

Tuberculosis Vaccination (BCG)

Questions & Answers for Parents

Tuberculosis

Tuberculosis (TB) is a disease caused by a bacterium called Koch's bacillus. It most often affects the lungs, but can also affect other parts of the body such as the bones, kidneys or brain. The disease can lead to complications in the affected organs (e.g., respiratory or kidney failure, bone deformities, death).

Once a person is infected, it may take several months or even years for symptoms to appear and the person to become contagious (the disease is then considered to be in its active form). Common symptoms of TB include cough, fever, weight loss and night sweats.

TB can be transmitted through the air when a person with the disease spends several hours in a closed room with other people. Coughing increases the risk of transmission.

Young children are more likely to have a severe form of TB (such as one that infects the brain or spreads throughout the body).

What is the BCG vaccine?

The BCG vaccine protects young children against complications and severe forms of tuberculosis.

The BCG vaccine is made from a mild bacterium (live vaccine). It does not cause the disease. It activates the vaccinated person's immune system and teaches it to defend against the disease.

At what age should the BCG vaccine be given?



In Nunavik, the BCG vaccine is given to all infants at around one month of age.

Babies are at greater risk of developing severe forms of TB if they get the disease. It's important to protect them before they come into contact with it.

CAUTION

BCG vaccination is not recommended for certain children with severe immune system problems.



How do you know if a child is eligible to receive the BCG vaccine?

BCG vaccination is offered to all Nunavik infants born on or after January 1, 2023.

A nurse will help parents/guardians complete a form to help ensure that the child has no problematic health conditions that interfere with the vaccination.

Depending on the child's age at the time of vaccination and/or the presence of risk factors for exposure to TB:

- ◆ A severe combined immune deficiency (SCID) test may be done at birth
- ◆ A tuberculin skin test (TST) may be recommended

What is severe combined immunodeficiency syndrome (SCID)?

SCID is a rare syndrome caused by defective genes in a child's DNA which affects the immune system and prevents the child from effectively fighting off infections.

While SCID usually affects 1 out of every 75,000 to 100,000 children born, some studies carried out in Nunavut indicate that the disease may be more prevalent among Inuit.

Why do the SCID screening test in newborns?

SCID is a serious condition that can affect a child at birth. Early screening is important to ensure that affected children can receive the care they need.

What is the SCID screening test?

The SCID screening test is usually done 24 to 48 hours after birth, by taking a few drops of blood from the heel.

Test results are usually available within one month.

Why is it necessary to wait for the SCID screening test result before getting the BCG vaccine?

Live vaccines, like the BCG, rarely pose a risk to healthy children. A child with SCID might not be able to safely respond to this type of vaccine.

The SCID screening test ensures that there is no issue with TB vaccination (BCG vaccine).

Is the BCG vaccine effective?

The BCG vaccine is effective and adequately protects young children against severe forms of the disease (infection of the brain lining, generalized infections, etc.). Its effectiveness has been established at around **75-80 %**.

Is the BCG vaccine safe?

The BCG vaccine has been used for more than a century and is received by approximately 100 million children around the world every year.

This vaccine is safe. However, it should not be given to children with certain medical conditions or whose immune systems are weak or compromised (e.g. children with HIV or severe combined immune deficiency syndrome [SCID]).

How is the BCG vaccine given?

BCG is injected on the shoulder with a small needle. It is normal to see a small bubble of liquid appear under the skin during the vaccination.

What are some of the potential side effects of BCG vaccination?

Side effects are usually not serious.

Possible side effects include:

- ◆ Pain, redness and a small wound at the injection site.
- ◆ Swelling of lymph nodes in the armpit or above the collarbone on the side of the body where the vaccine was given.
- ◆ A small red bump containing fluid developing 2 to 4 weeks after the vaccination. It may take 2 to 5 months for the lump to disappear, leaving a small scar.
- ◆ Fever, redness of the skin and red eyes.
- ◆ In extremely rare cases, more severe reactions can occur, such as an allergic reaction or a generalized infection. These side effects are rare and the benefits of vaccination greatly outweigh the risks.



