



Alabama  
Department of Labor

Labor Market Information  
James Henry, Division Director

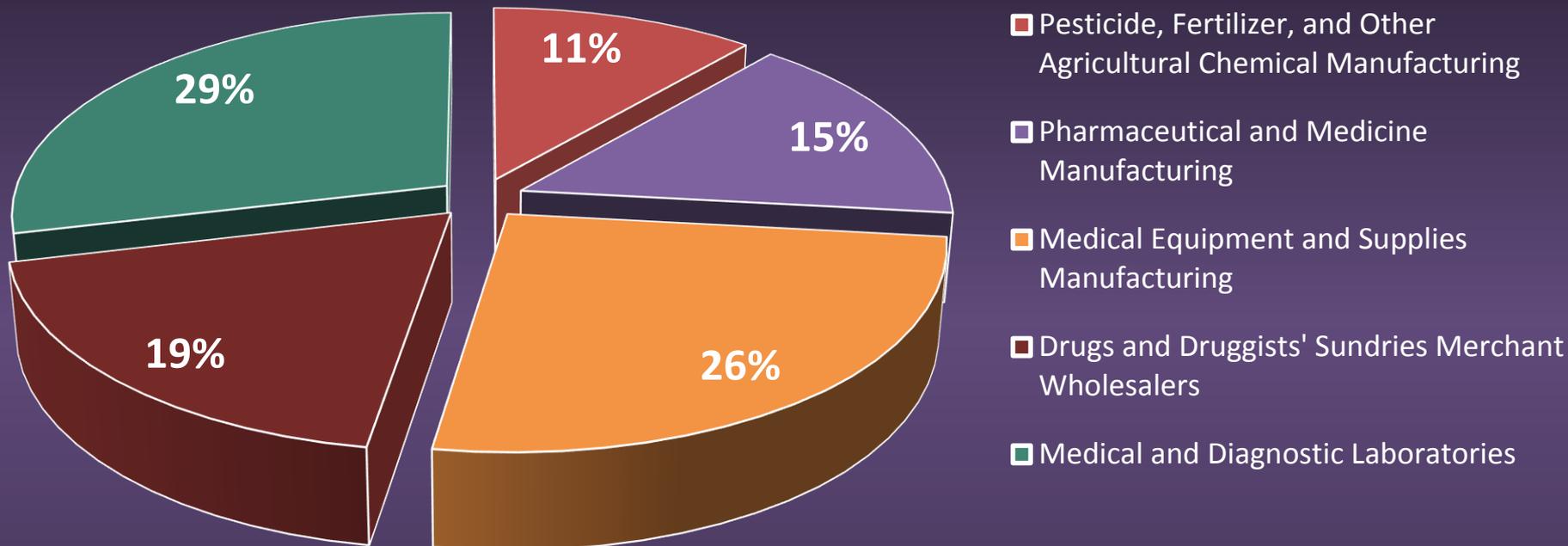


# Accelerate Alabama Bioscience

Alabama Department of Labor  
Labor Market Information Division



# Alabama Bioscience Employment by Industry Sectors





## Alabama Bioscience Industry Overview

Sector	# of Companies	# Employed
Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	26	1,176
Pharmaceutical and Medicine Manufacturing	23	1,622
Medical Equipment and Supplies Manufacturing	152	2,693
Drugs and Druggists' Sundries Merchant Wholesalers	107	1,959
Medical and Diagnostic Laboratories	378	3,009



# Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing

**3253: 32531 Fertilizer Manufacturing** – This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing nitrogenous or phosphatic fertilizer materials; (2) manufacturing fertilizers from sewage or animal waste; (3) manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and (4) mixing ingredients made elsewhere into fertilizers. **32532 Pesticide & Other Agricultural Chemical Manufacturing** – This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

26 companies; 1,176 employed;  
11% of Bioscience Industry Employment

# of Employees	% of Companies
1-49	77%
50-99	8%
100-249	12%
250+	3%

**Source:** Quarterly Census of Employment and Wages, 2014 annual average. *Note: Numbers may not equal 100% due to rounding.*

## Top 5 Job Categories:

- 36% Chemical Plant and System Operators
- 7% Mixing and Blending Machine Setters, Operators, and Tenders
- 5% Industrial Machinery Mechanics
- 5% Chemists
- 4% Packers and Packagers, Hand

**Source:** 2015 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	*	*	*	*
2 – 3 Years	17	\$2,463	\$1,686	*
4 – 5 Years	*	\$2,842	\$2,325	*
6 – 10 Years	*	\$3,756	*	*
11+ Years	1,018	\$6,557	\$4,840	4.2%
All Firm Ages	1,067	\$6,404	\$4,405	4.5%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2014 annual average data shown. \*Data not available or marked confidential. Note: Data may not add due to rounding.



# Pharmaceutical and Medicine Manufacturing

## 3254 Pharmaceutical and Medicine Manufacturing

This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

23 companies; 1,622 employed;  
15% of Bioscience Industry Employment

# of Employees	% of Companies
1-49	78%
50-99	4%
100-249	9%
250+	9%

**Source:** Quarterly Census of Employment and Wages, 2014 annual average. *Note: Numbers may not equal 100% due to rounding.*

### Top 5 Job Categories:

- 17% Inspectors, Testers, Sorters, Samplers, and Weighers
- 10% Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
- 9% Mixing and Blending Machine Setters, Operators, and Tenders
- 7% Chemists
- 5% Chemical Plant and System Operators

**Source:** 2015 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Pharmaceutical and Medicine Manufacturing

## Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	*	\$2,856	*	*
2 – 3 Years	*	\$4,836	\$1,788	*
4 – 5 Years	*	\$2,807	*	*
6 – 10 Years	81	\$3,739	\$1,884	6.2%
11+ Years	1,508	\$4,944	\$4,329	4.6%
All Firm Ages	1,610	\$4,863	\$4,152	4.7%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2014 annual average data shown. *\*Data not available or marked confidential. Note: Data may not add due to rounding.*



# Medical Equipment and Supplies Manufacturing

## 3391 Medical Equipment and Supplies Manufacturing

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, ophthalmic goods, dentures, and orthodontic appliances.

152 companies; 2,693 employed;  
26% of Bioscience Industry Employment

# of Employees	% of Companies
1-49	92%
50-99	3%
100-249	4%
250+	1%

**Source:** Quarterly Census of Employment and Wages, 2014 annual average. *Note: Numbers may not equal 100% due to rounding.*

### Top 5 Job Categories:

- 27% Dental Laboratory Technicians
- 7% Packers and Packagers, Hand
- 5% Team Assemblers
- 4% Customer Service Representatives
- 3% Office Clerks, General

**Source:** 2015 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Medical Equipment and Supplies Manufacturing Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	15	\$4,209	\$3,612	*
2 – 3 Years	70	\$1,854	\$1,297	14.5%
4 – 5 Years	18	\$2,367	\$1,666	*
6 – 10 Years	324	\$2,593	\$1,856	5.7%
11+ Years	2,046	\$3,620	\$2,664	5.7%
All Firm Ages	2,472	\$3,417	\$2,481	6.0%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2014 annual average data shown. *\*Data not available or marked confidential. Note: Data may not add due to rounding.*



# Drugs and Druggists' Sundries Merchant Wholesalers

## 4242 Drugs and Druggists' Sundries Merchant Wholesalers

This industry comprises establishments primarily engaged in the merchant wholesale distribution of biological and medical products; botanical drugs and herbs; and pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

107 companies; 1,959 employed;  
19% of Bioscience Industry Employment

# of Employees	% of Companies
1-49	91%
50-99	7%
100-249	1%
250+	1%

**Source:** Quarterly Census of Employment and Wages, 2014 annual average. *Note: Numbers may not equal 100% due to rounding.*

### Top 5 Job Categories:

- 63% Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
- 5% Laborers and Freight, Stock, and Material Movers, Hand
- 4% Pharmacists
- 3% General and Operations Managers
- 2% Customer Service Representatives

**Source:** 2015 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Drugs and Druggists' Sundries Merchant Wholesalers

## Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	18	\$3,556	\$1,926	*
2 – 3 Years	14	\$3,521	\$2,468	*
4 – 5 Years	*	\$6,179	*	*
6 – 10 Years	119	\$5,508	\$4,717	6.3%
11+ Years	1,707	\$6,668	\$4,783	6.5%
All Firm Ages	1,858	\$6,538	\$4,694	6.6%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2014 annual average data shown. \*Data not available or marked confidential. Note: Data may not add due to rounding.



# Medical and Diagnostic Laboratories

## 6215 Medical and Diagnostic Laboratories

This industry comprises establishments known as medical and diagnostic laboratories primarily engaged in providing analytic or diagnostic services, including body fluid analysis and diagnostic imaging, generally to the medical profession or to the patient on referral from a health practitioner.

378 companies; 3,009 employed;  
29% of Bioscience Industry Employment

# of Employees	% of Companies
1-49	97%
50-99	2%
100-249	0%
250+	1%

### Top 5 Job Categories:

- 13% Medical and Clinical Laboratory Technologists
- 13% Medical and Clinical Laboratory Technicians
- 10% Phlebotomists
- 6% Couriers and Messengers
- 6% Billing and Posting Clerks

**Source:** Quarterly Census of Employment and Wages, 2014 annual average. *Note: Numbers may not equal 100% due to rounding.*

**Source:** 2015 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



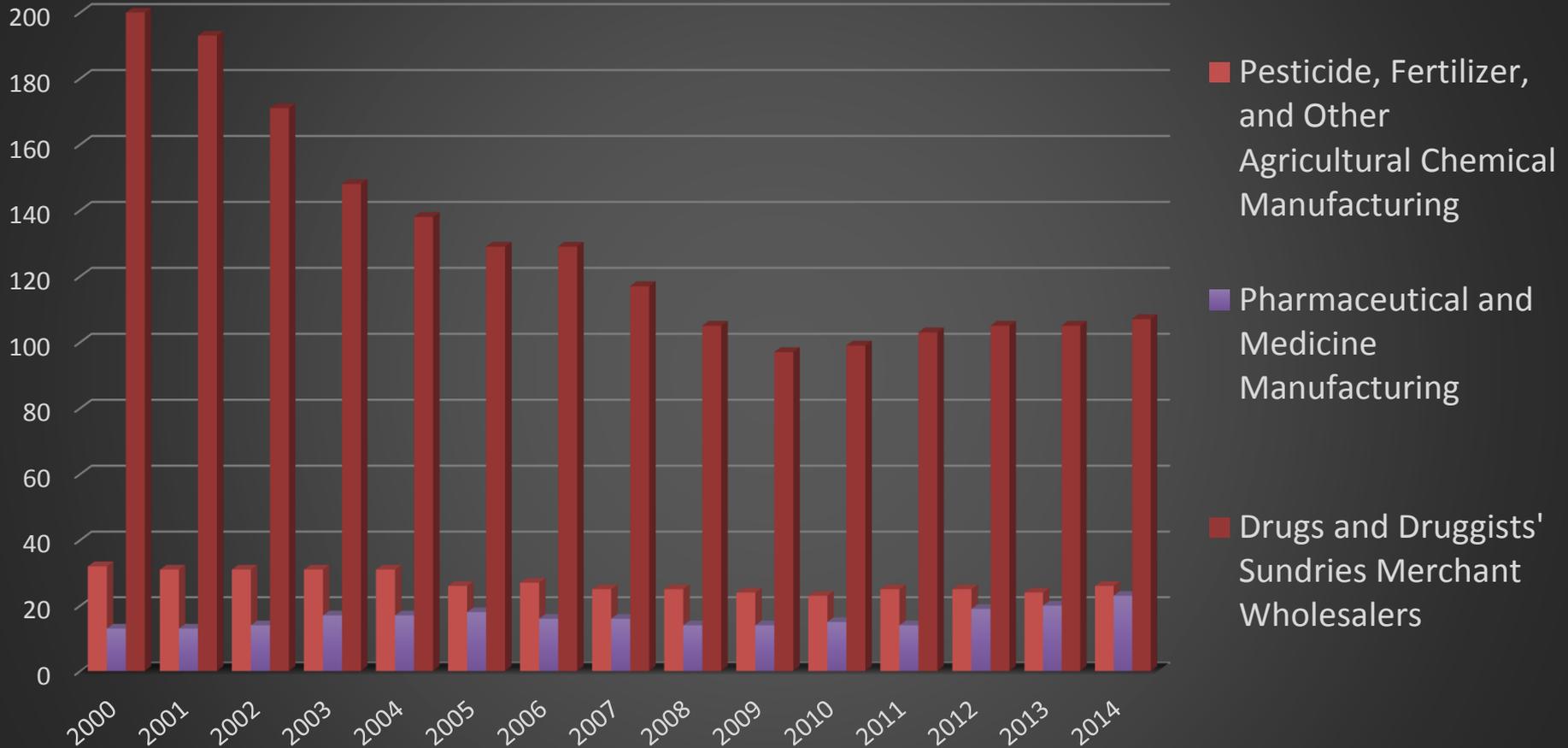
## Medical and Diagnostic Laboratories Firm Age Workforce Indicators

Firm Age	Employment	Monthly Earnings	Monthly Earnings New Hires	Turnover
0 – 1 Year	80	\$5,105	\$3,680	*
2 – 3 Years	86	\$3,040	\$2,694	*
4 – 5 Years	34	\$3,074	\$2,824	*
6 – 10 Years	225	\$4,185	\$2,797	5.8%
11+ Years	2,443	\$3,922	\$2,824	6.0%
All Firm Ages	2,868	\$3,940	\$2,940	6.6%

Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, LED Extraction Tool; 2014 annual average data shown. *\*Data not available or marked confidential. Note: Data may not add due to rounding.*



# Development of Alabama's Bioscience Industry by Company



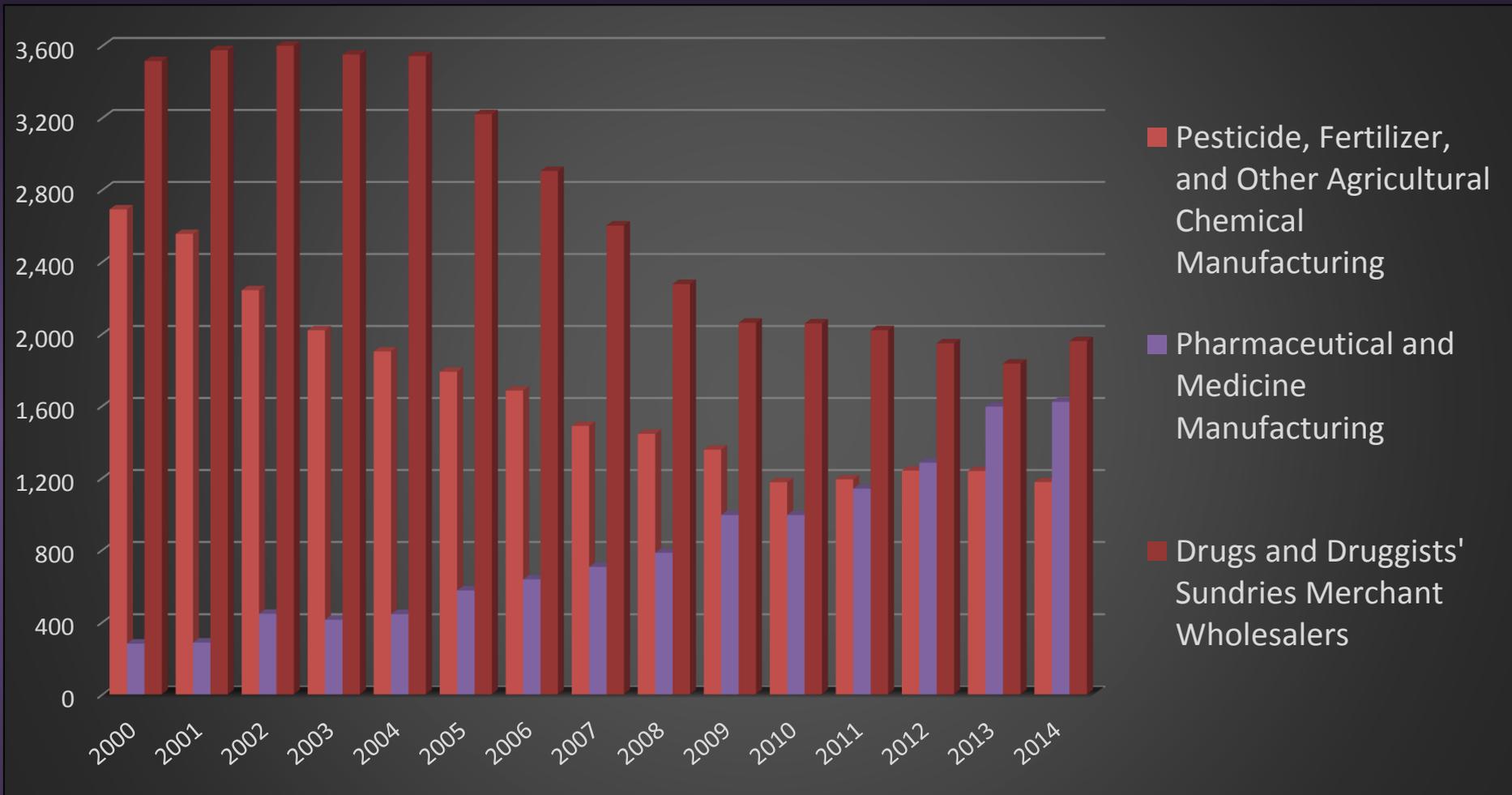


# Development of Alabama's Bioscience Industry by Company





# Development of Alabama's Bioscience Industry by Employment





# Development of Alabama's Bioscience Industry by Employment





## Top Occupations for Bioscience by Rounded Employment

Occupations	# of Jobs	% of Total
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,240	12%
Dental Laboratory Technicians	730	7%
Chemical Plant and System Operators	500	5%
Medical and Clinical Laboratory Technologists	380	4%
Medical and Clinical Laboratory Technicians	380	4%
Inspectors, Testers, Sorters, Samplers, and Weighers	350	3%
Phlebotomists	310	3%
Customer Service Representatives	280	3%
Packers and Packagers, Hand	250	2%
Remaining Occupations	6,040	57%



# Wage Information

## Top 10 by Rounded Occupational Employment

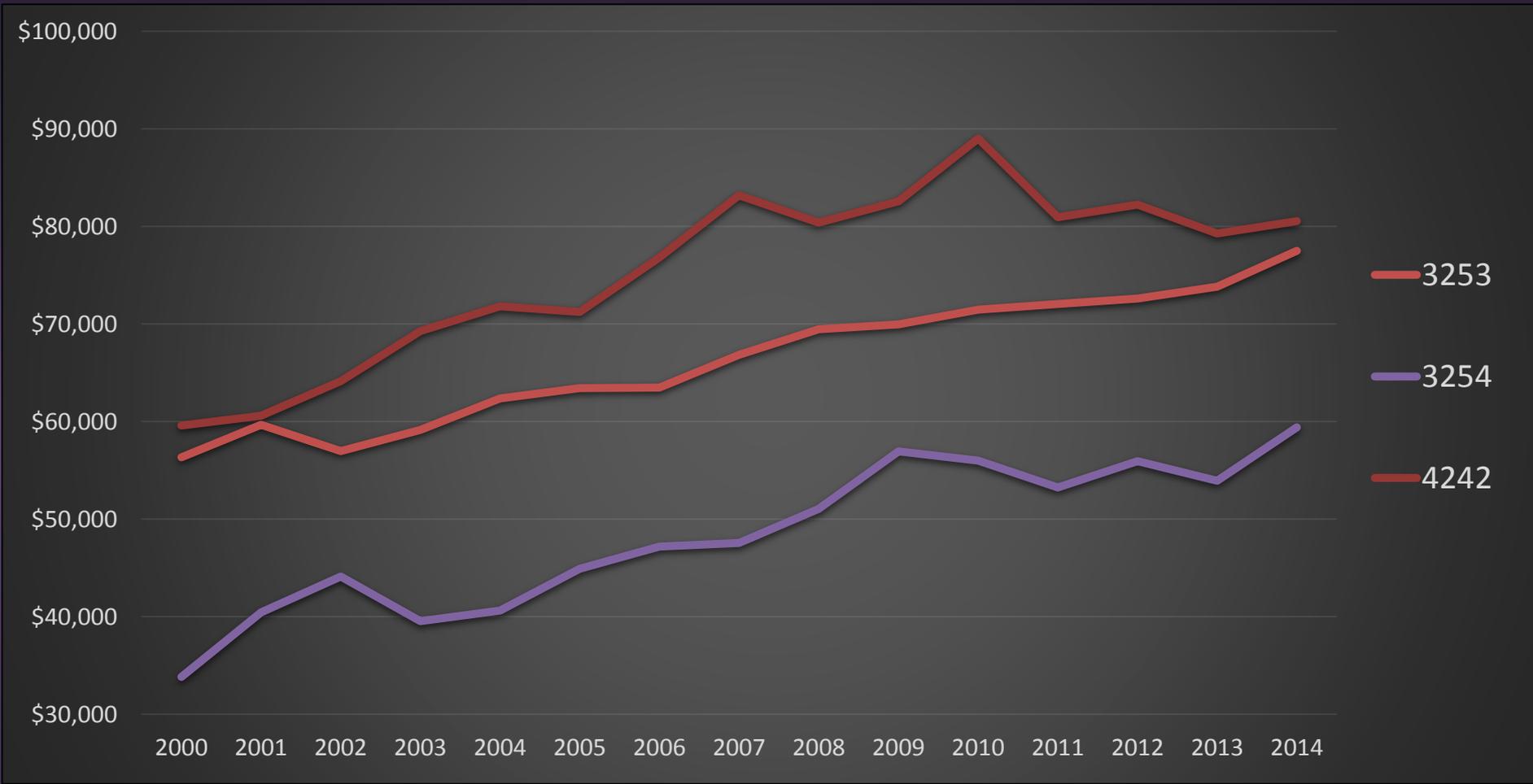
Occupation	Rounded Emp.	Mean Hourly	Mean Annual	Entry Hourly	Entry Annual	Experience Hourly	Experience Annual
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,240	\$31.30	\$65,096	\$15.62	\$32,496	\$39.14	\$81,396
Dental Laboratory Technicians	730	\$17.25	\$35,895	\$11.00	\$22,878	\$20.38	\$42,393
Chemical Plant and System Operators	500	\$30.87	\$64,212	\$25.76	\$53,560	\$33.43	\$69,528
Medical and Clinical Laboratory Technologists	380	\$26.08	\$54,259	\$19.40	\$40,355	\$29.43	\$61,221
Medical and Clinical Laboratory Technicians	380	\$17.42	\$36,237	\$11.86	\$24,678	\$20.20	\$42,027
Inspectors, Testers, Sorters, Samplers, and Weighers	350	\$15.84	\$32,965	\$9.63	\$20,040	\$18.96	\$39,432
Phlebotomists	310	\$13.58	\$28,252	\$10.35	\$21,519	\$15.21	\$31,619
Customer Service Representatives	280	\$15.46	\$32,144	\$10.01	\$20,828	\$18.18	\$37,802
Packers and Packagers, Hand	250	\$10.69	\$22,226	\$8.52	\$17,711	\$11.77	\$24,478
General and Operations Managers	230	\$60.32	\$125,465	\$31.74	\$66,038	\$74.61	\$155,179

Source: 2015 release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics; wage data aged using the most current Employment Cost Index (ECI) factors. Annual wage information rounded to the nearest whole dollar. *Note: Data reflects wages across all industries, not specifically to respective industry cluster.*



# Wage Information

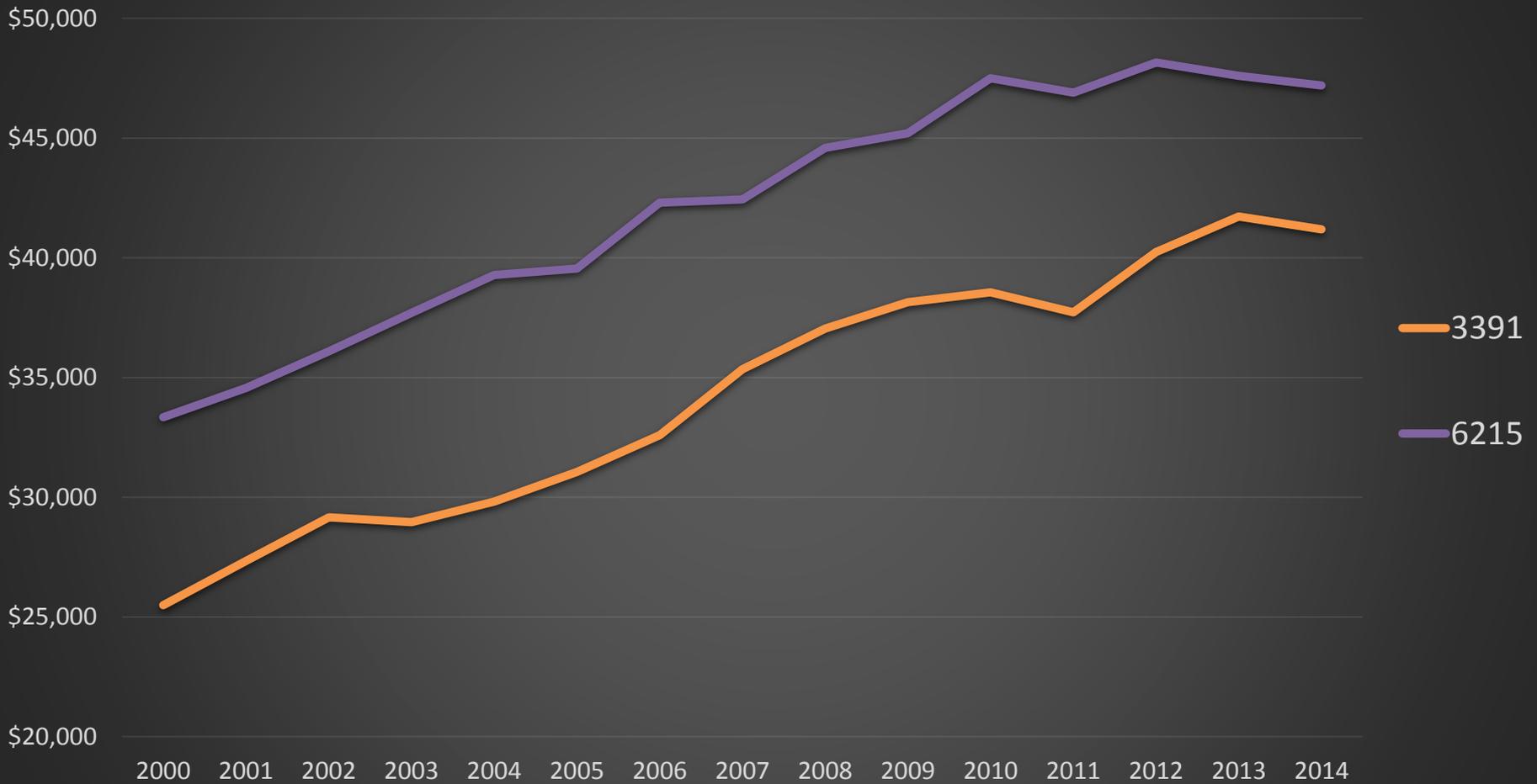
## Total Wages by NAICS Code 2000-2014





# Wage Information

## Total Wages by NAICS Code 2000-2014



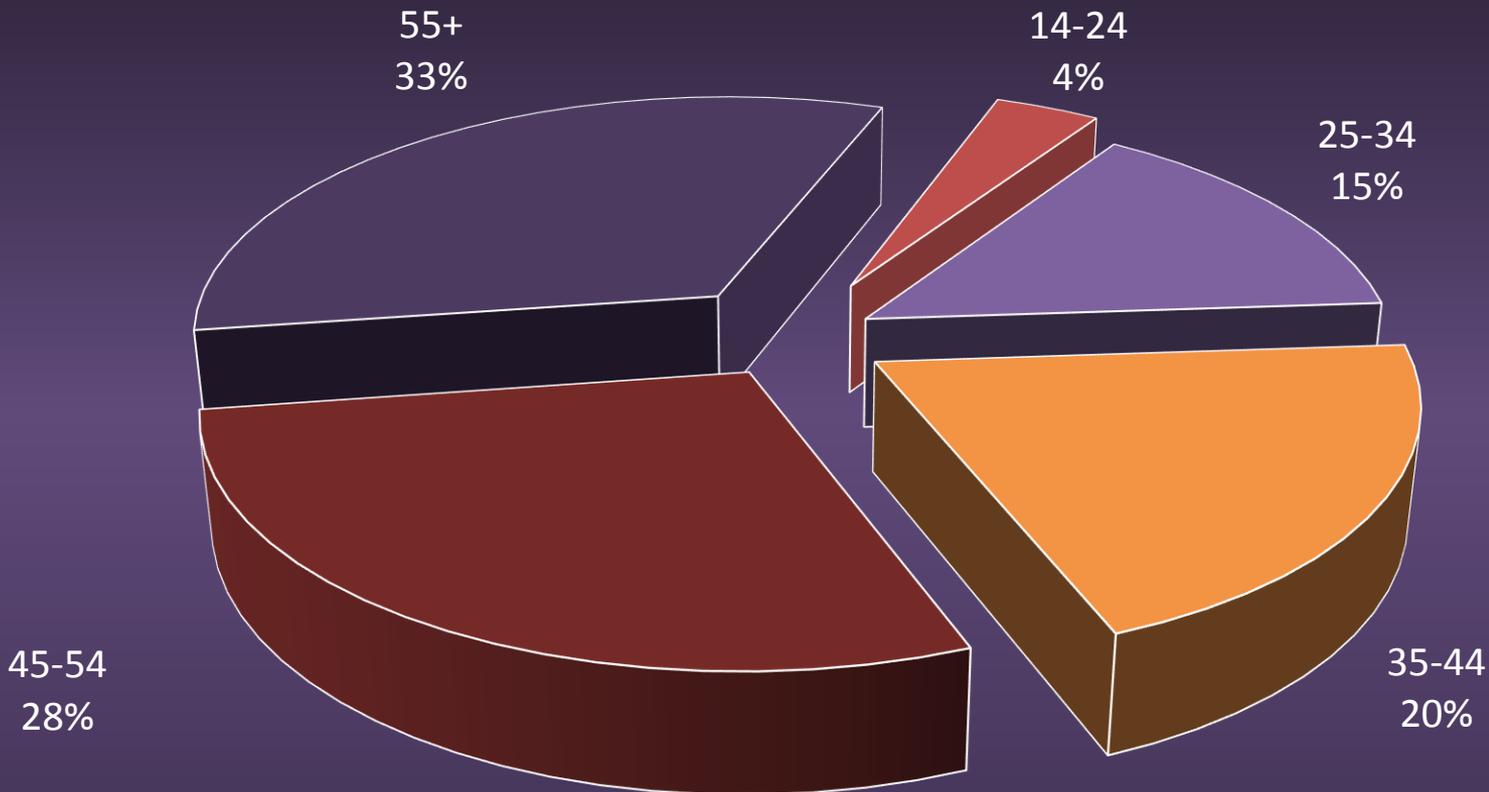


## 2014 Quarterly Workforce Indicators

NAICS	Industry	Average Turnover Rate	Average Job Gains	Average Net Job Flows	Average Monthly Earnings	Average Monthly Earnings – New Hires
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	4.5%	15	-26	\$6,404	\$4,405
3254	Pharmaceutical and Medicine Manufacturing	4.7%	27	6	\$4,863	\$4,152
3391	Medical Equipment and Supplies Manufacturing	6.0%	80	32	\$3,418	\$2,481
4242	Drugs and Druggists' Sundries Merchant Wholesalers	6.6%	71	23	\$6,538	\$4,694
6215	Medical and Diagnostic Laboratories	6.5%	109	20	\$3,922	\$2,931

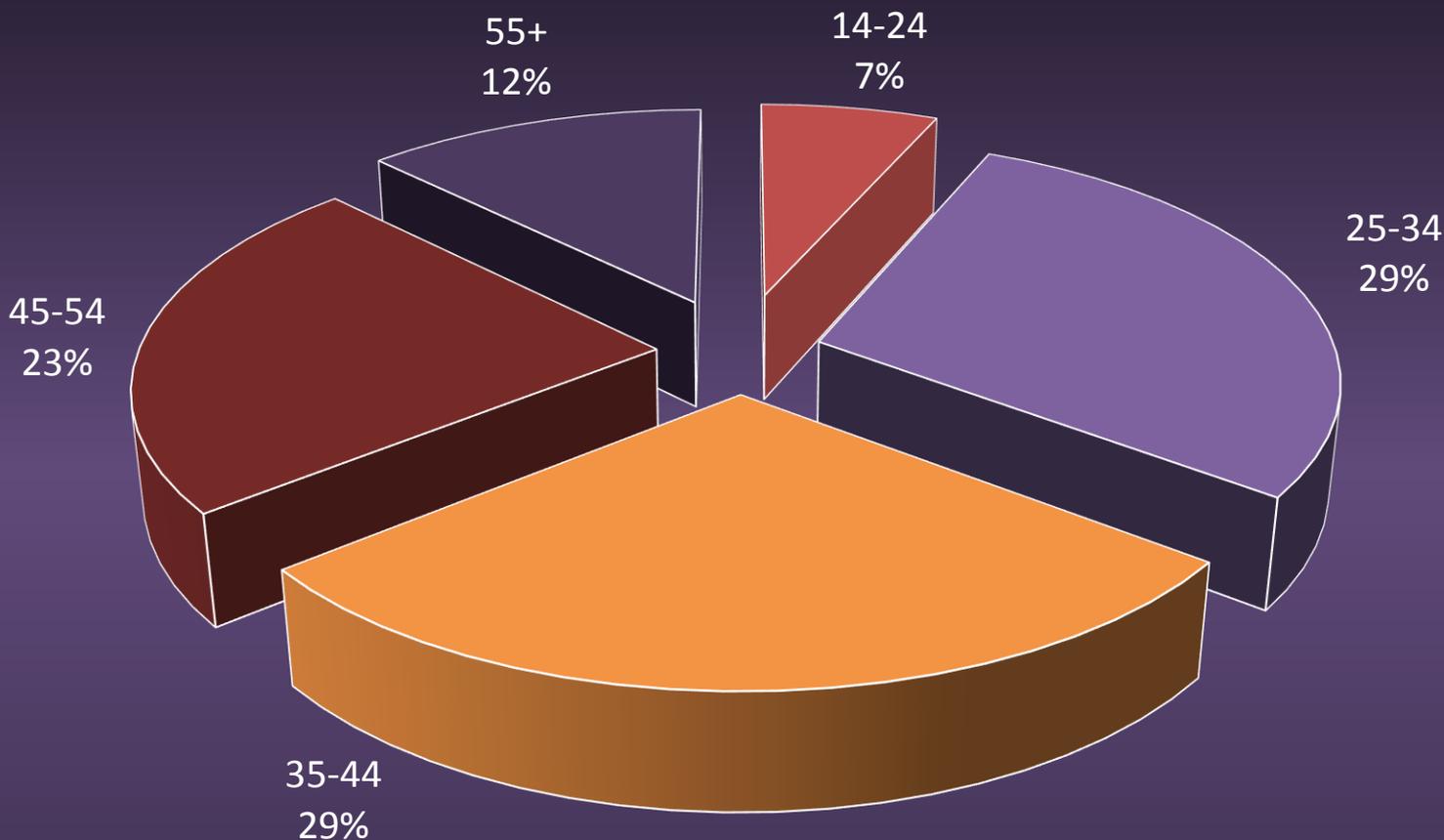


# 3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing 2014 Average Annual Employment by Age Group



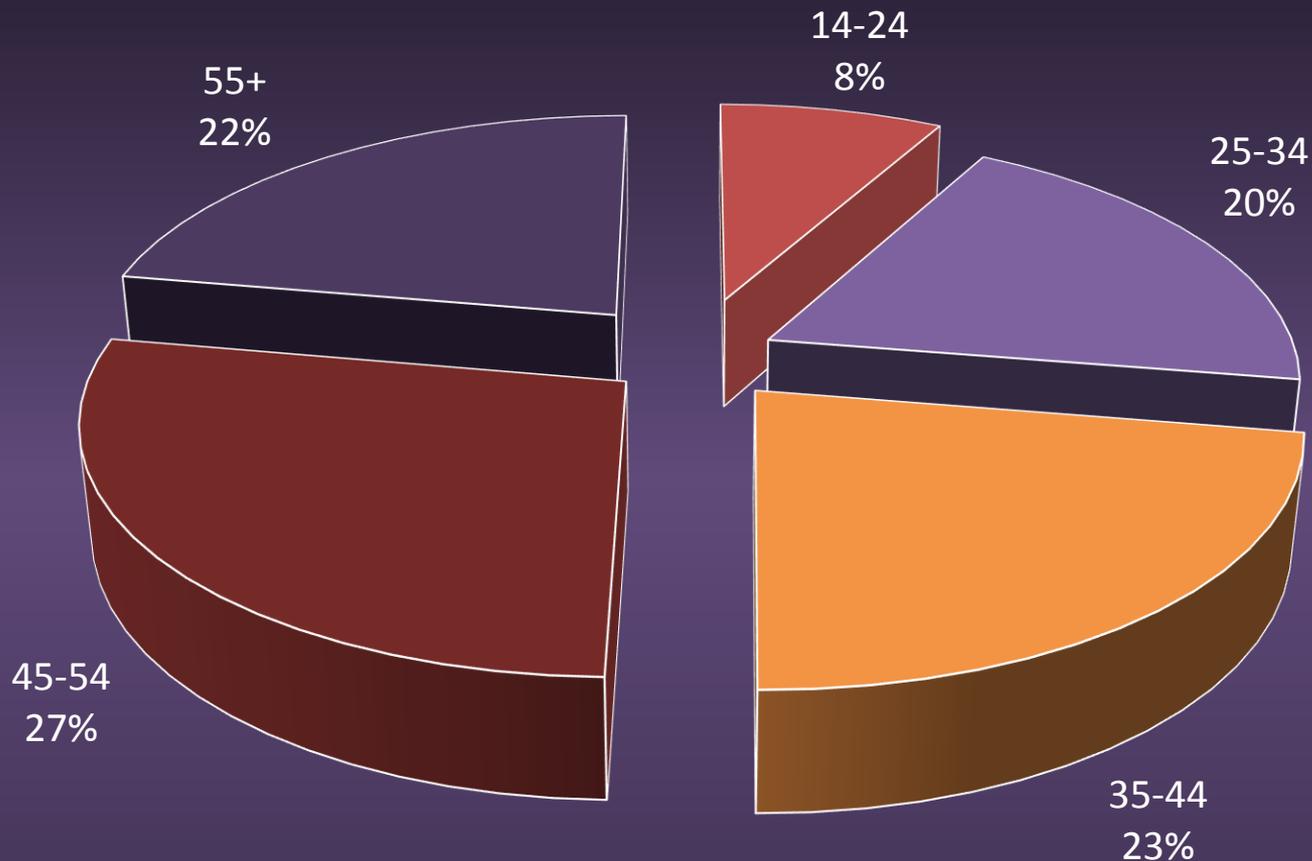


# 3254 Pharmaceutical and Medicine Manufacturing 2014 Average Annual Employment by Age Group





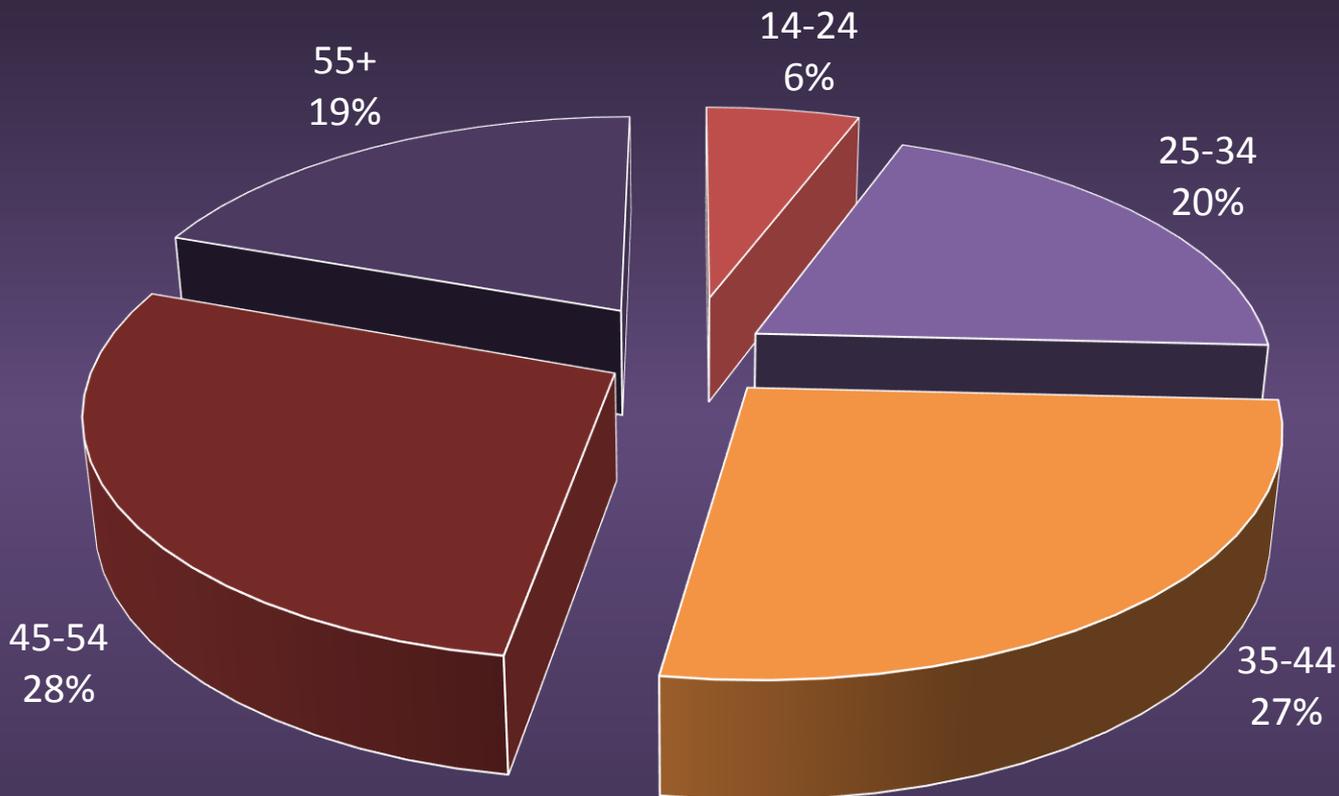
# 3391 Medical Equipment and Supplies Manufacturing 2014 Average Annual Employment by Age Group





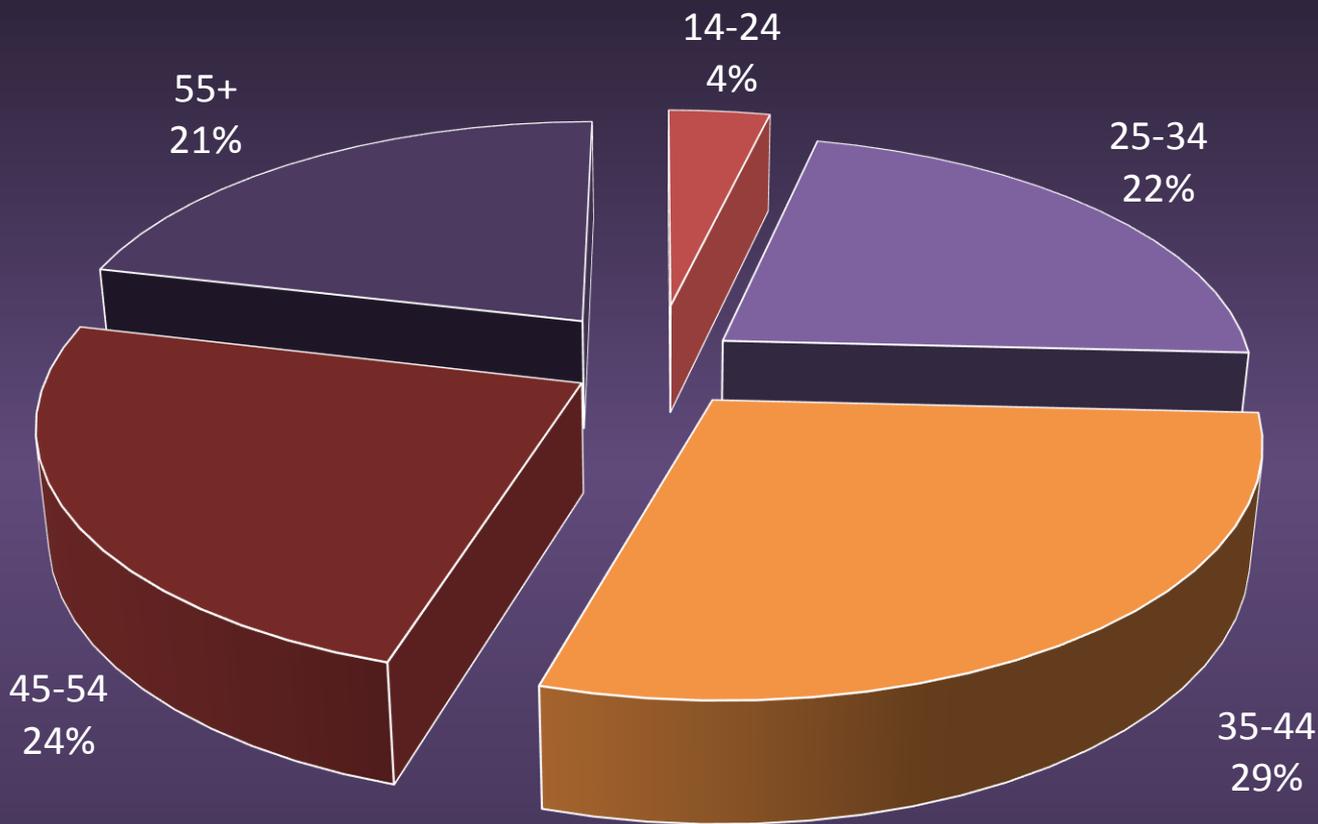
# 4242 Drugs and Druggists' Sundries Merchant Wholesalers

## 2014 Average Annual Employment by Age Group





# 6215 Medical and Diagnostic Laboratories 2014 Average Annual Employment by Age Group





# Projections Information

## 2014 – 2024 Industry Projections by NAICS Code

NAICS	Industry	2014	2024	Net Change	Percent Change	Average Annual Growth	U.S. Average Annual Growth	Location Quotient
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	1,180	1,150	-30	-2.54	-0.26	-1.34	2.34
3254	Pharmaceutical and Medicine Manufacturing	1,620	1,800	180	11.11	1.06	-0.08	0.42
3391	Medical Equipment and Supplies Manufacturing	2,690	2,990	300	11.15	1.06	0.14	0.63
4242	Drugs and Druggists' Sundries Merchant Wholesalers	1,960	1,800	-160	-8.16	-0.85	-1.06	0.73
6215	Medical and Diagnostic Laboratories	3,010	4,030	1,020	33.89	2.96	2.83	0.87



# Major Bioscience Regions

## Bioscience Industry Maps:

### Statewide

- Workforce Development Region 1
- Workforce Development Region 2
- Workforce Development Region 3
- Workforce Development Region 4
- Workforce Development Region 5
- Workforce Development Region 6
- Workforce Development Region 7
- Workforce Development Region 8
- Workforce Development Region 9
- Workforce Development Region 10