

Industry Spotlight

Life Sciences

Polk County, Florida



Polk County's Economic Development Partnership

Find your company's success in Central Florida's Polk County, Florida's Best Place for Business. cfdc.org | 863-937-4430

Spotlight Summary	
Industry Snapshot	
Staffing Pattern	5
Employment Distribution by Type	6
Establishments	7
GDP & Productivity	
Supply Chain: Top Suppliers	9
Sector Strategy Pathways	
Postsecondary Programs Linked to Life Sciences	
Polk County, Florida Regional Map	
Data Notes	
Industry Definition	
FAQ	



Spotlight Summary

Life Sciences Polk County, Florida – 2022Q4

EMPLOYMENT



24,928

Regional employment / 16,012,952 in the nation



9.0%

Avg Ann % Change Last 10 Years / **+1.7%** in the U.S.

Region	
Nation	

% of Total Employment / 9.9% in the U.S.

Region	
Vation	

TOP OCCUPATION GROUPS



WAGES

2002

\$67,453

Avg Wages per Worker / \$78,250 in the nation

3.1%

Avg Ann % Change Last 10 Years / **+3.1%** in the U.S.

Region		
Nation		

Healthcare Practitioners and Technical Office and Administrative Support Management All Others 45.8% 19.4% 3.8% 9.2% Healthcare Support Community and Social Service 19.2% 2.6%

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years



General Medical and Surgical Hospitals



Offices of Physicians (except Mental Health Specialists)



Home Health Care Services



Industry Snapshot

EMPLOYMENT

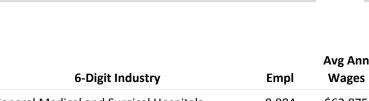




		Avg Ann			Annual	Forecast Ann
6-Digit Industry	Empl	Wages	LQ	5yr History	Demand	Growth
General Medical and Surgical Hospitals	8,884	\$62,875	0.86		956	2.1%
Offices of Physicians (except Mental Health Specialists)	8,013	\$83,919	1.63		927	2.5%
Home Health Care Services	1,679	\$42,438	0.58		243	3.1%
Offices of Dentists	1,462	\$64,006	0.83		188	2.3%
Offices of Optometrists	568	\$51,671	2.16		67	2.4%
Offices of Physical, Occupational and Speech Therapists, and Audiologists	496	\$49,912	0.60		65	3.9%
Freestanding Ambulatory Surgical and Emergency Centers	436	\$50,568	1.39		52	3.2%
All Other Outpatient Care Centers	412	\$133,216	0.96	· · ·	49	3.1%
Surgical and Medical Instrument Manufacturing	396	\$71,892	1.62	· · · ·	51	2.1%
Blood and Organ Banks	383	\$52,577	2.61		52	3.4%
Remaining Component Industries	2,196	\$49,898	0.46		263	2.4%
Life Sciences	24,928	\$67,453	0.91		2,916	2.5%

Employment is one of the broadest and most timely measures of a region's economy. Fluctuations in the number of jobs shed light on the health of an industry. A growing employment base creates more opportunities for regional residents and helps a region grow its population.

Since wages and salaries generally compose the majority of a household's income, the annual average wages of a region affect its average household income, housing market, quality of life, and other socioeconomic indicators.





Staffing Pattern

Healthcare Practitioners and Technical 45.8%	Office and Administrative Supp 19.4%	port	Manageme 3.8%	nt All Others 9.2%
		Healthcare Support 19.2%	Community and S 2.6%	ocial Service
6-digit Occupation	Empl	Avg Ann Wages	Annual Demand	
Registered Nurses	3,973	\$67,500	335	
Medical Assistants	1,657	\$33,300	310	
Medical Secretaries and Administrative Ass	istants 1,319	\$34,300	196	
Receptionists and Information Clerks	932	\$30,600	160	

Total	24,899		
Remaining Component Occupations	13,415	\$67,300	1,586
Physicians, All Other	456	\$253,200	24
Licensed Practical and Licensed Vocational Nurses	500	\$44,100	57
Dental Assistants	500	\$38,900	90
Medical and Health Services Managers	583	\$114,200	79
Personal Care Aides	742	\$24,900	137
Nursing Assistants	822	\$28,200	153

) The mix of occupations points to the ability of a region to support an industry and its flexibility to adapt to future demand. Industry wages are a component of the cost of labor for regional employers.



Employment Distribution by Type

The table below shows the employment mix by ownership type for Life Sciences for Polk County, Florida. Four of these ownership types - federal, state, and local government and the private sector - together constitute "Covered Employment" (employment covered by the Unemployment Insurance programs of the United States and reported via the Quarterly Census of Employment and Wages).

"Self-Employment" refers to unincorporated self-employment and represents workers whose primary job is selfemployment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).

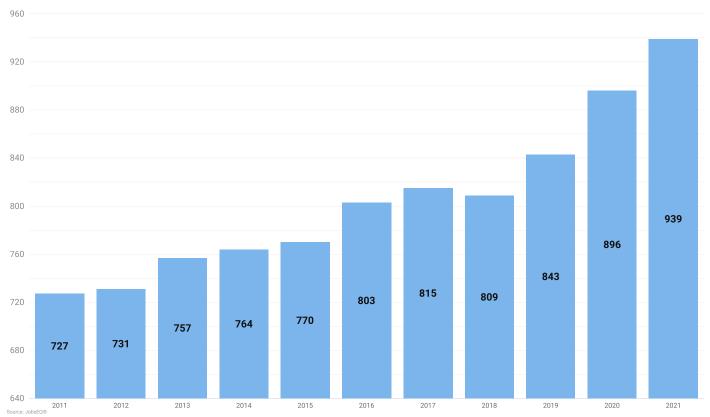
Freed	
Empl	%
23,943	96.0%
900	3.6%
1	0.0%
84	0.3%
0	0.0%

Strong entrepreneurial activity is indicative of growing industries. Using self-employment as a proxy for entrepreneurs, a higher share of self-employed individuals within a regional industry points to future growth.



Establishments

In 2021, there were 939 Life Sciences establishments in Polk County, Florida (per covered employment establishment counts), an increase from 727 establishments ten years earlier in 2011.



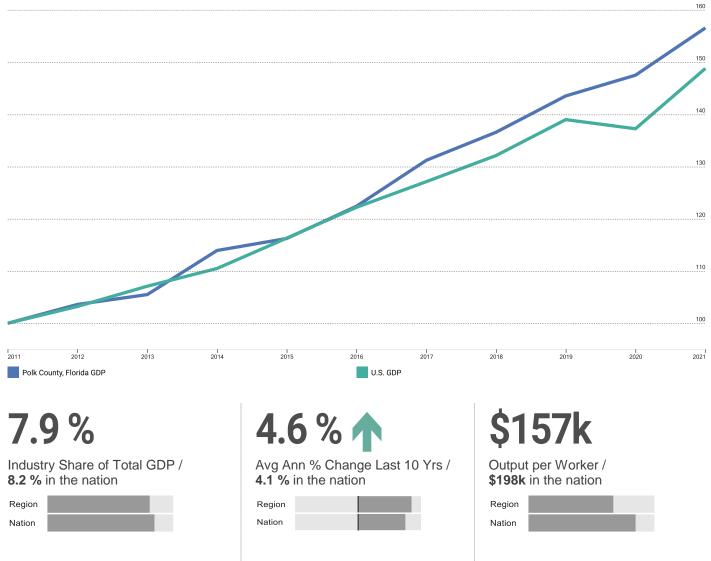
New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business activity takes place, and with at least one employee.



GDP & Productivity

In 2021, Life Sciences produced \$2.0 billion in GDP for Polk County, Florida.

GDP: Indexed 2011 = 100



) Gross domestic product (GDP) is the most comprehensive measure of regional economic activity, and an industry's contribution to GDP is an important indicator of regional industry strength. It is a measure of total value-added to a regional economy in the form of labor income, proprietor's income, and business profits, among others. GDP values shown on this page are nominal GDP data.

Growth in productivity (output per worker) leads to increases in wealth and higher average standards of living in a region.



Supply Chain: Top Suppliers

As of 2022Q4, Life Sciences in Polk County, Florida are estimated to make \$1.5 billion in annual purchases from suppliers in the United States with about 46% or \$0.7 billion of these purchases being made from businesses located in Polk County, Florida.

6-digit Supplier Industries	Purchases from In- Region (\$M)	Purchases from Out-of-Region (\$M)
Pharmaceutical Preparation Manufacturing	\$0.1	\$69.6
Residential Property Managers	\$32.6	\$18.6
Corporate, Subsidiary, and Regional Managing Offices	\$48.6	<\$0.1
Offices of Real Estate Agents and Brokers	\$28.4	\$15.2
Direct Property and Casualty Insurance Carriers	\$43.4	<\$0.1
Remaining Supplier Industries	\$533.7	\$713.7
Total	\$686.8	\$817.3

) Supplier-buyer networks can indicate local linkages between industries, regional capacity to support growth in an industry, and potential leakage of sales out of the region.



Sector Strategy Pathways

Medical Assistants	
Licensed Practical and Licensed Vocational Nurses	Registered Nurses
Compliance Officers	
Health Technologists and Technicians, All Other	
Psychiatric Technicians	
Home Health Aides	Medical Assistants
Pharmacy Technicians	
Veterinary Technologists and Technicians	
Office Clerks, General	
Receptionists and Information Clerks	Medical Secretaries and Administrative Assistants
Interviewers, Except Eligibility and Loan	
Switchboard Operators, Including Answering Service	

Word Processors and Typists

The graphics on this page illustrate relationships and potential movement (from left to right) between occupations that share similar skill sets. Developing career pathways as a strategy promotes industry employment growth and workforce engagement.



Postsecondary Programs Linked to Life Sciences

Program	Awards
Florida Southern College	
Family Practice Nurse/Nursing	51
Health/Health Care Administration/Management	17
Nursing Practice	23
Registered Nursing/Registered Nurse	60
Polk State College	
Emergency Medical Technology/Technician (EMT Paramedic)	98
Health Information/Medical Records Technology/Technician	35
Registered Nursing/Registered Nurse	248
Southeastern University	
Divinity/Ministry	441
Registered Nursing/Registered Nurse	28
Traviss Technical College	
Licensed Practical/Vocational Nurse Training	41

Source: JobsEQ®

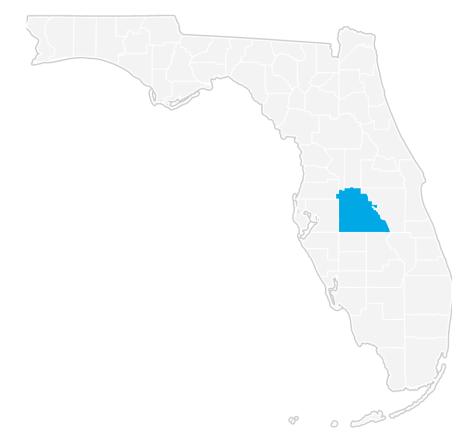
 $\langle \rangle$

The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

Among postsecondary programs at schools located in Polk County, Florida, the sampling above identifies those most linked to occupations relevant to Life Sciences. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq



Polk County, Florida Regional Map





Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2022Q4 and are based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts.
- Occupation employment is as of 2022Q4 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data. Wages by occupation are as of 2022, utilizing BLS OEWS data and imputed by Chmura.
- GDP is derived from BEA data and imputations by Chmura. Productivity (output per worker) is calculated by Chmura using industry employment and wages as well as GDP and BLS output data. Supply chain modeling including purchases by industry are developed by Chmura.
- Postsecondary awards are per the NCES and are for the 2020-2021 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.



Industry Definition

Life Sciences is defined as the following NAICS industries:

Code	Description
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing
334516	Analytical Laboratory Instrument Manufacturing
334517	Irradiation Apparatus Manufacturing
339112	Surgical and Medical Instrument Manufacturing
339113	Surgical Appliance and Supplies Manufacturing
339115	Ophthalmic Goods Manufacturing
621111	Offices of Physicians (except Mental Health Specialists)
621112	Offices of Physicians, Mental Health Specialists
621210	Offices of Dentists
621310	Offices of Chiropractors
621320	Offices of Optometrists
621330	Offices of Mental Health Practitioners (except Physicians)
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists
621391	Offices of Podiatrists
621399	Offices of All Other Miscellaneous Health Practitioners
621410	Family Planning Centers
621420	Outpatient Mental Health and Substance Abuse Centers
621491	HMO Medical Centers
621492	Kidney Dialysis Centers
621493	Freestanding Ambulatory Surgical and Emergency Centers
621498	All Other Outpatient Care Centers
621511	Medical Laboratories
621512	Diagnostic Imaging Centers
621610	Home Health Care Services
621910	Ambulance Services
621991	Blood and Organ Banks
621999	All Other Miscellaneous Ambulatory Health Care Services
622110	General Medical and Surgical Hospitals
622210	Psychiatric and Substance Abuse Hospitals
622310	Specialty (except Psychiatric and Substance Abuse) Hospitals



What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

