

Why perform two-step tuberculin skin testing?

The two-step tuberculin skin test (TST) is designed to detect individuals with past tuberculosis (TB) infections who now have diminished skin test reactivity. Use a two-step test for new employees or volunteers who will have serial TSTs and:

- Have never been tested or have no documentation of being tested, or
- Do not remember being tested, or
- Tested negative over 12 months ago.

The first TST administered may not be positive, but helps the body “remember” *Mycobacterium tuberculosis*. The second TST evokes a positive response because the body now identifies and reacts to the purified protein derivative-tuberculin (PPD). The second (boosted) response is the valid baseline for the individual.

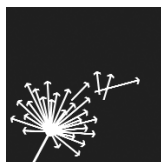
For example, an employee who was infected with *Mycobacterium tuberculosis* as a child, but has not had a TST in a long while, might have a negative test at hire. One year later, the employee is tested as part of routine employee TB surveillance, and develops 16 mm of induration. There is no way to tell if this is a TST conversion representing new infection, or a boosted reaction from old infection. A two-step test at the time of hire would have prevented this dilemma.

Is it cost effective?

Two-step testing allows a facility to accurately establish baseline TSTs for employees, determine TST conversion rates, and more accurately assess facility risk. It will reduce the likelihood that a boosted reaction is interpreted as a new infection, which can result in unnecessary investigation, treatment for TB infection, and employer/employee expense. While groups with a high prevalence of TB infection will particularly benefit from two-step testing, facilities with lower boosting rates should also find it cost effective.¹

This information is available at our website: www.nationaltbcenter.edu

¹ Slutkin G, Perez-Stable EJ, Hopewell PC. Time course and boosting of tuberculin reactions in nursing home residents. *Am Rev Respir Dis* 1986; 134:1048-1051.



Francis J. Curry National Tuberculosis Center
<http://www.nationaltbcenter.edu>