What You Need to Know about Tuberculosis (An outline of TB)

What is Tuberculosis (TB)?

TB is a disease caused by TB bacteria. It is a disease, which attacks the lungs or other organs. If it remains untreated, it can develop into a serious illness.

You can get TB regardless of age, nationality or income.

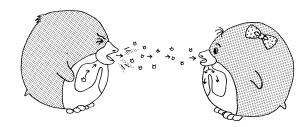
How does TB spread?

TB spreads from one person to another through the air.

The bacteria get into the air, when a person with untreated TB disease of the lungs or throat coughs sneezes or snores. When people nearby breathe in the bacteria they become infected. Those who have very close, day-to-day, contact with the TB patients are most likely to breathe in the bacteria. Therefore, TB is spread to those who spend a lot of time with the patient such as family members, friends or colleagues. Most of them will be required to undergo a check-up program designed for family and the others with close contact.

Two "stages" of TB:

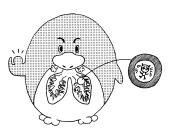
Infection (or latent) and Active TB (or TB disease).



TB bacteria are spread through the air.

Having TB "infection" means:

TB bacteria are in the body but are not active. When TB bacteria enter the body, in most Cases the immune system protects the body by building a wall around the bacteria, like a scab forming over a cut. The bacteria can stay alive inside these walls for years in an inactive state. This is called TB infection.



If your body's defense (immunity) works against TB bacteria, you will not contract the disease even if you are infected.

Characteristics of TB (bacteria) infection are:

The TB bacteria are present in the body.

There are no symptoms.

The person with TB infection is not ill.

He is not infectious (not contagious).

For most people, TB infection never develops into TB disease and the bacteria remain inactive throughout his/her lifetime.

They are not even aware of their infection.

But for some, especially those with weak immune system, the bacteria become active and cause TB disease.

Preventative treatments may be given to prevent TB infection from developing into a disease. If you see symptoms of TB disease, you should see a doctor right away.

What is TB disease?

TB disease is an illness caused by active TB bacteria.

There are some people whose immune systems are too weak to prevent the bacteria from growing when they breathe in TB bacteria. This means the bacteria are active in the body and will multiply, causing TB disease.

Other people may contract the disease later when their immune systems weaken and the inactive bacteria become active. This might be caused by aging, diabetes, a serious illness, drug or alcohol abuse, or HIV infection, which causes AIDS. Also babies and young children do not have strong enough immune systems to fight TB bacteria.

If the TB patient do not receive any treatment such as required medication, their TB disease can become a serious illness that may even result in death. However, TB disease is curable if appropriate medical treatment is received and medicine is taken as directed. The disease develops when the immune system is so weak that it causes inactive TB bacteria to become active and break up the walls.

Characteristics of active TB:

TB bacteria are active in the body.

Symptoms of TB (disease) are often present, which includes:

cough

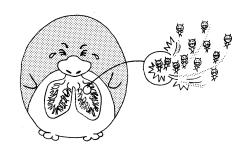
weight loss

loss of appetite

night sweats

fever

chest pain



If TB bacteria become active and multiply, they will make you ill.

Any activities such as coughing, sneezing, snoring, laughing, singing, or just talking which release bacteria into the air through the sputum may infect others.

In order to treat the disease, you must take medicine as directed

Symptoms of TB;

TB bacteria can attack any part of the body, but the lungs are the most common target.

People with TB disease may have some or all of the following symptoms;

cough continuing for more than 2 weeks

fevers (especially slight fevers)

weight loss

night sweats

constant tiredness

loss of appetite

A person with advanced TB may also cough out bloody sputum.

However, most TB patients only show mild symptoms. It is important to remember that you may spread TB bacteria to others without even noticing that you have TB.

What are the tests for TB?

- -Tuberculin Mantoux PPD skin test: to see whether a person has been infected. However this does not show whether TB disease has developed. It can be difficult to make a judgment if the person has been BCG vaccinated.
- -Chest X-ray: to check for any disorder (or the disease itself) in the lungs.
- -A sputum test: to look for TB bacteria in the sputum.

People who should get tested for TB;

Those with symptoms of TB (e.g. cough, phlegm, fever or weight loss)

Those who have close day-to-day contact with someone who has active TB, for example, family members, friends or co-workers.

Those who are infected with HIV or those with low immunity.

Those who are required to be tested for starting their jobs or schools.

Do TB disease patients infect others?

The medicine given to TB patients usually stops release of TB bacteria within a few weeks. A doctor will take X-rays and check the sputum of the patient to determine he/she becomes no longer infectious. As long as the patient takes medicine as directed, he/she will not spread the bacteria.

The most important thing is to continue taking the prescribed medicine until the doctor says you may stop. This will enable you to recover from TB, maintain your health and prevent the spread of bacteria to others.

Most TB patients can live at home and continue their normal activities as long as they take their TB medicine.

What is drug resistant TB?

Some TB bacteria are resistant to one or more types of TB medicine. This is called multidrug-resistant TB (MDR TB) and it is a very serious problem. Patients with MDR TB disease are prescribed combination of non resistant medicine. The treatment period for MDR TB disease is longer than common TB disease.

Also, non-resistant bacteria can become resistant when medication is skipped, so taking proper medication is important and necessary.

How is TB related to HIV/AIDS?

Having both TB and HIV infections greatly increases the risk of developing TB disease. This is because HIV weakens the body's immune system and it leads to development of TB disease. As a result, TB disease is very common among people infected with HIV.

At the early stages, a person can be both TB and HIV infected without any symptoms. It is therefore very important to be tested for TB if you are HIV positive and to be tested for HIV if you are infected with TB. And with that, a person with both infections can begin taking medicine and prevent TB disease. Among the diseases associated with HIV, TB is one of the most preventable and curable.

Fighting against TB

The best way to fight against TB is to make sure that those who need medicine take it regularly. Treatment is required for the following people:

-Those with TB disease

These people have active TB bacteria that can infect others. The only way they can get well is to take medicine as directed.

-Those who are infected but have not developed the disease

These people have inactive bacteria which are walled off. They may not have the disease now but the TB bacteria may become active later on in life causing the illness. Also, preventive medicine may not always be prescribed to those who are infected due to their age or medical conditions. If you ever see symptoms of TB disease, you should see a doctor right away.