World Health Organization

MULTIDRUG-RESISTANT TUBERCULOSIS (MDR-TB)

2018 UPDATE

GLOBAL BURDEN

The latest anti-TB drug resistance surveillance data show that 3.5% of new and 18% of previously treated TB cases in the world are estimated to have **multidrug-resistant** or rifampicin-resistant tuberculosis (**MDR/RR-TB**).

In 2017, an estimated 558 000 new cases of MDR/RR-TB emerged globally. MDR/RR-TB caused 230 000 deaths in 2017. Most cases and deaths occurred in India and China.

About 8.5% of MDR-TB cases had **extensively drug-resistant TB (XDR-TB)**.

DETECTION

In 2017, 24% of new and 70% of previously treated TB patients notified globally were tested for MDR/RR-TB (up from 12% and 53% respectively in 2015). 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 2017 only reached 161 000, a slight increase from the 153 000 cases reported in 2016.

In 2017, 11 000 cases of XDR-TB were reported by 77 countries.

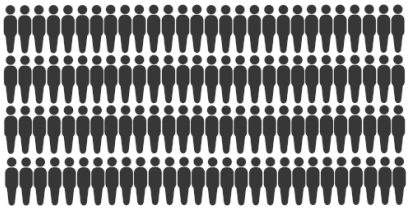
ENROLMENT ON MDR-TB TREATMENT

Countries reported enrolling 139 000 patients on MDR-TB treatment in 2017, equivalent to about 25% of the estimated number of new MDR/RR-TB cases emerging that year alone. 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 2017, 8700 patients with XDR-TB were enrolled on treatment worldwide.

TREATMENT OUTCOMES

Only 55% of the MDR/RR-TB patients who started treatment globally in 2015 were successfully treated, while 15% of patients died and treatment failed in 8% of patients (21% were lost to follow-up or not evaluated). The treatment success in XDR-TB patients was only 34%.

558 000



estimated new MDR/RR-TB cases in 2017

161 000

MDR/RR-TB cases detected in 2017

139 000

patients started on MDR-TB treatment in 2017

55%

treatment success in MDR/RR-TB patients starting treatment in 2015

ABOUT DRUG-RESISTANT 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 (RR-TB) 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 **multidrug-resistant** or **rifampicin-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 enrol diagnosed patients on effective treatment to minimize the risk of disease transmission.

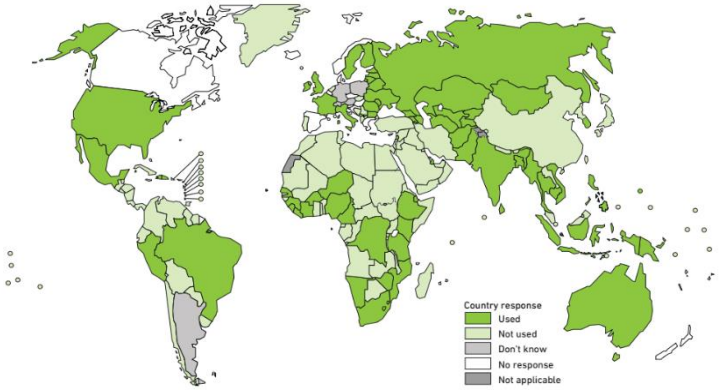
5 INCREASE POLITICAL COMMITMENT WITH FINANCING

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 TREATMENTS FOR MDR/RR-TB

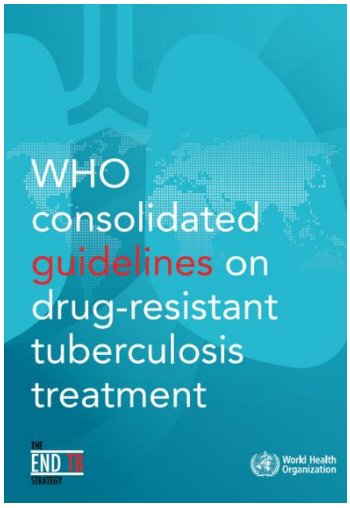
More countries are now using bedaquiline and delamanid, the two newer medicines approved by stringent regulatory authorities for the treatment of MDR-TB in recent years. By the end of 2017, 68 countries reported importing or starting to use bedaquiline (map) and 42 countries had used delamanid. In addition, 62 countries, mostly in Africa and Asia, reported using shorter MDR-TB regimens lasting 9–12 months by the end of 2017.

Countries that had used bedaquiline for the treatment of M/XDR-TB as part of expanded access, compassionate use or under normal programmatic conditions by the end of 2017



NEW POLICIES FOR MDR-TB TREATMENT

In March 2019, WHO consolidated its drug-resistant TB treatment guidelines into one comprehensive document. This groups in one place the latest WHO policies on the care of patients with isoniazid-resistant TB and MDR/RR-TB and provides links to the evidence and the methods used to derive them.



https://www.who.int/tb/publications/2019/consolidated-guidelines-drug-resistant-TB-treatment/en/

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**

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