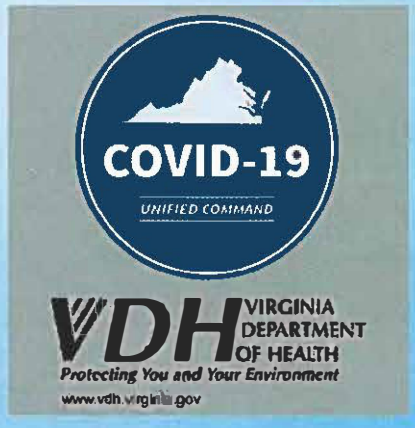
VDH Plan for Equitable Distribution of the COVID-19 Vaccine

October 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 September 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).*

Trends in Average Daily Cases

- *As of September 28th, the highest average number of daily cases in Virginia for the month was 28.9 cases per 100,000 people on September 1st (Source).*

Vaccination Rates

- *At the end of September 2022, 72.6% of Virginia's population was fully vaccinated and 82.7% had received one dose of the vaccine (Source).*

Impacts on Children

- *As of September 29th, 2022, 31 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).*
- *Ahead of the start of the 2022-2023 academic year, 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 was released on July 14th and states that quarantine is no longer recommended for asymptomatic individuals who were exposed to COVID-19-infected individuals in these settings (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 September include:

- September 1: The Richmond and Henrico County health districts announced that they will offer testing at the Fulton Neighborhood Resource Center, 1519 Williamsburg Road, from 3:30 p.m. to 5:30 p.m. on Thursday, September 1st (Source).
- September 2: Less than a month into the school year, school staff and students continue to be affected by COVID-19. Since starting on August 9th, Washington County Virginia Public Schools (WCS) reported 485 new cases amongst its students and staff (Source).
- September 2: The Virginia Beach Department of Public Health announced that it will host a free COVID-19 vaccination clinic on Wednesday, September 7th. The clinic will be held from 4:30 p.m. to 6:30 p.m. at the New Light Full Gospel Baptist Church, located at 5549 Indian River Road (Source).
- September 4: Recent data by the Virginia Hospital and Healthcare Association (VHHA) showed that COVID-19 cases and hospitalizations have started to plateau, indicating that COVID-19 may be transitioning from pandemic to endemic. Still, experts say it is hard to predict what might happen in the upcoming months, since COVID-19 tends to spread more in the fall. "If there's one thing we've learned from this pandemic, it's that COVID-19 is hard to predict," said Dr. Elaine Perry, director of the Richmond and Henrico Health Districts (Source).
- September 5: VDH's Chief Deputy Commissioner for Community Health Services, Dr. Parham Jaberi, announced that new COVID booster shots are available to the public starting this week. The CDC recommends that teens and adults get updated booster shots from Pfizer or Moderna (Pfizer for those aged twelve and up and Moderna for those aged 18 and up). "We will get access increasingly over the course of the month," Dr. Jaberi said. "The goal with these [boosters] is to give additional protection, specifically against the Omicron subvariant b.4 and b.5. That's what's new in these vaccines. They're going to give you additional and better protection against the common circulating strains of COVID right now in the community." (Source)
- September 6: The Prince William Health District's mobile vaccine clinic announced that it will offer the new Pfizer BioNTech 'bivalent' COVID-19 booster for the first time on September 6th and 8th. The new booster shot has been formulated to combat both the original strain of the coronavirus as well as the Omicron variant and subvariants BA.4 and BA.5 (Source).
- September 7: Starting on September 7th, eligible Virginia residents were able to schedule appointments with their healthcare providers to receive the new, free COVID-19 bivalent booster vaccinations, manufactured by Pfizer-BioNTech and Moderna. The new updated boosters are targeted specifically at the BA.4 and BA.5 subvariants of the Omicron variant that initially emerged in the United States in November 2021 (Source).

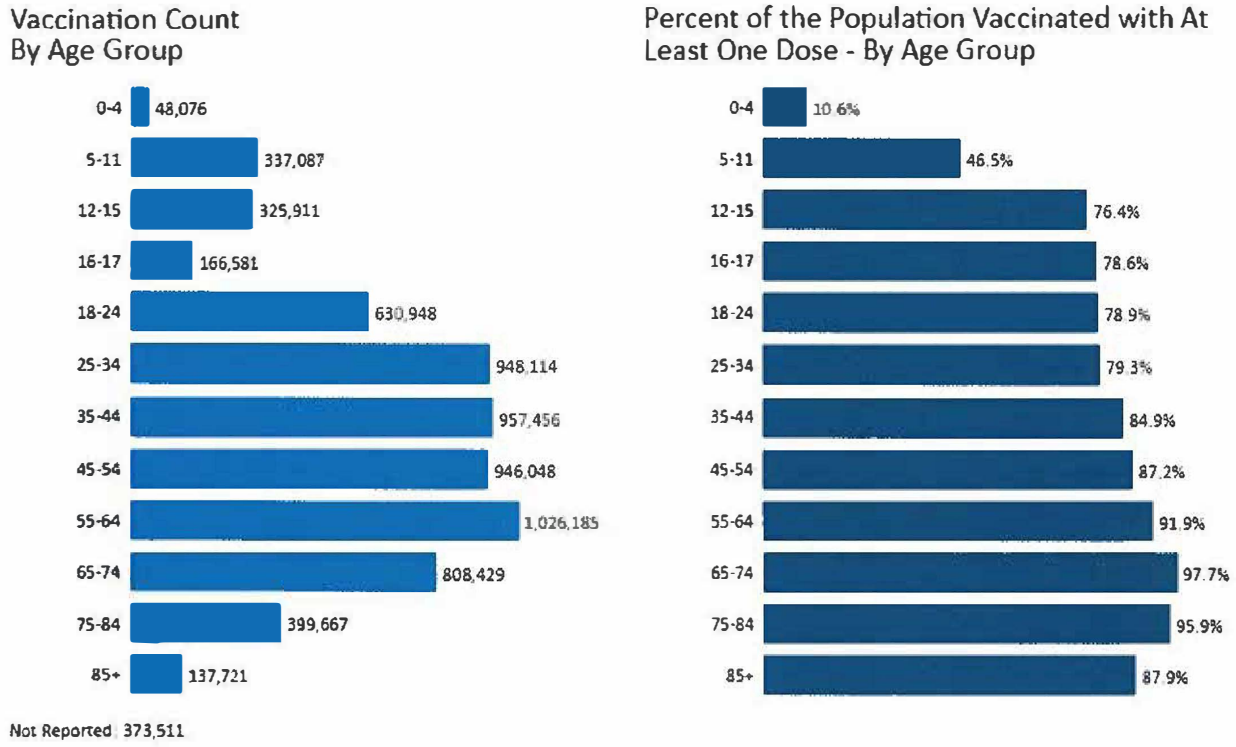
- September 8: The Richmond and Henrico County health districts announced that they are offering free community testing for COVID-19. The testing will be held on September 8th and 15th at the Fulton Neighborhood Resource Center from 3:30 p.m. to 5:30 p.m. and on September 14th from 8:00 to 10:00 a.m. at the East Henrico Recreation Center (Source).
- September 9: COVID-19 modeling by the University of Virginia (UVA) indicates that new bivalent boosters could have a significant impact on COVID-19, potentially preventing 225,000 cases, 9,000 hospitalizations, and 850 deaths (Source).
- September 10: VDH announced that it is reopening its Community Vaccination Clinic at Military Circle Mall in Norfolk on September 12th. On specific days and times, the monkeypox and COVID-19 vaccines (including the new bivalent booster) will be provided (Source).
- September 12: In the last seven days period, Virginia averaged 1,739 newly reported cases a day. In the prior seven-day period, Virginia averaged 2,310 newly reported cases a day. Since March 2020, Virginia has reported 2,062,984 cases of COVID-19 to date (Source).
- September 13: According to the CDC's weekly updates of community COVID-19 levels, community transmission levels remain high but stable in the Roanoke City and Alleghany Health Districts (Source).
- September 14: The past week's average daily newly reported cases are 11.89% lower than the previous seven-day period (Source).
- September 15: The Rappahannock County Public Schools (RCPS) Superintendent Dr. Shannon Grimsley presented the school board with new COVID-19 guidance from VDH on Tuesday. For children that experience COVID-19 symptoms and test positive, VDH recommends that they should quarantine at home for five days, and can return to school once their symptoms have improved and there is no fever. On days 6 through 10, VDH is advising the child to wear a mask. RCPS is no longer conducting contact tracing, data gathering, or daily health screenings for staff (Source).
- September 16: The seven-day positivity rate for COVID-19 in Virginia dropped to 16.7% and new cases were down this last week by 12% (Source).
- September 17: Within the past week, VDH reported that 11,600 more people tested positive for COVID-19 out of the 63,316 PCR tests that VDH processed (Source).
- September 20: The CDC announced on September 20th that it granted five-year awards to five state public health systems. The awards is part of the Pathogen Genomics Centers of Excellence (PGCoE) network. The PGCoE network is intended to foster and improve innovation and technical capacity in pathogen genomics, molecular epidemiology, and bioinformatics to better prevent, control, and respond to microbial threats of public health importance. One of the awardees is the Virginia Division of Consolidated Laboratory Services, who will partner with VDH, the Virginia Commonwealth University, and the University of Virginia. Combined, the PGCOEs will serve as a network to: perform a landscape analysis of gaps, needs, and opportunities for genomics in the United States public health system; pilot and implement genomics technologies and applications for public health; and prepare for and respond to infectious disease threats (Source).

- September 21: In the last week, Virginia reported 10,239 new cases. In the last seven days, Virginia has averaged 1,463 newly reported cases a day. In the prior seven-day period, Virginia averaged 1,778 newly reported cases a day (Source).
- September 22: The Richmond and Henrico County health districts announced that they are offering free community testing at the following locations:
    - Thursday, Sept. 22, 3:30 to 5:30 p.m. - Fulton Neighborhood Resource Center, 1519 Williamsburg Road.
    - Thursday, Sept. 22 & Sept. 29, 1:00 to 4:00 p.m. - Richmond Henrico Health District, 400 E. Cary St., Pfizer for ages 6 months and older, Moderna for ages 6 months to 5 years old and ages 18 years and older.
    - Wednesday, Sept. 28, 1:00 to 4:00 p.m. - Henrico Health District West Headquarters, 8600 Dixon Powers Drive, Pfizer for ages 6 months and older, Moderna for ages 6 months to 5 years old and ages 18 years and older (Source).
- September 23: According to data from the Virginia Hospital & Healthcare Association (VHHA), more than 550 additional COVID-19 patients were discharged from Virginia hospitals over the past week. As of Friday, there were 605 hospitalized patients confirmed positive for COVID-19, which is down from 657 (-52) last Friday (Source).
- September 25: In the last seven days, Virginia's COVID-19 positivity rate dropped to 13.1% and new cases were down by 13% (Source).
- September 26: For the second week in a row, COVID-19 community levels have been low in the Rappahannock-Rapidan Health District. "COVID remains in our communities. Although reported COVID-19 cases and hospitalizations are declining, an average of 400 Americans continue to die from COVID every day," stated the weekly Friday update on Sept. 23 from the Rappahannock-Rapidan Health District (Source).
- September 28: Shannan Green, M.D., the new medical director of University Student Health Services at Virginia Commonwealth University, discussed challenges that the student body faces regarding COVID-19, monkeypox, and mental health. "One of the biggest issues I see facing the campus as we transition through the COVID-19 pandemic is addressing the mental health needs of our community in a way that is inclusive," she said (Source).

2. Vaccination Equity in Virginia

At the end of September, over 16.9 million COVID-19 vaccine doses have been administered in Virginia (Source). With 72.6% 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). At present, 82.7% of all Virginians have received at least one dose of a vaccine (Source), which is above the 79.5% national total vaccination rate receiving at least one dose (Source). Virginia's fully vaccinated rate, 72.6%, is higher than the 67.8% national total fully vaccinated rate (Source). On average, Virginia is administering approximately 15,021 vaccination doses per day (Source).

Figure 1: Vaccinations by Age (One Dose)



Source

Vaccinations for 65+

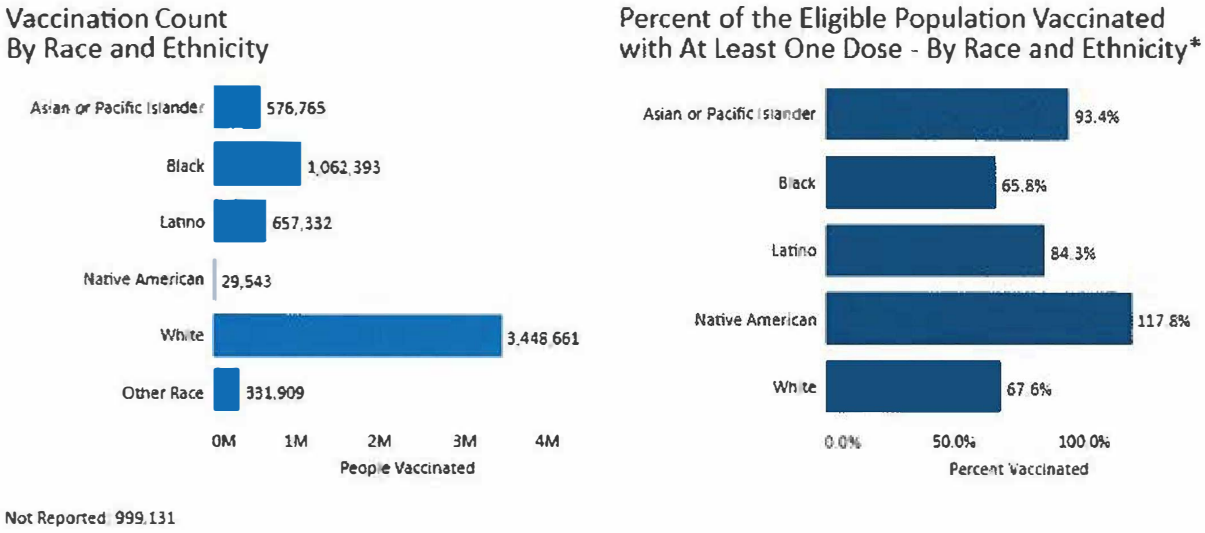
As seen in Figure 1, VDH reports the following age ranges: 65-74, 75-84, and 85+ (Source). At the end of September, 96.1% of those ages 65+ were vaccinated (Source).

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, 60.9% of those aged 5-17 years have been vaccinated with at least one dose, up by 0.3% from last month. 87.3% of individuals older than 5, up by 0.2% since last month, have been vaccinated with at least one dose. Furthermore, 92.6% of the population over the age of 18 have been vaccinated with at least one dose, up by 0.1% from last month. Data are also reported by each age group for percentages of the population vaccinated with at least one dose: 10.6% of 0-4 year olds (up from 9.0% last month), 46.5% of 5-11 year olds (up from 46.1%), 76.4% of 12-15 year olds (up from 76.3%), 78.6% of 16-17 year olds (up from 78.4%), 78.9% of 18-24 year olds (up from 78.8%), 79.3% of 25-34 year olds (up from 79.2%), and 84.9% of 35-44 year olds (no change since last month) (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

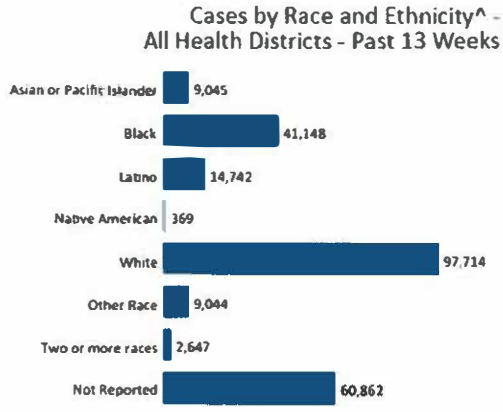
Race and ethnicity	Percent of people with at least one dose with reported race and ethnicity
Black	17.4%
Latino	10.8%
Asian or Pacific Islander	9.4%
White	56.5%

Source

According to Figure 2 and Table 1, as of September 28th, 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 84.3% 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

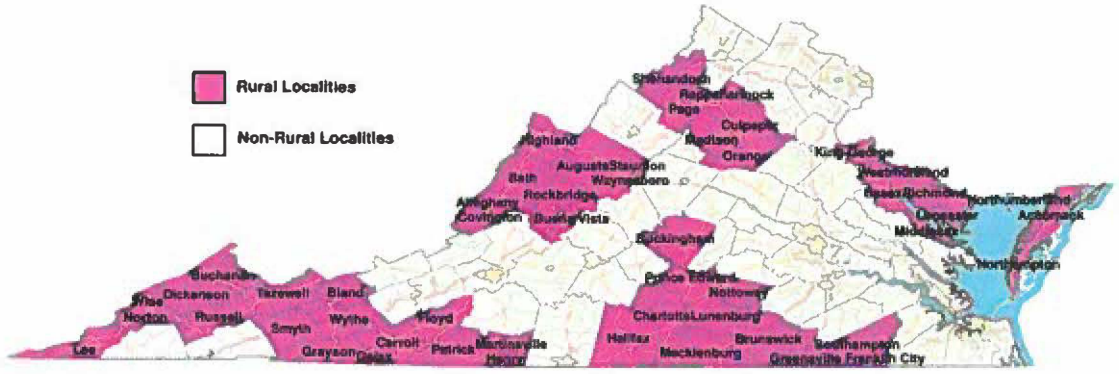
^For more information on how VDH is presenting data on race and ethnicity, visit:
https://www.vdh.virginia.gov/coronavirus/2020/06/16/race-and-ethnicity-reporting-update/

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 the cooler months begin, 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.

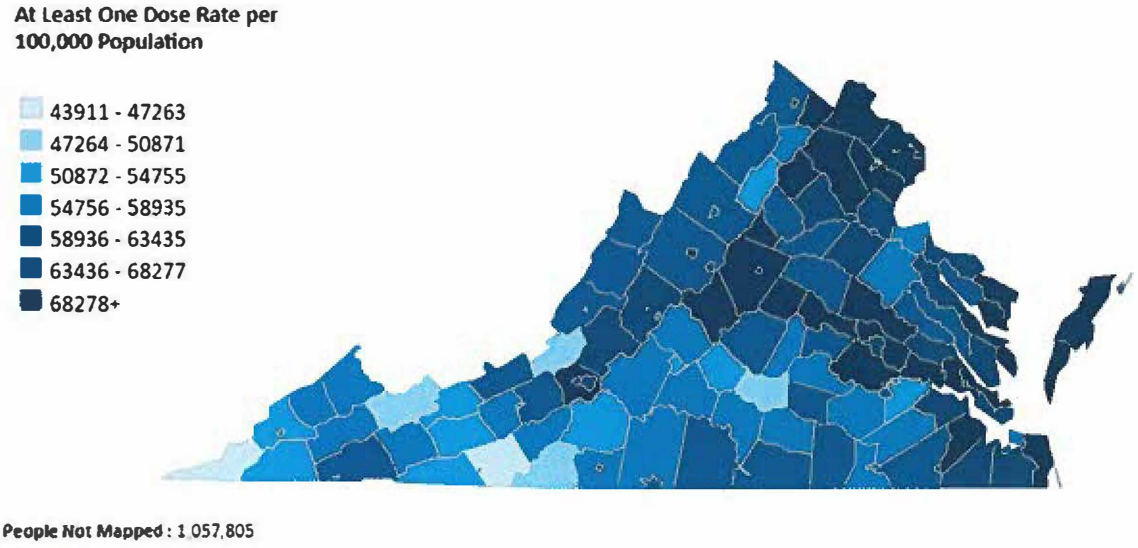
Table 2: Percent Population Vaccinated by Urban and Rural Jurisdictions (by Age Groups)

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

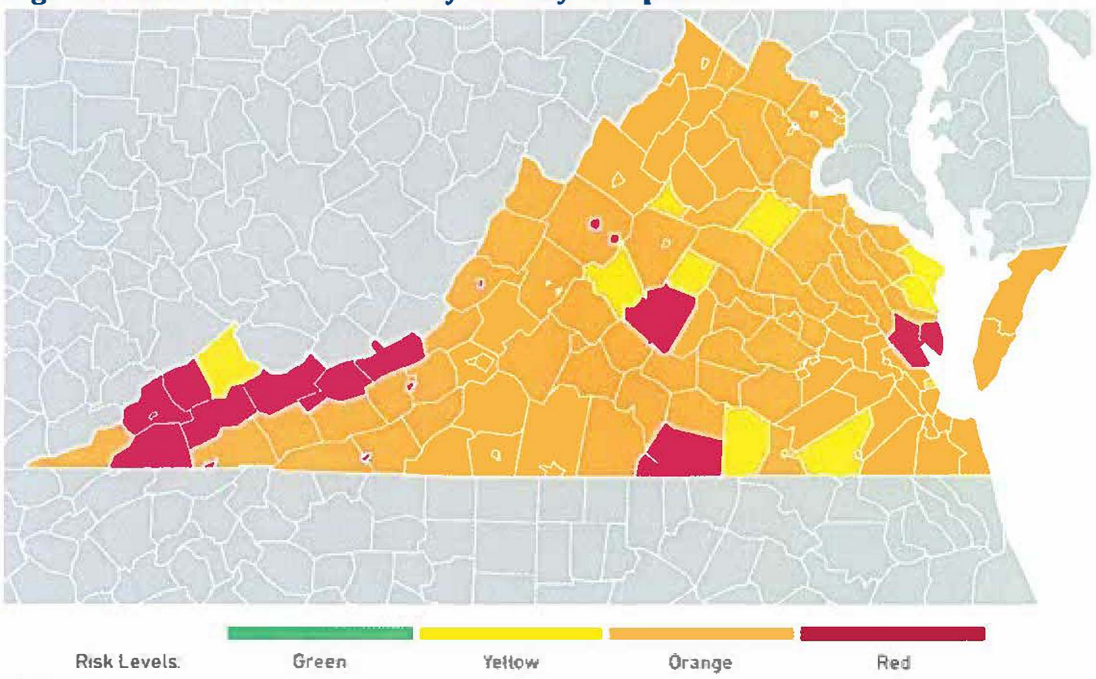
Rural areas, especially in south-central and southwest Virginia, continue to have lower vaccination rates as compared to other areas of the state. There have been some improvements, primarily concentrated in the north-central and northern regions (Figure 5). Vaccination hesitancy continues to be an issue throughout the Commonwealth. As seen in Figure 6, counties across Virginia are experiencing medium to high risk levels. Risk levels have 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 – Rate per 100,000 Population – As of September 30th, 2022



Source

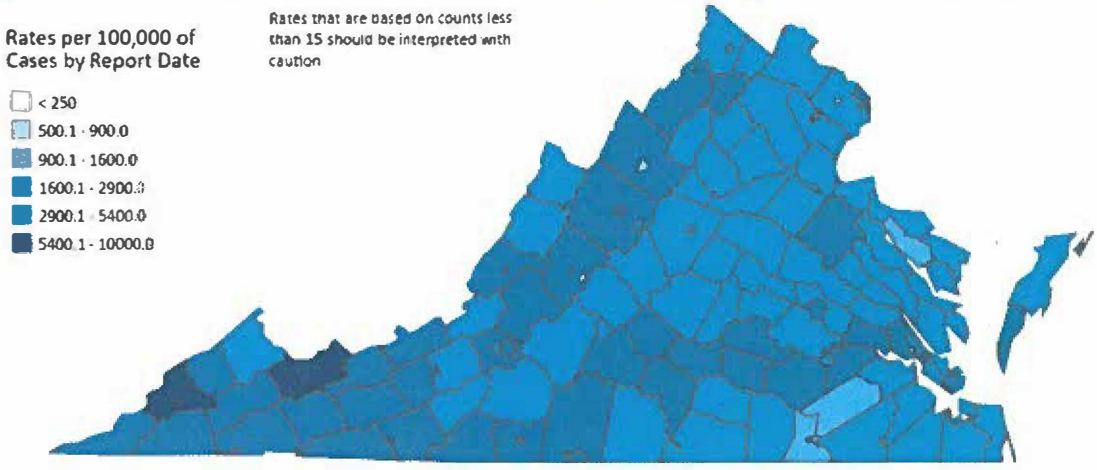
Figure 6: COVID-19 Risk Levels by Locality in September



Source

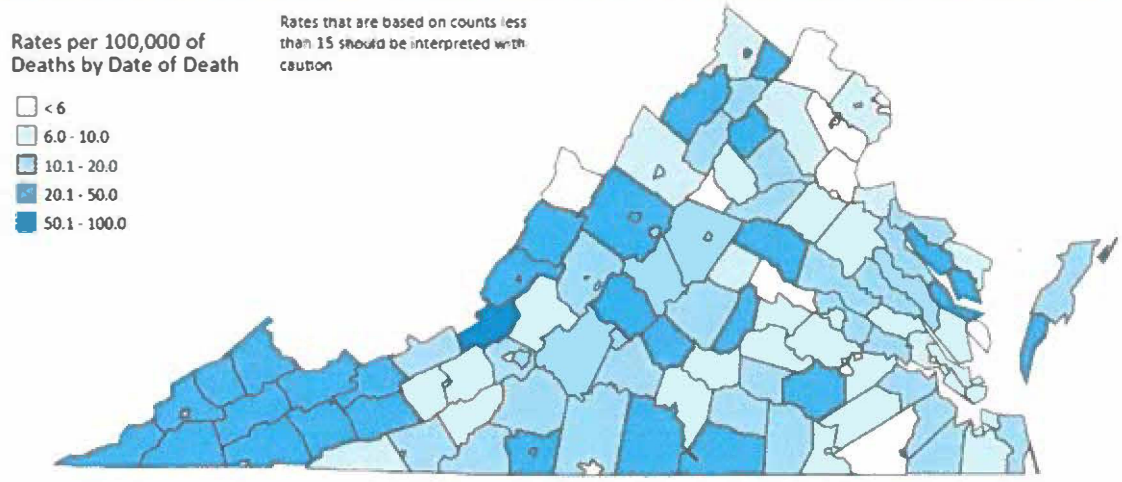
Third, as shown in Figures 7 and 8, some urban and rural disparities remain in terms of cases as measured by rates per 100,000 people. Some rural counties continue to show slightly higher rates of cases throughout the Commonwealth.

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. As shown in Table 3, disparities detailed in previous vaccine equity reports remain. 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

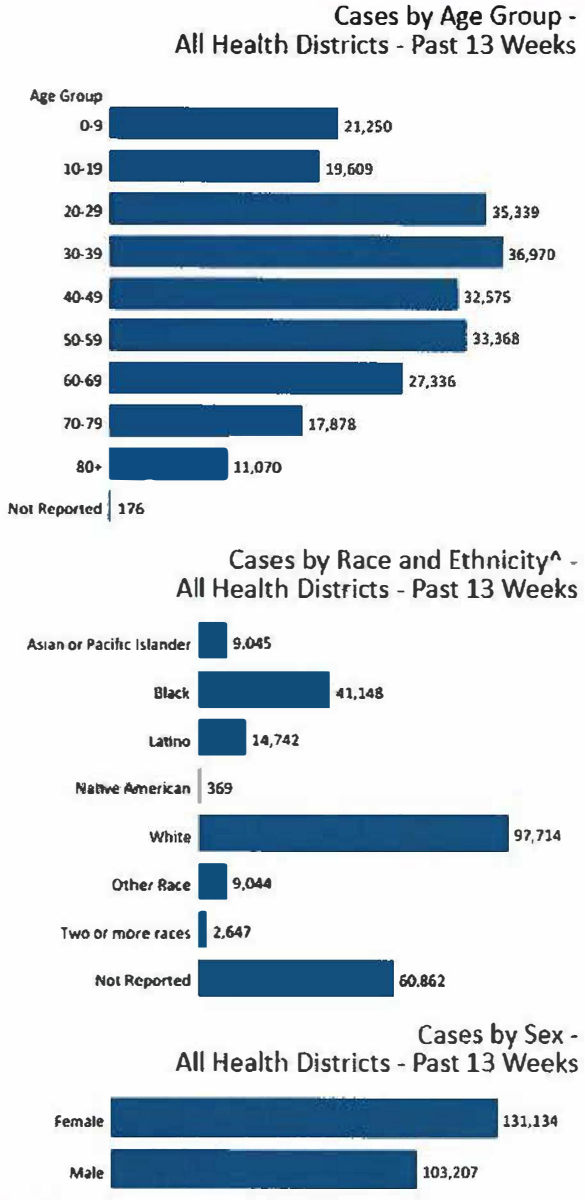
	% of Cases	% of Deaths	% of Total Population
White	56%	67%	61%
Black	23%	23%	19%
Hispanic	14%	6%	10%
Asian	4%	3%	7%
Other	3%	1%	3%

Source

Secondly, as shown below in Figures 9 and 10, patterns concerning cases and deaths by age and sex remain similar in September as they were in previous months. Concerning cases and age, those

aged between 30-39 continue to 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. Regarding deaths and sex, those identifying as male tend to die at a slightly higher rate than those identifying as female.

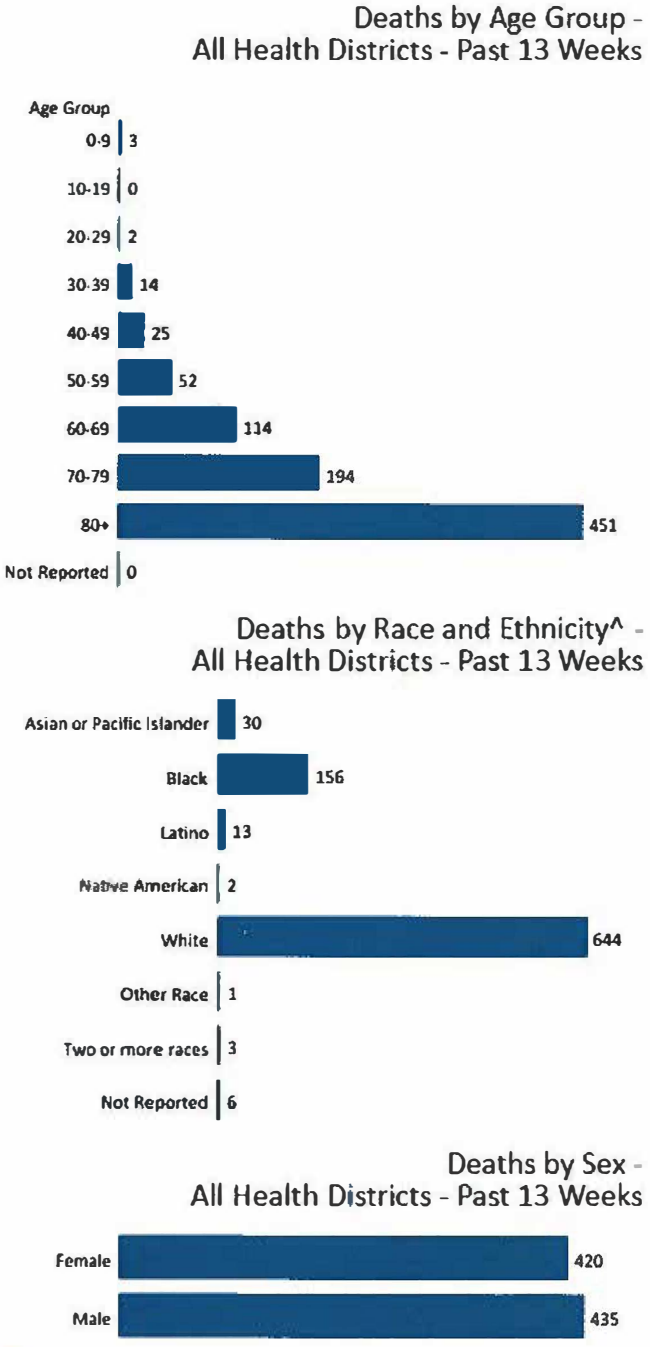
Figure 9: Cases of COVID-19 in Virginia: Demographics



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

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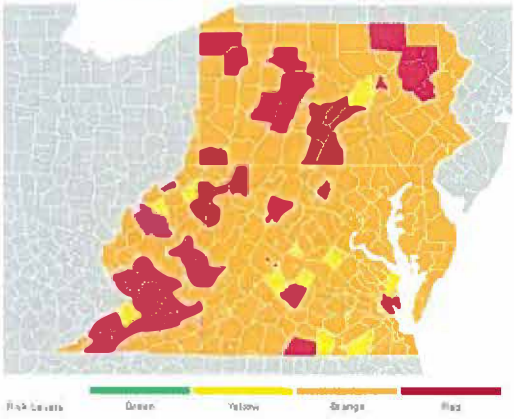
3. Vaccinations in FEMA Region 3

Regarding COVID-19 risk levels in September (Figure 11), most of Region 3 is currently experiencing medium or high risk levels. The risk levels for Virginia in September were lower than what they were in August. At present, West Virginia is the most at-risk in FEMA Region 3. Virginia has 1,330.6 new daily cases, a seven-day moving average of 15.6 new cases per 100,000 people (last month, Virginia saw 2,682.9 new daily cases with a seven-day moving average of 31.4 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, meaning that this month was better for Virginia's rankings than last month when Virginia came in second. 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 September by County across FEMA Region 3

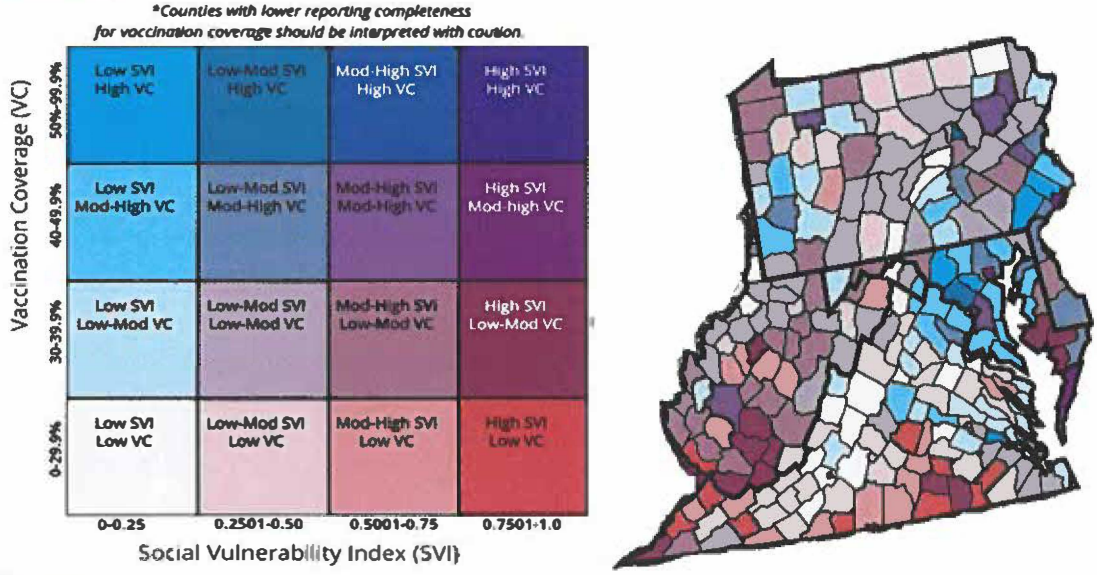
State/County	Rank	Daily new cases per 100k people (7d moving avg.)	Daily new cases (7d moving avg.)
West Virginia	1	22.9	411.1
Delaware	2	22.0	214.0
Pennsylvania	3	19.5	2,501.4
Virginia	4	15.6	1,330.6
Maryland	5	14.2	859.3
District of Columbia	6	13.2	93.1



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

A little 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.

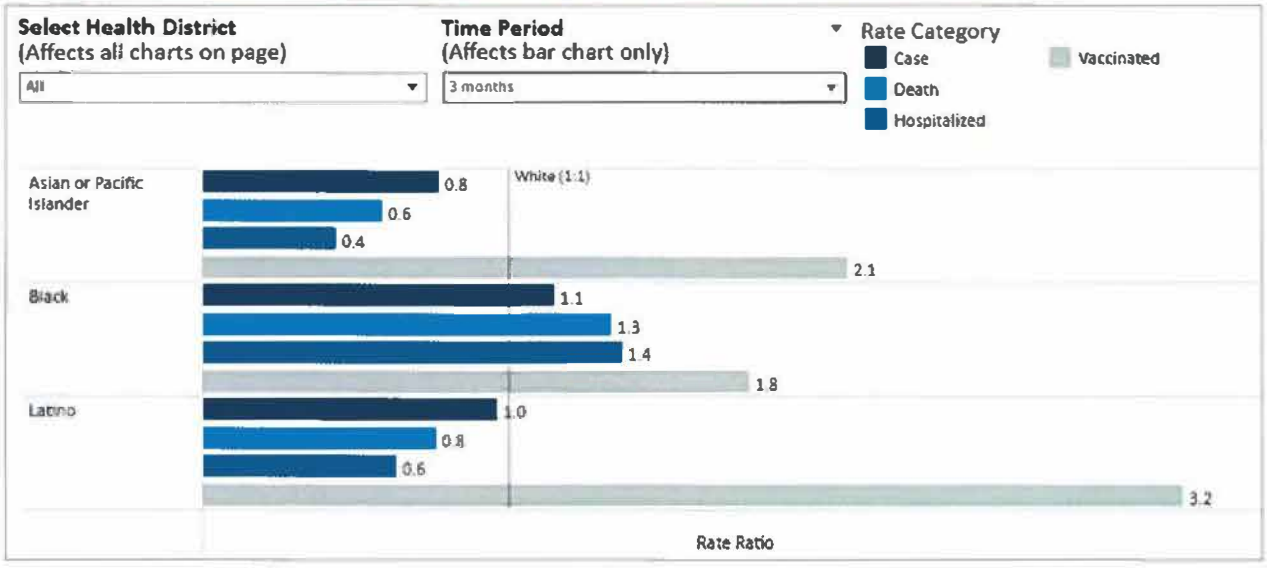
Racial Groups as a Share of Total Vaccinations in Virginia

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). Looking at vaccination coverage data since the start of the vaccine rollout, vaccinations occurred amongst Blacks at only 0.9 times the rate of Whites. Cases and deaths occurred amongst Blacks at 1.2 and 1.5 times the rate of Whites, respectively, when looking at

cumulative data across the entire pandemic. While some progress has been made in closing the disparity gap for vaccinations amongst racial groups, the Black population is notably behind other minority groups in Virginia when it comes to vaccination percentages.

Blacks especially carry an unequal burden of disease in Virginia when compared to Whites and Asians, as shown in Figure 17. Amongst Latinos, when analyzing data from the start of the vaccine rollout, vaccinations occurred at 1.1 times the rate of Whites while cases and deaths each occurred at 1.3 times the rate of Whites. VDH has been working throughout the pandemic to address these health disparities. Fortunately, some notable progress occurred in the last three months. As shown in Figure 17, rate ratios within the time period of the last three months reveal that, when compared to the cumulative rate ratios discussed above, the disparity gaps in vaccination status amongst Blacks and Latinos have disappeared. While Blacks continued to experience a disproportionately higher burden of cases, deaths, and hospitalizations in the last three months when compared to Whites, the rate ratio gaps are still smaller than what they were cumulatively, indicating some recent progress in health equity. The data in Figure 17 used to be publicly available on VDH's Health Equity dashboard, but is now stored internally.

Figure 17: Racial and Ethnic Distribution of Burden of Disease in Virginia Over the Last Three Months (according to vaccinations, cases, deaths, and hospitalizations)

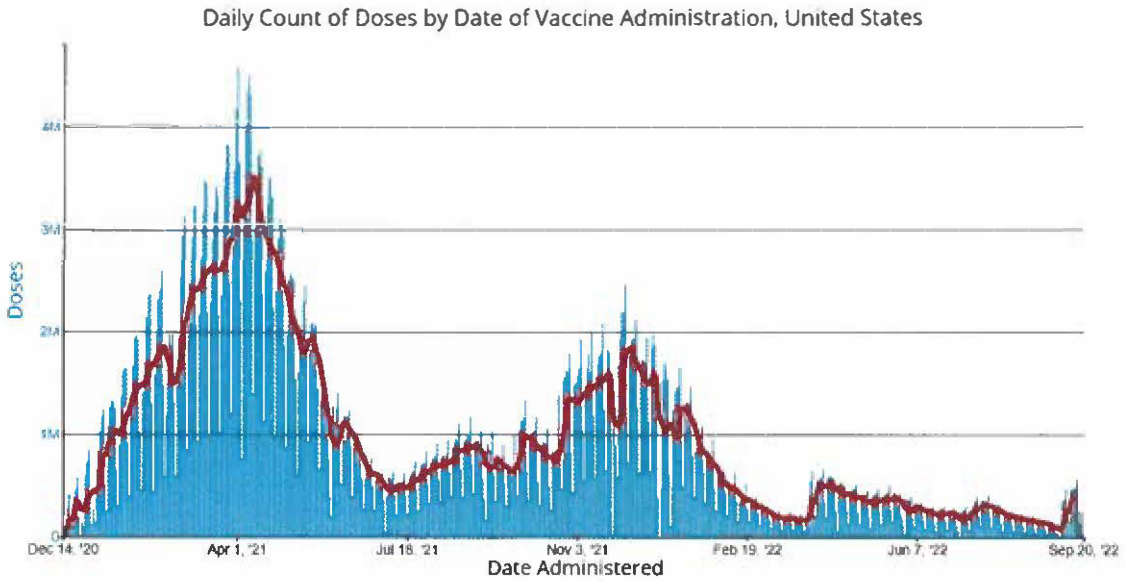


Doses Administered

Between October 2021 and March 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 September 29th, the peak average number of vaccines administered in September occurred on September 24th, with 15,021 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 onward, and a slight uptake in vaccinations again as the

BA.5 subvariant began to spread (Source; Source). As the fall season begins, the daily number of vaccines administered is starting to rise again statewide 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 close to 17 million vaccination doses administered, and a little over 7 million people (82.7%) vaccinated with at least one dose, Virginia's vaccination rates surpass the national rate of 79.5% (Source; Source). This percentage includes those who have received at least one dose as well as those who are fully vaccinated (67.8% of the U.S. population is fully vaccinated while 72.6% of Virginia's population is fully vaccinated). 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 (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 the latest poll from July 2022 (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 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 July 2022. Of those adults who have not gotten a vaccine:

- 58% are individuals between the ages of 18-49
- 28% are between the ages of 30-49
- 31% have a high school education or less
- 31% identify as Republican
- 32% have annual incomes less than $40k
- 21% reside in suburban areas and 33% 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, 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).

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, daycares, and summer camps. 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/