Tuberculosis

Tuberculosis (TB) is a highly infectious bacterial disease caused by a germ (*Mycobacterium tuberculosis)*. TB can affect any part of the body. When it affects the lungs, it is called pulmonary TB. The commonest form of TB is pulmonary TB. It affects over 2 million people in India. TB in any other part of the body (i.e. other than lungs) is called extra-pulmonary TB.

How does TB spread?

TB germs usually spread through tiny droplets in the air, when a patient with pulmonary tuberculosis coughs or sneezes. When these droplets are inhaled by a healthy person, s/he gets infected with TB. This infected person will have a 10% lifetime risk of developing TB. Spread of disease is increased in poorly ventilated houses where many people live close together or in high dust areas like mines and quarries. An undernourished or malnourished patient is also at a high risk of contracting and dying of TB. Both drugs and nourishment are needed to achieve a cure in such persons. Children can also get both forms of TB.

When should TB be suspected?

The symptoms of pulmonary TB are:

- Cough with sputum for two weeks or more
- Pain in chest
- Sometimes the presence of blood stained sputum (haemoptysis) with symptoms like:
  - Rise in evening temperature
  - Night sweats
  - Loss of weight
  - Loss of appetite.

A person with cough for two weeks or more is a suspect for TB and should be referred to a PHC/CHC/DH for the confirmation of diagnosis.

How to diagnose TB?

Sputum examination is the main tool for diagnosing pulmonary TB.

The diagnosis is made when the germ is present in the sputum of the patient. At least two sputum samples have to be tested (one of which has to be collected first thing in the morning at the patient's home and the other at the health facility). A receptacle for collection of sputum at home is given to the patient at the microscopy centre at the health facility). The two samples should be collected for examination preferably within 24 hours. The sputum is stained by a special dye and examined under a microscope by trained personnel.