

New Jersey's Life Sciences Industry Cluster

Prepared by:
New Jersey Department of Labor & Workforce Development
Office of Research & Information
Bureau of Labor Market Information
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STATE OF NEW JERSEY
DEPARTMENT OF LABOR AND
WORKFORCE DEVELOPMENT



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

Identify the types of industries and establishments that make up the life sciences industry cluster 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 cluster 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 cluster and provide an outlook for employment into the future.



LIFE SCIENCES INDUSTRY CLUSTER: OVERVIEW



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

MAJOR INDUSTRY COMPONENTS

New Jersey's Life Sciences employment in 2014 was identified within three primary components: pharmaceuticals (45.0%), biotechnology-R&D (34.5%) and medical device manufacturing (20.5%). The breakdown of the major segments are:

Pharmaceuticals

- Pharmaceutical and medicine manufacturing
- Soap, cleaning compound, and toiletry manufacturing
- Druggists' goods merchant wholesalers



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

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



Biotechnology (R&D)

- Scientific research and development services
- Medical and diagnostic laboratories

Medical Devices

- Electronic instrument manufacturing
- Medical equipment and supplies manufacturing



Establishments primarily engaged in manufacturing medical equipment and supplies.



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

MAJOR NEW JERSEY EMPLOYERS

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

Pharmaceuticals

- Bayer HealthCare Pharmaceutical
- Bristol-Myers Squibb Co.
- Daiichi Sankyo
- Ethicon, Inc.
- Johnson & Johnson
- L'Oreal, USA, Inc.
- Merck & Co. Inc.
- Novartis Pharmaceuticals
- Pfizer, Inc.
- Sanofi, U.S.

Biotechnology (R&D)

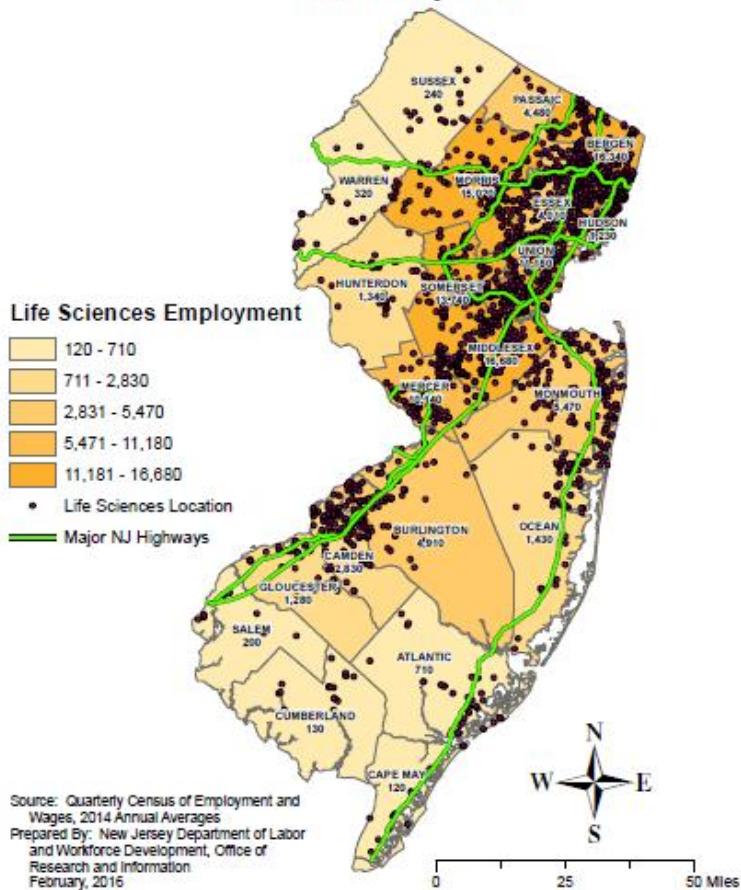
- Becton Dickinson & Co.
- C. R. Bard, Inc.
- Integra Life Sciences
- Micro Corp.
- Novo Nordisk, Inc.
- Ortho McNeil Pharma
- Oticon, Inc.
- Roche Molecular Systems
- Siemens Hearing Instruments
- Stryker Orthopaedics

Medical Devices

- Bio-Reference Laboratories
- CRI Lifetree
- Celgene
- Chugai Pharma, USA
- Collagen Matrix Inc.
- ImClone System
- NPS Pharmaceuticals, Inc.
- PTC Therapeutics Inc.
- Progenitor Cell Therapy
- Quest Diagnostics

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER OVERALL STATE IMPACT

Life Sciences Employment and Establishment Locations
New Jersey, 2014

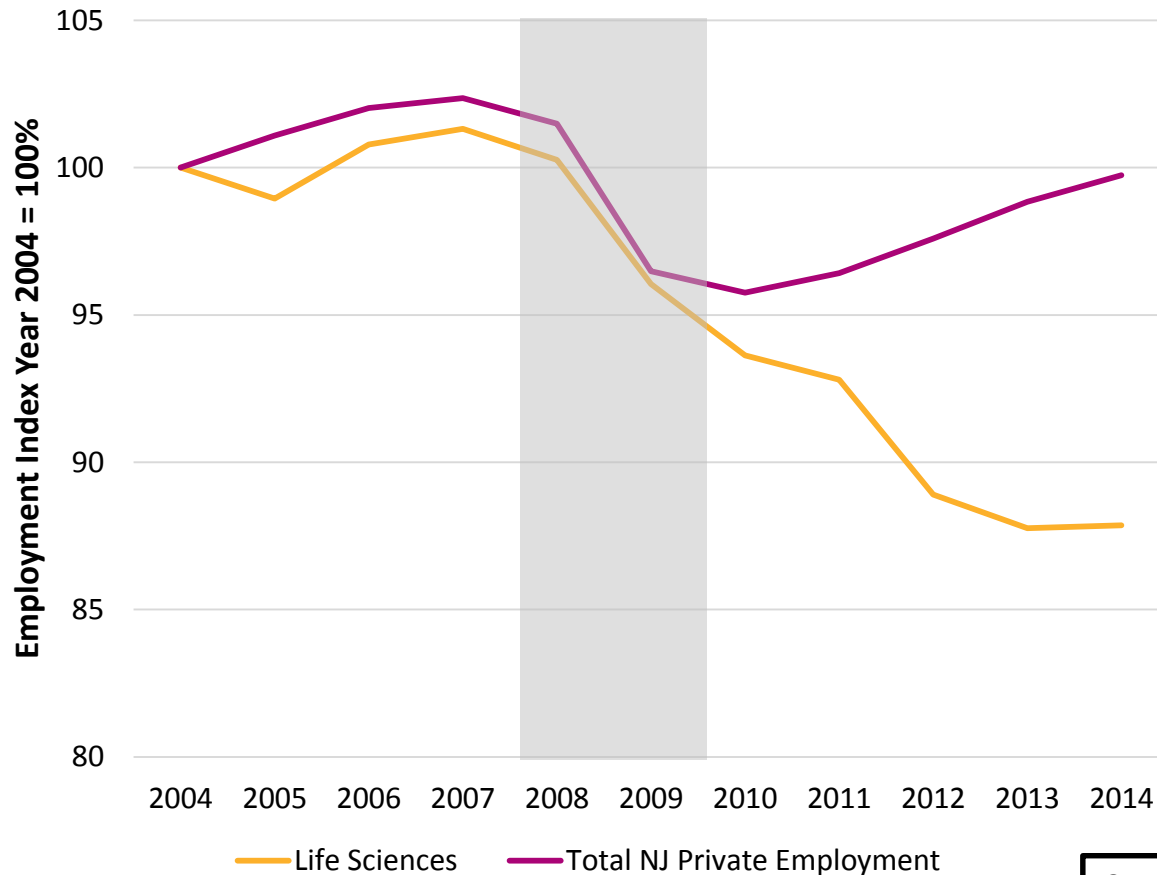


The Life Sciences Cluster has an enormous impact on providing high quality jobs and adding significant value to the State's economic activities. Recent New Jersey highlights included:

- **Employment Total:** averaged over 115,000 or 3.5 percent of all private sector workers in the state for 2014. Nationally, the proportion was just 1.9 percent.
- **Well-paying Jobs:** Paid over \$15.8 billion in 2014 annual payrolls; 8.1 percent of the state's total wages.
- **Establishments total:** over 3,000 in 2014. Over the five year period (2009-2014) – even with numerous industry related reorganizations – New Jersey's drug & pharmaceutical component still grew (by +8.8%).



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

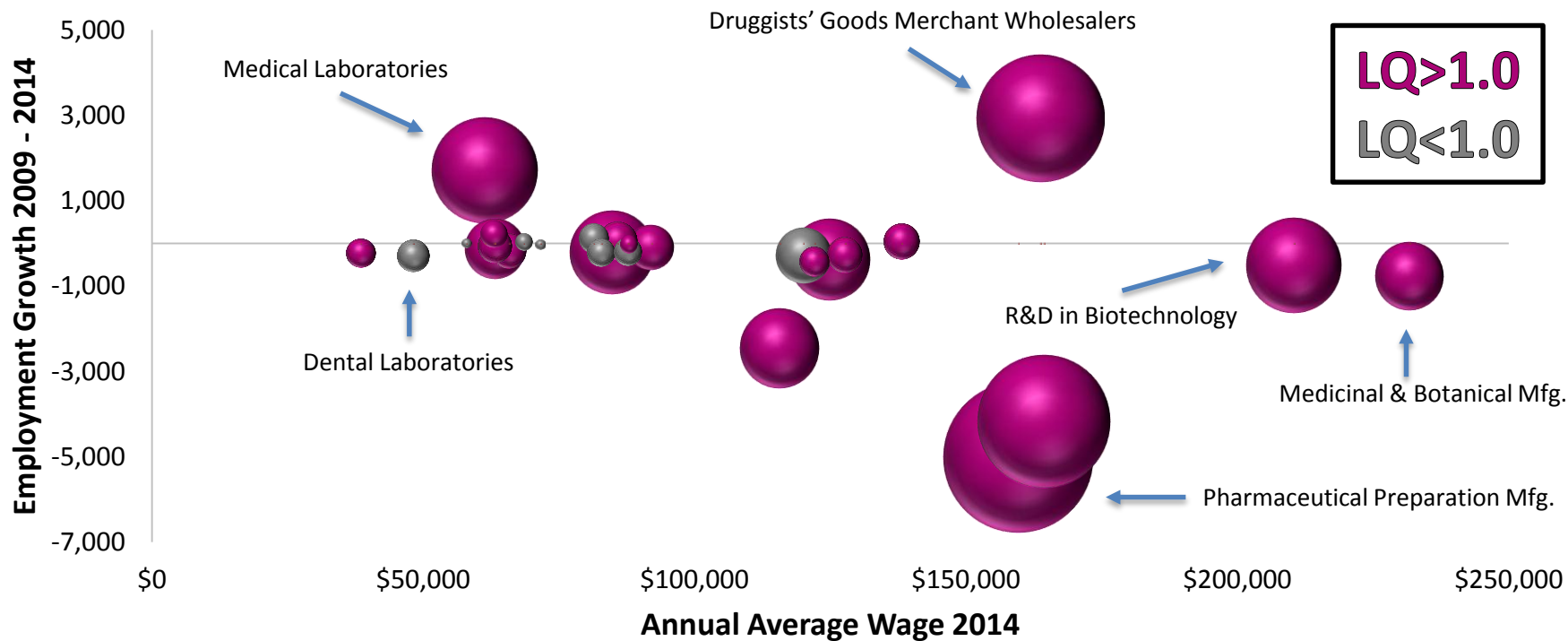


- After increasing slightly from 2005 to 2007 (+2.4%), the NJ life sciences industry experienced a steady decline from 2007 to 2013 (-13.6%) before flattening out from 2013 to 2014 (0.1%), and is currently below the 2004 employment level (-12.1%).
- Total statewide private sector employment has led life sciences employment from 2004 to 2014 and is currently below the 2004 employment level by 0.3 percent.

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



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



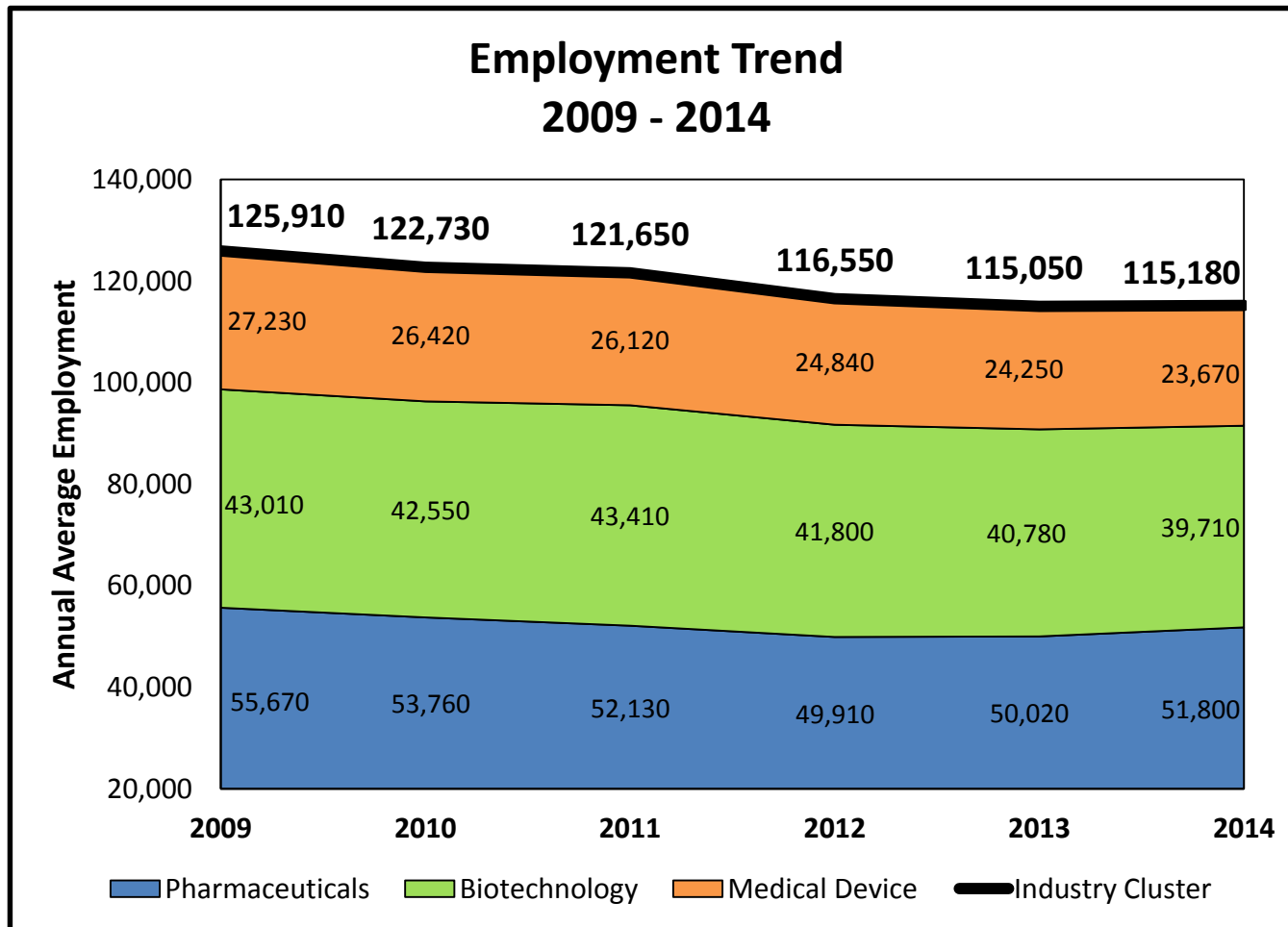
The above bubble graph has four elements:

1. Total 2014 employment - represented by the size of the bubble.
2. 2009-2014 employment growth- shown on the Y-axis, or vertical position.
3. 2014 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.

LIFE SCIENCES INDUSTRY CLUSTER: EMPLOYMENT ANALYSIS



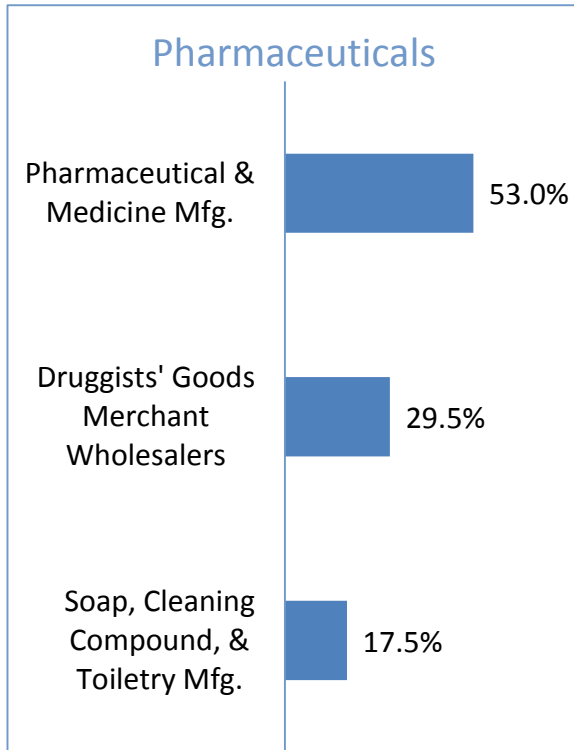
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER 5-YEAR EMPLOYMENT TREND



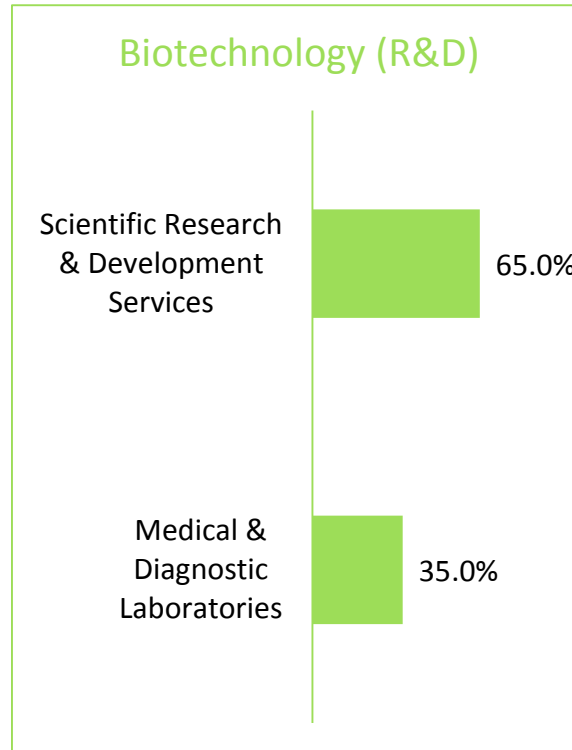
- With an average of 115,180 workers employed in this NJ cluster in 2014, the employment over the 5-year period experienced a decline of 8.5 percent.
- The medical device component experienced the largest total percent loss over the 5-year period (-13.1%).

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER SUB-SECTOR EMPLOYMENT

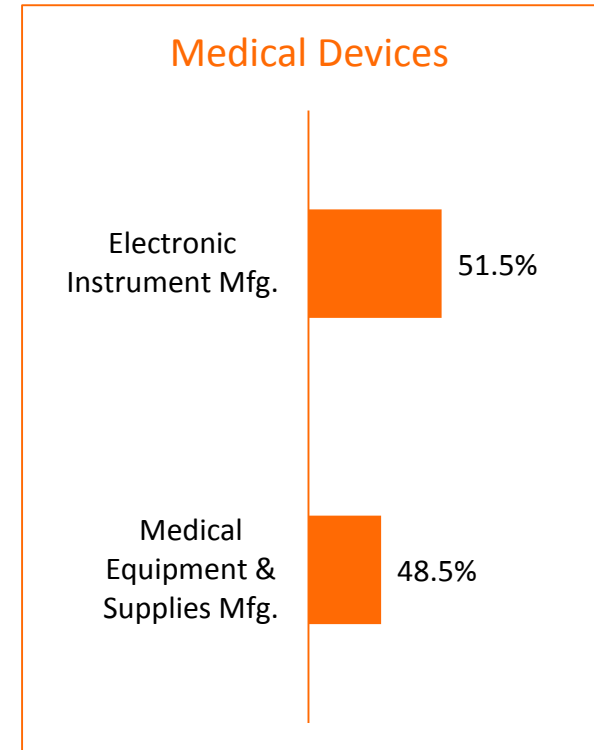
In 2014, the 115,180 jobs within this New Jersey cluster were concentrated in:



- 51,800 jobs
- The pharmaceuticals component accounted for 45.0 percent of the life sciences industry cluster employment.



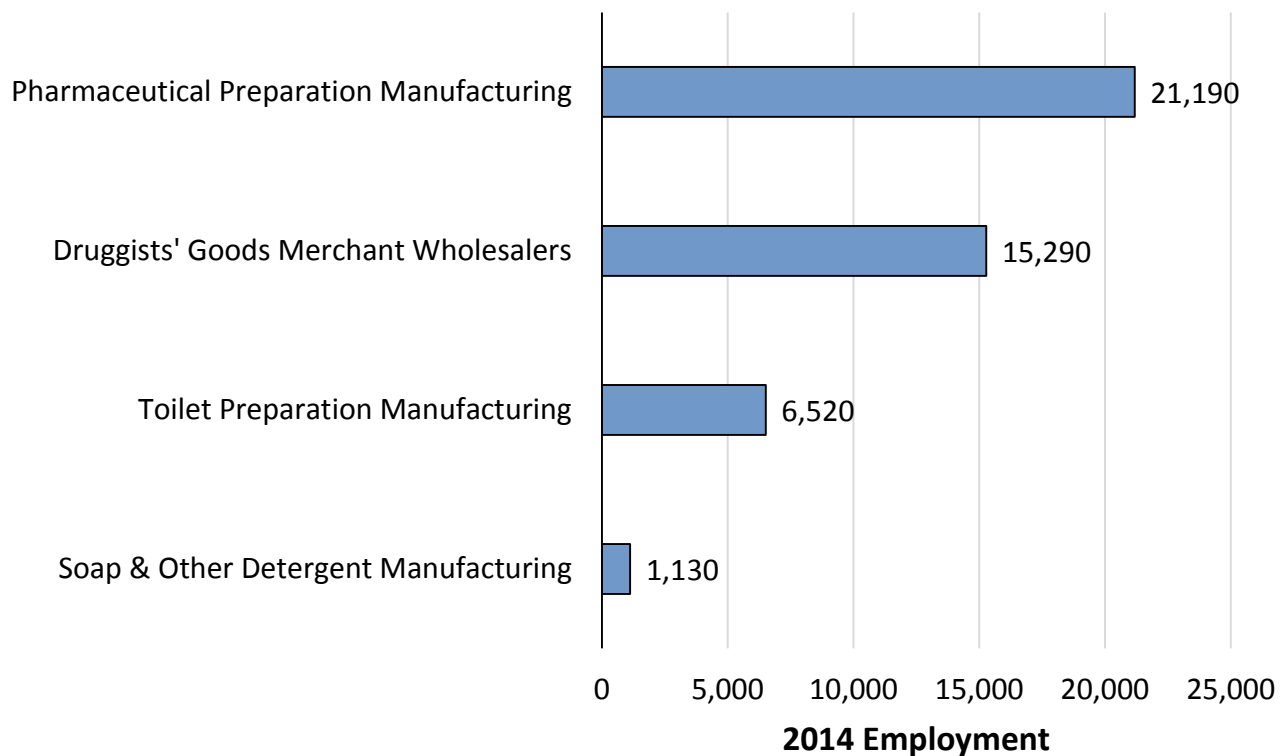
- 39,710 jobs
- Scientific research and development services accounted for more than 25,000 employment.



- 23,670 jobs
- Medical devices is the smallest of the three components and makes up 20.5 percent of the life sciences industry.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER PHARMACEUTICALS INDUSTRY TOP EMPLOYMENT, 2014

Pharmaceuticals Industry

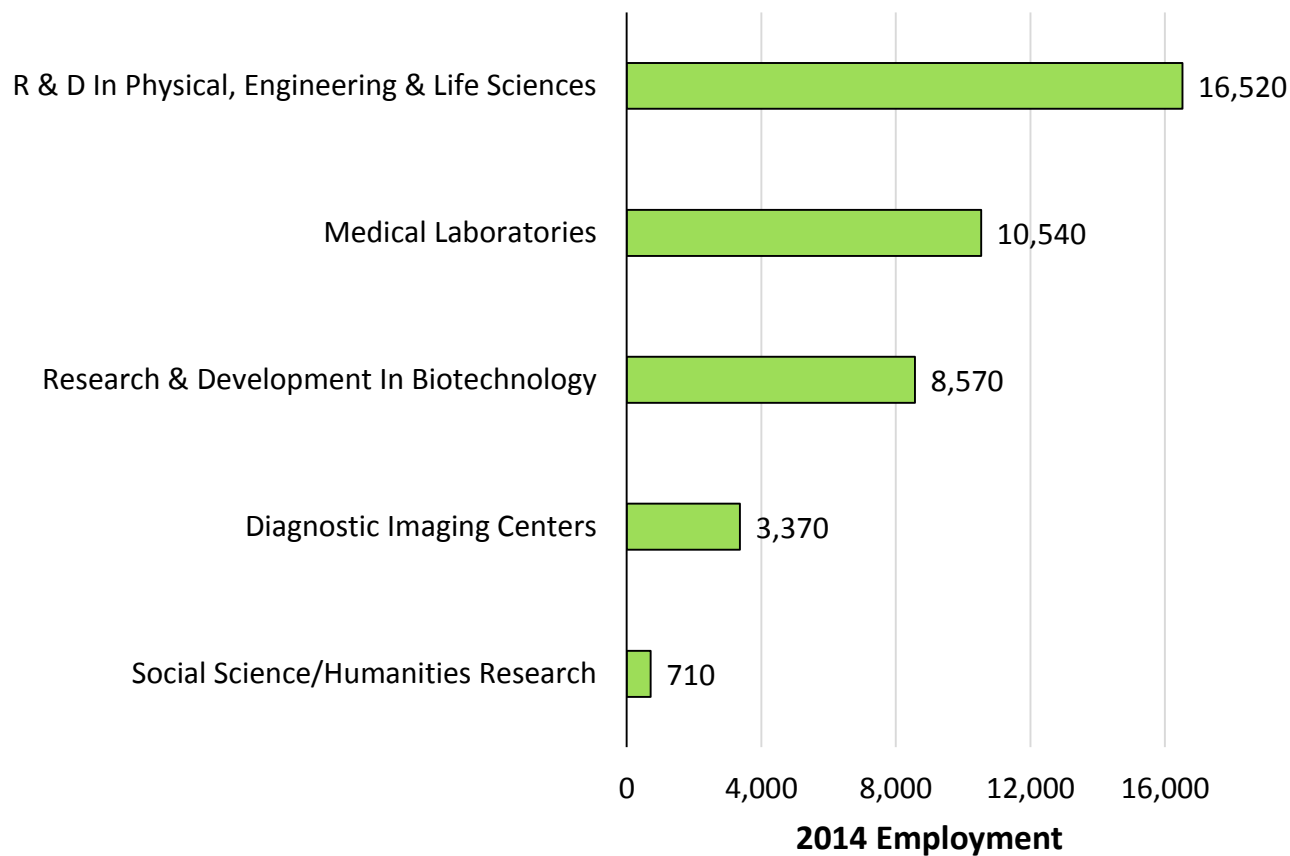


Due to disclosure issues, medicinal and botanical mfg., surface active agent mfg., other biological product mfg., in-vitro diagnostic substance mfg., and polish and sanitation good manufacturing are not included in the chart above.

- Made up 45.0 percent of the life sciences industry cluster's employment in 2014.
- Pharmaceutical & medicine manufacturing (-19.1%) and soap, cleaning compound, and toiletry manufacturing (-3.5%) both experienced a decline from 2009 to 2014 while druggists' goods merchant wholesalers experienced growth (+23.7%).

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER BIOTECHNOLOGY INDUSTRY TOP EMPLOYMENT, 2014

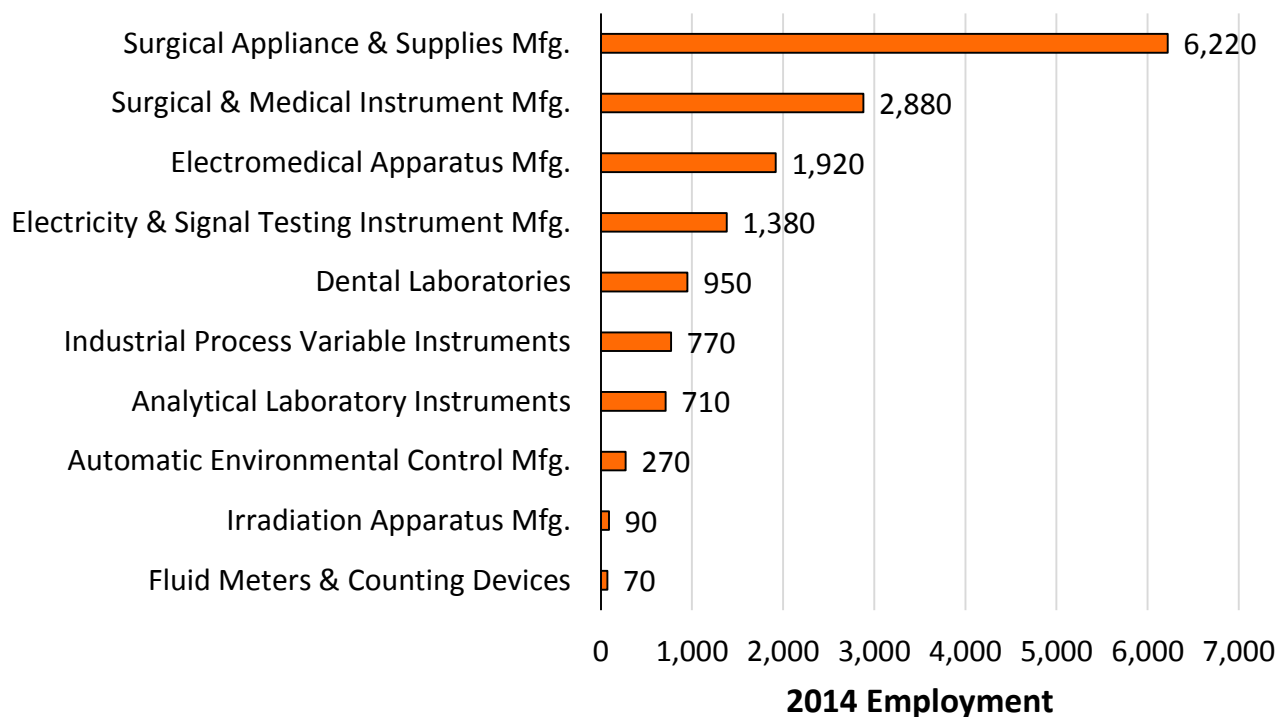
Biotechnology



- Accounted for 34.5 percent of life sciences industry cluster's employment in 2014.
- Scientific R&D industry service sectors declined (-15.9%) over the 5-year period from 2009 to 2014.
- Medical and diagnostic laboratories experienced growth over the same period (+12.8%).

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MEDICAL DEVICES INDUSTRY TOP EMPLOYMENT, 2014

Medical Devices



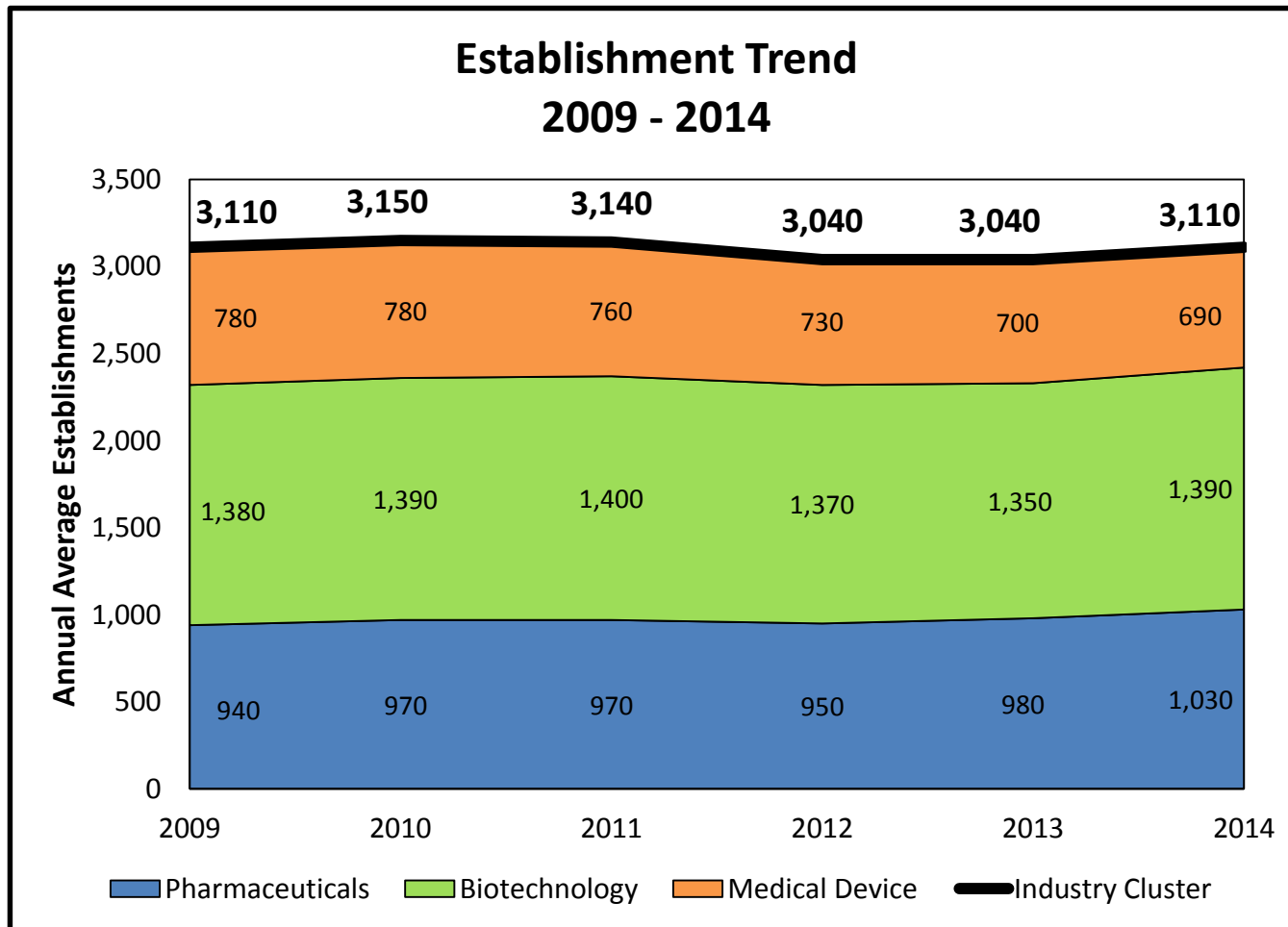
- Accounted for 20.5 percent of the life sciences industry cluster's employment in 2014.
- Electronic instrument manufacturing (-17.7%) and medical equipment & supplies manufacturing (-7.6%) both experienced employment loss from 2009 to 2014.

Due to disclosure issues, search, detection & navigation instruments, other measuring & controlling devices, dental equipment & supplies mfg., dental equipment & supplies mfg., and ophthalmic goods mfg. are not included in the chart above.

LIFE SCIENCES INDUSTRY CLUSTER: ESTABLISHMENT ANALYSIS



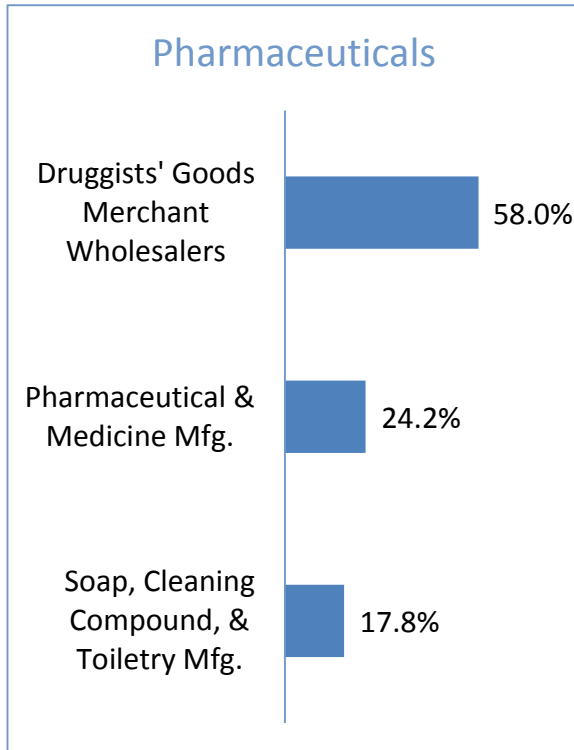
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER 5-YEAR ESTABLISHMENT TREND



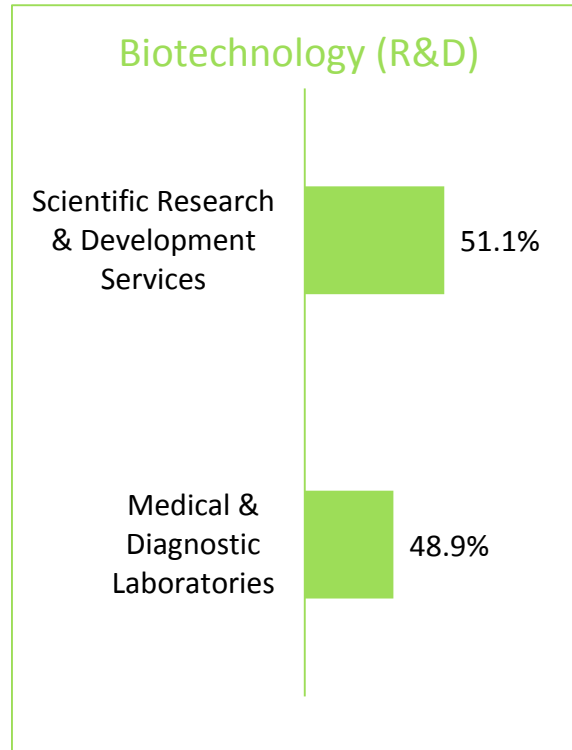
- Establishments in this cluster totaled 3,110 in 2014 after experiencing a slight decline (0.1%) from 2009 – 2014.
- Pharmaceuticals has seen an upward trend from 2009 to 2014, adding an additional 90 establishments.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER SUB-SECTOR ESTABLISHMENTS

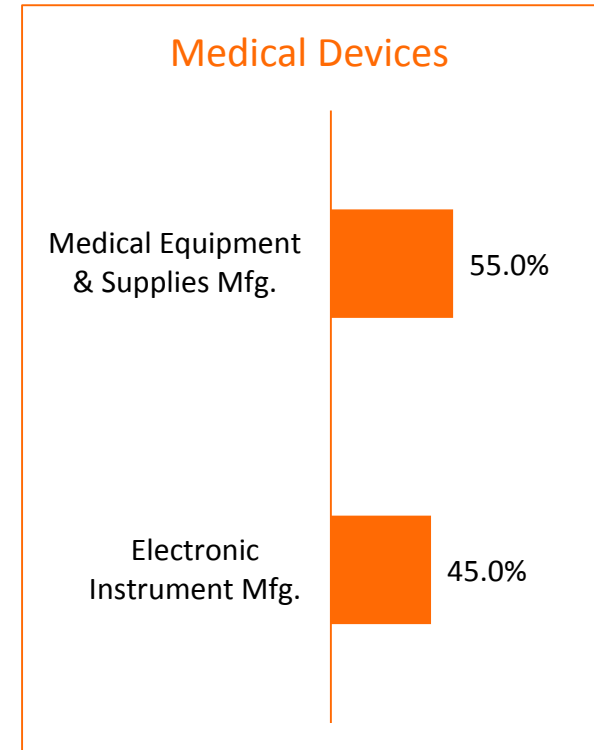
In 2014, New Jersey had 3,110 establishments in this cluster engaged in:



- 1,030 establishments
- The pharmaceutical component accounts for more than 1/3 of all life sciences industry establishments.



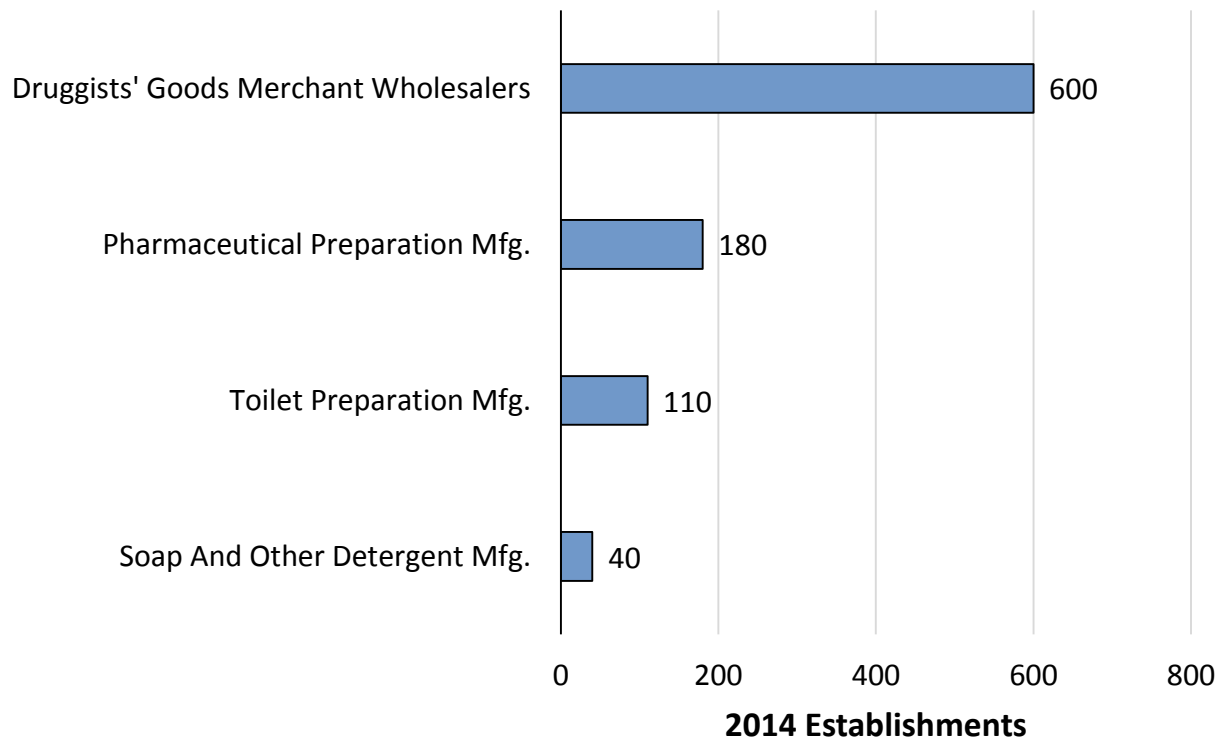
- 1,390 establishments
- R&D related sub-sectors accounted for 44.8% of all life sciences establishments.



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

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER PHARMACEUTICALS INDUSTRY TOP ESTABLISHMENTS, 2014

Pharmaceuticals Industry

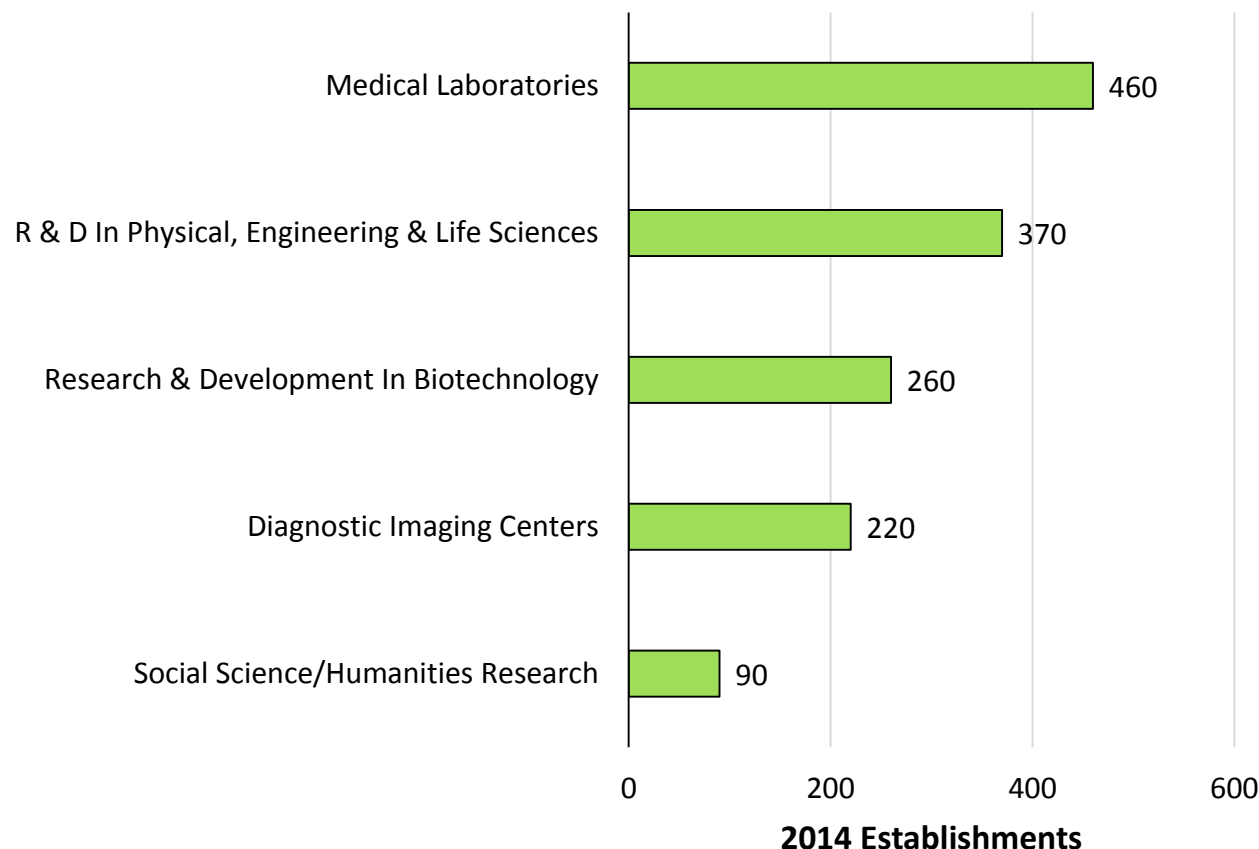


Due to disclosure issues, medicinal and botanical mfg., surface active agent mfg., other biological product mfg., in-vitro diagnostic substance mfg., and polish and sanitation good manufacturing are not included in the chart above.

- Accounted for 33.0 percent of the life sciences industry cluster's establishments in 2014.
- Establishments in the pharmaceutical & medicine manufacturing (-3.1%) and soap, cleaning compound, and toiletry manufacturing industries (-12.5%) both declined from 2009 to 2014, while druggists' goods merchant wholesalers realized substantial growth (+24.5%).

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER BIOTECHNOLOGY INDUSTRY TOP ESTABLISHMENTS, 2014

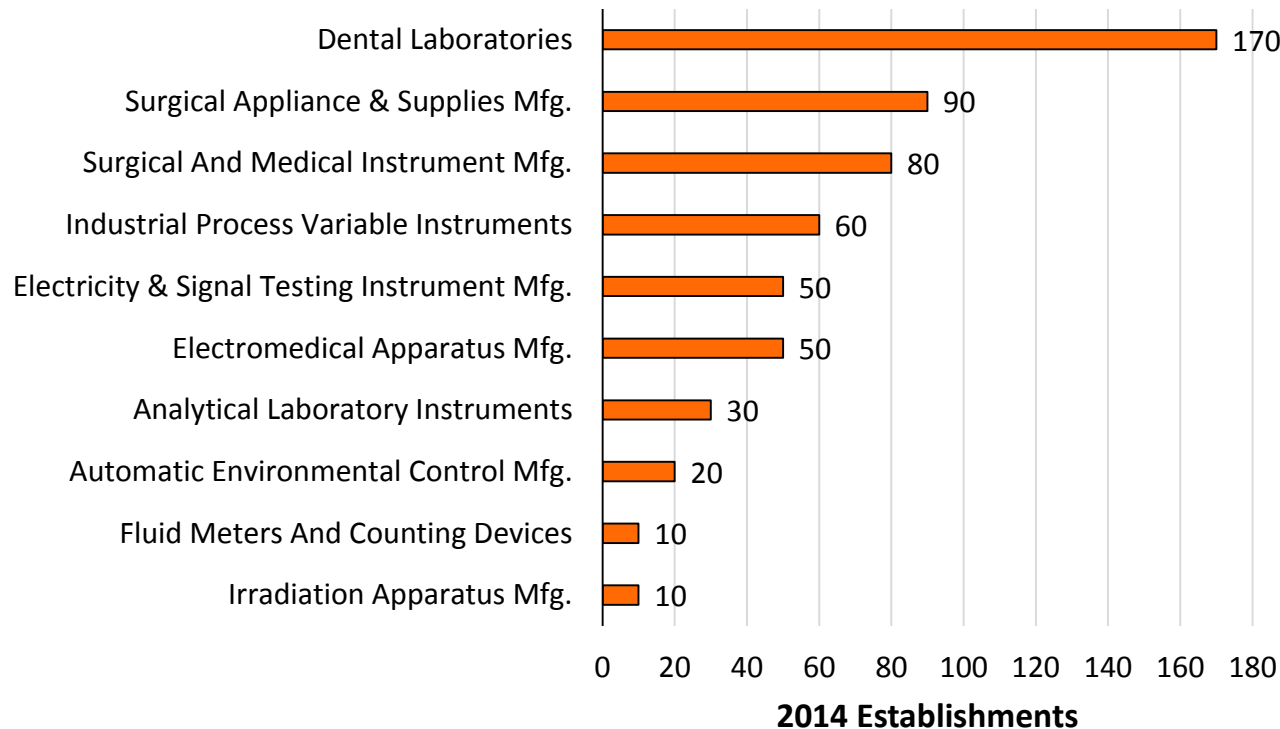
Biotechnology (R&D)



- Made up 44.8 percent of all establishments in the life sciences industry cluster in 2014 with 1,390 establishments.
- Scientific R&D industry service sectors (+0.3%) and medical diagnostic laboratories (+0.7%) both experienced a slight growth from 2009 to 2014.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MEDICAL DEVICES INDUSTRY TOP ESTABLISHMENTS, 2014

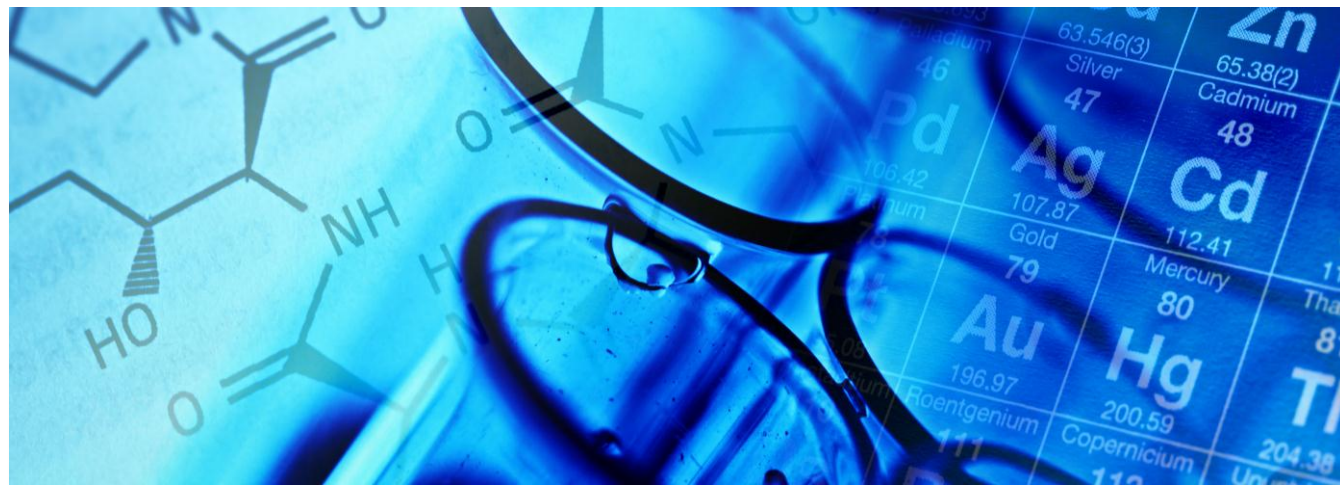
Medical Devices



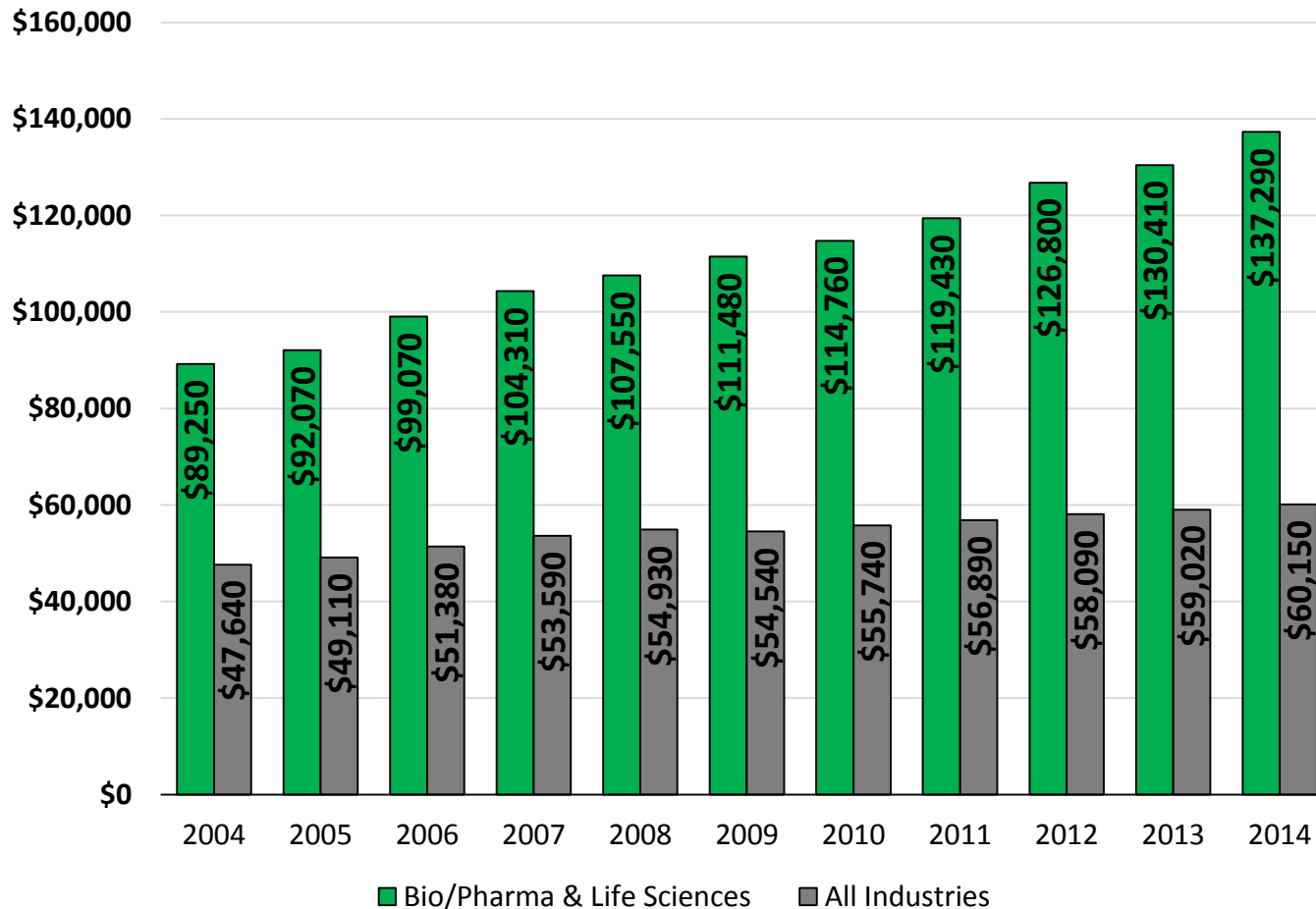
Due to disclosure issues, search, detection & navigation instruments, other measuring & controlling devices, dental equipment & supplies mfg., dental equipment & supplies mfg., and ophthalmic goods mfg. are not included in the chart above.

- Represented 22.2 percent of the life sciences industry cluster's establishments in 2014 (690).
- Electronic instrument manufacturing (-3.4%) and medical equipment and supplies manufacturing (-17.8%) both declined from 2009 to 2014.

LIFE SCIENCES INDUSTRY CLUSTER: ANNUAL AVERAGE WAGE ANALYSIS

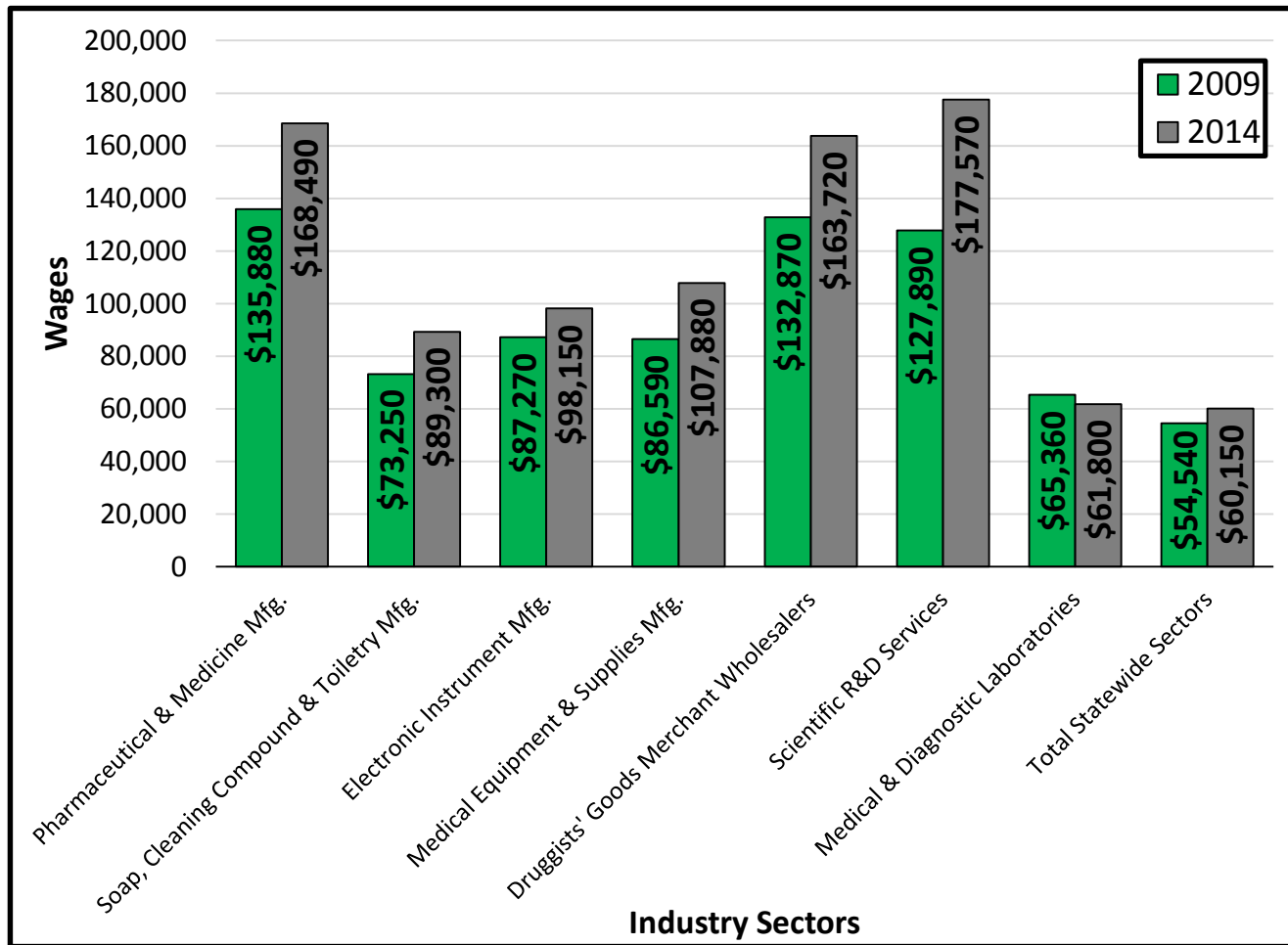


NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER ALL PRIVATE SECTOR VS. LIFE SCIENCES ANNUAL AVERAGE WAGE



- Wages in the life sciences cluster have averaged 204.2% of the statewide annual average wage since 2004.
- Annual average wages for the cluster have risen +53.8% over the ten year period from 2004 to 2014.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER 5-YEAR AVERAGE ANNUAL WAGES TREND

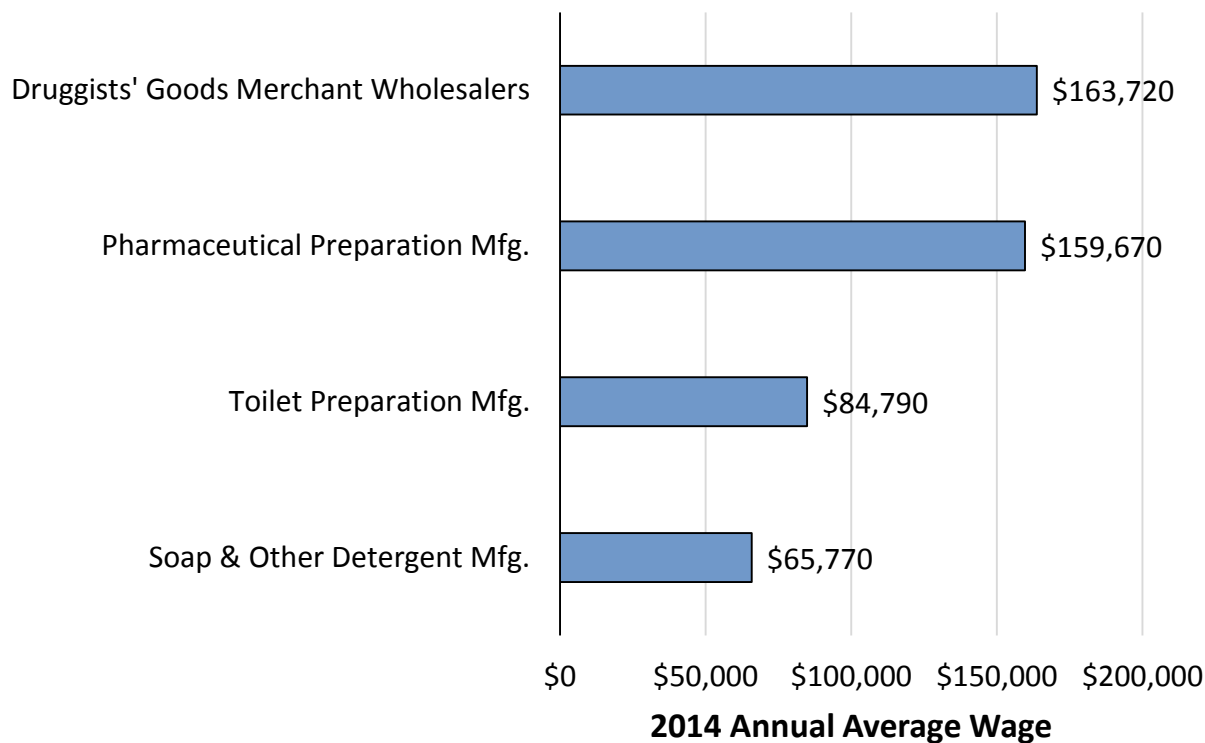


- This cluster's average annual wage was \$137,290 in 2014, which was 128.3% higher than the state's total private sector's average annual wage of \$60,150.
- All three of this cluster's components had 2014 wages that were significantly higher than the state's total average annual wage.



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER PHARMACEUTICALS INDUSTRY TOP ANNUAL AVERAGE WAGE, 2014

Pharmaceuticals Industry

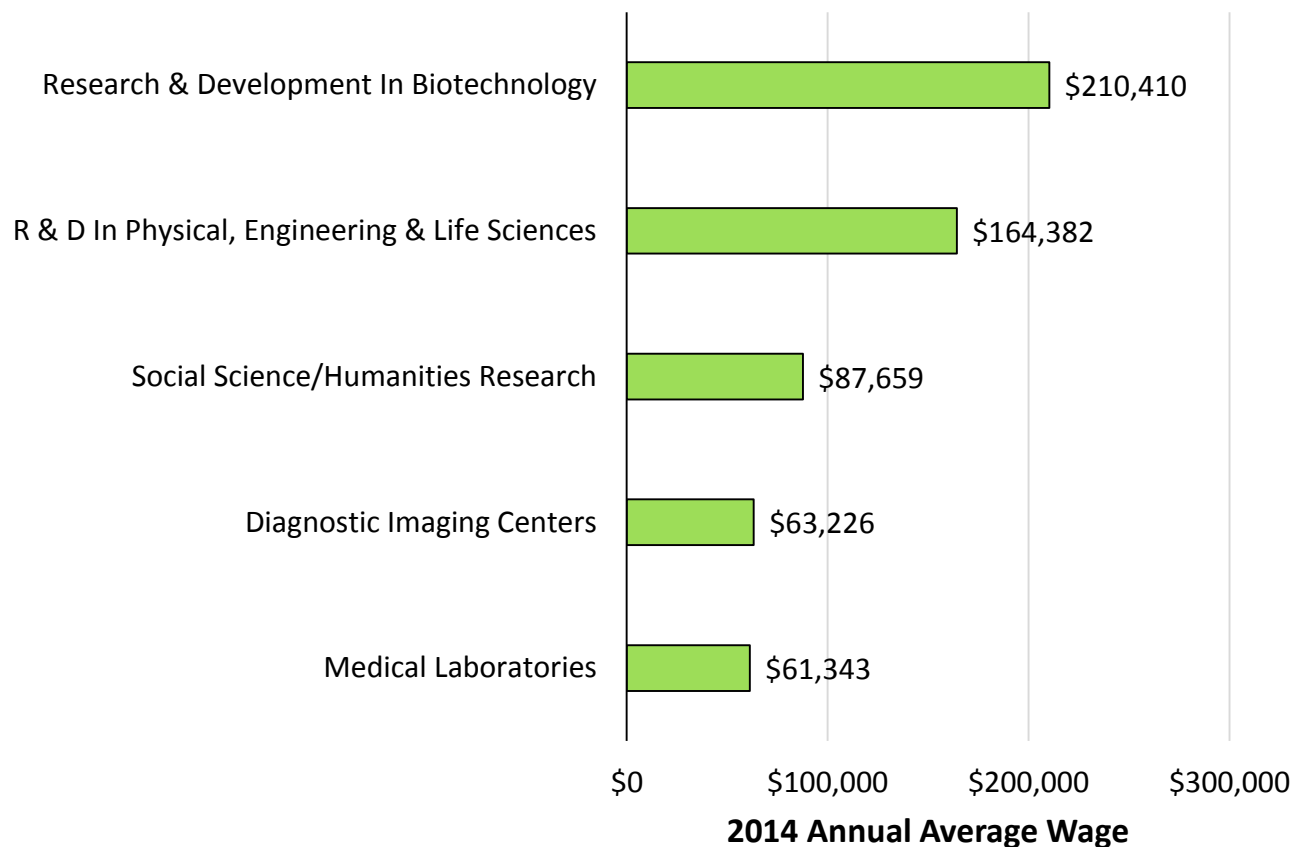


- Annual average wages increased \$28,590 (or +22.9%), from \$124,650 in 2009 to \$153,230 in 2014.
- Increases in the industry sectors ranged from soap, cleaning compound, and toiletry manufacturing (+21.9%) to pharmaceutical and medicine manufacturing (+24.0%) in annual average wages from 2009 to 2014.

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

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER BIOTECHNOLOGY INDUSTRY TOP ANNUAL AVERAGE WAGE, 2014

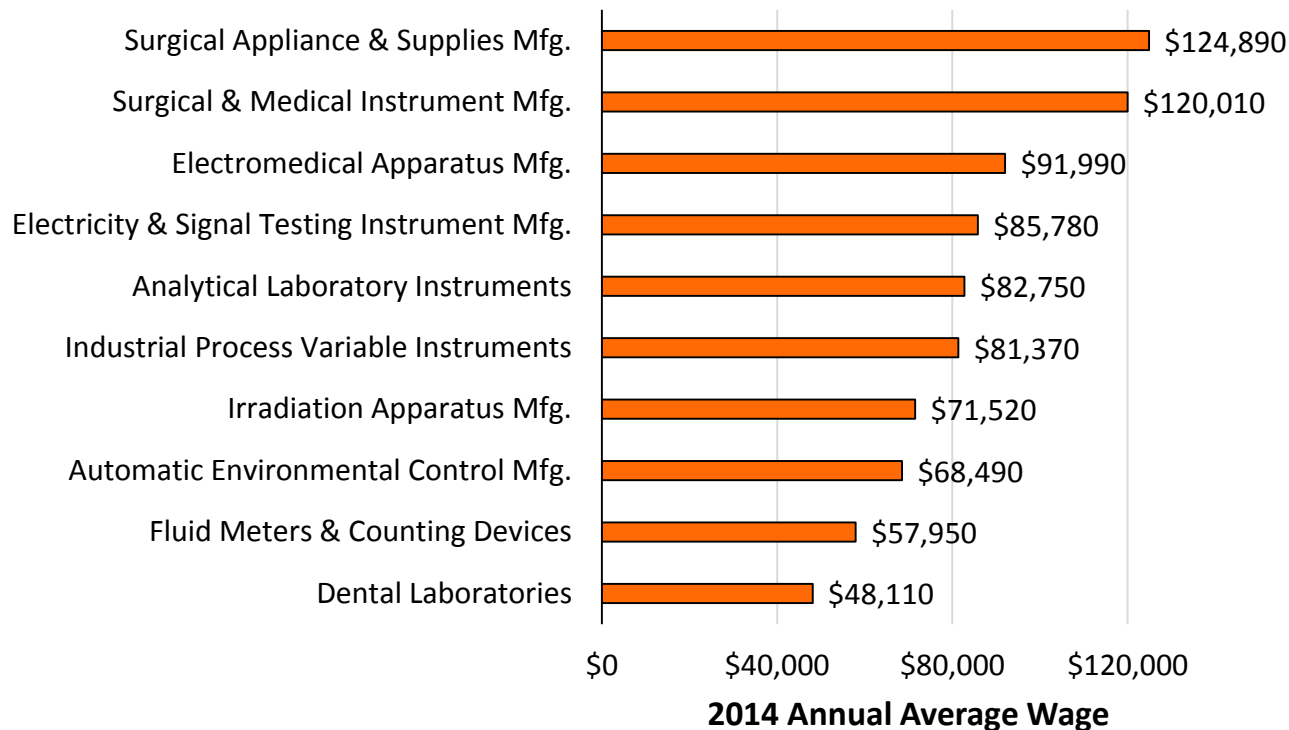
Biotechnology (R&D)



- Annual average wages were \$137,010 in 2014, up +24.6% from \$109,960 in 2009.
- The industry sectors experienced mixed results: from medical & diagnostic laboratories, which declined (-5.4%), to scientific R&D services which realized an increase (+38.8%) over the same 5-year period.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MEDICAL DEVICES INDUSTRY TOP ANNUAL AVERAGE WAGE, 2014

Medical Devices



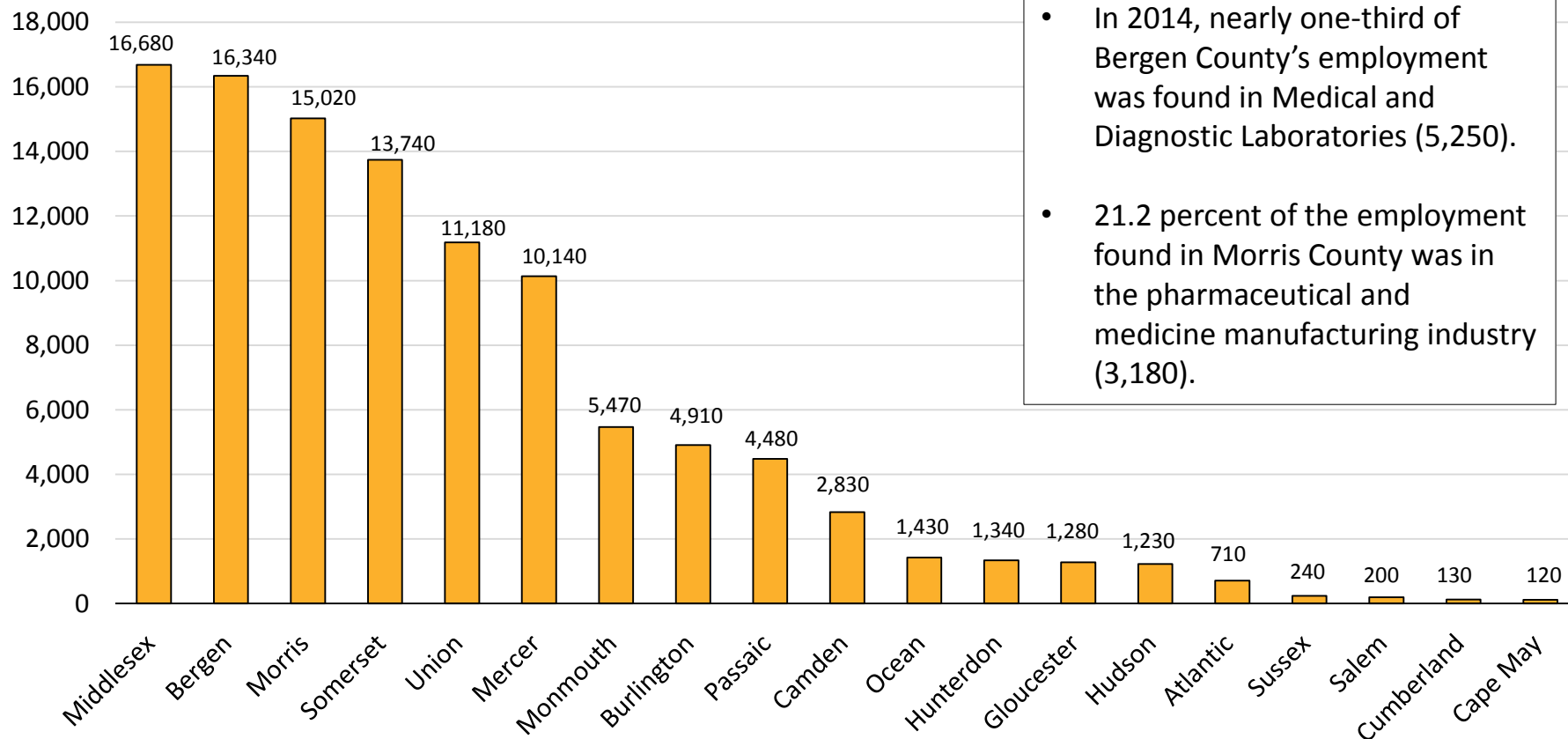
- Annual average wages were \$102,880 in 2014, up +14.0% from \$86,960 in 2009.
- Growth for the industry sectors ranged from +12.5% (electronic instrument manufacturing) to +24.6% (medical equipment and supplies manufacturing) over the 5-year period.

Due to disclosure issues, search, detection & navigation instruments, other measuring & controlling devices, dental equipment & supplies mfg., dental equipment & supplies mfg., and ophthalmic goods mfg. are not included in the chart above.

LIFE SCIENCES INDUSTRY CLUSTER: REGIONAL AND COUNTY ANALYSIS



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER EMPLOYMENT BY COUNTY, 2014 ANNUAL AVERAGES



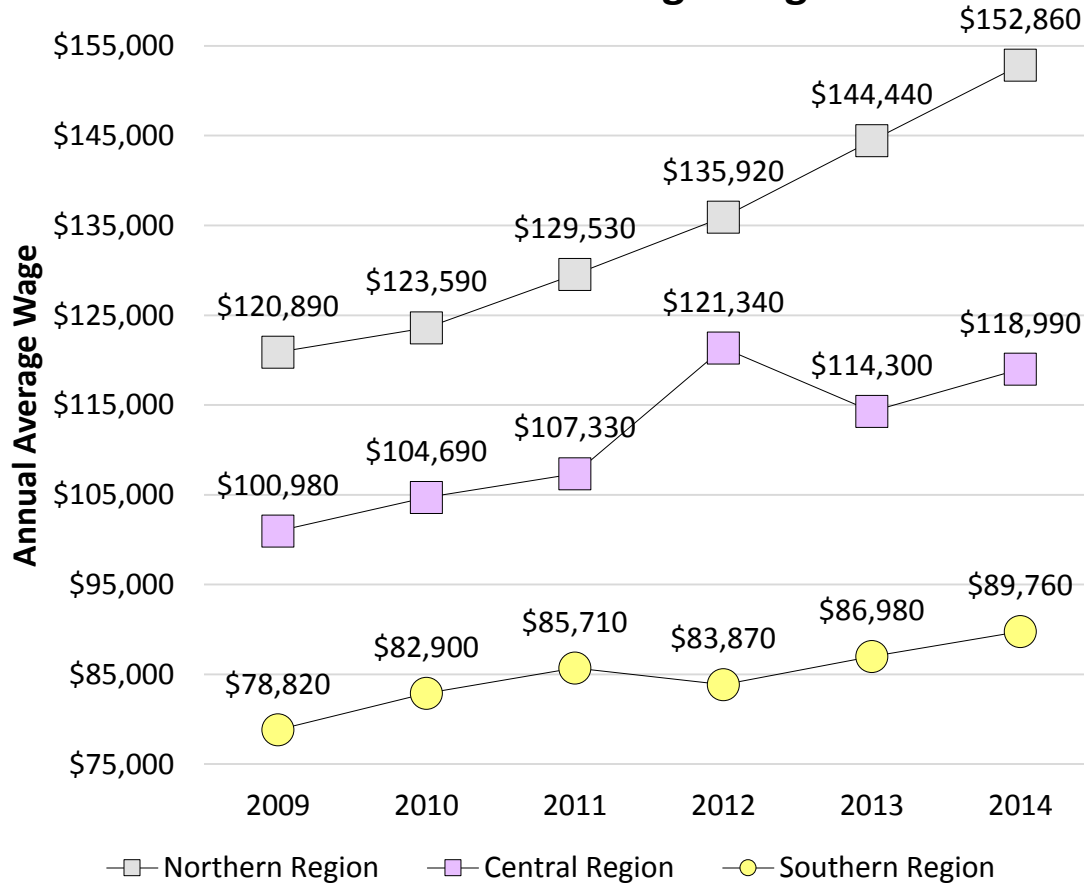
- In 2014, nearly one-third of Bergen County’s employment was found in Medical and Diagnostic Laboratories (5,250).
- 21.2 percent of the employment found in Morris County was in the pharmaceutical and medicine manufacturing industry (3,180).

Due to disclosure issues, Essex and Warren Counties are not included in the chart above.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

LIFE SCIENCES ANNUAL AVERAGE WAGE BY REGION 5-YEAR TREND

Life Sciences Annual Average Wage Trend

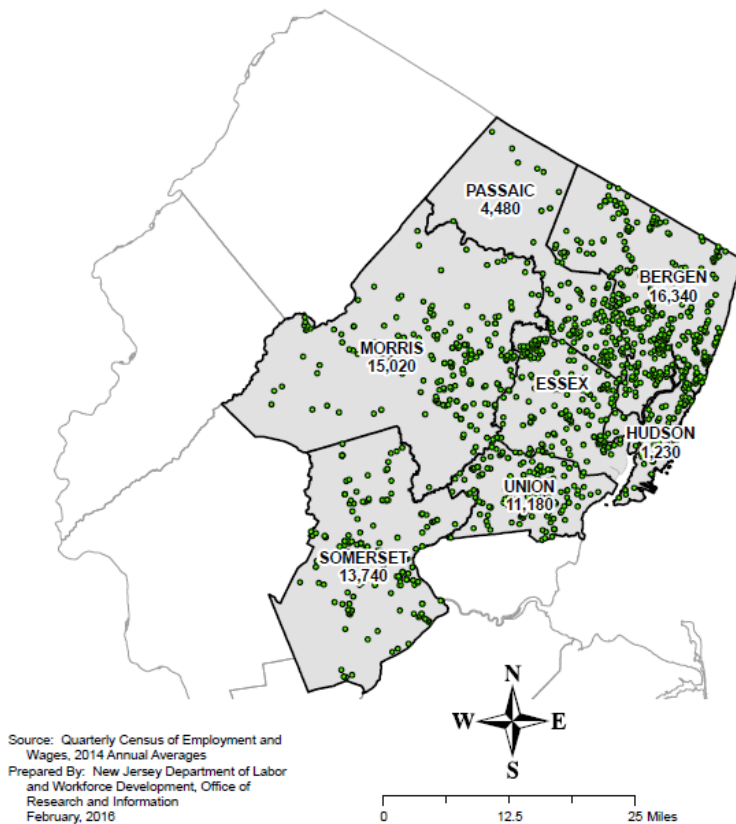


- Northern Region - (Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex, Union, and Warren Counties) – Annual average wage increased 26.4 percent from 2009 - 2014.
- Central Region – (Mercer, Middlesex, Monmouth, and Ocean Counties) – Annual average wage experienced a 17.8 percent growth over the five-year period.
- Southern Region – (Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties) –Smallest annual average wage increase over the period amongst the regions (+13.9%).



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER COUNTIES IN THE NORTHERN REGION

Life Sciences Employment and Establishment Locations
Northern Region of New Jersey, 2014



Due to disclosure issues, Essex County life sciences employment is not included in the map to the left.

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

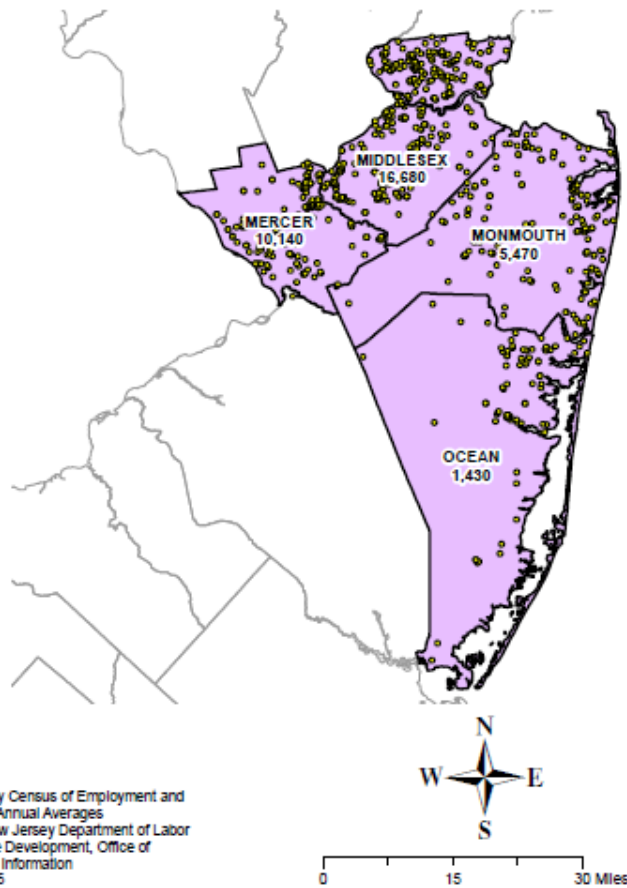
- **Establishments** – A majority of the Life Science industry related establishments can be found along major highways in NJ within a close proximity to New York, NY.
- **Employment** – Represent more than half of the life sciences employment in New Jersey in 2014.
- **Average Wage** – The average wage for these counties in life sciences related industries is above the NJ average for life sciences industry employment (\$151,880 vs. \$137,290).



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

CENTRAL NEW JERSEY ESTABLISHMENTS

Life Sciences Employment and Establishment Locations
Central Region of New Jersey, 2014



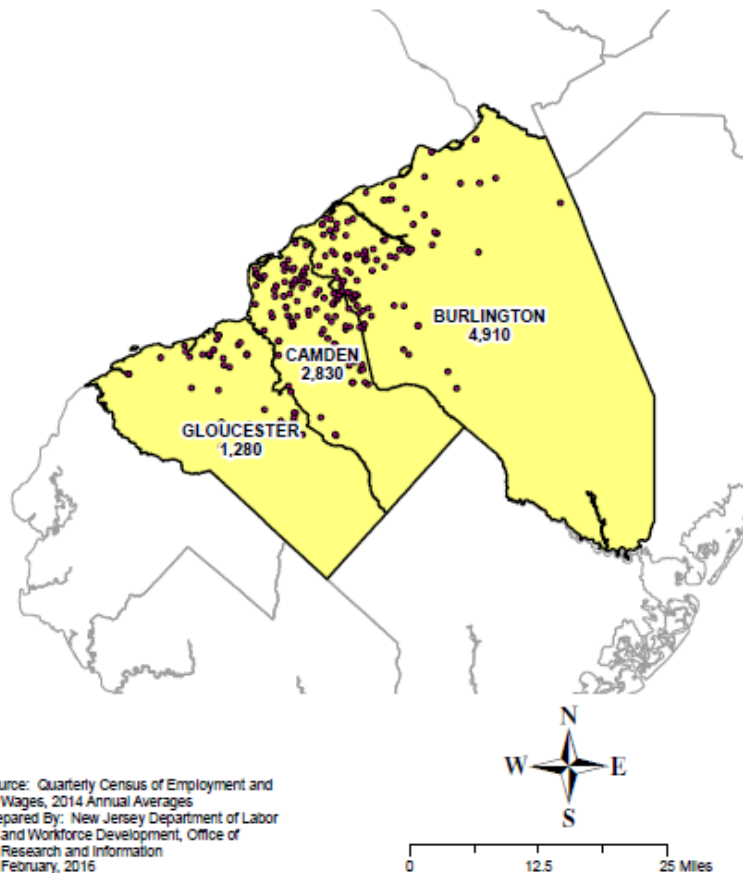
Source: Quarterly Census of Employment and Wages, 2014 Annual Averages
Prepared By: New Jersey Department of Labor and Workforce Development, Office of Research and Information
February, 2016

- The highlighted region to the left consists of Mercer, Middlesex, Monmouth, and Ocean Counties.
- **Establishments** - These counties account for 26.0 percent of all establishments in the life sciences industry cluster in New Jersey (810).
- **Employment** – Employment for these five counties is more than 33,700 and makes up nearly a third of employment in the life sciences industry cluster (29.3%).
- **Average Wage** – The average wage for these counties in life sciences related industries is below the NJ average for life sciences industry employment (\$118,990 vs. \$137,290).



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER SOUTHERN NEW JERSEY ESTABLISHMENTS

Life Sciences Employment and Establishment Locations
Southern Region of New Jersey, 2014



Source: Quarterly Census of Employment and Wages, 2014 Annual Averages
Prepared By: New Jersey Department of Labor and Workforce Development, Office of Research and Information
February, 2015

- 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 nearly ten percent of all life sciences industry establishments in New Jersey.
- **Employment** – The three counties have slightly more than 9,000 employment
- **Average Wage** – The average wage for these counties in life sciences related industries is below the NJ average for life sciences industry employment (\$91,730 vs. \$137,290). These counties account for 5.2 percent of total life sciences annual average wages paid in 2014.

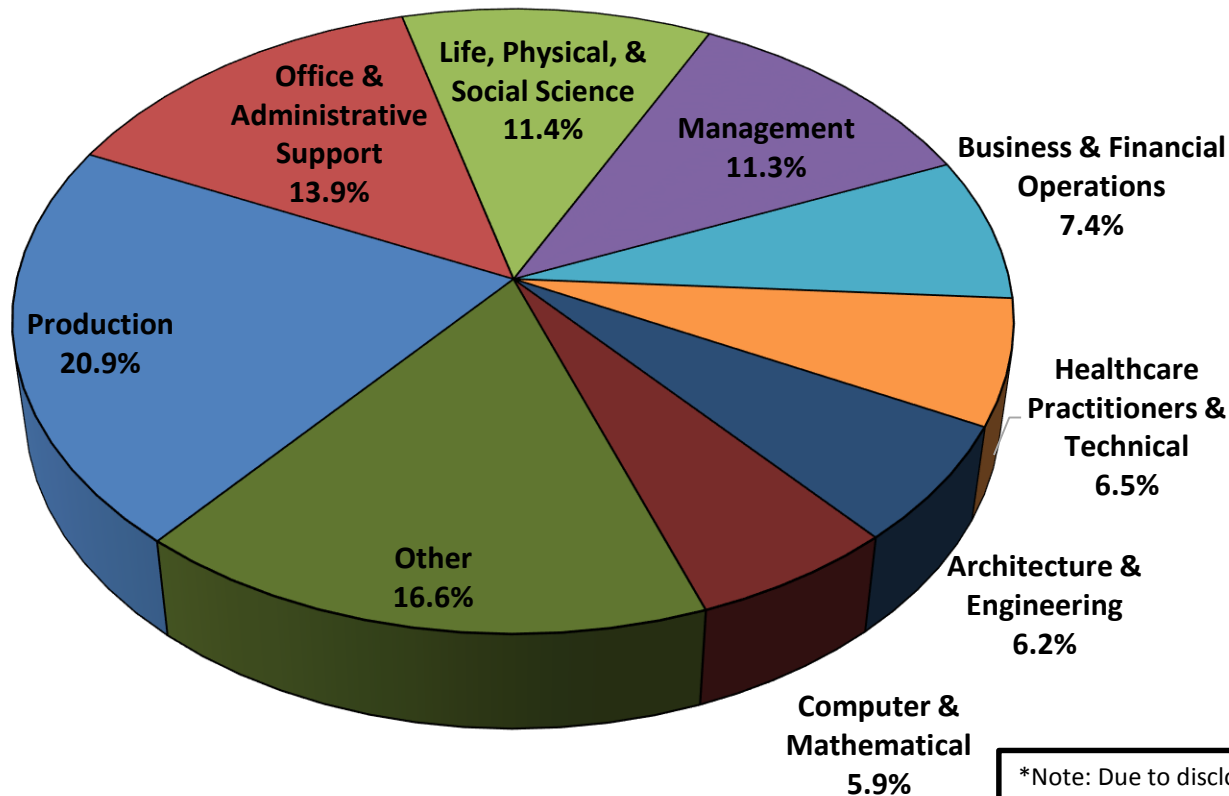


LIFE SCIENCES INDUSTRY CLUSTER: OCCUPATIONAL ANALYSIS



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MAJOR OCCUPATIONAL GROUP BREAKDOWN FOR INDUSTRY, 2014

Life Sciences Industry Cluster



- An occupational analysis of 109,410* jobs revealed that five major occupational groups in this cluster accounted for nearly two-thirds (64.9%) of the jobs.
- A majority of the employment in the “other” group are sales and healthcare support occupations.

*Note: Due to disclosure issues, of the total 115,710 jobs identified, only 94.5 percent of the estimates could be used for this occupational analysis.



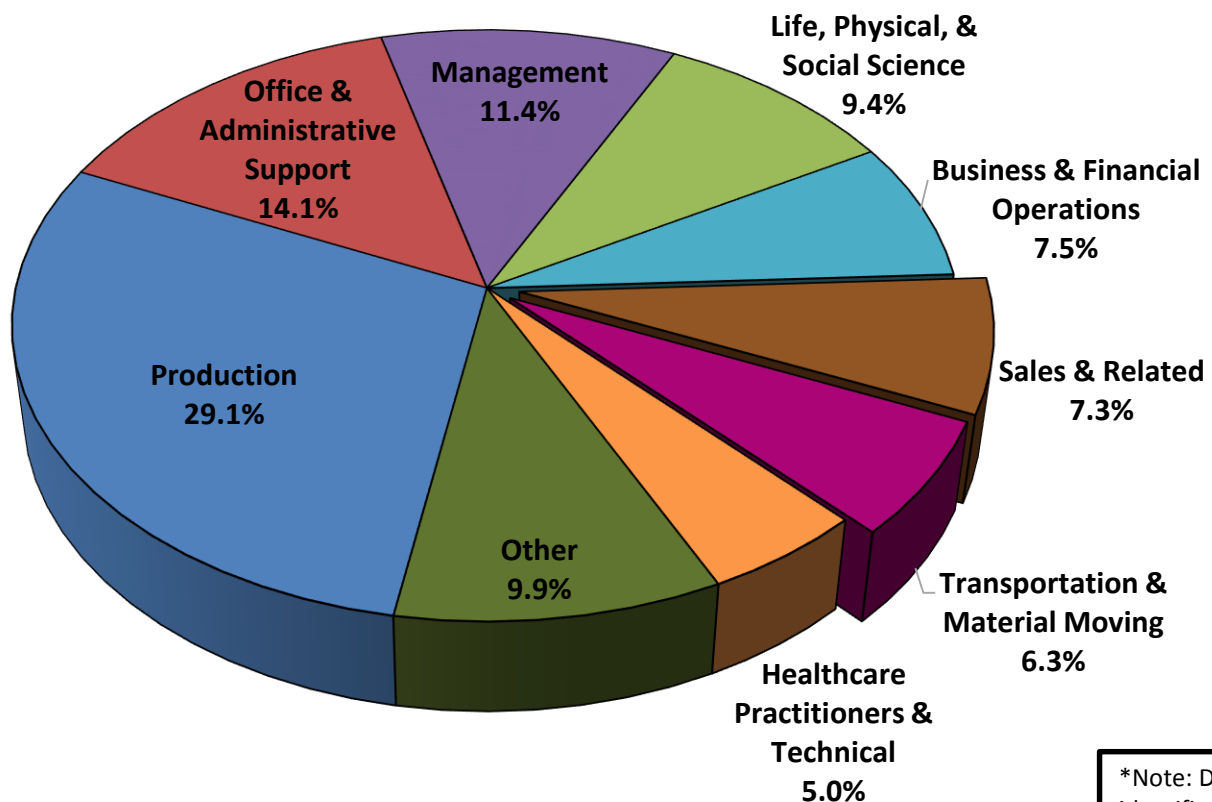
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER INDUSTRY CLUSTER TOP 20 OCCUPATIONS BY EMPLOYMENT, 2014

New Jersey Life Sciences Cluster's Top 20 Occupations

NAICS and Occupational Title	2014 Employment	Education
51-9111 Packaging & Filling Machine Operators & Tenders	4,720	High school diploma or equivalent
19-2031 Chemists	3,460	Bachelor's degree
19-4031 Chemical Technicians	2,700	Associate's degree
51-9061 Inspectors, Testers, Sorters, Samplers, & Weighers	2,570	High school diploma or equivalent
31-9097 Phlebotomists	2,370	Postsecondary non-degree award
43-4051 Customer Service Representatives	2,310	High school diploma or equivalent
41-4012 Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	2,050	High school diploma or equivalent
51-9023 Mixing and Blending Machine Setters, Operators, & Tenders	2,040	High school diploma or equivalent
51-1011 First-Line Supervisors of Production & Operating Workers	2,030	Postsecondary non-degree award
19-1021 Biochemists & Biophysicists	1,820	Doctoral or professional degree
29-2011 Medical & Clinical Laboratory Technologists	1,780	Bachelor's degree
11-1021 General & Operations Managers	1,770	Bachelor's degree
51-9041 Extruding, Forming, Pressing, & Compacting Machine Setters, Operators, & Tenders	1,640	High school diploma or equivalent
41-4011 Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	1,590	Bachelor's degree
15-1132 Software Developers, Applications	1,560	Bachelor's degree
11-9121 Natural Sciences Managers	1,530	Bachelor's degree
17-2141 Mechanical Engineers	1,450	Bachelor's degree
53-7062 Laborers & Freight, Stock, & Material Movers, Hand	1,440	Less than high school
43-5071 Shipping, Receiving, & Traffic Clerks	1,410	High school diploma or equivalent
29-2052 Pharmacy Technicians	1,340	High school diploma or equivalent

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER PHARMACEUTICAL COMPONENT

Major Occupational Group Breakdown



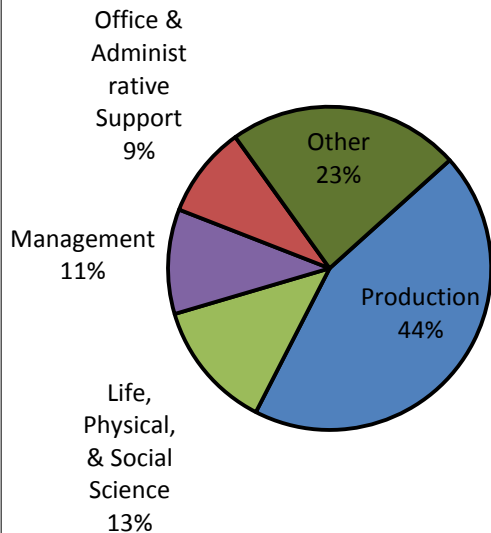
- An occupational analysis of 47,380* jobs revealed that five major occupational groups in this component accounted for nearly three-fourths (71.5%) of the employment.

• Sales and related and transportation and material occupational groups are in the top eight components for the pharmaceuticals sub sector and not for the total industry cluster.

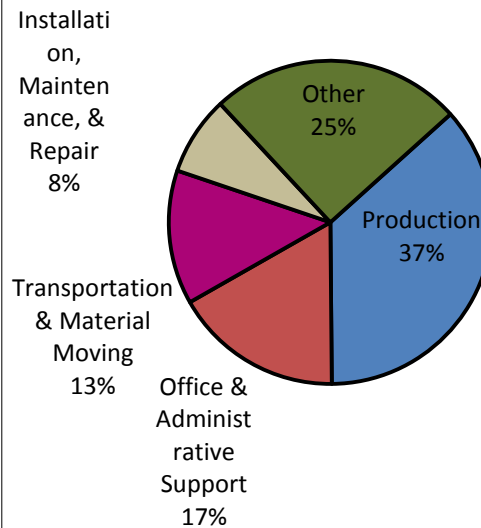
*Note: Due to disclosure issues, of the total 47,440 jobs identified, 47,380 could be used for this occupational analysis.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER PHARMACEUTICAL'S MAJOR OCCUPATIONAL GROUPS

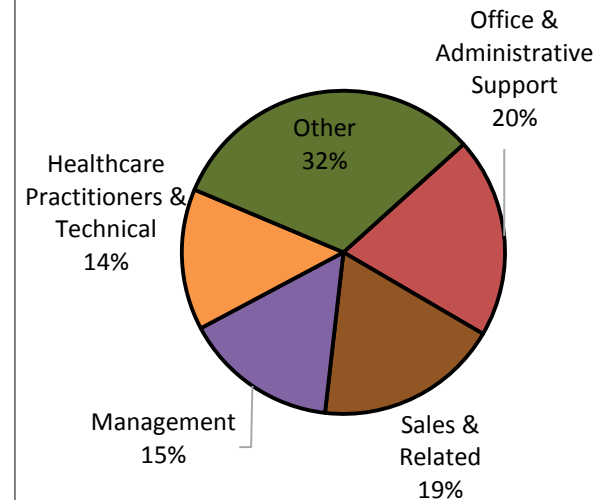
Pharmaceutical & Medicine Manufacturing



Soap, Cleaning Compound, & Toilet Preparation Manufacturing



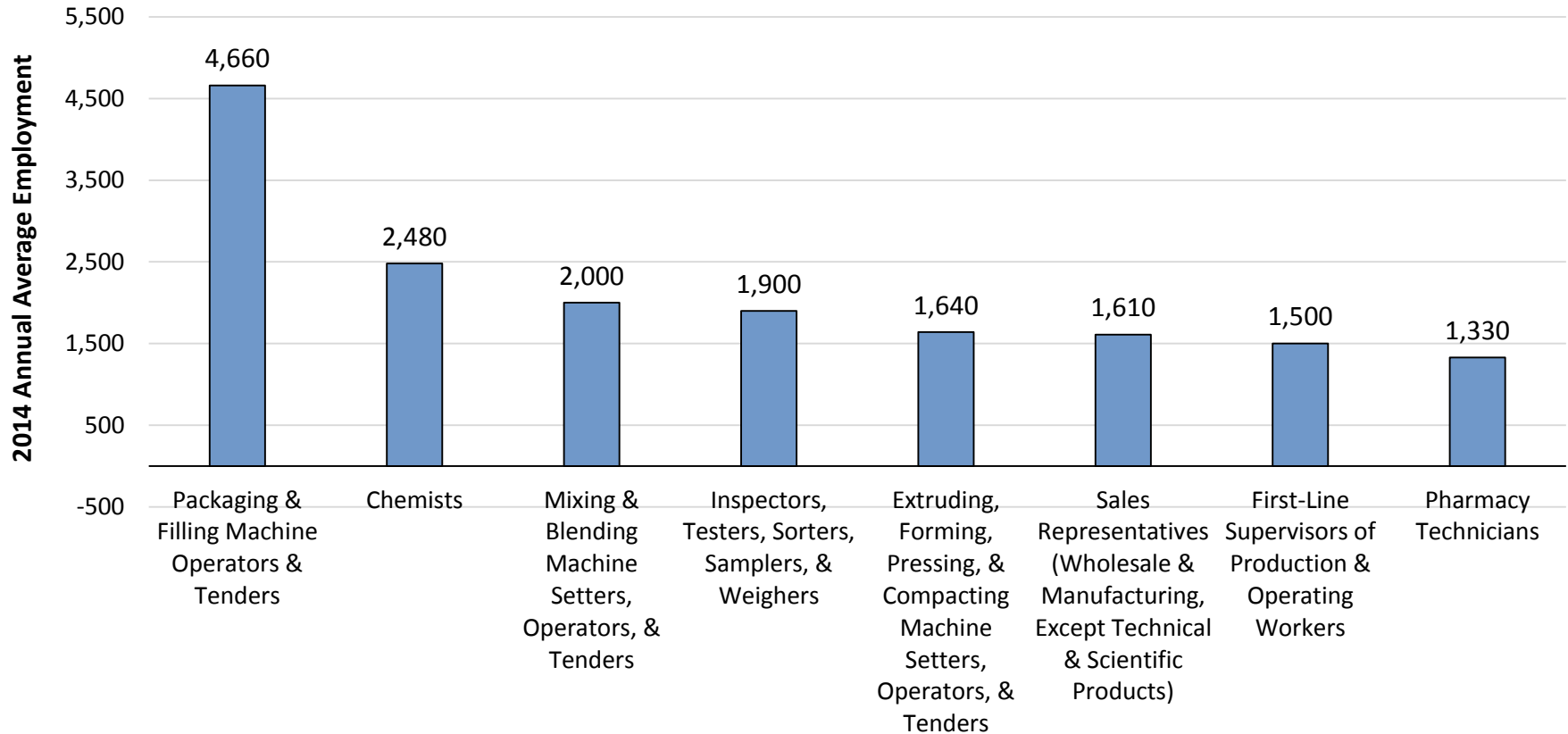
Drugs & Druggists' Sundries Merchant Wholesalers



- In all three industry groups, office & administrative support workers account for a significant portion of the employment.
- A majority of occupations in pharmaceutical and medicine manufacturing and soap, cleaning compound, and toilet preparation manufacturing are production related while occupations in drugs & druggists sundries merchant wholesalers are sales and related occupations.

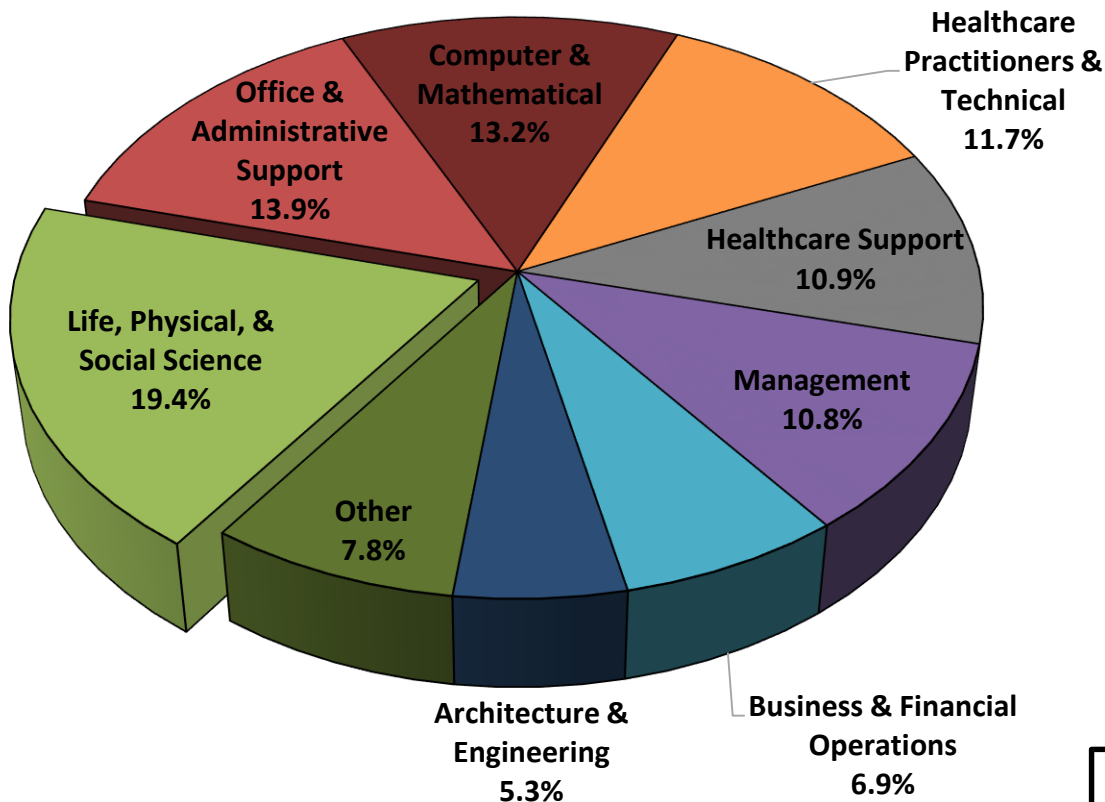
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER TOP PHARMACEUTICAL OCCUPATIONS

Pharmaceutical Industry



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER BIOTECHNOLOGY (R&D) COMPONENT

Major Occupational Group Breakdown



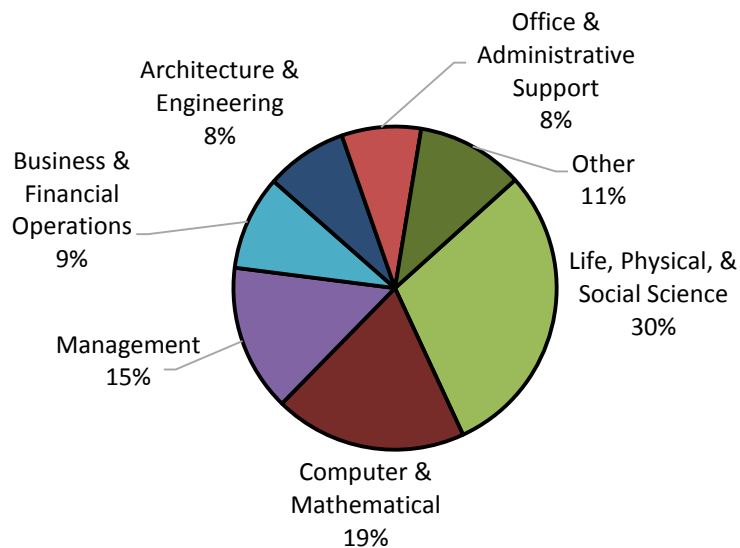
- An occupational analysis of 39,970* jobs revealed that five major occupational groups in this component accounted for more than two-thirds (69.2%) of the employment.
- Life, physical, and social science occupations employed the most in this component with more than 7,750 jobs, and accounted for nearly one-fifth of the component.

*Note: Due to disclosure issues, of the total 40,130 jobs identified, 39,970 could be used for this occupational analysis.

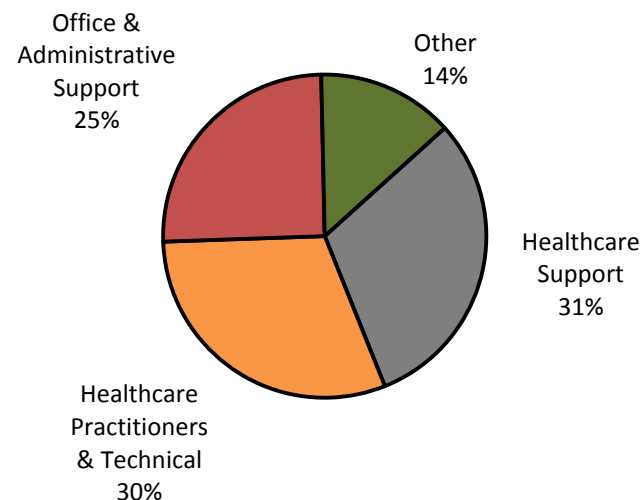


NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER BIOTECHNOLOGY (R&D) MAJOR OCCUPATIONAL GROUPS

Scientific Research & Development Services



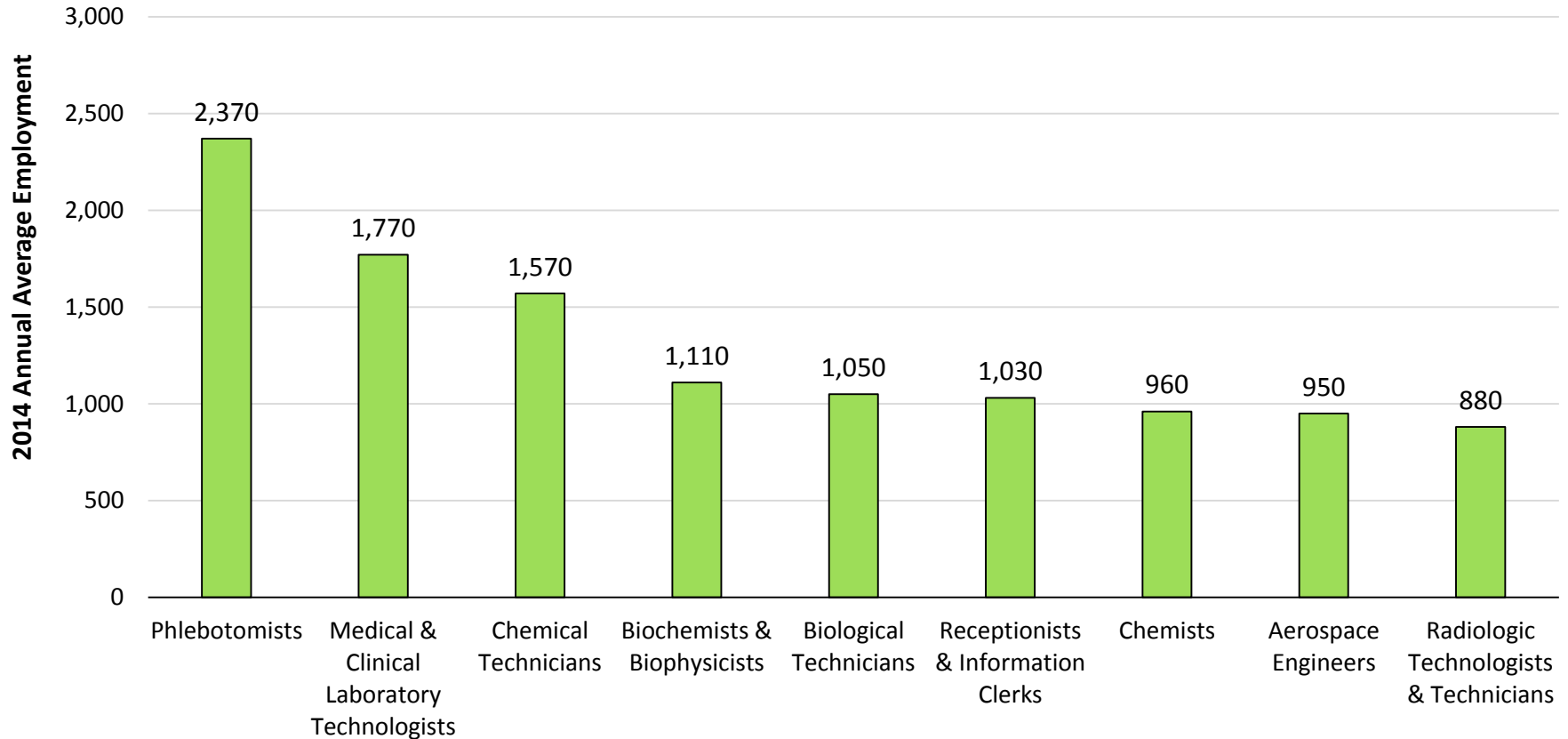
Medical and Diagnostic Laboratories



- Biotech's occupational groups show that these industry groups utilize a significant portion of professional, scientific, and technical workers with in-depth skills and knowledge related to science and healthcare.
- Nearly 90% of occupations found in the medical and diagnostic laboratories can be found in three major occupational groups: office and administrative support, healthcare support, and healthcare practitioners and technical.

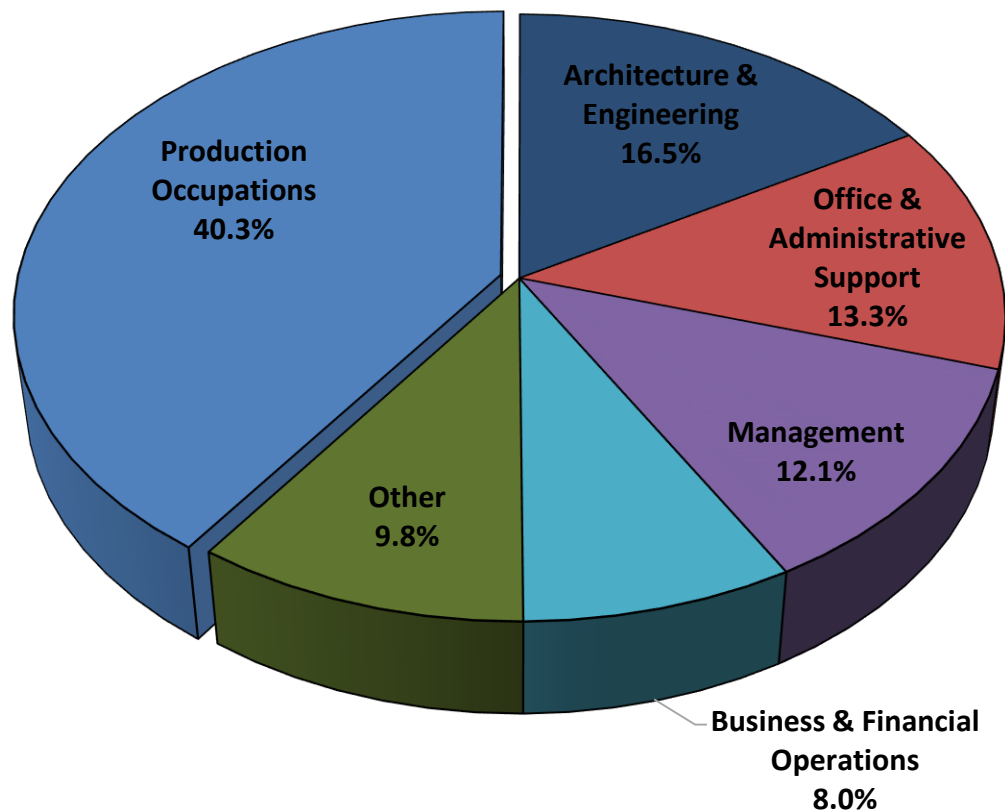
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER TOP BIOTECHNOLOGY OCCUPATIONS

Biotechnology (R&D) Industry



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MEDICAL DEVICE COMPONENT

Major Occupational Group Breakdown

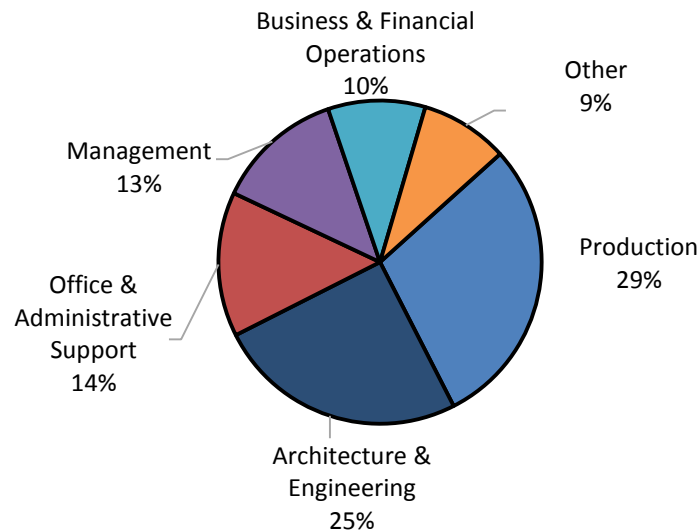


- An occupational analysis of 22,060* jobs revealed that five major occupational groups in this component accounted for more than ninety percent of the employment.
- Production occupations employed the most in this component with 8,890 jobs, and accounted for nearly half of the component (40.3%).

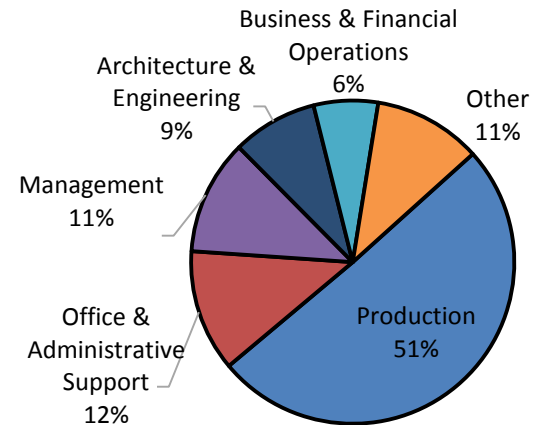
*Note: Due to disclosure issues, of the total 23,710 jobs identified, only 22,060 could be used for this occupational analysis.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER MEDICAL DEVICES MAJOR OCCUPATIONAL GROUPS

Navigational, Measuring, Electromedical, & Control Instruments Manufacturing



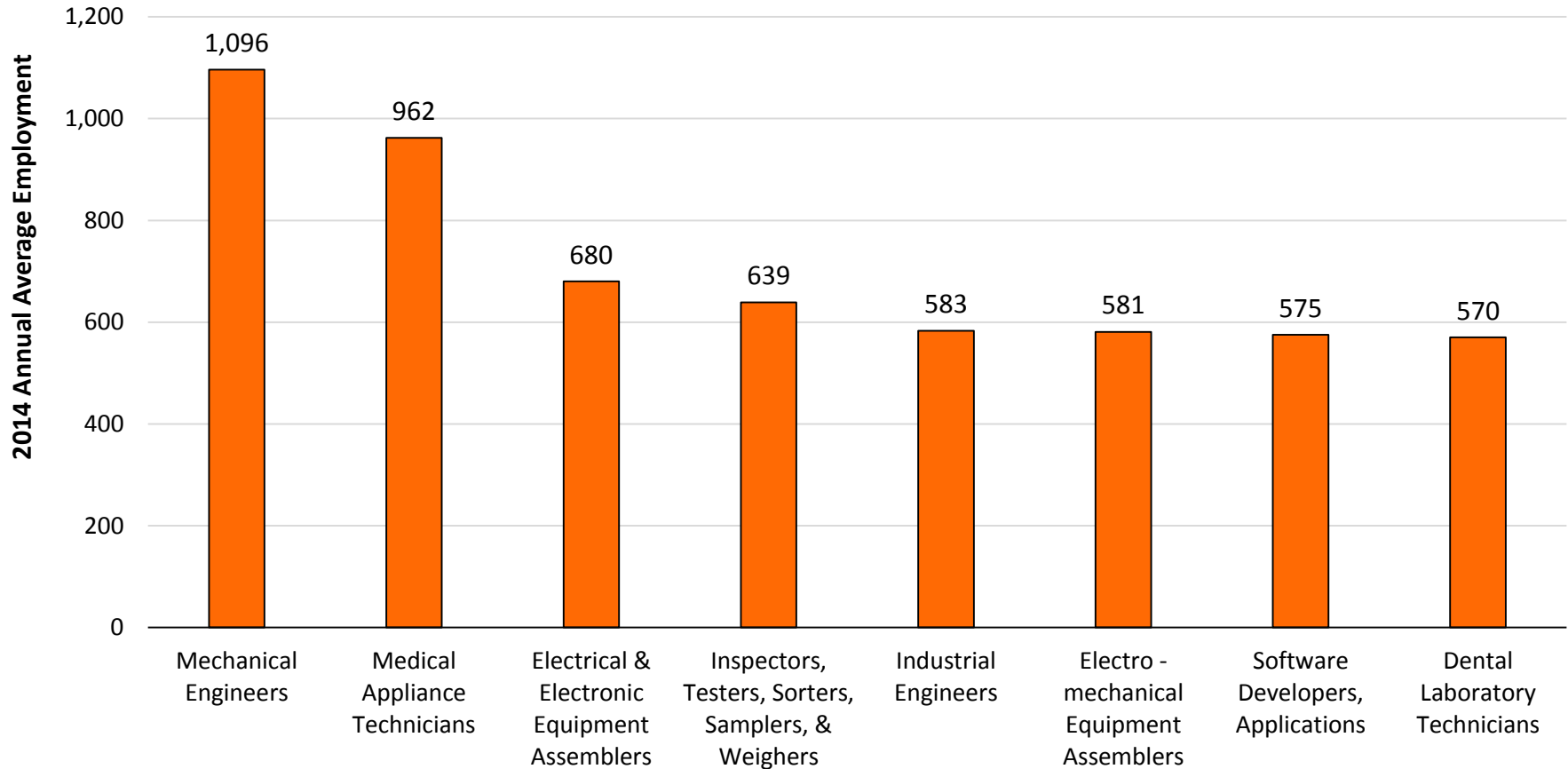
Medical Equipment and Supplies Manufacturing



- While the percentages differ, the top four occupational groups reveal that these two industry groups both have a need for many of the same type of workers.
- Occupations found in the medical devices component are production based, but other occupational family groups that make up a significant percentage are architecture and engineering, and business and financial.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER TOP MEDICAL DEVICE OCCUPATIONS, 2014

Medical Devices Industry

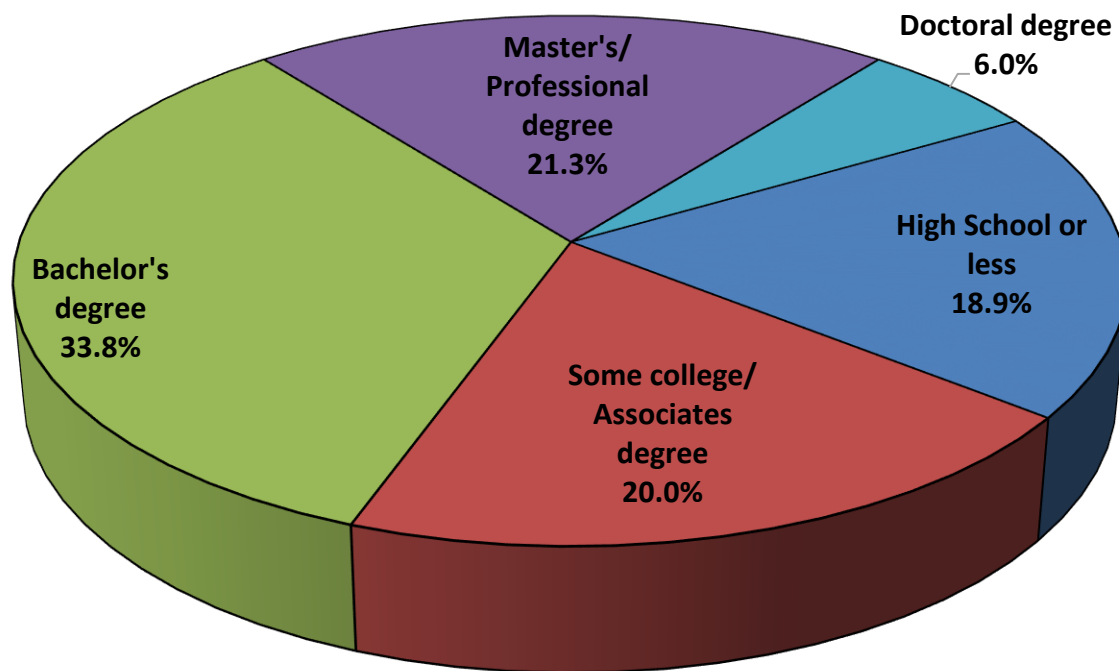


LIFE SCIENCES INDUSTRY CLUSTER: 2014 DEMOGRAPHIC OVERVIEW



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER EDUCATION CHARACTERISTICS

Educational Breakdown



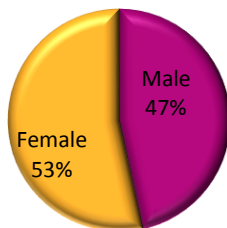
- It is often mentioned that life sciences related employers require a well-educated and highly skilled workforce to meet the high level and technical demands of many of the occupations they need to fill.
- Nearly two-thirds of New Jersey's workforce employed in this cluster hold at least a Bachelor's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



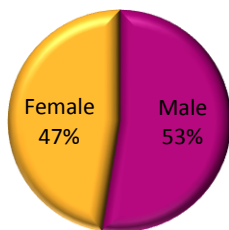
NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

NJ RESIDENTS IN LIFE SCIENCES INDUSTRY CLUSTER WORKFORCE

Life Sciences



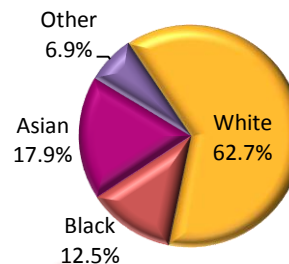
All Industries



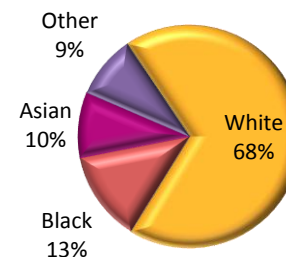
Females outnumber males by 6.8%.

The technology workforce has a greater proportion of NJ residents who are Asian (18%).

Life Sciences

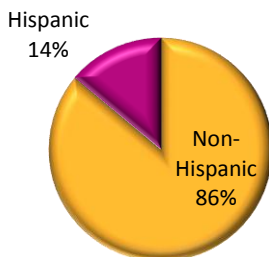


All Industries

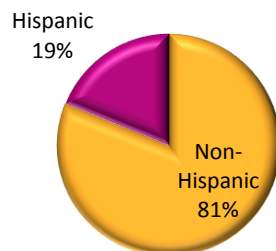


The technology workforce has fewer Hispanics than average.

Life Sciences



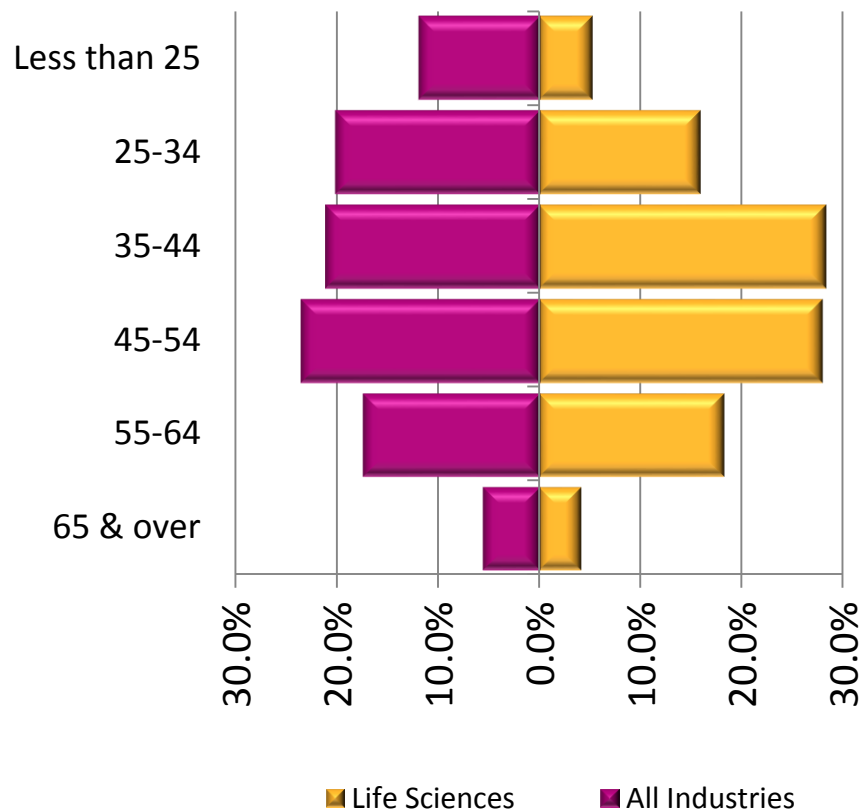
All Industries



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

LIFE SCIENCES INDUSTRY CLUSTER VS. TOTAL NONFARM

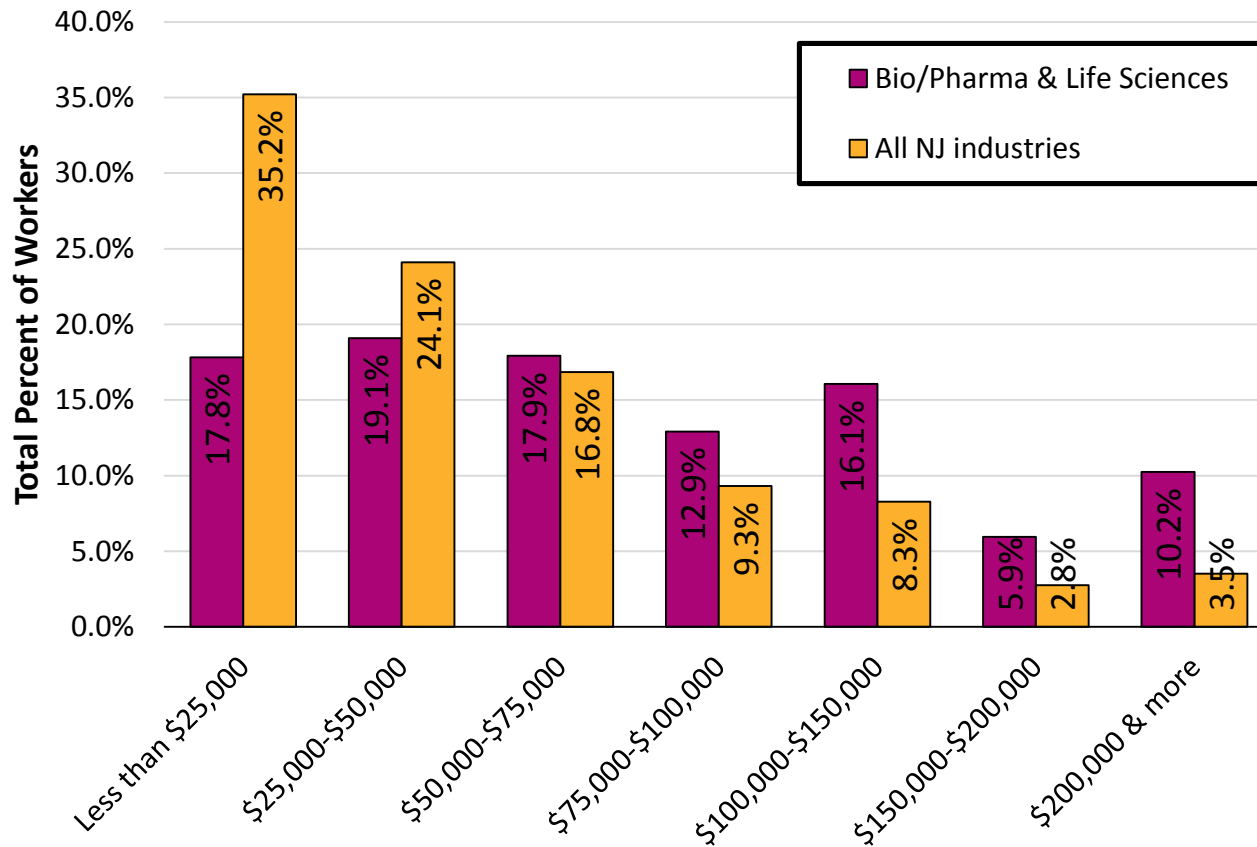
Age Breakdown of Workers in Life Sciences
and All Industries
New Jersey, 2014



- The workforce of the Life Sciences industry is older than average with slightly more than 50 percent aged 45 and up compared to only 46.7 percent overall.
- The largest disparity among age cohorts occurs in the 35-44 year old age group, where nearly 30 percent of the life sciences industry cluster is found.
- 4.2 percent of the current NJ resident life sciences workforce is aged 65 and older.

NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER NJ RESIDENTS PERSONAL EARNINGS

Personal Earnings 2014



- Nearly two-thirds of the worker (63.1%) in this cluster earned over \$50,000, whereas 59.3% 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 cluster.



LIFE SCIENCES INDUSTRY CLUSTER: TOP OCCUPATIONS OUTLOOK



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER

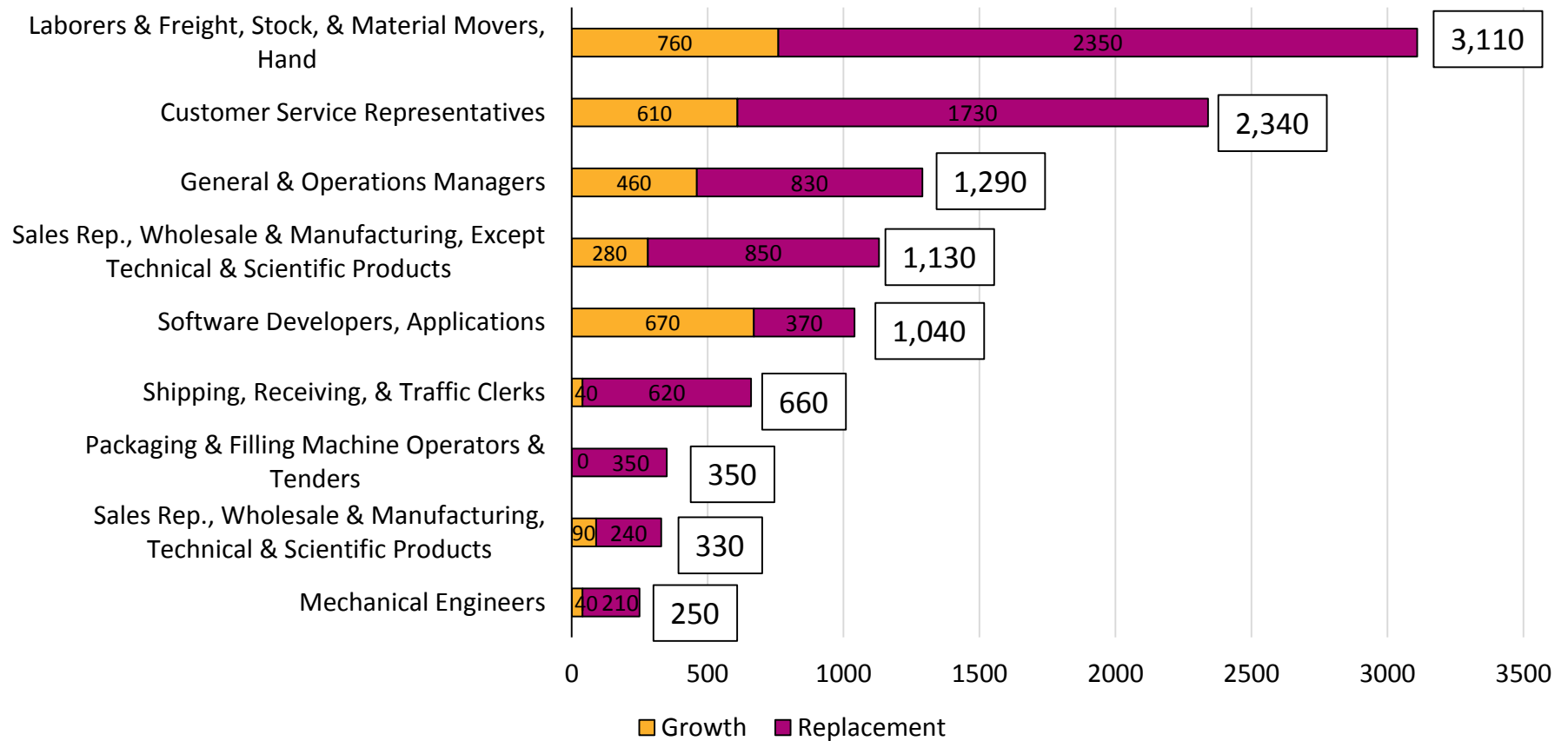
TOP LIFE SCIENCES INDUSTRY CLUSTER OCCUPATIONS OUTLOOK

Occupational Title	Employment				Average Annual		
	Actual 2012	Projected 2022	Change 2012 - 2022		Job Openings		
			Number	Percent	Total	Growth	Replacement
Software Developers, Applications	29,100	35,750	6,650	23.0	1,040	670	370
Phlebotomists	3,850	4,650	800	20.6	150	80	70
Biochemists & Biophysicists	4,000	4,500	500	13.6	170	50	110
Pharmacy Technicians	8,300	9,350	1,050	12.9	190	110	80
General & Operations Managers	44,250	48,850	4,600	10.4	1,290	460	830
Laborers & Freight, Stock, & Material Movers, Hand	75,750	83,350	7,600	10.1	3,110	760	2,350
Customer Service Representatives	63,450	69,550	6,100	9.6	2,340	610	1,730
Medical & Clinical Laboratory Technologists	4,950	5,350	400	7.7	170	40	130
Sales Rep., Wholesale & Manufacturing, Technical & Scientific Products	12,250	13,150	900	7.1	330	90	240
Sales Rep., Wholesale & Manufacturing, Except Technical & Scientific Products	43,800	46,550	2,750	6.3	1,130	280	850
Natural Sciences Managers	3,000	3,200	200	6.0	80	20	60
Mechanical Engineers	6,200	6,550	350	5.8	250	40	210
Inspectors, Testers, Sorters, Samplers, & Weighers	9,700	9,950	250	2.7	240	30	210
Chemical Technicians	4,600	4,700	100	1.9	120	10	110
Shipping, Receiving, & Traffic Clerks	23,500	23,900	400	1.8	660	40	620
Chemists	5,800	5,850	50	1.1	160	10	150
First-Line Supervisors of Production & Operating Workers	15,400	15,050	-350	-2.3	220	0	220
Packaging & Filling Machine Operators & Tenders	14,650	14,000	-650	-4.4	350	0	350
Mixing & Blending Machine Setters, Operators, & Tenders	4,200	3,750	-450	-10.5	120	0	120
Extruding, Forming, Pressing, & Compacting Machine Setters, Operators, & Tenders	3,550	3,150	-400	-11.3	100	0	100



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

2012-2022 Projected Annual Average Job Openings



NEW JERSEY LIFE SCIENCES INDUSTRY CLUSTER COPYRIGHT STATEMENT

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STATE OF NEW JERSEY
DEPARTMENT OF LABOR AND
WORKFORCE DEVELOPMENT



NEW JERSEY DEPARTMENT OF
LWD
LABOR AND WORKFORCE DEVELOPMENT
nj.gov/labor

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http://lwd.dol.state.nj.us/labor/lpa/LMI_index.html

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