

# Pediatric Tuberculosis (TB) Risk Assessment

This tool is used to identify asymptomatic **children** for latent TB infection (LTBI) testing.

Check appropriate risk factor boxes below based on patient response.

Refer to pediatrician for LTBI testing (skin or blood test), if any of the 4 boxes below are checked.  
If a LTBI test result is positive, and active TB disease is ruled out, LTBI treatment is recommended.

**Non-US born person from a country with an elevated TB rate**

- Includes any country other than the United States, Canada, Australia, New Zealand, or a country in western or northern Europe
- Interferon Gamma Release Assay is preferred over Tuberculin Skin Test for non-US born persons  $\geq 2$  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  $\geq 2$  mg/kg/day, or  $\geq 15$  mg/day for  $\geq 2$  weeks) or other immunosuppressive medication

**Close contact to someone with infectious TB disease at any time**

- The Centers for Disease Control and Prevention indicates that the investigation of contacts and treatment of infected contacts is an important component of the U.S. strategy for TB elimination.

**Foreign travel or residence of  $\geq 1$  month consecutively in a country with an elevated TB rate**

- Any country other than the United States, Canada, Australia, New Zealand, or a country in Western or Northern Europe

- Re-testing should only be done in persons who previously tested negative and have new risk factors since the last risk assessment.  
*If initial negative screening test occurred prior to 6 months of age, repeat testing should occur at age 6 months or older.*
- For children with TB symptoms or abnormal chest x-ray consistent with active TB disease → Evaluate for active 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 active TB disease.
- Do not treat for LTBI until active TB disease has been excluded.

See the **Pediatric TB Risk Assessment User Guide** below for more detailed information about this tool.

Provider: \_\_\_\_\_

Assessment Date: \_\_\_\_\_

Patient Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

*(Place sticker here if applicable)*

For the most current version, go to the PEDIATRIC TB RISK ASSESSMENT at: <http://publichealth.lacounty.gov/tb/TBTesting.htm>

# Tuberculosis Clearance Form

*This satisfies requirements in the California Education Code, and the California Health and Safety Code.*

*Certificate of Completion of Tuberculosis Risk Assessment and/or Examination*

Date of TB risk assessment and/or examination: \_\_\_\_\_month/\_\_\_\_day/\_\_\_\_\_year

First and Last Name of the patient assessed and/or examined: \_\_\_\_\_

Date of Birth: \_\_\_\_\_month/\_\_\_\_day/\_\_\_\_\_year

The patient named above has submitted to a pediatric tuberculosis risk assessment. The patient does not have risk factors, or if tuberculosis risk factors were identified, the patient has had a TB skin test (TST) or TB blood test (IGRA), and chest x-ray (CXR) if indicated, and upon exam determined to be free of infectious tuberculosis. The patient is cleared to attend school.

***Please print, place label or stamp with Health Care Provider information below:***

\_\_\_\_\_

Name of Health Care Provider Completing the TB Risk Assessment and/or Examination

\_\_\_\_\_

Health Care Provider Signature

\_\_\_\_\_

Facility Name and Address

*In order to protect the privacy of individuals, all information regarding this assessment is considered confidential. The facility and the Los Angeles County Department of Public Health cannot release the name(s) of any ill person(s).*

# Pediatric Tuberculosis Risk Assessment User Guide

## Avoid testing persons at low risk

Routine testing of low risk populations is not recommended and may result in unnecessary evaluations and treatment because of falsely positive test results.

## Local recommendations, mandated testing and other risk factors

Several risk factors for TB that have been used to select children for TB screening historically or in mandated programs are not included among the 4 components of this risk assessment. This is intentional in order to focus testing on children at highest risk. However, certain populations may be mandated for testing by statute, regulation, or policy. This risk assessment does not supersede any mandated testing. Testing can also be considered in children with frequent exposure to adults at high risk of TB infection, such as those with extensive foreign travel in areas with high TB rates. Local recommendations should also be considered in testing decisions. **Providers should check with local TB control programs for local recommendations.**

## Decision to test is a decision to treat

Because testing of persons at low risk of TB infection should not be done, persons that test positive for LTBI should generally be treated once active TB disease has been ruled out with a physical exam, chest radiograph and, if indicated, sputum smears, cultures, and nucleic acid amplification (NAAT). However, clinicians should not be compelled to treat low risk persons who test positive for LTBI.

## When to repeat a risk assessment and testing

Risk assessments should be completed on new patients, patients thought to have new potential exposures to TB since last assessment, and during routine pediatric well-child visits. Repeat risk assessments should be based on the activities and risk factors specific to the child. High-risk children who volunteer or work in health care settings might require annual testing and should be considered separately. Re-testing should only be done in persons who previously tested negative and have new risk factors since the last assessment (unless they were <6 months of age at the time of testing). In general new risk factors would include new close contact with an infectious TB case or new immunosuppression, but could also include foreign travel.

## Immunosuppression

The exact level of immunosuppression that predisposes to increased risk for TB progression is unknown. The threshold of steroid dose and duration used here are based on data in adults and in accordance with ACIP recommendations for live vaccines in children receiving immunosuppression.

## Foreign travel or residence

Travel or residence in countries with an elevated TB rate may be a risk for TB exposure in certain circumstances (e.g., extended duration, likely contact with infectious TB cases, high TB prevalence of TB in travel location, non-tourist travel). The duration of at least 1 consecutive month to trigger testing is intended to identify travel most likely to involve TB exposure. TB screening tests can be falsely negative within the 8 weeks after exposure, so are best obtained 8 weeks after a child's return.

## IGRA preference in foreign-born children $\geq 2$ years old

Because IGRA has increased specificity for TB infection in children vaccinated with BCG, IGRA is preferred over the tuberculin skin test for foreign-born children  $\geq 2$  years of age. IGRAs can be used in children <2 years of age, however, there is an overall lack of data in this age group, which complicates interpretation of test results. In BCG vaccinated immunocompetent children with a positive TST, it may be appropriate to confirm a positive TST with an IGRA. If IGRA is not done the TST result should be considered the definitive result.

## Negative test for LTBI does not rule out active TB

It is important to remember that a negative TST or IGRA result does not rule out active TB. A negative TST or IGRA in a patient with active TB can be a sign of extensive disease. Any suspicion for active TB or extensive exposure to TB should prompt a physical exam and an evaluation for active disease.

## 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, although the 12-week regimen is not recommended for children <2 years of age, children on antiretroviral medications, or pregnant adolescents. Drug-drug interactions and contact to drug resistant TB are other contra- indications for shorter regimens.

\*The CDC currently recommends DOT for this regimen; however, preliminary data suggests that SAT is non-inferior to DOT in the United States. Many clinicians are using SAT or modified DOT.

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

**Los Angeles County (LAC) 3HP Fact Sheet:** available on the LAC Tuberculosis Control Program website: [3HP for treatment of TB infection 3.26.21.pdf \(lacounty.gov\)](https://www.lacounty.gov/health-services/tuberculosis-control-program/fact-sheet-3hp)

Medication	Frequency	Duration
Rifampin	Daily	4 months
Isoniazid + rifapentine*	Weekly	12 weeks**

## Refusal of recommended LTBI treatment

Refusal should be documented. Recommendations for treatment should be made 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.

## Symptoms that should trigger evaluation for active TB

Patients with any of the following symptoms that are otherwise unexplained should be evaluated for active TB: cough for more than 2-3 weeks, fevers, night sweats, weight loss, lymphadenopathy, hemoptysis or excessive fatigue.

ACIP= Advisory Committee on Immunization Practices; LTBI=latent TB infection; IGRA= Interferon gamma release assay (e.g., QuantiFERON-TB Gold, T-SPOT.TB); BCG=Bacillus Calmette-Guérin; TST= tuberculin skin test; DOT=Directly observed therapy; CXR= chest x-ray