The Local Public Health Agency Workforce: Research Needs and Practice Realities

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There is a paucity of information about the nation’s local governmental public health agency (LPHA) workforce. Without additional research, crucial questions about the individuals providing front-line public health services remain unanswered. Current national efforts to develop a public health workforce research agenda must include strategies for collecting basic data on local governmental public health workers. The work of enumerating and classifying LPHA staff is complicated, but not impossible. Projects to improve LPHA performance and discussions of the certification of public health workers are incomplete without current and accurate data on the individuals comprising our nation’s public health system. The need to describe basic facets of the LPHA workforce is not trivial. As city and county budgets are cut and LPHAs are left scrambling to cover lost positions, data are needed to inform important decisions about what kinds of LPHA staff are needed to keep a community healthy.

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At the front line of our nation’s public health system are approximately 3,000 local public health agencies (LPHAs) carrying out the important business of protecting and improving the health of communities nationwide. Earlier research on LPHAs demonstrates that LPHAs are structured in a variety of ways and provide a number of different services in their jurisdictions, ranging from conducting restaurant inspections to staffing sexually transmitted disease clinics and everything in between. The diversity of LPHA structures has led to the development of a popular adage to describe America’s local governmental public health system: “If you’ve seen one local health department, you’ve seen one local health department.”

Corresponding to the diversity of LPHA size, services provided, and regulatory authority is the diverse composition of the local public health workforce. Given that LPHAs represent a very large, if not the largest, segment of the public health practice workforce nationwide, one might expect to find a sizeable body of research on the individuals that are daily involved in strengthening and improving the public’s health. Unfortunately, if one looks to the literature for answers on even the most basic facets of the local governmental public health workforce there are little data to be found on the people who work in LPHAs and their professional qualifications. No state or national system is in place to track local public health workers in any way. Thus, we have no data on when they enter the workforce, when they leave, their average age, their years of education, and other important characteristics of public health professionals. Additionally, while the nation recently invested almost $1 billion in preparing the nation’s public health system to respond to bioterrorism and other public health threats and emergencies, including specific attention to workforce development and training, no one can accurately identify how many public health workers will benefit from the training this funding may support (current thinking is “about half a million” individuals practice public health nationwide), what kinds of occupations they represent (conventional wisdom is that “most are public health nurses, sanitarians, and administrative staff”) or their professional preparation (it is often cited that “most don’t have master’s degrees in public health”). Given the lack of knowledge on the LPHA workforce, we...
clearly have a lot more to learn and this information is very much needed for critical workforce planning and professional development activities at all levels of government.

**Earlier Research on the LPHA Workforce**

The majority of past research on the LPHA workforce has focused on “the size issue,” or quantifying the number of public health workers in LPHAs across the country. Gebbie enumerated the overall American public health workforce (not just governmental agencies) and estimated it to be 448,254 or one public health worker for every 635 people (in the 1970s that number was one public health worker for every 457 people). The National Association of County and City Health Officials (NACCHO) has conducted three census surveys or “profiles” of LPHAs nationwide (in 1989–1990, 1992–1993, and 1996–1997) in which LPHA staff size in full-time-equivalents (FTEs) was acquired. NACCHO’s 1996–1997 Profile found an aggregate of 212,364 employees or 168,508 FTEs employed by 2,492 responding LPHAs.

Beyond Gebbie’s overall enumeration and NACCHO’s counts of the LPHA workforce, only a handful of other studies have attempted to determine the number of staff and specific occupational classifications (SOCs) that comprise LPHAs, the credentials LPHA staff hold, or LPHA workforce development needs. Along the lines of Gebbie’s public health workforce enumeration and initial attempt to classify the public health workforce by job title, the latest NACCHO survey of the LPHA workforce (1999–2000) enumerated LPHA staff size and also explored if it would be possible to classify FTEs by SOCs. The SOC is an occupational classification scheme used by the Bureau of Labor Statistics in its analyses of the American workforce, and includes several categories specific to the medical and public health professions.

NACCHO’s attempt to collect public health workforce data using the SOC was exploratory. Like several other researchers, NACCHO researchers learned a great deal about the difficulties involved in asking health directors to categorize the occupational classification of their staff. Most respondents in the NACCHO survey indicated that the SOC listing was problematic primarily because they did not know how to categorize those on their staff who crossed occupational classifications (e.g., the health director who is also a public health nurse, occasionally practices basic epidemiology, and provides some health education in schools). The SOC categories did not match existing local and state job titles or existing civil service classifications or personnel series (e.g., the county human resources agency calls all health educators “public health specialists,” or epidemiologists are combined with the state’s “public health analyst” series).

Indeed, a corollary to the “you’ve seen one health department, you’ve seen one health department” adage may be “you’ve seen one public health worker, you’ve seen one public health worker.” There is little consistency in what comprises specific job classifications, especially across district or state lines. Clearly there is a need to work with local and state governmental human resource agencies to develop a common scheme for quantifying and classifying public health workers or at least some kind of cross-state translation tool that would help generate national data, echoing Gebbie’s call for a standard taxonomy to describe public health workers nationwide. Exploratory efforts to classify public health workers demonstrate that without a standard typology or way to group similar positions across the country, research will continue to suffer by comparing “apples to oranges” when state-level data are aggregated to paint a picture of the entire country’s LPHA workforce.

**What Do We Currently Know about the LPHA Workforce?**

The most recent NACCHO survey, based on a stratified, random sample of 1,100 LPHAs nationwide and a response rate of 63 percent (n = 694), suggests that the size of the LPHA workforce in metropolitan area health departments numbers in the thousands, surpassing the total staff size of many state departments of health. Metropolitan area LPHAs employ a cadre of specialty public health professionals such as public health attorneys, public information officers, and public health nutritionists. But NACCHO’s data also demonstrate that the majority of county, city, and townships across the nation are served by LPHAs with much fewer and less specialized FTEs.

According to the 1999–2000 NACCHO study, the median staff size of a LPHA was 13 FTEs and the most common occupational classifications were the core professionals of public health practice: public health nurses, environmental specialists, health educators...
and administrative staff. When asked what their current and future workforce needs were, LPHA directors said they needed more core LPHA staff, the “work horses” of local public health practice: public health nurses, environmental health specialists, epidemiologists, health educators, and administrative staff. Notably absent in the directors’ responses are the kinds of specialty occupations that are the focus of many current public health and medical workforce development initiatives such as physicians, informatics specialists, or biodefense experts.

The need to be able to say more about individuals working in LPHAs is not trivial. As governments face major budget shortfalls, many city and county budgets have been drastically reduced and LPHAs are left scrambling to cover lost positions. Data are needed to inform these important human resource decisions. What is the minimum number of public health nurses per 100,000 population to ensure a community’s health? How many restaurant inspectors are required to adequately and regularly inspect restaurants in a city of 50,000 inhabitants? 200,000 inhabitants? Two million inhabitants? Data on the current LPHA workforce are also needed to project future LPHA needs. How many public health workers are going to be needed in ten years, with what kinds of skills? What kinds of personnel are needed to protect the health of our communities in the future? Without an accurate understanding of who comprises the public health workforce, advocacy for supporting the LPHA workforce is less effective and training programs for LPHA workers may, or may not, be meeting LPHA needs. It is difficult to advocate for increasing the capacity of LPHAs nationwide without quantifying the current LPHA workforce and their training and continuing education needs.

Is More Better?

It appears that a basic premise driving public health workforce development has been “more is better.” That is, it seems a given that the public’s health would be better served if we just hired more workers to help do the many things that LPHAs are being asked to do nationwide. Granted, the things LPHAs do are important things, ranging from ensuring drinking water quality to providing smallpox vaccinations. It is very likely that more LPHA workers would help build LPHA capacity. But it would also be useful to specifically identify how many and what kinds of workers are needed in LPHAs, what their continuing education needs are, and what an increased investment in LPHA personnel is buying health department and the communities they serve nationwide (and, conversely, what are the costs of cutting existing LPHA staff).

Certification, Accreditation, and Accountability

Discussions of the public health workforce have increasingly turned to the need to certify LPHA workers, and accredit LPHAs. Without debating the merits and pitfalls of worker certification and LPHA accreditation, it would be useful to have even the most basic data on the LPHA workforce to inform these discussions. For example, how many LPHA workers are there and what would it take for them to be certified? How many in the LPHA workforce are already certified as nurses, health educators, registered environmental health specialists, or any one of a number of different certified professional disciplines that are already served by national certification bodies? What does the LPHA workforce, the focus of these certification discussions, have to say about efforts to certify and accredit them and their workplaces? Basic information on the LPHA workforce, including the perspective of current LPHA staff, would enhance these conversations by adding a practice dimension to this important topic.

In conjunction with discussions of certification and accreditation, efforts to improve public health practice have focused on improving agency performance through the adoption of local and state public health system performance standards. Although not overtly stated, national public health performance standards could serve as the basis for LPHA accreditation or public health workforce certification. This raises a number of different questions, the answers to which have important ramifications for ultimately understanding who is responsible for community health, and to whom LPHAs are accountable as governmental agencies charged with keeping a jurisdiction healthy.

However, the focus of national public health performance standards is not specifically on the LPHA workforce, it is improving local public health systems of which LPHAs are a part. One might ask: Will a LPHA with 13 FTEs ever be able to fully perform against a set of national standards? Should it be expected to do so? What other parts of the local public health system need to perform adequately to ensure that LPHA staff is able to meet local public health system standards? What are the costs of training LPHA staff so that local public health systems meet national standards, and what are the costs of LPHAs not meeting standards? Making connections between improving public health systems and the development of individual workers within a
LPHA is a necessary activity. The LPHA is at the core of any functional local public health system. Discussions of improving local public health systems need to include specifics on what systems improvement really means for the workers at the heart of these systems.

**Research Needs and Practice Realities**

Several groups, comprised primarily of academics and federal agency staff, with nominal participation from the practice community, are currently developing research agendas to study the public health workforce. The results of their research will provide a great deal of information on the public health workforce. However, these research agendas include various research questions, and are rarely focused primarily on the LPHA workforce. There is a need to more explicitly include plans to answer the elementary questions about LPHA workers nationwide. Isolated, disconnected, investigator-initiated, rather than practice-driven, research on the public health workforce does little to advance a national workforce development agenda. Collecting basic information on public health practitioners should be a priority for researchers and agencies interested in enhancing and improving our nation’s public health system. Without elementary information on LPHA workers, we will never be able to concretely say that efforts to build public health capacity succeeded in meeting their goals or achieving their objectives. As additional resources flow into a system badly in need of investment, it would be prudent to be able to explain the benefit these resources had on the size, preparation, and competency of the LPHA workforce. Without the most basic research on LPHA workers, our understanding of the LPHA workforce will continue to meet research needs at the expense of investigating important practice realities.

**REFERENCES**

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