

Spotlight on Health

Latent Tuberculosis

Many people think tuberculosis (TB) is a disease of the past. But data from 2015 show that this is not true. It is 1 of the top 10 causes of death worldwide.¹ TB is less of a problem in the United States than it is in some other countries, though. This might be because we have guidelines for screening in the U.S. In this newsletter, we'll discuss screening and how it helps to keep TB under control.

Screening for Tuberculosis

A screen is a test performed on people who don't have signs or symptoms of disease. Screening can detect disease when it is hidden and/or in an early stage. Once detected, the disease can be treated. Doing this often prevents or delays symptoms from developing.

A TB screen detects latent tuberculosis infection (LTBI). "Latent" means that the bacteria that cause TB are present, but hidden. People with LTBI don't have symptoms and can't spread TB to others. However, screening for LTBI is still important. That's because LTBI can progress to active TB disease. When this happens, the person will have symptoms and can spread TB to others. So the best way to keep TB under control is to screen for LTBI and treat people who test positive.

Screening Guidelines in the U.S.

Experts in the U.S. recommend screening for TB infection. They say people who don't have symptoms but have an increased risk for LTBI should be screened. People who are at higher risk for developing active TB disease should be tested too. These include people who²⁻⁴:

- Are from a country, or have lived in a country, where TB is common^a
- Live or work where TB disease is more common (homeless shelters, prisons, nursing homes)
- Have HIV or another condition that weakens the immune system
- Receive chemotherapy or a TNF α inhibitor
- Have had an organ transplant
- Have had close contact with someone who has active TB
- Are in healthcare and work closely with those who are at increased risk for active TB
- Are infants, children, or teens exposed to adults who are at increased risk for TB
- Are elderly
- Have been infected in the last 2 years
- Inject illegal drugs

^a Includes most countries in Latin America, the Caribbean, Africa, Asia, Eastern Europe, and Russia.



Tuberculosis Facts

- Caused by bacteria
- Spreads from person-to-person through the air
- Primarily affects the lungs
- Two types of infection:
 - Latent TB—no symptoms, can't be spread to others, but can progress to active TB
 - Active TB—symptoms present, can be spread to others
- Treating LTBI:
 - Helps keep the infection from becoming active TB
 - Reduces the spread, symptoms, and death related to TB
- 30% of persons exposed to the bacteria develop LTBI²
- 5% to 10% of people with untreated LTBI develop active TB²
- About 5% of people in the U.S. have LTBI²
 - 23% to 88% of prisoners²
 - 19% to 80% of homeless people²

Screening Tests

Doctors can choose 1 of 2 screening tests:

- TB skin test, which is also called the tuberculin skin test (TST)
- TB blood test, which is also called the interferon-gamma release assay (IGRA)

In the TB skin test, a small amount of test fluid is injected into the skin on the lower part of the arm. A trained healthcare worker “reads” the test result 2 to 3 days later. So, this test requires 2 visits to the doctor’s office.

A TB blood test measures your body’s reaction to the bacteria that cause TB. It doesn’t require a return visit to the doctor’s office.

Both tests can detect LTBI and active TB. A positive result means bacteria that cause TB may be present. Further testing is needed to know for sure. A negative result means that bacteria that cause TB are probably not present. But some people with TB might have a negative result. This is true with either test. Neither test can be used to:

- Tell the difference between LTBI and active TB disease
- Tell if a person will develop active TB disease

What You Can Do

If you think you are at increased risk for TB infection, talk with your doctor about screening. If you know someone who might be at increased risk, encourage him or her to get screened.

Additional Information

To learn more about tuberculosis, visit these websites:

- Centers for Disease Control and Prevention: CDC.gov/tb/topic/basics/
- MedlinePlus: MedlinePlus.gov/tuberculosis.html
- World Health Organization (WHO): WHO.int/mediacentre/factsheets/fs104/en/

References

1. World Health Organization. Global tuberculosis report, 2016. www.who.int/tb/publications/global_report/en/. Accessed November 8, 2016.
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3. Centers for Disease Control and Prevention. Latent tuberculosis infection: a guide for primary health care providers. www.cdc.gov/tb/publications/ltbi/pdf/targetedltbi.pdf. Accessed November 7, 2016.
4. Tuberculosis testing and diagnosis. Centers for Disease Control and Prevention website. www.cdc.gov/tb/topic/testing/. Updated April 14, 2016. Accessed November 8, 2016.