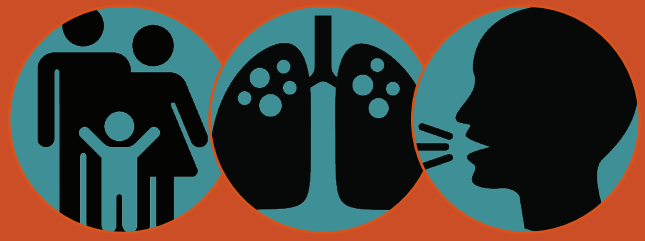


# Tuberculosis Screening and Intercountry Adoption



**When adopting a child from a country outside the United States, screening for tuberculosis (TB) is important to protect the health of your child and the people your child interacts with.**

## 1. What is TB? And how is it spread?

[Tuberculosis \(TB\)](#) is a disease caused by the bacteria *Mycobacterium tuberculosis*. It is spread from person to person through the air. Symptoms of TB disease can include coughing, chest pain, weight loss, fever, and night sweats. TB bacteria get into the air when a person with TB disease in the lungs or throat coughs, speaks, or sings. These bacteria can stay in the air for several hours. TB bacteria can live in the body without making you sick. This is called latent TB infection. In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. TB bacteria become active if the immune system can't stop them from growing. When TB bacteria are active (multiplying in the body), this is called TB disease.

TB disease usually affects the lungs, but it can also affect other body parts, such as the brain, kidneys, or spine. TB disease is among the world's top 10 causes of death. It is the leading cause of death among people with known HIV infection.

## 2. Can children who have TB spread TB to others?

Young children who have TB disease can spread it to others, although the chance is much less than for older children, teens, or adults who have TB disease. Doctors are more concerned about children spreading TB infection if a child has an abnormal chest x-ray, a forceful and productive (bringing up mucus) cough, or known exposure to a person with drug-resistant TB disease.

## 3. What kind of medical exam does my child need to obtain an immigrant visa to enter the United States?

As required by the US Immigration and Nationality Act, any child or adult applying for an immigrant visa to enter the United States needs an overseas medical exam. It includes testing for TB. This medical exam must be conducted by a panel physician (a doctor who has an agreement with a US embassy or consulate to perform immigrant screening exams). Things that affect the choice of [TB tests](#) for children include:

- Their age
- If they have
  - 1) a known HIV infection **or** 2) signs or symptoms of TB **or** 3) a personal history of TB disease
- How much TB is present in the country they live in (TB disease rate)

## 4. What does each TB test involve?

### Interferon Gamma Release Assay (IGRA) or Tuberculin Skin Test (TST)

An [IGRA](#) is a blood test performed routinely in children 2–14 years old who are examined in countries where the TB disease rate is high (20 or more cases of TB per 100,000 people). It is also required for any child younger than 15 with known HIV infection, with signs or symptoms of TB disease, or with a personal history of TB disease. Results are usually available within 1 week. The IGRA will show if your

child has been infected with TB but doesn't give any information about if your child has active TB disease.

A [TST](#) is performed by a healthcare worker, who injects a small amount of fluid (called tuberculin) in the forearm, just under the top layer of skin. After 48–72 hours, the child returns to the healthcare worker, who looks for a raised, hard area or swelling at the injection site. Like the IGRA, a TST shows if a child has TB infection but doesn't give information about disease.

### Chest X-ray (CXR)

If your child has an IGRA or TST that shows TB infection, known HIV infection, signs or symptoms of TB disease, or a personal history of TB disease, or is 15 years of age or older, your child must have a [chest x-ray](#). A chest x-ray will show if there is disease in the lungs that could be TB. The x-ray results are generally available within 2–3 days.

### Sputum Sample

[Sputum](#) (mucus that is coughed up) samples are needed if your child's chest x-ray suggests TB disease or your child has known HIV infection or TB signs or symptoms. Under the direct observation of a healthcare provider, your child will cough up three samples of sputum (one each day for three days) that will be tested for TB bacteria. If your child is unable to cough up enough sputum for testing, sputum induction or early morning gastric aspirate methods can be used. Sputum induction loosens and thins mucus with a mild salt mist that your child breathes in; this helps your child cough out the mucus. Early morning gastric aspiration involves a tube passed through your child's nose to the stomach to collect mucus that your child has swallowed; this method can be used if your child is too young to follow directions to cough.

### Sputum Smears and Cultures

To determine whether your child has TB disease, the sputum samples are examined under a microscope; this process is called a [sputum smear](#). Results of the sputum smear are generally available 1 day after the third sputum sample is collected.

Another part of the sputum sample is placed in a tube with growth nutrients and monitored in a lab for 8 weeks; this part is called a [sputum culture](#). If your child has TB disease, the TB bacteria should grow in the culture within 2–8 weeks. If your child's sputum smears and/or cultures show TB bacteria, the panel physician will make a diagnosis of TB disease. However, sometimes, even if the laboratory tests are negative, if your child has persistent TB signs or symptoms, the doctor may make a clinical diagnosis of TB disease because not treating TB can have severe consequences.

### Drug Susceptibility Testing

If TB bacteria grow in the sputum culture, a [drug susceptibility](#) test is done on the TB bacteria. This test determines which medications can



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kill the TB bacteria. Results are typically available in 2–4 weeks. The results of this test are used to choose the TB medications that are most effective for your child's TB.

## 5. Why are sputum smears and cultures required for children younger than 15 with HIV regardless of their other test and x-ray results?

TB is the leading cause of death among people with known [HIV infection](#). It is one of the most common diseases for people with weakened immune systems. Also, HIV is the most common reason that latent TB infection can become TB disease. It is especially important for people with known HIV infection to be tested for TB. Because HIV infection weakens a person's immune system, people with known HIV infection and TB may test negative on the TST, IGRA, chest x-ray, and sputum smears, but test positive on the sputum culture. (A known HIV infection is not the only reason your child's sputum smears may be negative but the sputum culture test positive).

## 6. What laboratory results or other findings mean that my child has TB?

If your child's sputum smears and/or cultures show TB bacteria, the panel physician will make a diagnosis of TB disease. Regardless of lab tests, if your child has signs or symptoms of TB disease, or signs of TB disease on the chest x-ray, the panel physician may determine that your child should start treatment for TB disease. In either situation, [TB treatment](#) must begin overseas.

## 7. If my child is diagnosed with TB disease, what is the treatment, and how long does it take to complete?

TB disease is [treated](#) with a combination of antibiotics determined by your child's strain of TB (determined by drug susceptibility testing). At least 4 drugs are needed in the beginning; fewer drugs may be needed later in the course of treatment. A healthcare worker or other trained person will watch your child swallow each dose of the drugs. This way of providing treatment is called directly observed therapy (DOT). DOT is the most effective way to treat TB and is required for US immigration of people with TB disease. DOT typically takes at least 6 months to complete. The panel physician compares findings on the first chest x-ray with those on a chest x-ray taken during treatment to show whether the drugs are working. Follow-up smears and cultures are also used to show that treatment is working. It is important to note that if a child stops taking the drugs before completion, the child can become sick again. If drugs are not taken correctly, the bacteria that are still alive may become resistant to those drugs. TB that is resistant to drugs is harder and more expensive to treat, and treatment lasts much longer (up to 18 to 24 months).

## 8. If my child is diagnosed with latent TB infection, what is the treatment, and how long does it take to complete?

[Treatment](#) is recommended for children with latent TB infection to prevent them from developing TB disease. Children over 2 years of age can be treated for latent TB infection with a once-weekly regimen for 12 weeks. Alternative treatments for latent TB infection in children can take 4 months or 9 months to complete. The regimens are equally acceptable; however, health care providers should prescribe the more convenient shorter regimens, when possible. Patients are more likely to complete shorter treatment regimens. Although treatment for latent TB infection can be beneficial, unlike treatment for TB disease, it is not required for immigration and can be completed in the United States.

## 9. Are the TB screening requirements for immigration new?

CDC Technical Instructions have required TB screening of immigrant visa applicants for decades. The most significant change to the Technical Instructions occurred in 2007, when sputum culture testing and directly observed therapy were introduced. In 2018, minor updates included requiring a TB blood test or IGRA (when available) rather than a TST when testing for TB infection is needed. The 2018 changes did not significantly alter the timeline, screening procedures, or treatment for applicants.

## 10. Before adoption, my child visited the United States with a hosting program and was not required to have TB testing. Why must my child now undergo testing before being cleared for travel to the United States?

Children participating in hosting programs usually visit the United States on tourist visas. Under the Immigration and Nationality Act, people applying for tourist visas are not required to have a medical examination. People becoming permanent US residents—including children who are adopted—who must have an immigrant visa, are required to have a medical exam, including testing for TB.

## 11. Do I have to wait until the adoption paperwork is finalized to begin the TB testing process?

Parents may not have to wait. In many countries, CDC has worked with adoption service providers and US consular sections to have children evaluated by a panel physician before the adoption process is complete.

## 12. Sometimes children with TB are granted a waiver to travel to the United States before their TB treatment is complete. Who qualifies for this waiver?

People who have TB disease and apply to immigrate to the United States are required to complete TB treatment before traveling to the United States. However, for people whose medical situations suggest they would benefit from receiving their TB treatment in the United States, the Department of Homeland Security's US Citizenship and Immigration Services may grant a Class A waiver allowing them to travel to the United States before the end of their TB treatment. More information can be found on CDC's Intercountry Adoption Tuberculosis FAQs webpage (<http://www.cdc.gov/immigrantrefugeehealth/exams/adoptees-tuberculosis-screening-faq.html>).

People who have latent TB infection are not infectious, therefore, they do not require treatment for this condition before immigration and do not need a waiver.

For more information about CDC's role in intercountry adoption, please visit <https://www.cdc.gov/immigrantrefugeehealth/adoption/index.html> or e-mail CDC-INFO at <https://www.cdc.gov/dcs/ContactUs/Form>.

