



The Urgent Threat of TB Drug Resistance

DRUG-RESISTANT TB THREATENS TO ERASE DECADES OF PROGRESS

Nearly 2 billion people, or a quarter of the global population, is estimated to have been infected with TB bacteria and 10.6 million people become sick with active TB disease each year. TB is a leading cause of death from infectious disease globally, second only to COVID-19, and claims 1.6 million lives each year, even though a TB cure has existed for more than 70 years. In some cases, the bacteria that causes TB can develop resistance to drugs used for TB treatment. Most often, this stems from incomplete treatment of non-resistant TB. In recent decades, these strains have

become resistant to our most common TB drugs and continue to spread globally. Drug-resistant TB strains are more difficult to cure and costly to our economy and health system. Because TB is airborne and contagious, the continued spread of drug-resistant TB could cause a resurgence of TB in parts of the world where TB is currently less common, including the United States.

This is why CDC responds to TB at home and abroad to create a safer America and a safer world.

To prevent further spread of drug-resistant TB, we must find and cure all cases of multidrug-resistant tuberculosis TB (MDR TB). But equally important is ensuring

drug-susceptible TB cases are properly diagnosed and treated, so those strains do not develop drug resistance and start the cycle anew. To stop drug-resistant TB, we must get back to the basics of effective TB prevention and treatment.

THE TIME IS NOW

In 2021, an estimated 450,000 people became sick with MDR TB/rifampicin-resistant TB (RR-TB) around the world. Recent estimates suggest **191,000 people** lost their lives due to MDR/RR-TB in 2021, and if we do not act to contain these strains, MDR TB will remain a public health crisis and a health security threat.

DRUG-RESISTANT TB IS HARDER TO FIND, TREAT, AND CURE



DRUG-RESISTANT TB IS HARDER TO DIAGNOSE

- Requires laboratory tests not easily accessible to patients and some countries have limited capacity for testing
- Often requires weeks to months to diagnose accurately
- From 2018 to 2021, the reported number of children on MDR/RR-TB treatment was only 15 percent of the 5-year target of 115,000



DRUG-RESISTANT TB IS HARDER TO CURE

- Can require two years of treatment and may require longer treatment
- MDR TB treatment drugs are often more toxic and may cause long-term side effects
- Only 1 in 3 people have access to quality care, and just 60 percent of those patients are successfully treated for MDR/RR-TB



DRUG-RESISTANT TB STRAINS ARE BECOMING MORE WIDESPREAD

- MDR TB (Multidrug-resistant TB):** Resistance to the two most common anti-TB drugs has been reported in virtually every country in the world
- XDR TB (Extensively drug-resistant TB):** Resistance to the two most common first-line drugs and at least two second-line drugs and has been reported in more than 100 countries

CDC IS A LEADER IN THE RESPONSE TO MDR TB

CDC is committed to achieving global targets for ending all forms of TB by 2035. To address drug-resistant TB, CDC works with partners including the World Health Organization (WHO), other U.S. government agencies, and ministries of health to:



FIND

Strengthen laboratory networks and surveillance systems to enable rapid, accurate diagnosis of all TB and MDR TB cases

Develop innovative approaches to find TB in all forms



CURE

Work closely with WHO to consolidate guidelines for treating drug-resistant TB

Expand access to newer, shorter treatment regimens that cure patients faster with fewer side effects



PREVENT

Ensure appropriate treatment of all TB cases to prevent drug resistance

Break the cycle of transmission through infection prevention and control

Scale up TB preventive treatment and antiretroviral therapy for people living with HIV to prevent TB disease

ELIMINATING MDR TB WORLDWIDE

We are at a critical point in the response to TB and MDR TB. Drug-resistant strains of TB continue to spread with a potential to grow more resistant to treatment if left unchecked. This may lead to a future where TB is no longer curable, which could result in substantial increase in TB-related deaths. To prevent this scenario, we must act now to:



Find and cure all existing cases of MDR TB



Develop better tools to find and cure all forms of TB



Strengthen basic TB control programs to prevent drug-resistant strains from developing

Find TB. Cure TB. Prevent TB.



<http://www.cdc.gov/globalhivtb>