



Critical Interventions: Tuberculosis and HIV/AIDS

Tuberculosis (TB), an airborne disease caused by *Mycobacterium tuberculosis*, is the leading cause of death among people living with HIV (PLWHA).

By the Numbers

- At least one-third of the over 34 million PLWHA are infected with a latent form of TB, which can progress to TB disease as HIV depletes the immune system.
- Among PLWHA with latent TB infection, approximately 10% per year develop TB disease, and in most countries supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), an even greater proportion develop TB disease in the first 6-12 months after initiation of antiretroviral therapy (ART).
- Globally, an estimated 13% of incident TB cases are co-infected with HIV.
- The dual epidemic is particularly pervasive in Africa, where 80% of the total global burden of dual HIV/TB cases is found. Therefore, screening, diagnosis, treatment, and prevention of TB disease among PLWHA is critical to reducing mortality and preventing the spread of TB to others.
- PEPFAR's annual funding for HIV/TB activities has increased from \$19 million in 2005 to \$160 million in 2011.

Priority HIV/TB Interventions

- Routine HIV testing for people with TB, their partners and families, and people with symptoms of TB
- Provision of co-trimoxazole, a cost-effective medicine to prevent against opportunistic infections for all PLWHA co-infected/TB patients
- Starting all people with active TB and HIV on ART (within the first 2 months of starting anti-TB treatment or as soon as possible if severely immunocompromised)
- Evidence-based methods to prevent the acquisition of HIV for people with TB, their families and communities
- Preventing TB in co-infected persons through isoniazid prophylactic treatment
- Ensuring people with TB who test positive for HIV are referred for ongoing HIV care and treatment
- Evidence-based methods to prevent the transmission of TB in healthcare settings



Saving Lives with Smarter Programs: PEPFAR at Work

PEPFAR supports national TB and HIV/AIDS programs to integrate TB prevention, diagnostic, and treatment services into HIV services in TB care settings. PEPFAR has supported the development of adult and pediatric comprehensive care packages which include TB prevention, screening and treatment and recommend interventions targeting the primary causes of HIV-related illness and death.

The following are examples of PEPFAR working under national strategies and in partnership with host nations to support scale-up of collaborative HIV/TB services:

- In 2011, PEPFAR-supported programs reported 3.8 million PLWHA were screened for TB in HIV care or treatment settings. Also that year, 230,800 patients in HIV care or treatment started TB treatment.
- In 19 PEPFAR-supported countries in Africa, between 2003 and 2010, HIV testing in TB patients rose from 4% to 61%, compared to 1% to 40% increases in testing in non-PEPFAR supported African countries.
- In 2010, WHO reported that 42% of HIV-positive TB patients received ART in PEPFAR countries, compared to 34% in non-PEPFAR countries.
- The USG is playing an active role in the global roll-out of Xpert MTB/RIF, an exciting new rapid molecular test for TB and drug resistance (RIF). With funding from NIH, PEPFAR and USAID, the organizations and their supported partners have procured 115 GeneXpert instruments to date in 24 countries. Plans are in place to procure an additional 160 instruments in 2012, which in total will support 32 countries. Through intensive technical assistance in a number of countries, USG and their partners have developed a robust strategic approach to assist Ministries of Health to begin planning and using Xpert in a number of sites.
- PEPFAR technical experts developed key evidence on optimal screening tools to identify TB in PLWHA, which more accurately diagnoses patients while targeting limited resources to those at highest risk. This research changed international guidelines for TB screening.
- PEPFAR provided technical and financial support to WHO to develop the recently released "Policy on collaborative TB/HIV activities: guidelines for national programs and other stakeholders." This normative document provides the backbone of PEPFAR's guidance to teams on programming PEPFAR resources.
- PEPFAR has compiled summary recommendations for TB intensified case finding among pregnant women living with HIV. Provision of integrated HIV/TB activities in PMTCT and MCH services is the most effective strategy for reducing HIV/TB-



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related morbidity and mortality among pregnant women and their infants. Specific recommendations include routine TB screening for HIV-infected pregnant women, early initiation of ART, provision and appropriate use of IPT and TB infection control in PMTCT and other maternal-child healthcare facilities, and improved monitoring and evaluation of TB screening, diagnosis, treatment, and IPT initiation and completion.

- From 2005 to 2011, Rwanda documented significant increases in HIV testing for people with TB (69% to 97%). For people with TB testing positive for HIV they reported increases in provision of both CPT (15% to 97%) and ART (13% to 67%). These increases were a direct result of their focused scale-up of collaborative HIV/TB activities which included introducing a “one-stop” approach whereby HIV care and treatment services are now available at 90% (177 of 196) of all TB diagnostic and treatment centers in the country.
- In Tanzania, PEPFAR supported the expansion of HIV/TB collaborative activities resulting in 95% of TB patients being tested for HIV in new sites.
- PEPFAR supported development of a TB infection control training and implementation package to address evidence that TB was being transmitted in healthcare facilities. This package emphasizes simple activities that can be performed and monitored at the facility level to begin immediate implementation of TB infection control. Facility risk assessment and risk analysis tools as well as sample facility infection control plans and templates are included.

Resources:

[Revised WHO policy on collaborative TB/HIV activities](#)
[Guidelines for ICF/IPT for PLWHA in resource-constrained settings](#)
[Guide to monitoring & evaluation for collaborative HIV/TB activities](#)
[PEPFAR Next Generation Indicators Reference Guide \(August 2009\)](#)
[WHO Policy on TB infection control](#)
[2010 WHO HIV Treatment Guidelines](#)
[CDC TBIC Implementation Package](#)

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