

## SUCCESS STORY Tuberculosis Program



Although a cure for tuberculosis (TB) was developed more than 50 years ago, TB remains one of the world's deadliest infectious diseases:

- TB causes 2 million deaths each year, 98% of which occur in the developing world.
- Two billion people onethird of the world's population - are infected with TB.
- 750,000 women die each year of TB.
- Hundreds of thousands of children will become TB orphans this year.
- One out of every three HIV/AIDS patients is also infected with TB.

The U.S. Agency for International Development (USAID), in close collaboration with its partners, is committed to addressing the global tuberculosis (TB) burden. In 1998, USAID developed a focused program on TB as part of its new strategy to expand efforts to address infectious and re-emerging diseases. USAID funding for TB has increased each year from approximately \$8 million in 1998 to \$93 million in 2005, making the Agency the largest bilateral donor for TB.

USAID's goal is to make a significant contribution to global, regional, and national efforts to prevent and control TB, thereby leading to a reduction in morbidity and mortality associated with the disease. USAID seeks to increase the capacity of developing countries to prevent and cure TB and achieve global targets of 70% case detection and 85% treatment success rates. USAID programs focus on expansion and strengthening of the World Health Organization (WHO)-recommended TB control strategy known as DOTS (Directly Observed Treatment, Short Course).

## **Country Success Stories**

USAID provided support for expanding and strengthening DOTS programs in 39 countries in 2004. Funding for training, technical assistance, improved monitoring and supervision, and laboratory strengthening has produced impressive results in the following countries:

**Uganda:** USAID provides financial and technical assistance to support training in community-based DOTS, to upgrade laboratories and provide equipment, and to implement a computerized data entry system for tracking TB drug and supply procurement. Between 2001 and 2003, the case detection rate increased from 45% to 53% and the treatment success rate increased from 51% to 60% in USAID-supported districts.

**Democratic Republic of the Congo:** USAID assists DOTS implementation and strengthening in eight provinces. Support includes training, purchase of laboratory equipment and supplies, and social mobilization. Average treatment success rates in USAID-assisted provinces increased from 65% in 2000 to 79% in 2003.

**Nigeria:** USAID support for DOTS expansion, training, and technical assistance contributed to an increase in coverage of DOTS services from 1,745 treatment centers in 26 states to 1,847 treatment centers in 37 states. The case detection rate increased from 12% in 2002 to 18% in 2003, the first year of significant USAID investment in TB control. Support also included strengthening of monitoring and supervision of TB activities.

**Indonesia:** USAID support is closely coordinated with the Indonesian government, other donors, and the resources of the Global Fund To Fight AIDS, Tuberculosis and Malaria. USAID support is focused on the provinces of Central and East Java, both with populations exceeding 30 million people. In Central Java, the case detection rate increased from 22% to 27%, and the treatment success rate is now 90%. The case detection rate in East Java increased from 12% to 30% and the treatment success rate from 74% to 82%.

**Cambodia:** USAID supported pilot community-based DOTS activities in five districts of four provinces and strengthened DOTS programs in six other provinces and the city of Phnom Penh. In these USAID-assisted districts, sputum smear-positive case detection rates ranged from 60% to 82%, compared with a national average of 59%. Support also included training and technical assistance to develop national TB guidelines and a manual for behavior change communication.

**India:** In Haryana state, DOTS coverage increased from 59% to 100% between 2003 and 2004. From 2002 to 2003, the case detection increased from 50% to 74% and the treatment success rate from 82% to 84%. Support has also included improvements in human and infrastructure capacity to implement DOTS.

**Dominican Republic:** USAID supports DOTS implementation in more than 900 public and private health facilities in seven districts and Santo Domingo. DOTS coverage is 73% in these sites. Between 2001 and 2003, the case detection rate increased from 53% to 86% and the cure rate increased from 37% to 72%. USAID technical assistance also helped the national TB program secure a \$2.6 million grant for DOTS expansion from the Global Fund.

**Honduras:** USAID funding and technical assistance enabled the country to achieve 100% DOTS coverage in Ministry of Health clinics and prison health services. The USAID-supported prison DOTS program is serving as a model for the entire region and is being replicated in other countries. Honduras achieved a case detection rate of 100% and a treatment success rate of 86% in 2003, surpassing global targets.

**Russia:** USAID has played a major role in building political commitment in Russia for TB control and prevention based on the DOTS strategy. USAID funding helped expand DOTS to 20 of Russia's 88 territories and supported training of more than 4,000 doctors, nurses, laboratory technicians, and social workers. Treatment success rates improved in Orel oblast from 64% to 77% and in Ivanov oblast from 54% to 70% in 2003.

**Ukraine:** USAID support for DOTS implementation in Donetsk oblast resulted in 100% coverage of the area's 5 million people. Between 2002 and 2003, case detection rates increased from 40% to 52% and treatment success rates from 61% to 70%. Support also included DOTS and laboratory training, improved health information, and development of a TB program technical protocol.

**South Africa:** USAID's activities include developing a national TB advocacy and social mobilization strategy, strengthening the recording and reporting system, awarding grants to community-based and nongovernmental organizations (NGOs) to implement community-based DOTS, assessing health worker and patient risks for nosocomial TB, and collaborating on a national survey of TB drug resistance. The case detection rate increased from 76% in 2001 to 96% in 2003. For the past few years, the treatment success rate has remained constant at about 65%.

**Philippines:** USAID has contributed to substantial improvements in human and infrastructure capacity. In 2002, USAID launched the Philippines Tuberculosis Initiative Private Sector to improve cooperation with the government and strengthen TB diagnosis and treatment by private providers in 25 selected sites nationwide. USAID has supported DOTS training for health workers, a TB/DOTS curriculum for medical schools, and the creation of the National Infectious Disease Advisory Council. Between 2000 and 2001, case detection improved from 50% to 70% and treatment success from 78% to 99%.

## **Partners**

The accomplishments and success stories above would not have been possible without the assistance of a wide variety of partners. USAID works with host countries, the public and private sector, and other donors to achieve its goal of reducing TB morbidity and mortality. Partners include national TB programs; the Global TB Drug Facility; the Centers for Disease Control and Prevention; WHO; the Gorgas TB Initiative; the International Union Against Tuberculosis and Lung Disease; MEASURE Evaluation; the TB Coalition for Technical Assistance; the Voice of America; the Global Alliance for TB Drug Development; the Global Fund to Fight AIDS, Tuberculosis and Malaria; Management Sciences for Health/Rational Pharmaceutical Management Project; and a variety of local NGOs and U.S.-based private voluntary organizations.