

# Research Brief Report

## Profile of Public Health Leadership

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**Context:** Public health leaders play pivotal roles in ensuring the population health for our nation. Since 2000, the number of schools of public health has almost doubled. The scholarly credentials for leaders of public health in academic and practice are important, as they make decisions that shape the future public health workforce and important public health policies.

**Objective:** This research brief describes the educational degrees of deans of schools of public health and state health directors, as well as their demographic profiles, providing important information for future public health leadership planning. **Design:**

Data were extracted from a database containing information obtained from multiple Web sites including academic institution Web sites and state government Web sites. Variables describe 2 sets of public health leaders: academic deans of schools of public health and state health directors. **Results:** Deans of schools of public health were 73% males and 27% females; the PhD degree was held by 40% deans, and the MD degree by 33% deans. Seventy percent of deans obtained their terminal degree more than 35 years ago. State health directors were 60% males and 40% females. Sixty percent of state health directors had an MD degree, 4% a PhD degree, and 26% no terminal degree at all. Sixty-four percent of state health directors received their terminal degree more than 25 years ago. In addition to terminal degrees, 56% of deans and 40% of state health directors held MPH degrees. **Conclusion:** The findings call into question competencies needed by future public health professionals and leadership and the need to clarify further the level of public health training and degree type that should be required for leadership qualifications in public health.

**KEY WORDS:** doctorate of public health, leadership, public health

Public health leadership is a topic that has inspired recent debate in the United States and on an international basis.<sup>1</sup> While public health leadership exists at all levels of the health system, leaders at educational institutions and within state practice influence the direction of the future public health workforce through training and hiring practices. Thus, their leadership influences the health of the nation through policy that directs programmatic change. Rowitz<sup>1</sup> notes that the relationship of these 2 leadership clusters (academic and government public health) is important because it links the research of academia to evidence-based public health practice. Given the current state of health care reform, public health leaders are challenged to transform the preparation of future public health leaders.

In 2013, there were 48 colleges/schools of public health in the United States, 17 formed since 2000.<sup>2</sup> At the time of this study, student enrollment in doctor of public health (DrPH) programs had risen by 40% since 2002.<sup>3</sup> This dramatic increase in the number of schools of public health and the enrollment of students pursuing the DrPH degree is reflective of trends for the doctoral practice degree in pharmacy and nursing.

In the past 3 decades, the DrPH degree has been articulated as the highest practice degree for “practitioners” of public health when compared with other health science doctorates.<sup>4</sup> The rationale behind this assertion is that well-prepared public health professionals are vitally important for ensuring population health; therefore, the scholarly credentials for the profession of public health are equally important as other health science professions. However, as the advanced practice degree for public health, the DrPH degree represents

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mastery of practice-based competencies<sup>5</sup> and prepares graduates for leadership positions. Hence, the value of the DrPH degree is in preparing future public health leaders for both academic and practice roles.

It is important to examine the educational profiles of the current public health leaders who are making decisions that shape the public health workforce and its future leaders. The goal of this research brief is to describe the educational degrees of deans of schools of public health and state health directors. This demographic profile of 98 public health leaders provides important information for future planning related to public health leadership.

## ● Methods

Data were extracted using variables that describe the deans of schools of public health and state health directors within the United States.

## Participants and data extraction

For this analysis, the academic public health leadership comprised deans of the 48 schools/colleges of public health in the United States. The second cluster group represented state public health leadership and comprised state public health directors from all 50 states and the District of Columbia, minus the state of Hawaii (director vacancy) ( $n = 50$ ). The total subjects for this secondary analysis represent 98 public health leaders.

The 2 leadership clusters were extracted from the original data set and analyzed using SPSS. The original

study protocol was reviewed and approved by the institutional review board at East Carolina University.

## ● Results

The demographics of deans of public health schools and state health directors are displayed in the Table. Of the 48 deans of schools of public health, 73% were males and 27% females. The PhD degree was held by 40% of deans, 33% held an MD degree, 10% held both MD and PhD degrees, and 6% had DrPH degrees. In addition, 56% of deans held an MPH degree. Seventy percent of deans obtained their terminal degrees during the 1970s and 1980s, 22% during the 1970s, with 48% in the 1980s.

State health directors were 60% males and 40% females. The most prevalent degree held by this group was the MD degree (60%); 4% held an MD/JD degree, 4% a PhD degree, and 2% a DrPH degree. Forty percent of state health directors had an MPH degree. Sixty-four percent of state health directors completed their terminal degrees in the 1980s and 1990s, 35% during the 1980s, and 29% during the 1990s.

## ● Discussion

The Council on Education for Public Health identifies graduate public health degrees encompassing both terminal degrees and master's degrees as either professional or academic.<sup>6</sup> The DrPH and MPH degrees are considered professional degrees, whereas the PhD degree is considered an academic degree.<sup>7</sup> Calhoun et al<sup>8</sup>

**TABLE ● Demographic Data of Public Health Leaders**

Terminal Degrees	Deans (n = 48)	State Health Directors (n = 50)	Total Leadership (N = 98)
PhD	19 (40%)	2 (4%)	21 (21%)
MD	16 (33%)	30 (60%) <sup>a</sup>	46 (47%)
DrPH	3 (6%)	1 (2%)	4 (4%)
MD, DrPH	1 (2%)	0	1 (1%)
MD, PhD	5 (10%)	0	5 (5%)
ScD	2 (4%)	0	2 (1%)
DMD	1 (2%)	0	1 (1%)
DrPH, MD, ScD	1 (2%)	0	1 (1%)
MD, JD	0	2 (4%)	2 (2%)
JD	0	1 (3%)	1 (1%)
No degree	0	13 (26%)	13 (13%)
Gender			
Male	35 (73%)	30 (60%)	65 (66%)
Female	13 (27%)	20 (40%)	33 (37%)

<sup>a</sup>Includes 1 DO.

note that the DrPH competencies provide an explicit skill set for the training of public health practitioners.

The PhD degree was the most prevalent degree held by academic deans of schools of public health (40%), closely followed by the MD degree at 33%. Ten percent of academic deans held both PhD and MD degrees. Conversely, the MD degree was the most prevalent degree held by state health directors (60%), with 4% having a PhD degree. The terminal degrees of academic deans are closely distributed between the PhD and MD degrees, whereas state health directors most often held medical doctorate degrees. Twenty-six percent of state health directors held no terminal degree. More than half (56%) of academic deans, compared with 40% of state health directors, also had an MPH degree.

Of interest is there has been a 40% growth in DrPH programs,<sup>3</sup> yet only 6% of deans and 2% of state health directors held this degree. This may be indicative of pipeline circumstances; it was not until the 1980s that an explicit study design for the DrPH degree was identified.<sup>3</sup> The first schools of public health in the United States were developed after medicine established a uniform curriculum in the early 20th century. In the beginning, many public health students had medical degrees.<sup>4</sup> Over time, this trend has changed, with a significant number of students entering public health degree programs having no clinical degrees or training.<sup>9</sup> Possibly, in the future, we can expect to see an increase in leaders holding a DrPH degree. However, this situation will require ongoing examination to determine whether DrPH is a practice degree or preparation for academic leadership.

An examination of the decades in which academic deans and state health directors obtained their terminal degrees reveals that three-fourths of academic deans received their terminal degrees more than 35 years ago and more than half of the state health directors received their terminal degrees more than 25 years ago. This information reflects another example of an aging public health workforce. The literature notes that the demand for public health professionals in the future will be expanded to work in new arenas outside of government-based public health agencies.<sup>10</sup> Succession planning for these current public health leaders, which quite possibly may include graduates holding DrPH degrees, is recommended on the basis of these results.

## Limitations

Only 2 categories of public health leaders are described in this study: those of academic deans of schools of public health and state health directors. Consequently, these results are not generalizable to all public health leaders. An additional limitation is due to the availability of public health leaders' *résumés* and curricula vitae from the institutional and state government Web sites.

## Conclusion

Thus, study findings suggest that a number of opportunities exist, which could benefit from additional studies. These recommendations include determining public health leadership competencies for those holding, (1) non-public health graduate degrees, (2) non-public health terminal degrees, (3) research versus public health practice doctorates (eg, PhD vs. DrPH), and (4) articulating differences in the competencies of individuals holding diverse terminal degrees. Currently, the DrPH degree is gaining enrollment momentum and seems to be at a crossroad in terms of evolution and professional adoption. The challenge of the public health profession is how to best align public health curriculum with leadership roles. Furthermore, the challenge of the profession of public health is to determine if the future of public health leadership is best prepared when individuals leading public health have terminal degrees in public health.

## REFERENCES

1. Rowitz L. *Public Health Leadership*. Burlington, MA: Jones & Bartlett Publishers; 2013.
2. Council on Education for Public Health. Accredited schools of public health. <http://ceph.org/accredited>. Accessed September 8, 2013.
3. Declercq E, Caldwell K, Hobbs SH, Guyer B. The changing pattern of doctoral education in public health from 1985 to 2006 and the challenge of doctoral training for practice and leadership. *Am J Public Health*. 2008;98(9):1565-1569.
4. Roemer M. The need for professional doctors of public health. *Public Health Rep*. 1986;101(1):21-29.
5. Gebbie K, Potter M, Quill B, Tilson H. Education for the public health profession: a new look at the Roemer proposal. *Public Health Rep*. 2008;123(2):18-26.
6. Association of Schools & Programs of Public Health. Framing the future DrPH for the 21st century. [http://www.aspph.org/wp-content/uploads/2014/06/DrPH-Report\\_2014-11-05\\_FINAL.pdf](http://www.aspph.org/wp-content/uploads/2014/06/DrPH-Report_2014-11-05_FINAL.pdf). Published November 4, 2015. Accessed June 4, 2015.
7. Council on Education for Public Health. Accreditation criteria for public health programs. <http://ceph.org/assets/SPH-Criteria-2011.pdf>. Amended June 2011. Accessed June 4, 2015.
8. Calhoun J, McElligott J, Weist E, Raczynski J. Core competencies for doctoral education in public health. *Am J Public Health*. 2012;102(1):22-29.
9. Gebbie K, Rosenstock L, Hernandex L. *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*. Washington, DC: Institute of Medicine; 2003.
10. Association of Schools & Programs of Public Health. Framing the future public health trends and redesigned education. [www.aspph.org/wp-content/uploads/2015/02/Blue-Ribbon-Employers-Advisory-Baord-Report1.pdf](http://www.aspph.org/wp-content/uploads/2015/02/Blue-Ribbon-Employers-Advisory-Baord-Report1.pdf). Published September 6, 2013. Accessed June 4, 2015.