

TB Screening: A Decision to Test is a Decision to Treat

Tuberculin skin test (TST)

Tuberculosis screening of the general population is no longer recommended. Screening should be targeted to populations with increased rates of TB infection (see *previous page*); persons with an increased risk of progression to active TB if infected; and those likely to be exposed or to expose others, such as health care workers and volunteers.

Mantoux Test

The Mantoux test (0.1 cc PPD injected intradermally in the inner forearm) is the only recommended method of skin testing for TB. Multiple-puncture "tine" tests are unreliable and should not be used.

The test should be read by a trained professional 48-72 hours after injection. The edge of the induration (palpable swelling, not redness) is marked with a ballpoint pen and the diameter is measured in millimeters.

Interpreting TST Reactions

Size of Induration	Clinical Circumstances
Positive if ≥ 5 mm	<ul style="list-style-type: none"> • HIV infected person • Close contacts to active disease • Abnormal Chest X-ray consistent with prior TB • Immunosuppressed patients
Positive if ≥ 10 mm	<p><u>Everyone else</u>, with special focus on:</p> <ul style="list-style-type: none"> • Persons with certain medical conditions • IV drug users • Homeless people • Foreign born people from TB-endemic countries • Infants and children < 5 years of age • Residents & staff of long-term care facilities • Healthcare workers

Skin test limitations

The tuberculosis skin test is neither 100% sensitive nor 100% specific. Vaccination within the last year or multiple vaccinations with BCG (*Bacillus Calmette Guerin*) can cause a false positive, as can infection with non-TB *mycobacteria*. **Generally a history of BCG vaccination is ignored in skin test interpretation if the BCG was given over one year ago.**

Quantiferon test

This screening tool for latent TB was recently approved by the FDA. It is a blood test that also differentiates TB from BCG and Mycobacterium avium. The San Mateo County Public Health Laboratory will have the capability to perform Quantiferon testing. Further information will be provided as it becomes available.



A negative TB skin test or a negative quantiferon test does not rule out active TB. The clinical picture and patient history should always be taken into account.

Up to 25% of persons with active pulmonary TB will be skin test negative. Furthermore, it can take up to 10 weeks for a positive reaction to develop in a newly infected person.

Chest X-ray

If the TST is positive or a patient has symptoms compatible with TB, a chest x-ray is indicated.

A pregnant patient with a positive TST should be questioned about symptoms at least each trimester, and if any are present she should have a chest x-ray with abdominal shielding immediately. If she has no symptoms, the chest x-ray may be postponed until the second trimester.

See next page for further management.

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