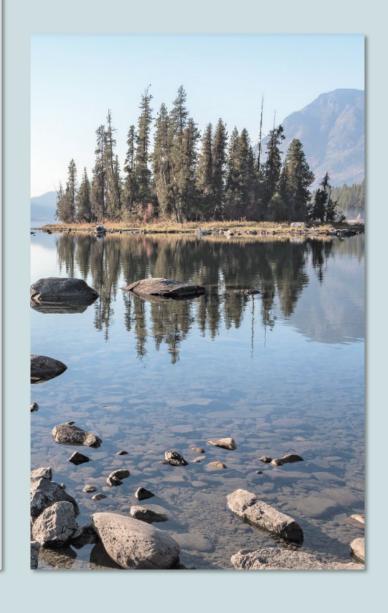
Washington State Tuberculosis Services and Standards Manual

Chapter 3:

Targeted Testing for LTBI



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About the Washington State Tuberculosis Services and Standards Manual

Purpose

In Washington State, tuberculosis (TB) care and prevention is governed by state law and rule. The purpose of the TB Services and Standards manual is to provide information and guidance to aid local health jurisdictions (LHJs) in fulfilling the requirements detailed in the Revised Code of Washington (RCW) 70.28.005 and the Washington Administrative Code (WAC) 246-170. This manual includes information and links to CDC guidelines and TB Centers of Excellence materials with key steps and information needed to fulfill these required TB care and prevention tasks.

Audience

The most likely readers of this manual are TB providers, primarily those working in Local Health Jurisdictions (LHJs) and Tribal Public Health. As a result, the TB Services and Standards Manual has a special focus on the roles, responsibilities and care given by local public health partners. These TB providers may include, but are not limited to nurses, physicians, Health Officers, Regional Medical Officers, epidemiologists, disease intervention specialists and outreach workers from local and state TB programs, clinics, and hospitals.

Eliminating Stigmatizing Language

Judgmental terms and negative connotations of words such as 'defaulter' and 'suspect' may be perceived to place blame for the disease and responsibility for adverse treatment outcomes on the patient. To assist in implementing a change in the use of stigmatizing language the Heartland TB Center of Excellence, the International Union Against TB and Lung Disease, the National Society of TB Clinicians, the global TB community and the Treatment Action Group developed the Stigmatizing Language reference tool to aid in identifying suggested replacement language as a reminder of how our words may affect others.

Use This	Not that	Use This	Not that
Adherence / Non-adherence	Compliance / Non- compliance	Undocumented	Illegal; Illegal alien
Person lost to follow up	Defaulter	Person with TB disease	TB case
TB Prevention and Care	TB Control	Treatment failed	Treatment failure
Person to be evaluated for TB	TB Suspect	Missed doses/ Non- adherent	Delinquent
HIV-Positive	HIV-infected	Contact Analysis; Contact Elicitation; Contact Identification	Investigation; Investigate
Immigrant	Alien	Exposed to TB	TB Contact
Lack of housing; Under- housed; People experiencing homelessness	Homeless/ Homelessness	Tuberculosis	Consumption; White Plague

Adapted from: https://www.heartlandntbc.org/wp-content/uploads/2021/12/FactSheet Final 5 19 16.pdf

More information can be found at <u>Case Management Tools/Health Equity</u> in the TB Program SharePoint page which includes additional resources to encourage positive change, sensitize, promote appropriate language, end the stigmatization, and empower people affected by TB.

How to Use This Manual

Icons

Throughout the manual, these icons quickly cue you about 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 area in the manual or another resource that you may want to review.



This alerts you that a form is available for the task.

CHAPTER 3: Targeted Testing for Latent TB Infection

Introduction

Purpose

Use this section to understand and follow national and Washington state guidelines to screen and test for latent TB infection (LTBI) using targeted testing. Targeted testing for TB is a strategy to **diagnose and treat LTBI** among persons who are at high risk (or increased risk relative to the overall U.S. population) for developing TB disease. Necessary medical evaluation and treatment resources need to be identified before testing activities begin. All TB testing activities should be accompanied by a plan for appropriate follow-up medical evaluation and treatment. Treating LTBI supports U.S. TB elimination goals through preventing infected persons from developing TB disease, thereby stopping the spread of TB to others.

Targeted TB Testing

- Essential TB prevention and control strategy.
- Detects persons with LTBI who would benefit from treatment.
- De-emphasizes testing of groups that are not at high risk for TB.
- Can help reduce the waste of resources and prevent inappropriate treatment.

Source: https://www.cdc.gov/tb/publications/slidesets/ltbi/default.htm

The <u>CDC and the U.S. Preventive Services Task Force (USPSTF)</u> recommend testing people who are at increased risk for LTBI and progression to disease. As part of routine patient evaluations, health care providers should identify persons who are at high risk for TB exposure and/or progression to disease if infected, test them, and if positive treat them for their LTBI.

Testing only populations at risk maximizes the positive predictive value of tests for LTBI (i.e., persons from these populations with positive tests are more likely to truly have LTBI). People at *low* risk of exposure to TB or progression to TB disease *should not be tested*; there is an increased likelihood of false positive results in people who are at low risk for TB exposure. Increasing the number of false positive test results leads to unnecessary examination and treatment of persons who do not actually have LTBI and can divert resources away from preventing TB disease among those most likely to develop TB disease.

Flexibility is needed in defining groups for testing, as the epidemiology of TB within a community can shift over time and can even vary from one neighborhood to the next. The risk for TB disease or LTBI among groups currently considered high risk may decrease over time, or they may be much different from one community to the next and groups currently not identified as being at risk might be considered high risk in the future. In general, however, groups at high risk for TB infection and disease fall into two broad categories:

- People at higher risk for exposure to or infection with Mycobacterium tuberculosis (MTB)
- People at higher risk of progression to TB disease once infected with MTB

Policy

In Washington:

- Persons who show or report signs and symptoms of TB should be evaluated for TB disease as
 described in <u>Chapter 5: Diagnosis of Tuberculosis Disease</u> and reported as suspected cases of TB
 as described in the Reporting TB section of <u>Chapter 2: Surveillance</u>.
- Those exposed to TB should be evaluated as described in *Chapter 11: Contact Investigation*.
- TB screening in certain employment settings is required by regulation and described under Standards for LTBI Targeted Screening, Testing and Treatment later in this chapter.
- 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 with increased likelihood of LTBI, refer to Figure 1: Paradigm for evaluation of those with latent tuberculosis infection (LTBI) based on risk of infection, risk of progression to tuberculosis, and benefit of therapy.

State Laws and Regulations

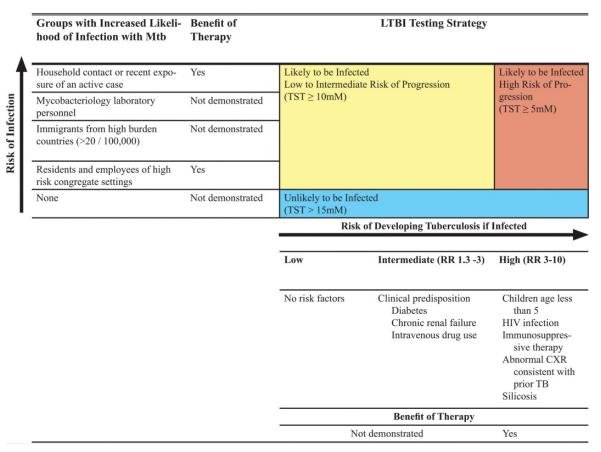


See the <u>Statutes and Regulations on the Washington State website</u> for more information on TB testing in various work and other facility settings.

Targeted Testing for Those at Greatest Risk

Targeted testing programs should be conducted only among groups that are at high risk. High-risk groups include people likely to be infected with MTB, and those with increased risk for developing TB disease once they are infected. Testing should be discouraged for people or groups at low risk.

Figure 1. Paradigm for Evaluation of Those with Latent Tuberculosis Infection (LTBI) Based on Risk of Infection, Risk of Progression to Tuberculosis, and Benefit of Therapy



Abbreviations: CXR= chest radiograph; HIV= human immunodeficiency virus; LTBI= latent tuberculosis infection; Mtb= Mycobacterium tuberculosis; RR= relative risk,; TB, tuberculosis; TST, tuberculin skin test.

Notes: In developing a diagnostic approach for the evaluation of those with suspected LTBI, we recommend the clinician weigh the likelihood of infection, the likelihood of progression to tuberculosis if infected, and the benefit of therapy (Horsburgh and Rubin, Clinical practice: latent tuberculosis infection in the United States. N Engl J Med 2011; 364:1441–8).

Recommendations were formulated for each of the 3 groups illustrated above. These groups are concordant with current recommendations for the interpretation of the tuberculin skin test. (American Thoracic Society, Targeted tuberculin testing and treatment of latent tuberculosis infection. MMWR Recomm Rep 2000; 49:1–51).

Source: ATS, CDC, IDSA. Diagnosis of Tuberculosis in Adults and Children. Clinical Infectious Diseases 2017; 64(2):1-33

Additional information on persons at risk for LTBI and progression to TB disease may be found on the



- TB Partners SharePoint Clinical Resources section
- Sterling TR, Njie G, Zenner D, et al. <u>Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from the National Tuberculosis Controllers Association and CDC, 2020</u>. MMWR Recomm Rep 2020;69(No. RR-1):1–11.
- Guidelines for preventing the transmission of Mycobacterium tuberculosis in health-care settings, 2005. MMWR 2005;54(No. RR-17):1-141; CDC.



Additional information on evaluating high-risk patients for LTBI may be found in <u>Chapter</u> 7: <u>Diagnosis of Latent TB</u>.

For additional information on offering treatment of LTBI to infected persons, irrespective of age, who are considered at high risk for developing active TB:



- Chapter 8: Treatment of Latent Tuberculosis Infection, and in
- Sosa LE, Njie GJ, Lobato MN, et al. <u>Tuberculosis Screening</u>, <u>Testing</u>, <u>and</u>
 <u>Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC</u>, 2019. MMWR Morb Mortal Wkly Rep 2019; 68:439–443, and in
- CDC. <u>Targeted tuberculin testing and treatment of latent tuberculosis infection</u>. MMWR 2000;49(No. RR-6)

Standards for LTBI Targeted Screening, Testing and Treatment

In the document, "Controlling Tuberculosis in the United States: Recommendations from the American Thoracic Society, CDC, and the Infectious Diseases Society of America" two approaches for increasing targeted testing and treatment of LTBI are described. When planning and implementing programs for targeted testing and treatment of LTBI, consider these two recommended approaches.

- 1. One approach is to promote clinic-based testing of persons who are under a clinician's care for a medical condition that also increases risk of progression to TB disease if infected (e.g., human immunodeficiency virus [HIV] infection or diabetes mellitus). This approach depends on a person's risk profile for exposure to TB and the extent to which their underlying condition(s) increase the risk of progression to active TB. For example, testing among people with diabetes can be limited to patients with epidemiologic risk factors for exposure, whereas virtually any patient being placed on TNF-alpha blockers or planning for solid organ transplantation should be tested. This approach will likely require local public health to provide routine education to community providers regarding local TB epidemiology, as well as screening and treatment guidelines. This consistent education and connection with local public health helps keep TB "front of mind" for providers. Some LHJs have found success working with local clinics to add TB screening tools into existing electronic health record systems to help remind healthcare providers to screen patients for TB risk factors.
- 2. The second approach is to establish specific programs that target a subpopulation of persons who have a high prevalence of LTBI or who are at high risk for progressing to TB disease if they have LTBI, or both. This approach requires identifying the subpopulations or areas in a community with high TB risk through epidemiologic analysis. Contacts to persons with active TB are one example of a subpopulation that should be prioritized by public health. Individuals newly arrived from countries with higher burden of TB are another example. Geographic disparities, co-occurring medical conditions, the unhoused and those in correctional care are all other examples of health or social disparities that increase the risk of infection and/or progression to TB. This strategy might also encourage providers serving these subpopulations and communities to "Think TB" and screen for TB during encounters, especially when patients present with compatible respiratory symptoms. This approach can be limited by scarcity of local public health resources in some settings, but it can be an effective way to reach subpopulations that are underserved and less likely to access healthcare due to various reasons.

Ultimately, utilizing both approaches to complement each other and establishing a strong partnership between public health, local service organizations and community healthcare providers will likely achieve the best outcomes for the most individuals and the community. **The following are specific U.S. subpopulations who may fit the second approach**. However, risk will vary from one community/state/region to another.

- Individuals who have lived in or traveled to TB-endemic countries for >1 month (uninterrupted)
- U.S.-born persons identifying as racial or ethnic minority groups in the U.S., and anyone identifying as Native Hawaiian, Pacific Islander, American Indian and/or Alaska Native regardless of country of birth
- Known contacts to a person with infectious TB

- Persons experiencing homelessness
- Current and previous staff and residents of <u>correctional care facilities</u>
- Staff and residents in long-term care facilities
- Health Care Personnel (HCP)

Persons from Countries with High Rates of TB

Individuals who have lived in or traveled to countries with high rates of TB are more likely to be infected with MTB. Therefore, the CDC recommends testing these individuals when possible. LHJs should be aware of their local community's immigration and travel patterns to understand which TB-endemic countries people may have lived in or travelled to and focus screening efforts on those most likely to have been exposed to TB. Please refer to the World Health Organization (WHO) global lists of high burden countries for tuberculosis (TB), TB/HIV and multidrug/rifampicin-resistant TB (MDR/RR-TB), 2021–2025 to better understand which countries have the highest TB incidence. Specifically, Table 1 in this document shows the 30 countries with the highest burden of TB in absolute number of cases and by incidence rate per 100,000 population from 2016-2020. Table 2 goes on to show which countries the WHO projects to have the highest burden of TB through 2025. For data specific to your jurisdiction, reach out to the WA DOH TB Program and review the WHO global lists of high burden countries for TB, TB/HIV and MDR/RR-TB 2021–2025.



To see an overview of TB for any country or territory that reports TB data to WHO, refer to the WHO Country TB Profiles application (https://worldhealthorg.shinyapps.io/tb_profiles/).

TB profiles are generated automatically based on data reported by countries and which are held in WHO's global TB database.



For more information on screening and testing new arrivers from TB endemic countries see: *Chapter 4: Class B Notifications*.

US Born Racial & Ethnic Minorities, Native Hawaiians, Pacific Islanders. American Indians. Alaska Natives

Health disparities occur within the U.S.-born population as well. TB adversely affects groups that have historically experienced greater obstacles to health. The percentage of TB cases that occur in Hispanic or Latino, Black or African American, and Asian persons is higher than expected based on the percentage of these populations in the U.S. population. In 2018 the rate of TB disease in Native Hawaiians and Other Pacific Islanders was 20 cases per 100,000 population (40 times higher than the rate of TB disease in non-Hispanic whites), and the rate of TB disease in American Indians and Alaska Natives was 4.3 cases per 100,000 population (over eight times higher than the rate of TB disease in non-Hispanic whites). For current data, review the CDC website page: Reported Tuberculosis in the United States, 2022 or reach out to the WA DOH TB Program for more information specific to your region.



For more information see the AAPCHO 2022 Needs Assessment: Addressing Tuberculosis and Latent Tuberculosis Infection Screening, Testing, and Treatment Needs Among Community Health Centers Serving Asian Americans, Native Hawaiians, and Pacific Islanders.

Contacts to Persons with Infectious TB

The evaluation of those recently exposed to infectious TB is one of the most productive methods of identifying adults and children with LTBI at high risk for progression to TB disease and persons in the early stages of TB disease. Contact investigations therefore serve as an important means of detecting TB cases and at the same time identify persons in the early stage of LTBI, when the risk for progression to TB disease is high and the benefit of treatment is greatest.

In Washington State, approximately 10% of persons diagnosed with TB disease report having known contact to someone with infectious TB.



For more information on identification, testing and treatment of contacts see <u>Chapter 11:</u> <u>Contact Investigation</u>

Congregate Settings

Persons Experiencing Homelessness and Living in Overnight Shelters

According to the CDC, in the United States, 1% of the population experiences homelessness in a given year, but approximately 5% of people with TB disease reported experiencing homelessness within the year prior to diagnosis nationally. In Washington state, 3-5% of people with TB disease report experiencing homelessness within the year prior to their TB diagnosis.

Persons experiencing homelessness (PEH) are at an increased risk of TB compared to the general population. Persons experiencing homelessness may be more likely to be exposed to TB in shelter environments with crowding or ventilation issues, and the immune stresses associated with homelessness (rough sleeping, cold, poor nutrition, substance use) can make it more likely that they will go on to develop TB disease. People experiencing homelessness often lack ready access to the medical care required to make an early diagnosis of TB disease, and stigma and mental health disorders may contribute to delays in achieving a TB diagnosis.

Homelessness is a dynamic problem, and population estimates for persons experiencing homelessness largely rely on point-in-time (PIT) counts. The PIT count is mandated by the Department of Housing and Urban Development and is a count of sheltered and unsheltered people experiencing homelessness on a single night in January, conducted by volunteers who fan out along streets in communities across the country. In Washington, using average PIT count population estimates from 2018-2022 and reported RVCT data regarding homelessness in the year prior to TB diagnosis, that translates into an estimated annual rate of TB among persons experiencing homelessness that is 16.8 times the statewide rate for all persons. National incidence estimates for TB among persons experiencing homelessness are 11 times higher compared with the US population. In national analyses, among TB disease cases experiencing homelessness with at least one plausible source identified, 63% of cases had whole genome sequencing and/or local epidemiologic data that were consistent with recent transmission.

In 2023, federal reporting requirements for TB were updated to additionally include data collection regarding the experience of homelessness *at any point in time* for a person with TB disease (previously only the experience of homelessness in the year prior to TB diagnosis was captured), which will allow for expanded representation and measurement of the impacts of TB among persons experiencing homelessness moving forward.

Administrative control measures are effective especially when used in shelters that work in collaboration with the local TB program. These measures include:

- Assigning responsibilities for TB infection control to a point-person at each facility.
- Conducting TB risk assessments for these facilities; This is an example of a risk assessment worksheet for health care facilities that can be modified for use at a homeless facility.
- Developing a written TB infection control plan for each facility. This plan should include
 procedures for systematically evaluating clients, staff, and volunteers for TB disease and
 infection. Evaluations for TB should include regular queries to staff and clients as to whether
 they have symptoms compatible with TB disease and further medical evaluation should be
 facilitated for persons with any TB symptoms.
- Requiring TB screening and testing for clients who stay longer than a defined period (e.g., after staying 1 day, 3 days, or 1 week) helps ensure all clients have been evaluated and treated, if necessary, for TB infection and disease. This helps minimize exposures to infectious TB within the facility. The grace period during which clients can obtain services without verification of TB screening and testing can differ by site and should be decided in consultation with the local public health TB and human services programs. If possible, usage of a shared computer platform for storing TB screening and test results might facilitate result verification and prevent duplication of efforts.
- Maintaining bed maps and tracking bed assignments, ideally in a searchable electronic format (e.g., a spreadsheet) rather than paper records to facilitate contact investigations if a TB case is reported.
- Maintaining as much space as possible between beds and positioning beds head to toe to reduce the possibility of transmission.
- Posting signs and informational posters for client awareness and cough monitoring (e.g., see the CDC Cover Your Cough Poster).
- Considering use of a cough log to document which persons are coughing, particularly at night, so
 that they can be referred for medical evaluation (e.g., see the <u>Curry International TB Center</u>
 <u>Viewer's Guide, Shelters and TB: What Staff Need to Know</u>).
- Providing ongoing education to staff, volunteers, and clients.





Marks SM, Self JL, Venkatappa T, et al. Diagnosis, Treatment, and Prevention of Tuberculosis Among People Experiencing Homelessness in the United States: Current Recommendations. Public Health Reports. 2023;0(0). Available at: https://journals.sagepub.com/doi/pdf/10.1177/00333549221148173.

Correctional Care Facilities

People living in congregate settings, including correctional care facilities and detention centers, are at an increased risk of becoming infected with TB compared to the overall population. TB screening, testing and treatment are recommended at intake for persons who are detained or incarcerated. In the 2022 At a Glance: CDC Recommendations For Correctional and Detention Settings, the CDC recommends immediate screening for symptoms of pulmonary TB during or shortly after intake for all persons. In facilities with minimal TB risk*, persons who have one or more clinical condition(s) or other factor that increases their risk for infection or the risk for progressing to TB disease should be further screened with a TST, an IGRA, or a chest radiograph within 7 days of arrival.

* A facility has minimal TB risk if a) no cases of infectious TB have occurred in the facility in the last year, b) the facility does not house substantial numbers of persons with risk factors for TB (e.g., HIV infection, injection drug use), c) the facility does not house substantial numbers of persons who have arrived in the U.S. within the previous 5 years from areas of the world with high rates of TB, or d) employees in the facility are not otherwise at risk for TB. All other facilities should be categorized as a nonminimal TB risk facility.

In addition, for facilities with **nonminimal risk** the CDC also recommends the following evaluation:

Resident Characteristics	Annual TB Test (IGRA or TST)	Annual Symptom Screening (further workup if symptomatic)
Long-term sentence, history of negative TB test	abla	abla
Long-term sentence, history of positive TB test		abla
History of TB treatment completion, active or latent		
	Immediate TB Test	Immediate Symptom Screening (further workup if symptomatic)
Known exposure to infectious TB and no history of positive TB testing	abla	
Known exposure to infectious TB and known history of positive TB testing		

LTBI Treatment should be recommended to those who test positive on a tuberculin skin test (TST) or interferon gamma release assay (IGRA, e.g., QFT or T-spot). Treatment should follow the <u>Guidelines for the Treatment of Latent Tuberculosis Infection: Recommendations from NTCA and CDC, 2020</u>. Shortcourse, rifamycin-based regimens are preferred.

It is best practice for correctional and detention facilities to **ensure that discharge plans facilitate linkage** with community-based providers by:

- Communicating with <u>state</u> and <u>local public health</u> and community healthcare providers to facilitate treatment completion after release for persons under treatment for TB/LTBI.
- Providing counseling for persons being treated for TB or LTBI on the importance of completing a full course of treatment.



For more information on LTBI screening, testing and treatment in Correctional Care see: <u>Correctional Health Recommendations and Guidance</u> and the <u>2006 Prevention and</u> <u>Control of Tuberculosis in Correctional and Detention Facilities: Recommendations</u> from CDC

Long-Term Care Facilities in Washington

WA State Department of Social and Health Services (DSHS) has developed TB testing regulations for long-term care facilities. These facilities include two subpopulations of persons who have a higher prevalence of LTBI: staff and residents.

Staff who have emigrated from TB-endemic countries, where exposure to TB was more likely, are at risk of developing TB disease if they have LTBI.

Residents of long-term care facilities are usually elderly or fragile due to other co-morbidities, which may put them at risk of developing active TB if they have LTBI. Most cases of TB in the elderly are linked to the reactivation of lesions that have remained dormant. The awakening of these lesions is attributable to changes in the immune system related to aging and illness. The mortality rate from TB remains higher in elderly patients. Symptoms of active TB are nonspecific and less pronounced in the elderly, therefore it is important to use all possible techniques, including TB testing, to make a diagnosis.

Refer to this contact list: <u>343-205-FacilityLicensureHandout.pdf (wa.gov)</u>, to obtain the most up-to-date licensure contact to consult with for the current TB screening requirements for each facility type. Below in Table 2 are a few common facility types with reference to WACs that guide testing of employees and residents.

Table 2. WA DSHS TB Testing Regulations for Long Term Care Facilities

WA TB Testing Regulation	Skilled Nursing Facilities	Assisted Living Facilities	Adult Family Homes
Staff	Within 3 days of hire and yearly (WAC 388-97-1380)	Within 3 days of hire (WAC 388-78A-2480)	Within 3 days of hire (WAC 388-76-10265)
Residents	Upon admission (<u>WAC 388-97-1380</u>)	Any individual on respite care (WAC 388-78A-2206)	Not required (no law in place currently)
Testing Method	Skin or blood test (<u>WAC 388-97-1400</u>)	Skin or blood test (WAC 388-78A-2481)	Skin or blood test (<u>WAC 388-76-10270</u>)
Reporting	WAC 388-97-1560	WAC 388-78A-2488	WAC 388-76-10305

References: TB Laws and Guidelines: WA State Department of Health "Laws and Regulations"

Health Care Personnel (HCP)

Health Care Personnel (HCP) may be at increased risk for TB exposure while caring for patients with known or unknown infectious TB. Since risk can vary substantially depending on several factors, such as the healthcare setting, epidemiology of patients served, position within an organization, and the HCP's own health conditions, risk must be assessed at the facility and individual level.

Individual HCP <u>screening determines if a person should be evaluated for LTBI or TB disease</u> by asking questions to gather information about whether they have risk factors including:

- 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) or IGRA (Interferon Gamma Release Assay, e.g., QuantiFERON or T-Spot.)

Facility risk assessments look at the risk of exposure to TB in the facility overall based on data over the previous year. This data may include:

- the number of infectious TB cases cared for in the facility in the previous year
- TB prevalence in the local community
- known transmission or outbreaks of TB in the community or facility

Indicators of Risk for TB at Baseline HCP Assessment

HCPs should be considered at increased risk for TB if they answer "yes" to any of the following statements. Use this information when interpreting test results:

 Temporary or permanent residence (for ≥1 month) in a country with a high TB rate (i.e., any country other than Australia, Canada, New Zealand, the United States, and those in western or northern Europe)

OR

 Current or planned immunosuppression, including human immunodeficiency virus infection, receipt of an organ transplant, treatment with a tumor necrosis factor (TNF)-alpha antagonist (e.g., infliximab, etanercept, or other), chronic steroids (equivalent of prednisone ≥15 mg/day for ≥1 month), or other immunosuppressive medication

OR

Close contact with someone who has had infectious TB disease since the last TB test.

Individual risk assessment information can be useful in interpreting TB test results. (Lewinsohn DM, Leonard MK, LoBue PA, et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention clinical practice guidelines: diagnosis of tuberculosis in adults and children. Clin Infec Dis 2017;64:111–5). https://academic.oup.com/cid/article/64/2/111/2811357external.icon.

Adapted from the TB risk assessment form developed by the California Department of Public Health: https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/TBCB-CA-TB-Risk-Assessment-and-Fact-Sheet.pdf

The CDC and the NTCA released recommendations titled, <u>Tuberculosis Screening</u>, <u>Testing</u>, and <u>Treatment of U.S. Health Care Personnel</u>, <u>2019</u>. These recommendations update the HCP screening and testing section of the <u>2005 CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Settings</u>. However, the <u>facility risk assessment</u> and <u>infection control practice</u> sections remain unchanged from the 2005 guidelines.

The WA State TB Program supports the implementation--where feasible--of these new recommendations that focus on baseline testing of all staff while de-emphasizing serial testing outside high-risk settings. Nevertheless, facilities should first contact their <u>licensing authority</u> to determine the TB screening requirements they need to follow for their personnel. It will take some time for licensing authorities to consider updating codes related to TB screening and treatment.



For help determining which code or licensing authority your facility operates under, refer to this reference guide (PDF) or contact the WA State TB Program for assistance.



The WA Department of Health, Health Systems Quality Assurance has issued a <u>Policy Statement</u> regarding TB screening of HCW allowing residential treatment facilities to implement the 2019 updated CDC guidelines.

Table 1. Comparison of 2005 and 2019 recommendations for TB screening and testing of U.S. health care personnel (HCP)

Category	2005 Recommendation	2019 Recommendation
Baseline (preplacement) screening and testing	TB screening of all HCP, including a symptom evaluation and test (IGRA or TST) for those without documented prior TB disease or LTBI.	TB screening of all HCP, including a symptom evaluation and test (IGRA or TST) for those without document prior TB disease or LTBI (unchanged); individual TB risk assessment (new).
Post exposure screening and testing	Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8-10 weeks after the last exposure.	Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8-10 weeks after the last exposure. (unchanged)
Serial screening and testing for HCP without LTBI	According to health care facility and setting risk assessment. Not recommended for HCP working in low-risk health care settings. Recommended for HCP working in medium-risk health care settings and settings with ongoing transmission.	Not routinely recommended (new); can consider for selected HCP groups (unchanged); recommend annual TB education for all HCP (unchanged); including information about TB exposure risk for all HCP (new emphasis).
Evaluation and treatment of positive test results	Referral to determine whether LTBI treatment in indicated.	Treatment is encouraged for all HCP with untreated LTBI, unless medically contraindicated (new).

Abbreviations: IGRA= interferon-gamma release assay; HCP= health care personnel; LTBI= latent tuberculosis infection; TST= tuberculin skin test.

Source: Guidelines for preventing the transmission of Mycobacterium tuberculosis in health-care settings, 2005. MMWR 2005;54(No. RR-17):10 and Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019 | MMWR



Facility risk assessment protocols and elements are outlined in the CDC's "Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-care Settings, 2005"



Updated recommendations for health care worker screening are outlined in CDCs "<u>Tuberculosis Screening</u>, <u>Testing</u>, <u>and Treatment of U.S. Health Care Personnel:</u>

<u>Recommendations from the National Tuberculosis Controllers Association and CDC</u>, <u>2019</u>". MMWR Morb Mortal Wkly Rep 2019; 68:439-443.

TB Targeted Testing Events

Mass screening events can be a useful way to screen and test a large number of individuals who are part of a group with a higher risk for TB infection. However, these mass screenings work best if the LHJ partners with a local community organization who already have established relationships with that group. Some organizations to consider partnering with might be:

- The <u>TB Elimination Alliance (TEA)</u> of the Association of Asian Pacific Community Health
 Organizations (AAPCHO), a group creating a national voice to advocate for the unique and
 diverse health needs of Asian American (AA), Native Hawaiian, and Pacific Islander (NH/PI)
 communities.
- The <u>Northwest Washington Indian Health Board</u> provides public health services and advocates for improvements in native health for tribes in Northwest Washington
- Programs to assist people displaced from their countries of origin for various reasons. This may
 include local government and community groups, for example: <u>Afghan Allies</u> and <u>Uniting for</u>
 Ukraine (U4U) and the Ukrainian Association of Washington
- Database to find local Federally Qualified Health Centers (FQHCs) in your area: <u>Federally</u>
 Qualified Health Center (FQHC) Washington | Page 1 (npidb.org)



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).



The US Preventive Services Task Force published recommendations for LTBI screening and treatment "Screening for Latent Tuberculosis Infection in Adults: US Preventive Services Task Force Recommendation Statement"

JAMA .969-962:(9)316;2016 .doi:10.1001/jama.2016.11046



For assistance in planning targeted testing events, contact the WA State TB Program at 206-418-5500 or email TBServices@doh.wa.gov.

Resources

Association of Asian Pacific Community Health Organizations. Tiffany Hirokawa, Evelyn Moua, Justin Santos, Chibo Shinagawa. Addressing Tuberculosis and Latent Tuberculosis Infection Screening, Testing, and Treatment Needs Among Community Health Centers Serving Asian Americans, Native Hawaiians, and Pacific Islanders. September 2022. Available at: https://aapcho.org/addressing-tuberculosis-and-latent-tuberculosis-infection-screening-testing-and-treatment-needs-among-community-health-centers-serving-asian-americans-native-hawaiians-and-pacific-islanders-sept.

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, 40. Available at: https://www.cdc.gov/mmwr/pdf/rr/rr5412.pdf.

ATS, CDC, IDSA. **Diagnosis of Tuberculosis in Adults and Children**. *Clinical Infectious Diseases 2017*; 64(2):1-33. Available at: https://www.thoracic.org/statements/resources/tb-opi/diagnosis-of-tuberculosis-in-adults-and-children.PDF.

Caraux-Paz, P.; Diamantis, S.; de Wazières, B.; Gallien, S. **Tuberculosis in the Elderly**. J. Clin. Med. 2021, 10, 5888. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8703289/.

CDC. Administrative Controls. **TB Control in Overnight Homeless Facilities Quick Reference Guide**. Available at: https://www.cdc.gov/tb/topic/populations/homelessness/AdminControls.htm.

CDC. **At-A-Glance: CDC Recommendations for Correctional and Detention Settings.** Available at: https://www.cdc.gov/correctionalhealth/rec-guide.html#full-guidance.

CDC. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care settings, **2005**. *MMWR* 2005;54(No. RR-17):10. Available at:

https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm.

CDC. Health Disparities in TB. Available at: https://www.cdc.gov/tb/topic/populations/default.htm.

CDC website. **Reported Tuberculosis in the United States, 2022**. Available at: https://www.cdc.gov/tb/statistics/reports/2022/state_local_data.htm#Highlights

CDC. **TB** and **People Living in Correctional Facilities in the United States.** Available at: https://www.cdc.gov/tb/topic/populations/correctional/default.htm.

CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49(No. RR-6):1-2. Available at: https://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf.

CDC. Tuberculosis, **People Experiencing Homelessness**. Available at: https://www.cdc.gov/tb/topic/populations/homelessness/default.htm.

CDC. Tuberculosis, Reported TB in the United States, 2020. **Table 38. Tuberculosis Cases and Percentages, by Homeless Status, Ages ≥15 Years: Reporting Areas, 2020.** Available at: https://www.cdc.gov/tb/statistics/reports/2020/table38.htm.

Khan A, Rebhan A, Seminara D, Szerszen A. Enduring Challenge of Latent Tuberculosis in Older Nursing Home Residents: A Brief Review. J Clin Med Res. 2019 Jun;11(6):385-390. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522238/.

Marks SM, Self JL, Venkatappa T, et al. **Diagnosis, Treatment, and Prevention of Tuberculosis Among People Experiencing Homelessness in the United States: Current Recommendations**. Public Health Reports. 2023;0(0). Available at: https://journals.sagepub.com/doi/pdf/10.1177/00333549221148173

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Division of Tuberculosis Elimination. **Targeted Tuberculosis (TB) Testing and Treatment of Latent TB Infection, Slide Set**. September 2016. Available at: https://www.cdc.gov/tb/publications/slidesets/ltbi/default.htm.

Public Health, Seattle & King County Prevention Division, TB Control Program, Community Health Services Division, Health Care for the Homeless Network. **Tuberculosis Prevention and Control Guidelines for Homeless Service Agencies in Seattle & King County, Washington** Updated online: May 2019. Available at: https://kingcounty.gov/depts/health/communicable-diseases/documents/tuberculosis/homeless-tb-guidelines.ashx.

Self JL, McDaniel CJ, Bamrah Morris S, Silk BJ. Estimating and Evaluating Tuberculosis Incidence Rates Among People Experiencing Homelessness, United States, 2007-2016. Med Care. 2021 Apr 1;59(Suppl 2):S175-S181. doi: 10.1097/MLR.000000000001466. PMID: 33710092; PMCID: PMC8324075.

Sosa, LE, Njie, GJ, Lobato, MN, et al. **Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019**. MMWR Morb Mortal Wkly Rep 2019; 68:439-443. Available at: http://dx.doi.org/10.15585/mmwr.mm6819a3.

Stewart, R. J., Raz, K. M., Burns, S. P., Kammerer, J. S., Haddad, M. B., Silk, B. J., & Wortham, J. M. (2022). **Tuberculosis Outbreaks in State Prisons, United States, 2011-2019.** American journal of public health, 112(8), 1170–1179. https://doi.org/10.2105/AJPH.2022.306864

US Preventive Services Task Force. Screening for Latent Tuberculosis Infection in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2016;316(9):962–969. doi:10.1001/jama.2016.11046. Available at: https://jamanetwork.com/journals/jama/fullarticle/2547762.

Washington State Department of Health TB Laws and Guidelines. Available at: https://doh.wa.gov/you-and-your-family/illness-and-disease-z/tuberculosis-tb/laws-guidelines.

WHO global lists of high burden countries for TB, multidrug/rifampicin-resistant TB (MDR/RR-TB) and TB/HIV, 2021–2025. Geneva: World Health Organization; 2021. Licence: CC BY-NCSA 3.0 IGO. Available at: https://cdn.who.int/media/docs/default-source/hq-tuberculosis/who_globalhbcliststb_2021-2025_backgrounddocument.pdf?sfvrsn=f6b854c2_9#page=8.