



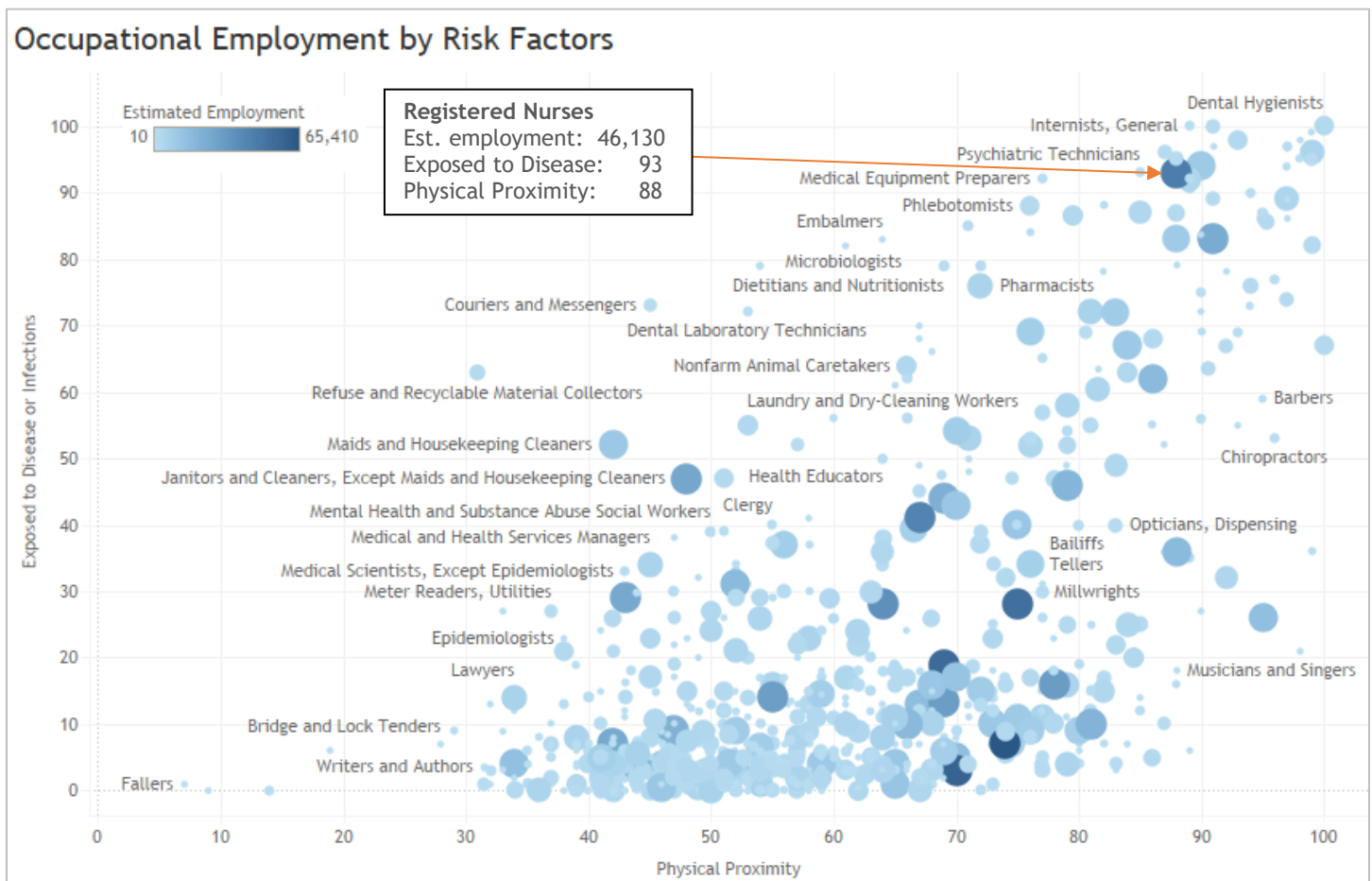
April 2020

KENTUCKY LABOR FORCE UPDATE

Which Occupations Are at the Greatest Risk from Coronavirus?

As the coronavirus spreads throughout the U.S. and Kentucky, there are occupations that are at higher risk for exposure due to the nature of the job itself. Occupations where employees are in close proximity to coworkers, patients, customers, students and the public are at highest risk. This month, KYSTATS used data from the Occupational Information Network (O*NET) program¹ and the Occupational Employment Statistics (OES) program to determine which occupations may face the most risk during the coronavirus pandemic. Risk levels were measured by looking at the physical characteristics of each occupation.

The *New York Times* recently examined occupations and compared both exposure to disease or infection and the physical proximity of workers to others. Since the disease is spreading through close, personal contact, occupations that were rated the highest on both measures were likely the most at risk for contracting the virus. The chart below presents the same analysis for occupations in Kentucky. Each bubble represents an occupation and the size of the bubble correlates to the estimated number of people working in the occupation.



Sources: O*NET and OES

¹ O*NET is developed under the sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA) through a grant to the North Carolina Department of Commerce. O*NET provides detailed information on almost 1,000 distinct occupations in the U.S. economy.



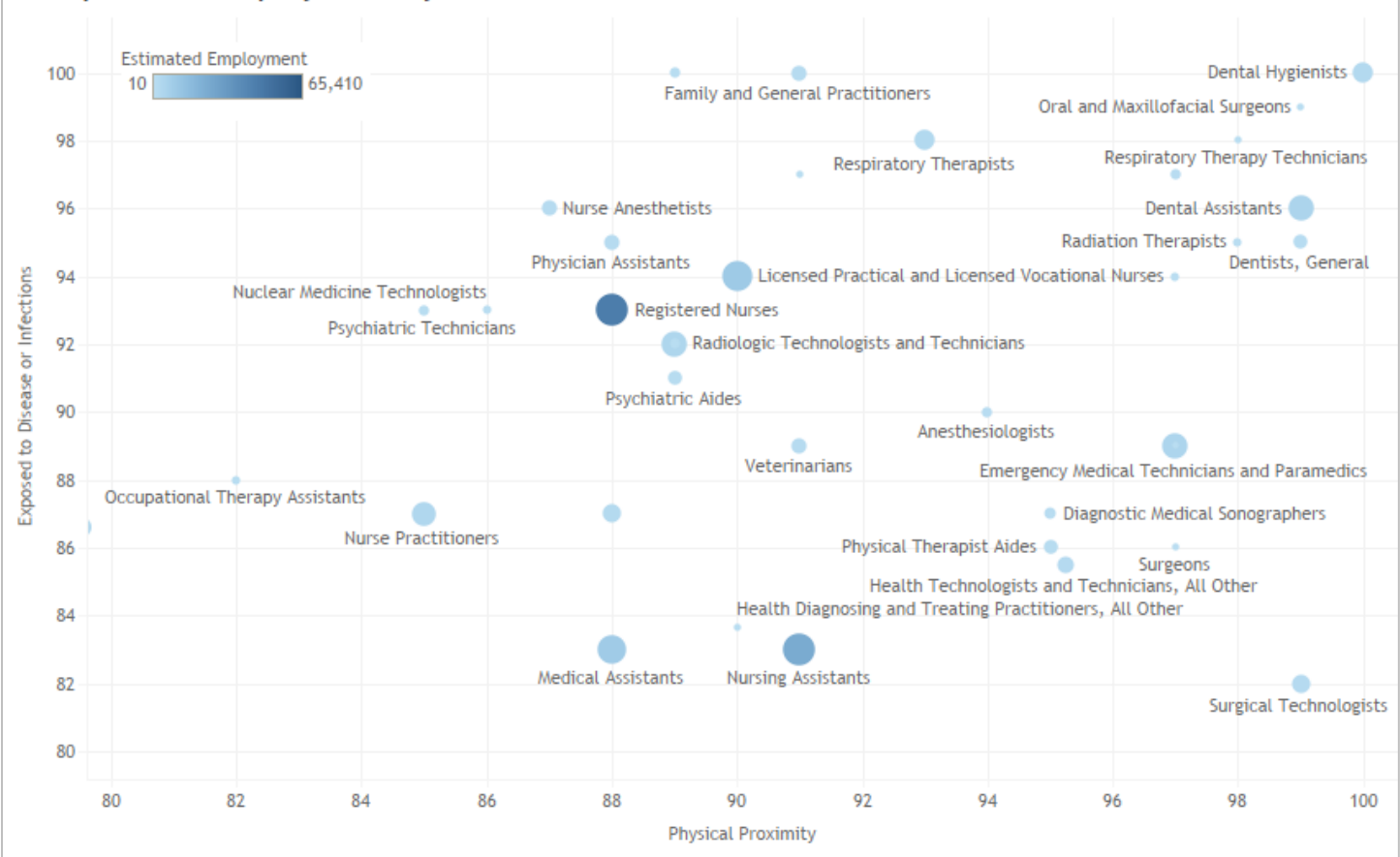
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Exposure to disease equal to 100 indicates that those employed in the occupation are exposed every day. A value of 75 equates to exposure once a week, 50 once a month, 25 once a year, and 0 never. Physical proximity measures how close workers are to others during a typical workday with 100 being very close, 75 moderately close, 50 slightly close, 25 not close, and 0 for those who work alone.

Occupations within the healthcare sector have the greatest risk. Workers in these occupations are in close proximity to others and are the most exposed to disease.

A closer look at the above chart where both risk factors exceed 80 is shown below. Occupations within the healthcare sector have the greatest risk. They are the most exposed to disease or infection (shown on the vertical axis on the previous page) and have the highest physical proximity to others including both coworkers and patients (shown on the horizontal axis). Registered Nurses in Kentucky is the occupation with the largest estimated employment in this group, followed by Nursing Assistants.

Occupational Employment by Risk Factors



Sources: O*NET and OES



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The top ten occupations for both risk factors are shown below with their estimated employment throughout the state. All are in healthcare.

Most Exposed to Disease or Infections

Occupation	Est. Employment	Risk Factor
Dental Hygienists	2,150	100.0
Family and General Practitioners	1,220	100.0
Internists, General	450	100.0
Oral and Maxillofacial Surgeons	60	99.0
Respiratory Therapists	2,480	98.0
Respiratory Therapy Technicians	110	98.0
Orderlies	550	97.0
Occupational Therapy Aides	20	97.0
Dental Assistants	4,710	96.0
Nurse Anesthetists	1,160	96.0

Highest Physical Proximity to Others

Occupation	Est. Employment	Risk Factor
Dental Hygienists	2,150	100.0
Physical Therapists	2,460	100.0
Oral and Maxillofacial Surgeons	60	99.0
Dental Assistants	4,710	99.0
Dentists, General	910	99.0
Surgical Technologists	1,730	99.0
Skincare Specialists	320	99.0
Respiratory Therapy Technicians	110	98.5
Radiation Therapists	230	98.0
Emergency Medical Technicians and Paramedics	4,210	97.0

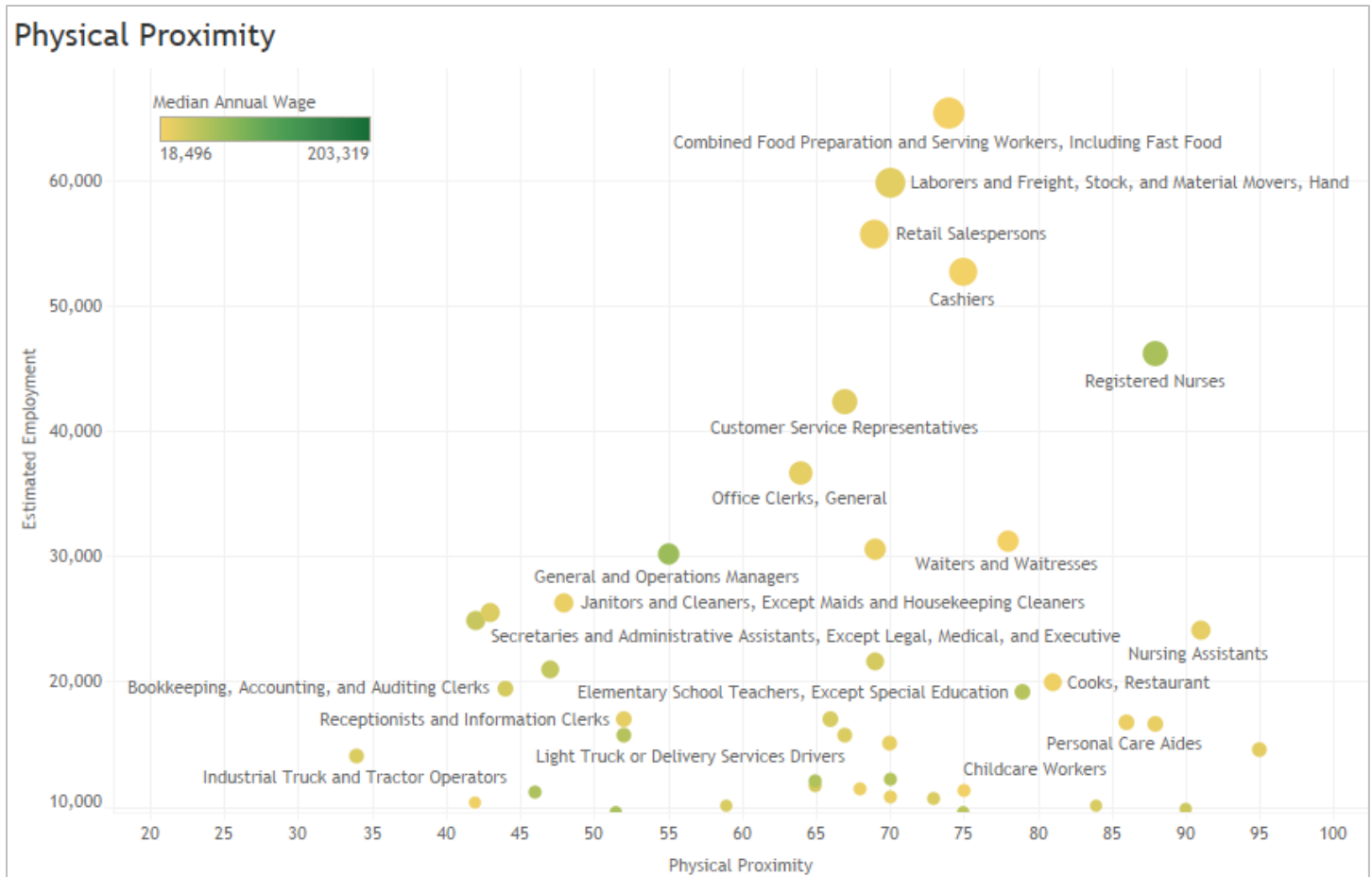
Sources: O*NET and OES

In addition to occupations in the healthcare sector, which possess a unique risk of exposure to disease, many other occupations are at risk simply due to the fact that workers perform duties in close proximity to others. Many public-facing occupations have been impacted by business closures, staff reductions, and work stoppages. The following chart examines occupations with more than 10,000 estimated employees in Kentucky (vertical axis) with high physical proximity to others (horizontal axis). Each bubble represents an occupation and the size of the bubble corresponds to the number of estimated workers (also shown on the vertical axis). The color represents the estimated median annual wage. The two healthcare occupations with more than 10,000 employees in Kentucky are Registered Nurses (46,130) and Nursing Assistants (24,060).

Many of the occupations with a large number of employees that are in high physical proximity with others pay median annual wages below the overall state median wage (\$35,432). For example, Combined Food Preparation and Serving Workers, Including Fast Food have a median annual wage of \$19,197. This is the occupation with the largest estimated employment in Kentucky with 65,410 employed. Workers in this occupation have a physical proximity to others of 74, moderately close. Retail Salespersons and Cashiers are two occupations with similar levels of risk based on physical proximity, have high estimated employment, and have median wages around \$20,000 per year (\$22,803 and \$19,791 respectively).



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Sources: O*NET and OES

As shown above, many of the occupations with high employment and elevated risk, as measured by physical proximity with others, have wages lower than the state median wage.

The following table provides specific information for the 20 largest occupations in Kentucky with estimated employment, median annual wage and physical proximity score.

Many of the largest occupations in close contact with others often have wages that are lower than the state median.



Which Occupations Are at the Greatest Risk from Coronavirus?

Largest Occupations in Kentucky

SOC Code	Standard Occupational Classification (SOC) Title	Estimated Employment	Median Annual Wage	Physical Proximity
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	65,410	\$19,197	74
51-2092	Assemblers and Fabricators, All Other, Including Team Assemblers	61,480	\$37,650	66
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	59,760	\$28,641	70
41-2031	Retail Salespersons	55,740	\$22,803	69
41-2011	Cashiers	52,660	\$19,791	75
29-1141	Registered Nurses	46,130	\$62,856	88
43-4051	Customer Service Representatives	42,300	\$30,278	67
43-9061	Office Clerks, General	36,580	\$27,932	64
35-3031	Waiters and Waitresses	31,250	\$19,021	78
43-5081	Stock Clerks and Order Fillers	30,570	\$24,726	69
11-1021	General and Operations Managers	30,240	\$71,693	55
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	26,330	\$24,646	48
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	25,450	\$32,808	43
53-3032	Heavy and Tractor-Trailer Truck Drivers	24,850	\$45,315	42
31-1014	Nursing Assistants	24,060	\$26,917	91
49-9071	Maintenance and Repair Workers, General	21,550	\$37,518	69
43-1011	First-Line Supervisors of Office and Administrative Support Workers	20,930	\$47,568	47
35-2014	Cooks, Restaurant	19,890	\$22,262	81
43-3031	Bookkeeping, Accounting, and Auditing Clerks	19,450	\$37,335	44
25-2021	Elementary School Teachers, Except Special Education	19,150	\$55,011	79

Sources: O*NET and OES

The coronavirus outbreak has affected how work is done in Kentucky. Many workplaces have closed, reduced staff, limited hours open for business, and encouraged customers to order online. Other businesses have allowed employees who can to work from home. Updates on the coronavirus in Kentucky, including a complete list of Kentucky Governor Beshear's Executive Orders, can be found at: [kycovid19.ky.gov](https://www.kycovid19.ky.gov).





KYSTATS NEWS

KYSTATS has updated and produced several new dashboards that can be accessed on our website (<https://kystats.ky.gov/>).



Kentucky Future Skills Report

How many jobs will Kentucky need to fill during the next five years? What will those jobs pay? Do we have the right mix of workers and skills to fill those jobs? Find out in this interactive report.

https://kystats.ky.gov/Reports/Tableau/2019_KFSR



Legislative Dashboard

This interactive report is the first KYSTATS report to display data for legislative districts. Topics covered in this report include a variety of economic, health, housing, and education metrics.

https://kystats.ky.gov/Reports/Tableau/LD_2020



Kentucky Commuting Patterns Report

Nearly 2 million people commute to or from Kentucky for their primary job – where are they going?

This interactive report shows commuting patterns for each county in Kentucky, allowing users to view where people are coming from and going to for work.

https://kystats.ky.gov/Reports/Tableau/KCPR_2020



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Kentucky Labor Force Update

A monthly publication of the
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This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. ALL other uses require prior authorization by the copyright owner.

Published 4/27/2020