



APHL Position StatementPublic Health Laboratory Workforce Shortage

A. Statement of Position

Immediate and continuing actions are required to provide and sustain a workforce pipeline producing competent public health, environmental, and agricultural laboratory (PHEAL) scientists, managers, and directors needed to monitor, detect, and control deadly diseases and environmental hazards.

B. Implementation

The extent to which PHEALs can continue to protect and improve the health of the public depends on having a sufficiently large workforce of fully educated and effectively experienced laboratory professionals. APHL and its partners must help ensure a sufficient and competent PHEAL workforce by:

- Conducting a triennial PHEAL compensation survey, disseminating survey findings, and using findings to help effect competitive compensation;
- Supporting implementation and maintenance of basic national personnel standards that include job titles and classifications, career paths based on standardizing minimum education and experience requirements, job descriptions based on core competencies, harmonized promotional criteria, retention tools, and mentoring and succession tools;
- 3. Working with partners to conduct periodic

- surveys to characterize the PHEAL workforce, disseminating findings, and using findings to support maintenance and enhancement of the PHEAL workforce pipeline;
- Implementing and maintaining career development and core competency training programs (e.g., New Lab Directors' Training, Emerging Leader Cohorts, Fellowship Programs, Internships, Regional Forums, Webinars);
- 5. Providing continuing support of the American Board of Bioanalysis' certification examination in public health microbiology;
- Working with CDC and other partners to develop, vet, and maintain a current set of workplace competencies for PHEAL scientific and technical employees;
- 7. Working with academic partners to help develop, implement, and maintain a doctoral program in public health laboratory science and practice employing distance learning and PHEALs as field-based applied research sites;
- Working with partners to identify, gain access to, and effectively use public and private funding to support continuing education and training needed by the current and future PHEAL workforce to pursue and gain core competencies;
- Supporting the visibility and marketing of careers in PHEAL science and practice.

C. Background/Data Supporting Position

Although laboratorians comprise only 1% of the public health workforce (Reference 1), they represent a key component of the public health infrastructure. Unfortunately a predicted shortage of laboratory professionals has been documented for over a decade (References 2-4). In addition to the loss of clinical laboratory science degree programs there is a rising rate of retirement among the "baby-boomer generation" (Reference 5). With the economic recession of 2008, job turnover also has risen along with the reduction in job security associated with both changing political environments and budgetary reductions. For example, a PHEAL workforce characterization survey in 2011 (Reference 6, pg. 38) reported 30% of 1,730 laboratorians expected to work fewer than 7. DeBoy, J., Luedtke, P., Warren, N., and Wichman, M. five more years in a PHEAL.

Other challenges to the current and future PHEAL workforce include lack of public visibility, expanding educational requirements, complex scientific and technical competencies, difficulty accessing access to advanced degrees in PHEAL science and practice, and a growing need for personal certification. In 2006 PHEAL directors identified (Reference 7) core courses needed by PHEAL scientist-managers and directors. However, in 2011an APHL survey (Reference 8) showed many current and future PHEAL managers and directors still lack this formal education.

The 2011 PHEAL workforce characterization survey (Reference 6, pp. 35, 37) also reported a range of factors that can have a negative impact on young people entering and staying in PHEAL careers. These factors include an insufficient number of job classifications and pay grade levels, lack of career paths/promotional opportunities, lack of work/life balance, and noncompetitive salaries. These factors also must be addressed to help ensure an adequate PHEAL workforce pipeline.

D. References

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- 4. Garcia, E., Bennett, A., DeFranco, M., et al. ASCP's 2011 vacancy survey of clinical laboratories. Lab. Med. 42(6):199-206.
- 5. Toossi, M. Labor force projections to 2012: the graying of the U.S. workforce. Monthly Labor Rev. 2004. Feb:37-57.
- 6. Univ. of Michigan Center of Excellence in Public Health Workforce Studies and Assoc. of Public Health Labs. National Laboratory Capacity Assessment, 2011. Ann Arbor, MI: Univ. of MI, 2012.
- Public Health leadership Institute year 15 report: toolkit for ensuring a future workforce of qualified public health laboratory scientist-managers and directors. 2006, 1-60.
 - http://www.aphl.org/search/results_publications.aspx?k =Publication:Workforce
- 8. Assoc. of Public Health Laboratories, National Laboratory Workforce Capacity Assessment: Survey of Laboratorians, 2011

Recommended by: The Workforce Development Committee, Approved by Board of Directors for Interim Use: December 2012, Approved by Membership: January 2013, Sunset Date: January 2018

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