

### Indications for BCG

- A. BCG should be used in the following circumstances:
- B. Newborn Aboriginal and Torres Strait Islander babies in areas where tuberculosis is prevalent
- C. Neonates and children who are likely to travel to or live in countries where tuberculosis is common
- D. Newborn babies, if either parent has leprosy
- E. Children and adults who have been in contact with tuberculosis and remain Mantoux negative three months after last contact.

### BCG may also be considered in the following circumstances

- A. healthcare workers in frequent contact with patients with tuberculosis, especially multi-drug resistant tuberculosis
- B. adults who will spend prolonged periods in countries where tuberculosis is common
- C. newborn babies living in households where they may be exposed to migrants or visitors from overseas countries with high tuberculosis rates
- D. children under 16 years who are in contact with a patient with tuberculosis where the infection is resistant to treatment or where the child cannot take prophylactic anti-tuberculosis treatment.

### BCG vaccination

Bacille Calmette-Guerin (BCG) vaccination  
A BCG (Bacillus Calmette-Guérin) vaccine is available for Tuberculosis (TB) but it is not part of the routine childhood immunization program. The vaccine does not prevent TB infection, BCG vaccination is most effective at preventing severe disease in infants and young children. When given to infants and young children, it minimises the risk of death, meningitis, and disseminated TB

The vaccine available for use in Australia is the vaccine made by the India (SII) It is not formally registered for Australia - the registered vaccine has been unavailable for a few years. Vaccines made by the SII are accredited by the World Health Organisation and used in 140 countries around the globe in their national immunisation programs. The vaccine is also used by public health clinics around Australia.

**Dr Zaman Bhuiyan is an authorised prescriber of this BCG Vaccine.**



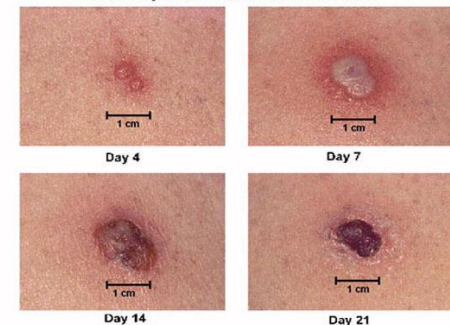
**Pakenham  
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Primary Vaccination Site Reaction



## Contraindications to BCG vaccination

- Infants with a body mass below 2,000g.
- Newborn children with suspected congenital immune deficiencies
- Persons who have had a tuberculin skin test (TST) reaction.
- Persons who have TB disease now, or have had TB disease in the past.
- Persons with HIV infection; including newborn children of mothers infected with HIV until this infection is ruled out in the child.
- Newborn children of mothers treated in their third trimester with medications such as anti-TNF-alpha monoclonal antibodies.
- Persons with primary or secondary immune deficiencies (including interferon-gamma deficiency and DiGeorge syndrome)
- Persons who take anti-cancer or steroid drugs such as cortisone or immunosuppressive drugs (including anti-TNF-alpha monoclonal antibodies such as infliximab) or are undergoing radiotherapy
- Patients after bone marrow stem cell transplantation or organ transplantation
- Persons who have had a serious illness such as kidney disease.
- Patients with malignant diseases (e.g. leukaemia, Hodgkin lymphoma, lymphoma, or other carcinoma of the reticuloendothelial system);
- Patients after bone marrow stem cell transplantation or organ transplantation;
- People with generalised skin diseases such as eczema or other exudative inflammatory dermatological conditions
- People with known hypersensitivity to any component of the vaccine.
- Pregnant women
- Serious diseases (malnutrition)

## Contraindications to BCG vaccination

### Those who are receiving or have received in the past 3 months immunosuppressive therapy including:

- o Adults and children on high-dose corticosteroids (>40mg prednisolone per day or >2mg/kg/day in children under 20kg) for more than 1 week
- o Adults and children on lower dose corticosteroids (>20mg prednisolone per day or >1mg/kg/day in children under 20kg) for more than 14 days
- o On-biological oral immune modulating drugs e.g. methotrexate >25mg per week, azathioprine >3.0mg/kg/day or 6-mercaptopurine >1.5mg/kg/day
- o For children on non-biological oral immune modulating drugs (except those on low dose) specialist advice should be sought prior to vaccination

### What to expect

Before vaccination, anyone older than 6 months may need tuberculin skin test (sometimes known as the Mantoux test). If the test is positive, this means that the person already has some immunity to TB and BCG vaccination is not recommended as it provides no benefit and there is a higher chance of side effects.

BCG vaccination is given by injecting a small amount of vaccine into the first layer of skin on the left upper arm.

Following BCG vaccination it is normal to develop redness and/or a small lump at the injection site, followed by a small ulcer (an open sore) a few weeks later. The ulcer is usually less than one centimetre in diameter and may last from a few weeks to a few months before healing to a small flat scar.

## After care instructions

- The vaccination site should be kept clean and dry.
- Use clean, warm water only to clean the site when necessary.
- Do not use antiseptics, creams or ointments.
- Do not use sticking plaster directly over the vaccination site. If a dressing is needed, it should be a dry dressing with a strip of sticking plaster along two sides, allowing air to circulate.
- The child's arm where the BCG vaccine has been administered should not be used for at least 3 months after the BCG vaccination for any other vaccine

## Side effects

Side effects from BCG vaccination are uncommon. Temporary fever and swollen glands in the armpit or neck usually resolve without any special treatment.

The most common reactions (when they do occur) are enlarged lymph glands (about 1 in 100 vaccinations given), and abscess at the injection site (about 2 to 3 in 100)<sup>1</sup>.

Disseminated (widespread) infection is very rare (up to 4 in 1,000,000)<sup>2</sup> and is more likely to occur in people with weak immune systems such as people receiving treatment for cancer or other conditions or those with HIV infection. Other rare side effects include osteitis (bone inflammation), keloid scarring and severe immediate allergic reactions.