

# Tuberculosis

## What Is Tuberculosis (TB)?

Tuberculosis is a bacterial disease that usually affects the lungs but can also damage other parts of your body and cause serious illness. A person may carry the TB germ, but may never develop the disease, if that person is in good health.

## Who Is At Risk of Contracting Tuberculosis?

Anyone can get Tuberculosis, but some people are at a higher risk of contracting TB because they may come in contact with TB patients at their work locations:

- Health care workers in hospitals and long-term care facilities;
- Correctional facility employees, such as guards and juvenile counselors;
- Court employees;
- Family members or co-workers who have contact with individuals who have an "active" case of Tuberculosis.

## What Are Some of The Symptoms of "Active" Tuberculosis?

- Fatigue
- Loss of Appetite
- Night Sweats
- Weight Loss
- Persistent Cough (that brings up phlegm or sometimes blood and lasts for more than three weeks)
- Fever



## How Is Tuberculosis Spread?

There is a difference between TB infection and TB disease. TB infection occurs when the germs are in the body but are not active. This means a person has a positive PPD skin test but has negative results from a chest x-ray or sputum culture. TB disease occurs when the germs have become active in the lungs and the person becomes contagious: the germs are no longer being fought by the body's defense system. Any number of reasons can cause the body's defense system to weaken (age, drug or alcohol abuse, HIV infection, etc.) and make a person more susceptible.

A person must have "active" TB in order to spread the disease to others, usually by coughing, sneezing, speaking or singing. There needs to be prolonged and continual contact with someone who has "active" TB in order to catch it. A person is more likely to get TB from a person at home or in the workplace than from someone coughing on the subway, or using a rest room.

## How is Tuberculosis Infection or Disease Detected?

In order to detect whether a person has been exposed to the TB bacteria or has developed the disease, a Mantoux PPD Tuberculin Skin Test is done. A small amount of Purified Protein Derivative (PPD) is injected under the skin of the forearm. Approximately 48-72 hours later the site of the injection is then evaluated. From the length and depth of the "bump", a qualified health care professional is able to determine if an individual needs to have a chest x-ray and sputum test. If the initial PPD test is positive, the person has been infected. A positive skin test does not mean that the individual has the active disease (a person can have the infection in their

body and never become an active case). A chest x-ray is then usually given, and if it is not normal, a sputum test is then given (this looks for TB germs in the liquid a person coughs up). The x-ray and sputum test confirm whether or not a person has "active" Tuberculosis.

### **Treatment of Tuberculosis Disease**

The treatment of Tuberculosis is a long process lasting from six to twelve months (longer if necessary). If the antibiotics are not taken for a long enough period of time, some bacteria may remain in the patient's body, causing a re-emergence of the disease. The patient then develops a resistance to the drugs that were used, and a new course of therapy must begin.

### **What is Multi-Drug Resistant Tuberculosis (MDR-TB)**

Sometimes, after a few weeks, a patient may begin to feel better and stop taking his/her medication. This produces a resistance to the drugs, and the individual must be placed on a new course of therapy. If patients do not take their medication for the prescribed period, they can become multi-drug resistant. This happens when the body becomes immune to the drug being taken and the drug loses its effectiveness. If patients become immune to many TB drugs, treating them becomes a problem. It is imperative that the patients take all the medication that is prescribed for them.

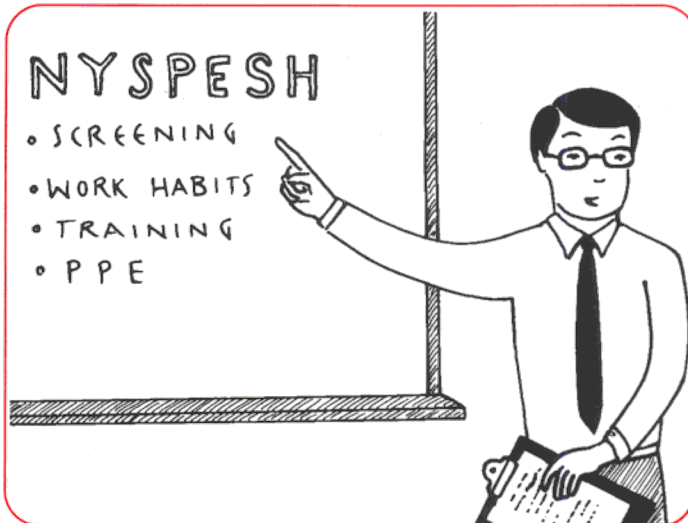
### **PESH Guidelines for Tuberculosis Control**

To combat the spread of Tuberculosis, guidelines have been established to address TB control, patient care and worker education.

It has been determined that workers in health care settings, correctional institutions, homeless shelters, long-term care facilities and drug-treatment centers are at a greater risk of contracting TB. These facilities need to maintain a higher standard of TB control than other work locations. A written TB control plan needs to include identifying sources of exposure, employee screening and patient care.

## **NYSPESH**

- SCREENING
- WORK HABITS
- TRAINING
- P P E



### **New York State Department of Health Guidelines on TB in Health Facilities**

The New York State Department of Health has zeroed in on Tuberculosis in hospitals, the care of patients as well as the education of their employees.

Hospitals must review their policies regarding TB, update them, if necessary, and make that policy available to all employees. They need to have written procedures for the diagnosis and treatment of patients; the care given to them, including the isolation of patients with "active" TB; the appropriate amount of medication therapy; the necessary ventilation in the patient's room (the ability to have complete air changes at least six times per hour), as well as how to transport patients to and from their rooms.

Workers need to be educated about the mode and risk of transmitting and spreading TB, the difference between TB infection and "active" TB, and the procedures for diagnosis (PPD, Chest X-Ray, and Sputum Tests). Workers also need to know what protective equipment is needed (gowns, gloves, masks, respirators) at the workplace and when they should wear it.

## **Protection on the Job Against Tuberculosis**

There are many ways for employees and employers to protect themselves against the possibilities of contracting Tuberculosis. Some of them include:

### **For Employers**

- Have appropriate procedures in place to protect workers against infection;
- avoid overcrowding and provide properly ventilated areas for patients and workers;
- Maintain proper records;
- Make sure workers are tested and diagnosed;
- Train workers on TB.

### **For Workers**

- Obtain a copy of the facility's written procedures and study them;
- Make sure you are tested at least once a year;
- See your physician as necessary;
- Receive and continue to take appropriate medication (if necessary);
- Make changes on how you do your job.