Antibiotic Resistance (AR) Solutions Initiative

In most cases, tuberculosis (TB) is treatable and curable, but sometimes TB bacteria become resistant to the drugs used to treat the disease. This means the drugs can no longer kill the bacteria. Drug-resistant TB can occur when the drugs used to treat TB are taken incorrectly, or when appropriate drugs are not prescribed or are not available.

Reduce rate of multidrug-resistant TB by 15%

CDC’s Solutions Initiative will Fight Drug-Resistant TB

Help people with TB
- Evaluate the use of smartphones or video to monitor patient treatment and ensure therapy is completed
- Create a national TB stockpile to help with urgent TB drug shortages

Reduce spread of TB in the U.S.
- Extend TB medical exam and treatment overseas, and increase global impact by partnering with other agencies to include TB screenings for additional U.S. visa categories (e.g., students, healthcare workers)
- Increase global technology for testing and treating TB to stop it at its source

TB is a Serious Threat

TB is the leading cause of death from infectious disease worldwide
- TB is spread through the air
- Tests are needed for each person sick with TB to determine if it is drug-resistant TB and what drugs will work
- To treat TB, trained staff must observe patients as they take each dose of TB drug through Directly Observed Therapy, which helps prevent resistance and ensure patients are cured

TB can become resistant to the treatment drugs
- Multidrug-resistant TB is resistant to the two most effective drugs used to treat TB
- Extensively drug-resistant TB is resistant to almost all of the drugs used to treat TB
- Treatment for multidrug-resistant TB costs an average of $150,000, compared with $17,000 to treat drug-susceptible TB

TB travels to the U.S.
- Rates of drug-resistant TB remain low in the U.S., though more than half a million cases are estimated to occur globally each year
- Persons born in other countries, many of whom have been in the United States for many years, account for most of the TB cases reported in the U.S.
- CDC is collaborating with national and international public health organizations to ensure high-quality testing and treatment of refugees and immigrants coming to live in the U.S. permanently from countries with high rates of TB
- CDC works closely with Ministries of Health in more than 25 high-burden countries worldwide to strengthen TB control efforts

Innovation and transformations in prevention will reduce rates of drug-resistant TB.