# **Antibiotic Resistance 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 misused or mismanaged.

Reduce rate of multidrug-resistant TB by 15%

15%

## Two ways CDC's Initiative will fight drug-resistant TB



## Help people with TB

- Develop and confirm new methods, such as using smartphones or video, to monitor patient treatment and response, and to ensure therapy is completed and treatment works
- Explore new ways to treat people who have been exposed and infected with TB before they get sick and become contagious



## Reduce spread of TB in the U.S.

- Extend medical exam and treatment overseas and increase global reach by partnering with other agencies to include long-term visitors (6 months or longer) to the U.S., such as students
- Increase global technology for testing and treating TB to stop TB at its source





## Top 10 cause of death in the world

- Spread through the air
- Tests are done for each person sick with TB to determine what drugs will work or if the TB is drug-resistant
- To treat TB, trained staff must observe patients as they swallow each dose of TB drug, known as Directly Observed Therapy



## **Drug-resistant TB**

- Multidrug-resistant TB is resistant to the two best drugs used to treat TB
- Extensively drug-resistant TB is resistant to almost all of the best drugs used to treat TB
- Treatment for multidrug-resistant TB costs an average of \$134,000, 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 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

