Tuberculosis compared with other diseases caused by a

Countries, United States

Tuberculosis (TB) describesan infectious disease that has plagued humans since the Neolithic times. Tuberculosis — or TB, as it’s commonly called — is a contagious infectionthat usually attacks the lungs. It can also spread to other parts of the body, like the brain and spine.

Tuberculosis is an infectious disease that usuallyaffects the lungs. Compared with other diseases caused by a single infectiousagent, tuberculosis is the second biggest killer, globally. During the 17th and 18thcenturies, TB caused up to 25% of all deaths in Europe. In the 20th century, TBwas a leading cause of death in the United States. There are two forms of thedisease: Latent TB: The bacteria remainin the body in an inactive state. They cause no symptoms and are notcontagious, but they can become active. That means you don’t have any symptomsand you’re not contagious.

But the infection is still alive in your body andcan one day become active. You are at high risk for re-activation — forinstance, you have HIV, your primary infection was in the last 2 years, yourchest X-ray is abnormal, or you are immunocompromised Active TB disease: Thebacteria do cause symptoms and can be transmitted to others. Ninety percent ofadult cases of active TB are from the reactivation of a latent TB infection. About one-third of the world’s population is believed to have latent TB. Peopleinfected with TB bacteria have a 5–15% lifetime risk of falling ill with TB. However, persons with compromised immune systems, such as people living with HIV, malnutrition or diabetes, or people who use tobacco, have a much higher risk offalling ill. Two organisms causetuberculosis — Mycobacterium tuberculosis and Mycobacterium bovis.

Symptoms: Common symptoms of activelung TB are cough with sputum and blood at times, chest pains, weakness, weightloss, fever and night sweats. How does it spread? TB is spread from person toperson through the air. When people with lung TB cough, sneeze or spit, theypropel the TB germs into the air. Multidrug-resistantTB (MDR-TB), Extensively drug-resistant TB (XDR-TB) Anti-TB medicines have beenused for decades and strains that are resistant to 1 or more of the medicineshave been documented in every country surveyed. Drug resistance emerges whenanti-TB medicines are used inappropriately, through incorrect prescription byhealth care providers, poor quality drugs, and patients stopping treatmentprematurely. Multidrug-resistanttuberculosis (MDR-TB) is a form of TB caused by bacteria that do not respond toisoniazid and rifampicin, the 2 most powerful, first-line anti-TB drugs.

MDR-TBis treatable and curable by using second-line drugs. However, second-linetreatment options are limited and require extensive chemotherapy (up to 2 yearsof treatment) with medicines that are expensive and toxic. In some cases, more severedrug resistance can develop. Extensively drug-resistant TB (XDR-TB) is a moreserious form of MDR-TB caused by bacteria that do not respond to the mosteffective second-line anti-TB drugs, often leaving patients without any furthertreatment options. Worldwide, only 54% ofMDR-TB patients and 30% of XDR-TB are currently successfully treated. In 2016, WHO approved the use of a short, standardised regimen for MDR-TB patients whodo not have strains that are resistant to second-line TB medicines. .

Patientswith XDR-TB or resistance to second-line anti-TB drugs cannot use this regimen, however, and need to be put on longer MDR-TB regimens to which 1 of the newdrugs (bedaquiline and delamanid) may be added. DiagnosisTuberculosis is diagnosed by detecting Mycobacterium tuberculosisbacteria in clinical specimen which is taken from the infectant. There aredifferent types of diagnosis process for TB.