WEEKLY COVID-19 REPORT FOR EXTERNAL USE

Mon August 9, 2021 - Mon August 16, 2021

CONTENTS

KEY TAKEAWAYS

Cases

Cases in both districts have begun to **increase** over the past couple of weeks, with a **7-day total case rate** of 198.1 new cases per 100,000 population in Richmond and 184.1 new cases per 100,000 population in Henrico. Both districts have community transmission levels that are considered **High**, according to the **CDC COVID Data Tracker**.

Richmond City & Henrico County	
Demographic	Highest Proportion
Age	20-29 Year Olds
Sex	Female
Race	Black

Hospitalizations & Fatalities

Hospitalizations and **deaths** in both Richmond City and Henrico County are low, with mild upticks noted during late July and early August. *Hospitalizations & Deaths by subgroup (sex, age, and race) are reported on a monthly basis. Data may be impacted by a lag in reporting.*

Richmond Catchment Area: Hospital Status Board Trends			
Time Period	Hospitalizations	ICU Hospitalizations	Ventilator Utilizations
2021 January 1st, 2021→			
Last 4 Weeks July 19, 2021→			

**11 out of 11 hospitals in the Richmond Catchment Area are operating at a 'Normal' clinical status.*

Vaccinations

Richmond and Henrico Health Districts are in Phase 2 of vaccination; anyone 12 or older is eligible to receive a vaccine. Pharmacies appear to be administering the largest percentage of vaccines to Richmond and Henrico residents, compared with other providers.

Local Vaccination Stats & Regional Comparison		
Location	**≥ 1 Dose**	Complete
Richmond City & Henrico County	**56.6%**	**50.6%**
Region	57.4%	51.6%

Vaccination Demographic Trends		
Demographic	Richmond City	Henrico County
Age Groups ≥ 70% Vaccinated	65+	50+
Sex	Female	
Race	Asian/Pacific Islander & Latino	

In both Richmond and Henrico, older age groups have consistently been vaccinated at a higher rate than younger age groups. Section 4 includes an estimated breakdown of vaccination uptake by race and age subgroups.

1.0 COVID-19 SNAP SHOT

1.1 Total Tests and Percent Positivity by Modality in Richmond and Henrico

Total tests by testing modality and the associated 7-day average in percent positivity are summarized in the table below. Data are from the VDH public dashboard on August 16, 2021.

	RICHMOND CITY		HENRICO COUNTY	
	Tests	Positivity	Tests	Positivity
PCR*	277,510	10.5%	424,531	7.6%
Antigen	61,435	6.4%	119,035	8.8%
Total (PCR, antigen, and antibody)	343,697	9.4%	553,565	8.2%

1.2 Confirmed cases, hospitalizations, fatalities, and probable cases by county

CASE STATUS	RICHMOND CITY	HENRICO COUNTY	VIRGINIA
New cases this week (August 16)	335	459	14408
All cases	18399	27566	723727
Confirmed cases	14938	20122	556283
Hospitalizations	813	1074	30610
Deaths	242	573	9814
Probable cases	3461	7444	167444
Hospitalizations	21	48	1706
Deaths	39	70	1804
Case rate per 100,000	7984.4	8332.7	8176.9

Weekly cases added are estimated as the difference between the cases recorded from the current and prior week
*Case Rate per 100,000=(confirmed+probable)/population count *100,000.*
Population estimates for the case rate are from 2019 data compiled by the National Center for Health Statistics (NCHS).

1.3 Current COVID-19 hospitalizations in the Richmond catchment area on August 16, 2021

The data included in this section comes from VHASS and it comes from the following hospitals: VCU Health System, Retreat Doctors', Bon Secours Community, CWJ Chippenham, CWJ Johnson Willis, VA Medical Center, Bon Secours St. Mary's, Henrico Doctors, and Parham Doctors, Bon Secours St. Francis, and Memorial Regional Medical Center.

	TOTAL IN USE FOR COVID-19	CURRENTLY AVAILABLE
Confirmed Hospitalizations	199	101
Pending Hospitalizations	10	
Confirmed - ICU	51	18
Pending - ICU	*	
Confirmed - Ventilators	*	273
Pending - Ventilators	*	

Within these 11 hospitals that comprise the Richmond catchment area, there are currently 101 total available hospital beds, 18 available adult ICU beds, and 273 available ventilators. Based on the VHASS hospital dashboard on August 16, 2021, all 11 hospitals in the Richmond Catchment area are operating at normal clinical status.

*A clinical status of "normal" indicates that hospital clinical resources are operating within normal conditions. A clinical status of "full" indicates that hospital clinical resources are exceeded and acceptable care cannot be provided to additional patients. Diversion or Community surge response is required.

2.0 COVID-19 CASES

2.1 SUMMARY OF CASES

Cases

Cases in both districts have begun to increase over the past couple of weeks, with a **7-day total case rate** of 198.1 new cases per 100,000 population in Richmond and 184.1 new cases per 100,000 population in Henrico.

In both districts, females comprise a higher proportion of cases and 20-29 year olds continue to lead case counts cumulatively. Regarding race and ethnicity, the highest incidence of cases in both districts is still among Black individuals. Additionally, in both districts, the percentage of cases among the Latino population is disproportionately high cumulatively as compared to their population percentage but closer to their population percentage more recently.

In both Richmond City and Henrico County, the level of community transmission is considered **High**, according to recent CDC guidance & the CDC Covid Data Tracker.

2.2 CASE REPORTING TRENDS BY DATE (SOURCE-VDH WEBSITE)

***** Disclaimer *****

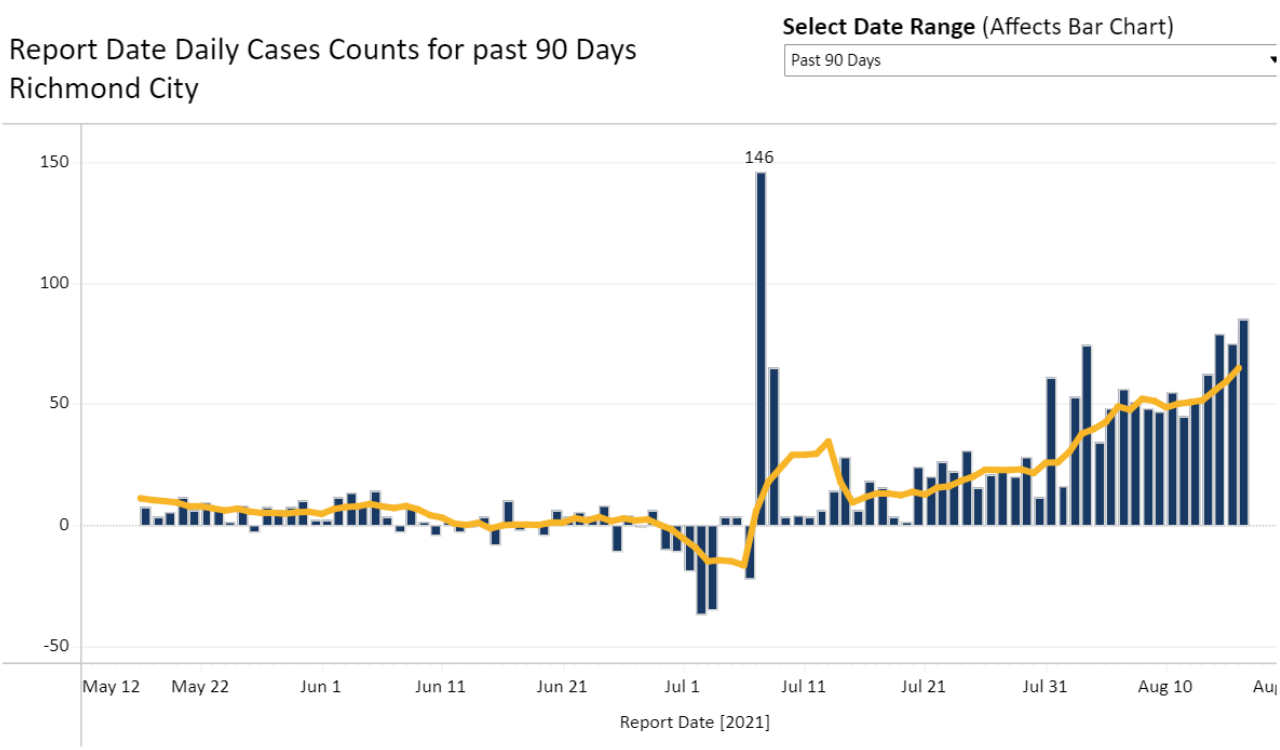
In recent weeks, case investigators have made significant efforts to reallocate past cases to appropriate localities (e.g. a case originally listed in Richmond City might be reassigned to Henrico County, Chesterfield County, etc.). This has led to sometimes significant discrepancies between reported cases and actual new cases.

Below is an estimation of the eventual adjustments made to each county's Reported Case counts per week. Interpretation: ***On the week of July 12, 2021 -July 18, 2021, there were 0-25 fewer cases than were reported in Richmond City, and between 0 and 25 more cases than were reported in Henrico County****. For more, see 'QA Note - Section 2.0 - Cases' at the end of this report.*

Week	Deviation of Actual New Case Counts from Reported Counts	
	Richmond	Henrico
07/19 to 07/25	0-25 Higher Count than Reported	0-25 Higher Count than Reported
07/26 to 08/01	0-25 Higher Count than Reported	26-50 Higher Count than Reported
08/02 to 08/08	0-25 Higher Count than Reported	0-25 Higher Count than Reported
08/09 to 08/15	26-50 Higher Count than Reported	0-25 Higher Count than Reported

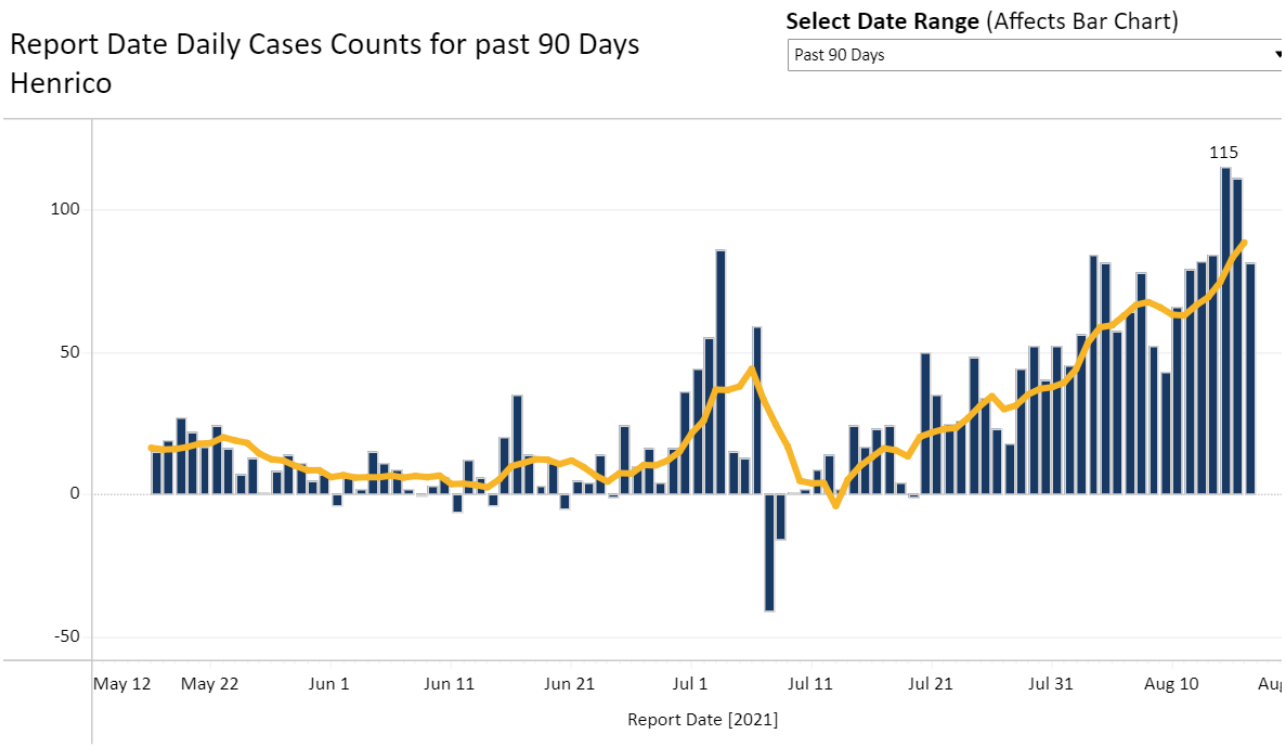
*While the table reports the **weekly** total discrepancy between the actual new case count and the reported case count, the plots below display the **daily** reported case count. The corresponding 7-day moving average is a recurrent average of the reported case count for each 7-day data sequence.*

Number of New Cases Reported^	7-Day Average Number of Daily New Cases Reported	7-Day Average Number of New Daily Cases Reported, Rate per 100,000 Population	Total Number of New Cases per 100,000 Population within last 14 days
85	**65**	**28.3**	**354.5**



- In Richmond, the number of daily new cases reported is influenced by cases being reallocated to different localities. The daily plot trends should be compared with the weekly corrections reported in the table above.
- For the week of July 12 to July 18 the amount of "noise" in the data is still high and now the actual case count for the week is 0 to 25 cases fewer than the graph presents.
- For the week of July 19 through July 25, there were between 0 and 25 more new cases than what was reported. Together with the uptick in the daily curve, this indicates an increase in cases recently.
- This increase in cases has continued over the week of July 26 through August 1, with the daily counts showing an increase in cases compared to previous weeks and the table indicating that the actual count for the week is between 0 and 25 higher than the reported counts show.
- For the week of August 2 through August 8, there has still been an upward trend with cases 0 and 25 higher than the reported counts shown.

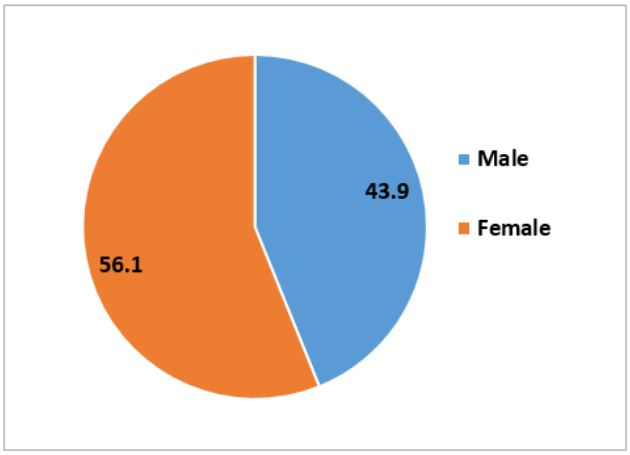
Number of New Cases Reported^	7-Day Average Number of Daily New Cases Reported	7-Day Average Number of New Daily Cases Reported, Rate per 100,000 Population	Total Number of New Cases per 100,000 Population within last 14 days
81	88	26.8	327.1

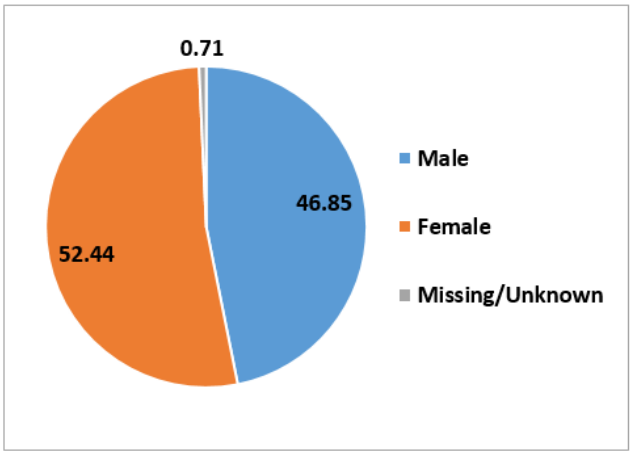


- In Henrico, the number of new cases reported per day is also fluctuating due to recent efforts to reallocate older cases to appropriate localities. The plot trends should be compared with the weekly corrections reported in the table above.
- For the week of July 12 to July 18 the amount of “noise” in the data is still present, and there were between 0 and 25 more new cases than actually reported in the graph, suggesting an increase in cases from the previous week.
- For the week of July 19 to July 25, there were between 26 and 50 new cases than actually reported while the daily counts are higher, demonstrating a notable rise in cases compared to previous weeks.
- The trend upward in cases has continued over the week of July 26 through August 1, with daily cases reported increasing from previous weeks and the table indicating that the weekly count is actually between 26 and 50 higher than the reported count.
- For the week of August 2 through August 8, there has still been an upward trend with cases 0 and 25 higher than the reported counts shown.

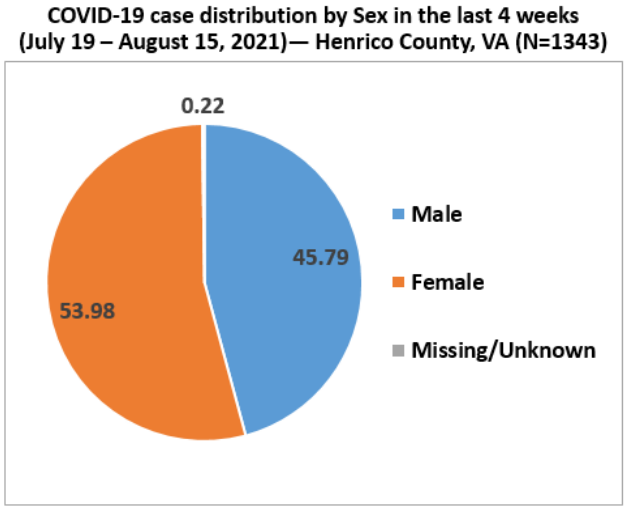
2.3 CASES BY SEX BY COUNTY

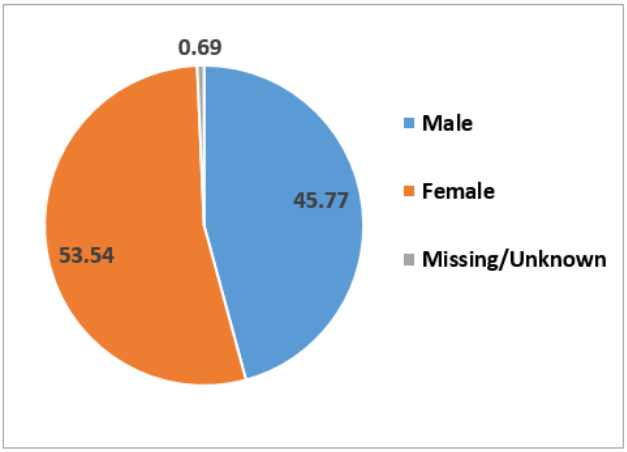
All percentages are based on overall case distribution, rather than the proportion of known cases for each measure, and therefore may not correspond directly with VDH percentages.





- In Richmond City, over the last four weeks, females have comprised a majority of cases (56.1%) when compared to males (43.9%). No sex data has been deemed 'Missing/Unknown' over the last four weeks.



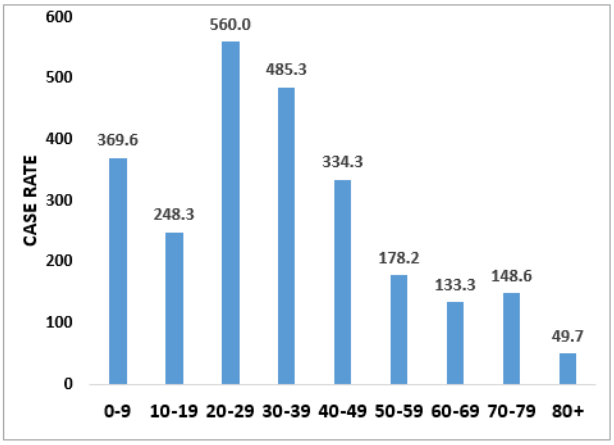


- In Henrico, over the last four weeks, females have comprised 53.98% of known cases, whereas males have comprised 45.79% of known cases.

2.4 Cases by Age Group by County

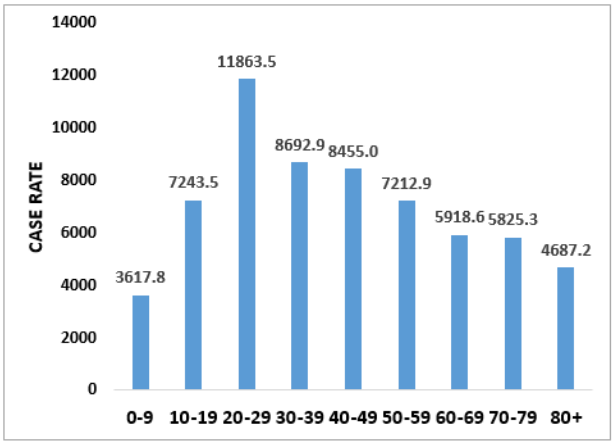
Population totals are based on 2019 data from the National Center for Health Statistics (NCHS). Please note - this is a change from previous reports which used Census data to estimate population by age group.

COVID-19 case distribution by Age in the last 4 weeks (July 19 – August 15, 2021)—Richmond City, VA (N=959)



Age is missing for 17.94% (n=172) cases

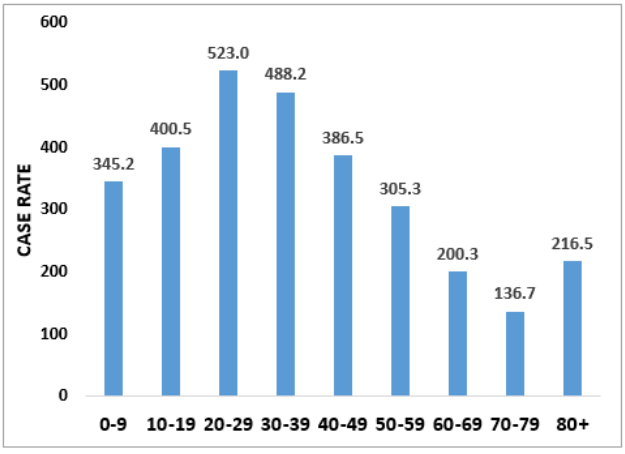
Cumulative COVID-19 case distribution by Age as of August 15, 2021 —Richmond City, VA (n= 18399)



Age is missing for .95% (n=175) cases

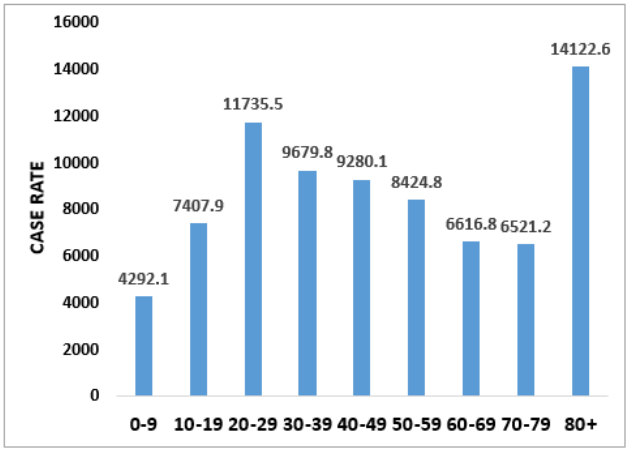
- In Richmond City, individuals aged 20-29 and 30-39 have the highest case rates in the last four weeks, while individuals aged 20-29 have the highest case rate cumulatively.
- Case burdens for individuals 50 and over are notably down in the last four weeks compared to cumulatively.

COVID-19 case distribution by Age in the last 4 weeks (July 19 – August 15, 2021)— Henrico County, VA (N=1343)



Age is missing for 11.91% (n=160) cases

Cumulative COVID-19 cases by Age as of August 15, 2021 —Henrico County, VA (n=27566)



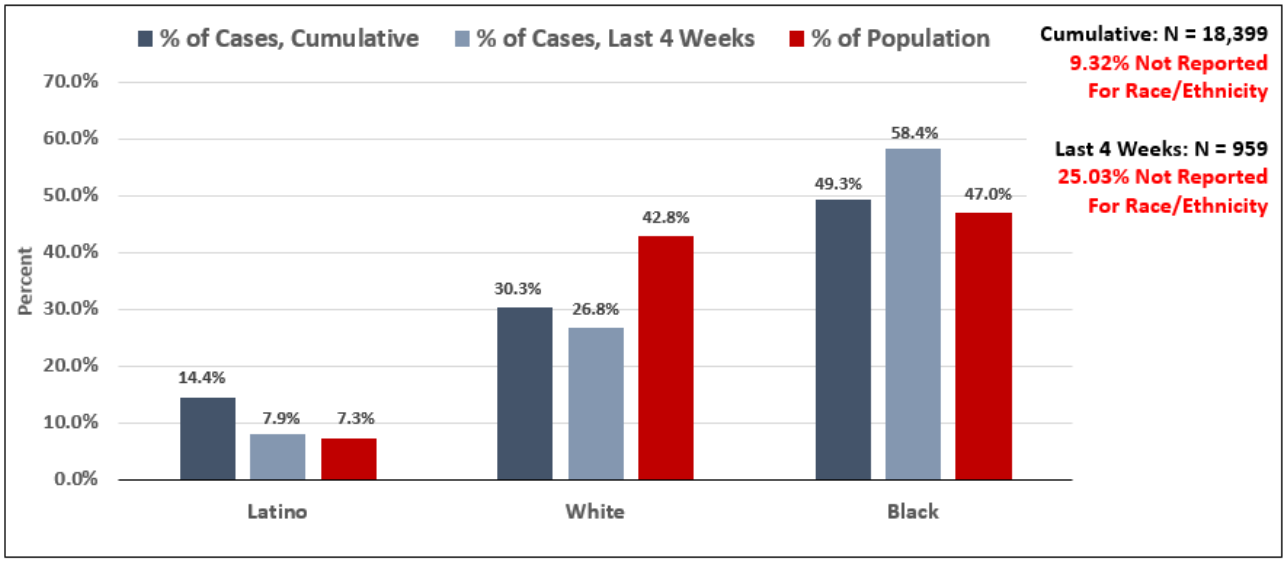
Age is missing for .62% (n=172) cases

- In Henrico, case rates over the past four weeks indicate a majority of cases occurring in individuals aged 20-29, followed by those aged 30-39 and 40-49 respectively, whereas cumulative case rates indicate a large burden being placed on individuals aged 20-29 and those 80 and over.
- Case rates are notably down for other older age groups (60 and over), with a particularly notable drop for individuals 70 to 79.

2.5 CASES AND POPULATION PROPORTIONS BY RACE AND ETHNICITY BY COUNTY

Population totals are based on 2019 data from the National Center for Health Statistics (NCHS). Please note - this is a change from previous reports which used Census data to estimate population by race and ethnicity group. The categories for NCHS population estimates do not include one for "Other Race" or "Two or More =

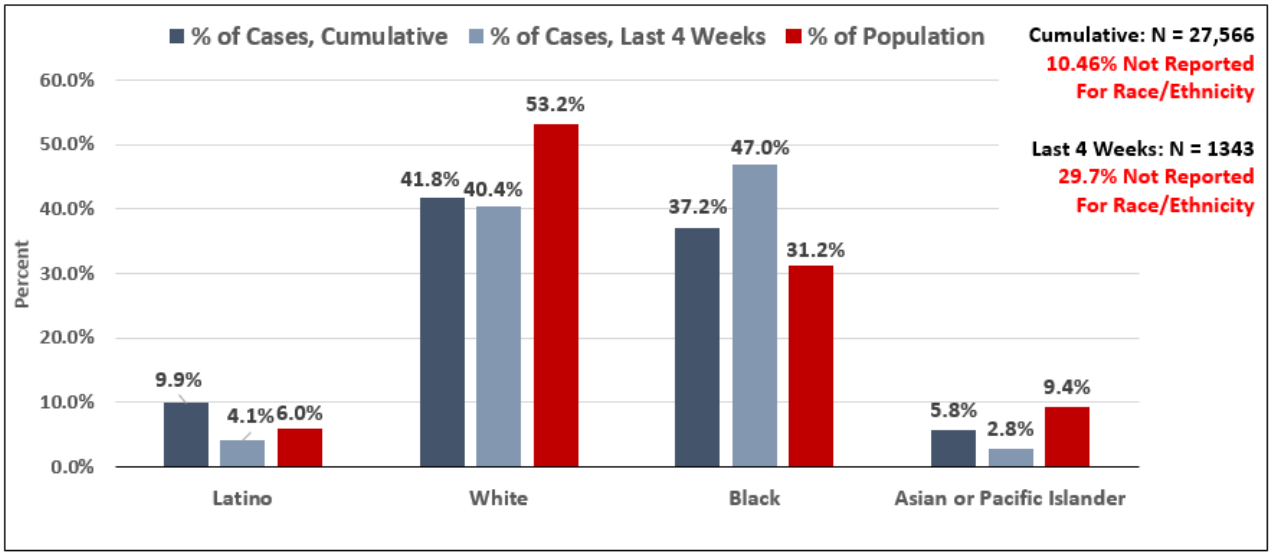
COVID-19 Case Distribution by Race and Ethnicity in the Last 4 Weeks (July 19 – August 15, 2021) and Cumulatively through August 15, 2021 – Richmond City, VA



* NCHS population estimates are not available for Two or More Races (235 total cases) or Other Race (394 total cases) and thus they are absent from the plots.
* Missing and Unknown Ethnicities were assumed to be of Non-Hispanic ethnicity.
* Cases among individuals identifying as Asian or Pacific Islander or Native American are suppressed (counts < 5)

- In Richmond, the case burden for Black individuals over the last 4 weeks (58.4%) is disproportionately high relative to their population percentage (47%), while the case burden for White individuals is disproportionately low (26.8%) relative to their population percentage (42.8%).

COVID-19 Case Distribution by Race and Ethnicity in the Last 4 Weeks (July 19 – August 15, 2021) and Cumulatively through August 15, 2021 – Henrico County, VA



* NCHS population estimates are not available for Two or More Races (375 total cases) or Other Race (849 total cases) and thus they are absent from the plots.
* Missing and Unknown Ethnicities were assumed to be of Non-Hispanic ethnicity.
* Cases among individuals identifying as Native American are suppressed (counts < 5)

- In Henrico in the last four weeks, the case burden for Black individuals (47%)is relatively higher than the proportion of the population (31.2%). Meanwhile, the case burdens for White individuals (40.4%) and Asian or Pacific Islander individuals (2.8%) are relatively low compared to their proportions of the population (53.2% and 9.4%, respectively). Cases in Latino individuals have been proportionally low (4.1%) compared to their population proportion (6%).

3.0 Hospitalizations & Fatalities

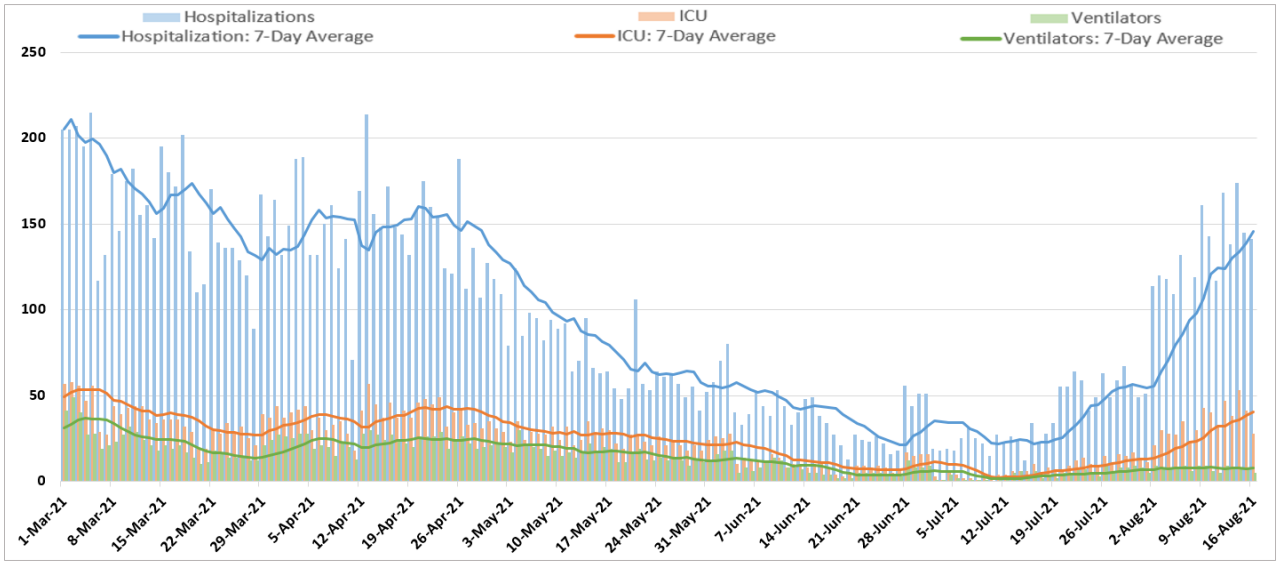
3.1 Summary of Hospitalizations & Fatalities

Hospitalizations based on date of admission are low in Henrico County and Richmond City, as are deaths based on date of death.

Looking more broadly at health systems within the Richmond catchment area, hospitalizations, ICU hospitalizations, and ventilator utilizations are increasing, but are generally at a lower level as compared to January of this year. *Hospitalizations by subgroup (sex, age, and race) are reported on a monthly basis.*

3.2 COVID-19 Hospitalizations, ICU Hospitalizations, & Ventilator Utilizations in the Richmond Catchment Area

Total Daily COVID-19 Hospitalizations, ICU Hospitalizations, and Ventilator Utilizations
March 1, 2021 – August 16, 2021
Richmond Catchment Area



*Counts Displayed in Above Metric - Hospitalizations: 15,975 of 79,127; ICU Hospitalizations: 4,200 of 19,260; Ventilator Utilizations: 2,357 of 10,532

- Hospitalizations, ICU Hospitalizations, and Ventilator Utilizations in the Richmond Catchment area mostly followed a downward trend through mid July from the most recent notable peak during the last week of April, but have since seen increases over the last month back to levels in April.

4.0 VACCINATION

4.1 Vaccine Summary

Richmond and Henrico Health Districts are in Phase 2 of vaccination. Anyone 12 or older is eligible to receive a vaccine. As of August 16, 57.4% of the region's population has received at least one dose of the vaccine and 52% of the region's population has been fully vaccinated. Approximately 57% of Richmond and Henrico's combined population has received at least one dose and 51% of the two districts combined population has been fully vaccinated. Cumulatively, local health departments have administered the largest percentage of vaccines to Richmond and Henrico residents, compared with other providers. However, pharmacies have delivered the majority of vaccines in the last 4 week. Due to data quality efforts, some duplicate first dose records have been removed, leading to minor changes in vaccination counts in certain areas.

The majority of vaccine recipients in both districts have been female. In both Richmond and Henrico, older age groups have consistently been vaccinated at a higher rate than younger age groups, with individuals in Richmond 65 and over, in Henrico 65 and over, and in Henrico between 50 and 64 all reaching the 70% goal for vaccinated percentage. This section includes an estimated breakdown of vaccination uptake by race, sex, and age subgroups.

4.2 Percentage of vaccination goals reached by population

		POPULATION	POPULATION GOAL (70%)	PEOPLE WITH AT LEAST ONE DOSE	PEOPLE FULLY VACCINATED
Richmond	12-17	11,150	7,805	4,844 (43.4%)	3,814 (34.2%)
	18+	**190,750**	**133,525**	**109,200 (57.2%)**	**97,751 (51.2%)**
	65+	31,809	22,266	23,764 (74.7%)	21,928 (68.9%)
Henrico	12-17	25,954	18,168	15,843 (61%)	12,994 (50.1%)
	18+	**256,660**	**179,662**	**187,577 (73.1%)**	**169,623 (66.1%)**
	65+	52,720	36,904	45,757 (86.8%)	42,889 (81.4%)

Population totals are based on 2019 data from the National Center for Health Statistics (NCHS). Please note - this is a change from previous reports which used Census data to estimate population by age group.

Nationally, the Biden administration is using the **percentage of adults (individuals 18 and over)** to track progress in vaccination. Though the percentage of the population needed to reach herd immunity is still uncertain, in line with federal guidance, we have set an overall goal of vaccinating 70% of the population. First and second doses of the Pfizer vaccine must be administered at least 21 days apart. First and second doses of the Moderna vaccine must be administered at least 28 days apart. People who received the Johnson & Johnson vaccine, which is a single dose, are included in the count of people with at least one dose *and* the count of people who are fully vaccinated.

4.3 Vaccinations by locality as of August 16, 2021 - source: VDH.VIRGINIA.GOV

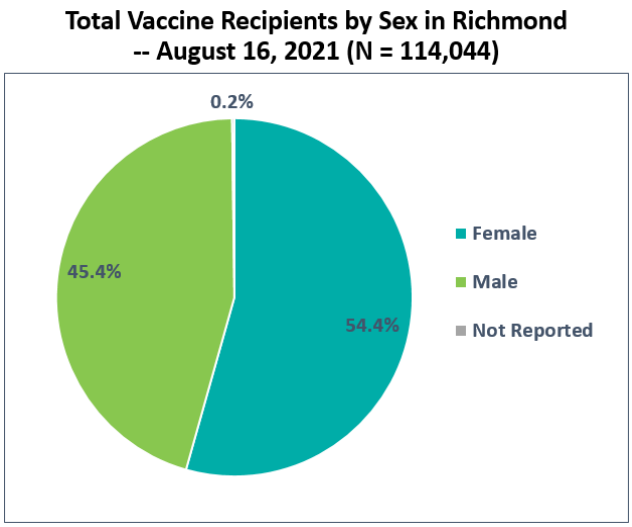
HEALTH DISTRICT	LOCALITY	TOTAL POPULATION	PEOPLE WITH AT LEAST ONE DOSE	PEOPLE FULLY VACCINATED
Chesterfield	Chesterfield	352,802	204,704	183,064
	Colonial Heights	17,370	8,734	7,559
	Powhatan	29,652	15,039	13,557
Chickahominy	Charles City	6,963	3,938	3,632
	Goochland	23,753	15,790	14,734
	Hanover	107,766	66,267	61,227
	New Kent	23,091	12,110	11,109
Henrico	Henrico	330,818	203,420	182,617
Richmond	Richmond City	230,436	114,044	101,565
Total		**1,122,651**	**644,046**	**579,064**

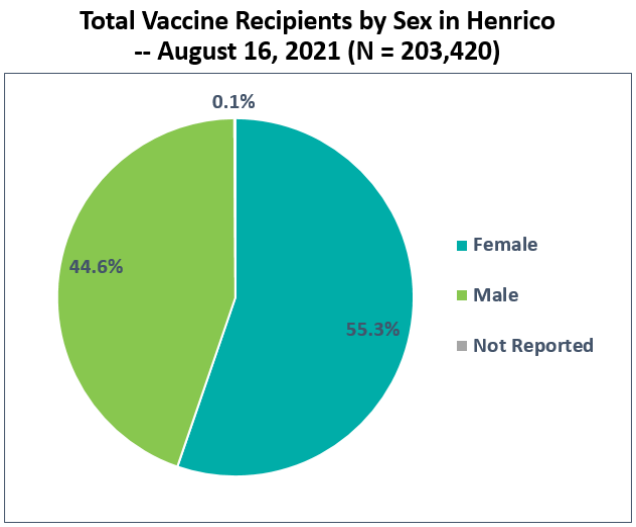
Population totals are based on 2019 data from the National Center for Health Statistics (NCHS). Please note - this is a change from previous reports which used Census data to estimate population by age group.

4.4 Vaccine Distribution by Sex by County

Population estimates for age subgroups and for race and ethnicity subgroups have been changed for this report from the U.S. Census Bureau's American Community Survey (ACS) 2019 5-year estimates to the National Center for Health Statistics (NCHS) 2019 estimates to align with estimates used by other VDH metrics. This change also involves new race and ethnicity categories: Latino or Hispanic, Non-Hispanic White, Black or African-American, Asian or Pacific Islander, and Native American. Racial groups such as Two or more Races and Other Race have been excluded from the following metrics as they do not have corresponding NCHS estimates, but the counts for these groups can be seen in the footnotes for those plots.

In both Richmond and Henrico, a majority of vaccinated individuals have been female.

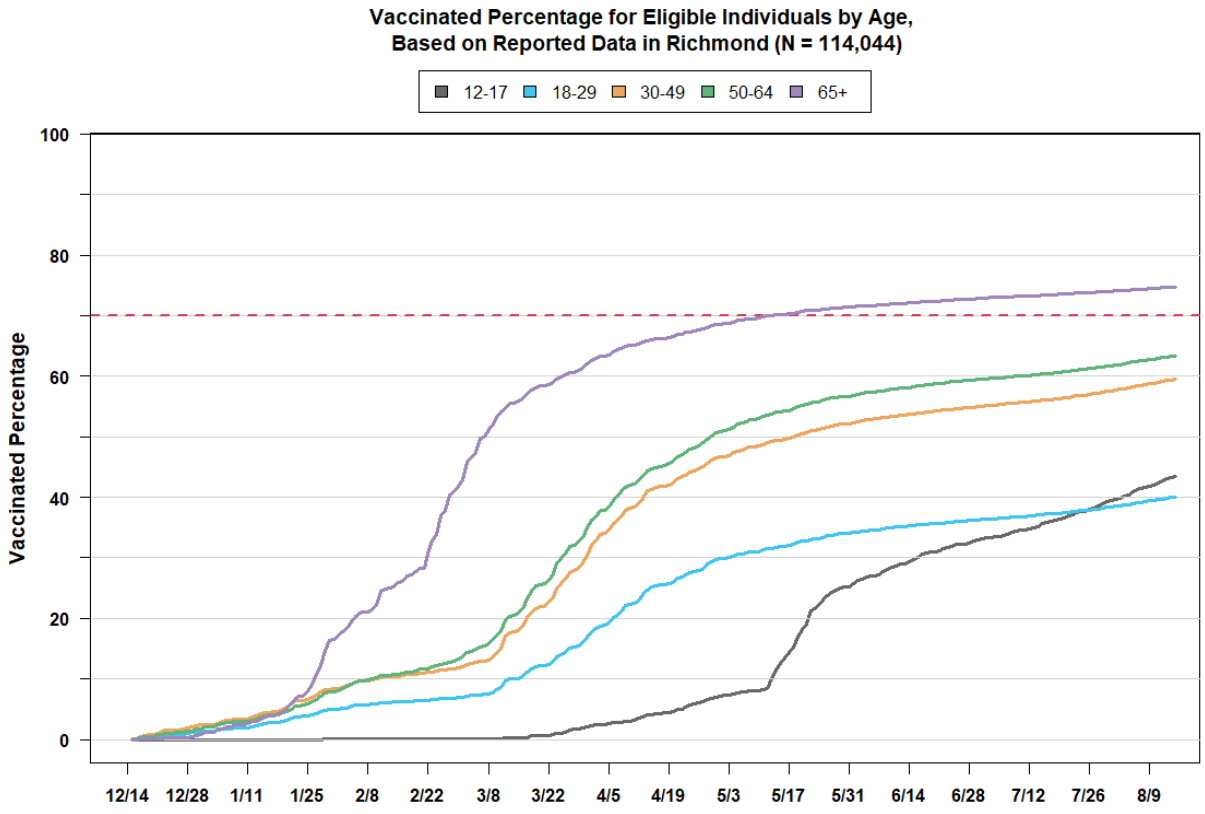


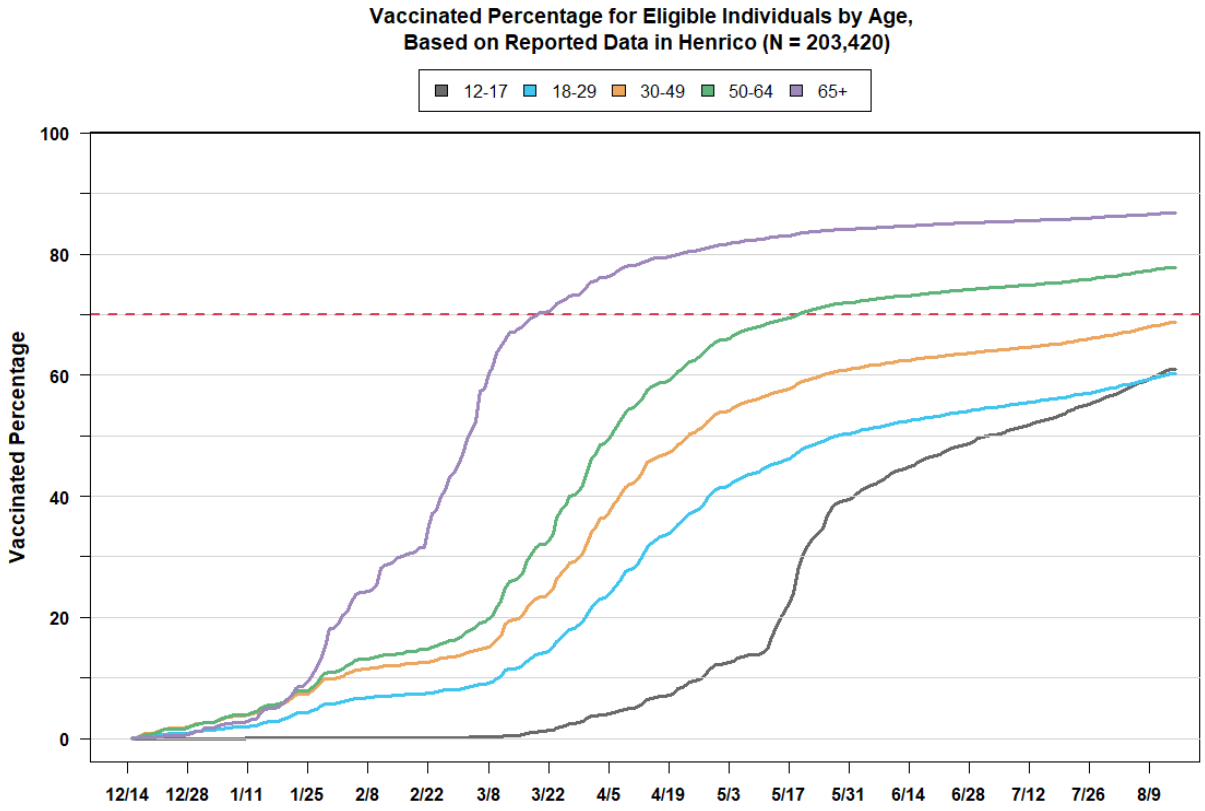


4.5 Vaccine Distribution by Age Group over Time

The following charts track vaccination rates by age group over time since vaccinations first began in mid-December.

- We can see a steep increase in vaccination rates in February and early March for individuals 65 and over such that over 70% of this age group is now vaccinated but new vaccinations are rising slowly.
- Individuals aged 18 to 29, 30 to 49, and 50 to 64 in Richmond saw sharp increases in vaccination rates in early March through the middle of April, with a steady but slower increase in vaccinations since then. These same age groups in Henrico saw a similar pattern, but the dropoff to a slower increase did not occur until May.
- Among individuals aged 12 to 17, vaccination rates were low until individuals aged 12 to 15 were able to get vaccinated in May. In the first two weeks, we saw a spike in vaccination rates that has not yet noticeably slowed, followed by a steady rate of new vaccinations that has not yet slowed.
- Individuals in Henrico between 50 and 64 reached the 70% threshold in mid-May, while the same age group in Richmond is still well short of this goal.
- Individuals in Henrico have seen consistently higher vaccination rates across all age groups as compared to Richmond.
- All data is subject to lags in reporting, particularly in recent weeks.

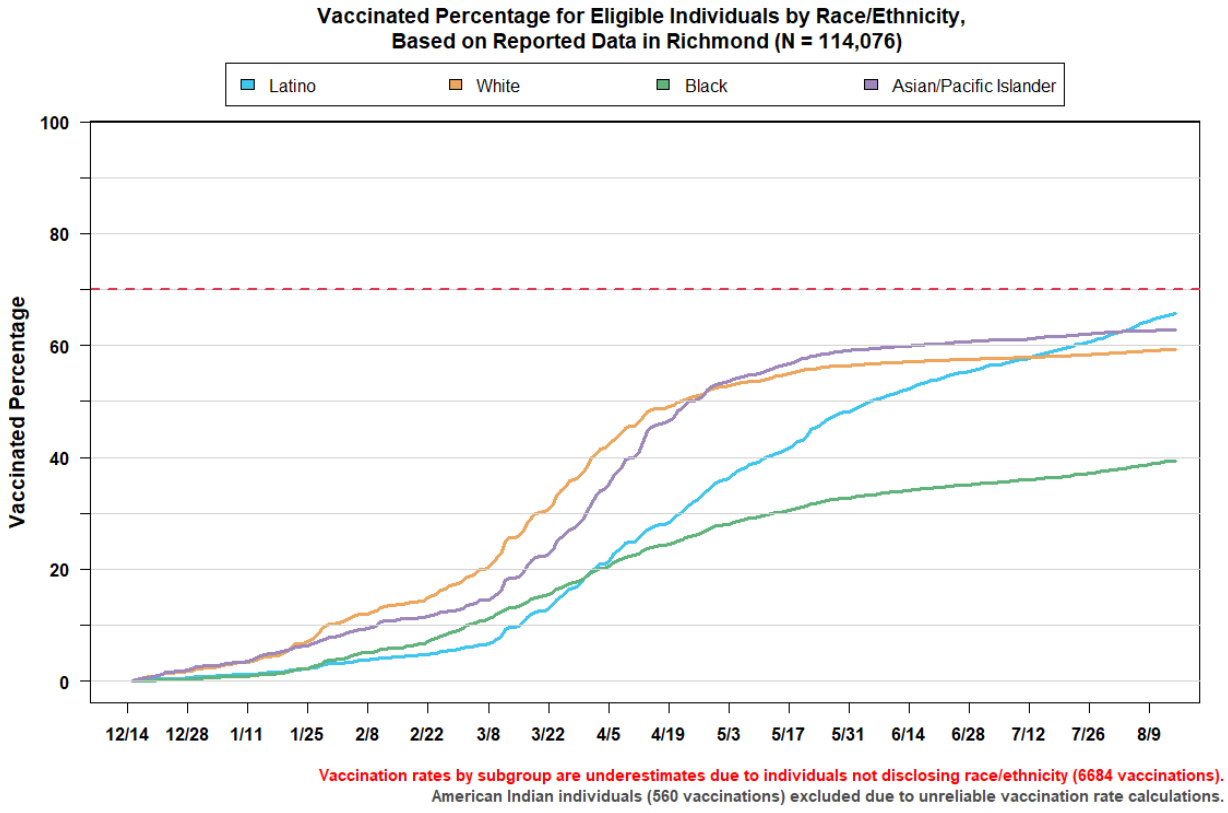

Vaccinated Percentage for Eligible Individuals by Age,
Based on Reported Data in Richmond (N = 114,044)
12-17
18-29
30-49
50-64
65+
Vaccinated Percentage
100
80
60
40
20
0
12/14
12/28
1/11
1/25
2/8
2/22
3/8
3/22
4/5
4/19
5/3
5/17
5/31
6/14
6/28
7/12
7/26
8/9

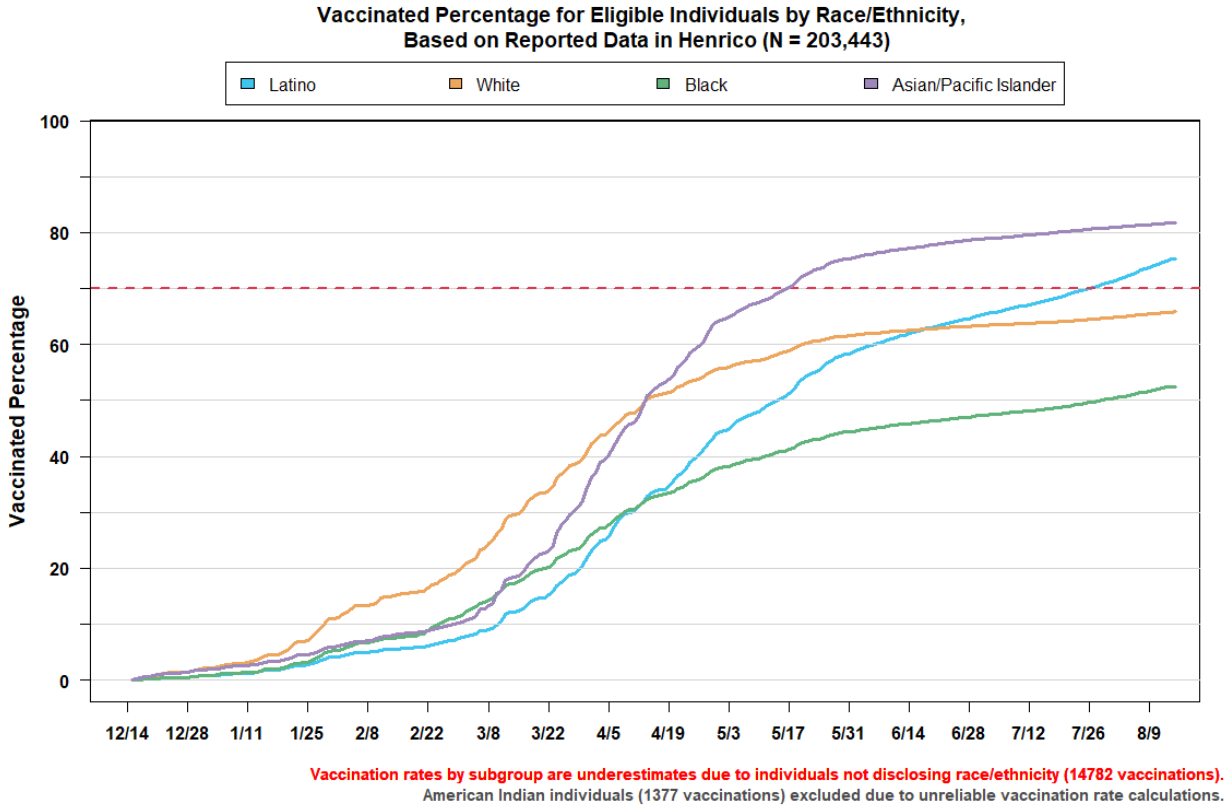

Vaccinated Percentage for Eligible Individuals by Age,
Based on Reported Data in Henrico (N = 203,420)
12-17
18-29
30-49
50-64
65+
Vaccinated Percentage
100
80
60
40
20
0
12/14
12/28
1/11
1/25
2/8
2/22
3/8
3/22
4/5
4/19
5/3
5/17
5/31
6/14
6/28
7/12
7/26
8/9

4.6 Vaccine Distribution by Race/Ethnicity over Time

The following charts track vaccination rates by race and ethnicity over time since vaccinations first began in mid-December.

- In Richmond, the rate of increase of vaccinations among White individuals and Asian or Pacific Islander individuals have been fairly consistent, with around 60% of both groups vaccinated.
- In both Richmond and Henrico, Latino individuals and Black individuals saw a slower increase in vaccination rates through early March, but the rate of new vaccinations for Latino individuals began sharply increasing then and now represents the fastest increasing vaccination rates among all groups. The current vaccination rate is just below 70% in Richmond and just above 70% in Henrico, based on NCHS population estimates.
- In Henrico, Asian or Pacific Islander individuals saw slower uptake similar to Black individuals and Latino individuals through early March before seeing a sharp increase in March and April. Now over 70% of this subgroup is vaccinated.
- In Henrico, White individuals represented the highest vaccination rate through the middle of April, but the rate of new vaccinations decreased noticeably since then, falling behind the vaccination rate of Asian or Pacific Islander and Latino individuals and still somewhat short of the 70% threshold.
- In both Richmond and Henrico, Black individuals now represent the lowest vaccination rates among all subgroups, with only about 40% of Richmond residents vaccinated and only about 50% of Henrico residents vaccinated.





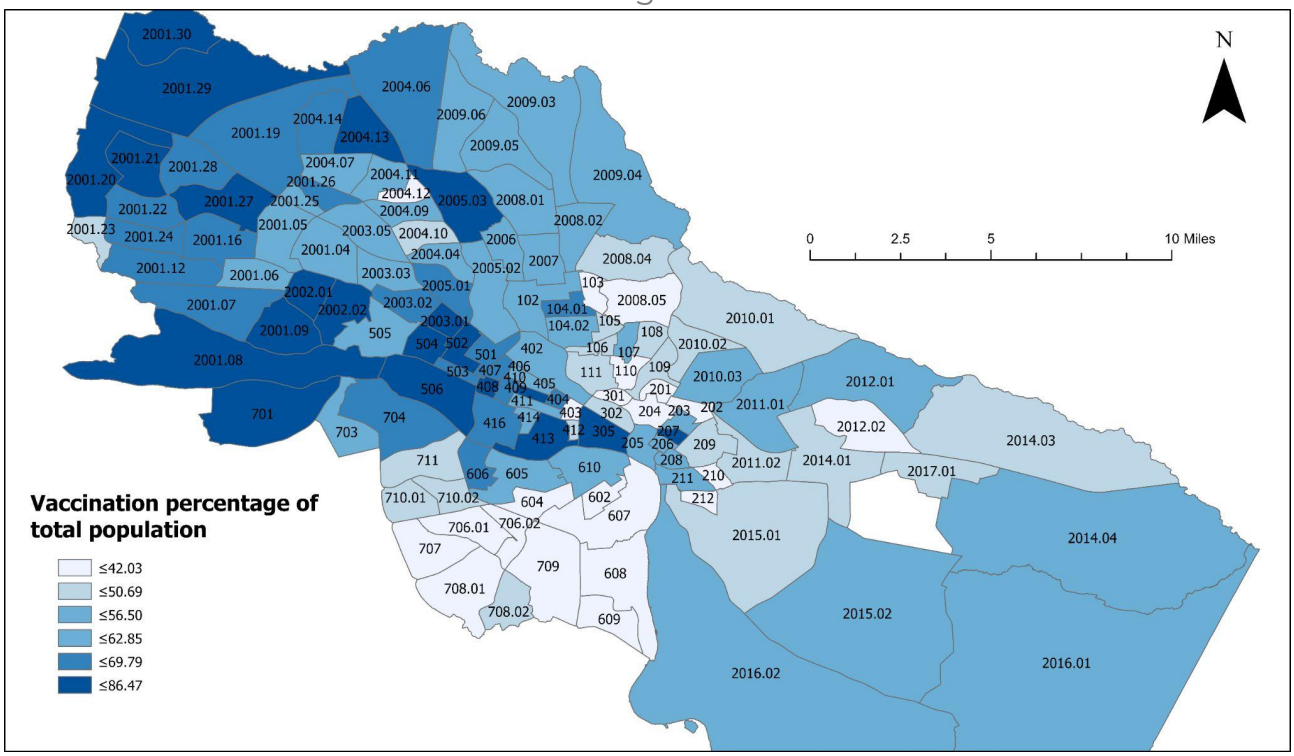
Vaccination rates by subgroup are underestimates due to individuals not disclosing race/ethnicity (14782 vaccinations).
American Indian individuals (1377 vaccinations) excluded due to unreliable vaccination rate calculations.

4.7 Vaccine Distribution Maps

Below are maps that compare vaccination uptake percentage and COVID-19 burden by census tract. The data collected is consistent with statewide and national data trends; lower income communities of color tend to experience more severe outcomes of COVID-19, yet are disproportionately undervaccinated. RHHD monitors this data as part of its equity-driven approach; this data is used to assist program managers in strategically standing up vaccination opportunities, outreach, and education efforts in areas that are in highest need.

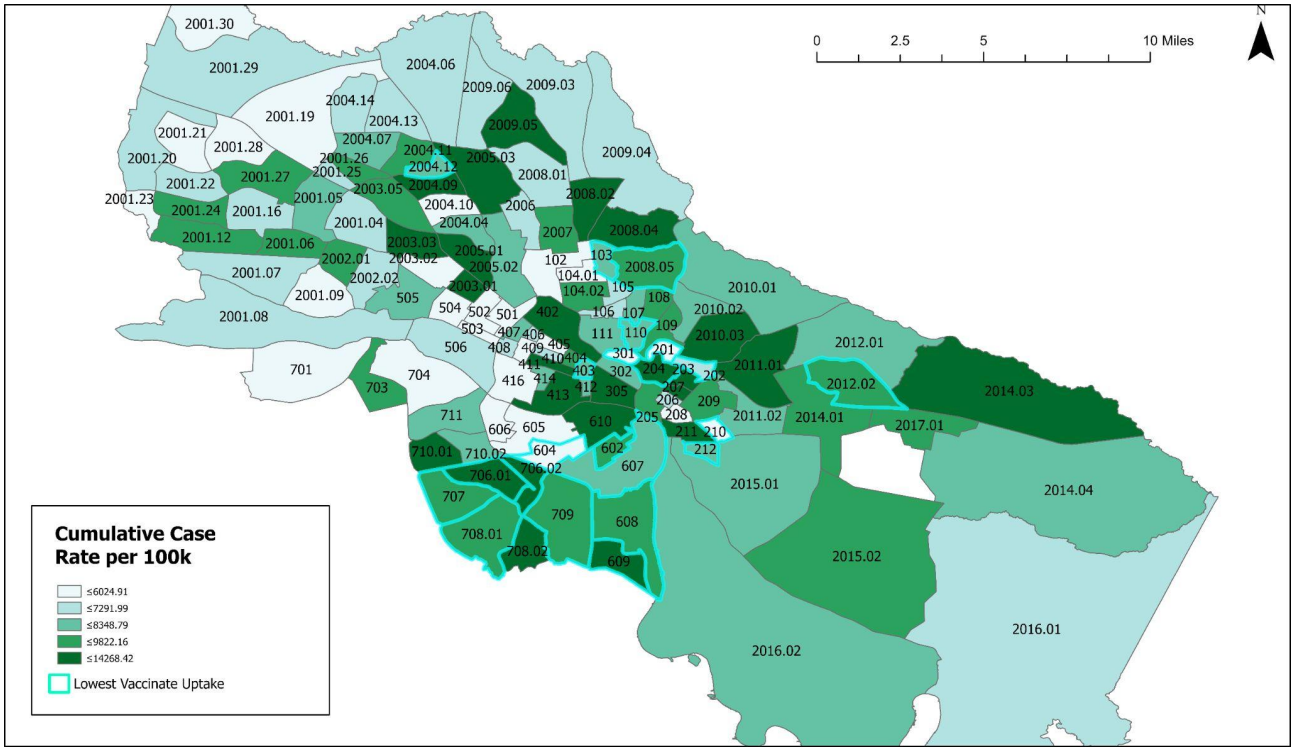
<u>These percentages are estimations, and are solely intended for use in the planning and facilitation of outreach event</u>

Percentage of Population Vaccinated By Census Tract: Richmond & Henrico, VA -- Aug 16th

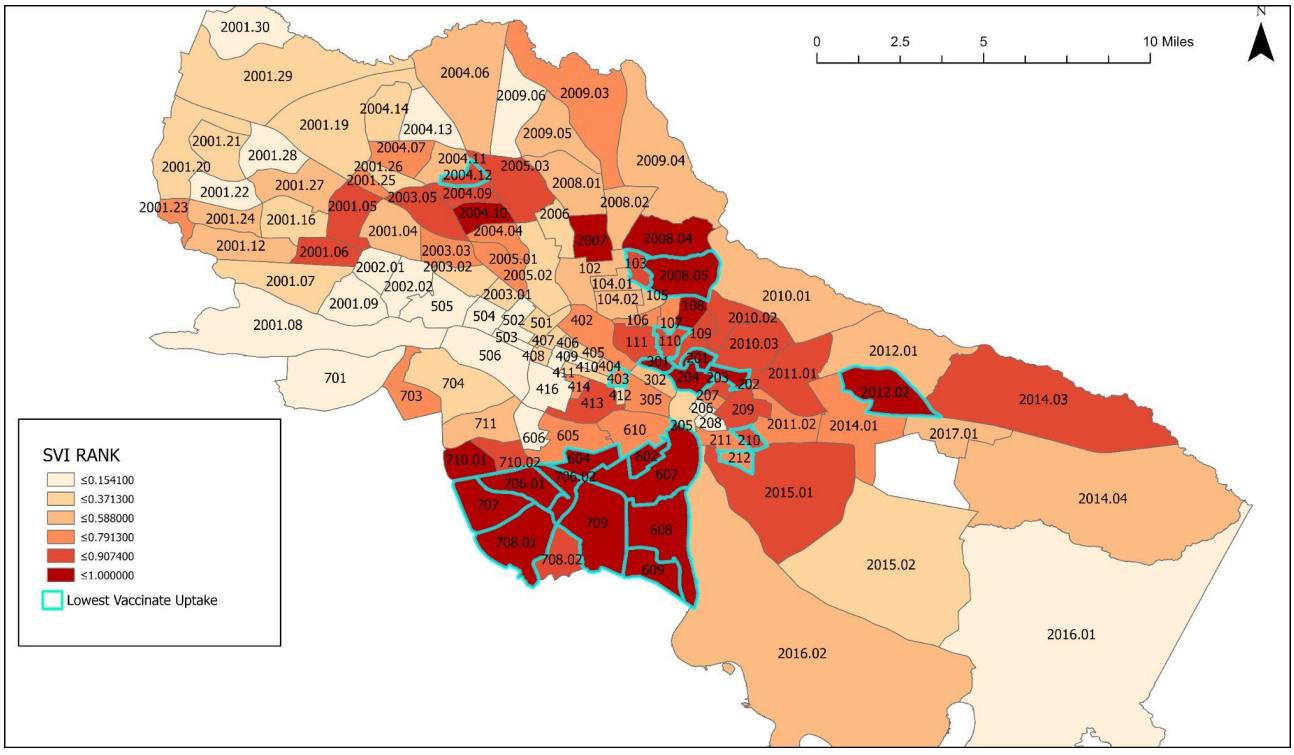


Current data suggests that vaccination rates still vary significantly at the census tract level. With the highest uptake percentage (86.47%) seen in Census Tract 2001.29, and the lowest uptake percentage (17.28%) seen in Census Tract 403.

COVID-19 Case Rate and Low Vaccination Uptake by Census Tract in Richmond & Henrico, VA -- Cumulative Cases and Vaccinations Aug 16th 2021



Social Vulnerability and Low Vaccination Uptake by Census Tract in Richmond & Henrico, VA -- Cumulative Vaccinations Aug 16th 2021



- **Social vulnerability** is based on the CDC's Social Vulnerability Index, last updated in 2018.
- **COVID-19 vaccination percentages** reflect the percentage of the **Total Population** within each tract that has been vaccinated. Data are sourced from the Virginia Immunization Information System (VIIS).
- **COVID-19 case rates** reflect **Cumulative** cases per 100,000 census tract population and are sourced from the Virginia Electronic Disease Surveillance System (VEDSS).
- **Population estimates** are from the US Census 2019 ACS Community Survey 5-year estimates.
- SVI, vaccination percentage, and case rates are visualized on these maps using the **quantiles** classification method, dividing the range 5 groups, each containing the same number of observations (census tracts).

QA Note - Section 2.0 - Cases:

In recent weeks, case investigators have made significant efforts to reallocate past cases to appropriate localities (e.g. a case originally listed in Richmond City might be reassigned to Henrico County, Chesterfield County, etc.). This has led to sometimes significant discrepancies between reported cases and actual new cases.

The report date and its count corresponds to the date the case count was reported publicly (or reallocated publicly). The report date does not have any equivalent variable in VEDSS and cannot be directly linked to case-specific dates (e.g. event dates or lab report dates).

Case counts by report date are estimated by subtracting the cumulative cases on the previous day from that of the current day. If the number of cases reallocated to another locality on a day is higher than the cases added for that day (either as new cases or via reallocation), a **negative** *count will be displayed. Meanwhile, if the number of cases reallocated to a specific locality is a high number on a given day, reported cases counts can be noticeably* ***inflated*** *for that day beyond the actual case counts. The table in section 2.2 clarifies the weekly total deviation of actual new case counts from the reported counts.*