



WHAT IS TUBERCULOSIS?

Tuberculosis (TB) is a major global cause of death, caused by a bacterium called *Mycobacterium tuberculosis*. Infection occurs through airborne transmission. Timely diagnosis is essential for treatment and transmission control.

WHAT IS THE BURDEN OF TB?¹

TB is one of the top infectious disease killers in the world.



10 million people develop TB disease each year

> 1 million people die from TB disease each year

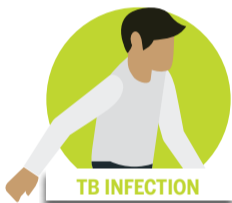
WHAT ARE THE TWO MAIN FORMS OF TB?^{1,2}

TB is a spectrum which ranges from asymptomatic TB infection to symptomatic TB disease.

TB INFECTION

- No symptoms
- Not contagious

Close contact with people who have TB disease increases the risk of becoming infected.



TB DISEASE

- May present symptoms
- Contagious

The risk of developing TB disease is highest in the first two years after infection.



Most people with TB infection never develop TB disease.

~5% of those infected will go on to develop TB disease within 2 years.

HOW DOES TB SPREAD?¹



TB is spread when people who have TB disease expel bacteria into the air (e.g., by coughing).

WHAT ARE THE SYMPTOMS OF TB DISEASE?³



Night sweats



Cough and fever



Unexpected weight loss

HOW IS TB DIAGNOSED?³



TB is diagnosed using both clinical evaluation and diagnostic testing. Diagnostic tests include:

TB INFECTION



Skin tests: TST* or TBST**



Blood test: TB IGRA***

TB DISEASE



Chest X-Ray



Lab tests (e.g., bacterial culture, smear microscopy...)

*TST: tuberculin skin test
** TBST: *Mtb* antigen-based skin test
***IGRA: interferon gamma release assay

HOW IS TB PREVENTED?¹

The Bacille Calmette-Guérin or BCG vaccine can provide protection, especially from severe forms of TB in children.

Diagnosing people with TB infection is important to prevent progression to TB disease and help stop the spread of TB.

HOW IS TB TREATED?^{2,3}



TB INFECTION
Treatment can prevent progression to TB disease

TB DISEASE
Treatment can stop the disease

TB is curable if well diagnosed and treated appropriately with antibiotics.

- Treatment is long-term: 3 months to 2 years. It is very important to complete the full course to prevent the bacteria from becoming resistant to the treatment.
- New technologies such as targeted next-generation sequencing (tNGS) can help detect resistance to TB drugs and improve treatment efficacy.

References:

1. WHO. Global Tuberculosis Report 2025. <https://www.who.int/publications/i/item/9789240116924>
2. Trajman A et al. Tuberculosis. *The Lancet*. 2025;405:850–866
3. WHO. Consolidated Guidelines on Tuberculosis: Module 3 – Diagnosis (2025). <https://www.who.int/publications/i/item/9789240107984>