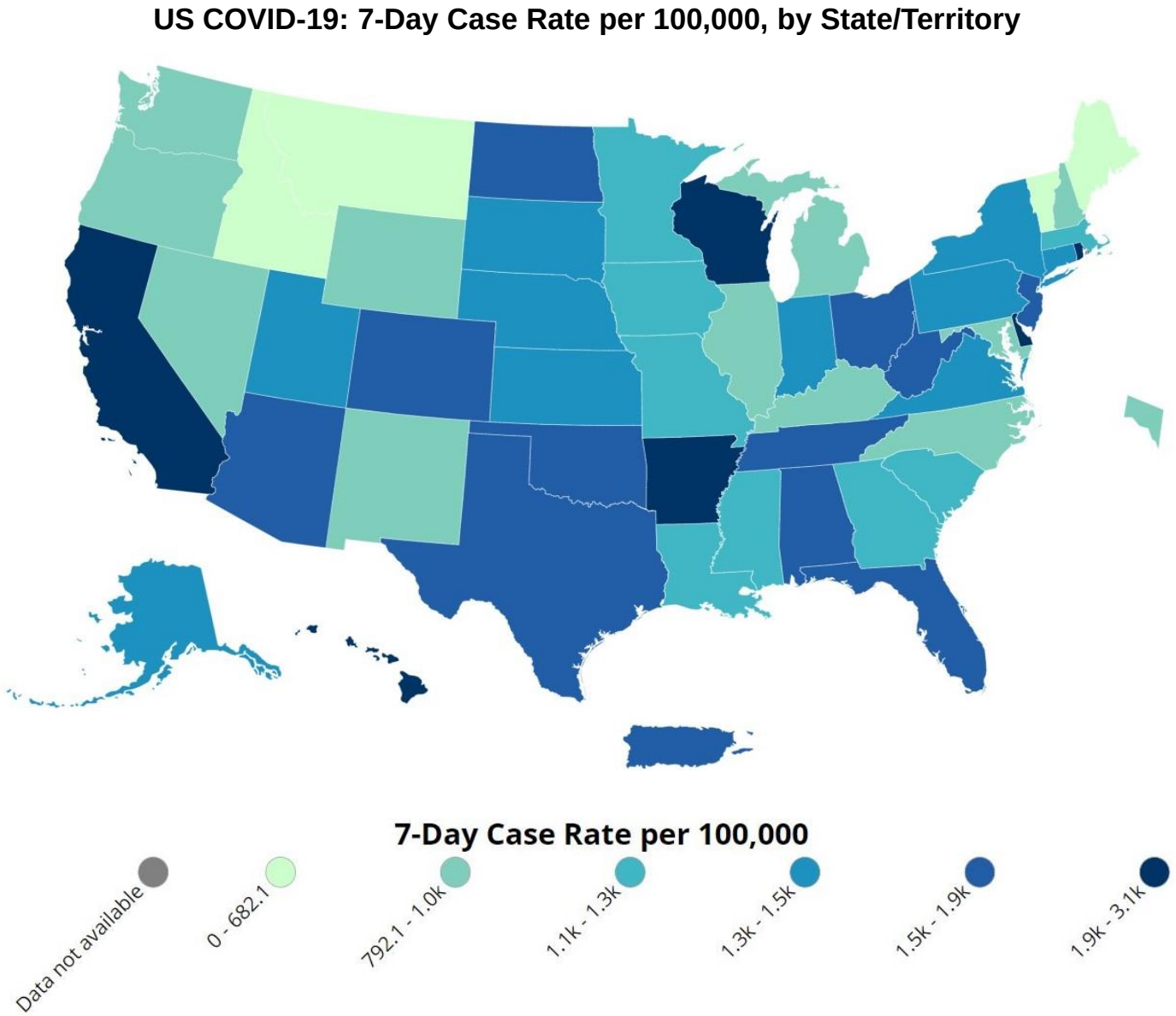
Virginia
COVID-19 Surveillance Data Update

January 20, 2022

VIRGINIA'S HEALTH IS IN OUR HANDS.
Do your part, stop the spread.

National: Weekly COVID-19 Case Rate

Updated 1/19/22



	Cases in the Last 7 Days Per 100k Population
Virginia	1,312 (-12.8%)
U.S.	1,478.6 (-8.1%)
Rhode Island	3,078.1 (-12.5%)
Wisconsin	2,770.8 (+75.4%)
Delaware	2,199.6 (+14.0%)

Our Neighbors

Rates Higher than Virginia

West Virginia, **1,702.9** (-16.8%)
Tennessee, **1702.3** (-27.0%)

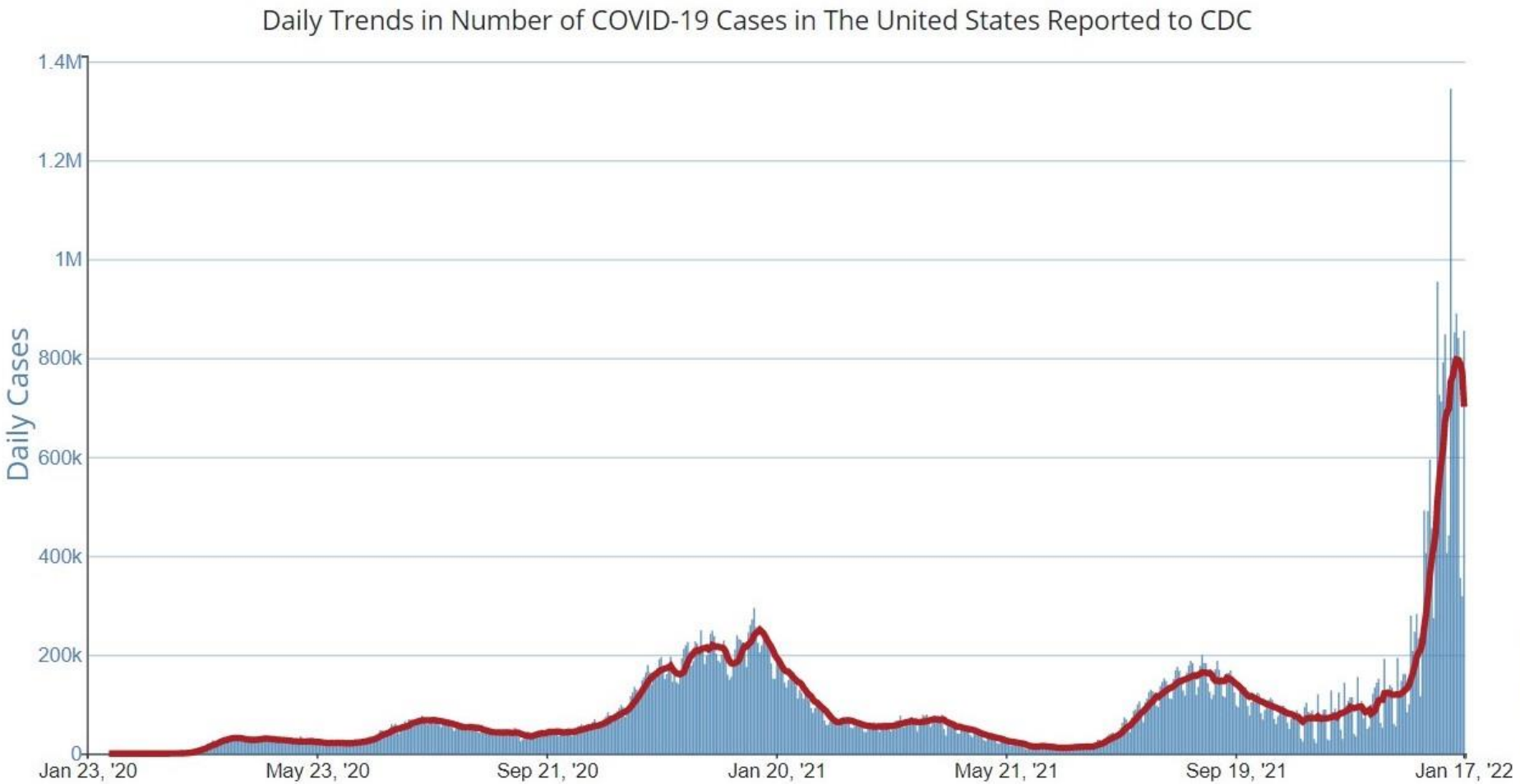
Rates Lower than Virginia:

North Carolina, **988.3** (-30.3%)
Maryland, **977.7** (-30.6%)
Kentucky, **957.9** (-24.0%)
District of Columbia, **792.5** (-53.8%)

Source CDC COVID Data Tracker Please not rate change comparisons are from the previous week's data.

National: Cases, Hospitalizations, and Deaths

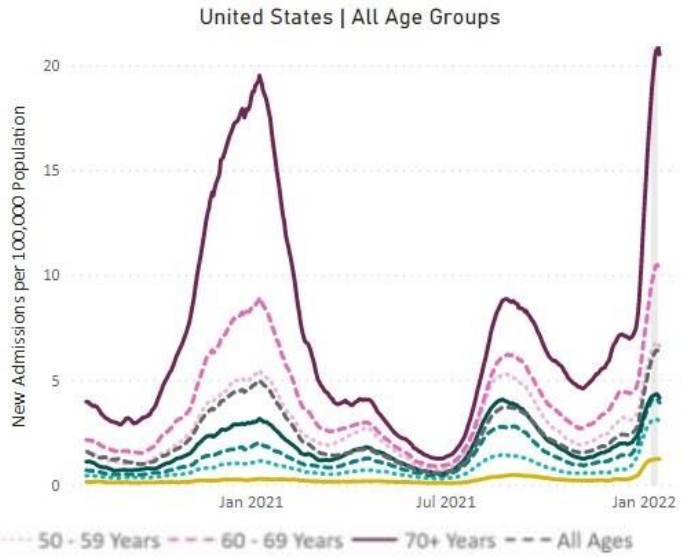
Updated 1/19/22



Compared to last week, **cases** decreased to 701,277 (7-day MA) per day (-6.8%)

Hospitalizations increased to 20,808 (7-day MA) per day (+4.2%)

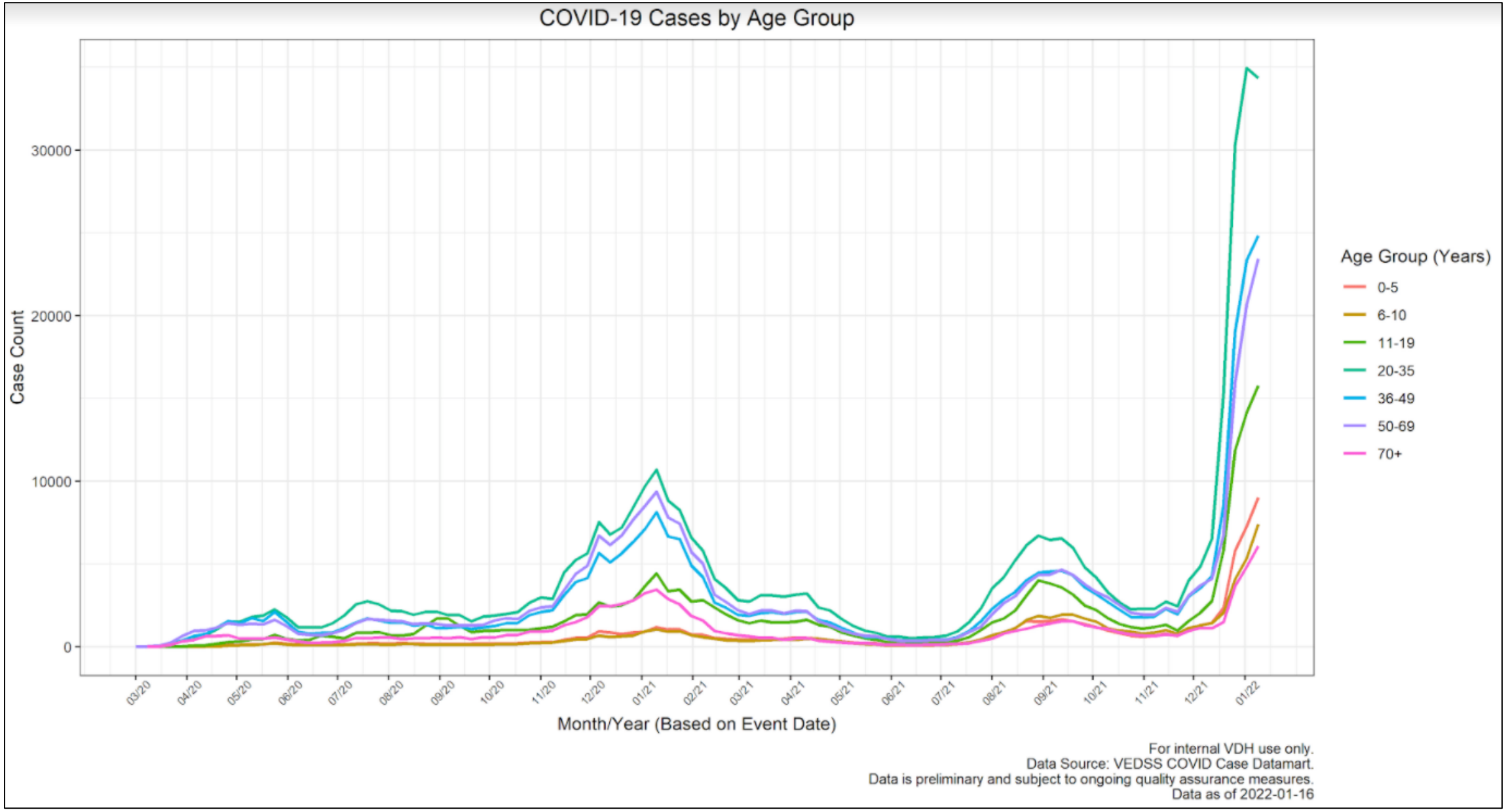
Deaths increased to 1,633 (7-day MA) per day (+4.9%)



Source: CDC COVID Data Tracker

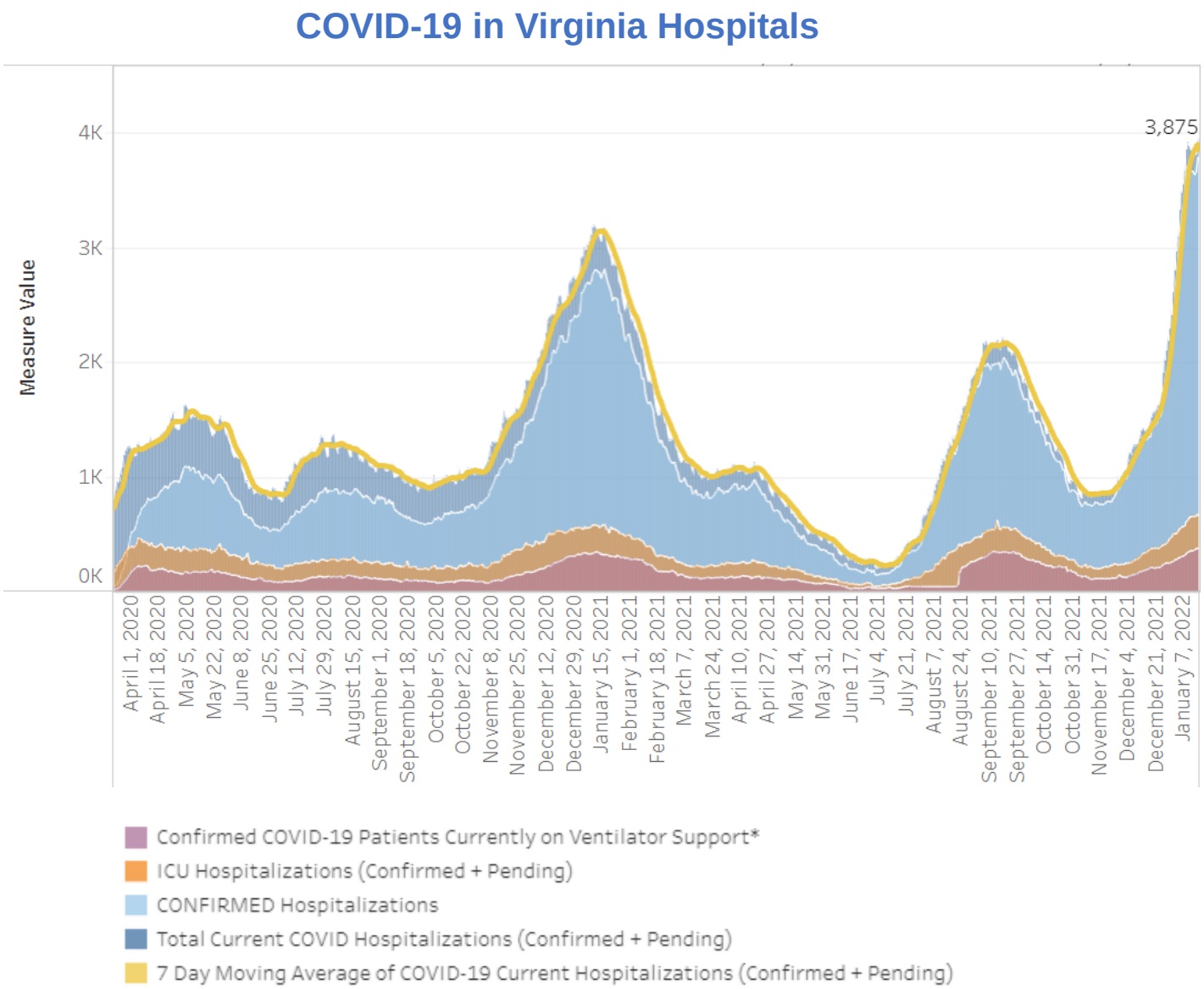
Virginia: COVID-19 Cases by Age Group

Updated 1/18/22



Virginia Hospitalization Trends

Updated 1/19/22



- Compared to last week hospitalizations **increased to 3,875** (7-day MA) from 3,556 (+9%)
- Compared to last week. ICU hospitalizations have **increased to 676** from 621 (+9%)
- 377 patients are currently on ventilator support (+15%)

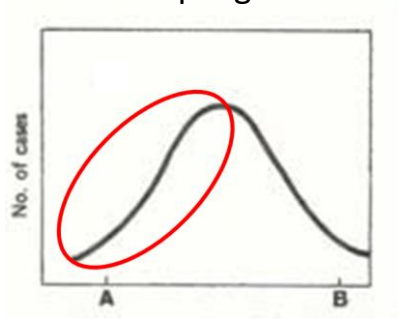
Source: VHHA Hospitalizations - Coronavirus (virginia.gov)

Virginia: Preliminary Analysis of Omicron

Updated 1/18/22

A

Data Sampling Method



B

Data Point	Alpha/Beta	Delta	Omicron
1	11/28/2020	7/31/2021	12/4/2021
2	12/5/2020	8/7/2021	12/11/2021
3	12/21/2020	8/14/2021	12/18/2021
4	12/19/2020	8/21/2021	12/25/2021
5	12/26/2020	8/28/2021	1/1/2021
6	1/2/2021	9/4/2021	1/8/2022

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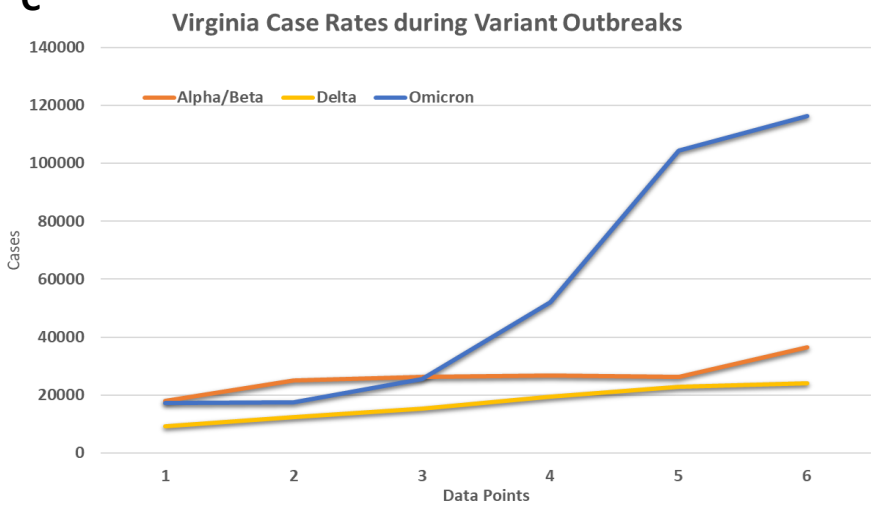

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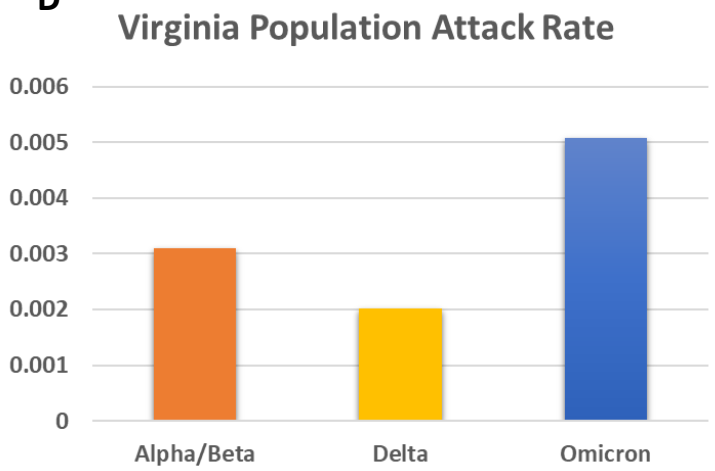

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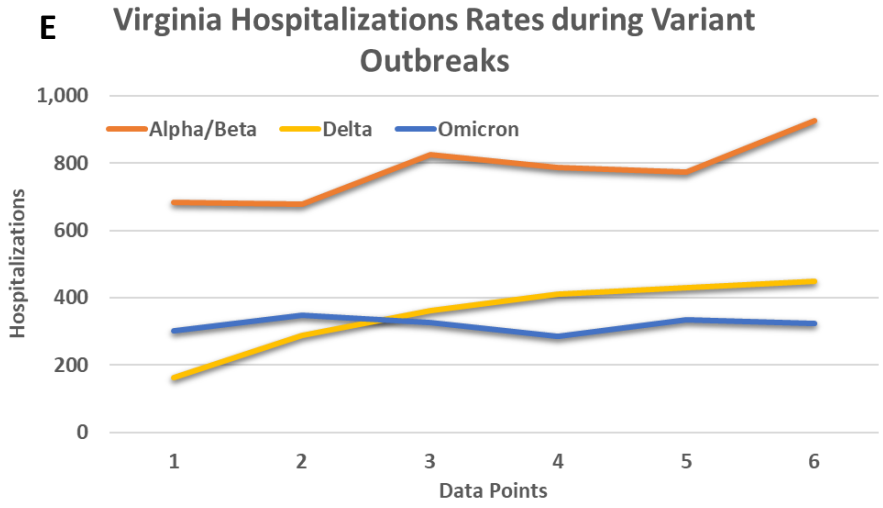

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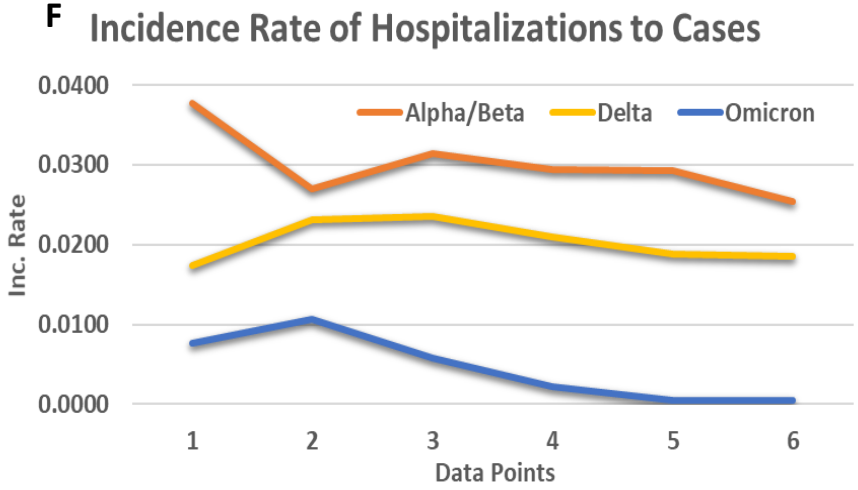


COVID-19 Burden in Virginia LTCFs

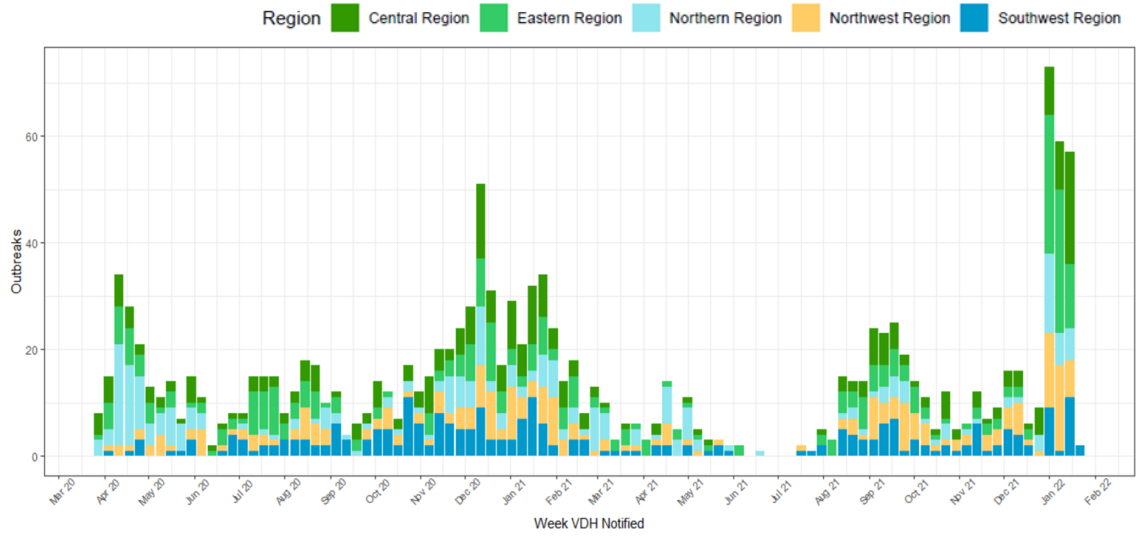
Questions can be directed to: hai@vdh.virginia.gov

Updated 1/18/2022

Key Trends

- There were **202 LTCF COVID-19 outbreaks reported in the past 30 days**: 67 in Eastern, 38 in Northwest, 45 in Central, 29 in Northern, and 23 in Southwest *(see figure top right)*.
- The number of reported resident and staff cases have dramatically increased in the past few weeks *(see figure bottom right)*.
  - For the reporting week ending January 16, 2022, 1,122 resident and 1,248 staff cases were reported to NHSN. Data for this reporting week are preliminary.
  - This is the highest number of resident cases reported during a week since nursing homes began reporting to NHSN. There was a slight decline in staff cases from the previous reporting week.
- For reporting week ending January 9, 2022, data reported from 280 nursing homes showed **89% of residents were fully vaccinated**; data reported from 281 nursing homes showed **90% of staff were fully vaccinated** (*see figures bottom left*).
  - Of the nursing home residents eligible to receive an additional dose or booster, 72% have received an additional dose or booster of COVID-19 vaccine.
  - Of the nursing home healthcare personnel eligible to receive an additional dose or booster, 41% have received an additional dose or booster of COVID-19 vaccine.

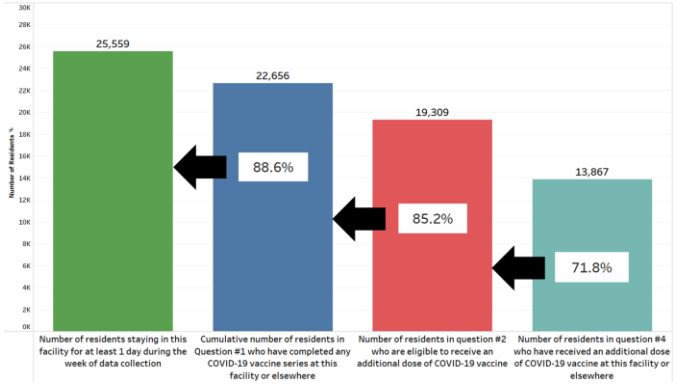
Number and Region of LTCF COVID-19 Outbreaks by Date VDH Notified



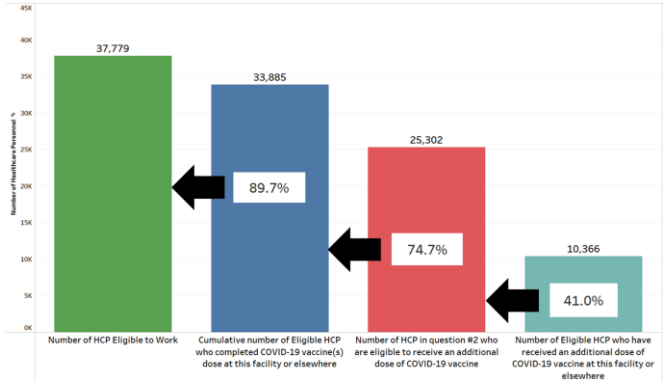
Outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2. Data are from the Virginia Outbreak Surveillance System as of 1/18/2022 and are subject to change. Please note that a few SW outbreaks had been reported for the current week (week beginning 1/16/22) at the time of the data pull.

COVID-19 Booster Vaccination in Virginia Nursing Homes (n=286)

Nursing Home Residents

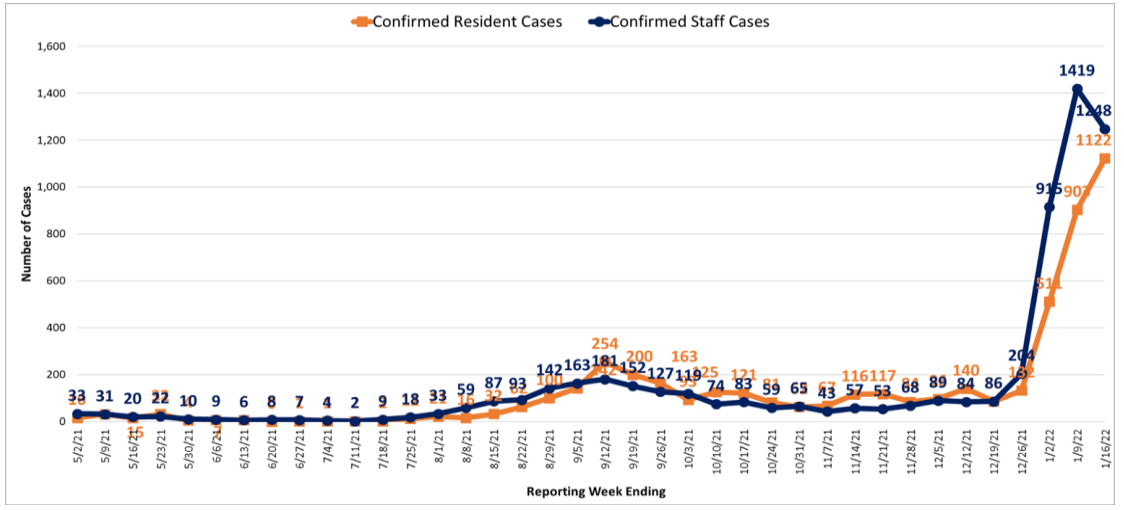


Nursing Home Staff



Data are from the National Healthcare Safety Network (NHSN) as of 1/18/2022 and are subject to change, including booster eligibility per updated vaccine guidance. In Virginia, 280 nursing homes reported resident vaccination data for reporting week ending 1/9/2022; 281 nursing homes reported staff vaccination data for reporting week ending 1/9/2022. For staff type definitions, refer to NHSN Table of Instructions.

Nursing Home Resident and Staff COVID-19 Cases



Data are from NHSN as of 1/18/2022 and are subject to change. For reporting information, please refer to the NHSN data collection forms: residents, staff.

Virginia: Regional Metric Summary

Updated 1/19/22

Metrics date: 1/16/2022

	Central	Eastern	Far Southwest	Near Southwest	Northern	Northwest
New cases per 100k within the last 7 days	1,388.1 ↑	1,798.2 ↑	1,170.4 ↑	1,360.4 ↑	1,380.3 ↓	1,275.2 ↑
% Positivity 7-day moving average	27.1% ↓	40.0% ↓	28.7% ↑	32.6% ↑	29.2% ↓	32.7% ↓
COVID-like ED visits rate per 100k	48.5 ↓	43.3 ↓	35.6 ↑	45.0 ↑	18.6 ↓	30.2 ↓

Burden	Level 0	Level 1	Level 2	Level 3	Level 4
New Cases	<10	10-49		50-100	>100
% Positivity	<3	3-5	5-8	8-10	>10
CLI ED Visits	<4		4-5.9		≥6

Symbol	Trend
↑	Increasing
↓	Decreasing
○	Fluctuating

Please note: the methods used this week have changed slightly; data is now compared from Sunday to Sunday instead of Wednesday to Wednesday

Source: Region Metrics – Coronavirus

*Data represents a 7-day moving average, trends compared to 1 week ago comparing end of week totals from Sunday to Sunday

Literature Review: Omicron Viral Shedding, Antigen Testing, and Severity

Updated 1/18/22

Active epidemiological investigation on SARS-CoV-2 infection caused by Omicron variant (Pango lineage B.1.1.529) in Japan: preliminary report on infectious period: January 5, 2022

- **Summary:** Preliminary data from the National Institute of Infectious Diseases examined the duration of virus shedding to determine the incubation period for patients with Omicron
- **Key Findings:** SARS-CoV-2 RNA in 83 respiratory specimens from 21 cases revealed the amount of viral RNA was **highest three to six days after diagnosis or symptom onset** and **no infectious virus was detected in samples after 10 days since diagnosis** or **symptom onset.**

Discordant SARS-CoV-2 PCR and Rapid Antigen Test Results When Infectious: A December 2021 Occupational Case Series: January 5, 2022

- **Summary:** Retrospective cohort study measuring SARS-CoV-2 PCR and nasal rapid antigen testing amongst individuals in occupational safety programs diagnosed with Omicron variant between December 1-31, 2021
- **Key Findings:** 4 of 30 Omicron cases were confirmed to have transmitted the virus between false-negative results, despite 28 of 30 pairs having infectious viral load within the range of confirmed Omicron transmissions in the cohort. **Between days 0 and 1, all rapid antigen tests produced false-negative results** despite showing infectious viral load.

SARS-CoV-2 variants of concern and variants under investigation-Technical briefing 34: January 14, 2022

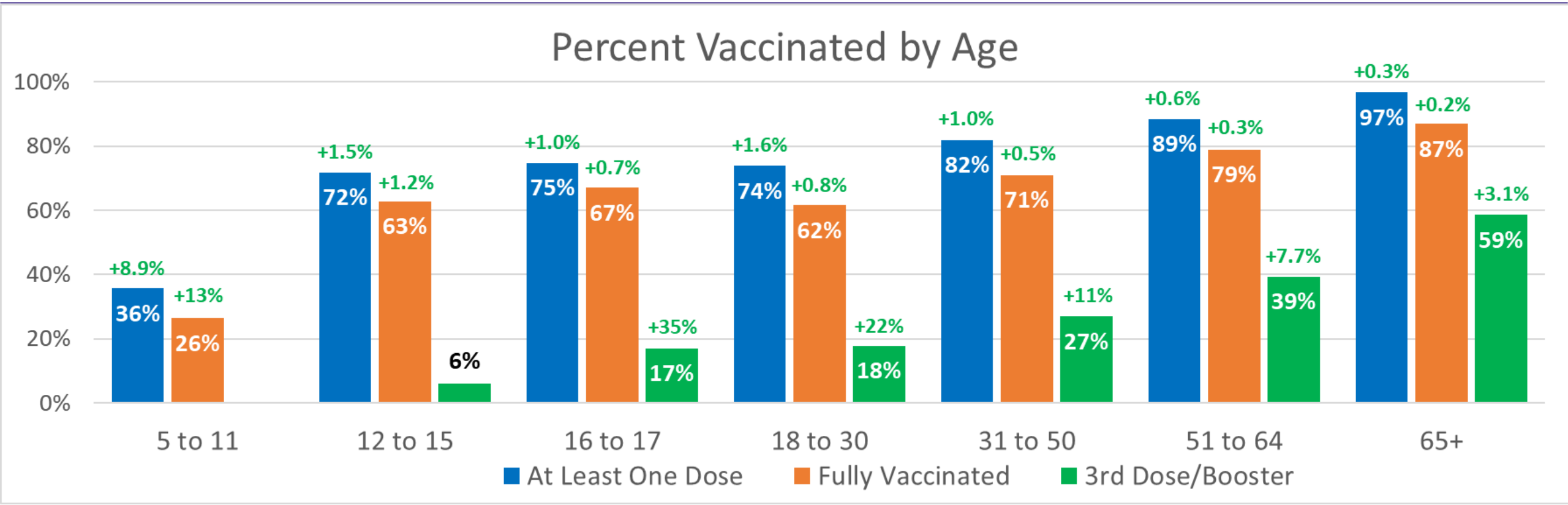
- **Summary:** UK Health Security Agency technical report outlining surveillance and analysis of Omicron severity, symptoms, and prevalence throughout England from December 1st to January 10th.
- **Key Findings: Most common symptoms associated with Omicron** cases included **sore throat** (53% Omicron; 34% Delta), while **loss of smell and taste was less common in Omicron** compared to Delta (13% Omicron; 34% Delta). **Vaccine effectiveness for symptomatic Omicron cases is significantly lower than compared to Delta and wane rapidly**, however **protection against hospitalization is much greate**r (*see table below*)

Table 2. Hazard ratios and vaccine effectiveness against hospitalisation (all vaccine brands combined). OR = odds ratio, HR = hazards ratio, VE = vaccine effectiveness

Dose	Interval after dose (weeks)	OR v symptomatic disease	HR vs hospitalisation	VE vs hospitalisation
1	4+	0.74 (0.72-0.76)	0.57 (0.38-0.85)	58% (37-72)
2	2 to 24	0.81 (0.8-0.82)	0.45 (0.36-0.56)	64% (54-71)
2	25+	0.94 (0.92-0.95)	0.6 (0.49-0.74)	44% (30-54)
3	2 to 4	0.32 (0.31-0.33)	0.26 (0.19-0.35)	92% (89-94)
3	5 to 9	0.42 (0.41-0.43)	0.29 (0.23-0.37)	88% (84-91)
3	10+	0.5 (0.49-0.51)	0.34 (0.26-0.44)	83% (78-87)

Virginia: Vaccination by Age Groups

Updated 1/19/22



Virginia Vaccination by Age

- ✓ **72.8%** **(+1.1%)** of the Eligible (5+) Population **68.5%** **(+1.1%)** of the Total Population are Fully Vaccinated
- ✓ **50.1%** **(+7.8%)** of the Eligible Population and **27.5%** **(+9.8%)** of Total Population Vaccinated with 3rd Dose/Booster
- ✓ **35.2**% **(+7.9%)** of the Total Population is "Up-to-Date" with their Vaccinations
- ✓ **89.8%** **(+1.0%)** of the Adult (18+) Population and **36%** **(+8.9%)** of 5 to 11 year olds Vaccinated with at Least One Dose

- Green percent represents percent increase from two weeks prior

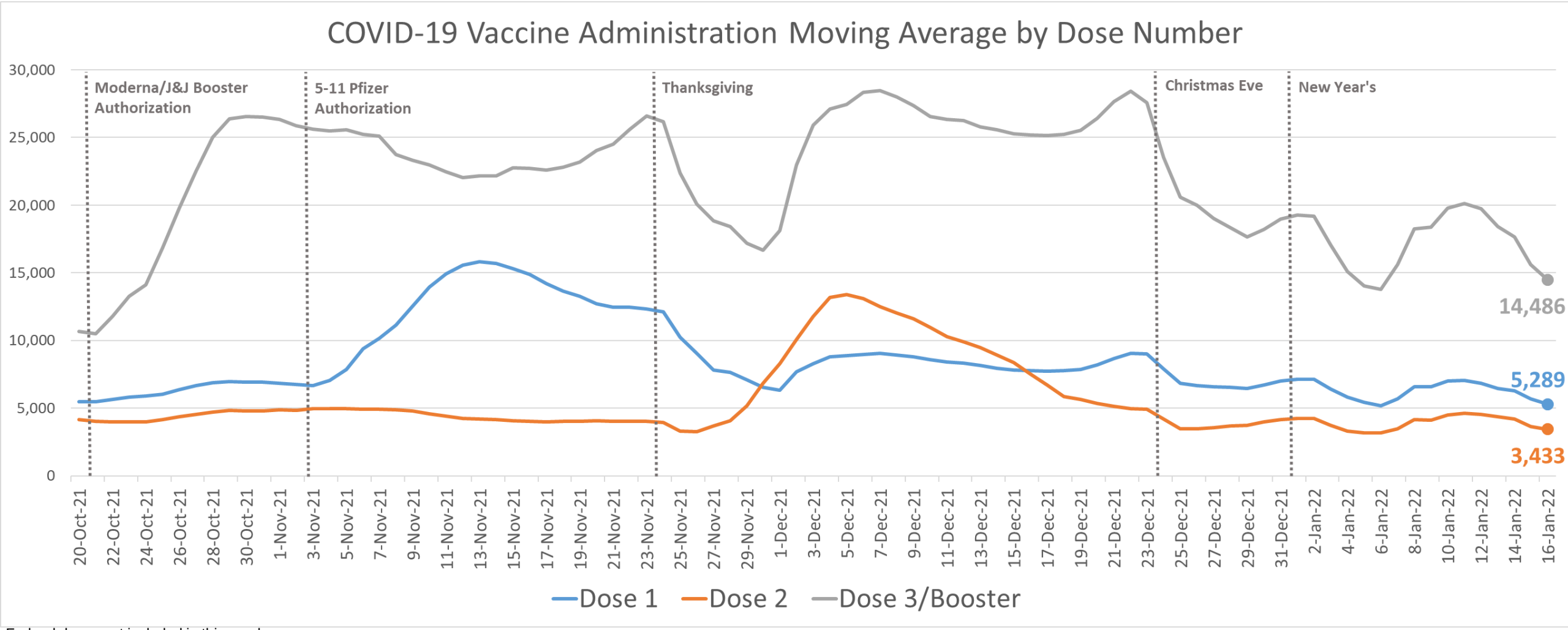
Source: COVID-19 in Virginia: Vaccine Summary, Keep Virginia Safe Tournament | Metaculus

Virginia: Vaccine Demand by Dose Number

Updated 1/19/22

The 7 Day Moving Average of First Dose, Second Dose, and Booster Administrations Are Decreasing

- Third Dose/Booster administrations have fallen in the past week
- First Dose and Second Dose administrations have seen a small decline over the past week

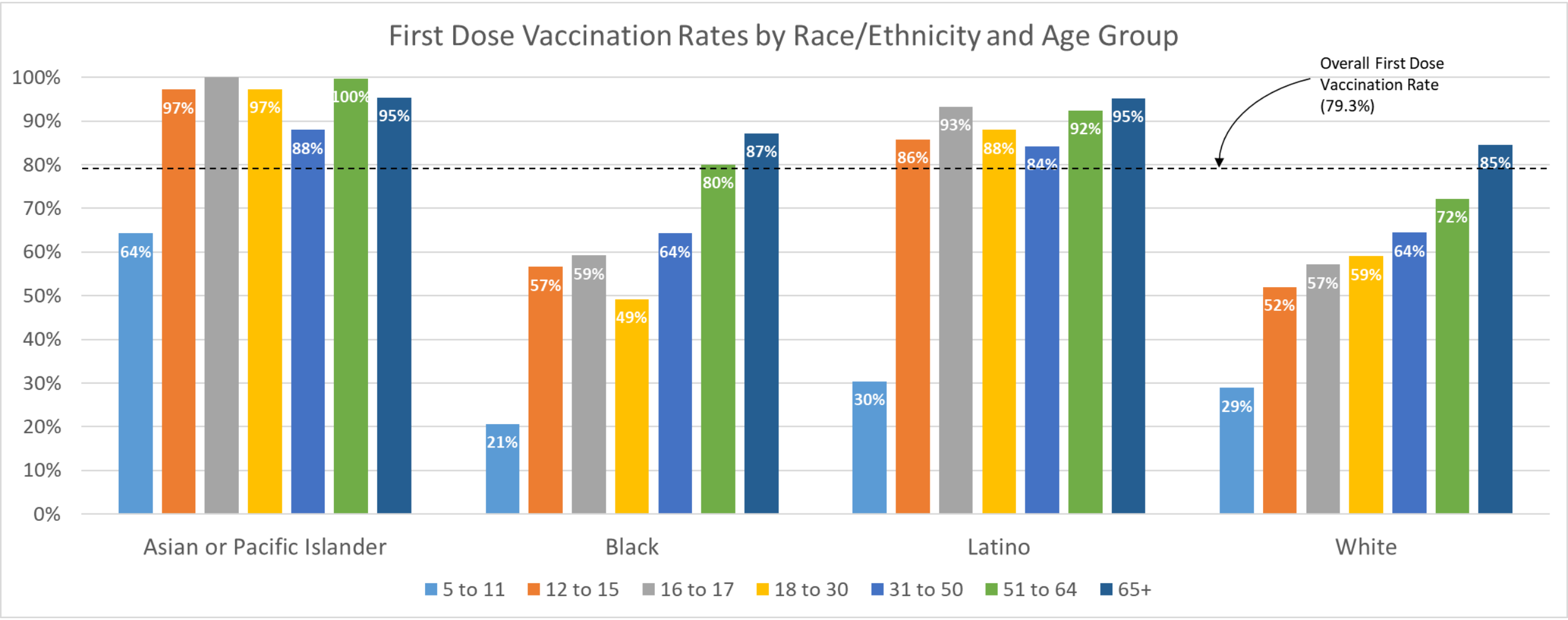


Federal doses not included in this number

Source: [COVID-19 Vaccine Summary – Coronavirus (virginia.gov)]

Virginia: Vaccination by Race/Ethnicity and Age

Updated 1/19/22

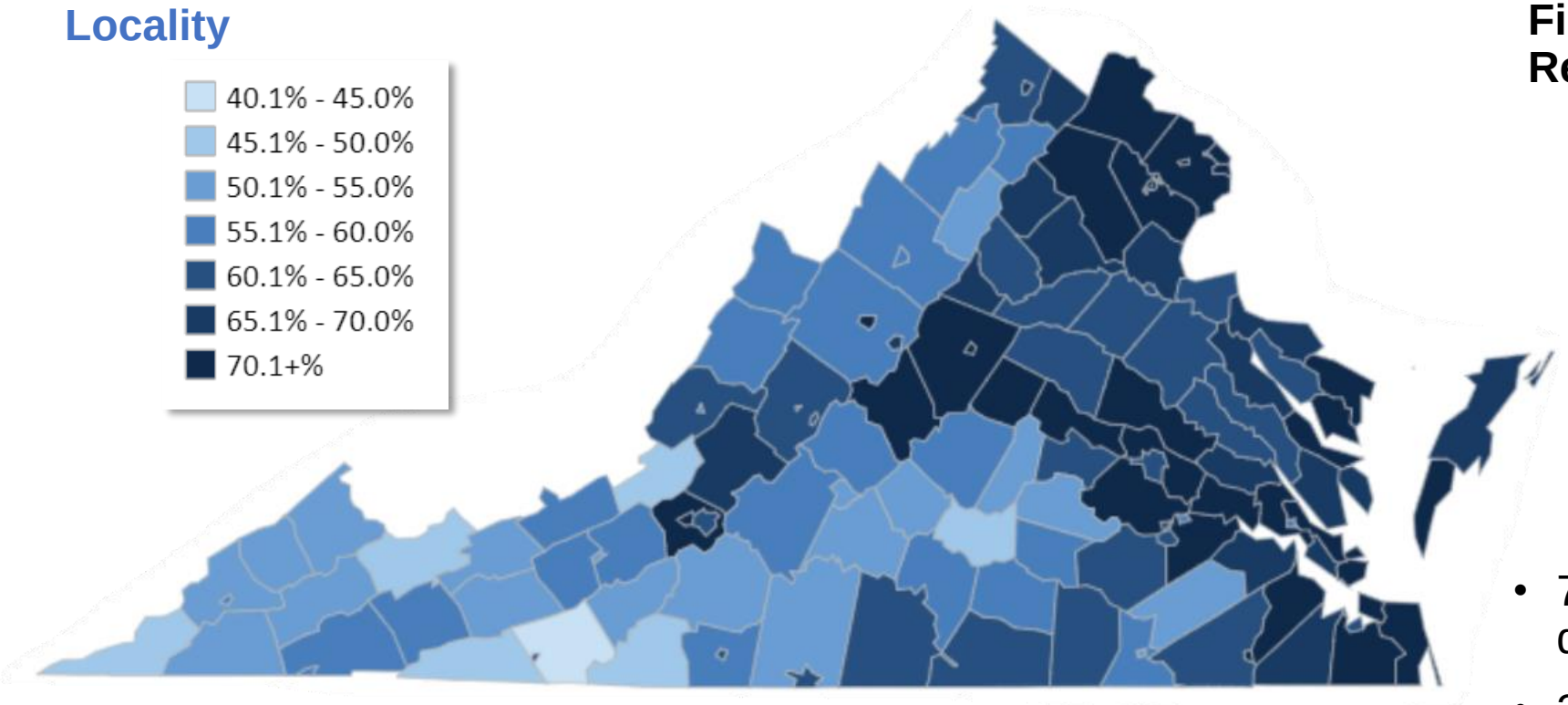


Source: [COVID-19 Vaccine Summary – Coronavirus (virginia.gov)]

Virginia: Vaccination across the Commonwealth by Geography

Updated 1/19/22

Percent of the Total Population with at Least One Dose by Locality



2013 SRHP Isserman Classification	5 to 11	12 to 17	16 to 17	18 to 30	31 to 50	51 to 64	65+	Grand Total
Mixed Urban	39%	72%	77%	74%	74%	85%	87%	65%
Urban	36%	74%	80%	67%	78%	86%	96%	76%
Mixed Rural	25%	52%	59%	58%	64%	74%	83%	61%
Rural	16%	43%	49%	52%	57%	70%	93%	75%
Grand Total	**32%**	**66%**	**72%**	**64%**	**72%**	**81%**	**90%**	**72%**

First Dose Vaccination Rate by Region for Total Population

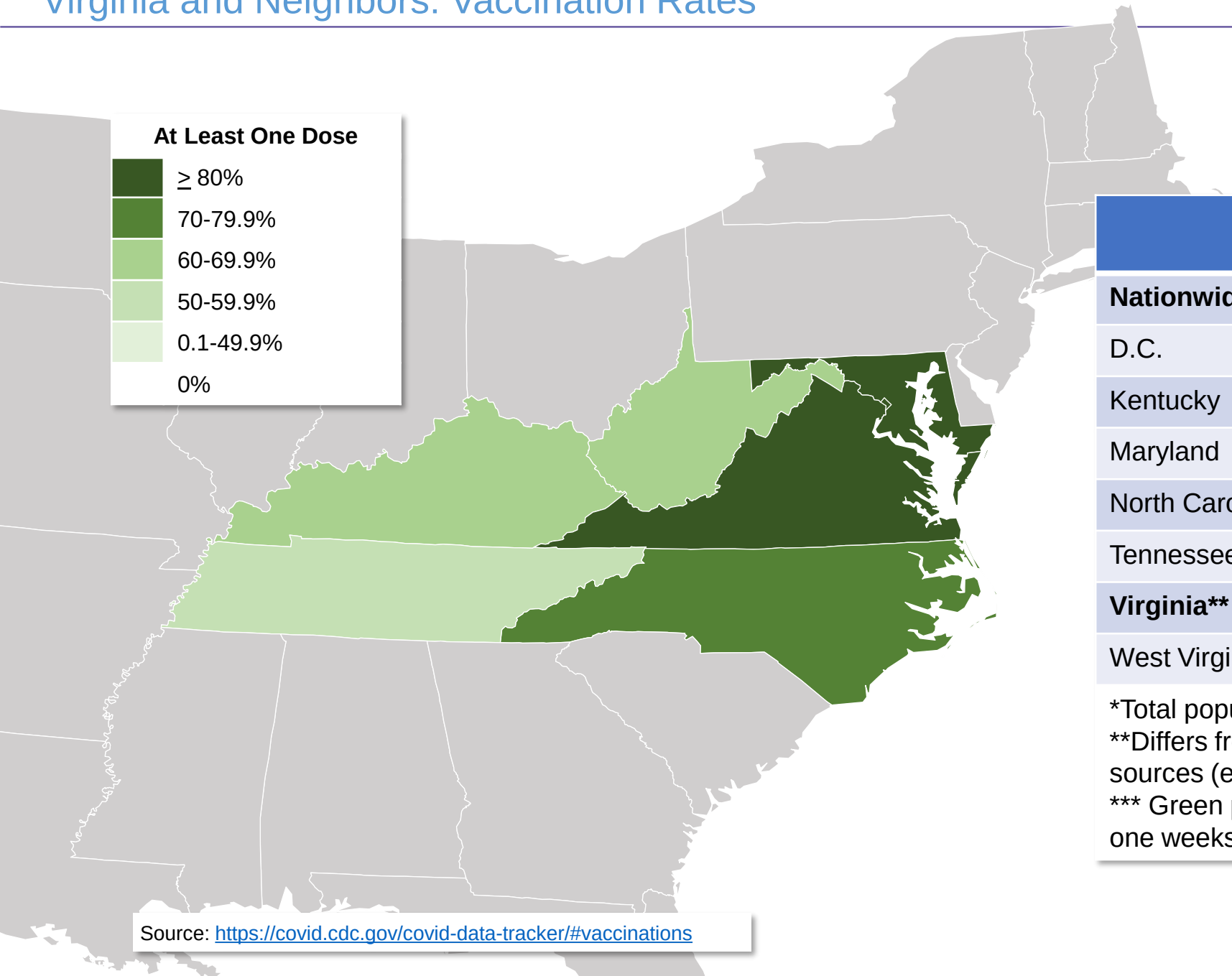
Region Name	1st Dose Vaccination
Central	68.2%
Eastern	72.2%
Northern	82.4%
Northwest	65.6%
Southwest	56.9%

- 7 out of 133 Localities have a first dose vaccination rate below 50%
- 35 out of 133 Localities have a first dose vaccination rate above 70%
- There is a disparity across Urban and Rural areas by Age Groups, with Rural Adolescents the Lowest Vaccinated group

Federal doses not included in this number
Source: COVID-19 Vaccine Summary – Coronavirus (virginia.gov)

Virginia and Neighbors: Vaccination Rates

Updated 1/19/22



	At Least One Dose*	Fully Vaccinated*
Nationwide	**75.1% (+1.8%)**	**63.0% (+1.3%)**
D.C.	91.3% (+2.4%)	68.8% (+1.5%)
Kentucky	63.6% (+1.4%)	55.0% (+1.1%)
Maryland	82.4% (+2.0%)	71.7% (+1.6%)
North Carolina	79.2% (+2.7%)	57.6% (+1.2%)
Tennessee	59.7% (+1.2%)	52.0% (+1.0%)
Virginia**	**80.8% (+1.6%)**	**69.0% (+1.2%)**
West Virginia	62.8% (+1.0%)	55.6% (+0.7%)

*Total population, includes out-of-state vaccinations
**Differs from previous slide because all vaccination sources (e.g., federal) are included
*** Green percent represents percent increase from one weeks prior

Source: https://covid.cdc.gov/covid-data-tracker/#vaccinations