Executive Summary
CDC-APHL Public Health Laboratory Workforce Strategic Plan
April 2014

Background and Purpose
Public health programs depend on highly skilled public health laboratory (PHL) professionals who provide accurate and timely test results in many specialized areas. However, the PHL system and its workforce face severe challenges, including loss of professionals to retirement, a declining number of professionals entering the workforce, and rapidly evolving laboratory science and technology that require frequent informal and formal training. The Centers for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories (APHL) have long-standing efforts that provide training and fellowships, foster leadership development, and measure the current state and needs of the PHL workforce. However, the need was identified for a focused PHL workforce strategic plan to guide and prioritize future activities.

In May 2013, the Centers for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories (APHL) convened a multidisciplinary workgroup to develop a PHL workforce strategic plan with concrete activities to improve PHL workforce recruitment, education, and training to meet the challenges of the 21st century. This report summarizes key points of the plan.¹

Review of Existing Strategic Frameworks
CDC and APHL created the Laboratory Efficiencies Initiative (LEI)² in 2011 to lead transformation of the nation’s PHL network into a sustainable and integrated system. Using the LEI strategic plan and the CDC-sponsored “Roadmap for Developing the National Public Health Workforce Strategy” (a product of the 2012 “Modernizing the Workforce for the Public’s Health” summit³) as guideposts, participants in the May 2013 meeting focused on four objectives:

- Identifying critical technical and managerial deficiencies and gaps in workforce development

¹ The full meeting report, Draft Framework for the CDC-APHL Public Health Laboratory Workforce Strategic Plan, is available at: https://www.aphlweb.org/aphl_departments/qs/Projects/lei/default.aspx
² Information about the LEI is available at: https://www.aphlweb.org/aphl_departments/qs/Projects/lei/default.aspx.
• Recommending and prioritizing strategies and key activities to address short- and long-term needs to address the deficiencies
• Crafting creative solutions to workforce recruitment, retention, and development
• Establishing, enhancing, and maintaining strategic alliances and national partnerships to leverage and enable collaboration on workforce development initiatives.

Mapping Goals and Identifying Priority Activities

For maximum practical impact, the meeting participants agreed to focus on workforce recruitment and retention, while presuming the need to work within the constraints of existing resources. They developed the following two statements of intent:

1. Intent Statement 1 (Recruitment): Encourage/help science majors to choose the PHL over other career options.
2. Intent Statement 2 (Retention): Provide PHL staff resources to ensure mobility within the PHL system.

Four broad goals related to these statements were mapped to the “Roadmap” and were customized specifically to address needs of the PHL workforce:

- Goal A — Enhance the education system at multiple levels
- Goal B — Increase the capability of the existing PHL workforce
- Goal C — Improve pathways for PHL careers
- Goal D — Strengthen systems and capacity to support the PHL workforce

Figure 1 shows the supporting strategies the participants proposed for each intent statement and their alignment with the four goals.

Meeting participants gave highest priority to Goals B, C, and D, especially in light of PHLs’ limited resources, and proposed several activities for each of the supporting strategies deemed relevant to each intent statement. The group then voted and prioritized the following four activities to be further developed\(^4\). These activities form the basis of the strategic plan, and are listed below, and depicted in Table 1.

1. Develop a marketing plan to promote awareness about PHL science
2. Expand the number of fellowship programs, considering the Wadsworth model of state-supported fellowships\(^5\)

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\(^4\) Consensus was obtained regarding the urgency of development of a comprehensive set of PHL workforce competencies. As such an effort is currently underway (with expected publication in 2014); this activity was not included in the voting process.

\(^5\) The New York state public health laboratory – the Wadsworth Center – has leveraged the APHL-CDC sponsored Emerging Infectious Diseases Fellowship program by creating a parallel program and giving eligible and qualified candidates who were not selected for the EID fellowship program due to funding constraints, an opportunity to participate.
3. Inventory activities that promote PHL careers
4. APHL will establish a new award to recognize PHLs that actively provide professional development resources and opportunities (the “Learning Laboratory” award).

Table 1: Public Health Laboratory Workforce Strategic Plan

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<tr>
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<td>Inventory activities that promote public health laboratory science careers</td>
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Conclusions

CDC and APHL will use this plan as a basis for their work to strengthen the nation’s PHL workforce. They commit to partnering actively with leaders across the public health sector to ensure close alignment with the priorities of state and local public health departments and programs. CDC and APHL also acknowledge the necessity to leverage assistance, skills or expertise, and other existing resources from partners, organizations and leaders in order to successfully accomplish these goals and commensurate activities.

The APHL Workforce Development Committee will lead implementation of the plan, which they will align with the APHL 2014-2016 Strategic Roadmap, beginning with the following next steps:

- Establish team leads for each of the prioritized activity areas
- Schedule a meeting to coordinate project planning among the team leads
- Develop action plans to include action steps, resources, timeframes, deliverables, outcome measures, and responsible parties
- Schedule quarterly status reports on execution of action plans.
Within CDC, the Center for Surveillance, Epidemiology, and Laboratory Services (CSELS) is available to facilitate internal communication with key program representatives, recognizing the distributed nature of laboratory workforce activities across different Centers.

![Public Health Laboratory Workforce Development Strategic Roadmap](image)

**Figure 1: Goals and Supporting Strategies**

- * indicates supporting strategies related to Intent Statement 1. (A1, A2, B4, C1, C2, D1, D4)
- ** indicates supporting strategies related to Intent Statement 2. (B2, B5, C3)
- + indicates supporting strategies related to both Intent Statements. (B1, C4, D2, D3)