

Almaty 2015 year

# INTRODUCTION

- Pulmonary Tuberculosis (TB) is an infectious disease that mainly affect the lungs parenchyma.
- TB is a contagious bacterial (M. tuberculosis)infection that mainly affects the lungs parenchyma, but may spread to other organs.



# **Incidence and Prevalence**

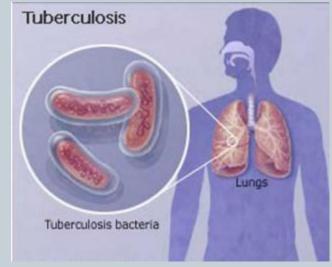
- 1/3rd of the world's population is infected with M. tuberculosis
- Tuberculosis remains one of the top three killers



#### Cause

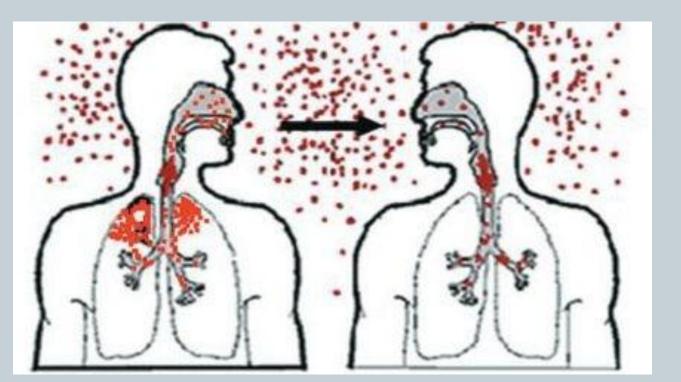
- <u>Tuberculosis</u> (TB) is caused by <u>Mycobacterium</u>
   <u>tuberculosis</u>, which produces characteristic
   tuberculous changes in the lung.
- The causative agent of tuberculosis was discovered by Koch In 1882.





# • TB spread from person to person by airborne transmission.

Talking
Coughing
Sneezing
Laughing



# **Risk factors**

- CLOSE CONTACT WITH SOME ONE WHO HAVE ACTIVE TB.
- IMMUNO COMPROMISED STATUS (ELDERLY,CANCER)
- DRUG ABUSE AND ALCOHOLISM
- PEOPLE LACKING ADEQUATE HEALTH CARE
- PRE EXISTING MEDICAL CONDITIONS (DIABETES MELLITUS, CHRONIC RENAL FAILURE)
- IMMIGRANTS FROM COUNTRIES WITH HIGHER INCIDENCE OF TB.
- LIVING IN SUBSTANDARD CONDITIONS

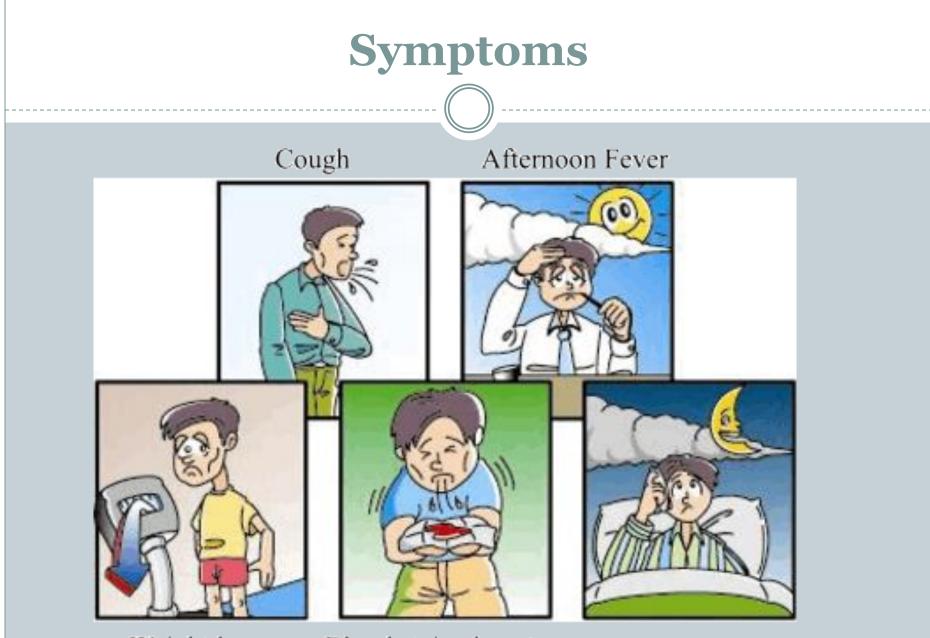
## Tuberculosis is either latent or active.

If you have latent <u>tuberculosis</u> (TB), you do not have symptoms and cannot spread the disease to others. If you have active TB, you do have symptoms and can spread the disease to others.



# **Symptoms**

- Breathing difficulty
- Chest pain
- Cough (usually with mucus)
- Coughing up blood
- Excessive sweating, especially at night
- Fatigue
- Fever
- Weight loss
- Wheezing
- Anorexia



Weight loss

Blood stained sputum

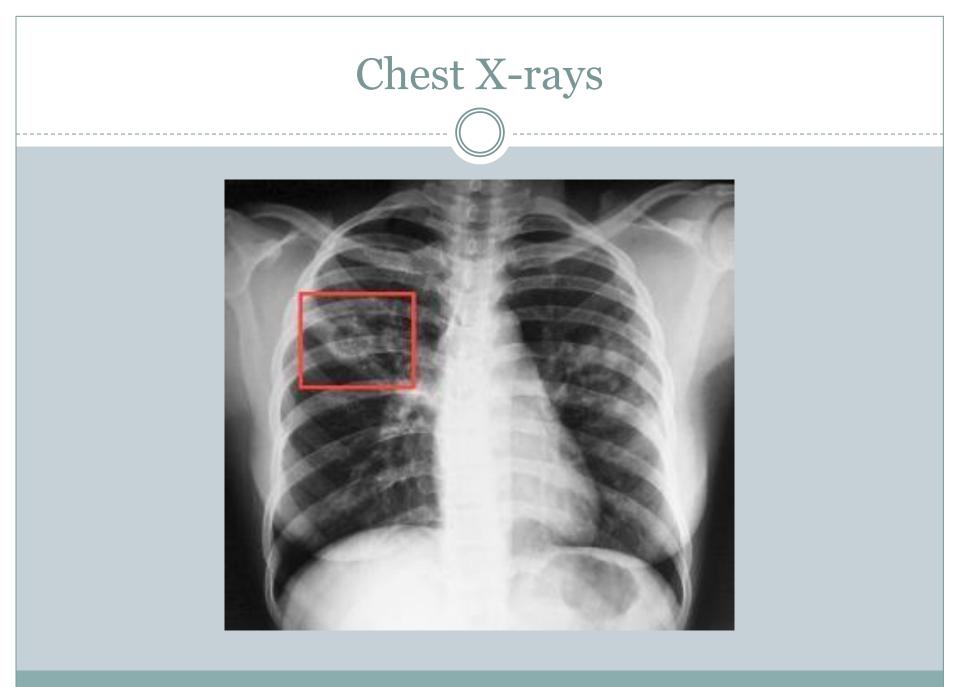
Night sweats

# Diagnosis of pulmonary tuberculosis

Tests that may be ordered include:

- <u>Tuberculin skin test</u>
- Chest X-rays
- Analysis of sputum





#### Tuberculosis treatment

 The standard «short» course treatment for tuberculosis (TB), is isoniazid, rifampicin, pyrazinamide, and ethambutol.



# Prevention

 TB is preventable, even in those who have been exposed to an infected person. Skin testing for TB is used in high risk populations or in people who may have been exposed to TB, such as health care workers.

• Some countries with a high incidence of TB give people a BCG vaccination to prevent TB.

# References

- http://www.medicinenet.com/tuberculosis
- http://www.stoptb.org
- http://www.who.int/tb
- http://www.microbiologybytes.com/video/Mtubercu losis.html
- http://www.cdc.gov/TB/topic/basics/default.htm

# THANK YOU FOR YOUR ATTENTION!