

Active Tuberculosis (TB) Disease

Tuberculosis (too ber cu LOW sis), or TB, is the common name for a germ (bacteria) called *Mycobacterium tuberculosis*. Active TB disease is contagious. That means it can be spread from one person to another. It is most often spread through the air. The germs may enter the air when a person with TB disease of the lungs or throat coughs or sneezes. People nearby may breathe in these germs and get infected. People get sick from the TB germs that are alive and active. This means that they are growing and destroying tissues in a person's body.

TB was once the leading cause of death in the United States. Today, we have many medicines to treat and cure TB disease.

Risk factors

- Being in close contact with a person with active TB disease
- People who were born, traveled, or have lived overseas
- Contact with groups known for passing on TB, such as the homeless, injection drug users, and persons with HIV/AIDS
- Living or working with people who are at high risk for TB, such as those in hospitals, homeless shelters, prisons, nursing homes, or refugee camps

Signs and symptoms

- A cough that lasts two weeks or more
- Pain in the chest, with cough or at rest
- Coughing up blood or thick mucous
- Night sweats
- Feeling weak or tired
- Weight loss
- Not wanting to eat
- Fever
- Swollen neck gland(s)

Diagnosis

- Positive TB skin test
- Positive TB blood test (QuantiferON®-TB Gold In-Tube or T-SPOT®.TB) **AND**
- Positive (abnormal) chest x-ray **AND/OR**
- Signs/symptoms of TB disease

Treatment

TB can be treated by taking several medicines for six to twelve months. It is very important that all medicines are taken exactly as prescribed. If your child stops taking the medicines too soon, the germs that are still alive may become resistant. This makes the TB germs harder to treat.

The standard of care for treatment of active TB is daily administration of medicines from local health department nurses. These nurses meet at regular times with TB patients Monday through Friday to watch them take their medicines and to monitor for any problems. This is called directly observed therapy (DOT). DOT helps patients finish treatment in the least amount of time possible. On weekends and holidays, parents give their child the medicines.

Usually, your child will be isolated at home until he or she is determined to no longer be contagious. Once your child is out of isolation, he or she will be seen in the TB clinic monthly, or as needed, until the end of treatment. Your child may also attend school when out of isolation.

What to watch for at home

- If your child is taking rifampin, it is expected that he or she will have orange urine, tears, and all other body fluids. This orange color will go away at the end of therapy. During therapy, contact lenses may become permanently stained from the orange tears.
- Watch for and report any adverse effects of the medicines. These include:
 - stomach pain
 - nausea
 - vomiting
 - yellowish skin or eyes
 - rash
 - fever
 - changes in vision
 - tingling in the fingers or toes
- Watch and report your child's symptoms. These include:
 - cough getting worse
 - trouble breathing
 - coughing up blood
 - fever not controlled
 - refusal to eat or drink
 - any other unusual symptoms or behavior

Activity, diet and other information

- Take medicines on an empty stomach, either one hour before a meal or two hours after a meal. Do not take the medicines with milk products.
- Your child will have positive TB skin and blood tests for the rest of his or her life. Therefore, when being evaluated for TB in the future, your child will need a chest x-ray. TB skin and blood testing will not be accurate in diagnosing returned or new TB disease.
- Keep your child away from other members of the family while he or she is isolated. Any family member around your child must wear a mask.
- Get other family members and people in contact with your child tested for TB. Write down all names of potential contacts for the health department.
- Do not give your child acetaminophen (Tylenol®) or any form of alcohol since receiving either of these while taking TB medicines can harm the liver.
- Adolescents using hormonal contraceptives who receive rifampin will need to use a barrier method to prevent pregnancy.

If you have any questions, please call:

Nationwide Children's Hospital TB Clinic at 614-722-4452, Monday through Friday, from 8am to 4:30pm.

For all other times, call 614-722-2000. Ask to page the Infectious Disease doctor on call.