



## What

Tuberculosis (TB) is a bacterial disease caused by members of the Mycobacterium tuberculosis complex. TB is transmitted when a patient with a contagious form of the infection coughs, releasing bacilli into the air. The lungs are the primary site of infection and disease, but TB can also affect other organs.

Inhalation of aerosol droplets containing the bacteria can result in either immediate clearance of the organism, primary disease, or latent infection. People can also acquire bovine TB (caused by *M. bovis*) by consuming unpasteurized dairy products from infected animals.



## Who

Over 80% of tuberculosis (TB) cases and deaths occur in low- and middle-income countries. Risk factors for TB infection and disease can be categorized into two groups: impaired immunity (host factors) and increased exposure to infectious individuals (environmental factors). Poverty, HIV infection, and drug resistance are major contributors to the resurging global TB epidemic. While tourists are generally not considered a typical risk group, this can depend on the level of exposure. Humanitarian aid workers and healthcare personnel working in high-prevalence settings, such as refugee camps, HIV clinics, and inpatient hospital wards, are at an increased risk.



## Where and when

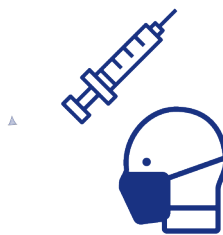
Tuberculosis (TB) occurs worldwide, but its incidence varies by region.

In some countries in sub-Saharan Africa and Asia, the annual incidence can be several hundred cases per 100,000 population.

Drug-resistant TB is an increasing concern, making prevention and treatment more challenging. It is important to always discuss TB risk with your healthcare advisor, especially if traveling to high-prevalence areas.

## Prevention

To prevent tuberculosis (TB), avoid high-risk social contexts and use precautions in high-risk settings. The BCG vaccine mainly protects children from severe TB, with variable efficacy in adults. Early detection through pre- and post-travel testing can guide treatment, and travelers should avoid unpasteurized dairy products to prevent *M. bovis* and other foodborne pathogens. For personalized advice, consult a travel doctor.

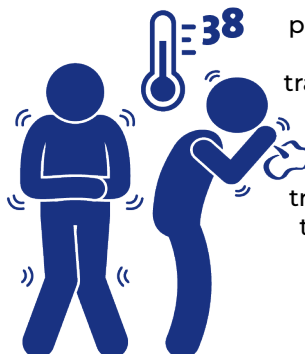


## Treatment

*M. tuberculosis* infection can be detected by a positive tuberculin skin test (TST) or a blood test 8–10 weeks after exposure. The treatment of tuberculosis must be tailored to each individual, considering factors such as patient characteristics and medical history, drug susceptibility and toxicity, disease localization, and public health considerations.

## Symptoms

Progression to TB disease can take anywhere from weeks to decades after initial infection. Overall, only 5%–10% of otherwise healthy individuals infected with *M. tuberculosis* will progress to TB disease during their lifetime. In 70–80% of cases, the disease affects the lungs. Symptoms of primary disease primarily include fever and chest pain. Latent (non-active) infection does not cause clinical symptoms, but active disease can develop many years after a period of latency, presenting with symptoms such as cough, weight loss, fatigue, fever, night sweats, chest pain, dyspnea, and/or coughing up blood.



## In case of infection

Patients with infectious ('open') pulmonary tuberculosis should be isolated or take precautions to prevent airborne transmission to others until they have been treated sufficiently. Treatment is individualized and typically lasts for several months. The success rate of treatment depends on various factors, and the rise in drug-resistant TB continues to significantly impact treatment outcomes. The prognosis is worse when there is limited or delayed access to appropriate treatment and care.