



BCG anti-tuberculosis vaccine

What is *Bacillus Calmette-Guerin* (BCG)?

BCG is a vaccine that protects against tuberculosis (TB). It uses live TB bacteria modified in the laboratory so that it will not cause disease in a healthy person.

The BCG vaccination is not part of the Western Australian Immunisation Schedule, as it is only recommended for those at greatest risk of tuberculosis.

How is the BCG vaccine given?

The vaccine is injected between the layers of skin in the upper arm by a nurse who has been trained in BCG vaccination.

Is the vaccine safe?

The vaccine is safe; however, as with any vaccination, adverse reactions can occur.

Are there any side effects?

Possible side effects include:

- A sore or ulceration at the site of injection
- Pain, redness and swelling around the injection site
- Swelling of the glands in the armpit and/or neck.

Rare side effects:

- Severe allergic reactions.

How effective is the vaccine?

BCG vaccination reduces the risk of tuberculosis in people who are not already infected with TB. The vaccine does not always prevent disease.

It is more effective in children under the age of six, providing 50 to 80 percent protection against meningeal and disseminated tuberculosis. It is not recommended for adults.

Protection against TB starts about six to eight weeks after administration and lasts for about 10 years. Revaccination is not recommended.

Who could be vaccinated?

Children less than six years old who:

- Are going to live in another country with a high incidence of tuberculosis (defined as an annual incidence of more than 40 per 100,000 population) for more than three months, or
- Will make repeated visits to a country with a high incidence of tuberculosis that is likely to be for a cumulative period of more than three months (for country-specific incidence rates, see the [*TB country profile*](#) on the World Health Organisation's website)
- Newborn children of migrants who have arrived from countries with a high incidence of tuberculosis (see definition above) in the past five years, or newborn children who have household contact with people who have arrived from a high incidence country in the past five years.
- Newborn children of parents with leprosy or a family history of leprosy
- Children less than six years old who have not previously been vaccinated with BCG and are household contacts of a newly diagnosed leprosy case.
- Infant household contacts of TB.

BCG should ideally be given two to three months before departure to countries with a high incidence of tuberculosis.

When should BCG vaccination be delayed?

The nurse will complete a pre-vaccination assessment to ensure the vaccine is suitable for your child.



The vaccine may be delayed if your child has:

- Received another live vaccine (excluding oral rotavirus) within the past four weeks (measles, mumps, rubella, yellow fever, or varicella)
- Infection with a fever
- Generalised skin conditions such as eczema
- Premature newborn children in an unstable clinical condition (wait until general condition has improved).

Who should not be vaccinated with BCG?

- Infants weighing under two kilograms.
- Newborn children with suspected congenital immune deficiencies
- People who have had a positive Tuberculin Skin Test (TST) reaction.
- People who have TB disease now, or have had TB disease in the past.
- People with HIV infection; including newborn children of mothers infected with HIV until this infection is ruled out in the child.
- People with primary or secondary immune deficiencies
- People who take anti-cancer or steroid drugs such as cortisone or immunosuppressive drugs or who are undergoing radiotherapy.
- People who have had a serious illness, such as kidney disease.
- Patients with malignant diseases
- People with generalised skin diseases such as eczema or dermatitis
- People who have had a previous reaction to a BCG.

Important information post vaccination

Please keep these instructions until the injection site has completely healed.

What to expect after BCG vaccination

- BCG vaccination is given into the skin on the upper arm. A white lump is seen for a few minutes immediately after the injection.
- A red spot/small swelling will appear in two to four weeks.
- This may develop into a sore, which will form a scab and heal two to three months after vaccination. A scar usually remains at the injection site.

What to do if a sore appears

- Leave the sore alone and exposed to the air - this helps it to heal quickly.
- Keep the affected site clean.

What not to do

- Do not scratch, squeeze or disturb the sore or scab.
- Do not apply ointment, creams or antiseptics to the site.
- Do not apply sticking plaster or a tight sealed dressing, as these can delay healing.
- The arm in which the BCG vaccine has been administered should not be used for any other vaccines for at least three months.
- No live vaccines should be administered after the BCG vaccine for four weeks. Please inform your health practitioner of the BCG administration date.

If your child experiences an adverse event following immunisation, please call Anita Clayton Centre and ask to speak to a nurse.

The event should also be reported to the [WA Vaccine Safety Surveillance \(WAVSS\)](#) [Department of Health](#). Phone: (08) 6456 0208

Where can I get more information?

If you have any questions, please phone the TB clinic between 815am and 415pm, Monday to Friday, on (08) 9222 8500 to talk to a nurse.



WA Tuberculosis Control Program

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