

Interpreting Tuberculin Skin Test (TST) Results

Previous BCG vaccine

TST is not contraindicated for persons who have been vaccinated with BCG and should be interpreted using the same criteria for unvaccinated individuals. Usually, the effect BCG vaccine has on TST wanes within 5 years. To avoid confusion, it may be prudent to test previously vaccinated individuals using the Interferon Gamma Release Assay (IGRA) blood test. BCG has no effect on IGRA testing.

Use of steroids (>15 mg/day of prednisone for > 1 month)

May result in a reduced immune response, causing a false negative reaction.

Acute viral or bacterial infection

May result in a false negative reaction.

Interpretation of TST's

Interpretation of TST's is determined by millimeters of induration and a person's risk of acquiring TB infection, or if already infected, his risk of progression to active TB disease. When a TST is reactive (positive) patients should undergo chest x-ray and be screened for symptoms of active TB disease. Once active TB is ruled out, treatment for latent TB infection can be considered. Note: Individuals with active TB disease can have negative TST's due to anergy (absence of immune response to TB purified protein derivative).

Induration of > 5 mm is reactive (positive) for the following:

- HIV- infected persons
- Recent contacts of someone with infectious TB
- Persons who have chest radiograph findings suggestive of prior TB
- Persons with organ transplant(s) and other immunosuppressed persons. These include,
 - Those on the equivalent of ≥ 15 mg/day of prednisone x 1 month and those on TNF- α antagonists.

Induration of > 10 mm is reactive (positive) in persons who do not meet the preceding criteria but who have the following risk factors:

- Conversion from a non-reactive (negative) TST to a reactive (positive) TST within a 2-year period.
- Persons with: silicosis, diabetes mellitus, chronic renal failure, certain types of cancer (e.g. leukemia, lymphomas, cancer of the head, neck or lung), gastrectomy or jejunioileal bypass and weight loss of greater than 10% below ideal body weight.
- Injection drug users
- Arrival to US (< 5 years) from high-prevalence areas (Africa, Asia, Eastern Europe, Latin America)
- Mycobacteriology laboratory personnel
- Residents and employees of high risk congregate settings (correctional facilities, nursing homes, hospitals, homeless shelters)
- Children younger than 5 years of age
- Infants, children and adolescents exposed to adults in high risk categories

Induration of > 15mm is interpreted as reactive (positive) in persons with no known risk factors.