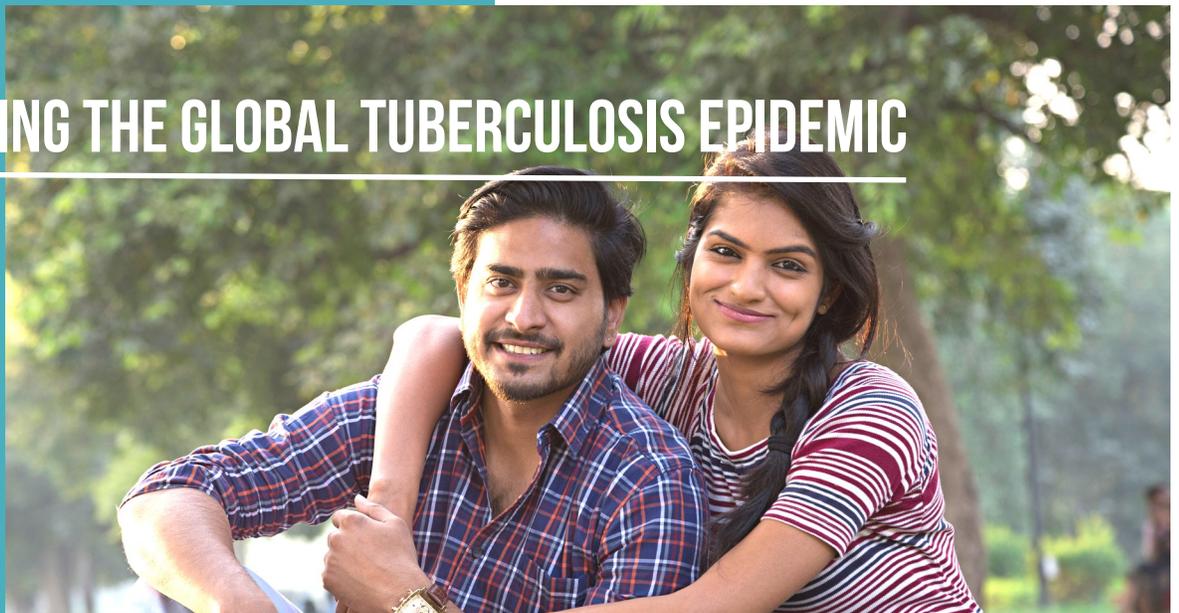


COMBATING THE GLOBAL TUBERCULOSIS EPIDEMIC



OVERVIEW

Tuberculosis (TB) is the leading infectious disease killer in the world, taking the lives of 1.4 million people each year.¹ Today, more than 1.7 billion people – one-fourth of the world’s population – are infected with TB. People who are infected are not yet sick with TB, yet they are at risk of developing active TB disease, which can be transmitted to others. In partnership with other U.S. Government agencies, multilateral organizations, and country governments, the U.S. Centers for Disease Control and Prevention (CDC) works in over 25 countries with high TB burdens. These partners are working together to accelerate progress towards the global End TB targets to reduce TB mortality by 95 percent and incidence by 90 percent by 2035, compared to the 2015 levels.

TB PREVENTIVE TREATMENT

People living with HIV are up to twenty one times more likely to develop TB than people without HIV, and children and adolescents are up to 10 times more likely to develop TB than adults. TB Preventive Treatment (TPT), a proven course of treatment that can prevent TB disease among those infected with TB, has been shown to reduce TB-related mortality among people living with HIV by 37 percent. With support from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), **CDC supported 2.9 million people living with HIV to complete regimens of TPT from fiscal year 2018 to 2020**, including more than 1.53 million in fiscal year 2020 alone. To further accelerate TPT scale up, CDC provides technical direction to country TB programs with a goal to provide a full course of TPT to all people living with HIV on PEPFAR-supported antiretroviral treatment by the end of 2021.

TB SCREENING AND DIAGNOSIS

Many in the populations most vulnerable to TB, including children, people living with HIV, and healthcare workers, lack support for the TB treatment they need. Each year, a person living with TB disease can infect up to 15 others.² This means that each missed case can add to the current TB burden, compounding the challenge to end TB. **Finding these missing cases is a priority for CDC and the global community.** It requires sustained commitment to enhancing TB screening, surveillance and laboratory capacity to find and diagnose persons with tuberculosis. **CDC uses its robust technical expertise, peer-to-peer relationships with Ministries of Health, and a data-driven approach to find, cure and prevent TB globally and to strengthen surveillance and laboratory systems to sustain progress.** As part of PEPFAR, CDC supports diagnostic testing for all people living with HIV to identify TB disease and initiate treatment.

TB INFECTION PREVENTION AND CONTROL

CDC is building on the agency’s existing TB infection prevention and control platform, which includes a mentorship model and toolkit for preventing the spread of airborne respiratory infections in healthcare settings. These established TB infection prevention and control partnerships, platforms, training curriculum, and toolkits are being used to prevent the spread of TB, COVID-19, and other respiratory infections in healthcare facilities.

MULTIDRUG-RESISTANT TB

Multidrug-resistant (MDR) TB is a growing threat and poses a serious challenge to controlling the spread of TB worldwide. Drug-resistant TB strains are more difficult to diagnose and cure.



MULTIDRUG-RESISTANT TB (CONT)

Estimates show that there are nearly 500,000 cases of MDR TB each year, and only 56 percent of those patients are successfully treated.³ CDC supports governments and partners in countries with a high rate of TB and MDR TB to build and enhance laboratory capacity and diagnostic networks. In these countries, **CDC has used innovative models to improve diagnosis and treatment of MDR TB**, including mobile screening, molecular diagnostics, and point-of-care treatment monitoring to improve adherence and treatment outcomes. **CDC supports an interface between public and private clinicians to improve MDR TB case reporting** and to link patients to services to ensure timely and appropriate treatment. CDC is collaborating with partners to advance genome sequencing to improve diagnosis and treatment of MDR TB and to build capacity to explore transmission patterns in countries with high rates of MDR TB, including India and South Africa.

CLOSING REMAINING GAPS

Up to ten percent of those infected with TB eventually develop active TB disease during their lifetime. For those living with HIV and infected with TB, ten percent will develop active TB disease each year. With a quarter of the world's population infected with TB, a key challenge is to find and place those infected on TB preventive treatment to avoid progression to active TB disease. Particular attention should be paid to groups at higher risk for infection, including children and people living with HIV.

¹WHO. https://www.who.int/health-topics/tuberculosis#tab=tab_1.

²WHO. <https://www.who.int/news-room/fact-sheets/detail/tuberculosis>.

³WHO. <https://www.who.int/news-room/fact-sheets/detail/tuberculosis>.