# Virginia Department of Health Plan for Equitable Distribution of COVID-19 Vaccine – November, 2022

**November 2022**

**Office of Health Equity in the Virginia Department of Health**

## Contents

## Executive Summary

This monthly report is from the Office of Health Equity in the Virginia Department of Health. It provides an overview of vaccination equity in the Commonwealth of Virginia, including key equity accomplishments, for October 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 October, the BA.5 variant remained the dominant strain in the U.S., but experts warn of new variants that are gaining ground (Source).*

*Trends in Average Daily Cases*

- *As of October 27th, the highest average number of daily cases in Virginia for the month was 13.65 cases per 100,000 people on October 1st (Source).*

*Vaccination Rates*

- *At the end of October 2022, 73.0% of Virginia's population was fully vaccinated, or 6,274,391 people (Source).*

*Impacts on Children*

- *As of October 28th, 2022, 32 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 October include:

- October 1: The Centers for Disease Control and Prevention (CDC) reported that Richmond City and Henrico County have low COVID-19 community levels for the first time in weeks (Source).
- October 3: The Rappahannock Rapidan Health District (RRHD) announced that it will offer free flu shots on Oct. 6th and 13th. "This year it is especially important to get a flu shot," said RRHD director Trice Gravatte. "According to the CDC, COVID-19 will likely continue in our community into the fall and winter and may overlap with the flu season. With the possibility of both viruses being in our communities at the same time, it is vital that everyone aged 6 months or older get their yearly flu shot." The Oct. 6th event will be held at Prospect Heights Middle School in Orange County and will accept walk-ins from 4:30-6:30 p.m. The Oct. 13th event will be at Brandy Station Fire Department in Culpeper County, will be drive-thru only, and will take place between 4:30-7 p.m. (Source)
- October 4: In a newsletter from October 3rd, VDH described the great impact hurricanes like Hurricane Ian have on public health, further worsened by the lingering effects of the COVID-19 pandemic. Risk for COVID-19 transmission is higher in evacuation shelters and the hurricane impacts patients who are hospitalized and have to be evacuated because of flooding. This is particularly difficult for COVID-19 patients who need mechanical ventilation or oxygen (Source).
- October 5: VDH's Dr. Cynthia Morrow spoke with WFIR Radio to encourage parents to make the decisions that are best for their families regarding COVID-19 and flu vaccinations, but says that she will continue to recommend vaccines. It is just one example of the outreach efforts that VDH is executing to increase vaccination efforts in Virginia (Source).
- October 6: VDH is working to communicate the benefits of getting up to date this season on COVID-19 and flu shots. Cat Long, spokesperson for the Richmond and Henrico Health Districts, encouraged Virginians to get their flu shots ahead of a flu season that experts are saying is starting earlier than usual and could be more severe. "There isn't any data that we've seen that getting both the [flu and COVID-19] vaccines will double your side effects," said Long. "If you do end up getting side effects, and the side effects that we see for getting both at the same time is similar to what we see for getting each of those vaccines individually. Some people have a sore arm, some people feel a little fatigued or feel like they have a cold for a few hours, and some people don't feel anything." (Source)
- October 9: As defined by the CDC, COVID-19 levels in Danville and Pittsylvania County are at their lowest levels since the spring, but experts warn that this could reverse in a matter of weeks (Source).
- October 11: Infectious disease expert Dr. Gonzalo Bearman spoke to VCU Health to reassure the public that it is safe to get the flu vaccine and the updated COVID-19 vaccine at the same

time. He emphasized that, since the symptoms for COVID-19 and flu are quite similar, getting tested is key for diagnosis and treatment (Source).

- October 12: Virginia is now amongst the top 10 states when it comes to vaccinating children for COVID-19. In order to address health disparities in the vaccine, Dr. Christy Gray with the VDH urged pediatricians and family doctors to have the vaccine on hand at appointments to lower the vaccine barrier for families with young children. She said that childhood vaccination rates are following the same patterns as adults: higher in urban areas, lower in rural ones (Source).
- October 13: In order to better serve rural and urban areas, the Roanoke City and Allegheny County Health District is now operating a mobile clinic out of an RV. The D.A.S.H. van, "Delivering Accessible and Sustainable Health", is mostly offering COVID-19 boosters and flu shots at the moment, but hopes to expand its services (Source).
- October 13: Due to declining COVID-19 rates in the area, the Rappahannock-Rapidan Health District discontinued its COVID-19 hotline on October 7th (Source).
- October 14: According to updated VDH data released on October 13th, Virginia has seen a total of 1,487,381 confirmed COVID-19 cases since the pandemic began. During the same time period, Virginia saw 614,321 probable cases and 18,289 confirmed deaths (Source).
- October 16: While most of Virginia is experiencing a decline in cases, some districts are currently seeing a rise in cases, and Lenowisco County is in a surge. Growing infection levels are primarily concentrated in southwest Virginia at the moment (Source).
- October 17: VDH made an announcement on Monday that parents of young children in Virginia are now able to receive a free bivalent pediatric COVID-19 booster vaccine for their children aged five years and older (Source).
- October 18: VDH announced that a free bivalent pediatric COVID-19 booster vaccine for children five years and older is now available in Virginia. VDH advises parents to discuss this option with their child's healthcare provider. Vaccination opportunities may be found at Vaccinate.Virginia.gov (Source).
- October 19: The Gloucester NAACP and the Iota Phi Lambda Sorority Epsilon Eta Chapter sponsored a COVID-19 vaccination clinic with nurses from VDH. The clinic was held on Oct. 8th at the First United Baptist Church and is an example of the community collaboration that Virginia needs to pursue moving forward (Source).
- October 20: On October 20th, a CDC advisory committee voted to add the COVID-19 vaccines to its recommended immunization schedules, including the schedule for children. Leading up to the vote, false claims spread that the vote would mandate the COVID-19 vaccine for schoolchildren. However, the decision to set school immunization requirements is left for the states and the vote doesn't mandate the vaccine for schoolchildren (Source).
- October 21: Dr. Lisa Thanjan with the VDH said there are many studies ongoing about Long COVID, but right now, information is limited. According to a CDC Survey, more than 30% of patients who were hospitalized with COVID experienced symptoms for six months or longer (Source).
- October 22: Stafford High School in Virginia had to cancel all of its school activities this weekend after more than half of its students were absent this week due to flu-like

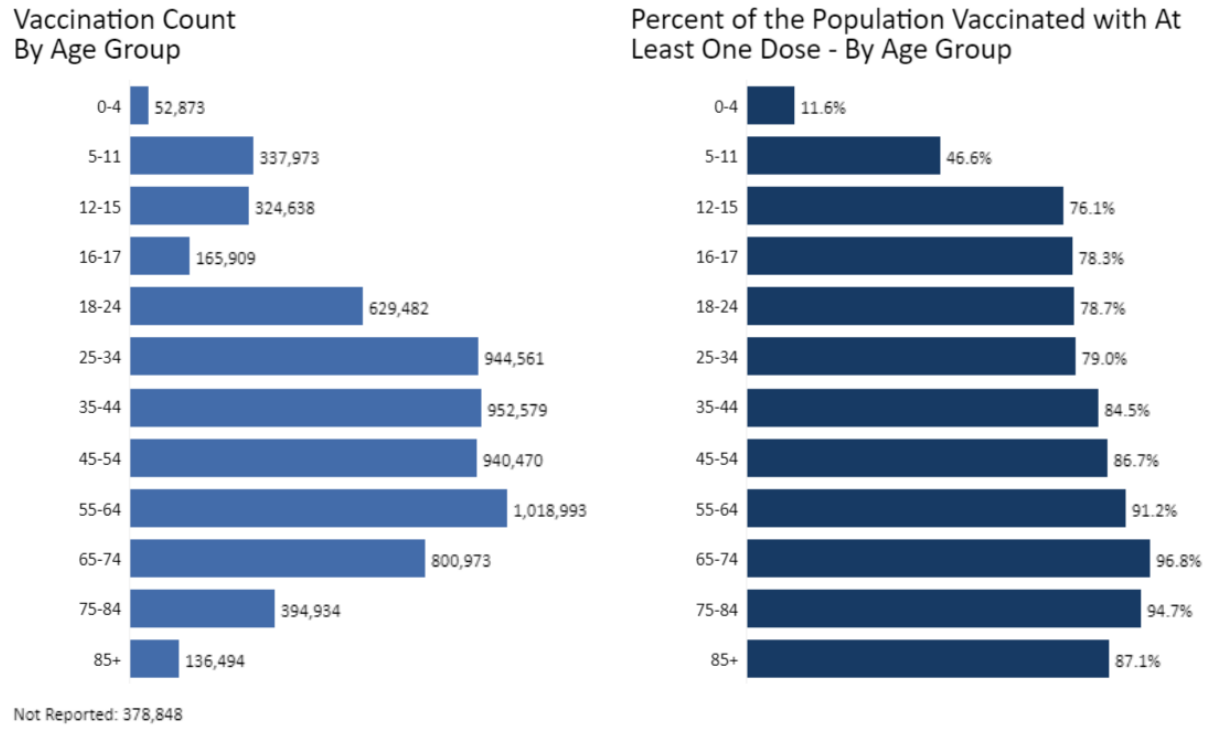
symptoms. On Friday, approximately 1,000 students were absent from the Fredericksburg-area high school, out of a total student body of 2,100 (Source).

- October 25: Loudoun Health Department Director Dr. David Goodfriend said this year's surge in illnesses like the flu, respiratory syncytial virus (RSV), and the common cold is both larger and earlier than usual. This is probably due to people largely avoiding these diseases over the past two years with masks and social distancing because of the COVID-19 pandemic. Now, in the first winter without widespread COVID-19 safety measures, three years of infections are arriving at once (Source).
- October 26: VDH announced that the number of cases of RSV with cold-like symptoms have quadrupled since September. Experts are saying that the virus is spreading at its fastest rate in 25 years. It particularly impacts babies and children, although anyone can get it. Experts also explain that the rise this year in illnesses like these can be explained by the lifting of COVID-19 safety measures, which reduced the spread of these illnesses in the past two years (Source).
- October 27: VDH data shows that very few Virginians are getting boosted this time around compared to the initial booster campaign; a trend that is worrying public health experts (Source).

## 2. Vaccination Equity in Virginia

At the end of October, 17.4 million COVID-19 vaccine doses have been administered in Virginia (Source). With 73.0% 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, 73.0%, is higher than the 68.2% national total fully vaccinated rate (Source; Source). On average, Virginia is administering approximately 13,712 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 October, 95.1% of those ages 65+ were vaccinated (Source).

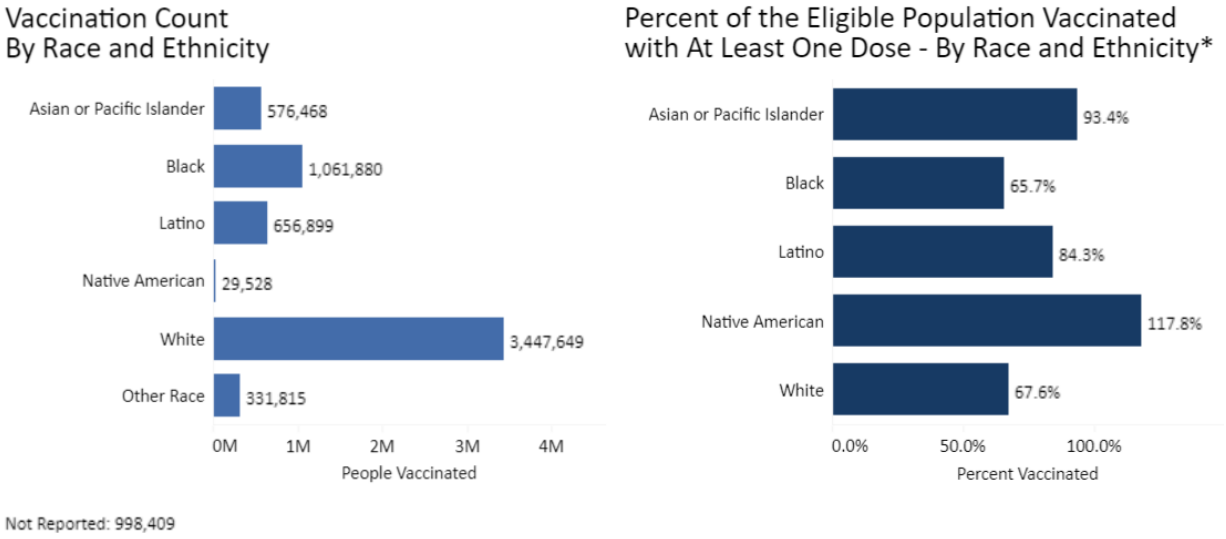
### Vaccinations for Under 45

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, 60.8% of those aged 5-17 years have been vaccinated with at least one dose, down by 0.1% from last month. 86.9% of individuals older than 5, down by 0.4% since last month, have been vaccinated with at least one dose. Furthermore, 92.2% of the population over

the age of 18 have been vaccinated with at least one dose, down by 0.4% from last month. Data are also reported by each age group for percentages of the population vaccinated with at least one dose: 11.6% of 0-4 year olds (up from 10.6% last month), 46.6% of 5-11 year olds (up from 46.5%), 76.1% of 12-15 year olds (down from 76.4%), 78.3% of 16-17 year olds (down from 78.6%), 78.7% of 18-24 year olds (down from 78.9%), 79.0% of 25-34 year olds (down from 79.3%), and 84.5% of 35-44 year olds (down from 84.9%) (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**

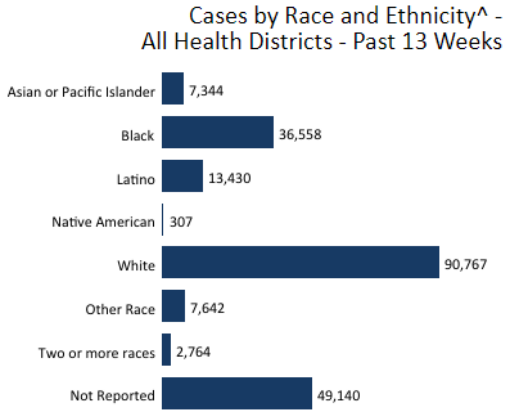
| Race and ethnicity | Percent of people with at least one dose with reported race and ethnicity |
|---|---|
| Black | 17.4% |
| Latino | 10.8% |
| Asian or Pacific Islander | 9.4% |
| White | 56.5% |

Source

According to Figure 2 and Table 1, as of October 24th, 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 65.7% of Blacks have been vaccinated with at least one dose.
- Second, Latinos have received 10.8% of all vaccinations and 84.3% of Latinos have been vaccinated with at least one dose.
- Third, Asians or Pacific Islanders have received 9.4% of all vaccinations and 93.4% of Asians or Pacific Islanders have been vaccinated with at least one dose.
- Fourth, Whites have received 56.5% of all vaccinations and 67.6% 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/*

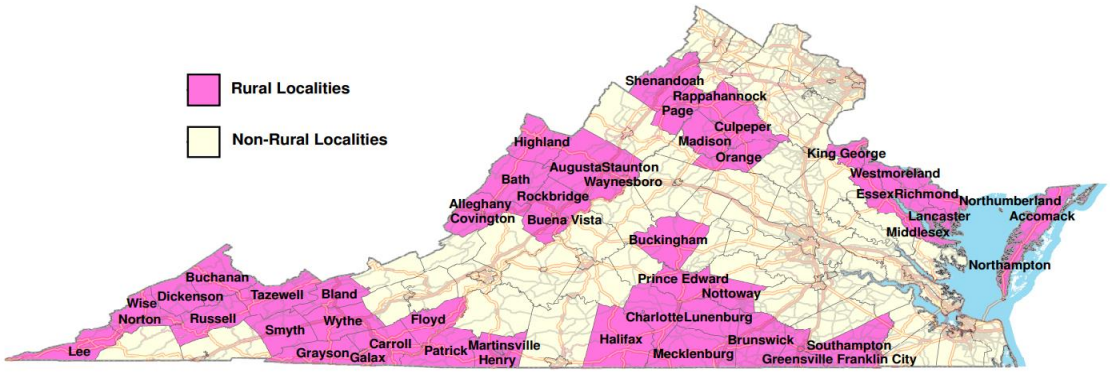
Case counts continue to occur amongst Virginia's population, making it more important to focus efforts on vaccination. Moving forward, continuing to collect data on race and ethnicity will be crucial to making more progress on vaccine equity in Virginia. This is especially true given the

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 proceeds into the winter months, 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)**

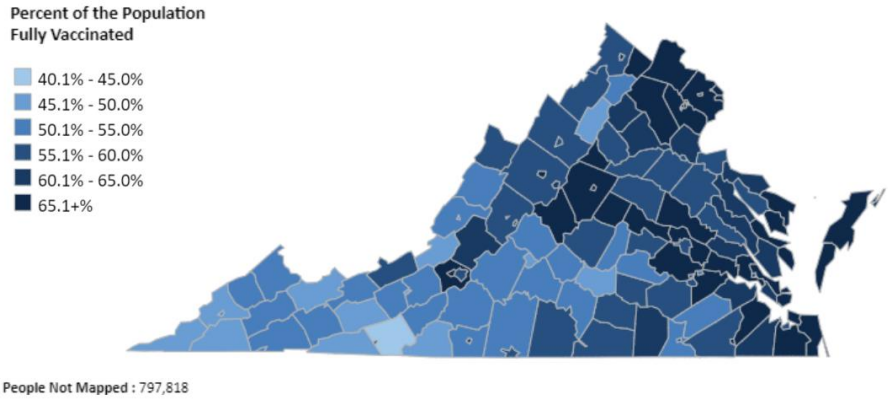
| 2013 SRHP Isserman Classification | 5 to 11 | 12 to 17 | 16 to 17 | 18 to 30 | 31 to 50 | 51 to 64 | 65+ | Grand Total |
|---|---|---|---|---|---|---|---|---|
| Mixed Urban | 41% | 69% | 73% | 68% | 69% | 81% | 88% | 72% |
| Urban | 38% | 69% | 75% | 60% | 72% | 82% | 86% | 70% |
| Mixed Rural | 25% | 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 south-central and 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 north-central and northern 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 are slightly lower overall than what they were in last month's report. Risk levels have also improved

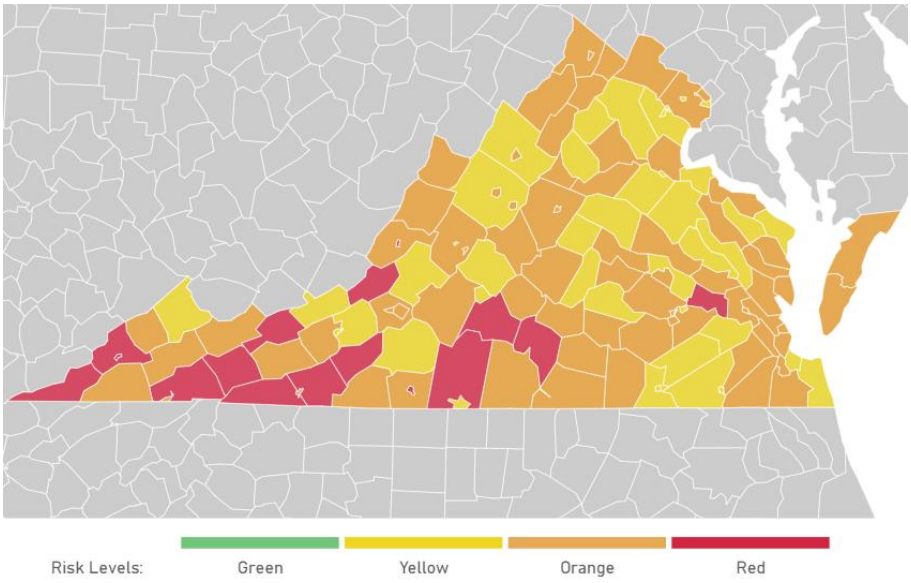
this month in comparison to August when almost the entire Commonwealth was experiencing highly elevated risk levels (Source). As the winter draws nearer, increasing vaccination rates will be crucial to maintaining lower risk levels.

**Figure 5: Vaccinations by Locality – Percent of Total Population – As of October 24th, 2022**




Source

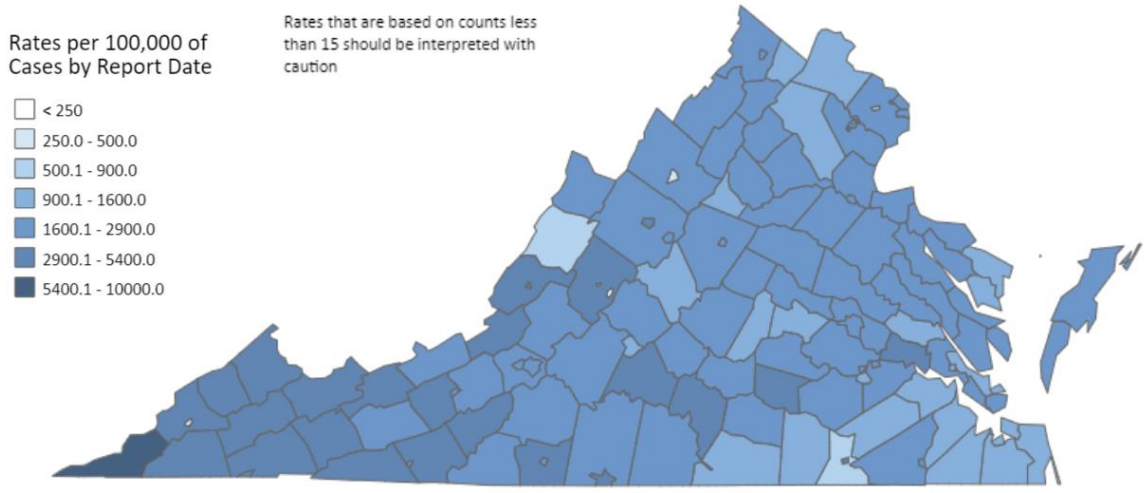
**Figure 6: COVID-19 Risk Levels by Locality in October**




Source

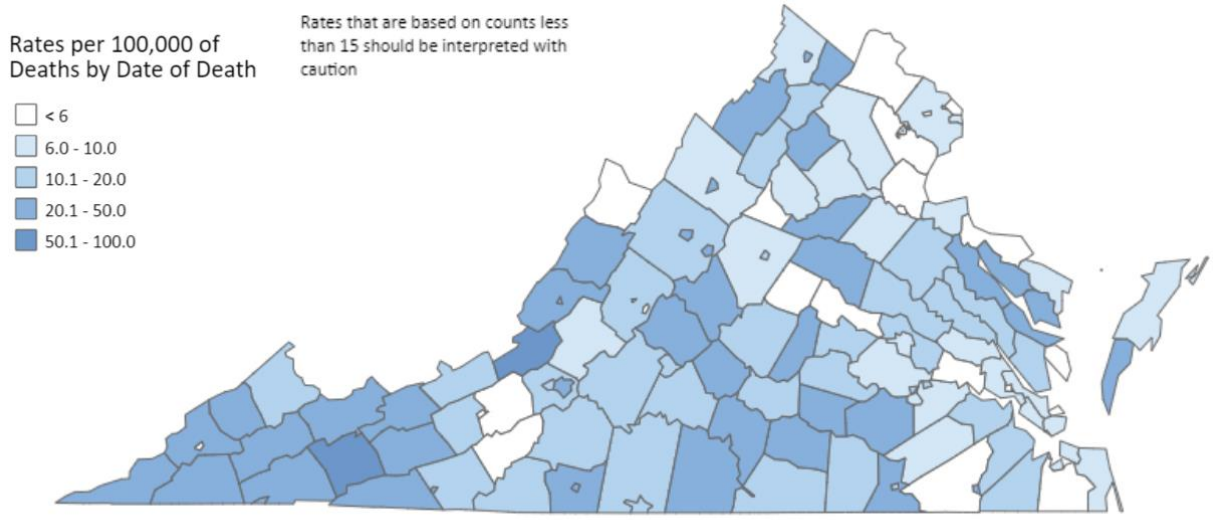
Third, as shown in Figures 7 and 8, some urban and rural disparities remain in terms of cases as measured by rates per 100,000 people. Some rural counties continue to show slightly higher rates of cases throughout the Commonwealth. Southwest Virginia particularly has a higher case rate than the rest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

**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.

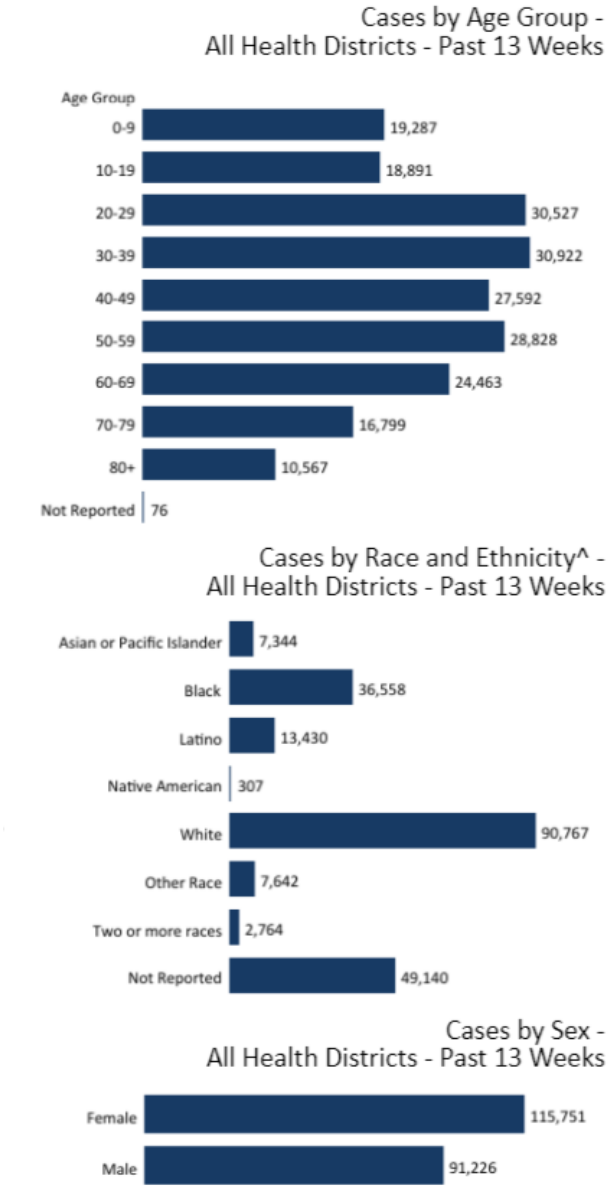
**Table 3: Comparisons of COVID-19 Cases, Deaths, and Population**

| | % 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 30-39 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 ages 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 time around and as shown in Figure 10, females had a slightly higher death rate than males (a departure from the usual trend).

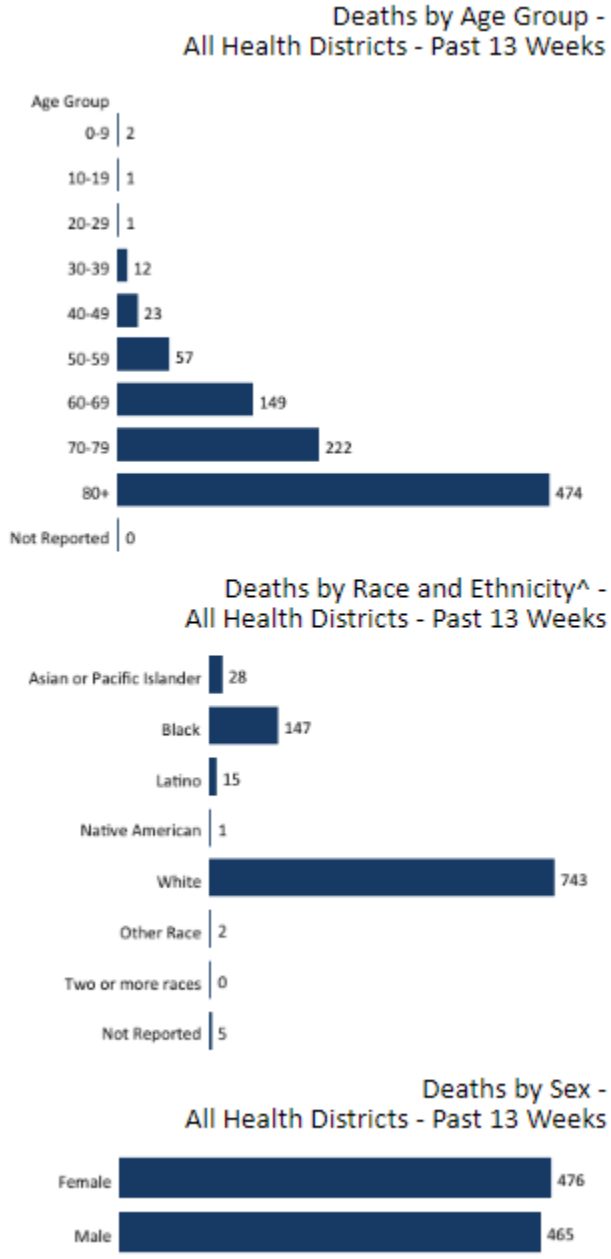
**Figure 9: Cases of COVID-19 in Virginia: Demographics**




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

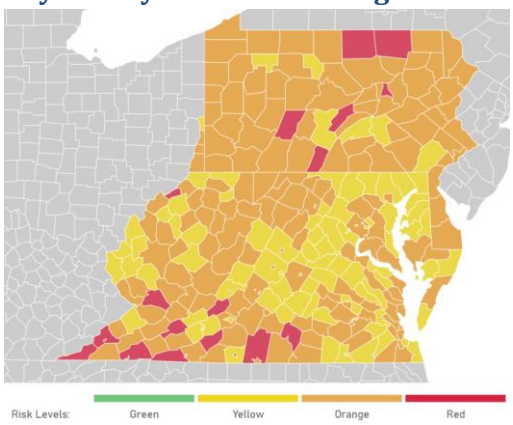
*^For more information on how VDH is presenting data on race and ethnicity, visit: https://www.vdh.virginia.gov/coronavirus/2020/06/16/race-and-ethnicity-reporting-update/*

## 3. Vaccinations in FEMA Region 3

Regarding COVID-19 risk levels in October (Figure 11), most of Region 3 is currently experiencing low or medium risk levels. The risk levels for Virginia in October were lower than what they were in previous reports this year. At present, Delaware is the most at-risk in FEMA Region 3. Virginia has 1,074.3 new daily cases, a seven-day moving average of 12.6 new cases per 100,000 people (last month, Virginia saw 1,330.6 new daily cases with a seven-day moving average of 15.6 new cases per 100,000 people). These numbers place Virginia fourth out of sixth in FEMA Region 3 in terms of COVID-19 risk level, the same rank that Virginia received last month. 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.

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

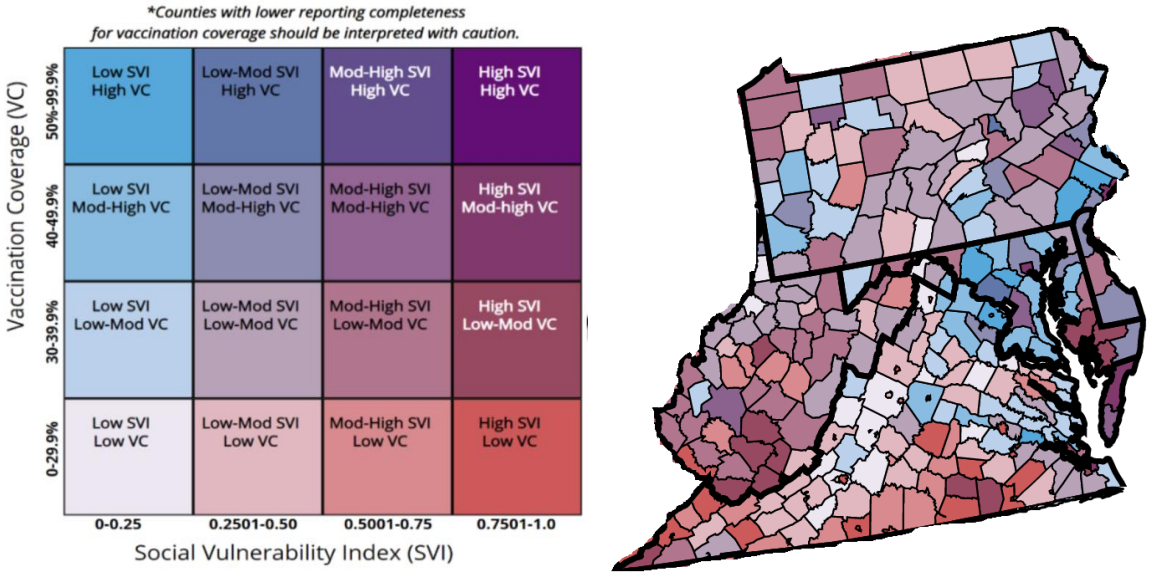
| State/County | Rank | Daily new cases per 100k people (7d moving avg.) | Daily new cases (7d moving avg.) |
|---|---|---|---|
| Delaware | 1 | 14.4 | 139.9 |
| Pennsylvania | 2 | 13.7 | 1,755.9 |
| West Virginia | 3 | 12.8 | 229.3 |
| Virginia | 4 | 12.6 | 1,074.3 |
| Maryland | 5 | 10.0 | 601.7 |
| District of Columbia | 6 | 5.8 | 41.0 |




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.*

## 4. 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.

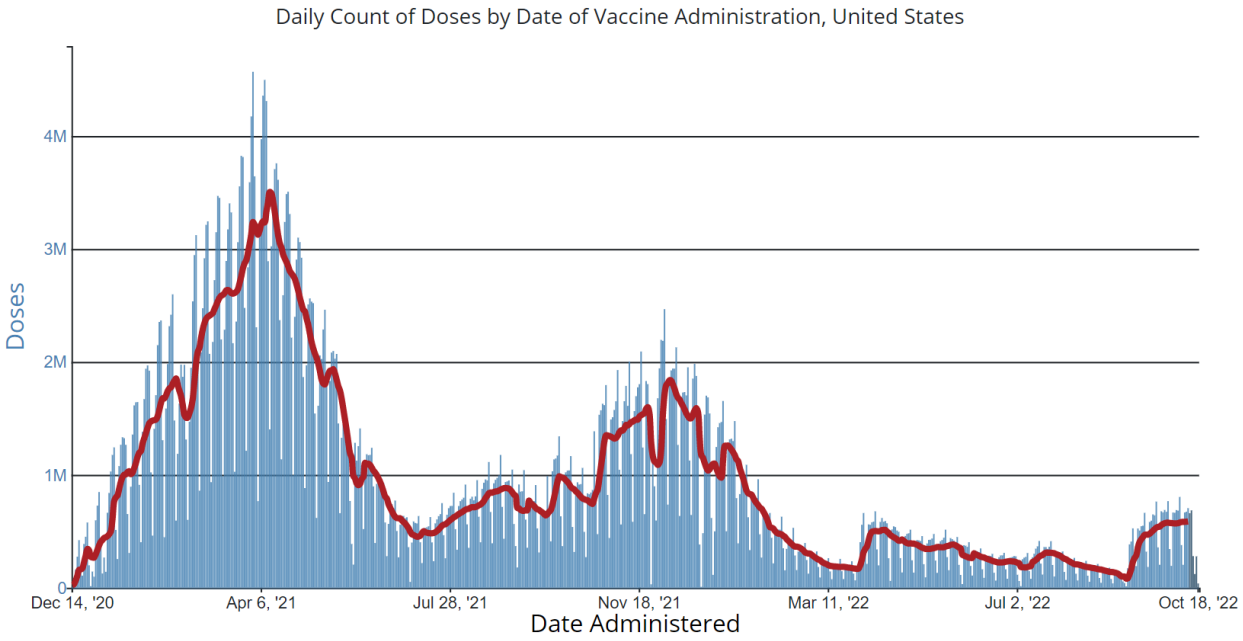
### Racial Groups as a Share of Total Vaccinations in Virginia

In Virginia, Whites make up 61% of the total population and 56.5% of the population with reported race and ethnicity that have been vaccinated with at least one dose (no change since last month). Blacks make up 19% of Virginia's total population and 17.4% of the one-dose vaccinated population (no change). 10% of Virginia's population is Hispanic and 10.8% of the vaccinated population in Virginia is reported to be Latino (no change). Asians make up 7% of Virginia's total population while Asian and Pacific Islanders make up 9.4% of the vaccinated population in the Commonwealth (no change) (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 Omicron surge subsided. As of October 27th, the peak average number of vaccines administered in October occurred on October 11th, with 17,176 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). With fall underway, the daily number of vaccines administered is starting to rise again statewide, as discussed above, and nationally, as shown below.

**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

## 5. Vaccine Hesitancy

With 17.4 million vaccination doses administered, and a little over 6 million people (73.0%) fully vaccinated, Virginia's vaccination rates surpass the national rate of 68.2% (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 the school year now underway across Virginia and a recent spike in school absences due to sickness (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 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)

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).

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)

### 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).

## 6. 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 gets ready to enter the winter months. 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/