

Oregon Adult Tuberculosis Assessment

- Use this tool to identify asymptomatic **adults** for latent TB infection (LTBI) testing. Testing with an interferon gamma release assay (IGRA) such as QuantiFERON or TSPOT is recommended for most adults.
- **Do not repeat testing** unless there is a possibility of a **new TB exposure** since the last negative test.
- Do not treat for LTBI until TB disease has been excluded:
If person has TB symptoms or an abnormal chest x-ray (CXR) consistent with TB disease, evaluate with a CXR, symptom screen, and if indicated, 3 sputum AFB smears, cultures, and nucleic acid amplification testing. A negative tuberculin skin test or interferon gamma release assay does not rule out TB disease.

LTBI testing is recommended if any of the boxes below are checked.

- Birth, travel, or residence** in a country or U.S. territory with an elevated TB rate for at least 2 months
 - Includes any country or U.S. territory other than the United States, Canada, Australia, New Zealand, or a country in western or northern Europe
 - Interferon Gamma Release Assay (QuantiFERON or TSPOT) is preferred over tuberculin skin test for non-U.S.-born persons ≥ 2 years old

- Immunosuppression**, current or planned
HIV infection, organ transplant recipient, treated with TNF-alpha antagonist (e.g., infliximab, etanercept, others), steroids (equivalent of prednisone ≥ 15 mg/day for ≥ 1 month) or other immunosuppressive medication

- Close contact** to someone with infectious TB disease during lifetime
- Experiencing or experienced homelessness**

Consider treating for LTBI if test result is positive and TB disease is ruled out.

- None**; no TB testing is indicated at this time.

Provider Name: _____
Assessment Date: _____

Patient Name: _____
Date of Birth: _____

See the Oregon Adult Tuberculosis Assessment User Guide for more information about using this tool.

Oregon Adult Tuberculosis Assessment User Guide

Avoid testing persons who were not likely to have been exposed to TB

Routinely testing people who were unlikely to have been exposed to TB is not recommended. Unnecessary evaluations and treatment due to false positive test results may occur.

United States Preventive Services Task Force

The USPSTF has recommended testing persons born in or former residents of a country with an elevated tuberculosis rate and persons who live in or have lived in high-risk congregate settings such as homeless shelters and correctional facilities. The USPSTF did not review data supporting testing among close contacts to persons with infectious TB or among persons who are immunosuppressed because these persons are recommended to be screened by public health programs or by clinical standard of care.

Children

This risk assessment tool is intended for adults. A risk assessment tool created for use in California for children is available on the [TBCB Risk Assessment page](#).

Mandated testing and other risk factors

Certain populations are mandated for testing by Oregon Administrative Rule. This assessment tool does not include or supersede mandated testing of healthcare personnel and correctional facility residents.

Age as a factor

Age (among adults) is not considered in this risk assessment. However, younger adults have more years of expected life during which progression from latent infection to TB disease could develop. An upper age limit for testing has not been established but could be appropriate depending on available resources, individual patient TB risks, comorbidities, and life expectancy.

Foreign travel

Travel to countries with an elevated TB rate put people at risk for TB exposure in certain circumstances (e.g., extended duration, likely contact with persons with infectious TB, high prevalence of TB in travel location, non-tourist travel). The duration of at least 2 consecutive months to trigger testing is intended to identify travel most likely to involve TB exposure. Travelers coming to the United States should be tested for TB using a TB skin test or IGRA 8-10 weeks after their arrival.

When to repeat a test

Re-testing should only be done in persons who previously tested negative and have new risk factors since the last test. In general, this would include new close contact with an infectious TB case or new immunosuppression but could also include foreign travel in certain circumstances.

When to repeat a TB assessment

The TB assessment should be administered at least once. Persons can be screened for new risk factors at subsequent preventive health visits.

IGRA preference in BCG vaccinated

Because IGRA has increased specificity for TB infection in persons vaccinated with BCG, IGRA is preferred over the TST in these persons. Most persons born outside the United States have been vaccinated with BCG.

Previous or inactive tuberculosis

Chest radiograph findings consistent with previous or inactive TB include fibrosis or non-calcified nodules, but do not include a solitary calcified nodule or isolated pleural thickening. Persons with a previous chest radiograph consistent with previous or inactive TB should be tested for LTBI. In addition to LTBI testing, evaluate for TB disease.

Negative test for LTBI does not rule out active TB disease

It is important to remember that a negative TST or IGRA result does not rule out TB disease. In fact, a negative TST or IGRA in a patient with TB disease can be a sign of extensive disease and poor outcome.

Symptoms that should trigger evaluation for TB disease

Evaluate patients with any of the following symptoms that are otherwise unexplained for TB disease: cough for more than 2-3 weeks, fevers, night sweats, weight loss, and hemoptysis.

How to evaluate for TB disease

Evaluate for TB disease with a chest x-ray, symptom screen, and if indicated, sputum AFB smears, cultures, and nucleic acid amplification testing. A negative tuberculin skin test or interferon gamma release assay does not rule out TB disease

Most patients with LTBI should be treated

Persons with risk factors who test positive for LTBI should generally be treated once active TB disease has been ruled out. However, clinicians should not feel compelled to treat when the risk may outweigh the benefit.

Emphasis on short course for treatment of LTBI

Shorter regimens for treating latent TB infection have been shown to be as effective as 9 months of isoniazid and are more likely to be completed.

Use of these shorter regimens is preferred in most patients. Drug-drug interactions and contact to drug resistant TB are typical reasons these regimens cannot be used.

Shorter duration LTBI treatment regimens

Medication	Frequency	Duration
Rifampin (4R)	Daily	4 months
Isoniazid + rifapentine (3HP)	Weekly	12 weeks*
Isoniazid + rifampin (3HR)	Daily	3 months

* 11-12 doses in 16 weeks required for completion.

Patient refusal of recommended LTBI treatment

Document patient refusal to take LTBI treatment. Recommend treatment at future encounters with medical services. If treatment is later accepted, TB disease should be excluded and CXR repeated if it has been more than 3 months from the initial evaluation; or more than 1 month if there is immunosuppression, or the prior CXR was abnormal and consistent with potentially active TB disease.

Resources

Fact Sheets for LTBI Regimens, Isoniazid+Rifapentine, Rifampin, and Isoniazid are available on the [TB Patient Education Page](http://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/COMMUNICABLEDISEASE/TUBERCULOSIS/Pages/factsheets.aspx) (www.oregon.gov/oha/PH/DISEASES/CONDITIONS/COMMUNICABLEDISEASE/TUBERCULOSIS/Pages/factsheets.aspx)

U.S. Preventive Services Task Force Latent TB Infection Screening Recommendations are available on the [U.S. Preventive Services Task Force website](https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/latent-tuberculosis-infection-screening). (https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/latent-tuberculosis-infection-screening)

Abbreviations

AFB= acid-fast bacilli BCG= Bacillus Calmette-Guérin
CXR= chest x-ray DOT= directly observed therapy
IGRA=interferon gamma release assay LTBI= latent TB infection
NAAT= nucleic acid amplification testing TST= tuberculin skin test