Uncovering Environmental Health Needs and Opportunities

Editor’s Note: NEHA strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, the National Environmental Health Association (NEHA) features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the Journal.

In these columns, authors from CDC’s Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

Maggie Byrne is a communicator in the Water, Food, and Environmental Health Services Branch at CDC’s National Center for Environmental Health. Kayleigh Hall is an Oak Ridge Institute for Science and Education (ORISE) fellow in the same branch. Dr. Natasha DeJarnett is the interim associate director of Program and Partnership Development at NEHA. Reem Tariq and Madelyn Gustafson are project coordinators in Program and Partnership Development at NEHA.

Health departments represent the frontline of public health but how much do we really know about the professionals working there? Profiles of state and local health departments provide helpful information about health department services and programs. In fact, these profiles document that environmental health is one the largest segments of the public health workforce (Association of State and Territorial Health Officials, 2017; National Association of County and City Health Officials, 2017). Detailed information about the environmental health profession, however, is beyond the scope of those assessments.

To better understand environmental health professionals and the programs they lead, the Centers for Disease Control and Prevention’s (CDC) National Center for Environmental Health, the National Environmental Health Association (NEHA), and Baylor University partnered to conduct a first of its kind assessment of this critical group within governmental health departments. The initiative became known as Understanding the Needs, Challenges, Opportunities, Vision, and Emerging Roles in Environmental Health (UNCOVER EH).

Contacting environmental health professionals across the nation turned out to be no small undertaking. Overall, the final results included responses from 1,700 environmental health professionals from governmental public health programs at state, tribal, local, and territorial levels.

What Did They Find?
The initial UNCOVER EH article (Gerding et al., 2019) focused on demographic and programmatic information. Key takeaways included the following:

- Food safety is the most common program area environmental health professionals work in and many work in more than one program area.
- While balanced between men and women, the environmental health workforce has opportunities to become more racially and ethnically diverse.
- The environmental health workforce is aging and presents recruitment needs (Figure 1).
- The environmental health workforce is well educated but degrees are not always in environmental health.
- Most respondents hold the Registered Environmental Health Specialist/Registered Sanitarian (REHS/RS) credential.

Further analysis reported by NEHA yielded insight into salaries and credentialing (National Environmental Health Association, 2019a, 2019b). Subsequent articles summarized themes from focus group discussions with environmental health professionals about challenges they face. Environmental health staff reported challenges in six key areas: drinking water quality, wastewater management, healthy homes, food safety, vectors and public health pests, and emerging issues (Brooks et al., 2019). Challenges...
were reported in six professional areas: effective leadership, workforce development, use of data and information, technology and instrumentation, program support, and partnerships (Gerding et al., 2020).

Results might not be generalizable to the entire environmental health workforce because of response and other potential biases. Regardless, the results offer detailed feedback from environmental health professionals and present a window into the practice gaps and challenges faced by the profession.

**Strengthening Environmental Health Programs**

Tim Callahan (see photo), evaluation and support program director for the environmental health section at the Georgia Department of Public Health, feels the UNCOVER EH assessment highlights important trends that need to be addressed. “There are two cracks in the foundation of public health: the combination of people retiring and not being able to hire people who will work until they retire. We’re going to have to really shift how we recruit and maintain staff.”

While 64% of UNCOVER EH respondents hold the REHS/RS credential, Callahan would like to see an even greater percentage in this area. He hopes the UNCOVER EH results will increase the percentage of environmental health professionals who are credentialed as programs compare their numbers to those of the national assessment.

The UNCOVER EH articles noted several recommendations to strengthen environmental health programs and address challenges facing the profession. These recommendations center around four core areas:

1. **Training and workforce development:** Developing a strategy for standardizing environmental health professional qualifications, educational requirements, and credentialing, as well as enhancing leadership development and mentorship opportunities.

2. **Partnerships and collaboration:** Expanding and strengthening partnerships with other public health disciplines, academic and government researchers, and nongovernmental partners.

3. **Data-related tools and guidance:** Establishing methods for sharing information and resources on the use and benefit of various environmental health inspection equipment and technologies.

4. **Research:** Conducting studies to determine the impact of environmental health services on health outcomes.

CDC, NEHA, and Baylor University have designed several products to make the research findings, data, and recommendations more accessible and easier to use for environmental health staff and supervisors, decision makers (e.g., local boards of health), and even those in industry (see sidebar). CDC is learning that health departments are using these data to set workforce and program benchmarks. Having a target can help improve practice in these areas. Ultimately, improving the practice of environmental health is the name of the game.

**Corresponding Author:** Maggie Byrne, National Center for Environmental Health, Centers for Disease Control and Prevention, 4770 Buford Highway, MS S106-5, Atlanta, GA 30341-3717. E-mail: mbyrne@cdc.gov.

References on page 36
References


To donate, visit www.neha.org/about-neha/donate.