State Health Agency Workforce by Occupation

State health agencies (SHAs) employ a wide range of occupations to fulfill their missions. These occupations can vary based on the purview of a state health agency; however, there are several common occupations employed by SHAs. These include:

- **Administrative and business occupations** that are common to nearly all organizations, such as executive staff, finance and human resources professionals, information technology professionals, administrative assistants, and other support staff.
- **Clinical/laboratory occupations** that are common to many health organizations, such as physicians, nurses, counselors, and laboratorians.
- **Other public health professionals**, including specialized public health occupations such as environmental health workers, epidemiologists, health educators, and public health informatics specialists.

This brief provides insight into the make-up of the state public health workforce as of 2019, allowing us to better understand current SHA priorities and potential workforce shortages. All data in the brief reflect full-time equivalents (FTEs).

SHA staff are primarily distributed across administrative, clinical, and other public health occupations.

![Circle diagram showing the distribution of staff by occupation.](image)

Administrative and business occupations make up the largest occupational group, accounting for 35% of all FTEs. The clinical/laboratory and other public health professionals groups account for 27% and 20% of all FTEs, respectively. The other category (18%) likely includes both staff in occupations not included in the Profile survey and staff that respondents could not accurately categorize.
Most administrative/business staff provide office and administrative support or business and financial functions.

<table>
<thead>
<tr>
<th>Category</th>
<th>FTE Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and administrative support</td>
<td>12,832</td>
</tr>
<tr>
<td>Business and financial operations staff</td>
<td>11,684</td>
</tr>
<tr>
<td>Executive leadership</td>
<td>1,598</td>
</tr>
<tr>
<td>Quality improvement specialist</td>
<td>628</td>
</tr>
<tr>
<td>Public information specialist</td>
<td>297</td>
</tr>
</tbody>
</table>

**Office and administrative support**: Performs administrative, clerical, and support duties (e.g., administrative assistants, receptionists, clerks, maintenance staff).

**Business and financial operations**: Performs duties in the areas of business, finance, accounting, human resources, information technology, and legal issues.

**Executive leadership**: Oversees operations of the overall agency or a major subdivision.

**Quality improvement specialist**: Leads and establishes performance management and quality improvement systems.

**Public information specialist**: Serves as agency communications coordinator or spokesperson.

Over 90% of FTE staff in the administrative/business occupations category are either office and administrative support or business and financial operations staff. Office and administrative support positions comprise 17% of all SHA staff. Business and financial operations staff make up 15% of all SHA staff. Executive leadership comprise 2% of all SHA staff. About 1% of all SHA staff are quality improvement specialists or public information specialists.
Most clinical/laboratory staff are behavioral health professionals or public health nurses.

**Behavioral health staff:** A diverse group of staff involved in behavioral health programs, including psychiatrists, psychologists, social workers, and various types of counselors (e.g., HIV/AIDS, mental health, substance abuse, social services).

**Public health nurse:** A registered nurse involved in a wide range of public health activities, including providing direct medical services to clients.

**Laboratory worker:** Designs, implements, and analyzes laboratory testing (e.g., laboratory scientists, technicians, aides, assistants).

**Public health physician:** Licensed physicians involved in population-based programs or clinical services.

**Nurse practitioner:** Licensed advanced practice nurses involved in population-based programs or clinical services.

**Oral health professional:** Provides education, diagnosis, or treatment regarding oral health (e.g., dentists, dental hygienists, dental assistants).

**Physician assistant:** Licensed professionals involved in population-based programs or clinical services.

The largest occupation category in the clinical/laboratory group is behavioral health staff, representing 11% of all SHA staff. This diverse category includes psychiatrists, psychologists, social workers, and various types of counselors. Public health nurses make up 9% of all SHA staff. Public health nurses serve in many different roles and may or may not provide direct medical services to clients. Laboratory workers comprise 5% of all SHA staff. The other occupations in this group each comprise less than 1% of all SHA staff.
Environmental health workers and epidemiologists are the most common of the other public health professional occupations.

Environmental health worker: Focuses on problems or risks that may affect the environment (e.g., EH specialists, scientists, or technicians; occupational health workers; and inspectors).

Epidemiologist/statistician: Conducts surveillance, investigations, and analytic studies of disease occurrence and potential.

Health educator: Develops and implements strategies to support and modify health related behaviors of individuals and communities.

Nutritionist: Provides population-based or individual services related to nutrition and food. This category includes dieticians, nutritionists, and WIC lactation and nutrition staff.

Preparedness staff: Manages plans and training programs involving public health response to all-hazard events (e.g., emergency preparedness coordinator, manager, specialist).

Public health informatics specialist: Applies informatics principles and standards to improve population health.

Environmental health (EH) workers and epidemiologists and statisticians are the most common occupations within this category, however, they only account for a small portion of overall SHA staff. EH workers account for about 8% of all SHA staff and epidemiologists and statisticians comprise about 5%. Additionally, health educators comprise 3% of the workforce and nutritionists make up only 2% of all SHA staff. Preparedness staff and public health informatics specialists only account for slightly over 1% of the overall public health workforce.
Methodology

The ASTHO Profile of State and Territorial Public Health (Profile) is a survey completed periodically every two to three years since 2007 by all state health agencies (SHAs), Washington, D.C., U.S. territories, and freely associated states. The Profile presents comprehensive data to document changes over time in public health agency activities, structure, financial resources, and workforce.

ASTHO selected 18 specific and common occupation categories to include in the Profile survey. These 18 occupations were categorized into three groups: administrative and business, clinical/laboratory, and other public health professionals. The questionnaire also included an “other” category that was intended to capture staff in occupations not included in the Profile survey; examples of these occupations may include chaplains, pharmacists, Office of the Chief Medical Examiner death investigators, guards, and medical security.

Limitations

State health agencies were asked to report the total FTEs working at their agency, including both regular and contract employees, and to include vacant positions that were being actively recruited. Each SHA has its own system for job classifications and titles, so respondents were required to map their job classifications and titles onto the survey’s 18 occupation categories. This variation across systems may add uncertainty to these data. The ability to provide occupation information on contract employees also varies across SHAs, as data for those workers are often kept in separate information systems with less detail about the employees’ job responsibilities.

Information about Profile methods and limitations of the data, including details on missing data and estimates of data points, is available in the technical notes documentation here.

Profile data can be found on ASTHO’s website at www.astho.org/profile. For additional information about the ASTHO Profile Survey, contact profile@astho.org.

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