



California Tuberculosis Risk Assessment

Pediatrics



- Use this tool to identify asymptomatic children for latent TB infection (LTBI) testing.
- Re-testing should only be done in persons who previously tested negative, and have new risk factors since the last 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
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.

Check appropriate risk factor boxes below.

LTBI testing is recommended if any of the 4 boxes below are checked.

If LTBI test result is positive and active TB disease is ruled out, LTBI treatment is recommended.

Foreign-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 foreign-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 ≥ 2 mg/kg/day, or ≥ 15 mg/day for ≥ 2 weeks) or other immunosuppressive medication

Close contact to someone with infectious TB disease at any time

Foreign travel or residence of ≥ 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
- TB testing should occur at least 8 weeks after the child left the country with elevated TB prevalence

See the [Pediatric TB Risk Assessment User Guide](#) for more information about using this tool.

Provider: _____

Assessment Date: _____

Patient Name: _____

Date of Birth: _____

(Place sticker here if applicable)



California Pediatric TB 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 5 components of this risk assessment. This is purposeful 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. Local TB control programs and clinics can customize this risk assessment according to local recommendations. 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 chest radiograph and, if indicated, sputum smears, cultures, and nucleic acid amplification (NAAT). However, clinicians should not be compelled to treat low risk persons with a positive test 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.

IGRA preference in foreign-born children ≥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 ≥2 years of age. IGRA 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.

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 contraindications for shorter regimes.

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

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

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

CDPH 3HP Fact Sheet: available on the CDPH TBCB website: <http://www.cdph.ca.gov/programs/tb>

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, 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

