

U.S. GLOBAL HEALTH Initiative



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Tuberculosis

Contribute to the treatment of a minimum of 2.6 million new sputum smear-positive tuberculosis cases and 57,200 multidrug-resistant cases of TB, and contribute to a 50 percent reduction in TB deaths and disease burden relative to the 1990 baseline.

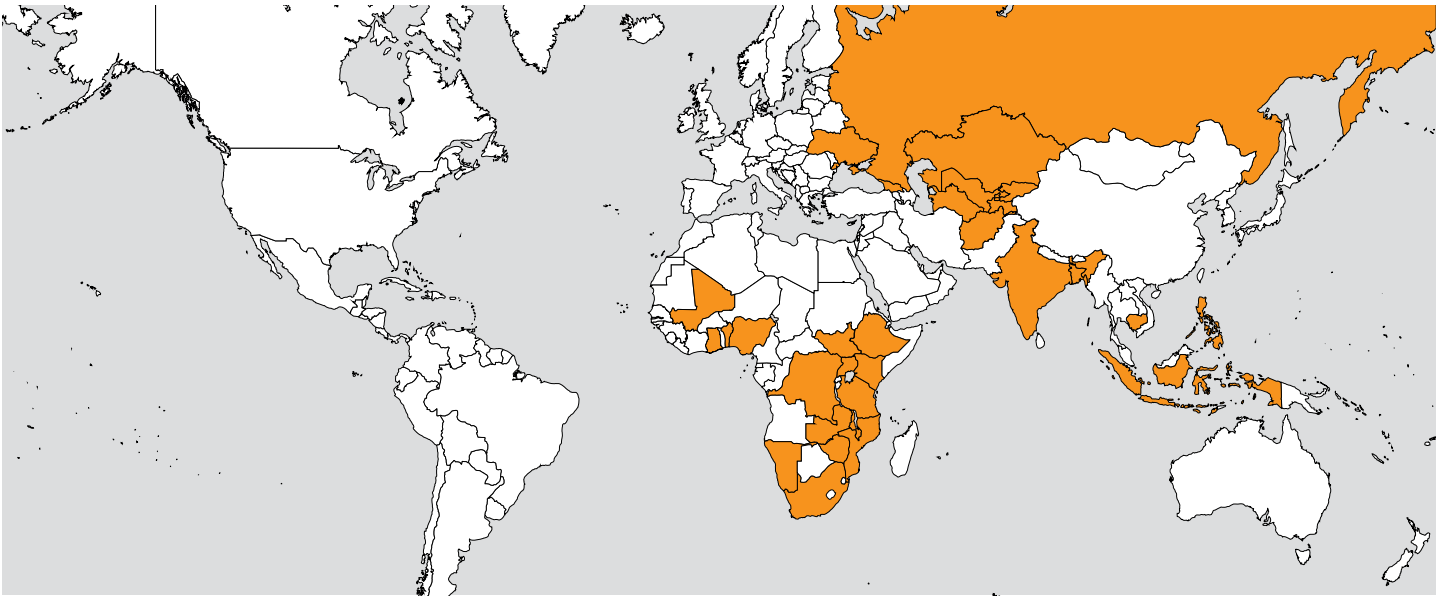
More than 8.8 million people develop tuberculosis (TB) every year, and 1.4 million die from this disease. However, U.S. Government-supported countries have achieved steady success, with TB prevalence and mortality falling by 33 percent and 35 percent, respectively, since 1990.

How is the target measured?

- **Percent reduction in TB prevalence:** TB prevalence is defined as the number of TB cases (all forms) at a given point in time. The best way to measure the prevalence of TB is through national population-based surveys of TB disease. Data from such surveys are available for an increasing number of countries. However, for a large number of U.S. Agency for International Development (USAID) priority countries, TB prevalence is estimated by World Health Organization (WHO) using available indirect data and expert consultations (information regarding estimation methods can be found in Annex I of the latest WHO Global TB Control Report). We calculate the percent reduction in TB prevalence rate by comparing the current year's TB prevalence rate to the 1990 level.
- **Percent reduction in TB mortality:** According to the latest revision of the international classification of diseases (ICD-10), TB mortality is the number of deaths caused by TB in HIV-negative people. Estimates of TB mortality are produced directly by WHO from vital registration data or mortality surveys or indirectly from estimates of TB incidence and case-fatality rates. The percent reduction in TB mortality rate is calculated by comparing the current year's TB mortality rate to the 1990 level.
- **TB case detection rate:** The case detection rate allows us to track how well countries are detecting the estimated number of overall TB cases in a country. This indicator is based on WHO estimates of incidence that can vary in reliability depending on the country and the estimation method used. Very few countries have completed TB prevalence surveys, so estimates often change significantly year by year.
- **TB treatment success rate:** The indicator measures a program's capacity to retain patients through a complete course of chemotherapy with a favorable clinical result. This indicator includes cases that are "cured," meaning that have been confirmed as no longer having TB at the end of treatment, and "completed," which are cases that complete a full course of treatment with clinical improvements but without bacteriological confirmation of cure.
- **Number of TB cases successfully treated:** The number of TB cases successfully treated is the absolute number of smear-positive TB cases in the treatment cohort (notified and registered) that have been successfully treated (either cured or completed treatment). This indicator is another outcome measurement of the quality of the program to treat successfully each patient put on treatment. It is calculated by multiplying the treatment success rate (for a particular cohort year) by the number of smear-positive TB cases in the same treatment cohort.
- **Number of multidrug-resistant TB (MDR-TB) cases diagnosed and started on treatment:** MDR-TB is defined as TB that is confirmed to be resistant to at least the two most powerful anti-TB drugs, isoniazid and rifampicin. This indicator measures the absolute number of MDR-TB cases that are diagnosed as resistant to at least isoniazid and rifampicin through drug susceptibility testing and put on appropriate second-line drug treatment.

U.S. Government's TB data are weighted and take into account country-specific epidemiological data; therefore, data should be interpreted as the overall rate for the total population included from each of the countries not as an average of the countries

GHI COUNTRY PROGRAMS BY ELEMENT – TUBERCULOSIS



Africa: Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Namibia, Nigeria, South Africa, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe, USAID East Africa Regional Program **East Asia and Pacific:** Cambodia, Indonesia, Philippines, USAID Regional Development Mission – Asia **South Asia and Central Asia:** Afghanistan, Bangladesh, India, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan **Europe and Eurasia:** Georgia, Eurasia Regional Program, Russia, Ukraine

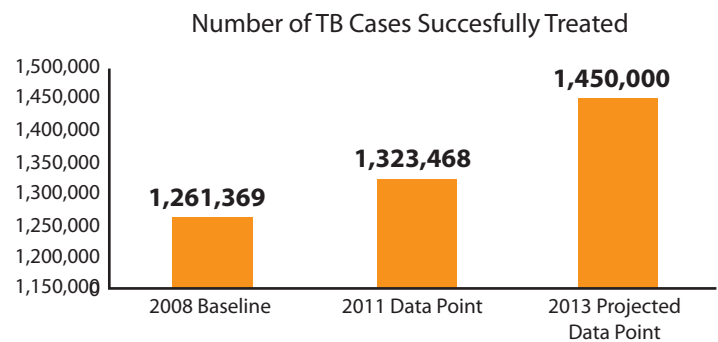
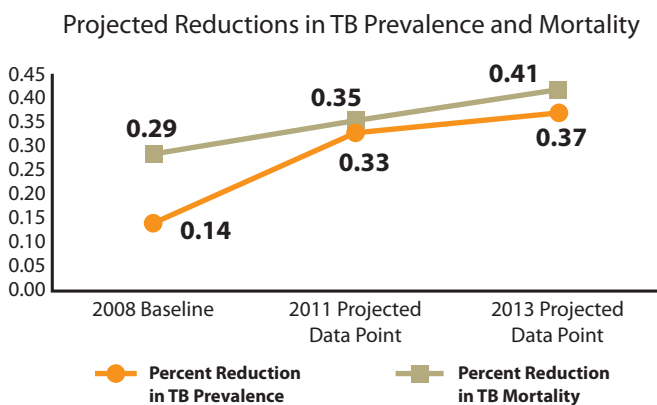
included. These data reflect national level efforts affected by interventions from different partners and donor funding. Therefore, results are not solely attributable to the U.S. Government.

What are the U.S. Government-supported countries?

Countries receive funding based, in part, on an analysis of need (both the severity of the health problem and the number of people affected by the health problem) and the U.S. Government's ability to affect health programs.

What are the results?

Case detection rates increased from 57 percent in 2008 to 61 percent in 2011 (up from 42 percent in 2001), and treatment success, already at high levels, increased from 84 percent in FY 2008 to 85 percent in 2011. Current U.S. Government TB investments in 28 countries have contributed to treating successfully more than 1.3 million TB cases in 2011 and are diagnosing and initiating treatment for nearly 20,000 MDR-TB cases. Forward progress against the disease is closely linked to the investments of national TB programs and the U.S. Government. As evidenced by the resurgence of TB in the United States in the 1990s, divestment leads to resurgence.



Source: WHO World TB Report, based on calendar year.

Indicator	2008 Baseline	2011 Data Point	2013 Projected Data Point
TB			
Percent reduction in TB prevalence (relative to 1990)	14%	33%	37%
Percent reduction in TB mortality	29%	35%	41%
TB case detection rate	57%	61%	65%
Treatment success rate	84%	85%	86%
Number of TB cases successfully treated	1,261,369	1,323,468	1,450,000
Number of MDR-TB cases diagnosed and started on treatment	0	19,121	42,000