ADDITIONAL **RESOURCES**

Centers for Disease Control and Prevention. (2012). *Tuberculosis: Get the Facts!* [Brochure]. https://www.cdc.gov/tb/publications/pamphlets/Tuberculosis Get the-facts.pdf

Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. (2021). *Questions and Answers about Tuberculosis [TB].* https://www.cdc.gov/tb/publications/faqs/pdfs/qa.pdf

Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. (2014). *TB: What You Need to Know about Tuberculosis Infection*. https://www.cdc.gov/tb/publications/pamphlets/tb_infection.pdf

Latent TB. Active Concern.
Tuberculosis Program

Virginia Department of Health

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VDH VIRGINIA DEPARTMENT OF HEALTH

The Virginia Department of Health TB Program aims to prevent, treat, and eliminate TB to protect the health and promote the well-being of all people in Virginia.

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ASSESS • TEST • TREAT

LATENT TB. ACTIVE CONCERN.

A HEALTHCARE PROVIDER RESOURCE

Tuberculosis Program
Virginia Department of Health

WHAT YOU SHOULD **KNOW**

ABOUT **TB**

Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis (*M. tuberculosis*). It is an illness that mainly affects the lungs, although it can attack any part of the body. It is caused by bacteria spread through the air when when a person with active TB disease coughs, laughs, sings or sneezes. TB is a major cause of illness and death in many parts of the world. Continued efforts to eliminate TB abroad and in the United States are still needed.

Active TB disease is most often spread among friends, family, coworkers and schoolmates. TB can be serious and even fatal. Fortunately, TB can be prevented with treatment.

ABOUT **LTBI**

People who have a latent tuberculosis infection (LTBI) are infected with the *M. tuberculosis* bacteria. Some people with TB bacteria in their body may never develop active TB disease. Other people, especially those with weakened immune systems and other risk factors, can develop active TB disease.

People with LTBI do not feel sick, so they often do not know they carry the bacteria. They do not have any symptoms. They are not contagious. But, if their latent TB infection develops into active TB disease, without treatment, they could become sick, spread TB to others, and even die.

Over 80% of those who become sick from TB in the U.S. had untreated latent TB.

WHAT YOU CAN **DO**

I. ASSESS

Determine if your patient may be at risk for Latent TB

The Centers for Disease Control and Prevention (CDC) and the U.S. Preventive Services Task Force (USPSTF) recommend testing people at increased risk of latent TB. During routine visits, you should identify these patients and test them. Screening of patients who are not at risk diverts resources from high-priority activities and is not recommended.

Persons at high risk are those who:

- **spent time with someone who has active TB disease**
- **were born in, spent more than a month in, or traveled frequently to areas where TB is common, such as:**
  - Africa
  - Asia
  - Mexico
  - Central America
  - South America
  - The Caribbean
  - Eastern Europe
- **are a resident or employee of a high TB risk congregate setting, such as a:**
  - homeless shelter
  - correctional facility
  - nursing home
  - long term care facility
- **are medically underserved**
- **have experienced homelessness within the past two years**
- **are infants, children, or adolescents exposed to an adult(s) in high risk categories**
- **use injection drugs**
- **are a member of a group identified by the health department to be at increased risk for TB infection**
- **have a weakened immune system because of:**
  - HIV
  - an organ transplant
  - diabetes
  - immunosuppressive medications
- **have silicosis; chronic renal failure; leukemia; or cancer of the head, neck, or lung**
- **have had a gastrectomy or jejunoileal bypass**
- **have a low body weight (<90% of ideal body weight)**
- **were recently (within the past 2 years) infected with *M. tuberculosis***
- **have untreated or inadequately treated TB disease**
- **have TB symptoms, such as:**
  - cough that lasts more than 3 weeks
  - fever
  - chest pain
  - weight loss
  - night sweats
  - fatigue
  - decreased appetite

The CDC and the National Tuberculosis Controllers Association (NTCA) recommend that all healthcare personnel be screened for TB upon hire. Annual TB testing is not recommended unless there is a known exposure, ongoing transmission, or they work in a high-risk setting

II. TEST

Perform a targeted TB test

TB Testing Options

Even if patients exhibit no symptoms and do not feel sick, they may have LBTI. Especially if a patient has any of the risk factors, testing is recommended. The patient may have either a Mantoux tuberculin skin test (TST) or an Interferon Gamma Release Assay (IGRA) blood test. Both are relatively painless, and both yield definitive results.

Before administering either test, assess patients for risk factors. Those who are candidates for testing should undergo a clinical assessment, including a review of their symptoms. TB disease must be excluded in high-risk patients who have TB-like symptoms, regardless of the results of the TST or IGRA test. Before initiating treatment for latent TB, you will need a chest X-ray taken within the last three months that shows no evidence of active TB disease. If the patient tests negative and has a weakened immune system or history of recent exposure to an active case of TB, another test may be able to rule out a false negative.

TB Testing and BCG Vaccine

In some countries where TB is common, a preventative bacille Calmette-Guérin (BCG) vaccine is given to infants and young children. This is not a common practice in the U.S., but patients who were born in another country may have received the BCG vaccine when they were very young. In that case, these patients should ideally receive the IGRA blood test for latent TB.

For additional questions, please contact the Virginia Department of Health TB Program.

804-864-7906

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III. TREAT

Make sure treatment is completed

Treatment

The CDC and NTCA guidelines on the treatment of latent TB recommend a short, rifamycin-based regimen for 3-4 months. If this short-course treatment is not an option, a 6–9 month daily isoniazid treatment provides an effective alternative. Since only active TB is contagious, the patient diagnosed with LTBI is not endangering family and friends while making a decision about LTBI treatment.

Since there are several treatment regimens available, you should work with your patients to choose the one that is most appropriate. Begin by considering:

- drug susceptibility results from the presumed source case, if available
- coexisting medical conditions
- potential for interactions with other drugs patient is taking

It is very important to treat latent TB as soon as the diagnosis is confirmed. All medication must be finished as directed. The only way to get rid of TB bacteria is to take TB medicine. If patients stop treatment early or skip doses, the treatment may not be effective in preventing progression to active TB disease.

After Treatment

Even after completing treatment, patients will test positive on tests for TB infection in the future. Provide the patient with a written record documenting the regimen taken and completion of treatment. Unfortunately, there is still the possibility of their contracting TB again if exposed in the future, because the medication only eradicates TB bacteria in the body at the time of treatment.

Reporting

You are legally required to report LTBI. Results of skin and blood tests, as well as chest X-ray results, treatment information, and underlying conditions must be included in morbidity reports. You can report LTBI electronically using the Virginia Department of Health's Confidential Morbidity Report on the VDH website. Or, if you prefer to fax a report of TB infection to your local health department, you may download a Morbidity Report Form Epi-1.