

# APHL TB Activities

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6<sup>th</sup> National Conference on Laboratory Aspects  
of Tuberculosis  
June 21-22, 2010





“Take interest, I implore you, in those sacred dwellings which are designated by the expressive term: laboratories. Demand that they be multiplied; that they be adorned. These are the temples of the future...temples of well being and happiness. There it is that humanity grows greater, stronger, better.”

- Louis Pasteur

# Vision

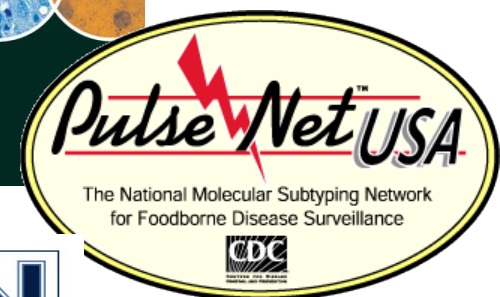
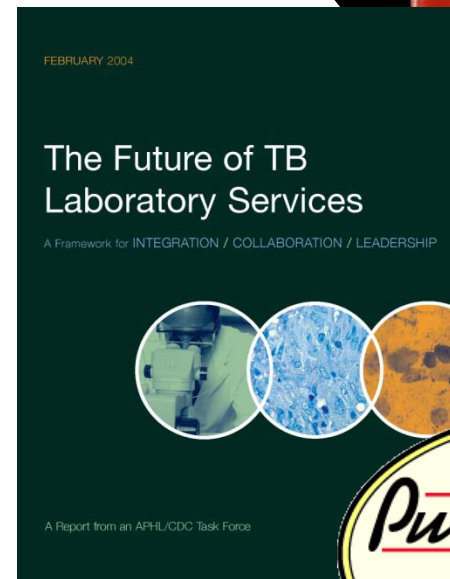
A healthier world through quality laboratory practice.

# Mission

To promote the role of public health laboratories in **shaping national and global** health objectives, and to promote **policies, programs, and technologies** which assure continuous improvement in the **quality** of laboratory practice and **health outcomes**.

# Public Health Programs

- Emergency Preparedness & Response
  - LRN
- Environmental Health
  - Environmental Labs
  - Newborn Screening & Genetics
- Infectious Diseases
  - Food Safety
  - HIV, **TB** & STDs
  - Flu, EIDs
- Strategic Initiatives & Research
  - Informatics
  - Knowledge Management
  - Surveys
- Laboratory Systems and Standards



# Committees

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- Emergency Preparedness and Response
- Environmental Health
- Food Safety
- Global Health
- Infectious Diseases
  - TB SC
  - HIV SC
  - STD SC
  - Influenza SC
  - Molecular SC
- Informatics
- Knowledge Management
- Laboratory Systems and Standards
- Membership and Recognition
- Newborn Screening and Genetics
- Public Policy
- Workforce

\* Many have subcommittees

# APHL FY11 Legislative Priorities

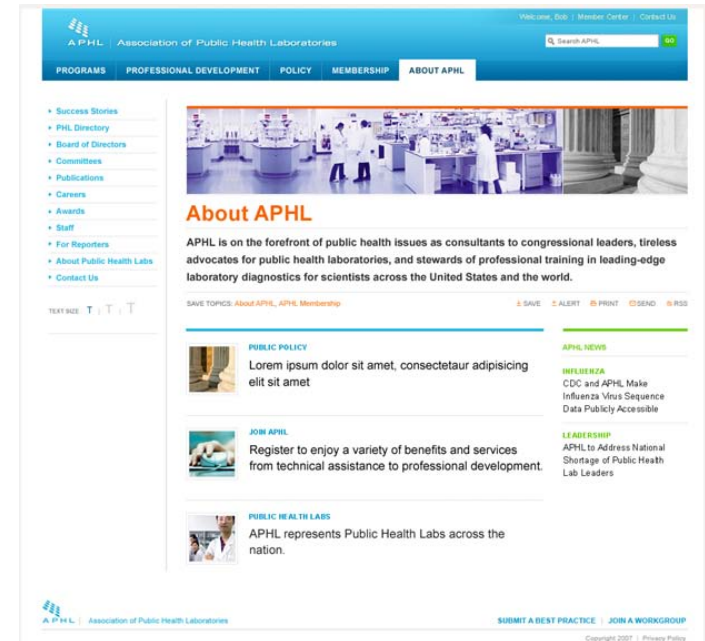


- Preparedness
- Infectious Diseases
  - Epi Lab Capacity
  - Food Safety
  - TB/HIV/TB
- Environmental Health
  - Biomonitoring
  - Newborn Screening
- Electronic Lab Messaging
- Health Reform



# Information & Resources

- Web/Communication
  - Member-only web content (e.g. protocols, survey data)
  - Listservs & Web boards
  - Email Communications
- Publications
  - Lab Matters
  - E-Update
  - Promotional Brochures
- Survey/Data Collection
  - Issue Briefs





# TUBERCULOSIS

## A SERIOUS RE-EMERGING THREAT

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### UNMET NEEDS

- Provide federal funding of \$210 million as authorized in Public Law 110-392. HHS Secretary's Advisory Council for the Elimination of Tuberculosis has recommended \$252.4 million to meet the CDC goal of tuberculosis (TB) elimination in the US.
  - > Develop government/private partnerships designed to encourage the development of new tuberculosis assays.
- Increase funding for laboratories to implement new and existing diagnostic tests that can identify tuberculosis and screen for drug resistance.
- Standardize drug susceptibility testing methods in the US for first- and second-line drugs used to treat TB patients to improve clinical outcome.
- Provide funding for CDC to conduct an assessment of laboratory tuberculosis testing capacity.
- Develop a plan of action that will address extensively drug resistant tuberculosis (XDR-TB) to prevent it from invading the US.
- Direct CDC to develop a strategic plan for implementing and maintaining a systems approach to TB control that includes laboratory systems.
- Assess the true costs of providing TB laboratory services because the cost to identify individual cases rises as the number of cases declines and the cost of services will vary from one jurisdiction to another.
- Develop recommended testing methods for different patient populations, as well as



guidelines to help jurisdictions select the appropriate level of service.

- Improve laboratory staff proficiency in complex tuberculosis testing procedures in light of fewer specimens being tested in relation to the decline in tuberculosis.
- Train new laboratory staff in tuberculosis testing procedures in light of a rapidly aging workforce.

### BACKGROUND

Tuberculosis is a serious re-emerging infectious disease that affects the lungs and respiratory system, as well as other organs, and can lead to death if left untreated. This illness is transmitted person-to-person via the air by coughing, sneezing and even talking. Tuberculosis has re-emerged as a co-infection with Human Immunodeficiency Virus (HIV) because HIV weakens the immune system and makes the patient more susceptible to infection and severe TB disease.

Today, despite an overall decline in cases, tuberculosis continues to incur significant social, public health and economic costs in the US.

# APHL/CDC TB Lab Services Survey

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- Future of TB Laboratory Services recommendation -2004
- Comprehensive national assessment of available TB laboratory services in order to fully understand laboratory capabilities and capacities of jurisdictional laboratory networks.

Results will be used to:

- Identify gaps /Develop appropriate interventions
- Identify opportunities to strengthen TB systems
  - improving intra- and extra- laboratory communication; ordering and reporting mechanisms;
  - referral systems.

# APHL/CDC TB Lab Services Survey

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- **Process to date**

- Funding identified
- Workgroup convened August 2009
- Clinical, commercial, public health , CDC input
- Survey development complete
  - 118 Questions, 11 sections
  - The number of questions depends on the level of services provided;  
Target labs identified
- OMB approval
- Beta tested
- In beta testing the survey took an average of 60 minutes to complete

- **Launch September 2010**

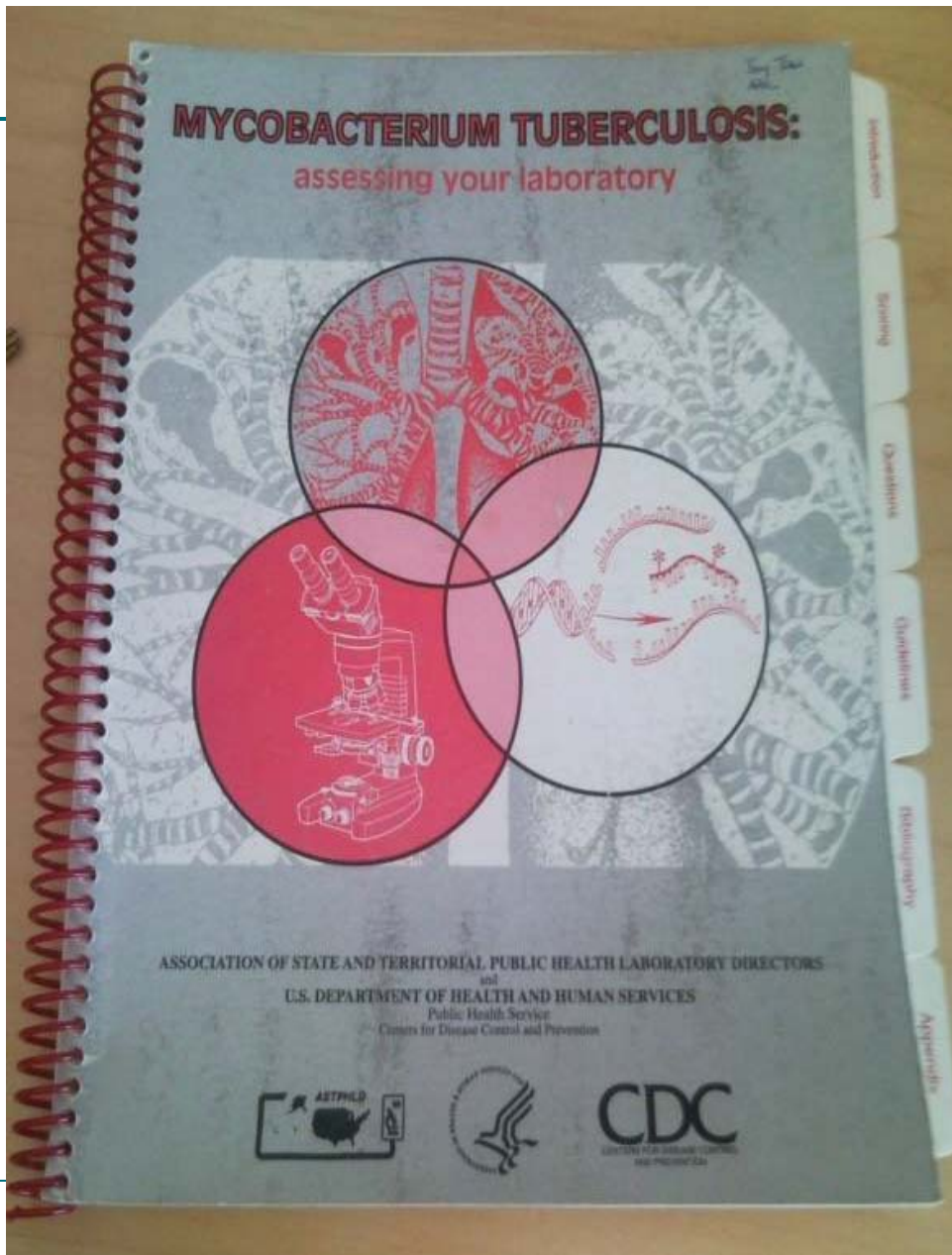
- electronic survey via email; a pdf version also available
- all U.S. commercial, clinical and public health laboratories that perform any level of TB testing

# APHL/CDC TB Lab Services Survey

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## How PHLs Can Help

- Complete the survey when it arrives in your lab.
- Promote the survey to clinical and commercial laboratories in your jurisdiction
  - APHL will provide promotional tools including flyers and letters
  - Promotional tools will be available on [aphl.org](http://aphl.org) later this summer



# TB Self-Assessment Tool

v. 1995

# Mycobacterium Tuberculosis: Assessing Your Laboratory

[www.aphl.org/tbtool](http://www.aphl.org/tbtool)

## Background:

Tuberculosis is a serious re-emerging infectious disease. An estimated 10-15 million United States (US) citizens have latent tuberculosis infections, and without detection and treatment, approximately 10% of these individuals will develop tuberculosis at some point in their lives. Costly tuberculosis outbreaks still occur. The growing threat of multi-drug resistant (MDR) and extensively-drug resistant (XDR) TB not only leads to increased cases of tuberculosis but also increased costs. Tuberculosis-related healthcare costs approach \$1 billion each year in the US.

Quality laboratory testing is essential in order to reach the goal of TB elimination in the US. Improvements in laboratory testing must be maintained and translated into expedited and improved treatment and control. It is imperative that the laboratory community provides healthcare providers and TB controllers with accurate smear, culture, drug susceptibility and molecular results within acceptable turn-around times while providing a safe work environment for laboratorians. *Mycobacterium Tuberculosis: Assessing Your Laboratory* is intended to be used as a self-assessment tool to provide information on best-practices in the laboratory and an opportunity to thoroughly review your procedures, assign priorities, and adopt a plan to update and improve your laboratory practices if needed.

## LOG IN

If you are already registered please enter your email address and password.

Login (Email Id.):

Password :

**Submit**

## REGISTER / GET NEW PASSWORD

If you need to register, or if you **forgot your password**, please enter your email address. You will receive a password via email. Any existing data you have entered **will not be overwritten**.

Email :

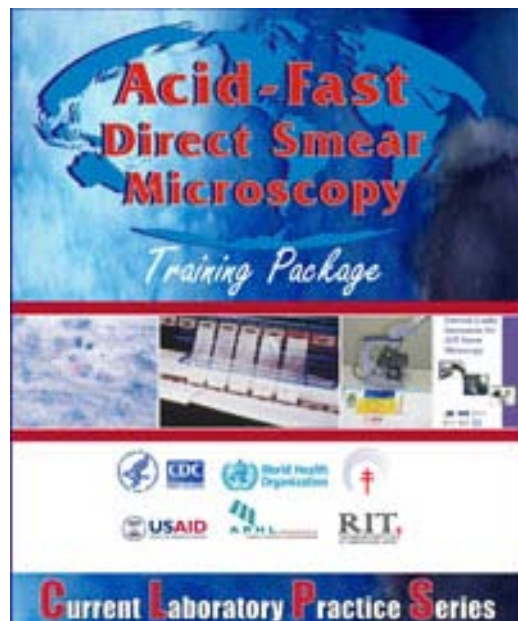
**Submit**

# Core TB Laboratory Services for Public Health Laboratories

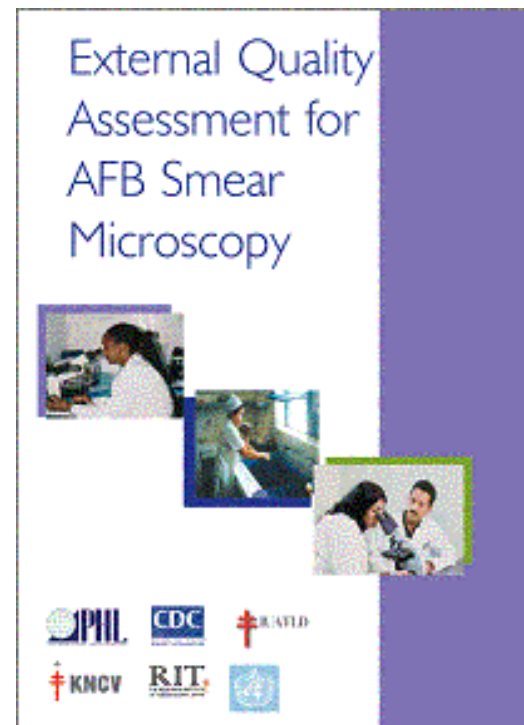
by the APHL TB Steering Committee

# Core Functions Document

# International TB related Activities



- PEPFAR/GAP
  - APHL Global Health Program
- WHO- Global Lab Initiative



# Other APHL TB Resources

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- Laboratory Upgrade Component of the TB Cooperative Agreement – Data Templates and Checklists Available on APHL’s website
- APHL’s TB Resources Page:  
[www.aphl.org/aphlprograms/infectious/tuberculosis/pages/default.aspx](http://www.aphl.org/aphlprograms/infectious/tuberculosis/pages/default.aspx)
  - The Core TB Services of Public Health Laboratories
  - The Future of TB Laboratory Services
  - TB DST Expert Panel Meeting Summary Report
  - Sputum Collection Guidelines
  - TB Conference Proceedings

Make a Suggestion! – Let us know what other resources you would like to see APHL develop or provide

# Questions

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  - Manager, HIV, Hepatitis, STD & TB Programs
- Shari Shea ([sharon.shea@aphl.org](mailto:sharon.shea@aphl.org))
  - Director, Infectious Diseases and Food Safety
- Rosemary Humes ([roseamry.humes@aphl.org](mailto:roseamry.humes@aphl.org))
  - Senior Advisor, Scientific Affairs