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# *The Regional Impact of the Coronavirus on Licensed Healthcare Workforce Unemployment*

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Healthcare Workforce Data Center

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Get a copy of this report from: <http://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/>

*Members of twenty-three healthcare profession groups voluntarily participated in the surveys used in this report. Without their efforts the work of the center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the different licensing boards express our sincerest appreciation for their ongoing cooperation.*

***Thank You!***

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## The Regional Impact of the Coronavirus on Licensed Healthcare Workforce Unemployment in Virginia

The coronavirus pandemic has had significant impact on the healthcare industry. One way the pandemic impacted the industry was that hospitals and patients postponed elective procedures and practitioner visits during the pandemic. This led to unemployment for some healthcare professionals. Consequently, the unemployment rates reported by different healthcare profession groups allow us to estimate some of the impact of the pandemic on the healthcare industry in Virginia and explore how best to address these impacts. A previous report titled *The Impact of the Coronavirus on Licensed Healthcare Workforce Unemployment in Virginia*<sup>1</sup> examined trends in the state as a whole for each healthcare profession. However, significant variation exists by regions in the state.

Using Virginia professions' survey data, this report examines three indicators—past year underemployment, past year involuntary unemployment, and current year involuntary unemployment—by Virginia Performs Regions. For each indicator, the statistics obtained from surveys conducted during the pandemic, between April 2020 and March 2021, for 23 licensed healthcare workforce professions in each of the eight Virginia Performs regions are reported. Measures of the deviation from the state, i.e., a region's rate minus the state rate summed across all 23 professions, are reported; the higher and more positive the measure is, the more severe the impact of the pandemic was on licensed healthcare professions in the region compared to the state. It should be noted that, because some respondents did not provide the county in which they had worked, the average across the regions may not yield the state's rate; this will likely also affect the deviation measures. Physician assistants, radiologic technologists, and respiratory therapists complete surveys in December of odd numbered years so they were excluded from the analysis below. Certified nurse aides were also excluded because only one of the indicators was collected in that survey. Additional profession-specific data are available [here](#)<sup>2</sup>.

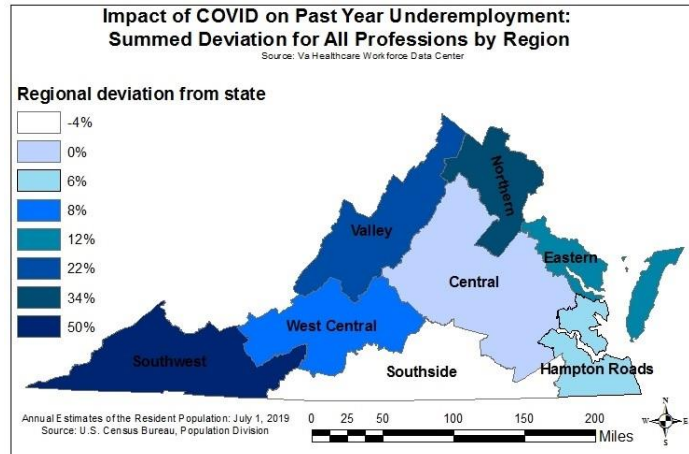
### Past Year Underemployment

**Past year underemployment** captures whether survey respondents had a part-time or temporary position but would have preferred a full-time/permanent position in the one-year period before they completed their survey. Table 1 presents past year underemployment rates by profession and region. Substantial variations from the state rates are observed. The following map shows the geographical distribution of the summed deviation across the state. Significant findings include:

- Dentists and audiologists had some of the largest regional deviations from the state rate
  - Dentists' past year underemployment rate was 3% at the state level but the rate was as high as 32% in the Valley region and 28% in the Southwest region.
  - Audiologists past year underemployment rate was 3% at the state level but 23% in the southwest region.
- Compared to the state, the Southwest region was most impacted by the pandemic with regards to underemployment and the Southside region was the least impacted.

<sup>1</sup> [http://www.dhp.virginia.gov/media/dhpweb/docs/hwdc/Coronavirus\\_Impact\\_Healthcare\\_Unemployment.pdf](http://www.dhp.virginia.gov/media/dhpweb/docs/hwdc/Coronavirus_Impact_Healthcare_Unemployment.pdf)

<sup>2</sup> <http://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/Dashboards/ImpactofCOVIDonHealthcareWorkforce/>.



**Table 1: Past Year Underemployment by Profession and Region**

	Central	Eastern	Hampton	Northern	Southside	Southwest	Valley	West Central	State
<b>Assisted Living Facility Administrators</b>	2%	0%	2%	0%	0%	0%	2%	1%	<b>1%</b>
<b>Audiologists</b>	1%	0%	0%	4%	9%	23%	0%	6%	<b>3%</b>
<b>Dental Hygienists</b>	4%	6%	5%	8%	3%	6%	5%	8%	<b>5%</b>
<b>Dentists</b>	4%	9%	2%	5%	2%	28%	32%	3%	<b>3%</b>
<b>Funeral Service Providers</b>	1%	0%	1%	1%	5%	2%	2%	4%	<b>1%</b>
<b>Licensed Clinical</b>	2%	0%	2%	3%	0%	4%	0%	4%	<b>2%</b>
<b>Licensed Clinical Social</b>	3%	3%	2%	3%	2%	0%	3%	2%	<b>2%</b>
<b>Licensed Practical Nurses</b>	5%	6%	6%	8%	4%	3%	3%	3%	<b>4%</b>
<b>Licensed Professional Counselors</b>	3%	0%	3%	3%	3%	4%	4%	4%	<b>3%</b>
<b>Nurse Practitioners</b>	3%	2%	4%	4%	1%	2%	3%	3%	<b>3%</b>
<b>Nursing Home Administrators</b>	1%	7%	4%	1%	0%	5%	0%	1%	<b>2%</b>
<b>Occupational Therapists</b>	6%	12%	4%	9%	6%	5%	8%	5%	<b>6%</b>
<b>Occupational Therapy Assistants</b>	6%	15%	16%	17%	8%	14%	12%	11%	<b>12%</b>
<b>Optometrists</b>	5%	0%	3%	5%	3%	2%	0%	2%	<b>3%</b>
<b>Pharmacists</b>	4%	6%	5%	6%	5%	4%	6%	5%	<b>4%</b>
<b>Pharmacy Technicians</b>	3%	6%	5%	6%	2%	3%	3%	4%	<b>3%</b>
<b>Physical Therapists</b>	9%	5%	6%	10%	9%	5%	5%	7%	<b>7%</b>
<b>Physical Therapy Assistants</b>	9%	5%	6%	10%	9%	5%	5%	7%	<b>9%</b>
<b>Physicians</b>	2%	3%	2%	3%	3%	3%	3%	2%	<b>2%</b>
<b>Registered Nurses</b>	2%	3%	2%	3%	2%	3%	2%	3%	<b>2%</b>
<b>Speech-Language Pathologists</b>	5%	4%	5%	5%	4%	4%	3%	4%	<b>4%</b>
<b>Veterinarian</b>	1%	4%	0%	1%	0%	3%	2%	1%	<b>1%</b>
<b>Veterinary Technicians</b>	3%	0%	5%	3%	0%	6%	3%	2%	<b>2%</b>
<b>Summed Deviation*</b>	<b>0%</b>	<b>12%</b>	<b>6%</b>	<b>34%</b>	<b>-4%</b>	<b>50%</b>	<b>22%</b>	<b>8%</b>	

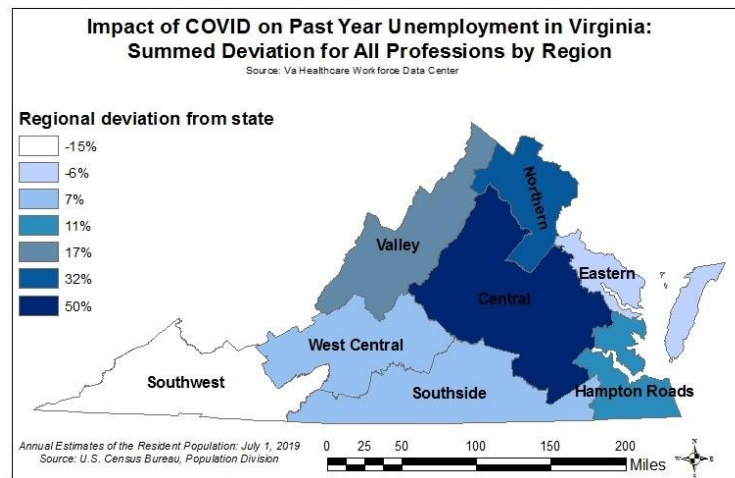
Source: Va. Healthcare Workforce Data Center

\* Summed deviation is a region's rate minus the state rate summed across all 23 professions; the higher and more positive it is, the more severe the impact of the pandemic was on the licensed healthcare professions in the region compared to the state.

## Past Year Unemployment

**Past year involuntary unemployment** captures whether survey respondents have been involuntarily unemployed at any time in the one-year period before they completed their survey. Table 2 presents the past year unemployment rates by profession and region. Significant variations from the state average are observed. The following map shows the deviation by state, indicating the Central region deviated most from the state average. Other significant findings include:

- Optometrists' past year unemployment rate was 14% for the state but the rate was as high as 28% and 27% in the Valley and Central regions, respectively. By contrast, the rate was 0% in the Eastern region.
- Compared to the state, the Central Virginia region was the most impacted by past year underemployment followed by the Northern Virginia region.
- The Southwest region had rates most similar to the state, followed by the Eastern region.



**Table 2: Past Year Unemployment by Profession and Region**

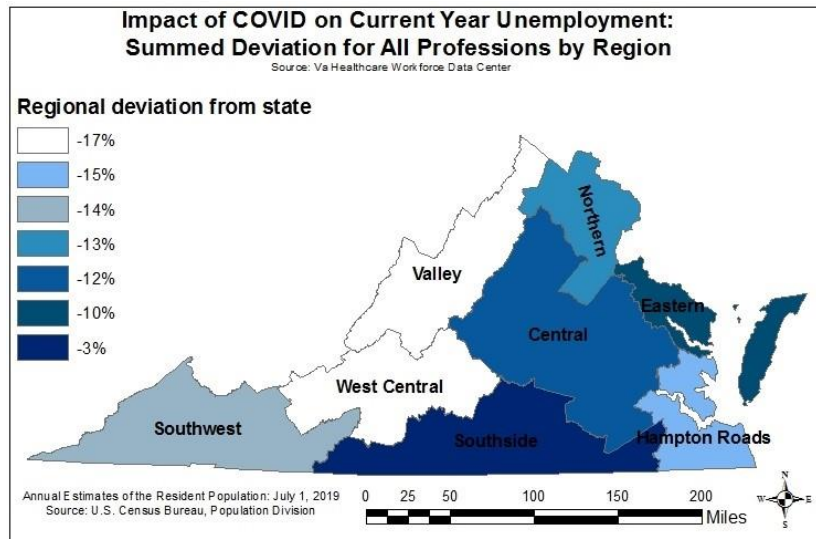
	Central	Eastern	Hampton	Northern	Southside	Southwest	Valley	West Central	State
<b>Assisted Living Facility Administrators</b>	4%	0%	1%	1%	6%	0%	2%	1%	<b>2%</b>
<b>Audiologists</b>	11%	0%	9%	13%	0%	0%	0%	3%	<b>7%</b>
<b>Dental Hygienists</b>	47%	38%	47%	44%	44%	39%	50%	50%	<b>37%</b>
<b>Dentists</b>	28%	12%	21%	26%	31%	28%	3%	30%	<b>20%</b>
<b>Funeral Service Providers</b>	2%	10%	1%	0%	0%	0%	2%	0%	<b>1%</b>
<b>Licensed Clinical</b>	1%	0%	4%	3%	0%	0%	2%	1%	<b>2%</b>
<b>Licensed Clinical Social</b>	4%	0%	2%	2%	6%	4%	4%	2%	<b>2%</b>
<b>Licensed Practical Nurses</b>	3%	2%	3%	3%	3%	3%	4%	3%	<b>3%</b>
<b>Licensed Professional Counselors</b>	3%	5%	3%	2%	4%	5%	6%	3%	<b>2%</b>
<b>Nurse Practitioners</b>	4%	1%	2%	5%	4%	4%	5%	6%	<b>4%</b>
<b>Nursing Home Administrators</b>	4%	7%	3%	3%	0%	0%	2%	2%	<b>3%</b>
<b>Occupational Therapists</b>	11%	24%	6%	10%	9%	6%	12%	9%	<b>9%</b>

	Central	Eastern	Hampton	Northern	Southside	Southwest	Valley	West Central	State
<b>Occupational Therapy Assistants</b>	10%	15%	11%	15%	17%	6%	19%	12%	<b>12%</b>
<b>Optometrists</b>	27%	0%	18%	22%	13%	2%	28%	12%	<b>14%</b>
<b>Pharmacists</b>	3%	3%	3%	3%	1%	3%	4%	1%	<b>3%</b>
<b>Pharmacy Technicians</b>	3%	0%	2%	1%	1%	1%	2%	1%	<b>2%</b>
<b>Physical Therapists</b>	16%	13%	13%	15%	12%	13%	12%	11%	<b>13%</b>
<b>Physical Therapy Assistants</b>	16%	13%	13%	15%	12%	13%	12%	11%	<b>17%</b>
<b>Physicians</b>	1%	2%	2%	2%	1%	1%	2%	1%	<b>1%</b>
<b>Registered Nurses</b>	3%	2%	2%	2%	2%	2%	2%	3%	<b>2%</b>
<b>Speech-Language Pathologists</b>	10%	14%	7%	7%	6%	6%	4%	6%	<b>6%</b>
<b>Veterinarian</b>	2%	0%	3%	2%	2%	1%	4%	4%	<b>2%</b>
<b>Veterinary Technicians</b>	4%	0%	2%	3%	0%	15%	3%	2%	<b>2%</b>
<b>Summed Deviation*</b>	<b>50%</b>	<b>-6%</b>	<b>11%</b>	<b>32%</b>	<b>7%</b>	<b>-15%</b>	<b>17%</b>	<b>7%</b>	

## Current Year Unemployment

Finally, **current year involuntary unemployment** captures the percent of survey respondents who were involuntarily unemployed while completing their survey. Table 3 presents the current year unemployment rates by profession and region. Although the current unemployment rates indicate significant economic recovery has occurred in the healthcare industry, some regions' rates still vary substantially from the state. The following map shows the deviation by region, indicating the Southside region deviated most from the state. Other significant findings include:

- Funeral service providers, clinical psychologists, licensed professional counselors, physicians, and veterinarians had overcome the detrimental impact of the pandemic on unemployment as their current year unemployment rate was 0% regionally and statewide.
- The highest regional current year unemployment rates was recorded for assistant living facility administrators and occupational therapy assistants in the Southwest Virginia region, both at 5%. State rates were 2% and 3%, respectively, for both professions.
- Compared to the state, the impact of the pandemic with respect to current year involuntary unemployment was highest in the Southside Virginia region and lowest in the Valley and West Central regions.



**Table 3: Current Year Unemployment by Profession and Region**

	Central	Eastern	Hampton	Northern	Southside	Southwest	Valley	West Central	State
<b>Assisted Living Facility Administrators</b>	3%	0%	0%	1%	5%	0%	0%	0%	<b>2%</b>
<b>Audiologists</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>1%</b>
<b>Dental Hygienists</b>	1%	0%	0%	1%	0%	1%	0%	1%	<b>2%</b>
<b>Dentists</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>1%</b>
<b>Funeral Service Providers</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Licensed Clinical Psychologists</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Licensed Clinical Social</b>	0%	0%	0%	0%	2%	0%	1%	0%	<b>0%</b>
<b>Licensed Practical Nurses</b>	1%	1%	1%	1%	1%	1%	0%	0%	<b>1%</b>
<b>Licensed Professional Counselors</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Nurse Practitioners</b>	0%	0%	0%	0%	1%	1%	0%	0%	<b>1%</b>
<b>Nursing Home Administrators</b>	0%	0%	1%	1%	0%	0%	0%	1%	<b>1%</b>
<b>Occupational Therapists</b>	1%	2%	1%	1%	4%	1%	0%	1%	<b>1%</b>
<b>Occupational Therapy Assistants</b>	2%	4%	3%	2%	5%	1%	2%	0%	<b>3%</b>
<b>Optometrists</b>	1%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Pharmacists</b>	0%	1%	1%	1%	0%	0%	0%	1%	<b>2%</b>
<b>Pharmacy Technicians</b>	1%	0%	1%	0%	0%	0%	1%	0%	<b>1%</b>
<b>Physical Therapists</b>	0%	2%	0%	1%	0%	1%	0%	0%	<b>1%</b>
<b>Physical Therapy Assistants</b>	0%	2%	0%	1%	0%	1%	0%	1%	<b>3%</b>
<b>Physicians</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Registered Nurses</b>	0%	1%	0%	0%	1%	1%	0%	0%	<b>1%</b>
<b>Speech-Language Pathologists</b>	0%	0%	0%	0%	1%	1%	0%	0%	<b>1%</b>
<b>Veterinarian</b>	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
<b>Veterinary Technicians</b>	1%	0%	0%	0%	0%	0%	2%	1%	<b>1%</b>
<b>Summed Deviation*</b>	<b>-12%</b>	<b>-10%</b>	<b>-15%</b>	<b>-13%</b>	<b>-3%</b>	<b>-14%</b>	<b>-17%</b>	<b>-17%</b>	

## Conclusion

The coronavirus pandemic has had tremendous impact on healthcare professions in Virginia. Statewide rates obscure significant variations in unemployment rates across the different regions of the state. The current report provides a breakdown of past year underemployment, past year involuntary unemployment, and current involuntary unemployment by Virginia Performs Regions. The current year unemployment rates are lower than past year underemployment and unemployment rates for most professions. In fact, the current unemployment rate for funeral service providers, clinical psychologists, licensed professional counselors, physicians, and veterinarians regionally and statewide was 0%, suggesting significant recovery in the healthcare industry. However, some professions are still grappling with the impact of the epidemic in certain regions and substantial variations are still observed between regions and professions.

Regions with generally high concentration of healthcare professionals, such as the Central and Northern regions, seem to be most impacted by the pandemic whereas regions with low concentration of healthcare professionals, such as the Eastern region, were generally less impacted by the pandemic. This is because regions with fewer supply of healthcare professionals did not have adequate professionals to start with and therefore professionals in those areas were less likely to be furloughed or laid off during the pandemic. Further, it appears that different regions coped with the pandemic's impact differently. The findings from this report suggest that professionals in the Central and Northern regions were more likely to report involuntary unemployment whereas those in regions like the Southwest were more likely to experience underemployment. However, from what is observed in the current unemployment rates, most of the impact of the pandemic appear to have been temporary. Now that healthcare facilities have resumed providing elective procedures and outpatient visits, the current unemployment rates are 0% for some professions and regions. As the state recovers, it is important to examine the regional differences to identify regions that may need additional support to overcome the impact of the pandemic.