Los Angeles County Adult Tuberculosis Risk Assessment User Guide

United States Preventive Services Task Force

The USPSTF has recommended testing persons from countries with an elevated TB rate as well as persons who have lived in high-risk congregate settings such as homeless shelters and correctional facilities. Because the increased risk of exposure to TB in congregate settings varies substantially by facility and location, clinicians are encouraged to follow local recommendations when considering testing among persons from these congregate settings. USPSTF did not review data supporting testing among close contacts to infectious TB nor among persons who are immunosuppressed because these persons are recommended to be screened by public health programs or by clinical standard of care

Los Angeles County recommendations

The Los Angeles County TB risk assessment incorporates national and state guidance along with local recommendations that are specific to our population. Certain risk factors, such as homelessness and frequenting community-based alcohol treatment facilities known as 'Grupos', impart high risk for tuberculosis in Los Angeles County.

Prioritize persons with risks for progression

If health system resources do not allow for testing of all persons born in a country with an elevated TB rate, prioritize patients with at least one of the following medical risks for progression:

- Diabetes mellitus
- End stage renal disease
- Smoker within past 1 year
- Silicosis
- Leukemia or lymphoma
- Cancer of head or neck
- Intestinal bypass/gastrectomy
- Chronic malabsorption
- Body mass index ≤20
- History of chest x-ray findings suggestive of previous or inactive TB (no prior treatment). Includes fibrosis or non-calcified nodules, but does not include solitary calcified nodule or isolated pleural thickening. In addition to TB infection testing, evaluate for active TB disease.

Mandated testing

Several risk factors for TB that have been used historically to select patients for TB screening or used in mandated programs were not included among the 4 risk factors of the Los Angeles County TB Risk Assessment. This is purposeful in order to focus testing on patients at highest risk. Certain populations may be mandated for testing by statute, regulation, or policy, and have specific documentation forms. This risk assessment does not supersede any mandated testing. Examples of these populations include: healthcare workers, residents or employees of correctional institutions, substance abuse treatment facilities, homeless shelters, and others.

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 active TB disease could develop. Some programs or clinicians may additionally prioritize testing of younger foreign-born persons if all foreign-born are not tested. An upper age limit for testing has not been established but could be appropriate depending on individual patient TB risks, comorbidities, and life expectancy.

Homeless and incarceration

Persons experiencing homelessness and who have been in jail are vulnerable to exposure to TB disease and at risk for progression to TB disease if they have untreated TB infection. Several risks that may be associated with this population include: lack of access to care, human immunodeficiency virus (HIV) or HIV risk behaviors, diabetes, tobacco use, and substance abuse.

Children

The risk assessment form is intended for adults. The American Academy of Pediatrics has created four validated risk assessment questions in children. See: American Academy of Pediatrics. Tuberculosis. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. Red Book®: 2015 Report of the Committee on Infectious Diseases. American Academy of Pediatrics; 2015; 805-831. Or see the LAC Pediatric Risk Assessment on our website.

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Avoid tuberculosis (TB) 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.

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 TB infection 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 testing.

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 assessment. 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 (e.g., extended duration such as > 1 month, likely contact with infectious TB cases, high TB prevalence of TB in travel location).

When to repeat a risk assessment

The risk assessment should be administered at least once. Per sons can be screened for new risk factors with the Adult TB Risk Assessment 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 per-sons. 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 showing findings consistent with previous or inactive TB should be tested for TB infection. In addition to TB infection testing, evaluate for active TB disease.

Negative test for TB infection does not rule out active TB disease

It is important to remember that a negative TST or IGRA result does not rule out active TB. In fact, a negative TST or IGRA in a patient with active TB can be a sign of extensive disease and poor outcome. Clinical judgement should be exercised and consider the patient's clinical history, symptoms, and exam findings.

Symptoms that should trigger evaluation for active TB disease

Patients with any of the following symptoms that are otherwise un- explained should be evaluated for active TB disease: cough for more than 3 weeks, hemoptysis, hoarse voice, fevers, night sweats, weight loss.

IGRA = Interferon gamma release assay (e.g., QuantiFERON-TB Gold, T-SPOT.TB); **BCG** = Bacillus Calmette-Guérin; **TST** = tuberculin skin test;

Adapted from the California Tuberculosis Risk Assessment available on the PROVIDERS page at www.ctca.org