



BCG/TB

Tuberculosis

Tuberculosis (TB) is caused by a type of bacterium called *Mycobacterium tuberculosis*.

TB is spread when a person with an active TB infection in their lungs coughs or sneezes and someone else inhales the expelled droplets containing TB bacteria. However, although it is spread in a similar way to cold or flu, TB is not as contagious. You would usually have to spend prolonged periods in close contact with an infected person to catch the infection yourself.

For example, TB infections usually spread between family members who live in the same house. It would be highly unlikely to become infected by sitting next to an infected person on a bus or train. Not everyone with TB is infectious. Generally, children with TB or people with TB that occurs outside the lungs (extrapulmonary TB) do not spread the infection.

Latent or active TB

Your immune system will usually be able to defeat the bacteria that cause TB. However, in some cases the bacteria infect the body but don't cause any symptoms (latent TB) or the infection will begin to cause symptoms within weeks or months (active TB).

About 10% of people with latent TB develop active TB years after the initial infection. This usually happens when the immune system is weakened, for example during chemotherapy.

How common is TB?

Before antibiotics were introduced, TB was a major health problem in the UK. Nowadays, the condition is much less common. However, in the last 20 years TB cases have gradually increased, particularly among ethnic minority communities who are originally from places where TB is more common.

In 2016, 5664 cases of TB were reported in the England alone. Of these, more than 6,000 of these cases affected people who were born outside the UK.

Increased risk

It is estimated that one-third of the world's population is infected with latent TB. Of these, about 10% will become active at some point.

Anyone can catch TB, but people particularly at risk include:

- Those living in environments where the level of existing TB infection is higher than normal
- People with health conditions such as HIV or whose circumstances mean they are less able to fight off a TB infection

Other things that can increase your risk of developing an active TB infection include:

- Being in close contact with someone who is infected
- Having lived in, travelled to or had visitors from parts of the world where TB is common
- Being part of an ethnic group that originated in parts of the world where TB is still common
- Having a weakened immune system because of HIV, diabetes or other medical conditions
- Having a weakened immune system because of long courses of medication, such as corticosteroids, chemotherapy or tumour necrosis or factor blockers (used to treat some types of arthritis)



- Being very young or very old – the immune systems of people who are young or elderly tend to be weaker than those of healthy adults
- Being in poor health or having a poor diet due to lifestyle and other problems, such as drug misuse, alcohol misuse or homelessness
- Living in poor or crowded housing conditions, such as prisons

The schools based programme of offering BCG vaccines to protect ALL children from TB at the age of 12 was terminated in July 2005. Now BCG vaccines are offered ONLY to "at risk" children in the new born period. There has been minimal information regarding this significant change in policy from the Dept of Health.

Those NOW recommended to receive BCG include:

- All infants living in an area where 40 or more people in 100,000 have TB
- All infants whose parents or grandparents were born in a country where 40 or more people in 100,000 have TB
- Unvaccinated new immigrants from countries with a high rate of TB
- Close contacts of a person with active TB
- Unvaccinated people in an occupation where the risk of coming into contact with cases of TB is high

This is despite the fact that, since the early 1990's, new cases of TB have steadily increased in this country.

Each Area Health Authority make an assessment, about the risk of each child contracting TB. Those children assessed to be at a higher risk of TB will be tested, using the Mantoux test, to check whether or not they have immunity to TB. If they do not have immunity, they will be offered a BCG vaccine.)

The Department of Health (DOH) has advised that children without significant TB risk factors SHOULD NOT be vaccinated against TB.

In our opinion, there seems to be NO advantage for individual children from these changes to the BCG Vaccination Policy. There will be significant financial saving, in the short term, as the NHS will need to provide far fewer BCG vaccines. However, a future long term increase in NHS financial expenditure could be caused by the need to treat an increased number of cases of TB as a result of the policy changes outlined above.

Infants/children originally designated as being "low risk" will, of course, remain unprotected and be susceptible to TB infection if they move to, regularly visit &/or attend schools in "high risk" areas.

The following references may be helpful if you wish to access further information:

- **www.hpa.org**
- **www.tbalert.org**
- **www.dh.gov.uk**

The information and opinions in these information sheets have been checked by me, Dr David Eccleston. I believe them to be correct. They are designed only as a supplement to a full consultation with me and should not be used as a single definitive source of information. My opinion may differ from that of some other Doctors.