World Health Organization

MULTIDRUG-RESISTANT TUBERCULOSIS (MDR-TB)

2017 UPDATE

GLOBAL BURDEN

The latest anti-TB drug resistance surveillance data show that 4.1% of new and 19% of previously treated TB cases in the world are estimated to have **rifampicin-** or **multidrug-resistant** tuberculosis (**MDR/RR-TB**).

In 2016, an estimated 600 000 new cases of MDR/RR-TB emerged globally. MDR/RR-TB caused 240 000 deaths in 2016. Most cases and deaths occurred in Asia.

About 6.2% of MDR-TB cases have additional drug-resistance, **extensively drug-resistant TB (XDR-TB)**.

DETECTION

In 2016, 41% of laboratory confirmed TB patients notified globally were tested for MDR/RR-TB, up from 11% in 2012. In many countries a steady increase has occurred in recent years, driven by the continued expansion in the use of rapid molecular tests.

In spite of increased testing, the number of MDR/RR-TB cases detected in 2016 only reached 153 000, a slight increase from the 132 000 cases reported in 2015.

In 2016, 8000 cases of XDR-TB were reported worldwide. To date, 121 countries have reported at least one XDR-TB case.

ENROLLMENT ON MDR-TB TREATMENT

Countries reported enrolling 130 000 patients on MDR-TB treatment in 2016, equivalent to about 22% of the 600 000 incident MDR/RR-TB cases that year. Enrolments have increased over time and in several countries the gap between detecting MDR/RR-TB cases and starting them on treatment has narrowed. In 2016, 8 500 patients with XDR-TB were enrolled in treatment, a 17% increase over 2015.

TREATMENT OUTCOMES

Only 54% of the MDR/RR-TB patients who started treatment in 2014 were successfully treated, while 16% of patients died and in 8% of patients their treatment failed (21% were lost to follow-up or not evaluated). The treatment success in XDR-TB patients was only 30%.

490 000

incident cases of MDR-TB in 2016
(with another 110 000 rifampicin-resistant TB cases eligible for second-line treatment)

153 000

MDR/RR-TB cases detected in 2016

130 000

patients started on MDR-TB treatment in 2016

54% 

treatment success in MDR/RR-TB patients starting treatment in 2014

WHAT ARE MDR/RR-TB AND XDR-TB?

Most anti-TB medicines have been used for decades, and resistance to them is widespread. TB strains that are resistant to at least one anti-TB medicine have been documented in every country surveyed.

Rifampicin-resistant tuberculosis is caused by bacteria that do not respond to rifampicin, one of the most powerful anti-TB medicines. These patients require MDR-TB treatment.

Multidrug-resistant tuberculosis (MDR-TB) is caused by bacteria that do not respond to, at least, isoniazid and rifampicin, the two most powerful anti-TB medicines.

Patients with **rifampicin-resistant** or **multidrug-resistant tuberculosis (MDR/RR-TB)** require treatment with second-line treatment regimens, which are more complex than those used to treat patients without drug-resistant TB

Extensively drug-resistant TB (XDR-TB) is a form of MDR-TB which is also resistant to two groups of second-line anti-TB medicines, making it more difficult to treat.

More information:
http://www.who.int/tb/areas-of-work/drug-resistant-tb/

Five priority actions to address the global MDR-TB crisis

1 PREVENT THE DEVELOPMENT OF DRUG RESISTANCE THROUGH HIGH QUALITY TREATMENT OF DRUG-SUSCEPTIBLE TB

Prevent MDR/RR-TB as a first priority.

2 EXPAND RAPID TESTING AND DETECTION OF DRUG-RESISTANT TB CASES

Scale up rapid testing and detection of all MDR/RR-TB cases.

3 PROVIDE IMMEDIATE ACCESS TO EFFECTIVE TREATMENT AND PROPER CARE

Ensure prompt access to appropriate MDR-TB care, including adequate supplies of quality drugs and scaled-up country capacity to deliver services.

4 PREVENT TRANSMISSION THROUGH INFECTION CONTROL

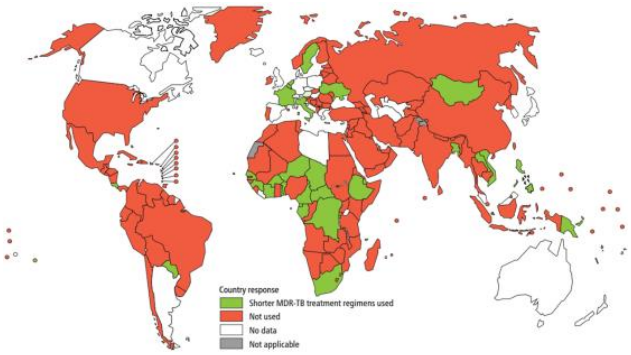
Implement appropriate TB infection control measures and quickly enroll diagnosed patients on effective treatment to minimize the risk of disease transmission.

5 INCREASE POLITICAL COMMITMENT WITH FINANCING

Sustain the MDR-TB response through high-level political commitment, strong leadership across multiple governmental sectors, ever-broadening partnerships, and adequate financing for care and research.

NEW REGIMENS FOR MDR/RR-TB

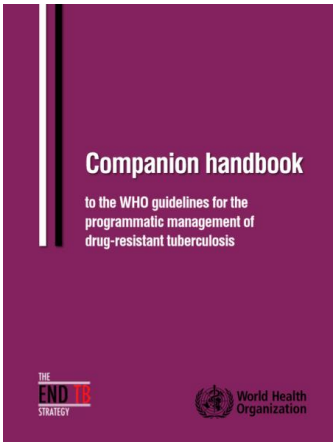
At least 36 countries in Africa and Asia have introduced shorter MDR-TB regimens, which have achieved treatment success rates comparable to drug-susceptible TB under operational research conditions. WHO recommends a standardised shorter MDR-TB regimen for selected MDR/RR-TB patients who do not have resistance to fluoroquinolones or second-line injectable agents.



By June 2017, 89 countries were known to have imported or started using bedaquiline and 55 countries had used delamanid. These two new medicines were conditionally approved by stringent regulatory authorities for treatment of MDR-TB in recent years.

NEW POLICIES FOR MDR-TB TREATMENT

Through 2017, WHO revised its treatment guidance for drug-resistant TB. These updates will be reflected in the new WHO guidance on the treatment of isoniazid-resistant TB and in the latest edition of the implementation handbook for the programmatic management of drug-resistant TB.



http://apps.who.int/iris/bitstream/10665/130918/1/9789241548809_eng.pdf

The **WHO GLOBAL TB PROGRAMME**, together with WHO regional and country offices, develops policies, strategies and standards; supports the efforts of WHO Member States; measures progress towards TB targets and assesses national programme performance, financing and impact; promotes research; and facilitates partnerships, advocacy and communication. More information: **www.who.int/tb**