FREQUENTLY ASKED QUESTIONS:
LATENT TUBERCULOSIS INFECTION (LTBI) CARE FOR PROVIDERS

01 What are the most common risk factors for Tuberculosis (TB) in San Diego County?

The San Diego County Tuberculosis Risk Assessment is a tool to to identify asymptomatic persons for Latent TB Infection (LTBI) testing. LTBI Testing is recommended if any of the five categories below are checked:

- ☐ Close contact to someone with infectious TB disease during lifetime.
- ☐ 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).
- ☐ US-born person and
  - ☐ Lives in or visits a country with an elevated TB rate.
  - ☐ US-born person and crosses the US-Mexico border frequently.
  - ☐ US-born person and eats queso fresco or other unpasteurized dairy products from Mexico. (see Question 7).

The most common risk factor for TB disease in San Diego is birth outside the U.S. in a country with moderate or high TB prevalence. The most common medical risk factor for progression to active TB is diabetes. More information on characteristics of persons reported with TB in San Diego is available at SD County Tuberculosis Control Program Statistics.

02 What are risk factors for disease progression from latent TB to active TB?

About 5 to 10% of infected persons who do not receive treatment for LTBI will develop TB disease at some time in their lives. Populations at increased risk for developing TB disease fall into two categories (CDC.gov):

Persons with medical conditions that weaken the immune system:

- Diabetes mellitus
- Severe kidney disease
- TNF-alpha inhibitors
- Renal failure or on hemodialysis

- Specialized treatment for Rheumatoid Arthritis or Crohn's disease
- Head and neck cancer, especially hematologic
- Silicosis

- Children ≤ 5 years of age who have a positive TB test
- HIV/AIDS
- Substance abuse
- Malnutrition/low body weight

- Corticosteroids or organ transplant
- Gastrectomy or jejunoileal bypass
- History of prior, untreated TB or fibrotic lesions on chest radiograph

Persons who have been recently infected with TB bacteria:

Groups with high rates of TB transmission:

- People experiencing homelessness
- People who inject drugs

- Recent exposure to a person known to have active TB disease

Other risk factors:

- Persons working in hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with HIV

KNOW YOUR TB STATUS. GET TESTED. IF POSITIVE, TAKE MEDICATION.

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02 Does the BCG vaccine prevent TB infection?

BCG is a vaccine for TB. This vaccine is not widely used in the U.S., but it is often given to infants and small children in other countries where TB is common. The primary benefit of BCG is its effectiveness in preventing children from developing severe disseminated TB or TB meningitis (CDC.gov).

The BCG vaccine is not very good at protecting adults against TB. A patient can still get TB infection or TB disease even if they were vaccinated with BCG. Your patient will need a TB test to see if they have latent TB infection (LTBI) or TB disease. (CDC.gov).

03 Are all TB skin tests for people who have had the BCG vaccine false positives?

NO. You can interpret TB skin tests in patients who had the BCG vaccine. And since the BCG vaccine is given in countries with high rates of tuberculosis, people with the BCG vaccine are more likely to have a true positive. If a patient who has had the BCG vaccine as a child has a positive TST result, it is not recommended to follow up with a TB blood test, or Interferon-gamma release assay (IGRA). Rule out active TB and then treat for LTBI.

04 If a patient's TB skin test has "always" been positive, does a patient still need LTBI treatment?

YES. Rule out active TB and treat LTBI with shorter course regimens recommended by CDC.

- If the patient has already completed treatment for LTBI, assess if there has been an additional significant exposure that would require additional LTBI treatment.

05 Should you "double check" TB skin test results with a TB blood test (IGRA)?

NO! Pick a test and then act on the results. IGRA is the recommended test, but if you do a TB skin test and it is positive, do not follow-up with an IGRA.

06 Should you do a TB blood test (IGRA) or TB skin test if a person has had a verified positive TB skin test or IGRA?

NO. Once it is positive it should be considered positive, and the patient should receive LTBI treatment after ruling out active TB.

07 What is *Mycobacterium bovis* (*M. bovis*)?

M. bovis is part of the *Mycobacterium tuberculosis* (*M. tuberculosis)* complex. Across the US, a small number of TB cases in people are caused by *M. bovis*; however, in San Diego County, approximately 10% of culture-proven cases are due to *M. bovis*. The clinical presentation of TB due to *M. bovis* is often similar to *M. tuberculosis*, and both forms of TB are treated applying the same treatment guidelines. Standard LTBI treatment regimens are effective prevention for TB due to *M. bovis*.

- *M. bovis* is usually contracted through the consumption of unpasteurized dairy products.
- Person-to-person transmission is also believed to occur.

- TB due to *M. bovis* can occur from consumption of raw milk and raw milk products, including yogurt & ice cream made from unpasteurized milk, and soft cheeses such as brie, queso fresco, panela, asadero, and queso blanco.

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08 How should I approach LTBI treatment in the following populations?

In all cases, first rule out active TB disease immediately.

Courtesy of TB Free California.

My patient had a positive TB test and is an **Older Adult.**	• Older adults are more likely to have conditions that lead to active TB and have more morbidity if they do develop TB.
	  ◦ There is no upper age cutoff for LTBI screening and treatment.
	  ◦ Consider overall health and risk/benefit tradeoff.

My patient had a positive TB test **during pregnancy. What now?**	• X-rays may be able to be safely delayed until after the first trimester in some women, but some people (e.g. people with recent exposures, who are living with HIV) should have an x-ray with a leaded shield in the first trimester. • If patient has high risk of progression, treat immediately; otherwise consider delaying LTBI treatment until ~3 months postpartum. ◦ Even if a patient is breastfeeding, it is safe to take medicine to treat TB infection. It will not harm the baby.
My patient had a positive TB test and is a **child ≤ 5 years old. What now?**	• Children ≤ 5 years old are at high risk for progression to active TB disease. ◦ Ensure your patient completes a chest PA x-ray, lateral chest x-ray and an exam. If no signs or symptoms of active TB, be sure to treat for LTBI (with weight-based dosing).

09 How often should TB risk assessment and testing be completed?

US Preventative Services Task Force (USPSTF): **USPSTF Latent Tuberculosis Infection in Adults: Screening**	• The USPSTF found no evidence on the optimal frequency of screening for LTBI. In the absence of evidence, a reasonable approach is to repeat screening based on specific risk factors. ◦ Screening frequency could range from 1-time only screening among persons at low risk for future tuberculosis exposure to annual screening among those at continued risk of exposure. • This recommendation applies to asymptomatic adults 18 years or older at increased risk for tuberculosis.
California Department of Public Health (CDPH) & California Tuberculosis Controller Association (CTCA): **California Adult Tuberculosis Risk Assessment**	When to repeat a risk assessment and testing: • The risk assessment should be administered at least once. Persons can be screened for new risk factors at subsequent preventive health visits. • 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 extended travel or residence outside the United States.

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