

Virginia Department of Health Plan for Equitable Distribution of COVID-19 Vaccine - December, 2022

December 2022

Office of Health Equity in the Virginia
Department of Health



VDH VIRGINIA
DEPARTMENT
OF HEALTH
Protecting You and Your Environment
www.vdh.virginia.gov

Contents

Executive Summary	2
1. Key Equity Announcements and Critical Updates	3
2. Vaccination Equity in Virginia	6
Vaccinations for 65+	6
Vaccinations for Under 45	6
Race and Ethnicity	7
Rural Areas	9
Infections and Deaths Since Vaccine Availability	12
3. Vaccinations in FEMA Region 3	15
FEMA Region 3 and Race/Ethnicity	16
4. Trends Over Time	19
Racial Groups as a Share of Total Vaccinations in Virginia	19
Doses Administered	20
5. Vaccine Hesitancy	20
Vaccination Mandates	22
6. On the Horizon	22

Executive Summary

This monthly report is from the [Office of Health Equity in the Virginia Department of Health \(VDH\)](#). It provides an overview of vaccination equity in the Commonwealth of Virginia, including key equity accomplishments, for November 2022.

This report compares Virginia's equitable vaccination progress with other states in Region 3 of the Federal Emergency Management Agency (FEMA), namely Delaware, the District of Columbia, Maryland, Pennsylvania, and West Virginia. Additionally, this report explores vaccine trends over time, vaccination hesitancy, and equity considerations for vaccine distribution. An overview of recent legislative, executive, and administrative actions is also included. Key findings include:

Impact of the Omicron Variant BA.5

- *At the end of July and August, the BA.5 variant was responsible for over half of all cases in Virginia, according to CDC estimates ([Source](#); [Source](#)).*
- *In November, the BA.5 variant remained the dominant strain in the U.S., but experts warn of new variants that are gaining ground ([Source](#); [Source](#)).*

Trends in Average Daily Cases

- *As of November 22nd, the highest average number of daily cases in Virginia for the month was 12.96 cases per 100,000 people on November 1st ([Source](#)).*

Vaccination Rates

- *At the end of November 2022, 73.4% of Virginia's population was fully vaccinated, or 6,309,285 people ([Source](#)).*

Impacts on Children

- *As of November 22nd, 2022, 105 individuals younger than 20 have died from COVID-19 in Virginia ([Source](#)).*
- *CDC data shows that three out of every four kids in Virginia has had COVID-19 ([Source](#)).*
- *Statewide rates for Virginia show that students have fallen behind on their routine school immunizations during the pandemic. It is yet another grim reminder of how the pandemic has indirectly and directly impacted life for Virginians ([Source](#)).*
- *On July 14th, 2022, Governor Youngkin announced updated guidance on quarantine recommendations for people exposed to COVID-19 in K-12 schools, child care, and camp settings. The revised guidance states that quarantine is no longer recommended for asymptomatic individuals who were exposed to COVID-19-infected individuals in these settings ([Source](#)).*
- *Even as COVID-19 cases decline, students are facing a wave of flu-like symptoms ahead of a flu season that experts warn will be more severe than previous years ([Source](#)).*

1. Key Equity Announcements and Critical Updates

This section details equity-related announcements regarding COVID-19 in the Commonwealth of Virginia during the month. It also provides information on critical updates relevant to Virginia's responses to COVID-19. Equity announcements and critical updates from November include:

- **November 1:** According to data from the Centers for Disease Control and Prevention (CDC), the Omicron subvariant cases of BQ.1 and BQ.1.1 make up some of the most rapidly growing share of newly confirmed COVID-19 cases ([Source](#)).
- **November 2:** Experts are warning of a possible surge this year around the holidays. Modeling from the University of Virginia forecasts sharp rises in cases in November and December in the LENOWISCO and Mount Rogers health districts — peaking in mid- to late December — while the surge in the Cumberland Plateau district is forecast to start later and peak in January ([Source](#)).
- **November 3:** Health officials in Virginia are cautioning that Virginia may see a “triple-demic” this winter, with rises in cases of COVID-19, influenza, and Respiratory Syncytial Virus (RSV). In a letter sent to health-care providers on Oct. 21st and a news release issued Oct. 24th, the VDH cautioned that this year’s flu season is already showing concerning, early signs that it may be worse than in recent years. The news release also said that more people, particularly young children aged 0-4 years, are seeking care in hospitals and urgent care centers for influenza-like illness than at this point in previous years ([Source](#)).
- **November 6:** Currently, Pittsylvania-Danville Health District is the only district in the Commonwealth experiencing a COVID-19 surge. An uptick in cases is expected throughout the state. In addition, according to CDC data, Virginia is also experiencing a high level of flu cases this season ([Source](#)).
- **November 8:** Due to more adults being affected by COVID-19 than children, many hospitals across the U.S. closed their pediatric units to make room for adults. This is now posing a problem as cases of severe RSV surge amongst U.S. children ([Source](#)).
- **November 9:** Arlington County announced that it is closing its public COVID-19 vaccination clinic next month. The county government made the decision due to a drop in demand “with COVID-19 vaccines now widely available in the community through pharmacies, urgent care centers, and medical providers.” [Source](#)
- **November 10:** COVID-19 “Test to Treat” sites are clinical centers launched based on a federal initiative to provide free testing, diagnosis, and immediate access to COVID-19 antiviral treatment with Paxlovid. However, a recent study by investigators from Brigham and Women’s Hospital, the University of Virginia’s School of Medicine, and the University of Pittsburgh found that these sites are less accessible to marginalized communities. In particular, rural and American Indian or Alaska Native communities experience major disparities in geographical access to these treatment centers ([Source](#)).
- **November 11:** According to a Thursday COVID update from Rappahannock-Rapidan Health District (RRHD), flu levels are high across Virginia. Also in the report, RRHD saw a 32%

increase in reported cases between last week and the prior week, indicating that Virginia may be headed into a period of new COVID-19 case increases ([Source](#)).

- **November 13:** In order to protect against COVID-19 and the flu, public health experts are advising the public to get their vaccinations, wash their hands, cover coughs, and stay home when sick. The Chatham Health District also announced that it will offer a free drive-thru flu vaccine clinic on Friday at the Chatham Health Department at 200 H G Mcghee Drive ([Source](#)).
- **November 14:** As COVID-19 continues to circulate, the CDC reports that Virginia is amongst seven states in which flu cases are the highest. "If we do peak early, that means that we are peaking early, which means we'd see decreased activity in December, January, and February," Cynthia Morrow, MD, a representative for the Virginia Department of Health Roanoke-Allegheny district, told local ABC affiliate WSET in a Nov. 1st interview ([Source](#)).
- **November 15:** For the past two years, COVID-19 cases peaked during the winter months. That has not yet happened this year in Virginia or nationally. On the other hand, flu and RSV cases are surging, leading the Northern Virginia Regional Commission (NVRC) to send out a news release yesterday. In it, the NVRC urged the public to maintain its vigilance in preventing these concerning diseases ([Source](#); [Source](#)).
- **November 16:** The Richmond and Henrico Health Districts (RHHD)'s mobile clinic announced that it will partner with local groups and organizations to host free vaccination clinics for COVID-19, the flu, and monkeypox. The mobile clinics, which will be stationed across various locations in the Richmond area and operate during select hours, will offer the vaccines free of charge for attendees and members of partnering organizations. Walk-ups will also be welcome ([Source](#)).
- **November 17:** Dr. Laurie Forlano, Deputy Epidemiologist with the Virginia Department of Health, gave advice for staying healthy over the holidays. "If your symptoms are mild and you can manage them at home, that's OK. Rest, fluid, just taking it easy for a couple days. Sometimes, time is the best medicine for some of these infections," said Dr. Forlano. "One of the best gifts you can give to your family and friends at the dinner table is to stay healthy and help keep them healthy. Wash your hands, get a vaccine, and seek care if you're not feeling well." ([Source](#))
- **November 18:** On November 30th, Arlington County government will close all but one of its COVID testing kiosks, citing a lack of demand and other practical alternatives ([Source](#)).
- **November 18:** The Virginia Beach Department of Public Health announced that it is hosting a free COVID-19 and flu clinic at Kingdom Cathedral, 3820 Stoneshore Road on Saturday, Nov. 19th from 10 a.m. to 12 p.m. ([Source](#))
- **November 20:** Local epidemiologists are raising concerns over an alarming rise of tick-borne diseases, yet another health concern that was overshadowed these last two years by COVID-19. "Prior to COVID, one of the number one tested conditions in our whole health district ... was Lyme disease," said Rappahannock-Rapidan Health District Epidemiologist Daniel Ferrell, whose coverage area includes Rappahannock, Culpeper, Fauquier, Madison and Orange. "So many of the local epidemiologists were so busy dealing with COVID, that a

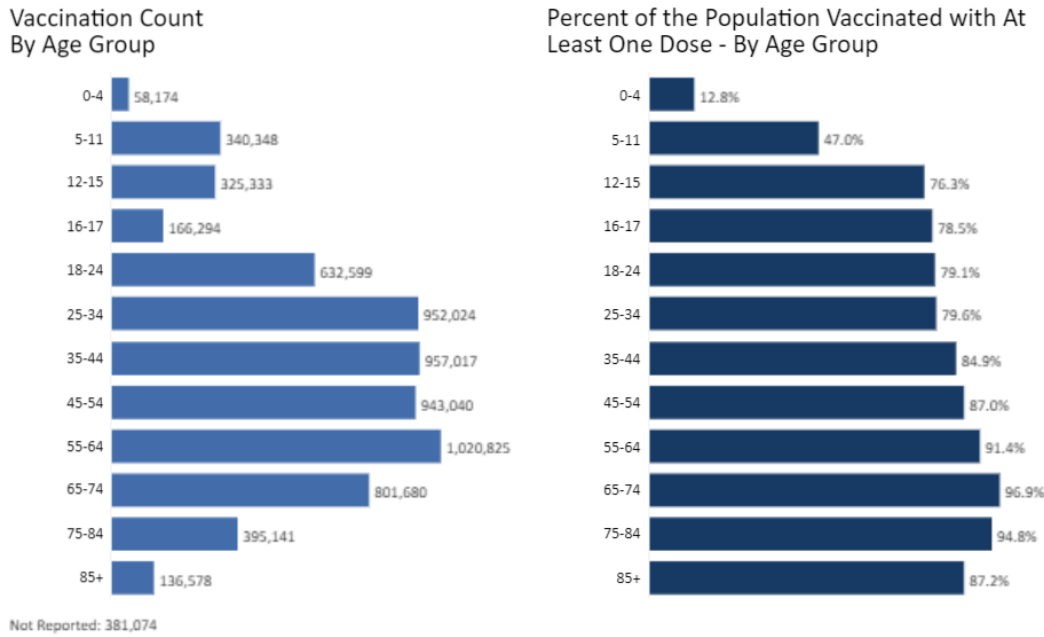
lot of tick-borne disease cases probably went unreported," said Dr. David Gaines, Public Health Entomologist for the VDH ([Source](#)).

- November 21: Lisa Sollot, a respiratory illness expert with the VDH, explained why flu and RSV cases are rising at unprecedented levels this fall and winter in Virginia. "COVID-19 is a respiratory virus and has changed how influenza and RSV and other respiratory viruses are expected to circulate," Sollot said. She and other epidemiologists do not expect a slowdown soon, given that students and families will be traveling for the holidays. "It is concerning that we're seeing these numbers heading into the holidays, knowing that increased spread is probably inevitable," Sollot said ([Source](#)).

1. Vaccination Equity in Virginia

At the end of November, nearly 17.9 million COVID-19 vaccine doses have been administered in Virginia ([Source](#)). With 73.4% of the population fully vaccinated, Virginia ranks 11th in the country for the percentage of the population that has been fully vaccinated against COVID-19 ([Source](#); [Source](#)). Virginia’s fully vaccinated rate, 73.4%, is higher than the 68.7% national total fully vaccinated rate ([Source](#); [Source](#)). On average, Virginia is administering approximately 10,817 vaccination doses per day ([Source](#)).

Figure 1: Vaccinations by Age (One Dose)



[Source](#)

Vaccinations for 65+

As seen in Figure 1, VDH reports the following age ranges: 65-74, 75-84, and 85+ ([Source](#)). At the end of November, 95.2% of those ages 65+ were vaccinated ([Source](#)).

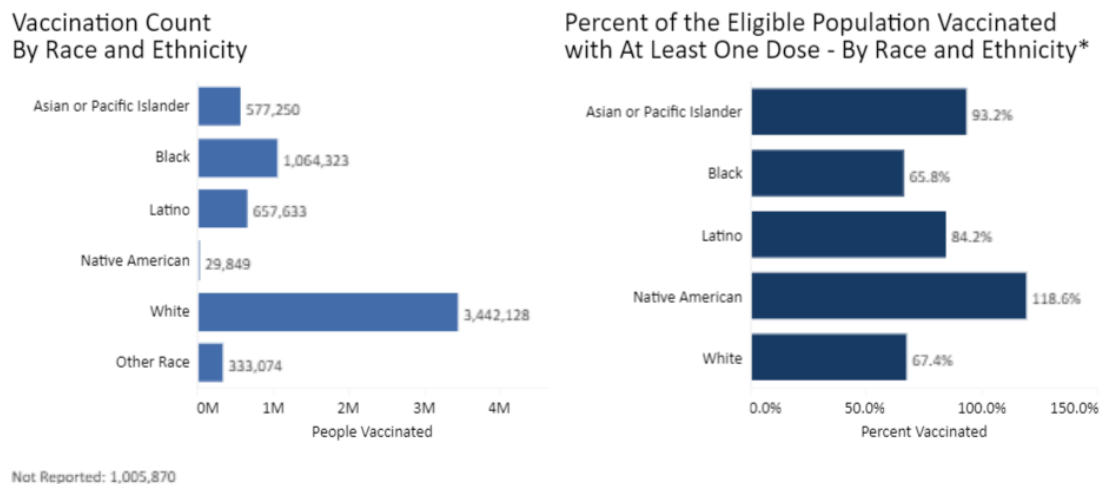
Vaccinations for Under 45

The reported age ranges in Virginia are: 0-4, 5-11, 12-15, 16-17, 18-24, 25-34, and 35-44. As seen on VDH’s COVID-19 dashboard, 61.0% of those aged 5-17 years have been vaccinated with at least one dose, up by 0.3% from last month. 87.2% of individuals older than 5, up by 0.3% since last month, have been vaccinated with at least one dose. Furthermore, 92.5% of the population over the age of 18 have been vaccinated with at least one dose, up by 0.3% from last month. Data are also reported by each age group for percentages of the population vaccinated with at least one dose:

12.8% of 0-4 year olds (up from 11.6% last month), 47.0% of 5-11 year olds (up from 46.6%), 76.3% of 12-15 year olds (up from 76.1%), 78.5% of 16-17 year olds (up from 78.3%), 79.1% of 18-24 year olds (up from 78.7%), 79.6% of 25-34 year olds (up from 79.0%), and 84.9% of 35-44 year olds (up from 84.5%) ([Source](#)).

Race and Ethnicity

Figure 2: Vaccination Count and Percent of Population Vaccinated by Race and Ethnicity (One Dose)



[Source](#)

**This data source does not include population estimates for the Other Race category. No population estimates are available for out-of-state individuals or those without a reported locality. More information about population estimates can be found at this link:*

http://www.cdc.gov/nchs/nvss/bridged_race.htm

The percentage of Native Americans that are vaccinated can be above 100% for two reasons.

- 1. There are small numbers of vaccinations and small population estimates for Native Americans at the city/county level in Virginia. VDH gets population estimates from the National Center for Health Statistics (NCHS). For example, there were 3 Native American vaccinations in a county. Population estimates say there were only 2 people who identify as Native American in that same county. This means that the data would say there were 3 vaccinations over 2 people in the population. This would equal 150%, or a percentage over 100%.*
- 2. Some people may identify that they are Native American and multi-race when they are getting their vaccine. They will be categorized as Native American only in the data system. This is because population estimates from NCHS do not include multi-race as an option. If there was a multi-race option, a person who identified as Native American and multi-race would be in the multi-race population estimates.*

Table 1: Vaccination Distribution by Race and Ethnicity

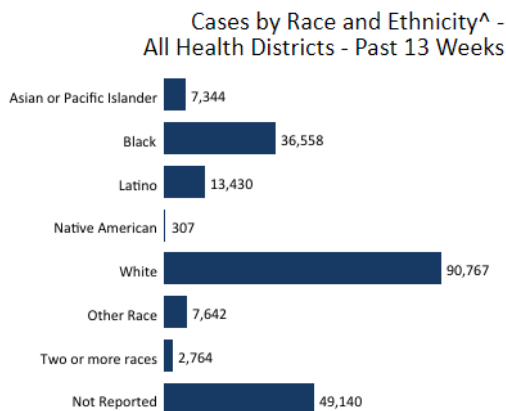
Race and ethnicity	Percent of people with at least one dose with reported race and ethnicity
Black	17.4%
Latino	10.8%
Asian or Pacific Islander	9.5%
White	56.4%

[Source](#)

According to Figure 2 and Table 1, as of November 21st, the key race and ethnicity breakdowns for those receiving at least one dose are as follows (with little change since last month):

- First, Blacks have received 17.4% of all vaccinations and 65.8% of Blacks have been vaccinated with at least one dose.
- Second, Latinos have received 10.8% of all vaccinations and 84.2% of Latinos have been vaccinated with at least one dose.
- Third, Asians or Pacific Islanders have received 9.5% of all vaccinations and 93.2% of Asians or Pacific Islanders have been vaccinated with at least one dose.
- Fourth, Whites have received 56.4% of all vaccinations and 67.4% of Whites have been vaccinated with at least one dose ([Source](#)).

Figure 3: Cases by Race and Ethnicity



[Source](#)

[^]For more information on how VDH is presenting data on race and ethnicity, visit:

<https://www.vdh.virginia.gov/coronavirus/2020/06/16/race-and-ethnicity-reporting-update/>

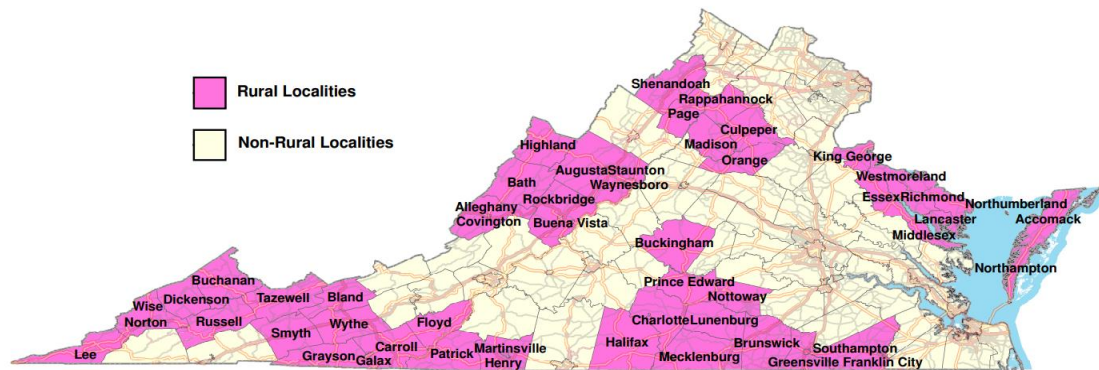
Case counts are currently low but continue to occur amongst Virginia’s population, making it more important to focus efforts on vaccination. Moving forward, continuing to collect data on race and ethnicity will be crucial to making more progress on vaccine equity in Virginia. This is especially true given the known increased and disproportional risks faced by historically marginalized populations in experiencing the worst effects and outcomes of COVID-19, including death. Likely explanations for the unequal burden of disease on these populations include social vulnerability,

social determinants of health, and a pattern of historical disparity. It will be crucial to pay attention to these disparities as Virginia enters the holiday season, possibly bringing another wave of COVID-19 cases.

Rural Areas

Figure 4 below displays the rural (non-metropolitan) areas in Virginia as defined by the Office of Management and Budget (OMB) ([Source](#)). Areas in pink are rural localities while areas in beige are considered non-rural (as defined by the OMB).

Figure 4: Rural and Non-Rural Areas in Virginia



[Source](#)

Another way to examine rural and urban disparities is to examine rural, urban, suburban, and exurban areas. The Isserman Classification system (shown in Table 2 below) uses a combination of urban area population and population density to identify counties as urban, rural, or mixed.

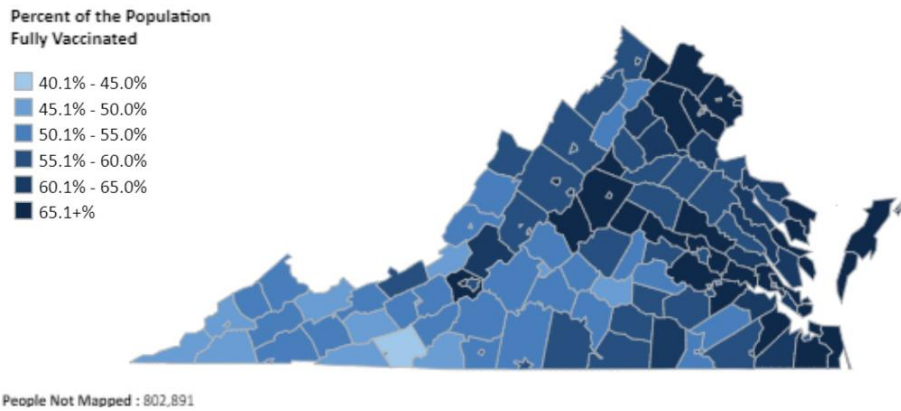
Table 2: Percent Population Vaccinated by Urban and Rural Jurisdictions (by Age Groups)

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	41%	69%	73%	68%	69%	81%	88%	72%
Urban	38%	69%	75%	60%	72%	82%	86%	70%
Mixed Rural	25%	49%	56%	54%	60%	73%	82%	62%
Rural	17%	41%	47%	48%	54%	69%	78%	58%
Grand Total	34%	62%	67%	59%	67%	78%	84%	67%

[Source](#)

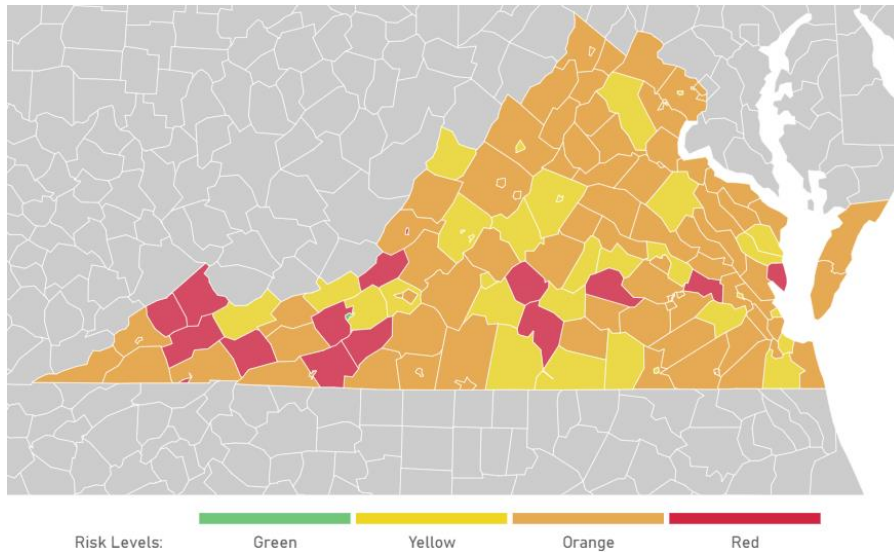
Rural areas, especially in southwest Virginia, continue to have lower vaccination percentages as compared to other areas of the state. There have been some improvements, primarily concentrated in the northern, central, and southeastern regions (Figure 5). Vaccination hesitancy continues to be an issue throughout the Commonwealth. As seen in Figure 6, counties across Virginia are experiencing a combination of risk levels. Fortunately, risk levels this month remain relatively low. Risk levels have also improved this month in comparison to August when almost the entire Commonwealth was experiencing highly elevated risk levels ([Source](#)). As the winter and holiday season draws nearer, increasing vaccination rates will be crucial to maintaining lower risk levels.

Figure 5: Vaccinations by Locality – Percent of Total Population – As of November 22nd, 2022



[Source](#)

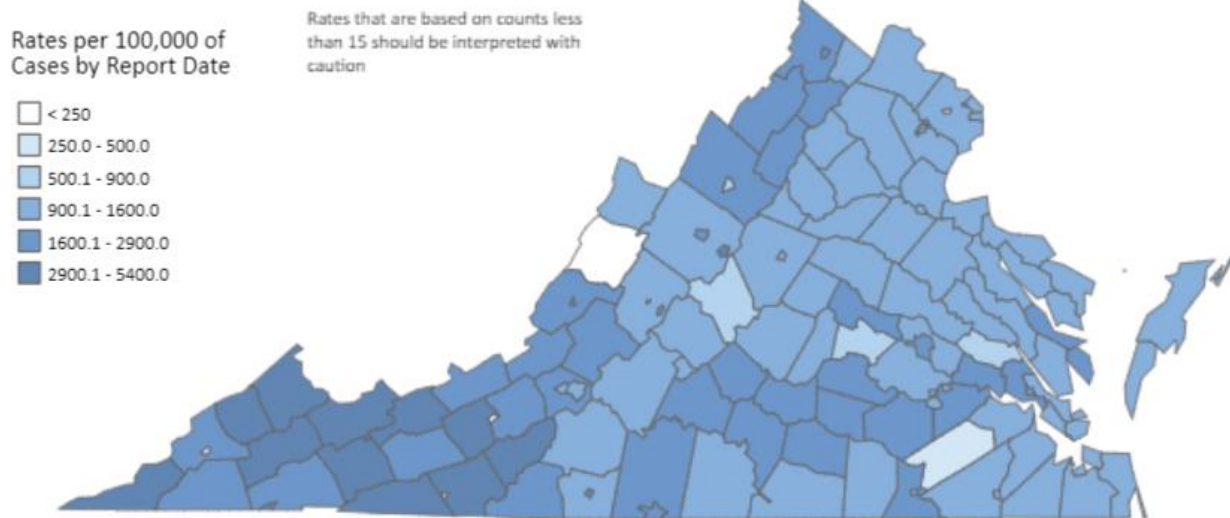
Figure 6: COVID-19 Risk Levels by Locality in November



[Source](#)

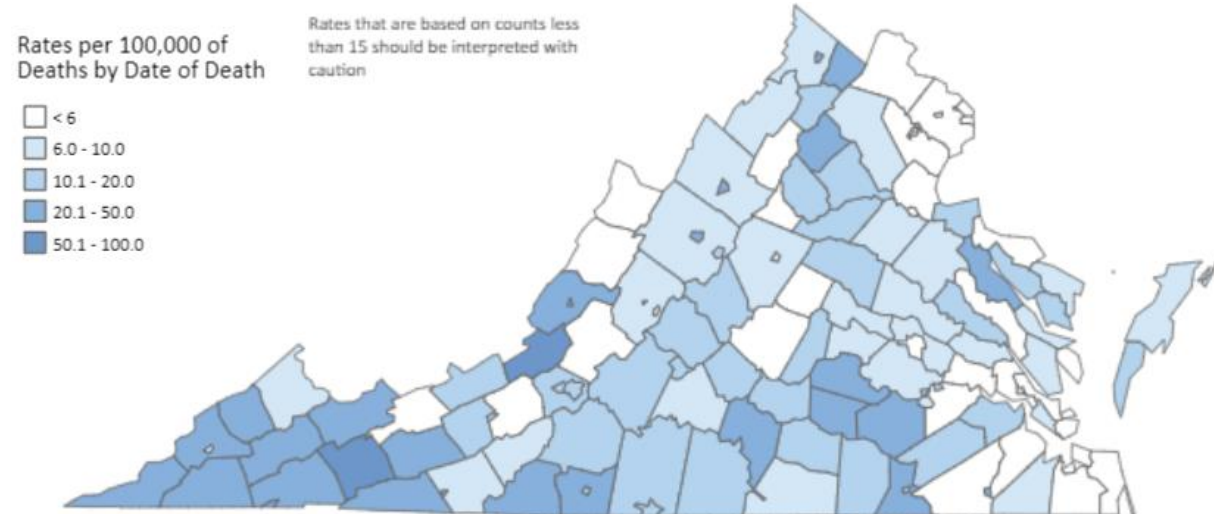
Third, as shown in Figures 7 and 8, some urban and rural disparities remain in terms of cases as measured by rates per 100,000 people. Some rural counties continue to show slightly higher rates of cases throughout the Commonwealth. Southwest Virginia particularly has a higher case rate than the rest of the state. Death rates per 100,000 remain relatively low in Virginia, with more deaths occurring in southwest Virginia, as shown in Figure 8.

Figure 7: Cases of COVID-19 Over the Last 13 Weeks in Virginia: Urban and Rural



[Source](#)

Figure 8: Deaths from COVID-19 Over the Last 13 Weeks in Virginia: Urban and Rural



[Source](#)

Infections and Deaths since Vaccine Availability

VDH's data reveal that vaccinations have saved lives ([Source](#); [Source](#)). Despite some progress in recent months, disparities remain in infections and deaths since the availability of vaccines, especially concerning: 1) race; 2) age and sex; and 3) urban-rural divides. Disparities detailed in previous vaccine equity reports remain. As shown in Table 3, Whites represent 61% of the population, 56% of cases, and 67% of deaths. Blacks represent only 19% of the population yet 23% of cases and 23% of deaths. Further, Hispanics make up 10% of the population yet 14% of cases and 6% of deaths. When comparing the percentages in the population, both Blacks and Hispanics still disproportionately contract COVID-19, and Blacks disproportionately die from it.

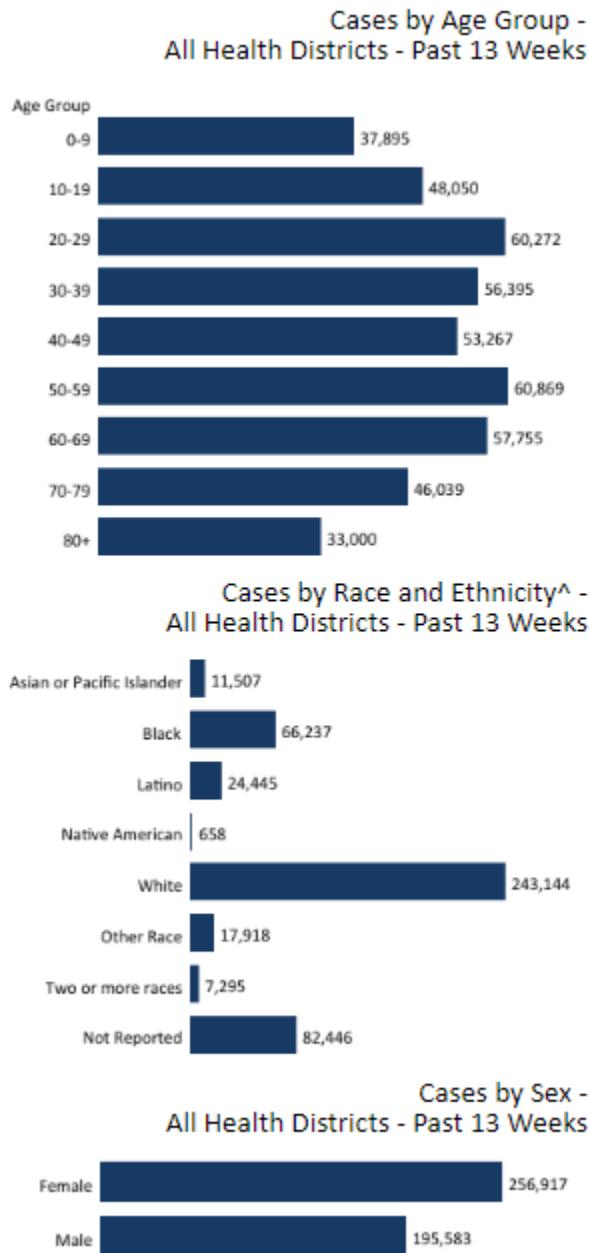
Table 3: Comparisons of COVID-19 Cases, Deaths, and Population

	% of Cases	% of Deaths	% of Total Population
White	56%	67%	61%
Black	23%	23%	19%
Hispanic	14%	6%	10%
Asian	4%	3%	7%
Other	3%	1%	3%

[Source](#)

Figures 9 and 10 show patterns concerning cases and deaths by age, race and ethnicity, and sex for the last 13 weeks. Regarding cases and age, those aged between 20-29 and 50-59 comprise the segment of the population with the single largest number of cases. Regarding cases and sex, those identifying as females tend to represent more COVID-19 cases. Concerning deaths and age, those aged 50+ comprise most of the deaths from COVID-19 with noted rises in deaths for successive age groups and with the bulk of deaths occurring in the age 80+ category. In previous reports, regarding deaths and sex, those identifying as male tend to die at a slightly higher rate than those identifying as female. However, this month and as shown in Figure 10, females had a slightly higher death rate than males (a departure from the usual trend).

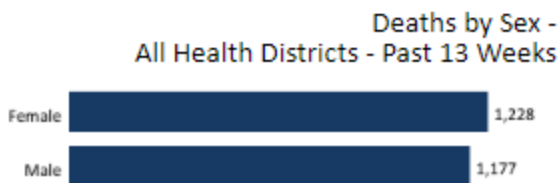
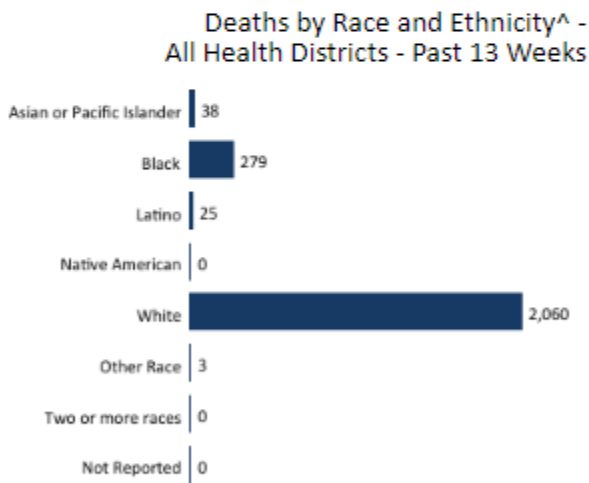
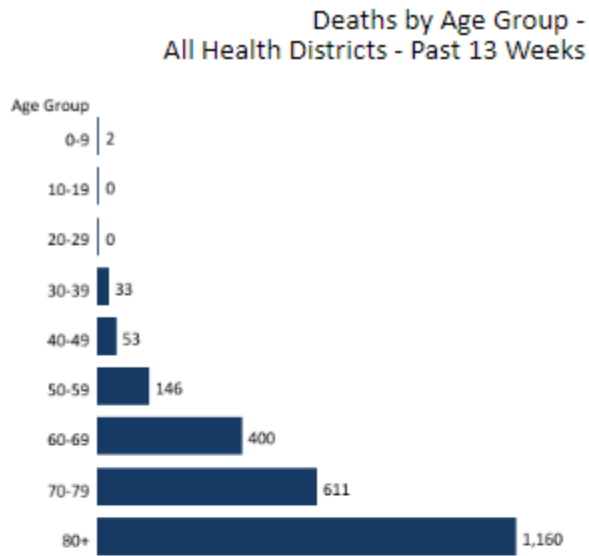
Figure 9: Cases of COVID-19 in Virginia: Demographics



[Source](#)

^For more information on how VDH is presenting data on race and ethnicity, visit: <https://www.vdh.virginia.gov/coronavirus/2020/06/16/race-and-ethnicity-reporting-update/>

Figure 10: Deaths by COVID-19 in Virginia: Demographics



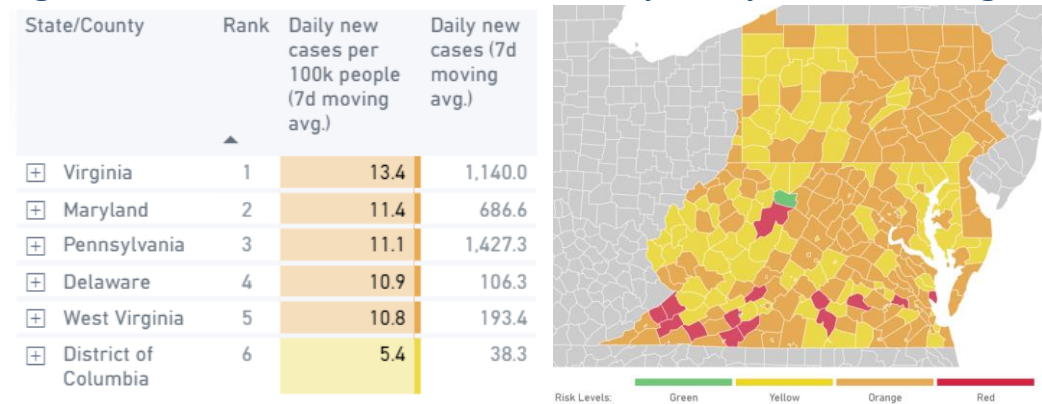
[Source](#)

^For more information on how VDH is presenting data on race and ethnicity, visit: <https://www.vdh.virginia.gov/coronavirus/2020/06/16/race-and-ethnicity-reporting-update/>

2. Vaccinations in FEMA Region 3

Regarding COVID-19 risk levels in November (Figure 11), most of Region 3 is currently experiencing low or medium risk levels. The risk levels for Virginia in November were about the same as they were in October’s report. At present, Virginia is the most at-risk in FEMA Region 3. Virginia has 1,140.0 new daily cases, a seven-day moving average of 13.4 new cases per 100,000 people (last month, Virginia saw 1,074.3 new daily cases with a seven-day moving average of 12.6 new cases per 100,000 people). These numbers place Virginia first out of sixth in FEMA Region 3 in terms of COVID-19 risk level, meaning that Virginia is currently the most at risk in the region. To compare, in the month of January 2022, Virginia had 9,194.0 new daily cases with a seven-day moving average of 107.7 new cases per 100,000 people ([Source](#)).

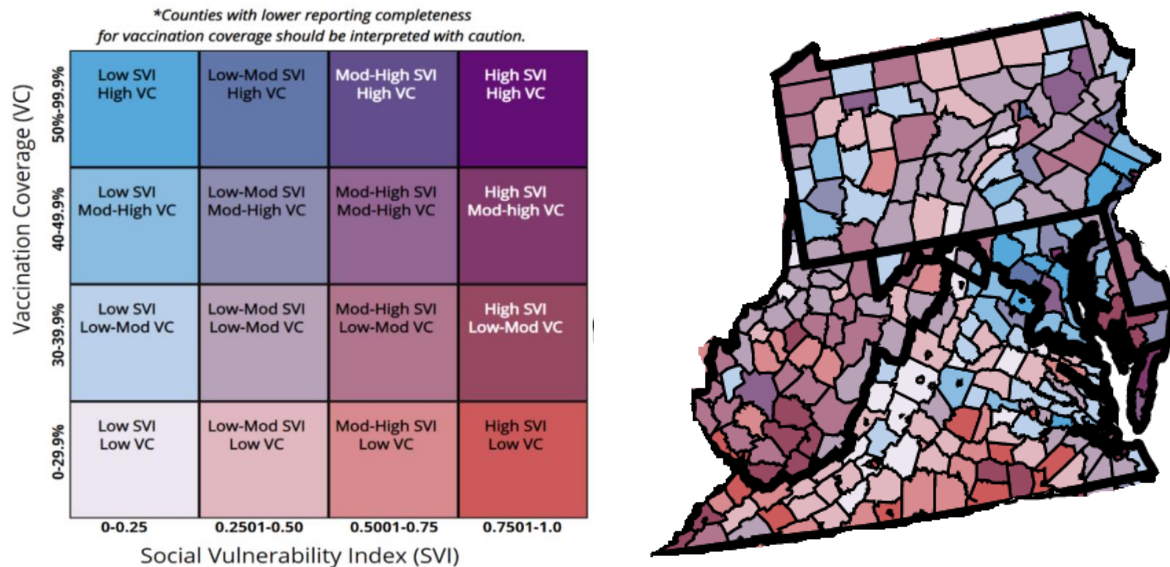
Figure 11: COVID-19 Risk Levels in November by County across FEMA Region 3



[Source](#)

Further, as seen in Figure 12 below, updated FEMA data are available concerning linkages between vaccination coverage (low to high) and rankings on the social vulnerability index (SVI). As shown below, Virginia particularly faces issues of high SVI and low vaccination coverage. In Virginia, these issues especially affect the south-central and southwest parts of the state.

Figure 12: Percent of Population Fully Vaccinated by Social Vulnerability Index, FEMA Region 3



[Source](#)

FEMA Region 3 and Race/Ethnicity

All areas in FEMA Region 3 continue to show racial disparities in the percentages of vaccines administered. Both Blacks and Hispanics/Latinos continue to see some improvements in vaccination percentages, but Blacks are still behind in vaccinations. The vaccination disparity for the Latino population reversed as of July 11, 2022, with 82% of Latinos vaccinated compared to 68% of Whites ([Source](#)). Virginia remains a leader in working to close gaps between the percentage of cases and the percentage of vaccinations for Blacks, Hispanics/Latinos, and Asians. Still, comparing state vaccination rates by race and ethnicity is challenging because of reporting inconsistency and missing data on race and ethnicity ([Source](#)). Data shown below in Figures 13-16 are current as of April 4, 2022.

Figure 13: Blacks as a Share of COVID-19 Trends, FEMA Region 3

Location	Black % of Cases	Black % of Total Population
Delaware	24%	22%
District of Columbia	57%	45%
Maryland	33%	30%
Pennsylvania	8%	10%
Virginia	23%	19%
West Virginia	5%	3%

[Source](#)

Location	Black % of Vaccinations	% of Vaccinations with Known Race	% of Vaccinations with Known Ethnicity
Delaware	20%	97%	78%
District of Columbia	46%	88%	92%
Maryland	28%	97%	96%
Pennsylvania ¹	7%	91%	78%
Virginia	17%	85%	85%
West Virginia ²	4%	97%	NR

[Source](#)

Figure 14: Hispanics as a Share of COVID-19 Trends, FEMA Region 3

Location	Hispanic % of Cases	Hispanic % of Total Population
Delaware	18%	10%
District of Columbia	14%	11%
Maryland	17%	11%
Pennsylvania	14%	8%
Virginia	14%	10%
West Virginia	3%	1%

[Source](#)

Location	Hispanic % of Vaccinations	% of Vaccinations with Known Race	% of Vaccinations with Known Ethnicity
Delaware	11%	97%	78%
District of Columbia	15%	88%	92%
Maryland	11%	97%	96%
Pennsylvania ¹	7%	91%	78%
Virginia	11%	85%	85%
West Virginia ²	NR	97%	NR

[Source](#)

Figure 15: Asians as a Share of COVID-19 Trends, FEMA Region 3

Location	Asian % of Cases	Asian % of Total Population
Delaware	2%	4%
District of Columbia	2%	4%
Maryland	3%	6%
Pennsylvania	2%	4%
Virginia	4%	7%
West Virginia	<1%	1%

[Source](#)

Location	Asian % of Vaccinations	% of Vaccinations with Known Race	% of Vaccinations with Known Ethnicity
Delaware	6%	97%	78%
District of Columbia	6%	88%	92%
Maryland	8%	97%	96%
Pennsylvania ¹	3%	91%	78%
Virginia	9%	85%	85%
West Virginia ²	NR	97%	NR

[Source](#)

Figure 16: Whites as a Share of COVID-19 Trends, FEMA Region 3

Location	White % of Cases	White % of Total Population
Delaware	47%	61%
District of Columbia	21%	37%
Maryland	43%	50%
Pennsylvania	74%	76%
Virginia	56%	61%
West Virginia	91%	93%

[Source](#)

Location	White % of Vaccinations	% of Vaccinations with Known Race	% of Vaccinations with Known Ethnicity
Delaware	70%	97%	78%
District of Columbia	47%	88%	92%
Maryland	53%	97%	96%
Pennsylvania ¹	74%	91%	78%
Virginia	57%	85%	85%
West Virginia ²	92%	97%	NR

[Source](#)

Notes:

1. Data does not include Philadelphia County due to differences in reporting data. As of 6/21, PA total population data was updated to exclude Philadelphia; data should not be compared to earlier periods due to these data changes or corrections.
2. Data prior to 4/12 will not reflect people receiving the single dose of the Janssen vaccine because the data reflects people receiving the first dose of two-dose vaccinations.

3. Trends Over Time

Over two years into the COVID-19 pandemic, there are still inequities in overall vaccination rates. However, these inequities have declined over time in Virginia. Overall, minorities have consistently had less access to vaccinations, and lower overall vaccination rates, than Whites. Recently, those gaps have begun to narrow and VDH is working to further dispel disparities. In addition, the 7-day average number of cases increased last winter due to the Omicron variant, declined significantly during the spring, and started to climb again in late spring and summer. As part of its efforts to address inequities, VDH has transitioned its community testing centers to a mobile clinic model in order to be able to reach areas that have low access to testing. Moving forward, particular attention should be given to the Black population as they still suffer the worse vaccination disparity out of all other racial and ethnic groups. These items are discussed further, with a focus on racial equity, in the sections that follow.

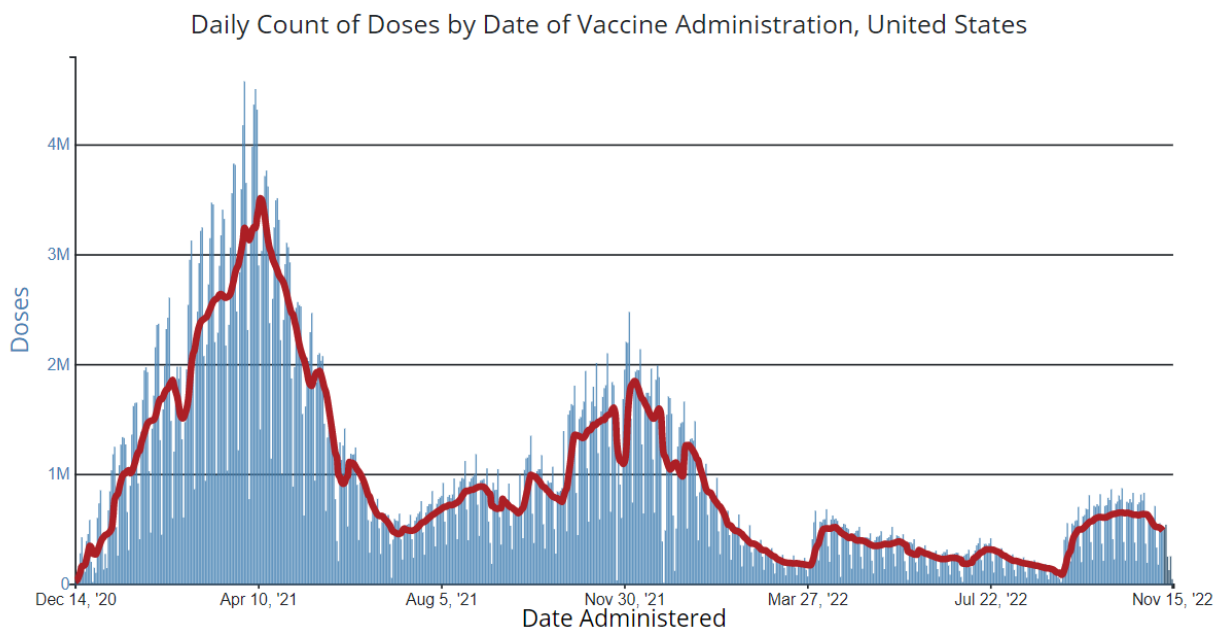
Racial Groups as a Share of Total Vaccinations in Virginia

In Virginia, Whites make up 61% of the total population and 56.4% of the population with reported race and ethnicity that have been vaccinated with at least one dose. Blacks make up 19% of Virginia’s total population and 17.4% of the one-dose vaccinated population. 10% of Virginia’s population is Hispanic and 10.8% of the vaccinated population in Virginia is reported to be Latino. Asians make up 7% of Virginia’s total population while Asian and Pacific Islanders make up 9.5% of the vaccinated population in the Commonwealth ([Source](#); [Source](#)).

Doses Administered

Between October 2021 and January 2022, Virginia saw a spike in the 7-day average of doses administered. In general, the number of vaccines administered decreased as the winter 2021-2022 Omicron surge subsided. As of November 22nd, 2022 the peak average number of vaccines administered in Virginia in November occurred on November 1st, with 16,341 doses ([Source](#)). These trends in Virginia generally match that of the United States as a whole, which saw an increase in demand for vaccines during the winter months when the first Omicron variant was spreading, then a general decrease in demand from the second half of January 2022 onward, and a slight uptake in vaccinations again as the BA.5 subvariant began to spread ([Source](#); [Source](#)). Statewide and nationally, the daily number of vaccines administered gradually decreased over the month of November ([Source](#); [Source](#)).

Figure 18: Daily Number of Administered COVID-19 Vaccine Doses and 7-Day Average in the United States



(Blue bars represent daily numbers and red line shows 7-day average) [Source](#)

4. Vaccine Hesitancy

With over 17.8 million vaccination doses administered, and a little over 6 million people (73.4% of the population) fully vaccinated, Virginia's vaccination rates surpass the national rate of 68.7% ([Source](#); [Source](#)). However, there is still nearly 30% of Virginia's population who has not been fully vaccinated ([Source](#)). Working to vaccinate a larger percentage of the population and reducing vaccine hesitancy are important factors in combating the pandemic, especially with mounting concerns about a "triple-demic" this winter and a recent spike in school absences due to sickness ([Source](#); [Source](#); [Source](#)).

Looking at nationwide trends from Kaiser Family Foundation polling, there has been some change over time between December 2020 and July 2022 when it comes to individuals who say that they will “definitely not” get vaccinated. Data indicate that, while 14% said that they would not get vaccinated in January 2022, 19% said the same in a poll from July 2022 ([Source](#)). In September of 2022, 53% of parents said they will “definitely not” get their children vaccinated against COVID-19 ([Source](#)).

Throughout 2021, there were some changes in attitudes in Virginia as well. A May 2021 poll conducted by the Research Institute for Social Equity (RISE) at VCU’s Wilder School found that 32% of those not vaccinated (n = 84/259) said that they were “not at all likely” to get vaccinated. In June 2021, the same poll found that 47% of those not vaccinated (n = 91/183) were “not at all likely” to get vaccinated ([Source](#)). Between these polls, both the percentage and the total number of those who were not at all likely to get vaccinated increased. More recent polls by RISE regarding Virginians’ attitudes towards vaccination have either not been conducted yet or the results have not yet been released. According to a February 2022 poll by the Wason Center at Christopher Newport University, over half of Virginia voters support vaccine mandates for first responders, teachers, and medical providers, while opposing mandates for elementary and middle school students. 56% said that health data should be used to determine mask requirements ([Source](#)).

According to a statewide survey conducted by Mason-Dixon Polling & Strategy, 87% of unvaccinated adults in Virginia say they do not plan on getting vaccinated for COVID-19 ([Source](#)). Their reasons for not getting vaccinated included:

- Concerns that the vaccine could cause other health problems (28% of respondents)
- Doubts about the health threat posed by COVID-19 (22%)
- Doubts about vaccines in general
- Feeling that the vaccine is unnecessary for individuals who have already contracted coronavirus (17%)
- Skepticism about the federal government’s role in vaccine development (13%). ([Source](#))

More recent polling from the Kaiser Family Foundation indicates who remains unvaccinated. The most recent poll is from September 2022. Of those adults who have not gotten a vaccine:

- 28% are individuals between the ages of 18-29
- 28% are between the ages of 30-49
- 28% have a high school education or less
- 34% identify as Republican
- 26% have annual incomes less than \$40k
- 23% reside in suburban areas and 32% reside in rural areas ([Source](#))

In order to combat vaccine hesitancy, VDH is working to communicate the benefits of vaccination to the public. VDH experts regularly communicate with local media to answer questions and offer information about COVID-19 vaccines in Virginia (for example, [here](#) and [here](#)).

Vaccination Mandates

On September 9, 2021, President Biden unveiled an action plan to mandate vaccines for employers with 100 or more personnel, federal workers, and healthcare providers ([Source](#)). In January 2022, the Biden Administration withdrew its mandate following the Supreme Court's decision to block it. On January 15, 2022, the Governor of Virginia issued Executive Director Number Two (2022), rescinding Executive Directive Number 18 (2021), and with it the vaccine mandate for state employees ([Source](#)). On January 26, 2022, Virginia's Attorney General issued an advisory opinion concluding that Virginia colleges and universities did not have the authority to require COVID-19 vaccinations as a condition of enrollment or in-person attendance, superseding a prior opinion ([Source](#)). These actions effectively ended vaccine mandates in Virginia.

On January 20, 2022, the Governor of Virginia announced the COVID-19 Action Plan with three key activities: (1) COVID-19 Vaccine Marshall Plan for Virginia, (2) Expanded Healthcare Flexibility & Support, and (3) Prioritized Testing Guidelines ([Source](#)). His plan was updated on February 21, 2022 to include Treatment in activity (2) and to replace activity (3) with Charting a Path to Normalcy. The White House released its March 2022 National COVID-19 Preparedness Plan with an outline of its four key goals: (1) Protect against and treat COVID-19, (2) Prepare for new variants, (3) Prevent economic and educational shutdowns, and (4) Continue to lead the effort to vaccinate the world and save lives ([Source](#)). These plans signaled a new phase in the pandemic response for Virginia and the nation. On July 14th, 2022, Governor Youngkin announced updated guidance on quarantine recommendations for people exposed to COVID-19 in K-12 schools, child care, and camp settings. The revised guidance states that quarantine is no longer recommended for asymptomatic individuals who were exposed to COVID-19-infected individuals in these settings ([Source](#)). Following a recent vote in October 2022 by a CDC advisory committee to approve adding COVID-19 vaccines to the recommended schedule of immunizations for both children and adults, Governor Youngkin emphasized his stance that Virginia will not mandate the COVID-19 vaccine ([Source](#)).

5. On the Horizon

Virginia's vaccination rates are better than rates in many other states. However, nearly 30% of Virginia's population has not been fully vaccinated. Vaccination hesitancy remains of great concern. Recent reports show that those who were unwilling to be vaccinated in late 2020 were still unwilling to be vaccinated in the fall of 2021. Vaccinations in children under the age of 18 (including now infants) and frequent testing are essential to keeping children and staff healthy in schools and daycares. These protocol will be especially critical since the school year has begun and as Virginia enters the winter months. Unprecedented and elevated levels of influenza and RSV this fall and winter are already putting a strain on hospitals and health care providers, making it more important to mitigate the spread of COVID-19. Risks of reinfection and experiencing more severe symptoms seem to be higher with the BA.5 variant. Continued efforts to encourage vaccination, including booster shots when eligible, and reducing vaccine hesitancy are important factors to ensure Virginia remains on the path to normalcy. Therapeutics, testing, prevention, outbreak control, and public health information are also important factors.

Despite much progress, a continued focus on vaccine equity remains critical. Fears of virus spread and breakthrough infections require the critical need to bolster vaccination efforts across the Commonwealth and center equity in policy and procedures. Given ongoing issues of inequities concerning who gets infected, as well as who dies from COVID-19, equity remains an important factor in controlling COVID-19 and maintaining the path to normalcy. Racial and ethnic disparities, as well as disparities between urban and rural areas, remain a challenge.

Appendix

Charging Statutes

[2022 Appropriation Act Item 291 I](#). The Department of Health shall convene a work group, which shall include the Commonwealth's Chief Diversity, Equity, and Inclusion Officer and representatives of the Office of Health Equity of the Department of Health, the Department of Emergency Management, and such other stakeholders as the department shall deem appropriate and which may be an existing work group or other entity previously convened for a related purpose, to (i) evaluate the methods by which vaccines and other medications necessary to treat or prevent the spread of COVID-19 are made available to the public, (ii) identify and develop a plan to implement specific actions necessary to ensure such vaccines and other medications are equitably distributed in the Commonwealth to ensure all residents of the Commonwealth are able to access such vaccines and other medications, and (iii) make recommendations for any statutory, regulatory, or budgetary actions necessary to implement such plan. The Department shall make an initial report on its activities and any findings to the Chairs of the House Committee on Health, Welfare and Institutions and the Senate Committee on Education and Health by December 1, 2020, and shall report monthly thereafter <https://budget.lis.virginia.gov/item/2022/2/HB30/Chapter/1/291/>