

Tuberculosis (TB) and the BCG vaccine

What is TB?

Tuberculosis (TB) is a serious condition that can affect anyone. If you breathe in TB bacteria, you may become ill with what is known as 'TB disease'. The bacteria can also live quietly in your body in a condition called 'TB infection'.

TB disease, also known as active TB, requires urgent treatment with antibiotics. Common symptoms include a cough, fever, night sweats, weight loss, loss of appetite, and tiredness.

TB infection, also known as latent TB, does not cause symptoms and cannot be passed to others. However, it can make you ill with TB disease at any time, particularly if your immune system is under stress. Antibiotic treatment can help prevent this.

What is the BCG vaccine?

The BCG (Bacille Calmette-Guérin) is a vaccine that protects against TB. It is a specially weakened strain of the TB germ that encourages your body to build immunity to the bacteria. The vaccine is given as a single injection into the skin of the upper arm.

Who needs a BCG vaccination?

In the UK, the BCG is not part of the routine vaccination schedule because the risk of TB is generally very low in the UK, and a strong immune system is good protection against it.

It is available as part of a targeted program for babies, children, and young adults at higher risk of TB. You may be eligible for a BCG if you belong to one of the following groups:

- babies under 12 months old who were born or live in areas with a high number of TB cases, or who have a parent or grandparent from a country with a high number of TB cases
- older children who have not had the BCG but are at risk, usually due to living in, or having a parent or grandparent from, a country where TB is common
- close contacts of people diagnosed with TB in the lungs
- occupational groups such as healthcare workers, prison staff, or those working in homeless hostels, if you are under 35 and have not been vaccinated

Before the BCG vaccine

The BCG vaccine is not recommended for people who have already been exposed to TB bacteria. The TB skin test, or Mantoux test, checks for a reaction to a small amount of tuberculin extract. If you have a reaction, it suggests you have been exposed to TB or previously had a BCG vaccination, and you should not get the vaccine. A negative test means you have not been exposed, and you may be given a BCG within the next three months.

For children under 6 years old, a skin test is usually not necessary unless they have had close contact with someone with infectious TB or have lived in a high-risk country for more than three months. For babies, a doctor or nurse will check their SCID (severe combined immunodeficiency) screening result before offering vaccination.

Your doctor or nurse should also ask about the following before offering a skin test or BCG:

- any other serious health conditions, including HIV
- any history of TB – disease (active TB) or infection (latent TB)
- a previous positive TB skin test
- a previous BCG vaccination
- a raised temperature, fever or viral infection
- systemic steroids
- pregnancy or breastfeeding
- any other live vaccines given in the previous four weeks

After the BCG vaccine

The injection site may be sore for a few days. After about two weeks, a small lump will develop, which may weep or ooze, but this is a normal reaction.

To care for the injection site, you should:

- leave it open to the air
- not squeeze it or dislodge any scab that forms
- wash, bathe, and swim as normal, be careful when drying the area
- protect it with a dry dressing if needed

The site will take about eight weeks to heal completely, and a small circular scar may remain. The vaccine takes about six weeks to build an immune response to TB. The BCG is thought to be effective for only about 15 years, and research suggests it has little effect on people aged over 35.

Information and support

TB Alert information service: If you have any questions or concerns about TB, you can contact TB Alert by email at contact@tbalert.org or by telephone on **0330 102 2403**. This number is low cost or free to call by mobile phone, depending on your contract.

NHS: Find out about vaccinations for babies, children and adults, including why they're important and how to get them

www.nhs.uk/vaccinations