



Chapter 1: Introduction

Contents

About the Wisconsin Tuberculosis Program manual	1.2
Purpose	1.2
Audience	1.2
How to use this manual	1.2
Portable document format	1.2
Hyperlinks	1.2
Bookmarks	1.3
Icons	1.3
Abbreviations	1.3
Purpose of tuberculosis control	1.6
Objectives and standards.....	1.7
Quality of care	1.7
Wisconsin laws and rules on TB control	1.7
State laws and regulations	1.8
National and state program objectives.....	1.10
Standards	1.11
Roles, responsibilities, and contact information	1.12
Wisconsin Tuberculosis Program staff roles and responsibilities	1.12
Local public health agencies	1.14
Reporting	1.14
Case investigation.....	1.14
Public health interventions and prevention measures	1.15
Private medical providers	1.17
Laboratories	1.17
Resources and references	1.19
Resources	1.19
References.....	1.19

About the Wisconsin Tuberculosis Program manual

Purpose

This manual is designed to present the key steps and crucial information needed to perform tuberculosis (TB) control tasks Wisconsin. Where additional or more detailed information is available, hyperlinks to Centers for Diseases Control and Prevention (CDC) guidelines and other resources are provided.

The Wisconsin *Tuberculosis Program Manual* is based on a template created by an advisory group convened during CDC Task Order #6, which aimed to upgrade local public health capacity for responding to public health events through planning, assessment, and development of preparedness and response activities. The advisory group developed the template's format and created its content by reviewing other TB control manuals, current CDC guidelines, and needs in the four low-incidence states of Idaho, Montana, Utah, and Wyoming. The Wisconsin Tuberculosis Program adapted the template to the state's unique public health system and needs.

Audience

The audience for this manual includes city, county, regional public health nurses; outreach workers, physicians, and public health officers; Tribal health centers staff; physician consultants; private sector physicians; infection control nurses in hospitals and other facilities; disease intervention specialists; state epidemiologists; and state TB program staff.

How to use this manual

Portable document format

This manual is available electronically as a portable document format (PDF) file. To view the PDF file, you will need the [free Adobe Reader](#).

Hyperlinks

When viewing this manual online with an internet connection, you can go directly to underlined web addresses by clicking on them.

Bookmarks

In PDF files, you can use bookmarks to go quickly to a chapter or topic. If the bookmarks are not visible on the left, click the bookmarks icon or tab on the left of the window.

To view chapters and topics in the bookmarks list:

- Click + to see a more detailed list.
- Click – to hide the more detailed list.

To go to a chapter or topic in the bookmarks list, point to its name and left click.

Icons

Throughout the manual, these icons quickly cue you into important information and other resources:



This warns about high-consequence information you must understand when performing the task.



This signals when you should call to report or to consult on the task.



This highlights special considerations for pediatric patients.



This suggests another relevant chapter in the manual or another resource that you may want to review.



This alerts you that a form is available for the task. Forms are available on the [Wisconsin Tuberculosis Program web page](#) under the [Forms](#) Section

Abbreviations

Refer to the list below for abbreviations used in the manual.

ACET	Advisory Council for the Elimination of Tuberculosis
ACH	air changes per hour
AFB	acid-fast bacilli

AIDS	acquired immunodeficiency syndrome
All	airborne infection isolation
ALT	alanine aminotransferase
ARPE	<i>Aggregate Report for Program Evaluation</i>
ART	antiretroviral therapy
AST	aspartate aminotransferase
ATS	American Thoracic Society
BCG	bacille Calmette-Guérin
CDC	Centers for Disease Control and Prevention
CT	computed tomography
CXR	chest radiograph
DNA	deoxyribonucleic acid
DOT	directly observed therapy
DTBE	Division of Tuberculosis Elimination
ED	emergency department
EDOT	Electronic Directly Observed Therapy
EMB	ethambutol
EMS	emergency medical service
ESRD	end-stage renal disease
FDA	U.S. Food and Drug Administration
HAART	highly active antiretroviral therapy
HCW	health care worker
HEPA	high-efficiency particulate air
HIPAA	Health Insurance Portability and Accountability Act
HIV	human immunodeficiency virus
IDSA	Infectious Diseases Society of America
IGRA	interferon gamma release assay

INH	isoniazid
LTBI	latent tuberculosis infection
<i>M. tuberculosis</i>	<i>Mycobacterium tuberculosis</i>
MDR-TB	multidrug-resistant tuberculosis
MIRU	mycobacterial interspersed repetitive units
NAA	nucleic acid amplification
NIOSH	National Institute for Occupational Safety and Health
NNRTI	nonnucleoside reverse transcriptase inhibitors
NTCA	National Tuberculosis Coalition of America (formerly: National Tuberculosis Controllers Association)
NTM	nontuberculous mycobacteria
NTNC	National Tuberculosis Nurse Coalition
OSHA	Occupational Safety and Health Administration
PAPR	powered air-purifying respirator
PCR	polymerase chain reaction
PI	protease inhibitor
PPD	purified protein derivative
PZA	pyrazinamide
QA	quality assurance
QFT	QuantiFERON®-TB test
QFT	QuantiFERON®-TB Gold
RFB	rifabutin
RFLP	restriction fragment length polymorphism
RIF	rifampin
RNA	ribonucleic acid
RPT	rifapentine
<i>RVCT</i>	<i>Report of Verified Case of Tuberculosis</i>

TB	tuberculosis
TNF- α	tumor necrosis factor-alpha
TST	tuberculin skin test
TU	tuberculin units
USCIS	U.S. Citizenship and Immigration Services
UVGI	ultraviolet germicidal irradiation
VDOT	Video Directly Observed Therapy
XDR-TB	Extensively drug-resistant tuberculosis

Purpose of tuberculosis control

Tuberculosis (TB) is caused by a bacterial organism named *Mycobacterium tuberculosis*. These organisms are sometimes called tubercle bacilli or *Mycobacterium tuberculosis* complex. Mycobacteria can cause a variety of diseases. TB causing bacteria include *M. tuberculosis*, *M. bovis*, *M. caprae*, *M. pinnipedii*, and *M. africanum*. Other mycobacteria are called nontuberculous mycobacteria (NTM) because they do not cause TB. One common type of nontuberculous mycobacteria is *M. avium* complex (MAC). Tuberculous mycobacteria can readily spread from person to person; nontuberculous mycobacteria do not usually spread from person to person.

The goal of TB control in the United States is to reduce TB morbidity and mortality by doing the following:

- Preventing transmission of *M. tuberculosis* from people with contagious forms of the disease to uninfected people
- Preventing progression from latent TB infection (LTBI) to active TB disease among people who have contracted *M. tuberculosis* infection¹



For information on the transmission of *M. tuberculosis* and on how LTBI progresses to TB disease, see the Centers for Disease Control and Prevention's (CDC's) online course, [TB 101 for Health Care Workers](#).

The four fundamental strategies to reduce TB morbidity and mortality include the following:

1. Early and accurate detection, diagnosis, and reporting of TB cases, leading to initiation and completion of treatment.

2. Identification of contacts of patients with infectious TB and treatment of those at risk with an effective drug regimen
3. Identification of other people with LTBI and treatment of those people with an effective drug regimen
4. Identification of settings in which a high risk exists for transmission of *M. tuberculosis* and application of effective infection control measures²



For more information on these strategies and the thinking behind them, see [“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])

Objectives and standards

Quality of care

For TB programs, quality of care is measured by objectives and standards. Such objectives and standards are used as yardsticks to direct the program and measure its success.

Objectives reflect outcomes or results and program desires. Programs require objectives to define expected outcomes and results for case management activities.

Standards are an accepted set of conditions or behaviors that define what is expected and acceptable regarding job duties, performance, and provision of services. The TB control program works to achieve objectives through a series of standards.

Wisconsin laws and rules on TB control

Wisconsin laws and rules on TB are in the Wisconsin Statutes and Annotations.



[Wisconsin Statutes & Annotations](#)



Contact the Wisconsin TB Program at 608-261-6319 or email us at dhswebprogram@dhs.wisconsin.gov for assistance with interpreting laws and rules regarding TB control.

In Wisconsin, TB program objectives and standards are established from the following:

State laws and regulations

Wis. Stat. § 251.06(3)	Local health officer duties
Wis. Stat. § 252.02(1)	Disease surveillance and inspection
Wis. Stat. § 252.02(3)	Authority to forbid public gatherings Also see Wis. Stat. § 252.03(2)
Wis. Stat. § 252.02(4)	Authority to enforce rules or issue orders to prevent the introduction of communicable diseases, for the control and suppression of communicable diseases, and quarantine
Wis. Stat. § 252.02(6)	Authorization to implement emergency measures to control communicable diseases
Wis. Stat. § 252.03(1)	Health officer's authority to take all measures necessary to control communicable diseases
Wis. Stat. § 252.03(4)	No person may interfere with communicable disease investigation
Wis. Stat. § 252.05(1)	Reporting of communicable diseases
Wis. Stat. § 252.05(11)	Failure to report communicable diseases Also see Wis. Stat. § 252.0(1M) .
Wis. Stat. § 252.06	Isolation and quarantine
Wis. Stat. § 252.06(1)	Health officer may require isolation and quarantine
Wis. Stat. § 252.06(5)	Authority to post isolation/quarantine guards See Wis. Stat. § 252.06(10)(b) for payment of guards
Wis. Stat. § 252.06(6)(b)	Authorization to move a confined person to a safe facility for isolation.

Wis. Stat. § 252.06(10)	Responsibility for costs associated with communicable diseases
Wis. Stat. § 252.07	Tuberculosis-specific statutes
Wis. Stat. § 252.07(2)	Identification of at-risk groups and screening
Wis. Stat. § 252.07(5)	Authority to investigate and enforce necessary orders- in cases of noncompliance health officer may order medical evaluation, DOT and/or home isolation
Wis. Stat. § 252.07(8)(a)	Ordering confinement for individuals with confirmed or suspected TB for up to 72 hours
Wis. Stat. §252.07(9)(a)	Petitioning the court for a hearing to determine whether an individual can be confined longer than 72 hours
Wis. Stat. § 252.07(11)	The department may promulgate any rules necessary to contain and control the spread of mycobacterium tuberculosis
Wis. Stat. § 252.10(7)	Drugs purchased through the TB dispensary
Wis. Stat. § 252.19	No person who is knowingly infected with a communicable disease may willfully violate the recommendations of the local health officer or subject others to danger of contracting the disease.
Wis. Stat. § 252.21	Communicable disease in schools- duties of teachers, parents, officers
Wis. Stat. § 252.25	Punishment for violation of laws relating to health

TB program agreements, plans, and protocols

[Wisconsin DHS Communicable Disease Case Reporting and Investigation Protocol Tuberculosis](#)

National TB guidelines

CDC Guidelines are written with cooperation of the American Thoracic Society (ATS) and the Infectious Diseases Society of American (IDSA)

National and state program objectives

Below are national and state TB program objectives. The CDC program objectives are current as of December 2006.³ Wisconsin state objectives follow national objectives.

Table 1.1: Program objectives and performance targets

Indicator		National tuberculosis program objectives and performance targets
1	Percent completion of treatment	Increase timely completion of treatment National Objective: For patients with newly diagnosed TB disease for whom 12 months or less of treatment is indicated, increase the proportion who complete treatment within 12 months to 95%.
2	TB case rate	Decline in TB rates a. National Objective: The TB rate in U.S. born will be less than 0.4 cases per 100,000 by 2025. b. National Objective: The TB rate in foreign born will be less than 8.8 cases per 100,000 by 2025. c. National Objective: The TB rate in U.S.-born black non-Hispanics will be less than 1.0 cases per 100,000 by 2025. d. National Objective: The TB rate in children less than 5 years of age will be less than 0.1 cases per 100,000 by 2025.
3	Thorough contact investigations	Improve contact identification, evaluation, and treatment a. National Objective: For TB patients with positive AFB sputum-smear results, increase the proportion who have contacts elicited to 100% by 2025. b. National Objective: At least 94% of contacts to sputum-AFB-smear-positive TB cases will be evaluated for infection and disease by 2025. c. National Objective: At least 92% of infected contacts will start treatment by 2025. d. National Objective: At least 93% of contacts who start treatment will complete treatment.

Indicator		National tuberculosis program objectives and performance targets
4	Timely laboratory reporting	<p>Ensure timely laboratory reporting</p> <ul style="list-style-type: none"> a. National Objective: State public health labs will report 78% of results of culture identification of <i>M. tuberculosis</i> complex to submitter and state TB program within 25 days of receipt of specimen by 2025. b. National Objective: Increase the percentage of TB patients with initial positive cultures who also are tested for and receive drug susceptibility results to 100% by 2025.
5	Examination of immigrants and refugees	<p>Ensure immigrants and refugees receive timely evaluation and treatment</p> <ul style="list-style-type: none"> a. National Objective: For immigrants and refugees with abnormal chest radiographs (x-rays) read overseas as consistent with TB, increase the proportion who initiate a medical examination within 30 days of notification to 72%. b. For immigrants and refugees with abnormal chest x-rays read overseas as consistent with TB, increase the proportion who complete a medical examination within 120 days of notification to 78%. c. For immigrants and refugees with abnormal chest x-rays read overseas as consistent with TB who are diagnosed with LTBI or have radiographic findings consistent with prior pulmonary TB on the basis of examination in the United States, for whom treatment was recommended, increase the proportion who start treatment to 87%. d. For immigrants and refugees with abnormal chest x-rays read overseas as consistent with TB who are diagnosed with LTBI or have radiographic findings consistent with prior pulmonary TB on the basis of examination in the United States, and who have started treatment, increase the proportion who complete treatment to 87%.

Source: National TB Indicators Project National TB Program Objectives and Performance Targets for 2025. Atlanta, GA: CDC Division of Tuberculosis Elimination; [National TB Program Objectives and Performance Targets for 2020 | Mission Statement and Activities | About Us | TB | CDC](#)

Standards

Program standards are what the partners and funders of the TB program would consider to be "reasonable expectations" for the program. For TB, standards have been established by nationally accepted authorities, such as the American Thoracic Society (ATS), the Infectious Diseases Society of America (IDSA), and the CDC, and generally recognized TB control experts, such as the National Tuberculosis Nurse Coalition (NTNC) and the National Tuberculosis Coalition of America (NTCA). Many state programs, and some local TB control programs, have established their own standards and objectives for case management. The NTNC/NTCA have developed a set of [Tuberculosis Nurse Case Manager competencies](#).

The standards of care for the medical treatment and control of TB are published jointly by ATS, IDSA, and the CDC. These standards should be available for reference by each TB staff member. The standards are included in the following guidelines:

- 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]). Available at: <http://www.cdc.gov/mmwr/PDF/rr/rr5412.pdf> .
- CDC “Clinical Testing and Diagnosis for Tuberculosis” Available at: [Clinical Testing and Diagnosis for Tuberculosis | Tuberculosis \(TB\) | CDC](#)
- ATS, CDC, IDSA. “Treatment of Drug-Susceptible Tuberculosis” (*Clinical Infectious Diseases* 2016; 63[7]). Available at: [Official American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America Clinical Practice Guidelines: Treatment of Drug-Susceptible Tuberculosis | Clinical Infectious Diseases | Oxford Academic \(oup.com\)](#).
- CDC, NTCA. “Guidelines for the Investigation of Contacts of Persons with Infectious Tuberculosis: Recommendations from the National Tuberculosis Controllers Association and CDC” (*MMWR* 2005;54 [No. RR-15]). Available at: <http://www.cdc.gov/mmwr/pdf/rr/rr5415.pdf> .
- CDC. “Tuberculosis Screening, Testing, and Treatment of U.S. Healthcare Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019” Available at: [Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019 | MMWR](#)
- CDC. “Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection” (*MMWR* 2000;49[No. RR-6]). Available at: <http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf> .
- CDC. “Guidelines for Using the QuantiFERON-TB Gold Test for Detecting *Mycobacterium tuberculosis* Infection, United States. (*MMWR* 2005; 54 (no. RR15, 49-55). Available at [Guidelines for Using the QuantiFERON-TB Gold Test for Detecting *Mycobacterium tuberculosis* Infection, United States \(cdc.gov\)](#)

For additional guidelines, see the Division of Tuberculosis Elimination’s “Clinical Guidelines-Tuberculosis” Web page (Division of Tuberculosis Elimination Web site; accessed November 25, 2006). Available at: [Clinical Guidelines | Tuberculosis \(TB\) | CDC](#)

Roles, responsibilities, and contact information

Wisconsin Tuberculosis Program staff roles and responsibilities

Table 1.2: State tuberculosis program staff and consultants’ roles, responsibilities, and contact information

Staff role	Responsibilities
Tuberculosis program manager	Supervises CDC Cooperative Agreement grant funds allocated for Wisconsin and the Wisconsin TB Dispensary Program. Manages education, consultation, policies, and procedures for statewide TB control.
Tuberculosis nurse consultant	Provide guidance and technical assistance to local and Tribal health department partners, medical providers, and other stakeholders regarding tuberculosis disease and LTBI testing, treatment, and case management. Ensure timely and accurate reporting of program data to CDC. One program evaluation and one education focal point.
Tuberculosis program office associate	Supports the Wisconsin Tuberculosis Program (WTBP) activities in the Healthcare-Associated Infections (HAI) and TB Section within the Bureau of Communicable Diseases. The major responsibility of the LTE TB Program Assistant is to support WTBP's and local and Tribal health departments' (LTHDs) follow up to treat people confirmed or suspected to have TB or LTBI. This position also assists with the timely and accurate review, entry, preparation, and submission of data to fulfill TB and LTBI medication requests.
Refugee health liaison	Supports the continued collaboration between the Bureau of Refugee Programs (BRP) and DHS on health matters of refugee populations in Wisconsin. This position assures accurate and complete entry of health-related screening data and patient information into Wisconsin Electronic Disease Surveillance System (WEDSS) and the Electronic Disease Notification system (EDN) data is readily accessible to CDC, the state, and LTHDs to inform public health actions.
Financial and contracts specialist-Wisconsin TB Program	Provides financial and administrative support for the TB Program. This includes negotiation and management of contracts and budgets for the Wisconsin TB Dispensary Program and financial and operational management of the TB Treatment Assistance Program. This position serves as a subject matter expert for LTHDs requesting reimbursement from the Wisconsin TB Dispensary Program using the Tuberculosis Ordering and Billing Interface (TOBI) and for reimbursement for the TB Treatment Assistance Program.
Tuberculosis disease intervention specialist	Supports disease intervention activities for the state of Wisconsin, specifically for TB. This position conducts epidemiological interviews and subsequent investigation of reported cases of TB (including certain co-infections), but in an outbreak situation can also investigate other diseases and infections which may need disease intervention in the state.

Table 1.3: Wisconsin Tuberculosis Program contact information

Wisconsin Tuberculosis Program email, phone, and fax	
Email	dhswitbprogram@dhs.wisconsin.gov
Phone	608-261-6319
Fax	608-266-0049

Local public health agencies

Reporting

- I. Wisconsin Notifiable Disease Category I- Methods for Reporting: Active tuberculosis disease shall be reported **immediately by phone** to the patient's local health officer or to the local health officer's designee upon identification of a confirmed or suspected case, per Wis. Admin Code 145.04(3)(a). In addition to the immediate report, complete and fax, mail or electronically report an [Acute and Communicable Diseases Case Report \(DHS F-44151\)](#) or [TB Suspect Case Data Form \(DHS F-42001\)](#) to the address on the form, or enter the data into the Wisconsin Electronic Disease Surveillance System (WEDSS) within 24 hours.
- II. Wisconsin Notifiable Disease Category II- Methods for reporting: LTBI shall be reported within 72 hours to the patient's local health officer or to the local health officer's designee upon identification of confirmed or suspected case. In addition to this report, complete and fax, mail or electronically report an [Acute and Communicable Diseases Case Report \(DHS F-44151\)](#) or [Latent Tuberculosis Infection \(LTBI\) Confidential Case Report Form \(DHS F-02265\)](#) to the address on the form, or enter the data into the Wisconsin Electronic Disease Surveillance System (WEDSS) within 72 hours.
- III. Responsibility for Reporting: According to Wis. Admin. Code § [DHS 145.04\(1\)](#), people licensed under Wis. Stat. chs. [441](#) or [448](#), laboratories, health care facilities, teachers, principals, or nurses serving in a school or daycare center, and any person who knows or suspects that a person has a communicable disease identified in [Appendix A](#).

Case investigation

- I. Responsibility for case investigation: It is the responsibility of the local or Tribal health department (LTHD) to investigate or arrange for investigation of suspected or confirmed cases as soon as is reasonably possible. A case investigation may include information collected by phone, in-person, in writing, or through review of medical records or communicable disease report forms, as necessary and appropriate. Also see

[Communicable Disease Case Reporting and Investigation Protocol: Tuberculosis \(TB\) \(DHS P-01928\)](#) for more information on reporting and investigating active TB disease.

II. Required documentation:

- A. Enter case investigation information into the Wisconsin Electronic Disease Surveillance System (WEDSS).
 - B. The Wisconsin TB Program is responsible for filling out the Report of Verified Case Tuberculosis (Centers for Disease Control and Prevention form) in WEDSS upon receipt of a confirmed case and sending it to the CDC to meet federal reporting requirements.
- III. Additional investigation responsibilities: All clients with active tuberculosis disease receive anti-tuberculosis medications through the Wisconsin Dispensary Program. Please fill out the antituberculosis therapy program [Initial Request for Medication form \(DHS F-44000\)](#) and submit it to the Wisconsin Tuberculosis Program.
- IV. For individuals diagnosed with LTBI, obtaining meds through the Wisconsin Dispensary Program is not required, but highly encouraged for those at risk for TB and experiencing financial hardship. Contacts to active cases do not need to demonstrate financial hardship to receive medications through the program. Please complete the [TB Infection Initial Request for Medication, \(F-00905\) \(Word\)](#) to request medication for LTBI from the WTBP.

Public health interventions and prevention measures

- I. In accordance with Wis. Admin Code [DHS 145.05](#), local public health agencies should follow the methods of control recommended in the current edition of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association, and the American Academy of Pediatrics' *Red Book: Report of the Committee on Infectious Diseases*, unless otherwise specified by the state TB Program.
- II. Protocol for Disease Management
 - A. For patients with pulmonary, pleural, and laryngeal tuberculosis, control of infectivity is best achieved by prompt initiation of four-drug therapy. Collection of three (3) sputum samples, either by spontaneous production, or induction, is required.
 - B. People with extrapulmonary TB should receive a complete medical examination and provide three (3) sputum samples for testing to assure that the TB is not disseminated to other parts of the body or to the lungs, pleura, or larynx (which would make them infectious). **Pulmonary symptoms are not always present to indicate pulmonary or infectious TB may also be occurring.**

- C. Patients with drug-susceptible, pulmonary, pleural, or laryngeal TB must remain in the appropriate level of respiratory isolation and restrictions (RIR) until deemed applicable by public health. See the updated [memo](#) released by the WTB Program for more information on RIR guidance.
- D. If three (3) AFB smear *positive* sputum specimens are tested and there is a negative nucleic acid amplification test result **AND** the patient is asymptomatic, the patient may be released from isolation as minimally infectious. Such a person may, however, still have active TB, and the case may not be closed until final culture results are available and negative for *M. tuberculosis* complex. The decision to release the patient from isolation must be balanced by the risk for TB and clinical suspicion for TB disease.
- E. People with Multiple-Drug Resistant (MDR) pulmonary or laryngeal TB may be eligible for the [updated RIR guidelines](#) in Wisconsin, based on local adoption of this guidance. For questions about eligibility or consultation, please contact the TB program.

III. Investigation of Contacts and Identification of the Source of Infection.

- A. Initial interferon gamma release assay (IGRA) or tuberculin skin testing (TST) of all household members and other close contacts, with repeat testing of those with negative tests 8–10 weeks post-exposure.

IV. Prevention Measures

- A. Prevention of the spread of tuberculosis is achieved by:
 - 1. Rapid recognition of TB disease.
 - 2. Isolation of the person with TB disease until no longer infectious, as proven by sputum smears and cultures.
 - 3. Appropriate, complete, and directly observed therapy of the person with TB disease.
 - 4. Timely, complete, and appropriate treatment for those exposed to the person with active disease, including:
 - a. Directly observed preventive therapy of all children and immunosuppressed people in contact with the person with confirmed or suspect TB disease. This therapy should begin promptly after thorough medical evaluation for active disease and infection. Therapy should continue for those who do not have active TB disease or LTBI, and until final testing is complete and negative, 8–10 weeks after the last exposure to the infectious person.

- b. Identification and testing of as many high-and medium-priority contacts as can be identified.
- c. Appropriate and completed treatment of any contacts who are identified as having TB infection, but ONLY after they have been shown to not have active TB disease, as determined by:
 - (1). Chest X-ray.
 - (2). Medical evaluation, and in the event of respiratory symptoms **or** abnormal chest x-ray results, smear, and culture of three (3) respiratory specimens. Collect a series of three (3) sputum specimens, 8–24 hours apart with at least one of those being an early-morning specimen.

- B. No single intervention is sufficient to control the spread of tuberculosis; a coordinated approach and usually more than one person are necessary. Please consult the state TB Program when you have a person with confirmed or suspected TB.

Private medical providers

Private medical providers are responsible for the medical evaluation, diagnosis, and treatment of active tuberculosis disease and LTBI. Private medical providers are also responsible for periodic monitoring of the patient's condition throughout the course of therapy and ordering additional tests as needed to detect and treat abnormalities, side effects to treatment, or adverse effects of treatment.

For clients being treated for LTBI by private medical providers, use the [Latent Tuberculosis Infection \(LTBI\) Follow-up Form, F-44125: \(PDF\)](#) to facilitate sharing treatment outcomes with public health. Local and Tribal health department staff should document any information received in the client's LTBI record in WEDSS.

Laboratories

- A. Work with local and state TB Control Programs to ensure that clinical laboratories in their jurisdictions are aware of the molecular detection of drug resistance (MDDR) and phenotypic drug susceptibility (pDST) testing service and protocol for accessing it at the Wisconsin State Laboratory of Hygiene (WSLH).
- B. Coordination of programmatic and laboratory activities.
- C. Develop protocols with TB Control Programs for shipping specimens or isolates to WSLH.
- D. Develop protocol with TB Control Programs for detecting and analyzing discrepancies in the results of molecular and conventional tests.

- E. Work with TB Control Programs and WSLH to develop and implement a reflex testing protocol that ensures prompt culture-based testing of susceptibilities to first-line and second-line drugs either in house or provided by WSLH.
- F. Work with programs to develop and implement protocols for reporting test results.
- G. Provide technical assistance and consultation on the interpretation of tests to laboratorians and health care providers in their jurisdiction, if not within the state TB nurse consultant's ability. Please contact the state TB program staff for questions on how to access further laboratory specific education or for testing requests.

Table 1.4: Roles, responsibilities, and contact information of laboratories

Role and responsibilities	Contact information
<p>State Laboratory</p> <p>The Wisconsin State Laboratory of Hygiene (WSLH) is the state's public, environmental, and occupational health laboratory. We protect the health and safety of Wisconsin's people and environment and provide training to other professionals. The Communicable Disease Division (CDD) provides reference and specialized testing services in support of public health and ensures statewide access to laboratory expertise and capabilities in the disciplines of bacteriology, mycobacteriology, virology, parasitology, molecular microbiology, and serology. The CDD also coordinates a network of clinical laboratories throughout Wisconsin for emergency and public health response, as well as facilitates planning among clinical laboratories, local public health laboratories and other state-level laboratories.</p>	<p><i>Wisconsin State Lab of Hygiene (WSLH)</i> <i>2601 Agriculture Drive, PO Box 7996</i> <i>Madison, WI 53707-7996</i> Tel: 800-862-1013 Regular Hours of Operation: M-F 7:45a.m.– 4:30p.m.</p> <p>*Please note: Local and Tribal health departments should not contact WSLH for information on lab results or testing. Please contact the Wisconsin TB Program for assistance with these questions. Contact information for WSLH is provided so local and Tribal health departments can call to request specimen collection supplies when necessary.</p>

Resources and references

Resources

- CDC. “Framework for Program Evaluation in Public Health” (*MMWR* 1999;48[No. RR-11]). Available at: [Framework for Program Evaluation in Public Health \(cdc.gov\)](https://www.cdc.gov/mmwr/rr/rr11a.htm) .
- Division of Tuberculosis Elimination. *Improving TB Prevention and Control Through Program Evaluation* (Division of Tuberculosis Elimination Web site; accessed November 1, 2006). Available at: [Program Evaluation | Resources & Tools | TB | CDC](https://www.cdc.gov/tb/prevention/evaluation/).
- Division of Tuberculosis Elimination. *Understanding the TB Cohort Review Process: Instruction Guide* (Division of Tuberculosis Elimination Web site; accessed November 1, 2006). Available at: [Understanding the TB cohort review process; an instruction guide \(cdc.gov\)](https://www.cdc.gov/tb/prevention/evaluation/understanding-the-tb-cohort-review-process-an-instruction-guide/) .
- New Jersey Medical School National Tuberculosis Center. *Planning & Implementing the TB Case Management Conference: A Unique Opportunity for Networking, Peer Support and Ongoing Training* (Newark, NJ; 2004). Available at: [TB-Case MGT \(rutgers.edu\)](https://www.rutgers.edu/tb-case-mgt/) .

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):14.
- 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):15.