



# APHL Position Statement

## Increase in Tuberculosis Funding for Public Health Laboratories

### A. Statement of Position

APHL supports increased federal funding for tuberculosis (TB) control that includes specific support for public health laboratories in order to ensure and enhance diagnostic capability and training for laboratorians and public health personnel leading to improved prevention, control, testing, and treatment.

### B. Implementation

1. APHL will continue to advocate for more funds to be included in the federal budget for TB testing in public health laboratories.
2. APHL will encourage public health laboratories to develop and implement new TB diagnostics for more rapid detection and drug susceptibility testing of TB. Improved detection will enhance both diagnosis and surveillance.
3. APHL will distribute this policy statement to key policy decision makers to assure that the public health laboratory is included as an integral component of TB control.
4. APHL will assist the public health laboratories in assessing the true costs of providing TB laboratory services. The cost to identify individual cases rises as the number of cases declines and the cost of services varies from one jurisdiction to another; laboratory costs may need to increase in order to detect cases more

rapidly.

5. APHL will advocate for more TB laboratory training since the testing for tuberculosis is highly complex, and with the complication of workforce shortage issues, it is important to ensure the ability of public health laboratory TB workforce to keep pace with technology.
6. APHL will continue to collaborate with federal and non-governmental organizations (i.e., NTCA, STOP TB USA) to promote the need for increased funding for TB control and resource sharing.

### C. Background/Data Supporting Position

To reach the goal of the elimination of TB in the US, improvements in laboratory testing must be maintained and translated into improvements in the treatment, prevention and control of tuberculosis. In 2008, 12,904 new cases of tuberculosis disease were diagnosed in the US. Despite an overall decline in cases, TB continues to incur significant social, public health, and economic costs in the US, and world-wide. Approximately one-third of the world's population is latently infected with the bacterium that causes TB, and may progress to an active case. An estimated 10 to 15 million US citizens have latent TB infection<sup>1</sup>, and about ten percent of these individuals will develop TB at some point in their lives. Costly TB outbreaks

still occur, multi-drug resistant TB (MDR-TB) continues to spread, and extensively-drug resistant TB (XDR-TB) is now present, as well. Altogether, TB-related costs approach \$1 billion each year in the US<sup>2</sup>.

Control of TB in the United States is dependent upon the use of the latest laboratory testing methods at public health laboratories. Currently all 50 state public health laboratories perform some level of TB testing and serve as referral and reference laboratories for culture identification and TB drug susceptibility testing in support of other public and private sector laboratories. In addition, most state public health laboratories provide follow-up laboratory services during the course of treatment of TB, which lasts at least six months and may extend up to 2 years or longer for MDR-TB or XDR-TB cases.

Public health laboratories have used CDC funding over the last 2 decades to improve the laboratory diagnosis of TB. This included upgrading facilities to Biosafety Level-3 to enhance biosecurity; adding trained laboratory personnel sufficient to meet the need for the rapid laboratory diagnosis of TB; and ensuring competency of staff in the use of state-of-the-art diagnostic equipment and molecular testing procedures. It is costly to develop and maintain the capability to perform state-of-the-art assays, and in recent years funding has declined both in real dollars and even more when adjusted for inflation. This funding decline is exacerbated by the fact that specialized and highly complex tests such as nucleic acid amplification for rapid identification and drug susceptibility testing for TB are not readily available in the private sector in many parts of the country, and not fully implemented throughout the country; therefore, private laboratories rely on public health laboratories for these highly specialized and costly services.

As part of CDC's response to the threat of MDR-TB<sup>3</sup>,

funding was provided to improve laboratory services and an increased emphasis was placed on providing reliable results in a timely manner. During the past decade, public health laboratories made tremendous strides in improving test performance. These improvements contributed to the resumption of the decline of the incidence of TB in the United States and the decrease in MDR-TB cases.

The Healthy People 2010 objective 14.14 sets a two-day target from receipt of specimen for laboratories to confirm and report 75% of culture-confirmed TB cases<sup>4</sup>. Achieving this objective requires the implementation of newer and more costly rapid molecular techniques. For example, in January of 2009, CDC published recommendations that nucleic acid amplification testing be performed on all patients suspected of having pulmonary tuberculosis in order to provide TB diagnosis within 48 hours<sup>5</sup>. Adequate funding of public health laboratories is critical if they are to achieve aggressive turnaround times required by TB programs for the identification and drug susceptibility testing of TB specimens<sup>6</sup> and if they are to implement the latest diagnostic technologies.

APHL, CDC, the National TB Controllers Association (NTCA) and colleagues in the private sector laboratory community partnered to develop the report "The Future of TB Laboratory Services<sup>7</sup>" which was published on April 15, 2005 as a Morbidity and Mortality Weekly Report (MMWR) Recommendations and Reports<sup>8</sup>. This report emphasizes the leadership role of the public health laboratory in assuring effective TB services within the US, and identifies key benchmarks that will require federal, state and local action. Elements of this report were included as requirements in recent Cooperative Agreement requests for proposals (RFPs), and it is essential that resources be provided to meet these requirements. Additionally, APHL has established a TB steering committee, which also includes representatives from CDC and,

NTCA, to guide further implementation of these benchmarks.

APHL has advocated for \$252 million to be allocated for tuberculosis control, with \$27 million going to support public health laboratory testing. Yet, while APHL has advocated for additional TB control resources, this funding has been stagnant since 1995. With inflation factored in the funding has experienced a substantial decline of 25 percent in real dollars<sup>2</sup>. At the same time, severe budget shortfalls have led many state and local governments to decrease local or state funding for public health laboratories. Additional financial support for the nation's public health laboratories is critically needed to maintain the infrastructure and TB testing capabilities in order to reach the goal of TB elimination in the US by the year 2020.

#### D. References

1. Bennett DE, Courval JM, Onorato IM, et al. Prevalence of TB infection in the US population, 1999–2000 [Abstract 67921]. In: Program and abstracts, 131st annual meeting of the American Public Health Association; San Francisco, California, November 15–19, 2003.
2. Tuberculosis: A Serious Re-Emerging Threat. Silver Spring, MD: Association of Public Health Laboratories; 2010; Available at [http://www.aphl.org/policy/facts/Documents/Policy\\_2010\\_TBFactSheet.pdf](http://www.aphl.org/policy/facts/Documents/Policy_2010_TBFactSheet.pdf)
3. Centers for Disease Control and Prevention. (1992) National Action Plan to Combat MDR-TB. MMWR. Recommendations and Reports. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00031159.htm>
4. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
5. Centers for Disease Control and Prevention. (2009) Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis. MMWR. Recommendations and Reports. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5801a3.htm>
6. TB Funding Letter to CDC. Washington, DC: Association of Public Health Laboratories; 2005.
7. The Future of TB Laboratory Services—a framework for integration, collaboration, leadership. Washington, DC: Association of Public Health Laboratories; 2004. Available at [http://www.aphl.org/AboutAPHL/publications/Documents/TB\\_Task\\_Force\\_Future\\_2004.pdf](http://www.aphl.org/AboutAPHL/publications/Documents/TB_Task_Force_Future_2004.pdf).
8. Morbidity and Mortality Weekly Report (MMWR) Recommendations and Reports , April 15, 2005 (<http://www.cdc.gov/mmwr/PDF/rr/rr5406.pdf>).

---

Recommended by: The Infectious Disease Committee, Approved by Board of Directors for Interim Use: January 2012, Approved by Membership: February 2012, Sunset Date: February 2017

Contact: Celia Hagan, Senior Specialist, Public Policy  
240.485.2758, [celia.hagan@aphl.org](mailto:celia.hagan@aphl.org).