


The Future of the Environmental Health Profession

 See also the *AJPH* Environmental Health Workforce & Regulation section, pp. 284–298.

Environmental health (EH) is a fundamental component of a comprehensive public health system, so the role of EH professionals is critical to the health and safety of the communities they serve.^{1,2} New and evolving challenges are stressing the EH profession. The rapid development of information technology renders many former practices obsolete, with few reliable funding sources available to stay up-to-date in a constantly changing landscape. A reduced and increasingly aging workforce may not have the necessary training and strategic skills to tackle these complex and evolving challenges.³

To identify and address these ongoing deficiencies, the Centers for Disease Control and Prevention, the National Environmental Health Association, and Baylor University established the initiative Understanding the Needs, Challenges, Opportunities, Vision, and Emerging Roles in Environmental Health (UNCOVER EH).⁴ This initiative surveyed state, tribal, local, and territorial public health departments using a Web-based assessment and held two in-person workshops to gather data on the perceived priority problems and needs.⁴

Gerding et al., in “Identifying Needs for Advancing the Profession and Workforce in Environmental Health” (p. 288) in this issue of *AJPH*, present feedback from focus groups conducted in August 2018. These focus groups examined the problems and needs affecting EH professionals and identified 29 problem statements. The problem statements were organized by preidentified themes for examination, including effective leadership, workforce development, equipment and technology, information systems and data, garnering support, and partnerships and collaboration.

The authors discuss the problem statements identified across these six themes in their article. I discuss some perspectives that illuminate how these problem areas are affecting the delivery of EH services at the state and local levels.

EFFECTIVE LEADERSHIP

Gerding et al. state that leadership training opportunities are resource intensive and rare, with formal mentoring or coaching opportunities seldom

implemented. Over time, federal funding for leadership academies has been reduced, if it is available at all. With a tremendous number of baby boomers in leadership roles, the expectation is that most current leaders will retire at around the same time, leaving a vacuum in these positions and an insufficiently trained workforce to assume these roles. Often, leadership roles are filled with internally promoted candidates who meet only the minimum qualifications for the position based on factors other than professional acuity, such as seniority.

A CAPABLE, SUSTAINED WORKFORCE

Focus group respondents suggest that there is no common definition or identity for EH, and they find it difficult to adequately define their profession, given a lack of consistent and universal educational and credentialing requirements. Both the

definition of national-level professional qualifications and the creation of data showcasing the impact environmental health practice has on the health of communities are needed to recruit prospective EH professionals and to retain current staff. The EH workforce has been drastically reduced, and entry-level salaries are often not substantial enough to attract the most qualified candidates. Credentialing requirements are not uniform across states; in states where credentialing is not required, EH professionals can lose touch with advancements in the field because of the lack of continuing education. Furthermore, the profession not having a definition may be contributing to diminished clarity and consistency in the academic preparation of these professionals.

EQUIPMENT AND TECHNOLOGY

Despite the complexity and sophistication of EH inspections and investigations, sufficiently advanced technologies are not uniformly available, and the resources necessary to replace aging or obsolete equipment are inconsistent among health departments. Some states still use pen

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and paper to complete inspection reports, and other equipment and technology is not prioritized thanks to consistent budget shortfalls. Even within a state, the availability of equipment may be uneven, as rural counties receive less funding from county-specific sources. Additional funding may be seen only after an outbreak or other event draws attention to the adverse EH impacts on the community.

INFORMATION AND DATA SYSTEMS

Although information and data management systems are normally available in health departments nationwide, EH professionals find decision-making and communication hampered by inconsistent and inaccessible data collection and analysis tools, which are not consistently adapted or understood. Health departments are not using a consistent means to collect data at the local level. States do not always have access to data that can be searched, compiled, or aggregated to identify priority EH issues within a community. Data provide the evidence that is needed to identify the issue clearly, drive funding to address the issue, and evaluate the effectiveness of EH interventions. Although it is largely understood that EH interventions provide considerable economic value, few data exist to be used in evaluations of the effectiveness of these interventions or their delivery.

SUPPORT FOR THE PROFESSION

Focus group attendees said that a lack of awareness and

understanding of the importance of EH programs across key constituencies has led to diminished support and underrepresentation in health department accreditation processes. But, currently, there is a national push to bolster EH requirements in public health accreditation board health department accreditation criteria. In addition, there has been recent attention to public health preparedness and disaster response, with better integration in the Public Health Emergency Preparedness Cooperative Agreement and more emphasis on EH in the Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2019.

PARTNERSHIPS AND COLLABORATION

It is necessary to build multi-sector partnerships to address issues of growing complexity, reaching for health equity across broad populations. Cross-state and cross-jurisdictional partnerships between agencies are common. For instance, Emergency Management Assistance Compacts are necessary for sharing resources across state lines during times of crisis. However, although collaborations for disaster response are common, there are limited partnerships to support the day-to-day activities of EH professionals. Focus group respondents suggested that a broadening of these partnerships is needed to address emerging issues. Unfortunately, in most departments, travel budgets to establish these partnerships are often the first to be cut, with in-state travel rare and out-of-state travel often unheard of.

IMPLICATIONS

The limitations of the study presented by Gerding et al. are clear: the concerns of the relatively small sample of EH professionals in the focus groups may not accurately represent the broad concerns of the EH workforce. However, they are consistent with EH workforce problems identified in previous studies. Moreover, although these problems may change over time, the authors suggest that these data can be distilled to a common set of key issues.

First, there is a need to use available data and evidence to promote and demonstrate the worthwhile nature of the EH profession, which will aid in developing a robust future workforce, building necessary partnerships, and gaining sustainable support and resources to deliver vital programs. Second, EH professionals strongly push for uniformity in data collection so that their efforts can be used to effectively and efficiently inform intervention practices. Third, as the EH workforce ages, leadership training opportunities must be made consistently available and accessible to bolster and support a new generation of EH professionals. And fourth, professional qualifications must be standardized to better create a clear definition of the profession and its responsibilities.

UNCOVER EH reveals the major challenges facing the EH profession and the effect these challenges can have on the vital role EH professionals play in protecting the nation's health. Developing innovative solutions across the identified problem statements must be a priority to ensure the future efficacy of the EH profession. **AJPH**

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CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

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