

Tuberculosis: Frequently Asked Questions Answered

Q1. What is tuberculosis (TB)?

Tuberculosis is a serious infectious disease caused by bacteria *Mycobacterium tuberculosis*. It primarily affects the lungs, but can affect any part of the body.¹

Q2. How is TB spread?

TB is transmitted from person to person through coughing and breathing by airborne droplets that contain bacteria.¹

Q3. What are the symptoms of TB?

- Cough lasting over 2-3 weeks
- Unintentional weight loss and weakness
- Night sweats and fever
- Chest pain
- Coughing up blood or sputum
- Loss of appetite

If you have these symptoms, you should consult a doctor. 1,2

Q4. What are two types of TB conditions?

• Latent Tuberculosis (No symptoms)

Latent TB infection (LTBI) affected individuals do not show any clinical symptoms, radiological abnormalities, or microbiological evidence of disease. And they cannot spread TB to others.

• Active TB (Symptoms present)

Active TB affected individuals show symptoms like persistent cough, fever, night sweats, weight loss, and fatigue. And they can spread TB to others through airborne droplets.³

Q5. How is TB diagnosed?

- Immune-based diagnostics
- X-ray
- Clinical symptoms and scores
- Cough detection
- Culture of *Mycobacterium tuberculosis* and identifying its resistance profile using phenotypic and genotypic methods
- Next-generation sequencing
- Sputum and non–sputum based molecular diagnosis⁴

O6. Can TB be cured?

TB can be cured in most cases with proper treatment, including standard and short-course regimens. But cure rates are lower in multidrug-resistant TB.^{5,6}

Q7. What happens if TB is left untreated?

- Most people will ultimately die
- Suffer long-term disability
- Some may recover naturally, with outcomes depending on disease severity, individual health, and setting. ^{7,8,9}

Q8. How can TB be prevented?

- TB can be prevented through vaccination (BCG)
- Preventive therapy (especially for high-risk groups like people living with HIV)
- Early detection and treatment
- Targeted screening
- Good hygiene and ventilation
- Wearing masks in high-risk areas^{11,12}

O9. Can TB come back after treatment?

TB can come back after treatment, by factors such as incomplete adherence, HIV infection, older age, lung cavitation, diabetes, and high background TB incidence. 13,14,15

Q10. What is drug-resistant TB?

Drug-resistant TB caused by bacteria that do not respond to standard anti-TB drugs. Including forms like:

- Multidrug-resistant TB (MDR-TB) resistant to first-line drugs Isoniazid and Rifampicin
- Extensively drug-resistant TB (XDR-TB) resistant to multiple second-line drugs

The mechanism of resistance develops further, and ultimately causes uncontrollable totally drug-resistant TB (TDR-TB) that makes treatment longer, more complex, and less successful. 16,17

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