

The BCG Vaccine (Bacille Calmette-Guérin)

This helps protect against TB. It is a weakened strain of a form of the TB germ which will not cause disease. It encourages the body to fight TB disease by building up immunity. While BCG can give protection against TB, it does not protect everyone it is given to.

Since changes to the BCG programme in 2005, BCG is no longer offered routinely to children in secondary schools in the United Kingdom. It has been replaced with a targeted programme for babies, children and young adults at higher risk of tuberculosis (TB).

Who needs to have BCG?

Department of Health recommendations are:

- All babies under 12 months either born or living in areas where there is a high number of cases (i.e. more than 40 cases of TB a year in every 100,000 people), or who have a parent or grandparent who were born in a country where there is a high number of TB cases.

Your midwife or health visitor should automatically arrange a BCG if your child falls into this category. You should speak to them if you have any questions.

- Older children who have not had BCG may be screened for TB risk factors, and tested and vaccinated if appropriate. Risk factors are usually either coming from a country where there is a high number of cases or having a parent or grandparent who were born in or come from such a country.

Please ask your health visitor, practice nurse or GP to seek advice from the local Immunisation Co-ordinator if you feel your child is at increased risk and they have not been vaccinated.

There are certain other groups of individuals who may also be at increased risk of TB.

- Close contacts of people diagnosed with tuberculosis in the lungs.

If you are in this category, you will be identified and contacted by local public health services

- Occupational groups such as those working in healthcare, with the elderly, in hostels for the homeless and refugees, laboratory staff, prison staff and veterinary staff.

If you are in one of these groups, are aged under 35 years of age (research suggests BCG has little impact in people over 35) and not previously vaccinated, you should contact your occupational health or personnel department regarding BCG.

- Individuals under 16 years old going to live with a local population for more than three months in a country that has a high number of TB cases.

If you are in this group and not previously vaccinated, you may need BCG, but are unlikely to get the vaccination on the NHS. You may have to access BCG privately for travel. See below for more details.

But I want BCG, so can I still get it?

If you are not in one of the groups listed, BCG is not recommended and you will not be able to get it through the NHS.

BCG for travel

BCG is not recommended as a routine travel vaccination.

Children under 16 years old going to live with the local population in a country with a high number of TB cases for more than three months and who have not had a BCG are advised to get a skin test to see if BCG is needed.

Usually, BCG for travel and the testing for it will need to be carried out privately. Some travel clinics offer this service but prices vary and it is a good idea to telephone and find out the cost in advance. MASTA travel clinics are found across the UK and some, although not all, offer BCG. You can find your nearest clinic by accessing their website at www.masta.org.

If you live in London, clinics called Medicentre based at most major railway stations also offer BCG. Their website address is www.medicentre.co.uk or you can telephone them on 0870 600 0870. If you have difficulty finding a clinic to offer this service call TB alert on 0845 456 0995 for more information.

What is TB?

TB is a bacterial infection commonly affecting the lungs but which can affect any part of the body. TB is curable with a course of medicine, usually lasting 6 months. Only TB of the lungs or throat may be infectious and most people will not be infectious within two weeks of taking the correct medicine.

How is it caught?

When someone with infectious TB of the lungs coughs or sneezes, the germs can get into the air in small droplets and other people can breathe them in. People most likely to catch TB are those who have spent a lot of time with the person with TB (usually partners and other people in the same household, or rarely close work colleagues). It is unlikely that someone could catch TB in a place such as a bus or train, since contact for a number of hours with

someone who is infectious is usually necessary to be at risk of infection. TB is not spread by spitting or sharing objects.

In the UK, people at most risk of developing TB are those who have;

- been in contact for a long time with an infectious case;
- lived in places where TB is still common;
- an immune system which is weakened by HIV or other medical conditions
- chronic poor health through social factors such as homelessness, alcoholism and drug misuse.

Young children and very elderly people are also more likely to develop TB disease than the general population.

There is a big difference between infection and active disease; people can be infected but not ill (this is called latent TB infection), as most people's immune systems manage to keep the bacteria from becoming active. Only active TB is potentially infectious to others.

I didn't have a BCG vaccination when I was younger - should I have one now that TB is on the increase in the UK?

Before 2005 when the BCG schools programme ended, most of us would have had a BCG jab given at school sometime around age 13. If you haven't had the vaccine (about 30% of us haven't), it wouldn't really be useful to have it now. BCG is thought to be only effective for around 15 years and research suggests it has little impact if given a second time and has little effect on those aged over 35. The risk of catching TB for most people is still very small and the best way to prevent TB is to cure people who have it and so stop it being spread.

How is a BCG vaccination done?

A skin test is first carried out to check the immune system's reaction to TB bacteria. Usually, for children under 6 years old, no test is needed before the vaccination, unless they have had close contact with infectious TB or have lived for more than three months in a country with a high number of TB cases. The skin test is called a Mantoux Test and is a small injection into the top layers of the skin. This may sting a little but is not usually painful for long. There are also two types of blood test which may be used and a number of other tests in development.

With a skin test, a return visit is required to the clinic a few days later for the skin's reaction to be read and then BCG may be given up to three months following a negative skin Test. The vaccination is given as an injection into the skin of the upper arm. Initially, a small spot will be left which should disappear in 4-6 hours.

What happens after the BCG injection?

The site of the injection will be sore for a few days but there is usually not much to see at this stage. It is unlikely to make anyone feel unwell or feverish.

After about two weeks a lump will develop at the site. This may develop into a small spot or ulcer which can weep or ooze. Please do not squeeze this! Leave it open to the air, as this will help it to heal. Try not to dislodge any scab that may have formed. Occasionally, it may be necessary to protect it with a dry dressing. Washing, bathing and swimming can take place as normal but care must be taken when drying the site. It will take about 8 weeks from the time of vaccination for the site to heal up.

A small circular scar may remain on the upper arm. BCG takes approximately six weeks to build an immune response to TB.

When BCG is given, no further immunisation should be given in the same arm for 3 months. BCG should ideally be given at the same time as other live vaccines (live vaccines include BCG, measles, mumps, MMR and rubella). However, if they are not given at the same time, a delay of 4 weeks is recommended between live vaccines.

Let your doctor or nurse know before a skin test or BCG if you are/have any of the following

- Known to be HIV positive
- A serious disease
- Previous or current history of TB
- On systemic steroids
- Positive TB skin test in the past
- Live vaccines given in the last 4 weeks
- Previous BCG vaccination
- Pregnant or breastfeeding
- Raised temperature or fever
- Glandular fever or any type of viral infection
- General septic skin condition

It is important to keep your record of BCG vaccination for future medical reference.

TB Alert is a unique charity, raising awareness in the UK of Tuberculosis worldwide.

We support projects in the UK and in developing countries ensuring that more patients receive proper information and treatment. With your support we can make a positive, worldwide impact on Tuberculosis and save more lives.



TB Alert

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For further information or copies of this leaflet, please contact 0845 456 0995 (*office hours only*).

To make a donation or volunteer to help **TB Alert**, please contact 0845 223 5293 (*office hours only*).

Or go to our website at www.tbalert.org

The most common symptoms of TB include:

- cough that lasts for more than three weeks does not respond to normal medicine and keeps getting worse
- fever (high temperature)
- sweating at night so much that the bed sheets need changing
- loss of weight for no reason
- fatigue (lack of energy or extreme tiredness)
- swollen glands
- coughing up blood (this is very rare but needs immediate medical advice)

All of these symptoms may be signs of other problems, but if you have three or more of them and are worried you should talk to a doctor or nurse at your local surgery or clinic.



Tuberculosis (TB) and the BCG Vaccination