

Tuberculosis E-News



New Developments

Country Spotlight: USAID/Brazil Drug Resistance Tuberculosis Information System Earns Honor in Brazil

On September 16, the Drug Resistance Tuberculosis information system was named the winner of the Special Prize for the 56th Anniversary of the National School of Public Health/Oswaldo Cruz Foundation in the category of "Health Care." Founded in 1900, The Oswaldo Cruz Foundation is considered one of the world's leading health and technology research institutions. Developed in partnership with the Helio Fraga Reference TB Center in Brazil, the information system has been implemented in 122 MDR-TB treatment centers throughout the country.

The system is a Brazilian adaptation of the e-TB Manager® (developed by the USAID-funded Strengthening Pharmaceutical Management Project, a comprehensive electronic web-based tool for monitoring the availability and use of second-line TB drugs and other critical elements of multi-drug resistant TB treatment services). Beyond Brazil, USAID is collaborating with WHO to expand the use of [e-TB Manager®](#), including in the Eastern European region and the countries of the former Soviet Union, where the tool has been endorsed for region-wide implementation.

Fully Functional Laboratory Network

Up to now, our USAID-supported programs have mainly focused on laboratories, but not the laboratory network. The scaling up to a fully functioning laboratory network is a paradigm shift. A key intervention of the Lantos-Hyde USG TB Strategy is to "increase TB diagnosis by scaling up a fully functional laboratory network with appropriate biosafety provisions." In resource-limited settings, the following five levels of laboratories are desirable to best deliver services in a laboratory network that provides universal access to TB diagnostic services:

1. **Level I – Diagnostic Microscopy Center**
2. **Level II – District Laboratory**
3. **Level III – Provincial/State/Intermediate Laboratory**
4. **Level IV – National Reference Laboratory**
5. **Level V – Supranational Reference Laboratory**

In supporting the GHI and with the increase in HIV/AIDS and tuberculosis funding, the [framework for strengthening laboratory systems](#) [PowerPoint, 199KB] globally shows the core elements of a

★ Did You Know?

Union technical courses cover the practical and theoretical aspects of TB prevention, treatment, and control. Subjects considered include bacteriology, clinical presentation and diagnosis, epidemiology, interventions for TB control and elimination, and the principles of TB control in a national program. Teaching methods consist of lectures, discussion, group work, laboratory bench work, and field visits. [Learn more](#)

The WHO European region accounts for 6 percent of the global burden of TB and has the highest levels of drug-resistant tuberculosis in the world. The region faces the fastest growing HIV epidemic in the world, yet it has countries with the lowest coverage with antiretroviral therapy (ART) globally. See the link to the full report under [resources](#).

The CAMELIA study (Cambodian Early Versus Late Introduction of Antiretroviral Drugs) in Cambodia showed that HIV-infected TB patients who started antiretroviral therapy two weeks after anti-TB treatment had a 33 percent reduction in mortality compared with those starting antiretroviral therapy at eight weeks. [Read the study](#) [PDF, 244KB].

★ Pearls

Ambulatory Outpatient Treatment

TB programs should discourage hospitalized treatment of drug susceptible TB patients and move towards ambulatory outpatient treatment to reduce unnecessary stress on health system, increase successful treatment outcomes and respect human rights of patients.

"Treatment 2.0"

The most recent World Health Organization guidelines for antiretroviral therapy, call for earlier

laboratory system that need to be strengthened, to provide broad-based, integrated, quality laboratory services and ensure sustainability of global laboratory investments. This framework provides the foundation needed to combat multiple global disease program needs, and to address issues in order to be effective in resource-poor countries.

The Lantos-Hyde USG TB Strategy states that the “USG will ensure that our support to TB programs is integrated with overall health sector policies and planning frameworks and strengthens the overall health system,” and a “specific focus will be on strengthening laboratory systems.” The Stop TB Partnership Global Laboratory Initiative Working Group recommends that programs designed to support laboratory strengthening address the following eight essential systems: political commitment, legislation, policies, plans, and financial; training and human resource development; quality management; biosafety; infrastructure, equipment procurement, validation, and maintenance; supply chain management; laboratory information, reporting, and data management; specimen transport and sample referral.



Participants in the World TB Day Healthy Walk in Senayan, Jakarta, March 28, 2010. Source: KNCV Indonesia

Country Spotlight: Indonesia

The commemoration of World TB Day 2010 is still going on in Indonesia, with a series of interesting events as a platform for creating more public awareness about the TB threat. The festivities reached their pinnacle at the World TB Day Healthy Walk, on March 28, 2010, at the Senayan National Stadium lot. This event was organized by Aisyiyah, the women wing of Muhammadiyah, which is one of the largest Islamic faith-based organizations. Around 7,000 people from all over parts of

Jakarta, Bogor, Depok, Tangerang, and Bekasi took part in the campaign.

“...health is not merely the responsibility of health sectors; it is everybody business.” The Healthy Walk was also attended by other high-level persons, such as the Minister of Justice and Human Rights, Patrialis Akbar; the Director General of Communicable Diseases and Environment Health, Tjandra Yoga Aditama; the Chief of Muhammadiyah, Din Syamsudin; and the Chief of Aisyiyah, Siti Chamanah.

Diagnosis and Outcome of Childhood Tuberculosis: Implementing Public Health Policy in Three Districts of Pakistan

This study estimated case notifications of children with TB and their outcomes. With the introduction of the new NTP policy, case notification of childhood TB increased from 189 (2004–2005) to 731 for the two years 2006–2007. The annual notification rate of childhood TB cases increased from 1.4 per 100,000 population (2004–2005) to 5.2 per 100,000 population (2006–2007). Of the total 920 childhood TB cases registered, 610 were pulmonary, 202 extra-pulmonary, and the remaining 108 unclassified. The threefold increase in case notification was accompanied by a lack of follow-up, resulting in an increase in unknown treatment outcomes, from 21.7 to 73.3 percent. Managing children with TB in routine NTP practice is possible, but without adequate operational guidelines, and expanding

initiation of treatment, use of simpler and better drug regimens, and strategic use of laboratory monitoring. These recommendations will further decrease morbidity and mortality as well as vertical and horizontal transmission of HIV. However, despite 5 million people living with HIV in low- and middle-income countries receiving antiretroviral treatment, global coverage remains low. “Treatment 2.0” opens a new door, and the next few years will see whether funding allows a potentially new paradigm of care to be realized.

★ Calendar

11.11.10 to 11.15.10 – [The 41st Union World Conference on Lung Health, Berlin, Germany](#)

October 2010 – The TB E-Newsletter Electronic Survey is coming your way! Feedback from our readership will determine whether to continue the newsletter, and if so, how to shape it for future issues.

★ Resources

- [Practical Solutions for TB Infection Control: Infectiousness and Isolation – Francis J. Curry National Tuberculosis Center Online Course \(60 minutes\)](#)
- [TB/HIV Activities Report from the Joint Meeting of WHO/EURO and the TB/HIV Working Group of the STOP TB Partnership \[PDF, 668KB\]](#)
- [Health Extension Workers Improve Tuberculosis Case Detection and Treatment Success in Southern Ethiopia: A Community Randomized Trial – PLoS ONE \[PDF, 441KB\]](#)

PowerPoints You Can Use

- [Laboratory Systems – Integrated, Functional, Effective \[PowerPoint, 199KB\]](#)

services and follow-up, it can lead to suboptimal results. *The International Journal of Tuberculosis and Lung Disease*. 2010 Jul; Volume 14, Number 7: 872–7. [Read the abstract.](#)

Top photo source: Reproductive and Child Health Alliance (RACHA)

If you have questions or comments, please contact Clydette Powell at cpowell@usaid.gov.

To access the PDF version of USAID's TB e-newsletter, please visit http://ghintranet.usaid.gov/GH/elements/TB/tb_eneews/index.html.