

Targeted Testing for Tuberculosis Infection

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Introduction

Purpose

Use this section to understand and follow national and Ohio guidelines to conduct targeted testing to screen for tuberculosis infection (TBI).

In the 2005 guideline “Controlling Tuberculosis in the United States: Recommendations from the American Thoracic Society, Centers for Disease Control and Prevention (CDC), and the Infectious Diseases Society of America,” one of the recommended strategies to achieve the goal of reduction of tuberculosis (TB) morbidity and mortality is to identify persons with LTBI who are at risk for progression to TB disease and to treat them with an effective drug regimen.¹



For information on treatment, refer to the Treatment of Tuberculosis Disease and Treatment of Tuberculosis Infection sections.

Reducing LTBI in high-risk populations is an important strategy to control TB. Considering that there are an estimated 9.5–14.7 million persons with LTBI in the United States, continued progress toward eliminating TB in the United States and reducing TB among foreign-born persons requires effective strategies to meet this challenge.² Targeted testing for LTBI is a strategic component of TB control that identifies persons who are at high risk for developing TB and who would benefit by treatment of LTBI, if detected. Persons with increased risk for developing TB include those who have had recent infection with *Mycobacterium tuberculosis* and those who have clinical conditions that are associated with an increased risk for progression of LTBI to active TB.³

Policy

In Ohio:

- Persons who show or report signs and symptoms of TB should be evaluated for TB disease as described in the Diagnosis of Tuberculosis Disease section and reported as suspected cases of TB as described in the “Reporting Tuberculosis” topic in the Surveillance section.
- Contacts should be evaluated as described in the Contact Investigation section.
- Targeted testing should only be undertaken by TB control units if national objectives for the treatment of TB cases and their infected contacts have been met.
- Targeted testing for LTBI should be conducted only among persons in groups with identified risk factors for LTBI and/or progression to TB disease.
- For a list of groups at high risk, refer to the “High-Risk Groups” topic in the section on Diagnosis of Tuberculosis Infection.

When to Conduct Targeted Testing

Targeted testing programs should be conducted only among groups at high risk, and testing should be discouraged for groups at low risk.⁴ High-risk groups include persons with increased risk for developing tuberculosis (TB) and those who have clinical conditions that are associated with an increased risk for the progression of TB infection (LTBI) to TB disease.



For a summary of the TB classification numbers, refer to the “Tuberculosis Classification System” topic in the Surveillance section.



Factors that identify persons at high risk of LTBI infection and/or of progression to TB disease are listed in the “High-Risk Groups” topic in the section on Diagnosis of Tuberculosis Infection.



Evaluate high-risk patients for TBI as specified in the Diagnosis of Tuberculosis Infection section.



Offer treatment of TBI to infected persons, irrespective of age, who are considered to be at high risk for developing active TB.⁵ See the Treatment of Tuberculosis Infection section.

Approaches to Increasing Targeted Testing and Treatment of Tuberculosis Infection

The Centers for Disease Control and Prevention (CDC) describes two approaches to increasing targeted testing and treatment of TBI. To plan and implement programs for targeted testing and treatment of TBI, follow the recommended approaches outlined below.⁶

One approach is to promote clinic-based testing of persons who are under a clinician's care for a medical condition (e.g., human immunodeficiency virus [HIV] infection or diabetes mellitus) that also confers a risk for acquiring TB. This approach depends on a person's risk profile for TB.⁷

The other approach is to establish specific programs that target a subpopulation of persons who have a high prevalence of TBI or who are at high risk for acquiring TB disease if they have TBI, or both. This approach requires identifying the subpopulations or areas with high TB risk through epidemiologic analysis and profiling.⁸



For information on the system for prioritizing persons for targeted testing, refer to "Controlling Tuberculosis in the United States: Recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America" (*MMWR* 2005;54[No. RR-12]:40–42) at this hyperlink: <http://www.cdc.gov/mmwr/PDF/rr/rr5412.pdf>.



For assistance in planning targeted testing, contact the Ohio TB Program at (614) 466-2381.

Screening for Tuberculosis Infection in Facilities

Screening for TBI should be conducted based upon each facility's risk for transmission of *Mycobacterium tuberculosis* (i.e., low risk, medium risk, or potential for ongoing transmission),⁹ as determined in its TB risk assessment (both the initial baseline assessment and periodic reassessments).



Risk assessment protocols and elements are outlined in the CDC's "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-care Settings, 2005" (MMWR 2005;54[No. RR-17]) at this hyperlink: <http://www.cdc.gov/mmwr/pdf/rr/rr5417.pdf>.



In Ohio, other facilities should follow state requirements based on setting. Requirements referenced below are available at this hyperlink: <http://codes.ohio.gov/>

Adult Care Facilities

OAC 3701-20-14 Staff requirements

OAC 3701-20-18 Resident requirements

Ambulatory or free standing Surgical Care and Dialysis Centers

OAC 3701-83-08

Hospice

OAC 3701-19

Hospitals

Hospitals are not licensed in Ohio. Infection control policies for each institution are dependent upon risk assessment protocols provided in the CDC's "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-care Settings, 2005" (*hyperlink provided above*)

Maternity Homes

OAC 3701-07

Nursing Homes

OAC 3701-17-07 Staff requirements

OAC 3701-17-10 Resident requirements

Ohio Department of Rehabilitation and Correction (prisons)

ORC 5120.163

Jails

ORC 5120:1-8-09

Please refer to ODRC Bureau of Adult Detention's Website to determine requirements for type of jail

<http://www.drc.state.oh.us/web/prisprog.htm>

Screening determines if a person should be evaluated for LTBI or TB disease by asking questions to gather information about whether the person has signs or symptoms of TB disease, belongs to a group at high risk for LTBI or (if infected) for progression to TB disease, or has a prior positive tuberculin skin test (TST).

References

- ¹ ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005;54(No. RR-12):15.
- ² ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005;54(No. RR-12):40.
- ³ CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6):1.
- ⁴ CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6):1–2.
- ⁵ CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6):1.
- ⁶ ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005;54(No. RR-12):40.
- ⁷ ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005;54(No. RR-12):40.
- ⁸ ATS, CDC, IDSA. Controlling tuberculosis in the United States: recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America. *MMWR* 2005;54(No. RR-12):40.
- ⁹ CDC. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, 2005. *MMWR* 2005;54(No. RR-17):10.