

Facts about TB

Tuberculosis (TB) can usually be treated with a course of four standard, or first-line, anti-TB drugs. However, if these drugs are misused or mismanaged, multidrug-resistant TB (MDR-TB) can develop.

Multidrug-resistant TB (MDR-TB)

MDR-TB is a specific form of TB, resistant to at least isoniazid and rifampicin, the two most powerful anti-TB drugs. MDR-TB takes longer to treat with second-line drugs, which are more expensive and have more side-effects. It has been demonstrated, however, that management of MDR-TB is feasible and effective in resource-limited settings.

In 2008, there were 29,423 MDR-TB cases reported throughout the world by 127 countries.¹ However, these cases only represent about 7% of the MDR-TB cases estimated to have emerged that year. In 2008, an estimated 440,000 cases of MDR-TB emerged globally (3.6% of all new TB patients). Almost 50% of MDR-TB cases worldwide are estimated to occur in China and India. About 100,000 MDR-TB cases are emerging in China annually. To date, 12 countries have reported proportions of MDR-TB of 6% or more among new TB cases. Five of these countries also report MDR-TB proportions of 50% or more among previously treated cases. All of these are located in the eastern part of Europe or in Central Asia. China has reported proportions of MDR-TB of 5.7% among new cases and 25.6% among those previously treated.

In 2008, MDR-TB caused an estimated 150,000 deaths.

Second-line drugs

Second-line drugs are used for treating MDR-TB. However, management of second-line drugs is complex, especially when individualised treatment regimens are used.²

Drugs are frequently changed as a result of adverse effects, delayed results and poor response to treatment. In addition, most second-line drugs have a short shelf-life, global production of quality assured drugs is limited, and drug registration may be a lengthy and costly process that is not always attractive to drug manufacturers.

Steps to ensure an uninterrupted drug supply must begin six months or more in advance of the anticipated need, and drug needs must be estimated as accurately as possible. Countries should only use drugs that have been quality-assured by a stringent drug regulatory authority recognized by WHO, a WHO prequalification programme or that meet WHO standards.

¹ Multidrug and extensively drug-resistant TB (M/XDR-TB): 2010 global report on surveillance and response.

http://whqlibdoc.who.int/publications/2010/9789241599191_eng.pdf

²From Guidelines for the programmatic management of drug-resistant tuberculosis Emergency update 2008, WHO.