

**Kingdom of Saudi Arabia**

**Ministry of Health**

**General Health Agency**

**General Department of Infectious Disease Control**

## **National Tuberculosis & Prevention Program**

**Let us unite in fighting tuberculosis**

**To do any of the followings, you need to breathe:**

**Laughter    Crying    Cheering    Talking    Whispering**

### Do you know that:

1. One third of the world's population carries Mycobacterium tuberculosis.
2. Every year, nearly nine million people are infected with tuberculosis, about a million and a half of them die.
3. The number of female deaths due to tuberculosis annually is more than the number of deaths due to pregnancy and childbirth.
4. Tuberculosis is a curable disease and should not be associated with a social stigma.
5. All people suffering from continuous cough for three weeks should be examined through Phlegm for TB bacilli examination.
6. All person in contact with TB patients should be brought to health care institutions for examination.
7. Proper and good nutrition is a key factor that helps to cure and prevent tuberculosis.
8. Sputum for tuberculosis bacilli should be examined for pulmonary tuberculosis patients at diagnosis and at the end of the sixth month of treatment to follow the progress of treatment.
9. Good ventilation and lighting in the accommodation and work are important factors for TB prevention.
10. A patient with pulmonary tuberculosis left untreated can transmit it to approximately fifteen people annually.
11. Tuberculosis is more prevalent in the productive age groups (15-45 years) which adversely affects social, economic development in society.



وزارة الصحة  
Ministry of Health

### **How does drug-sensitive tuberculosis becomes resistant to them?**

Drug resistance results from improper use of antibiotics biochemical prophylaxis for drug-sensitive tuberculosis patients.

Such inappropriate use of drugs is due to a number of behaviors, including the fact that health care workers give improper treatments, and patients are not subject to direct supervision and the patient does not take his drugs regularly, hence arises a resistance to drugs,

direct and irregular patient taking medication arises resistance mainly in areas with weak control programs, mostly due to the lack of application of short-term treatment under direct supervision in those areas.

### **What is the difference between treating drugs-sensitive tuberculosis and drugs sensitive tuberculosis?**

Duration of treatment for drug sensitive tuberculosis ranges from 6 to 8 months, while in multiple drugs-sensitive tuberculosis it reaches a duration not less than two years.

## History of Tuberculosis

- **2400 BC:**  
The first official recognition of tuberculosis
- **460 BC:**  
Hippocrates mentioned the word phthisis which is a Greek word and mean tuberculosis
- **1650 AD:**  
Silivas identified tuberculosis as characteristic and persistent changes in the lungs and other organs of patients infected with tuberculosis.
- **1670 AD:**  
Willis describes a fibrous, smoke and chronic tumor.
- **1854 AD:**  
Building of the first clinic for tuberculosis patients in the city of «Gurbersdorf»
- **1882 AD**  
Roper Koch discovered tuberculosis bacillus as a cause of the disease.
- **1895:**  
Roentgen discovers the X-ray
- **1900:**  
Calmette and Guerrin discovered BCG vaccine
- **1921:**  
For the first time in Paris, BCG vaccine is used.
- **1943:**  
Discovery of Streptomycin Antibiotic
- **1993:**  
WHO declares tuberculosis a global emergency.
- **1995:**  
WHO launches short treatment strategy under direct supervision (DOTS)

## Facts about Tuberculosis:

- **What is tuberculosis:**

Tuberculosis is an infectious disease that primarily causes Mycobacterium tuberculosis, it mainly affects the lungs (pulmonary tuberculosis), but it can attack any other part of the body (tuberculosis outside the lung).

- **Who is at risk of TB infection?**

Anyone can get TB, as the disease does not differentiate between any races, ages and income levels.

The following factors are associated with a higher incidence of the disease:

- Close contact with people with active tuberculosis.
- HIV infection.
- Poverty.
- Malnutrition.
- Homelessness.

- **What are the symptoms of the disease?**

A person with pulmonary tuberculosis may experience any or all of the following symptoms.

Other symptoms depend on the affected organs.

- Fatigue
- Night sweating
- Dyspnea
- Bloody cough
- Persistent cough
- Weight loss
- Fever
- Anorexia

**As for the other symptoms, their appearance depends on infected organs, for example,**

- Swollen lymph nodes from purulent drainage when infected.
- Pain and swelling when joints are injured.
- Headache, fever, stiff neck and drowsiness when infected
- Meningococcal tuberculosis.

### How can we diagnose pulmonary tuberculosis?

Microscopic examination of sputum smears is the most cost-effective way to detect suspected TB patients and refer them to health services, and it detect positive sputum smear in highly contagious pulmonary tuberculosis cases. The diagnosis of tuberculosis is conducted through the patient's history, clinical examination and diagnostic tests, where a sputum sample is delivered to the laboratory, then the results of the microscopic examinations are entered in the laboratory record. The purpose of that is to perform a lab microscopic examination of the sputum smear for all those suspected of being infected with TB, as well as the registration and treatment of all patients diagnosed with tuberculosis.

It is the most effective strategy currently available for tuberculosis control. Achieving cure rates close to 95% even in the poorest countries. Prevent the emergence of MDR-TB cases by ensuring that patients are committed to treatment and complete treatment.

### Chemical treatment under direct supervision (DOTS)

- It is the most effective strategy currently available for tuberculosis control.
- Achieving cure rates close to 95% even in the poorest countries.
- Prevents the emergence of MDR-TB cases by ensuring that patients are committed to treatment and complete it.

#### **Clinical Health Education Department**

For further questions kindly contact us via email:

[Hpromotion@moh.gov.sa](mailto:Hpromotion@moh.gov.sa)