

Latent TB Infection Testing and Treatment: Summary of U.S. Recommendations

Eliminating tuberculosis (TB) in the United States requires expanding testing and treatment of latent TB infection. The [Centers for Disease Control and Prevention \(CDC\)](#) and the [U.S. Preventive Services Task Force \(USPSTF\)](#) recommend testing people that are at increased risk for TB infection. Clinicians, health care agencies, and community organizations, especially those serving at-risk populations, have a critical role in TB elimination.

Who should be tested for latent TB infection?

The Centers for Disease Control and Prevention (CDC) and the U.S. Preventive Services Task Force (USPSTF) recommend testing populations that are at increased risk for TB infection.

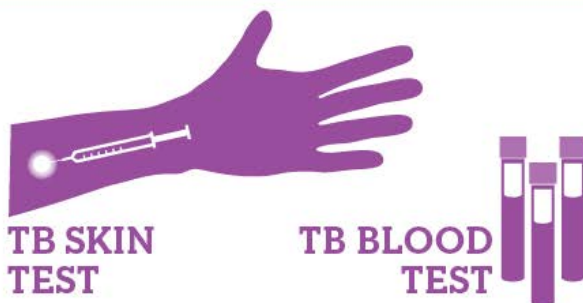
- Anyone can get TB. However, some people have a higher risk of getting infected with TB bacteria. The CDC supports the USPSTF recommendation to test certain high-risk groups for TB infection. These groups include:
 - People born in or who frequently travel to countries where TB disease is common, including Mexico, the Philippines, Vietnam, India, China, Haiti, and Guatemala, or other countries with high rates of TB. *(Of note, people born in Canada, Australia, New Zealand, or Western and Northern European countries are not considered at high risk for TB infection, unless they spent time in a country with a high rate of TB.)*
 - People who currently, or used to, live in large group settings, such as homeless shelters or prisons and jails where TB is more common.
- CDC also recommends testing for TB infection for other high-risk groups. These groups include:
 - Health care workers and others who work in places at high risk for TB transmission, such as hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with HIV.
 - Someone who has spent time with a person who has infectious TB disease.
- Others with weaker immune systems, such as those with certain health conditions or taking certain medications, have a higher risk of developing TB disease once infected. Testing for TB infection should be part of their regular medical care.
 - Health problems that increase a person's risk of developing TB disease once infected include:

<ul style="list-style-type: none"> ▪ HIV ▪ Substance abuse (such as smoking, alcohol abuse, or injection drug use) ▪ Silicosis ▪ Diabetes mellitus ▪ Severe kidney disease 	<ul style="list-style-type: none"> ▪ Low body weight ▪ Organ transplants ▪ Head and neck cancer ▪ Medical treatments such as corticosteroids or organ transplant ▪ Specialized treatment for rheumatoid arthritis or Crohn's disease
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- Children, especially those under age 5, have a higher risk of developing TB disease once infected. Therefore, testing for TB infection in children is important if they are in one of the risk groups noted above.

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Recommended Tests for Latent TB Infection:

- There are two kinds of tests that are used to determine if a person has been infected with TB bacteria: the TB blood test and TB skin test.
 - TB Blood Test (Interferon Gamma Release Assays – IGRAs)
 - TB blood tests (sometimes called IGRAs) use a blood sample to find TB infection. The tests measure the response of TB proteins when they are mixed with a small amount of blood. Only one visit is required to draw blood for the test.
 - TB blood tests are the preferred method of TB testing for people 5 years of age and older who have received the BCG vaccine.
 - A positive reaction usually means TB infection. More tests are needed to rule out TB disease.
 - TB Skin Tests (TST):
 - With a TB skin test, a health care provider injects a small amount of testing fluid (called tuberculin or PPD) into the skin on the lower part of the arm.
 - After 2 or 3 days, the skin test reaction must be examined by a trained health care worker. The health care worker measures any swelling where the tuberculin was injected to determine if the reaction to the test is positive or negative.
- A positive reaction to a TB blood test (IGRA) or TB skin test (TST) usually means TB infection. More tests are needed to rule out TB disease.
- A diagnosis of latent TB infection is made if a person has a positive TB blood test (IGRA) or TB skin test (TST) result and a medical exam does not indicate TB disease.



**A TB skin test or
TB blood test can
find TB infection.**

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Recommended Treatment Regimens for Latent TB Infection:

- There are four treatment regimens available for the treatment of latent TB infection.
 - These four regimens use the drugs isoniazid, rifapentine, or rifampin.
 - Treatment for latent TB infection can take 3 to 9 months, depending on the regimen.
 - Shorter treatment regimens can help patients complete treatment faster and with fewer side effects.
- CDC resources can help health care providers choose the appropriate regimen for patients.
 - One recent advancement in latent TB infection treatment options is a shorter regimen that combines isoniazid and rifapentine, and is administered once weekly for 12 weeks.
 - This regimen is recommended to be delivered using directly observed treatment (DOT). DOT is usually done by a health care worker, to monitor for any side effects, and to make sure patients take all the medication.
 - This regimen is recommended for otherwise-healthy people 12 years or older.
 - This regimen is not recommended for children younger than 2, people living with HIV taking antiretroviral treatment, or pregnant women.
 - A daily 4-month rifampin regimen can be considered for persons who cannot tolerate isoniazid or who have been exposed to isoniazid-resistant TB.
 - There are two isoniazid regimen options: a 9-month or 6-month daily regimen.
 - The 9-month regimen is preferred because it is the most effective.
 - The 9 month regimen is the preferred treatment regimen for children ages 2-11, people living with HIV taking antiretroviral treatment, and pregnant women.
 - Clinicians should make sure that patients complete at least 6 months of isoniazid to treat latent TB infection.
- Treating latent TB infection is less costly than treating TB disease.
 - It costs about \$600 to treat someone with latent TB infection. Treating a typical case of TB disease costs about \$18,000.



**1 dose
1 time per week
12 weeks**

**Shorter regimens
help patients
finish treatment.**