

Resources for Question: "Can a tuberculin skin test (TST) be administered to a person who had the BCG vaccine in the past?"

- (1) ***MMWR, Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Setting, 2005***, p.28 - 29
<http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>

"...A positive TST reaction as a result of BCG wanes after 5 years. Therefore, HCWs with previous BCG vaccination will frequently have a negative TST result (74,227–232). Because HCWs with a history of BCG are frequently from high TB-prevalence countries, positive test results for *M. tuberculosis* infection in HCWs with previous BCG vaccination should be interpreted as representing infection with *M. tuberculosis* (74,227–233). Although BCG reduces the occurrence of severe forms of TB disease in children and overall might reduce the risk for progression from LTBI to TB disease (234,235), BCG is not thought to prevent *M. tuberculosis* infection (236). Test results for *M. tuberculosis* infection for HCWs with a history of BCG should be interpreted by using the same diagnostic cut points used for HCWs without a history of BCG vaccination.

- (2) ***Georgia Tuberculosis Reference Guide, 2005***, p. 6.
<http://health.state.ga.us/programs/tb/publications.asp>

"...Tuberculin skin testing is not contraindicated for persons who have been vaccinated with BCG, although currently no FDA-approved method can reliably distinguish tuberculin reactions caused by vaccination with BCG from those caused by natural mycobacterial infections. A positive test in a BCG-vaccinated person is assumed to indicate infection with *M. tuberculosis* when the person tested is at increased risk for recent infection, is from an area with high rates of TB or has medical conditions that increase the risk for disease (Section IV, B)..."

- (3) ***CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. MMWR 2000; 49 (No. RR-6).***
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4906a1.htm>

"...Previous BCG vaccination. Intracutaneous inoculation with BCG is currently used in many parts of the world as a vaccine against tuberculosis. Tuberculin reactivity caused by BCG vaccination generally wanes with the passage of time but can be boosted by the tuberculin skin test. Periodic skin testing may prolong reactivity to tuberculin in vaccinated persons (74). No reliable method has been developed to distinguish tuberculin reactions caused by vaccination with BCG from those caused by natural mycobacterial infections, although reactions of ≥ 20 mm of induration are not likely caused by BCG (75)..."

- (4) ***CDC Fact sheet: Tuberculin Skin Testing, Last Updated: April 2006***
<http://www.cdc.gov/nchstp/tb/pubs/tbfactsheets/250140.htm>

"...Most persons can receive a TST. TST is contraindicated only for persons who have had a severe reaction (e.g., necrosis, blistering, anaphylactic shock, or ulcerations) to a previous TST. It is not contraindicated for any other persons, including infants, children, pregnant women, persons who are HIV-infected, or persons who have been vaccinated with BCG..."

(5) **CDC Fact sheet: Targeted Tuberculin Testing and Interpreting Tuberculin Skin Test Results , Last Updated: May 2005**

<http://www.cdc.gov/nchstp/tb/pubs/tbfactsheets/250005.htm>

"...Questions often arise about the interpretation of TST results in persons with a history of Bacille Calmette-Guérin (BCG) vaccine, HIV infection, and recent contacts to an infectious TB case.

BCG vaccine is currently used in many parts of the world to protect infants and children from severe TB disease, especially TB meningitis. It does not confer lifelong immunity, and its significance in persons receiving the TST causes confusion in the medical and lay community.

- History of BCG vaccine is NOT a contraindication for tuberculin testing
- TST reactivity caused by BCG vaccine generally wanes with time
- If more than 5 years have elapsed since administration of BCG vaccine, a positive TST reaction is most likely a result of *M. tuberculosis* infection..."

(6) **CDC Fact sheet: BCG Vaccine, Last Updated: April 2006**

<http://www.cdc.gov/nchstp/tb/pubs/tbfactsheets/250120.htm>

"...Many foreign-born persons have been BCG-vaccinated. BCG vaccination may cause a positive reaction to the tuberculin skin test (TST), which may complicate decisions about prescribing treatment. Despite this potential for BCG to interfere with test results, the TST and the QuantIFERON[®]-TB Gold test (QFT-G) are not contraindicated for persons who have been vaccinated with BCG. The presence or size of a TST reaction in these persons does not predict whether BCG will provide any protection against TB disease. Furthermore, the size of a TST reaction in a BCG-vaccinated person is not a factor in determining whether the reaction is caused by LTBI or the prior BCG vaccination..."

"...Evaluation of TST reactions in persons vaccinated with BCG should be interpreted using the same criteria for those not BCG-vaccinated..."