

# ***New Jersey's Life Sciences Industry Sector***

Prepared by:  
New Jersey Department of Labor & Workforce Development  
Office of Research & Information  
**Bureau of Labor Market Information**  
**Winter 2021-2022**



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# THE GOAL OF THIS REPORT IS TO GET AN “IDEA” OF WHAT LIFE SCIENCES MEANS TO NEW JERSEY

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**Identify** the types of industries and establishments that make up the life sciences industry sector based on a standard industry classification system.

**Describe** any similarities and differences among its components with regard to such variables as employment, wage, occupation type, education, and demographic characteristics.

**Examine** any present distinctions within the sector and its components that give New Jersey a competitive advantage compared to neighboring states, regions or the nation, or show areas where New Jersey could improve to add to the state’s economy.

**Analyze** the current state of the life sciences industry sector and provide an outlook for employment into the future.



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# **LIFE SCIENCES INDUSTRY SECTOR: OVERVIEW**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## MAJOR INDUSTRY COMPONENTS

New Jersey's Life Sciences employment in 2020 was identified within three primary components: pharmaceuticals (43.6%), biotechnology - R&D (42.0%), and medical device manufacturing (14.4%). The breakdown of the major segments are:

### Pharmaceuticals

- Pharmaceutical and medicine manufacturing
- Soap, cleaning compound, and toiletry manufacturing



Establishments that are primarily engaged in manufacturing or distribution of drug related products.

Consists of service-related establishments primarily engaged in scientific research, development and/or analytic.



### Biotechnology (R&D)

- Scientific research and development services

### Medical Devices

- Medical equipment and supplies manufacturing



Establishments primarily engaged in manufacturing medical equipment and supplies.



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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2020 Annual Averages  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## MAJOR NEW JERSEY EMPLOYERS

Some of New Jersey's well-known employers in this sector include:

### Pharmaceuticals

- Alberto-Culver Co.
- Bayer HealthCare Pharmaceutical
- Bristol-Myers Squibb
- Ethicon USA
- Glaxo Smith Kline
- Johnson & Johnson
- Merck & Co. Inc.
- Novartis Pharmaceuticals
- Pfizer, Inc.
- Sanofi Genzyme
- Teva Pharmaceuticals USA
- West-Ward Pharmaceutical

### Biotechnology (R&D)

- Bioclinica, Inc.
- Bioreference
- Community Medical Center
- Collagen Matrix, Inc.
- Covance, Inc.
- Genesis Biotech
- Immunomedics, Inc.
- Medical Laboratory Diagnostics
- Lab Corp
- Progenitor Cell Therapy
- Sandoz, Inc.
- SRI International

### Medical Devices

- Abbott Laboratories
- Bard International, Inc.
- Becton Dickinson & Co.
- Integra Life Sciences
- Micro Corporation
- Lohmann Therapy Systems Corporation
- Ortho McNeil Pharmaceutical
- Roche Molecular Diagnostics
- Safilo USA, Inc.
- Stryker Orthopedics
- Sony Electronics, Inc.

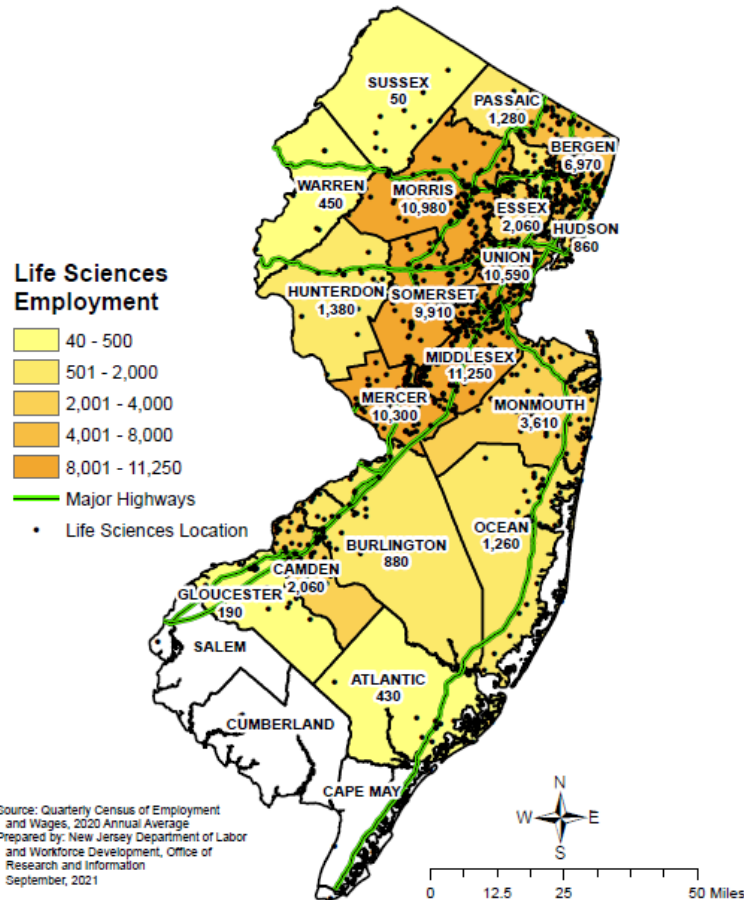


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Source: 2019 InfoUSA  
Prepared by: New Jersey Department of Labor and  
Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR OVERALL STATE IMPACT

## *Life Sciences Employment and Establishment Locations New Jersey, 2020*



The Life Sciences Sector has an enormous impact on providing high quality jobs and adding significant value to the State's economic activities. Recent New Jersey highlights included:

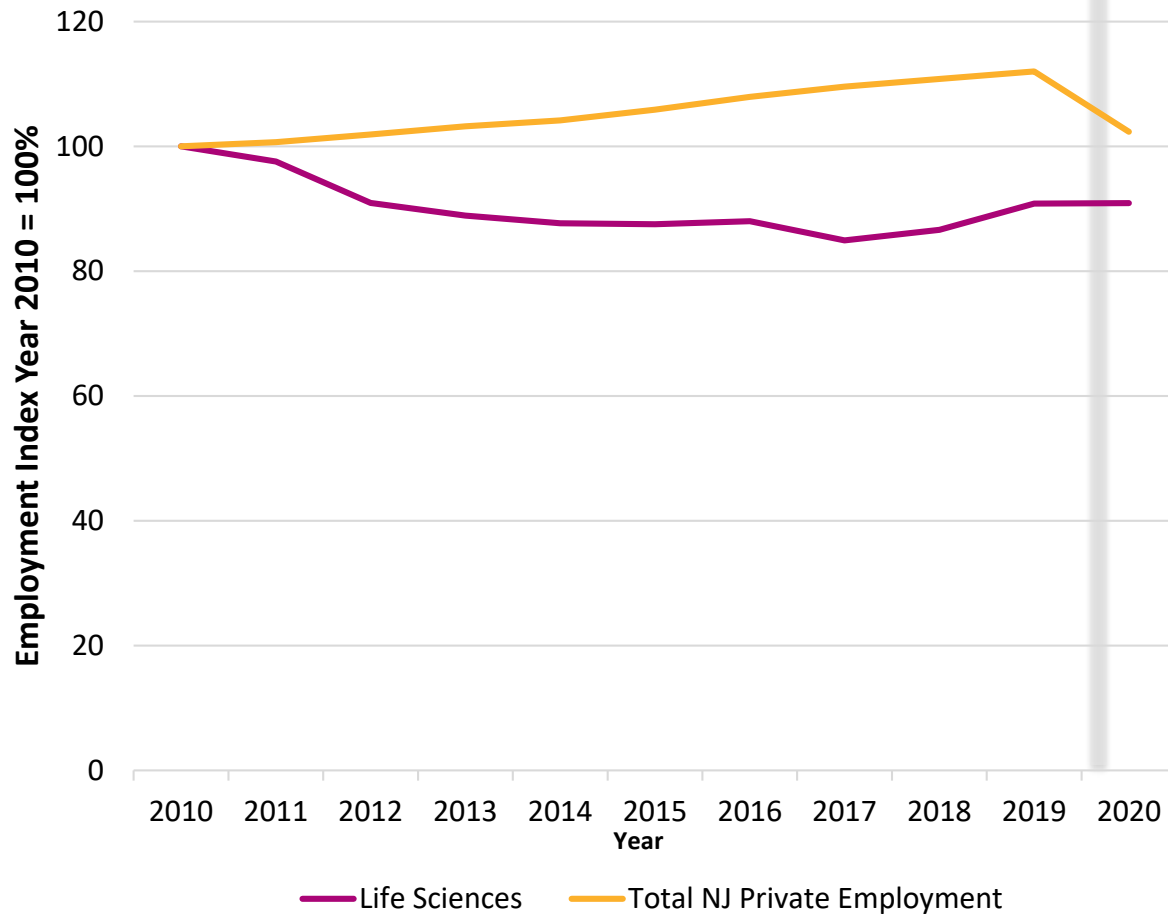
- **Employment Total:** Averaged 76,510 or 2.4 percent of all private sector workers in the state for 2020. Nationally, the proportion was just 1.3 percent.
- **Well-paying Jobs:** Paid over \$14.1 billion in 2020 annual payrolls; 6 percent of the state's total wages.
- **Establishments total:** Nearly 1,700 in 2020. Over a five-year period (2015-2020) – even with numerous industry related reorganizations – New Jersey's pharmaceutical component still grew (by +20.2%).



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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR ALL PRIVATE VS. INDUSTRY SECTOR EMPLOYMENT



- The NJ life sciences industry experienced a steady decline from 2010 to 2014 (-12.3%), flattened out from 2014 to 2015 (-0.1%), increased from 2015 to 2016 (+0.4%), and is currently below the 2010 employment level (-9.1%).
- Total statewide private sector employment has led life sciences employment from 2010 to 2020 and is currently above the 2010 employment level by 2.3 percent.

Gray area denotes U.S. economic recession as defined by the National Bureau of Economic Research (NBER)

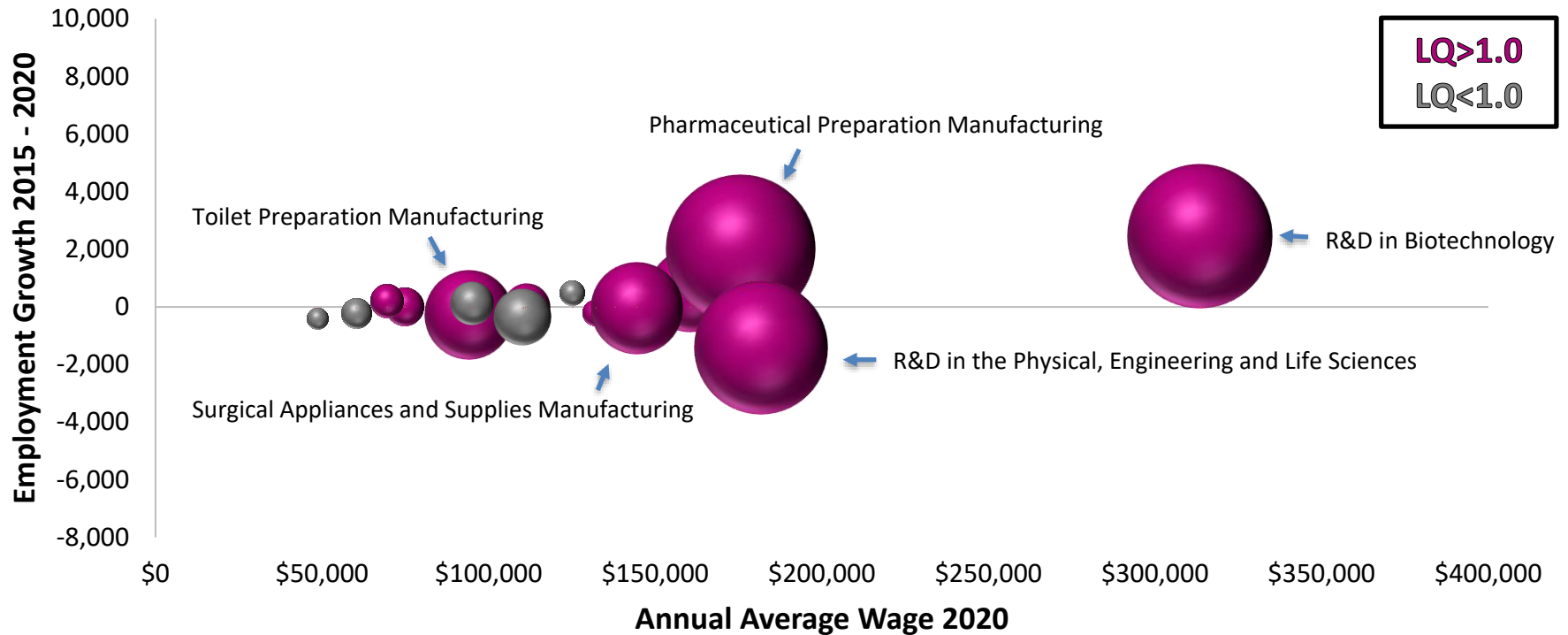


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2010-2020 Annual Averages  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR EMPLOYMENT SIZE, GROWTH, SALARY & LOCATION QUOTIENT



The above bubble graph has four elements:

1. Total 2020 employment - represented by the size of the bubble.
2. 2015-2020 employment growth- shown on the Y-axis, or vertical position.
3. 2020 annual average wages - shown on the X-axis, or horizontal position.
4. Location quotient - indicated by the color of the bubble. The location quotient compares the concentration of the industry subsectors in the state to those of the nation. Industries with a location quotient **above 1** are known as “basic industries” which (in theory) export a good or service from the state and in return, bring in wealth.

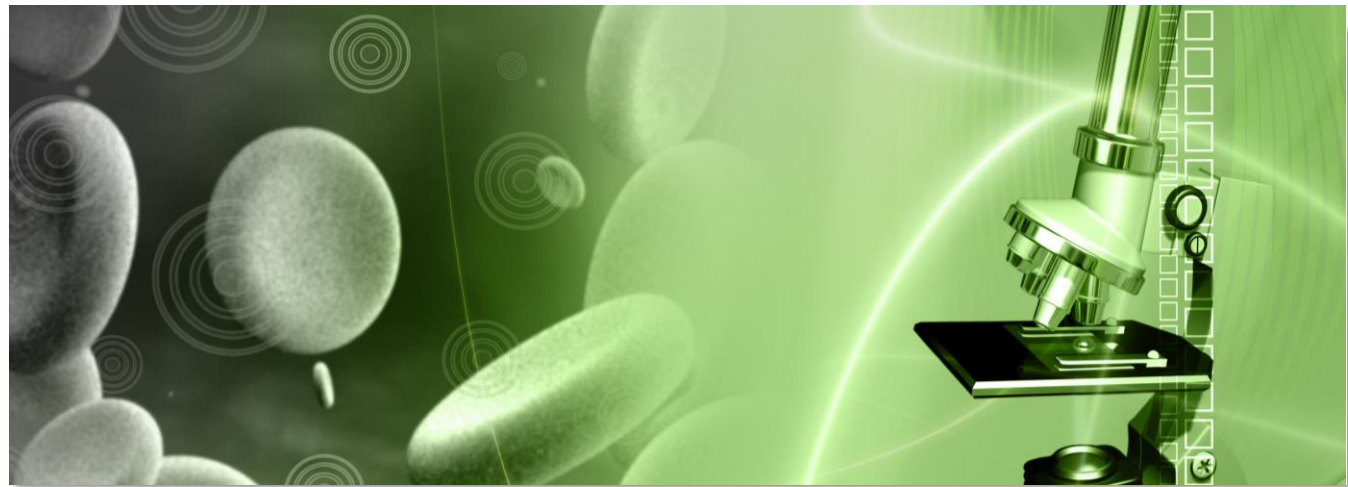


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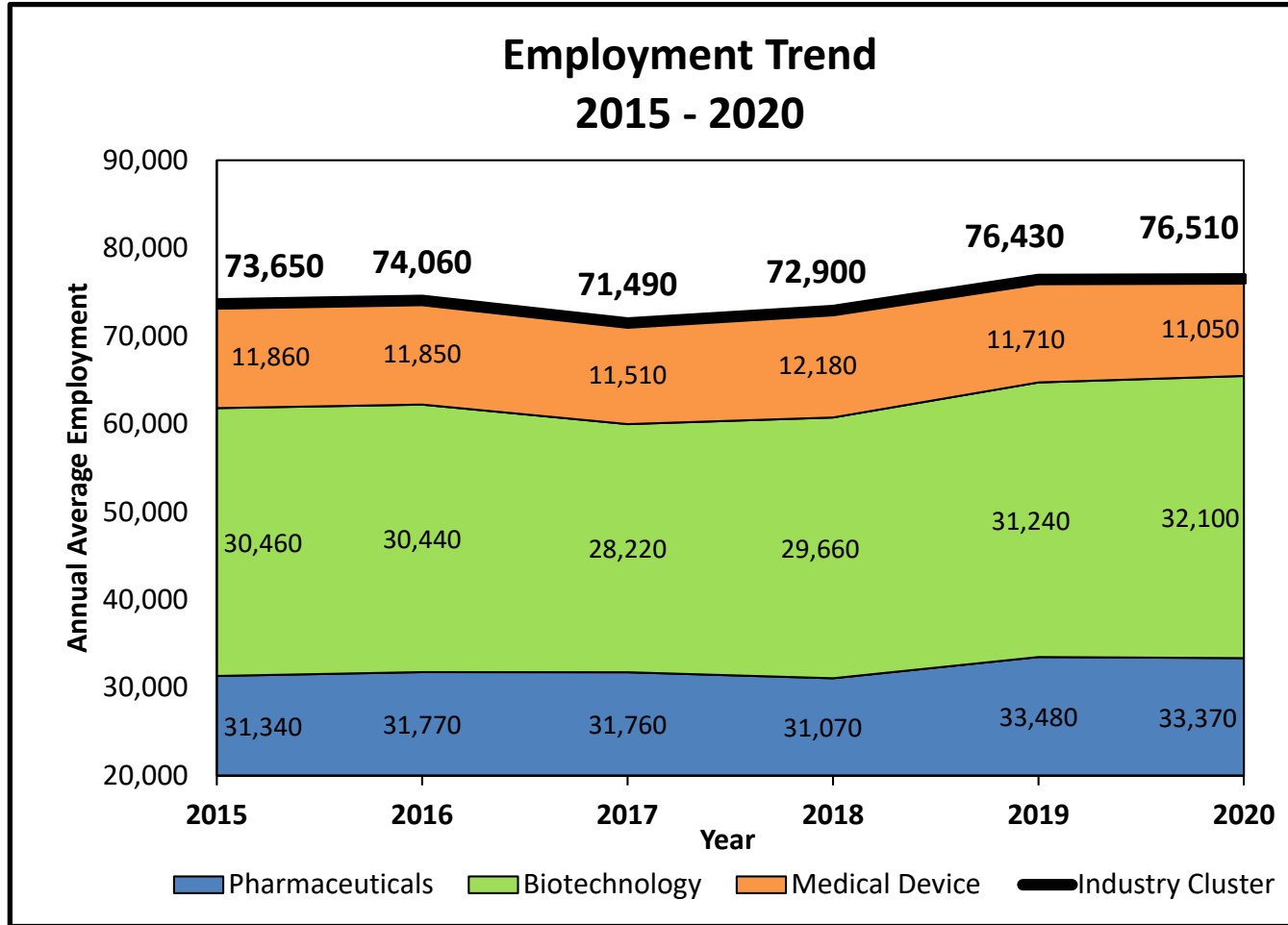
Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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# **LIFE SCIENCES INDUSTRY SECTOR: EMPLOYMENT ANALYSIS**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR 5-YEAR EMPLOYMENT TREND



- With an average of 76,500 workers employed in this NJ cluster in 2020, the employment over the 5-year period experienced an increase of 3.8 percent.
- However, the medical device component encountered a loss of -6.8 percent over the same period.



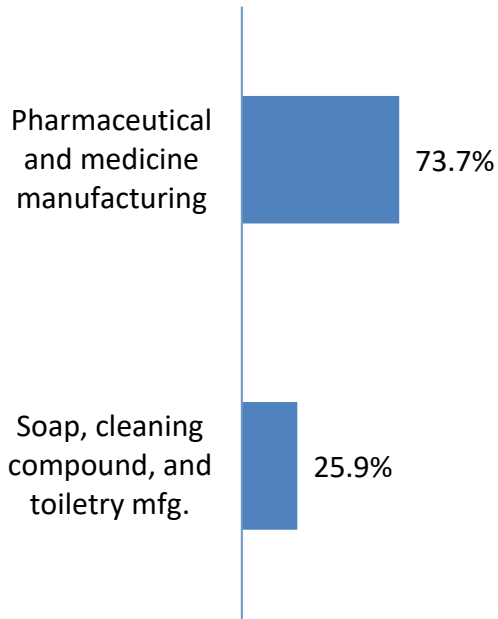
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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR SUB-SECTOR EMPLOYMENT

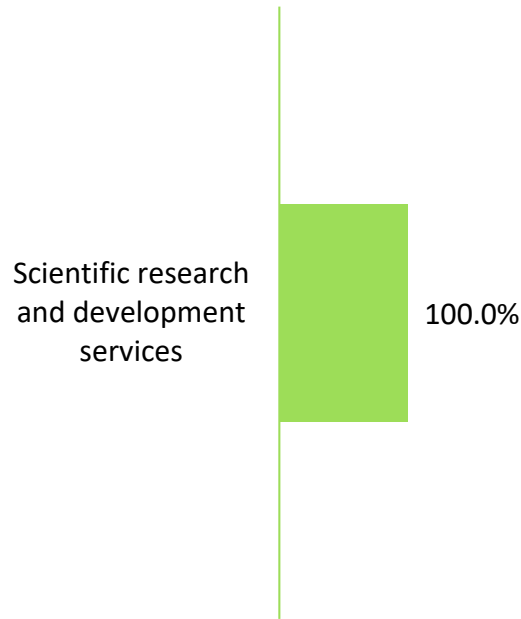
In 2020, the 76,510 jobs within this New Jersey sector were concentrated in:

## Pharmaceutical



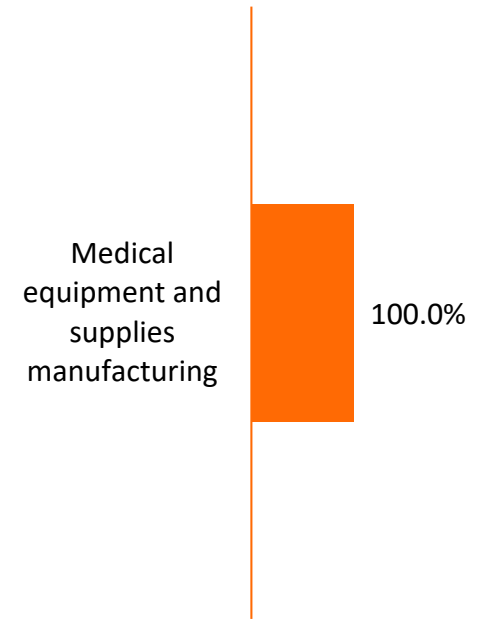
- 33,360 jobs
- The pharmaceuticals component accounted for 43.6 percent of the life sciences industry sector employment

## Biotechnology (R&D)



- 32,100 jobs
- Biotechnology (R&D) accounted for 42.0 percent of the life sciences sector employment

## Medical Devices



- 11,050 jobs
- Medical devices is the smallest of the three components and makes up 14.4 percent of the life sciences industry

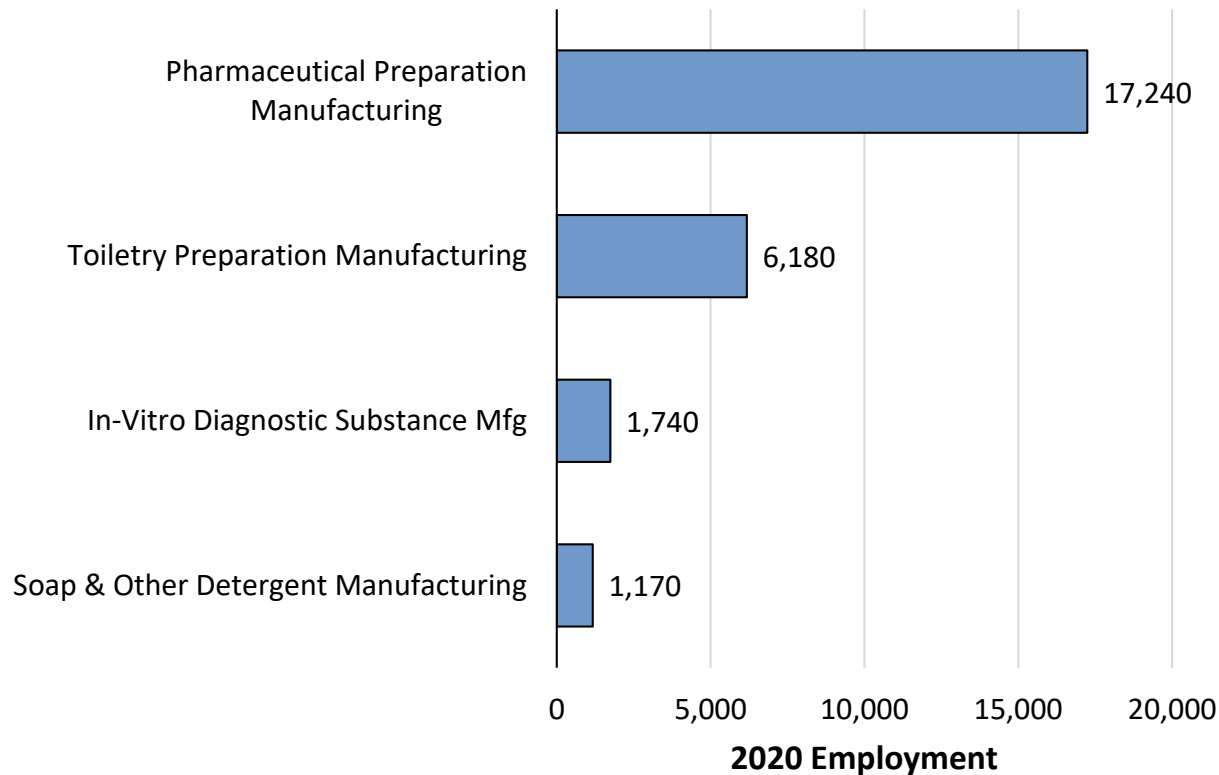


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR PHARMACEUTICALS INDUSTRY EMPLOYMENT, 2020

## Pharmaceuticals Industry



Due to disclosure issues, medicinal and botanical mfg., surface active agent mfg., other biological product mfg., and polish and sanitation good manufacturing are not included in the chart above.

- Made up 43.6 percent of the life sciences industry sector's employment in 2020.
- In-vitro diagnostic substance manufacturing (-1.0%) and toiletry preparation manufacturing (-4.4%) encountered a decline from 2015 to 2020, while pharmaceutical & medicine manufacturing (13.1%) and cleaning compound and other detergent manufacturing (1.8%) recorded an increase during the same period.

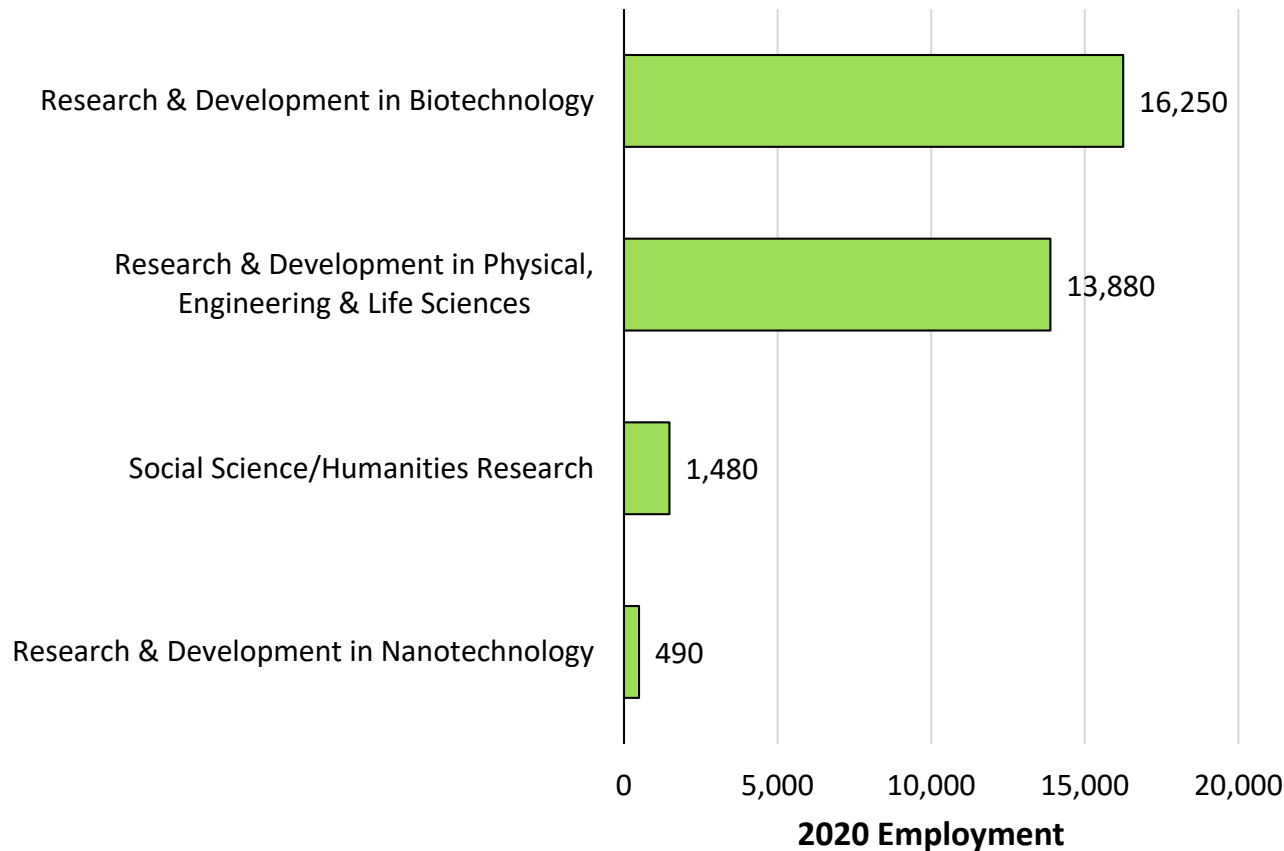


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR BIOTECHNOLOGY INDUSTRY EMPLOYMENT, 2020

## Biotechnology



- Accounted for 42.0 percent of the life sciences industry cluster's employment in 2020.
- Research & development in biotechnology (17.8%) and social science & humanities research (9.2%) both experienced a significant growth over the 5-year period from 2015 to 2020.

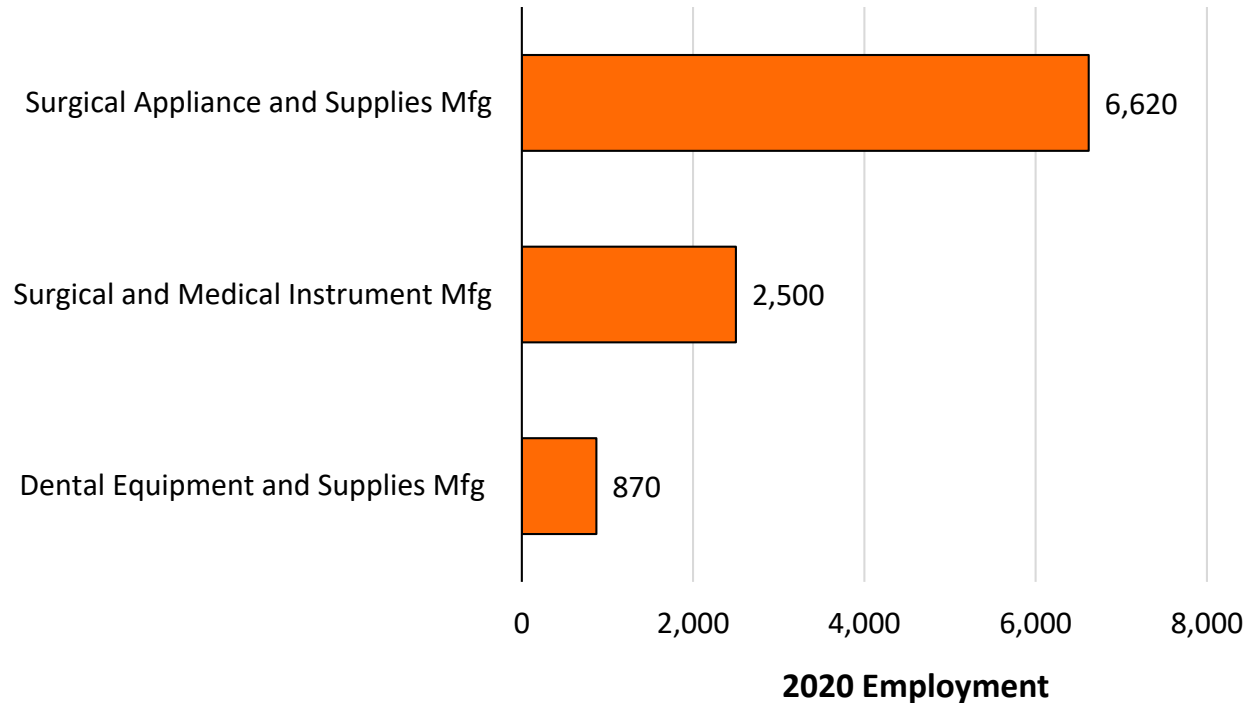


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR MEDICAL DEVICES INDUSTRY EMPLOYMENT, 2020

## Medical Devices



Due to disclosure issues, dental laboratories, and ophthalmic goods manufacturing are not included in the chart above.

- Represented 14.4 percent of the life sciences industry sector's employment in 2020.
- Surgical appliance and supplies manufacturing (-0.8%) and surgical and medical instrument manufacturing (-12.3%) both declined over the 5-year period from 2015 to 2020.



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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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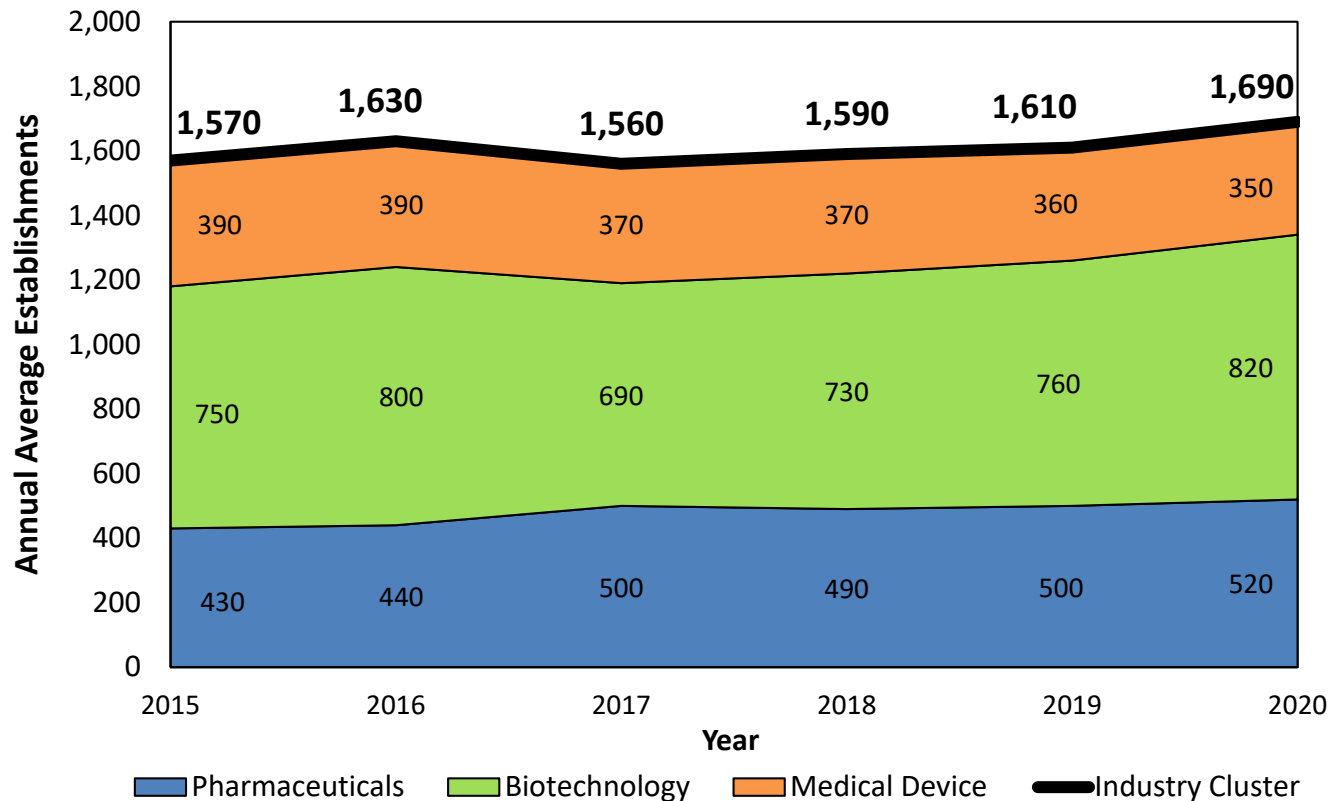
# **LIFE SCIENCES INDUSTRY SECTOR: ESTABLISHMENT ANALYSIS**





# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR 5-YEAR ESTABLISHMENT TREND

**Establishment Trend  
2015 - 2020**



- Establishments in this sector totaled 1,690 in 2020 after experiencing a notable growth (+7.6%) from 2015 – 2020.
- Pharmaceuticals sector has seen an upward trend from 2015 to 2020, adding an additional 90 establishments statewide.

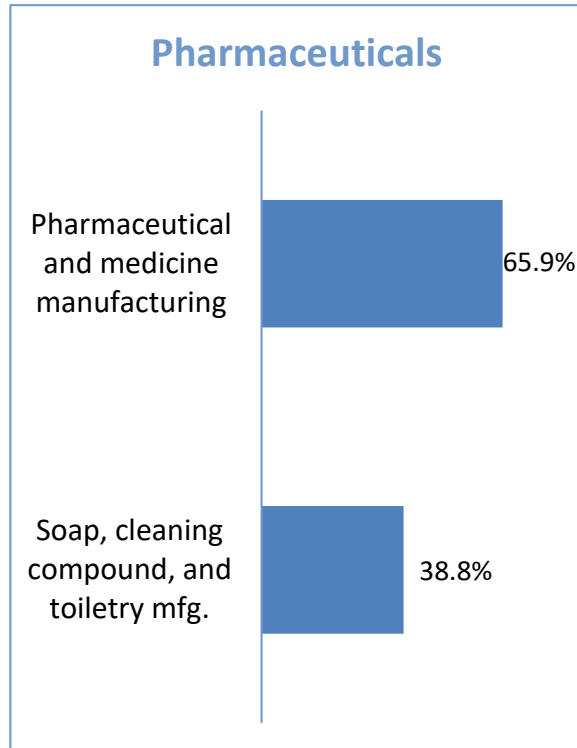


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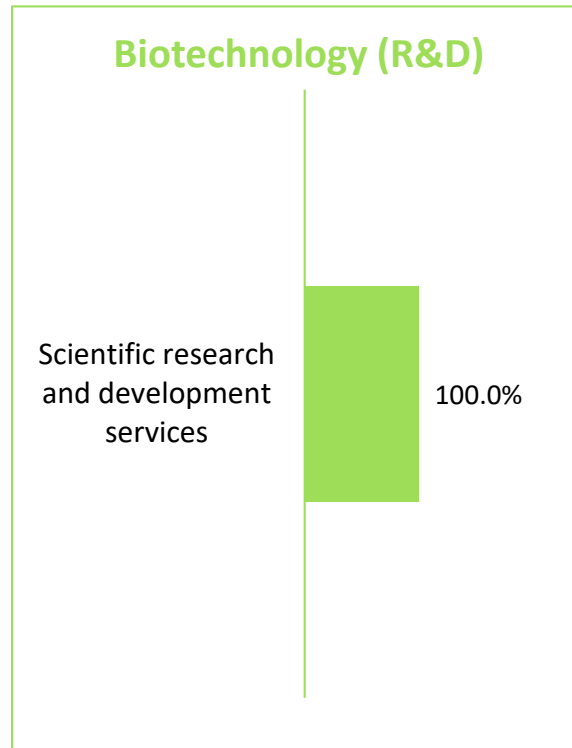
Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR SUB-SECTOR ESTABLISHMENTS

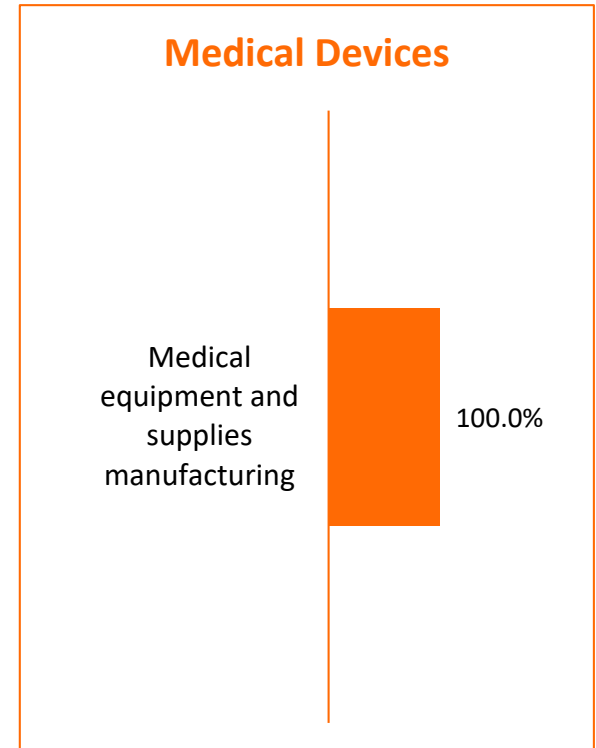
In 2020, New Jersey had 1,690 establishments in this sector engaged in:



- 520 establishments.
- The pharmaceutical component accounts for one-third of all life sciences industry establishments.



- 820 establishments.
- Biotechnology embraces almost half of all life sciences establishments in the state.



- 350 establishments.
- The medical devices component has the least establishments of all three life sciences industry components.

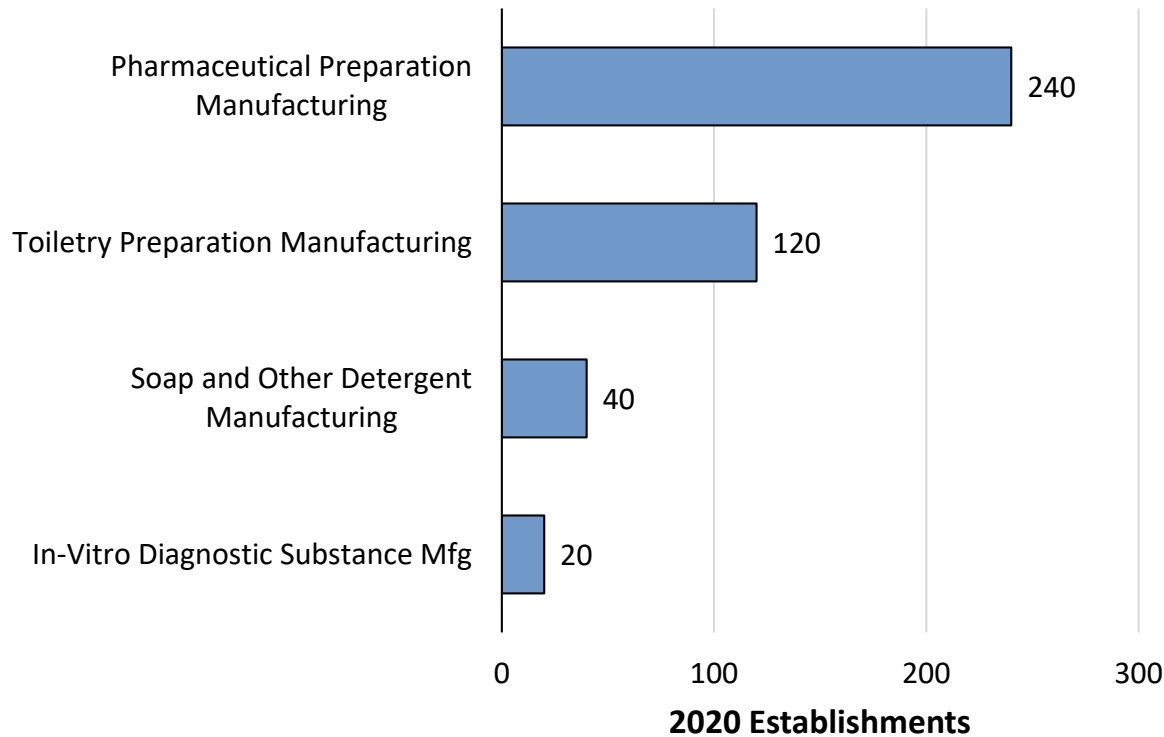


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR PHARMACEUTICALS INDUSTRY ESTABLISHMENTS, 2020

## Pharmaceuticals Industry



Due to disclosure issues, medicinal and botanical mfg., surface active agent mfg., other biological product mfg., and polish and sanitation good manufacturing are not included in the chart above.

- Accounted for 30.6 percent of the life sciences industry sector's establishments in 2020.
- Establishments in the soap and cleaning compound manufacturing field (+22.9%), toiletry preparation manufacturing (+12.4%) and pharmaceutical preparation manufacturing (+26.0%) experienced a significant growth over the 5-year period from 2015 to 2020.

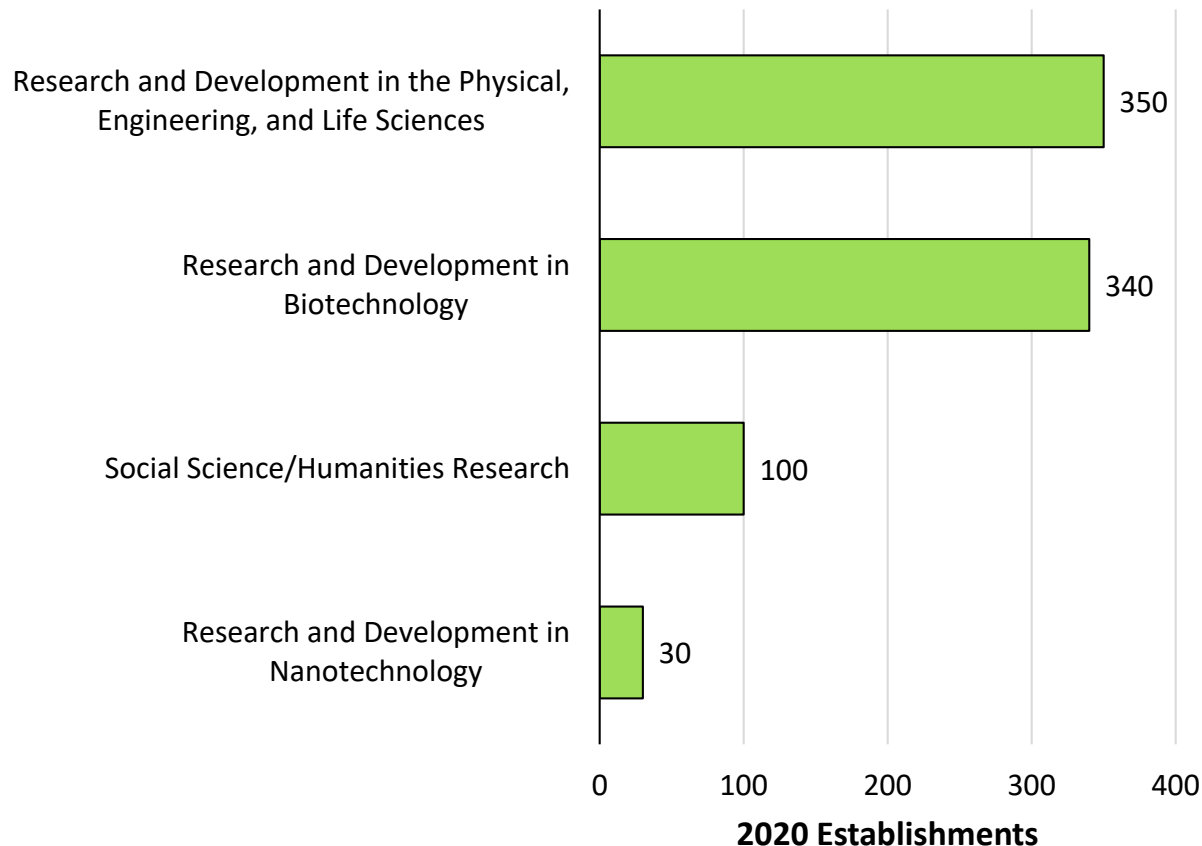


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR BIOTECHNOLOGY INDUSTRY ESTABLISHMENTS, 2020

## Biotechnology (R&D)



- Made up 48.5 percent of all establishments in the life sciences industry sector in 2020 with 820 establishments.
- R & D in biotechnology (+17.5%) and social science & humanities research (+14.4%) both experienced growth from 2015 to 2020 while R & D development in physical, engineering and life sciences (-6.3%) experienced a small decline in establishments during the same period.

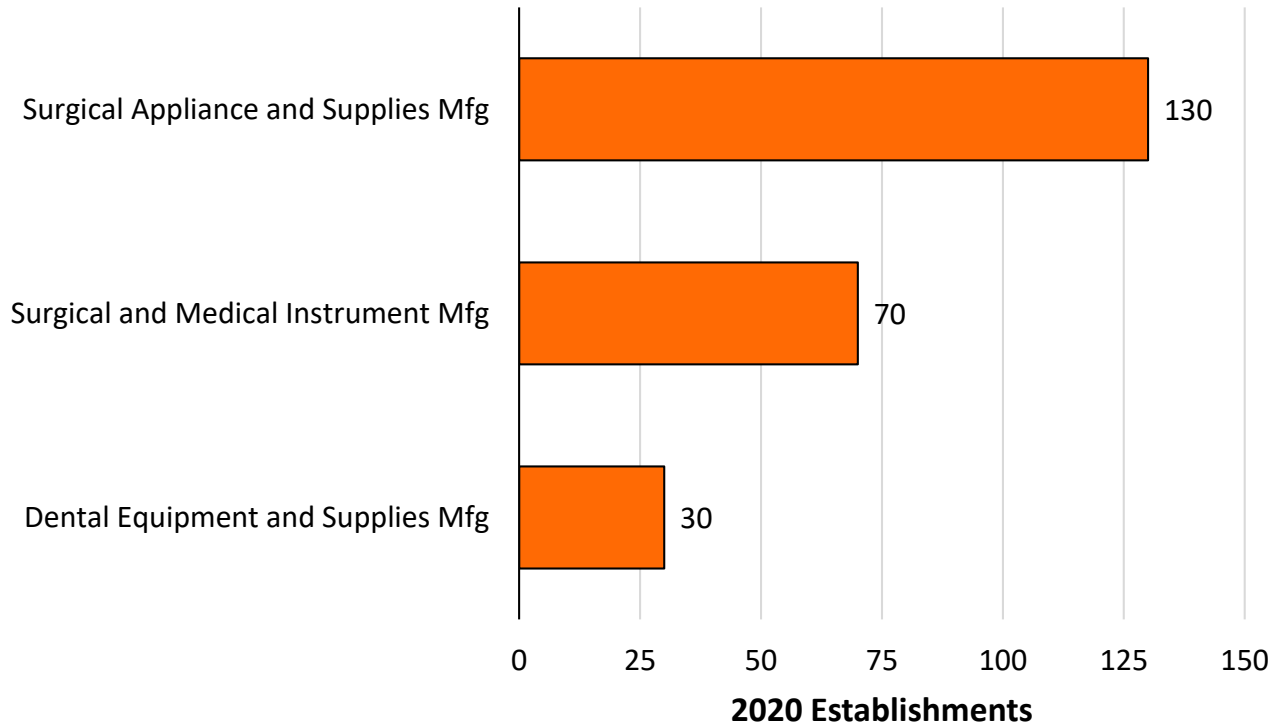


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR MEDICAL DEVICES INDUSTRY ESTABLISHMENTS, 2020

## Medical Devices



Due to disclosure issues, dental laboratories, and ophthalmic goods mfg. are not included in the chart above.

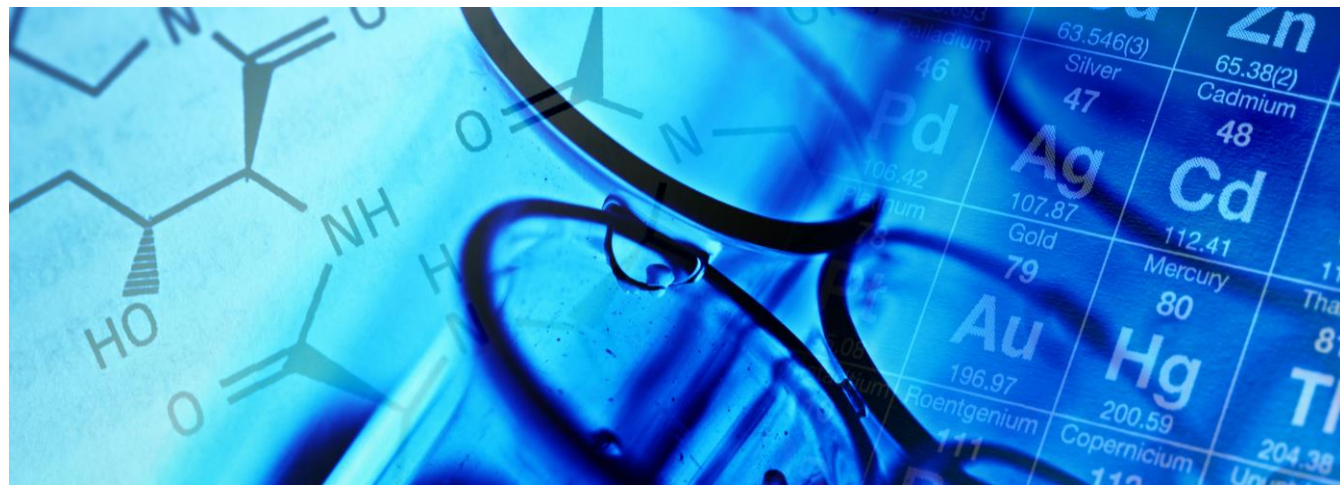
- Represented 20.9 percent of the life sciences industry sector's establishments in 2020.
- Surgical appliance and supplies manufacturing grew (+26.0%) while surgical and medical instrument manufacturing (-19.3%) experienced a decline in establishments over the 5-year period from 2015 to 2020.



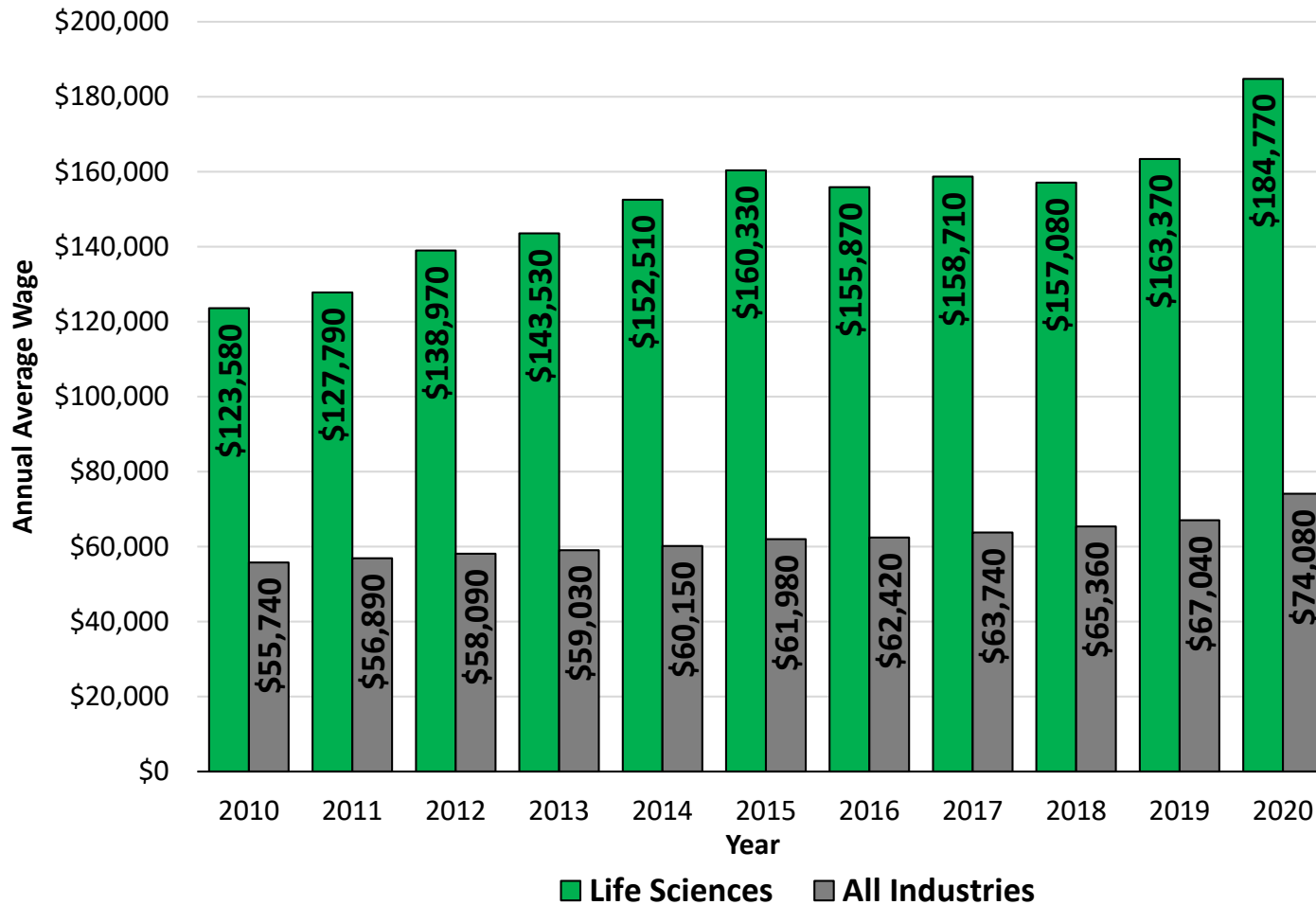
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# **LIFE SCIENCES INDUSTRY SECTOR: ANNUAL AVERAGE WAGE ANALYSIS**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR ALL PRIVATE SECTOR VS. LIFE SCIENCES ANNUAL AVERAGE WAGE



- Wages in the life sciences sector have averaged 243% of the statewide annual average wage since 2010.
- Annual average wages for the sector have risen +49.5% over the ten-year period from 2010 to 2020.

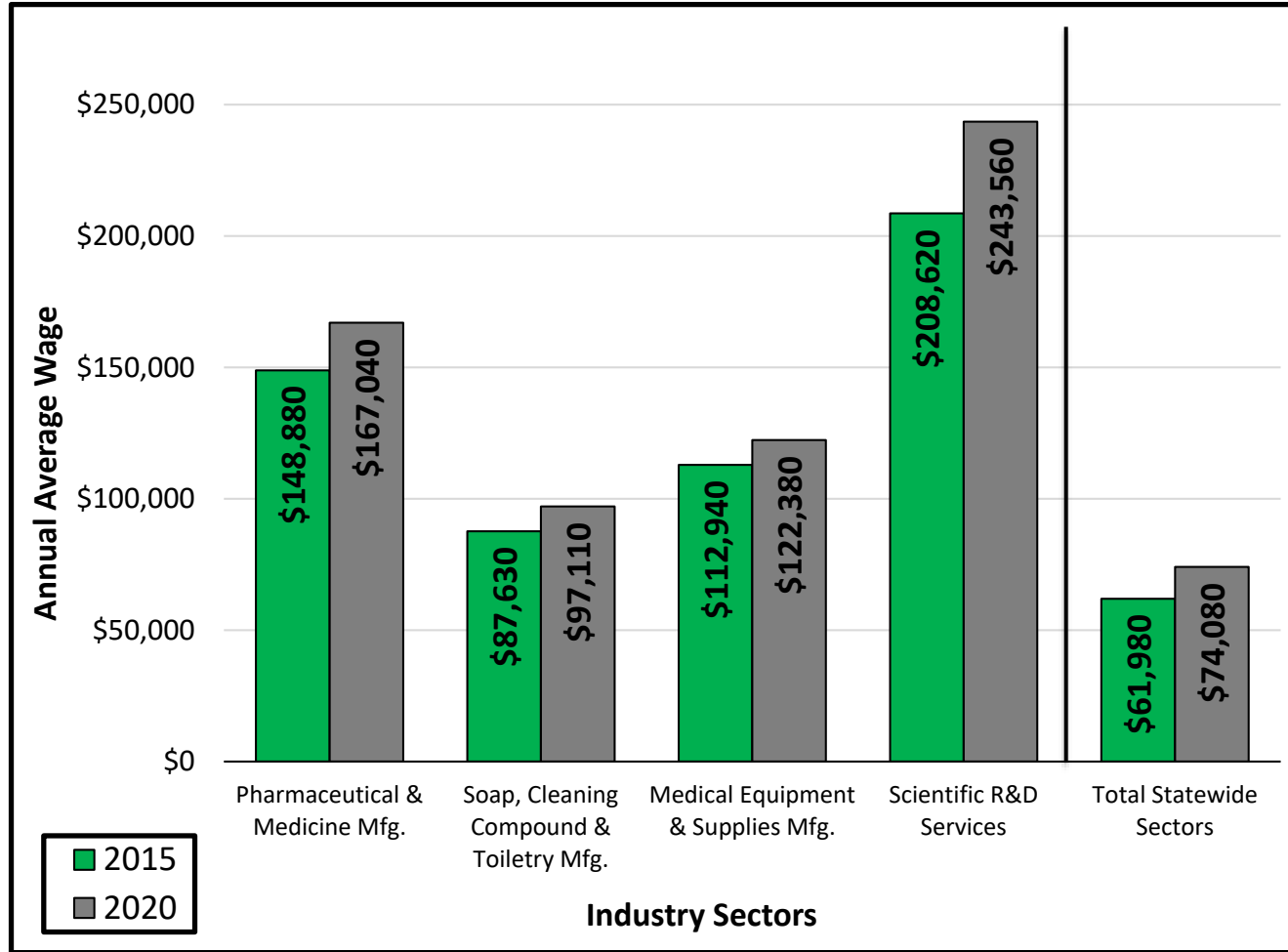


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2010-2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR 5-YEAR AVERAGE ANNUAL WAGES TREND



- This sector's average annual wage was \$184,770 in 2020, which was 149.4 percent higher than the state's total private sector's average annual wage of \$74,080.
- All three of this sector's components had 2020 wages that were significantly higher than the state's total average annual wage.



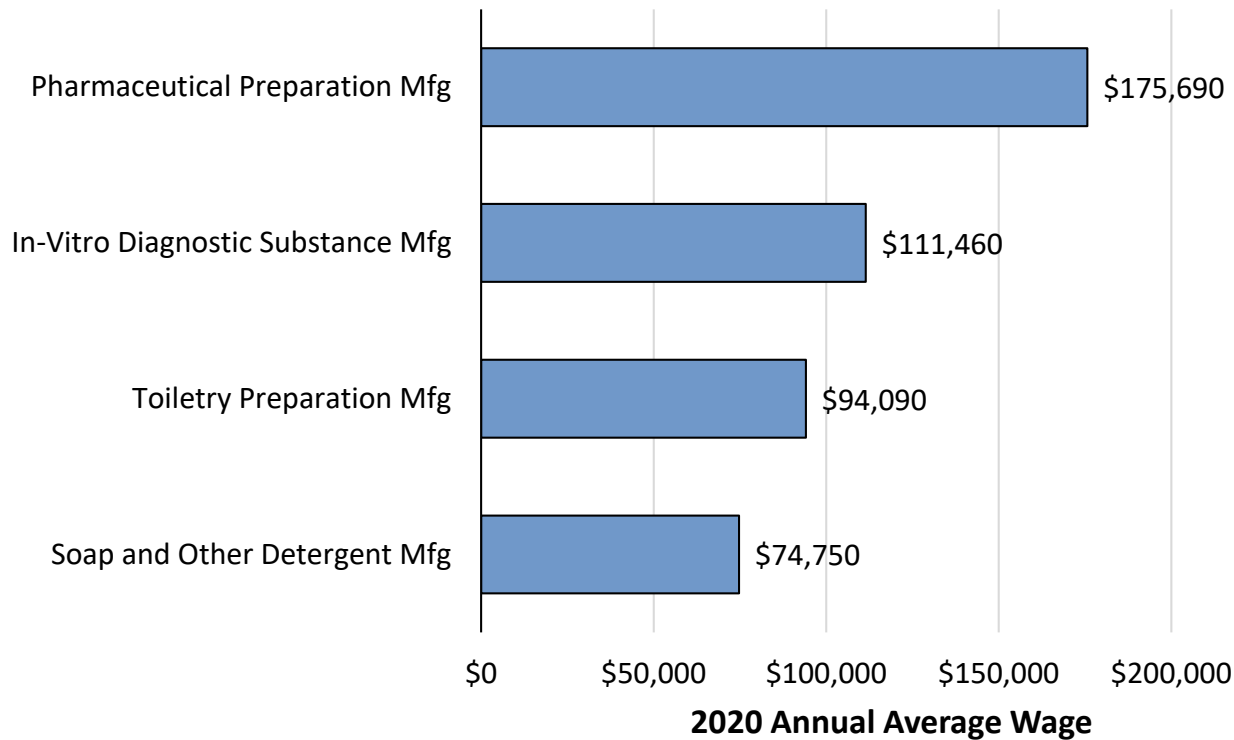
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## PHARMACEUTICALS INDUSTRY ANNUAL AVERAGE WAGE, 2020

### Pharmaceuticals Industry



Due to disclosure issues, medicinal and botanical mfg., surface active agent mfg., other biological product mfg., and polish and sanitation good manufacturing are not included in the chart above.

- Annual average wages increased \$24,700 (or +19.9%), from \$124,140 in 2015 to \$148,840 in 2020.
- Changes in this industry ranged from soap, cleaning, compound, and toiletry manufacturing (+10.8%) to pharmaceutical & medicine manufacturing (+12.2%) in annual average wages from 2015 to 2020.

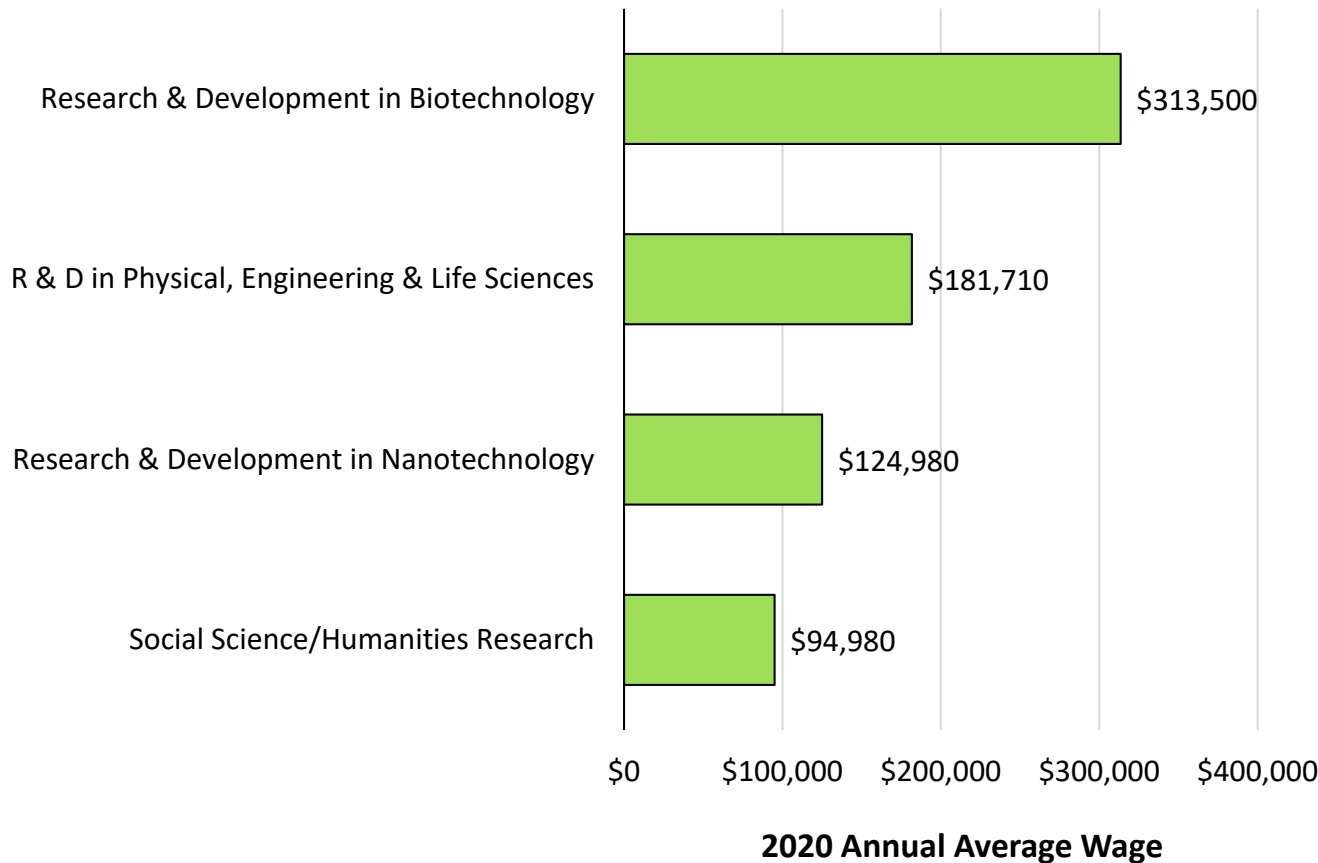


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2015 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR BIOTECHNOLOGY INDUSTRY ANNUAL AVERAGE WAGE, 2020

## Biotechnology (R&D)



- Annual average wages were \$243,560 in 2020, up +16.7 percent from \$208,620 in 2015.
- Research and development in biotechnology experienced the highest wages increase from \$266,220 in 2015 to \$313,500 in 2020. A total increase of +17.8%.

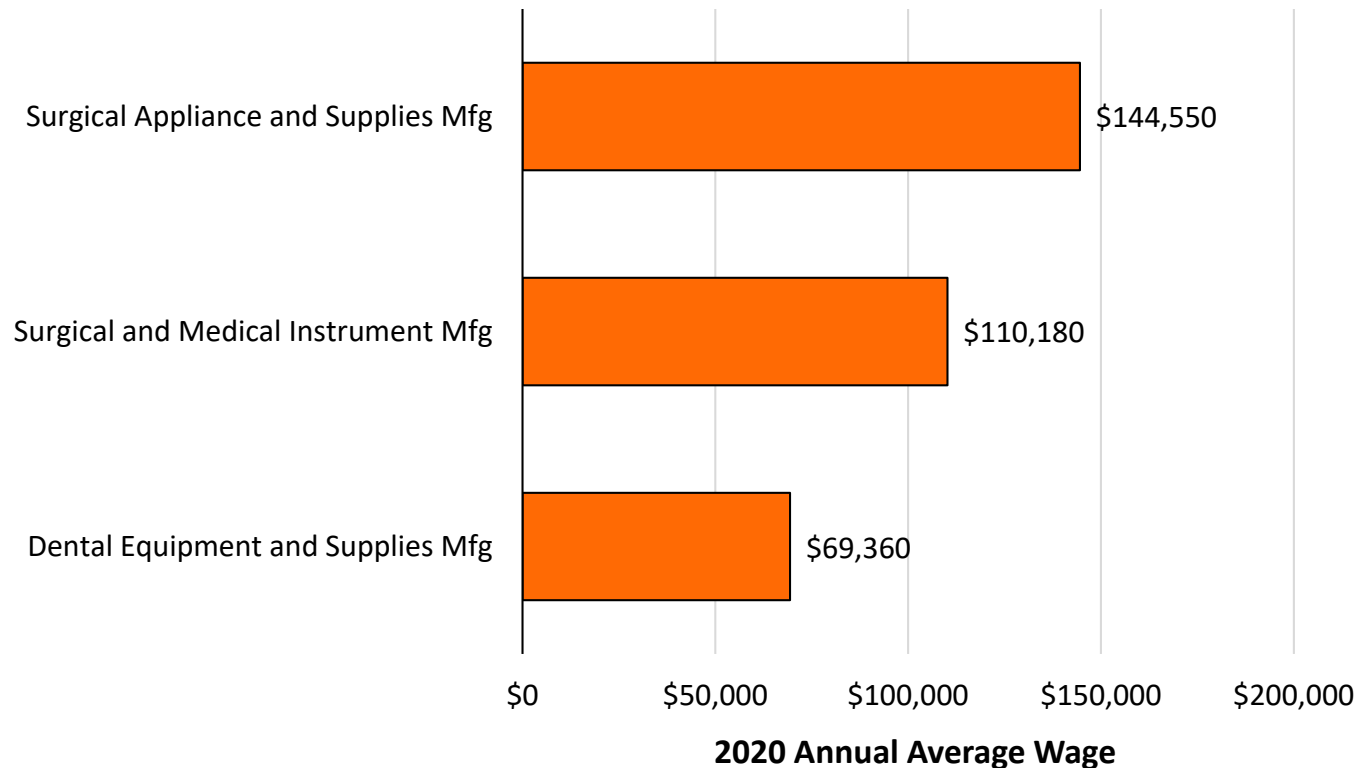


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR MEDICAL DEVICES INDUSTRY ANNUAL AVERAGE WAGE, 2020

## Medical Devices



Due to disclosure issues, dental laboratories, and ophthalmic goods mfg. are not included in the chart above.

- Annual average wages were \$122,380 in 2020, up +8.4% from \$112,940 in 2015.
- Surgical appliances and supplies manufacturing experienced a significant wages increase from \$127,270 in 2015 to \$144,550 in 2020. A total growth of +13.6%.



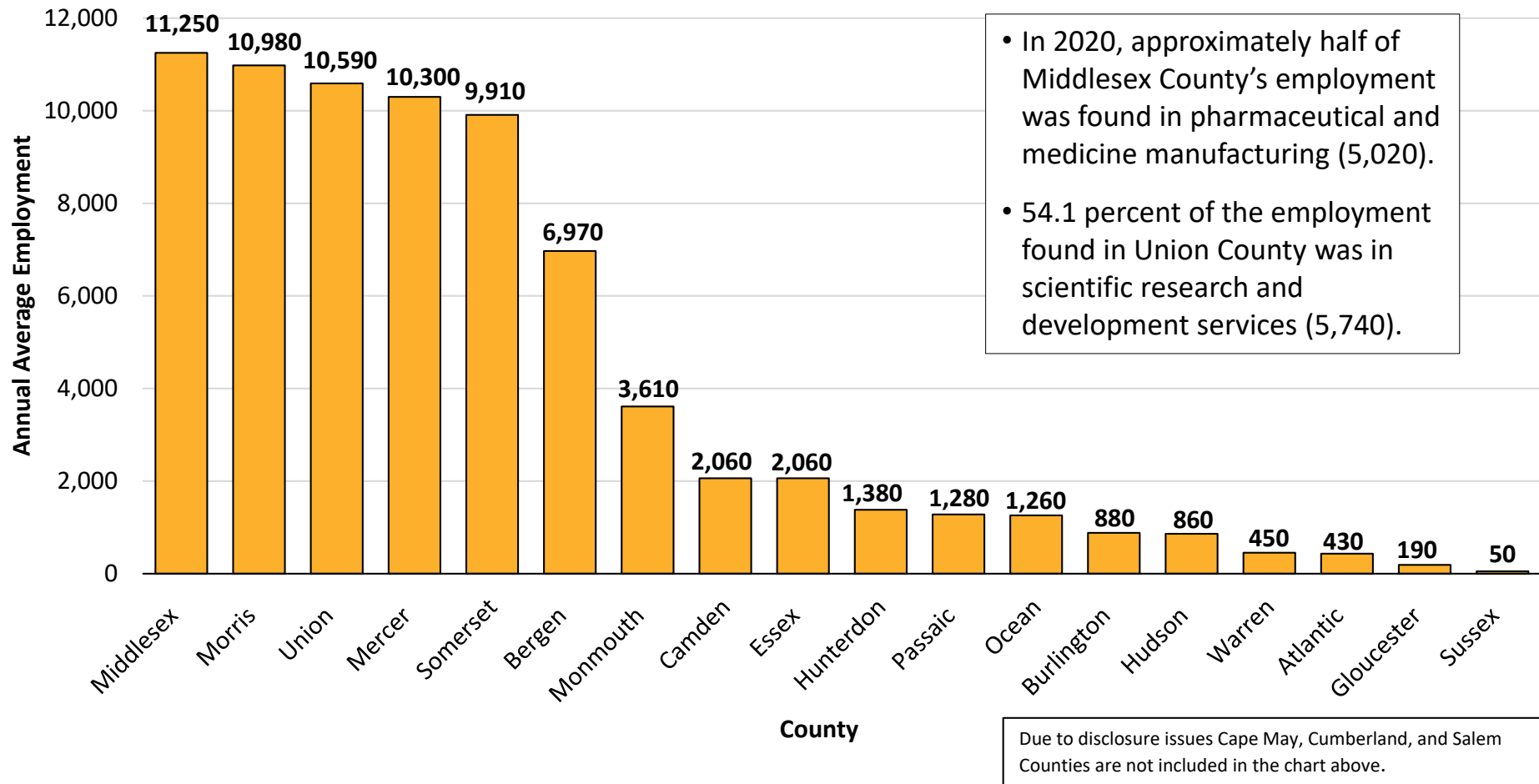
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# **LIFE SCIENCES INDUSTRY SECTOR: REGIONAL AND COUNTY ANALYSIS**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR EMPLOYMENT BY COUNTY, 2020 ANNUAL AVERAGES

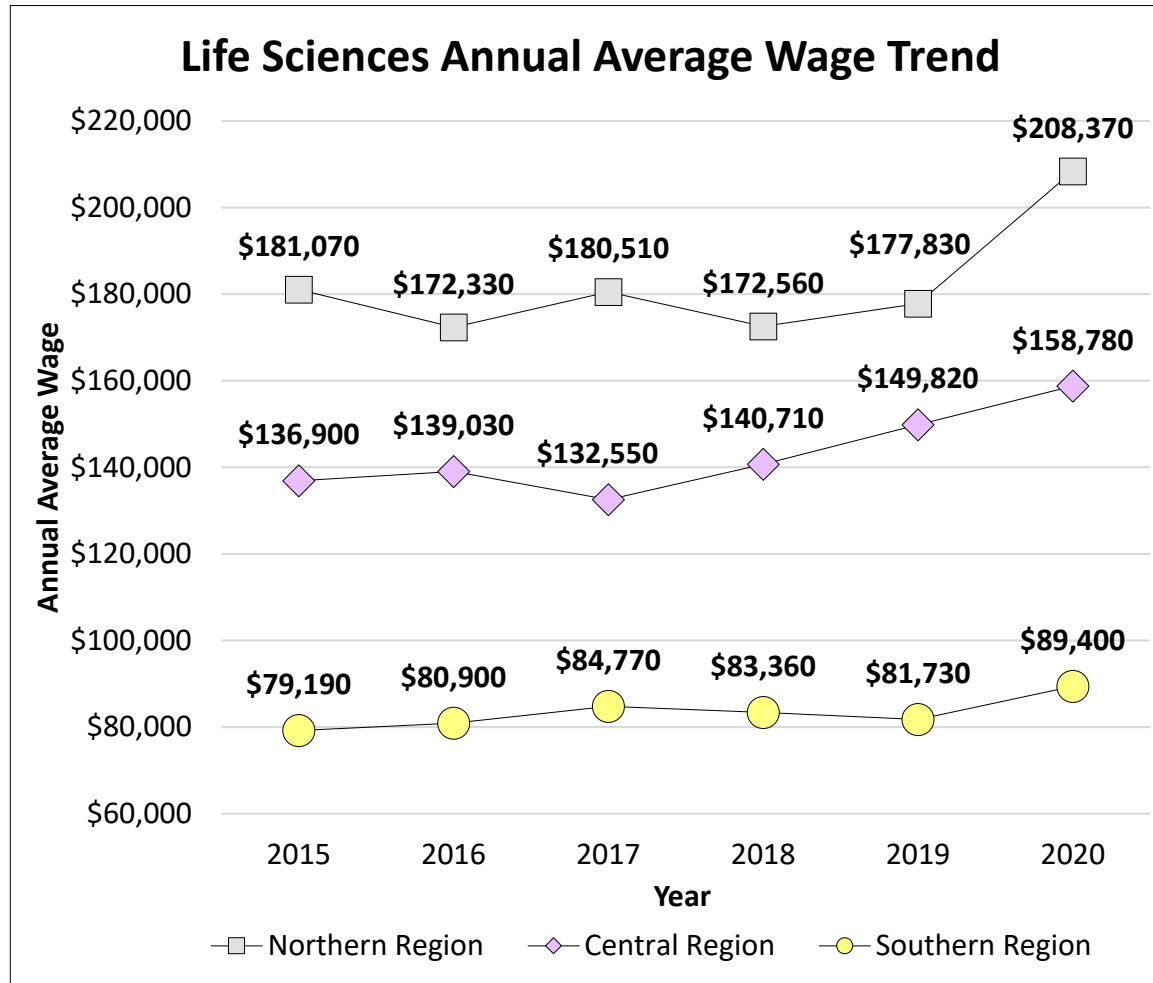


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## LIFE SCIENCES ANNUAL AVERAGE WAGE BY REGION 5-YEAR TREND



- Northern Region - (Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex, Union, and Warren Counties) – Annual average wage increased 15.1 percent from 2015 - 2020.
- Central Region – (Mercer, Middlesex, Monmouth, and Ocean Counties) – This region experienced the highest growth in annual average wage over the five-year period. A total of 16 percent.
- Southern Region – (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties) – Presented the smallest annual average wage increase (+12.9%) during the shown period.



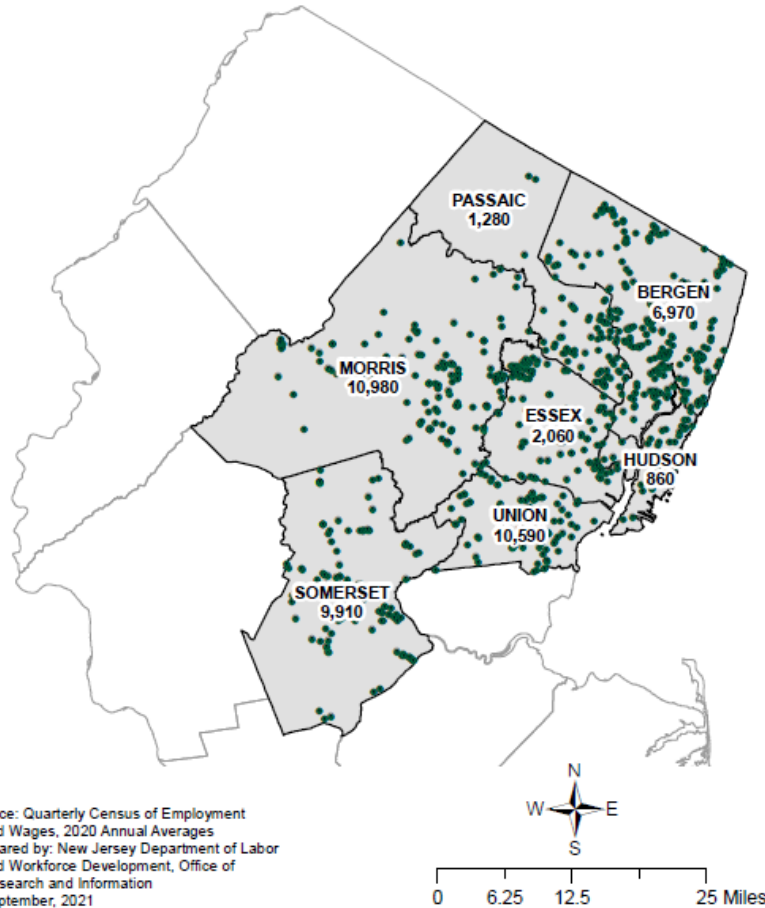
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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2015-2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR COUNTIES IN THE NORTHERN REGION

*Life Sciences Employment and Establishment Locations  
Northern Region of New Jersey, 2020*



The highlighted region to the left consists of Bergen, Essex, Hudson, Morris, Passaic, Somerset, and Union Counties.

- **Establishments** – A majority of the Life Sciences industry related establishments can be found along major highways in New Jersey within a close proximity to New York, New York.
- **Employment** – Represent more than half of the life sciences employment in New Jersey in 2020.
- **Average Wage** – The average wage for these counties in life sciences related industries is comparatively above the statewide total average in this sector (\$211,620 vs. \$184,760).

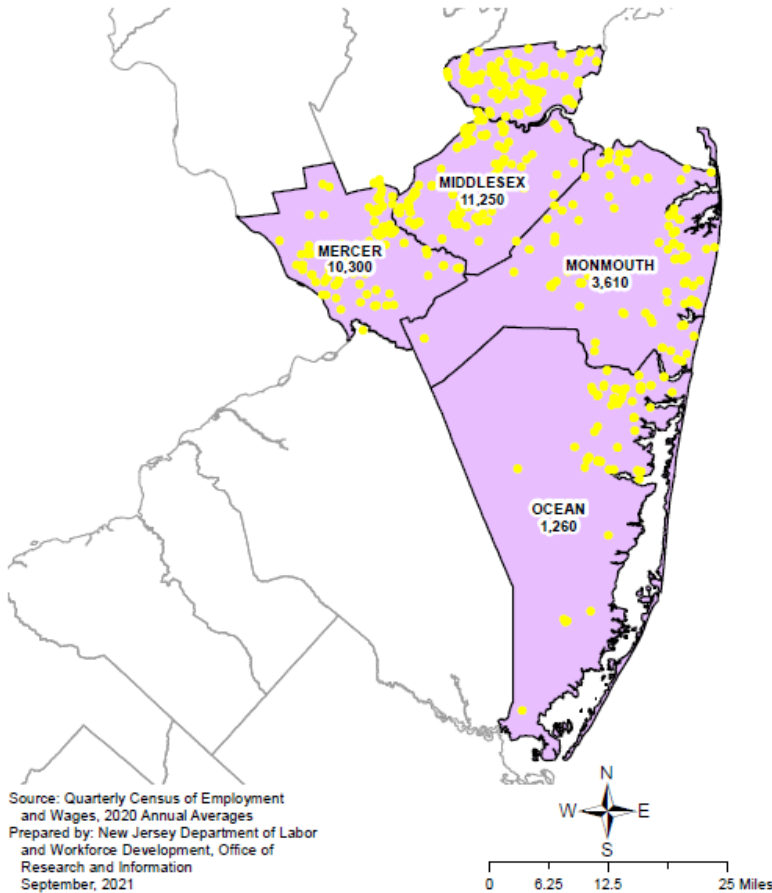


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Source: NJ Department of Labor & Workforce Development, Quarterly Census of Employment and Wages, 2020 Annual Averages  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR COUNTIES IN THE CENTRAL REGION

*Life Sciences Employment and Establishment Locations  
Central Region of New Jersey, 2020*



The highlighted region to the left consists of Mercer, Middlesex, Monmouth, and Ocean Counties.

- ***Establishments*** - These counties account for more than a quarter of all establishments in the life sciences industry sector in New Jersey.
- ***Employment*** – Employment for these four counties makes up nearly one third of employment in the life sciences industry sector.
- ***Average Wage*** – The average wage for these counties in life sciences related industries is relatively below the statewide total average in this cluster (\$158,780 vs. \$184,760) in 2020.

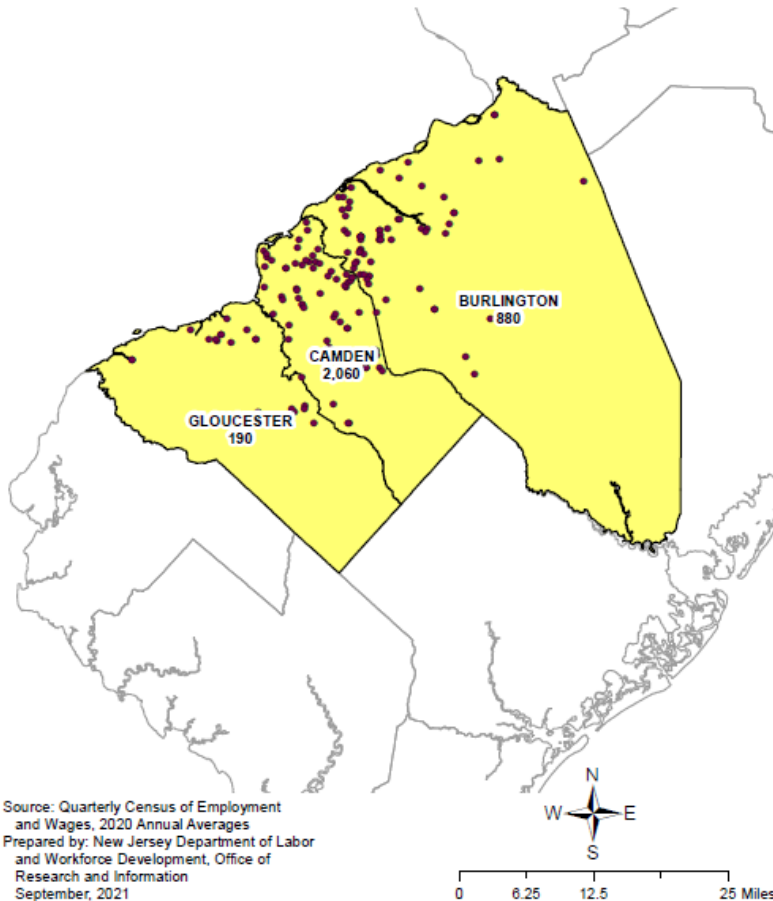


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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR COUNTIES IN THE SOUTHERN REGION

*Life Sciences Employment and Establishment Locations  
Southern Region of New Jersey, 2020*



The highlighted region to the left consists of Burlington, Camden, and Gloucester Counties.

- **Establishments** – Having a close proximity to Philadelphia, PA these three counties account for 6.2 percent of all life sciences industry establishments in New Jersey.
- **Employment** – The three counties have slightly more than 3,100 employment.
- **Average Wage** – The average wage for these counties in life sciences related industries is below the statewide total average in this cluster (\$89,830 vs. \$184,760). These counties also account for 2 percent of total life sciences annual average wages paid in 2020.



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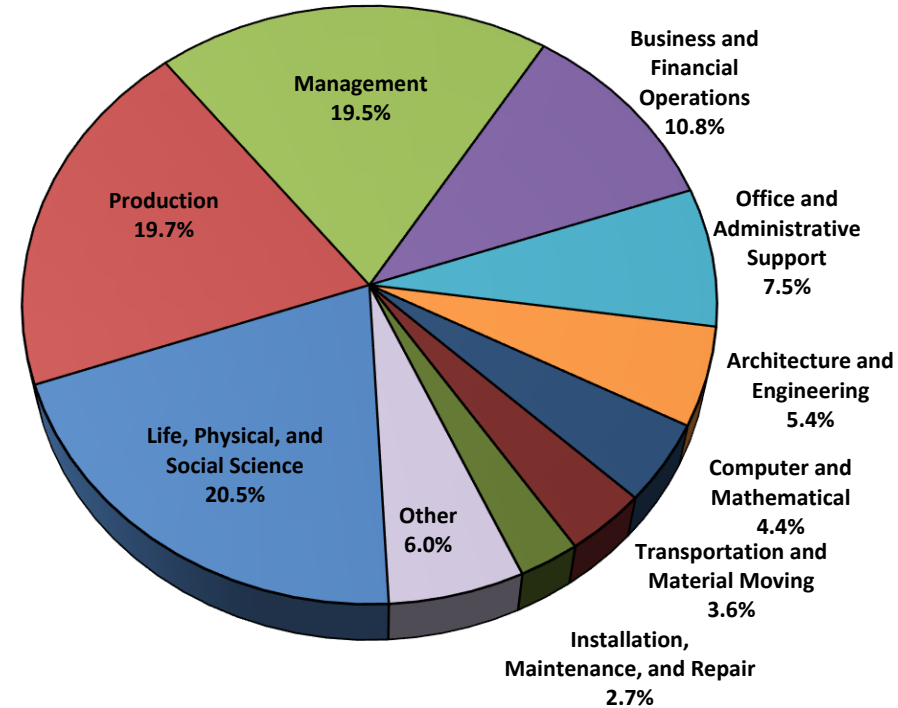
# **LIFE SCIENCES INDUSTRY SECTOR: OCCUPATIONAL ANALYSIS**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR TOP OCCUPATIONAL GROUPS, 2020

Occupational Title	2020 Employment	2020 Average Salary
<b>All Life Sciences Occupations</b>	<b>78,040</b>	<b>\$104,040</b>
Life, Physical, and Social Science	15,830	\$101,610
Production	15,190	\$45,890
Management	15,080	\$204,910
Business and Financial Operations	8,350	\$100,450
Office and Administrative Support	5,770	\$55,090
Computer and Mathematical	4,140	\$105,040
Architecture and Engineering	3,370	\$117,290
Transportation and Material Moving	2,770	\$40,630
Installation, Maintenance, and Repair	2,060	\$66,450
Sales and Related	1,500	\$105,820
Healthcare Support	850	\$38,780
Arts, Design, Entmt., Sports, and Media	680	\$95,250

## Life Sciences Industry Sector



Note: Due to disclosure issues, of the total 78,040 jobs identified, only 98.9 could be used for this occupational analysis.



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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR TOP 20 OCCUPATIONS BY EMPLOYMENT, 2020

## New Jersey Life Sciences Sector's Top 20 Occupations

SOC and Occupational Title	2020 Employment	Education
11-9121 Natural Sciences Managers	4,730	Bachelor's degree
19-2031 Chemists	3,340	Bachelor's degree
51-9111 Packaging and Filling Machine Operators and Tenders	2,740	High school diploma or equivalent
51-9011 Chemical Equipment Operators and Tenders	2,420	High school diploma or equivalent
19-1021 Biochemists and Biophysicists	1,920	Doctoral or professional degree
51-9061 Inspectors, Testers, Sorters, Samplers, and Weighers	1,790	High school diploma or equivalent
11-1021 General and Operations Managers	1,720	Bachelor's degree
19-4031 Chemical Technicians	1,700	Associate's degree
19-4021 Biological Technicians	1,490	Bachelor's degree
51-1011 First-Line Supervisors of Production and Operating Workers	1,410	High school diploma or equivalent
11-2021 Marketing Managers	1,220	Bachelor's degree
51-9023 Mixing and Blending Machine Setters, Operators, and Tenders	1,180	High school diploma or equivalent
13-1041 Compliance Officers	1,180	Bachelor's degree
51-2090 Miscellaneous Assemblers and Fabricators	1,160	High school diploma or equivalent
17-2112 Industrial Engineers	1,130	Bachelor's degree
11-3051 Industrial Production Managers	1,070	Bachelor's degree
41-4012 Sales Rep., Wholesale and Manufacturing, Except Technical and Scientific Products	1,060	High school diploma or equivalent
49-9041 Industrial Machinery Mechanics	980	High school diploma or equivalent
53-7062 Laborers and Freight, Stock, and Material Movers, Hand	960	No formal educational credential
19-1022 Microbiologists	940	Bachelor's degree



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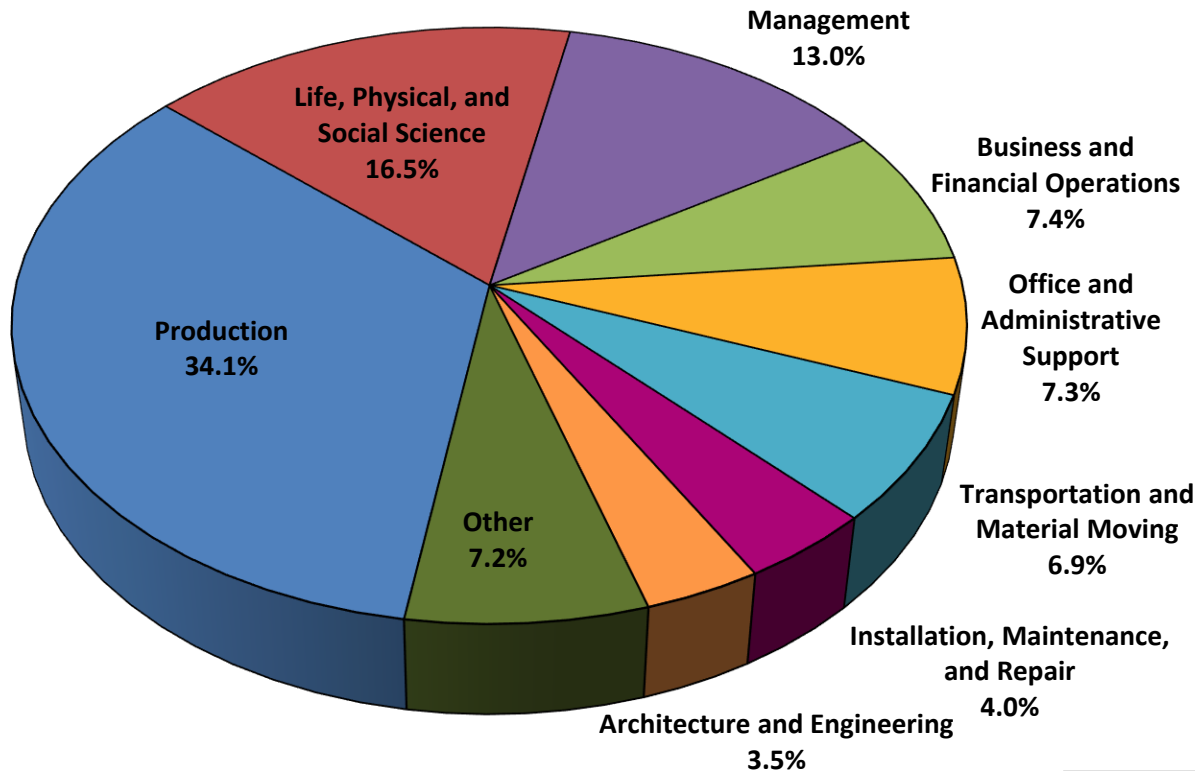
Source: NJ Department of Labor & Workforce  
Development, Occupational Employment Statistics,  
May 2020

Prepared by: New Jersey Department of Labor and  
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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR PHARMACEUTICAL COMPONENT, 2020

## Major Occupational Group Breakdown



An occupational analysis of 31,450 jobs revealed that five major occupational groups in this component accounted for nearly three-fourths (78,3%) of the employment.

Production and Life, Physical, and Social Science occupations employed the most in this component with 15,910 jobs in 2020.

Note: Due to disclosure issues, of the total 31,620 jobs identified, only 31,450 could be used for this occupational analysis.



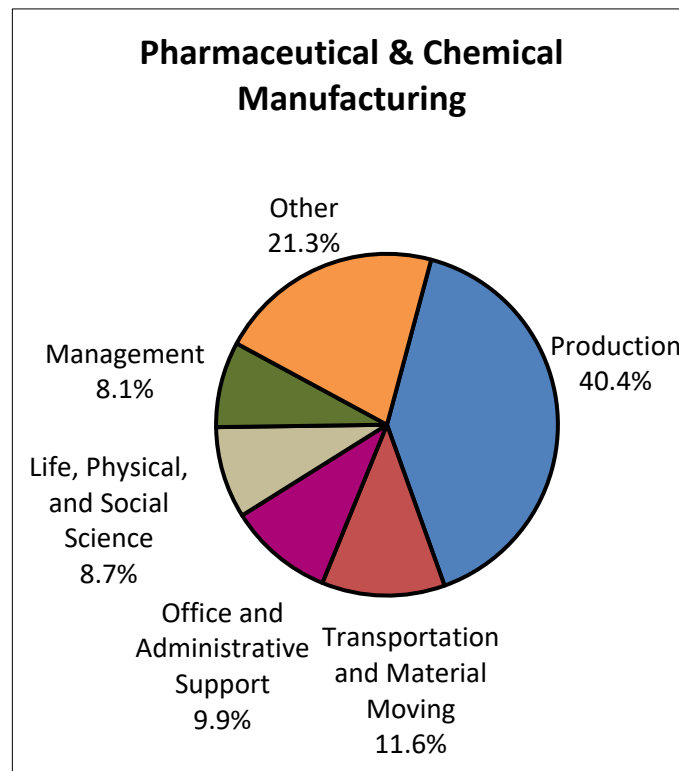
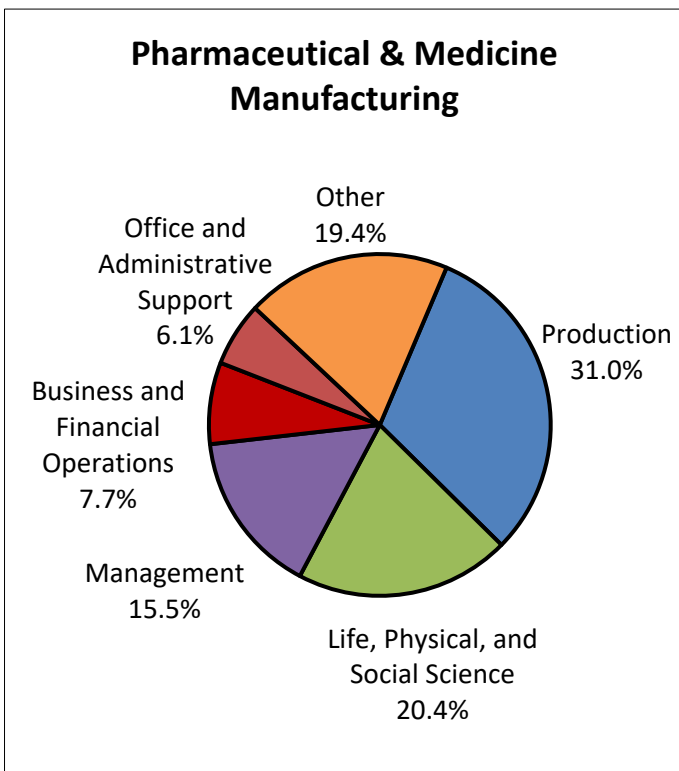
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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## PHARMACEUTICAL'S MAJOR OCCUPATIONAL GROUPS, 2020



- A majority of occupations in pharmaceutical & medicine manufacturing and pharmaceutical & chemical manufacturing are production related.
- In both industry groups, computer & mathematical and installation, maintenance and repair occupations account for a significant portion of the employment within the “Other” categories.

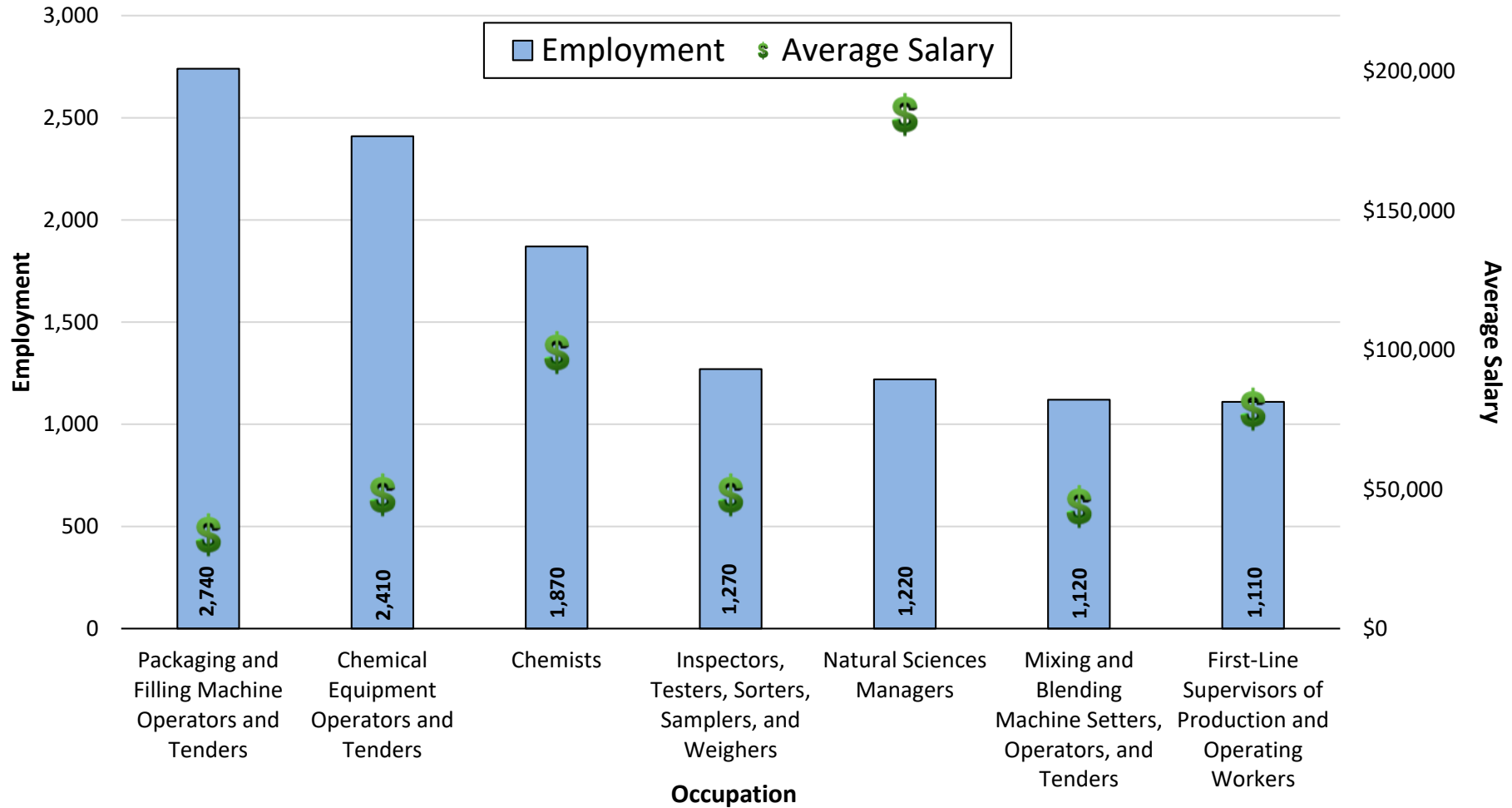


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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR TOP PHARMACEUTICAL OCCUPATIONS, 2020



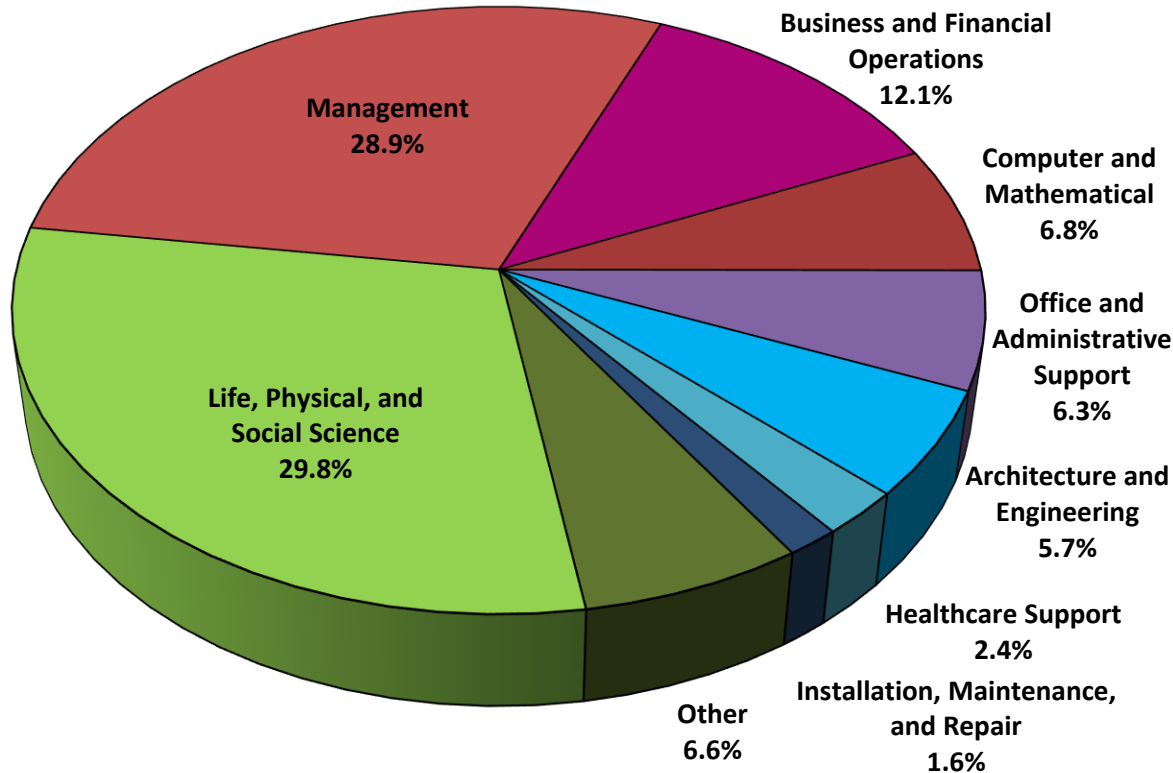
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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR BIOTECHNOLOGY (R&D) COMPONENT, 2020

## Major Occupational Group Breakdown



An occupational analysis of 35,220 jobs revealed that five major occupational groups in this component accounted for nearly four-fifth (83.8%) of the employment.

Life, physical, and social science occupations employed the most in this component with approximately 10,500 jobs in 2020 and accounted for more than one-fourth of the component.

Note: Due to disclosure issues, of the total 35,810 jobs identified, only 35,220 could be used for this occupational analysis.

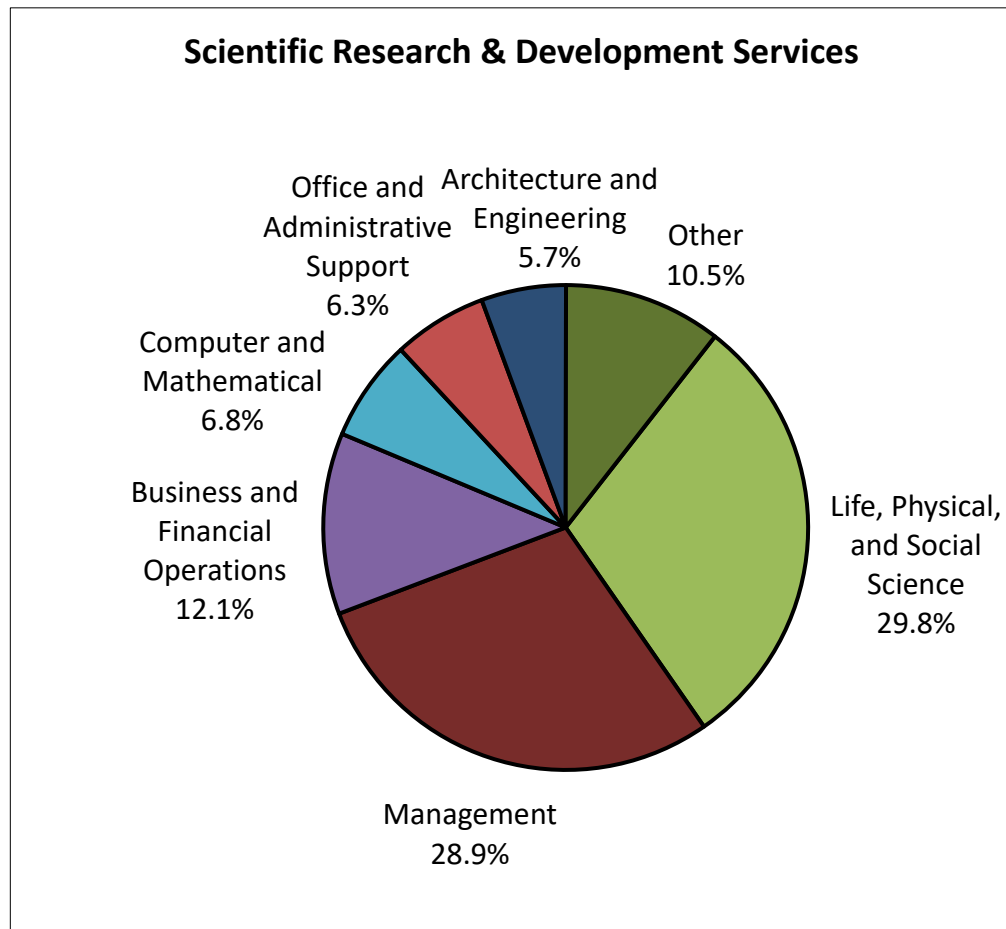


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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR BIOTECHNOLOGY (R&D) MAJOR OCCUPATIONAL GROUP, 2020

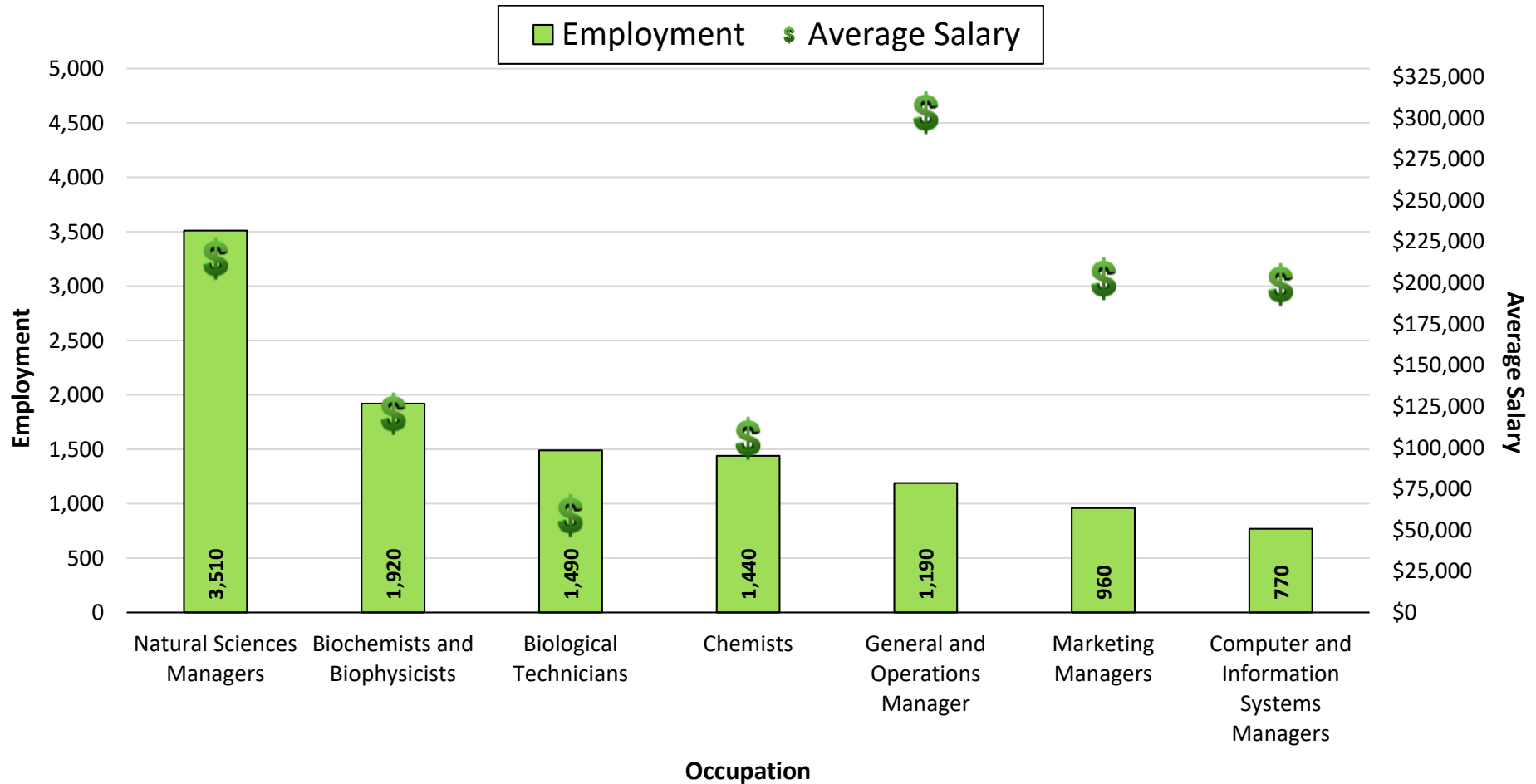
- The biotech's occupational group shows that this industry class holds a significant portion of professional, scientific, and technical workers with in-depth skills and knowledge related to science.
- In this bundle, healthcare support, and installation, maintenance & repair occupations account for a significant portion of the employment within the "Other" category.



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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR TOP BIOTECHNOLOGY (R&D) OCCUPATIONS, 2020



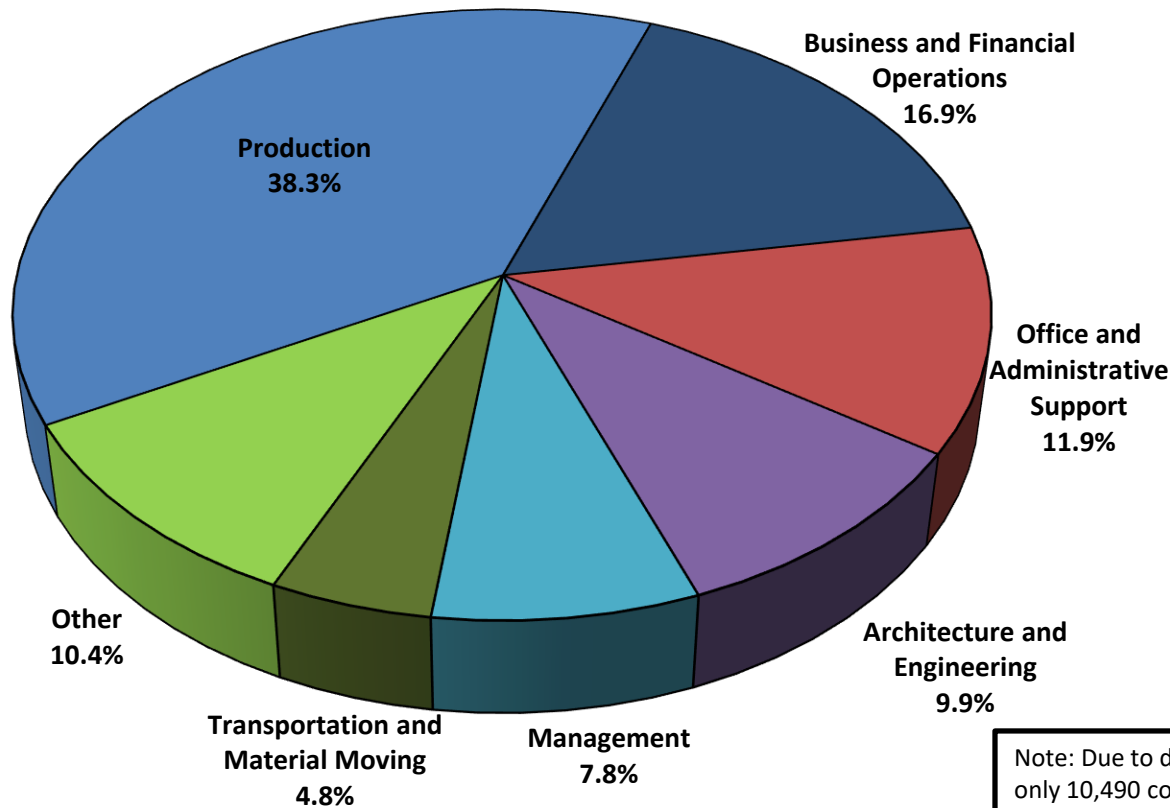
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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR MEDICAL DEVICE COMPONENT, 2020

## Major Occupational Group Breakdown



An occupational analysis of 10,490 jobs revealed that five major occupational groups in this component accounted for more than four-fifths of the employment (84.8%).

Production occupations employed the most in this component with 4,020 jobs and accounted for more than one-third of the component (38.3%).

Note: Due to disclosure issues, of the total 10,610 jobs identified, only 10,490 could be used for this occupational analysis.



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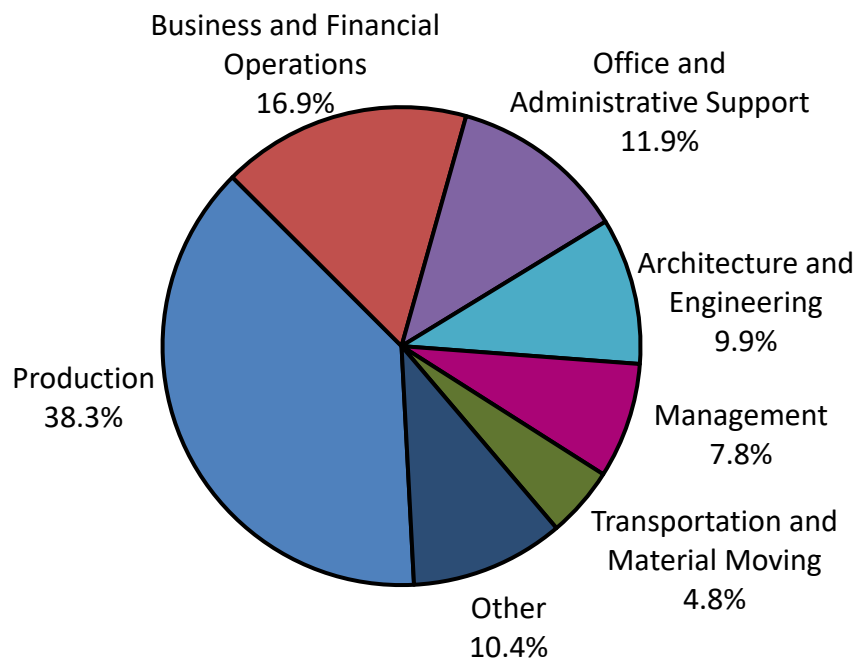
Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## MEDICAL DEVICES MAJOR OCCUPATIONAL GROUPS, 2020

- The medical devices' occupational group shows that this industry class holds a significant portion of technical workers with skills and knowledge related to production.
- In this bundle, the installation, maintenance & repair, and sales & related occupations account for a significant portion of the employment within the “Other” category.

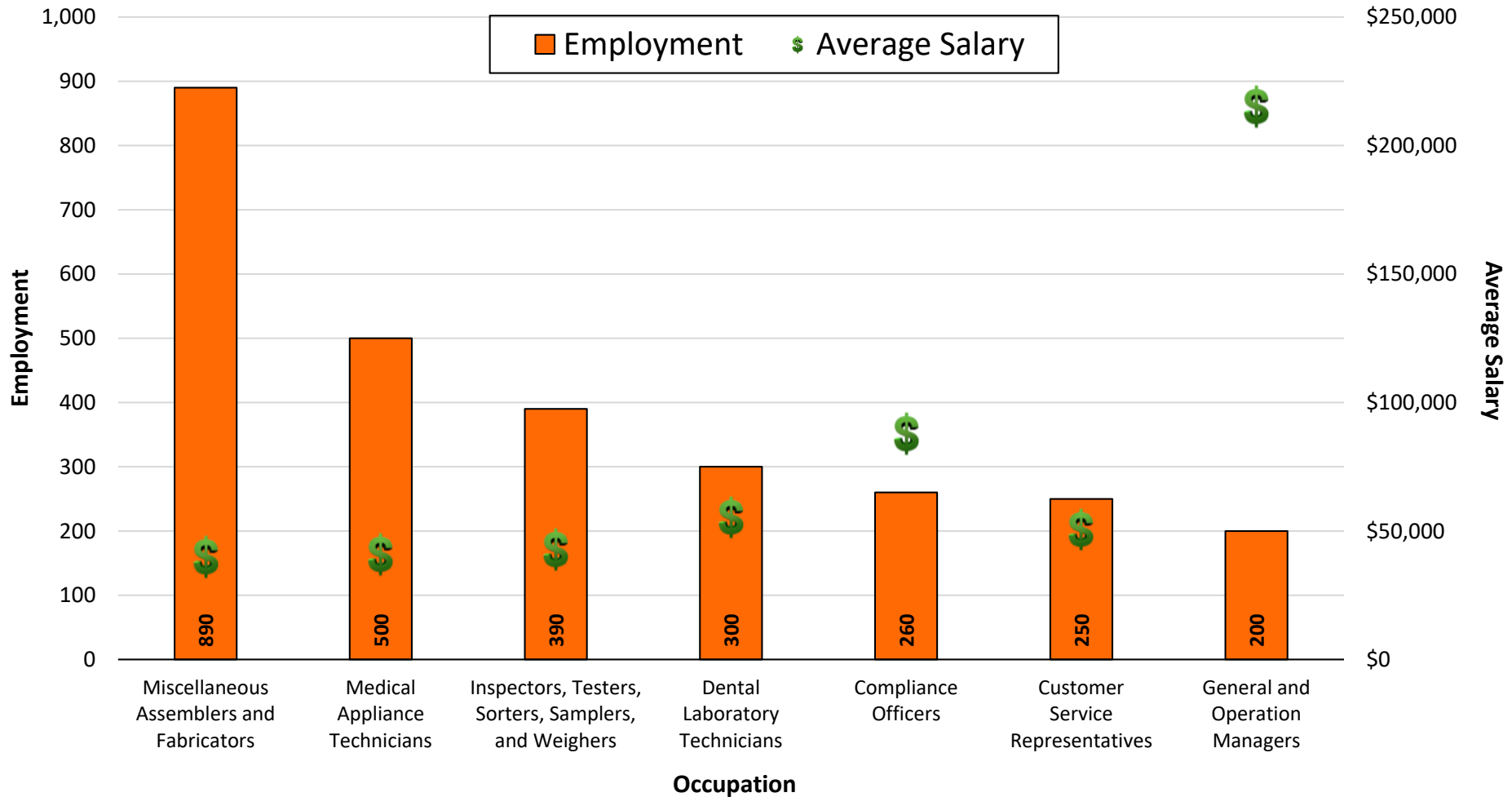
**Medical Equipment and Supplies Manufacturing**



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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR TOP MEDICAL DEVICE OCCUPATIONS, 2020



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Source: NJ Department of Labor & Workforce Development, Occupational Employment Statistics, May 2020

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

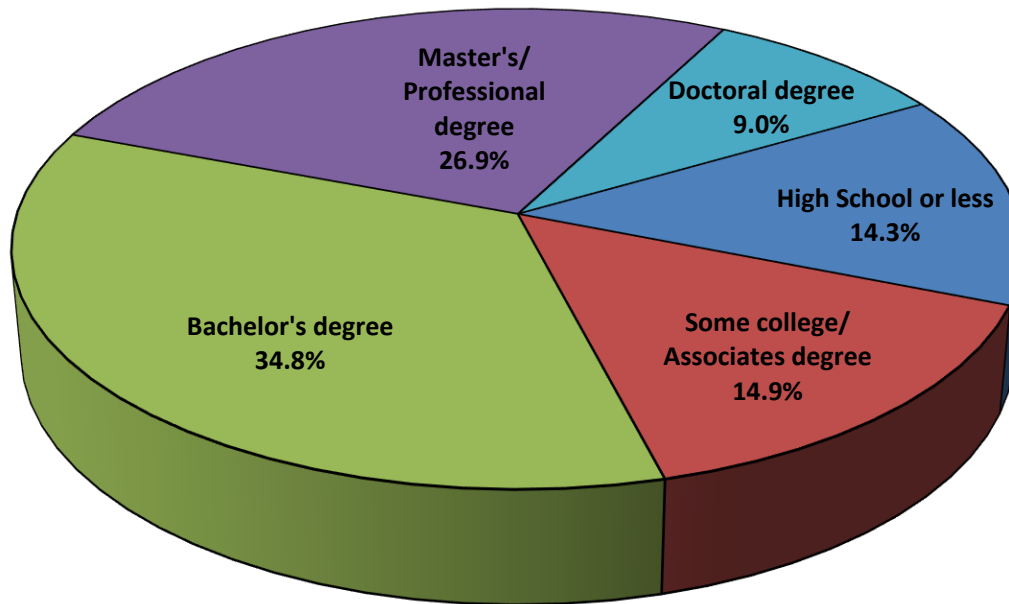


# **LIFE SCIENCES INDUSTRY SECTOR: DEMOGRAPHIC OVERVIEW**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR EDUCATION CHARACTERISTICS

## Educational Breakdown



- It is often mentioned that life sciences related employers require a well-educated and highly skilled workforce to meet the high level and technical demands of many of the occupations they need to fill.
- Nearly two-thirds of New Jersey's workforce employed in this sector hold at least a Bachelor's degree, many holding even more advanced degrees.

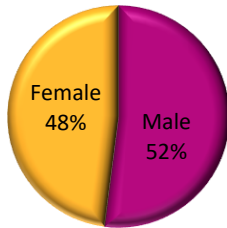


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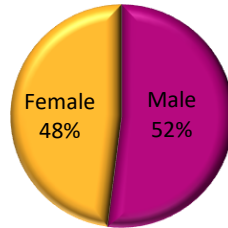
Source: U.S. Census Bureau, 2019 American Community Survey  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR GENDER, RACIAL, AND ETHNIC PROFILE

**Life Sciences**



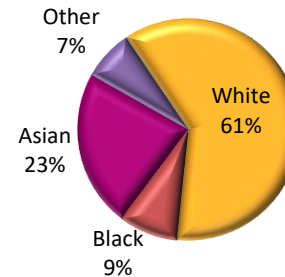
**All Industries**



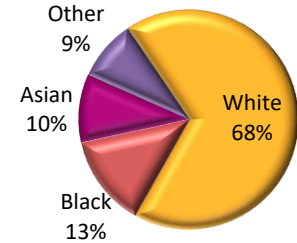
Males outnumber females by 4 % in this sector

The life sciences workforce has a greater proportion of NJ residents who are Asian (22.9%)

**Life Sciences**

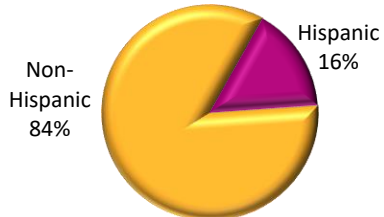


**All Industries**

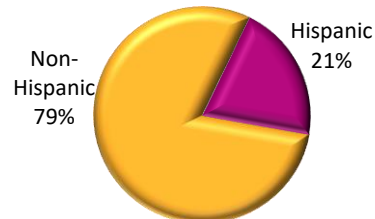


The life sciences workforce has fewer Hispanics than average

**Life Sciences**



**All Industries**



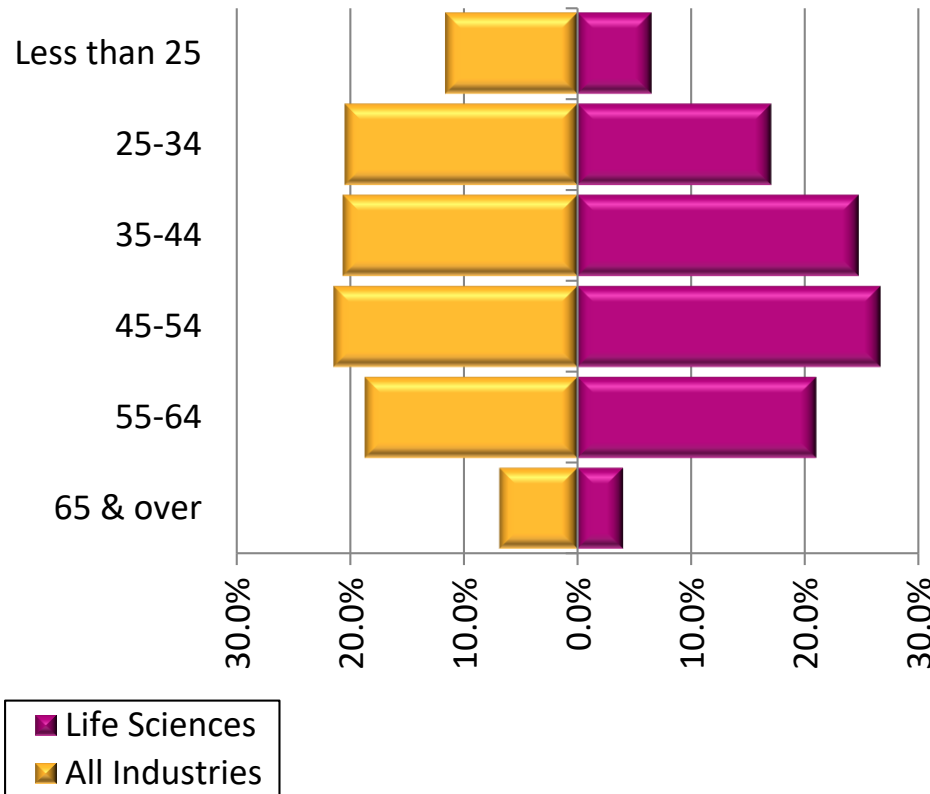
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Source: U.S. Census Bureau, 2019 American  
Community Survey  
Prepared by: New Jersey Department of Labor and  
Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## LIFE SCIENCES SECTOR VS. TOTAL NONFARM

Age Breakdown of Workers in Life  
Sciences and All Industries  
New Jersey, 2019



- The workforce of the life sciences industry is older than average with 51.7 percent aged *45 and up* compared to only 47.1 percent overall.
- The largest disparity among age cohorts occurs in the 35-44 *and* 45-54 year old age groups, where 51.4 percent of the life sciences industry sector is found.
- 4 percent of the current NJ resident life sciences workforce is aged *65 and older*.

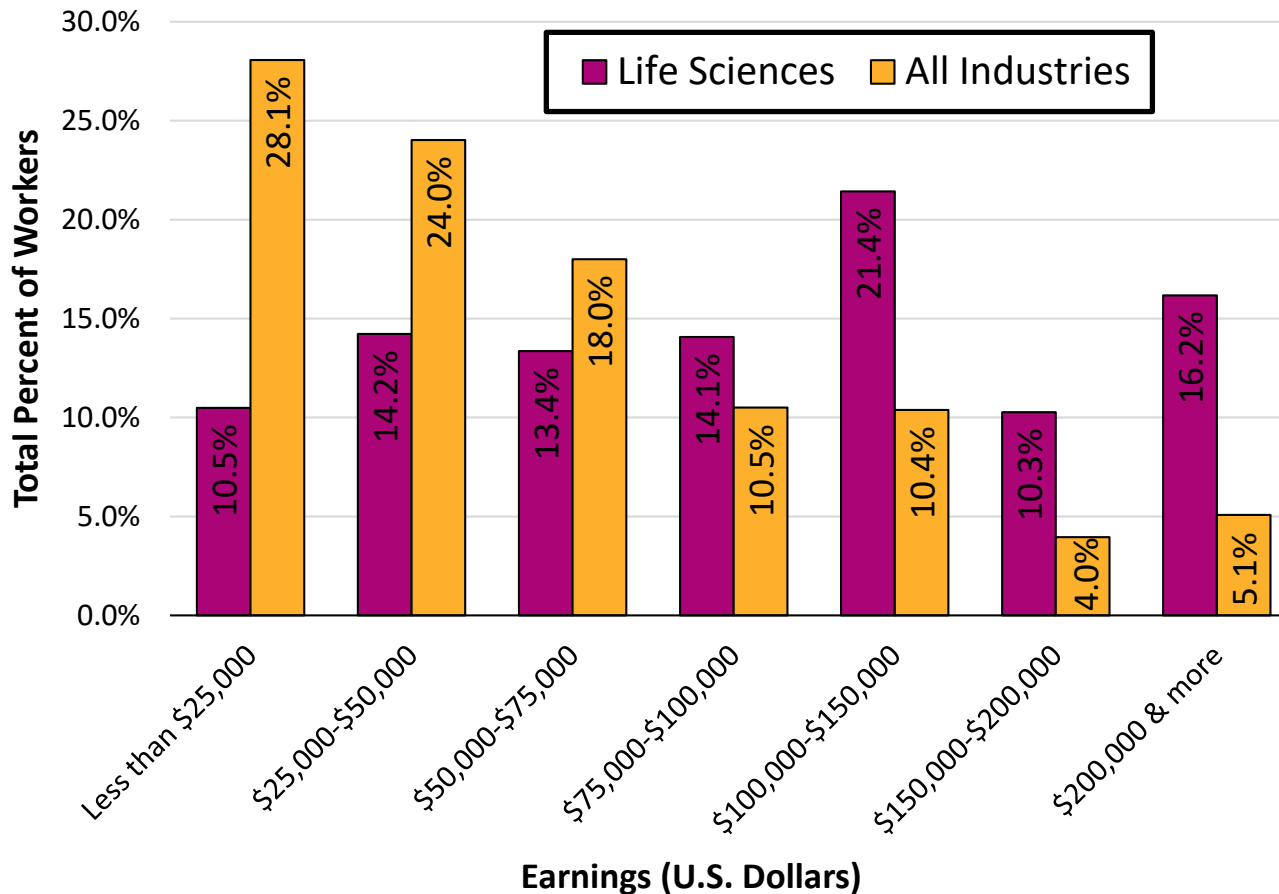


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Source: U.S. Census Bureau, 2019 American Community Survey  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR NJ RESIDENTS PERSONAL EARNINGS

## Personal Earnings in New Jersey, 2019



- Three-fourths of the workers (75.3%) in this sector earned over \$50,000, whereas 52.1% of all workers (in all industries combined) earned less than \$50,000.
- The percentage of workers making \$150,000 or greater is almost a 3:1 ratio in favor of this sector.



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Source: U.S. Census Bureau, 2019 American Community Survey  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# **LIFE SCIENCES INDUSTRY SECTOR: TOP OCCUPATIONS OUTLOOK**



# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR

## TOP LIFE SCIENCES OCCUPATIONS OUTLOOK ACROSS ALL INDUSTRIES

Occupation Title	Employment				Annual Average			
	Actual 2018	Projected 2028	Change 2018-2028		Job Openings			
			Number	Percent	Exits	Transfers	Change	Total
Market Research Analysts and Marketing Specialists	20,290	24,170	3,880	19.1	520	1,750	390	2,660
Laborers and Freight, Stock, and Material Movers, Hand	141,760	156,860	15,100	10.7	6,740	13,990	1,510	22,240
Natural Sciences Managers	4,590	5,030	440	9.5	100	320	40	460
Industrial Engineers	4,940	5,400	460	9.4	100	250	50	400
Marketing Managers	12,120	13,240	1,120	9.2	260	870	110	1,240
Biochemists and Biophysicists	6,750	7,360	610	9.1	110	540	60	710
Industrial Machinery Mechanics	7,680	8,330	650	8.4	250	480	70	800
Medical Scientists, Except Epidemiologists	3,140	3,400	260	8.0	50	250	30	330
Packaging and Filling Machine Operators and Tenders	14,140	15,110	970	6.9	650	1,050	100	1,800
Accountants and Auditors	41,790	44,600	2,810	6.7	1,220	2,810	280	4,310
Compliance Officers	12,630	13,380	750	5.9	360	780	80	1,220
Chemists	7,780	8,240	460	5.8	130	590	50	770
Industrial Production Managers	5,330	5,610	280	5.4	120	280	30	430
Chemical Technicians	3,810	4,000	190	5.0	70	320	20	410
Sales Representatives, Wholesale and Manufacturing	44,130	46,320	2,190	4.9	1,380	3,370	220	4,970
First-Line Supervisors of Production and Operating Workers	12,970	13,390	420	3.2	420	930	40	1,390
Mixing and Blending Machine Setters, Operators, and Tenders	3,800	3,800	0	0.0	120	330	0	450
Chemical Equipment Operators and Tenders	3,440	3,320	-120	-3.6	90	300	-10	380
Assemblers and Fabricators	12,190	11,320	-870	-7.1	480	890	-90	1,280
Inspectors, Testers, Sorters, Samplers, and Weighers	13,950	12,510	-1,440	-10.3	530	1,110	-140	1,500

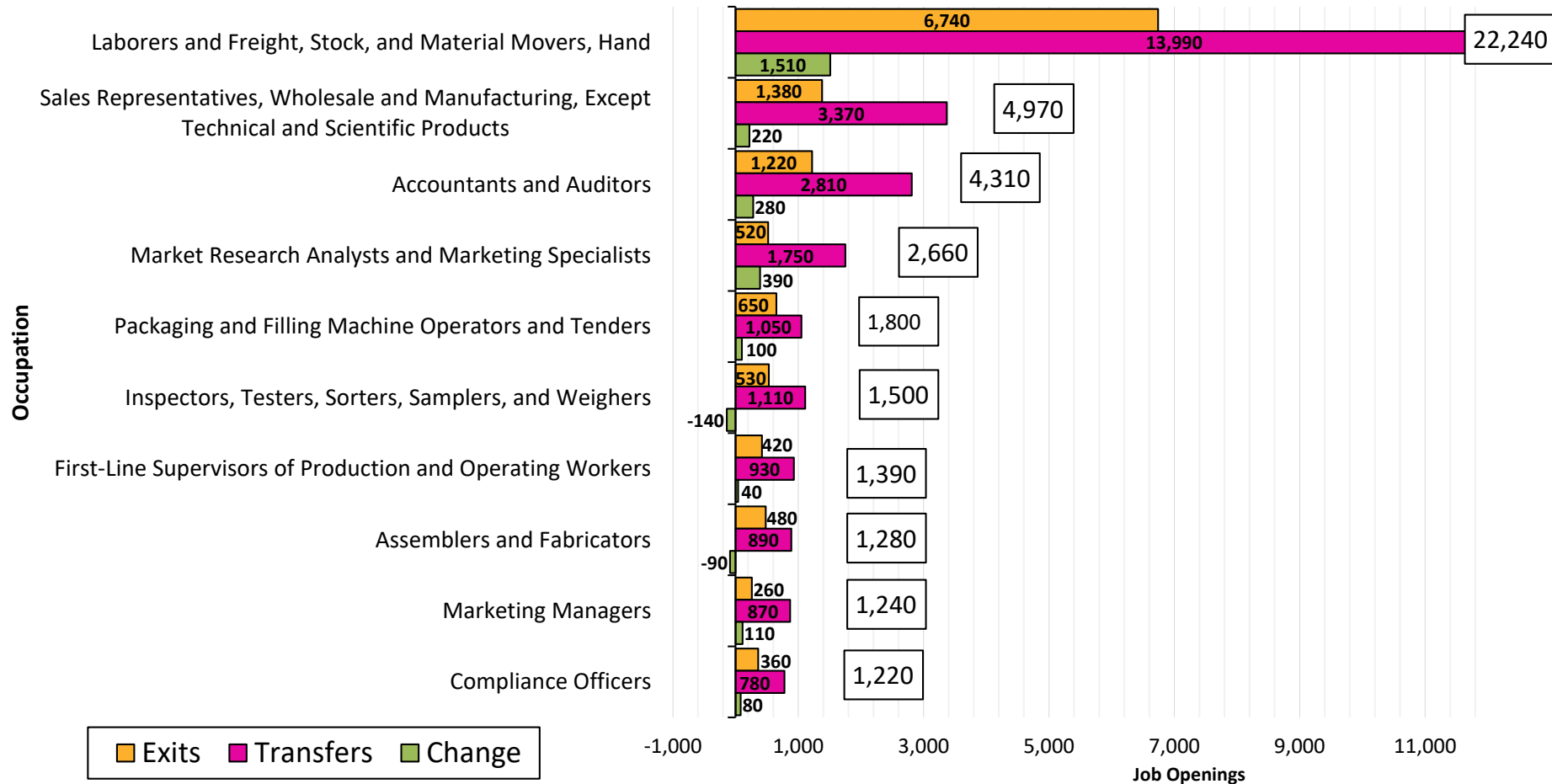


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Source: New Jersey Department of Labor and Workforce Development, 2018–2028 Industry and Occupational Employment Projections.  
Prepared by: New Jersey Department of Labor and Workforce Development, December 2021

# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR PROJECTED ANNUAL AVERAGE OPENINGS FOR TOP OCCUPATIONS

## 2018-2028 Projected Annual Average Job Openings



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Source: New Jersey Department of Labor and Workforce Development, 2018–2028 Industry and Occupational Employment Projections.

Prepared by: New Jersey Department of Labor and Workforce Development, December 2021



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# NEW JERSEY LIFE SCIENCES INDUSTRY SECTOR CONTACT INFORMATION

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[http://lwd.dol.state.nj.us/labor/lpa/LMI\\_index.html](http://lwd.dol.state.nj.us/labor/lpa/LMI_index.html)

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