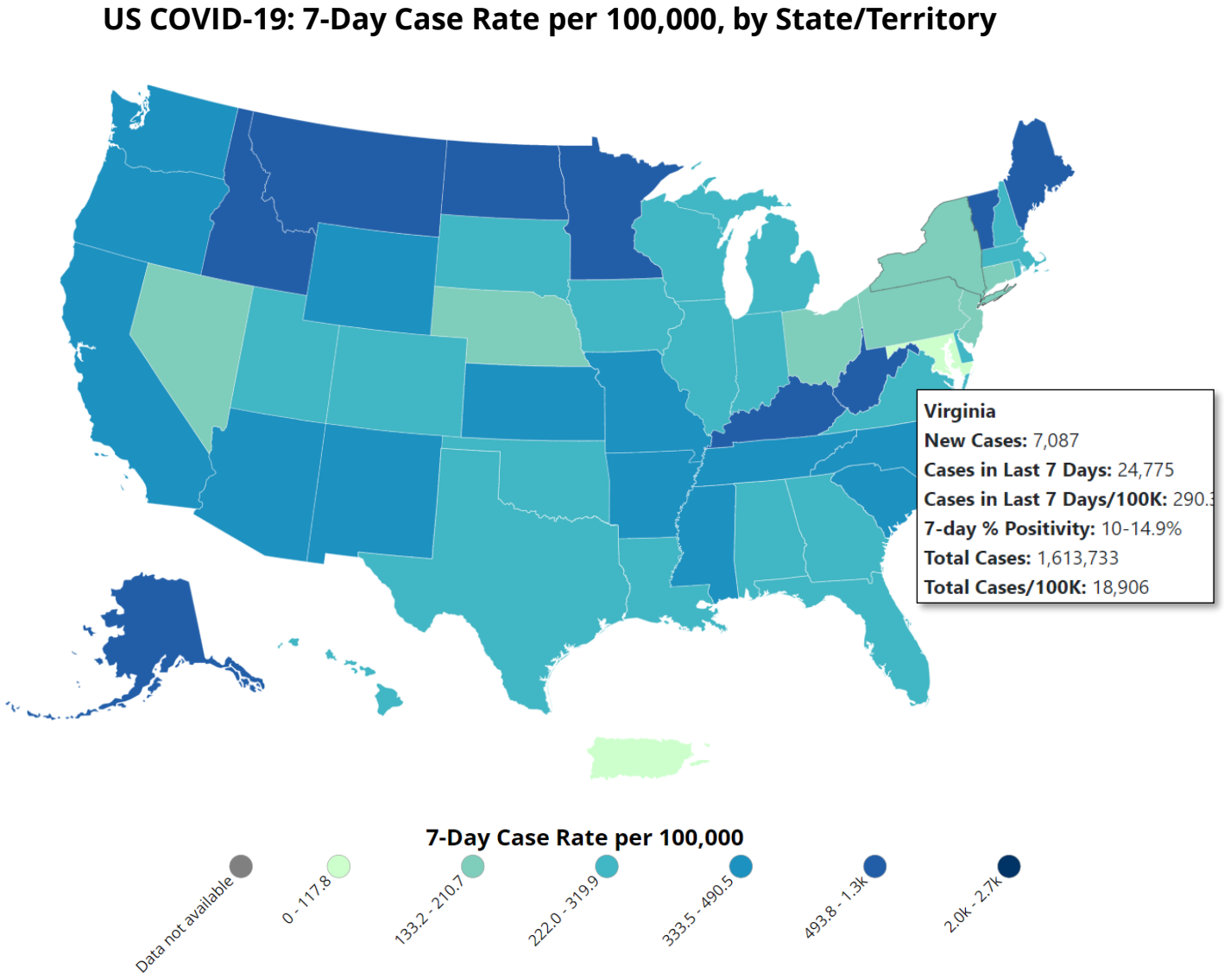
Virginia COVID-19 Surveillance Data Update

February 17, 2022

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

National: Weekly COVID-19 Case Rate

Updated 2/16/22



	Cases in the Last 7 Days Per 100k Population
Virginia	290.3 (-29.9%)
U.S.	309.8 (-36.4%)
Maine	1,314.2 (+176.1%)
Alaska	804.9 (-45.6%)
Kentucky	762 (-21.9%)

Our Neighbors

Rates Higher than Virginia

North Carolina, **413.9** (-21.5%)
West Virginia, **687.8** (-28.4%)
Tennessee **490.5** (-36.5%)
Kentucky, **762** (-21.9%)

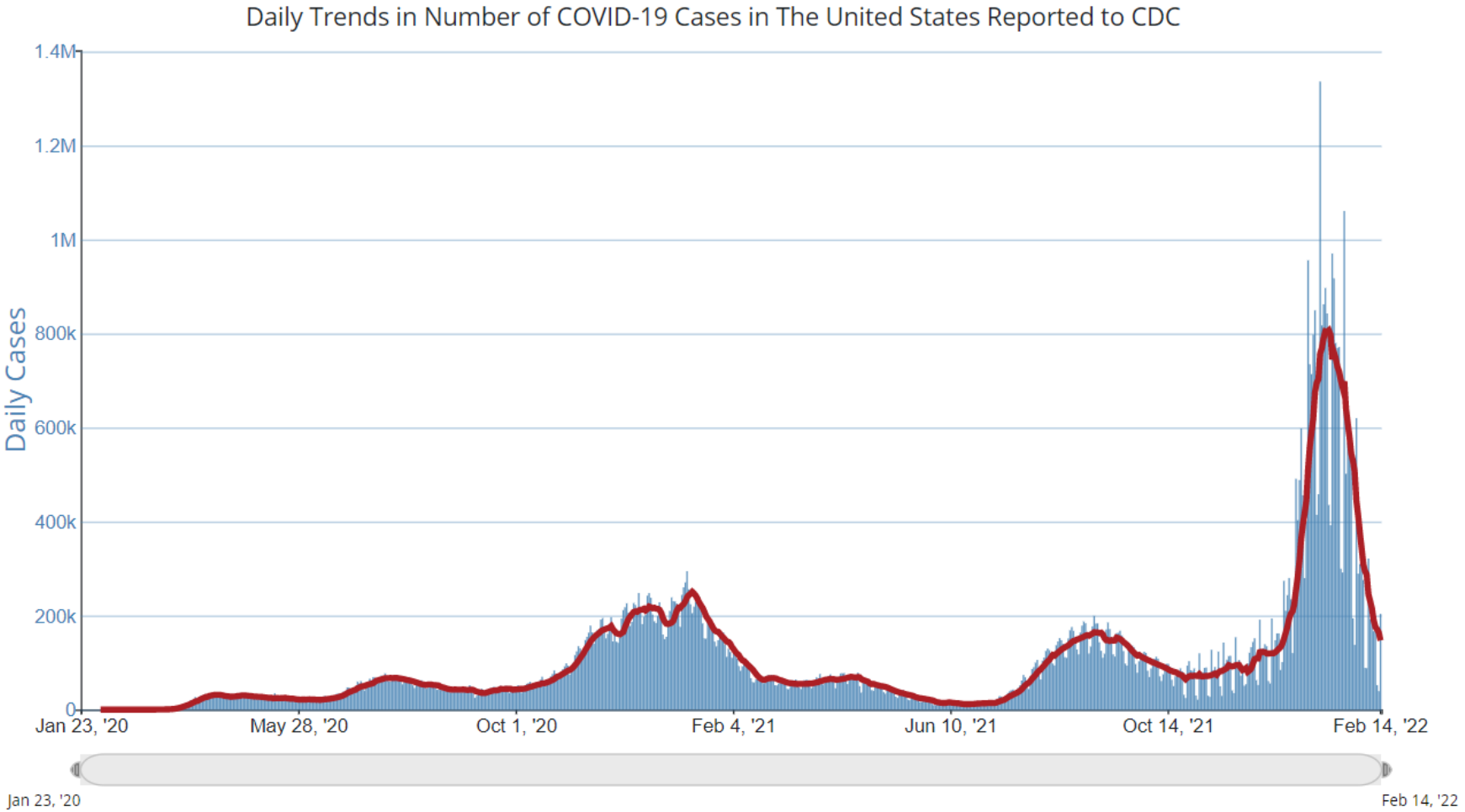
Rates Lower than Virginia:

District of Columbia, **147.1** (-19.6%)
Maryland, **91.1** (-43.8%)

Source CDC COVID Data Tracker Please note rate change comparisons are from the previous week's data.

National: Cases, Hospitalizations, and Deaths

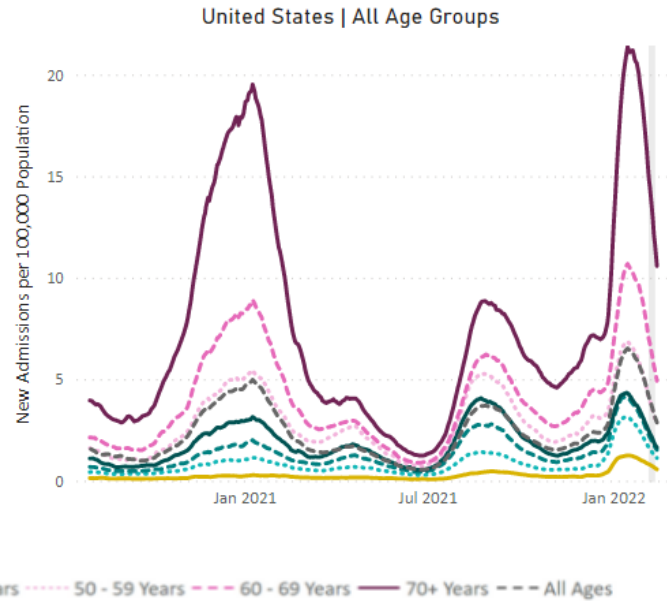
Updated 2/16/22



Compared to last week, **cases** decreased to 146,921 (7-day MA) per day (-40%)

Hospitalizations decreased to 9,523 (7-day MA) per day (-28.1%)

Deaths decreased to 2,208 (7-day MA) per day (-8.8%)

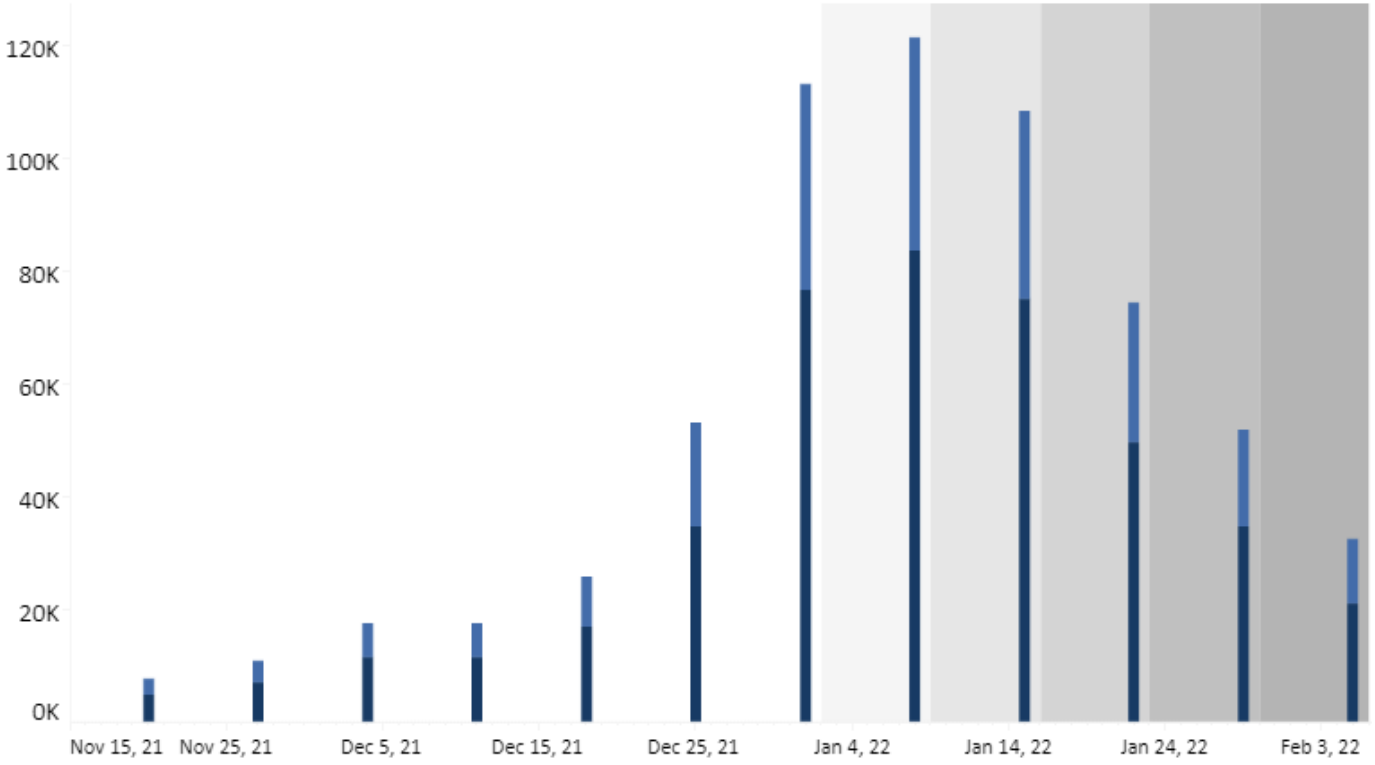


Source: CDC COVID Data Tracker

Virginia: Cases, Hospitalizations, and Deaths

Updated 2/16/22

Cases by Date of Symptom Onset, Past 13 weeks



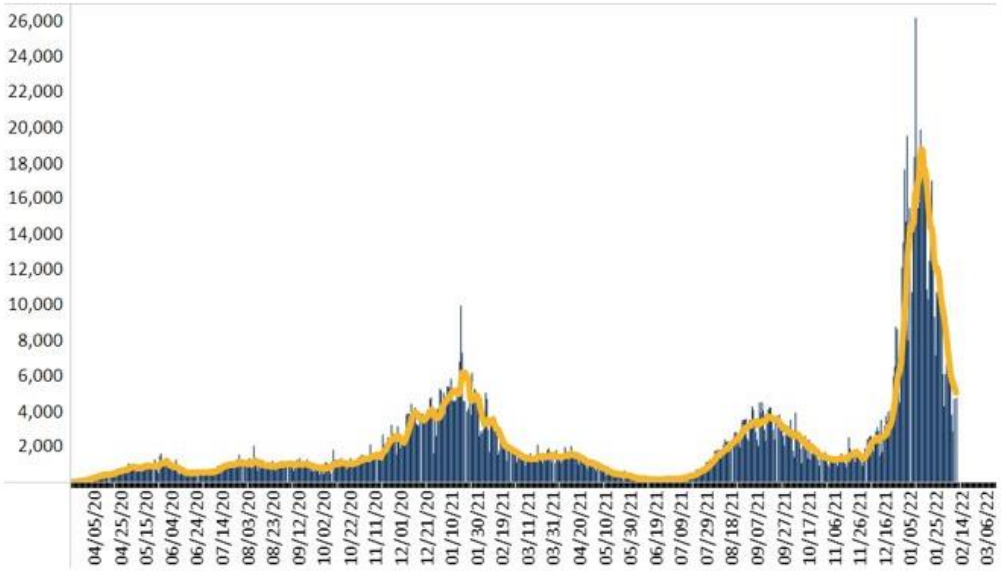
Gray shaded area illness may not have been reported yet

Compared to last week, **cases decreased** to 3,296 (7-day MA) from 5,042 per day (-35.6%)

Hospitalizations decreased to 1,763 per day (7-day MA) (-27.3%)

Deaths decreased to 98 (-42.4%) (Date of Death)

Cases by Date Reported, All Reporting Timeline

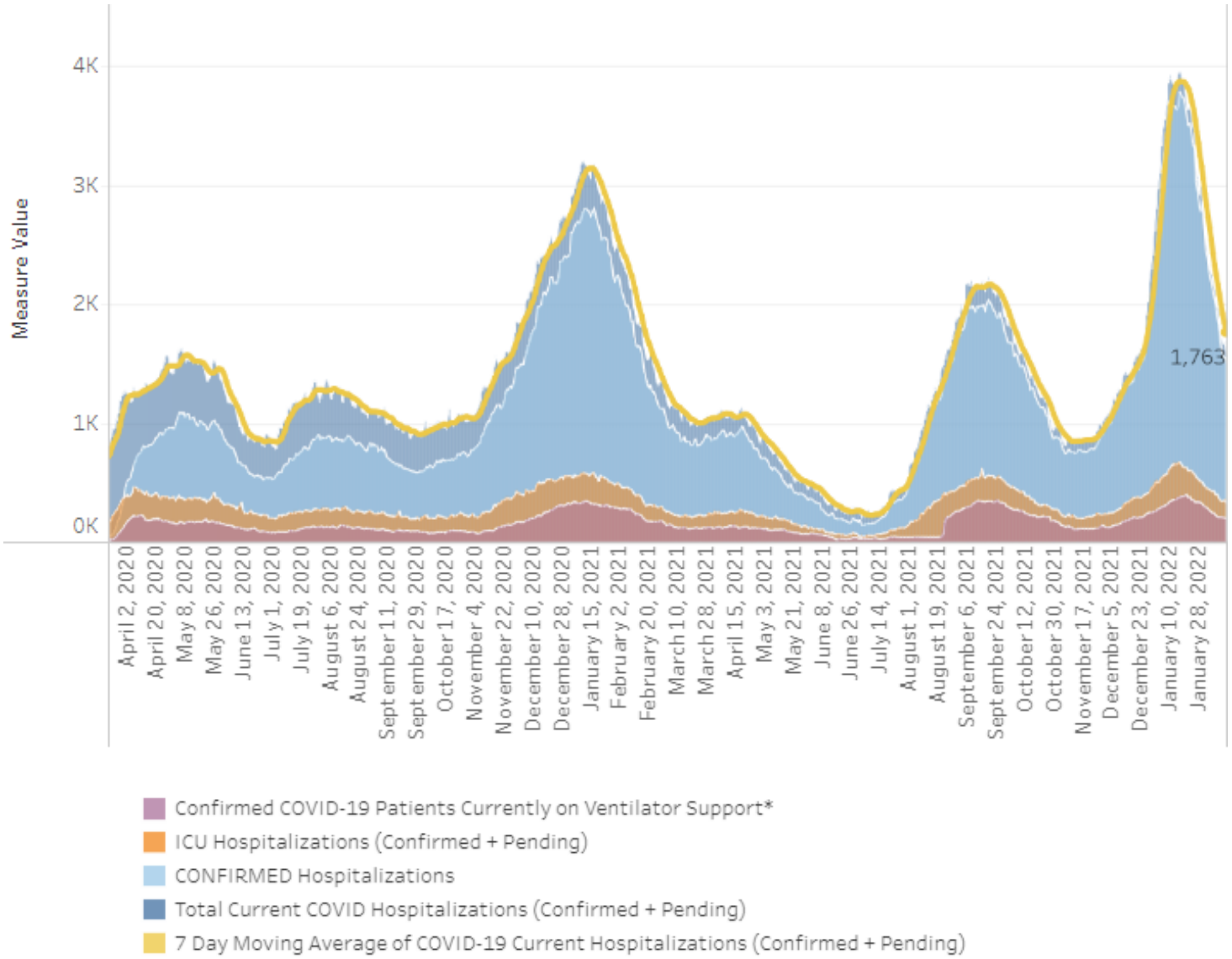


Source: Cases – Coronavirus (virginia.gov), Cases and Deaths - Coronavirus (virginia.gov), VHHA Hospitalizations – Coronavirus (virginia.gov), Data represent a 7-day moving average

Virginia Hospitalization Trends

Updated 2/16/22

COVID-19 in Virginia Hospitals



- Compared to last week hospitalizations **decreased to 1,763** (7-day MA) from 2,426 (-27.3%)
- Compared to last week. ICU hospitalizations have **decreased to 320** from 397 (-19.4%)
- **199 patients** are currently on ventilator support (-13.9%)

Source: VHHA Hospitalizations - Coronavirus (virginia.gov)

Virginia: Regional Metric Summary

Updated 2/15/22

Metrics date: 2/13/2022

	Central	Eastern	Far Southwest	Near Southwest	Northern	Northwest
New cases per 100k within the last 7 days	320.0 ↓	207.4 ↓	1,010.3 ↓	547.2 ↓	189.8 ↓	384.4 ↓
% Positivity 7-day moving average	16.2% ↓	15.5% ↓	30.4% ↓	21.5% ↓	8.2% ↓	17.9% ↓
COVID-like ED visits rate per 100k	15.6 ↓	9.4 ↓	27.9 ↓	20.8 ↓	4.6 ↓	10.9 ↓

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

COVID-19 Burden in Virginia LTCFs

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

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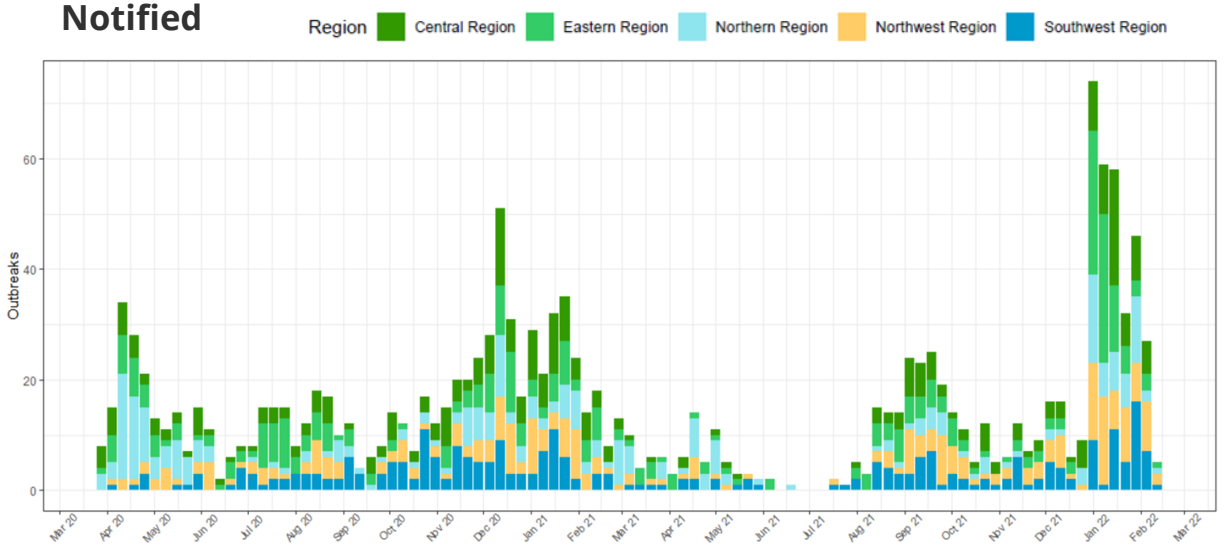
Updated 02/15/2022

Key Trends

- There were **168 LTCF COVID-19 outbreaks reported in the past 30 days**: 41 in Eastern, 40 in Central, 35 in Northwest, 28 in Northern, and 24 in Southwest *(see figure top right)*.
- The number of reported staff cases has declined in the past couple of weeks. The number of reported resident cases has slightly declined in recent reporting weeks *(see figure bottom right)*.
  - For the reporting week ending February 13, 2022, 512 resident and 344 staff cases were reported to NHSN. Data for this reporting week are preliminary.
- For reporting week ending February 6, 2022, data reported by 284 nursing homes showed 89% of residents were fully vaccinated; data reported by 284 nursing homes showed 92% of staff were fully vaccinated *(see figures bottom left)*.
  - Of the nursing home residents eligible to receive an additional dose or booster, **76% of residents 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, **44% of staff have received an additional dose or booster** of COVID-19 vaccine.

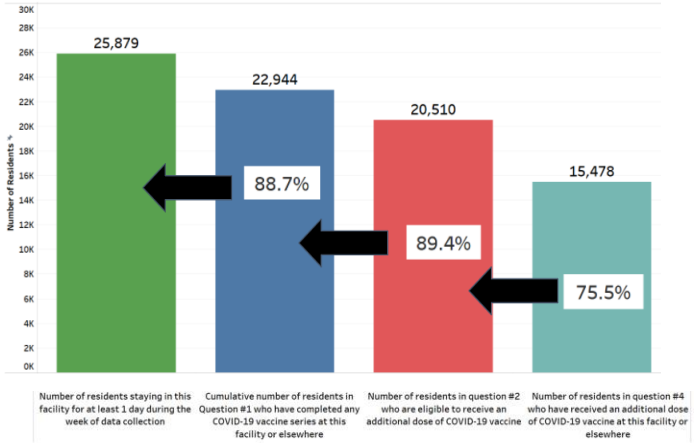
Number and Region of LTCF COVID-19 Outbreaks by Date VDH Notified



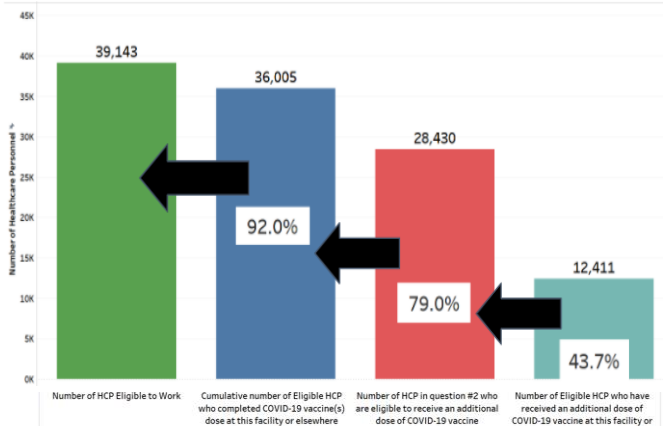
Outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2. Data are from the Virginia Outbreak Surveillance System as of 2/14/2022 and are subject to change.

COVID-19 Booster Vaccination in Virginia Nursing Homes

Nursing Home Residents

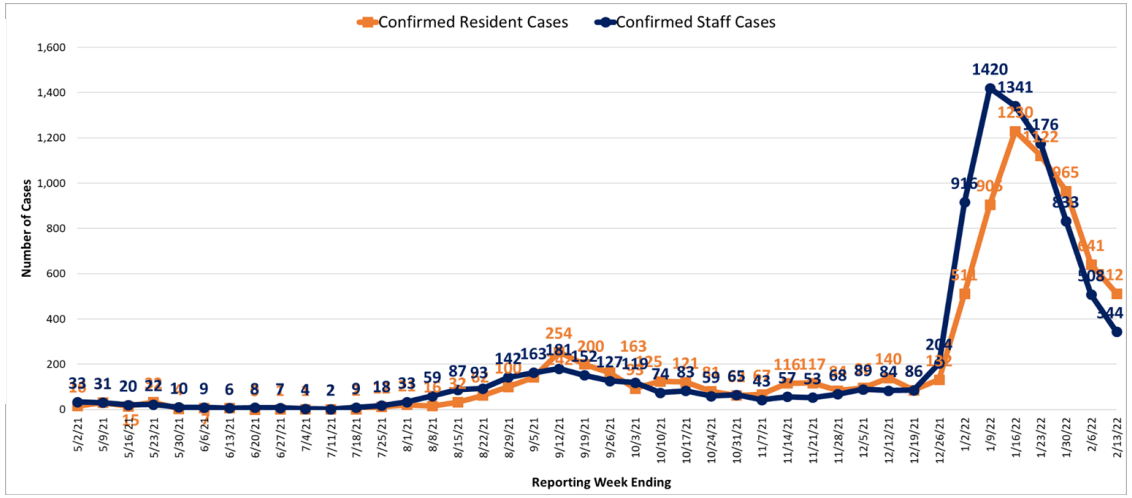


Nursing Home Staff



Data were reported by 286 Virginia nursing homes into the National Healthcare Safety Network (NHSN) as of 2/15/2022 and are subject to change, including booster eligibility per updated vaccine guidance. In Virginia, 284 nursing homes reported resident vaccination data for reporting week ending 2/06/2022; 284 nursing homes reported staff vaccination data for reporting week ending 2/06/2022. For staff type definitions, refer to NHSN Table of Instructions.

Nursing Home Resident and Staff COVID-19 Cases



Data are from NHSN as of 2/15/2022 and are subject to change. For reporting information, please refer to the NHSN data collection forms: residents, staff.

VDH VIRGINIA DEPARTMENT OF HEALTH

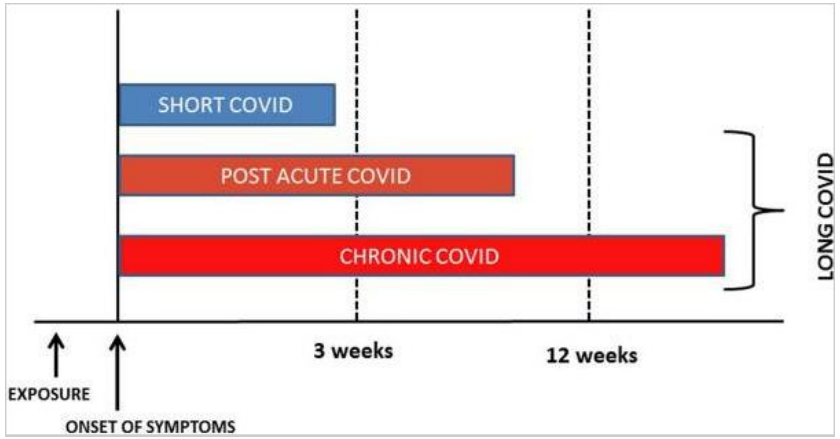
PASC: Post-Acute Sequelae of SARS-CoV-2 Infection ("Long COVID")

Updated 2/15/22

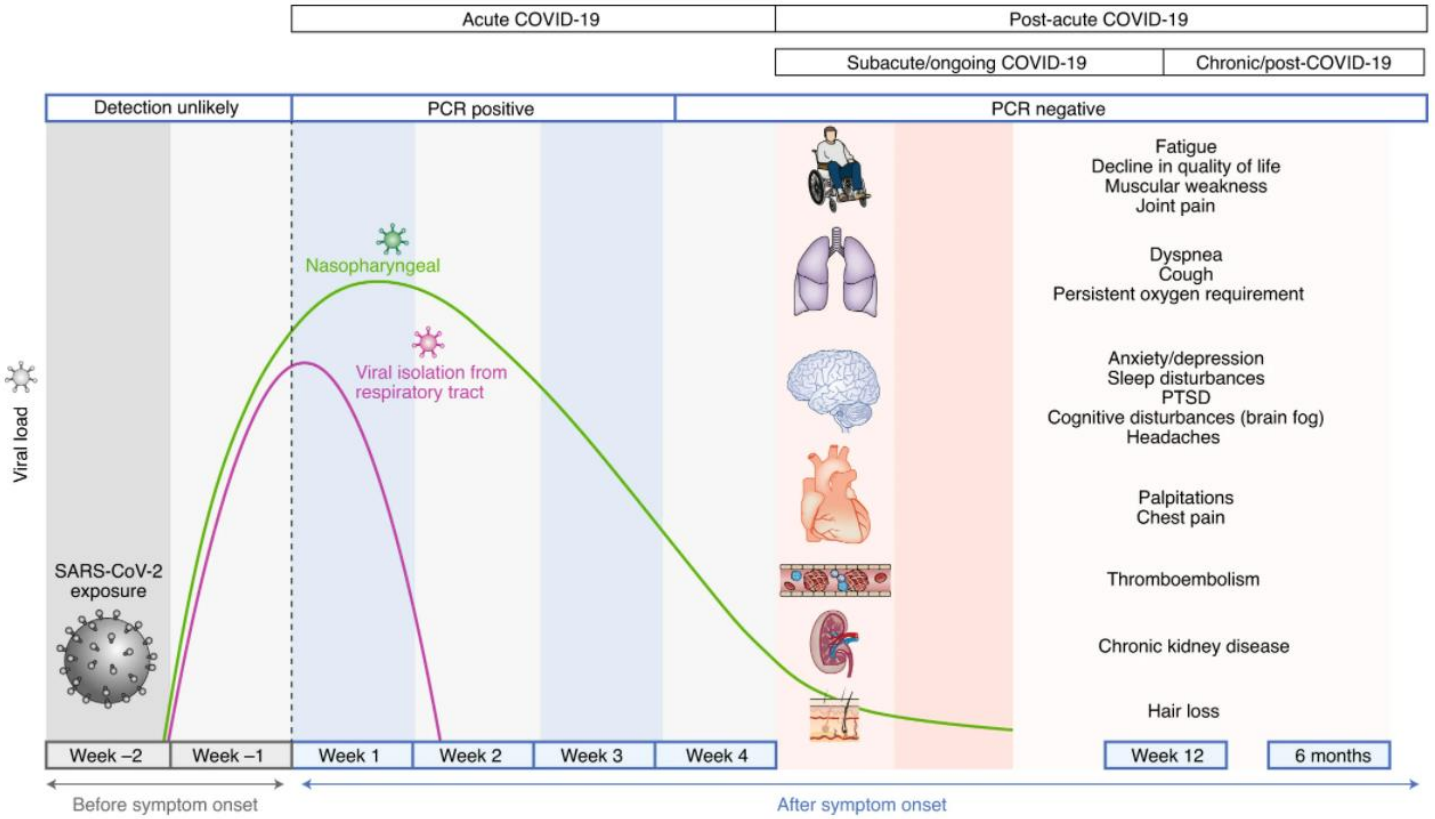
Background and Ongoing Research

- Long COVID describes symptoms **weeks or months** after SARS-CoV-2 infection causing **neurologic, psychiatric, pulmonary, cardiovascular, and other symptoms**.
  - Preliminary estimates show **10%-30% of people** infected with COVID experience ongoing symptoms.
- The National Institutes of Health launched the RECOVER Initiative in 2021 and awarded funding to over 100 researchers to study the long-term effects of COVID-19.

Classification of Long COVID



Timeline of Post-Acute COVID



New Research

- A pilot study from Spain suggests **long COVID could be linked to effects of SARS-CoV-2 on the vagus nerve**.
  - Out of 348 patients with long COVID, 228 **(66%) had at least one symptom that could be attributed to vagus nerve dysfunction (VND).** 22 patients with at least one VND symptom were then evaluated; **19 (86%) had three or more VND symptoms**.

Source: https://recovercovid.org/, Pilot study suggests long COVID could be link | EurekAlert!, https://www.nature.com/articles/s41591-021-01283-z, Long COVID: An overview (nih.gov)

Literature Review: Long-term COVID Outcomes and Vaccine Effectiveness

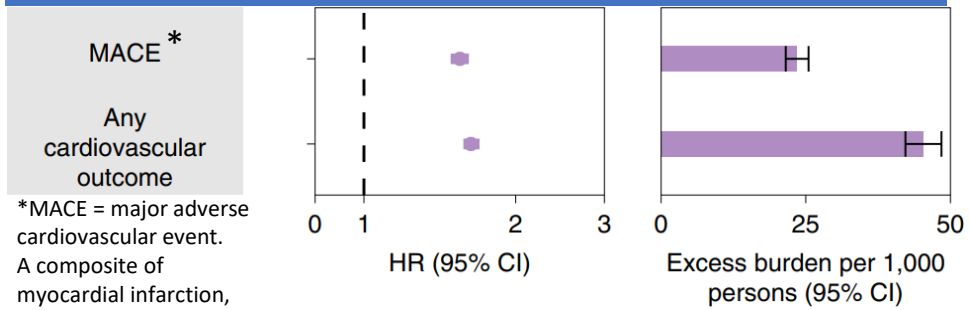
Updated 2/14/22

Long-term cardiovascular outcomes of COVID-19 | Nature Medicine: **February 7, 2022**

Summary: A cohort-control study of COVID patients from 2019 (with contemporary and historical controls) from US Department of Veterans Affairs assessing risks and 12-month increased burdens of cardiovascular outcomes according to care setting of the acute infection.

Key Findings: People with COVID-19 exhibited **increased risks and 12-month burdens of cardiovascular diseases and disorders beyond their acute infection**. The risks and burdens increased across the severity spectrum of the acute phase of COVID-19 (from non-hospitalized to hospitalized to those admitted to intensive care). Increased risks and burdens were found among all groups of COVID infected including those who were not hospitalized during the acute phase of the COVID-19 infection. **Compared to the contemporary control group, there were increased risks and burdens of major adverse cardiovascular events** (MACE) Hazard Ratio (HR) = 1.55 (95% CI =1.50-1.60); burden 23.48 (95% CI = 21.54- 25.48)) **and any cardiovascular outcome** (HR = 1.63 (95% CI = 1.59, 1.68); burden 45.29 (95% CI = 42.22, 48.45)).

Risks and 12-Month Burden of Post-Acute COVID-19 Cardiovascular Outcomes Compared with the Contemporary Control Cohort



*MACE = major adverse cardiovascular event. A composite of myocardial infarction, stroke and all-cause mortality.

COVID-19 VE Against ED/UC Visits and Hospitalizations by Number and Timing of Vaccine Dose During Omicron

After Receipt of 2 Doses of mRNA COVID-19 Vaccine		
Time Since Vaccination	VE Against ED/UC (95% CI)	VE Against Hospitalization (95% CI)
<2 months	69% (62-75)	71% (51-83)
2-3 months	50% (45-55)	65% (53-74)
≥ 5 months	37% (34-40)	54% (48-59)
After Receipt of 3 Doses of mRNA COVID-19 Vaccine		
Time Since Vaccination	VE Against ED/UC (95% CI)	VE Against Hospitalization (95% CI)
<2 months	87% (85-88)	91% (88-93)
2-3 months	81% (79-82)	88% (85-90)
4 months*	66% (59-71)	78% (67-85)

* VE against ED/UC was collected at 4 months; VE against hospitalization was collected at ≥4 months. There was no data ≥5 months for recipients of 3 doses of mRNA vaccine.

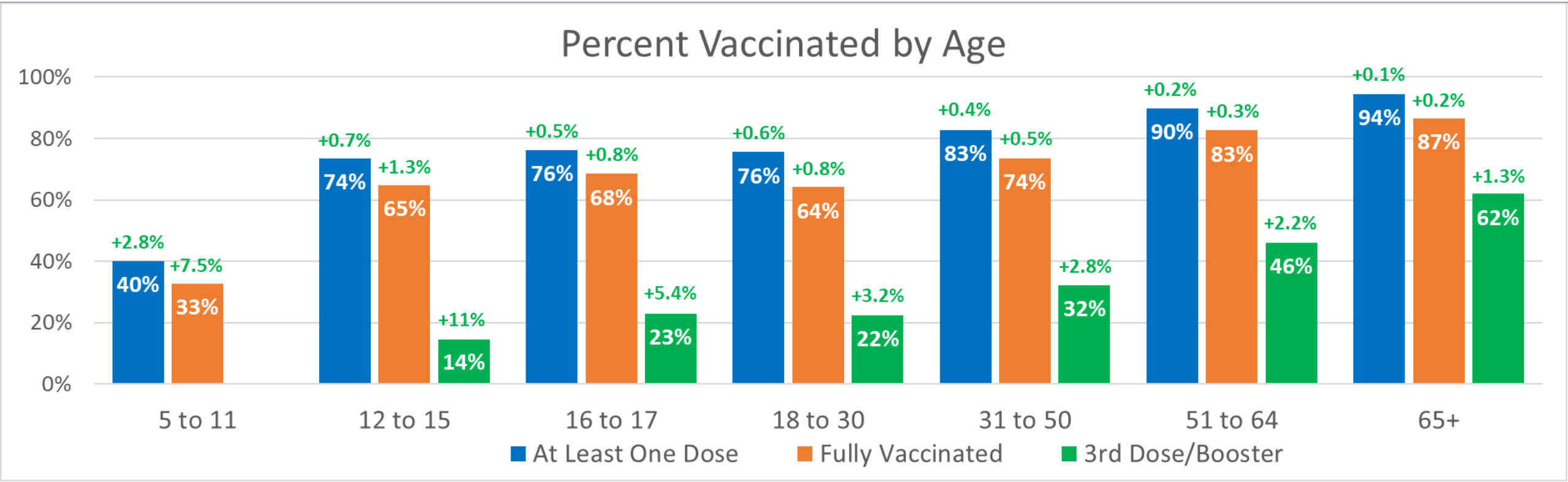
Waning 2-Dose and 3-Dose Effectiveness of mRNA Vaccines Against COVID-19–Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Adults During Periods of Delta and Omicron Variant Predominance — VISION Network, 10 States, August 2021–January 2022 | MMWR (cdc.gov): **February 11, 2022**

Summary: A test-negative case-control study examining vaccine effectiveness (VE) against COVID-19 emergency department/urgent case (ED/UC) visits and hospitalizations in adults aged ≥18 after second and third vaccine doses during Delta and Omicron.

Key Findings: Vaccine effectiveness (VE) against COVID-19–associated emergency department/urgent care (ED/UC) visits and hospitalizations **was higher after the third dose than after the second dose, but waned with time** since vaccination. VE after 2 and 3 doses was lower during Omicron than Delta at all time points. For both Delta- and Omicron-predominant periods, VE was generally higher for protection against hospitalizations than against ED/UC visits.

Virginia: Vaccination by Age Groups

Updated 2/16/22



Virginia Vaccination by Age

- ✓ **75.4%** **(+0.7%)** of the Eligible (5+) Population and **71.0%** **(+4.3%)** of the Total Population are Fully Vaccinated
- ✓ **56.3%** **(+0.2%)** of the Eligible Population and **37.5%** **(+2.4%)** of Total Population Vaccinated with 3rd Dose/Booster
- ✓ **40.4%** **(+3.1%)** of the Total Population is "Up-to-Date" with their Vaccinations
- ✓ **90.4%** **(+0.3%)** of the Adult (18+) Population and **56.2%** **(+1.4%)** of 5 to 17 year olds Vaccinated with at Least One Dose
- Green percent represents percent increase from two weeks prior

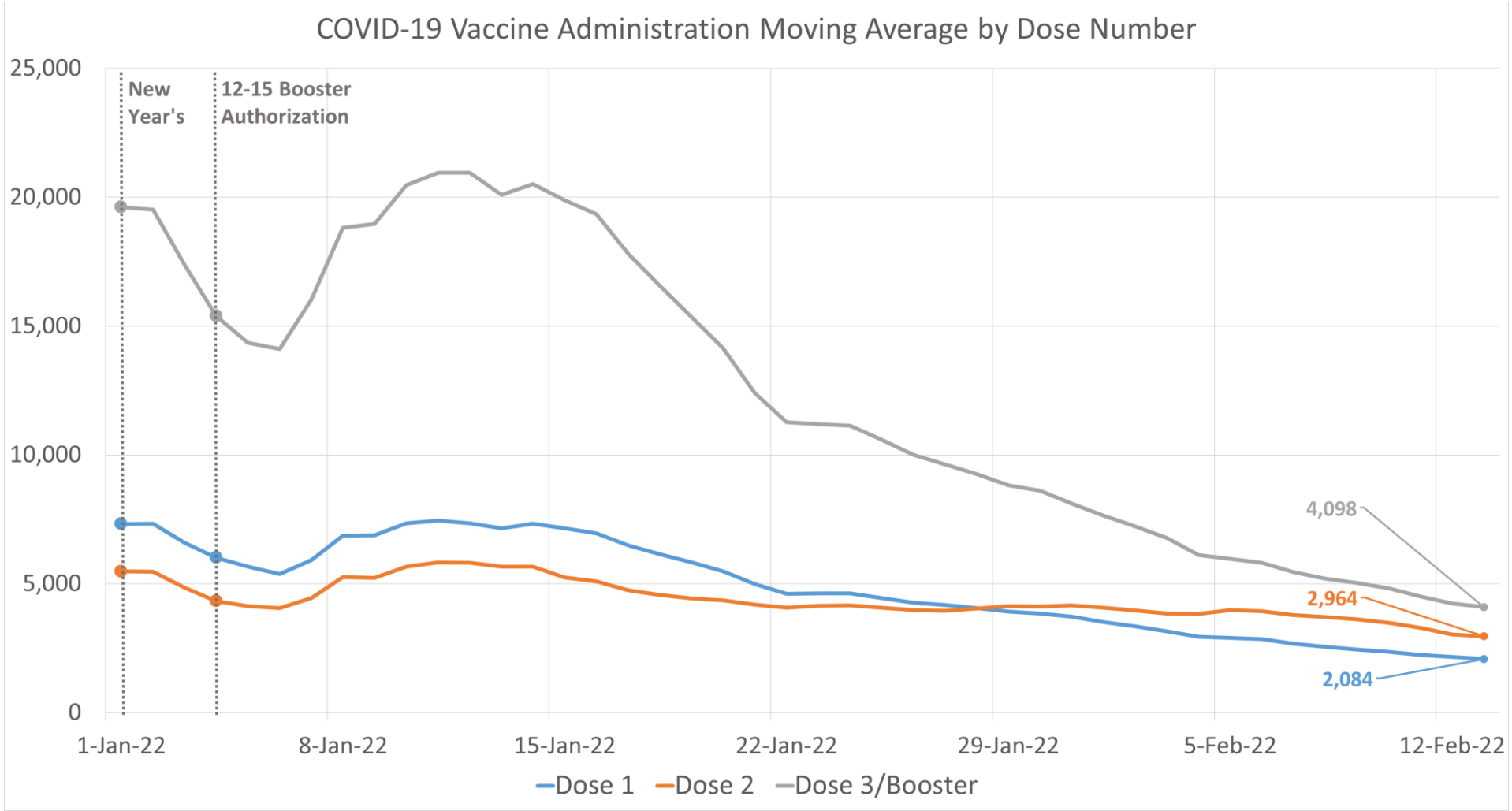
Source: COVID-19 in Virginia: Vaccine Summary, Keep Virginia Safe Tournament | Metaculus

Virginia: Vaccine Demand by Dose Number

Updated 2/16/22

First Dose, Second Dose, and Booster Administrations Have Decreased

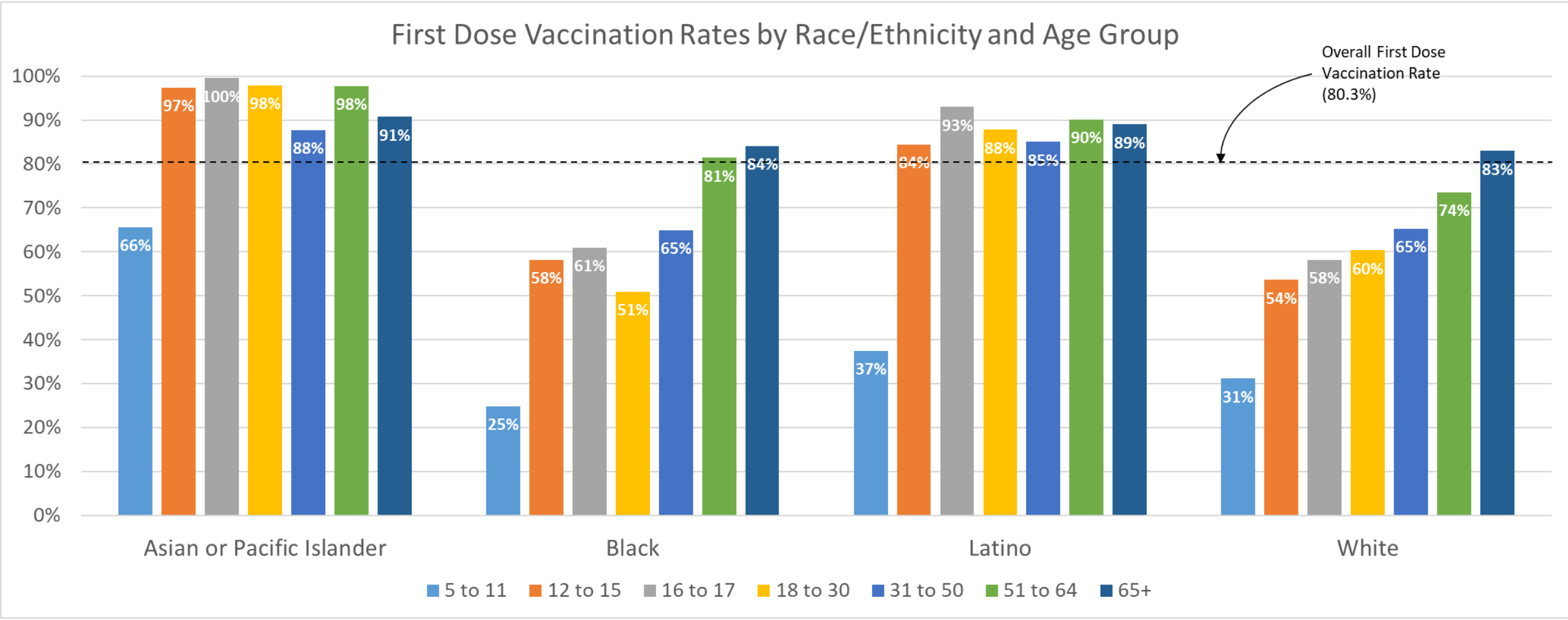
- Over the past 4 weeks, Third Dose/Booster Administrations have decreased by nearly 80%
- First and Dose Administrations continue to decline



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

Virginia: Vaccination by Race/Ethnicity and Age

Updated 2/16/22

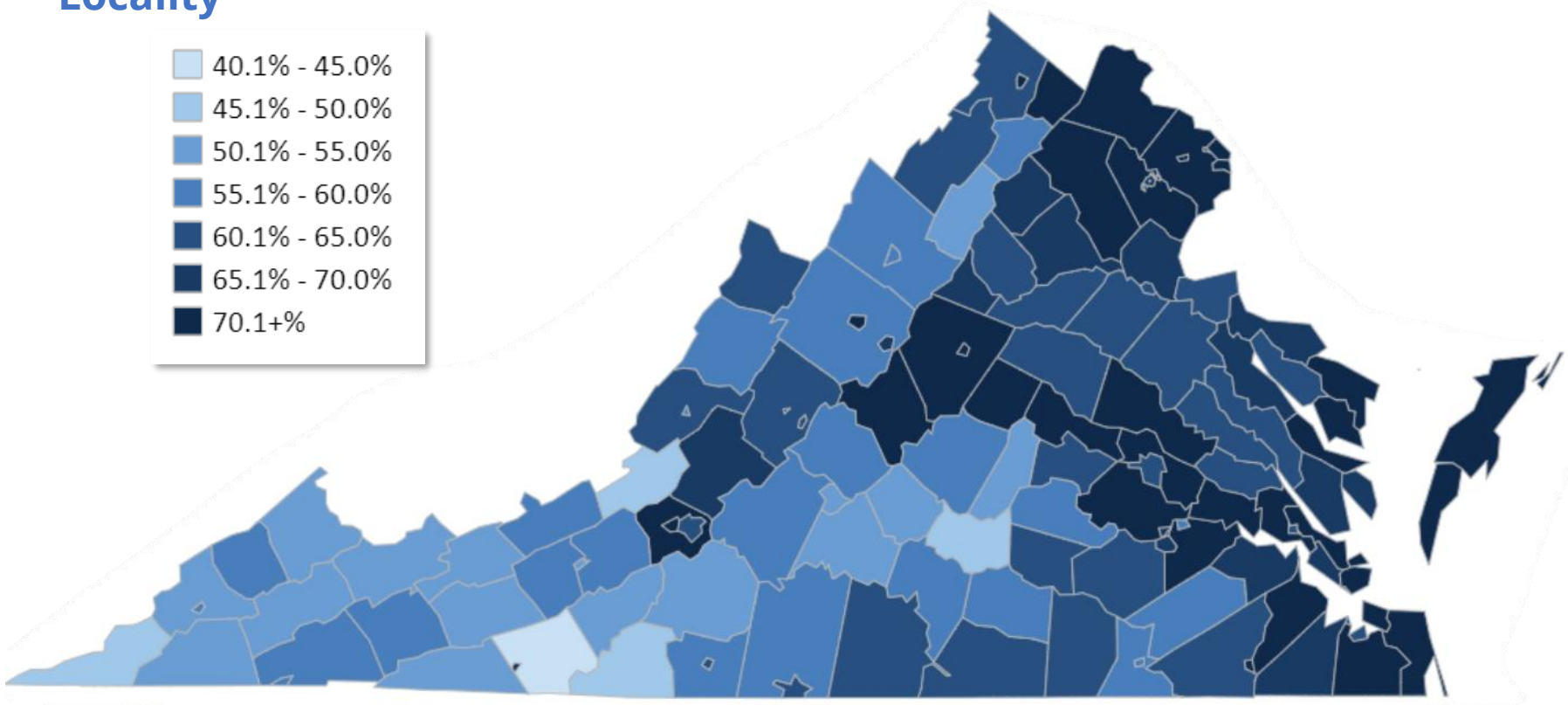


Source: [COVID-19 Vaccine Summary – Coronavirus (virginia.gov)]

Virginia: Vaccination across the Commonwealth by Geography

Updated 2/16/22

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	44%	74%	78%	75%	74%	85%	93%	76%
Urban	41%	76%	81%	68%	79%	87%	91%	76%
Mixed Rural	28%	53%	60%	59%	64%	75%	85%	66%
Rural	19%	45%	51%	53%	58%	71%	82%	62%
Grand Total	**36%**	**67%**	**73%**	**66%**	**73%**	**82%**	**88%**	**72%**

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

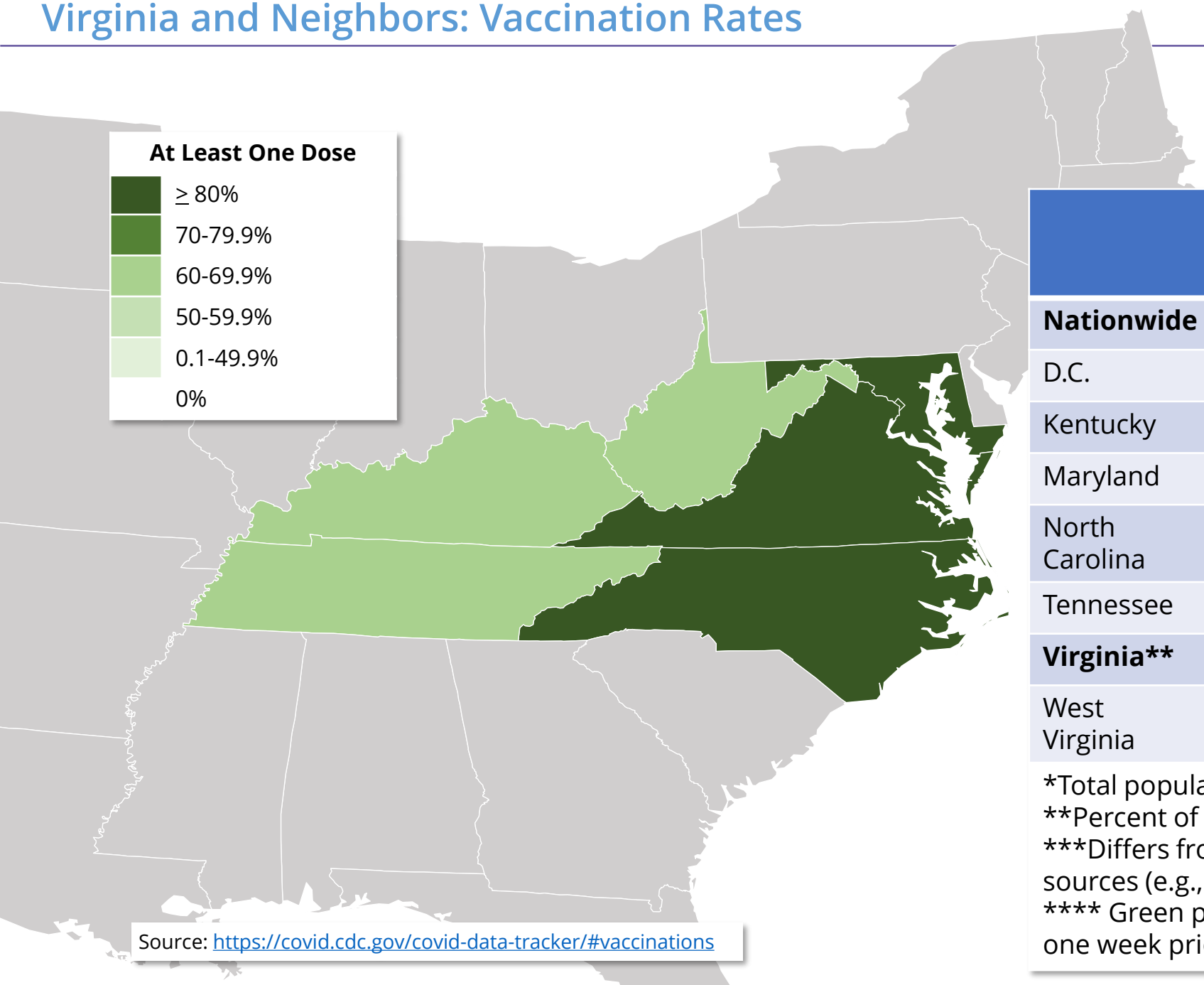
First Dose Vaccination Rate by Region for Total Population

Region Name	1st Dose Vaccination
Central	68.9%
Eastern	73.2%
Northern	83.3%
Northwest	65.9%
Southwest	57.8%

- 5 out of 133 Localities have a first dose vaccination rate below 50%
- 38 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

Virginia and Neighbors: Vaccination Rates

Updated 2/16/22



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

	At Least One Dose*	Fully Vaccinated *	Booster Dose**
Nationwide	**75.4% (+0.4%)**	**63.8% (+1.3%)**	**43.0%**
D.C.	93.3% (+2.2%)	70.1% (+1.9%)	33.9%
Kentucky	64.7% (+1.7%)	55.7% (+1.3%)	42.2%
Maryland	83.7% (+1.6%)	72.7% (+1.4%)	47.9%
North Carolina	80.9% (+2.1%)	58.5% (+1.6%)	24.8%
Tennessee	60.7% (+1.7%)	52.8% (+1.5%)	41.4%
Virginia**	**83.2% (+3.0%)**	**70.6% (+2.3%)**	**45.1%**
West Virginia	63.6% (+1.3%)	56.2% (+1.1%)	43.7%

*Total population, includes out-of-state vaccinations
**Percent of fully vaccinated people with a booster dose
***Differs from previous slide because all vaccination sources (e.g., federal) are included
**** Green percent represents percent increase from one week prior