

Public Health

| 2017-18 Program of Study | Level 1 | Level 2 | Level 3 | Level 4 |
|--------------------------------|---------------------------------------|----------------------------------------------|---------------------------------------------|--------------------------------------|
| Public Health | Health Science Education (5998) | Behavioral and Community Health (6130) | Global Health and Epidemiology (6132) | Public Health Practicum (6184) |

Description

Public Health is designed to place students at the intersection of health science and health policy. This program investigates the patterns, causes, and effects of diseases in a variety of populations, and how the provision of healthcare has changed in response to global needs. Successful international strategies and programs will be examined. Upon completion of this course, proficient students will be able to interpret and communicate statistical information relating to the distribution of disease and mortality/morbidity nationally and globally, determine national and international health disparities, analyze national and international health policies, and evaluate outcomes from a range of health interventions.

Job Outlook

Employment for public health workers, specifically community health workers, is projected to grow an average of greater than 25% from 2014-2024 with employment projected to be 620 by 2024¹. In addition, **Figures 2 and 3** show 2024 projected employment for environmental scientists and specialists at over 950. Other public health occupations include occupational health and safety technicians and epidemiologists. The 2024 projected employment for these careers is 350 and 100 respectively. According to the Bureau of Labor Statistics, the number of individuals who have access to health insurance is expected to continue to increase because of federal health insurance reform. Health educators and community health workers, **Figure 4**, will be needed to show patients how to get access to healthcare services, such as preventive screenings.² In addition, health educators and

¹ United States Department of Labor, Employment and Training Administration. (2016). *Career One Stop*. Retrieved from <https://www.onetonline.org/link/summary/21-1094.00>

² United States Department of Labor, Bureau of Labor Statistics. (2015, December 17). *Occupational Outlook Handbook, 2016-17 Edition*. Retrieved from <https://www.bls.gov/ooh/community-and-social-service/health-educators.htm>

community health workers might take part in state and local programs designed to treat and prevent conditions such as diabetes and obesity.

It is interesting to note the education required for employment as an occupational health and safety technician is a high school diploma. ³ Students with a robust portfolio will have the advantage when it comes to the application process for one of the 350 projected positions in the state. These jobs will be more concentrated in or around urban areas, **Figure 1**, so this will be an important factor to consider when school systems plan programs of study for their students.

Figure 1. 2024 projected employment for Occupational Health and Safety Technicians ⁴



³ United States Department of Labor, Bureau of Labor Statistics. (2017, April 26). *Occupational Outlook Handbook, 2016- 17 Edition*. Retrieved from <https://www.bls.gov/ooh/healthcare/occupational-health-and-safety-technicians.htm>

⁴ Tennessee Department of Labor & Workforce Development. (2016). *Occupational Projections*. Retrieved from <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occpj>

Figure 2. 2024 projected employment for Environmental Scientists and Specialists⁵

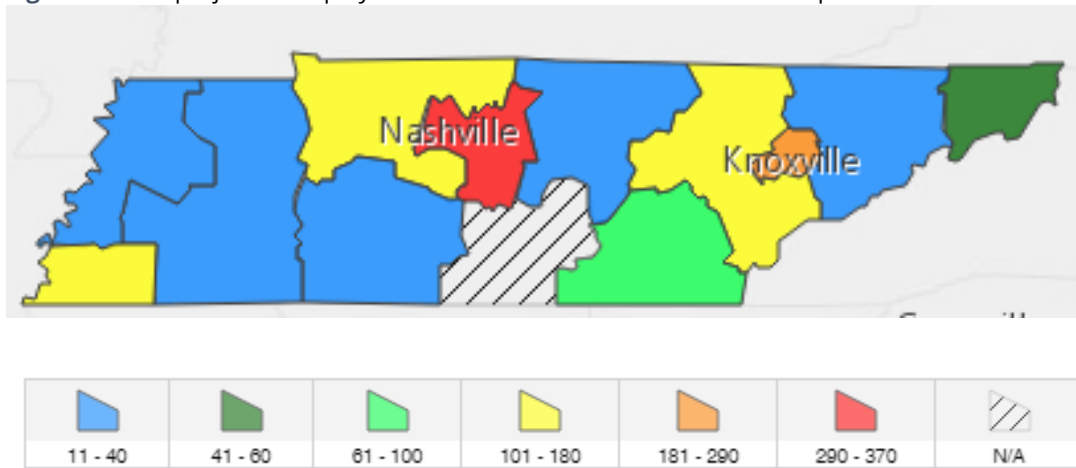


Figure 3. Tennessee employment projections for public health occupations

| Occupation | 2014 Estimated Employment | 2024 Projected Employment | Total 2014 - 2024 Employment Change | Annual Avg. Percent Change | Median Salary |
|----------------------------------------------------|---------------------------|---------------------------|-------------------------------------|----------------------------|-----------------------|
| Occupational Health & Safety Specialist | 1470 | 1580 | 110 | 0.7% | \$70,830 |
| Occupational Health & Safety Technician | 330 | 350 | 20 | 0.6% | \$ 51,190 |
| Community Health Workers | 500 | 620 | 120 | 2.2% | \$31,950 |
| Health Educator | 830 | 1.120 | 290 | 3.0% | \$34,330 |
| Epidemiologist | 90 | 100 | 0 | 0.5% | \$ 69,739 national |

⁵ Tennessee Department of Labor & Workforce Development. (2016). *Occupational Projections*. Retrieved from <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occpj>

Figure 4. State and national trends for community health workers with positive projections 2014-24⁶

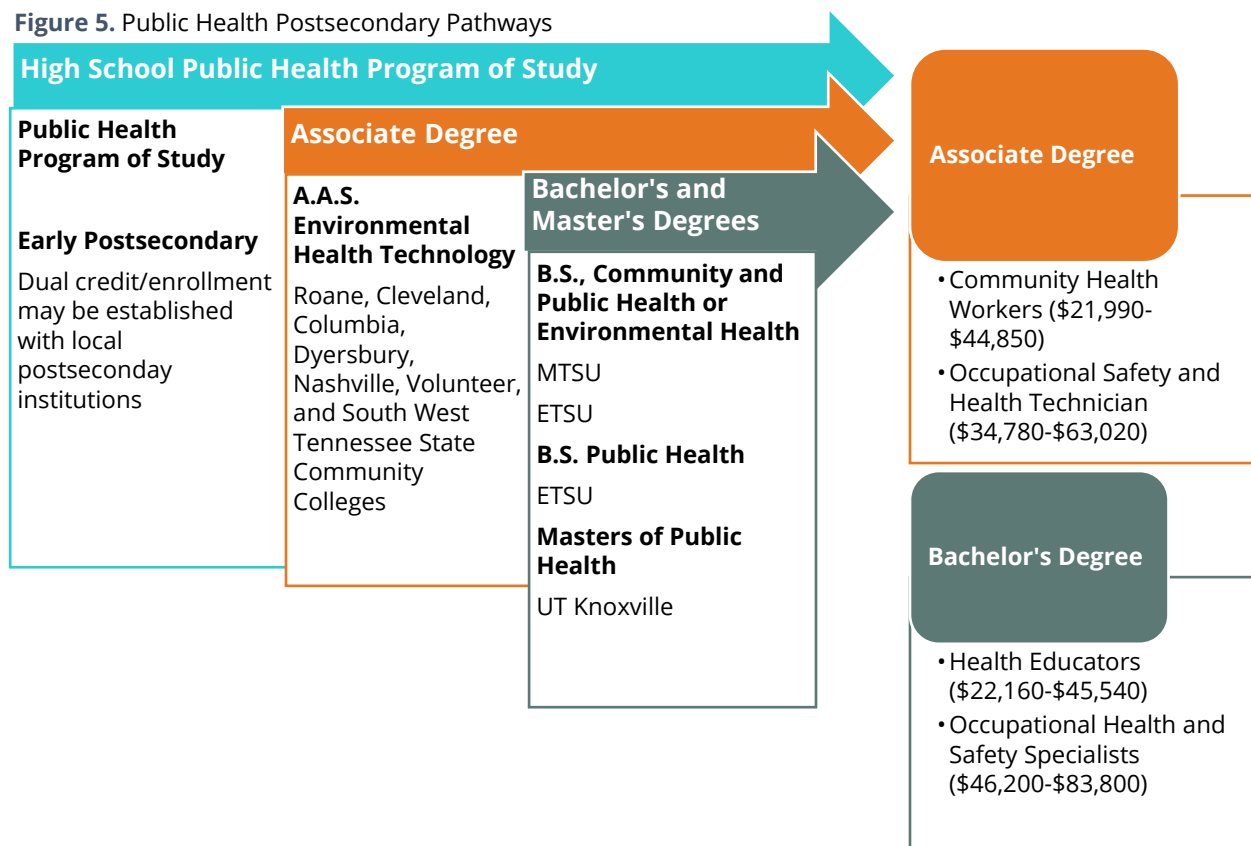
| | Employment | | Percent Change | Projected Annual Job Openings |
|-------------------------------|------------|--------|----------------|-------------------------------|
| | 2014 | 2024 | | |
| National | | | | |
| Community Health Workers | 54,300 | 62,400 | 15% | 1,880 |
| Tennessee¹⁸ | Employment | | Percent Change | Projected Annual Job Openings |
| | 2014 | 2024 | | |
| Community Health Workers | 500 | 620 | 25% | 30 |

⁶ United States Department of Labor, Employment and Training Administration. (2016). *Career One Stop*. Retrieved from <https://www.onetonline.org/link/summary/21-1094.00>

Postsecondary Pathways

Upon completion of this POS, students will be prepared to further their training at community colleges and universities in the areas of public health. **Figure 5** outlines the related career opportunities and training necessary for careers in public health. Students interested in a career in public health can seek on the job training and employment as an occupational health and safety technician using the robust portfolio they create in this program of study. At this time, seven community colleges across the state offer an associate's degree in Environmental Health Technology. This degree can be the on-ramp to a bachelor's degree in Community and Public Health, Environmental Health, or Public Health.

Figure 5. Public Health Postsecondary Pathways



Current Secondary Landscape

In the 2014-15 school year, 4 schools in Tennessee offered courses in the Public Health program of study. Of the 13,624 students who were enrolled in a Health Science course, only 28 students were enrolled in Behavioral and Community Health, the current Level 2 course. The number of schools offering a Public Health program of study increased over the past four years. **Figure 6** shows the open enrollment analysis for 2014-15 to 2017-18 as well student enrollment for 2014-15 through 2016-17 in the Public Health POS.

Figure 6. Open Enrollment Analysis⁷

| SY | Public Health |
|---------|---------------|
| 2014-15 | 4 |
| 2015-16 | 7 |
| 2016-17 | 9 |
| 2017-18 | 8 |

Student Enrollment

| SY | Health Science Education | Behavioral and Community Health | Global Health and Epidemiology | Public Health Practicum |
|---------|--------------------------|---------------------------------|--------------------------------|-------------------------|
| 2013-14 | 13622 | No data | No data | 0 |
| 2014-15 | 13624 | 28 | 10 | 0 |
| 2015-16 | 14563 | 28 | 0 | 0 |

Public Health Concentrators

| SY | Public Health Concentrators |
|---------|-----------------------------|
| 2013-14 | 0 |
| 2014-15 | 4 |
| 2015-16 | 15 |

⁷ Tennessee Department of Education. (2017). *Student Enrollment Data*. Retrieved from Author's calculation of student enrollment data.

Recommendations

No changes are recommended.

| 2018-19 Program of Study | Level 1 | Level 2 | Level 3 | Level 4 |
|--------------------------------|---------------------------------------|----------------------------------------------|---------------------------------------------|--------------------------------------|
| Public Health | Health Science Education (5998) | Behavioral and Community Health (6130) | Global Health and Epidemiology (6132) | Public Health Practicum (6184) |

References

- Tennessee Department of Labor & Workforce Development, Jobs4TN Online. (2016). *Occupational Projections*. Retrieved from <https://www.jobs4tn.gov/vosnet/analyzer/results.aspx?session=occproj>
- Tennessee Department of Labor & Workforce Development, Jobs4TN Online. (2016). *Labor Supply and Demand for Tennessee*. Retrieved from <https://www.jobs4tn.gov/vosnet/Default.aspx>
- Tennessee Department of Education. (2015). Student Enrollment Data. Retrieved from Author's calculation of student enrollment data.
- United States Department of Labor, Bureau of Labor Statistics. (2017, April 26). Occupational Outlook Handbook, 2016-17 Edition. Retrieved from <http://www.bls.gov/ooh/community-and-social-service/health-educators.htm#tab-6>
- United States Department of Labor, Bureau of Labor Statistics. (2017, April 26). Occupational Outlook Handbook, 2016-17 Edition. Retrieved from <https://www.bls.gov/ooh/healthcare/occupational-health-and-safety-technicians.htm>
- United States Department of Labor, Employment and Training Administration. (2016). *Career One Stop*. Retrieved from <https://www.onetonline.org/link/summary/21-1094.00>