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VACCINE INFORMATION SHEET

Bacille Calmette-Guérin (BCG) Vaccine

What is BCG vaccine?

BCG is a vaccine containing live, weakened tuberculosis germs that activate a person's immune system. Countries have used BCG for almost 100 years. Globally, about 100 million children receive BCG yearly. BCG protects infants and young children from severe presentations of tuberculosis such as TB Meningitis and Disseminated TB. There is uncertainty about whether BCG protects people from tuberculosis infections after infancy.

What is Tuberculosis (TB)?

TB is an infection that can cause disease in any part of the body but most often the lungs. If a person breathes in a TB germ, it may cause a long-term TB infection that does not cause any symptoms. In some people with TB infection, the TB germ multiplies and causes TB disease. TB disease in the lungs can cause symptoms like coughing and fever. When a person with TB disease coughs, the germ goes into the air, and others around that person can breathe in the germ and become infected too.

Is BCG vaccine safe?

BCG vaccine is safe for most infants. BCG is a live bacteria and infants with severe immune deficiencies cannot receive BCG.

BCG vaccine causes a small raised bump that can swell and leak fluid 2-4 weeks after the vaccine. This usually heals within 2-5 months and usually leaves a small scar.

BCG often causes a lymph node in the armpit or above the collarbone to swell—this is a normal immune system response. There is a low risk of a lymph node becoming infected. If you find a lump after BCG, talk to your healthcare provider.

A BCG vaccine in the first year of life may result in a future false positive tuberculin skin test (TST) up to the age of 10. TSTs help diagnose TB infections.

There is a very rare chance of a severe allergic reaction called *anaphylaxis*. Anaphylaxis can occur with any vaccine or medication. Anaphylaxis results in hives, rash, swelling of the lips or tongue, and difficulty breathing. Anaphylaxis typically occurs within 15 minutes of receiving a vaccine so we recommend that you stay in the clinic for 15 minutes after getting the vaccine. Your healthcare provider is trained to treat anaphylaxis.

What is the risk of not getting BCG vaccine?

BCG protects from severe forms TB in infants and children. The rates of TB infection are much higher in some parts of the NWT compared to Canada as a whole.

Reasons an infant may not be eligible to receive BCG vaccine:

Tell your healthcare provider if your baby has any of the following:

- Immune system concerns such as:
 - Taking medications that affect the immune system
 - HIV positive
 - Born to HIV positive or unknown HIV status mother
 - The birth mother was on immune suppressing medications during pregnancy or while breastfeeding
 - Having a family member with Severe Combined Immunodeficiency (SCID)
- Positive TST or active TB disease
- Allergy to the vaccine or its components
- Burns or other serious skin problems
- Is older than 12 months of age
- Positive SCID test

BCG and Severe Combined Immunodeficiency (SCID)

Severe Combined Immunodeficiency (SCID) is a group of rare genetic conditions that affects the body's ability to fight infections. Children born with SCID who don't receive treatment develop frequent severe infections.

All infants in the Northwest Territories are tested for SCID at birth.

Babies that have SCID cannot receive any live vaccine because their immune system does not work normally. If BCG is given to a child with SCID, there is the potential for a severe infection.

BCG in the NWT was previously given at birth but is now given after you and your healthcare provider know the results of your baby's SCID test.

BCG vaccine aftercare

After your infant receives BCG vaccine:

- Wash your baby's arm normally
- Place a cool damp compress over any swelling
- If the sore is draining, cover it with a dry, dressing that is not waterproof (e.g. gauze)
- **DO NOT:**
 - Squeeze, pop, or scratch the site
 - Put cream or ointment on it
 - Put a band aid on the sore
 - Rub or massage the site

If you are concerned about a reaction with the vaccine, talk to your healthcare provider.