

County of Santa Clara

Public Health Department

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HEALTH UPDATE: U.S. Preventive Services Task Force Recommendations Screening for Latent Tuberculosis Infection in Adults

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TO: Primary Care Providers

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After over 20 years of declining Tuberculosis (TB) case counts and case rates in the United States, in 2015, the number of TB cases increased and the case rate remained stable. Santa Clara County, which has the third highest number of cases among all counties in California and a TB rate over three times as high as the national rate, experienced a 22% increase in cases from 2014 to 2015 (7% increase from 2013 to 2015). During 2015, 95% of persons with active TB in Santa Clara County were born outside of the U.S.; the majority of cases occurred among persons born in Vietnam, the Philippines, or India. We estimate that 8.5%, or 160,000 of the 1.9 million people living in Santa Clara County have latent tuberculosis infection (LTBI). This population represents a large reservoir from which future cases of TB disease can develop. Treatment of LTBI decreases the risk of developing active TB disease by over 90% among persons adherent to treatment. Identifying and treating persons with LTBI is essential to decrease the number of patients with TB in the county. Primary care providers' role in targeted testing and treatment is critical in preventing future TB cases.

The U.S. Preventive Services Task Force (USPSTF) has issued recommendations for screening asymptomatic adults at increased risk for LTBI. The recommendation was published in *JAMA* on September 6, 2016. The USPSTF recommends screening adults who were born in or lived in countries with increased TB prevalence and persons who have lived in high-risk congregate settings (e.g., homeless shelters or correctional facilities).

The USPSTF did not review data regarding testing of patients with increased risk for progression from LTBI to TB disease for whom testing is considered standard care in the management of their condition (e.g. patients with HIV infection, silicosis, etc.); patients for whom testing is indicated prior to starting an immunosuppressive medication (e.g. chemotherapy, medications after organ transplant, tumor necrosis factor-alpha inhibitors, etc.); persons who are contacts to a patient with infectious TB, who are tested as part of public health investigations; or employees in high-risk settings for whom routine screening is performed by employee health.

The USPSTF recommendation is a Grade B recommendation, which means that the USPSTF recommends LTBI testing in populations at increased risk for infection because they found sufficient evidence that LTBI treatment provides a moderate health benefit in preventing progression to active TB disease, and they have moderate certainty that there is moderate net benefit to screening persons at increased risk for infection. This is the same grade given to a large number of widely accepted preventive

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Health ADVISORY: provides important information for a specific incident or situation; may not require immediate action.

Health UPDATE: provides updated information regarding an incident or situation; unlikely to require immediate action.

care practices such as use of low-dose aspirin for primary prevention of cardiovascular disease in persons at increased risk, and diabetes screening among older adults who are overweight.

USPSTF Recommends that **Primary Care Providers** Screen Asymptomatic Adults for LTBI who:

1. Are born in or have lived in countries with an elevated TB rate (includes countries other than the United States, Canada, Australia, New Zealand or Western and Northern European countries). See California Tuberculosis Risk Assessment for additional information:
<http://www.cdph.ca.gov/programs/tb/Documents/TBCB-CA-TB-Risk-Assessment-and-Fact-Sheet.pdf>.
2. Have lived in high-risk congregate settings (e.g. homeless shelters or correctional facilities).

CDC Also Recommends to Screen Persons:

3. With current or planned immunosuppression, which is associated with a high risk of progression from latent TB infection to active TB disease [e.g. patients with HIV-infection, organ transplant recipients, or patients treated with TNF-alpha antagonists, steroids (e.g. prednisone \geq 15mg/day for \geq 1 month), or chemotherapy].
4. Who have been close contacts to someone with infectious TB.
5. With medical conditions that increase the risk of progression to active TB [e.g. diabetes; end stage renal disease; head, neck, or lung cancer; leukemia; lymphoma; silicosis; substance abuse (injection drug use, smoking, or alcohol abuse); history of gastrectomy or jejunioileal bypass; pulmonary fibrotic lesions on CXR consistent with prior, healed TB (after active TB disease has been excluded with sputum testing); or who are underweight (<90% of their ideal body weight)].
6. Who work in high-risk settings including health care facilities, homeless shelters, and correctional facilities.
7. Who are children, with any of these risk factors.

CDC Recommends the Following Preferred Treatment Regimens:

Isoniazid and rifapentine given weekly for 12 weeks; isoniazid daily for 9 months; or rifampin daily for 4 months. Please see the CDPH Fact Sheet on the 12-dose Isoniazid/Rifapentine Regimen at:
<http://www.cdph.ca.gov/programs/tb/Documents/TBCB-INH-RIF-LTBI-fact-sheet.pdf>.

REFERENCES

U.S. Preventive Services Task Force. Screening for Latent Tuberculosis Infection in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2016; 316: 962-969. Available at: <http://jama.jamanetwork.com/article.aspx?articleid=2547762> OR <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/latent-tuberculosis-infection-screening>

Centers for Disease Control and Prevention. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR*. 2000; 49 (RR-6):1-51.

Centers for Disease Control and Prevention. Updated guidelines for using Interferon Gamma Release Assays to detect *Mycobacterium tuberculosis* Infection — United States. *MMWR*. 2010; 59 (RR-5): 1-25.

Centers for Disease Control and Prevention. Recommendations for use of an isoniazid-rifapentine regimen with direct observation to treat latent *Mycobacterium tuberculosis* infection. *MMWR*. 2011;60:1650-3.

Thompson NJ. International Union Against Tuberculosis Committee on Prophylaxis. Efficacy of various durations of isoniazid preventive therapy for tuberculosis: five years of follow-up in the IUAT trial. *Bull World Health Organ*. 1982;60:555-64.

RESOURCES

<http://www.cdc.gov/tb/publications/lbti/default.htm>

<http://www.cdph.ca.gov/programs/tb/Pages/default.aspx>

<https://www.sccgov.org/sites/sccphd/en-us/HealthProviders/TB/Pages/default.aspx>

To contact the Santa Clara County Public Health Department TB Prevention and Control Program, please call the TB Provider Line: (408) 885-2440.