed to the bacteria. In some cases the bacteria lie dormant in the body but don't cause any symptoms; this is known as latent TB and is not infectious to others. If an individual has symptoms of TB, this is known as active TB but is only infectious if it is in the lungs, mouth or larynx.

Cough



Afternoon Fever



Weight loss



Blood stained sputum



Night sweats

People with TB might have all or some of the following symptoms;

- Cough for more than three weeks

- Loss of appetite
- Unintentional weight loss
- Fever (particularly at night)
- Breathlessness
- Chest pain

TB in a part of the body other than the lungs may produce a lump or swelling which can be painful.

Is it Infectious?

Some (but not all) people who develop TB of the lungs, mouth or larynx are infectious to others. Spread is by the respiratory route so only happens when an individual is in close proximity to someone with infectious TB for a long time and inhales sufficient quantities of the bacteria (usually if the infectious individual has been coughing). The incubation period is long (four to twelve weeks).

- In many healthy people the immune system (the body's natural defense against infection and illness) kills the bacteria and no symptoms develop.
- Sometimes the immune system cannot kill the bacteria but manages to prevent it from spreading in the body. The individual will have no symptoms but the bacteria will lie dormant in the body and sometimes may activate months or even years later. While the bacteria is dormant, the individual is not infectious to others. This is known as latent TB.
- If the immune system fails to kill or contain the infection, it can spread to the lungs or other parts of the body and symptoms will develop slowly over a few weeks or months. This is known as active TB and may become infectious to others if the active TB is in the lungs, mouth or larynx and is not treated.

Without treatment, latent TB could develop into an active TB infection at a later date, particularly if the immune system weakens.

- Children are rarely infectious (usually diagnosed when an adult, relative or close friend is found to have TB)
- Even if an individual has infectious TB, exclusion from school is not usually necessary once treatment has been taken for 2 weeks. Staff and students with non-pulmonary TB do not require exclusion and can return to school as soon as they are well enough.
- Adults with TB may be infectious so children in close contact may need medical assessment and this should be discussed with the health protection team.

What is the treatment?

Treatment for tuberculosis (TB) depends on which type an individual has and will involve a course of different antibiotics over several months. The individual will be monitored by a TB treatment team who will ensure they are on the appropriate antibiotic regime. It is extremely important that individuals with TB take their antibiotics everyday as prescribed.

Can a contact of someone with TB attend school?

When someone is diagnosed with TB their treatment team will assess whether other people are at risk of infection and require screening. Close contacts (usually people living in the same household as the individual with TB) may be screened. Occasionally wider social and workplace contacts may also require screening. The TB team will work with the health protection team to assess screening requirements and arrange appointments as required. If contacts of someone with TB are well and do not have any symptoms of TB then there is no reason why they cannot still attend school while waiting for their screening appointment.

How can spread be prevented?

If an individual is diagnosed with TB of the lungs, mouth or larynx they may be contagious up to about two to three weeks after starting their course of treatment. Individuals do not usually need to be isolated during this time, but it is important to take some basic precautions reduce the risk of spread to others. These precautions are:

- Exclusion from work, school or college until the TB treatment team advises it is safe to return (usually after two weeks of treatment)
- Ensure good respiratory hygiene is performed (use a disposable tissue to cover the mouth when coughing, sneezing or laughing, dispose of the tissue afterwards and wash hands immediately)
- Open windows when possible to ensure a good supply of fresh air
- Ensure the affected individual has their own bedroom until they are no longer infectious
- Advise parents to take their child for medical assessment if they have any signs or symptoms of TB (such as a cough lasting for more than three weeks, unintended weight loss and/or profuse night sweats)
- Contact the health protection team for more advice and to ascertain whether or not screening of school contacts may be required.

More information on tuberculosis can be found in chapter nine of the **Health protection in schools and childcare facilities** guidance.