

# Tuberculosis

Tuberculosis (TB) is a serious disease that is still a major threat to children and adults worldwide. Fortunately, active TB is now relatively uncommon in the United States, although it still occurs. A TB skin test sometimes shows inactive or latent TB infection. If this happens, your child may need treatment to eliminate the infection and prevent it from progressing to active TB.

## What is tuberculosis?

Tuberculosis (TB) is a disease caused by infection with certain bacteria (called *Mycobacterium tuberculosis*). Throughout human history, TB has been a major source of illness. Although it is best known for causing serious infections of the lungs, TB infection can occur anywhere in the body.

Through effective prevention and treatment programs, active TB infection is now uncommon in the United States and other developed countries. However, TB still occurs in children as well as adults. It is a special risk for patients infected with HIV (human immunodeficiency virus, the virus that causes acquired immunodeficiency syndrome [AIDS]).

Skin testing for TB is performed in children with risk factors and in other situations. Some children without symptomatic active TB disease (no cough or other symptoms, and a normal chest x-ray) have a positive result on TB skin testing. This is called inactive or “latent” TB. If your child has latent TB, he or she will receive treatment to prevent active TB from developing.

## What does it look like?

*Active TB* (disease with symptoms) is rare in otherwise healthy children. Cough is the most common symptom, although weight loss and fever may occur first. TB infection may progress rapidly or may remain latent for a long time. When infection spreads within the lungs, it causes definite symptoms, including cough, chest pain, and spitting up blood.

*Latent TB* (infection but no disease) is still uncommon but may occur. Your child will have no symptoms of TB; he or she will probably seem perfectly healthy. However, a TB skin test will show that he or she has been exposed to the bacteria that cause TB.

- Your doctor will perform a chest x-ray to find out whether your child has active TB disease. If so, effective treatments are available.
- If your child has no signs of active disease, your doctor may make the diagnosis of “latent” TB. In this case, your child will need a different kind of treatment to prevent active TB from developing.

## What causes tuberculosis?

Infection with bacteria called *Mycobacterium* cause TB. The bacteria can spread easily if your child is in close contact with an infected person. The infection can be present for a long time before any symptoms develop.

## What are some possible complications of tuberculosis?

TB is a potentially serious disease. Active or latent TB infection requires treatment to eliminate the infection.

Treatment prevents serious complications of TB, such as:

- Destruction of lung tissue.
- Bone infection.
- Lymph node infection.
- Meningitis (rare).

## What puts your child at risk of tuberculosis?

- In the United States, TB is most likely to occur in children who were born in other countries. The TB infection rate is very high in certain parts of the world, especially in Africa, Asia, and Latin America.
- Most children are exposed to the TB bacteria at home by an infected family member. Less commonly, outbreaks of TB infection can occur in other settings.
- Infection with HIV is an important risk factor for TB. Children and adults with HIV infection are much more likely to develop active TB disease after being exposed to the TB bacteria. However, TB is usually curable even in patients with HIV/AIDS.

## Can tuberculosis be prevented?

- Early identification and treatment of people with latent TB infection is the best way to prevent the infection from spreading and to prevent active TB.
- A vaccine for TB is used in some parts of the world, but it has some important limitations. Vaccination against TB is not recommended for most children in the United States.

## How is tuberculosis diagnosed and treated?

- *Active TB* (disease) is rare among healthy children in the United States. If your child has a positive TB skin test, your doctor will ask about cough and other symptoms and perform a chest x-ray to see if active TB is present. If so, your child will receive medications to eliminate

the infection. Treatment continues for a long time, usually 6 months. Your child will be closely monitored throughout treatment.

- *Latent TB* may be diagnosed if your child has a positive TB skin test but no cough or other symptoms and a normal chest x-ray. Your child still needs treatment to prevent the development of active TB disease.
  - Treatment for latent TB is usually with a medication called isoniazid (sometimes abbreviated “INH”).
  - Your child must take INH for a long time, usually every day for 9 months.
  - Your doctor may recommend another medication instead of INH.
  - Side effects of INH are unusual in children. Your child will receive close medical follow-up to check for complications, such as liver or nervous system problems.
- *Drug-resistant TB* is an increasing problem. Some types of the bacteria that cause TB have become immune to

the most commonly used medications. If your child’s infection is with a drug-resistant type of bacteria, his or her treatment may have to be changed.

### **When should I call your office?**

Whether your child has active or latent TB, he or she will receive close medical follow-up until treatment is complete.

During treatment, call our office if your child develops any of the following:

- Weight loss or loss of appetite.
- Fever.
- A bad cough with chest pain or spitting up blood.
- Abdominal pain or jaundice (yellow or orange color of the skin).
- Medication side effects, or if for any reason your child hasn’t been taking prescribed medications.