

THE U.S. HEALTH WORKFORCE CHARTBOOK

PART III: HEALTH TECHNOLOGISTS & TECHNICIANS AND AIDES & ASSISTANTS

September 2018

**U.S. Department of Health and Human Services
Health Resources and Services Administration
Bureau of Health Workforce
National Center for Health Workforce Analysis**



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GENERAL LIST OF ACRONYMS

Acronym	Definition
AAPA	American Academy of Physician Assistants
ACNM	American College of Nurse-Midwives
ACS	American Community Survey
APRN	Advanced Practice Registered Nurse
BHW	Bureau of Health Workforce
BLS	Bureau of Labor Statistics
BSN	Bachelor of Science in Nursing
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
CRNA	Certified Registered Nurse Anesthetist
EMT	Emergency Medical Technician
HHS	U.S. Department of Health and Human Services
HRSA	Health Resources and Services Administration
IPEDS	Integrated Postsecondary Education Data System
LPN	Licensed Practical and Licensed Vocational Nurse
NAICS	North American Industry Classification System
NCHWA	National Center for Health Workforce Analysis
NCLEX-PN®	National Counsel Licensure Examination for Practical Nurses
NP	Nurse Practitioner
NPI	National Provider Identification
OT	Occupational therapy
PA	Physician Assistant
PA-C	Certified Physician Assistant
PUMS	Public Use Microdata Sample
RN	Registered Nurse
RSE	Relative standard error
SOC	Standard Occupational Classification

Introduction

The Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS), provides national leadership in the development, distribution, and retention of a diverse, culturally competent health workforce that can adapt to the population's changing health care needs and provide the highest-quality care for all. The agency administers a wide range of training grants, scholarships, loans, and loan repayment programs that strengthen the health care workforce and respond to the evolving needs of the health care system.

The National Center for Health Workforce Analysis (the National Center) informs public and private sector decision-making on the U.S. health workforce by expanding and improving health workforce data and its dissemination to the public, and by improving and updating projections of supply and demand for health workers.

For more information about the National Center, please visit our website at <https://bhw.hrsa.gov/national-center-health-workforce-analysis>.

The U.S. Health Workforce Chartbook provides extensive data on 34 health occupations and is part of the Health Resources and Services Administration's (HRSA's) effort to assist states, policymakers, local workforce planners, researchers, and the public in understanding the U.S. health workforce. The Chartbook may also be used as a baseline to track changes in the health workforce. While this Chartbook includes extensive data on supply, including comparative data by state, it does not include data on demand and, as such, does not address the adequacy of the supply.

The purpose of this Chartbook is to provide an update to the HRSA 2013 Chartbook. The five-year 2011 to 2015 American Community Survey (ACS) Public Use Microdata Sample (PUMS) file was analyzed to provide the estimated number of individuals nation-wide within selected health occupations, along with information pertaining to workforce settings (industry), and the demographic makeup of the occupation (i.e., sex, age, race, and ethnicity).¹ The 2011 to 2015 ACS data file included more than 15 million individuals and these individuals represent approximately 10 percent of the nation's workforce.² The 34 health occupations included in this Chartbook are classified based on the U.S. government's Standard Occupational Classification (SOC) system. The occupations also represent those with the largest current employment and those that are expected to grow substantially in the future.

The vast majority of workers are employed in what the U.S. Office of Management and Budget defines as the "health sector," which includes health settings such as hospitals, clinics, physician's offices, and nursing homes. The health sector also includes many workers in occupations that are not considered health occupations. For example, workers such as accountants or food service workers employed in hospitals are working *in* the health sector, even though they are not working in a health occupation. Individuals in health occupations may also

¹ HRSA Analysis of the U.S. Census Bureau, American Community Survey (ACS) Public Microdata Sample (PUMS), 2011-2015.

² HRSA Analysis of the U.S. Bureau of Labor Statistics (BLS), Employment Projections, 2014-2015. Note: The "workforce" is defined as individuals employed in the occupation and individuals whose last job was in the occupation and who are still seeking employment.

work outside the health sector in settings such as local governments, schools, or insurance companies. The information provided in this Chartbook includes individuals in health occupations that are both within and outside the health sector.

For most occupations, the Chartbook relies on the U.S. Census Bureau's ACS to estimate the total number of individuals in each occupation, their geographic distribution, the settings in which they work, and their demographic characteristics. The ACS, which uses self-reported data, is the most comprehensive source available for the broad range of occupations included in this report.³ This report also draws from the U.S. Department of Education's Integrated Postsecondary Education System (IPEDS) to include information on the number of graduates from educational programs leading to entry into specific occupations. No graduate data are presented for occupations in which formal educational requirements are completed in institutions not reporting to IPEDS or vary substantially by state.

Some health occupations are not included or fully represented in the Chartbook because of data limitations. Only occupations that have 2010 Standard Occupational Classification (SOC) codes are included in this Chartbook. The report also does not include other health occupations because of the small size of the occupation, such as epidemiologists and other public health-oriented disciplines like laboratory workers (laboratorians) and environmental health professionals. In addition, some occupations in the Chartbook are limited by ACS occupational groupings because of the methods by which the ACS collects and reports SOC data. For example, although the SOC has two separate groupings for "medical and clinical laboratory technologists" and "medical and clinical laboratory technicians," the ACS only reports on "medical and clinical laboratory technologists and technicians" as a single occupational grouping and does not report the two occupations separately. Finally, some health occupations in this Chartbook are not comparable to those reported in the 2013 Chartbook because the SOC codes changed. More detailed information is available in the *U.S. Health Workforce Chartbook: Technical Documentation* which can be found at <https://bhw.hrsa.gov/health-workforce-analysis/research>.

The Chartbook is divided into four main parts for ease of reporting. Part I comprises clinicians. Part II presents additional clinician categories and occupations concerned with health care administration duties. Part III discusses health-related technologists and technicians as well as aides and assistants. Part IV describes behavioral and allied health occupations.

Data Sources

Data for this Chartbook come primarily from two federal agencies: the U.S. Census Bureau and the U.S. Department of Education.

The U.S. Census Bureau's American Community Survey (ACS): The ACS, a household survey, provides detailed self-reported data including demographic information (e.g., age, race,

³ Note: Self-reported data have limitations. Some individuals may report the occupation for which they are trained or licensed even when they are not currently working the majority of their time in the occupation. For example, a physician who is spending a majority of his/her time as an administrator may self-report as either a physician or an administrator. The ACS does not collect data on licensure or professional certification. See the Technical documentation for additional details on ACS reporting limitations.

and sex data) on individuals working in the health occupations and is the major source of data for this report.

The U.S. Department of Education’s Integrated Postsecondary Education System (IPEDS): IPEDS data are used to measure the educational pipeline into the health occupations. IPEDS provides enrollment and graduation data on an annual basis for all institutions that receive or apply for federal funds. The number of graduates, by degree type, is presented for occupations for which there is a specific educational pathway into the occupation. No data are reported for those occupations without a distinct educational pathway.

Descriptions of the educational and training requirements for the various occupations have been obtained from the BLS, ***Occupational Outlook Handbook***, 2015 Edition.

Details on the data sources, definitions and analysis, and other information provided in the Chartbook are available in the *U.S. Health Workforce Chartbook: Technical Documentation*. Also, more detailed information on the work settings used in this report can be found on the U.S. Census Bureau website at www.census.gov/eos/www/naics.

The following table lists each of the selected occupations in Part III of *The U.S. Health Workforce Chartbook* along with the associated total workforce estimates from the ACS.

Part III: Technologists & Technicians and Aides & Assistants

<u>Occupation</u>	<u>Total Workforce⁴</u>
1.0 Health Technologists and Technicians	
1.1 Medical and Clinical Laboratory Technologists and Technicians	393,230
1.2 Diagnostic Related Technologists and Technicians	370,539
1.3 Emergency Medical Technicians and Paramedics	225,887
1.4 Health Practitioner Support Technologist and Technicians	674,868
1.5 Medical Records and Health Information Technicians	167,149
2.0 Aides and Assistants	
2.1 Medical Assistants	574,389
2.2 Personal Care Aides	1,649,003
2.3 Nursing, Psychiatric, and Home Health Aides	2,845,496

⁴ Total Workforce from HRSA analysis of the ACS PUMS, 2011-2015. The ACS data are based on self-reported occupation.

1.0 Health Technologists and Technicians

Health Technologist and Technician occupations described in this section include:

- 1.1 Medical and Clinical Laboratory Technologists and Technicians;
- 1.2 Diagnostic Related Technologists and Technicians;
- 1.3 Emergency Medical Technicians and Paramedics;
- 1.4 Health Practitioner Support Technologists and Technicians; and
- 1.5 Medical Record and Health Information Technicians.

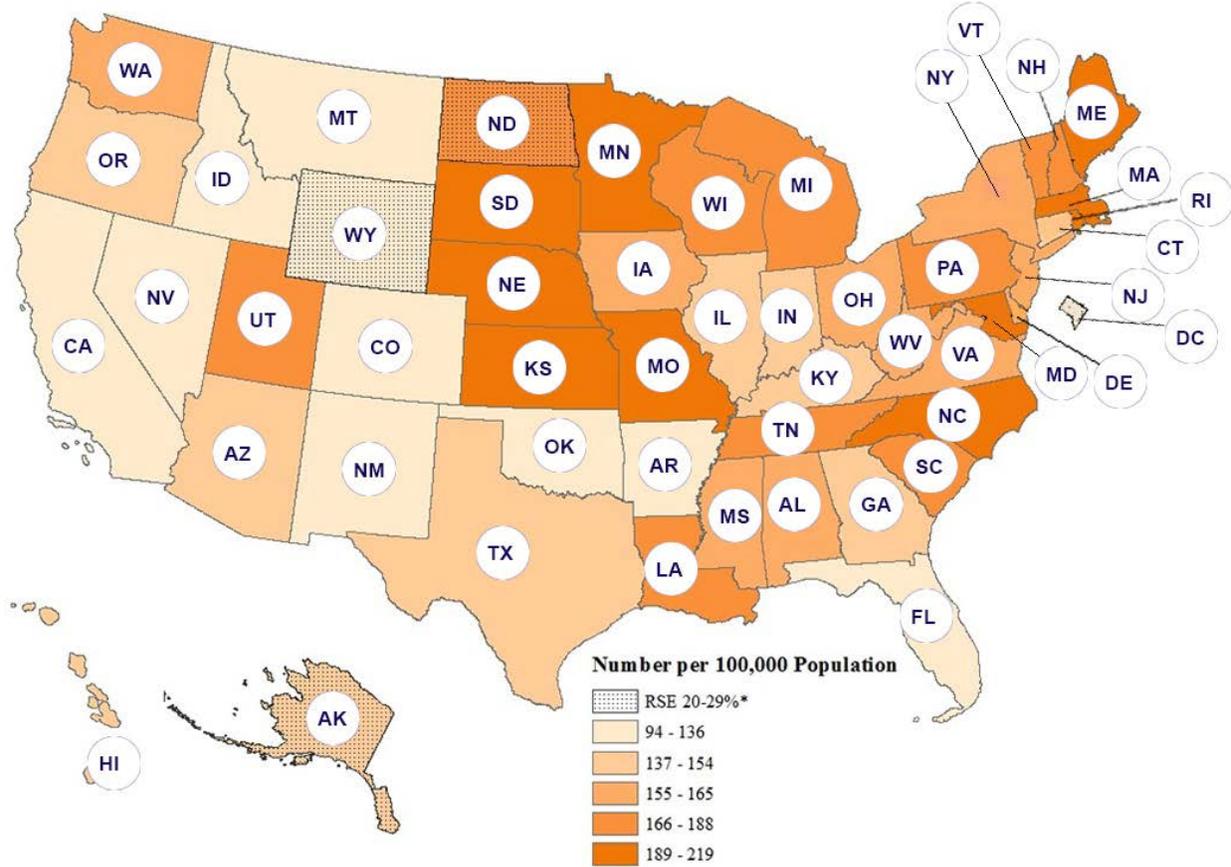
1.1 Medical and Clinical Laboratory Technologists and Technicians

- An estimated 393,230 individuals in the U.S. workforce reported their occupation as Medical and Clinical Laboratory Technologist or Technician.⁵ People in these occupations are sometimes collectively referred to as laboratory workers, medical laboratory science professionals, or laboratorians.
- To become a Medical and Clinical Laboratory Technologist, an individual must obtain a Bachelor's degree. To become a Technician, an individual must obtain Associate's degree or a postsecondary certificate.⁶

⁵ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

⁶ BLS, Occupational Outlook Handbook. 2015.

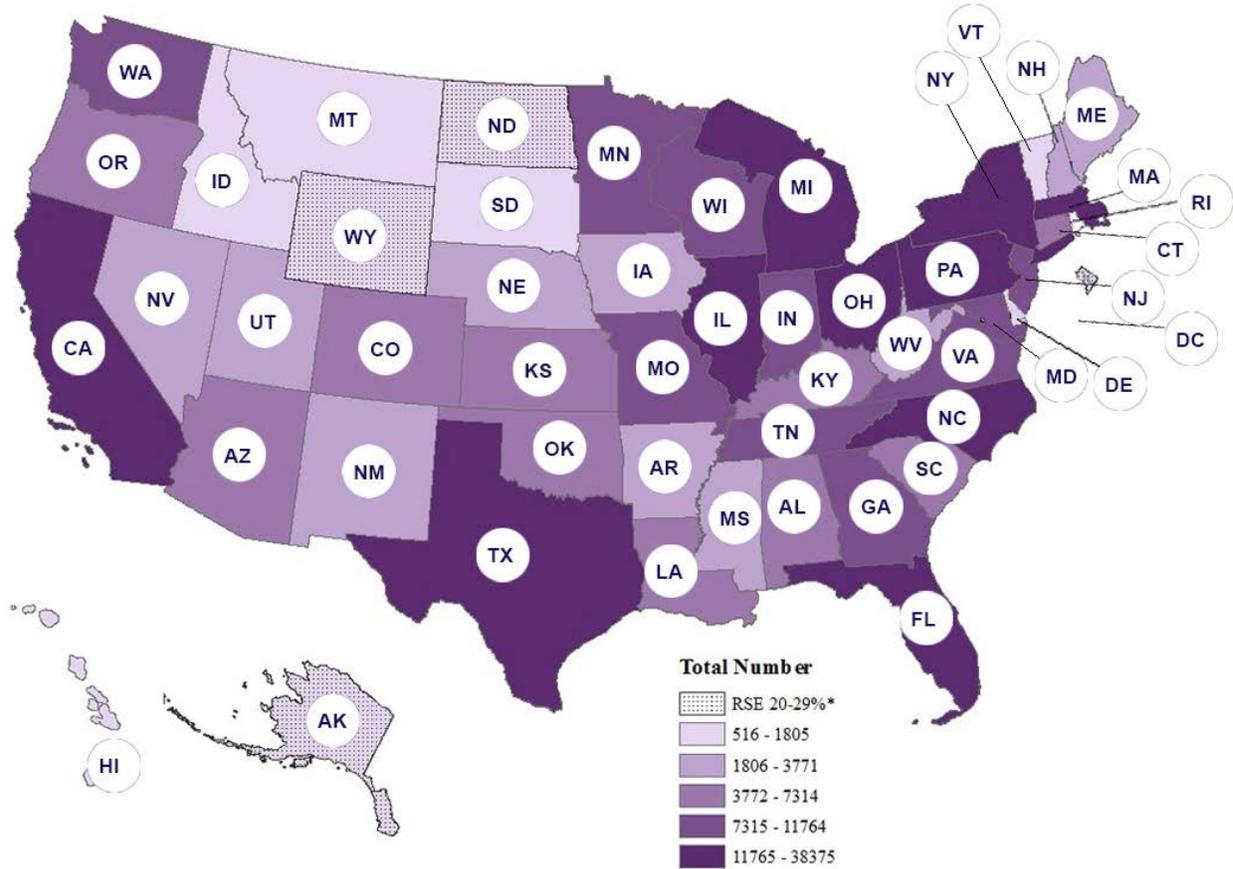
FIGURE 1: MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS PER 100,000 WORKING-AGE POPULATION, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

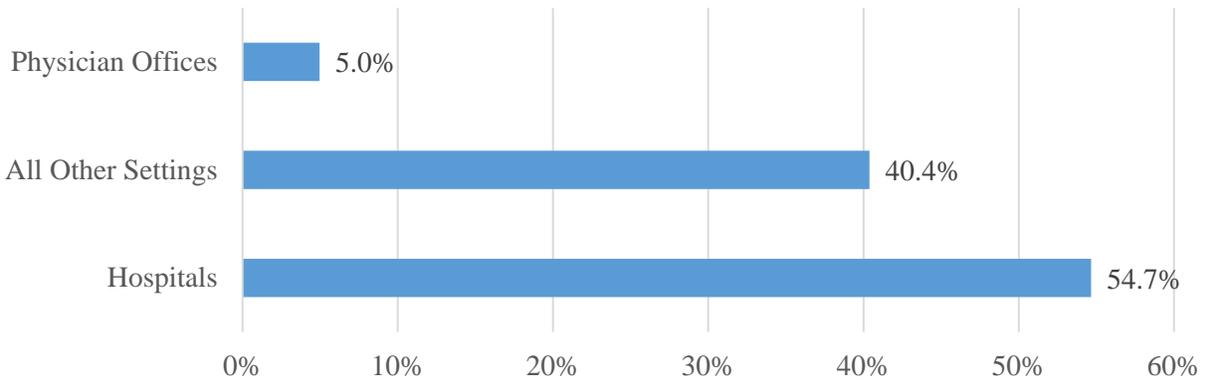
FIGURE 2: NUMBER OF MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

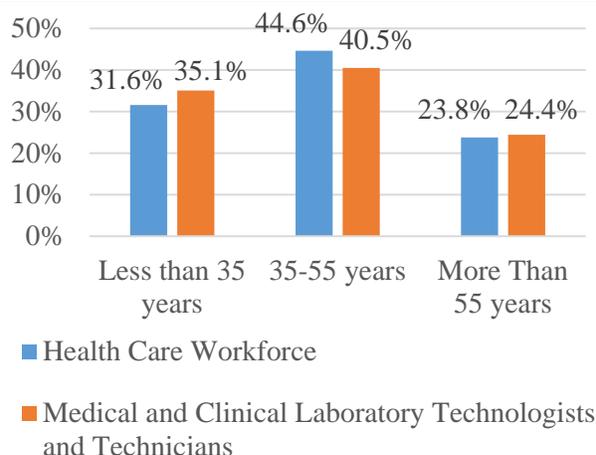
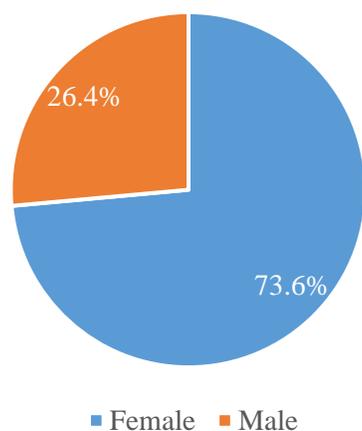
FIGURE 3: DISTRIBUTION OF MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS, BY WORK SETTING



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: Percentages may not total 100, because of rounding.

FIGURE 4: DISTRIBUTION OF MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS, BY SEX AND AGE

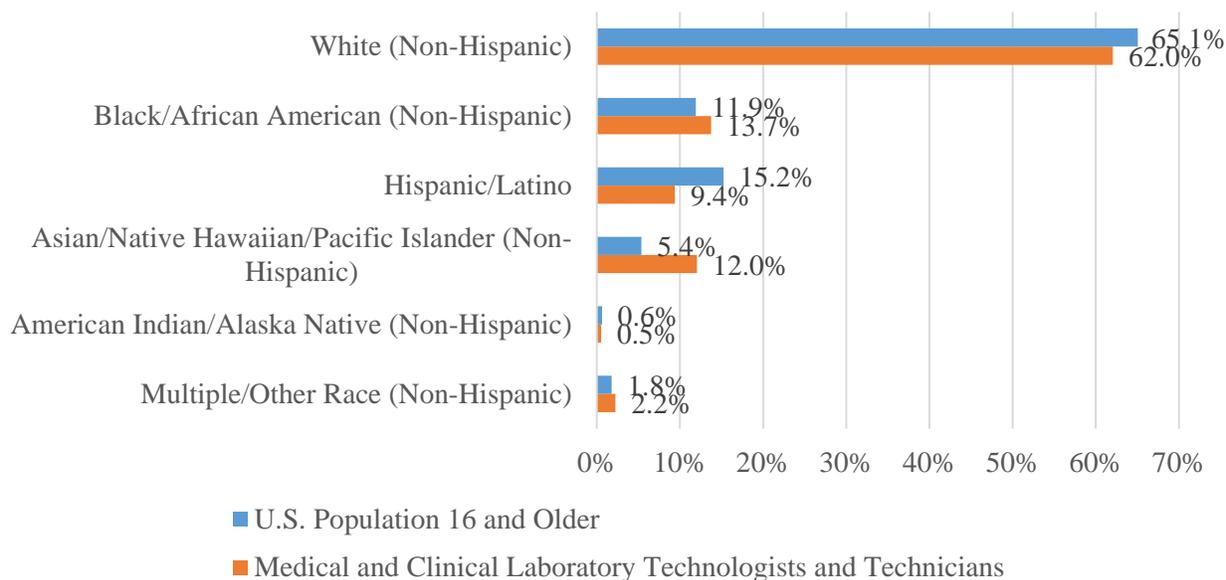


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: The "Health Care Workforce" in this figure refers to the health occupations in this report.

Note: Percentages may not total 100, because of rounding.

FIGURE 5: DISTRIBUTION OF MEDICAL AND CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: Percentages may not total 100, because of rounding.

Graduates

The total number of Medical and Clinical Laboratory Technologist and Technician graduates in the 2014-2015 academic year was 10,284.⁷

⁷ BLS, Occupational Outlook Handbook, 2015.

1.2 Diagnostic Related Technologists and Technicians

The information presented below for “diagnostic related technologists and technicians”⁸ combines data from the following individual occupations:

- Cardiovascular Technologists and Technicians;
- Diagnostic Medical Sonographers;
- Nuclear Medicine Technologists;
- Radiologic Technologists; and
- Magnetic Resonance Imaging Technologists.

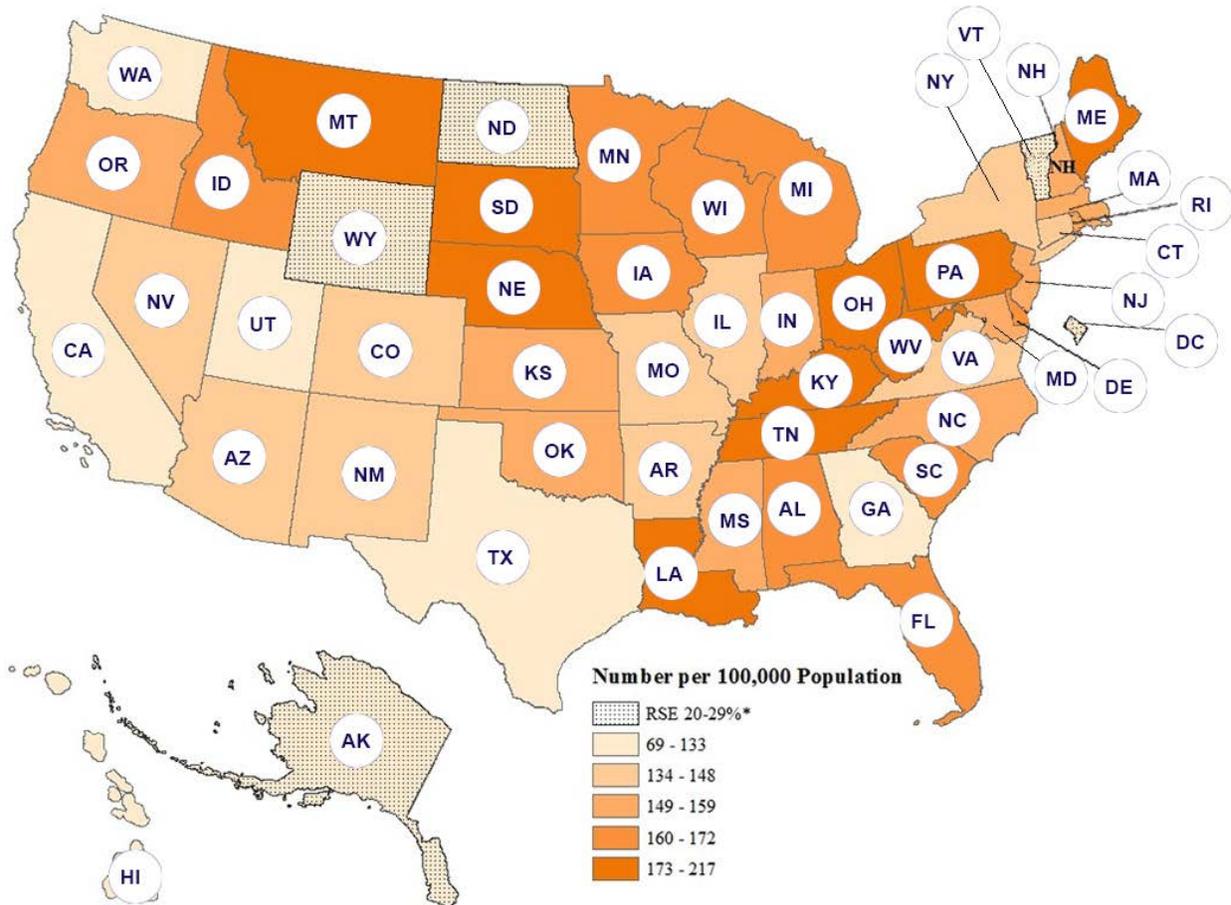
- An estimated 370,539 individuals in the U.S. workforce reported their occupation as diagnostic related technologist or technician in the U.S. workforce.⁹
- To become a diagnostic related technologist or technician, an individual must typically obtain an Associate’s degree and, commonly licensure.¹⁰

⁸ BLS, Occupational Outlook Handbook. 2015

⁹ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

¹⁰ BLS, Occupational Outlook Handbook. 2015.

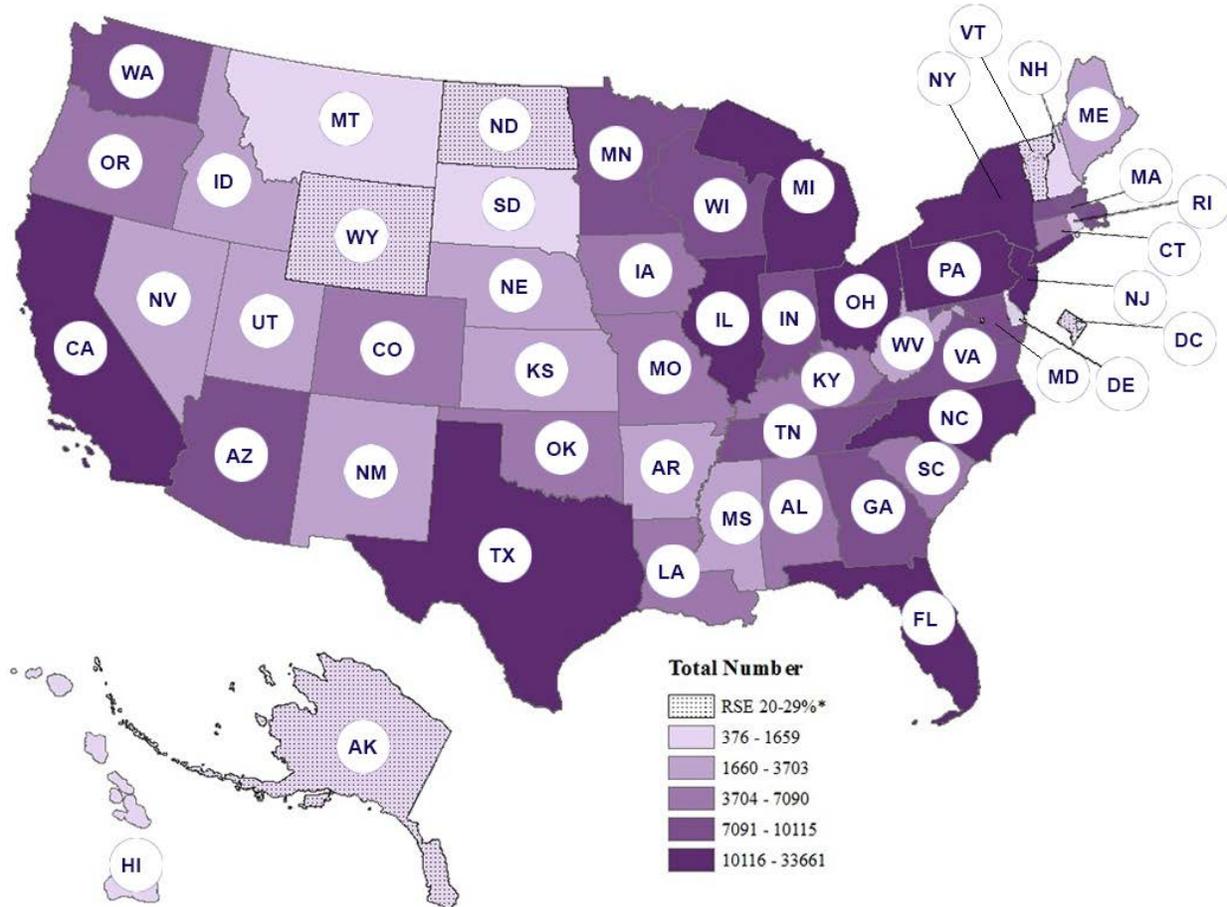
FIGURE 6: DIAGNOSTIC RELATED TECHNOLOGISTS AND TECHNICIANS PER 100,000 WORKING-AGE POPULATION, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

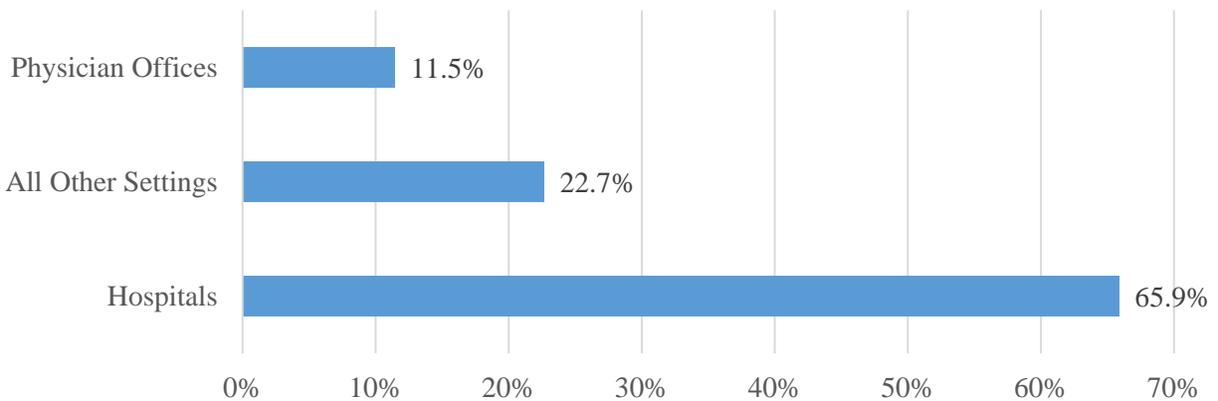
FIGURE 7: NUMBER OF DIAGNOSTIC RELATED TECHNOLOGISTS AND TECHNICIANS, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

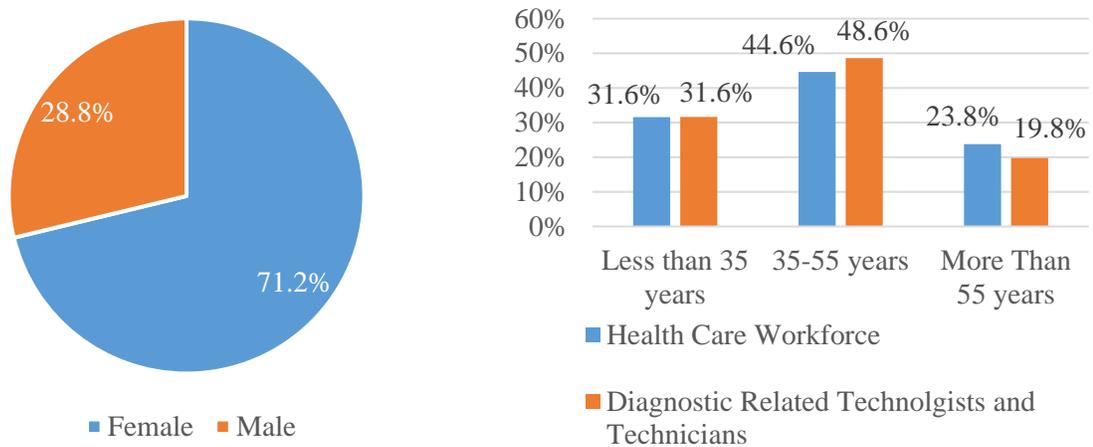
FIGURE 8: DISTRIBUTION OF DIAGNOSTIC RELATED TECHNOLOGISTS AND TECHNICIANS, BY WORK SETTING



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

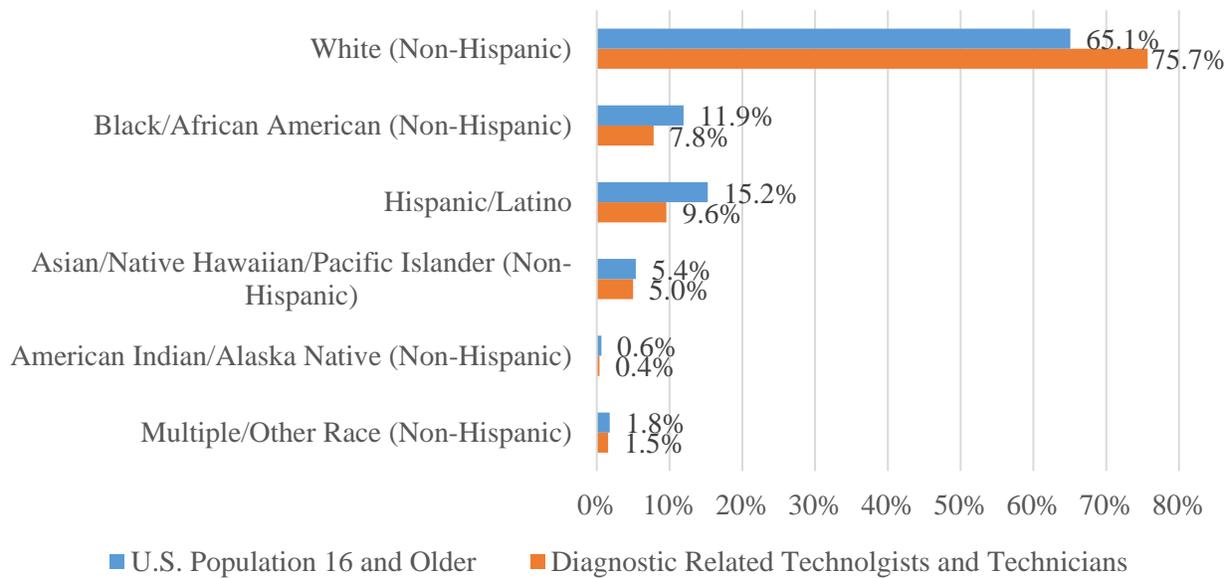
Note: Percentages may not total 100, because of rounding.

FIGURE 9: DISTRIBUTION OF DIAGNOSTIC RELATED TECHNOLOGISTS AND TECHNICIANS, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 10: DISTRIBUTION OF DIAGNOSTIC RELATED TECHNOLOGISTS AND TECHNICIANS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

Graduates

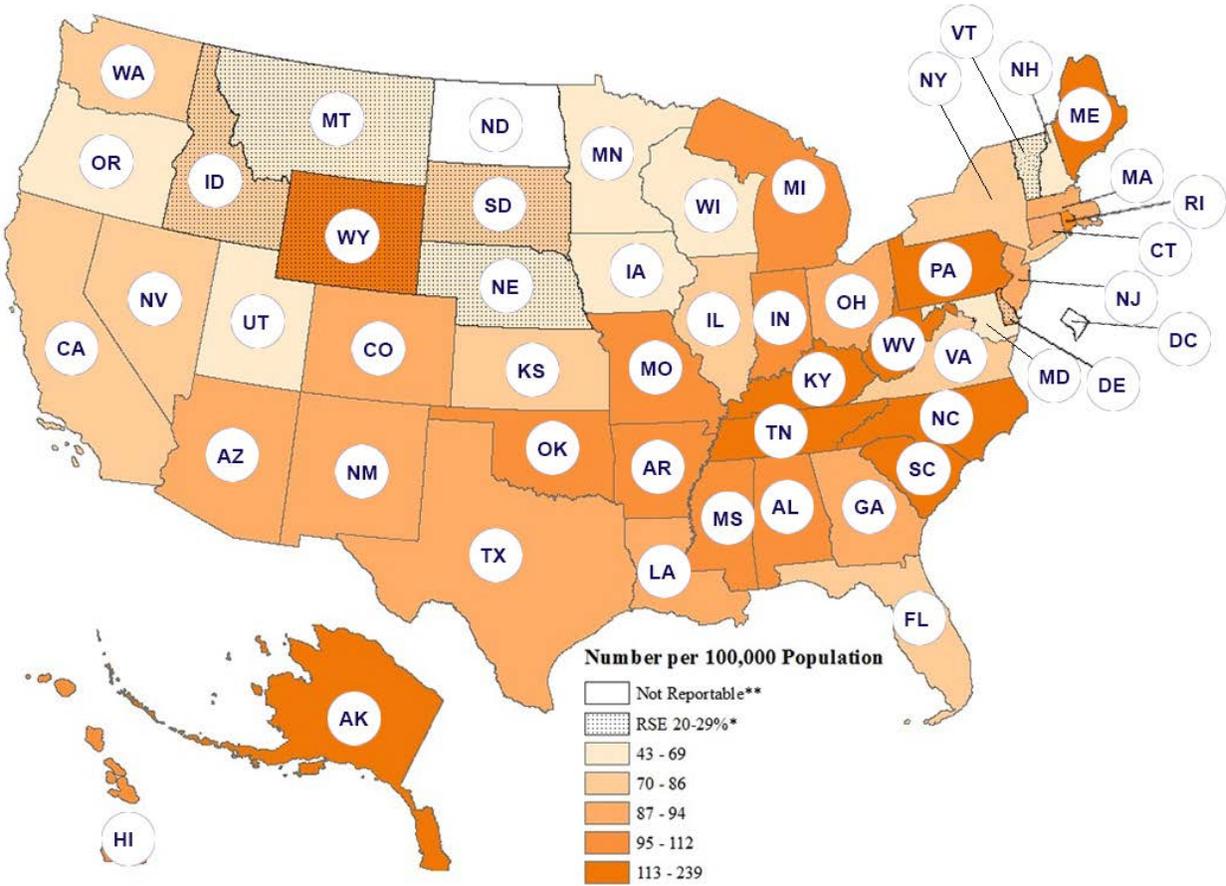
The total number of diagnostic related technologist and technician graduates in the 2014 to 2015 year was 22,651.¹¹

¹¹ HRSA analysis of the National Center for Education Statistics IPEDS, 2014-2015.

1.3 Emergency Medical Technicians and Paramedics

- An estimated 225,887 individuals in the U.S. workforce reported their occupation as emergency medical technician (EMT) or Paramedic.¹²
- To become an EMTs or Paramedic, an individual must obtain a post-secondary non-degree award, licensure, and meet certain additional requirements.¹³

FIGURE 11: EMTs AND PARAMEDICS PER 100,000 WORKING-AGE POPULATION, BY STATE

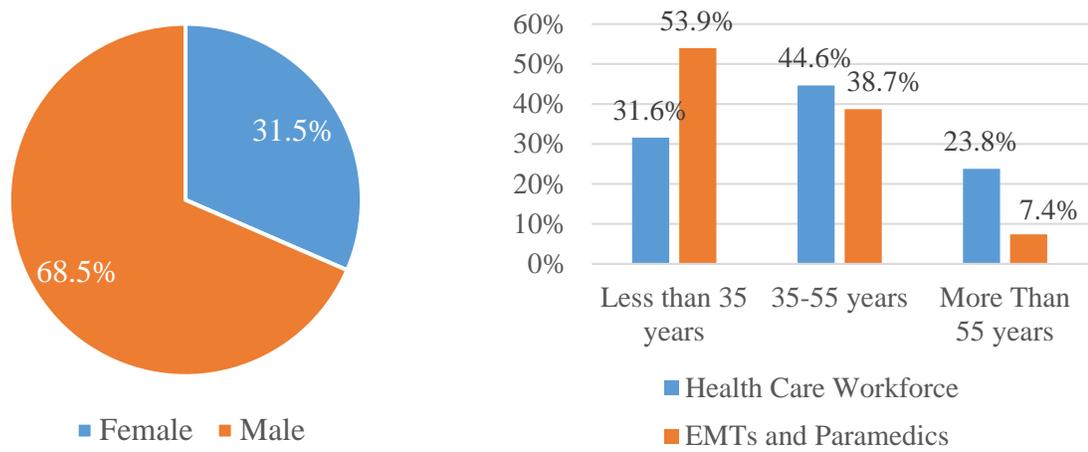


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 *Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.
 **Data are not reported at the state level, because the RSE ≥ 30%; estimate does not meet standards of reliability.

¹² Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

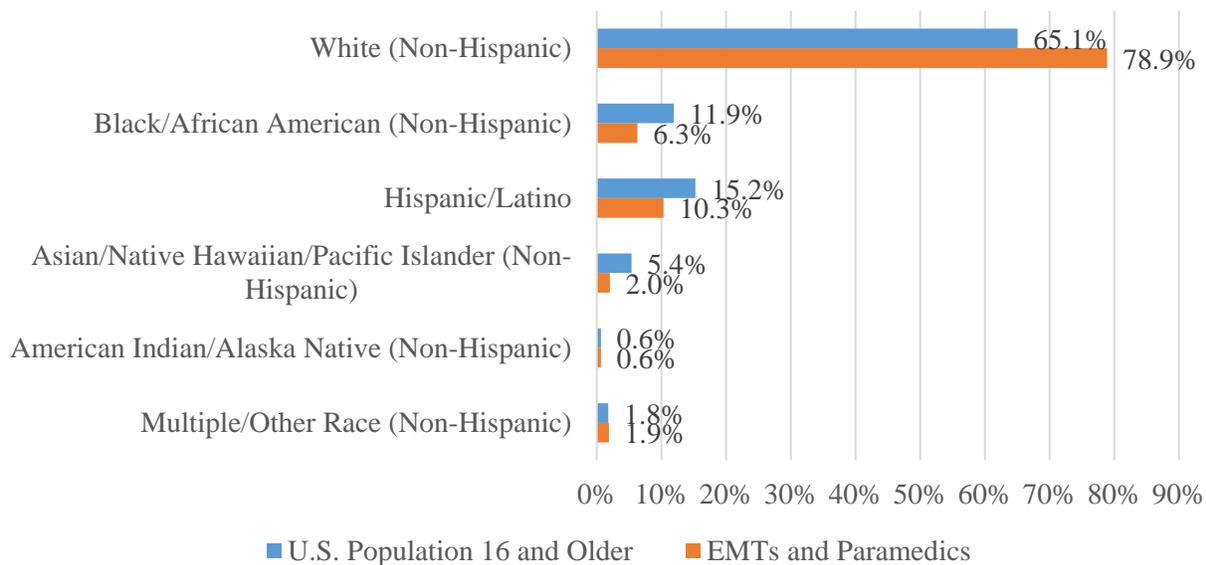
¹³ BLS, Occupational Outlook Handbook. 2015.

FIGURE 14: DISTRIBUTION OF EMTs AND PARAMEDICS, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 15: DISTRIBUTION OF EMTs AND PARAMEDICS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

Graduates

The total number of EMT and Paramedic graduates in the 2014 to 2015 year was 25,707.¹⁴

¹⁴ HRSA analysis of the National Center for Education Statistics IPEDS, 2014-2015.

1.4 Health Practitioner Support Technologists and Technicians

The information presented below for ““Health Practitioner Support Technologists and Technicians”” combines data for the following individual occupations that support Health Diagnosing and Treating Practitioners:

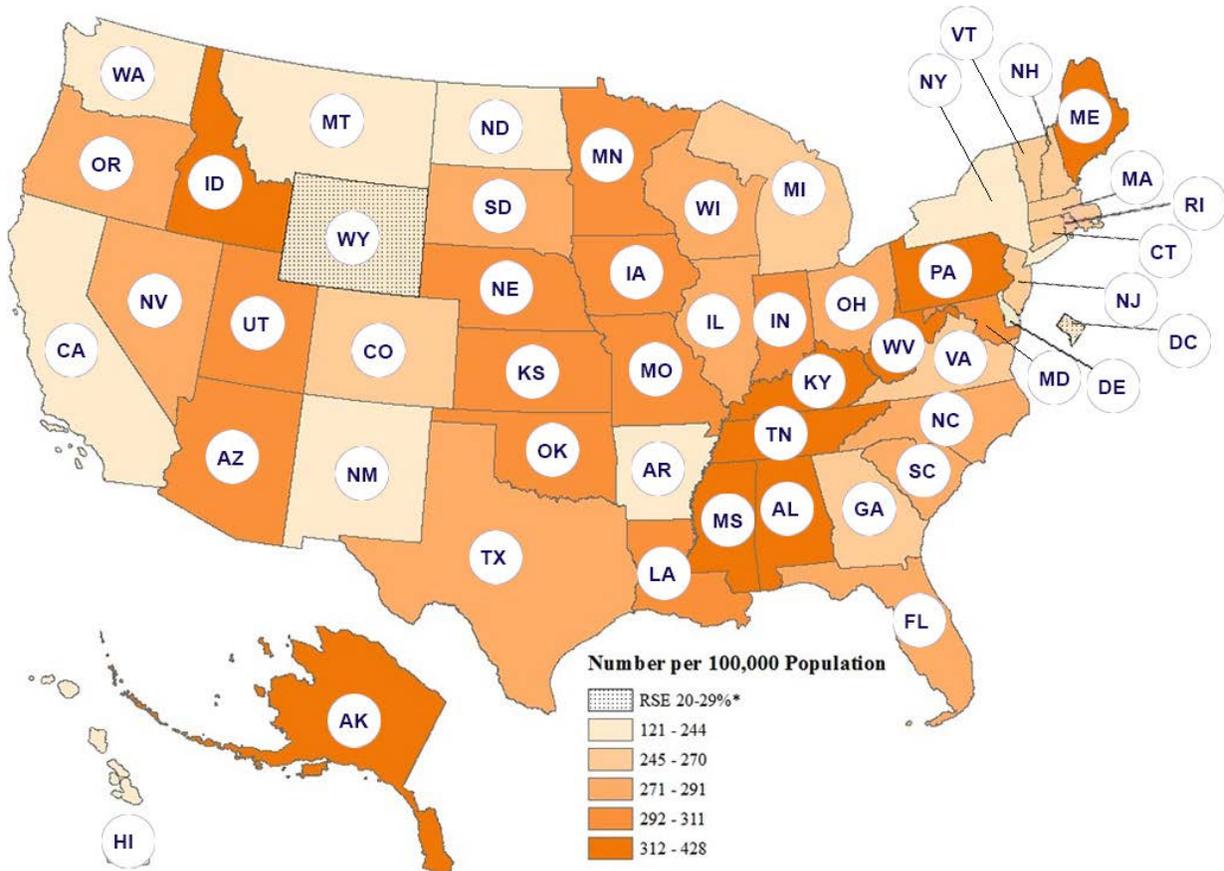
- Dietetic Technicians;
- Pharmacy Technicians;
- Psychiatric Technicians;
- Respiratory Therapy Technicians;
- Surgical Technologists; and
- Veterinary Technologists and Technicians.

- An estimated 674,868 individuals in the U.S. workforce reported their occupation as Health Practitioner Support Technologist or Technician.¹⁵
- To become a Technologist or Technician that supports Health Diagnosing and Treating Practitioners, an individual must obtain a high school diploma or equivalent, a post-secondary non-degree award, or an Associate’s degree.¹⁶ Typically, both technologists and technicians in these fields must take a credentialing exam and become registered, licensed, or certified.

¹⁵ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

¹⁶ BLS, Occupational Outlook Handbook. 2015.

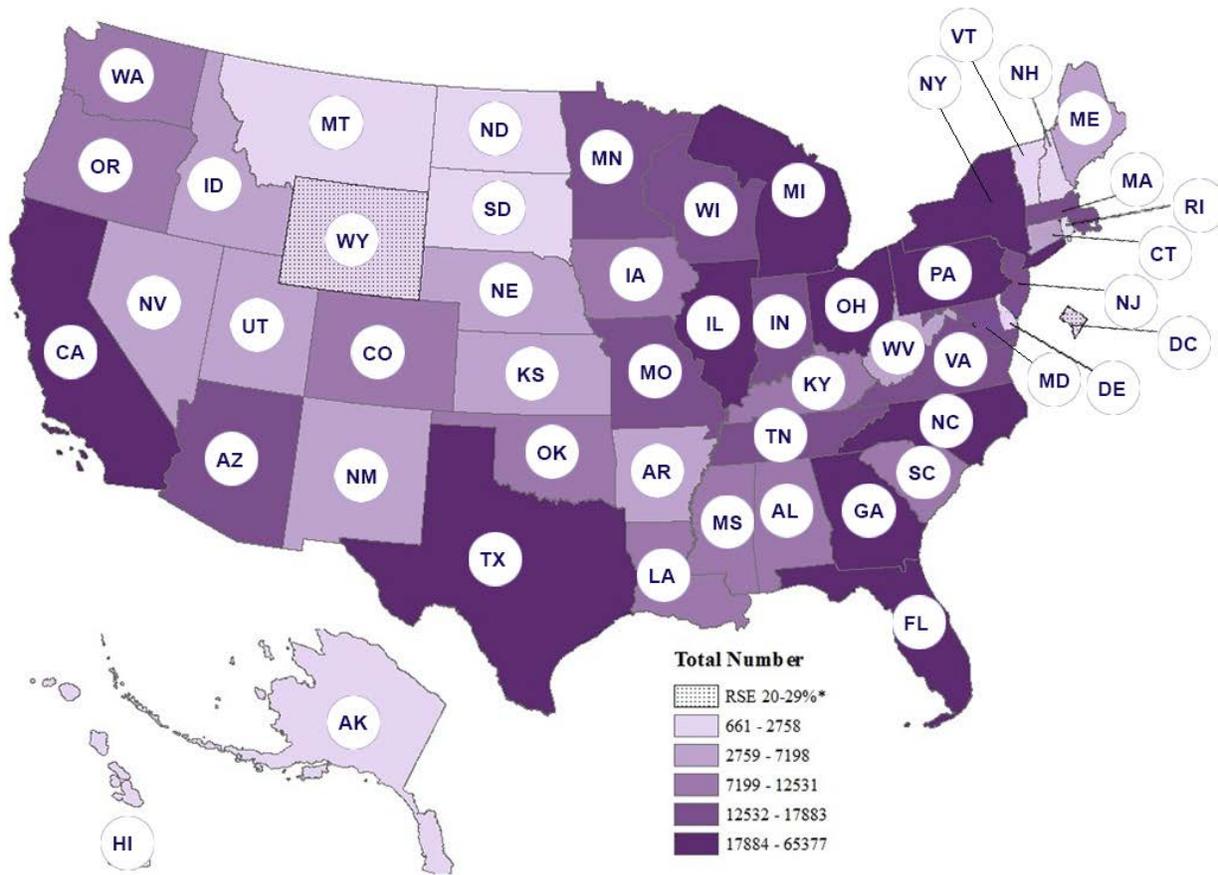
FIGURE 16: HEALTH PRACTITIONER SUPPORT TECHNOLOGISTS AND TECHNICIANS PER 100,000 WORKING-AGE POPULATION, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

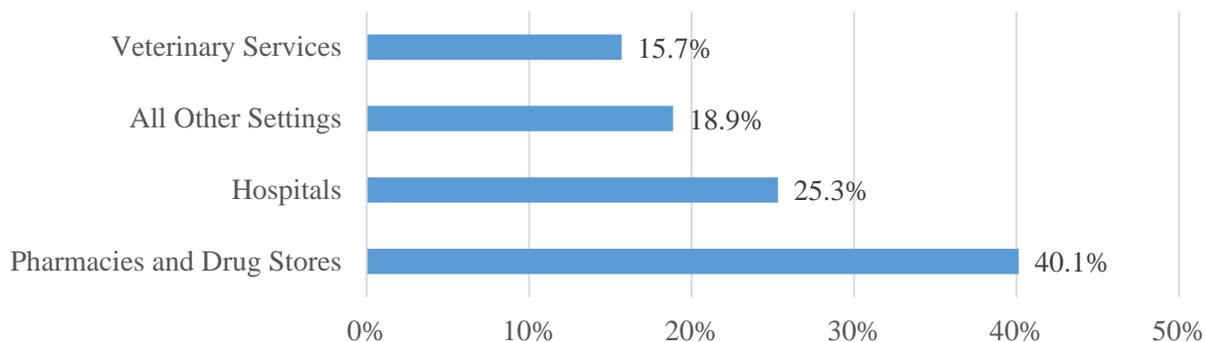
FIGURE 17: NUMBER OF HEALTH PRACTITIONER SUPPORT TECHNOLOGISTS AND TECHNICIANS, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

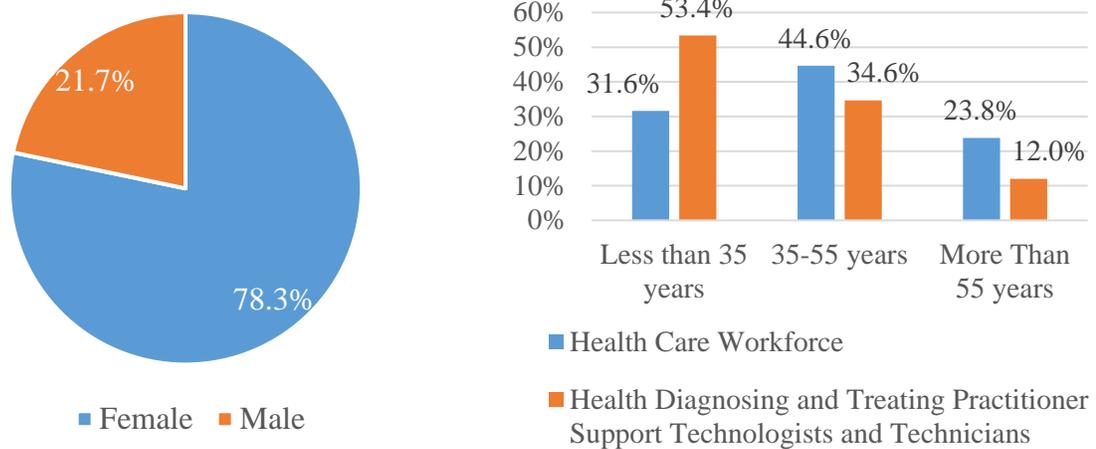
FIGURE 18: DISTRIBUTION OF HEALTH PRACTITIONER SUPPORT TECHNOLOGISTS AND TECHNICIANS, BY WORK SETTING



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

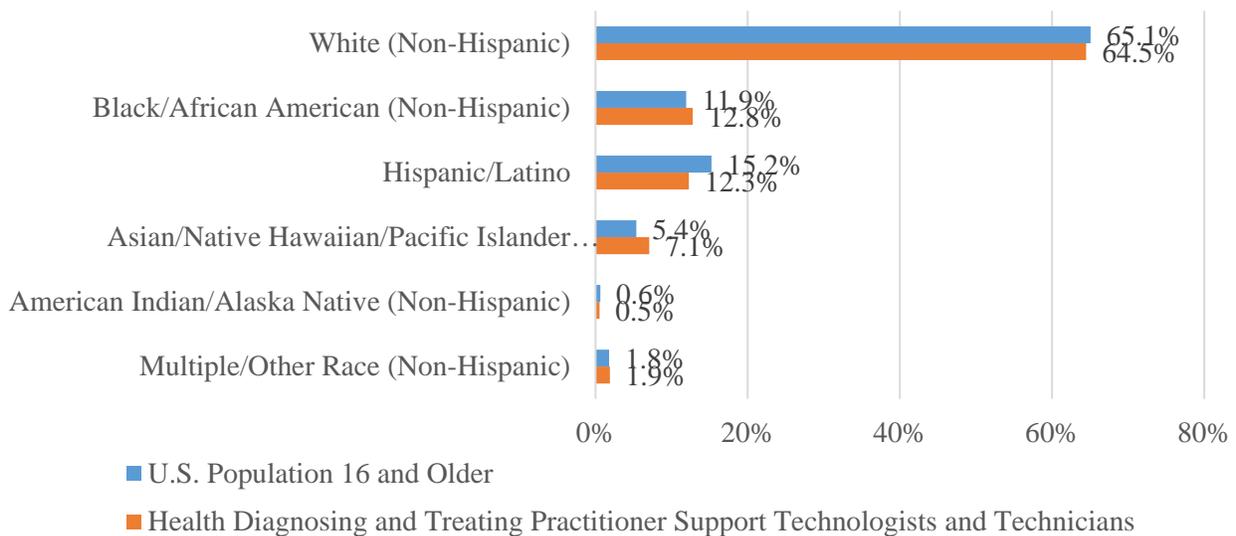
Note: Percentages may not total 100, because of rounding.

FIGURE 19: DISTRIBUTION OF HEALTH SUPPORT TECHNOLOGISTS AND TECHNICIANS, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 20: DISTRIBUTION OF HEALTH PRACTITIONER SUPPORT TECHNOLOGISTS AND TECHNICIANS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

Graduates

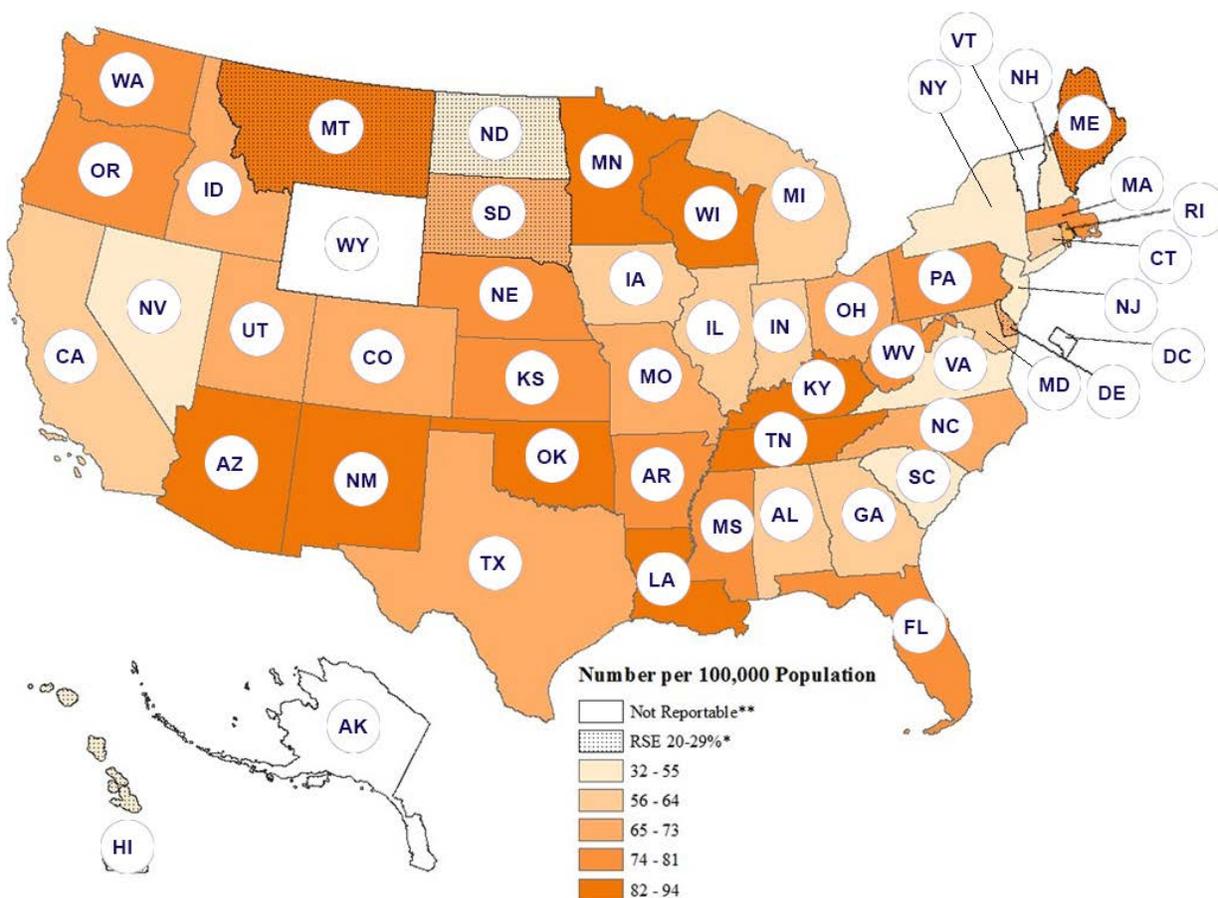
The total number of post-secondary graduates in the occupations of Health Practitioner Support Technologists and Technicians that support Health Diagnosing and Treating Practitioners in the 2014 to 2015 year was 41,490.¹⁷

¹⁷ HRSA analysis of the National Center for Education Statistics IPEDS, 2014-2015.

1.5 Medical Records and Health Information Technicians

- An estimated 167,149 individuals in the U.S. workforce reported their occupation as Medical Records and Health Information Technician.¹⁸
- To become a Medical Records and Health Information Technician, an individual must obtain a post-secondary non-degree award, and in some states, certification.¹⁹

FIGURE 21: MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIANS PER 100,000 WORKING-AGE POPULATION, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

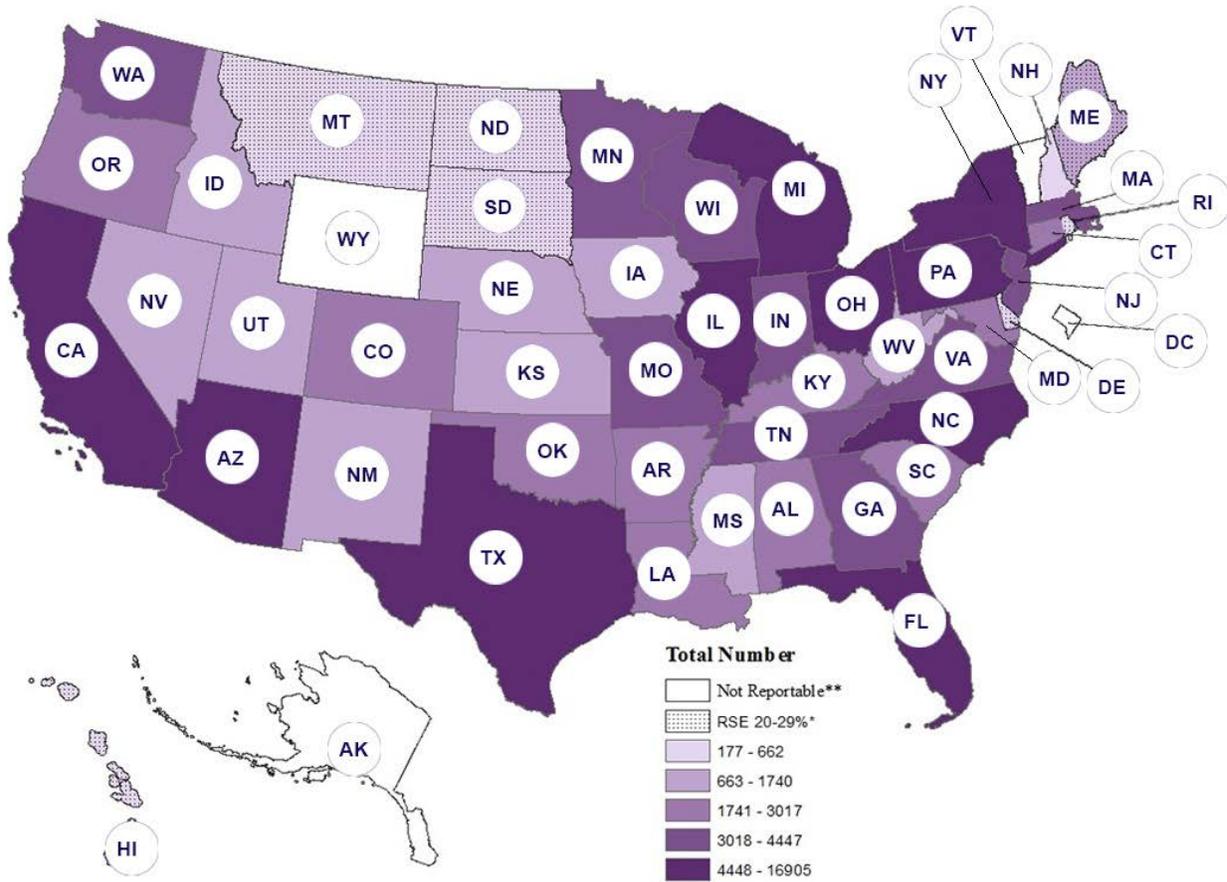
*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

**Data are not reported at the state level, because the RSE \geq 30%; estimate does not meet standards of reliability.

¹⁸ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

¹⁹ BLS, Occupational Outlook Handbook. 2015.

FIGURE 22: NUMBER OF MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIANS, BY STATE

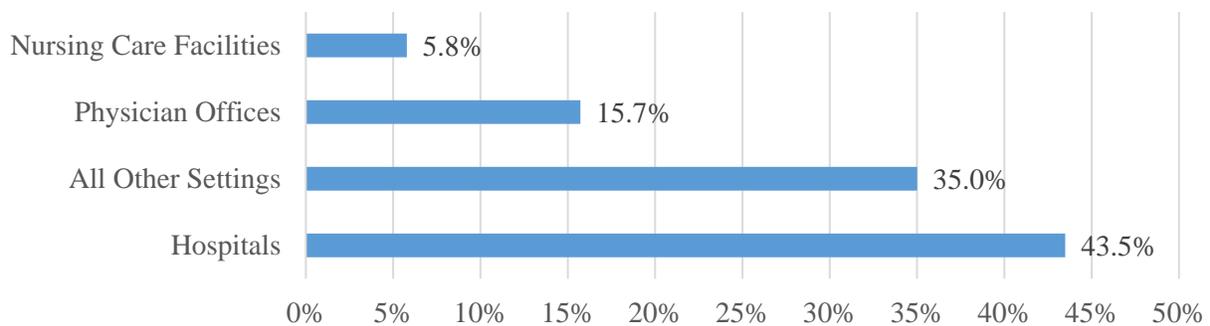


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

**Data are not reported at the state level, because the RSE \geq 30%; estimate does not meet standards of reliability.

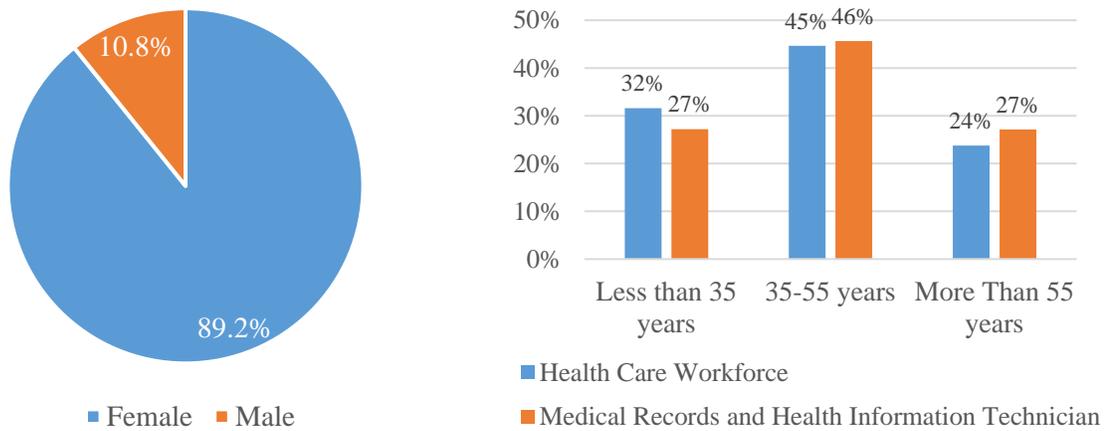
FIGURE 23: DISTRIBUTION OF MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIANS, BY WORK SETTING



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

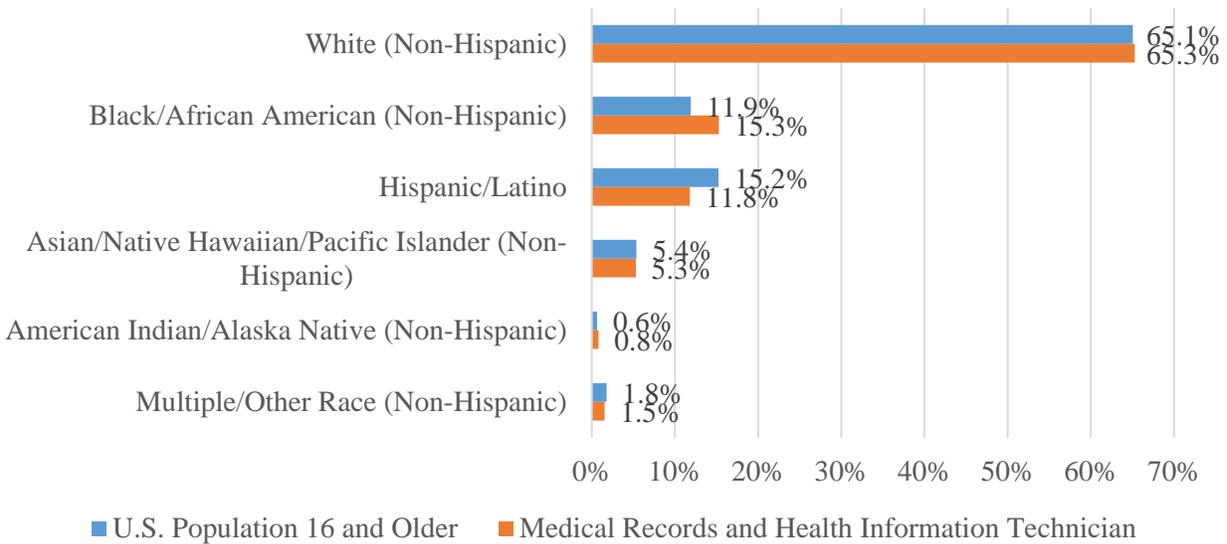
Note: Percentages may not total 100, because of rounding.

FIGURE 24: DISTRIBUTION OF MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIANS, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 25: DISTRIBUTION OF MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIANS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

Graduates

The total number of post-secondary Medical Records and Health Information Technician in the 2014 to 2015 academic year was 13,954.²⁰

²⁰ HRSA analysis of the National Center for Education Statistics IPEDS, 2014-2015.

2.0 Aides and Assistants

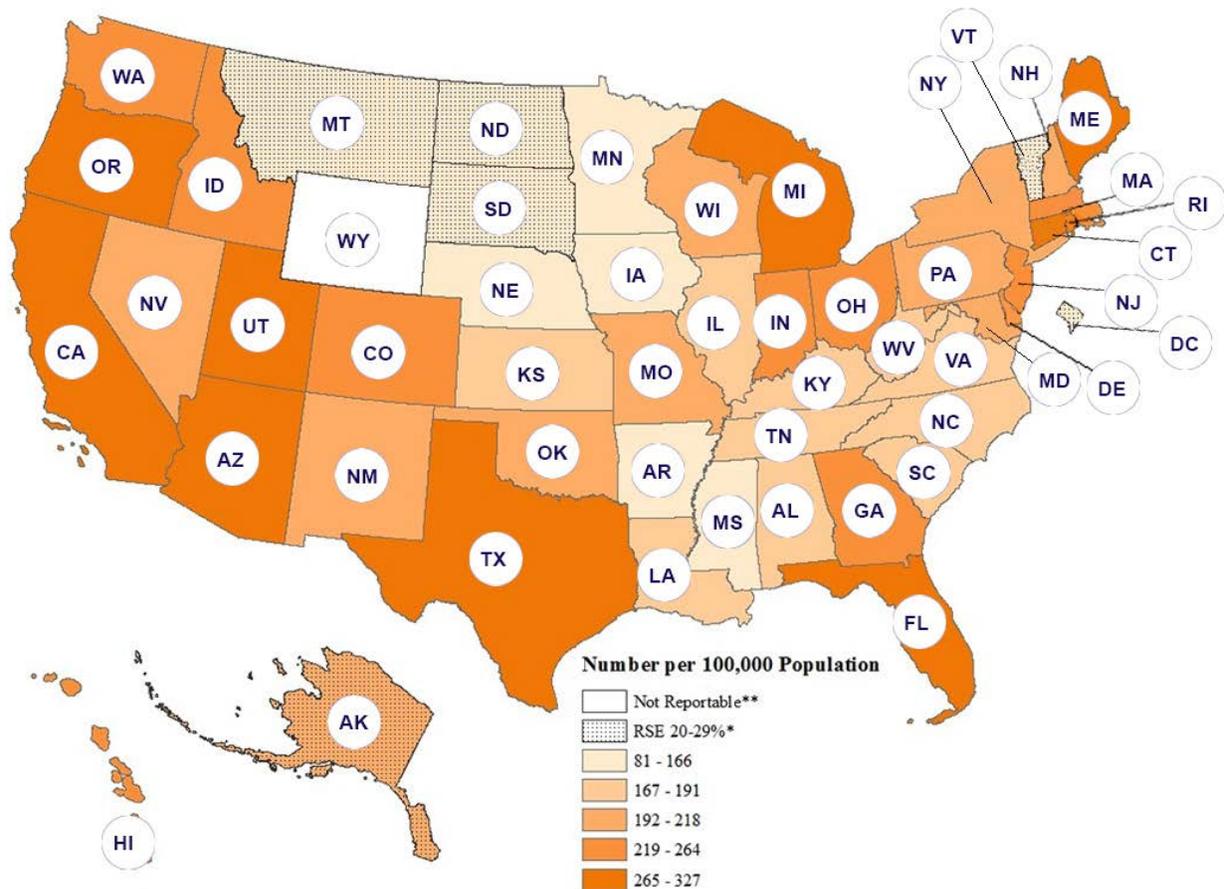
Auxiliary health occupations and professional groups described in this section include:

- 2.1 Medical Assistants;
- 2.2 Personal Care Aides; and
- 2.3 Nursing, Psychiatric, and Home Health Aides.

2.1 Medical Assistants

- An estimated 574,389 individuals in the U.S. workforce reported their occupation as Medical Assistant.²¹
- To become a Medical Assistant, an individual must obtain a high school diploma or equivalent.²²

FIGURE 26: MEDICAL ASSISTANTS PER 100,000 WORKING-AGE POPULATION, BY STATE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

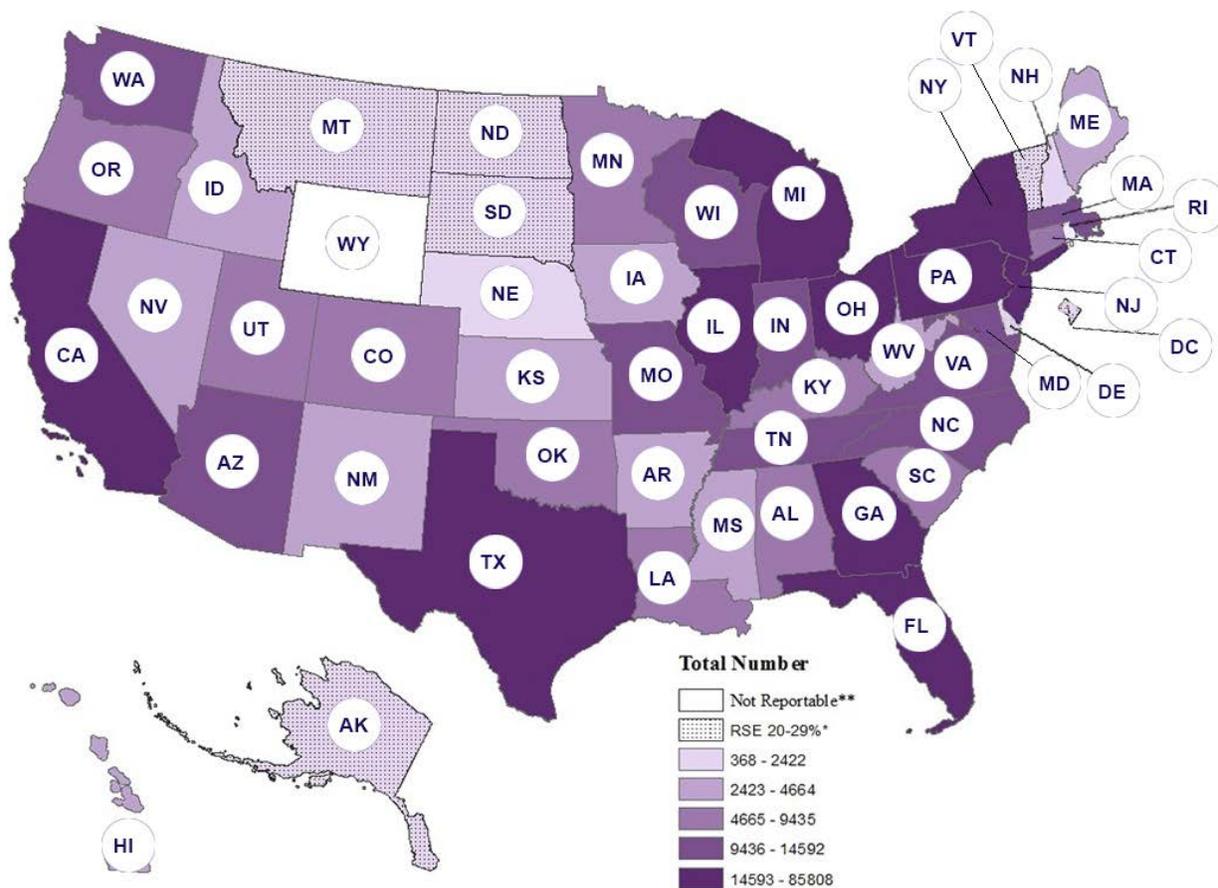
*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

**Data are not reported at the state level, because the RSE \geq 30%; estimate does not meet standards of reliability.

²¹ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

²² BLS, Occupational Outlook Handbook. 2015.

FIGURE 27: NUMBER OF MEDICAL ASSISTANTS, BY STATE

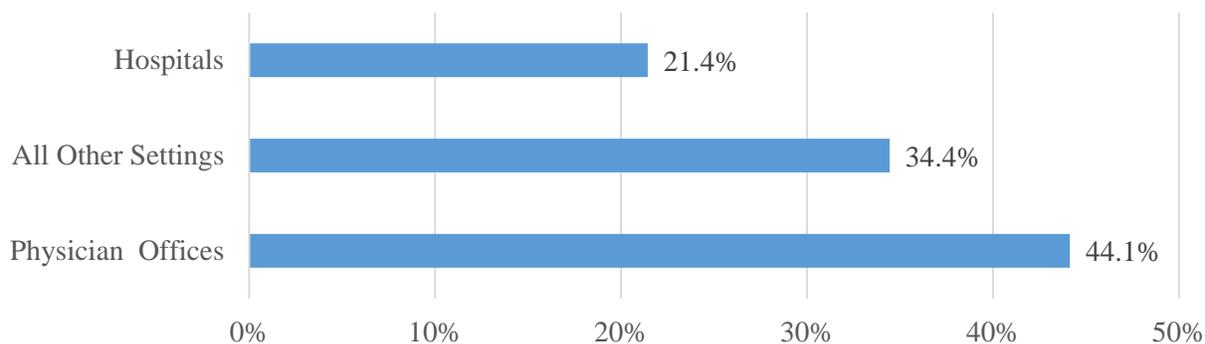


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

*Note: Estimates in states with an RSE = 20% - 29% should be considered with caution because of large sampling error.

**Data are not reported at the state level, because the RSE \geq 30%; estimate does not meet standards of reliability.

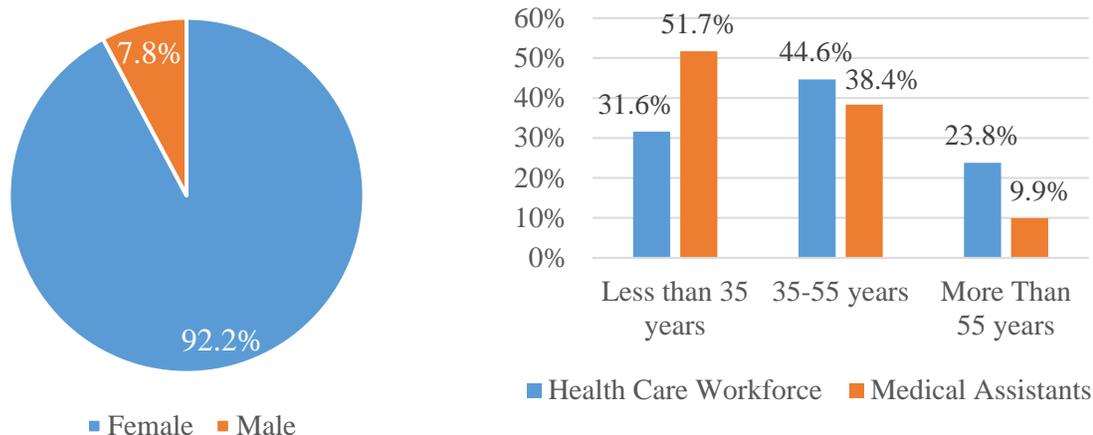
FIGURE 28: DISTRIBUTION OF MEDICAL ASSISTANTS, BY WORK SETTING



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: Percentages may not total 100, because of rounding.

FIGURE 29: DISTRIBUTION OF MEDICAL ASSISTANTS, BY SEX AND AGE

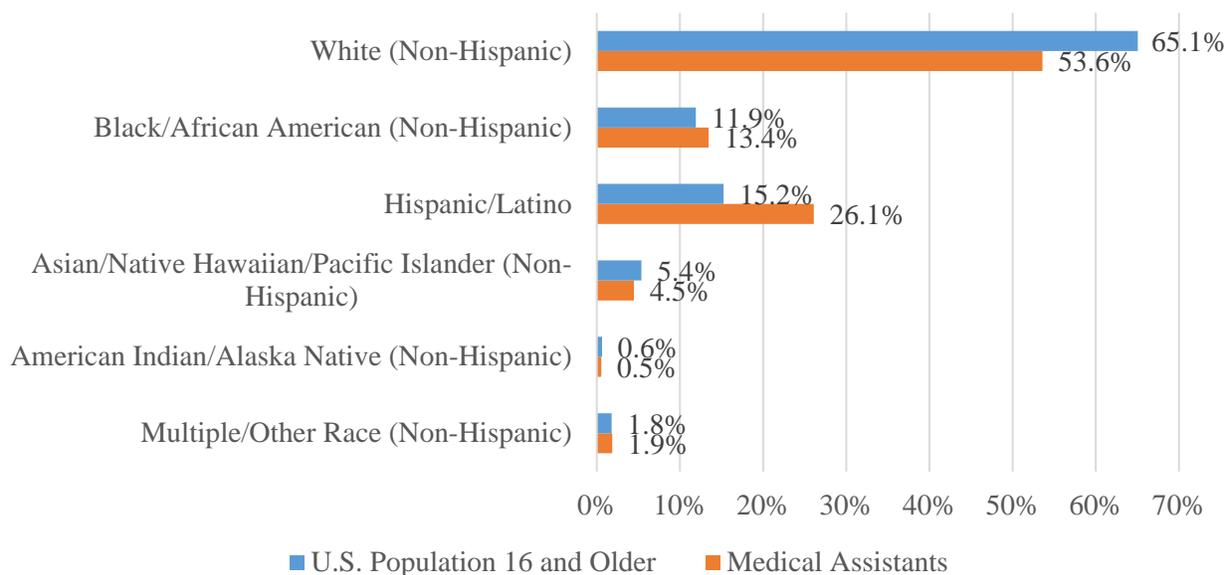


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: The "Health Care Workforce" in this figure refers to the health occupations in this report.

Note: Percentages may not total 100, because of rounding.

FIGURE 30: DISTRIBUTION OF MEDICAL ASSISTANTS, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

Note: Percentages may not total 100, because of rounding.

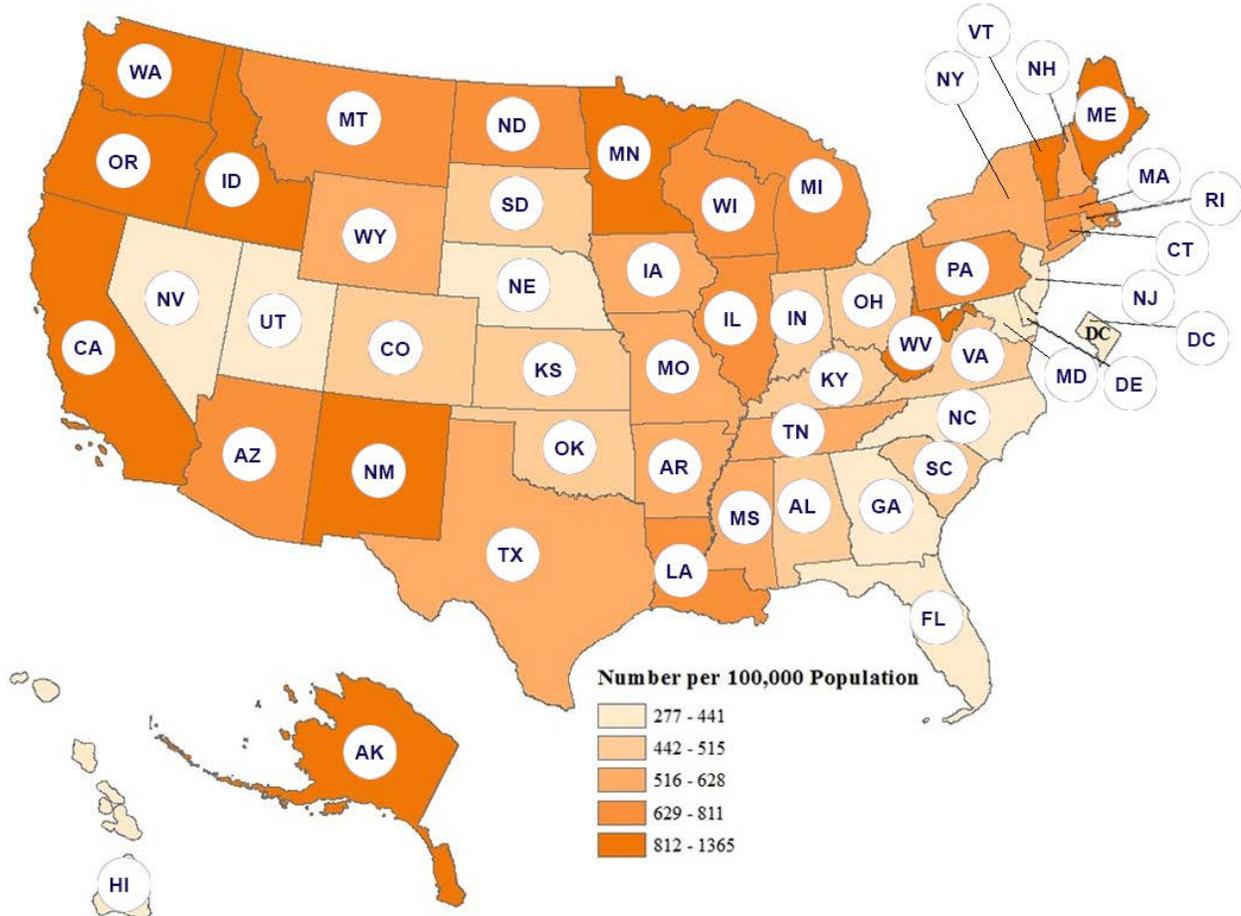
Graduates

No graduate data are presented for occupations in which formal educational requirements are completed in institutions not reporting to IPEDS or vary substantially by state.

2.2 Personal Care Aides

- An estimated 1,649,003 individuals in the U.S. workforce reported their occupation as Personal Care Aide.²³
- To become a Personal Care Aide, an individual typically needs a high school diploma or equivalent.²⁴

FIGURE 31: PERSONAL CARE AIDES PER 100,000 WORKING-AGE POPULATION, BY STATE

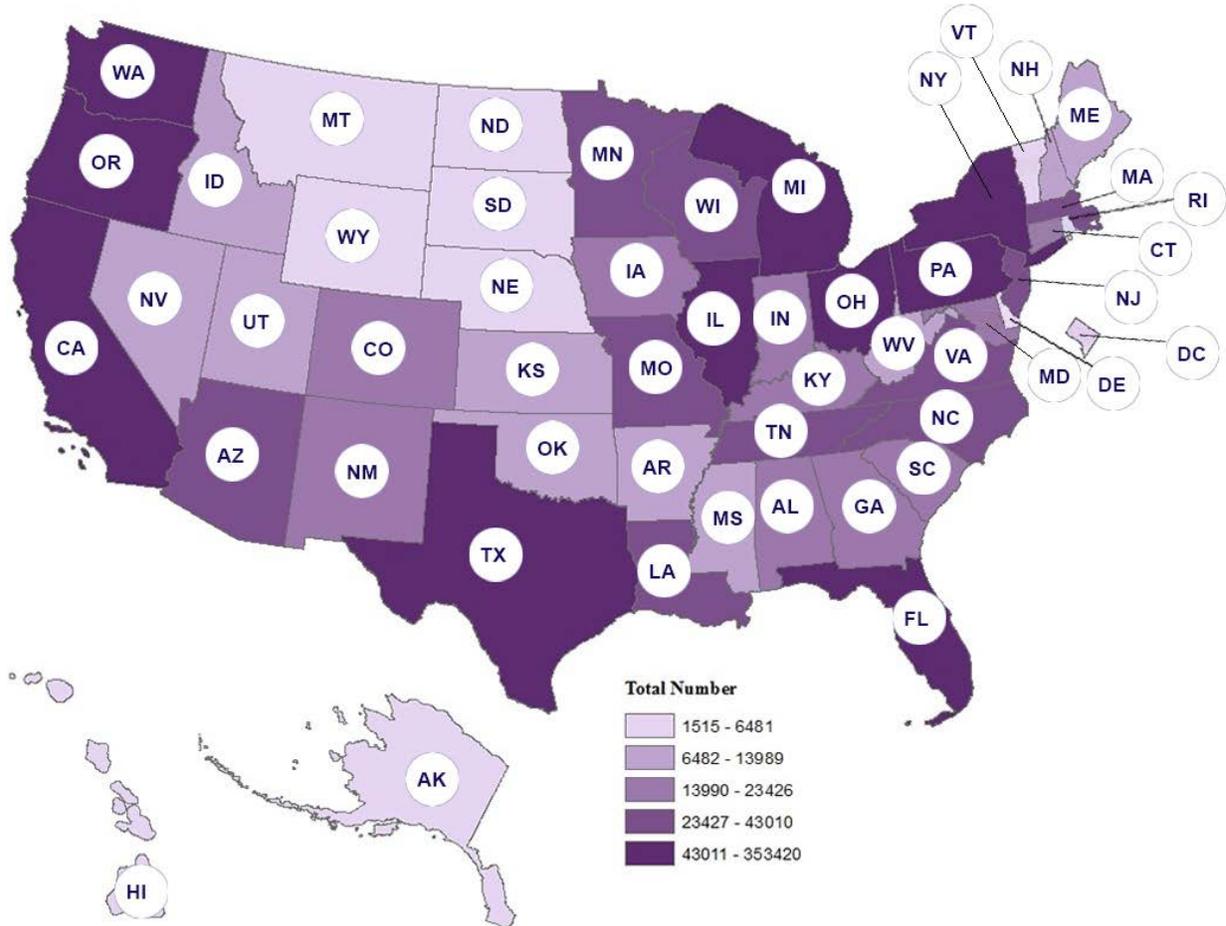


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

²³ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

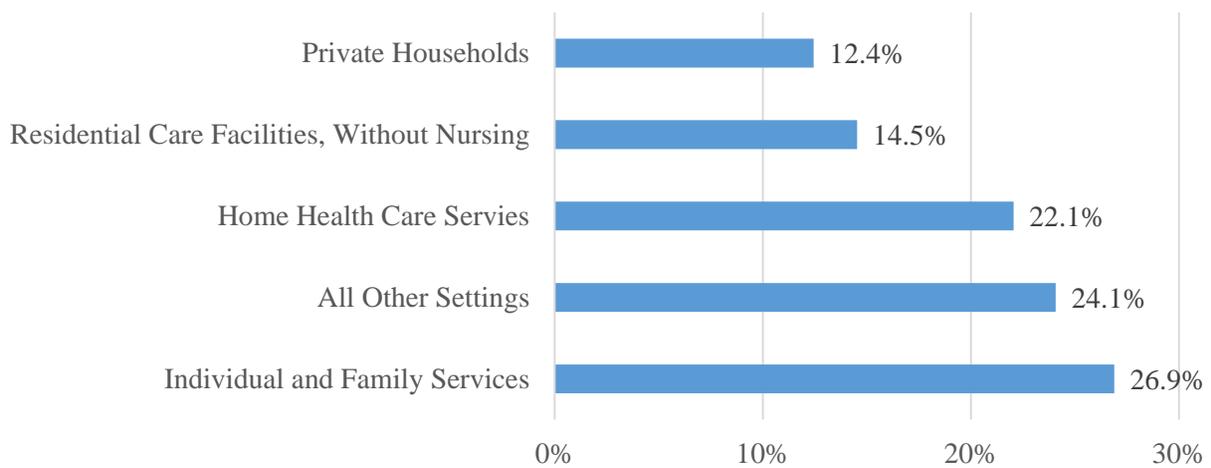
²⁴ BLS, Occupational Outlook Handbook. 2015.

FIGURE 32: NUMBER OF PERSONAL CARE AIDES, BY STATE



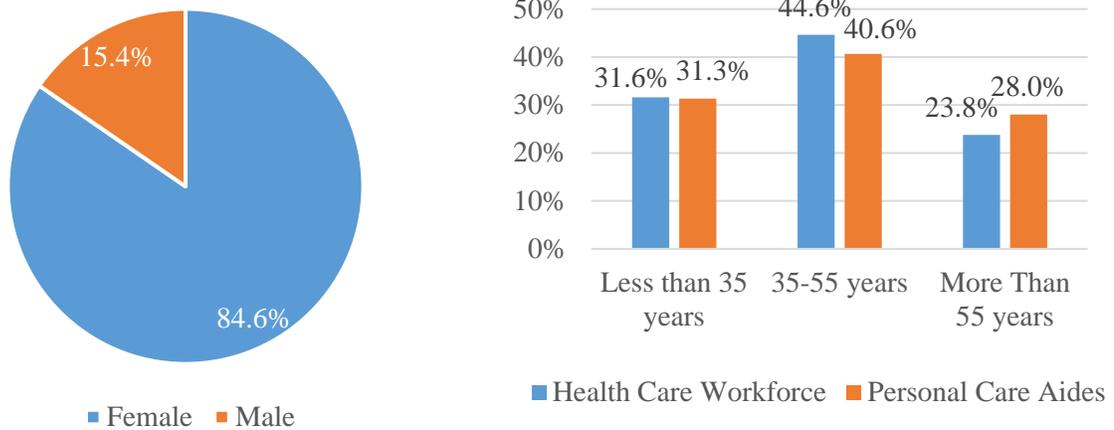
Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

FIGURE 33: DISTRIBUTION OF PERSONAL CARE AIDES, BY WORK SETTING



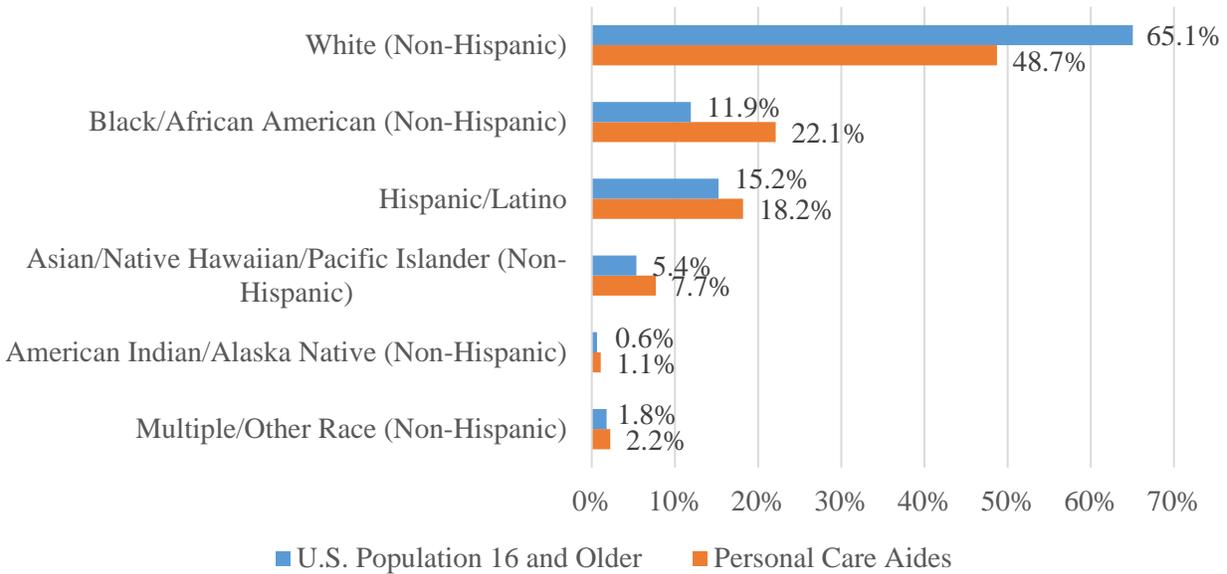
Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

FIGURE 34: DISTRIBUTION OF PERSONAL CARE AIDES, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 35: DISTRIBUTION OF PERSONAL CARE AIDES, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

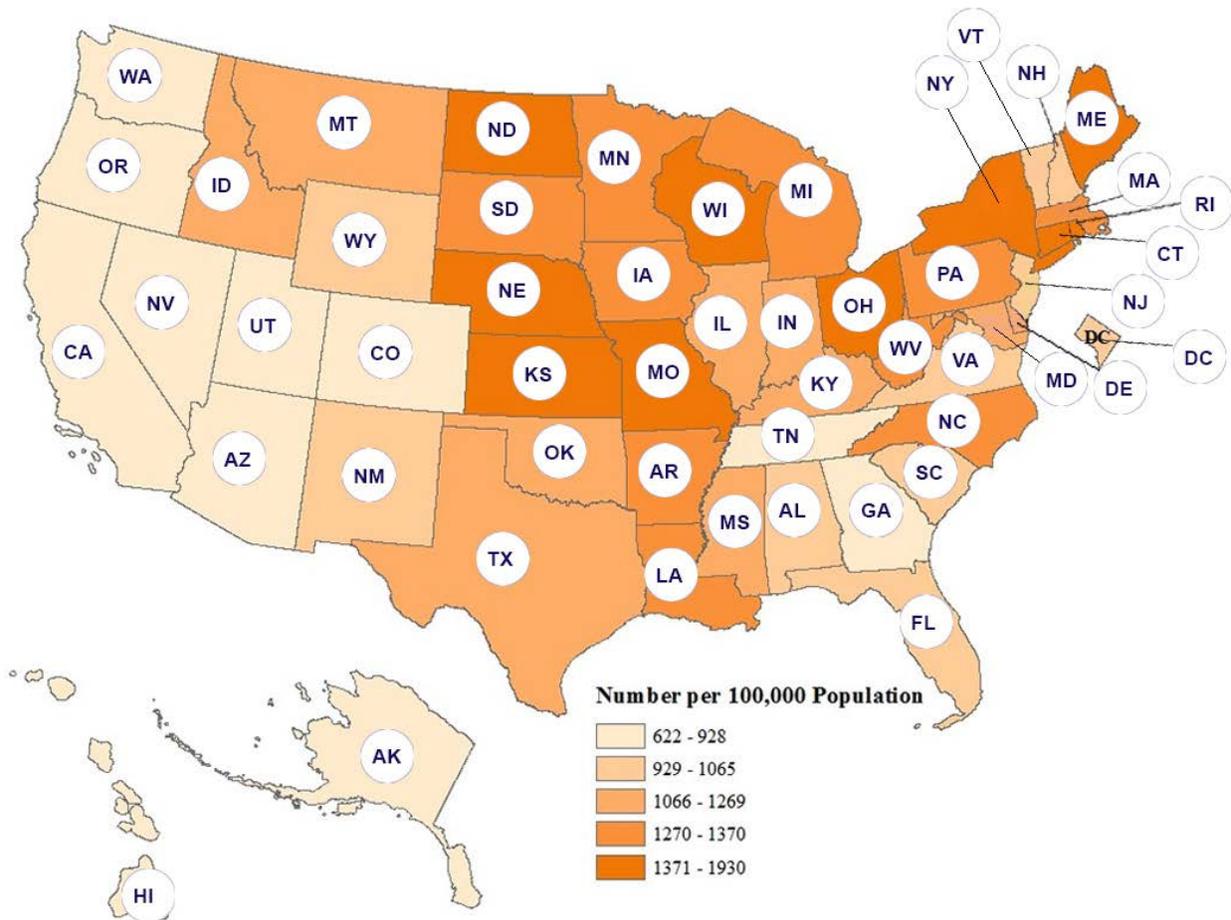
Graduates

No graduate data are presented for occupations in which formal educational requirements are completed in institutions not reporting to IPEDS or vary substantially by state.

2.3 Nursing, Psychiatric, and Home Health Aides

- An estimated 2,845,496 individuals in the U.S. workforce reported their occupation as Nursing, Psychiatric, or Home Health Aide.²⁵
- To become a Nursing, Psychiatric, and Home Health Aide, an individual may need less than high school, a high school diploma or equivalent, or a post-secondary non-degree award. In some cases, certification is required.²⁶

FIGURE 36: NURSING, PSYCHIATRIC, AND HOME HEALTH AIDES PER 100,000 WORKING-AGE POPULATION, BY STATE

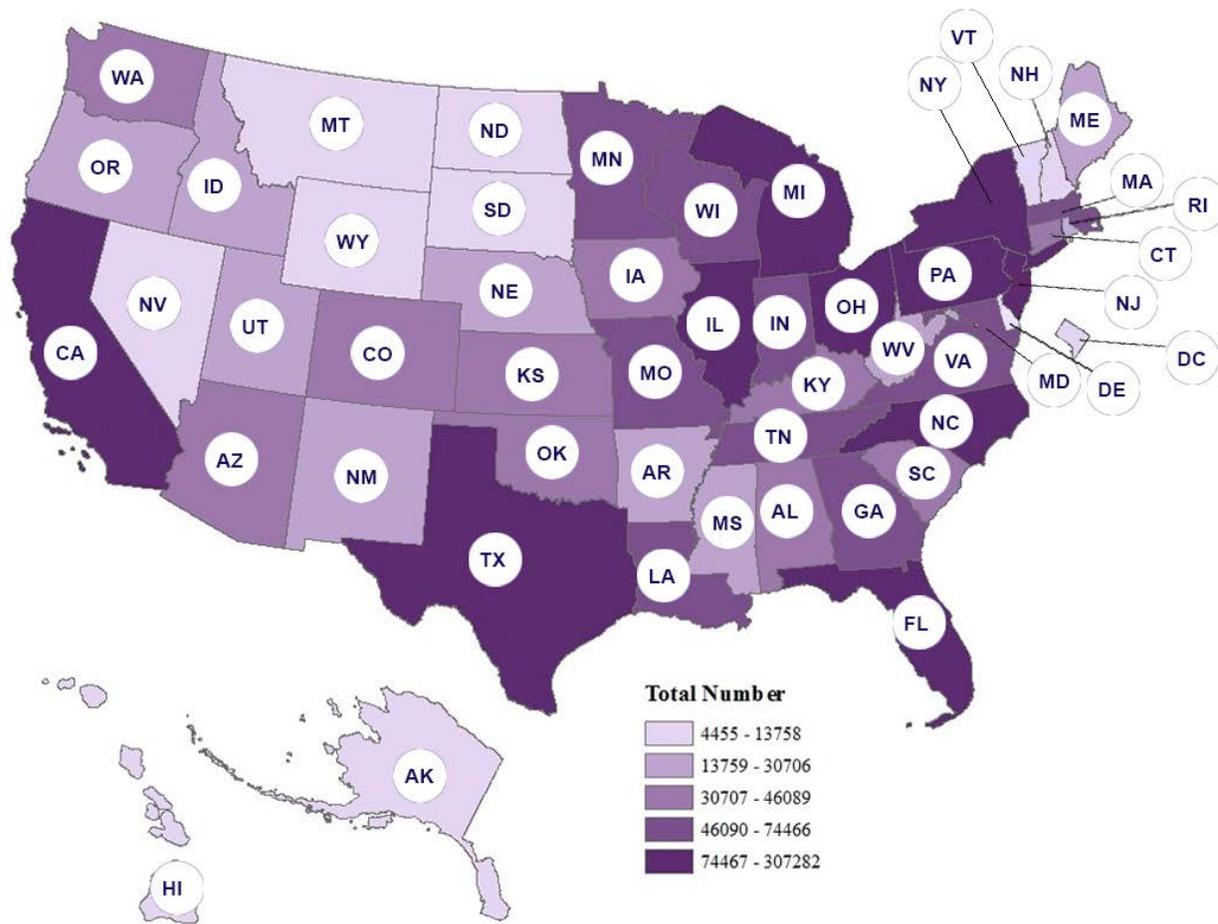


Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

²⁵ Total workforce from HRSA analysis of the ACS PUMS, 2011-2015.

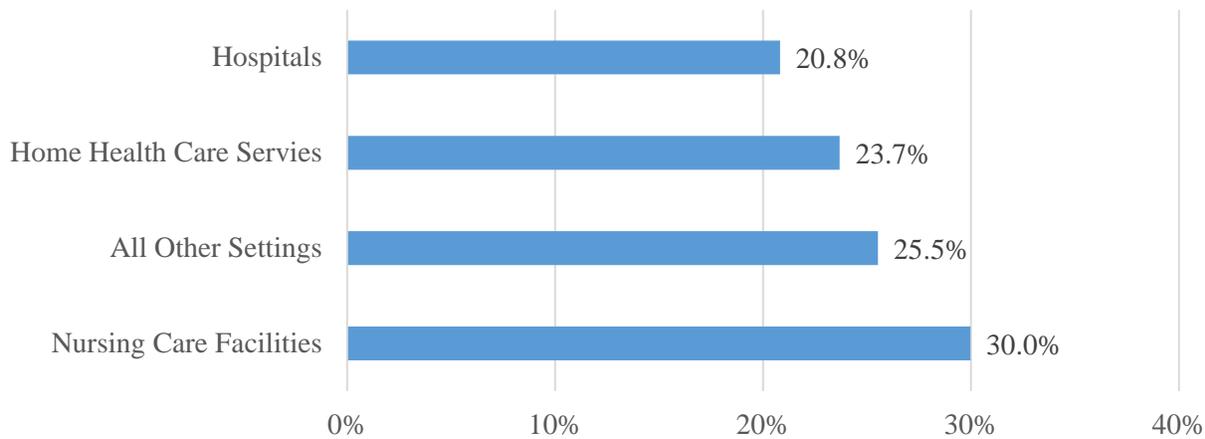
²⁶ BLS, Occupational Outlook Handbook. 2015.

FIGURE 37: NUMBER OF NURSING, PSYCHIATRIC, AND HOME HEALTH AIDES, BY STATE



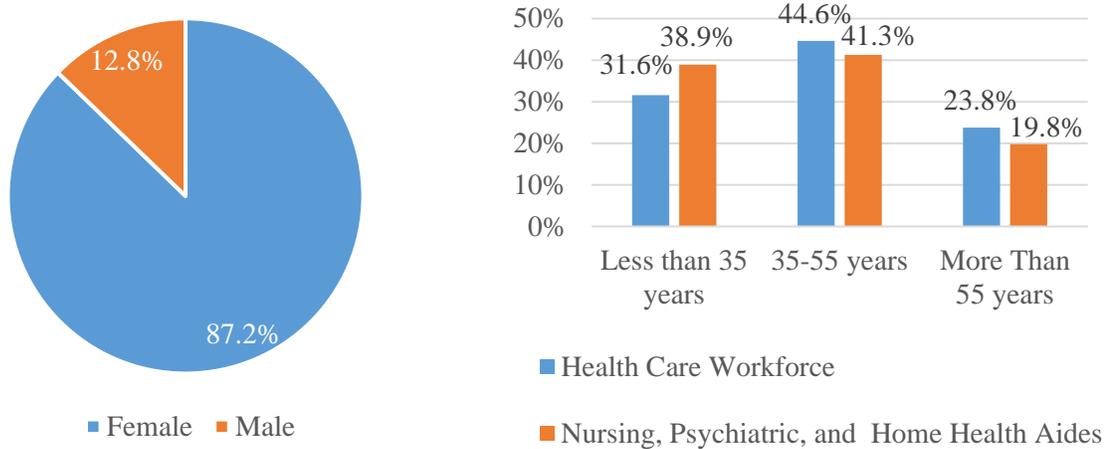
Data Source: HRSA analysis of the ACS PUMS, 2011-2015.

FIGURE 38: DISTRIBUTION OF NURSING, PSYCHIATRIC, AND HOME HEALTH AIDES, BY WORK SETTING



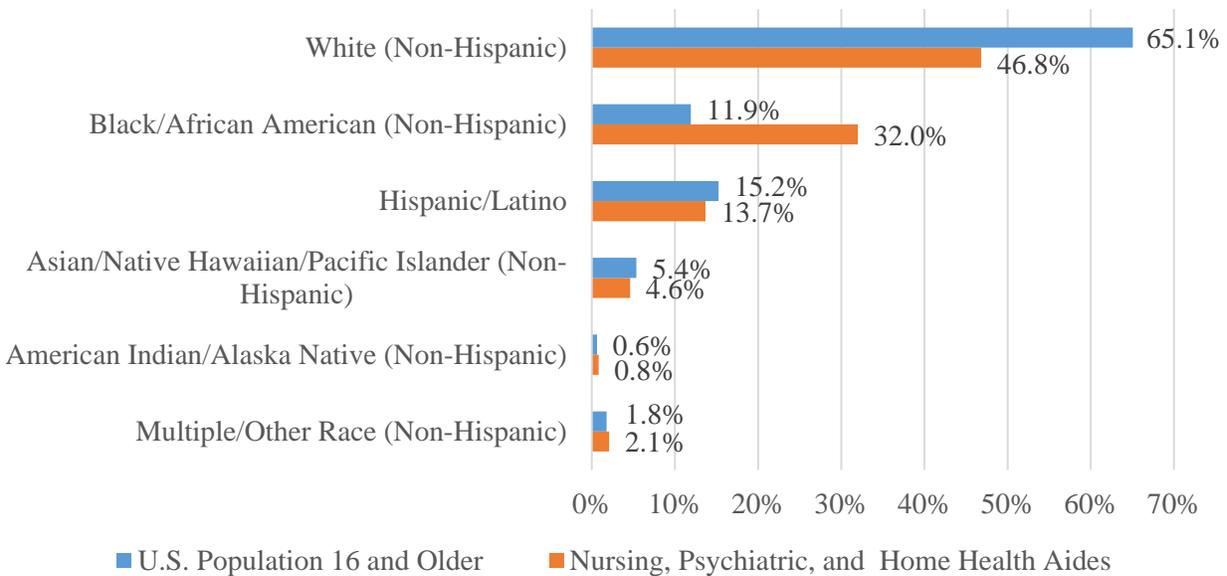
Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

FIGURE 39: DISTRIBUTION OF NURSING, PSYCHIATRIC, AND HOME HEALTH AIDES, BY SEX AND AGE



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: The “Health Care Workforce” in this figure refers to the health occupations in this report.
 Note: Percentages may not total 100, because of rounding.

FIGURE 40: DISTRIBUTION OF NURSING, PSYCHIATRIC, AND HOME HEALTH AIDES, BY RACE/ETHNICITY, RELATIVE TO THE WORKING-AGE POPULATION



Data Source: HRSA analysis of the ACS PUMS, 2011-2015.
 Note: Percentages may not total 100, because of rounding.

Graduates

No graduate data are presented for occupations in which formal educational requirements are completed in institutions not reporting to IPEDS or vary substantially by state.