

Occupation Report

Registered Nurses

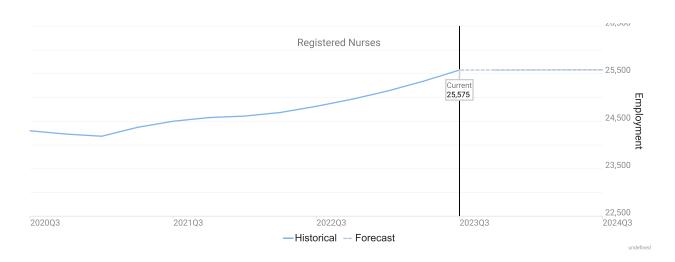
Cincinnati, OH-KY-IN MSA



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Occupation Snapshot

| | | Avg | | 3-Year | | Forecast |
|--------------------|--------|----------|------|--------|--------|----------|
| | | Mean | | Empl | Annual | Ann |
| 6-Digit Occupation | Empl | Wages | LQ | Change | Demand | Growth |
| Registered Nurses | 25,575 | \$85,800 | 1.13 | 1,280 | 1,418 | 0.1% |





"Annual Demand" is the projected need for new entrants into an occupation. New entrants are needed due to expected growth and to replace workers who left the occupation due to factors such as retirement or switching careers.



"Forecast Ann Growth" is the expected change in jobs due to national, long-term trend projections (per the BLS) as well as local factors such as industry mix and population growth (as computed and modeled by Chmura).

Employment by Industry

| | % of Occ | | 10-Year | 10-Year Empl | 10-Year Total |
|---|----------|--------|-------------|-----------------|------------------|
| Industry Title | Empl | Empl | Separations | Growth | Demand |
| General Medical and Surgical Hospitals | 64.8% | 16,570 | 8,896 | -129 | 8,767 |
| Offices of Physicians | 6.4% | 1,641 | 883 | -6 | 877 |
| Nursing Care Facilities (Skilled Nursing Facilities) | 4.7% | 1,210 | 631 | -77 | 555 |
| Home Health Care Services | 4.0% | 1,014 | 588 | 162 | 749 |
| Employment Services | 3.6% | 928 | 513 | 50 | 564 |
| Outpatient Care Centers | 3.4% | 869 | 503 | 133 | 636 |
| Insurance Carriers | 1.5% | 385 | 217 | 37 | 255 |
| Specialty (except Psychiatric and Substance Abuse) Hospitals | 1.4% | 357 | 198 | 23 | 221 |
| Elementary and Secondary Schools | 1.3% | 334 | 179 | -2 | 177 |
| Management of Companies and Enterprises | 1.2% | 316 | 176 | 23 | 199 |
| Psychiatric and Substance Abuse Hospitals | 1.1% | 269 | 148 | 13 | 161 |
| Executive, Legislative, and Other General Government Support | 0.8% | 208 | 112 | -2 | 110 |
| Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly | 0.8% | 207 | 116 | 18 | 134 |
| Colleges, Universities, and Professional Schools | 0.5% | 136 | 74 | 0 | 74 |
| Individual and Family Services | 0.5% | 133 | 80 | 31 | 111 |
| All Others | 3.9% | 998 | 553 | 60 | 613 |

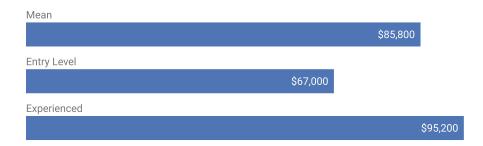


The industry distribution indicates the industries in which workers in the occupation(s) are primarily found.



"10-Year Empl Growth" may show industries with positive as well as negative growth; this would indicate that the occupation(s) being examined are expected to expand within some industries while contracting in others.

Wages



| Occupation | Mean | Median | Entry Level | Experienced |
|-------------------|----------|----------|--------------------|-------------|
| Registered Nurses | \$85,800 | \$82,700 | \$67,000 | \$95,200 |



Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.



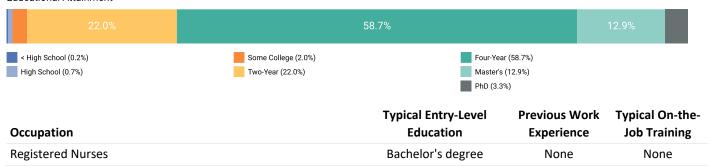
When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group.

Occupation Demographics

Age 16 to 19 years (0.2%) 25 to 34 years (25.9%) 45 to 54 years (21.8%) 20 to 24 years (5.7%) 35 to 44 years (23.3%) 55 to 64 years (17.7%) 65 years and over (5.5%) Race White (80.3%) American Indian (0.1%) Pacific Islander (0.1%) Black (13.4%) Asian (4.3%) Two or More Races (1.9%) Ethnicity 98.8% Non-Hispanic/Latino (98.8%) Hispanic or Latino (of any race) (1.2%) Gender 12.9% Male (12.9%) Female (87.1%) **Education and Training Requirements** Short-term OJT, no exp, no award (0.0%) Long-term training, no exp, no award (0.0%) 2-year degree or certificate (0.0%) Moderate-term OJT, no exp, no award (0.0%) Previous work experience, no award (0.0%) Bachelor's degree (100.0%) Postgraduate degree (0.0%)

Education Profile

Educational Attainment





The stacked bar chart here illustrates the estimated mix of educational attainment of the workers in this occupation(s) in aggregate.



The table indicates typical education and training requirements rather than the mix of attainment of workers in such positions.

Postsecondary Programs Linked to Registered Nurses

| Program | Awards |
|--|--------|
| Cincinnati State Technical and Community College | |
| Registered Nursing/Registered Nurse | 170 |
| Galen College of Nursing-Cincinnati | |
| Registered Nursing/Registered Nurse | 196 |
| Gateway Community and Technical College | |
| Registered Nursing/Registered Nurse | 91 |
| Good Samaritan College of Nursing and Health Science | |
| Registered Nursing/Registered Nurse | 95 |
| Miami University-Hamilton | |
| Registered Nursing/Registered Nurse | 91 |
| Northern Kentucky University | |
| Registered Nursing/Registered Nurse | 936 |
| The Christ College of Nursing and Health Sciences | |
| Registered Nursing/Registered Nurse | 232 |
| University of Cincinnati-Main Campus | |
| Family Practice Nurse/Nursing | 327 |
| Registered Nursing/Registered Nurse | 429 |
| Xavier University | |
| Registered Nursing/Registered Nurse | 374 |



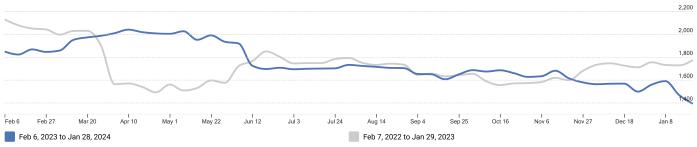
The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.



Among postsecondary programs at schools located in the Cincinnati, OH-KY-IN MSA, the sampling above identifies those most linked to Registered Nurses. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq

RTI (Job Postings)

Active Job Ads by Date



Online job ads are a timely indicator of local demand. Occupation assignments shown below are made by Chmura based upon analysis of job titles and job descriptions. Top employers and listed job requirements are shown on the following pages.

Occupations

| SOC | Occupation | Active Job Ads | |
|------------|--------------------------------------|----------------------|--|
| 29-1141.00 | Registered Nurses | 8,431 | |
| 29-1141.03 | Critical Care Nurses | 151 | |
| 29-1141.01 | Acute Care Nurses | 55 | |
| 29-1141.02 | Advanced Practice Psychiatric Nurses | 28 | |
| 29-1141.04 | Clinical Nurse Specialists | 3 | |

Locations

| | Active Job | |
|--|---------------|--|
| Location | Ads | |
| Cincinnati, Ohio | 1,932 | |
| Cincinnati, OH, 45208, US | 276 | |
| West Chester, Ohio | 274 | |
| United States-Ohio-Cincinnati-Burnet Building Location A | 226 | |
| Fairfield, Ohio | 218 | |
| Montgomery, OH, 45242, US | 184 | |
| Cincinnati, OH, 45220, US | 162 | |
| Miamisburg, OH 45342 | 155 | |
| Miamisburg, Ohio 45342 | 130 | |
| Batavia, Ohio | 109 | |

Employers

| Employer Name | Active Job Ads | |
|------------------------------------|----------------------|--|
| Mercy Health | 1,005 | |
| UCHealth | 887 | |
| Cincinnati Children's Hospital | 654 | |
| TriHealth | 590 | |
| Kettering Health | 251 | |
| Beckett Springs | 243 | |
| St. Elizabeth Healthcare | 153 | |
| Carespring | 148 | |
| The Christ Hospital Health Network | 125 | |
| Post Acute Medical | 115 | |

Hard Skills

| | Active | |
|------------------------------|------------|--|
| Skill Name | Job Ads | |
| Skiii Name | Aus | |
| Nursing | 1,521 | |
| Patient Care | 624 | |
| Long-Term Care | 562 | |
| Critical Care | 495 | |
| Ability to Lift 101-150 lbs. | 300 | |
| Epic Systems | 289 | |
| Home Health Care | 270 | |
| Pediatrics | 256 | |
| Teaching/Training, Job | 244 | |
| Intensive Care Unit (ICU) | 235 | |

Job Titles

| | Active Job | |
|--|---------------|--|
| Job Title | Ads | |
| Registered Nurse (RN) | 371 | |
| Registered Nurse | 286 | |
| RN - Registered Nurse | 62 | |
| Registered Nurse (RNs) - (FT, PT, PRN, and Temporary Contract) | 55 | |
| RN | 46 | |
| Charge Nurse (RN / LPN) | 31 | |
| Registered Nurse / RN - (7p-5a) | 29 | |
| Nurse Unit Manager | 25 | |
| RN Unit Manager | 24 | |
| Registered Nurse (RN) - Nights | 24 | |

Education Levels

| Minimum Education Level | Active Job Ads | |
|---------------------------------|----------------------|--|
| Bachelor's degree | 1,934 | |
| Associate's degree | 1,823 | |
| Master's degree | 48 | |
| Doctoral or professional degree | 3 | |
| Unspecified/other | 4,860 | |

Programs

| | Active Job | |
|--------------------|---------------|--|
| Program Name | Ads | |
| Nursing | 3,389 | |
| Biology | 234 | |
| Nursing Practice | 32 | |
| Health | 24 | |
| Social Work | 19 | |
| Medical Technology | 9 | |
| Epidemiology | 8 | |
| Public Health | 8 | |
| Healthcare | 7 | |
| Microbiology | 7 | |

Occupation Gaps

Supply Deficit

Supply Surplus

Registered Nurses (\$85,800)

-13

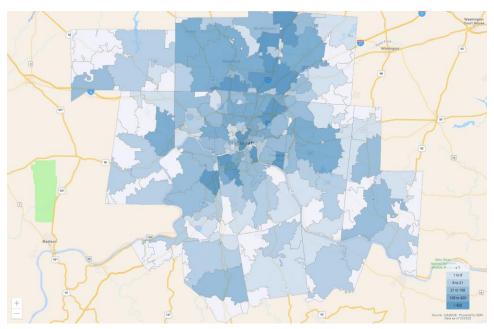


The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has an occupation expected to grow quickly but the educational requirement for the occupation does not match well with the educational attainment of its residents, there is a high potential for an occupation shortfall in the region. Alternatively, slow-growing or contracting occupations often represent potential supply surpluses.



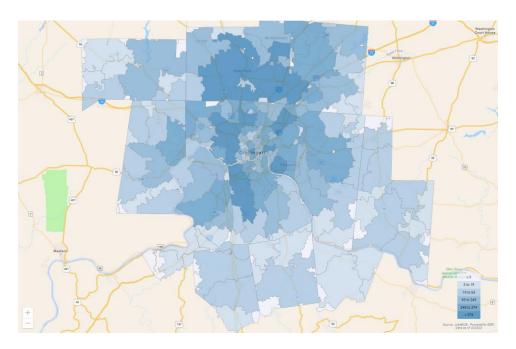
The potential supply shortfall is an underlying force that the market needs to resolve one way or another, such as by employers recruiting from further distances for these occupations, wages going up to attract more candidates, and/or increased demand and wages enticing more local residents to get training for these occupations. While this an important analysis for determining local occupation needs, the occupation gap should be considered along with other regional data including growth and separation forecasts, unemployment rates, wage trends, and award and skill gap analyses.

Geographic Distribution



Top ZCTAs by Place of Work for Registered Nurses, 2023Q3

| Region | Employment |
|---|------------|
| ZCTA 45229 | 3,978 |
| ZCTA 45220 | 2,317 |
| ZCTA 45242 | 2,142 |
| ZCTA 45219 | 1,518 |
| ZCTA 41017 | 1,446 |
| ZCTA 45236 | 1,114 |
| ZCTA 45069 (Butler County, Ohio portion) | 1,019 |
| ZCTA 41042 (Boone County, Kentucky portion) | 809 |
| ZCTA 45255 (Hamilton County, Ohio portion) | 665 |
| ZCTA 45014 | 618 |



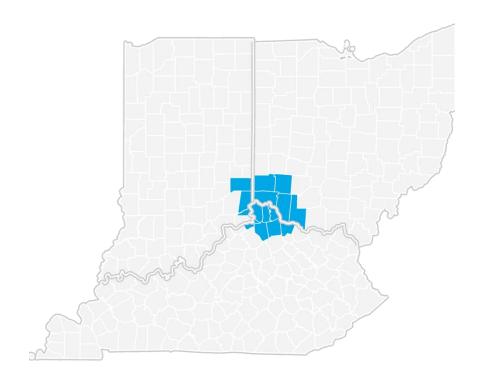
Top ZCTAs by Place of Residence for Registered Nurses, 2023Q3

| Region | Employment |
|--|------------|
| ZCTA 45040 | 713 |
| ZCTA 45069 (Butler County, Ohio portion) | 707 |
| ZCTA 45238 | 706 |
| ZCTA 45011 | 674 |
| ZCTA 41017 | 596 |
| ZCTA 45014 | 530 |
| ZCTA 45236 | 525 |
| ZCTA 45211 | 512 |
| ZCTA 45230 | 508 |
| ZCTA 45231 | 505 |



"Place of work" employment is based upon the location of employers for these workers. "Place of residence" data refers to the home locations of the workforce, which is typically the preferred data set to use when calculating labor availability within a drive-time or radius of a potential worksite.

Cincinnati, OH-KY-IN MSA Regional Map



Data Notes

- Occupation employment by default indicates employment by place of work. Occupation employment is as of 2023Q3
 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data.
 Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts. Wages by occupation are as of 2023Q3, utilizing BLS OEWS data, imputed and brought forward by Chmura. Entry-level and experienced wages are derived from these source data, computed by Chmura.
- Industry employment is as of 2023Q3 and is based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data.
- Education and training requirements are from the BLS. Educational attainment mix and other occupation demographics data are modeled by Chmura for 2023Q3 using regional occupation employment from JobsEQ, ZCTA-level demographics data from the Census Bureau, and national occupation-demographics patterns from the BLS.
- Postsecondary awards are per the NCES and are for the 2021-2022 academic year. Any programs shown are linked with
 the occupation(s) being analyzed via the program-occupation crosswalk, which may not be comprehensive. Any
 programs shown reflect only data reported to the NCES; reporting is required of all Title IV schools. Training providers
 that do not report data to the NCES are not reflected.
- Job ads data are online job posts from the Real-Time Intelligence (RTI) data set, produced by Chmura and gleaned from over 40,000 websites. Data reflect ads active during the 12-month period ending 02/06/2024 and advertised for any Zip Code Tabulation Area in or intersecting with the region for which this report was produced. Historical ad volume is revised as additional data are made available and processed. Since many extraneous factors can affect short-term volume of online job postings, time-series data can be volatile and should be used with caution. All ad counts represent deduplicated figures and exclude ads from staffing companies.
- For skill and certification gaps, openings and candidates are based upon regional occupation demand (growth plus separations) and the percent of skill demand and supply. Skill demand mix data are per a one-year sample of RTI data; skill supply data are estimated using a five-year sample of resumes data; both data sets compiled as of July 2022. Data may be based, at least in part, on data from broader geographies; see the Skill Gaps analytic export for more details.
- Occupation gaps are modeled by Chmura, indicating long-term potential supply and demand mismatches in a region due, in part, to job demand and labor pool dyanamics, including educational attainment and projected growth.
- Occupation employment by place of residence is as of 2023Q3 and modeled by Chmura based upon occuaption
 employment by place of work and commuting patterns. Commuting patterns are derived from source data from the
 Census Bureau, occupation-specific commuting tendancies, and updated to reflect more recent population and
 employment estimates.
- Figures may not sum due to rounding.

Region Definition

Cincinnati, OH-KY-IN MSA is defined as the following counties:

| Dearborn County, Indiana | Kenton County, Kentucky |
|---------------------------|----------------------------|
| Franklin County, Indiana | Pendleton County, Kentucky |
| Ohio County, Indiana | Brown County, Ohio |
| Boone County, Kentucky | Butler County, Ohio |
| Bracken County, Kentucky | Clermont County, Ohio |
| Campbell County, Kentucky | Hamilton County, Ohio |
| Gallatin County, Kentucky | Warren County, Ohio |
| Grant County, Kentucky | |

FAQ

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.