

**Testimony of Dr. Kent R. Hill
Assistant Administrator for Global Health
U.S. Agency for International Development**

Tuberculosis

**Before the Subcommittee on Africa and Global Health
Committee on Foreign Affairs
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Chairman Payne, Representative Smith and other distinguished members of the Committee, I would like to thank you for convening this important hearing and for inviting me to testify. Thank you for putting the spotlight on Tuberculosis (TB). The timing of this hearing is particularly relevant since March 24 is World TB Day. The World TB Day theme of "TB anywhere is TB everywhere" is a clear reminder that we are talking about a disease that is easily transmitted. TB knows no borders.

I am pleased to be here with Dr. Gerberding and Dr. Dybul, and I appreciate the excellent overview of the TB situation that was provided by Dr. Raviglione. The U.S. Agency for International Development's (USAID) efforts in TB are closely coordinated with other U.S. government agencies, particularly the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services (HHS), and Office of the Global AIDS Coordinator (OGAC). On research, we also work closely with CDC and the National Institutes for Health (NIH) in HHS, particularly in operations research to improve program implementation, and new drug development.

I will speak briefly about the problem and challenges of TB, particularly in Africa, and outline USAID's efforts to battle the disease, including our response to Multi-drug resistant (MDR) TB and extensively drug resistant (XDR) TB.

TB is not just a public health challenge but it is also a development problem as this devastating disease strikes people during their most economically productive years. The magnitude of the problem is staggering. According to the World Health Organization (WHO), each year nearly nine million people will develop TB and nearly 2 million people will die. Although a cure for TB has existed for more than half a century, the disease is often diagnosed late, treated improperly or not treated at all leading to transmission in the community and death. Unfortunately, the most vulnerable people have the greatest difficulties in accessing good quality care. TB is both a disease of poverty and a contributor to poverty, and it takes a tremendous toll especially on poor families in developing countries.

While the challenge is great there has been tremendous progress in the past few years. The STOP TB Partnership's *Global Plan to STOP TB 2006-2015* has catalyzed countries to be more ambitious than they have in the past. TB control is improving in many regions of the world - notably Asia and Latin America.

TB - The Global Context and USAID's Global Program

I know we are here to talk about Africa - where the TB problem is indeed severe -- but it is also important and relevant to keep in mind the global TB situation. Sixty percent of the global burden of TB is in the Asia and the Western Pacific regions - notably in countries such as India, China, Indonesia, Bangladesh, Pakistan, The Philippines, Viet Nam, and Cambodia. While many of these countries have made tremendous progress in recent years, there is still much more that needs to be done to ensure sustainability. In Latin America, while there has been much success in controlling TB, sustaining that progress will require TB services reaching the poorest and marginalized groups in all countries. We also can not forget Eastern Europe and Eurasia, where gaining commitment to internationally recognized TB control standards continues to be an uphill struggle. While the recent outbreak of XDR TB in South Africa has made the headlines and must be urgently and effectively dealt with, 17 of the 21 priority countries identified in the WHO's Global MDR and XDR TB response plan are in Asia and the Western Pacific. We must increase attention to Africa, but we can not overlook the other regions where TB is still a serious problem and

where MDR and XDR TB are a looming threat.

Between 2000 and 2006, USAID provided about \$500 million for TB programs worldwide. Our FY 2006 funding level was about \$90 million which supported bilateral TB programs in 37 countries (of which 19 are USAID high priority TB countries), as well as other key activities including global surveillance and research on new anti-TB drugs and diagnostics. In FY 2006, USAID provided \$5 million to the STOP TB Partnership's Global TB Drug Facility (GDF), an important mechanism that provides drugs to countries in need. Our programs are fully aligned with the new STOP TB Strategy, which builds on the WHO recommended "Directly Observed Treatment, Shortcourse" or DOTS by giving attention to DOTS quality and as well as expansion, TB/HIV-AIDS and MDR TB, engaging all care providers, empowering people with TB and communities, contributing to health system strengthening, and research.

Africa's TB Burden and USAID's Response

Africa accounts for a little over a quarter of the estimated global burden of TB, but deaths due to TB continue to rise, and it is the region in the world where TB incidence continues to increase. The factor behind this tragedy is HIV/AIDS and the deadly dynamic of TB/HIV-AIDS co-infection. HIV/AIDS, weak health systems, poor access to primary health care services, and a serious health work force crisis are contributing to the slow progress in TB control in Africa. Both case detection and cure rates are lagging in Africa.

To address these challenges, DOTS needs to be brought closer to patients. Laboratory and human resource capacity must be strengthened, all health providers including the private sector need to be engaged, and communities and civil society must be mobilized. Even with improvements in these areas, deaths due to TB will continue to be unacceptably high in countries with high TB/HIV-AIDS co-infection unless access to TB treatment and anti-retroviral treatment (ART) is dramatically scaled up. Increasing collaboration between TB and HIV/AIDS programs at the country level is an essential component of addressing these challenges.

Africa is a priority for USAID. Between 2000 and 2006, we provided \$95 million to TB programs in Africa. Sixteen of the 37 countries where we have TB programs are in Africa, including nine of our high priority TB countries. The proportion of our overall TB assistance devoted to Africa has risen to more than 20% of the total and continues to increase. We provide assistance to eight of the nine of the high burden countries in Africa.¹ Our programs support implementation of the STOP TB Strategy, including DOTS expansion and strengthening, the provision of laboratory supplies and equipment, training all cadres of health workers, technical assistance and engaging communities and the private sector in TB care. Our funding to the GDF benefits many countries in the region.

USAID is also strengthening coordination of TB programs with HIV care to help ensure that TB patients are tested for HIV and HIV patients are screened for TB and then treated for TB if needed. About 13% of our TB budget is used to help strengthen the capacity of TB programs in the area of TB/HIV-AIDS. To help ensure synergies between USG investments in TB and HIV/AIDS, many of our TB high priority countries overlap with focus countries of the President's Emergency Plan for AIDS Relief (PEPFAR). These countries are Ethiopia, Kenya, Mozambique, Namibia, Nigeria, South Africa, Tanzania, Uganda, and Zambia. Our programs help to strengthen TB services for the general population in these countries and are directly complementary to the assistance provided by OGAC to reach HIV infected populations.

Our programs are making a difference. In Nigeria, USAID supports DOTS expansion in 17 states where prior to 2002, there were no DOTS services. More than 74,000 TB cases have been detected in these states between 2002 and 2005 with the number of TB cases detected increasing by about 26% on average each year. In the Democratic Republic of Congo, USAID support to 63 districts has contributed to an increase in the TB case detection rate from 51% of the estimated cases in 2001 to 78% in 2004, and an increase in cure rates from 70% to 83% as compared to the target of 85%. USAID and PEPFAR are effectively leveraging TB funding and HIV/AIDS funding. In Kenya, TB/HIV collaborative activities have been expanded to 80 percent of districts where 37 percent of TB patients are now being tested for HIV. In Tanzania as well, TB/HIV activities are being scaled up quickly.

MDR and XDR TB and USAID's Response

While we continue to deal with the overlapping epidemic of TB and HIV/AIDS in Africa, we are now facing the more ominous threat of XDR TB. This deadly form of the disease not only threatens the lives of people living with HIV/AIDS, including those receiving ARVs, but it also threatens to undermine progress in TB control that has been made in recent years, and threatens HIV/AIDS programs and will compromise PEPFAR activities.

Resistant TB is not new. Previously, the problem was mainly confined to Eastern Europe and Asia; however, with increased access to anti-TB drugs in recent years resistance has developed in all regions. Limited capacity to conduct surveillance has hindered our understanding of resistance trends. The advent of MDR and XDR in Africa is particularly concerning because of the high HIV prevalence and the rapid progression from TB infection to disease and death among people with HIV/AIDS. Crowded living conditions, congregating of patients together in clinical facilities for treatment, and the lack of infection control measures makes the spread of TB, including these more deadly strains of TB, among HIV-infected individuals more likely.

USAID is actively engaged in the response to XDR, and is a global leader in addressing MDR TB. Recently, the USAID mission in South Africa reprogrammed resources to immediately respond to the needs identified there by training personnel and strengthening MDR TB treatment units, setting up a surveillance system to track MDR and XDR TB cases, and to assist with tracing of contacts. We are stepping up our support for capacity building in infection control and laboratory strengthening in South Africa. USAID also worked with HHS/CDC and the South African Department of Health to establish the Africa Regional International Training and Research Center on MDR TB and HIV that was launched in March 2006.

USAID has been a key supporter of the Green Light Committee (GLC) since its inception. The GLC of the Stop TB Partnership is a unique mechanism that ensures the quality of programs to treat MDR-TB to prevent the development of resistance to second line anti-TB drugs. Projects that are approved by the GLC are eligible to purchase second-line anti-TB drugs at discounted prices. Since 1998, USAID has supported country-level drug resistance surveys and the biannual Global Report on TB Drug Resistance. USAID, working in collaboration with the HHS/CDC and WHO, supported the surveys published in HHS/CDC's March 2006 Morbidity and Mortality Weekly Report that first called attention to the threat of XDR TB. USAID supports capacity building for MDR TB programs and for management of second line anti-TB drugs. USAID also invests in new diagnostics to rapidly detect TB and new drug regimens to increase the effectiveness and shorten the duration of treatment, both of which will help to reduce the emergence of drug resistant TB.

Globally, considerable momentum has been gained over the past several months, culminating in the establishment of a WHO-coordinated Global XDR-TB Task Force this past October. USAID has been an active participant on the Global Task Force, as well as the U.S. Federal TB Task Force. The Global XDR-TB Task Force is about to finalize a global plan to respond to XDR. For our part, USAID will build on the emergency actions we have already taken and on our long history of support for MDR TB. We will focus on: strengthening DOTS programs to prevent further emergence of drug resistance; building surveillance and laboratory capacity; improving infection control; ensuring effective management of MDR/XDR diagnosis and treatment; engaging communities to support patients; and investing in new drugs and diagnostics. We will work with our partners including WHO, HHS/CDC, the Stop TB Partnership, and others to move ahead on these priorities.

Our response to MDR and XDR is not confined to Africa. USAID, working with HHS/CDC, helped establish the International Training Center for MDR TB at the Latvian State Centre for TB and Lung Diseases. In 2004, the Center was named a WHO collaborating center for Research and Training in the Management of MDR TB. The rates of MDR TB in Latvia have fallen from 14% in 1994 to 8% in 2003, making the country a model for others to emulate. USAID has been supporting the expansion of DOTS in Russia since 1998. In Vladimir oblast, for example, treatment success rate has increased from 64% to 80%. Our mission in Russia supports drug resistance surveillance and DOTS Plus pilot projects for effective MDR TB control, which serve as models to be replicated with resources from the Global Fund grant.

U.S. Commitment

The U.S. is on the frontlines of the battle against TB. USAID, HHS/CDC, the Office of the Global AIDS Coordinator, and HHS/NIH have been working closely together over many years in TB and have extraordinarily good working relationships that takes advantage of each Agency's strengths and ensures that USG resources for TB and for TB/HIV are used in the most effective and efficient manner possible. USAID's bilateral programs assist TB programs in Africa, Asia, Europe and Eurasia, and Latin America. As the second leading donor to the GDF, our funding helps to provide drugs to many more countries, and our technical assistance is helping to improve the performance of Global Fund grants. We work closely with our international and in-country partners, and the USG is recognized not only as the leading bilateral donor for TB, but also for our technical leadership and very supportive engagement. USAID and HHS/CDC represent the US Government on the international Stop TB Partnership Coordinating Board, and a USAID staff member, Irene Koek, is currently serving as Chair of the Stop TB Partnership Coordinating Board.

Moving Forward

We know what needs to be done. The *Global Plan to STOP TB 2006 - 2015* provides us the road map and the STOP TB Strategy provides the key interventions. USAID remains fully committed to working with all of our partners to renew the charge against TB.

¹ The 22 High Burden countries (HBCs) are responsible for 80% of the global TB burden. USAID assists the following HBCs in Africa: Nigeria, South Africa, Ethiopia, Kenya, Democratic Republic of Congo, Tanzania, Uganda, and Mozambique. The only HBC in Africa where we do not work is Zimbabwe where USAID programs are limited due to the difficult conditions there; programs are focused on HIV/AIDS, democracy and humanitarian assistance, with the bulk of this being emergency humanitarian assistance, mostly food aid.