



The Health Care Workforce in New York State

Trends in the Supply of and Demand for Health Care Workers



School of Public Health
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PREFACE

This report summarizes secondary data and information that describe New York State's health care workforce. This report also contains primary data collected by the Center for Health Workforce Studies (CHWS) on registered nurse education in New York State.

A key goal of this report is to assist policymakers and other stakeholders in:

- Making informed decisions on health care workforce education and job training investments
- Addressing the most pressing health care workforce needs
- Guiding health care workforce policies, including decisions related to the capacity of health professions education programs
- Informing current and prospective students about health care employment prospects and opportunities

This report was prepared by CHWS staff, including Kristen Stiegler, Nubia Goodwin, Tehreem Khalid, Maa'isa Cleaves, Dustin Moore, Robert Martiniano, and Jean Moore. Funding for this report was provided by the 1199 Hospital League Health Care Industry Planning and Placement Fund, Inc.

Established in 1996, CHWS is an academic research center, based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate information and conduct policy-relevant research on the health care workforce. The research conducted by CHWS supports and promotes health care workforce planning and policymaking at local, regional, state, and national levels. CHWS is a national leader in the field of health care workforce studies.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of SUNY or the 1199 Hospital League Health Care Industry Planning and Placement Fund, Inc.

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I. EXECUTIVE SUMMARY

The health care workforce is a vital part of New York State's health care delivery system. Efforts to improve the quality of health care services and expand access to care depend on the availability of an adequate supply of appropriately prepared health care workers. With the rapid pace of change in health care, accurate and timely workforce data and insight have become more important to assess current and future health care workforce needs and deficits.

FINDINGS

This report presents data drawn from a variety of sources to describe the state's health care workforce and provides these data statewide and by region. It includes information on the health status of New Yorkers, the health care system, and the supply of and demand for health care workers. The report is designed to assist stakeholders to improve health care workforce planning efforts. Some of the most significant findings in this report include:

- **Jobs in all health care settings in New York State are growing, especially in ambulatory care settings (7.2%) and home health care (52.2%)**
- **Employment in health care in New York City grew by 16% between 2014 and 2018. Outside of New York City, the region with the highest job growth during this period was Long Island with 12.7%, followed by the Hudson Valley (7.5%) and Finger Lakes (7.0%) regions**
- **Registered nurse graduations continue to grow in New York State, driven by an increase in baccalaureate (BSN) graduations**
- **Nearly 1,500 nurse practitioners graduated from New York State schools in 2017, reflecting an 84.4% increase since 2013. Conversely, medical assistant program graduations and certifications dropped by more than 2,600, a 37.2% decline during the same period**
- **Nurse practitioners (28.8%) and physician assistants (22.4%) experienced the greatest growth in licenses between 2015 and 2019. In contrast, clinical laboratory technologists and clinical laboratory technicians declined by 10.5% and 12.1%, respectively, during the same period**

FUTURE OUTLOOK

The need for qualified health care workers is impacted by a number of factors. Among the most significant influences that affect the demand for health care workers are:

- A shift in the focus of the health care delivery system to primary care and prevention
- Increasing use of team-based service delivery models
- Growing attention to population health, especially chronic disease management
- An aging population

- Modified scopes of practice due to regulatory changes
- Creating new categories of workers who assist in the delivery and management of care
- Changing technology
- Increasing numbers of integrated service delivery systems, including accountable care organizations
- A move to value-based payment models

In addition, new legislation regulating certain occupational titles changes the opportunities and distribution of the health care workforce around the state. For example, laws regulating pharmacy technicians may impact job opportunities in Article 28 facilities (eg, hospitals) statewide and regionally in the coming years.^{*} In addition, the New York State legislature has changed the title and professional requirements for registered dental assistants.[†] Finally, the impact of the law allowing nurse practitioners to practice more independently remains uncertain.[‡]

New York State has initiated a number of important programs, such as the Delivery System Reform Incentive Payment (DSRIP) program and the State Health Innovation Plan (SHIP), that support the transition to models of service delivery that are team based and primary care focused and support value-based payment. Innovations in service delivery, such as telehealth, as well as improvements in health care equity, also will shift demands for health care workers over time. At a time when health care systems are undergoing dramatic change, data and information on the health care workforce can contribute greatly to informed workforce planning and development.

OBJECTIVES AND GOALS

The objectives of this report are to:

- Describe health care employment trends in New York State
- Identify the health care professions and occupations currently in greatest demand

The goals of this report are to:

- Assist policymakers and other stakeholders to target health care workforce education and job training resources to address the most pressing health care workforce needs
- Guide health care workforce policies, including decisions related to the capacity of health professions education programs
- Inform current and prospective students about health care employment prospects and opportunities

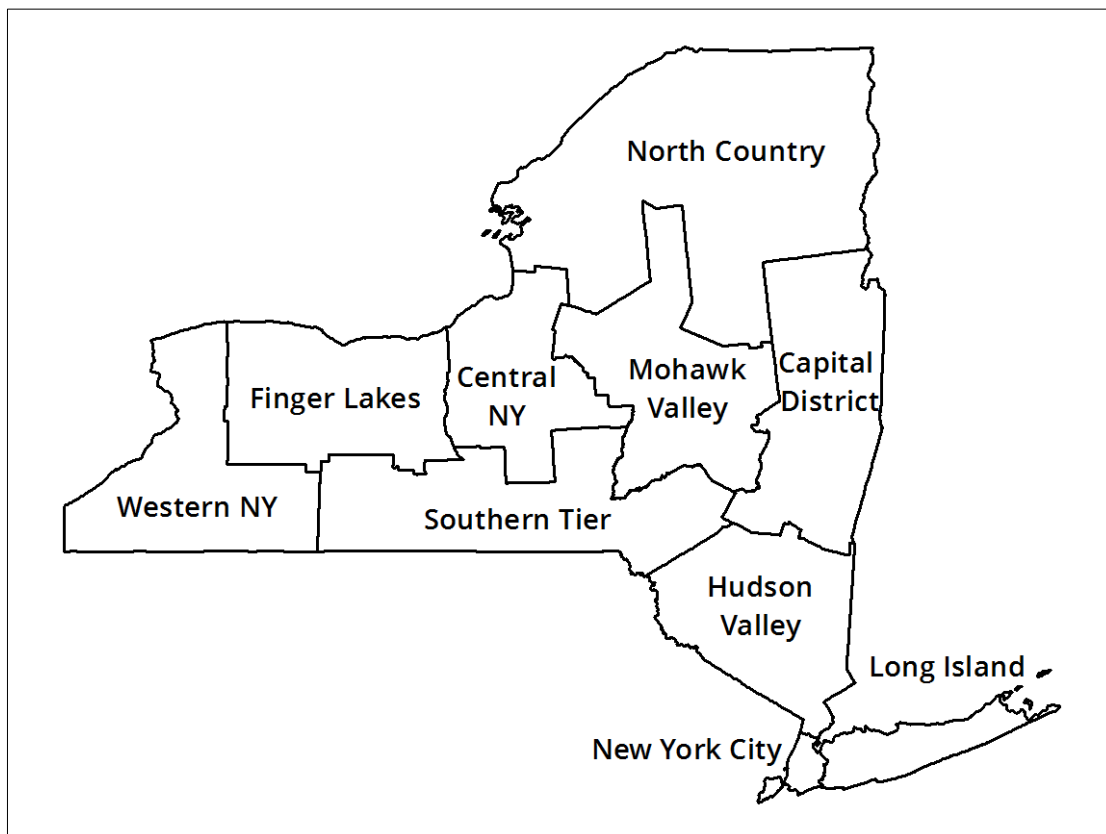
^{*} Law amending the New York State Education Law to include registered pharmacy technicians can be found in New York State Education Law [§6840](#).

[†] Law changing the occupational title of certified dental assistant to registered dental assistant can be found in New York State Education Law [§6608](#).

[‡] Law governing nurse practitioner certification is New York State Education Law [§6910](#).

The New York State Department of Labor (NYSDOL) has divided the state into several regions. Figure 1 is a map of the NYSDOL regions used in this report. For a list of counties in each region, please see Section C (Geographic Areas) in the [Appendix](#), page 115. Each regional profile page contains a list of counties profiled in that region as well.

Figure 1. Map of the New York State Department of Labor Regions



II. NEW YORK STATE HEALTH CARE SECTOR EMPLOYMENT

KEY FINDINGS

Health Care Employment

- There were nearly 1.2 million jobs in health care settings in New York State in 2018, an increase of slightly more than 3% between 2017 and 2018 (Figure 3)
- Since 2000, jobs in health care settings in New York State have increased by nearly 39%, compared with only 8% for jobs in other employment sectors (Figure 4)
- Jobs in health care in regions outside of New York City increased by 29% between 2000 and 2018, compared with only 1% for all other employment sectors during the same period (Figure 5)
- Employment in home health care in New York State grew faster than employment in other health care settings between 2000 and 2018, nearly tripling during that period and increasing by more than 50% between 2014 and 2018 (Table 3)
- In 2018, hospitals had 38% of health care setting jobs, compared with 29% in ambulatory care settings, 20% in home health care, and 13% in nursing homes and residential care facilities (Figure 6)
- The number of personal care aide jobs statewide increased by nearly 57,000 (40.0%) between 2014 and 2018. During the same period, the number of home health aide jobs grew by more than 45,000 (30.9%), and the number of registered nurse (RN) jobs increased by nearly 13,000 (7.6%). Between 2014 and 2018, the number of nursing assistant jobs decreased by nearly 10,000 (9.5%) (Table 14)

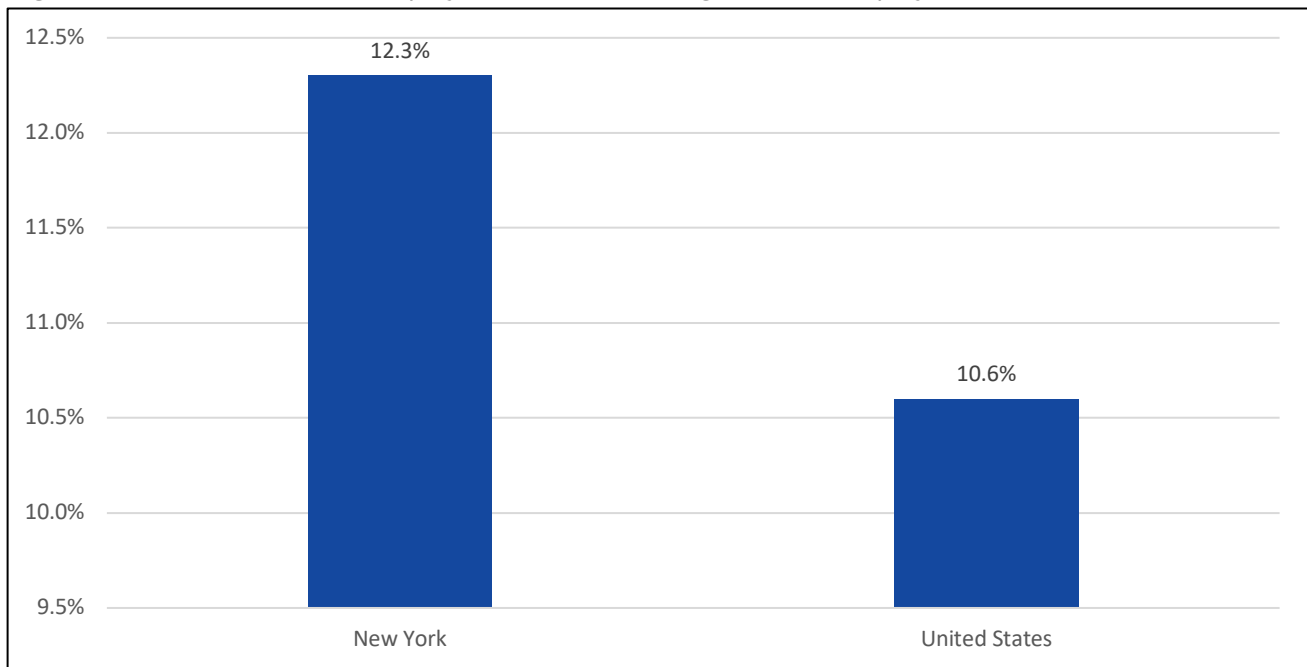
Health Care Production and Need

- The number of New York State nurse practitioner/clinical nurse specialist graduations nearly doubled between 2013 and 2017. The number of RN graduations increased by more than 1000 during the same period. The production of medical assistants, licensed practical nurses (LPNs), nursing assistants, and pharmacy technicians all decreased between 2013 and 2017 (Table 16)
- There were 17,820 more registered nurses licensed to practice in the state in 2019 compared with 2015, an increase of 6.1%. Licensed nurse practitioners increased as well during the same time period by 6,024 (28.8%). There were 249 (12.1%) fewer clinical laboratory technicians and 1,576 (10.5%) fewer clinical laboratory technologists licensed to practice in the state in 2019 than in 2015 (Table 17)
- Total new nurse graduations[§] statewide exceeded 9,000 in 2018, according to the Center for Health Workforce Studies' (CHWS) annual RN education survey. Nurses completing a 4-year baccalaureate degree in nursing continue to comprise the majority of RN graduations around the state, though the number of ADN graduations have decreased by 12% since 2011. Nurses returning to obtain their baccalaureate degree ("BSN completers") have increased since 2013, despite a slight decline between 2016 and 2018 (Figures 7 and 8)
- Between 2016 and 2026, some of the fastest-growing occupations statewide are projected to be in health care. Home health aides (52.4%), physician assistants (43.4%), nurse practitioners (41.6%), and personal care aides (40.6%) are projected to grow the fastest among health care occupations in the state during this period (Table 18)

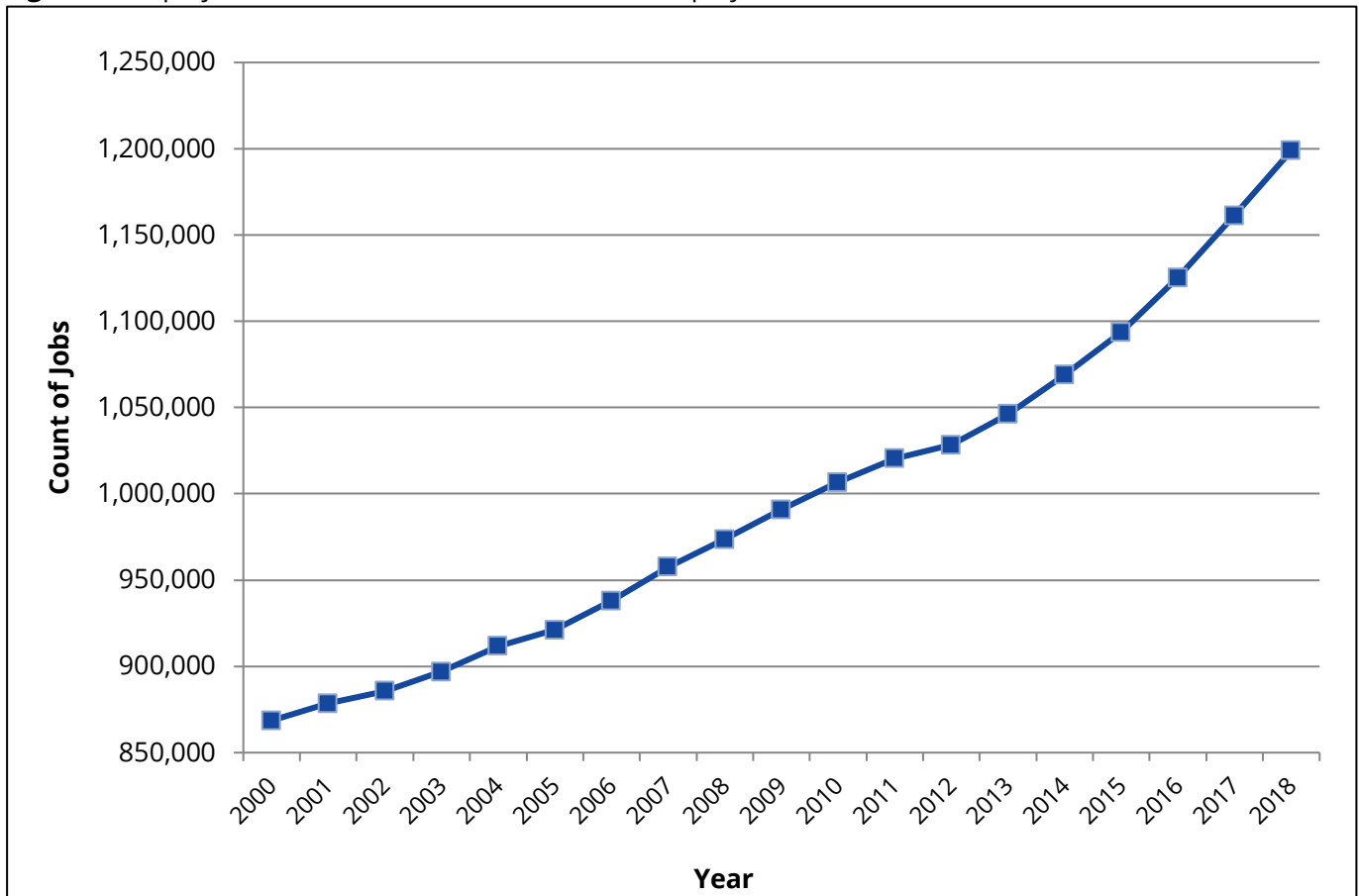
[§]"New nurse graduations" refers to graduating nurses who have not completed any other prior nursing education program. This is in contrast to nurses with a diploma or an associate degree (ADN) returning to school to complete their baccalaureate degree ("BSN completers").

Total Health Care Employment in New York State

Figure 2. Health Care Sector Employment as a Percentage of Total Employment, 2016

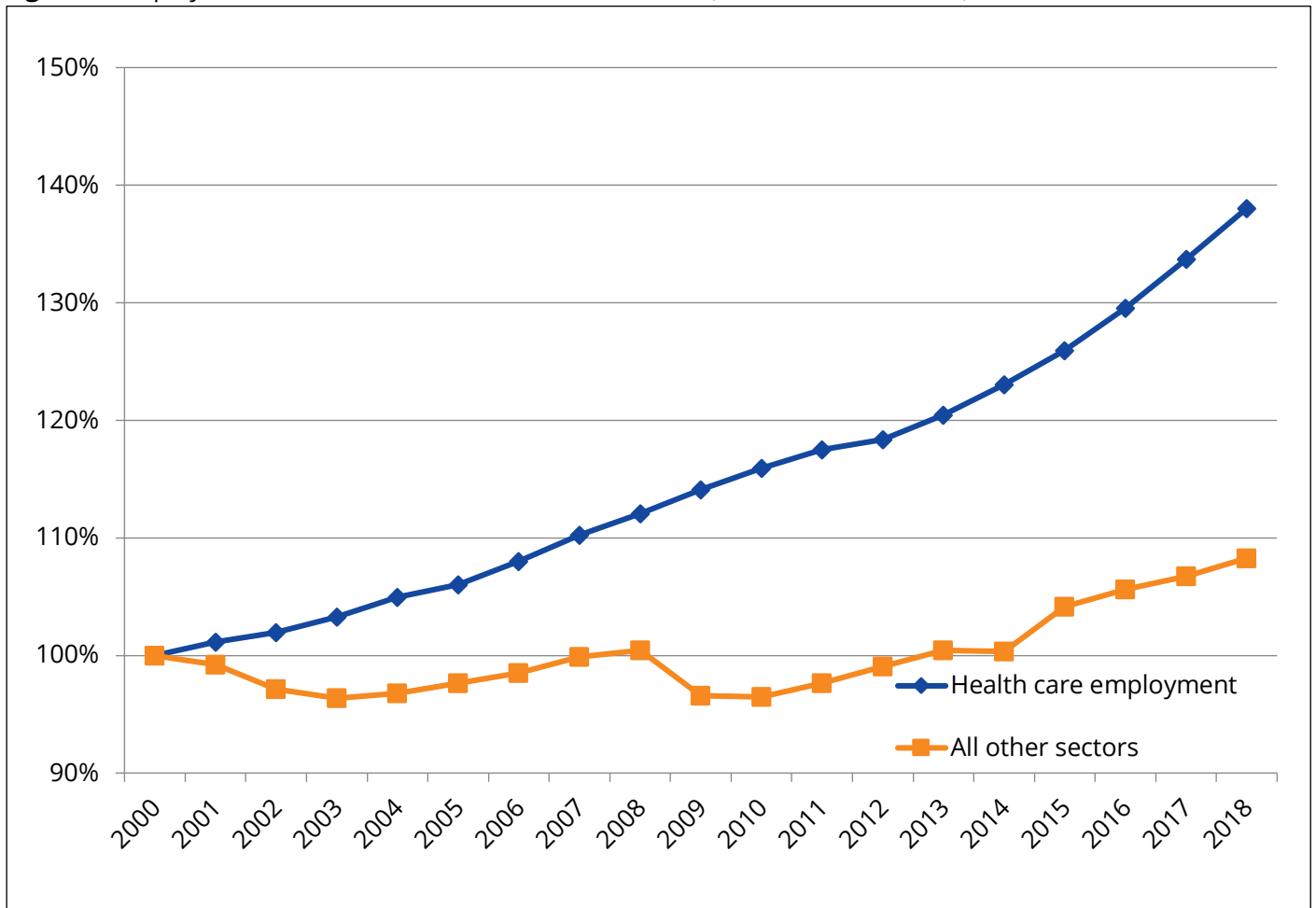


Sources: US Department of Labor, Bureau of Labor Statistics. Employment Projections program: Table 1.9, 2016-2026 Industry-Occupation Matrix Data, by Industry; and Table 2.7, Employment and Output by Industry; New York State Department of Labor, Quarterly Census of Employment and Wages.

Figure 3. Employment Growth in Health Care Sector Employment in New York State, 2000-2018

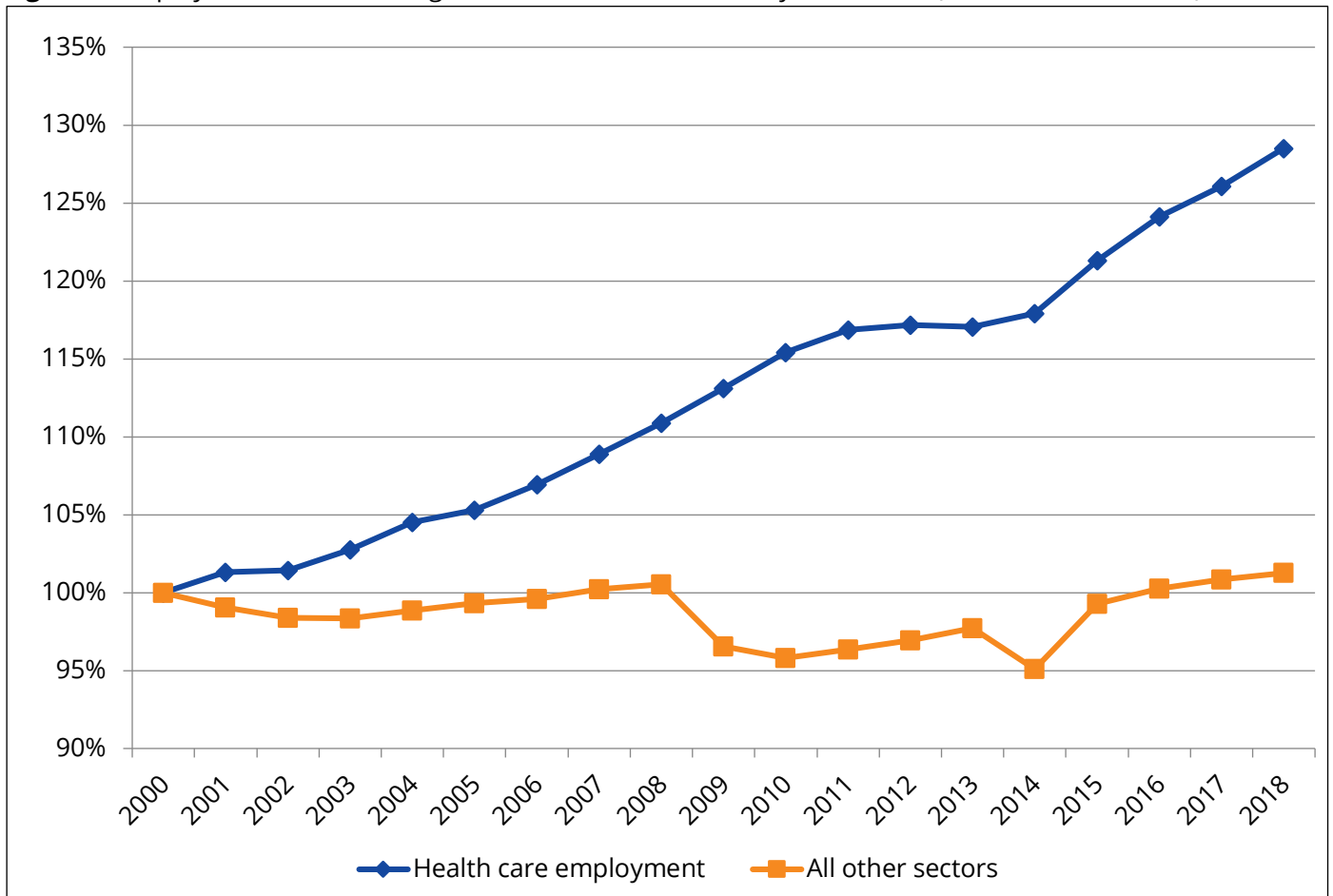
Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Figure 4. Employment Growth in New York State, 2000-2018 (Standardized to 2000)



Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Figure 5. Employment Growth in Regions Outside of New York City, 2000-2018 (Standardized to 2000)



Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

A. Population Characteristics

Table 1. Selected Population Characteristics in New York State, 2013-2017

| Population Characteristics | Number | Percent |
|---|------------|---------|
| Total population | 19,798,228 | N/A |
| Population under 100% FPL | 2,908,471 | 14.7% |
| Population under 200% FPL | 6,059,578 | 30.6% |
| Population aged birth to 17 years | 4,203,304 | 21.2% |
| Population aged 65 and older | 3,008,351 | 15.2% |
| Population female aged 15 to 44 | 4,027,930 | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 6,271 | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 157,635 | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 64,968 | 0.3% |
| Black/African American, non-Hispanic | 2,842,869 | 14.4% |
| Hispanic/Latino | 3,726,238 | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 1,645,031 | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 45,623 | 0.2% |
| Two or more/other races | 502,545 | 2.5% |
| Population with less than a high school education ^a | 1,895,439 | 13.9% |
| Population with a high school diploma or equivalent ^a | 5,760,439 | 42.2% |
| Population with an associate degree ^a | 1,184,118 | 8.7% |
| Population with a bachelor's degree ^a | 2,718,987 | 19.9% |
| Population with a master's degree or higher ^a | 2,101,826 | 15.4% |
| Home ownership | 3,942,483 | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 2. Selected Health Indicators in New York State, 2014-2016

| Health Indicator | Statewide | |
|--|-----------|---------|
| | Number | Rate |
| Total deaths, per 100,000 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 60,335 | 30.5 |
| Heart disease hospitalizations, per 10,000 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 8,231,938 | 4,169.1 |

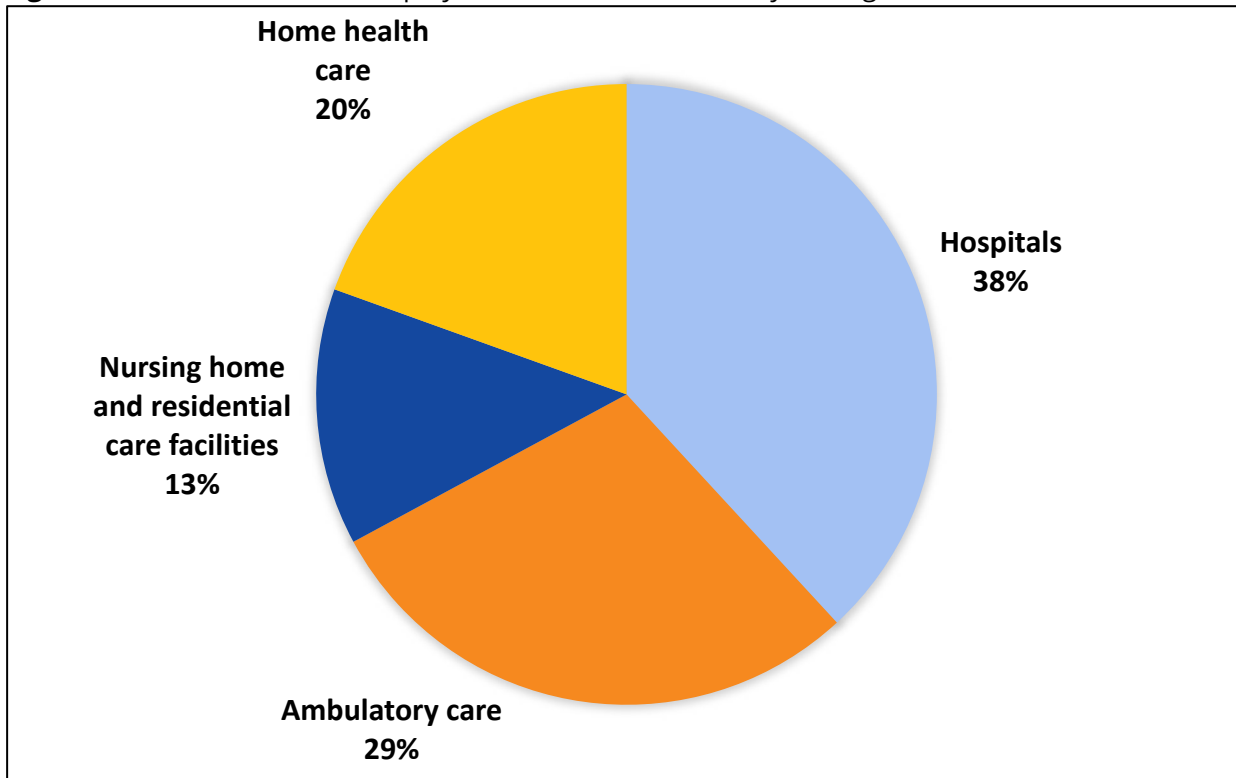
CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

B. Health Care Sector Employment

Figure 6. Health Care Sector Employment in New York State by Setting, 2018



Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 3. Number of Health Care Jobs in New York State by Setting, 2000, 2014, 2018

| Setting | 2000 | 2014 | 2018 | Number Change | | Percent Change | |
|---|----------------|------------------|------------------|----------------|----------------|----------------|--------------|
| | | | | 2000-2018 | 2014-2018 | 2000-2018 | 2014-2018 |
| Hospitals | 410,300 | 437,355 | 457,363 | 47,063 | 20,008 | 11.5% | 4.6% |
| Ambulatory care (excluding home health) | 245,600 | 319,470 | 347,411 | 101,811 | 27,941 | 41.5% | 8.7% |
| Nursing home and residential care facilities | 143,200 | 159,819 | 160,319 | 17,119 | 500 | 12.0% | 0.3% |
| Home health care | 64,600 | 152,256 | 233,833 | 169,233 | 81,577 | 262.0% | 53.6% |
| Total | 863,700 | 1,068,900 | 1,198,926 | 335,226 | 130,026 | 38.8% | 12.2% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

C. By Region

1. Regional Health Care Sector Employment Summaries

Table 4. Total Health Care Sector Employment in New York State by Department of Labor Region, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Capital District | 57,226 | 57,919 | 58,613 | 59,764 | 60,374 | 3,148 | 5.5% |
| Central New York | 39,123 | 39,334 | 40,075 | 40,258 | 40,538 | 1,415 | 3.6% |
| Finger Lakes | 64,791 | 65,592 | 67,125 | 68,200 | 69,298 | 4,507 | 7.0% |
| Hudson Valley | 113,251 | 116,098 | 118,275 | 120,732 | 121,722 | 8,471 | 7.5% |
| Long Island | 165,458 | 170,890 | 176,542 | 180,436 | 186,482 | 21,024 | 12.7% |
| Mohawk Valley | 26,247 | 26,659 | 26,816 | 27,177 | 26,984 | 737 | 2.8% |
| New York City | 484,870 | 492,963 | 510,565 | 536,892 | 562,429 | 77,559 | 16.0% |
| North Country | 18,215 | 18,601 | 18,898 | 18,976 | 19,026 | 811 | 4.5% |
| Southern Tier | 28,650 | 28,816 | 29,062 | 28,924 | 29,148 | 498 | 1.7% |
| Western New York | 71,039 | 71,446 | 72,658 | 73,287 | 75,376 | 4,337 | 6.1% |
| Total | 1,068,870 | 1,088,318 | 1,118,629 | 1,161,383 | 1,198,926 | 130,056 | 12.2% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 5. Total Employment and Health Care Sector Employment in New York State by Department of Labor Region, 2010 and 2018

| Region | 2010 | | 2018 | |
|------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| | Jobs per 100,000 Population | % of Jobs in Health Care | Jobs per 100,000 Population | % of Jobs in Health Care |
| Capital District | 5,052.0 | 11.1% | 5,564.7 | 11.4% |
| Central New York | 4,683.8 | 11.0% | 5,227.5 | 11.8% |
| Finger Lakes | 5,011.6 | 11.4% | 5,760.5 | 12.4% |
| Hudson Valley | 4,825.5 | 12.9% | 5,242.2 | 13.1% |
| Long Island | 5,697.2 | 13.6% | 6,567.6 | 14.4% |
| Mohawk Valley | 5,437.3 | 14.2% | 5,560.2 | 14.1% |
| New York City | 5,324.2 | 12.1% | 6,696.6 | 12.8% |
| North Country | 4,054.5 | 11.6% | 4,541.1 | 12.5% |
| Southern Tier | 4,354.4 | 10.9% | 4,604.5 | 11.2% |
| Western New York | 5,105.2 | 11.7% | 5,456.6 | 11.9% |
| Total | 5,195.5 | 12.3% | 6,135.1 | 12.7% |

Sources: New York State Department of Labor, Quarterly Census of Employment and Wages; US Census Bureau.

2. Hospital Employment

Table 6. New York State Upstate and Downstate Health Care Employment in Hospitals, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Downstate | 271,584 | 267,706 | 273,183 | 276,845 | 279,037 | 7,453 | 2.7% |
| Upstate | 165,771 | 168,400 | 171,766 | 174,826 | 178,270 | 12,499 | 7.5% |
| Total | 437,355 | 436,106 | 444,949 | 451,671 | 457,307 | 19,952 | 4.6% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Note: The Downstate category includes the Department of Labor regions of New York City and Long Island. The Upstate category includes the following Department of Labor regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.

Table 7. Hospital Employment in New York State by Department of Labor Region, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Capital District | 23,552 | 23,887 | 24,365 | 24,907 | 25,225 | 1,673 | 7.1% |
| Central New York | 13,715 | 13,708 | 13,755 | 13,931 | 14,066 | 351 | 2.6% |
| Finger Lakes | 30,406 | 30,977 | 32,027 | 32,738 | 33,911 | 3,505 | 11.5% |
| Hudson Valley | 38,157 | 39,297 | 40,633 | 42,007 | 42,156 | 3,999 | 10.5% |
| Long Island | 61,907 | 64,447 | 67,833 | 71,183 | 73,929 | 12,022 | 19.4% |
| Mohawk Valley | 11,435 | 11,585 | 11,667 | 11,773 | 11,838 | 403 | 3.5% |
| New York City | 209,677 | 203,259 | 205,350 | 205,662 | 205,108 | -4,569 | -2.2% |
| North Country | 8,957 | 9,216 | 9,438 | 9,507 | 9,710 | 753 | 8.4% |
| Southern Tier | 13,396 | 13,408 | 13,505 | 13,506 | 13,535 | 139 | 1.0% |
| Western New York | 26,153 | 26,322 | 26,376 | 26,457 | 27,829 | 1,676 | 6.4% |
| Total | 437,355 | 436,106 | 444,949 | 451,727 | 457,363 | 20,008 | 4.6% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

3. Ambulatory Care

Table 8. New York State Upstate and Downstate Health Care Employment in Ambulatory Care Settings (Excluding Home Health Care), 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Downstate | 181,414 | 186,550 | 190,693 | 194,917 | 196,004 | 14,590 | 8.0% |
| Upstate | 138,056 | 140,065 | 142,366 | 144,757 | 146,374 | 8,318 | 6.0% |
| Total | 319,470 | 326,615 | 333,059 | 344,132 | 347,411 | 27,941 | 8.7% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Note: The Downstate category includes the Department of Labor regions of New York City and Long Island. The Upstate category includes the following Department of Labor regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.

Table 9. Ambulatory Care Settings Employment (Excluding Home Health Care) in New York State by Department of Labor Region, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Capital District | 19,118 | 19,476 | 19,866 | 19,933 | 20,226 | 1,108 | 5.8% |
| Central New York | 14,677 | 14,690 | 15,313 | 15,622 | 15,924 | 1,247 | 8.5% |
| Finger Lakes | 17,497 | 17,067 | 16,863 | 16,719 | 16,350 | -1,147 | -6.6% |
| Hudson Valley | 42,939 | 44,305 | 44,693 | 46,360 | 47,357 | 4,418 | 10.3% |
| Long Island | 63,968 | 65,305 | 65,861 | 65,745 | 66,852 | 2,884 | 4.5% |
| Mohawk Valley | 6,755 | 6,823 | 6,845 | 6,968 | 6,967 | 212 | 3.1% |
| New York City | 117,446 | 121,245 | 124,832 | 129,172 | 129,152 | 11,706 | 10.0% |
| North Country | 5,358 | 5,559 | 5,637 | 5,698 | 5,703 | 345 | 6.4% |
| Southern Tier | 7,572 | 7,697 | 7,728 | 7,675 | 7,796 | 224 | 3.0% |
| Western New York | 24,140 | 24,448 | 25,421 | 25,782 | 26,051 | 1,911 | 7.9% |
| Total | 319,470 | 326,615 | 336,586 | 344,132 | 347,411 | 27,941 | 8.7% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

4. Nursing and Residential Care Facility Employment

Table 10. New York State Upstate and Downstate Health Care Employment in Nursing and Residential Care, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Downstate | 73,676 | 73,295 | 73,603 | 74,125 | 74,324 | 648 | 0.9% |
| Upstate | 86,143 | 87,138 | 87,022 | 86,034 | 85,671 | -148 | -0.5% |
| Total | 159,819 | 160,433 | 160,625 | 160,416 | 160,319 | 500 | 0.3% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Note: The Downstate category includes the Department of Labor regions of New York City and Long Island. The Upstate category includes the following Department of Labor regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.

Table 11. Nursing and Residential Care Facility Employment in New York State by Department of Labor Region, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Capital District | 11,167 | 11,278 | 11,203 | 11,490 | 11,423 | 256 | 2.3% |
| Central New York | 8,589 | 8,833 | 8,909 | 8,522 | 8,370 | -219 | -2.6% |
| Finger Lakes | 13,299 | 13,624 | 13,757 | 13,842 | 13,948 | 649 | 4.9% |
| Hudson Valley | 21,118 | 21,325 | 21,102 | 20,310 | 20,405 | -713 | -3.4% |
| Long Island | 22,934 | 23,111 | 23,681 | 23,953 | 24,490 | 1,556 | 6.8% |
| Mohawk Valley | 6,692 | 6,881 | 6,834 | 6,724 | 6,418 | -274 | -4.1% |
| New York City | 50,742 | 50,184 | 49,922 | 50,172 | 49,834 | -908 | -1.8% |
| North Country | 3,063 | 3,023 | 3,019 | 2,975 | 2,887 | -176 | -5.8% |
| Southern Tier | 6,621 | 6,631 | 6,692 | 6,689 | 6,738 | 117 | 1.8% |
| Western New York | 15,594 | 15,543 | 15,506 | 15,482 | 15,482 | -112 | -0.7% |
| Total | 159,819 | 160,433 | 160,625 | 160,416 | 160,319 | 500 | 0.3% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

5. Home Health Care

Table 12. New York State Upstate and Downstate Health Care Employment in Home Health Care, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--------------|----------------|----------------|----------------|----------------|----------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Downstate | 123,654 | 136,302 | 149,628 | 171,441 | 199,546 | 75,892 | 61.4% |
| Upstate | 28,602 | 28,862 | 33,217 | 31,701 | 32,151 | 3,549 | 12.4% |
| Total | 152,256 | 165,164 | 182,845 | 205,108 | 233,833 | 79,441 | 53.6% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Note: The Downstate category includes the Department of Labor regions of New York City and Long Island. The Upstate category includes the following Department of Labor regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.

Table 13. Home Health Care Employment in New York State by Department of Labor Region, 2014-2018

| Region | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Capital District | 3,419 | 3,278 | 3,179 | 3,434 | 3,500 | 81 | 2.4% |
| Central New York | 2,142 | 2,103 | 2,098 | 2,183 | 2,178 | 36 | 1.7% |
| Finger Lakes | 3,589 | 3,924 | 4,478 | 4,901 | 5,089 | 1,500 | 41.8% |
| Hudson Valley | 11,037 | 11,171 | 11,847 | 12,055 | 11,804 | 767 | 6.9% |
| Long Island | 16,649 | 18,027 | 19,167 | 19,555 | 21,211 | 4,562 | 27.4% |
| Mohawk Valley | 1,365 | 1,370 | 1,470 | 1,712 | 1,761 | 396 | 29.0% |
| New York City | 107,005 | 118,275 | 130,461 | 151,886 | 178,335 | 71,330 | 66.7% |
| North Country | 837 | 803 | 804 | 796 | 726 | -111 | -13.3% |
| Southern Tier | 1,061 | 1,080 | 1,137 | 1,054 | 1,079 | 18 | 1.7% |
| Western New York | 5,152 | 5,133 | 5,355 | 5,566 | 6,014 | 862 | 16.7% |
| Total | 152,256 | 165,164 | 179,996 | 205,108 | 233,833 | 81,577 | 53.6% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 14. Number of Jobs in Selected Health Care Occupations in New York State, in Alphabetical Order, 2014-2018

| Occupation | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------|---------|---------|---------|---------|------------------------------|---------|
| | | | | | | Number | Percent |
| Cardiovascular technologists and technicians | 2,690 | 2,950 | 3,110 | 3,260 | 3,280 | 590 | 21.9% |
| Certified registered nurse anesthetists | 1,430 | 1,700 | 1,230 | 1,660 | 1,770 | 340 | 23.8% |
| Dental assistants | 18,700 | 19,580 | 20,040 | 20,370 | 19,110 | 410 | 2.2% |
| Dental hygienists | 9,960 | 10,760 | 10,750 | 11,050 | 11,300 | 1,340 | 13.5% |
| Dietetic technicians | 840 | 840 | 930 | 900 | 1,090 | 250 | 29.8% |
| Dietitians and Nutritionists | 4,520 | 4,700 | 4,960 | 4,800 | 4,710 | 190 | 4.2% |
| Home health aides | 146,550 | 162,240 | 173,830 | 193,460 | 191,820 | 45,270 | 30.9% |
| Licensed practical nurses | 47,550 | 47,380 | 46,990 | 45,950 | 46,500 | -1,050 | -2.2% |
| Medical and health services managers | 27,840 | 26,810 | 26,010 | 25,850 | 25,830 | -2,010 | -7.2% |
| Medical assistants | 23,780 | 23,970 | 23,860 | 25,140 | 26,080 | 2,300 | 9.7% |
| Medical records and health info techs | 8,580 | 8,680 | 8,800 | 9,590 | 10,180 | 1,600 | 18.6% |
| Medical secretaries | 11,480 | 12,020 | 11,720 | 10,060 | 8,890 | -2,590 | -22.6% |
| Mental health counselors | 13,910 | 13,810 | 14,570 | 13,590 | 14,610 | 700 | 5.0% |
| Nuclear medicine technologists | 1,330 | 1,230 | 1,260 | 1,150 | 1,040 | -290 | -21.8% |
| Nurse midwives | 450 | 420 | 480 | 510 | 450 | 0 | 0.0% |
| Nurse practitioners | 10,310 | 11,260 | 13,060 | 13,450 | 13,710 | 3,400 | 33.0% |
| Nursing assistants | 101,030 | 98,500 | 98,040 | 94,980 | 91,400 | -9,630 | -9.5% |
| Occupational therapists | 9,160 | 8,680 | 8,140 | 9,080 | 9,740 | 580 | 6.3% |
| Occupational therapy assistants | 2,160 | 2,370 | 2,300 | 2,650 | 2,360 | 200 | 9.3% |
| Orderlies | 4,980 | 4,390 | 4,800 | 3,440 | 3,240 | -1,740 | -34.9% |
| Personal care aides | 142,220 | 162,240 | 156,830 | 166,760 | 199,060 | 56,840 | 40.0% |
| Pharmacists | 18,870 | 18,770 | 20,430 | 21,890 | 20,400 | 1,530 | 8.1% |
| Pharmacy aides | 2,570 | 2,680 | 2,480 | 2,210 | 2,050 | -520 | -20.2% |
| Pharmacy technicians | 16,580 | 17,720 | 17,660 | 18,260 | 19,320 | 2,740 | 16.5% |
| Physical therapist assistants/aides | 7,470 | 7,860 | 7,140 | 7,020 | 7,790 | 320 | 4.3% |
| Physical therapists | 15,310 | 15,970 | 16,390 | 15,750 | 16,660 | 1,350 | 8.8% |
| Physician assistants | 10,410 | 11,760 | 12,070 | 12,150 | 12,060 | 1,650 | 15.9% |
| Radiation therapists | 570 | 1,480 | 1,540 | 1,180 | 1,150 | 580 | 101.8% |
| Radiologic technologists and technicians | 13,190 | 13,310 | 12,990 | 12,320 | 12,780 | -410 | -3.1% |
| Registered nurses | 169,560 | 171,880 | 180,730 | 180,170 | 182,490 | 12,930 | 7.6% |
| Respiratory therapists | 6,000 | 5,830 | 5,840 | 5,750 | 5,740 | -260 | -4.3% |
| Social workers | 22,310 | 22,840 | 23,580 | 23,200 | 24,760 | 2,450 | 11.0% |
| Speech-language pathologists | 9,950 | 10,170 | 11,360 | 12,090 | 12,750 | 2,800 | 28.1% |

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Note: Changes in the number of health care jobs in New York State varied by occupation. Although these data represent positions or jobs and not individuals or full-time equivalents (FTEs), they are useful in identifying trends in occupations and job titles.

Table 15. Average Annual Salary in Selected Health Care Occupations by Setting in New York State, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$67,330 | N/A | \$64,150 | N/A |
| Child, family, and school social workers | \$56,600 | \$75,660 | \$66,550 | \$50,750 |
| Clinical, counseling, and school psychologists | \$97,220 | \$73,570 | \$90,300 | N/A |
| Dental hygienists | \$77,940 | N/A | \$66,500 | \$77,340 |
| Dietetic technicians | \$38,850 | N/A | \$45,460 | \$39,950 |
| Dietitians and Nutritionists | \$75,220 | \$84,030 | \$68,410 | \$70,300 |
| Health care social workers | \$67,090 | \$68,630 | \$74,040 | \$62,140 |
| Home health aides | \$26,280 | \$26,770 | N/A | \$28,340 |
| Licensed practical nurses | \$47,350 | \$49,690 | \$49,640 | \$50,840 |
| Medical and health services managers | \$155,080 | \$137,130 | \$153,790 | \$115,530 |
| Medical assistants | \$37,920 | \$45,660 | \$43,420 | \$30,280 |
| Medical records and health information technicians | \$37,000 | \$44,750 | \$53,070 | \$47,270 |
| Mental health and substance abuse social workers | \$68,200 | \$64,420 | \$68,010 | \$56,980 |
| Nuclear medicine technologists | \$92,670 | N/A | \$88,120 | N/A |
| Nurse midwives | \$114,890 | N/A | \$114,610 | \$111,490 |
| Nurse practitioners | \$126,060 | \$125,230 | \$124,400 | \$97,540 |
| Occupational therapists | \$95,530 | \$93,640 | \$90,950 | \$88,040 |
| Occupational therapy assistants | \$62,560 | \$56,990 | \$58,700 | \$63,570 |
| Orderlies | \$31,800 | N/A | \$37,550 | \$33,010 |
| Personal care aides | \$28,170 | \$26,860 | N/A | \$26,740 |
| Pharmacy aides | N/A | N/A | \$42,550 | \$30,770 |
| Physical therapist assistants | \$49,940 | \$50,000 | \$59,130 | \$62,120 |
| Physical therapists | \$85,430 | \$90,620 | \$93,920 | \$97,940 |
| Physician assistants | \$116,410 | N/A | \$123,110 | \$118,210 |
| Radiation therapists | \$89,240 | N/A | \$107,550 | N/A |
| Radiologic technologists | \$66,300 | N/A | \$73,320 | \$59,670 |
| Registered nurses | \$76,760 | \$85,460 | \$92,750 | \$82,250 |
| Respiratory therapy technicians | \$45,100 | N/A | \$60,590 | N/A |
| Speech-language pathologists | \$93,600 | \$101,750 | \$95,710 | \$94,880 |
| Surgical technologists | \$54,910 | N/A | \$56,360 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

E. Graduations by Occupation

Table 16. Number of Graduations in Selected Health Care Occupational Programs in New York State, Ranked by Largest Increase in Numbers, 2013-2017

| Occupational Program | School Year | | | | | Change Between 2013-2017 | |
|--|-------------|--------|--------|--------|--------|--------------------------|---------|
| | 2013 | 2014 | 2015 | 2016 | 2017 | Number | Percent |
| Registered nurses | 11,372 | 11,475 | 12,241 | 12,514 | 12,414 | 1,042 | 9.2% |
| Nurse practitioners/clinical nurse specialists | 803 | 1,194 | 1,322 | 1,297 | 1,481 | 678 | 84.4% |
| Medical and health services managers | 377 | 438 | 522 | 643 | 727 | 350 | 92.8% |
| Physical therapists | 1,006 | 1,139 | 1,147 | 1,121 | 1,316 | 310 | 30.8% |
| Physician assistants | 883 | 900 | 980 | 1,078 | 1,161 | 278 | 31.5% |
| Occupational therapists | 581 | 582 | 577 | 670 | 739 | 158 | 27.2% |
| Pharmacists | 913 | 948 | 996 | 996 | 1,056 | 143 | 15.7% |
| Dietitians and nutritionists | 141 | 148 | 196 | 234 | 276 | 135 | 95.7% |
| Social workers | 3,711 | 3,540 | 3,676 | 3,789 | 3,797 | 86 | 2.3% |
| Speech language pathologists | 320 | 377 | 456 | 385 | 391 | 71 | 22.2% |
| Medical and clinical laboratory technologists | 244 | 284 | 294 | 284 | 312 | 68 | 27.9% |
| Physical therapist assistants and aides | 219 | 219 | 263 | 251 | 281 | 62 | 28.3% |
| Surgical technologists | 190 | 270 | 294 | 279 | 232 | 42 | 22.1% |
| Dental hygienists | 429 | 378 | 420 | 459 | 458 | 29 | 6.8% |
| Dental assistants | 412 | 413 | 428 | 461 | 440 | 28 | 6.8% |
| Nurse midwives | 0 | 33 | 22 | 18 | 26 | 26 | N/A |
| Medical secretaries | 610 | 629 | 709 | 699 | 624 | 14 | 2.3% |
| Nuclear medicine technologists | 16 | 17 | 28 | 24 | 28 | 12 | 75.0% |
| Occupational therapy assistants and aides | 247 | 231 | 208 | 262 | 258 | 11 | 4.5% |
| Medical and clinical laboratory technicians | 110 | 126 | 122 | 104 | 118 | 8 | 7.3% |
| Dietetic technicians | 30 | 34 | 26 | 42 | 35 | 5 | 16.7% |
| Certified registered nurse anesthetists | 41 | 48 | 46 | 30 | 30 | -11 | -26.8% |
| Respiratory therapists | 226 | 220 | 218 | 174 | 165 | -61 | -27.0% |
| Cardiovascular technologists and technicians | 120 | 127 | 103 | 52 | 33 | -87 | -72.5% |
| Medical records and health information technicians | 446 | 466 | 417 | 392 | 346 | -100 | -22.4% |
| Radiologic technologists | 270 | 157 | 145 | 130 | 136 | -134 | -49.6% |
| Pharmacy technicians and aides | 746 | 465 | 554 | 486 | 335 | -411 | -55.1% |
| Nursing assistants | 1,174 | 1,049 | 1,371 | 969 | 654 | -520 | -44.3% |
| Licensed practical nurses | 3,435 | 3,448 | 3,300 | 2,798 | 2,505 | -930 | -27.1% |
| Medical assistants | 7,133 | 6,308 | 5,482 | 5,474 | 4,481 | -2,652 | -37.2% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

F. Professional Licensure by Occupation

Table 17. Number of Licensed Individuals in Selected Health Care Professions in New York State, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 2,065 | 1,873 | 1,896 | 1,900 | 1,816 | -249 | -12.1% |
| Clinical laboratory technologists | 14,985 | 14,222 | 14,279 | 14,284 | 13,409 | -1,576 | -10.5% |
| Dental assistants | 1,335 | 1,433 | 1,447 | 1,424 | 1,470 | 135 | 10.1% |
| Dental hygienists | 11,317 | 11,556 | 11,780 | 11,653 | 11,741 | 424 | 3.7% |
| Dietitians/nutritionists, certified | 5,588 | 5,687 | 5,690 | 5,861 | 6,044 | 456 | 8.2% |
| Licensed practical nurses | 73,938 | 70,270 | 70,618 | 69,872 | 67,717 | -6,221 | -8.4% |
| Nurse practitioners | 20,928 | 21,590 | 23,936 | 25,168 | 26,952 | 6,024 | 28.8% |
| Occupational therapists | 12,582 | 12,902 | 13,408 | 13,889 | 14,433 | 1,851 | 14.7% |
| Occupational therapy assistants | 4,013 | 3,970 | 4,119 | 4,322 | 4,513 | 500 | 12.5% |
| Pharmacists | 25,340 | 27,626 | 27,611 | 26,894 | 27,473 | 2,133 | 8.4% |
| Physical therapists | 22,172 | 22,836 | 23,220 | 23,431 | 23,876 | 1,704 | 7.7% |
| Physical therapy assistants | 6,160 | 6,292 | 6,417 | 6,587 | 6,636 | 476 | 7.7% |
| Physician assistants | 13,659 | 14,861 | 15,668 | 15,758 | 16,721 | 3,062 | 22.4% |
| Registered professional nurses | 291,421 | 291,885 | 295,802 | 302,560 | 309,241 | 17,820 | 6.1% |
| Respiratory therapists | 6,283 | 6,214 | 6,453 | 6,491 | 6,560 | 277 | 4.4% |
| Social workers | 57,827 | 57,221 | 57,102 | 56,703 | 56,947 | -880 | -1.5% |
| Speech-language pathologists | 17,559 | 17,917 | 18,523 | 18,920 | 19,406 | 1,847 | 10.5% |
| Total | 587,172 | 588,355 | 597,969 | 605,717 | 614,955 | 27,783 | 4.7% |

Source: New York State Education Department, Office of Professions.

G. Trends in New York State RN Education, 2002-2018

Every year, CHWS surveys the state's RN education program deans and directors to monitor the production of RNs in the state. The most recent survey was conducted in the fall of 2018 and the spring of 2019 and included questions on applications and acceptances to the nursing program, the number of graduations between 2014 and 2018, and perspectives on the local job market for new graduates. Of the 123 programs eligible to participate in the survey, 108 responded, for an 88.0% response rate. For more information on RN graduations in New York State, please click on the link to [Trends in New York Registered Nurses Graduations, 2002-2018](#) at the CHWS website.

Figure 7. Annual Number of New Graduates from RN Graduations in New York State by Degree Type, 2002-2018

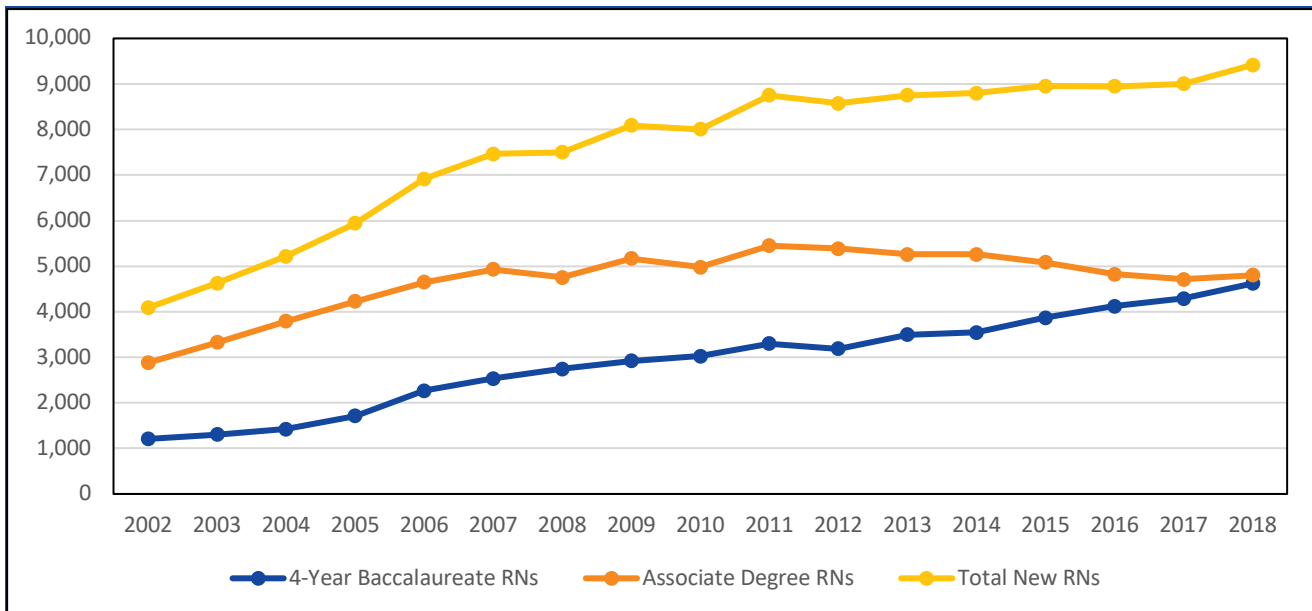
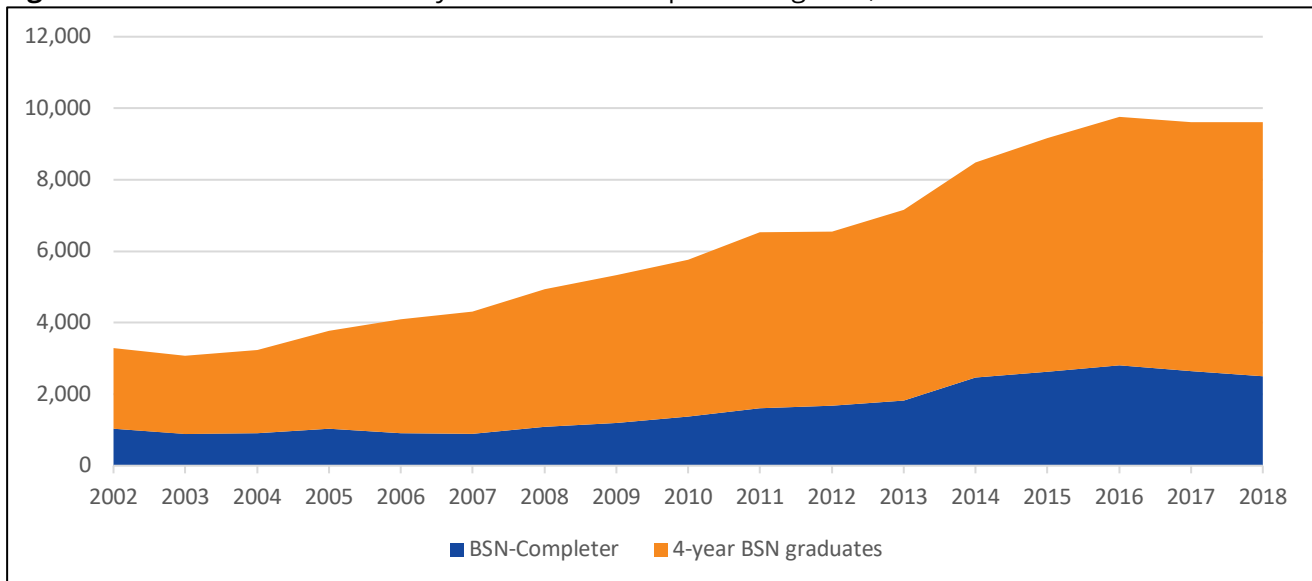


Figure 8. Graduations from BSN 4-year and BSN Completer Programs, 2002-2018



H. Projected Job Growth

Table 18. Employment Projections for Selected Health Care Occupational Programs in New York State, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings |
|---|---------|---------|------------------------------|---------|-------------------------|
| | | | Number | Percent | |
| Home health aides | 191,120 | 291,360 | 100,240 | 52.4% | 36,870 |
| Physician assistants | 13,550 | 19,430 | 5,880 | 43.4% | 1,460 |
| Nurse practitioners | 14,600 | 20,670 | 6,070 | 41.6% | 1,460 |
| Personal care aides | 179,870 | 252,980 | 73,110 | 40.6% | 37,590 |
| Medical assistants | 26,460 | 35,740 | 9,280 | 35.1% | 4,210 |
| Physical therapists | 18,800 | 24,950 | 6,150 | 32.7% | 1,500 |
| Occupational therapy assistants | 2,490 | 3,230 | 740 | 29.7% | 420 |
| Radiation therapists | 1,760 | 2,240 | 480 | 27.3% | 140 |
| Diagnostic medical sonographers | 5,240 | 6,650 | 1,410 | 26.9% | 440 |
| Occupational therapists | 9,270 | 11,760 | 2,490 | 26.9% | 760 |
| Respiratory therapists | 6,390 | 8,100 | 1,710 | 26.8% | 500 |
| Nurses anesthetists | 1,520 | 1,910 | 390 | 25.7% | 120 |
| Emergency medical technicians and paramedics | 15,970 | 19,710 | 3,740 | 23.4% | 1,410 |
| Dental assistants | 21,750 | 26,700 | 4,950 | 22.8% | 3,130 |
| Dental hygienists | 11,650 | 14,290 | 2,640 | 22.7% | 1,020 |
| Speech-language pathologists | 12,360 | 15,030 | 2,670 | 21.6% | 950 |
| Dietitians and nutritionists | 5,680 | 6,890 | 1,210 | 21.3% | 500 |
| Medical records and health information technicians | 9,710 | 11,740 | 2,030 | 20.9% | 840 |
| Registered nurses | 198,400 | 238,340 | 39,940 | 20.1% | 14,990 |
| Counselors and social workers | 184,440 | 221,260 | 36,820 | 20.0% | 25,210 |
| Medical and clinical laboratory technicians | 9,300 | 11,050 | 1,750 | 18.8% | 800 |
| Licensed practical nurses | 51,490 | 60,950 | 9,460 | 18.4% | 4,880 |
| Radiologic technologists | 14,330 | 16,950 | 2,620 | 18.3% | 1,050 |
| Nuclear medicine technologists | 1,400 | 1,650 | 250 | 17.9% | 110 |
| Surgical technologists | 6,120 | 7,200 | 1,080 | 17.6% | 630 |
| Cardiovascular technologists and technicians | 3,560 | 4,140 | 580 | 16.3% | 260 |
| Orderlies | 5,360 | 6,220 | 860 | 16.0% | 730 |
| Nursing assistants | 108,790 | 125,990 | 17,200 | 15.8% | 14,780 |
| Pharmacy technicians | 18,140 | 20,980 | 2,840 | 15.7% | 1,790 |
| Medical and clinical laboratory technologists | 11,460 | 13,190 | 1,730 | 15.1% | 910 |
| Pharmacists | 21,260 | 22,960 | 1,700 | 8.0% | 1,110 |
| Pharmacy aides | 2,550 | 2,470 | -80 | -3.1% | 330 |
| ^a Annual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the occupation. | | | | | |

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2016-2026.

III. REGIONAL PROFILES

A. New York City

The NYSDOL New York City region includes the 5 counties in New York City: Bronx, New York (Manhattan), Kings (Brooklyn), Queens, and Richmond (Staten Island).



KEY FINDINGS

- **Health indicators were generally worse in the New York City region than in other regions. For example, the teenage (age 15 to 19) birth rate was 16.8 births per 1,000 compared with the statewide rate of 14.6 births per 1,000. The rate of adult hospitalizations due to asthma in the region was 11.2 per 10,000 individuals compared with the statewide rate of 7.4 per 10,000 individuals. Finally, the rate of emergency department (ED) visits was 4,567.5 visits per 10,000 compared with the statewide rate of 4,169.1 visits per 10,000 (Table 20)**
- **Although hospitals continued to employ the most health care workers in the New York City region in 2018 (205,108), home health care showed the most growth in employment between 2014 and 2018 (66.7%) (Figures 10 and 11, Table 21)**
- **On average, salaries are slightly higher in hospitals than in other health care settings in the region. However, there is wide variation among certain job titles across settings. For example, LPNs can earn the highest annual salary (mean of \$58,240) working in a nursing home, and mental health and substance abuse social workers can earn the highest annual salary (mean of \$72,430) in ambulatory care settings (Table 23)**
- **Dental assistants (50.8%), nurse practitioners (37.5%), and physician assistants (21.6%) experienced the greatest increase in the number of licensed professionals in the region between 2015 and 2019. In contrast, the number of LPNs declined by 10.5% during the same period (Table 25)**

Table 19. Selected Population Characteristics in the New York City Region, 2013-2017

| Population Characteristics | Region | | Statewide Percent |
|---|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 8,560,072 | N/A | N/A |
| Population under 100% FPL | 1,648,288 | 19.3% | 14.7% |
| Population under 200% FPL | 3,246,278 | 37.9% | 30.6% |
| Population aged birth to 17 years | 1,794,644 | 21.0% | 21.2% |
| Population aged 65 and older | 1,168,268 | 13.6% | 15.2% |
| Population female aged 15 to 44 | 1,936,789 | 22.6% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 2,556 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 70,935 | 0.8% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 33,858 | 0.4% | 0.3% |
| Black/African American, non-Hispanic | 1,885,890 | 22.0% | 14.4% |
| Hispanic/Latino | 2,491,496 | 29.1% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 1,191,223 | 13.9% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 15,060 | 0.2% | 0.2% |
| Two or more/other races | 250,895 | 2.9% | 2.5% |
| Population with less than a high school education ^a | 1,127,442 | 18.9% | 13.9% |
| Population with a high school diploma or equivalent ^a | 2,267,034 | 38.0% | 42.2% |
| Population with an associate degree ^a | 383,693 | 6.4% | 8.7% |
| Population with a bachelor's degree ^a | 1,281,786 | 21.5% | 19.9% |
| Population with a master's degree or higher ^a | 909,993 | 15.2% | 15.4% |
| Home ownership | 1,025,332 | 12.0% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

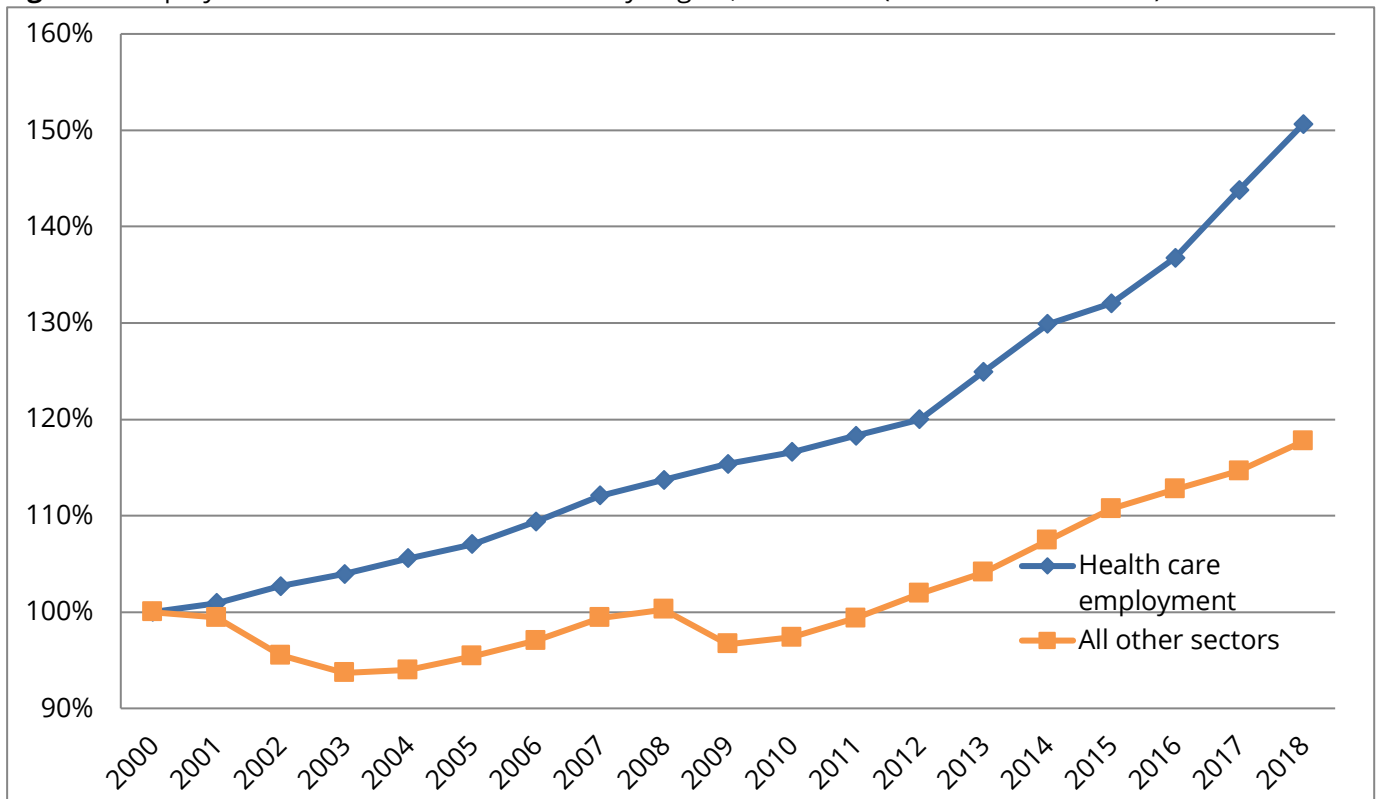
Table 20. Selected Health Indicators in the New York City Region, 2014-2016

| Health Indicator | Region | | Statewide | |
|--|-----------|----------|------------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 160,643 | 628 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 51,134 | 199.9 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 37,204 | 146.4 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 5,384 | 20.7 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 347,539 | 59.8 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 11,727 | 16.8 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 28,189 | 8.1 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 23,990 | 7 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 1,394 | 4 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 1,018,212 | 11,952.6 | 2,279,361 | 1,154.4 |
| Preventable hospitalizations, per 10,000 | 89,665 | 134 | 198,511 | 127.9 |
| Adult asthma hospitalizations, per 10,000 | 7,539 | 11.2 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 1,840 | 6.8 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 3,197 | 15.2 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 6,758 | 37.6 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 224,044 | 262.4 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 28,950 | 33.9 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 80,470 | 94.3 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 3,899,555 | 4,567.5 | 8,231,938 | 4,169.1 |
| One or more personal doctor(s), as percent | 5,589,458 | 87.4 | 13,578,631 | 86.7 |
| Had a checkup within the past 2 years, as percent | 5,150,084 | 80.5 | 12,978,396 | 82.8 |

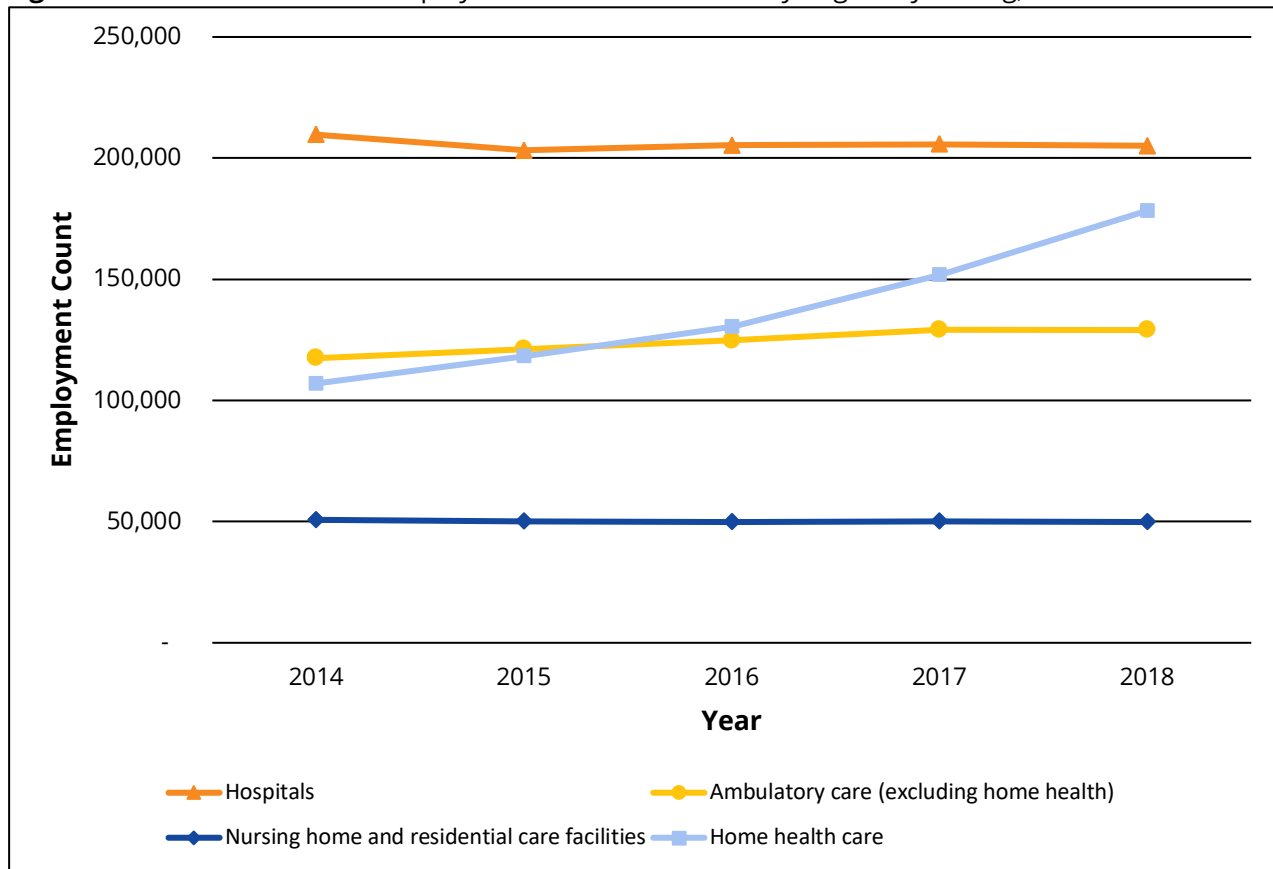
CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

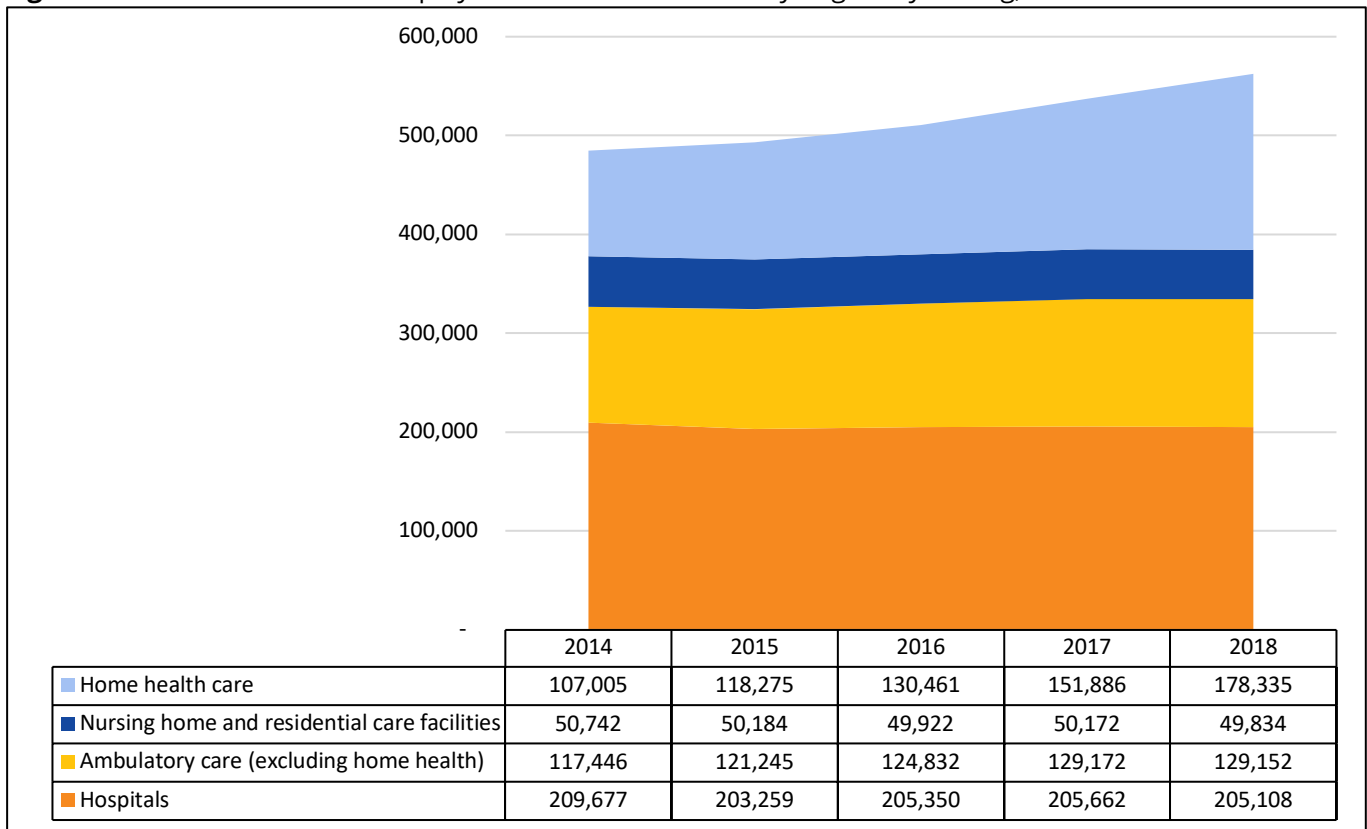
Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Figure 9. Employment Growth in the New York City Region, 2000-2018 (Standardized to 2000)

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Figure 10. Health Care Sector Employment in the New York City Region by Setting, 2014-2018

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Figure 11. Health Care Sector Employment in the New York City Region by Setting, 2014-2018

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 21. Health Care Sector Employment in the New York City Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|----------------|----------------|----------------|----------------|----------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Hospitals | 209,677 | 203,259 | 205,350 | 205,662 | 205,108 | -4,569 | -2.2% |
| Ambulatory care (excluding home health) | 117,446 | 121,245 | 124,832 | 129,172 | 129,152 | 11,706 | 10.0% |
| Nursing home and residential care facilities | 50,742 | 50,184 | 49,922 | 50,172 | 49,834 | -908 | -1.8% |
| Home health care | 107,005 | 118,275 | 130,461 | 151,886 | 178,335 | 71,330 | 66.7% |
| Total | 484,870 | 492,963 | 510,565 | 536,892 | 562,429 | 77,559 | 16.0% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 22. Number of Jobs in Selected Health Care Occupations in the New York City Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 1,150 |
| Certified registered nurse anesthetists | 580 |
| Dental assistants | 7,980 |
| Dental hygienists | 2,590 |
| Dietetic technicians | 380 |
| Dietitians and nutritionists | 1,920 |
| Home health aides | 147,150 |
| Licensed practical nurses | 13,920 |
| Medical and health services managers | 12,480 |
| Medical assistants | 12,850 |
| Medical records and health information technicians | 3,730 |
| Medical secretaries | 3,900 |
| Mental health counselors | 5,670 |
| Nuclear medicine technologists | 420 |
| Nurses midwives | N/A |
| Nurse practitioners | 5,830 |
| Nursing assistants | 7,030 |
| Occupational therapists | 3,360 |
| Occupational therapy assistants | 780 |
| Orderlies | 160 |
| Personal care aides | 11,910 |
| Pharmacists | 1,610 |
| Pharmacy aides | 720 |
| Pharmacy technicians | 8,780 |
| Physical therapist assistants/aides | 2,510 |
| Physical therapists | 5,590 |
| Physician assistants | 5,200 |
| Radiation therapists | 420 |
| Radiologic technologists and technicians | 4,850 |
| Registered nurses | 72,040 |
| Respiratory therapists | 2,070 |
| Social workers | 11,390 |
| Speech-language pathologists | 4,860 |
| Surgical technologists | 2,350 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 23. Average Annual Salary by Setting in Selected Health Care Occupations in the New York City Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$60,350 | N/A | \$67,530 | N/A |
| Child, family, and school social workers | \$57,530 | \$84,160 | \$67,390 | \$57,910 |
| Clinical, counseling, and school psychologists | \$101,760 | N/A | \$91,110 | N/A |
| Dental hygienists | \$87,580 | N/A | \$66,030 | N/A |
| Dietetic technicians | \$40,320 | N/A | \$48,720 | \$39,180 |
| Dietitians and nutritionists | \$80,780 | N/A | \$68,720 | \$70,780 |
| Health care social workers | \$70,130 | \$77,440 | \$80,010 | \$69,310 |
| Home health aides | \$25,900 | \$26,610 | \$42,960 | \$27,450 |
| Licensed practical nurses | \$57,820 | \$53,870 | \$55,340 | \$58,240 |
| Medical and health services managers | \$175,360 | \$159,500 | \$151,850 | \$120,140 |
| Medical assistants | \$38,720 | N/A | \$47,530 | N/A |
| Medical records and health information technicians | \$35,800 | \$48,140 | \$56,380 | \$53,160 |
| Mental health and substance abuse social workers | \$72,430 | N/A | \$67,130 | \$65,140 |
| Nuclear medicine technologists | \$99,170 | N/A | \$90,960 | N/A |
| Nurse midwives | N/A | N/A | \$112,840 | N/A |
| Nurse practitioners | \$148,460 | \$123,090 | \$130,890 | \$88,860 |
| Occupational therapists | \$106,230 | \$109,120 | \$100,030 | \$95,230 |
| Occupational therapy assistants | \$65,900 | N/A | \$65,040 | \$69,030 |
| Orderlies | \$29,690 | N/A | \$41,000 | \$38,890 |
| Personal care aides | N/A | \$26,830 | N/A | \$28,560 |
| Pharmacy aides | N/A | N/A | N/A | N/A |
| Physical therapist assistants | \$39,750 | \$49,340 | \$64,910 | \$69,940 |
| Physical therapists | \$87,120 | \$104,300 | \$100,400 | \$108,780 |
| Physician assistants | \$116,470 | N/A | \$123,890 | N/A |
| Radiation therapists | \$96,000 | N/A | \$122,680 | N/A |
| Radiologic technologists | \$72,640 | N/A | \$81,660 | N/A |
| Registered nurses | \$87,020 | \$98,060 | \$102,940 | \$92,050 |
| Respiratory therapy technicians | N/A | N/A | \$61,510 | N/A |
| Speech-language pathologists | \$110,380 | \$117,590 | \$104,440 | \$105,620 |
| Surgical technologists | \$68,460 | N/A | \$62,280 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 24. Number of Graduations in Selected Health Care Occupational Programs in the New York City Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|-------|-------|-------|-------|-------|------------------------------|---------|
| | | | | | | Number | Percent |
| Nurse practitioners/clinical nurse specialists | 258 | 584 | 584 | 620 | 683 | 425 | 164.7% |
| Registered nurses | 3,283 | 3,501 | 3,854 | 3,644 | 3,612 | 329 | 10.0% |
| Medical secretaries | 66 | 50 | 130 | 165 | 193 | 127 | 192.4% |
| Physician assistants | 475 | 463 | 499 | 567 | 583 | 108 | 22.7% |
| Dietitians and nutritionists | 41 | 49 | 96 | 145 | 143 | 102 | 248.8% |
| Social workers | 2,485 | 2,453 | 2,504 | 2,542 | 2,582 | 97 | 3.9% |
| Pharmacists | 515 | 481 | 484 | 495 | 602 | 87 | 16.9% |
| Medical and health services managers | 116 | 147 | 131 | 130 | 160 | 44 | 37.9% |
| Occupational therapists | 234 | 214 | 219 | 235 | 278 | 44 | 18.8% |
| Surgical technologists | 84 | 140 | 157 | 147 | 113 | 29 | 34.5% |
| Nurse midwives | 0 | 26 | 6 | 13 | 26 | 26 | N/A |
| Physical therapists | 258 | 261 | 257 | 221 | 279 | 21 | 8.1% |
| Physical therapist assistants and aides | 43 | 40 | 50 | 55 | 60 | 17 | 39.5% |
| Medical and clinical laboratory technologists | 120 | 116 | 134 | 121 | 136 | 16 | 13.3% |
| Dental hygienists | 174 | 154 | 164 | 167 | 185 | 11 | 6.3% |
| Medical and clinical laboratory technicians | 17 | 16 | 13 | 24 | 23 | 6 | 35.3% |
| Certified registered nurse anesthetists | 7 | 11 | 10 | 11 | 11 | 4 | 57.1% |
| Nuclear medicine technologists | 5 | 6 | 21 | 4 | 7 | 2 | 40.0% |
| Respiratory therapists | 24 | 20 | 20 | 23 | 23 | -1 | -4.2% |
| Dietetic technicians | 23 | 19 | 14 | 18 | 10 | -13 | -56.5% |
| Occupational therapy assistants and aides | 82 | 73 | 56 | 66 | 57 | -25 | -30.5% |
| Dental assistants | 248 | 257 | 252 | 198 | 202 | -46 | -18.5% |
| Cardiovascular technologists and technicians | 55 | 57 | 34 | 10 | 0 | -55 | -100.0% |
| Speech language pathologists | 210 | 220 | 257 | 225 | 118 | -92 | -43.8% |
| Medical records and health information technicians | 248 | 261 | 218 | 165 | 142 | -106 | -42.7% |
| Radiologic technologists | 136 | 71 | 69 | 78 | 27 | -109 | -80.1% |
| Licensed practical nurses | 489 | 626 | 580 | 450 | 208 | -281 | -57.5% |
| Pharmacy technicians and aides | 631 | 356 | 379 | 354 | 275 | -356 | -56.4% |
| Nursing assistants | 1,174 | 859 | 921 | 842 | 496 | -678 | -57.8% |
| Medical assistants | 3,957 | 3,622 | 3,070 | 3,297 | 2,486 | -1,356 | -34.3% |

N/A, not applicable. Source: Integrated Postsecondary Education Data System.

Table 25. Number of Licensed Individuals in Selected Health Care Occupations in the New York City Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 514 | 460 | 456 | 446 | 421 | -93 | -18.1% |
| Clinical laboratory technologists | 4,536 | 4,306 | 4,341 | 4,398 | 4,104 | -432 | -9.5% |
| Dental assistants | 67 | 69 | 75 | 83 | 101 | 34 | 50.8% |
| Dental hygienists | 2,099 | 2,209 | 2,287 | 2,325 | 2,378 | 279 | 13.3% |
| Dietitians/nutritionists, certified | 1,718 | 1,746 | 1,721 | 1,749 | 1,837 | 119 | 6.9% |
| Licensed practical nurses | 15,877 | 15,152 | 15,094 | 14,943 | 14,213 | -1,664 | -10.5% |
| Nurse practitioners | 5,098 | 5,374 | 6,123 | 6,543 | 7,007 | 1,909 | 37.5% |
| Occupational therapists | 3,491 | 3,640 | 3,786 | 3,892 | 4,017 | 526 | 15.1% |
| Occupational therapy assistants | 1,013 | 1,026 | 1,064 | 1,067 | 1,066 | 53 | 5.2% |
| Pharmacists | 6,559 | 7,656 | 7,781 | 7,257 | 7,603 | 1,044 | 15.9% |
| Physical therapists | 5,290 | 5,653 | 5,775 | 5,726 | 5,859 | 569 | 10.8% |
| Physical therapy assistants | 1,410 | 1,472 | 1,498 | 1,506 | 1,513 | 103 | 7.30% |
| Registered physician assistants | 3,746 | 4,097 | 4,303 | 4,333 | 4,554 | 808 | 21.6% |
| Registered professional nurses | 65,858 | 67,039 | 68,113 | 69,306 | 70,942 | 5,084 | 7.7% |
| Respiratory therapists | 1,591 | 1,585 | 1,639 | 1,635 | 1,674 | 83 | 5.2% |
| Social workers | 22,378 | 22,424 | 22,530 | 22,379 | 22,461 | 83 | 0.4% |
| Speech-language pathologists | 4,884 | 5,099 | 5,315 | 5,422 | 5,558 | 674 | 13.8% |
| Total | 146,129 | 149,007 | 151,901 | 153,010 | 155,308 | 9,179 | 6.3% |

Source: New York State Education Department, Office of Professions.

Table 26. Employment Projections for Selected Health Care Occupations in the New York City Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|---------|---------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 145,840 | 226,070 | 80,230 | 55.0% | 28,720 |
| Medical assistants | 12,360 | 17,880 | 5,520 | 44.7% | 2,150 |
| Personal care aides | 83,900 | 119,130 | 35,230 | 42.0% | 17,730 |
| Nurse practitioners | 6,550 | 9,280 | 2,730 | 41.7% | 650 |
| Physician assistants | 5,630 | 7,750 | 2,120 | 37.7% | 570 |
| Occupational therapy assistants | 880 | 1,160 | 280 | 31.8% | 150 |
| Diagnostic medical sonographers | 1,940 | 2,540 | 600 | 30.9% | 170 |
| Physical therapists | 7,280 | 9,520 | 2,240 | 30.8% | 560 |
| Occupational therapists | 3,230 | 4,210 | 980 | 30.3% | 280 |
| Medical secretaries | 5,510 | 7,030 | 1,520 | 27.6% | 820 |
| Respiratory therapists | 2,530 | 3,170 | 640 | 25.3% | 200 |
| Dental hygienists | 2,930 | 3,630 | 700 | 23.9% | 260 |
| Dental assistants | 9,130 | 11,300 | 2,170 | 23.8% | 1,320 |
| Radiation therapists | 800 | 990 | 190 | 23.8% | 60 |
| Speech-language pathologists | 4,750 | 5,730 | 980 | 20.6% | 360 |
| Dietitians and nutritionists | 2,330 | 2,810 | 480 | 20.6% | 200 |
| Licensed practical nurses | 15,440 | 18,610 | 3,170 | 20.5% | 1,510 |
| Counselors and Social Workers | 88,910 | 106,740 | 17,830 | 20.1% | 12,240 |
| Radiologic technologists | 5,330 | 6,340 | 1,010 | 18.9% | 400 |
| Registered nurses | 81,020 | 96,290 | 15,270 | 18.8% | 5,990 |
| Medical records and health information technicians | 3,570 | 4,220 | 650 | 18.2% | 300 |
| Medical and clinical laboratory technicians | 3,970 | 4,690 | 720 | 18.1% | 330 |
| Surgical technologists | 2,970 | 3,490 | 520 | 17.5% | 300 |
| Nuclear medicine technologists | 570 | 660 | 90 | 15.8% | 40 |
| Orderlies | 2,730 | 3,150 | 420 | 15.4% | 370 |
| Nursing assistants | 45,210 | 52,120 | 6,910 | 15.3% | 6,110 |
| Pharmacy technicians | 7,370 | 8,490 | 1,120 | 15.2% | 720 |
| Emergency medical technicians and paramedics | 4,930 | 5,660 | 730 | 14.8% | 380 |
| Nurses anesthetists | 480 | 540 | 60 | 12.5% | 30 |
| Cardiovascular technologists and technicians | 1,390 | 1,560 | 170 | 12.2% | 90 |
| Medical and clinical laboratory technologists | 5,110 | 5,700 | 590 | 11.5% | 390 |
| Pharmacists | 10,050 | 10,750 | 700 | 7.0% | 510 |
| Pharmacist aides | 1,060 | 990 | -70 | -6.6% | 130 |

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

B. Capital District

The Capital District region includes the counties of Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington.

KEY FINDINGS

- **People in the Capital District were generally healthier than the statewide average. A few exceptions include total deaths per 100,00 which was 898.6 compared to the statewide rate of 769.8; the rate of deaths due to heart disease, which was 232.3 per 100,000 individuals compared with the statewide rate of 220.7; and the rate of deaths due to diabetes per 100,000 which was 210.3 compared to the statewide rate of 176.2. Many other indicators in the Capital Region show superior health status compared with the rest of the state (Table 28)**
- **In all health care settings, health care jobs grew in the Capital District from 2014 to 2018. Overall, there were 3,118 more health care jobs in 2018 than in 2014. Capital District hospitals experienced the largest increase in health care jobs (7.1%) during that period (Table 29)**
- **Occupational therapy assistant and aide programs experienced the greatest growth in graduations in the region, with a 90.9% increase from 2013 to 2017. In contrast, medical assistant programs had 144 fewer graduations, which resulted in a 45.9% decline of graduates in the region (Table 32)**
- **Between 2015 and 2019, nurse practitioners (33.1%), physician assistants (21.5%), and occupational therapists (10.5%) experienced the greatest increase in the number of licensed professionals in the region. In contrast, the number of LPNs (-479) and clinical laboratory technologists (-118) licensed declined in the Capital District during the same period (Table 33)**



Table 27. Selected Population Characteristics in the Capital District Region, 2013-2017

| Population Characteristics | Region | | Statewide Percent |
|---|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 1,086,407 | N/A | N/A |
| Population under 100% FPL | 115,252 | 10.6% | 14.7% |
| Population under 200% FPL | 262,611 | 24.2% | 30.6% |
| Population aged birth to 17 years | 215,188 | 19.8% | 21.2% |
| Population aged 65 and older | 182,718 | 16.8% | 15.2% |
| Population female aged 15 to 44 | 205,550 | 18.9% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 289 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 7,781 | 0.7% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 3,017 | 0.3% | 0.3% |
| Black/African American, non-Hispanic | 71,791 | 6.6% | 14.4% |
| Hispanic/Latino | 50,632 | 4.7% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 39,935 | 3.7% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 1,608 | 0.1% | 0.2% |
| Two or more/other races | 31,465 | 2.9% | 2.5% |
| Population with less than a high school education ^a | 63,539 | 8.4% | 13.9% |
| Population with a high school diploma or equivalent ^a | 343,827 | 45.5% | 42.2% |
| Population with an associate degree ^a | 90,538 | 12.0% | 8.7% |
| Population with a bachelor's degree ^a | 142,092 | 18.8% | 19.9% |
| Population with a master's degree or higher ^a | 115,956 | 15.3% | 15.4% |
| Home ownership | 283,720 | 26.1% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 28. Selected Health Indicators in the Capital District Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 25,856 | 898.6 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 6,685 | 232.3 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 6,044 | 210.3 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 564 | 19.6 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 28,990 | 52.3 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 1,149 | 12.1 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 2,192 | 7.6 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 1,263 | 4.4 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 171 | 5.9 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 106,909 | 1,114.8 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 311 | 4.0 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 107 | 4.6 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 137 | 5.1 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 140 | 7.4 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 1,479 | 15.4 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 2,700 | 28.2 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 9,233 | 96.3 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 353,283 | 3,683.8 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 29. Number of Health Care Jobs in the Capital District Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 23,552 | 23,887 | 24,365 | 24,907 | 25,225 | 1,673 | 7.1% |
| Ambulatory care (excluding home health) | 19,118 | 19,476 | 19,866 | 19,933 | 20,226 | 1,108 | 5.8% |
| Nursing home and residential care facilities | 11,167 | 11,278 | 11,203 | 11,490 | 11,423 | 256 | 2.3% |
| Home health care | 3,419 | 3,278 | 3,179 | 3,343 | 3,500 | 81 | 2.4% |
| Total | 57,226 | 57,919 | 58,613 | 59,673 | 60,374 | 3,118 | 5.2% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 30. Number of Jobs in Selected Health Care Occupations in the Capital District Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 300 |
| Certified registered nurse anesthetists | 180 |
| Dental assistants | 840 |
| Dental hygienists | 860 |
| Dietetic technicians | N/A |
| Dietitians and nutritionists | 300 |
| Home health aides | 4,790 |
| Licensed practical nurses | 3,600 |
| Medical and health services managers | 1,520 |
| Medical assistants | 1,380 |
| Medical records and health information technicians | 690 |
| Medical secretaries | 550 |
| Mental health counselors | 780 |
| Nuclear medicine technologists | 50 |
| Nurse midwives | N/A |
| Nurse practitioners | 680 |
| Nursing assistants | 6,060 |
| Occupational therapists | 590 |
| Occupational therapy assistants | 170 |
| Orderlies | 170 |
| Personal care aides | 6,940 |
| Pharmacists | 1,440 |
| Pharmacy aides | 130 |
| Pharmacy technicians | 1,110 |
| Physical therapist assistants/aides | 360 |
| Physical therapists | 1,050 |
| Physician assistants | 830 |
| Radiation therapists | N/A |
| Radiologic technologists and technicians | 870 |
| Registered nurses | 12,570 |
| Respiratory therapists | 420 |
| Social workers | 1,390 |
| Speech-language pathologists | 640 |
| Surgical technologists | 310 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 31. Average Annual Salary by Setting in Selected Health Care Occupations in the Capital District Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$59,620 | N/A | \$49,910 | N/A |
| Child, family, and school social workers | N/A | N/A | \$46,140 | \$55,600 |
| Clinical, counseling, and school psychologists | \$112,470 | N/A | N/A | N/A |
| Dental hygienists | \$66,100 | N/A | N/A | N/A |
| Dietitians and nutritionists | \$62,770 | \$71,040 | \$57,230 | \$63,740 |
| Health care social workers | \$52,220 | \$55,680 | \$58,000 | \$51,250 |
| Home health aides | N/A | \$28,220 | N/A | \$27,310 |
| Licensed practical nurses | \$41,590 | \$39,800 | \$43,780 | \$43,350 |
| Medical and health services managers | \$132,420 | \$101,000 | \$139,910 | \$99,480 |
| Medical assistants | \$34,810 | N/A | \$31,990 | N/A |
| Medical records and health information technicians | \$37,570 | \$48,640 | \$45,410 | \$38,240 |
| Mental health and substance abuse social workers | \$63,970 | N/A | \$63,680 | N/A |
| Nuclear medicine technologists | N/A | N/A | \$81,790 | N/A |
| Nurse practitioners | \$122,660 | N/A | \$112,490 | N/A |
| Occupational therapists | \$69,900 | \$71,420 | \$79,680 | \$80,550 |
| Occupational therapy assistants | \$54,520 | N/A | \$58,040 | \$57,670 |
| Orderlies | N/A | N/A | \$26,310 | N/A |
| Personal care aides | N/A | \$25,310 | \$25,260 | \$26,220 |
| Physical therapist assistants | \$51,980 | \$49,550 | \$55,670 | \$54,420 |
| Physical therapists | \$75,570 | \$80,770 | \$83,840 | \$84,410 |
| Physician assistants | \$111,420 | N/A | \$122,020 | N/A |
| Radiation therapists | N/A | N/A | \$94,980 | N/A |
| Radiologic technologists | \$57,260 | N/A | \$61,840 | N/A |
| Registered nurses | \$67,480 | \$70,590 | \$72,380 | \$67,330 |
| Respiratory therapy technicians | \$62,340 | \$63,720 | \$84,930 | \$81,030 |
| Speech-language pathologists | \$45,340 | N/A | \$41,400 | N/A |
| Surgical technologists | \$59,620 | N/A | \$49,910 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 32. Number of Graduations in Selected Health Care Occupational Programs in the Capital District Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|-------|-------|-------|-------|-------|------------------------------|---------|
| | | | | | | Number | Percent |
| Occupational therapy assistants and aides | 33 | 35 | 36 | 53 | 63 | 30 | 90.9% |
| Social workers | 156 | 131 | 164 | 169 | 172 | 16 | 10.3% |
| Physician assistants | 30 | 41 | 49 | 40 | 40 | 10 | 33.3% |
| Medical secretaries | 62 | 69 | 80 | 91 | 71 | 9 | 14.5% |
| Occupational therapists | 27 | 30 | 29 | 35 | 34 | 7 | 25.9% |
| Medical and clinical laboratory technologists | 20 | 28 | 24 | 17 | 19 | -1 | -5.0% |
| Nurse practitioners/clinical nurse specialists | 44 | 61 | 63 | 25 | 43 | -1 | -2.3% |
| Respiratory therapists | 19 | 24 | 13 | 22 | 17 | -2 | -10.5% |
| Dental assistants | 19 | 12 | 14 | 11 | 16 | -3 | N/A |
| Dental hygienists | 38 | 30 | 30 | 37 | 30 | -8 | -21.1% |
| Physical therapists | 51 | 46 | 36 | 38 | 36 | -15 | -29.4% |
| Pharmacists | 216 | 283 | 271 | 240 | 200 | -16 | -7.4% |
| Medical and health services managers | 28 | 41 | 38 | 45 | 0 | -28 | -100.0% |
| Registered nurses | 2,047 | 1,867 | 2,014 | 2,130 | 1,960 | -87 | -4.3% |
| Medical assistants | 314 | 300 | 292 | 261 | 170 | -144 | -45.9% |
| Licensed practical nurses | 379 | 367 | 335 | 228 | 230 | -149 | -39.3% |
| Cardiovascular technologists and technicians | N/A | 6 | 9 | 6 | 15 | N/A | N/A |
| Certified registered nurse anesthetists | N/A | 20 | 20 | 19 | 19 | N/A | N/A |
| Dietetic technicians | N/A | 4 | 4 | 10 | 14 | N/A | N/A |

N/A, not available.

Source: Integrated Postsecondary Education Data System.

Table 33. Number of Licensed Individuals in Selected Health Care Occupations in the Capital District Region, in Alphabetical Order, 2015-2019

| Occupations | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 93 | 86 | 82 | 83 | 80 | -13 | -14.0% |
| Clinical laboratory technologists | 831 | 783 | 779 | 768 | 713 | -118 | -14.2% |
| Dental assistants | 143 | 144 | 148 | 148 | 154 | 11 | 7.7% |
| Dental hygienists | 864 | 884 | 907 | 889 | 874 | 10 | 1.2% |
| Dietitians/nutritionists, certified | 343 | 353 | 360 | 381 | 386 | 43 | 12.5% |
| Licensed practical nurses | 5,545 | 5,291 | 5,301 | 5,293 | 5,066 | -479 | -8.6% |
| Nurse practitioners | 900 | 932 | 1,060 | 1,105 | 1,198 | 298 | 33.1% |
| Occupational therapists | 628 | 647 | 668 | 662 | 694 | 66 | 10.5% |
| Occupational therapy assistants | 326 | 322 | 344 | 346 | 351 | 25 | 7.7% |
| Pharmacists | 1,560 | 1,620 | 1,584 | 1,588 | 1,603 | 43 | 2.8% |
| Physical therapists | 1,118 | 1,128 | 1,154 | 1,172 | 1,196 | 78 | 7.0% |
| Physical therapy assistants | 320 | 314 | 299 | 304 | 292 | -28 | -8.8% |
| Registered physician assistants | 738 | 832 | 890 | 857 | 897 | 159 | 21.5% |
| Registered professional nurses | 16,669 | 16,917 | 17,036 | 17,341 | 17,511 | 842 | 5.1% |
| Respiratory therapists | 415 | 407 | 429 | 436 | 434 | 19 | 4.6% |
| Social workers | 2,617 | 2,579 | 2,609 | 2,625 | 2,628 | 11 | 0.4% |
| Speech-language pathologists | 954 | 951 | 966 | 978 | 964 | 10 | 1.0% |
| Total | 34,064 | 34,190 | 34,616 | 34,976 | 35,041 | 977 | 2.9% |

Source: New York State Education Department, Office of Professions.

Table 34. Employment Projections for Selected Health Care Occupations in the Capital District Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|--------|--------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 5,340 | 7,830 | 2,490 | 46.6% | 980 |
| Emergency medical technicians and paramedics | 1,450 | 2,120 | 670 | 46.2% | 170 |
| Nurse practitioners | 820 | 1,190 | 370 | 45.1% | 90 |
| Physician assistants | 930 | 1,340 | 410 | 44.1% | 100 |
| Medical assistants | 1,220 | 1,700 | 480 | 39.3% | 200 |
| Radiation therapists | 180 | 240 | 60 | 33.3% | 20 |
| Medical secretaries | 880 | 1,170 | 290 | 33.0% | 140 |
| Physical therapists | 1,190 | 1,580 | 390 | 32.8% | 100 |
| Personal care aides | 7,650 | 10,060 | 2,410 | 31.5% | 1480 |
| Diagnostic medical sonographers | 310 | 390 | 80 | 25.8% | 30 |
| Speech-language pathologists | 850 | 1,060 | 210 | 24.7% | 70 |
| Nurse anesthetists | 210 | 260 | 50 | 23.8% | 20 |
| Dental hygienists | 730 | 900 | 170 | 23.3% | 70 |
| Medical records and health information technicians | 700 | 860 | 160 | 22.9% | 60 |
| Occupational therapists | 570 | 700 | 130 | 22.8% | 40 |
| Dental assistants | 1,100 | 1,350 | 250 | 22.7% | 160 |
| Respiratory therapists | 400 | 490 | 90 | 22.5% | 30 |
| Licensed practical nurses | 4,120 | 4,930 | 810 | 19.7% | 400 |
| Dietitians and nutritionists | 360 | 430 | 70 | 19.4% | 30 |
| Counselors and social workers | 12,400 | 14,740 | 2,340 | 18.9% | 1,680 |
| Registered nurses | 12,790 | 15,190 | 2,400 | 18.8% | 940 |
| Radiologic technologists | 890 | 1,040 | 150 | 16.9% | 60 |
| Occupational therapy assistants | 120 | 140 | 20 | 16.7% | 20 |
| Orderlies | 310 | 360 | 50 | 16.1% | 40 |
| Medical and clinical laboratory technicians | 590 | 680 | 90 | 15.3% | 50 |
| Nursing assistants | 7,320 | 8,410 | 1,090 | 14.9% | 980 |
| Surgical technologists | 340 | 390 | 50 | 14.7% | 30 |
| Pharmacy technicians | 1,300 | 1,490 | 190 | 14.6% | 130 |
| Cardiovascular technologists and technicians | 290 | 330 | 40 | 13.8% | 20 |
| Medical and clinical laboratory technologists | 770 | 850 | 80 | 10.4% | 60 |
| Pharmacists | 1,360 | 1,480 | 120 | 8.8% | 70 |
| Nuclear medicine technologists | 70 | 70 | 0 | 0.0% | 10 |
| Pharmacy aides | 70 | 70 | 0 | 0.0% | 10 |

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

C. Central New York

The Central New York region includes the counties of Cayuga, Cortland, Madison, Onondaga, and Oswego.

KEY FINDINGS



- Central New York, on average, had health indicators similar to the rest of the state, but some indicators suggested better average health. Health indicators for which Central New York had rates similar to the statewide rates included birthweight, chronic lower respiratory disease (CLRD) hospitalizations, and heart disease hospitalizations. The rate of low-birthweight births as a percentage of total births in Central New York was 7.6, which was very close to the statewide rate of 7.9. The rate of CLRD hospitalizations per 10,000 individuals in Central New York was 29.0; the statewide rate for this indicator was 30.6. The rate of heart disease hospitalizations per 10,000 individuals in Central New York was 100.9, which was similar to the statewide rate of 100.3. Asthma health indicators from Central New York had rates lower than the statewide rates. For example, the rate of adult asthma hospitalizations per 10,000 individuals was 2.9, whereas the statewide rate was 7.4. The rate of asthma among adults aged 45 to 64 was 3.0 per 10,000 individuals compared with the statewide rate of 9.2. Finally, the pediatric asthma hospitalization rate was 8.4 per 10,000 individuals compared with the statewide rate of 23.5 (Table 36)**
- From 2014 to 2018, ambulatory care settings consistently had the most jobs and experienced the most growth in the region. In 2018, there were 1,188 more jobs in ambulatory care settings (excluding home health care) than in 2014, an 8.4% increase (Table 37)**
- Ambulatory care settings in Central New York tended to pay higher-than-average salaries than other health care settings. For example, as of 2018, the average annual salary among speech-language pathologists was \$85,990 in ambulatory care settings, whereas those working in nursing home had an average salary of \$75,070, and those working in hospitals had an average salary of \$85,120. Similarly, the average annual salary for occupational therapists in ambulatory care settings was \$99,800, while those working in all other settings had salaries less than \$87,000 (Table 39)**
- Regional schools offering registered nursing programs had 162 more graduations in 2017 than in 2013. Conversely, programs for LPNs had 35 fewer graduations in 2017 than in 2013. In 2013, 34 respiratory therapists graduated compared to only 8 who graduated in 2017. At the same time, nursing programs have had graduation numbers gradually increase. In 2017, 47 graduations from nursing assistant programs in the region occurred, which was 26 more than the previous year (Table 40)**
- In 2019, there were 663 more RNs, 170 more nurse practitioners, and 100 more physical therapists licensed in the region than in 2015. The greatest loss of licensed professionals between 2015 and 2019 was among LPNs (572 fewer LPNs in 2015 than in 2019) (Table 41)**

Table 35. Selected Population Characteristics in the Central New York Region, 2013-2017

| Population Characteristics | Region | | Statewide Percent |
|---|---------|---------|-------------------|
| | Number | Percent | |
| Total population | 785,915 | N/A | N/A |
| Population under 100% FPL | 110,604 | 14.1% | 14.7% |
| Population under 200% FPL | 234,658 | 29.9% | 30.6% |
| Population aged birth to 17 years | 167,046 | 21.3% | 21.2% |
| Population aged 65 and older | 124,028 | 15.8% | 15.2% |
| Population female aged 15 to 44 | 153,232 | 19.5% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 333 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 6,110 | 0.8% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 1,630 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 56,353 | 7.2% | 14.4% |
| Hispanic/Latino | 29,737 | 3.8% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 20,321 | 2.6% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 3,063 | 0.4% | 0.2% |
| Two or more/other races | 20,515 | 2.6% | 2.5% |
| Population with less than a high school education ^a | 53,597 | 10.1% | 13.9% |
| Population with a high school diploma or equivalent ^a | 252,090 | 47.6% | 42.2% |
| Population with an associate degree ^a | 65,725 | 12.4% | 8.7% |
| Population with a bachelor's degree ^a | 89,895 | 17.0% | 19.9% |
| Population with a master's degree or higher ^a | 68,789 | 13.0% | 15.4% |
| Home ownership | 207,746 | 26.4% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 36. Selected Health Indicators in the Central New York Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 29,334 | 960.0 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 7,170 | 234.7 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 6,551 | 213.6 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 720 | 23.6 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 32,745 | 56.2 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 1,973 | 17.7 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 2,484 | 7.6 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 1,187 | 3.6 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 207 | 6.3 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 116,223 | 1,146.6 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 235 | 2.9 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 90 | 3.8 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 84 | 3.0 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 179 | 8.4 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 1,794 | 17.7 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 2,944 | 29.0 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 10,231 | 100.9 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 399,650 | 3,942.8 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 37. Number of Health Care Jobs in the Central New York Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 13,781 | 13,869 | 13,715 | 13,708 | 13,755 | -26 | -0.2% |
| Ambulatory care (excluding home health) | 14,125 | 14,337 | 14,677 | 14,690 | 15,313 | 1,188 | 8.4% |
| Nursing home and residential care facilities | 8,765 | 8,623 | 8,589 | 8,833 | 8,909 | 144 | 1.6% |
| Home health care | 1,829 | 2,112 | 2,142 | 2,103 | 2,098 | 269 | 14.7% |
| Total | 38,500 | 38,941 | 39,123 | 39,334 | 40,075 | 1,575 | 4.1% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 38. Number of Jobs in Selected Health Care Occupations in the Central New York Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 110 |
| Certified registered nurse anesthetists | 80 |
| Dental assistants | 1,020 |
| Dental hygienists | 830 |
| Dietetic technicians | N/A |
| Dietitians and Nutritionists | 230 |
| Home health aides | 1,620 |
| Licensed practical nurses | 3,100 |
| Medical and health services managers | 710 |
| Medical assistants | 710 |
| Medical records and health information technicians | 430 |
| Medical secretaries | 420 |
| Mental health counselors | 630 |
| Nuclear medicine technologists | N/A |
| Nurses midwives | N/A |
| Nurse practitioners | 590 |
| Nursing assistants | 3,330 |
| Occupational therapists | 390 |
| Occupational therapy assistants | N/A |
| Orderlies | 90 |
| Personal care aides | 5,580 |
| Pharmacists | 600 |
| Pharmacy aides | 170 |
| Pharmacy technicians | 560 |
| Physical therapist assistants/aides | 360 |
| Physical therapists | 770 |
| Physician assistants | 470 |
| Radiation therapists | N/A |
| Radiologic technologists and technicians | 570 |
| Registered nurses | 6,760 |
| Respiratory therapists | 250 |
| Social workers | 800 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 39. Average Annual Salary by Setting in Selected Health Care Occupations in the Central New York Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$81,830 | N/A | \$54,250 | N/A |
| Dental hygienists | \$71,490 | N/A | N/A | N/A |
| Dietetic technicians | N/A | N/A | \$50,770 | N/A |
| Dietitians and nutritionists | \$60,960 | N/A | \$65,610 | \$59,690 |
| Health care social workers | \$63,850 | \$46,990 | N/A | \$50,750 |
| Home health aides | N/A | \$32,670 | N/A | \$28,700 |
| Licensed practical nurses | \$40,390 | \$39,920 | \$46,090 | \$42,740 |
| Medical and health services managers | \$143,850 | \$115,730 | \$118,090 | \$97,450 |
| Medical assistants | \$35,420 | N/A | \$31,800 | \$26,130 |
| Medical records and health information technicians | \$37,380 | N/A | \$47,160 | \$45,810 |
| Mental health and substance abuse social workers | \$68,360 | N/A | N/A | N/A |
| Nuclear medicine technologists | N/A | N/A | \$82,150 | N/A |
| Nurse practitioners | \$105,560 | N/A | N/A | N/A |
| Occupational therapists | \$99,800 | \$71,490 | \$85,940 | \$86,960 |
| Occupational therapy assistants | N/A | N/A | N/A | \$45,150 |
| Personal care aides | N/A | \$24,950 | N/A | \$24,850 |
| Physical therapist assistants | \$46,030 | N/A | \$50,760 | \$51,130 |
| Physical therapists | \$81,800 | \$72,880 | \$89,010 | \$74,260 |
| Physician assistants | \$115,000 | N/A | N/A | N/A |
| Radiologic technologists | \$53,950 | N/A | \$64,220 | N/A |
| Registered nurses | \$61,400 | \$61,990 | \$71,110 | \$68,830 |
| Respiratory therapy technicians | N/A | N/A | \$50,530 | N/A |
| Speech-language pathologists | \$85,990 | N/A | \$85,120 | \$75,070 |
| Surgical technologists | \$45,960 | N/A | \$48,140 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 40. Number of Graduations in Selected Health Care Occupational Programs in the Central New York Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|------|------|------|------|------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 441 | 442 | 512 | 497 | 603 | 162 | 36.7% |
| Nursing assistants | 0 | 28 | 25 | 21 | 47 | 47 | N/A |
| Physician assistants | 48 | 58 | 72 | 75 | 89 | 41 | 85.4% |
| Nurse practitioners/clinical nurse specialists | 27 | 87 | 97 | 90 | 61 | 34 | 125.9% |
| Dental assistants | 42 | 52 | 49 | 51 | 56 | 14 | 33.3% |
| Social workers | 79 | 88 | 88 | 75 | 90 | 11 | 13.9% |
| Dietetic technicians | 0 | 0 | 1 | 2 | 7 | 7 | N/A |
| Medical and clinical laboratory technologists | 19 | 21 | 22 | 18 | 23 | 4 | 21.1% |
| Surgical technologists | 11 | 13 | 11 | 13 | 15 | 4 | 36.4% |
| Physical therapist assistants and aides | 17 | 17 | 19 | 11 | 20 | 3 | 17.6% |
| Medical records and health information technicians | 29 | 28 | 29 | 22 | 31 | 2 | 6.9% |
| Medical assistants | 162 | 178 | 167 | 112 | 160 | -2 | -1.2% |
| Physical therapists | 46 | 52 | 37 | 46 | 38 | -8 | -17.4% |
| Pharmacy technicians and aides | 33 | 36 | 37 | 42 | 21 | -12 | -36.4% |
| Medical secretaries | 58 | 58 | 58 | 41 | 41 | -17 | -29.3% |
| Respiratory therapists | 34 | 42 | 34 | 9 | 8 | -26 | -76.5% |
| Licensed practical nurses | 221 | 257 | 205 | 204 | 186 | -35 | -15.8% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 41. Number of Licensed Individuals in Selected Health Care Occupations in the Central New York Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 127 | 109 | 110 | 101 | 97 | -30 | -23.6% |
| Clinical laboratory technologists | 569 | 552 | 559 | 537 | 497 | -72 | -12.7% |
| Dental assistants | 222 | 242 | 247 | 252 | 236 | 14 | 6.3% |
| Dental hygienists | 570 | 572 | 584 | 553 | 551 | -19 | -3.3% |
| Dietitians/nutritionists, certified | 210 | 218 | 217 | 214 | 214 | 4 | 1.9% |
| Licensed practical nurses | 5,244 | 4,927 | 4,896 | 4,839 | 4,672 | -572 | -10.9% |
| Nurse practitioner | 1,152 | 1,234 | 1,268 | 1,267 | 1,322 | 170 | 14.8% |
| Occupational therapists | 390 | 395 | 418 | 448 | 461 | 71 | 18.2% |
| Occupational therapy assistants | 94 | 83 | 88 | 113 | 123 | 29 | 30.9% |
| Pharmacists | 805 | 821 | 819 | 822 | 844 | 39 | 4.8% |
| Physical therapists | 822 | 855 | 872 | 899 | 922 | 100 | 12.2% |
| Physical therapy assistants | 278 | 276 | 285 | 297 | 314 | 36 | 12.9% |
| Registered physician assistants | 508 | 568 | 590 | 568 | 595 | 87 | 17.1% |
| Registered professional nurses | 11,918 | 12,064 | 12,217 | 12,428 | 12,581 | 663 | 5.6% |
| Respiratory therapists | 404 | 400 | 399 | 388 | 382 | -22 | -5.4% |
| Social workers | 1,494 | 1,513 | 1,529 | 1,504 | 1,491 | -3 | -0.2% |
| Speech-language pathologists | 553 | 552 | 570 | 576 | 593 | 40 | 7.2% |
| Total | 25,360 | 25,381 | 25,668 | 25,806 | 25,895 | 535 | 2.1% |

Source: New York State Education Department, Office of Professions.

Table 42. Employment Projections for Selected Health Care Occupations in the Central New York Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|-------|-------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Physician assistants | 660 | 980 | 320 | 48.5% | 80 |
| Emergency medical technicians and paramedics | 720 | 1,050 | 330 | 45.8% | 80 |
| Medical assistants | 790 | 1,130 | 340 | 43.0% | 140 |
| Home health aides | 2,520 | 3,570 | 1,050 | 41.7% | 440 |
| Nurse practitioners | 710 | 1,000 | 290 | 40.8% | 70 |
| Personal care aides | 5,390 | 7,320 | 1,930 | 35.8% | 1,080 |
| Diagnostic medical sonographers | 240 | 320 | 80 | 33.3% | 20 |
| Physical therapists | 800 | 1,060 | 260 | 32.5% | 60 |
| Medical secretaries | 1,020 | 1,330 | 310 | 30.4% | 160 |
| Occupational therapists | 420 | 520 | 100 | 23.8% | 30 |
| Respiratory therapists | 270 | 330 | 60 | 22.2% | 20 |
| Speech-language pathologists | 410 | 500 | 90 | 22.0% | 30 |
| Dental hygienists | 730 | 890 | 160 | 21.9% | 60 |
| Dental assistants | 890 | 1,080 | 190 | 21.3% | 130 |
| Radiologic technologists | 740 | 890 | 150 | 20.3% | 60 |
| Dietitians and Nutritionists | 200 | 240 | 40 | 20.0% | 20 |
| Medical and clinical laboratory technologists | 500 | 600 | 100 | 20.0% | 40 |
| Cardiovascular technologists and technicians | 150 | 180 | 30 | 20.0% | 10 |
| Licensed practical nurses | 3,180 | 3,800 | 620 | 19.5% | 310 |
| Counselors and Social Workers | 7,490 | 8,910 | 1,420 | 19.0% | 1,020 |
| Registered nurses | 7,560 | 8,980 | 1,420 | 18.8% | 560 |
| Surgical technologists | 220 | 260 | 40 | 18.2% | 20 |
| Medical records and health information technicians | 560 | 660 | 100 | 17.9% | 50 |
| Nursing assistants | 4,290 | 5,010 | 720 | 16.8% | 590 |
| Nuclear medicine technologists | 60 | 70 | 10 | 16.7% | 10 |
| Pharmacy technicians | 650 | 730 | 80 | 12.3% | 60 |
| Pharmacists | 680 | 710 | 30 | 4.4% | 30 |
| Pharmacy aides | 110 | 90 | -20 | -18.2% | 10 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

D. Finger Lakes

The Finger Lakes region includes the counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates.

KEY FINDINGS

- Of the 18 health indicators tracked in this report, most suggest that the Finger Lakes region is healthier than the rest of the state. Despite this, several indicators suggest poorer health in this region. For example, there were 926.2 total deaths per 100,000 individuals in the region compared with the statewide rate of 769.8 deaths per 100,000. The teen fertility rate per 1,000 females aged 15 to 19 was 16.0 compared with the statewide rate of 14.6. Finally, deaths due to all cancers per 100,000 total population as 209.7 compared with the statewide rate of 176.2 (Table 44)
- The greatest growth in health care jobs in this region was in home health care, which experienced a 41.8% increase in jobs between 2014 and 2018 (3,589 jobs in 2014 compared with 5,089 jobs in 2018). Hospitals had 33,911 jobs in the region in 2018, which was 3,505 more jobs than in 2014 (11.5% growth). Ambulatory care settings (excluding home health care) lost 1,147 jobs during the same period (17,497 jobs in 2014 compared with 16,350 jobs in 2018) (Table 45)
- RNs and personal care aides were two of the most numerous jobs in the region (12,950 and 8,560 jobs, respectively, in 2018), followed by nursing assistants (6,370) and home health aides (5,430) (Table 46)
- Between 2013 and 2017, a number of professions experienced a decline in regional occupational program graduations, including respiratory therapists, medical assistants, dental hygienists, dental assistants, medical secretaries, and medical records and health information techs. In contrast, programs for RNs saw graduation numbers increase every year. There were 1,217 RN graduations in 2017 compared with 945 in 2013, a 28.8% increase (Table 48)
- There were 347 fewer LPNs licensed in the region in 2019 than in 2015 (6,242 compared with 6,589). However, from 2015 to 2019, licensed clinical laboratory technicians increased by 40.8%, representing the largest increase in the region among the occupations examined (Table 49)



Table 43. Selected Population Characteristics in the Finger Lakes Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 1,214,919 | N/A | N/A |
| Population under 100% FPL | 161,532 | 13.3% | 14.7% |
| Population under 200% FPL | 353,949 | 29.1% | 30.6% |
| Population aged birth to 17 years | 255,461 | 21.0% | 21.2% |
| Population aged 65 and older | 199,339 | 16.4% | 15.2% |
| Population female aged 15 to 44 | 230,512 | 19.0% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 365 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 10,816 | 0.9% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 2,600 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 122,722 | 10.1% | 14.4% |
| Hispanic/Latino | 80,222 | 6.6% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 31,835 | 2.6% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 2,643 | 0.2% | 0.2% |
| Two or more/other races | 26,500 | 2.2% | 2.5% |
| Population with less than a high school education ^a | 82,738 | 9.9% | 13.9% |
| Population with a high school diploma or equivalent ^a | 384,707 | 46.1% | 42.2% |
| Population with an associate degree ^a | 101,548 | 12.2% | 8.7% |
| Population with a bachelor's degree ^a | 149,516 | 17.9% | 19.9% |
| Population with a master's degree or higher ^a | 116,363 | 13.9% | 15.4% |
| Home ownership | 666,695 | 70.3% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 44. Selected Health Indicators in the Finger Lakes Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 35,500 | 926.2 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 8,120 | 211.9 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 8,055 | 209.7 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 735 | 19.2 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 40,672 | 56.1 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 2063 | 16.0 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 3,110 | 7.7 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 1415 | 3.7 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 248 | 6.1 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 140,108 | 1,100.0 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 470 | 4.7 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 153 | 5.0 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 197 | 5.5 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 221 | 8.3 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 2,064 | 16.2 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 3,450 | 27.1 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 12,803 | 100.5 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 538,356 | 4,226.8 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 45. Number of Health Care Jobs in the Finger Lakes Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 30,406 | 30,977 | 32,027 | 32,738 | 33,911 | 3,505 | 11.5% |
| Ambulatory care (excluding home health) | 17,497 | 17,067 | 16,863 | 16,719 | 16,350 | -1,147 | -6.6% |
| Nursing home and residential care facilities | 13,299 | 13,624 | 13,757 | 13,842 | 13,948 | 649 | 4.9% |
| Home health care | 3,589 | 3,924 | 4,478 | 4,901 | 5,089 | 1,500 | 41.8% |
| Total | 64,791 | 65,592 | 67,125 | 68,200 | 69,298 | 4,507 | 7.0% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 46. Number of Jobs in Selected Health Care Occupations in the Finger Lakes Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 130 |
| Certified registered nurse anesthetists | 80 |
| Dental assistants | 1,230 |
| Dental hygienists | 1,090 |
| Dietetic technicians | 100 |
| Dietitians and Nutritionists | 320 |
| Home health aides | 5,430 |
| Licensed practical nurses | 4,230 |
| Medical and health services managers | 1,270 |
| Medical assistants | 720 |
| Medical records and health information technicians | 580 |
| Medical secretaries | 600 |
| Mental health counselors | 1,090 |
| Nuclear medicine technologists | 80 |
| Nurse midwives | N/A |
| Nurse practitioners | 1,150 |
| Nursing assistants | 6,370 |
| Occupational therapists | 710 |
| Occupational therapy assistants | 100 |
| Orderlies | 250 |
| Personal care aides | 8,560 |
| Pharmacists | 1,000 |
| Pharmacy aides | 80 |
| Pharmacy technicians | 1,220 |
| Physical therapist assistants/aides | 360 |
| Physical therapists | 1,100 |
| Physician assistants | 860 |
| Radiation therapist | 140 |
| Radiologic technologists and technicians | 910 |
| Registered nurses | 12,950 |
| Respiratory therapists | 460 |
| Social workers | 1,120 |
| Speech-language pathologists | 870 |
| Surgical technologists | 340 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 47. Average Annual Salary by Setting in Selected Health Care Occupations in the Finger Lakes Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$65,690 | N/A | \$50,610 | N/A |
| Child, family, and school social workers | N/A | \$55,240 | \$48,400 | \$44,550 |
| Clinical, counseling, and school psychologists | \$70,580 | N/A | N/A | N/A |
| Dental hygienists | \$64,460 | N/A | N/A | N/A |
| Dietitians and nutritionists | \$60,330 | N/A | \$57,300 | \$58,650 |
| Health care social workers | \$51,590 | \$60,540 | \$59,450 | \$55,650 |
| Home health aides | N/A | \$28,890 | N/A | \$25,060 |
| Licensed practical nurses | \$41,150 | \$45,280 | \$41,180 | \$42,920 |
| Medical and health services managers | \$160,800 | \$108,120 | \$121,650 | \$115,650 |
| Medical assistants | \$34,950 | N/A | \$31,550 | N/A |
| Medical records and health information technicians | \$32,900 | \$39,000 | \$47,220 | \$37,820 |
| Mental health and substance abuse social workers | \$53,480 | N/A | \$63,970 | N/A |
| Nuclear medicine technologists | N/A | N/A | \$81,530 | N/A |
| Nurses midwives | N/A | N/A | \$112,950 | N/A |
| Nurse practitioners | \$108,750 | N/A | \$103,530 | \$103,710 |
| Occupational therapists | \$64,670 | \$75,210 | \$80,440 | \$83,670 |
| Occupational therapy assistants | N/A | N/A | \$54,690 | N/A |
| Personal care aides | \$27,370 | \$24,690 | N/A | \$25,220 |
| Pharmacy aides | N/A | N/A | N/A | N/A |
| Physical therapist assistants | \$47,200 | \$57,220 | \$50,750 | \$53,830 |
| Physician assistants | \$110,420 | N/A | \$106,450 | N/A |
| Radiation therapists | N/A | N/A | \$78,290 | N/A |
| Radiologic technologists | \$52,650 | N/A | \$56,060 | N/A |
| Registered nurses | \$61,400 | \$65,930 | \$67,750 | \$67,510 |
| Speech-language pathologists | \$65,570 | \$85,410 | \$79,820 | \$94,420 |
| Surgical technologists | \$39,520 | N/A | \$42,690 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 48. Number of Graduations in Selected Health Care Occupational Programs in the Finger Lakes Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|------|-------|-------|-------|-------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 945 | 1,045 | 1,179 | 1,346 | 1,217 | 272 | 28.8% |
| Social workers | 119 | 130 | 139 | 146 | 190 | 71 | 59.7% |
| Physician assistants | 25 | 24 | 4 | 27 | 60 | 35 | 140.0% |
| Occupational therapists | 26 | 32 | 31 | 37 | 48 | 22 | 84.6% |
| Nurse practitioners/clinical nurse specialists | 62 | 67 | 80 | 65 | 80 | 18 | 29.0% |
| Physical therapists | 36 | 42 | 43 | 49 | 54 | 18 | 50.0% |
| Pharmacists | 66 | 73 | 76 | 69 | 82 | 16 | 24.2% |
| Medical and health services managers | 41 | 26 | 65 | 60 | 55 | 14 | 34.1% |
| Licensed practical nurses | 265 | 260 | 319 | 275 | 270 | 5 | 1.9% |
| Physical therapist assistants and aides | 26 | 19 | 23 | 27 | 28 | 2 | 7.7% |
| Medical and clinical laboratory technologists | 14 | 7 | 6 | 14 | 10 | -4 | -28.6% |
| Medical records and health information technicians | 17 | 19 | 23 | 18 | 13 | -4 | -23.5% |
| Medical secretaries | 77 | 83 | 85 | 59 | 68 | -9 | -11.7% |
| Dental assistants | 81 | 71 | 92 | 83 | 71 | -10 | -12.3% |
| Dental hygienists | 42 | 29 | 30 | 25 | 31 | -11 | -26.2% |
| Respiratory therapists | 39 | 21 | 21 | 0 | 0 | -39 | -100.0% |
| Medical assistants | 157 | 139 | 122 | 57 | 67 | -90 | -57.3% |
| Medical and clinical laboratory technicians | N/A | N/A | 15 | 9 | 17 | N/A | N/A |

N/A, not available.

Source: Integrated Postsecondary Education Data System.

Table 49. Number of Licensed Individuals in Selected Health Care Occupations in the Finger Lakes Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 76 | 83 | 98 | 102 | 107 | 31 | 40.8% |
| Clinical laboratory technologists | 955 | 911 | 915 | 910 | 814 | -141 | -14.8% |
| Dental assistants | 255 | 258 | 266 | 283 | 292 | 37 | 14.5% |
| Dental hygienists | 1,081 | 1,101 | 1,131 | 1,082 | 1,084 | 3 | 0.3% |
| Dietitians/nutritionists, certified | 281 | 281 | 275 | 284 | 286 | 5 | 1.8% |
| Licensed practical nurses | 6,589 | 6,288 | 6,366 | 6,367 | 6,242 | -347 | -5.3% |
| Nurse practitioners | 1,610 | 1,629 | 1,737 | 1,773 | 1,871 | 261 | 16.2% |
| Occupational therapists | 710 | 726 | 755 | 796 | 827 | 117 | 16.5% |
| Occupational therapy assistants | 198 | 184 | 181 | 183 | 195 | -3 | -1.5% |
| Pharmacists | 1,221 | 1,333 | 1,281 | 1,260 | 1,289 | 68 | 5.6% |
| Physical therapists | 1,142 | 1,163 | 1,181 | 1,231 | 1,286 | 144 | 12.6% |
| Physical therapy assistants | 348 | 374 | 377 | 381 | 389 | 41 | 11.8% |
| Registered physician assistants | 812 | 860 | 902 | 934 | 997 | 185 | 22.8% |
| Registered professional nurses | 17,536 | 17,829 | 17,946 | 18,317 | 18,565 | 1,029 | 5.9% |
| Respiratory therapists | 352 | 354 | 376 | 374 | 384 | 32 | 9.1% |
| Social workers | 2,511 | 2,489 | 2,483 | 2,515 | 2,569 | 58 | 2.3% |
| Speech-language pathologists | 1,112 | 1,097 | 1,129 | 1,143 | 1,164 | 52 | 4.7% |
| Total | 36,789 | 36,960 | 37,399 | 37,935 | 38,361 | 1,572 | 4.3% |

Source: New York State Education Department, Office of Professions.

Table 50. Employment Projections for Selected Health Care Occupations in the Finger Lakes Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|--------|--------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 5,040 | 7,250 | 2,210 | 43.8% | 900 |
| Emergency medical technicians and paramedics | 1,270 | 1,770 | 500 | 39.4% | 140 |
| Nurse practitioners | 1,240 | 1,720 | 480 | 38.7% | 120 |
| Physician assistants | 900 | 1,240 | 340 | 37.8% | 90 |
| Personal care aides | 9,530 | 12,950 | 3,420 | 35.9% | 1,920 |
| Medical secretaries | 1,030 | 1,390 | 360 | 35.0% | 160 |
| Physical therapists | 1,210 | 1,630 | 420 | 34.7% | 100 |
| Medical assistants | 1,050 | 1,370 | 320 | 30.5% | 160 |
| Diagnostic medical sonographers | 430 | 550 | 120 | 27.9% | 40 |
| Respiratory therapists | 440 | 560 | 120 | 27.3% | 40 |
| Occupational therapists | 730 | 900 | 170 | 23.3% | 60 |
| Dental assistants | 1,280 | 1,560 | 280 | 21.9% | 180 |
| Dental hygienists | 1,170 | 1,410 | 240 | 20.5% | 100 |
| Counselors and social workers | 12,410 | 14,920 | 2,510 | 20.2% | 1,690 |
| Medical records and health information technicians | 550 | 660 | 110 | 20.0% | 50 |
| Speech-language pathologists | 820 | 970 | 150 | 18.3% | 60 |
| Registered nurses | 13,250 | 15,660 | 2,410 | 18.2% | 970 |
| Surgical technologists | 390 | 460 | 70 | 17.9% | 40 |
| Radiologic technologists | 1,020 | 1,200 | 180 | 17.6% | 80 |
| Dietitians and nutritionists | 360 | 420 | 60 | 16.7% | 30 |
| Medical and clinical laboratory technologists | 1,020 | 1,170 | 150 | 14.7% | 80 |
| Licensed practical nurses | 4,270 | 4,850 | 580 | 13.6% | 380 |
| Nursing assistants | 6,950 | 7,870 | 920 | 13.2% | 920 |
| Nuclear medicine technologists | 80 | 90 | 10 | 12.5% | 10 |
| Pharmacy technicians | 1,310 | 1,440 | 130 | 9.9% | 120 |
| Pharmacists | 930 | 1,000 | 70 | 7.5% | 50 |
| Cardiovascular technologists and technicians | 140 | 150 | 10 | 7.1% | 10 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

E. Hudson Valley

The Hudson Valley region includes the counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester.



KEY FINDINGS

- The Hudson Valley region had a higher percentage of individuals with either a bachelor's (21.0%) or master's (18.7%) degree compared with the rest of the state. On many indicators, the region was also healthier than the rest of the state. For example, total deaths per 100,000 individuals was 742.3 compared with the statewide rate of 769.8. The rate of diabetes hospitalizations per 10,000 individuals was 13.6 compared with the statewide rate of 17.6. Finally, the rate for heart disease hospitalizations per 10,000 individuals was 92.4, whereas the statewide rate was 100.3 per 10,000 (Table 51 and Table 52)
- The number of jobs in the ambulatory care setting (excluding home health care) grew by 10.3% between 2014 and 2018, increasing by 4,418 during that period. Home health care experienced 6.9% job growth during the same period (767 more jobs in 2018 than in 2014). In contrast, nursing homes and residential care facilities lost 713 jobs in the region between 2014 and 2018 (Table 53)
- Medical assistants earned an average annual salary of \$41,550 in hospitals and \$38,360 in ambulatory care settings in this region as of 2018. Similarly, speech-language pathologists earned an average of \$96,760 in hospitals, \$90,780 in ambulatory care settings, and \$84,040 in nursing homes. However, certain occupations tended to earn more in ambulatory care settings than in other settings. For example, medical and health services managers earned an average annual salary of \$160,410 in ambulatory care settings, \$153,890 in hospitals, \$116,100 in home health care, and \$115,150 in nursing homes (Table 55)
- Graduations from a number of health care occupational programs increased in the region between 2013 and 2017. For example, dental assistants had 72 more graduations in 2017 than in 2013, and there were 39 more graduations from physical therapist programs in the region in 2017 than in 2013. Conversely, there were 125 fewer LPN graduates in 2017 than in 2013 and 395 fewer graduations of medical assistants in 2017 than in 2013 (Table 56)

Table 51. Selected Population Characteristics in the Hudson Valley Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 2,329,583 | N/A | N/A |
| Population under 100% FPL | 244,837 | 10.5% | 14.7% |
| Population under 200% FPL | 540,856 | 23.2% | 30.6% |
| Population aged birth to 17 years | 536,848 | 23.0% | 21.2% |
| Population aged 65 and older | 362,953 | 15.6% | 15.2% |
| Population female aged 15 to 44 | 428,698 | 18.4% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 816 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 17,115 | 0.7% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 8,253 | 0.4% | 0.3% |
| Black/African American, non-Hispanic | 251,474 | 10.8% | 14.4% |
| Hispanic/Latino | 442,732 | 19.0% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 105,001 | 4.5% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 3,439 | 0.1% | 0.2% |
| Two or more/other races | 54,946 | 2.4% | 2.5% |
| Population with less than a high school education ^a | 177,335 | 11.3% | 13.9% |
| Population with a high school diploma or equivalent ^a | 640,163 | 40.8% | 42.2% |
| Population with an associate degree ^a | 129,652 | 8.3% | 8.7% |
| Population with a bachelor's degree ^a | 329,809 | 21.0% | 19.9% |
| Population with a master's degree or higher ^a | 293,701 | 18.7% | 15.4% |
| Home ownership | 537,231 | 23.1% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 52. Selected Health Indicators in the Hudson Valley Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 51,831 | 742.3 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 14,313 | 205.0 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 11,881 | 170.7 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 1,097 | 15.7 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 78,881 | 61.3 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 2,475 | 10.2 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 5,867 | 7.4 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 3,123 | 4.1 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 312 | 4.0 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 253,618 | 1,089.5 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 1,028 | 5.7 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 297 | 5.4 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 438 | 6.7 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 877 | 13.6 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 3,175 | 13.6 | 34,555 | 17.6 |
| CLRD hospitalizations, per 10,000 | 6,378 | 27.4 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 21,515 | 92.4 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 835,314 | 3,588.2 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 53. Number of Health Care Jobs in the Hudson Valley Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|----------------|----------------|----------------|----------------|----------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 40,633 | 42,007 | 42,156 | 42,007 | 42,156 | 1,523 | 3.8% |
| Ambulatory care (excluding home health) | 42,939 | 44,305 | 44,693 | 46,360 | 47,357 | 4,418 | 10.3% |
| Nursing home and residential care facilities | 21,118 | 21,325 | 21,102 | 20,310 | 20,405 | -713 | -3.4% |
| Home health care | 11,037 | 11,171 | 11,847 | 12,055 | 11,804 | 767 | 6.9% |
| Total | 113,251 | 116,098 | 118,275 | 120,732 | 121,722 | 8,471 | 7.5% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 54. Number of Jobs in Selected Health Care Occupations in the Hudson Valley Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 420 |
| Certified registered nurse anesthetists | N/A |
| Dental assistants | 2,350 |
| Dental hygienists | 1,250 |
| Dietetic technicians | 140 |
| Dietitians and Nutritionists | 650 |
| Home health aides | 10,490 |
| Licensed practical nurses | 5,790 |
| Medical and health services managers | 2,920 |
| Medical assistants | 2,460 |
| Medical records and health information technicians | 950 |
| Medical secretaries | 550 |
| Mental health counselors | 1,890 |
| Nuclear medicine technologists | N/A |
| Nurse midwives | N/A |
| Nurse practitioners | 1,200 |
| Nursing assistants | 10,980 |
| Occupational therapists | 1,580 |
| Occupational therapy assistants | 510 |
| Orderlies | 200 |
| Personal care aides | 17,660 |
| Pharmacists | 1,870 |
| Pharmacy aides | 220 |
| Pharmacy technicians | 1,620 |
| Physical therapist assistants/aides | 850 |
| Physical therapists | 2,090 |
| Physician assistants | 1,030 |
| Radiation therapists | N/A |
| Radiologic technologists and technicians | 1,500 |
| Registered nurses | 20,320 |
| Respiratory therapists | 510 |
| Social workers | 3,090 |
| Speech-language pathologists | 1,890 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 55. Average Annual Salary by Setting in Selected Health Care Occupations in the Hudson Valley Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$71,780 | N/A | \$67,220 | N/A |
| Child, family, and school social workers | \$57,670 | N/A | \$55,970 | \$37,560 |
| Clinical, counseling, and school psychologists | \$96,450 | N/A | \$89,310 | N/A |
| Dental hygienists | \$89,800 | N/A | N/A | N/A |
| Dietitians and nutritionists | \$83,830 | N/A | \$74,320 | \$81,740 |
| Health care social workers | \$73,820 | \$72,310 | \$75,540 | \$68,050 |
| Home health aides | N/A | \$27,150 | N/A | \$27,420 |
| Licensed practical nurses | \$48,340 | \$47,350 | \$55,730 | \$54,140 |
| Medical and health services managers | \$160,410 | \$116,100 | \$153,890 | \$115,150 |
| Medical assistants | \$38,360 | N/A | \$41,550 | N/A |
| Medical records and health information Technicians | \$40,260 | \$40,300 | \$55,350 | \$47,010 |
| Mental health and substance abuse social workers | \$71,710 | N/A | \$71,120 | \$50,670 |
| Nuclear medicine technologists | \$101,470 | N/A | \$101,000 | N/A |
| Nurses midwives | \$122,110 | N/A | N/A | N/A |
| Nurse practitioners | \$122,770 | \$121,190 | \$126,990 | N/A |
| Occupational therapists | \$93,370 | \$110,880 | \$90,780 | \$89,350 |
| Occupational therapy assistants | \$60,740 | N/A | \$61,390 | \$64,650 |
| Personal care aides | N/A | \$26,730 | N/A | \$25,800 |
| Pharmacy aides | N/A | N/A | \$38,020 | N/A |
| Physical therapist assistants | \$54,990 | N/A | \$59,500 | \$66,530 |
| Physician assistants | \$123,710 | N/A | \$126,910 | N/A |
| Radiation therapists | N/A | N/A | \$116,090 | N/A |
| Radiologic technologists | \$72,270 | N/A | \$78,810 | N/A |
| Registered nurses | \$78,190 | \$78,950 | \$97,100 | \$85,210 |
| Respiratory therapy technicians | N/A | N/A | \$71,940 | N/A |
| Speech-language pathologists | \$90,780 | N/A | \$96,760 | \$84,040 |
| Surgical technologists | \$59,600 | N/A | \$50,150 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 56. Number of Graduations in Selected Health Care Occupational Programs in the Hudson Valley Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|------|------|------|------|------|------------------------------|---------|
| | | | | | | Number | Percent |
| Medical and health service managers | 1 | 3 | 39 | 94 | 100 | 99 | 9900.0% |
| Dental assistants | 1 | 0 | 0 | 95 | 73 | 72 | 7200.0% |
| Physical therapists | 144 | 175 | 168 | 150 | 183 | 39 | 27.1% |
| Nurse practitioners/clinical nurse specialists | 27 | 28 | 45 | 59 | 63 | 36 | 133.3% |
| Medical records and health information technicians | 0 | 0 | 19 | 21 | 28 | 28 | N/A |
| Occupational therapy assistants and aides | 60 | 75 | 62 | 75 | 85 | 25 | 41.7% |
| Surgical technologists | 0 | 0 | 13 | 18 | 21 | 21 | N/A |
| Medical and clinical laboratory technologists | 10 | 15 | 26 | 21 | 28 | 18 | 180.0% |
| Speech language pathologists | 22 | 70 | 72 | 34 | 34 | 12 | 54.5% |
| Occupational therapists | 55 | 62 | 44 | 67 | 65 | 10 | 18.2% |
| Physician assistants | 52 | 35 | 50 | 62 | 59 | 7 | 13.5% |
| Physical therapist assistants and aides | 16 | 23 | 21 | 20 | 21 | 5 | 31.3% |
| Radiologic technologists | 12 | 15 | 10 | 0 | 16 | 4 | 33.3% |
| Dental hygienists | 14 | 13 | 16 | 14 | 14 | 0 | 0.0% |
| Medical and clinical laboratory technicians | 25 | 23 | 20 | 20 | 22 | -3 | -12.0% |
| Respiratory therapists | 29 | 28 | 32 | 31 | 26 | -3 | -10.3% |
| Cardiovascular technologists and technicians | 12 | 18 | 15 | 0 | 0 | -12 | -100.0% |
| Medical secretaries | 57 | 79 | 53 | 57 | 28 | -29 | -50.9% |
| Registered nurses | 956 | 913 | 854 | 794 | 863 | -93 | -9.7% |
| Licensed practical nurses | 450 | 432 | 385 | 345 | 325 | -125 | -27.8% |
| Medical assistants | 560 | 470 | 302 | 193 | 165 | -395 | -70.5% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 57. Number of Licensed Individuals in Selected Health Care Occupations in the Hudson Valley Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 238 | 216 | 223 | 234 | 235 | -3 | -1.3% |
| Clinical laboratory technologists | 1,424 | 1,343 | 1,351 | 1,346 | 1,257 | -167 | -11.7% |
| Dental assistants | 127 | 164 | 147 | 135 | 137 | 10 | 7.9% |
| Dental hygienists | 1,227 | 1,245 | 1,263 | 1,248 | 1,263 | 36 | 2.9% |
| Dietitians/nutritionists, certified | 768 | 781 | 790 | 821 | 820 | 52 | 6.8% |
| Licensed practical nurses | 8,231 | 7,867 | 7,934 | 7,861 | 7,606 | -625 | -7.6% |
| Nurse practitioners | 2,461 | 2,552 | 2,811 | 2,931 | 3,084 | 623 | 25.3% |
| Occupational therapists | 1,566 | 1,611 | 1,645 | 1,680 | 1,743 | 177 | 11.3% |
| Occupational therapy assistants | 802 | 799 | 837 | 882 | 913 | 111 | 13.8% |
| Pharmacists | 2,174 | 2,353 | 2,303 | 2,166 | 2,166 | -8 | -0.4% |
| Physical therapists | 2,564 | 2,651 | 2,646 | 2,703 | 2,749 | 185 | 7.2% |
| Physical therapy assistants | 549 | 560 | 573 | 597 | 597 | 48 | 8.7% |
| Registered physician assistants | 1,097 | 1,183 | 1,247 | 1,248 | 1,305 | 208 | 19.0% |
| Registered professional nurses | 33,643 | 33,654 | 33,832 | 34,408 | 34,669 | 1,026 | 3.0% |
| Respiratory therapists | 716 | 711 | 722 | 732 | 744 | 28 | 3.9% |
| Social workers | 8,001 | 7,871 | 7,820 | 7,692 | 7,670 | -331 | -4.1% |
| Speech-language pathologists | 2,388 | 2,430 | 2,512 | 2,596 | 2,654 | 266 | 11.1% |
| Total | 67,976 | 67,991 | 68,656 | 69,280 | 69,612 | 1,636 | 2.4% |

Source: New York State Education Department, Office of Professions.

Table 58. Employment Projections for Selected Health Care Occupations in the Hudson Valley Region, Ranked by Largest Increase in Percentage, 2016 and 2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|--------|--------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Physician assistants | 1,190 | 1,890 | 700 | 58.8% | 150 |
| Nurse practitioners | 1,190 | 1,830 | 640 | 53.8% | 140 |
| Emergency medical technicians and paramedics | 2,070 | 3,150 | 1,080 | 52.2% | 260 |
| Home health aides | 11,720 | 17,800 | 6,080 | 51.9% | 2,250 |
| Medical assistants | 3,230 | 4,800 | 1,570 | 48.6% | 580 |
| Medical secretaries | 1,450 | 1,990 | 540 | 37.2% | 240 |
| Diagnostic medical sonographers | 690 | 930 | 240 | 34.8% | 70 |
| Physical therapists | 2,030 | 2,710 | 680 | 33.5% | 160 |
| Personal care aides | 21,530 | 28,310 | 6,780 | 31.5% | 4,170 |
| Respiratory therapists | 670 | 860 | 190 | 28.4% | 50 |
| Occupational therapists | 1,210 | 1,520 | 310 | 25.6% | 100 |
| Radiologic technologists | 1,820 | 2,270 | 450 | 24.7% | 150 |
| Licensed practical nurses | 6,690 | 8,290 | 1,600 | 23.9% | 680 |
| Dietitians and Nutritionists | 840 | 1,040 | 200 | 23.8% | 80 |
| Medical records and health information technicians | 980 | 1,210 | 230 | 23.5% | 90 |
| Dental hygienists | 1,400 | 1,720 | 320 | 22.9% | 120 |
| Dental assistants | 2,760 | 3,390 | 630 | 22.8% | 400 |
| Registered nurses | 22,390 | 27,340 | 4,950 | 22.1% | 1,750 |
| Speech-language pathologists | 1,420 | 1,730 | 310 | 21.8% | 110 |
| Counselors and social workers | 20,510 | 24,900 | 4,390 | 21.4% | 2,830 |
| Cardiovascular technologists and technicians | 360 | 430 | 70 | 19.4% | 30 |
| Nursing assistants | 12,500 | 14,850 | 2,350 | 18.8% | 1,760 |
| Nuclear medicine technologists | 110 | 130 | 20 | 18.2% | 10 |
| Pharmacy technicians | 1,720 | 2,020 | 300 | 17.4% | 170 |
| Surgical technologists | 470 | 550 | 80 | 17.0% | 50 |
| Medical and clinical laboratory technologists | 950 | 1,090 | 140 | 14.7% | 80 |
| Pharmacists | 2,250 | 2,460 | 210 | 9.3% | 120 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

F. Long Island

The Long Island region includes the counties of Nassau and Suffolk.

KEY FINDINGS

- The population in the Long Island region was slightly older than statewide, with 16.2% of Long Islanders aged sixty-five and older compared with the statewide percentage of 15.2%. This region was also highly educated: 21.6% of the people in the region had a bachelor's degree compared with the statewide percentage of 19.9%, while the percentage of the population with a master's degree was 17.8% compared with the statewide percentage of 15.4% (Table 59)
- For most indicators, health in the Long Island Region was better than the statewide experience, with a few exceptions. For example, the rate for total deaths per 100,000 individuals was 793.6 compared with the statewide rate of 769.8, and the rate for deaths due to heart disease per 100,000 individuals was 253.3 compared with the statewide rate of 220.7. The rate of total hospitalizations per 10,000 individuals for the region was 1,196.5, whereas the statewide rate was 1,154.4 (Table 60)
- Hospitals had the most health care jobs in the region in 2018 (73,929), but home health care showed the highest growth between 2014 and 2018 (27.4%). Overall, health care jobs increased by 12.7% between 2014 and 2018 (Table 61)
- In 2018, the number of RNs (29,470), personal care aides (22,810), and home health aides (15,090) were the highest among health care occupations in the region (Table 62)
- Programs for medical and health services managers in the region experienced a greater increase in graduations between 2013 and 2017 (133.0%) than did all other programs. Graduations from programs for nurse practitioners grew 55.9% during the same period. In contrast, there were 31.0% fewer graduations from medical assistant programs and 13.2% fewer graduations from LPN programs in the region in 2017 than in 2013 (Table 64)
- Licensed professionals in the Long Island region whose numbers declined between 2015 and 2019: Clinical laboratory technicians and clinical laboratory technologists, declined by 16.6% and 4.9%, respectively; licensed dental assistants declined by 11.5%; and licensed practical nurses declined by 7.7% (Table 65)



Table 59. Selected Population Characteristics in the Long Island Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|--|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 2,860,664 | N/A | N/A |
| Population under 100% FPL | 184,179 | 6.4% | 14.7% |
| Population under 200% FPL | 465,833 | 16.3% | 30.6% |
| Population aged birth to 17 years | 627,918 | 22.0% | 21.2% |
| Population aged 65 and older | 462,455 | 16.2% | 15.2% |
| Population female aged 15 to 44 | 521,931 | 83.1% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 473 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 17,373 | 0.6% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 9,272 | 0.3% | 0.3% |
| Black/African American, non-Hispanic | 258,464 | 9.0% | 14.4% |
| Hispanic/Latino | 503,149 | 17.6% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 180,815 | 6.3% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 3,669 | 0.1% | 0.2% |
| Two or more/other races | 58,522 | 2.0% | 2.5% |
| Population with less than a high school education ^a | 186,349 | 9.4% | 13.9% |
| Population with a high school diploma or equivalent ^a | 839,233 | 42.5% | 42.2% |
| Population with an associate degree ^a | 168,764 | 8.6% | 8.7% |
| Population with a bachelor's degree ^a | 426,338 | 21.6% | 19.9% |
| Population with a master's degree or higher ^a | 351,961 | 17.8% | 15.4% |
| Home ownership | 751,047 | 26.3% | 19.9% |

^aEducation levels and rates are based on individuals aged 25 years and older.

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 60. Selected Health Indicators in the Long Island Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 68,084 | 793.6 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 21,730 | 253.3 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 15,702 | 183.2 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 1,176 | 13.7 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 89,803 | 57.3 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 2,555 | 9.1 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 7,023 | 7.8 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 3,134 | 3.6 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 326 | 3.6 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 341,504 | 1,196.5 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 1,277 | 5.7 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 336 | 5.0 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 502 | 6.0 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 1,023 | 16.5 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 4,138 | 14.5 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 7,568 | 26.5 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 34,348 | 120.3 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 964,210 | 3,378.4 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 61. Number of Health Care Jobs in the Long Island Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|----------------|----------------|----------------|----------------|----------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Hospitals | 61,907 | 64,447 | 67,833 | 71,183 | 73,929 | 12,022 | 19.4% |
| Ambulatory care (excluding home health) | 63,968 | 65,305 | 65,861 | 65,745 | 66,852 | 2,884 | 4.5% |
| Nursing home and residential care facilities | 22,934 | 23,111 | 23,681 | 23,953 | 24,490 | 1,556 | 6.8% |
| Home health care | 16,649 | 18,027 | 19,167 | 19,555 | 21,211 | 4,562 | 27.4% |
| Total | 165,458 | 170,890 | 176,542 | 180,436 | 186,482 | 21,024 | 12.7% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 62. Number of Jobs in Selected Health Care Occupations in the Long Island Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 650 |
| Certified registered nurse anesthetists | N/A |
| Dental assistants | 3,350 |
| Dental hygienists | 2,560 |
| Dietetic technicians | 180 |
| Dietitians and nutritionists | 650 |
| Home health aides | 15,090 |
| Licensed practical nurses | 5,480 |
| Medical and health services managers | 4,010 |
| Medical assistants | 5,070 |
| Medical records and health information technicians | 1,750 |
| Medical secretaries | 1,450 |
| Mental health counselors | 1,860 |
| Nuclear medicine technologists | 180 |
| Nurses midwives | N/A |
| Nurse practitioners | 2,200 |
| Nursing assistants | 13,670 |
| Occupational therapists | 1,420 |
| Occupational therapy assistants | 290 |
| Orderlies | 850 |
| Personal care aides | 22,810 |
| Pharmacists | 2,640 |
| Pharmacy aides | 240 |
| Pharmacy technicians | 2,990 |
| Physical therapist assistants/aides | 2,180 |
| Physical therapists | 3,580 |
| Physician assistants | 2,470 |
| Radiation therapists | 140 |
| Radiologic technologists and technicians | 2,050 |
| Registered nurses | 29,470 |
| Respiratory therapists | 1,150 |
| Social workers | 2,970 |
| Speech-language pathologists | 2,080 |
| Surgical technologists | 980 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates.

Table 63. Average Annual Salary by Setting in Selected Health Care Occupations in the Long Island Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$73,250 | N/A | \$73,660 | N/A |
| Child, family, and school social workers | \$77,740 | N/A | N/A | \$72,600 |
| Clinical, counseling, and school psychologists | \$81,890 | N/A | N/A | N/A |
| Dental hygienists | \$86,830 | N/A | \$71,030 | N/A |
| Dietitians and nutritionists | \$72,110 | N/A | \$74,140 | \$69,260 |
| Health care social workers | \$64,740 | \$65,450 | \$76,180 | \$60,540 |
| Home health aides | N/A | \$27,210 | N/A | \$36,690 |
| Licensed practical nurses | \$53,220 | \$55,570 | \$61,080 | \$56,620 |
| Medical and health services managers | \$128,820 | \$128,620 | \$188,010 | \$132,080 |
| Medical assistants | \$39,260 | N/A | \$42,820 | N/A |
| Medical records and health information technicians | \$41,240 | N/A | \$61,720 | \$52,250 |
| Mental health and substance abuse social workers | \$55,930 | N/A | \$73,640 | N/A |
| Nuclear medicine technologists | \$87,480 | N/A | \$92,060 | N/A |
| Nurses midwives | N/A | N/A | \$132,810 | N/A |
| Nurse practitioners | \$120,300 | N/A | \$133,470 | \$113,490 |
| Occupational therapists | \$95,680 | \$90,340 | \$96,030 | \$83,950 |
| Occupational therapy assistants | N/A | N/A | \$67,790 | \$65,550 |
| Personal care aides | N/A | \$27,960 | N/A | \$29,000 |
| Pharmacy aides | N/A | N/A | \$48,180 | N/A |
| Physical therapist assistants | \$65,060 | N/A | \$68,110 | \$67,810 |
| Physician assistants | \$119,380 | N/A | \$129,720 | \$119,560 |
| Radiation therapists | \$102,700 | N/A | \$119,770 | N/A |
| Radiologic technologists | \$67,330 | N/A | \$82,420 | N/A |
| Registered nurses | \$81,090 | \$90,460 | \$103,650 | \$92,060 |
| Respiratory therapy technicians | N/A | N/A | \$64,830 | N/A |
| Speech-language pathologists | \$92,780 | \$115,220 | \$97,340 | \$111,420 |
| Surgical technologists | \$53,440 | N/A | \$63,960 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 64. Number of Graduations in Selected Health Care Occupational Programs in the Long Island Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|-------|-------|-------|-------|-------|------------------------------|---------|
| | | | | | | Number | Percent |
| Medical and health service managers | 115 | 126 | 160 | 191 | 268 | 153 | 133.0% |
| Nurse practitioners/clinical nurse specialists | 236 | 198 | 248 | 258 | 368 | 132 | 55.9% |
| Nursing assistants | 0 | 162 | 425 | 106 | 99 | 99 | N/A |
| Registered nurses | 1,457 | 1,456 | 1,493 | 1,568 | 1,510 | 53 | 3.6% |
| Physician assistants | 134 | 159 | 160 | 165 | 177 | 43 | 32.1% |
| Dental hygienists | 58 | 52 | 80 | 106 | 87 | 29 | 50.0% |
| Medical and clinical laboratory technologists | 32 | 46 | 47 | 60 | 55 | 23 | 71.9% |
| Nuclear medicine technologists | 0 | 0 | 7 | 11 | 10 | 10 | N/A |
| Occupational therapists | 68 | 58 | 83 | 73 | 77 | 9 | 13.2% |
| Physical therapist assistants and aides | 34 | 26 | 45 | 45 | 42 | 8 | 23.5% |
| Speech language pathologists | 54 | 31 | 57 | 62 | 62 | 8 | 14.8% |
| Physical therapists | 121 | 107 | 112 | 102 | 127 | 6 | 5.0% |
| Respiratory therapists | 49 | 47 | 56 | 54 | 49 | 0 | 0.0% |
| Occupational therapy assistants and aides | 22 | 20 | 21 | 28 | 18 | -4 | -18.2% |
| Surgical technologists | 38 | 56 | 52 | 42 | 34 | -4 | -10.5% |
| Medical and clinical laboratory technicians | 28 | 25 | 29 | 26 | 18 | -10 | -35.7% |
| Medical records and health information technicians | 52 | 68 | 29 | 38 | 38 | -14 | -26.9% |
| Medical secretaries | 20 | 3 | 2 | 2 | 1 | -19 | -95.0% |
| Cardiovascular technologists and technicians | 53 | 46 | 45 | 36 | 18 | -35 | -66.0% |
| Pharmacy technicians and aides | 82 | 73 | 138 | 90 | 39 | -43 | -52.4% |
| Licensed practical nurses | 546 | 479 | 435 | 433 | 474 | -72 | -13.2% |
| Social workers | 571 | 518 | 521 | 598 | 481 | -90 | -15.8% |
| Medical assistants | 1,735 | 1,345 | 1,280 | 1,307 | 1,197 | -538 | -31.0% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 65. Number of Licensed Individuals in Selected Health Care Occupations in the Long Island Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 326 | 299 | 298 | 290 | 272 | -54 | -16.6% |
| Clinical laboratory technologists | 2,483 | 2,380 | 2,433 | 2,467 | 2,361 | -122 | -4.9% |
| Dental assistants | 87 | 83 | 86 | 80 | 77 | -10 | -11.5% |
| Dental hygienists | 1,870 | 1,912 | 1,946 | 1,954 | 1,954 | 84 | 4.5% |
| Dietitians/nutritionists, certified | 1,083 | 1,087 | 1,091 | 1,137 | 1,160 | 77 | 7.1% |
| Licensed practical nurses | 9,318 | 8,833 | 8,916 | 8,949 | 8,604 | -714 | -7.7% |
| Nurse practitioner | 3,571 | 3,717 | 4,068 | 4,249 | 4,496 | 925 | 25.9% |
| Occupational therapists | 2,250 | 2,309 | 2,423 | 2,518 | 2,604 | 354 | 15.7% |
| Occupational therapy assistants | 434 | 442 | 460 | 486 | 491 | 57 | 13.1% |
| Pharmacists | 4,222 | 4,569 | 4,554 | 4,432 | 4,385 | 163 | 3.9% |
| Physical therapists | 3,798 | 3,983 | 4,095 | 4,054 | 4,121 | 323 | 8.5% |
| Physical therapy assistants | 1,065 | 1,080 | 1,070 | 1,089 | 1,095 | 30 | 2.8% |
| Registered physician assistants | 2,771 | 3,123 | 3,308 | 3,240 | 3,383 | 612 | 22.1% |
| Registered professional nurses | 43,669 | 44,106 | 44,696 | 45,719 | 46,157 | 2,488 | 5.7% |
| Respiratory therapists | 1,090 | 1,079 | 1,125 | 1,130 | 1,125 | 35 | 3.2% |
| Social workers | 9,859 | 9,772 | 9,812 | 9,751 | 9,732 | -127 | -1.3% |
| Speech-language pathologists | 3,991 | 4,089 | 4,253 | 4,356 | 4,498 | 507 | 12.7% |
| Total | 91,887 | 92,863 | 94,634 | 95,901 | 96,515 | 4,628 | 5.0% |

Source: New York State Education Department, Office of Professions.

Table 66. Employment Projections for Selected Health Care Occupations in the Long Island Region, Ranked by Largest Increase in Percentage, 2016 and 2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings |
|--|--------|--------|------------------------------|---------|-------------------------|
| | | | Number | Percent | |
| Counselors and social workers | 13,610 | 20,840 | 7,230 | 53.1% | 2,640 |
| Dietitians and nutritionists | 26,660 | 39,510 | 12,850 | 48.2% | 5,920 |
| Pharmacists | 2,870 | 4,250 | 1,380 | 48.1% | 330 |
| Physician assistants | 2,110 | 3,090 | 980 | 46.4% | 220 |
| Occupational therapists | 4,520 | 6,420 | 1,900 | 42.0% | 770 |
| Physical therapists | 3,890 | 5,330 | 1,440 | 37.0% | 330 |
| Respiratory therapists | 940 | 1,250 | 310 | 33.0% | 90 |
| Speech-language pathologists | 1,020 | 1,330 | 310 | 30.4% | 90 |
| Registered nurses | 1,650 | 2,150 | 500 | 30.3% | 250 |
| Nurse practitioners | 1,460 | 1,870 | 410 | 28.1% | 120 |
| Medical and clinical laboratory technologists | 3,220 | 4,070 | 850 | 26.4% | 300 |
| Dental hygienists | 2,480 | 3,050 | 570 | 23.0% | 200 |
| Cardiovascular technologists and technicians | 30,960 | 37,900 | 6,940 | 22.4% | 2,430 |
| Diagnostic medical sonographers | 16,710 | 20,450 | 3,740 | 22.4% | 2,310 |
| Nuclear medicine technologists | 6,120 | 7,480 | 1,360 | 22.2% | 610 |
| Radiologic technologists | 270 | 330 | 60 | 22.2% | 20 |
| Emergency medical technicians and paramedics | 2,350 | 2,870 | 520 | 22.1% | 210 |
| Pharmacy technicians | 4,170 | 5,080 | 910 | 21.8% | 590 |
| Surgical technologists | 870 | 1,050 | 180 | 20.7% | 80 |
| Licensed practical nurses | 1,500 | 1,810 | 310 | 20.7% | 130 |
| Medical records and health information technicians | 2,130 | 2,570 | 440 | 20.7% | 160 |
| Home health aides | 1,870 | 2,230 | 360 | 19.3% | 160 |
| Nursing assistants | 780 | 930 | 150 | 19.2% | 60 |
| Dental assistants | 790 | 940 | 150 | 19.0% | 80 |
| Medical assistants | 15,950 | 18,830 | 2,880 | 18.1% | 2,220 |
| Personal care aides | 2,700 | 3,090 | 390 | 14.4% | 260 |
| Medical secretaries | 2,870 | 3,090 | 220 | 7.7% | 150 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

G. Mohawk Valley

The Mohawk Valley region includes the counties of Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie.

KEY FINDINGS

- The Mohawk Valley region has several economic and demographic challenges. For example, a higher percentage of the Mohawk Valley's population (33.8%) was under the 200% federal poverty level (FPL) than statewide (30.6%). The percentage of the region's population over the age of 65 was 18.2% compared with the statewide percentage of 15.2%. The percentage of the population with a high school diploma or diploma equivalent was 53.2% compared with the statewide percentage of 42.2% (Table 67)
- Several indicators suggested that the region was in poorer health than the rest of the state. For example, the rate of total deaths per 100,000 individuals was 1,065.9 compared with the statewide rate of 769.8. The rate of death due to diabetes per 100,000 individuals was 32.0 relative to a statewide rate of 20.3. The rate of infant deaths per 1,000 live births was 7.5, whereas the statewide rate was 4.5. Finally, the rate of total emergency department visits per 10,000 individuals was 5,639.5 in contrast to a statewide rate of 4,169.1 (Table 68)
- Between 2014 and 2018, jobs in home health care increased by 396 (29.0%). Hospitals and ambulatory care settings (excluding home health care) grew by 3.5% and 3.1%, respectively. In contrast, nursing homes and residential care facilities lost 274 jobs between 2014 and 2018, a decline of 4.1% (Table 69)
- There were more jobs in the Mohawk Valley for personal care aides (6,520), RNs (4,660), and nursing assistants (2,730) than in other health care occupations (Table 70)
- In 2018, the average annual salary for RNs in hospitals was \$73,040; in nursing homes, \$64,440; in ambulatory care settings, \$62,700; and in-home health care, \$59,350 (Table 71)
- In 2017, programs in the region conferring degrees to RNs had 519 graduations. Conversely, the region experienced a 28.3% decline in LPN graduations between 2013 and 2017 (56 fewer graduations). There were no graduations from programs for radiologic technologists in 2017 (Table 72)
- Three professions tracked in this report—LPNs, clinical laboratory technologists, and clinical laboratory technicians—declined by 8.1%, 15.4%, and 25.7%, respectively, between 2015 and 2019 (Table 73)



Table 67. Selected Population Characteristics in the Mohawk Valley Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|---------|---------|-------------------|
| | Number | Percent | |
| Total population | 491,083 | N/A | N/A |
| Population under 100% FPL | 76,787 | 15.6% | 14.7% |
| Population under 200% FPL | 166,171 | 33.8% | 30.6% |
| Population aged birth to 17 years | 101,008 | 20.6% | 21.2% |
| Population aged 65 and older | 89,459 | 18.2% | 15.2% |
| Population female aged 15 to 44 | 88,101 | 17.9% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 190 | 0.0% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 4,777 | 1.0% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 1,050 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 17,343 | 3.5% | 14.4% |
| Hispanic/Latino | 24,963 | 5.1% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 11,551 | 2.4% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 789 | 0.2% | 0.2% |
| Two or more/other races | 8,895 | 1.8% | 2.5% |
| Population with less than a high school education ^a | 39,763 | 11.7% | 13.9% |
| Population with a high school diploma or equivalent ^a | 180,262 | 53.2% | 42.2% |
| Population with an associate degree ^a | 42,247 | 12.5% | 8.7% |
| Population with a bachelor's degree ^a | 44,222 | 13.0% | 19.9% |
| Population with a master's degree or higher ^a | 32,374 | 9.6% | 15.4% |
| Home ownership | 134,998 | 27.5% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 68. Selected Health Indicators in the Mohawk Valley Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 8,273 | 1,065.9 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 2,294 | 295.6 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 1,785 | 228.7 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 248 | 32.0 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 7,600 | 54.1 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 510 | 18.5 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 585 | 7.8 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 483 | 6.4 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 57 | 7.5 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 31,046 | 1,207.4 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 53 | 2.6 | 11,510 | 7.6 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 17 | 3.0 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 19 | 2.6 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 35 | 6.9 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 382 | 14.9 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 863 | 33.6 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 3,505 | 136.3 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 145,009 | 5,639.5 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 69. Number of Health Care Jobs in the Mohawk Valley Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 11,435 | 11,585 | 11,667 | 11,773 | 11,838 | 403 | 3.5% |
| Ambulatory care (excluding home health) | 6,755 | 6,823 | 6,845 | 6,968 | 6,967 | 212 | 3.1% |
| Nursing home and residential care facilities | 6,692 | 6,881 | 6,834 | 6,724 | 6,418 | -274 | -4.1% |
| Home health care | 1,365 | 1,370 | 1,470 | 1,712 | 1,761 | 396 | 29.0% |
| Total | 26,247 | 26,659 | 26,816 | 27,177 | 26,984 | 737 | 2.8% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 70. Number of Jobs in Selected Health Care Occupations in the Mohawk Valley Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 80 |
| Certified registered nurse anesthetists | N/A |
| Dental assistants | 320 |
| Dental hygienists | 250 |
| Dietetic technicians | N/A |
| Dietitians and nutritionists | 120 |
| Home health aides | 900 |
| Licensed practical nurses | 2,280 |
| Medical and health services managers | 450 |
| Medical assistants | 250 |
| Medical records and health information technicians | 390 |
| Medical secretaries | 220 |
| Mental health counselors | 450 |
| Nuclear medicine technologists | N/A |
| Nurses midwives | N/A |
| Nurse practitioners | 350 |
| Nursing assistants | 2,730 |
| Occupational therapists | 300 |
| Occupational therapy assistants | 50 |
| Orderlies | N/A |
| Personal care aides | 6,520 |
| Pharmacists | 540 |
| Pharmacy aides | 100 |
| Pharmacy technicians | 410 |
| Physical therapist assistants/aides | 160 |
| Physical therapists | 350 |
| Physician assistants | 170 |
| Radiation therapists | N/A |
| Radiologic technologists and technicians | 330 |
| Registered nurses | 4,660 |
| Respiratory therapists | 160 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 71. Average Annual Salary by Setting in Selected Health Care Occupations in the Mohawk Valley Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$61,580 | N/A | \$52,140 | N/A |
| Child, family, and school social workers | N/A | N/A | N/A | \$51,540 |
| Clinical, counseling, and school psychologists | \$168,530 | N/A | N/A | N/A |
| Dental hygienists | \$75,290 | N/A | N/A | N/A |
| Dietitians and nutritionists | N/A | N/A | N/A | \$64,820 |
| Health care social workers | \$57,780 | \$58,480 | \$63,820 | \$53,400 |
| Home health aides | N/A | \$28,660 | N/A | \$25,620 |
| Licensed practical nurses | \$41,450 | \$38,300 | \$41,860 | \$40,010 |
| Medical and health services managers | \$132,270 | \$129,990 | \$134,900 | \$115,260 |
| Medical assistants | \$29,230 | N/A | \$30,810 | N/A |
| Medical records and health information technicians | \$30,880 | \$40,320 | \$43,460 | \$36,840 |
| Mental health and substance abuse social workers | \$78,720 | N/A | N/A | N/A |
| Nuclear medicine technologists | N/A | N/A | \$86,980 | N/A |
| Nurse practitioners | \$105,300 | N/A | \$104,330 | N/A |
| Occupational therapists | \$76,750 | \$72,650 | \$81,260 | \$87,830 |
| Personal care aides | N/A | \$24,800 | N/A | \$25,150 |
| Physical therapist assistants | \$42,970 | \$53,830 | \$49,790 | \$45,170 |
| Physician assistants | \$105,410 | N/A | N/A | N/A |
| Radiation therapists | N/A | N/A | \$76,520 | N/A |
| Radiologic technologists | \$62,020 | N/A | \$59,700 | N/A |
| Registered nurses | \$62,700 | \$59,350 | \$73,040 | \$64,440 |
| Speech-language pathologists | N/A | N/A | \$94,450 | \$82,160 |
| Surgical technologists | N/A | N/A | \$41,240 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 72. Number of Graduations in Selected Health Care Occupational Programs in the Mohawk Valley Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|------|------|------|------|------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 427 | 378 | 399 | 446 | 519 | 92 | 21.5% |
| Physical therapists | 200 | 241 | 240 | 263 | 283 | 83 | 41.5% |
| Medical and health service managers | 31 | 52 | 46 | 77 | 62 | 31 | 100.0% |
| Nurse practitioners/clinical nurse specialists | 32 | 33 | 42 | 45 | 54 | 22 | 68.8% |
| Respiratory therapists | 12 | 16 | 17 | 14 | 22 | 10 | 83.3% |
| Occupational therapists | 53 | 57 | 49 | 62 | 62 | 9 | 17.0% |
| Physical therapist assistants and aides | 17 | 16 | 19 | 19 | 26 | 9 | 52.9% |
| Surgical technologists | 4 | 17 | 17 | 14 | 10 | 6 | 150.0% |
| Dietitians and nutritionists | 44 | 37 | 45 | 41 | 47 | 3 | 6.8% |
| Dietetic technicians | 0 | 0 | 2 | 2 | 3 | 3 | N/A |
| Medical assistants | 12 | 12 | 21 | 22 | 9 | -3 | -25.0% |
| Medical secretaries | 36 | 34 | 35 | 35 | 22 | -14 | -38.9% |
| Radiologic technologists | 23 | 9 | 0 | 0 | 0 | -23 | -100.0% |
| Licensed practical nurses | 198 | 178 | 167 | 151 | 142 | -56 | -28.3% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 73. Number of Licensed Individuals in Selected Health Care Occupations in the Mohawk Valley Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 70 | 57 | 57 | 58 | 52 | -18 | -25.7% |
| Clinical laboratory technologists | 351 | 325 | 320 | 312 | 297 | -54 | -15.4% |
| Dental assistants | 39 | 42 | 41 | 42 | 42 | 3 | 7.7% |
| Dental hygienists | 295 | 303 | 305 | 297 | 292 | -3 | -1.0% |
| Dietitians/nutritionists, certified | 100 | 104 | 102 | 96 | 106 | 6 | 6.0% |
| Licensed practical nurses | 3,522 | 3,348 | 3,412 | 3,385 | 3,236 | -286 | -8.1% |
| Nurse practitioners | 483 | 482 | 511 | 527 | 563 | 80 | 16.6% |
| Occupational therapists | 346 | 353 | 372 | 387 | 388 | 42 | 12.1% |
| Occupational therapy assistants | 139 | 126 | 128 | 128 | 123 | -16 | -11.5% |
| Pharmacists | 512 | 530 | 504 | 494 | 491 | -21 | -4.1% |
| Physical therapists | 401 | 417 | 431 | 439 | 443 | 42 | 10.5% |
| Physical therapy assistants | 228 | 234 | 237 | 244 | 241 | 13 | 5.7% |
| Registered physician assistants | 215 | 224 | 225 | 238 | 245 | 30 | 14.0% |
| Registered professional nurses | 7,157 | 7,098 | 7,083 | 7,186 | 7,213 | 56 | 0.8% |
| Respiratory therapists | 231 | 228 | 237 | 238 | 245 | 14 | 6.1% |
| Social workers | 730 | 739 | 719 | 722 | 724 | -6 | -0.8% |
| Speech-language pathologists | 239 | 239 | 235 | 238 | 237 | -2 | -0.8% |
| Total | 15,058 | 14,849 | 14,919 | 15,031 | 14,938 | -120 | -0.8% |

Source: New York State Education Department, Office of Professions.

Table 74. Employment Projections for Selected Health Occupations in the Mohawk Valley Region, Ranked by Largest Increase in Percentage, 2016 and 2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|-------|-------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 2,310 | 3,080 | 770 | 33.3% | 380 |
| Physical therapists | 390 | 510 | 120 | 30.8% | 30 |
| Occupational therapy assistants | 70 | 90 | 20 | 28.6% | 10 |
| Physician assistants | 250 | 320 | 70 | 28.0% | 20 |
| Diagnostic medical sonographers | 180 | 230 | 50 | 27.8% | 20 |
| Respiratory therapists | 160 | 200 | 40 | 25.0% | 10 |
| Personal care aides | 6,060 | 7,510 | 1,450 | 23.9% | 1,090 |
| Occupational therapists | 270 | 330 | 60 | 22.2% | 20 |
| Dental assistants | 370 | 450 | 80 | 21.6% | 50 |
| Surgical technologists | 140 | 170 | 30 | 21.4% | 20 |
| Counselors and social workers | 4,910 | 5,950 | 1,040 | 21.2% | 670 |
| Speech-language pathologists | 240 | 290 | 50 | 20.8% | 20 |
| Medical records and health information technicians | 340 | 410 | 70 | 20.6% | 30 |
| Registered nurses | 5,150 | 6,190 | 1,040 | 20.2% | 390 |
| Nuclear medicine technologists | 50 | 60 | 10 | 20.0% | N/A |
| Medical assistants | 370 | 440 | 70 | 18.9% | 50 |
| Dietitians and nutritionists | 170 | 200 | 30 | 17.6% | 10 |
| Dental hygienists | 300 | 350 | 50 | 16.7% | 30 |
| Licensed practical nurses | 2,240 | 2,600 | 360 | 16.1% | 210 |
| Nurse practitioners | 390 | 450 | 60 | 15.4% | 30 |
| Orderlies | 70 | 80 | 10 | 14.3% | 10 |
| Medical and clinical laboratory technicians | 150 | 170 | 20 | 13.3% | 10 |
| Cardiovascular technologists and technicians | 80 | 90 | 10 | 12.5% | 10 |
| Medical and clinical laboratory technologists | 250 | 280 | 30 | 12.0% | 20 |
| Pharmacy technicians | 500 | 560 | 60 | 12.0% | 50 |
| Radiologic technologists | 370 | 410 | 40 | 10.8% | 20 |
| Nursing assistants | 3,450 | 3,790 | 340 | 9.9% | 440 |
| Emergency medical technicians and paramedics | 470 | 510 | 40 | 8.5% | 30 |
| Pharmacists | 600 | 630 | 30 | 5.0% | 30 |

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

N/A, not available.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

H. North Country

The North Country includes the counties of Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and Saint Lawrence.

KEY FINDINGS

- The region's health indicators present a mixed picture relative to the state as a whole. For example, the rate of total hospitalizations per 10,000 individuals was lower at 995.2 compared with the statewide rate of 1,154.4, and the rate of asthma hospitalizations among people aged 45 to 64 was 3.4 per 10,000 versus the statewide rate of 9.2. In contrast, the rate of total deaths per 100,000 individuals for this region was 970.5, whereas the statewide rate was 769.8. The rate of deaths due to all cancers per 100,000 was 225.1 versus the statewide rate of 176.2. Finally, the rate of death due to diabetes per 100,000 individuals was 30.5 compared with the statewide rate of 20.3 (Table 76)
- Nursing homes and residential care facilities experienced a loss of 176 jobs in the region between 2014 and 2018, and home health care lost 111 jobs during the same period. Hospitals and ambulatory care settings (excluding home health care) both experienced growth in the number of jobs in the region (753 and 345, respectively) between 2014 and 2018 (Table 77)
- Personal care aides (4,020), RNs (3,710), and nursing assistants (1,960) were the occupations with the largest number of jobs in the region as of 2018 (Table 78)
- Regional average annual salaries for RNs in 2018 were the highest in hospitals (\$77,630) and the lowest in nursing homes and residential facilities (\$59,190). The average annual salary of medical and health services managers ranged from \$160,240 in ambulatory care to \$84,220 in home health care (Table 79)
- There were 257 fewer LPNs in the region in 2019 than in 2015. In contrast, there were 46 more nurse practitioners licensed in the region in 2019 than in 2015 (Table 81)



Table 75. Selected Population Characteristics in the North Country Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|---------|---------|-------------------|
| | Number | Percent | |
| Total population | 429,386 | N/A | N/A |
| Population under 100% FPL | 63,023 | 14.7% | 14.7% |
| Population under 200% FPL | 139,459 | 32.5% | 30.6% |
| Population aged birth to 17 years | 89,387 | 20.8% | 21.2% |
| Population aged 65 and older | 66,098 | 15.4% | 15.2% |
| Population female aged 15 to 44 | 78,334 | 18.2% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 263 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 4,460 | 1.0% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 702 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 16,478 | 3.8% | 14.4% |
| Hispanic/Latino | 16,761 | 3.9% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 5,179 | 1.2% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 4,979 | 1.2% | 0.2% |
| Two or more/other races | 8,398 | 2.0% | 2.5% |
| Population with less than a high school education ^a | 32,887 | 11.5% | 13.9% |
| Population with a high school diploma or equivalent ^a | 159,322 | 55.5% | 42.2% |
| Population with an associate degree ^a | 32,267 | 11.2% | 8.7% |
| Population with a bachelor's degree ^a | 32,982 | 11.5% | 19.9% |
| Population with a master's degree or higher ^a | 29,501 | 10.3% | 15.4% |
| Home Ownership | 110,077 | 25.6% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 76. Selected Health Indicators in the North Country Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 8,794 | 970.5 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 1,989 | 219.5 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 2,047 | 225.1 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 276 | 30.5 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 8,042 | 52.7 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 466 | 17.5 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 523 | 6.5 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 404 | 5.1 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 31 | 3.9 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 29,904 | 995.2 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 108 | 2.5 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 16 | 2.2 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 30 | 3.4 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 31 | 5.6 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 416 | 13.8 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 926 | 30.8 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 2,928 | 97.4 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 131,446 | 4,374.3 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 77. Number of Health Care Jobs in the North Country Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 8,957 | 9,216 | 9,438 | 9,507 | 9,710 | 753 | 8.4% |
| Ambulatory care (excluding home health) | 5,358 | 5,559 | 5,637 | 5,698 | 5,703 | 345 | 6.4% |
| Nursing home and residential care facilities | 3,063 | 3,023 | 3,019 | 2,975 | 2,887 | -176 | -5.7% |
| Home health care | 837 | 803 | 804 | 796 | 726 | -111 | -13.3% |
| Total | 18,215 | 18,601 | 18,898 | 18,976 | 19,026 | 811 | 4.5% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 78. Number of Jobs in Selected Health Occupations in the North Country Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 100 |
| Certified registered nurse anesthetists | 20 |
| Dental assistants | 300 |
| Dental hygienists | 300 |
| Dietetic technicians | 20 |
| Dietitians and nutritionists | 70 |
| Home health aides | 910 |
| Licensed practical nurses | 1,410 |
| Medical and health services managers | 370 |
| Medical assistants | 210 |
| Medical records and health information technicians | 250 |
| Medical secretaries | 80 |
| Mental health counselors | 290 |
| Nuclear medicine technologists | 20 |
| Nurses midwives | N/A |
| Nurse practitioners | 230 |
| Nursing assistants | 1,960 |
| Occupational therapists | 210 |
| Occupational therapy assistants | 50 |
| Orderlies | 30 |
| Personal care aides | 4,020 |
| Pharmacists | 400 |
| Pharmacy aides | 130 |
| Pharmacy technicians | 360 |
| Physical therapist assistants/aides | 150 |
| Physical therapists | 340 |
| Physician assistants | 180 |
| Radiation therapists | 20 |
| Radiologic technologists and technicians | 240 |
| Registered nurses | 3,710 |
| Respiratory therapists | 80 |
| Social workers | 510 |
| Speech-language pathologists | 240 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 79. Average Annual Salary by Setting in Selected Health Occupations in the North Country Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | N/A | N/A | \$63,460 | N/A |
| Dental hygienists | \$71,300 | N/A | \$74,300 | N/A |
| Dietitians and nutritionists | N/A | N/A | \$66,870 | \$79,950 |
| Health care social workers | N/A | \$54,550 | \$57,260 | \$54,990 |
| Home health aides | N/A | \$28,280 | N/A | \$26,480 |
| Licensed practical nurses | \$39,550 | \$38,530 | \$43,310 | \$41,480 |
| Medical and health services managers | \$160,240 | \$84,220 | \$132,280 | \$93,870 |
| Medical assistants | \$38,080 | N/A | \$36,580 | N/A |
| Medical records and health information technicians | \$33,270 | N/A | \$44,080 | \$31,040 |
| Mental health and substance abuse social workers | \$62,970 | N/A | \$71,000 | N/A |
| Nuclear medicine technologists | N/A | N/A | \$85,710 | N/A |
| Nurse practitioners | \$111,100 | N/A | \$116,900 | N/A |
| Occupational therapists | N/A | \$82,100 | \$85,070 | \$85,620 |
| Occupational therapy assistants | N/A | N/A | \$55,420 | \$51,390 |
| Personal care aides | N/A | N/A | N/A | \$24,250 |
| Physical therapist assistants | \$45,170 | N/A | \$52,080 | \$46,330 |
| Physician assistants | \$118,090 | N/A | \$137,820 | N/A |
| Radiation therapists | N/A | N/A | \$84,270 | N/A |
| Radiologic technologists | \$40,970 | N/A | \$63,170 | N/A |
| Registered nurses | \$65,680 | \$64,670 | \$77,630 | \$59,190 |
| Speech-language pathologists | N/A | N/A | \$93,150 | N/A |
| Surgical technologists | N/A | N/A | \$46,710 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 80. Number of Graduations in Selected Health Care Occupational Programs in the North Country Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|---|------|------|------|------|------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 283 | 285 | 296 | 289 | 327 | 44 | 15.5% |
| Medical and health services managers | 16 | 20 | 15 | 18 | 56 | 40 | 250.0% |
| Physician assistants | 0 | 0 | 16 | 20 | 19 | 19 | N/A |
| Speech language pathologists | 0 | 19 | 19 | 14 | 14 | 14 | N/A |
| Physical therapists | 15 | 20 | 22 | 19 | 25 | 10 | 66.7% |
| Dental hygienists | 25 | 20 | 27 | 23 | 29 | 4 | 16.0% |
| Medical and clinical laboratory technologists | 6 | 11 | 3 | 5 | 10 | 4 | 66.7% |
| Medical secretaries | 19 | 23 | 16 | 32 | 21 | 2 | 10.5% |
| Radiologic technologists | 12 | 9 | 9 | 10 | 12 | 0 | 0.0% |
| Physical therapist assistants and aides | 16 | 22 | 21 | 21 | 14 | -2 | -12.5% |
| Licensed practical nurses | 220 | 192 | 189 | 185 | 207 | -13 | -5.9% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 81. Number of Licensed Individuals in Selected Health Care Occupations in the North Country Region, in Alphabetical Order, 2015-2019

| Occupation | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 62 | 59 | 60 | 61 | 57 | -5 | -8.1% |
| Clinical laboratory technologists | 254 | 244 | 246 | 241 | 228 | -26 | -10.2% |
| Dental assistants | 47 | 51 | 57 | 59 | 55 | 8 | 17.0% |
| Dental hygienists | 247 | 243 | 257 | 238 | 237 | -10 | -4.0% |
| Dietitians/nutritionists, certified | 88 | 84 | 83 | 81 | 79 | -9 | -10.2% |
| Licensed practical nurses | 2,759 | 2,619 | 2,637 | 2,578 | 2,502 | -257 | -9.3% |
| Nurse practitioners | 295 | 312 | 319 | 324 | 341 | 46 | 15.6% |
| Occupational therapists | 161 | 171 | 176 | 191 | 194 | 33 | 20.5% |
| Occupational therapy assistants | 81 | 77 | 78 | 78 | 78 | -3 | -3.7% |
| Pharmacists | 379 | 401 | 397 | 382 | 376 | -3 | -0.8% |
| Physical therapists | 333 | 342 | 345 | 352 | 363 | 30 | 9.0% |
| Physical therapy assistants | 185 | 182 | 179 | 180 | 170 | -15 | -8.1% |
| Registered physician assistants | 257 | 269 | 283 | 278 | 286 | 29 | 11.3% |
| Registered professional nurses | 5,514 | 5,469 | 5,452 | 5,491 | 5,502 | -12 | -0.2% |
| Respiratory therapists | 86 | 78 | 84 | 83 | 83 | -3 | -3.5% |
| Social workers | 445 | 466 | 469 | 461 | 474 | 29 | 6.5% |
| Speech-language pathologists | 269 | 266 | 277 | 273 | 279 | 10 | 3.7% |
| Total | 11,462 | 11,333 | 11,399 | 11,351 | 11,304 | -158 | -1.4% |

Source: New York State Education Department, Office of Professions.

Table 82. Employment Projections for Selected Health Care Occupations in the North Country Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|-------|-------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 1,230 | 1,740 | 510 | 41.5% | 220 |
| Physician assistants | 290 | 390 | 100 | 34.5% | 30 |
| Personal care aides | 3,680 | 4,840 | 1,160 | 31.5% | 710 |
| Medical assistants | 290 | 380 | 90 | 31.0% | 40 |
| Physical therapists | 440 | 560 | 120 | 27.3% | 30 |
| Emergency medical technicians and paramedics | 340 | 430 | 90 | 26.5% | 30 |
| Diagnostic medical sonographers | 80 | 100 | 20 | 25.0% | 10 |
| Occupational therapy assistants | 40 | 50 | 10 | 25.0% | 10 |
| Nurse practitioners | 260 | 320 | 60 | 23.1% | 20 |
| Medical secretaries | 140 | 170 | 30 | 21.4% | 20 |
| Dental hygienists | 290 | 350 | 60 | 20.7% | 30 |
| Dietitians and nutritionists | 100 | 120 | 20 | 20.0% | 10 |
| Nuclear medicine technologists | 50 | 60 | 10 | 20.0% | N/A |
| Respiratory therapists | 110 | 130 | 20 | 18.2% | 10 |
| Speech-language pathologists | 220 | 260 | 40 | 18.2% | 10 |
| Dental assistants | 340 | 400 | 60 | 17.6% | 50 |
| Registered nurses | 3,840 | 4,460 | 620 | 16.1% | 270 |
| Counselors and social workers | 3,790 | 4,380 | 590 | 15.6% | 490 |
| Medical and clinical laboratory technicians | 130 | 150 | 20 | 15.4% | 10 |
| Occupational therapists | 220 | 250 | 30 | 13.6% | 20 |
| Medical records and health information technicians | 230 | 260 | 30 | 13.0% | 20 |
| Cardiovascular technologists and technicians | 80 | 90 | 10 | 12.5% | 10 |
| Pharmacy technicians | 320 | 360 | 40 | 12.5% | 30 |
| Surgical technologists | 80 | 90 | 10 | 12.5% | 10 |
| Nursing assistants | 2,240 | 2,500 | 260 | 11.6% | 290 |
| Medical and clinical laboratory technologists | 200 | 220 | 20 | 10.0% | 10 |
| Licensed practical nurses | 1,730 | 1,900 | 170 | 9.8% | 140 |
| Radiologic technologists | 230 | 250 | 20 | 8.7% | 20 |
| Pharmacists | 370 | 380 | 10 | 2.7% | 20 |
| Nurses anesthetists | 30 | 30 | 0 | 0.0% | N/A |
| Pharmacy aides | 130 | 120 | -10 | -7.7% | 20 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

N/A, not available.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

I. Southern Tier

The Southern Tier region includes the counties of Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, and Tompkins.

KEY FINDINGS

- Asthma hospitalization rates were lower in the Southern Tier than the rest of the state. The rate of asthma hospitalization among people aged 25 to 44 was 3.3 per 10,000, while the statewide rate was 5.6; among people aged 45 to 64, the asthma hospitalization rate was 3.0 per 10,000 versus the statewide rate of 9.2. In contrast, other health indicators suggested poorer health in the region. For example, the rate of total deaths per 100,000 individuals was 973.0 compared with the statewide rate of 769.8. The rate of death due to heart disease per 100,000 individuals was 250.1, while the statewide rate was 220.7. Finally, the rate of death due to all cancers per 100,000 individuals was 203.6, in contrast to a statewide rate of 176.2 (Table 84)**
- Health care jobs in the Southern Tier region experienced virtually no growth between 2014 and 2018. There were 29,082 total jobs in 2014 and 29,148 total jobs in 2018, which reflects only 0.2% growth (Table 85)**
- The largest number of health care jobs in the region were found among RNs (5,940), personal care aides (4,630), and nursing assistants (3,250) (Table 86)**
- As of 2018, average annual salaries for the region varied widely by setting. Medical and health services managers earned the highest average salary of \$130,000 in nursing homes compared with other health care settings. Speech-language pathologists earned the most in hospitals at \$100,230 compared with other settings (Table 87)**
- There were 136 more licensed nurse practitioners in the region in 2019 than in 2015. In contrast, the number of LPNs declined by 302 between 2014 and 2019, a decrease of 9.4% (Table 89)**



Table 83. Selected Population Characteristics in the Southern Tier Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|---------|---------|-------------------|
| | Number | Percent | |
| Total population | 647,108 | N/A | N/A |
| Population under 100% FPL | 99,381 | 15.4% | 14.7% |
| Population under 200% FPL | 214,896 | 33.2% | 30.6% |
| Population aged birth to 17 years | 127,546 | 19.7% | 21.2% |
| Population aged 65 and older | 113,332 | 17.5% | 15.2% |
| Population female aged 15 to 44 | 124,040 | 19.2% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 370 | 0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 5,474 | 0.8% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 1,459 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 21,897 | 3.4% | 14.4% |
| Hispanic/Latino | 20,914 | 3.2% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 22,918 | 3.5% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 1,275 | 0.2% | 0.2% |
| Two or more/other races | 15,254 | 2.4% | 2.5% |
| Population with less than a high school education ^a | 41,448 | 9.6% | 13.9% |
| Population with a high school diploma or equivalent ^a | 216,819 | 50.0% | 42.2% |
| Population with an associate degree ^a | 51,803 | 11.9% | 8.7% |
| Population with a bachelor's degree ^a | 64,710 | 14.9% | 19.9% |
| Population with a master's degree or higher ^a | 58,882 | 13.6% | 15.4% |
| Home ownership | 176,347 | 27.3% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 84. Selected Health Indicators in the Southern Tier Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 13,007 | 973.0 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 3,343 | 250.1 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 2,734 | 203.6 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 318 | 23.8 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 12,651 | 47.3 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 654 | 12.1 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 865 | 6.8 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 580 | 4.6 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 61 | 4.8 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 42,788 | 965.7 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 94 | 2.6 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 31 | 3.3 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 35 | 3.0 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 48 | 5.8 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 591 | 13.3 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 1,085 | 24.5 | 60,335 | 30.6 |
| Heart disease hospitalizations, per 10,000 | 4,153 | 93.7 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 163,755 | 3,695.9 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 85. Number of Health Care Jobs in the Southern Tier Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2016 | 2017 | 2018 | Change Between 2014 and 2018 | |
|---|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 13,659 | 13,694 | 13,396 | 13,506 | 13,535 | -124 | -0.9% |
| Ambulatory care (excluding home health) | 7,586 | 7,591 | 7,572 | 7,675 | 7,796 | 210 | 2.8% |
| Nursing homes and residential care facilities | 6,706 | 6,665 | 6,621 | 6,689 | 6,738 | 32 | 0.5% |
| Home health care | 1,131 | 1,139 | 1,061 | 1,054 | 1,079 | -52 | -4.6% |
| Total | 29,082 | 29,089 | 28,650 | 28,924 | 29,148 | 66 | 0.2% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 86. Number of Jobs in Selected Health Care Occupations in the Southern Tier Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 70 |
| Certified registered nurse anesthetists | N/A |
| Dental assistants | 510 |
| Dental hygienists | 440 |
| Dietetic technicians | N/A |
| Dietitians and nutritionists | 170 |
| Home health aides | 1,540 |
| Licensed practical nurses | 1,700 |
| Medical and health services managers | 500 |
| Medical assistants | 580 |
| Medical records and health information technicians | 350 |
| Medical secretaries | 170 |
| Mental health counselors | 380 |
| Nuclear medicine technologists | N/A |
| Nurses midwives | N/A |
| Nurse practitioners | 470 |
| Nursing assistants | 3,250 |
| Occupational therapists | 320 |
| Occupational therapy assistants | 50 |
| Orderlies | 80 |
| Personal care aides | 4,630 |
| Pharmacists | 450 |
| Pharmacy aides | 50 |
| Pharmacy technicians | 640 |
| Physical therapist assistants/aides | 230 |
| Physical therapists | 380 |
| Physician assistants | 220 |
| Radiation therapists | N/A |
| Radiologic technologists and technicians | 390 |
| Registered nurses | 5,940 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 87. Average Annual Salary by Setting in Selected Health Care Occupations in the Southern Tier Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | N/A | N/A | \$59,900 | N/A |
| Dental hygienists | \$62,560 | N/A | N/A | N/A |
| Dietitians and nutritionists | \$56,600 | N/A | \$67,340 | N/A |
| Health care social workers | \$54,960 | \$46,580 | \$58,360 | \$53,490 |
| Home health aides | N/A | \$27,940 | N/A | \$28,010 |
| Licensed practical nurses | \$39,980 | \$39,390 | \$41,230 | \$43,280 |
| Medical and health services managers | \$100,300 | \$69,940 | \$114,080 | \$130,000 |
| Medical assistants | \$33,280 | N/A | 33750 | \$30,200 |
| Medical records and health information technicians | \$34,690 | N/A | \$40,540 | \$41,750 |
| Mental health and substance abuse social workers | \$57,970 | N/A | N/A | N/A |
| Nuclear medicine technologists | N/A | N/A | \$80,430 | N/A |
| Nurse practitioners | \$102,170 | N/A | \$109,150 | \$128,870 |
| Occupational therapists | \$70,460 | \$93,130 | \$85,000 | \$87,020 |
| Personal care aides | N/A | N/A | N/A | \$26,510 |
| Physical therapist assistants | \$45,380 | N/A | \$49,480 | \$56,990 |
| Physician assistants | \$117,350 | N/A | \$127,280 | N/A |
| Radiation therapists | N/A | N/A | \$78,630 | N/A |
| Radiologic technologists | \$47,630 | N/A | \$59,080 | N/A |
| Registered nurses | \$63,390 | \$62,920 | \$71,650 | \$60,810 |
| Speech-language pathologists | \$75,460 | N/A | \$100,230 | \$92,850 |
| Surgical technologists | \$64,340 | N/A | \$42,360 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 88. Number of Graduations in Selected Health Care Occupational Programs in the Southern Tier Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|------|------|------|------|------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 492 | 531 | 523 | 615 | 676 | 184 | 37.4% |
| Physical therapists | 0 | 63 | 79 | 82 | 85 | 85 | N/A |
| Physical therapist assistants and aides | 17 | 21 | 24 | 15 | 25 | 8 | 47.1% |
| Speech language pathologists | 6 | 6 | 22 | 11 | 11 | 5 | 83.3% |
| Occupational therapists | 38 | 42 | 43 | 43 | 42 | 4 | 10.5% |
| Dental hygienists | 30 | 35 | 26 | 34 | 33 | 3 | 10.0% |
| Medical records and health information technicians | 13 | 13 | 12 | 13 | 15 | 2 | 15.4% |
| Medical assistants | 100 | 109 | 114 | 91 | 101 | 1 | 1.0% |
| Medical and clinical laboratory technologists | 0 | 2 | 0 | 1 | 1 | 1 | N/A |
| Medical and clinical laboratory technicians | 21 | 38 | 26 | 16 | 20 | -1 | -4.8% |
| Nurse practitioners/clinical nurse specialists | 41 | 58 | 67 | 58 | 39 | -2 | -4.9% |
| Medical and health services managers | 29 | 23 | 28 | 28 | 25 | -4 | -13.8% |
| Social workers | 58 | 48 | 56 | 62 | 47 | -11 | -19.0% |
| Radiologic technologists | 18 | 19 | 24 | 7 | 6 | -12 | -66.7% |
| Medical secretaries | 44 | 26 | 18 | 12 | 2 | -42 | -95.5% |
| Licensed practical nurses | 225 | 158 | 156 | 121 | 71 | -154 | -68.4% |

N/A, not applicable.

Source: Integrated Postsecondary Education Data System.

Table 89. Number of Licensed Individuals in Selected Health Care Occupations in the Southern Tier Region, in Alphabetical Order, 2015-2019

| Profession | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|--------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 98 | 93 | 96 | 101 | 96 | -2 | -2.0% |
| Clinical laboratory technologists | 347 | 331 | 326 | 314 | 284 | -63 | -18.2% |
| Dental assistants | 90 | 93 | 95 | 94 | 99 | 9 | 10.0% |
| Dental hygienists | 503 | 514 | 502 | 499 | 495 | -8 | -1.6% |
| Dietitians/nutritionists, certified | 155 | 158 | 148 | 153 | 155 | 0 | 0.0% |
| Licensed practical nurses | 3,215 | 3,066 | 3,073 | 3,028 | 2,913 | -302 | -9.4% |
| Nurse practitioners | 672 | 721 | 746 | 761 | 808 | 136 | 20.2% |
| Occupational therapists | 340 | 349 | 354 | 361 | 374 | 34 | 10.0% |
| Occupational therapy assistants | 49 | 44 | 47 | 51 | 53 | 4 | 8.2% |
| Pharmacists | 509 | 583 | 572 | 519 | 522 | 13 | 2.6% |
| Physical therapists | 535 | 544 | 531 | 550 | 571 | 36 | 6.7% |
| Physical therapy assistants | 242 | 245 | 264 | 276 | 279 | 37 | 15.3% |
| Registered physician assistants | 251 | 263 | 284 | 291 | 309 | 58 | 23.1% |
| Registered professional nurses | 8,204 | 8,195 | 8,148 | 8,201 | 8,188 | -16 | -0.2% |
| Respiratory therapists | 163 | 149 | 149 | 154 | 149 | -14 | -8.6% |
| Social workers | 1,472 | 1,431 | 1,457 | 1,474 | 1,475 | 3 | 0.2% |
| Speech-language pathologists | 361 | 366 | 365 | 365 | 373 | 12 | 3.3% |
| Total | 17,206 | 17,145 | 17,157 | 17,192 | 17,143 | -63 | -0.4% |

Source: New York State Education Department, Office of Professions.

Table 90. Employment Projections for Selected Health Care Occupations in the Southern Tier Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|-------|-------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Home health aides | 1,230 | 1,740 | 510 | 41.5% | 220 |
| Physician assistants | 290 | 390 | 100 | 34.5% | 30 |
| Personal care aides | 3,680 | 4,840 | 1,160 | 31.5% | 710 |
| Medical assistants | 290 | 380 | 90 | 31.0% | 40 |
| Physical therapists | 440 | 560 | 120 | 27.3% | 30 |
| Emergency medical technicians and paramedics | 340 | 430 | 90 | 26.5% | 30 |
| Diagnostic medical sonographers | 80 | 100 | 20 | 25.0% | 10 |
| Occupational therapy assistants | 40 | 50 | 10 | 25.0% | 10 |
| Nurse practitioners | 260 | 320 | 60 | 23.1% | 20 |
| Medical secretaries | 140 | 170 | 30 | 21.4% | 20 |
| Dental hygienists | 290 | 350 | 60 | 20.7% | 30 |
| Dietitians and Nutritionists | 100 | 120 | 20 | 20.0% | 10 |
| Nuclear medicine technologists | 50 | 60 | 10 | 20.0% | N/A |
| Respiratory therapists | 110 | 130 | 20 | 18.2% | 10 |
| Speech-language pathologists | 220 | 260 | 40 | 18.2% | 10 |
| Dental assistants | 340 | 400 | 60 | 17.6% | 50 |
| Registered nurses | 3,840 | 4,460 | 620 | 16.1% | 270 |
| Counselors and social workers | 3,790 | 4,380 | 590 | 15.6% | 490 |
| Medical and clinical laboratory technicians | 130 | 150 | 20 | 15.4% | 10 |
| Occupational therapists | 220 | 250 | 30 | 13.6% | 20 |
| Medical records and health information technicians | 230 | 260 | 30 | 13.0% | 20 |
| Cardiovascular technologists and technicians | 80 | 90 | 10 | 12.5% | 10 |
| Pharmacy technicians | 320 | 360 | 40 | 12.5% | 30 |
| Surgical technologists | 80 | 90 | 10 | 12.5% | 10 |
| Nursing assistants | 2,240 | 2,500 | 260 | 11.6% | 290 |
| Medical and clinical laboratory technologists | 200 | 220 | 20 | 10.0% | 10 |
| Licensed practical nurses | 1,730 | 1,900 | 170 | 9.8% | 140 |
| Radiologic technologists | 230 | 250 | 20 | 8.7% | 20 |
| Pharmacists | 370 | 380 | 10 | 2.7% | 20 |
| Nurse anesthetists | 30 | 30 | 0 | 0.0% | N/A |
| Pharmacy aides | 130 | 120 | -10 | -7.7% | 20 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

N/A, not available.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

J. Western New York

The Western New York region includes the counties of Allegany, Cattaraugus, Chautauqua, Erie, and Niagara.

KEY FINDINGS

- The region's health indicators present a mixed picture relative to the state as a whole. For example, several indicators suggest poorer health in the region. The rate of total deaths per 100,000 individuals was 1,063.3 compared with the statewide rate of 769.8, while the rate of death due to heart disease per 100,000 individuals was 270.5 versus the statewide rate of 220.7. In contrast, several indicators suggest better health in the region relative to the state as a whole—for instance, the rate of adult asthma hospitalizations per 10,000 individuals was 3.3, whereas the statewide rate was 7.4 (Table 92)
- Between 2014 and 2018, hospitals in the Western New York region added 1,676 jobs, while ambulatory care settings (excluding home health care) added 1,911 jobs and home health care agencies added 862 jobs. In contrast, nursing home and residential care facilities lost 112 jobs (Table 93)
- In 2018, the average annual salary for RNs in hospitals was \$80,210, higher than for other settings. Medical and health services managers had the highest average salary (\$138,960) in home health care agencies compared with other settings (Table 95)
- Programs conferring degrees for RNs had 86 more graduations in 2017 than in 2013. Programs for occupational therapists experienced the highest percentage growth (60.0%), while certified registered nurse anesthetist programs showed the greatest percentage decline (-100%). In addition, there were 40 fewer graduations from social work degree programs and 75 fewer graduations from programs for LPNs in 2017 than in 2013 (Table 96)
- There were 1,613 more licensed RNs in the region in 2019 than in 2015. The number of registered physician assistants (+281), physical therapists (+280), and nurse practitioners (+275) also increased between 2015 and 2019. Only 2 professions tracked in this report, clinical laboratory technicians (-16) and clinical laboratory technologists (-84), declined between 2015 and 2019 (Table 97)



Table 91. Selected Population Characteristics in the Western New York Region, 2013-2017

| Population Characteristics ^a | Region | | Statewide Percent |
|---|-----------|---------|-------------------|
| | Number | Percent | |
| Total population | 1,393,091 | N/A | N/A |
| Population under 100% FPL | 204,588 | 14.7% | 14.7% |
| Population under 200% FPL | 434,867 | 31.2% | 30.6% |
| Population aged birth to 17 years | 288,258 | 20.7% | 21.2% |
| Population aged 65 and older | 239,704 | 17.2% | 15.2% |
| Population female aged 15 to 44 | 260,743 | 18.7% | 20.3% |
| Women aged 15 to 19 who had a birth in past 12 mos. | 616 | <0.1% | <0.1% |
| Women aged 20 to 34 who had a birth in past 12 mos. | 12,794 | 0.9% | 0.8% |
| Women aged 35 to 50 who had a birth in past 12 mos. | 3,127 | 0.2% | 0.3% |
| Black/African American, non-Hispanic | 140,457 | 10.1% | 14.4% |
| Hispanic/Latino | 65,632 | 4.7% | 18.8% |
| Asian/Pacific Islander, non-Hispanic | 36,253 | 2.6% | 8.3% |
| American Indian/Native Alaskan, non-Hispanic | 9,098 | 0.7% | 0.2% |
| Two or more/other races | 27,155 | 1.9% | 2.5% |
| Population with less than a high school education ^a | 90,341 | 9.3% | 9.6% |
| Population with a high school diploma or equivalent ^a | 476,982 | 49.3% | 18.1% |
| Population with an associate degree ^a | 117,881 | 12.2% | 6.0% |
| Population with a bachelor's degree ^a | 157,637 | 16.3% | 6.6% |
| Population with a master's degree or higher ^a | 124,306 | 12.9% | 10.6% |
| Home Ownership | 387,278 | 27.8% | 19.9% |
| ^a Education levels and rates are based on individuals aged 25 years and older. | | | |

FPL, federal poverty level; N/A, not applicable.

Source: US Census, American Community Survey, 2013-2017 (5-Year Estimate File).

Table 92. Selected Health Indicators in the Western New York Region

| Health Indicator | Region | | Statewide | |
|--|---------|---------|-----------|---------|
| | Number | Rate | Number | Rate |
| Total deaths, per 100,000 | 48,889 | 1,063.3 | 456,393 | 769.8 |
| Deaths due to heart disease, per 100,000 | 12,436 | 270.5 | 130,846 | 220.7 |
| Deaths due to all cancers, per 100,000 | 10,734 | 232.8 | 104,225 | 176.2 |
| Deaths due to diabetes, per 100,000 | 1,365 | 29.7 | 12,052 | 20.3 |
| Total births, per 1,000 females aged 15 to 44 | 49,235 | 57.7 | 706,627 | 58.5 |
| Teen births, per 1,000 females aged 15 to 19 | 2,761 | 18.5 | 26,853 | 14.6 |
| Low-birthweight births, as a percent of total births | 3,931 | 8.1 | 55,424 | 7.9 |
| Late/no prenatal care, as a percent of total births | 2,522 | 5.4 | 38,477 | 5.6 |
| Infant deaths, per 1,000 live births | 335 | 6.8 | 3,201 | 4.5 |
| Total hospitalizations, per 10,000 | 169,743 | 1,111.1 | 2,279,361 | 1,154.4 |
| Adult asthma hospitalizations, per 10,000 | 395 | 3.3 | 11,510 | 7.4 |
| Asthma hospitalizations, ages 25-44, per 10,000 | 118 | 3.2 | 3,023 | 5.6 |
| Asthma hospitalizations, ages 45-64, per 10,000 | 176 | 4.1 | 4,827 | 9.2 |
| Pediatric asthma hospitalizations, per 10,000 | 473 | 15.1 | 9,829 | 23.5 |
| Diabetes hospitalizations, per 10,000 | 2,837 | 18.6 | 34,555 | 17.5 |
| CLRD hospitalizations, per 10,000 | 4,626 | 30.3 | 60,335 | 30.5 |
| Heart disease hospitalizations, per 10,000 | 16,422 | 107.5 | 198,049 | 100.3 |
| Total ED visits, per 10,000 | 658,906 | 4,313.1 | 8,231,938 | 4,169.1 |

CLRD, chronic lower respiratory disease; ED, emergency department.

Sources: New York State Community Health Indicator Reports, 2014-2016 (3-Year Average); New York Department of Health 2016 SPARCS data (emergency department, asthma, and total hospitalizations data only). Note: The cancer data are an average of data from 2013-2015; diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization.

Note: For the methodology on how the rates were calculated, please refer to the Appendix, Section B. Data Sources and Methods, Section 6, in the New York State Community Health Indicator Report (CHIRS), page 113.

Table 93. Number of Health Care Jobs in the Western New York Region by Setting, 2014-2018

| Setting | 2014 | 2015 | 2015 | 2016 | 2018 | Change Between 2014 and 2018 | |
|--|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Hospitals | 26,153 | 26,322 | 26,376 | 26,457 | 27,829 | 1,676 | 6.4% |
| Ambulatory care (excluding home health) | 24,140 | 24,448 | 25,421 | 25,782 | 26,051 | 1,911 | 7.9% |
| Nursing home and residential care facilities | 15,594 | 15,543 | 15,506 | 15,482 | 15,482 | -112 | -0.7% |
| Home health care | 5,152 | 5,133 | 5,355 | 5,566 | 6,014 | 862 | 16.7% |
| Total | 71,039 | 71,446 | 72,658 | 73,287 | 75,376 | 4,337 | 6.1% |

Source: New York State Department of Labor, Quarterly Census of Employment and Wages.

Table 94. Number of Jobs in Selected Health Care Occupations in the Western New York Region, in Alphabetical Order, 2018

| Occupation | Employment |
|--|------------|
| Cardiovascular technologists and technicians | 260 |
| Certified registered nurse anesthetists | 380 |
| Dental assistants | 1,180 |
| Dental hygienists | 1,140 |
| Dietetic technicians | 80 |
| Dietitians and Nutritionists | 280 |
| Home health aides | 3,130 |
| Licensed practical nurses | 4,940 |
| Medical and health services managers | 1,460 |
| Medical assistants | 1,840 |
| Medical records and health information technicians | 1,000 |
| Medical secretaries | 940 |
| Mental health counselors | 1,550 |
| Nuclear medicine technologists | 110 |
| Nurses midwives | 50 |
| Nurse practitioners | 980 |
| Nursing assistants | 7,030 |
| Occupational therapists | 740 |
| Occupational therapy assistants | 240 |
| Orderlies | 160 |
| Personal care aides | 11,910 |
| Pharmacists | 1,610 |
| Pharmacy aides | N/A |
| Pharmacy technicians | 1,520 |
| Physical therapist assistants/aides | 480 |
| Physical therapists | 1,280 |
| Physician assistants | 640 |
| Radiation therapists | 120 |
| Radiologic technologists and technicians | 1,030 |
| Registered nurses | 13,620 |
| Respiratory therapists | 480 |
| Social workers | 1,540 |
| Speech-language pathologists | 1,060 |
| Surgical technologists | 490 |

N/A, not available.

Source: New York State Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 95. Average Annual Salary by Setting in Selected Health Care Occupations in the Western New York Region, in Alphabetical Order, 2018

| Occupational Title | Ambulatory Care | Home Health Care | Hospitals | Nursing Homes |
|--|-----------------|------------------|-----------|---------------|
| Cardiovascular technologists and technicians | \$64,690 | N/A | \$55,850 | N/A |
| Clinical, counseling, and school psychologists | \$102,330 | N/A | \$90,580 | N/A |
| Dental hygienists | \$56,740 | N/A | N/A | N/A |
| Dietitians and Nutritionists | \$62,590 | N/A | \$66,180 | \$67,680 |
| Health care social workers | \$57,000 | \$53,950 | \$66,300 | \$54,080 |
| Home health aides | N/A | \$26,810 | N/A | \$25,510 |
| Licensed practical nurses | \$42,320 | \$35,210 | \$46,260 | \$43,210 |
| Medical and health services managers | \$114,820 | \$138,960 | \$122,600 | \$93,380 |
| Medical assistants | \$34,330 | N/A | \$43,400 | N/A |
| Medical records and health information technicians | \$35,500 | \$37,310 | \$49,020 | \$50,260 |
| Mental health and substance abuse social workers | \$65,140 | N/A | \$63,280 | N/A |
| Nuclear medicine technologists | \$69,530 | N/A | \$76,380 | N/A |
| Nurses midwives | N/A | N/A | \$116,120 | N/A |
| Nurse practitioners | \$97,660 | \$133,160 | \$111,690 | N/A |
| Occupational therapists | \$70,520 | \$90,100 | \$77,260 | \$73,430 |
| Occupational therapy assistants | \$50,050 | N/A | \$51,310 | \$53,160 |
| Personal care aides | N/A | \$25,340 | N/A | \$25,620 |
| Physical therapist assistants | \$39,630 | N/A | \$51,470 | \$51,080 |
| Physical therapists | \$71,690 | \$75,840 | \$84,850 | \$82,450 |
| Physician assistants | \$106,690 | N/A | \$104,040 | N/A |
| Radiation therapists | \$80,350 | N/A | \$83,670 | N/A |
| Radiologic technologists | \$48,100 | N/A | \$61,270 | N/A |
| Registered nurses | \$64,880 | \$68,710 | \$80,210 | \$70,460 |
| Respiratory therapy technicians | N/A | N/A | \$53,810 | N/A |
| Speech-language pathologists | \$68,990 | N/A | \$85,610 | \$85,740 |
| Surgical technologists | \$47,100 | N/A | \$52,880 | N/A |

N/A, not available.

Source: New York State Department of Labor, Occupational Employment Statistics.

Note: N/A indicates that the Department of Labor did not report a salary for this occupation in this setting for this region. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. Occupational Employment Statistics (OES) wage estimates are based on responses from 6 semiannual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees also may earn lower average salaries.

Table 96. Number of Graduations in Selected Health Care Occupational Programs in the Western New York Region, Ranked by Largest Increase in Number, 2013-2017

| Occupational Program | 2013 | 2014 | 2015 | 2016 | 2017 | Change Between 2013 and 2017 | |
|--|-------|-------|-------|-------|-------|------------------------------|---------|
| | | | | | | Number | Percent |
| Registered nurses | 1,041 | 1,057 | 25 | 1,185 | 1,127 | 86 | 8.3% |
| Physical therapists | 135 | 132 | 153 | 151 | 203 | 68 | 50.4% |
| Pharmacists | 116 | 111 | 165 | 192 | 172 | 56 | 48.3% |
| Occupational therapists | 80 | 87 | 79 | 118 | 128 | 48 | 60.0% |
| Dietitians and Nutritionists | 56 | 62 | 55 | 48 | 86 | 30 | 53.6% |
| Physician assistants | 119 | 120 | 130 | 122 | 134 | 15 | 12.6% |
| Nurse practitioners/clinical nurse specialists | 76 | 78 | 96 | 77 | 90 | 14 | 18.4% |
| Physical therapist assistants and aides | 33 | 35 | 41 | 38 | 45 | 12 | 36.4% |
| Speech language pathologists | 28 | 29 | 29 | 56 | 39 | 11 | 39.3% |
| Medical and clinical laboratory technologists | 23 | 37 | 31 | 25 | 30 | 7 | 30.4% |
| Medical secretaries | 171 | 204 | 232 | 205 | 177 | 6 | 3.5% |
| Dental assistants | 21 | 21 | 21 | 23 | 22 | 1 | 4.8% |
| Dental hygienists | 48 | 45 | 47 | 53 | 49 | 1 | 2.1% |
| Nuclear medicine technologists | 11 | 11 | 0 | 9 | 11 | 0 | 0.0% |
| Respiratory therapists | 20 | 22 | 204 | 21 | 20 | 0 | 0.0% |
| Medical and clinical laboratory technicians | 19 | 24 | 19 | 9 | 18 | -1 | -5.3% |
| Dietetic technicians | 7 | 2 | 2 | 5 | 1 | -6 | -85.7% |
| Medical records and health information technicians | 86 | 77 | 86 | 115 | 79 | -7 | -8.1% |
| Medical assistants | 136 | 133 | 114 | 134 | 126 | -10 | -7.4% |
| Radiologic technologists | 43 | 34 | 33 | 35 | 33 | -10 | -23.3% |
| Occupational therapy assistants and aides | 50 | 28 | 33 | 40 | 35 | -15 | -30.0% |
| Certified registered nurse anesthetists | 16 | 17 | 16 | 0 | 0 | -16 | -100.0% |
| Surgical technologists | 53 | 44 | 44 | 45 | 35 | -18 | -34.0% |
| Social workers | 243 | 172 | 1,117 | 197 | 203 | -40 | -16.5% |
| Licensed practical nurses | 442 | 499 | 529 | 406 | 367 | -75 | -17.0% |

Source: Integrated Postsecondary Education Data System.

Table 97. Number of Licensed Individuals in Selected Health Care Occupations in the Western New York Region, in Alphabetical Order, 2015-2019

| Profession | 2015 | 2016 | 2017 | 2018 | 2019 | Change Between 2015 and 2019 | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|------------------------------|-------------|
| | | | | | | Number | Percent |
| Clinical laboratory technicians | 198 | 188 | 194 | 193 | 182 | -16 | -8.1% |
| Clinical laboratory technologists | 943 | 935 | 935 | 877 | 859 | -84 | -8.9% |
| Dental assistants | 223 | 252 | 248 | 213 | 241 | 18 | 8.1% |
| Dental hygienists | 1,132 | 1,187 | 1,189 | 1,147 | 1,192 | 60 | 5.3% |
| Dietitians/nutritionists, certified | 353 | 375 | 380 | 378 | 398 | 45 | 12.7% |
| Licensed practical nurses | 6,885 | 7,056 | 7,188 | 6,659 | 6,964 | 79 | 1.1% |
| Nurse practitioners | 1,405 | 1,518 | 1,583 | 1,553 | 1,680 | 275 | 19.6% |
| Occupational therapists | 882 | 930 | 970 | 977 | 1,047 | 165 | 18.7% |
| Occupational therapy assistants | 533 | 542 | 540 | 516 | 538 | 5 | 0.9% |
| Pharmacists | 1,704 | 1,966 | 1,941 | 1,804 | 1,856 | 152 | 8.9% |
| Physical therapists | 1,366 | 1,511 | 1,538 | 1,530 | 1,646 | 280 | 20.5% |
| Physical therapy assistants | 417 | 466 | 499 | 498 | 530 | 113 | 27.1% |
| Registered physician assistants | 871 | 1,042 | 1,098 | 1,033 | 1,152 | 281 | 32.3% |
| Registered professional nurses | 19,475 | 20,501 | 20,569 | 19,992 | 21,088 | 1,613 | 8.3% |
| Respiratory therapists | 510 | 515 | 530 | 515 | 529 | 19 | 3.7% |
| Social workers | 2,304 | 2,393 | 2,407 | 2,358 | 2,527 | 223 | 9.7% |
| Speech-language pathologists | 1,179 | 1,221 | 1,252 | 1,205 | 1,270 | 91 | 7.7% |
| Total | 40,380 | 42,598 | 43,061 | 41,448 | 43,699 | 3,319 | 8.2% |

Source: New York State Education Department, Office of Professions.

Table 98. Employment Projections for Selected Health Care Occupations in the Western New York Region, Ranked by Largest Increase in Percentage, 2016-2026

| Occupation | 2016 | 2026 | Change Between 2016 and 2026 | | Average Annual Openings ^a |
|--|--------|--------|------------------------------|---------|--------------------------------------|
| | | | Number | Percent | |
| Physician assistants | 750 | 1,090 | 340 | 45.3% | 80 |
| Home health aides | 5,740 | 8,280 | 2,540 | 44.3% | 1,030 |
| Nurse practitioners | 900 | 1,240 | 340 | 37.8% | 90 |
| Personal care aides | 11,010 | 14,690 | 3,680 | 33.4% | 2,170 |
| Medical assistants | 2,090 | 2,740 | 650 | 31.1% | 320 |
| Medical secretaries | 1,510 | 1,920 | 410 | 27.2% | 220 |
| Diagnostic medical sonographers | 300 | 380 | 80 | 26.7% | 30 |
| Emergency medical technicians and paramedics | 840 | 1,060 | 220 | 26.2% | 80 |
| Respiratory therapists | 590 | 740 | 150 | 25.4% | 50 |
| Physical therapists | 1,380 | 1,720 | 340 | 24.6% | 100 |
| Speech-language pathologists | 1,400 | 1,730 | 330 | 23.6% | 110 |
| Dental hygienists | 1,350 | 1,640 | 290 | 21.5% | 120 |
| Occupational therapists | 820 | 990 | 170 | 20.7% | 60 |
| Occupational therapy assistants | 290 | 350 | 60 | 20.7% | 50 |
| Dental assistants | 1,220 | 1,470 | 250 | 20.5% | 170 |
| Counselors and social workers | 12,410 | 14,630 | 2,220 | 17.9% | 1,650 |
| Licensed practical nurses | 5,670 | 6,580 | 910 | 16.0% | 520 |
| Cardiovascular technologists and technicians | 250 | 290 | 40 | 16.0% | 20 |
| Medical records and health information technicians | 940 | 1,090 | 150 | 16.0% | 70 |
| Registered nurses | 14,640 | 16,790 | 2,150 | 14.7% | 1,010 |
| Radiologic technologists | 1,160 | 1,320 | 160 | 13.8% | 80 |
| Dietitians and nutritionists | 370 | 420 | 50 | 13.5% | 30 |
| Pharmacy technicians | 1,730 | 1,950 | 220 | 12.7% | 160 |
| Medical and clinical laboratory technicians | 430 | 480 | 50 | 11.6% | 30 |
| Nursing assistants | 7,520 | 8,330 | 810 | 10.8% | 960 |
| Surgical technologists | 500 | 550 | 50 | 10.0% | 50 |
| Medical and clinical laboratory technologists | 460 | 500 | 40 | 8.7% | 30 |
| Nuclear medicine technologists | 120 | 130 | 10 | 8.3% | 10 |
| Pharmacists | 1,650 | 1,750 | 100 | 6.1% | 80 |

^aAnnual openings reflect creation of new positions in the occupation and replacement of those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Long-Term Occupation Projections, 2016-2026.

IV. APPENDIX

A. Data Sources and Methods

All data sources for this report are cited unless they entail primary data collection conducted by the Center for Health Workforce Studies (CHWS) and collaborating partners (such as the survey of registered nurse [RN] graduations). The following are descriptors of data sources used in this report. Where appropriate, the methods used for calculating the rates in this report are also described.

Information provided in this report is statewide or by New York State Department of Labor (NYSDOL) regions. A list of counties and a map depicting the NYSDOL regions are presented on pages 7 and 115, as well as on each regional profile page.

Data sources include:

1. Center for Health Workforce Studies (CHWS)

- New York State Registered Nursing Graduations

CHWS surveys RN education programs in New York annually to describe trends in the production of RNs in the state. The 2018 survey included questions about applications, acceptances, and graduations for that year as well as projected graduations through 2019.

2. New York State Department of Labor (NYSDOL)

- Quarterly Census of Employment and Wages (QCEW, formerly known as ES-202)

Counts of Jobs

Data from 2017-2018 were used to describe regional changes in health care employment by setting. A number of events potentially affected the information reported, including closures, mergers, and expansions. Consequently, large changes in jobs in specific health sectors (ie, hospitals, nursing homes, or home health care) may reflect changes in ownership in the service delivery system rather than changes in the workforce. At times, addresses of survey respondents could not be determined. As a result, the summed total of the regions will not add up to the statewide total. For more information about the QCEW data, please visit the QCEW Technical Notes web page at <https://labor.ny.gov/stats/lstechqcew.shtm>.

When reviewing the counts of jobs data, please keep in mind the following:

- These counts include full-time and part-time positions. Thus, one person could be working more than one job. In other words, there is not a one-to-one match of individuals employed to number of jobs reported in this report

- “Nurse midwives” is the title of the occupation used by the United States Bureau of Labor Statistics (BLS) and NYSDOL. However, in New York, a midwife does not have to be a nurse. The counts of jobs of nurse midwives may not be reflective of the actual midwives in an area
- To protect individual privacy, if counts of a job in any given area are below 3 reporting institutions, we do not report the actual number of jobs (per NYSDOL)
- Occupational Employment Statistics (OES)

The OES wage estimates are based on responses from 6 semi-annual panels collected between November 2015 and May 2018. Wages were then updated to the first quarter of 2019 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well as part-time consultants. Part-time employees may also earn lower average salaries.

- 2016-2026 Statewide and Regional Long-Term Occupation Projections

NYSDOL develops projections both for the state as a whole and by NYSDOL region, which are prepared for the 2016-2026 period. Annual job openings reflect both newly created positions in the occupation and turnover of workers in existing positions who retire, change jobs, or leave the occupation. Occupations with a small increase in the number of new jobs but a high number of annual openings typically reflect significant annual turnover rather than expansion of the occupation. Limitations to these projections include unanticipated external factors such as recessions, changes in scopes of work or education for specific occupational titles, changes in state and/or federal reimbursement, and/or advancements in technology.

3. US Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

IPEDS is a collection of interrelated surveys conducted annually by the US Department of Education, National Center for Education Statistics. IPEDS gathers information from every college, university, and technical and/or vocational institution that participates in the federal student financial aid program. The data from school year 2012/2013 (hereafter referred to as 2013) to school year 2016/2017 (hereafter referred to as 2017) were used to describe the number of new graduates each year potentially entering health occupations. These data were collected from 2- and 4-year universities, vocational schools, and technical schools. The number of graduations were displayed and aggregated by NYDOL region. These data do not reflect missing data or individuals trained through on-the-job training programs. For purposes of this report, counts of graduations were limited to those that led to licensure. For example, a bachelor's degree in social work is not considered, while a master's degree would be. Additionally, doctoral-level education is not counted unless it is needed for entry into the profession.

4. New York State Education Department (NYSED) licensure data

Licensure data from 2015-2019 presented in this report reflect counts of licensed health care professionals in New York. Data on licenses are available from NYSED on the number of individuals licensed in a health care profession. NYSED licenses more than 40 health care professions, and individuals must secure a New York license before practicing in one of these health care professions. Each year in April, CHWS downloads these data.

Licensure data in a health care profession represent the upper limit of the number of individuals in New York who can practice in a profession. It is important to recognize the limitations of these data. Some individuals who are licensed in a health care profession may be working less than full time, not at all in the profession, or working in the profession but in another state. Licensure data, however, can provide valuable information on major trends in the supply of health care professionals in the state.

In reviewing licensure data, please be aware that:

- Social workers are licensed in New York as either licensed clinical social workers (LCSWs) or licensed master social workers (LMSWs). Although state and federal labor department data sources provide statistics for LCSWs and LMSWs combined collectively as social workers, the licensing distinction is reflected for the purposes of understanding recruitment and retention difficulties
- Nurse practitioners (NPs) are licensed as RNs but certified in 1 or more of 16 NP specialties. Information presented in the report at the regional level represents a duplicated count of NPs across all specialties. The statewide count, however, is unduplicated
- Counts of health care professionals by region are based on the mailing address in the licensure file, which could be either a home or a practice location. Additionally, certain individuals in the file may be licensed to practice in New York but live in another state

5. US Census Bureau, American Community Survey

The American Community Survey (ACS) is conducted each year and is used to provide population estimates. The 2013-2017 5-Year Estimate File from the ACS was used to describe selected population characteristics by NYSDOL region. These population characteristics included total population, age structure, poverty, race/ethnicity, and education level. The education levels and rates were based on individuals aged 25 years and older. The following ACS categories were combined into one category for this report:

- Category “Population with less than a high school diploma” data were combined from “Total population aged 25 and older with less than 9th grade education” and “Total population aged 25 and older with 9th to 12th grade education, no diploma”
- Category “Population with a high school diploma or equivalent” data were combined from “Total population aged 25 years and older who is a high school graduate (includes equivalency)” and “Total population aged 25 years and older, some college, no degree”

6. New York State Department of Health

- New York State Community Health Indicator Report (CHIRS)

These data from 2014-2016 (2013-2015 for cancer) were used to describe the health of the population by NYSDOL region. The health indicators were obtained from CHIRS and include information on deaths, births, and hospitalizations. Both counts and rates are reported for an average of 3 years. The rates are calculated as follows:

- Infant death rates are reported per 1,000 live births
- Total birth rates are reported per 1,000 females aged 15 to 44 years
- Teen birth rates are reported per 1,000 females aged 15 to 19 years

- Low-birthweight rates and percentage of late/no prenatal care are reported per 100 live births. Percentage of late/no prenatal care was based on those births where information was provided and not on total births
- All deaths are reported per 100,000 total population
- Rates per 10,000 for adult asthma hospital admissions are based on the population aged 18 years and older
- Rates per 10,000 for pediatric asthma hospital admissions are based on the population aged birth to 15 years
- All other rates per 10,000 for hospitalizations and emergency department (ED) visits are based on the total population
- Statewide Planning and Research Cooperative System (SPARCS) data

SPARCS collects patient-level information for all hospital inpatient stays, outpatient visits (including visits to hospital extension settings), and ED visits. For this report, data from SPARCS were used to report the statistics related to asthma hospitalizations. The numbers represent the year 2016, and the rates are per 10,000 average total population.

B. Terminology

The settings used in this report are based on the North American Industry Classification System (NAICS) for the health care sector. The breakdown of settings within the health care sector is as follows:

- Hospitals (public and private)
- Nursing and personal care facilities (excluding residential, mental retardation, mental health and substance abuse facilities, and other residential care facilities)
- Home health care
- Ambulatory care settings (excluding home health care), including:
 - Medical and diagnostic laboratories
 - Offices and clinics of doctors of medicine
 - Offices and clinics of dentists
 - Offices and clinics of other health practitioners
 - Outpatient care centers
 - Other ambulatory health services

This classification scheme provides standardization among the data sets presented, but it has some limitations. By limiting the analyses to the NAICS health care service industries, health care workers in hospital-sponsored ambulatory care sites may be included in hospital employment counts. In addition, health care professionals in industries outside of the settings listed, such as those working in schools or insurance firms or who are self-employed, are excluded from the health care sector counts.

Historically, OES groups occupations by category. These occupational categories also have limitations. For example, prior to 2010, registered nursing made no distinction among NPs, nurse midwives, and RNs. Additionally, the “nursing aides, orderlies, and attendants” occupational category includes multiple job titles, levels of training, and certifications.

Some job titles in a health care setting may not necessarily reflect similar OES occupational classifications, and this may cause some problems in reporting. For example, confusion may result from the difference

between defining a home health aide as any individual providing services in the home, or, alternately, as one who completes home health aide certification requirements.

C. Geographic Areas

For purposes of this report, NYSDOL regions are used as described below and as depicted in Figure 1.

The NYSDOL regions (refer to Figure 1) used in this report are:

- Capital District: The counties of Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington
- Central New York: The counties of Cayuga, Cortland, Madison, Onondaga, and Oswego
- Finger Lakes: The counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates
- Hudson Valley: The counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester
- Long Island: The counties of Nassau and Suffolk
- Mohawk Valley: The counties of Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie
- New York City: The counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island)
- North Country: The counties of Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence
- Southern Tier: The counties of Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, and Tompkins
- Western New York: The counties of Allegany, Cattaraugus, Chautauqua, Erie, and Niagara

For the purpose of this report, the Downstate category includes the Department of Labor regions of New York City and Long Island. The Upstate category includes the following Department of Labor regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.