

Factsheet: Tuberculosis (TB)

What is Tuberculosis (TB)?

Tuberculosis (TB) is an infectious disease that usually affects the lungs, but it can affect any part of the body. It is caused by bacteria called '*Mycobacterium tuberculosis*'. The bacteria can survive in the body for many years in a dormant or inactive state whereby people are infected but show no signs of TB disease. When the bacteria are awake and dividing people are said to have 'active TB'.

What are the symptoms?

The most common symptoms are persistent cough that does not get better with usual antibiotics; loss of weight, fever, heavy night sweats, tiredness and less commonly coughing up blood and in some cases swollen glands.

How common is it?

With better housing and nutrition and effective treatment TB has become less common in the last century. Although since 1990's the numbers were rising slowly, there has been a year-on-year drop in the number of TB cases in England over the past four years, down to 5,758 cases in 2015 (10.5 per 100,000 population), a reduction of one-third since the peak of 8,280 cases in 2011 (15.6 per 100,000 population). London has higher rates compared to the rest of the UK, but a significant drop was also seen in London, with 2,269 cases in 2015 (26.2 per 100,000 population), down from 3,491 cases in 2011 (42.6 per 100,000 population).

How do you catch it?

TB is not easily caught. Only about 30% of healthy people closely exposed to TB will get infected and of those only 5% -10% will go on to develop active TB (usually in the first 5 years following infection). It is rare for children with TB to pass the infection to others – children get TB from adults with active respiratory TB. Those with TB can become non-infectious soon after beginning of treatment (usually 2 weeks) if they take the proper treatment as it is prescribed.

Who catches TB?

You have to be in close and lengthy contact (for example living in the same household) with someone with infectious TB in their lungs or throat. While anyone can catch TB some people are more at risk. These include people who:

- Live in the same household as, or have been in close and lengthy contact with someone with infectious TB
- Living in unhealthy or overcrowded conditions, including those who are homeless or sleeping rough
- Have lived, worked or stayed for a long time in a country with a high rate of TB
- May have been exposed to TB in their youth when TB was more common in this country
- Are children of parents whose country of origin has a high rate of TB
- Have been in prison, addicted to drugs or misuse alcohol
- Are unable to fight off infection due to illness (such as HIV), some treatments or poor diet
- Young children and very elderly people

What is the incubation period?

From infection to showing a response to a TB skin test may take 4-12 weeks. From infection some people may never progress to the actual (active) disease. If they do, it happens more commonly in the first 5 years after infection, but the bacteria may remain in the body for the rest of their life and

cause the disease later, especially if the individual's immunity is weakened as a result of other serious infections (such as HIV), other diseases, or some treatments.

What should be done after exposure to someone with TB?

People diagnosed with active TB are assessed for infection risk to others. If the bacteria are found in their sputum, then their close contacts will be invited for TB screening to identify those who have been infected. Casual contacts such as friends, work colleagues and schoolmates, are only investigated if the TB patient is considered to pose a risk to them, for example if they had close and prolonged contact.

For people under 65 years old the screening will usually consist of a skin test (Mantoux) and/or a blood test. Mantoux test can be interpreted after 2-3 days. If the skin shows a strong reaction, it means that there has been previous exposure to tuberculosis bacteria. This might be due to a previous BCG vaccination, exposure to similar bacteria that does not cause TB, or a current tuberculosis infection. It is normal for most people to have a small reaction to the test – it does not mean that you are ill or that you are infectious to other people. The test will be done by experienced specialist nurses who will explain to you what the result may mean when you come back to have it read. Some illnesses and medications may affect the skin reaction, which is why you are asked about these at the time of the test.

People over 65 years old are usually screened by having a chest x-ray but may also be offered further tests.

Those who have a positive skin test, or a positive blood test or an abnormal chest X-ray or who are unwell will be further investigated by the specialist TB team and may be treated with a course of antibiotics.

Do I still need to be tested for TB if I have had BCG vaccination in the past?

Yes. BCG vaccine works best to prevent the most serious forms of TB in children but it does not prevent TB in all cases, particularly respiratory TB in adults. It does not provide 100% protection and it is thought that over time its effectiveness decreases.

Is there any treatment for TB?

TB infection with or without symptoms can be treated with special antibiotics. Treatment for the active form lasts at least 6 months. It is vitally important to complete the whole course of antibiotics as prescribed. If not, TB may return in a form that is resistant to some of the drugs and be much more difficult to treat. If TB is not treated properly, it may lead to serious illness and even death.

How can you protect yourself against TB?

The most effective way to prevent the spread of TB is by diagnosing people as soon as possible and make sure they have a full course of correct treatment.

BCG vaccine is offered to infants and children who are at higher risk of catching TB, for example infants born in areas with a high incidence of TB or those whose parents or grandparents were born in a country with a high TB incidence.

Further information can be obtained from your family doctor or NHS Direct on 111.