

**FACT SHEET  
OKLAHOMA STATE DEPARTMENT OF HEALTH  
TB DIVISION**

**BCG**

---

**What is BCG?**

BCG stands for Bacillus of Calmette and Guerin vaccine. BCG vaccines are live vaccines derived from a strain of *Mycobacterium bovis* and the disease producing ability was altered by Calmette and Guerin 80 years ago. There are many different BCG vaccines in use around the world, all coming from the same altered *M bovis* strain but having different ability to protect against TB disease. In other words, there is no BCG vaccine but several different BCG vaccines which differ in effectiveness. BCG is used in countries around the world where many cases of TB occur (mainly countries of Asia, Africa and Central and South America). In those countries as many as 75%-80% of children are vaccinated with BCG, with a few children receiving repeat vaccination as an older child. In countries where TB disease occurs in only a few people, mainly the United States and some European countries, BCG vaccination almost never is done.

**Are BCG vaccines effective in preventing TB disease?**

Information available indicates BCG vaccines may prevent severe forms of TB in children, such as TB meningitis (TB around the brain) and miliary Th (TB that spreads throughout the child's body). The BCG vaccines prevent death from severe forms of TB in children. However, prior BCO vaccination is not effective in preventing TB disease in adolescents or adults.

**Tuberculin skin testing of individuals who have been vaccinated with BCG vaccine.**

There is no reason any BCG vaccinated person cannot be tested with a TB skin test. Such an individual should be tested if he/she is a contact of a person with TB disease, or there is another reason for TB skin testing. Any positive skin test result caused by BCG vaccination goes away with the passage of time. The majority of persons who previously were vaccinated with BCG will have a "negative" TB skin test when tested unless the vaccination was recent. A TB skin test of 10 mm or more indicates infection with *M tuberculosis*, the germ that causes TB. Reactions of such size are not caused by the prior BCG vaccination.

**What indicates TB infection or disease in a BCG vaccinated person?**

A diagnosis of *M tuberculosis* infection should be considered for any BCG-vaccinated person who has a TB skin test reaction of 10 mm or more. A diagnosis of active TB disease should be considered for a BCG-vaccinated person regardless of his/her TB skin test result, if he/she has symptoms suggestive of TB, especially if they have been exposed recently to infectious TB. Any person diagnosed with TB infection or disease by a TB doctor should take the TB therapy recommended.