

2022

COVID-19 Annual Report



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Authors and Contact Information



COVID-19 Data Steward and Visualization Team:

Vanessa Davis, MPH; Jennifer Jain MPH, RN; Grace Kambach, MPH; Chaitra Subramanya, MPH; Sarah Waldo, MPH, CPH; Jennifer Wang, MPH

COVID-19 Program Leadership:

Kelly Squires, MPH; Jane Yackley, MPH

Contact Information:

COVID.DataStewards@tn.gov

<https://www.tn.gov/content/tn/health/cedep/ncov/data.html>



Abbreviations



- American Community Survey (**ACS**)
- Centers for Disease Control and Prevention (**CDC**)
- Healthcare Resource Tracking System (**HRTS**)
- Hospitalizations (**hosp**)
- Long term care facility (**LTCF**)
- Multi-system Inflammatory Syndrome (**MIS-C**)
- National Electronic Disease Surveillance System (NEDSS) Base System (**NBS**)
- National Vital Statistics System (**NVSS**)
- Social Vulnerability Index (**SVI**)
- Tennessee (**TN**)
- Tennessee Department of Health (**TDH**)

Abbreviation	Regions	Counties within Regions
CHR	Chattanooga Hamilton County Health Department	Hamilton
ETR	East Tennessee Regional Health Department	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union
JMR	Jackson Madison County Health Department	Madison
KKR	Knoxville Knox County Health Department	Knox
MCR	Mid Cumberland Regional Health Department	Cheatham, Dickson, Houston, Humphreys, Montgomery, Roberston, Rutherford, Stewart, Sumner, Trousdale, Williamson, Wilson
MSR	Memphis Shelby County Health Department	Memphis
NDR	Nashville Davidson County Health Department	Davidson
NER	Northeast Regional Health Department	Carter, Greene, Hancock, Hawkins, Johnson, Unicoi, Washington
SCR	South Central Regional Health Department	Bedford, Coffee, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry, Wayne
SER	Southeast Regional Health Department	Bledsoe, Bradley, Franklin, Grundy, McMinn, Marion, Meigs, Polk, Rhea, Sequatchie
SUL	Sullivan County Health Department	Sullivan
UCR	Upper Cumberland Regional Health Department	Cannon, Clay, Cumberland, Dekalb, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Van Buren
WTR	West Tennessee Regional Health Department	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Fayette, Gibson, Hardeman, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, McNairy, Obion, Tipton, Weakley

COVID-19 Terminology



COVID-19: COVID-19 (Coronavirus disease 2019) is a disease caused by a virus named SARS-CoV-2.

Cases: A person infected with COVID-19 based on test results or information from a public health investigation. The case definition for COVID-19 changed throughout the pandemic as new information became available. The most up-to-date definition is available online:

<https://ndc.services.cdc.gov/case-definitions/coronavirus-disease-2019-2021/>

Case Rate: The number of COVID-19 cases per 100,000. In this report the total number of cases per year is used to calculate rates.

Hospitalization: A person who is hospitalized due to COVID-19 based on interview information or hospital discharge data from the Tennessee Hospital Association.

Hospitalization Rate: The number of COVID-19 hospitalizations per 100,000 population. In this report the total number of hospitalizations per year is used to calculate rates.

Death: A person who died due to COVID-19 based on death certificate information from a public health investigation. The definition for COVID-19 deaths changed throughout the pandemic as new information became available. The most up-to-date definition is available online: <https://preparedness.cste.org/covid-19-response/>

Mortality Rate: The number of COVID-19 deaths per 100,000 population. In this report the total number of deaths per year is used to calculate rates.

Public Health Region (Region): Tennessee has 95 counties grouped into 13 regions. Seven regions are served by a TDH Regional Office and the six larger, urban counties - Madison, Shelby, Knox, Davidson, Hamilton, and Sullivan - operate under local governance. For details on how the public health regions are grouped visit the abbreviation page.

Unknown: A category that includes individual without sufficient information to be added to a defined group or category.

Data Sources

Cases, Hospitalizations, and Deaths:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)

Clusters:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)

Hospital Utilization:

- Healthcare Resource Tracking System (HRTS)

Population Estimates:

- U.S. Census Bureau, 2019 American Community Survey 1-Year Estimates

Vaccinations:

- Tennessee Immunization Information System (TennIIS)

Variants:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)

Wastewater Surveillance:

- Data Collation and Integration for Public Health Event Responses (DCIPHER)

Special Populations

Children and MIS-C:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)

Pregnancy:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)
- National Vital Statistics System (NVSS)

Health Disparities and SVI (Special Populations):


- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)
- Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geo-spatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index 2020 Database Tennessee. https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html Accessed on March 16, 2023.

Appendix

Public Health Regional Profiles:

- National Electronic Disease Surveillance System (NEDSS) Base System (NBS)

Purpose

A blue-tinted photograph of a dense forest of evergreen trees, likely in a mountainous region, serving as a background for the top half of the slide.

This annual report summarizes the key metrics tracked by the Tennessee Department of Health (TDH) for the COVID-19 pandemic response, including infections, disease severity, vaccination, cluster response and data for specific populations.

For additional information, data visualizations and downloadable datasets visit:

<https://www.tn.gov/health/cedep/ncov.html>

All data are preliminary and subject to change.

COVID-19 Cases

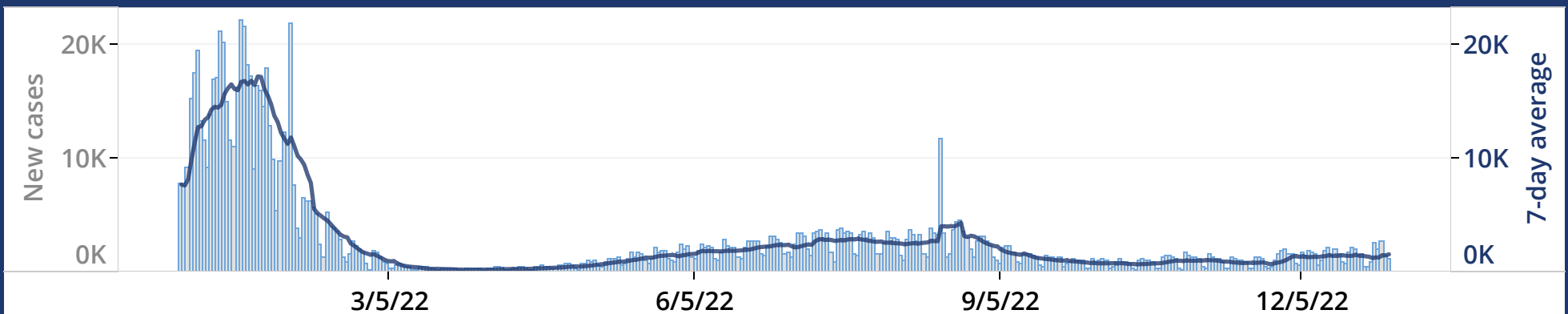


8,706
Total Hospitalizations

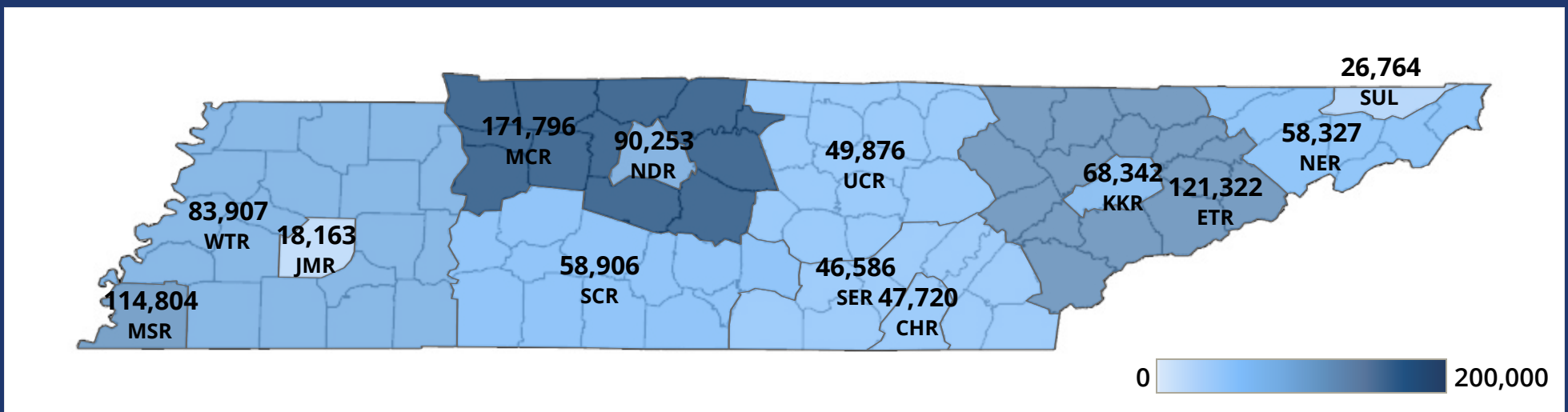
1,003,773
Total Cases

7,828
Total Deaths

Cases with 7-day Moving Average



Cases by Public Health Region



This visualization highlights the number of COVID-19 cases from January 01, 2022 to December 31, 2022. The highest number of cases occurred at the beginning of the year in January and February. Important Variants of Concern (VOC) during the year included Omicron and several subvariants, including BA.5, BQ.1, and BQ.1.1.

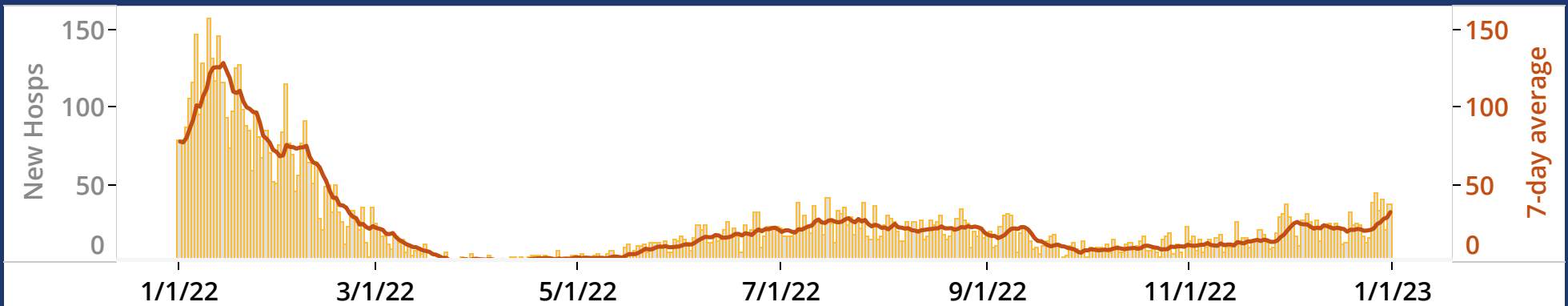
COVID-19 Hospitalizations

1,003,773
Total Cases

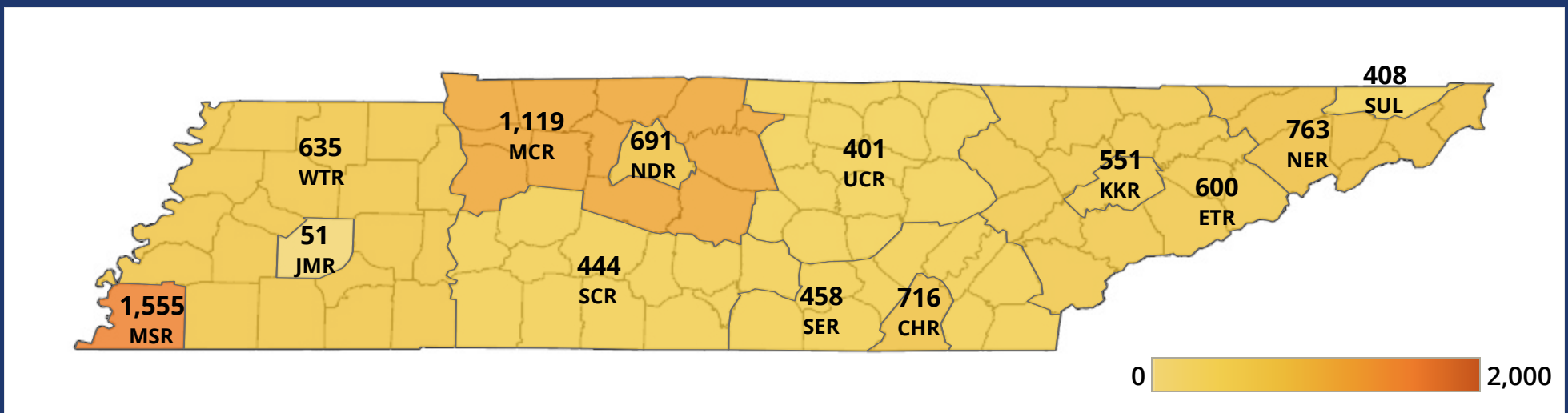
8,706
Total Hospitalizations

7,828
Total Deaths

Hospitalizations with 7-day Moving Average



Hospitalizations by Public Health Region



This visualization highlights the number of COVID-19 hospitalizations from January 01, 2022 to December 31, 2022. The highest number of hospitalizations occurred at the beginning of the year in January and February. Important Variants of Concern (VOC) during the year included Omicron and several subvariants, including BA.5, BQ.1, and BQ.1.1.

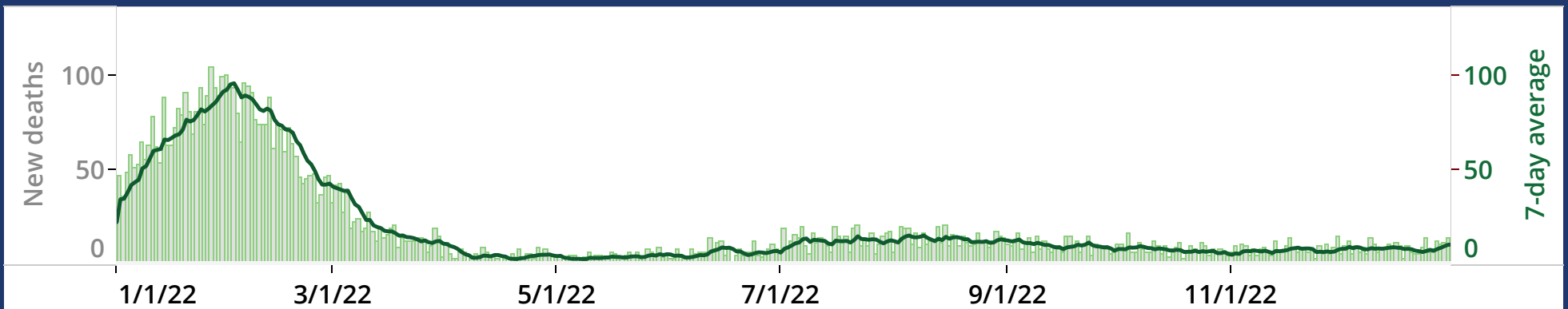
COVID-19 Deaths

1,003,773
Total Cases

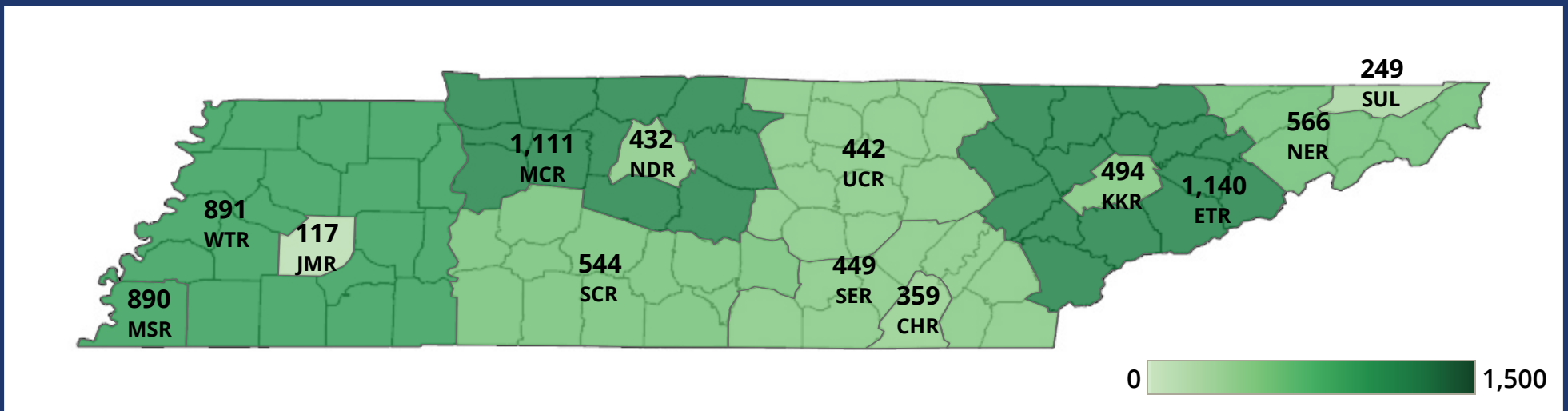
7,828
Total Deaths

8,706
Total Hospitalizations

Deaths with 7-day Moving Average



Deaths by Public Health Region



This visualization highlights the number of COVID-19 deaths from January 01, 2022 to December 31, 2022. The highest number of deaths occurred at the beginning of the year in January and February. Important Variants of Concern (VOC) during the year included Omicron and several subvariants, including BA.5, BQ.1, and BQ.1.1.

Case, Hospitalization (Hosp), and Mortality Rates by Region



Region	Case	Case Rate	Hosp	Hosp Rate	Death	Mortality Rate
CHR	47,720	12,974	716	195	359	98
ETR	121,322	15,629	600	77	1,140	147
JMR	18,163	18,537	51	52	117	119
KKR	68,342	14,531	551	117	494	105
MCR	171,796	12,880	1,119	84	1,111	83
MSR	114,804	12,250	1,555	166	890	95
NDR	90,253	13,002	691	100	432	62
NER	58,327	16,483	763	216	566	160
SCR	58,906	14,241	444	107	544	132
SER	46,586	13,743	458	135	449	132
SUL	26,764	16,902	408	258	249	157
UCR	49,876	13,841	401	111	442	123
WTR	83,907	15,940	635	121	891	169
UNKNOWN	47,007	–	314	–	144	–
TOTAL	1,003,773	14,698	8,706	127	7,828	115

This visualization highlights the number of COVID-19 cases, hospitalizations, and deaths from January 01, 2022 to December 31, 2022 by region. The rates were calculated per 100,000 population.

Case, Hospitalization (Hosp), and Mortality Percents by Region



Region	Case	% of Case	Hosp	% of Hosp	Death	% of Death
CHR	47,720	4.8%	716	8.2%	359	4.6%
ETR	121,322	12.1%	600	6.9%	1,140	14.6%
JMR	18,163	1.8%	51	0.6%	117	1.5%
KKR	68,342	6.8%	551	6.3%	494	6.3%
MCR	171,796	17.1%	1,119	12.9%	1,111	14.2%
MSR	114,804	11.4%	1,555	17.9%	890	11.4%
NDR	90,253	9.0%	691	7.9%	432	5.5%
NER	58,327	5.8%	763	8.8%	566	7.2%
SCR	58,906	5.9%	444	5.1%	544	6.9%
SER	46,586	4.6%	458	5.3%	449	5.7%
SUL	26,764	2.7%	408	4.7%	249	3.2%
UCR	49,876	5.0%	401	4.6%	442	5.6%
WTR	83,907	8.4%	635	7.3%	891	11.4%
UNKNOWN	47,007	4.7%	314	3.6%	144	1.8%
TOTAL	1,003,773	100.0%	8,706	100.0%	7,828	100.0%

This visualization highlights the number and percent of COVID-19 cases, hospitalizations, and deaths from January 1, 2022 to December 31, 2022 by region.

Case, Hospitalization (Hosp), and Mortality Rates, by Race, Ethnicity, and Sex



Category	Category Breakdown	Case	Case rate	Hosp	Hosp rate	Death	Mortality rate
RACE	White	641,239	11,976	6,444	120	6,163	115
	Black or African American	137,002	11,765	1,595	137	964	83
	Asian	12,197	9,097	35	26	24	18
	American Indian or Alaska Native	1,921	5,882	*	*	*	*
	Native Hawaiian or Other Pacific Islander	878	13,348	*	*	*	*
	Other/Multiracial	65,004	47,451	306	223	315	230
	Unknown	145,532	—	*	*	*	*
	Total	1,003,773	14,698	8,706	127	7,828	115
ETHNICITY	Hispanic	27,479	7,021	149	38	107	27
	Not Hispanic or Latino	641,556	9,965	7,569	118	6,960	108
	Unknown	334,738	—	988	—	761	—
	Total	1,003,773	14,698	8,706	127	7,828	115
SEX	Male	432,598	12,982	4,271	128	4,128	124
	Female	564,232	16,135	4,421	126	3,692	106
	Unknown	6,943	—	14	—	8	—
	Total	1,003,773	14,698	8,706	127	7,828	115

This visualization highlights the number of COVID-19 cases, hospitalizations, and deaths from January 01, 2022 to December 31, 2022 by race, ethnicity and sex. Rates were calculated per 100,000 population. | *Death Counts less than 20 and hospitalization counts less than 11 have been suppressed due to data privacy.

Case, Hospitalization (Hosp), and Mortality Percents by Race, Ethnicity, and Sex

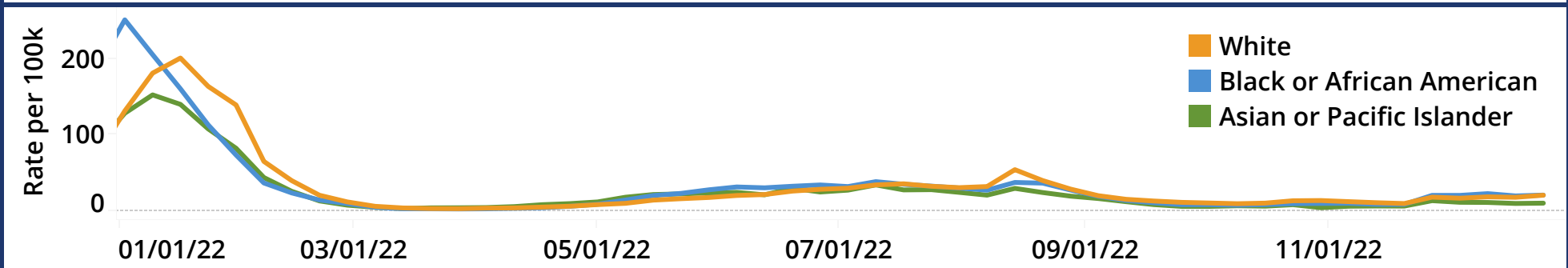


Category	Category breakdown	Case	% Case	Hosp	% Hosp	Death	% Death
RACE	White	641,239	63.9%	6,444	75.1%	6,163	78.7%
	Black or African American	137,002	13.6%	1,595	17.7%	964	12.3%
	Asian	12,197	1.2%	35	0.2%	24	0.3%
	American Indian or Alaska Native	1,921	0.2%	*	*	*	*
	Native Hawaiian or Other Pacific Islander	878	0.1%	*	*	*	*
	Other/Multiracial	65,004	6.5%	306	3.8%	315	4.0%
	Unknown	145,532	14.5%	317	3.1%	353	4.5%
	Total	1,003,773	100.0%	8,706	100.0%	7,828	100.0%
ETHNICITY	Hispanic	27,479	2.7%	149	2.0%	107	1.4%
	Not Hispanic or Latino	641,556	63.9%	7,569	87.4%	6,960	88.9%
	Unknown	334,738	33.3%	988	10.7%	761	9.7%
	Total	1,003,773	100.0%	8,706	100.0%	7,828	100.0%
SEX	Male	432,598	43.1%	4,271	47.2%	4,128	52.7%
	Female	564,232	56.2%	4,421	52.7%	3,692	47.2%
	Unknown	6,943	0.7%	14	0.1%	*	*
	Total	1,003,773	100.0%	8,706	100.0%	7,828	100.0%

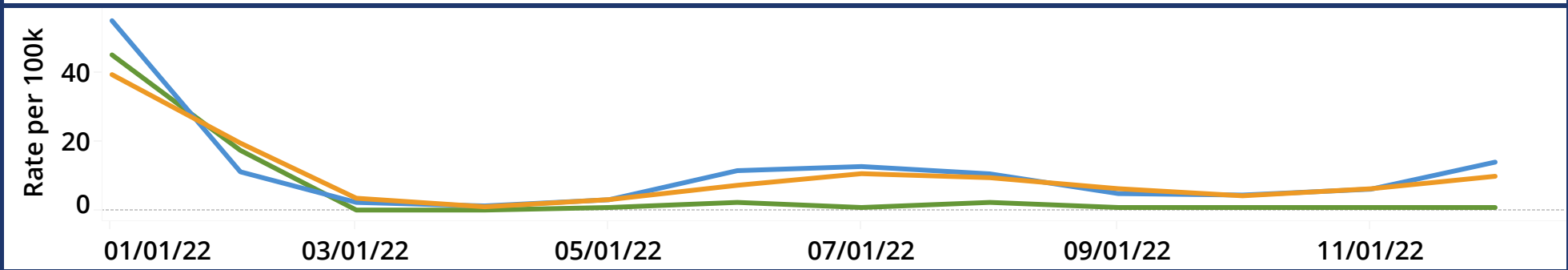
This visualization highlights the number and percent of COVID-19 cases, hospitalizations, and deaths from January 01, 2022 to December 31, 2022 by race, ethnicity and sex. | *Death counts less than 20 and hospitalization counts less than 11 have been suppressed due to data privacy.

Case, Hospitalization, and Mortality Rates by Race

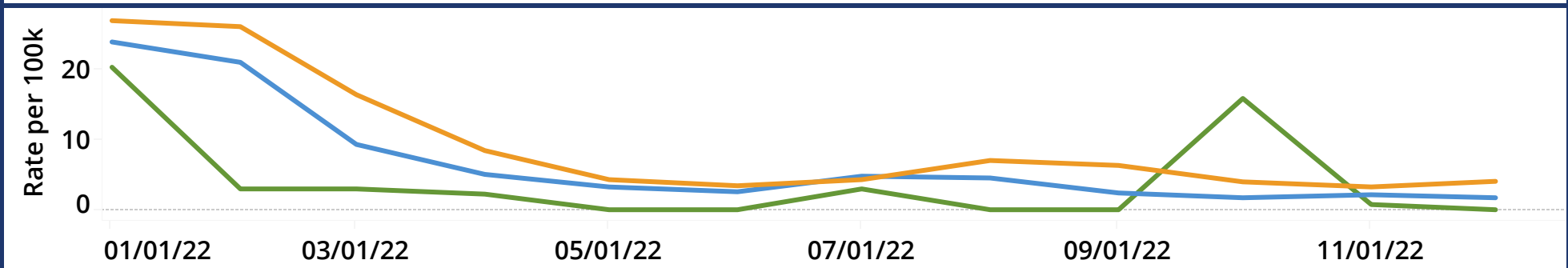
Case Rates per 100,000



Hospitalization Rates per 100,000



Mortality Rates per 100,000

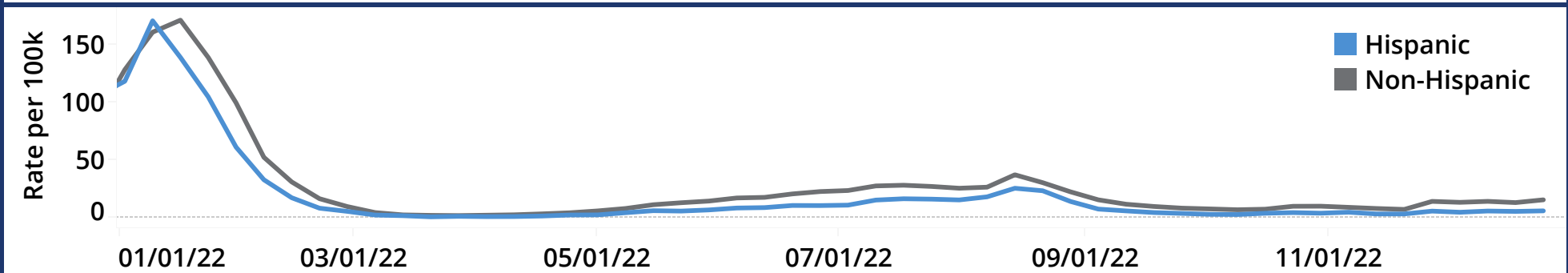


The Black or African American (AA) population had similar case and hospitalization rates as Whites, and Whites had a higher mortality rate compared to Black/AA and Asian American or Pacific Islander (AAPI) individuals.

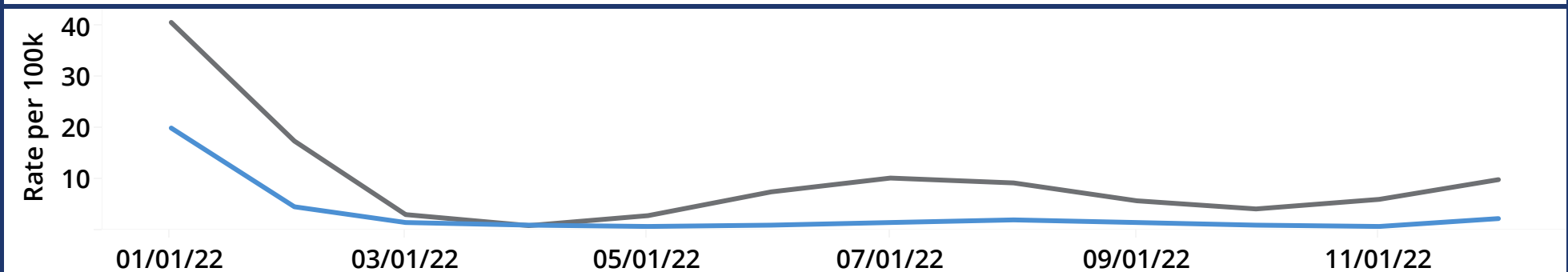
Case, Hospitalization, and Mortality Rates by Ethnicity



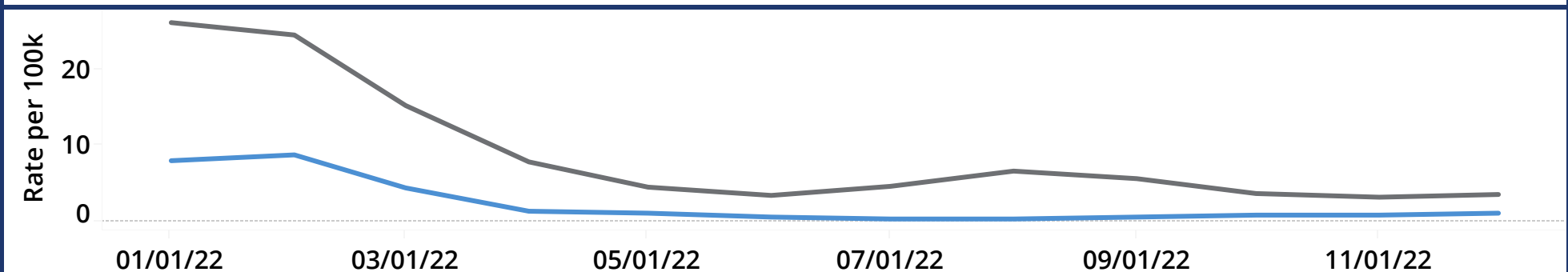
Case Rates per 100,000



Hospitalization Rates per 100,000



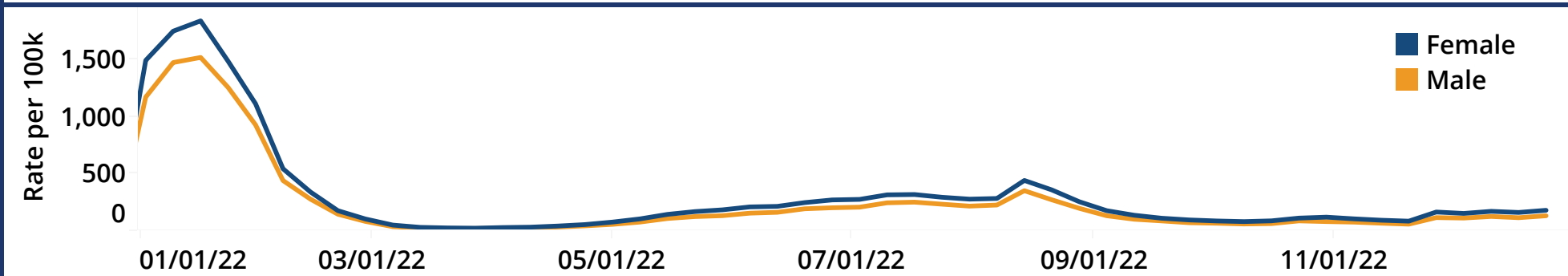
Mortality Rates per 100,000



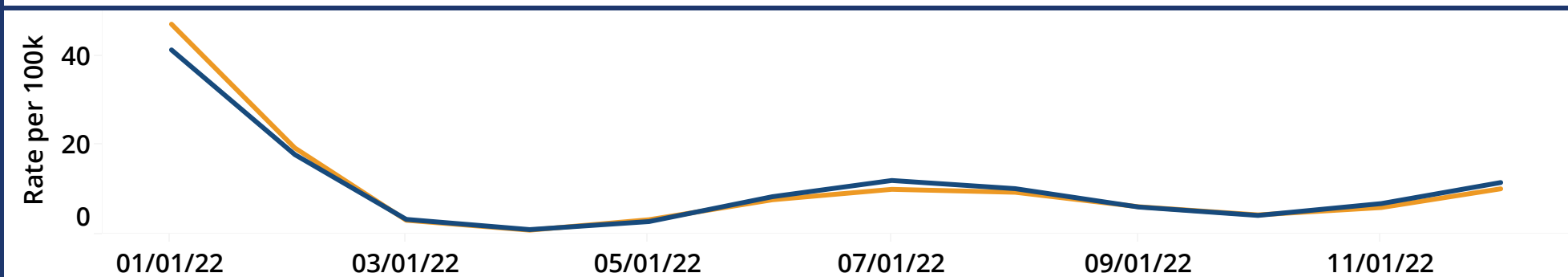
Non-Hispanic individuals had higher case, hospitalization, and mortality rates compared to Hispanic individuals in 2022.

Case, Hospitalization, and Mortality Rates by Sex

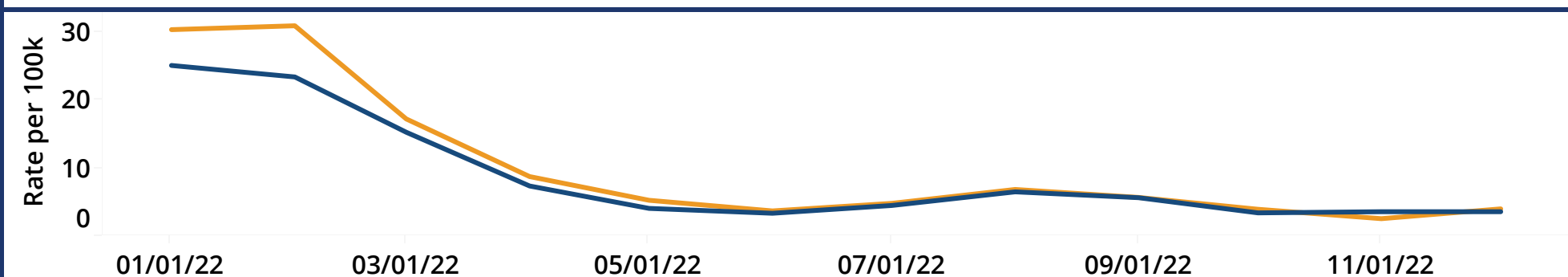
Case Rates per 100,000



Hospitalization Rates per 100,000



Mortality Rates per 100,000



Females and males had similar COVID-19 case, hospitalization, and mortality rates in 2022.

Case, Hospitalization (Hosp), and Mortality Rates by Age Group



Age Range	Case	Case Rate	Hosp	Hosp Rate	Death	Mortality Rate
0-10 years	108,671	11,978	149	16	*	*
11-20 years	118,342	13,806	71	8	*	*
21-30 years	160,142	16,875	162	17	57	6
31-40 years	149,717	17,056	267	30	131	15
41-50 years	134,923	15,815	507	59	336	39
51-60 years	132,094	14,734	1,073	120	845	94
61-70 years	102,250	13,009	1,927	245	1,653	210
71-80 years	65,442	13,587	2,402	499	2,184	453
81+ years	31,962	14,484	2,148	973	2,608	1,182
Unknown	230	—	0	—	*	—
Total	1,003,773	14,698	8,706	127	7,828	115

This visualization highlights the number of COVID-19 cases, hospitalizations, and deaths from January 1, 2022 to December 31, 2022 by age. The rates were calculated per 100,000 population. | *Death counts less than 20 have been suppressed due to data privacy.

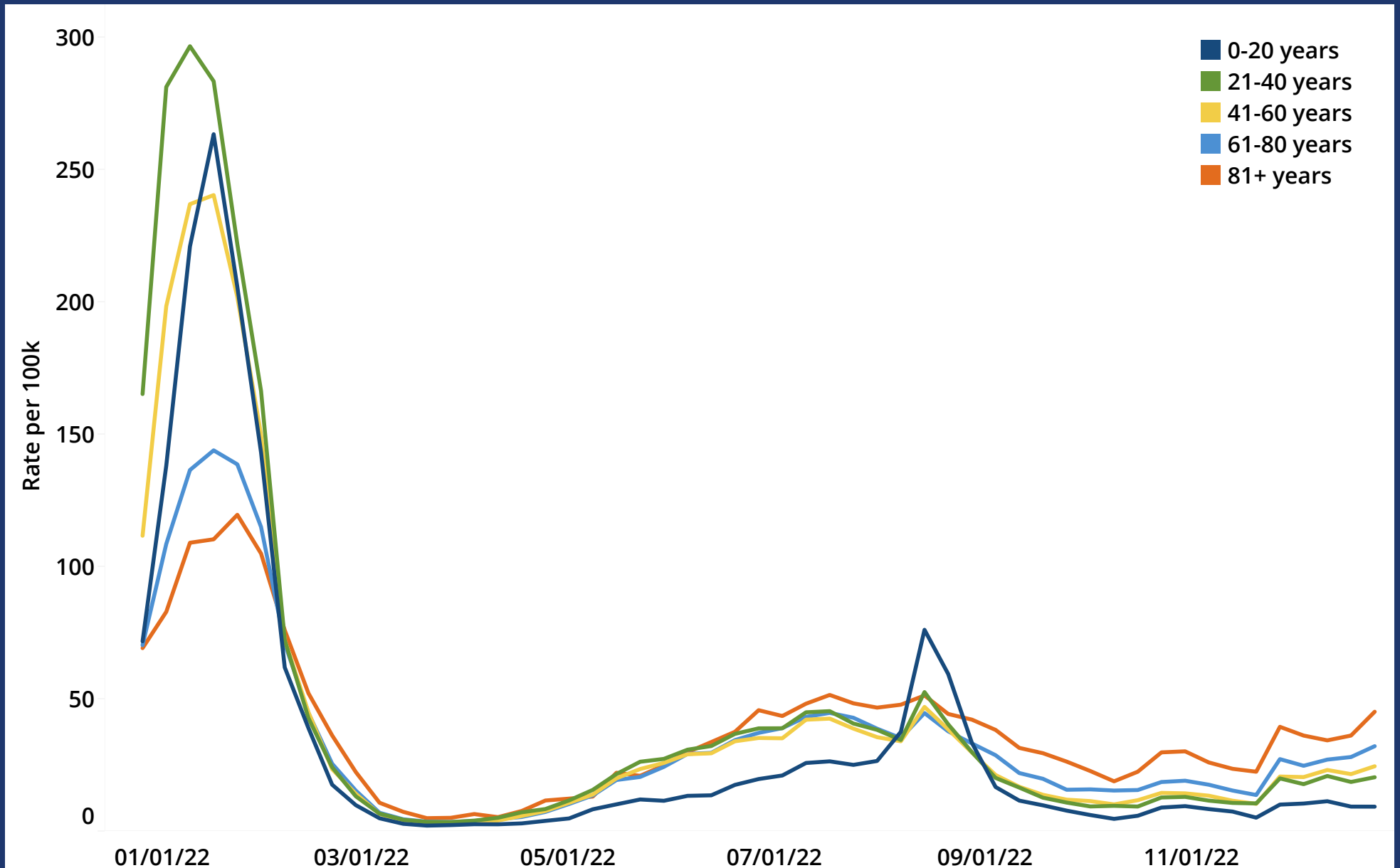
Case, Hospitalization (Hosp), and Mortality Percents by Age Group



Age Range	Case	% Case	Hosp	% Hosp	Death	% Death
0-10 years	108,671	10.8%	149	1.9%	*	*
11-20 years	118,342	11.8%	71	0.9%	*	*
21-30 years	160,142	16.0%	162	2.4%	57	0.7%
31-40 years	149,717	14.9%	267	2.6%	131	1.7%
41-50 years	134,923	13.4%	507	5.0%	336	4.3%
51-60 years	132,094	13.2%	1,073	11.5%	845	10.8%
61-70 years	102,250	10.2%	1,927	22.0%	1,653	21.1%
71-80 years	65,442	6.5%	2,402	26.5%	2,184	27.9%
81+ years	31,962	3.2%	2,148	27.2%	2,608	33.3%
Unknown	230	0.0%	0	0.0%	*	*
Total	1,003,773	100.0%	8,706	100.0%	7,828	100.0%

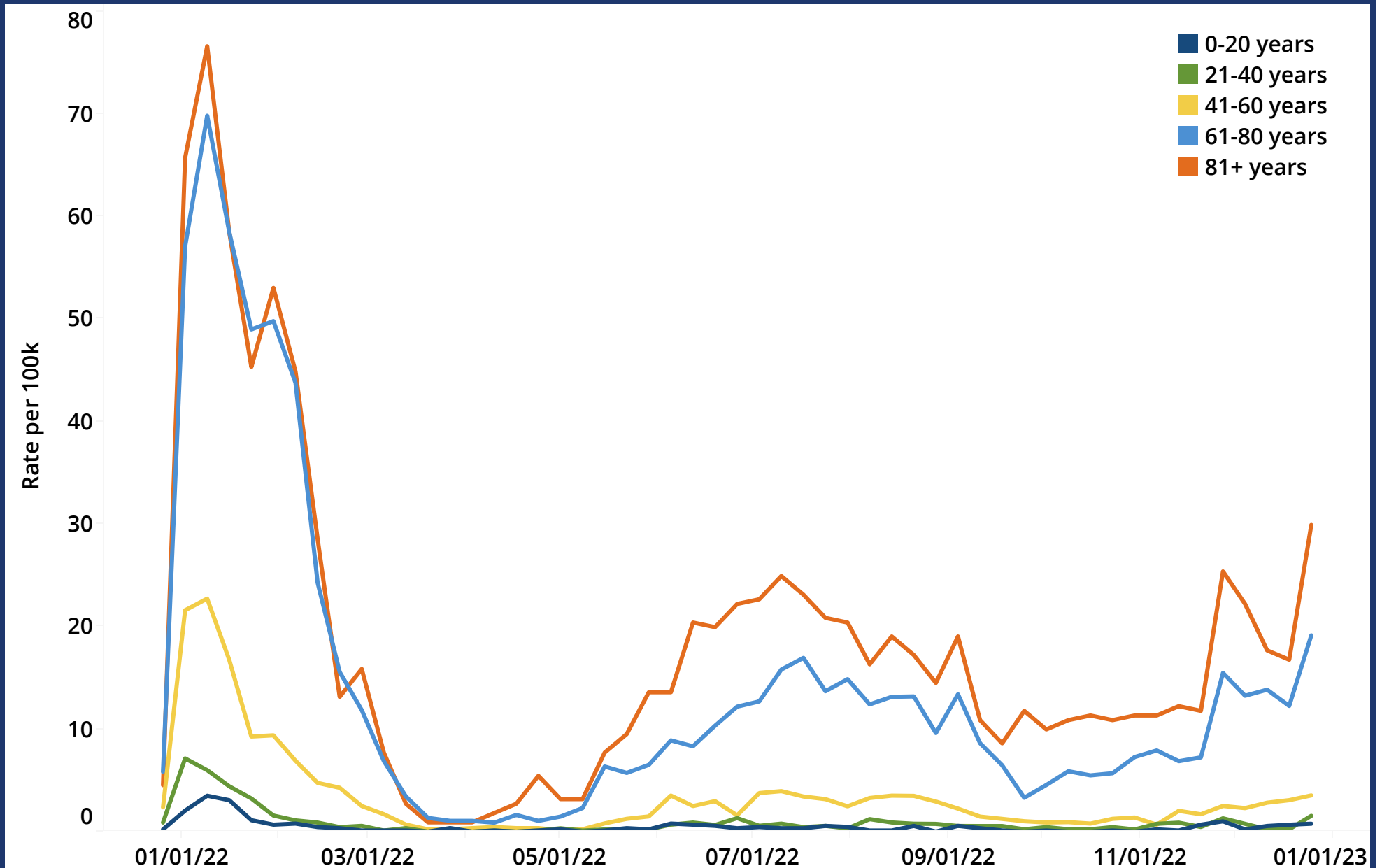
This visualization highlights the number and percent of COVID-19 cases, hospitalizations, and deaths from January 01, 2022 to December 31, 2022 by age. | *Death counts less than 20 have been suppressed due to data privacy.

Case Rates by Age Group



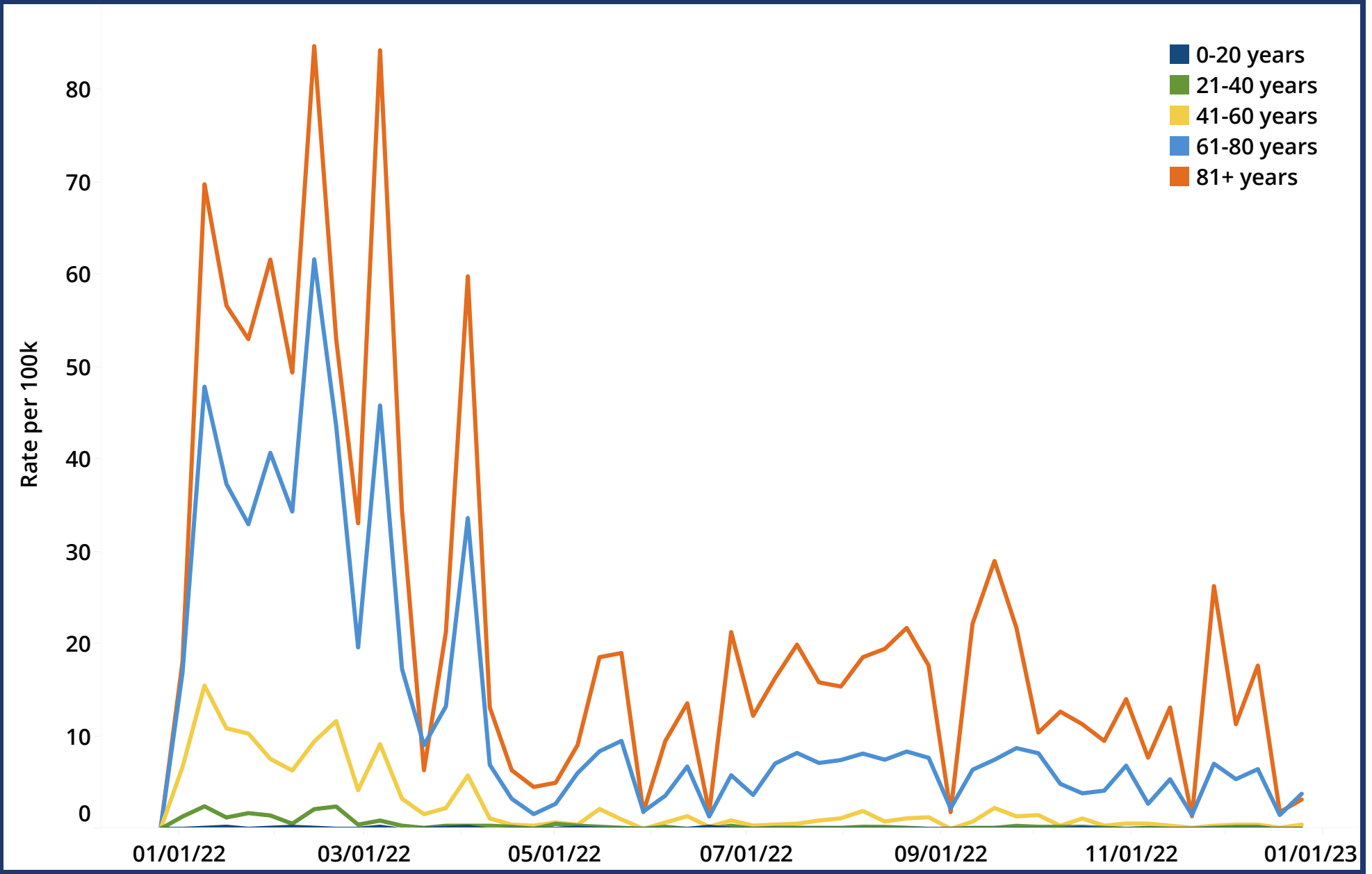
Individuals 81+ initially had lower case rates at the beginning of 2022 but generally surpassed case rates of all other age groups after June 2022. The age groups were combined for data visualization purposes.

Hospitalization Rates by Age Group



Individuals aged 61-80 years and 81+ had substantially higher hospitalization rates compared to those 60 and younger.

Mortality Rates by Age Group



Individuals aged 81+ had the highest mortality rate followed by individuals aged 61-80 years.

Key Trends of COVID-19 in Tennessee Summary



The data for cases, hospitalization and deaths were derived from National Electronic Disease Surveillance System (NEDSS) Base System (NBS) and the population estimates were derived from 2019 American Community Survey (ACS) 1-Year population estimates. From January 01, 2022 to December 31, 2022, Tennessee (TN) reported 1,003,773 cases of COVID-19 (case rate of 14.698), 8,706 hospitalizations (hospitalization rate of 127) and 7,828 deaths (mortality rate of 115). All rates were calculated per 100,000 population (100k). The case rates, hospitalization rates and mortality rates among the thirteen public health regions varied significantly. The case rates were lowest at 12,250 for MSR and highest at 16,902 for SUL. Similarly, the hospitalization and mortality rates varied with highest hospitalization rate in SUL and highest mortality rate in WTR at 127 and 115 per 100k respectively.

The population makeup by race for the state of TN is diverse; 78.4% Whites, 17.1% African Americans, 2.0% Asians, 2.0% Other/Multiracial, 0.5% American Indian/Alaskan Native, 0.1% Native Hawaiian and Pacific Islander. Race was missing for 14% of all reported 2022 cases. African Americans accounted for 13.6% of cases, 17.7% of hospitalizations, and 12.3% of deaths. The 2022 case rates for Native Hawaiian or Pacific Islander (13,348) were higher compared to Whites (11,976), though Whites accounted for 78.4% of the TN population when compared to Native Hawaiian or Pacific Islander at 0.1%. The hospitalization rate among African Americans were 1.1 times higher when compared to Whites.

Key Trends of COVID-19 in Tennessee Summary



Ethnicity data for COVID-19 was missing for 33% of all reported COVID-19 cases. Hispanic cases accounted for 2.7% of the 2022 cases, 2.0% of hospitalizations and 1.4% of deaths. Hispanic case rates per 100K were lower than non-Hispanics at 7,021 and 9,965, respectively. The percentage of cases, hospitalizations, and deaths follows the same trend with higher percentages among non-Hispanics when compared to Hispanics.

In Tennessee, males account for 48.8% of the population while females account for 51.2%. Among reported COVID-19 cases, 43.1% of cases were male, and 56.2% were female. Increased hospitalizations were seen among males when compared to females (1.0% males to 0.8% females). A similar pattern was seen among deaths where more males died from COVID-19 when compared to females (0.9% males to 0.6% females).

The population makeup by age for the state of TN is varied with the highest population among ages 21-30 years at 13.9% and the lowest among ages 81 years and older at 3.2%. The impact of COVID-19 was disproportionate among age groups in TN with older age groups taking the burden or severity of the disease in terms of hospitalization and deaths when compared to younger age groups. In 2022, 21-30-year-olds made up the highest percent of cases at 16.0% with the lowest percent of cases among 81 years and older at 3.2%. However, increased hospitalizations and deaths were seen among ages 81-years and older at 6.7% and 8.2%, respectively.

COVID-19 Variants

Genomic sequencing has been crucial to the COVID-19 public health response.

Reports of identified variants of concern, variants of interest or variants being monitored, as defined by CDC, are sent to TDH from facilities conducting genetic sequencing on Tennessee resident samples.

For more information about COVID-19 Variants and their classification as well as circulating variants please visit:

<https://www.cdc.gov/coronavirus/2019-ncov/variants/variant-classifications.html>

<https://covid.cdc.gov/covid-data-tracker/#variants-genomic-surveillance>

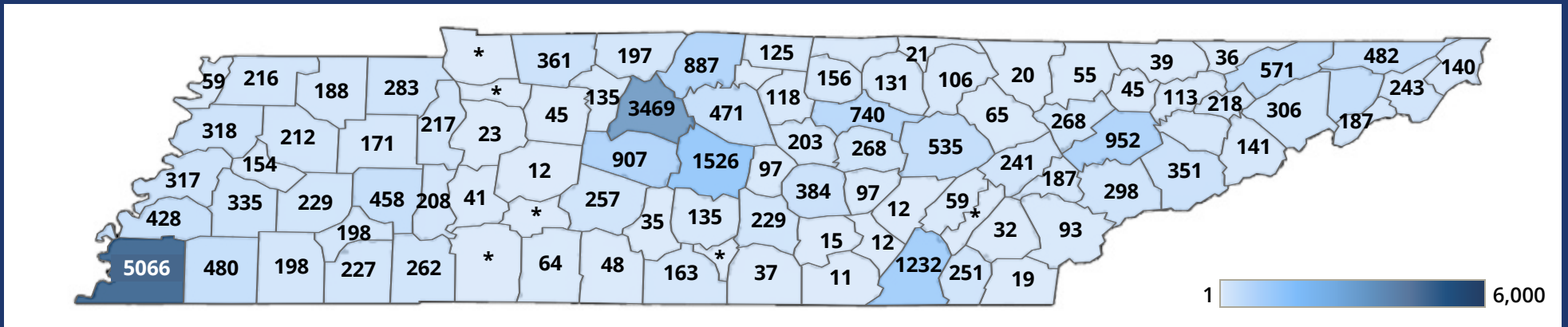
COVID-19 Variants

Total Cases: 668,844

Total Cases Sequenced: 30,088

Percent Sequenced: 4.49%

COVID-19 Cases with Sequencing Results by County



Sequencing results of Top 5 Variants in 2022

Region	BA.1.1	B.1.1.529 (Omicron)	BA.5	BA.2	B.1.617.2 (Delta)
CHR	658	398	25	74	20
ETR	1420	603	50	38	72
JMR	100	68	17	*	*
KKR	481	299	28	47	23
MCR	2297	1181	258	212	95
MSR	1576	2453	413	294	77
NDR	1414	1084	176	242	42
NER	1311	439	26	34	79
SCR	625	281	27	25	47
SER	268	108	17	*	22
SUL	257	137	24	24	14
UCR	1987	749	60	45	92
WTR	2789	1748	60	40	115
TOTAL	15183	9548	1181	1091	708

*Counts less than 11 have been suppressed due to data privacy.

COVID-19 Hospital Utilization

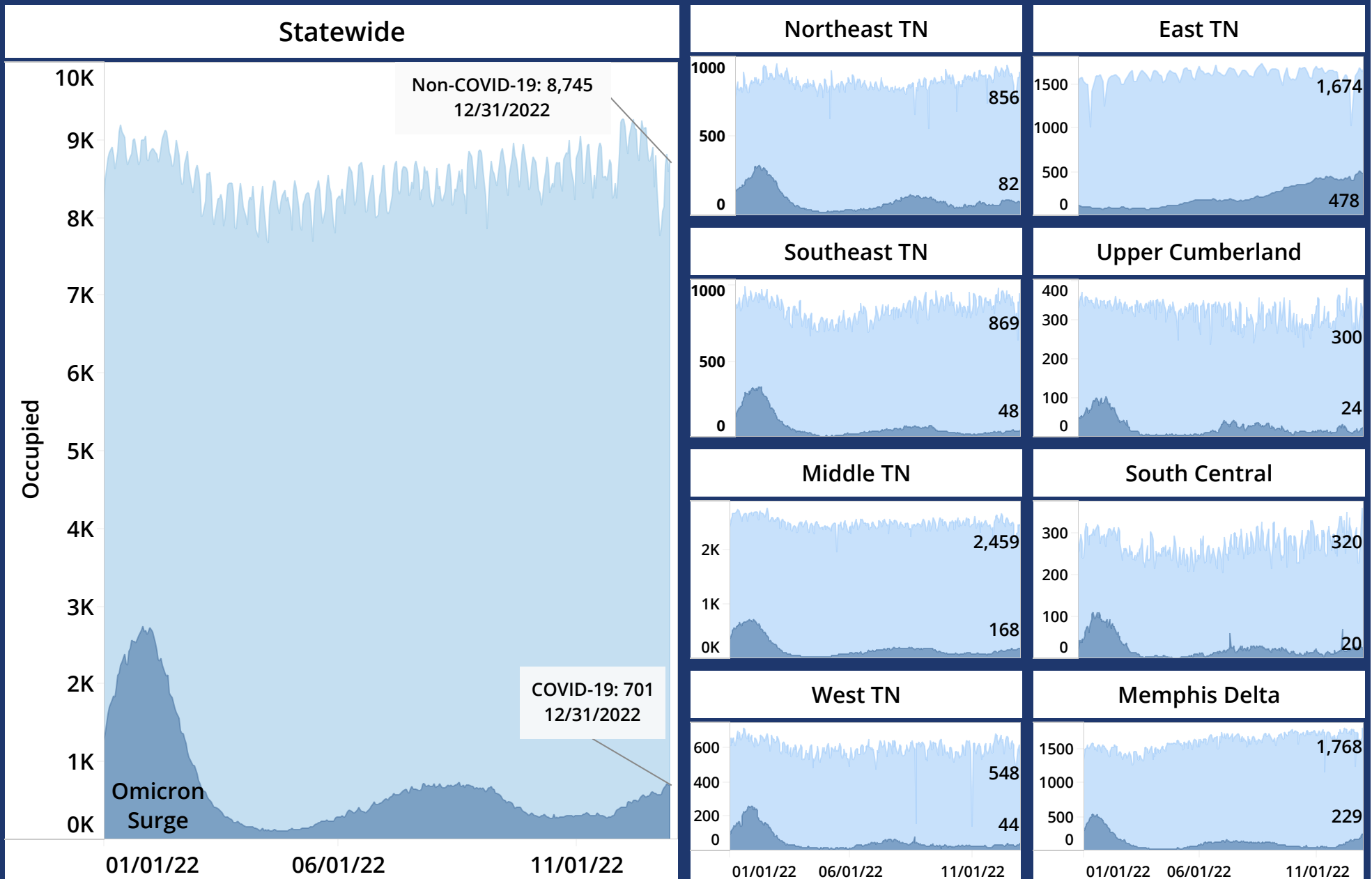


Hospital utilization data are from the Healthcare Resource Tracking System (HRTS). HRTS is a secure website used by Tennessee healthcare facilities and emergency managers to direct ill or injured patients to appropriate healthcare facilities in the event of an emergency or disaster. HRTS allows healthcare facilities to record and continually update their current availability of beds, specialty services, and resources providing state-wide awareness for emergency managers. The hospitalization data in this portion of the report are based on the bed occupancy per day. The number of hospitalized adults with diagnosed COVID-19 and non-COVID-19 diagnoses are compared to illustrate the impact of COVID-19 on the hospital infrastructure across Tennessee.

For more data on COVID-19 hospitalizations visit: <https://www.tn.gov/health/cedep/ncov/data/hospitalization-data.html>.

Hospital Utilization in Tennessee

Adult Floor Bed Hospital Patients (COVID-19 vs. Non-COVID-19)



This portion of the report details a comparison between COVID-19 hospitalizations and non-COVID-19 hospitalizations in TN among the Healthcare Coalitions and statewide. As of December 31, 2022, there were 701 COVID-19 adult hospitalizations.

COVID-19 Vaccinations



This portion of the report highlights COVID-19 vaccination data from the Tennessee Immunization Information System (TennIIS).

Providers administering COVID-19 vaccines are expected to report vaccine doses to TennIIS within 24 hours of administration and are required to report doses no later than 72 hours after administration. TennIIS does not collect data for COVID-19 vaccinations administered by the Bureau of Prisons (BOP), Department of Defense (DOD), Indian Health Service (IHS), and Veterans Health Administration (VHA).

On May 17, 2022, Booster doses were approved for children 5 to 11 years of age. The Food and Drug Administration issues an Emergency Use Authorization for the Novavax two-dose primary series on August 5, 2022.

Bivalent formulations of Pfizer and Moderna were added to Emergency Use Authorizations for use as booster doses in adults on August 26, 2022 and children on October 12, 2022.

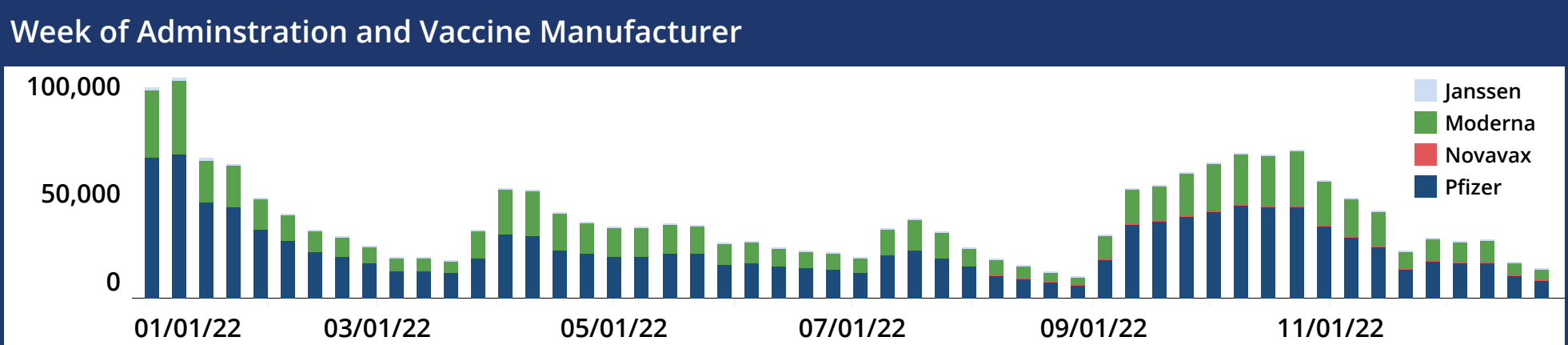
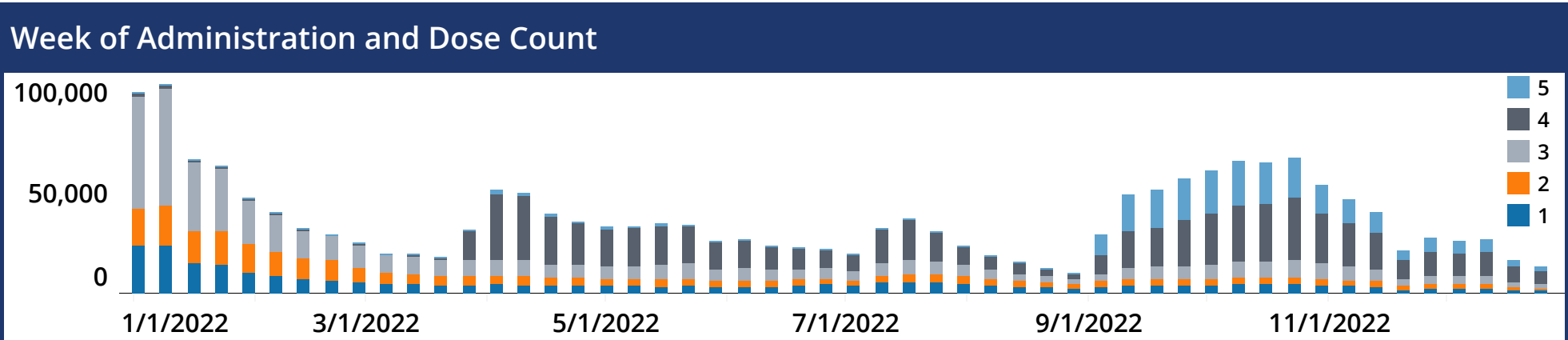
For more COVID-19 Vaccine information visit: <https://www.tn.gov/health/cedep/ncov/covid-19-vaccine.html>

COVID-19 Vaccine Administration



<p>10,829,065 Total Doses Administered</p>	<p>4,009,249 Total People With At Least One Dose</p>
<p>3,251,763 Total People Completing Primary Series</p>	<p>368,250 Total People With Bivalent Booster</p>

Number of COVID-19 Vaccine Doses Administered and Reported to TennIS



Totals are cumulative and range from December 17, 2020 to December 27, 2022. There were 10,829,065 vaccinations reported and 368,250 bivalent boosters reported in TN during this time.

COVID-19 Vaccination Demographics



Category	Category Breakdown	People Vaccinated	Percent Vaccinated	Age Range	People Vaccinated	Percent Vaccinated
RACE	White	349,947	48%	<5 years	18,505	3%
	Black or African American	87,111	12%	5-11 years	59,680	8%
	Asian	13,874	2%	12-15 years	29,766	4%
	Other/Multiracial	254,133	35%	16-20 years	38,326	5%
	Unknown	23,289	3%	21-30 years	82,162	11%
	Total	728,354	100%	31-40 years	75,895	10%
				41-50 years	73,799	10%
ETHNICITY	Hispanic	54,235	7%	51-60 years	96,996	13%
	Not Hispanic or Latino	626,215	86%	61-70 years	122,147	17%
	Unknown	47,904	7%	71-80 years	91,779	13%
	Total	728,354	100%	81+ years	39,252	5%
SEX	Female	399,076	55%	Unknown	47	0%
	Male	328,446	45%	Total	728,354	100%
	Other	73	0%			
	Unknown	759	0%			
	Total	728,354	100%			

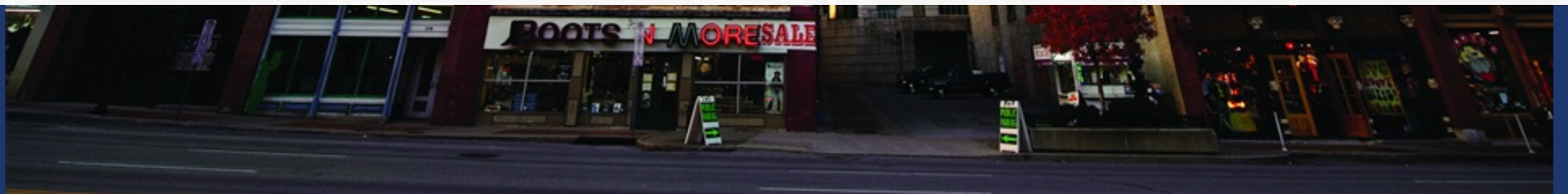
In TN from January 1, 2022 to December 31, 2022, there were 728,354 people vaccinated with the highest number of people vaccinated amongst White, non-Hispanic, and female demographics groups. During 2022, the highest number of people vaccinated were 51-60-year-olds and 61-70-year-olds. U.S. children 6 months to 5 years of age were eligible on June 18, 2022 for COVID-19 vaccination.

COVID-19 Clusters



A confirmed COVID-19 cluster is two (2) or more confirmed or probable cases of COVID-19 that are linked by the same location of exposure (e.g., workplace, long-term care facility, grocery store, etc.) or exposure event (e.g., work party, vacation, etc.) within a 14-day period that is not a household or school-associated exposure.

For more information about COVID-19 and congregate care settings visit:
<https://www.tn.gov/health/cedep/ncov/congregate-care-settings.html>



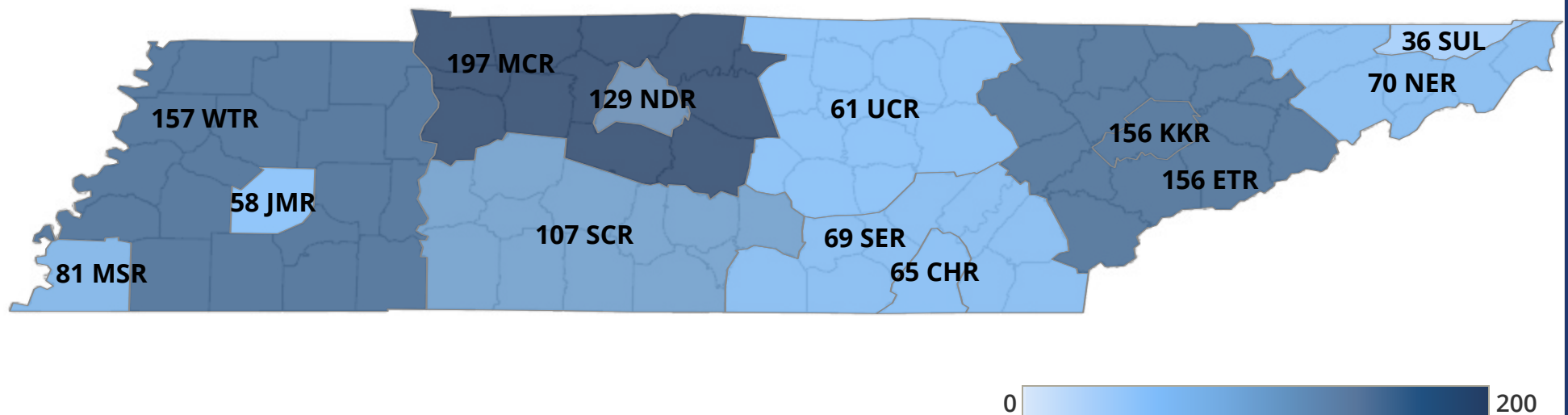
COVID-19 Clusters

1,342
Total Clusters

118,528
Total Clustered Cases

159
Total Cluster-Associated Deaths

Clusters by Region



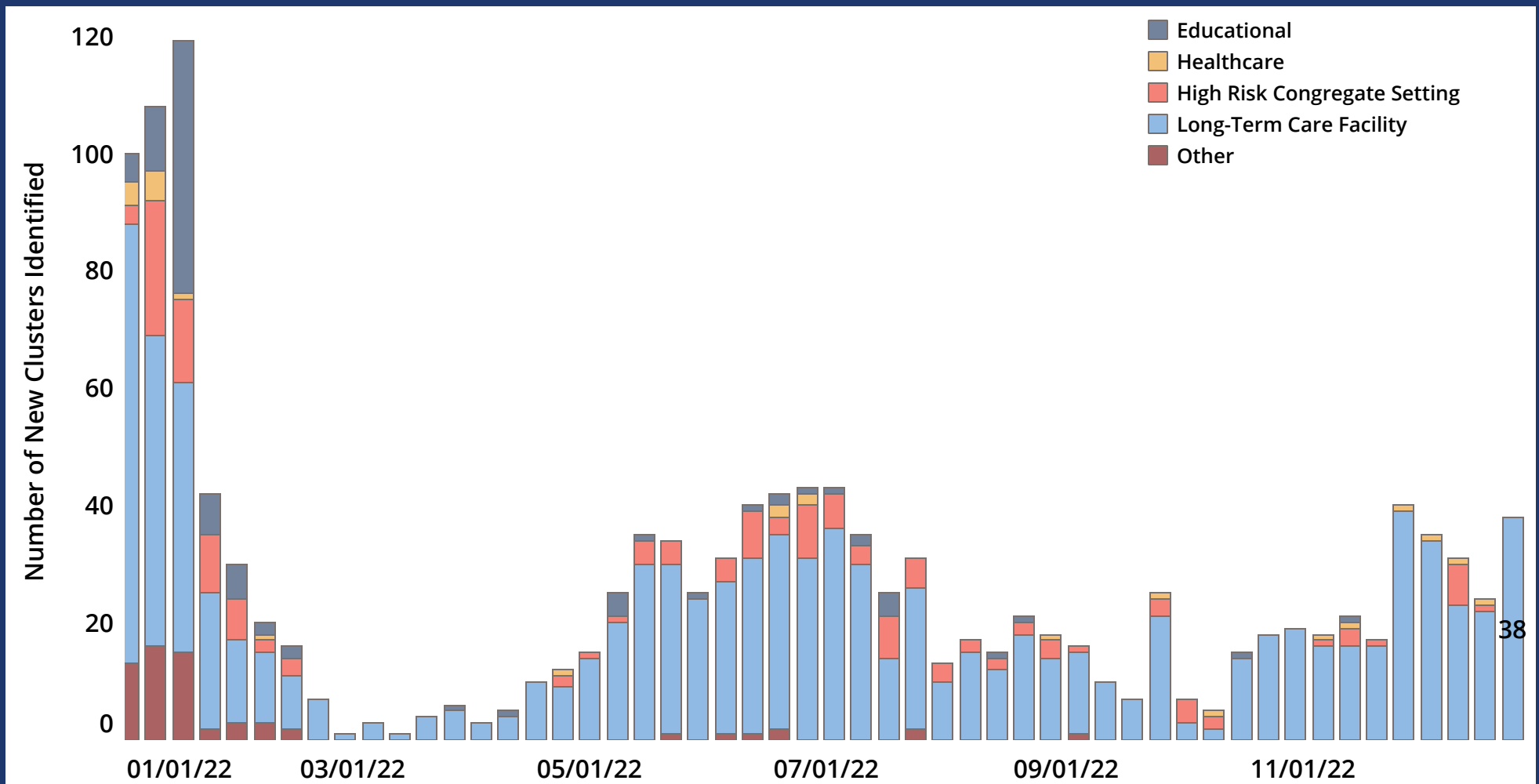
This visualization shows the sum of clusters by county from January 1, 2022 to December 31, 2022. The counties with the highest amount of clusters are Knox, Shelby, and Davidson. This could be due to these counties being more densely populated.

For more information visit: <https://www.tn.gov/content/dam/tn/health/documents/cedep/novel-coronavirus/COVID19-Cluster-FAQs.pdf>

COVID-19 Clusters by Facility Type



1,023 Total LTCF Clusters	14,666 Total Staff Cases	18,297 Total Resident Cases	2,540 Total Resident Deaths
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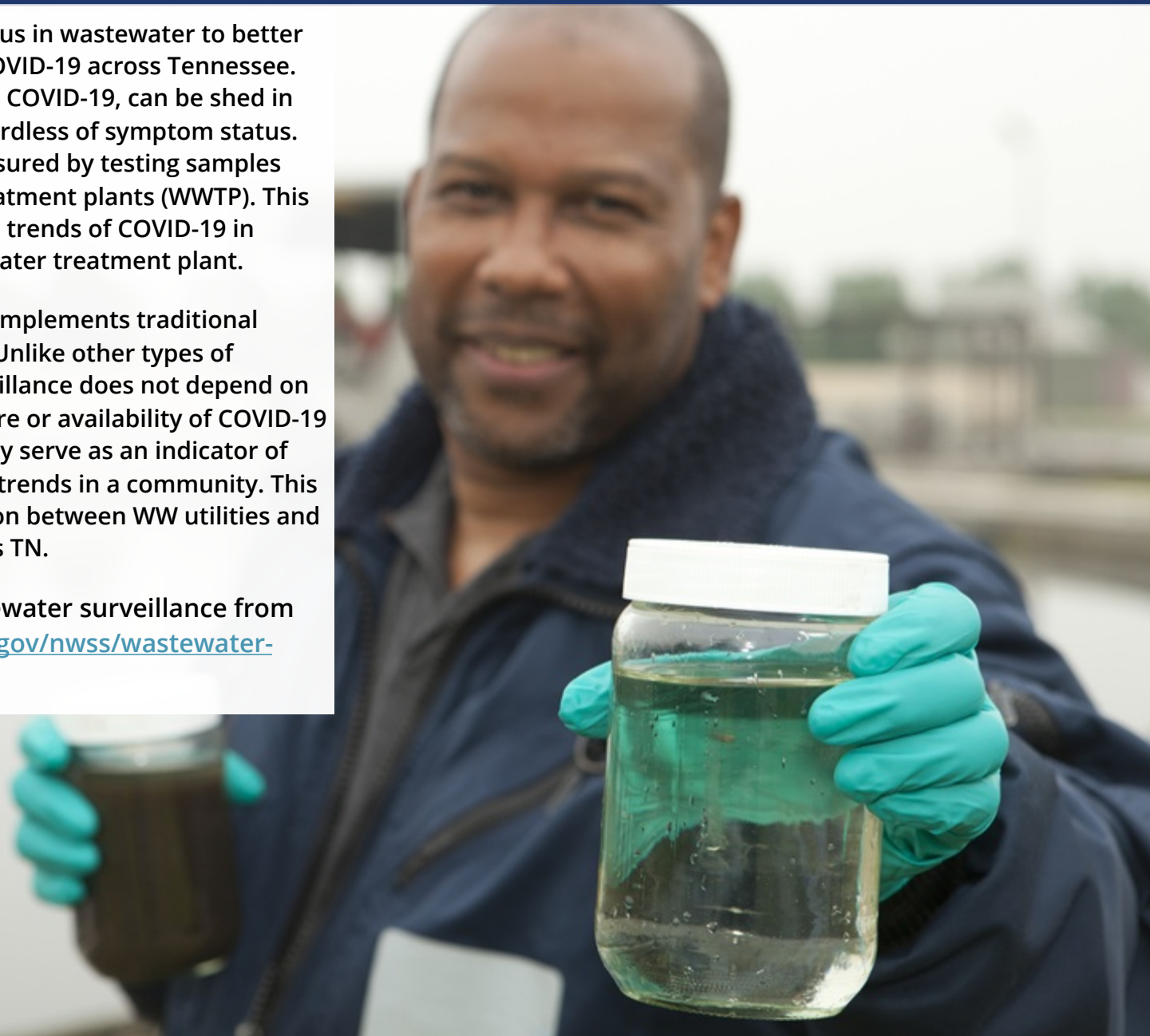
This bar chart shows the number of new clusters identified by facility type from January 1, 2022 to December 31, 2022. Long-term care facilities had the highest counts of clusters compared to educational, healthcare, congregated, and other settings.

COVID-19 and Wastewater

TDH is monitoring SARS-CoV-2 virus in wastewater to better understand the true impact of COVID-19 across Tennessee. SARS-CoV-2, the virus that causes COVID-19, can be shed in feces by infected individuals regardless of symptom status. Virus concentrations can be measured by testing samples from community wastewater treatment plants (WWTP). This information gives insight into the trends of COVID-19 in communities served by a wastewater treatment plant.

Wastewater (WW) surveillance complements traditional COVID-19 surveillance methods. Unlike other types of COVID-19 surveillance, WW surveillance does not depend on people having access to healthcare or availability of COVID-19 testing. WW surveillance data may serve as an indicator of increasing or decreasing disease trends in a community. This surveillance relies on collaboration between WW utilities and public health departments across TN.

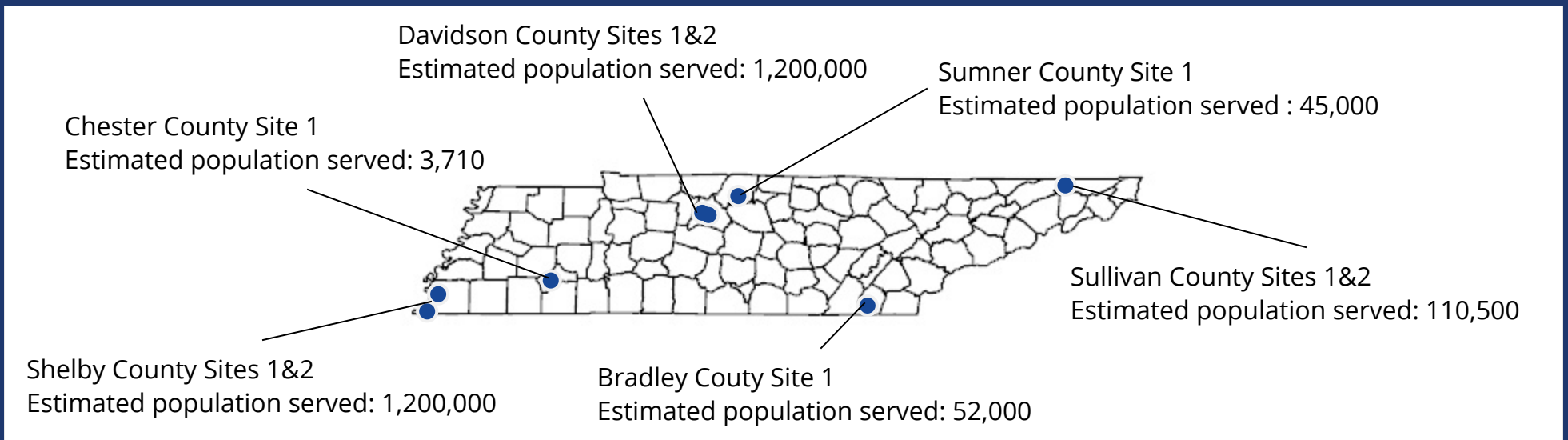
For more information on wastewater surveillance from the CDC visit: <https://www.cdc.gov/nwss/wastewater-surveillance.html>



Tennessee SARS-CoV-2 Wastewater Surveillance

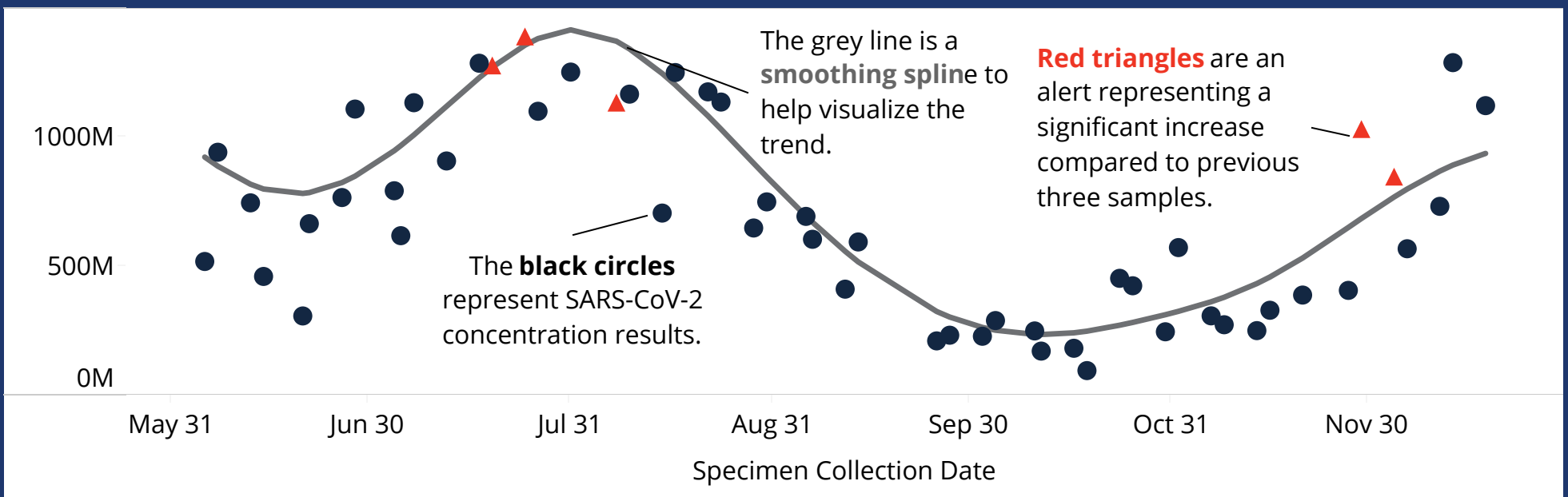
May 31st, 2022 - December 31st, 2022

Participating site locations onboarded in 2022 - Total estimated population under surveillance: 2,011,210



Bradley County Example:

The last three wastewater samples resulted in a **High** concentration category and the trend shows **No alert** ●.



Special Populations



Health Disparities and Social Vulnerability Index



According to the CDC, "health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by populations that have been disadvantaged by their social or economic status, geographic location, and environment".

Social Vulnerability refers to the potential negative effects on communities caused by natural and human influenced disasters or disease outbreaks.

The CDC Social Vulnerability Index (SVI) ranks Census tracts and counties on 16 social factors including poverty and educational attainment, and ranks them into four themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type/transportation. Each tract or county receives a ranking for each theme and one overall ranking based on all four themes. These rankings help emergency response planners and public health officials identify and map out communities that will likely need support before, during, and after a hazardous event.

For more information about health disparities visit: <https://www.cdc.gov/healthequity/whatis/index.html>

For more information about SVI visit: https://www.atsdr.cdc.gov/placeandhealth/svi/fact_sheet/fact_sheet.html



Health Disparities in Black or African American COVID-19 Cases, Hospitalizations, and Deaths

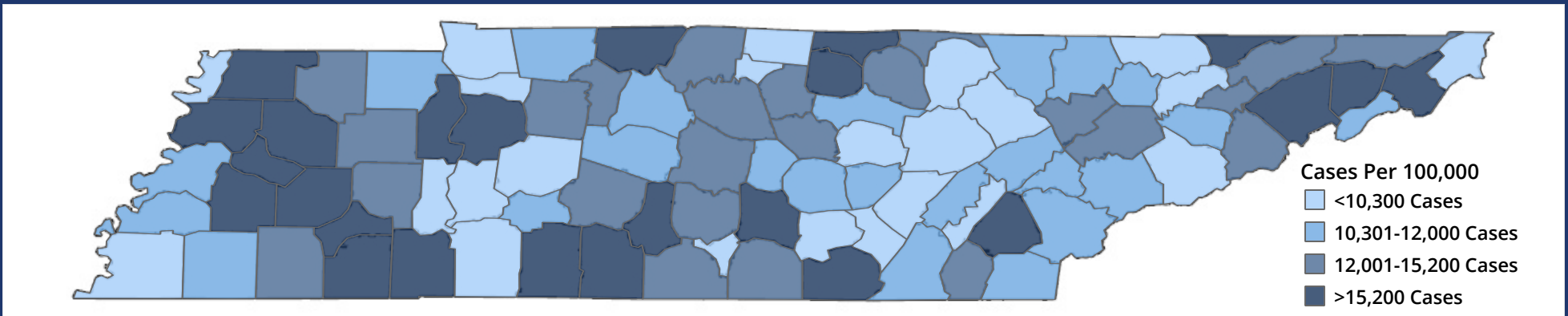


126,307
Total Cases

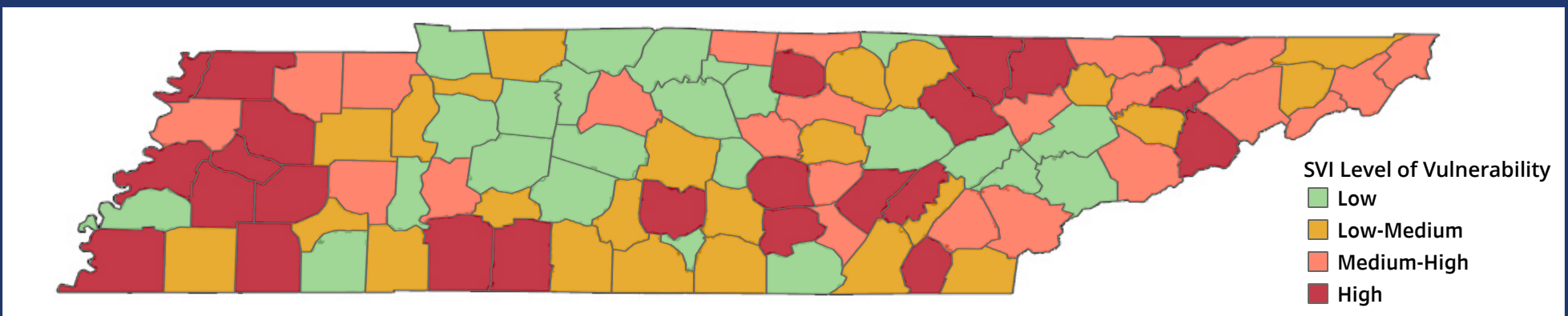
1,513
Total Hospitalizations

642
Total Deaths

Black or African American COVID-19 Cases Per 100,000 | 01/01/2022-12/31/2022



CDC Social Vulnerability Index Rankings



Featured, is a side by side of SVI rankings for Tennessee and the total 2022 COVID-19 case rate in Black or African American (AA) populations to show the association between the effects on this community and potential support needed based on this disease outbreak.

Health Disparities in Black or African American COVID-19 Cases, Hospitalizations, and Deaths



Age Range	Black/AA Cases	% of Black/AA Cases	Black/AA Hosp	% Black/AA Hosp	Black/AA Deaths	% of Black/AA Deaths
0-10 years	14,824	11.7%	31	0.2%	*	*
11-20 years	15,093	11.9%	23	0.2%	*	*
21-30 years	20,929	16.6%	46	0.2%	*	*
31-40 years	20,758	16.4%	82	0.4%	*	*
41-50 years	18,343	14.5%	143	0.8%	34	5.3%
51-60 years	16,703	13.2%	274	1.6%	91	14.2%
61-70 years	11,891	9.4%	353	3.0%	157	24.5%
71-80 years	5,416	4.3%	313	5.8%	150	23.4%
81+ years	2,341	1.9%	248	10.6%	176	27.4%
Unknown	9	0.0%	0	0.0%	*	*
Total	126,307	100.0%	1,513	100.0%	642	100.0%

Sex	Black/AA Cases	% of Black/AA Cases	Black/AA Hosp	% Black/AA Hosp	Black/AA Deaths	% of Black/AA Deaths
Female	76,621	60.7%	829	1.1%	335	52.2%
Male	49,388	39.1%	684	1.4%	306	47.7%
Unknown	298	0.2%	0	0.0%	1	0.2%
Total	126,307	100.0%	1,513	100.0%	642	100.0%

The above visualization highlights the number of cases, hospitalizations, and deaths in Black or African Americans by age groups and sex from January 1, 2022 to December 31, 2022. The highest percentage of cases were observed in young adult age groups (21-30 years) and in the female population. | *Counts less than 20 have been suppressed due to data privacy.

Health Disparities in Hispanic COVID-19 Cases, Hospitalizations, and Deaths

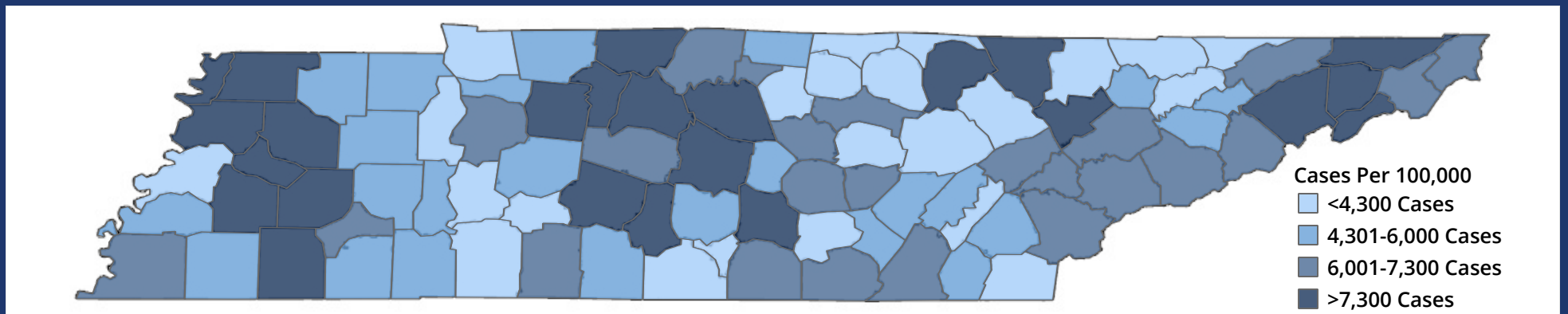


25,613
Total Cases

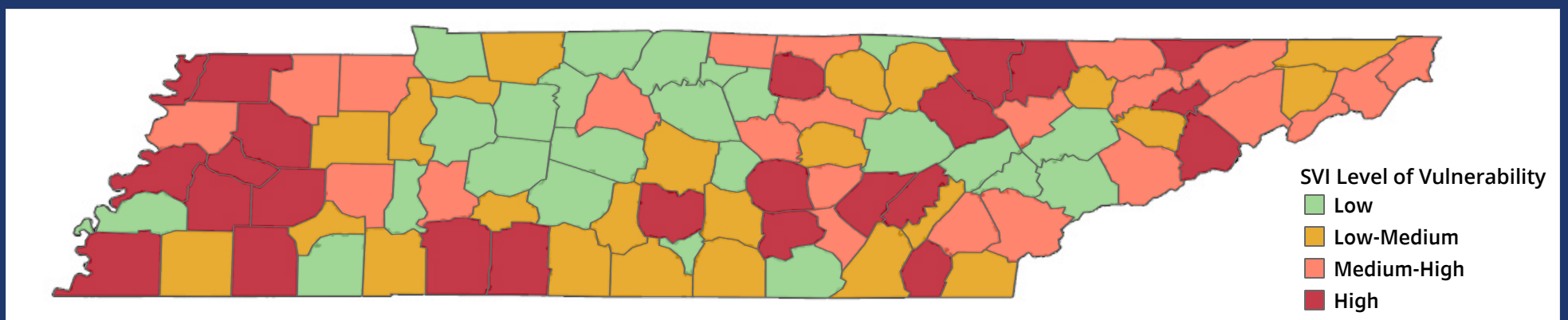
107
Total Hospitalizations

53
Total Deaths

Hispanic Total COVID-19 Cases Per 100,000 | 01/01/2022-12/31/2022



CDC Social Vulnerability Index Rankings



Featured, is a side by side of SVI rankings for Tennessee and the total 2022 COVID-19 case rate in Hispanic populations to show the association between the effects on this community and potential support needed based on this disease outbreak.

Health Disparities in Hispanic COVID-19 Cases, Hospitalizations, and Deaths

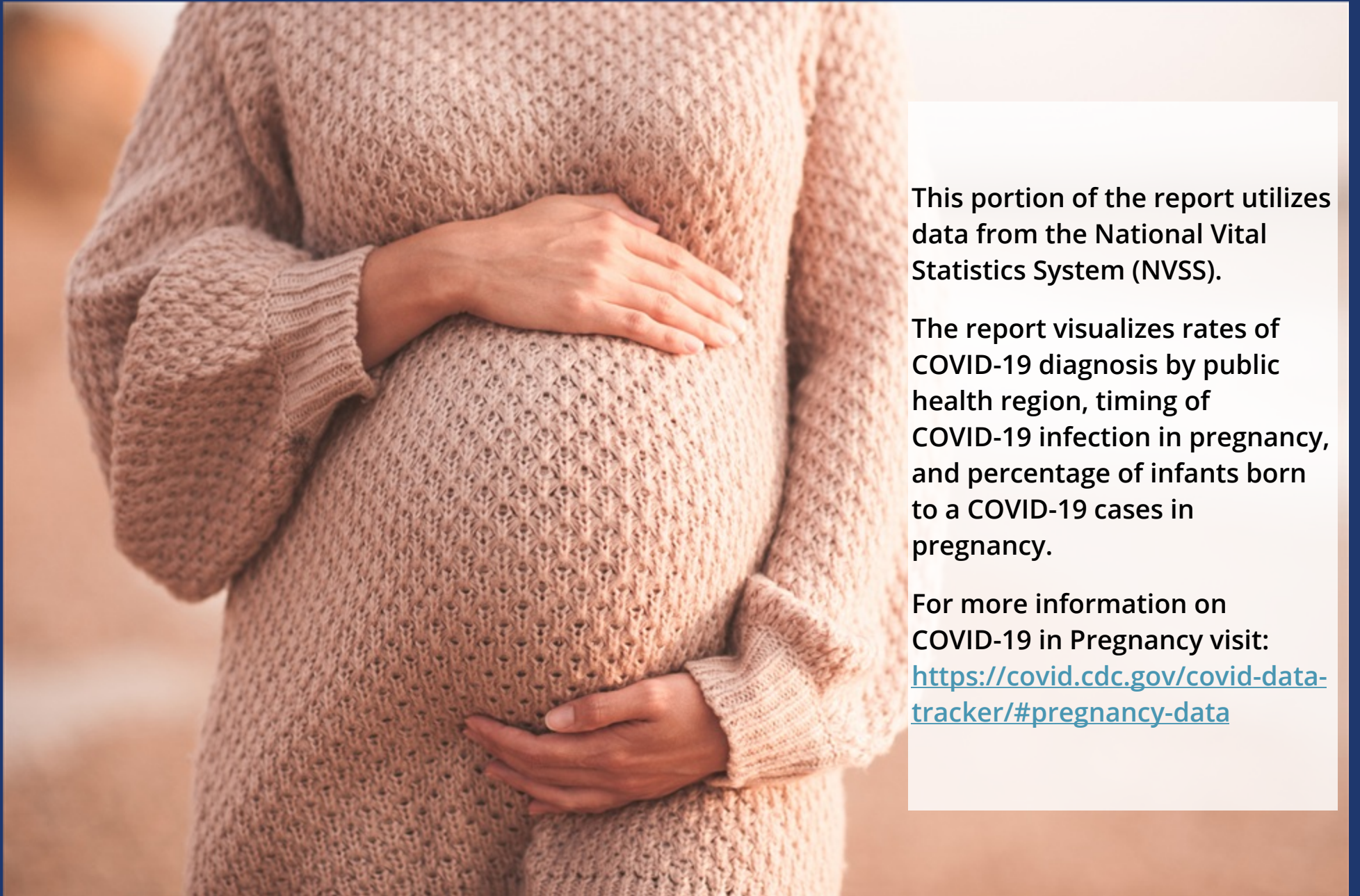


Age Range	Hispanic Cases	% of Hispanic Cases	Hispanic Hosp	% of Hispanic Hosp	Hispanic Deaths	% of Hispanic Deaths
0-10 years	5,207	20.3%	*	*	*	*
11-20 years	5,145	20.1%	*	*	*	*
21-30 years	4,520	17.6%	*	*	*	*
31-40 years	3,733	14.6%	*	*	*	*
41-50 years	3,225	12.6%	*	*	*	*
51-60 years	2,054	8.0%	*	*	*	*
61-70 years	1,050	4.1%	25	2.4%	*	*
71-80 years	456	1.8%	*	*	*	*
81+ years	221	0.9%	*	*	*	*
Unknown	2	0.0%	0	0.0%	*	*
Total	25,613	100.0%	107	100.0%	53	100.0%

Sex	Hispanic Cases	% of Hispanic Cases	Hispanic Hosp	% of Hispanic Hosp	Hispanic Deaths	% of Hispanic Deaths
Female	14,410	56.3%	51	0.4%	23	43.4%
Male	11,066	43.2%	74	0.7%	30	56.6%
Unknown	137	0.5%	0	0.0%	0	0.0%
Total	25,613	100.0%	107	100.0%	53	100.0%

The above visualization highlights the number of cases, hospitalizations, and deaths in the Hispanic population by age groups and sex from January 1, 2022 to December 31, 2022. The highest percentage of cases were observed in younger age groups (0-10 years) and in the female population. | *Counts less than 20 have been suppressed due to data privacy.

Characteristics of COVID-19 in Pregnancy



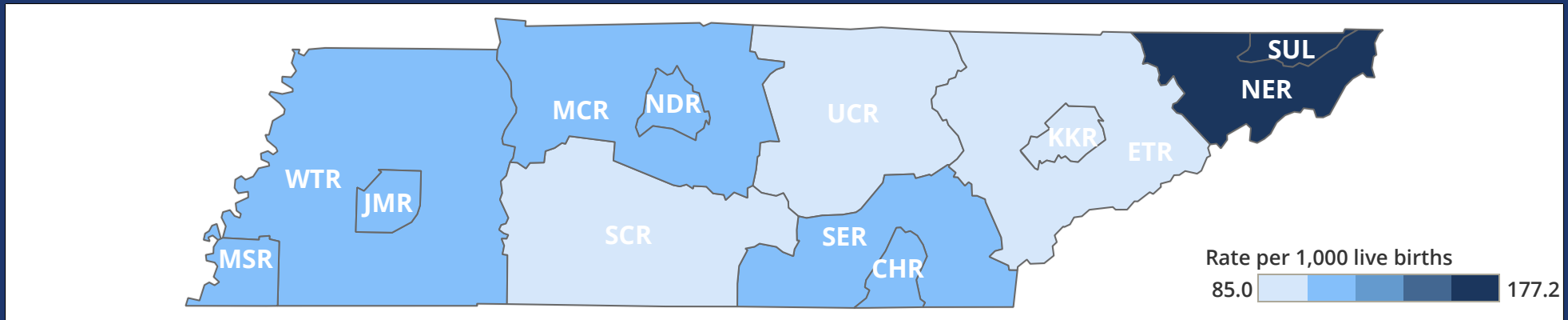
This portion of the report utilizes data from the National Vital Statistics System (NVSS).

The report visualizes rates of COVID-19 diagnosis by public health region, timing of COVID-19 infection in pregnancy, and percentage of infants born to a COVID-19 cases in pregnancy.

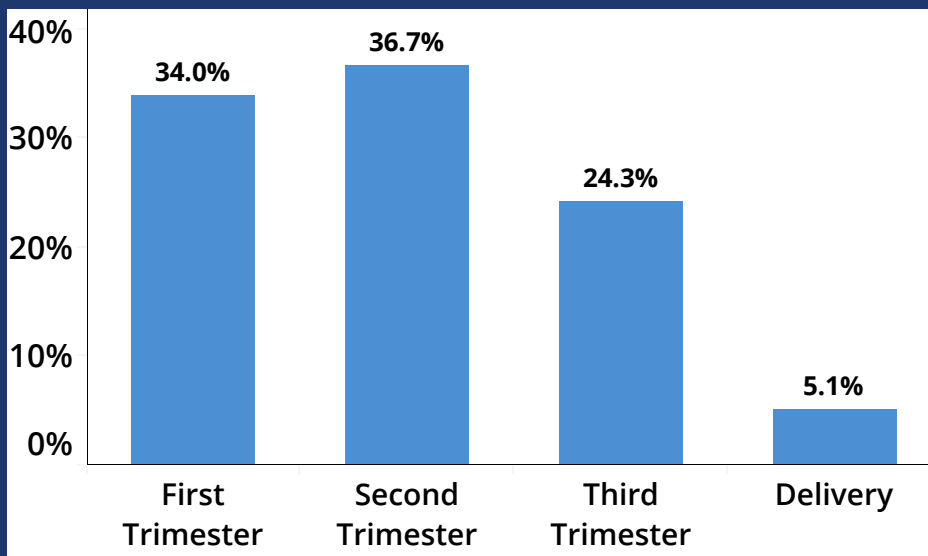
For more information on COVID-19 in Pregnancy visit: <https://covid.cdc.gov/covid-data-tracker/#pregnancy-data>

Characteristics of COVID-19 in Pregnancy*

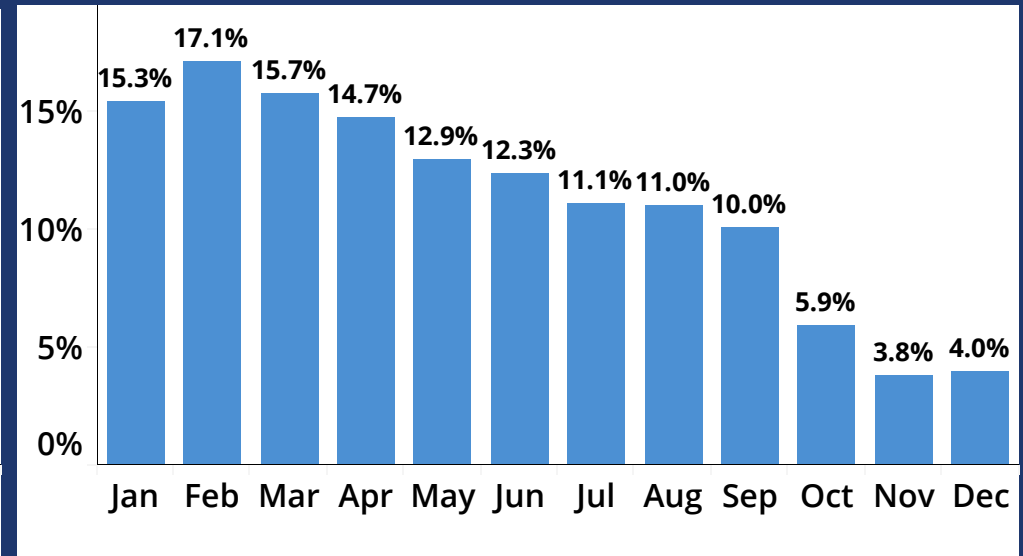
Rates of COVID-19 diagnosis in pregnancy by public health region



Timing of COVID-19 infection in pregnancy



Percentage of infants born to a COVID-19 case in pregnancy



From January 1, 2022 to December 30, 2022 there were 80,042 pregnancies completed in TN, of which 8,815 (11%) had a PCR-confirmed COVID-19 diagnosis in pregnancy.

*Only pregnancies that have resulted in a live birth are included in these data; therefore, data for pregnancies that are ongoing are not presented here.

COVID-19 in Children 0-18



This portion of the report covers the COVID-19 numbers for school aged children 0-18 years. The report visualizes the number of 0-18 cases, 0-18 cases by age group, and 0-18 cases by region.

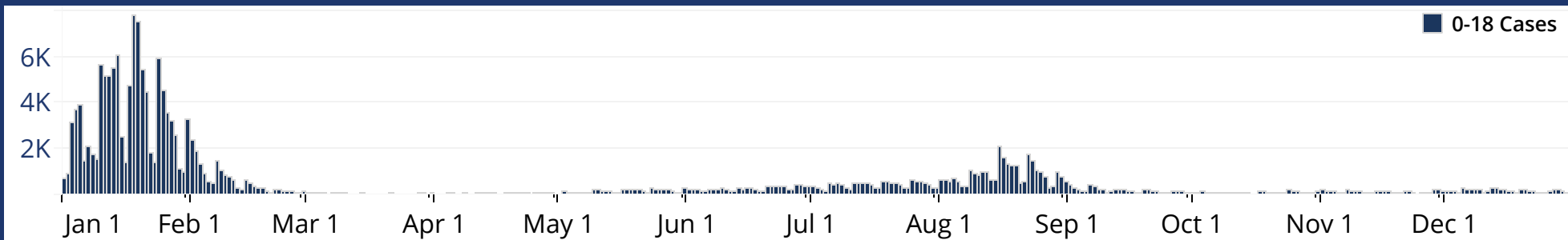
For more information on children 0-18 years in Tennessee visit:

<https://www.tn.gov/health/cedep/ncov/data/special-populations.html>

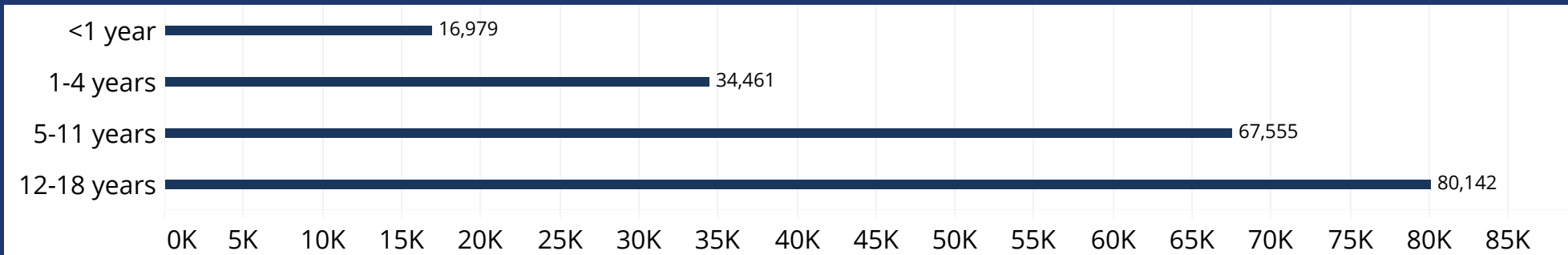
COVID-19 in Children 0-18 Years

199,137 Cases	197 Hospitalizations	* Deaths
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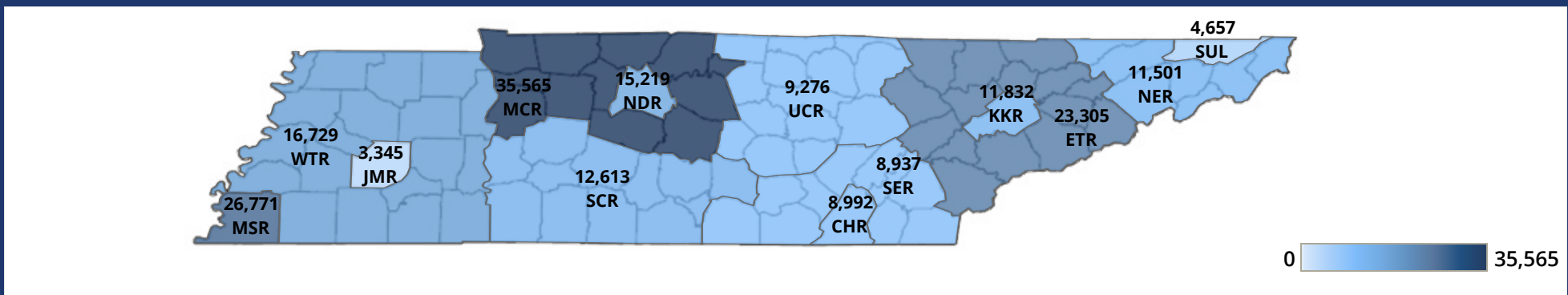
Children Aged 0-18 Years: COVID-19 Cases



Cases by Age

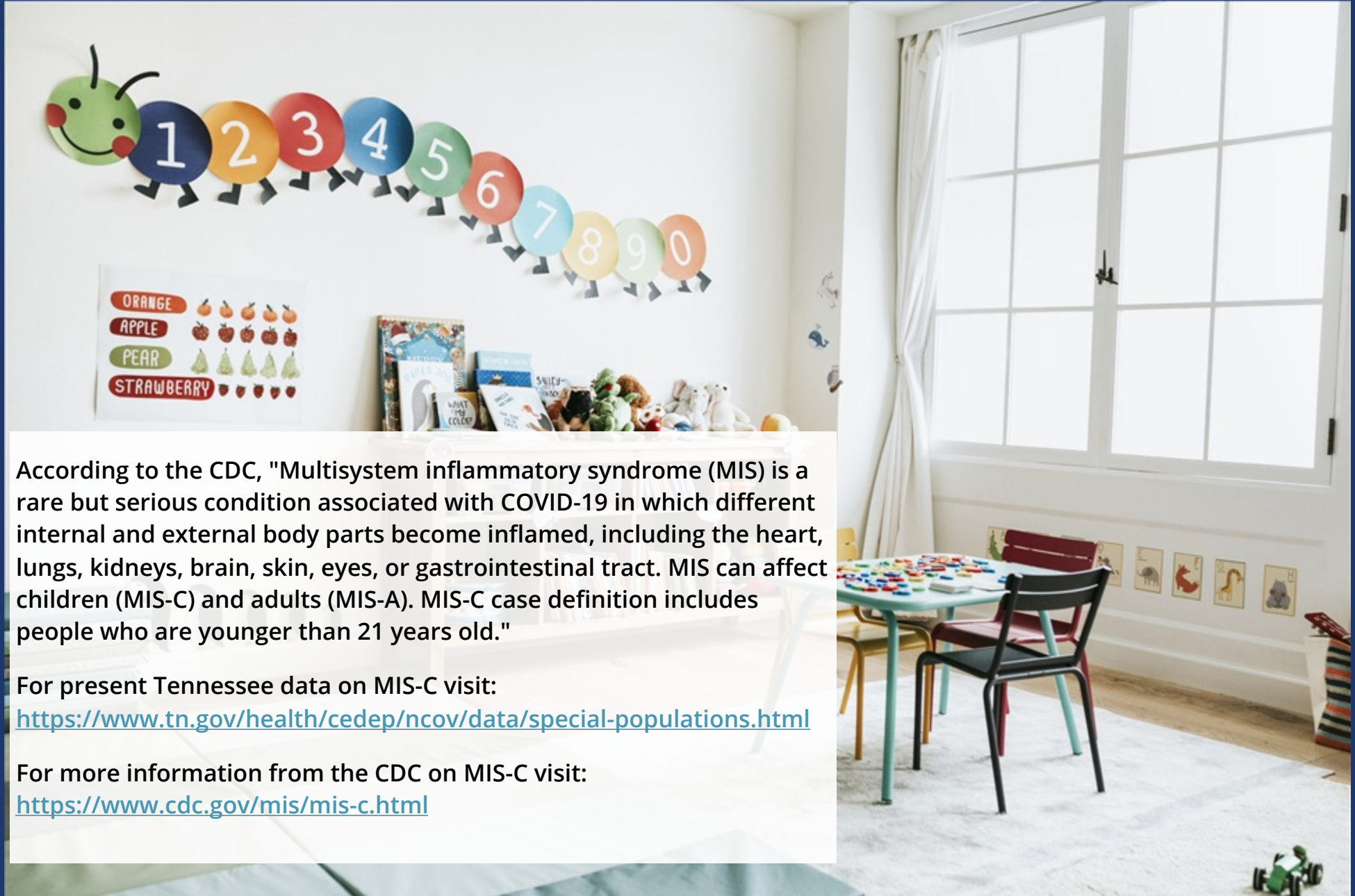


Cases by Region for Children 0-18 Years



These visualizations describe the number of COVID-19 cases in children 0-18 years by date, age group, and region. Overall cases in children 0-18 years were the highest in the beginning of 2022 and a small increase near the later half of the year. | *Counts less than 20 have been suppressed due to data privacy.

Multisystem Inflammatory Syndrome in Children (MIS-C)



According to the CDC, "Multisystem inflammatory syndrome (MIS) is a rare but serious condition associated with COVID-19 in which different internal and external body parts become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal tract. MIS can affect children (MIS-C) and adults (MIS-A). MIS-C case definition includes people who are younger than 21 years old."

For present Tennessee data on MIS-C visit:

<https://www.tn.gov/health/cedep/ncov/data/special-populations.html>

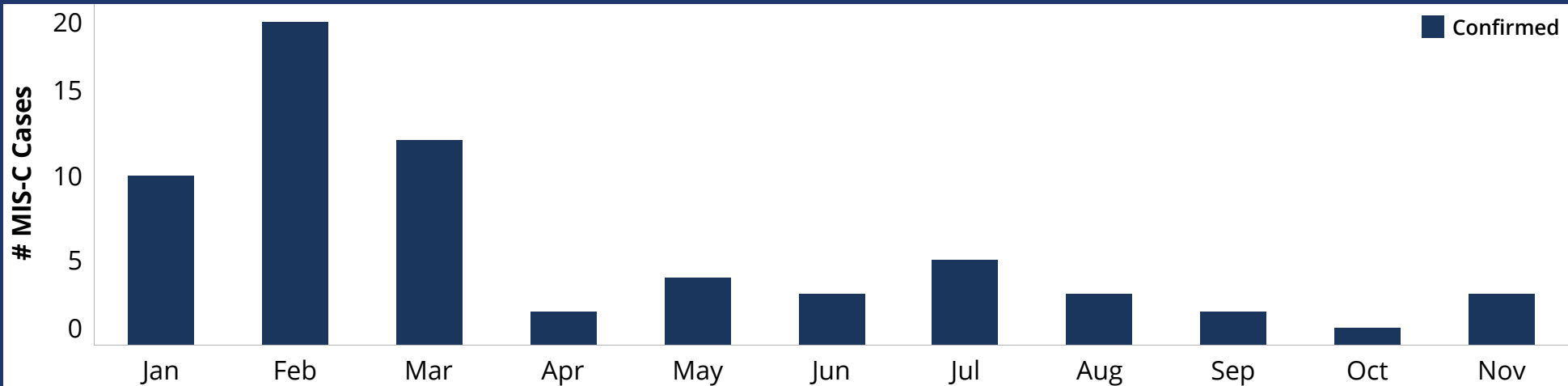
For more information from the CDC on MIS-C visit:

<https://www.cdc.gov/mis/mis-c.html>

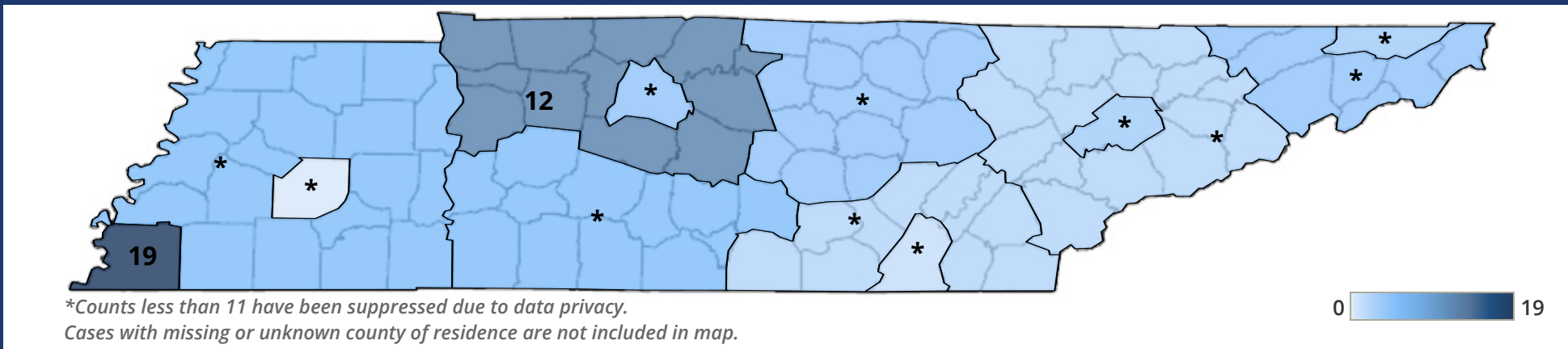
Multi-System Inflammatory Syndrome in Children (MIS-C)

64 Confirmed	* Probable Cases	* Under Investigation
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MIS-C Cases by Month



MIS-C Cases by PHC Region



These visualizations highlight the number of MIS-C cases and cases by region. Overall COVID-19 cases decreased for 2022 and MIS-C cases started to stabilize at lower levels.

COVID Trends Over the Years: 2020-2022



Tennessee reported its first lab confirmed case of COVID-19 on March 05, 2020. Since then, Tennessee has reported 585,505 cases with 21,682 (3.7%) hospitalizations and 6,907 (1.1%) deaths. COVID+ cases, hospitalizations and deaths continued to rise through the year with a surge from the Alpha variant (B.1.1.7) and Delta variant (B.1.617.2) in the later months of 2020 and reached its peak at the conclusion of 2020. As the cases and deaths began to surge in Tennessee, the U.S. Food and Drug Administration (FDA) approved Emergency Use Authorizations (EUAs) of the COVID-19 vaccine for two dose primary series of Pfizer on December 11, 2020, and Moderna on December 17, 2020.

In the second year into the pandemic (2021), Tennessee reported 850,510 cases with 22,377 (2.6%) hospitalizations and 13,854 (1.6%) deaths. The cases peaked in the beginning of the year with the highest number of cases in January, followed by the Delta variant surge (B.1.617.2) in August-September and ended with the Omicron variant (B.1.1.529) surge in December. These surges landed the Delta and Omicron variants on CDC's Important Variants of Concern (VOC) list and contributed to the significant increase of cases, hospitalizations, and deaths in 2021. Vaccines continued to be distributed by TDH using a phased rollout. Shipment and administration of doses were stalled by severe winter storms in mid-February. The FDA approved EUA for Johnson & Johnson vaccine on February 27, 2021. Vaccinations were expanded among more age groups with booster shot rollouts later in the year. The Pfizer vaccine was approved for children 12-15 years on May 10, 2021, then approved for children 5 to 11 years on October 29, 2021. Booster shots were endorsed for immunocompromised individuals on August 13, 2021, all adults on November 19, 2021, and adolescents on December 10, 2021.

COVID Trends Over the Years: 2020-2022 Continued



Compared to 2020, the percent of 2021 cases who were hospitalized from COVID-19 decreased from 3.7% to 2.6% while the percent of cases who died from COVID-19 increased from 1.1% to 1.6%. Cases among African Americans went up from 13.7% to 14.9%. However, the number of hospitalizations and deaths decreased from 2020. Hospitalizations were down from 27.1% to 19.8% and deaths went down from 18.3% to 16.5%. Similarly, deaths among Hispanics for the year 2021 were lower when compared to previous year. Among ages 81 years and older the percent of hospitalizations decreased from 19.3% to 16.1%, but the percent of deaths went up significantly from 14.3% to 21.5%.

In 2022, the third year into the pandemic, Tennessee reported 1,003,773 COVID-19 cases, with 8,706 (0.9%) hospitalizations, and 7,828 (0.8%) deaths. There was significant increase in number of cases in 2022, but the percent hospitalizations from COVID-19 decreased from 2.6% to 0.9% along with deaths from 1.6% to 0.8%. The highest number of cases occurred at the beginning of the year in January and February during the Omicron variant surge. Important Variants of Concern (VOC) during the year included Omicron and several subvariants, including BA.5, BQ.1, and BQ.1.1. Vaccine administration continued with booster doses approved for children 5 through 11 years on May 17, 2022. The FDA issued EUA for Novavax two-dose primary series on August 05, 2022. Bivalent formulations of Pfizer and Moderna were added to EUAs for use as booster doses in adults on August 26, 2022, and children on October 12, 2022.

COVID Trends Over the Years: 2020-2022 Continued



Cases among African Americans went down from 14.9% to 13.6% when compared to 2021, the number of hospitalizations and deaths also decreased from 2021, from 19.8% to 17.7% for hospitalizations and 16.5% to 12.3% for deaths. In 2022, Hispanics accounted for 2.7% of cases, 2.0% of hospitalizations and 1.4% of deaths which was lower when compared to previous year (3.8% of cases, 3.2% of hospitalizations and 2.1% of deaths for the year 2021). Compared to 2021, the percent of hospitalizations among ages 81 years and older decreased significantly from 16.1% to 6.7%, and the percent of deaths from 21.5% to 8.2%.

Although there has been a decline in cases, COVID has transformed from being in a pandemic stage to be circulating endemically. Tennessee will continue monitoring COVID with its emerging variants.

Acknowledgments



Acknowledgments:

Dr. John Dunn
Dr. Mary-Margaret Fill

COVID-19 Clusters Team
COVID-19 Wastewater Surveillance Team
Maternal and Child Health Team
TennIIS Data Quality and Management Team

COVID-19 Support Branch:
COVID-19 Case and Community Support Team
COVID-19 Data Entry Team
COVID-19 Data Quality Team
Genomic Surveillance Team

All staff who supported the TDH COVID-19 Pandemic Response
County, Regional and Metropolitan Health Departments



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Centers for Disease Control and Prevention. (2022, February 9). COVID-19 vaccines while pregnant or breastfeeding. 2022. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html>. Accessed February 9, 2023.

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Appendix



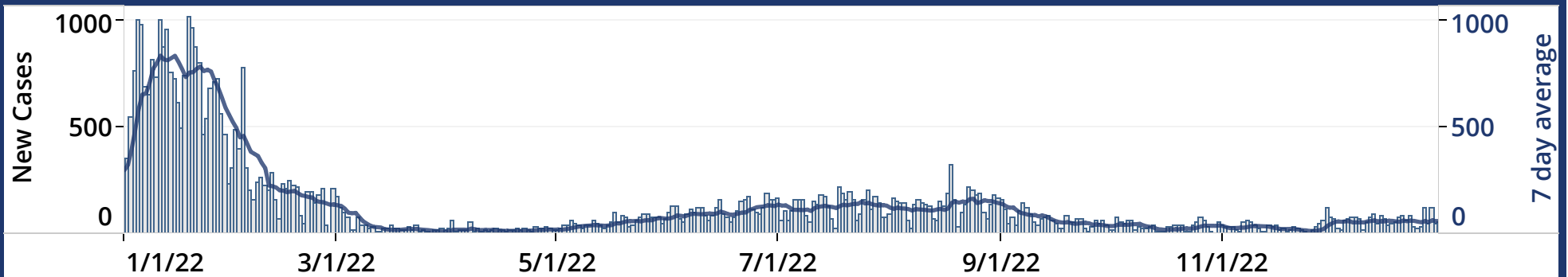
Chattanooga Hamilton Region (CHR)



47,720
Total Cases

716
Total Hospitalizations

359
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	31,010	65.0%	0-10 years	4,965	10.4%
	Black or African American	8,305	17.4%	11-20 years	5,530	11.6%
	Asian	883	1.9%	21-30 years	8,509	17.8%
	American Indian or Alaska Native	108	0.2%	31-40 years	7,470	15.7%
	Native Hawaiian or Other Pacific Islander	54	0.1%	41-50 years	6,197	13.0%
	Other/Multiracial	2,794	5.9%	51-60 years	5,940	12.4%
	Unknown	4,566	9.6%	61-70 years	4,639	9.7%
	Total	47,720	100.0%	71-80 years	2,944	6.2%
ETHNICITY	Hispanic	1,480	3.1%	81+ years	1,526	3.2%
	Not Hispanic/Latino	32,587	68.3%	Total	47,720	100.0%
	Unknown	13,653	28.6%			
	Total	47,720	100.0%			
SEX	Female	26,429	55.4%			
	Male	21,198	44.4%			
	Unknown	93	0.2%			
	Total	47,720	100.0%			

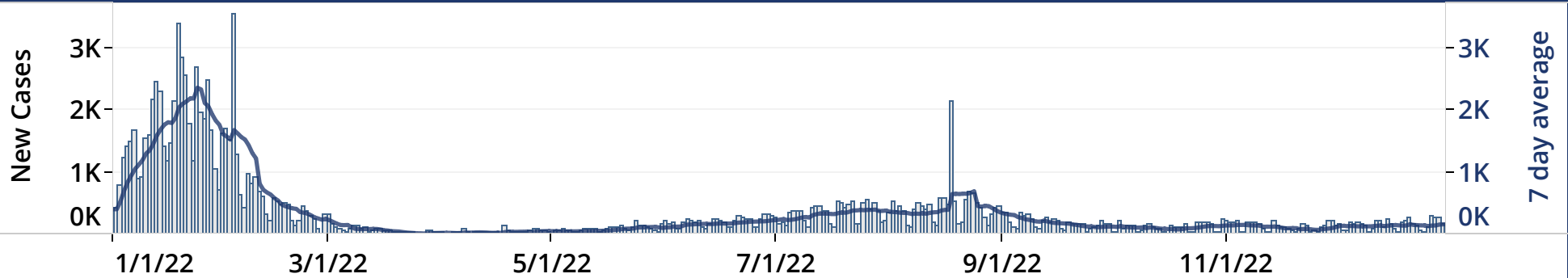
East Tennessee Region (ETR)



121,326
Total Cases

600
Total Hospitalizations

1,140
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	95,203	78.5%	0-10 years	12,248	10.1%
	Black or African American	2,121	1.7%	11-20 years	14,384	11.9%
	Asian	553	0.5%	21-30 years	17,237	14.2%
	American Indian or Alaska Native	174	0.1%	31-40 years	16,021	13.2%
	Native Hawaiian or Other Pacific Islander	79	0.1%	41-50 years	16,089	13.3%
	Other/Multiracial	8,313	6.9%	51-60 years	17,252	14.2%
	Unknown	14,883	12.3%	61-70 years	13,944	11.5%
	Total	121,326	100.0%	71-80 years	9,647	8.0%
ETHNICITY	Hispanic	2,161	1.8%	81+ years	4,490	3.7%
	Not Hispanic/Latino	80,428	66.3%	Unknown	14	0.0%
	Unknown	38,737	31.9%	Total	121,326	100.0%
	Total	121,326	100.0%			
SEX	Female	68,411	56.4%			
	Male	52,135	43.0%			
	Unknown	780	0.6%			
	Total	121,326	100.0%			

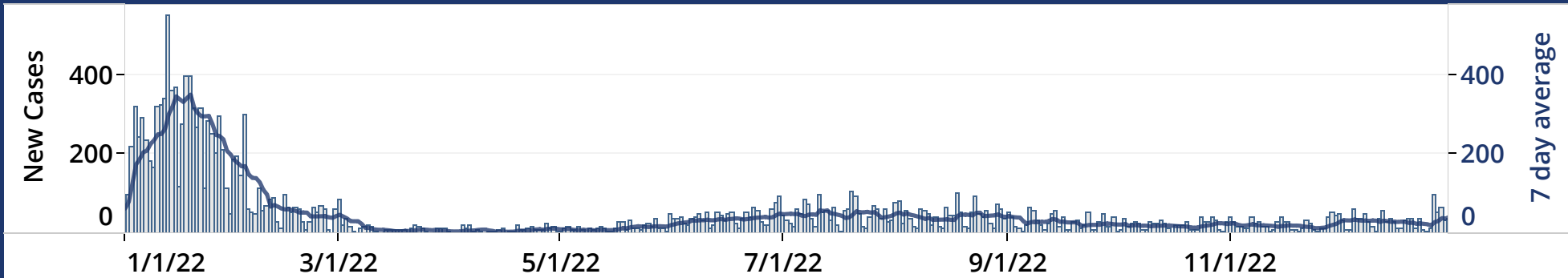
Jackson Madison Region (JMR)



18,163
Total Cases

51
Total Hospitalizations

117
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	8,619	47.5%	0-10 years	1,780	9.8%
	Black or African American	5,781	31.8%	11-20 years	1,960	10.8%
	Asian	80	0.4%	21-30 years	2,730	15.0%
	American Indian or Alaska Native	18	0.1%	31-40 years	2,535	14.0%
	Native Hawaiian or Other Pacific Islander	16	0.1%	41-50 years	2,429	13.4%
	Other/Multiracial	734	4.0%	51-60 years	2,464	13.6%
	Unknown	2,915	16.0%	61-70 years	2,216	12.2%
	Total	18,163	100.0%	71-80 years	1,399	7.7%
ETHNICITY	Hispanic	301	1.7%	81+ years	649	3.6%
	Not Hispanic/Latino	10,504	57.8%	Unknown	1	0.0%
	Unknown	7,358	40.5%	Total	18,163	100.0%
	Total	18,163	100.0%			
SEX	Female	10,437	57.5%			
	Male	7,662	42.2%			
	Unknown	64	0.4%			
	Total	18,163	100.0%			

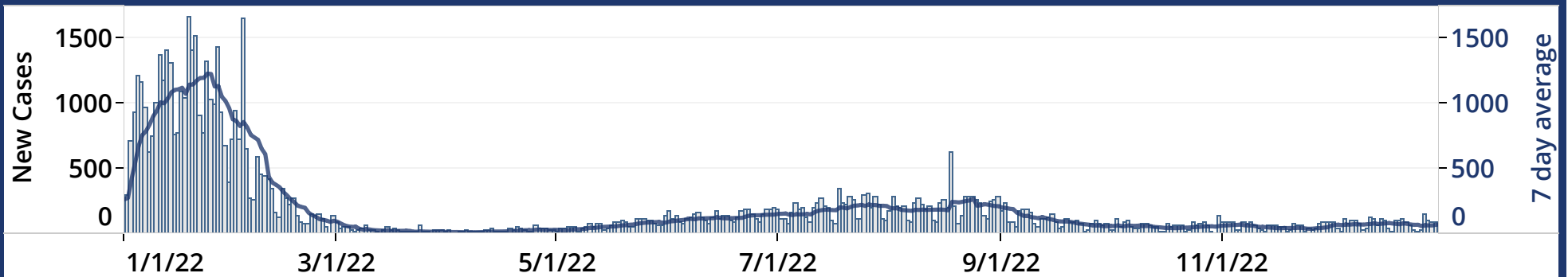
Knox Region (KKR)



68,342
Total Cases

551
Total Hospitalizations

494
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	45,589	66.7%	0-10 years	6,477	9.5%
	Black or African American	5,396	7.9%	11-20 years	7,310	10.7%
	Asian	1,176	1.7%	21-30 years	11,965	17.5%
	American Indian or Alaska Native	138	0.2%	31-40 years	11,027	16.1%
	Native Hawaiian or Other Pacific Islander	71	0.1%	41-50 years	9,400	13.8%
	Other/Multiracial	6,729	9.8%	51-60 years	8,895	13.0%
	Unknown	9,243	13.5%	61-70 years	6,756	9.9%
	Total	68,342	100.0%	71-80 years	4,147	6.1%
ETHNICITY	Hispanic	1,310	1.9%	81+ years	2,360	3.5%
	Not Hispanic/Latino	40,531	59.3%	Unknown	5	0.0%
	Unknown	26,501	38.8%	Total	68,342	100.0%
	Total	68,342	100.0%			
SEX	Female	38,451	56.3%			
	Male	29,561	43.3%			
	Unknown	330	0.5%			
	Total	68,342	100.0%			

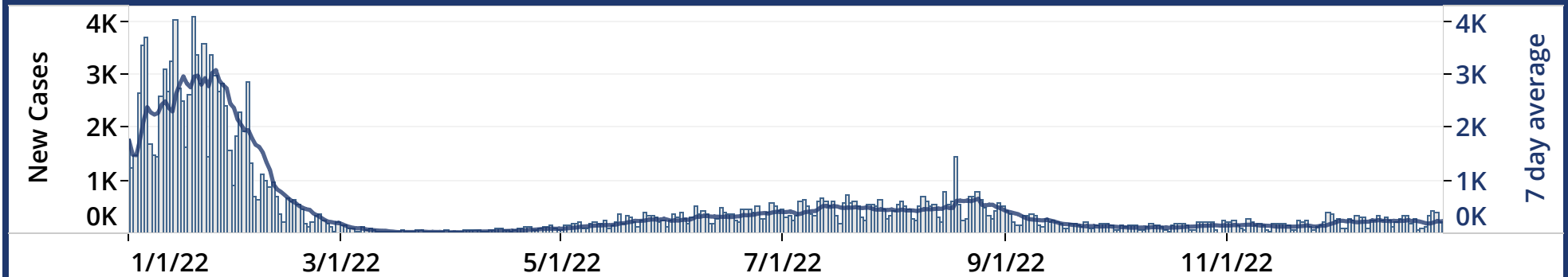
Mid Cumberland Region (MCR)



171,793
Total Cases

1,119
Total Hospitalizations

1,111
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	109,802	63.9%	0-10 years	19,161	11.2%
	Black or African American	18,800	10.9%	11-20 years	21,301	12.4%
	Asian	3,638	2.1%	21-30 years	26,804	15.6%
	American Indian or Alaska Native	429	0.2%	31-40 years	26,975	15.7%
	Native Hawaiian or Other Pacific Islander	216	0.1%	41-50 years	25,290	14.7%
	Other/Multiracial	14,203	8.3%	51-60 years	22,709	13.2%
	Unknown	24,707	14.4%	61-70 years	15,799	9.2%
	Total	171,795	100.0%	71-80 years	9,362	5.4%
ETHNICITY	Hispanic	6,160	3.6%	81+ years	4,376	2.5%
	Not Hispanic/Latino	101,576	59.1%	Unknown	18	0.0%
	Unknown	64,059	37.3%	Total	171,795	100.0%
	Total	171,795	100.0%			
SEX	Female	95,537	55.6%			
	Male	75,058	43.7%			
	Unknown	1,200	0.7%			
	Total	171,795	100.0%			

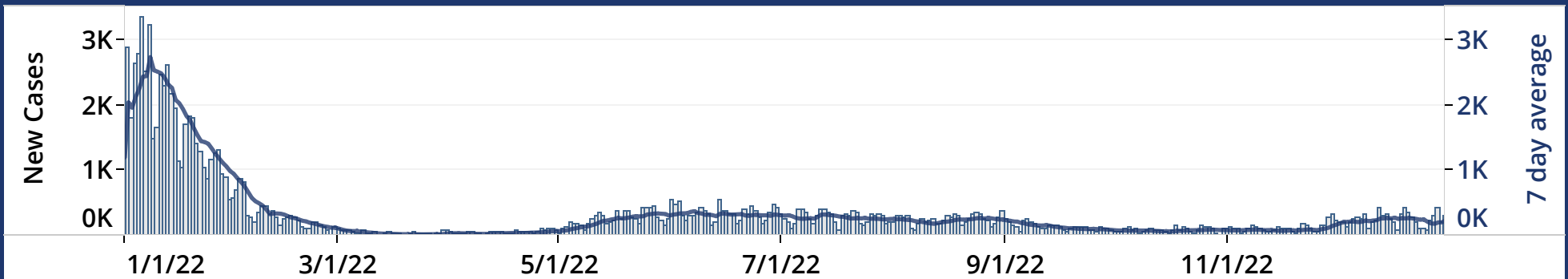
Memphis Shelby Region (MSR)



114,806
Total Cases

1,554
Total Hospitalizations

890
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	30,409	26.5%	0-10 years	15,584	13.6%
	Black or African American	50,261	43.8%	11-20 years	13,593	11.8%
	Asian	2,081	1.8%	21-30 years	17,366	15.1%
	American Indian or Alaska Native	216	0.2%	31-40 years	17,679	15.4%
	Native Hawaiian or Other Pacific Islander	98	0.1%	41-50 years	15,854	13.8%
	Other/Multiracial	7,012	6.1%	51-60 years	14,832	12.9%
	Unknown	24,729	21.5%	61-70 years	11,033	9.6%
	Total	114,806	100.0%	71-80 years	5,924	5.2%
ETHNICITY	Hispanic	3,833	3.3%	81+ years	2,923	2.5%
	Not Hispanic/Latino	69,270	60.3%	Unknown	18	0.0%
	Unknown	41,703	36.3%	Total	114,806	100.0%
	Total	114,806	100.0%			
SEX	Female	66,826	58.2%			
	Male	47,051	41.0%			
	Unknown	929	0.8%			
	Total	114,806	100.0%			

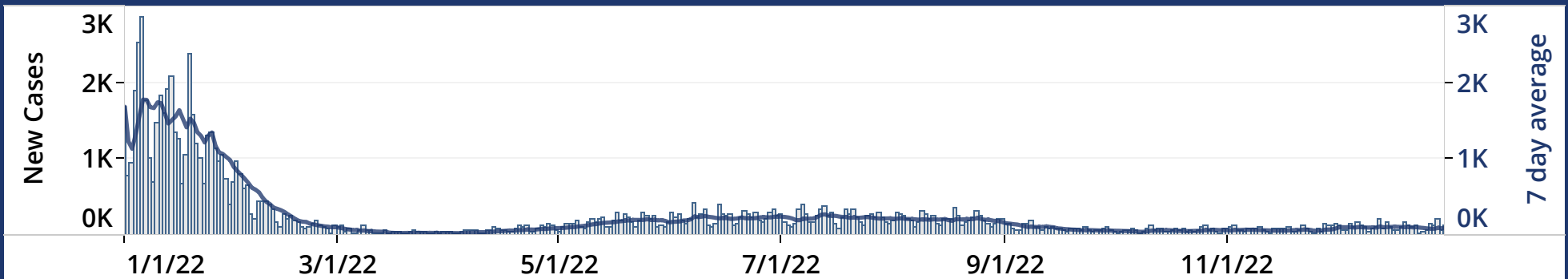
Nashville Davidson Region (NDR)



90,253
Total Cases

691
Total Hospitalizations

432
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	American Indian or Alaska Native	254	0.3%	0-10 years	8,751	9.7%
	Asian	2,277	2.5%	11-20 years	8,678	9.6%
	Black or African American	20,464	22.7%	21-30 years	20,465	22.7%
	Native Hawaiian or Other Pacific Islander	88	0.1%	31-40 years	17,550	19.4%
	Other/Multiracial	7,946	8.8%	41-50 years	11,172	12.4%
	Unknown	17,962	19.9%	51-60 years	9,822	10.9%
	White	41,262	45.7%	61-70 years	7,612	8.4%
	Total	90,253	100.0%	71-80 years	4,160	4.6%
ETHNICITY	Hispanic	5,743	6.4%	81+ years	2,029	2.2%
	Not Hispanic/Latino	52,653	58.3%	Unknown	14	0.0%
	Unknown	31,857	35.3%	Total	90,253	100.0%
	Total	90,253	100.0%			
SEX	Female	50,694	56.2%			
	Male	38,959	43.2%			
	Unknown	599	0.7%			
	Total	90,253	100.0%			

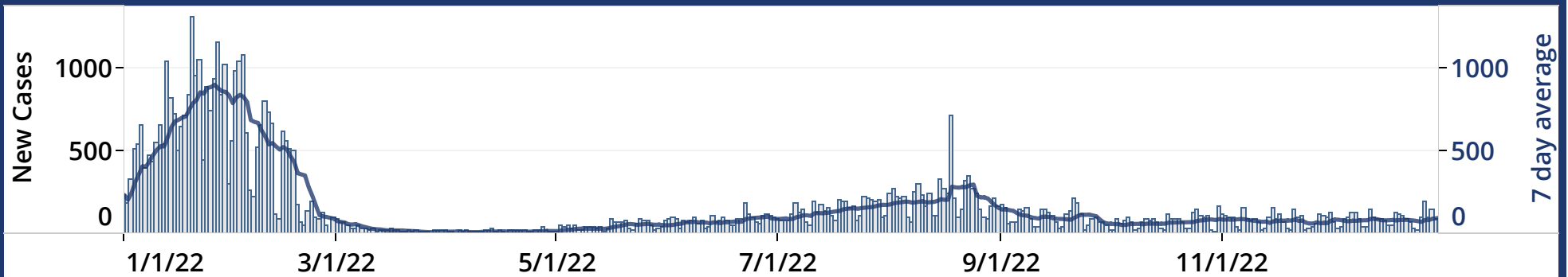
Northeast Region (NER)



58,326
Total Cases

763
Total Hospitalizations

566
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	47,217	81.0%	0-10 years	5,856	10.0%
	Black or African American	1,435	2.5%	11-20 years	7,289	12.5%
	Asian	223	0.4%	21-30 years	8,817	15.1%
	American Indian or Alaska Native	79	0.1%	31-40 years	7,785	13.3%
	Native Hawaiian or Other Pacific Islander	54	0.1%	41-50 years	7,548	12.9%
	Other/Multiracial	2,583	4.4%	51-60 years	7,953	13.6%
	Unknown	6,735	11.6%	61-70 years	6,295	10.8%
	Total	58,326	100.0%	71-80 years	4,521	7.8%
ETHNICITY	Hispanic	813	1.4%	81+ years	2,251	3.9%
	Not Hispanic/Latino	43,626	74.8%	Unknown	11	0.0%
	Unknown	13,889	23.8%	Total	58,326	100.0%
	Total	58,326	100.0%			
SEX	Female	32,184	55.2%			
	Male	25,237	43.3%			
	Unknown	905	1.6%			
	Total	58,326	100.0%			

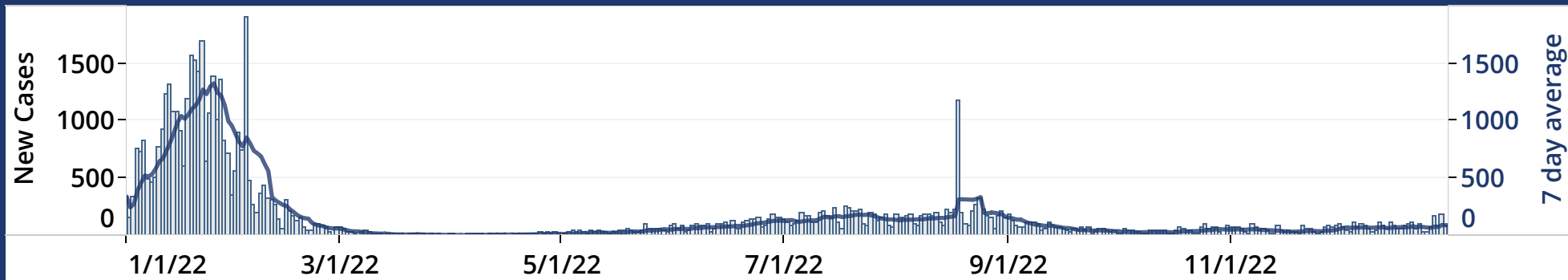
South Central Region (SCR)



58,893
Total Cases

441
Total Hospitalizations

544
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	44,689	75.9%	0-10 years	6,801	11.5%
	Black or African American	4,016	6.8%	11-20 years	7,403	12.6%
	Asian	276	0.5%	21-30 years	9,003	15.3%
	American Indian or Alaska Native	113	0.2%	31-40 years	8,689	14.8%
	Native Hawaiian or Other Pacific Islander	50	0.1%	41-50 years	7,731	13.1%
	Other/Multiracial	3,215	5.5%	51-60 years	7,629	13.0%
	Unknown	6,534	11.1%	61-70 years	5,863	10.0%
	Total	58,893	100.0%	71-80 years	3,687	6.3%
ETHNICITY	Hispanic	1,514	2.6%	81+ years	2,058	3.5%
	Not Hispanic/Latino	41,148	69.9%	Unknown	29	0.0%
	Unknown	16,231	27.6%	Total	58,893	100.0%
	Total	58,893	100.0%			
SEX	Female	33,174	56.3%			
	Male	25,557	43.4%			
	Unknown	162	0.3%			
	Total	58,893	100.0%			

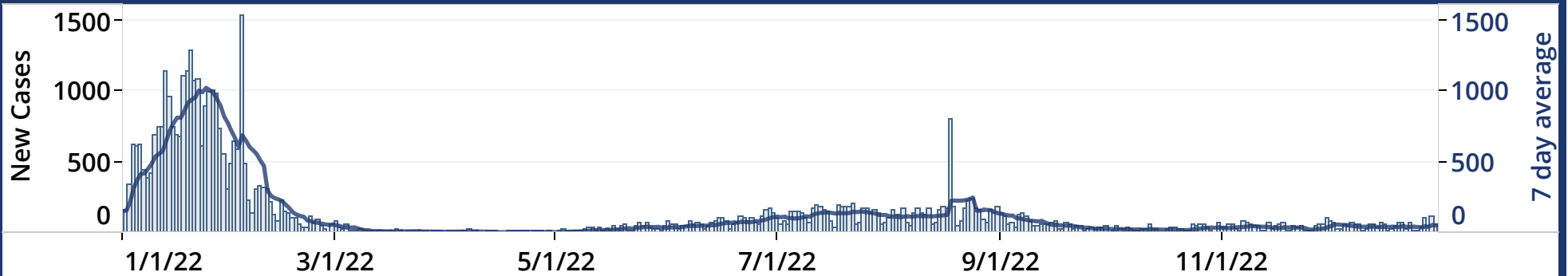
Southeast Region (SER)



46,586
Total Cases

458
Total Hospitalizations

449
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	38,106	81.8%	0-10 years	4,641	10.0%
	Black or African American	1,713	3.7%	11-20 years	5,717	12.3%
	Asian	179	0.4%	21-30 years	7,139	15.3%
	American Indian or Alaska Native	82	0.2%	31-40 years	6,324	13.6%
	Native Hawaiian or Other Pacific Islander	30	0.1%	41-50 years	6,539	14.0%
	Other/Multiracial	1,585	3.4%	51-60 years	6,436	13.8%
	Unknown	4,891	10.5%	61-70 years	4,920	10.6%
	Total	46,586	100.0%	71-80 years	3,350	7.2%
ETHNICITY	Hispanic	795	1.7%	81+ years	1,488	3.2%
	Not Hispanic/Latino	31,183	66.9%	Unknown	32	0.1%
	Unknown	14,608	31.4%	Total	46,586	100.0%
	Total	46,586	100.0%			
SEX	Female	26,069	56.0%			
	Male	20,276	43.5%			
	Unknown	241	0.5%			
	Total	46,586	100.0%			

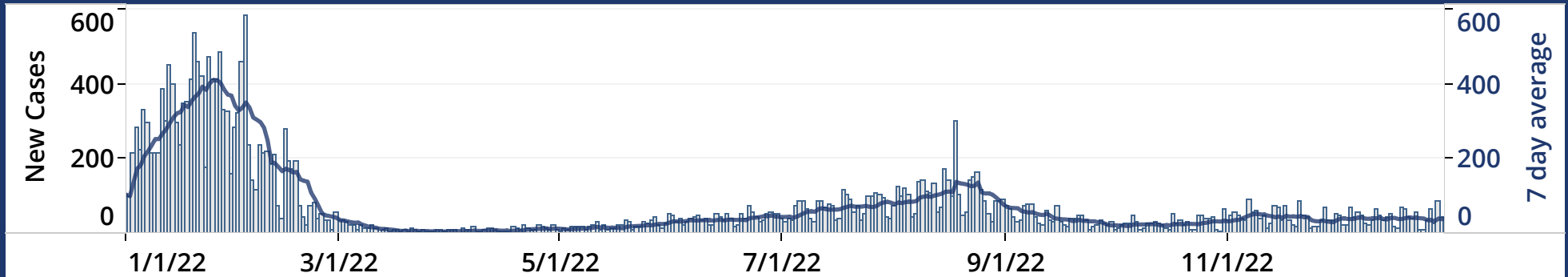
Sullivan Region (SUL)



26,764
Total Cases

408
Total Hospitalizations

249
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	American Indian or Alaska Native	34	0.1%	0-10 years	2,177	8.1%
	Asian	108	0.4%	11-20 years	3,228	12.1%
	Black or African American	529	2.0%	21-30 years	4,188	15.6%
	Native Hawaiian or Other Pacific Islander	26	0.1%	31-40 years	3,492	13.0%
	Other/Multiracial	1,109	4.1%	41-50 years	3,569	13.3%
	Unknown	2,257	8.4%	51-60 years	3,721	13.9%
	White	22,701	84.8%	61-70 years	2,986	11.2%
	Total	26,764	100.0%	71-80 years	2,214	8.3%
ETHNICITY	Hispanic	234	0.9%	81+ years	1,187	4.4%
	Not Hispanic/Latino	19,212	71.8%	Unknown	2	0.0%
	Unknown	7,318	27.3%	Total	26,764	100.0%
	Total	26,764	100.0%			
SEX	Female	14,920	55.7%			
	Male	11,673	43.6%			
	Unknown	171	0.6%			
	Total	26,764	100.0%			

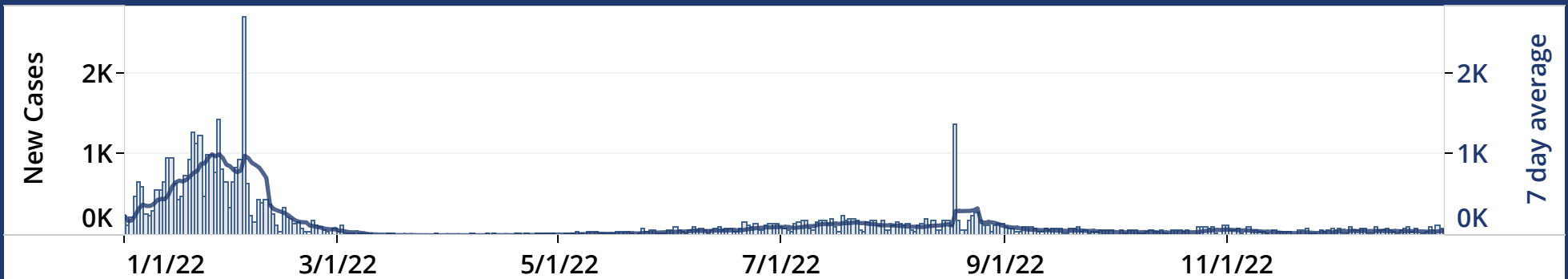
Upper Cumberland Region (UCR)



49,876
Total Cases

401
Total Hospitalizations

442
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	American Indian or Alaska Native	73	0.1%	0-10 years	5,120	10.3%
	Asian	183	0.4%	11-20 years	5,665	11.4%
	Black or African American	675	1.4%	21-30 years	7,613	15.3%
	Native Hawaiian or Other Pacific Islander	33	0.1%	31-40 years	6,651	13.3%
	Other/Multiracial	2,130	4.3%	41-50 years	6,161	12.4%
	Unknown	4,418	8.9%	51-60 years	6,656	13.3%
	White	42,364	84.9%	61-70 years	5,737	11.5%
	Total	49,876	100.0%	71-80 years	4,331	8.7%
ETHNICITY	Hispanic	1,039	2.1%	81+ years	1,932	3.9%
	Not Hispanic/Latino	34,899	70.0%	Unknown	10	0.0%
	Unknown	13,938	27.9%	Total	49,876	100.0%
	Total	49,876	100.0%			
SEX	Female	28,159	56.5%			
	Male	21,517	43.1%			
	Unknown	200	0.4%			
	Total	49,876	100.0%			

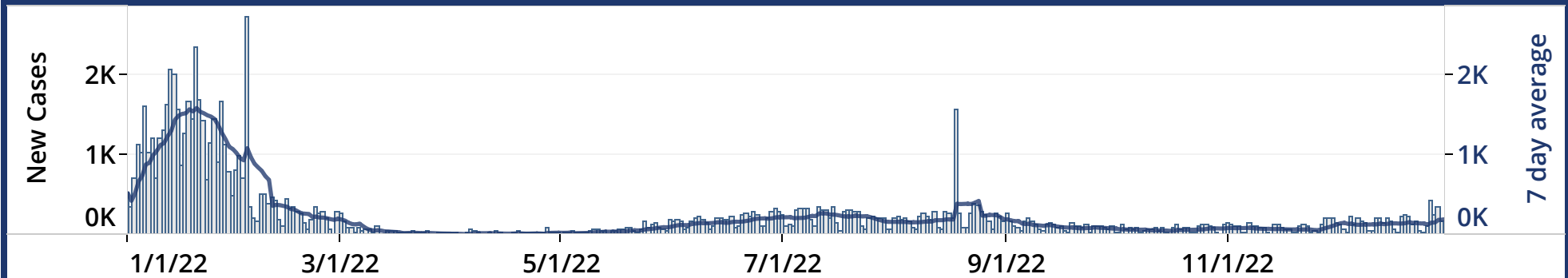
West Region (WTR)



83,907
Total Cases

633
Total Hospitalizations

891
Total Deaths



Category	Category Breakdown	Cases	% Cases	Age Group	Cases	% Cases
RACE	White	59,346	70.7%	0-10 years	8,656	10.3%
	Black or African American	12,149	14.5%	11-20 years	10,333	12.3%
	Asian	221	0.3%	21-30 years	11,804	14.1%
	American Indian or Alaska Native	116	0.1%	31-40 years	11,839	14.1%
	Native Hawaiian or Other Pacific Islander	37	0.0%	41-50 years	11,118	13.3%
	Other/Multiracial	4,201	5.0%	51-60 years	11,498	13.7%
	Unknown	7,837	9.3%	61-70 years	9,224	11.0%
	Total	83,907	100.0%	71-80 years	6,286	7.5%
ETHNICITY	Hispanic	1,162	1.4%	81+ years	3,136	3.7%
	Not Hispanic/Latino	59,807	71.3%	Unknown	13	0.0%
	Unknown	22,938	27.3%	Total	83,907	100.0%
	Total	83,907	100.0%			
SEX	Female	47,896	57.1%			
	Male	35,691	42.5%			
	Unknown	320	0.4%			
	Total	83,907	100.0%			



Department of
Health