

# How Does the Public Health Workforce Compare with the Broader Public Sector?



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### **Acknowledgements**

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## Introduction

The state and local governmental public health workforce plays a critical role in protecting and improving the lives of the individuals it serves. As is the case with state and local employment generally, the workforce in public health is changing. Recruitment and retention of the next wave of employees presents challenges, particularly at a time of continued retirements, low unemployment, and competition from the private sector for talented graduates and other career entrants.

To better understand the U.S. public health workforce, this primer describes its current size, expectations for growth, employee demographics, job tenure, and the skill sets most in demand. This description is offered against the broader backdrop of the overall state and local government sector. This briefing comes from a Center for State and Local Government Excellence (SLGE) analysis of the most recent Public Health Workforce Interests and Needs Survey (PH WINS 2017), along with data sets from the 2017 U.S. Census Bureau, the U.S. Department of Labor - Bureau of Labor Statistics, and the SLGE workforce survey (unless otherwise noted).

An analysis of the public health workforce in the broader context of the overall public sector workforce is essential for state and local leaders to understand how public health employees are similar to and different from other cohorts of the public sector. This can help to inform workforce development management and policies, and the applicability of promising practices related to the recruitment, retention, and the ultimate retirement of a skilled public workforce—something that is essential as governments of all types and sizes must take strategic steps today to develop the public sector workforces of the future.<sup>1</sup>

## Size of Workforce, 2017

As of May 2017, there were 19,544,000 state and local government employees, of which 5,165,000 were at the state level, and 14,379,000 were in local government.<sup>2</sup> These public servants work in all aspects of subnational government, including education, utilities, transportation, and general administration.<sup>3</sup> Within these state and local totals, 320,010 state and 653,150 local government workers fall under the category of *Healthcare Practitioners and Technical Occupations*<sup>4</sup> and 113,870 state and 140,300 local government workers fall under the category of *Healthcare Support Occupations*.<sup>5</sup> These healthcare-related categories make up 8.4 percent of the overall state workforce and 5.5 percent of the overall local workforce.

These two healthcare occupational groupings capture many of the roles typically found within state and local public health organizations (e.g., registered nurses, medical records and health information technicians). However, they also include healthcare staff outside traditional public health settings (e.g., home health aides and massage therapists), and exclude some public health roles (e.g., animal control staff and health educators).

Given this, a better estimate for the size of the state public health workforce may come from the Association of State and Territorial Health Officials' (ASTHO) *Profile of State and Territorial Public Health*. According to the 2016 ASTHO Profile survey, there were 97,230 state public health employees working for state public health agencies, spanning multiple occupational classifications.<sup>6</sup> Similarly, according to the National Association of County and City Health Officials' 2016 *National Profile of Local Health Departments*, there were 147,000 local public health employees working for local health departments.<sup>7</sup> It should be noted that there may be an overlap at the

state and local levels of some of these employees, as some states report assigning state public health employees to local health departments, according to the 2016 ASTHO *Profile*.<sup>8</sup>

The following lists show the top five most common positions at the state level in 2016.

### Public Health Departments:<sup>9</sup>

- Office and administrative support staff
- Business and financial operations staff
- Behavioral health staff
- Public health nurses
- Environmental health workers.

### State Sector, overall:<sup>10</sup>

- Bailiffs, correctional officers, and jailers
- Secretaries and administrative assistants
- Postsecondary health teachers
- Miscellaneous community and social service specialists
- Social workers.

The following lists show the top five most common positions at the local level in 2016.

### Public Health Departments:<sup>11</sup>

- Registered nurses
- Office support staff
- Environmental health workers
- Agency leadership
- Business operations staff.

### Local Sector, overall:<sup>12</sup>

- Elementary and middle school teachers
- Secondary school teachers
- Miscellaneous teachers and instructors
- Police officers
- Secretaries and administrative assistants.

## Projected Growth and Contraction in Workforce, 2018-2028

Between 2018 and 2028, the overall state government workforce is expected to decrease by 1.7 percent, with *Healthcare Practitioners and Technical Occupations* and *Healthcare Support Occupations* both expected to increase by 1.2 percent. A notable portion of the contraction in the state government sector is related to the reduction of positions that are becoming or could become automated, such as parking enforcement, data entry and information processing, and switchboard operators. Meanwhile, positions related to analysis, statistics, and mathematical sciences are expected to increase the most.<sup>13</sup> Local government positions are expected to increase by 3.1 percent during this same timeframe. At the local level, similar positions overall are expected to increase and decrease the most, but *Healthcare Practitioners and Technical Occupations* and *Healthcare Support Occupations* are projected to increase by 5.7 percent and 5.6 percent, respectively.<sup>14</sup>

## Skill Set Needs

Since 2008, SLGE has partnered with the International Public Management Association for Human Resources (IPMA-HR) and National Association of State Personnel Executives (NASPE) to conduct a survey of state and local government human resource professionals. The survey questions cover a range of workforce topics, including recruitment needs and approaches. Survey respondents come from all aspects of the state and local sector and are primarily the chief human resources professional or officer for a county government, municipality, town/township, state department, or other state or local jurisdiction. In 2017, the top five generalizable skill sets most needed for new hires were *interpersonal skills* (65 percent of respondents identified this as one of the most needed skills), *written communications* (53

percent), *technology* (51 percent), *management* (32 percent), and *finance* (14 percent). While these are generally the top five most needed skills from year to year, in recent years *public speaking / presentations* has also been in the top five (20 percent in 2018).

Whereas the SLGE/IPMA-HR/NASPE workforce survey series is helpful in understanding the government employer perspective, the *Public Health Workforce Interests and Needs Survey* asks a series of questions aimed at gauging the opinions of the individual public health employees themselves regarding the importance of certain skill sets in their roles and their respective skill levels. While there is not much alignment between these two surveys regarding the question structures and generalizable skills about which queries are asked, three questions in PH WINS cover similar topics to those touched upon above. For example, in 2017:

- Regarding *communications*, 55 percent of public health workers placed a high importance on the ability to *effectively target communications to different audiences*.
- Regarding *interpersonal skills*, 47 percent place a high importance on *collaborating with public health personnel across the agency to improve the health of the community*.
- Regarding *finance*, 35 percent place a high importance on *describing how public health funding mechanisms support agency programs and services*.

Together, these surveys reinforce the fact that effective careers in public service are not strictly determined by possession of technical or job-specific skills, but also by the ability to communicate, adapt, apply new or cross-disciplinary ideas and technology, and see the bigger picture.

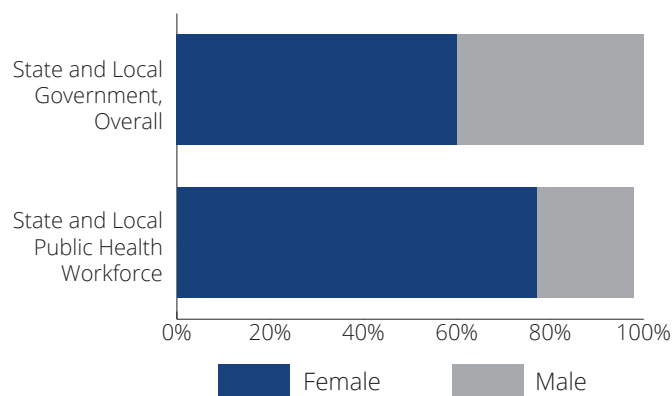
## Employee Demographics, 2017

This section explores the similarities and differences between various demographic attributes of the overall state and local government workforce and the state and local public health workforce. Unless otherwise noted, the data on the overall state and local sector come from the U.S. Census Bureau and Bureau of Labor Statistics' *Current Population Survey* and the health department-specific data come from the *Public Health Workforce Interests and Needs Survey*. All data were collected in 2017, the year of the most recent PH WINS survey.

### Gender

As shown in *Figure 1*, the gender breakdown of the overall state and local workforce is 60 percent female and 40 percent male. These numbers are the result of many factors, including that 55 percent of local government employees are in the education sector,<sup>16</sup> approximately 73 percent of whom are female.<sup>17</sup> The public health workforce has a greater proportion of females at 77 percent, relative to 21 percent male.<sup>18</sup>

**Figure 1.** Gender, 2017



**Sources:** de Beaumont Foundation, "Public Health Workforce Interests and Needs Survey," available at <https://www.debeaumont.org/ph-wins/>, and IPUMS CPS, "Current Population Survey Data for Social, Economic and Health Research," available at <https://cps.ipums.org/cps/>.

Figure 2. Race and Ethnicity, 2017

	State and Local Public Health Workforce	State and Local Workforce, Overall
White	57.2%	67.3%
Black or African American	15.5%	13.6%
Hispanic or Latino	12.7%	12.5%
Asian	5.3%	4.4%
American Indian or Alaska Native	.4%	.8%
Native Hawaiian or other Pacific Islander	.4%	.4%
Two or more races	6.2%	1%

**Note:** The above percentages are derived from variable categories offered in the PH WINS data set. CPS data offered was categorized and calculated to align with these same categories with reference to the U.S. Office of Personnel Management definition/data standard, found at: <https://dw.opm.gov/datastandards/dataStandard/1442?index=E>. Totals might not sum to 100% due to rounding.

**Sources:** de Beaumont Foundation, “Public Health Workforce Interests and Needs Survey,” available at <https://www.debeaumont.org/ph-wins/>, and IPUMS CPS, “Current Population Survey Data for Social, Economic and Health Research,” available at <https://cps.ipums.org/cps/>.

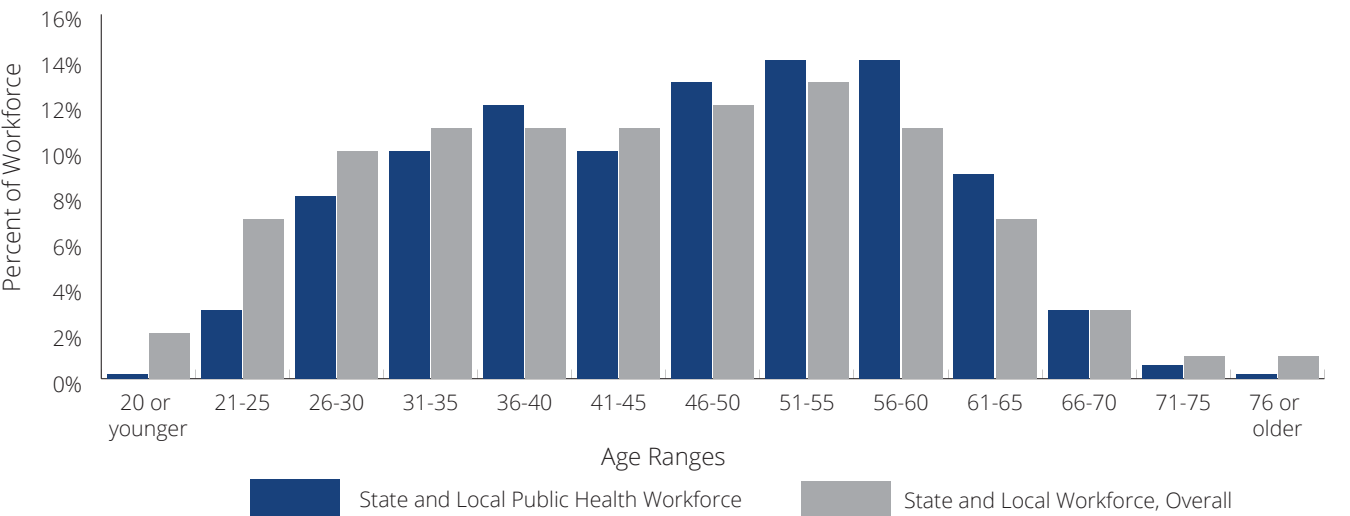
Race/Ethnicity

In 2017, the public health workforce was more diverse in terms of race and ethnicity than the overall state and local government workforce. As can be seen in Figure 2, non-white cohorts—such as Black or African Americans, Asians, and individuals of two or more races—make up larger portions of the public health workforce, relative to the overall state and local public sector workforce. As the overall U.S. population and workforce continues to increase in diversity, and public organizations of all kinds focus efforts on recruiting employees from a wider range of back-grounds and via increasingly non-traditional outreach approaches,<sup>19</sup> both the public health and overall state and local government workforce will likely continue to become more racially and ethnically diverse.<sup>20</sup>

Age

The age distributions of the public health workforce and overall state and local government workforce tend to follow the same general pattern, as can be seen in Figure 3. More than two-thirds of workers for the public health and overall government workforce are in the 36-to-65 age bracket. That said, the public

Figure 3. Age of Workforce, 2017



**Sources:** de Beaumont Foundation, “Public Health Workforce Interests and Needs Survey,” available at <https://www.debeaumont.org/ph-wins/>, and IPUMS CPS, “Current Population Survey Data for Social, Economic and Health Research,” available at <https://cps.ipums.org/cps/>.

health workforce skews somewhat older than the overall public sector workforce, as can be noted in age ranges younger than 35 and 46 to 65. The state and local government public health workforce has a median average age of 48 and mean average age of 47; the state and local government workforce overall has a median average age of 45 and mean average age of 44.3.

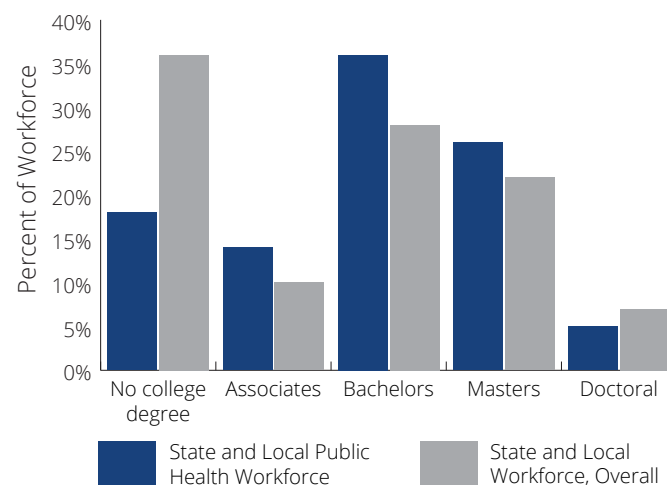
### Educational Attainment

Given the knowledge-based roles of most state and local government workers, a sizable majority (81 percent for the public health workforce and 67 percent for the overall state and local government workforce) has completed some type of post-secondary education. As can be seen in *Figure 4*, across the associate, bachelor, and master's degree categories, the state and local government public health workforce tends to be more educated than the state and local government workforce overall. This is likely a function of specialized training and/or degrees often being required by law, statute, or organizational policy for many public health positions (e.g., epidemiologists, nurses, state health officials). The higher percentage of those in the overall state and local workforce holding a doctoral degree is related to an increased number of lawyers in non-public health state and local government positions.

### Salary

The annual salary distribution of both the public health and overall state and local government workforce, as can be seen in *Figure 5* (next page), follows similar patterns, with there being fewer public health professionals in the lowest salary range (less than \$25,000). This is in line with the data in *Figure 4*, showing that half as many state and local public health workers have no college degree (18 percent) as compared with state and local government workers overall (36 percent). Relative to the state and local workforce overall, the public health sector has more staff in the \$45,000 to

**Figure 4.** *Educational Attainment*



**Note:** The doctoral category offered in Figure 4 is comprised of PH WINS categorizing all degrees above a master's degree into this segment, while the two categories of the Current Population Survey [professional degree (for example: MD, DDS, DVM, LLB, JD) and doctorate (for example, PhD, EdD)] have been combined into one category.<sup>21</sup>

**Sources:** de Beaumont Foundation, "Public Health Workforce Interests and Needs Survey," available at <https://www.debeaumont.org/ph-wins/>, and IPUMS CPS, "Current Population Survey Data for Social, Economic and Health Research," available at <https://cps.ipums.org/cps/>.

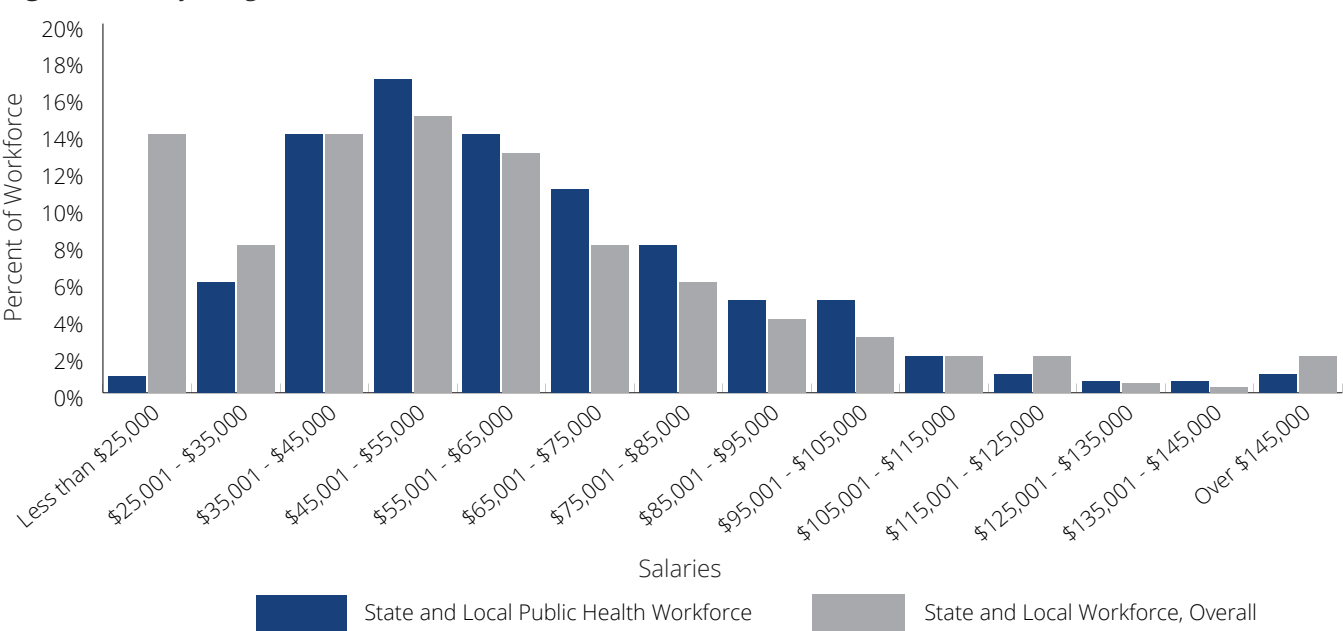
\$105,000 range. Again, this aligns with the overall higher levels of education found in the state and local public health workforce relative to the overall state and local government workforce.

### Tenure

Members of the public health workforce typically have a longer tenure than the state and local workforce overall. In 2017, the median length of time public health employees stayed with their respective employers was eight years, while the state and local government workforce overall had a median of 6.7 years.<sup>22</sup>



Figure 5. Salary Ranges



**Sources:** de Beaumont Foundation, “Public Health Workforce Interests and Needs Survey,” available at <https://www.debeaumont.org/ph-wins/>, and IPUMS CPS, “Current Population Survey Data for Social, Economic and Health Research,” available at <https://cps.ipums.org/cps/>.

## Next Steps

This analysis has been offered to describe the composition of the state and local government public health workforce and the overall state and local government workforce, highlighting how the two groups are similar and different in terms of size, projected growth and contraction, skill set needs, and demographic characteristics. With this background and understanding, effective workforce management approaches can be shared and adapted across the public sector, as governments of all sizes and

sectors look to recruit, retain, and develop future workforces.<sup>23</sup> Next steps for this research include exploring the ways in which public health departments and general local governments are partnering to address today’s greatest public health challenges. A forthcoming report will share survey results and case studies of how jurisdictions are sharing resources and workers to achieve their missions, leverage expertise, reduce duplication of efforts, and attract knowledge workers with essential skill sets.



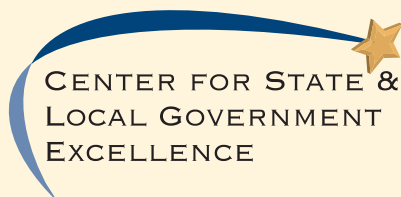
## Endnotes

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## About the Center for State and Local Government Excellence

The Center for State and Local Government Excellence (SLGE) helps local and state governments become knowledgeable and competitive employers so they can attract and retain a talented and committed workforce. SLGE identifies leading practices and conducts research on public retirement plans, health and wellness benefits, workforce demographics and skill set needs, and labor force development. SLGE brings state and local leaders together with respected researchers. Access all SLGE publications and sign up for its newsletter at [slge.org](http://slge.org) and follow [@4govtexcellence](https://twitter.com/4govtexcellence) on Twitter.



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Founded in 1998, the de Beaumont Foundation creates and invests in bold solutions that improve the health of communities across the country. Its mission is to advance policy, build partnerships, and strengthen public health to create communities where people can achieve their best possible health. For more information, visit [www.debeaumont.org](http://www.debeaumont.org).

