

Bacille Calmette-Guérin (BCG) Vaccination for Tuberculosis (TB)

Information for patients and families

About the BCG vaccine

The tuberculosis (TB) vaccine is called the bacille Calmette-Guerin (BCG) vaccine. TB is a disease caused by TB bacteria that is spread through the air from person to person. TB of the lungs is the most common type although TB can occur anywhere in the body and can cause severe illness. TB can be cured with special antibiotics. More information is available at health.nsw.gov.au/tb

BCG vaccination is more effective in babies and children than adults. BCG vaccination provides more than 70% protection against severe types of TB in young children (such as TB of the brain). The BCG vaccine is given by injection just under the skin on the upper arm.

The BCG vaccine can take 3 months to provide protection against TB. The BCG vaccine should ideally be given 3 months before travel to a country where TB is common. BCG vaccination loses its effectiveness over time, usually within 5 to 15 years.

Live vaccines

BCG is a live vaccine. People who need more than one live vaccine injection should either:

- have all their live vaccines injected on the same day, or
- allow at least 4 weeks between the BCG and other live injected vaccines.

Watch for TB symptoms

As BCG vaccination does not completely prevent the risk of TB, please be aware of the symptoms of TB and seek medical care if these develop. Symptoms of TB include fevers, a cough lasting more than 3 weeks, coughing up blood, night sweats, unexplained weight loss and tiredness.

Who should have a BCG vaccination?

In NSW, BCG vaccination is recommended for:

- children younger than 5 years of age who are travelling for 4 weeks or more to a country or countries where TB is common during their first 5 years of life
- children younger than 5 years of age considered by TB services to be at ongoing risk of TB exposure in Australia
- children younger than 5 years of age who live with someone with Hansen's disease (leprosy)
- healthcare workers travelling overseas to work in a country where BCG vaccination is required or strongly recommended.

Information on countries where TB is common can be found at health.nsw.gov.au/tb-countries

Pre-vaccination assessment

A tuberculin skin test (Mantoux test or TST) is needed prior to BCG vaccination if you or your child:

- was born in a country where TB is common
- has lived or travelled to a country or region where TB is common
- has been in close contact with a person with lung TB.

BCG vaccination is not recommended if you have a positive tuberculin skin test, low immunity, or a current illness with fever.

BCG vaccination sore

After vaccination it is normal for a sore to form where the needle went in. Normally, the sore should take a few weeks to form a red bump, then an open sore, and a few months to heal to a small, flat scar. If the sore forms within 2 to 3 days it is considered a fast or accelerated reaction, and it is important to call the clinic where the vaccination was given.

If you or your child do not get a BCG sore within 6 weeks of vaccination, call the clinic where the BCG vaccination was given. Some people may respond more slowly to the vaccination. In rare cases, a person may not have a response to the vaccine, not get a BCG sore and not be protected against TB. If you do not have a response to the vaccine, re-vaccination is not recommended.

How to look after the BCG vaccination sore

- keep the area clean and dry
- carefully pat the area dry after baths or showers
- keep the area uncovered where possible
- do not cover with plastic dressings or sticking plasters such as 'Band-Aids'
- do not use creams or ointments.

If the sore starts to ooze you can cover it with a piece of loose, sterile cloth (e.g. gauze) that is taped down at the edges but still allows air to get in. You or your child can continue to do all your normal activities such as baths, showers, swimming, and sports. More information is available at health.nsw.gov.au/bcg-sore

Are there any side effects with BCG vaccination?

BCG vaccination is very safe, and side-effects are generally mild. Occasional side effects include:

- fast or accelerated BCG vaccination sore development
- painful, red and swollen BCG vaccination sore
- swelling of the glands in the armpit or neck
- very notifiable scarring of the skin at the injection site, known as keloid scarring.

Very rarely, the vaccine can cause widespread BCG infection which can be treated with antibiotics.

If you have any concerns or experience any side effects, please contact the clinic where you or your child were vaccinated or your after-hours healthcare provider. For more information on TB or contact details of your local TB clinic, visit: www.health.nsw.gov.au/Infectious/tuberculosis/