

 <p><b>Tuberculin Skin Testing Guidelines for Children in Various Settings</b></p>	Policy Number	<b>TB-1003</b>
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	Subject Matter Expert ( <i>title</i> )	Manager, Infectious Disease Intervention and Control Branch
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**1.0 Purpose**

Although very young children are at high risk of developing tuberculosis (TB) disease if infected, not all children face equal risks of infection. This policy outlines the settings and conditions that should prompt a tuberculin skin test (TST).

**2.0 Policy**

The policy of the Department of State Health Services is to ensure that only children with risk factors for exposure to a person with infectious tuberculosis disease shall be screened for latent TB infection (LTBI) and/or TB disease. All children with signs or symptoms of active TB disease should receive a full medical evaluation.

The Texas Department of State Health Services (DSHS) concurs with the recommendations of the Pediatric Tuberculosis Collaborative Group of the American Academy of Pediatrics published in PEDIATRICS Vol. 114, No. 4, October 2004. It does not recommend a routine TST for school entry, day care attendance, Special Supplemental Nutrition Program for Women, Infants, and Children eligibility, or camp attendance for a child or adolescent at low risk for latent tuberculosis infection (LTBI).

Primary care providers should screen children and adolescents for LTBI risk factors by using a risk-assessment questionnaire (TB Questionnaire, EF12-11494 available at <http://www.dshs.state.tx.us/idcu/disease/tb/forms/>). A decision to place a TST should be based on identification of a risk factor on the questionnaire or a new risk factor that has been acquired since the last assessment. This decision is also a commitment to evaluate the patient completely and if indicated to provide treatment for LTBI or refer to the local or regional health department TB Program for treatment.

A trained health care worker must place the TST by the Mantoux method and must measure and interpret the TST by touching and measuring the indurated area. Providers shall not rely on a parent or other individual to call the provider with a description and or measurement of the reaction to the test. A TST may be repeated immediately at least 2 inches away from the original site, if the first test is administered incorrectly. If the patient does not return for reading within 48-72 hours, the TST may be repeated as soon as practical. If a child or adolescent has a history of a previously positive TST without written documentation of the millimeters of induration, the TST should be repeated. Repeat testing should be avoided if there is a history of a severe, immediate reaction to TST and such an individual should be screened for symptoms of TB disease if risk factors for LTBI or TB disease are present.

Children with a documented history of a previously positive TST should not be given a repeat TST; but should be screened for symptoms of TB disease and receive diagnostic chest radiography, if they have a subsequent significant exposure to someone with TB disease.

Asymptomatic children should not be excluded from school or other group activities pending the evaluation of a positive TST, which would include diagnostic chest radiography and might include others tests depending on the radiography results.

## **2.1 Special Situations:**

**2.1.1 TB Disease** – Children and adolescents with symptoms of TB disease should receive a full medical evaluation including TST, chest radiograph, and collection of sputum specimens or early morning gastric aspirates. Children and adolescents with prolonged or frequent contact with persons with confirmed or suspected infectious tuberculosis disease should receive a TST and if less than 5 years of age, they should also receive diagnostic chest radiography. Children or adolescents with radiographic or clinical findings suggesting tuberculosis disease should receive a TST within 72 hours.

**2.1.2 HIV/AIDS** - Children and adolescents with HIV/AIDS should receive an annual TST beginning at age 3-12 months. A medical evaluation for treatment should follow a positive skin test result. However, a negative skin test result does not exclude the possibility of TB disease in the presence of information from the child's medical history, clinical or radiographic findings suggestive of TB.

**2.1.3 Correctional Facilities** – Children and adolescents should be screened for symptoms of TB disease and receive a TST on admission or readmission to a correctional or detention facility. They should receive a TST annually thereafter if their first test result is negative.

**2.1.4 Foster Care** – Because of the difficulty of obtaining valid information for a TB risk assessment questionnaire, children entering foster care should receive a TST at their first medical appointment after placement in foster care. However, children entering foster care who have symptoms of TB disease or known exposure to a person with TB disease should receive medical evaluation including a TST within 72 hours.

**2.1.5 Internationally Adopted Children** – Children being adopted from a foreign country who have symptoms of TB disease should receive a full medical evaluation including a TST within 72 hours of arrival in the United States. Because of the difficulty of obtaining valid information for a TB risk assessment questionnaire, children adopted from a foreign country should receive a TST at their first medical appointment after coming to the United States. In addition, because of the risk for a false-negative TST after recent exposure to someone with TB disease or secondary to malnutrition, a repeat TST should be administered 3 to 6 months after internationally adopted children arrive in the United States.

**2.1.6 Immunosuppressive Medications** – A TST should be administered to children and adolescents before or at the same time as starting immunosuppressive medications that could increase their risk of progressing from LTBI to TB disease (e.g., steroids, chemotherapy, tumor necrosis factor  $\alpha$  antagonists).

**2.1.7 Medical Conditions** – Children at increased risk of progression from LTBI to TB disease due to medical condition (e.g., diabetes, chronic renal failure, malnutrition, congenital or acquired immunodeficiencies) should receive a TST at time of diagnosis or circumstance.

**2.1.8 Live Virus Vaccines** - A TST can be administered at the same time as live virus vaccines (e.g., measles, varicella). If not administered at the same time, wait 6 weeks to administer the test.

**2.1.9 Texas Health Steps Participants** – In most of Texas, each child should be evaluated annually for risk of TB exposure or infection using the Texas Health Steps TB Screening and Education Tool (TB Questionnaire EF12-11494). The first time the questionnaire is answered, children with one or more risk factors should receive a TST. At subsequent visits, a new occurrence of risk should result in a TST.

Children enrolled in the Texas Health Steps Program who have no known risk factors, but who reside or have resided in counties with greater than 1.5 times the TB rate for Texas (a list of counties is available at <http://www.dshs.state.tx.us/idcu/disease/tb/statistics/hiprev/>) should receive a TST at 1 year of age and once between the ages of 4 to 6 years, and then again between the ages of 11 to 16 years. Such a decision should be based on the local epidemiology of tuberculosis. The TB screening and education tool (TB questionnaire) should be administered at all other annual visits.

**2.2.0 BCG** (Bacillus of Calmette and Guérin) – A history of BCG immunization is not a contraindication to administering a TST and should not change the interpretation of the results.

**3.0 Definitions**

**BCG (Bacillus of Calmette and Guérin) vaccine** – a vaccine given in many countries with a high burden of tuberculosis that may lessen the development of serious forms of tuberculosis but does not prevent latent TB infection.

**Children and adolescents** – persons from birth to 18 years of age

**LTBI** – latent tuberculosis infection is characterized by a positive reaction to a TST, the absence of any symptoms of active TB, and a chest x-ray that is not suggestive of active TB disease.

**TST** – a tuberculin skin test

**4.0 Persons Affected**

Health care providers, organizations that serve children, local and regional health department TB programs

**5.0 Responsibilities**

- Administrators, directors, or managers responsible for day-to-day operations of settings that serve children at risk for exposure to infectious TB shall insure that their facility has procedures in place to prevent the transmission of *Mycobacterium tuberculosis*. They shall be responsible for designating someone in their organization to report all occurrences of LTBI or TB disease to the local or regional health department.
- Local and regional health departments shall educate health care providers and administrators of organizations that serve children about basic TB facts and appropriate measures for screening children for LTBI or TB disease. They shall be the primary organization responsible for implementation of this policy. Where a known exposure has occurred, the local or regional health department shall be the lead agency to manage the contact investigation.

**6.0 Procedures**

*For procedures on administering, reading, and interpreting a tuberculin skin test by the Mantoux method, see Procedures for Testing for Tuberculosis Infection at <http://www.dshs.state.tx.us/idcu/disease/tb/publications/default.asp>.*

**7.0 Revision History**

Date	Action	Section
October 29, 1996	New	
February 25, 1998	Revised	
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June 22, 2000	Revised	
June 26, 2008	Revised	