



Child and Teen Checkups (C&TC) FACT Sheet

For primary care providers

Tuberculosis (TB) Screening

C&TC Requirements / Minnesota Department of Health (MDH) recommendation:

C&TC Requirements:	Qualified Personnel	Documentation
<p>All children should be evaluated for their risk of exposure to TB. Routine TB screening by Mantoux test of all children is not recommended; screening is recommended for <u>high-risk children only</u>. In Minnesota, high-risk children include:</p> <ul style="list-style-type: none"> Close contacts of persons with infectious TB disease. Foreign-born children from high prevalence areas and children with foreign-born parents from such regions. Children of migrant farm workers Children with (or those children in households with) socioeconomic risk factors such as homelessness, living in shelters, or incarceration. <p>Any high-risk child who has not received a Mantoux skin test previously should be screened, regardless of age.</p>	<p>Only health care workers trained in the administration and interpretation of the Mantoux skin test should perform TB screening. Mantoux results should be read and recorded by a trained health care worker, <u>not</u> the patient or family member.</p>	<p>Document risk as appropriate and document lab tests ordered and completed.</p>

Screening Tools:

Use only the Mantoux tuberculin skin test. Other tests (e.g., multiple puncture, “Tine”) are not recommended because they lack standardization. Record Mantoux results in millimeters of induration (not erythema) at 48-72 hours after administration. Interpret results based on the individual’s TB risk factors (cutoff is 5 mm, 10 mm, or 15 mm induration, depending on child’s risk level).

Facts About TB in Minnesota:

- The overall incidence of active TB disease is relatively low (4.2 cases/100,000 population) [1].
- 217 cases of active TB disease were reported in 2006 [1].
- More than 80 percent of all TB cases in Minnesota occur among persons born outside the United States [1].
- The age group of children with the greatest number of reported cases for the quarter ending 6/30//2007 was 15-24 year olds – with 23 cases [2].

The Minnesota Department of Health (MDH) TB Prevention and Control Program collaborates with clinicians and local public health departments throughout the state to ensure that individuals who are candidates for TB screening and/or evaluation receive appropriate services and that patients with latent TB infections or, most importantly, active TB disease receive adequate treatment [3].

Key Points:

Infants and postpubertal adolescents are at increased risk of progression of LTBI to tuberculosis.

Since the predictive value of a positive Mantoux test is poor in low-risk populations, **routine TB screening of all children is not recommended.**

Persons with latent TB infection (LTBI) and no active TB disease are not infectious and should not be isolated from normal daily activities.

A positive Mantoux test in a child less than 6 years of age typically indicates recent infection. Family members should be evaluated for TB disease LTBI.

History of bacille Calmette-Guérin (BCG) vaccination is not a contraindication for Mantoux tuberculin skin testing. History of BCG vaccination should be disregarded when interpreting the Mantoux test result and evaluating the patient for treatment of LTBI [4].

REPORTING Online:

<http://www.health.state.mn.us/divs/idepc/dtopics/reportable/tuberculosis.html>

Pulmonary or extrapulmonary sites of disease, including laboratory confirmed or clinically diagnosed tuberculosis disease must be reported to MDH within one working day. MDH requests that tuberculosis cases be reported by phone or fax (i.e., not by mail) to help ensure timely public health follow-up measures.

- By phone at 651-201-5414 (or 877-676-5414).
- Tuberculosis reports also may be faxed to 651-201-5500.

FREE MEDICATIONS Online:

<http://www.health.state.mn.us/divs/idepc/diseases/tb/medications.html>

The primary purpose of TB screening is to identify persons with latent TB infection (LTBI) who would benefit from treatment to prevent future active TB disease. Children with positive Mantoux tests, normal chest x-rays, and no symptoms of active TB disease are candidates for nine months of isoniazid (INH) therapy for LTBI. Medications are available at no cost from the Minnesota Department of Health. Health care providers can call 651-201-5414 or 1-877-676-5414, to order medications.

Professional Recommendations:

American Academy of Pediatrics [5]:

All children need routine health care evaluations that include assessment of their risk of exposure to tuberculosis. Only children deemed to have increased risk of exposure to persons with tuberculosis should be considered for tuberculin (Mantoux) skin testing. Routine tuberculin skin testing of children with no risk factors residing in low-prevalence communities is not indicated.

Children who have no risk factors but who reside in high-prevalence regions and children whose histories for risk factors are incomplete or unreliable should be considered for tuberculin (Mantoux) skin testing at 4 to 6 and 11 to 16 years of age. The decision to test should be based on the local epidemiology of tuberculosis in conjunction with advice from regional tuberculosis control officials.

Resources:

Minnesota Department of Health (MDH) - [Infectious Disease Epidemiology, Prevention and Control Division](#).

Technical consultation, case reporting, state TB surveillance data, professional and patient education materials in a variety of languages, free TB medications. 651-201-5414. On-line at: <http://www.health.state.mn.us/divs/idepc/diseases/tb/index.html>.

(MDH), TB Prevention and Control Program, TB Risk Assessment. Online:

<http://www.health.state.mn.us/divs/idepc/diseases/tb/tbrisk.pdf>.

MDH (2007). Patient Education Materials (TB). Available online:

<http://www.health.state.mn.us/divs/idepc/diseases/tb/brochures.html>.

Division of TB Elimination, U.S. Centers for Disease Control and Prevention -

<http://www.cdc.gov/tb/default.htm> - Professional recommendations, free educational materials.

Pediatric Tuberculosis Collaborative Group. (2004). Targeted tuberculin skin testing and treatment of latent tuberculosis infection in children and adolescents. *Pediatrics* 2004; 114:1175-1201. Available online:

<http://www.pediatrics.org/cgi/content/full/114/4/S2/1175>.

Minnesota Department of Human Services (DHS). C&TC Documentation Forms [Online] http://www.dhs.state.mn.us/id_028848 and Criteria Guidelines for C&TC Provider Documentation. [Online]: <http://www.dhs.state.mn.us/provider/ctc>.

American Academy of Pediatrics. (2006) Red Book: Report of the Committee on Infectious Diseases. (27th Ed.) Elk Grove Village, IL: Author

References:

1. Minnesota Department of Health (MDH), TB Prevention and Control Program, Statistics. Online: <http://www.health.state.mn.us/divs/idepc/diseases/tb/stats.html>.
2. MDH Quarterly Surveillance Report, April 1, 2007 – June 30, 2007. Online: <http://www.health.state.mn.us/divs/idepc/diseases/tb/quarterlystats.html#3>.
3. MDH TB Prevention and Control Program. Information for health care professionals. Online: <http://www.health.state.mn.us/divs/idepc/diseases/tb/clinical.html>
4. MDH (2003) TB Prevention and Control Program. Recommendations for targeted tuberculin testing and treatment of latent TB infection. Online: <http://www.health.state.mn.us/divs/idepc/diseases/tb/tbtesting.html>.
5. American Academy of Pediatrics Policy Statement. (1996) Update on Tuberculosis Skin Testing of Children (RE9605). *Pediatrics*, 97,282-284 Online: <http://www.pediatrics.org>.