Tuberculosis affects people of all ages, nationalities, and social status.

Each year over 15,000 people in the United States are diagnosed with TB disease including approximately 1,700 people in the State of Texas. In almost all instances, however, tuberculosis can be cured with modern medications.

What is tuberculosis?

Tuberculosis or “TB” is a contagious disease that usually attacks the lungs but may spread and affect any other part of the body. This disease can kill a child or an adult if it is not treated quickly and with the appropriate medications.

How is TB spread?

TB is spread very easily from one person to another. People who have active untreated TB germs in their lungs send their germs into the air when they cough, sneeze, or speak. People who are around the person with TB can breathe these germs into their lungs and, without even knowing, become infected. Just inhaling one germ is enough to become infected.

People who breathe in TB germs usually have had very close, day-to-day, contact with someone who has the disease. That’s why most people get TB germs from someone they spend a lot of time with, like a family member, friend, or close co-worker.

One is less likely to get TB from someone coughing in the bus or at a restaurant. It is not spread by dishes, drinking glasses, sheets or clothing.

Who gets tuberculosis?

Any person who inhales the TB germs can get tuberculosis; however, the disease is more frequent in certain groups of people. These groups are called “high-risk groups” and they include the following:

A. Children and adults who live with people who have tuberculosis.
B. People who come from countries or large cities where tuberculosis is common.
C. Poor people.
D. People from shelters or those who live in crowded environments.
E. Homeless people.
F. People in jail.
G. People with AIDS.
H. Drug addicts.
I. People who live in nursing homes.
J. People with a weak immune system. Some examples would be people with diabetes, malnutrition, cancer, or kidney failure.
K. Migrant workers and their families.

What are the symptoms of TB

TB germs can attack any part of the body, but the lungs are the most common target. People with tuberculous disease may have some or all of the following symptoms:

Fever
Weight loss
Night sweats
Constant tiredness
Loss of appetite

What tests are done to know whether or not a person has TB?

1. The tuberculin skin test shows if a person has been infected*
2. A chest x-ray is given if the tuberculin skin test shows that a person has been or is currently infected. The x-ray shows if any damage has been done to the lungs as a consequence of an infection.
3. A sputum test shows if TB germs are present in the thick liquid a person coughs up.

Who should be tested for TB?

1. People who have symptoms of TB.
2. People who have had close day-to-day contact with someone who has active TB disease (this could be a family member, friend or co-worker).
3. People who have HIV infection, lowered immunity or certain medical conditions.
People who are required to do so for employment or school admission.

How is the tuberculin skin test given?

A small amount of a harmless substance called Tuberculin or PPD is placed just under the top layer of the skin on a person's arm with a very small needle and syringe. The needle will only feel like a slight pinch, it is not a shot. A new disposable sterile syringe with needle is used for each test. *The tuberculin skin test is also known as the PPD skin test or the Mantoux test.

How to care for the test area:

1. Don’t cover the area with a band-aid.
2. Don’t scratch the arm. If it itches, put a cold compress on it.
3. Do pat the arm dry after washing it. Don’t rub it dry.

Possible Side Effects

Side effects are uncommon from the PPD skin test. However, a person who has been exposed to TB germs may occasionally have a sizable reaction which may cause the arm to swell and may cause some discomfort. This swelling should disappear in about two weeks.

What does a negative result mean?

1. It can mean that the person has not been infected with TB germs.
2. It can mean that the person was tested too soon after breathing in the germ for the body to react to the skin test. If this happens, the test will have to be repeated again after three months.
3. It can mean that the person's body defenses are weakened and unable to react to the skin test, even thought he/she is infected. When this happens, another type of test is given.

Sometimes, the person with a negative skin test may be given medicine to take as a preventive measure if he/she has spent or is spending a lot of time near someone who has TB.

What does a positive result mean?

It means that TB germs are in the body. Although the person is infected by TB germs, it does not mean that he/she has active TB disease. The doctor may prescribe medications to prevent the development of tuberculosis in the future.

What happens after the results of the PPD skin test are known?

If the PPD test is negative, no further testing is needed at this time.

If the PPD test is positive, a chest x-ray will be needed to see if the germs have started to damage the lungs.

If the x-ray is normal and there are no symptoms, the TB germs are probably inactive and TB disease not present. *TB medication may be given to prevent active TB disease from developing in the future.

If the x-ray is normal but TB symptoms are present, other tests will be needed.

If the x-ray is not normal, more tests will be needed to see if TB or some other disease is present.

What does having a TB infection mean?

Having a TB infection means that the TB germs are in the body but they are in an “inactive” state or they are simply “sleeping.”

In most cases, after TB germs enter the body, normal immune defenses can control the germs by preventing them from growing and spreading to other areas.

The germs can remain alive for years in an “inactive” state. While TB germs are inactive, they can’t harm the person and they can’t spread to other people. The person is infected but not sick.
Sometimes inactive TB germs can be activated months or years later and cause disease. In order to protect an infected person from developing TB disease, the doctor may give the person one medicine for at least 6 months.

People known to have an active TB infection, however, must take up to four medicines for 4-12 months. The kind of medicines and the length of time a person may need to take them depends on the infected person's general health (stage of the disease, the closeness of contact to someone with active TB disease), age, and whether or not there is a suspicion of contact with someone with drug resistant tuberculosis.

Sometimes, a person with advanced TB will cough up blood-streaked sputum.

People with active TB disease may have only mild symptoms. They may be spreading their germs to others without even knowing that they have TB.

Will the PPD skin test have to be taken again?

If the skin test reaction is negative, a person will only need to take the PPD skin test again if he/she is exposed to someone with active TB, has symptoms of TB, or if it is a requirement for school or work.

If the skin test reaction is positive, future reactions usually tend to be positive. Therefore, a person should not take the skin test again but should save the record of the skin test for future reference.

Remember, if a person with proof of a positive skin test reaction has symptoms of TB, or is in the close contact with someone who has an active case of tuberculosis, he/she should not have a skin test but should have a chest x-ray and physical exam.

How can we fight TB?

The best way to fight TB is to make sure that people who need medicine take it regularly as prescribed.

They include:

1. People who are sick with TB: These people have active germs that can infect others. The only way people with TB disease can get well is by taking all their medicine regularly and as directed by the physician. The best way to take your medicine is by Directly Observed Therapy (DOT). In DOT, each patient with TB disease or infection receives medication at an appointed place and time and is observed ingesting EVERY DOSE.

2. People who are infected but are not sick: These people have inactive germs but the TB germs can become active later on in life and make them sick. Taking preventive medicine every day, as prescribed by the doctor, is the best way to get rid of TB germs and prevent illness. In some instances, preventive medicine may not be prescribed because of their age or certain medical conditions.

3. People in close contact with infectious tuberculosis cases, regardless of age: These people should take medicine as directed by the doctor in order to prevent TB.

Can TB patients infect other people?

Usually, after a week or more of taking effective medication, most patients with TB disease will stop spreading germs. A doctor will test the patient and then decide when the patient is no longer contagious. Most TB patients live at home and can continue their normal activities as long as they are taking their TB medicine.

If you or anyone you know has questions about TB, you may call your local health department.

ALL TB TESTS, MEDICINE AND CHECK-UPS ARE AVAILABLE FREE OF CHARGE AT THE TEXAS DEPARTMENT OF HEALTH CLINICS.

The University of Texas Health Center at Tyler
11937 U.S. Highway 271
Tyler, TX 75708-3154