WEEKLY COVID-19 REPORT FOR EXTERNAL USE

Week of: December 16, 2022

Key Takeaways2
1.0 COVID-19 Snapshot
1.1 PCR Tests & PCR Percent Positivity by Health District4
1.2 Confirmed Cases, Hospitalizations, Fatalities, & Probable Cases by County4
1.3 Current VHASS COVID-19 Richmond Catchment Area Hospitalizations5
2.0 COVID-19 Cases
2.1 Summary of Cases6
2.2 Case Rates by Age Group by County6
2.3 Cases by Race/Ethnicity by County9
3.0 Hospitalizations & Fatalities
3.1 Summary of Hospitalizations & Fatalities10
3.2 COVID-19 Hospitalization, ICU, & Ventilator Utilization (VHASS)10
4.0 Vaccination
4.1 Vaccine Summary11
4.2 Percentage of Population Vaccinated by Age - December 15, 202211
4.3 Vaccine by County & Age12
4.4 Vaccine by County & Race13
4.5 Vaccine Distribution Maps14
5.0 Glossary

Key Takeaways

<u>Cases</u>

According to the CDC Covid Data Tracker, cases are decreasing in Richmond and increasing in Henrico in recent weeks. The Community Level is Medium.

7-Day Total Case Rate per 100,000				
District	This Week	Last Week		
Henrico	152.1	176.9		
Richmond	86.8	22.3		

Richmond & Henrico				
Demographi c	Cumulative Highest	Last 4 Weeks		
Age	20-29	80+		
Sex	Female			
Race	Black & White			

HOSPITALIZATIONS & FATALITIES

Among hospitals in the Richmond Catchment Area, **hospitalizations** appear to have plateaued in the last four weeks. **Fatalities** stabilized at a low level since **January** in both districts. **Data** related to deaths are subject to sizable amounts of lag.

Richmond Catchment Area: Hospital Status Board Trends					
Time Period	Hospitalizations	ICU Hospitalizations	Ventilator Utilizations		
January 1st, 2022 →		M	M		
Last 4 Weeks November 15, 2022 →		~ ~~~	mm		

• 2 hospitals in the Richmond Catchment Area are operating at "Contingency" status and 10 hospitals are operating at a 'Conventional' clinical status.

Vaccinations

In Richmond City and Henrico County Health Districts, anyone aged 5 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 Booster					
Richmond City & Henrico County	- 710%				
Region	71.7%	68.2%	35.5%		

Vaccination Demogr	aphic Trend	ds	
Demographic	Richmond City	Henrico County	
Age Groups ≥ 70% Vaccinated	30+	12+	
Sex	Female		
Race	Asian/Pacific Islander & Latino		

In both Richmond and Henrico, older age groups have consistently been vaccinated at higher rates than younger age groups. Section 5 includes an estimated breakdown of vaccination uptake by race and age subgroups.

1.0 COVID-19 Snapshot

1.1 PCR Tests & PCR Percent Positivity by Health District

	RICHMOND CITY	HENRICO COUNTY
Cumulative PCR Tests	466,970	742,664
PCR Tests 11/28 - 12/4	1,175	1,986
7-Day Moving Average Positivity 11/29 - 12/5	9.7%	12.7%

1.2 Confirmed Cases, Hospitalizations, Fatalities, & Probable Cases by County

CASE STATUS	RICHMOND CITY	HENRICO COUNTY	VIRGINIA
New cases this week (December 9 - December 16)	214	552	10,177
All cases (December 16)	59,980	84,512	2,173,547
Confirmed cases	43,214	52,786	1,530,957
Hospitalizations	1,203	1,585	54,458
Deaths	469	896	18,726
Probable cases	16,766	31,726	643,488
Hospitalizations	46	93	3,592
Deaths	83	149	3,866
Case rate per 100,000	26,029	25,546	25,465

1.3 Current VHASS COVID-19 Richmond Catchment Area Hospitalizations

The following section utilizes data from the Virginia Healthcare Alerting & Status System (VHASS) COVID-19 Hospital Status Board. This data reflects the following hospitals in the Richmond Catchment Area (Chesterfield County, Hanover County, Henrico County, & Richmond City): 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	118	63
Pending Hospitalizations	28	. 03
Confirmed - ICU	15	29
Pending - ICU	5	23
Confirmed - Ventilators	5	350
Pending - Ventilators	-	

*This metric is unrelated to the CDC's measure of "Percent of staffed inpatient beds occupied by COVID-19 patients". The metrics are sourced differently and represent different geographic areas.

Clinical Status of Richmond Catchment Area Hospitals



9 Hospitals operating at Conventional clinical status

2 Hospitals are operating at Contingency clinical status

0 Hospitals are operating at a **Crisis** clinical status.

- **Conventional** indicates that the spaces, staff, and supplies used are consistent with daily practices within the hospital.
- **Contingency** indicates that the spaces, staff, and supplies used are not consistent with daily care but provide care that is functionally equivalent to usual patient care. Healthcare practices utilize limited resources differently than usual with the expectation that such altered practices are developed and performed in accordance with normal standards of care. In contingency conditions, this standard of care is maintained by providing care within the range of functionally equivalent options to care in conventional conditions.
- **Crisis** indicates that Crisis Standards of Care apply. Care is no longer functionally equivalent to usual standards of care. Risk to the patient or provider may exist.

2.0 COVID-19 Cases

2.1 Summary of Cases

Cases appear to be 10creasing week to week in Richmond and decreasing in Henrico. According to the CDC COVID-19 Data Tracker, in Richmond, on December 15, the 7-day total case rate was 86.9 new cases per 100,000 population, while in Henrico the 7-day total case rate was 152.1 new cases per 100,000 population. Additionally, in Richmond and Henrico, the CDC COVID-19 Community Level has continued to be medium due to an uptick in the region's weekly hospitalizations for Covid-19.

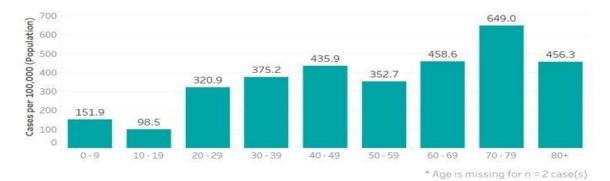
In the past four weeks in Richmond and Henrico it appears the Black population has experienced an excess disease burden, relative to other groups.

2.2 Case Rates by Age Group by County

Population totals are based on 2019 data from the National Center for Health Statistics (NCHS).

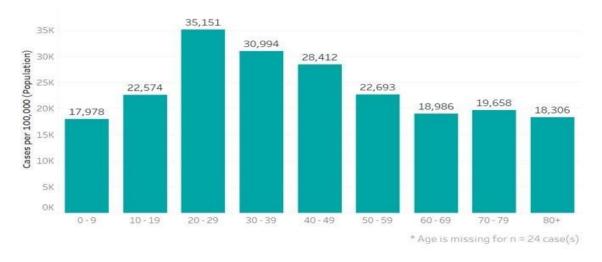
COVID-19 Case Distribution by Age in the Last 4 Weeks

Richmond City, VA (n = 793); November 17, 2022 - December 14, 2022



Cumulative COVID-19 Case Distribution by Age

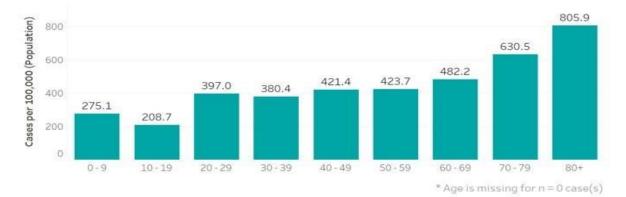
Richmond City, VA (N = 59,934); February 18, 2020 - December 14, 2022



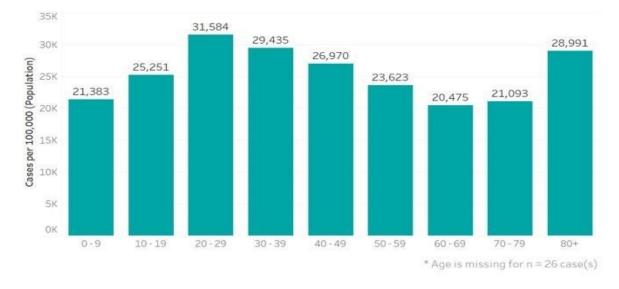
In Richmond City, individuals aged 70-79 have the highest case rates in the last four weeks, followed by individuals aged 60-69. Individuals aged 20-29 have the highest case rate cumulatively.

COVID-19 Case Distribution by Age in the Last 4 Weeks

Henrico County, VA (n = 1,339); November 17, 2022 - December 14, 2022



Cumulative COVID-19 Case Distribution by Age



Henrico County, VA (N = 84,404); January 4, 2020 - December 14, 2022

In Henrico, individuals aged 80+ have the highest case rates in the last four weeks. Individuals aged 20-29 have the highest case rate cumulatively.

2.3 Cases by Race/Ethnicity by County

Population totals are based on 2019 data from the National Center for Health Statistics (NCHS).

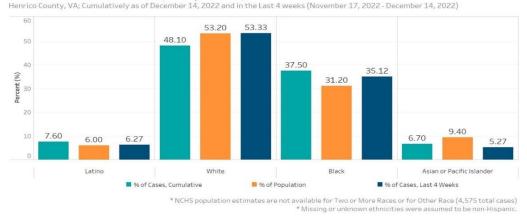




Richmond City, VA; Cumulatively as of December 14, 2022 and in the Last 4 weeks (November 17, 2022 - December 14, 2022)

* NCHS population estimates are not available for Two or More Races or for Other Race (2,233 total cases) * Missing or unknown ethnicities were assumed to be non-Hispanic

In the last 4 weeks in Richmond, the proportions of cases for Black individuals (59.7%) is higher than the population percentage (47%). The proportion of cases amongst White individuals (33.8%) are slightly lower than their respective population percentage (42.8%). Case proportions among Asian or Pacific Islanders (1%) and Latino individuals (5.6%) are lower than their respective population percentages (2.5% and 7.3%).



COVID-19 Case Distribution by Race/Ethnicity

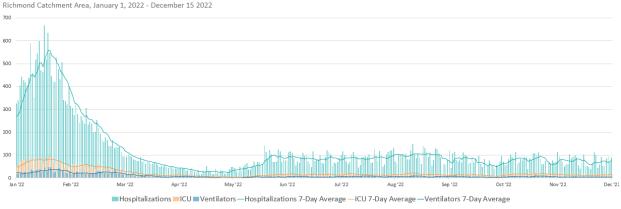
In Henrico in the last four weeks, the proportions of cases for White individuals (53.3%) and Black individuals (35.1%) are higher than their respective proportions of the population (53.2% and 31.2%). The distribution of cases for Asian or Pacific Islander individuals (5.3%) are lower than the respective proportion of the population at (9.4%). The distribution of cases for Latino individuals (6.3%) is slightly above the respective proportion of the population (6%).

3.0 Hospitalizations & Fatalities

3.1 Summary of Hospitalizations & Fatalities

Among hospitals in the Richmond Catchment Area, **Hospitalizations** appear to have plateaued at a low level. **ICU hospitalizations** and **ventilator utilizations** appear to be **following the same trend**. Fatalities peaked in January 2022 with totals not seen since January 2021 in both Richmond and Henrico, although they appear to have decreased since then. No fatalities were reported during the month of May in Richmond. In both districts, several fatalities were reported during the months from June through November. **Data related to deaths can be subject to sizable amounts of lag.**

3.2 COVID-19 Hospitalization, ICU, & Ventilator Utilization (VHASS)



Total Daily COVID-19 Hospitalizations, ICU Hospitalizations, and Ventilator Utilizations Richmond Catchment Area, January 1, 2022 - December 15 2022

Hospitalizations, ICU Hospitalizations and Ventilator Utilizations have plateaued despite mild fluctuations since June.

^{*}Sum of Daily Counts displayed above- Hospitalizations: 41129 of 143785 (All Time), ICU Hospitalizations: 7204 of 32427, Ventilator Utilizations: 2960 of 16727

4.0 Vaccination

4.1 Vaccine Summary

As of December 15, 71.7% of the **region's population** has received at least one dose of the vaccine, 68.2% of the region's population has been fully vaccinated and 35.5% of the region's population have received a booster dose

Approximately 71% of the **combined Richmond City and Henrico County population** has received at least one dose, 67.3% of the two districts' combined population has been fully vaccinated and 35.4% have received a booster dose

In both Richmond City and Henrico County, older age groups have consistently been vaccinated at a higher rate than younger age groups. In Richmond City, the 70% vaccination benchmark has been met by individuals aged 30 and over. In Henrico County that same benchmark has been met by all age groups over 12 years old.

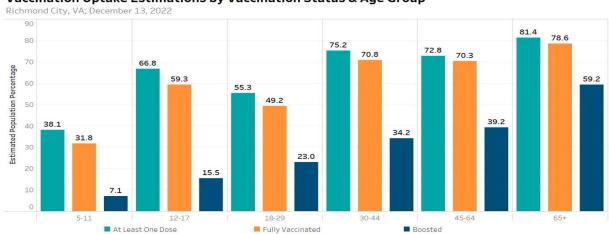
This section includes an estimated breakdown of vaccination uptake by race, sex, and age subgroups.

4.2 Percentage of Population Vaccinated by Age - December 15, 2022

County	Age Group	POPULATION	PEOPLE WITH AT LEAST ONE DOSE	PEOPLE FULLY VACCINATED	PEOPLE WITH BOOSTER
	5 to 11	15,198	5,761 (37.9%)	4,805 (31.6%)	1,086 (7.1%)
	12 to 17	11,150	7,437 (66.7%)	6,601 (59.2%)	1,729 (15.5%)
Richmond	18+	190,750	133,269 (69.9%)	125,499 (65.8%)	69,717 (36.5%)
	65+	31,809	25,884 (81.4%)	24,991 (78.6%)	18,842 (59.2%)
	5 to 11	28,406	14,793 (52.1%)	13,032 (45.9%)	2,562 (9%)
	12 to 17	25,954	20,717 (79.8%)	19,216 (74%)	5,891 (22.7%)
Henrico	18+	256,660	216,656 (84.4%)	208,373 (81.2%)	117,635 (45.8%)
	65+	52,720	49,704 (94.3%)	48,649 (92.3%)	37,038 (70.3%)

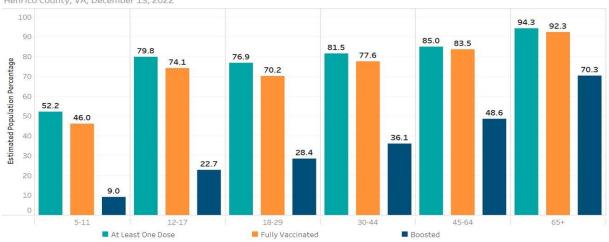
Population totals are based on 2019 data from the National Center for Health Statistics (NCHS). These totals are used in order to calculate percent in each column. Please note: This is a change from previous reports which used Census data to estimate population by age group.





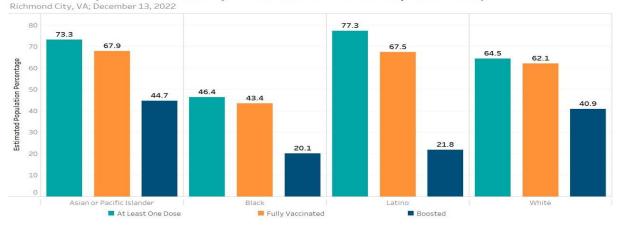
Vaccination Uptake Estimations by Vaccination Status & Age Group

Vaccination Uptake Estimations by Vaccination Status & Age Group



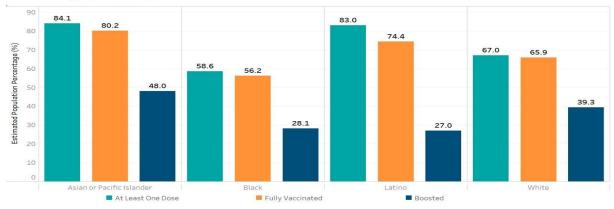
Henrico County, VA; December 13, 2022

4.4 Vaccine by County & Race



Vaccination Uptake Estimations by Vaccination Status & Racial/Ethnic Group

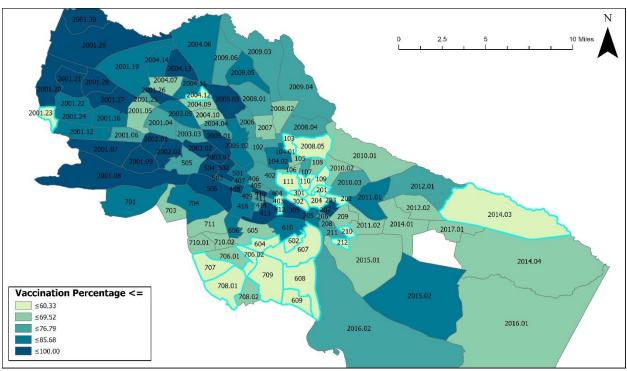
Vaccination Uptake Estimations by Vaccination Status & Racial/Ethnic Group Henrico County, VA; December 13, 2022



4.5 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 under vaccinated. 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.

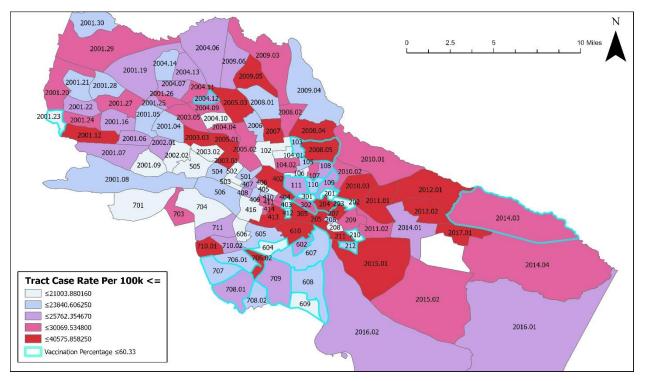
<u>These percentages are estimations and are solely intended for use in the planning and facilitation of outreach events.</u>



Vaccination Percentage by Census Tract Richmond City, VA & Henrico County, VA (December 15, 2022)

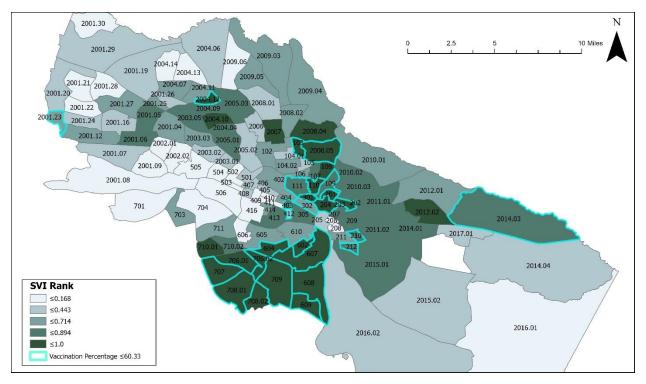
*Percentage of population receiving at least one dose

COVID-19 Case Rate per 100k & Low Vaccination Percentage Tracts Richmond City, VA & Henrico County, VA (December 15, 2022)



Social Vulnerability & Low Vaccination by Census Tract

Richmond City, VA & Henrico County, VA (December 15, 2022)



- Social vulnerability is based on the 2018 CDC's Social Vulnerability Index
- **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 <u>quantiles classification</u> method, dividing the range into 5 groups, each containing the same number of observations (census tracts).

5.0 Glossary

7-day average number of new daily cases

Recurrent average of the number of cases for each consecutive 7-day period regardless of data availability.

7-day total case rate per 100,000

Calculated by adding the number of new cases in the county (or other administrative level) in the last 7 days divided by the population in the county (or other administrative level) and multiplying by 100,000. 7-day total case rate per 100,000 is considered to have a transmission level of Low (0-9.99), Moderate (10.00-49.99), Substantial (50.00-99.99), or High (greater than or equal to 100.00).

Antigen

Antigens are molecules capable of stimulating an immune response. Antigen tests are commonly used in the diagnosis of respiratory pathogens such as the COVID-19 virus.

Assisted living facilities

A housing facility designed for people with disabilities or adults who cannot/decide not to live independently

At least one dose

This metric includes everyone who has received only one dose [including those who received one dose of the single-shot Johnson and Johnson's Janssen COVID-19 vaccine] and those who received more than one dose.

Case rate

the number of cases per 100,000 people in the population. Calculation: ((Confirmed Cases + Probable Cases)/Population 100,000

Community Level - Added 3/21/2022

A measure of the impact of COVID-19 illness on health and healthcare systems, created by the CDC.

The CDC looks at the combination of three metrics — new COVID-19 admissions per 100,000 population in the past 7 days, the percent of staffed inpatient beds occupied by COVID-19 patients, and total new COVID-19 cases per 100,000 population in the past 7 days — to determine the COVID-19 community level. New COVID-19 admissions and the percent of staffed inpatient beds occupied represent the current potential for strain on the health system. Data on new cases acts as an early warning indicator of potential increases in health system strain in the event of a COVID-19 surge.

Using these data, the COVID-19 community level is classified as low, medium, or high.

Community Transmission

Refers to when an individual is infected with COVID-19 in an area, including some who are not sure how or where they became infected. Community Transmission is low when less than 10 new cases per 100,000 persons in the past 7 days OR <5% of positive NAATs tests during the past 7 days. Nucleic Acid Amplification Test, or NAAT, is a type of viral diagnostic test for SARS-CoV-2, the virus that causes COVID-19

Confirmed Case

A confirmed case is an individual who had a confirmatory viral test performed by way of a throat swab, nose swab or saliva test and that specimen tested positive for SARS-CoV-2, which is the virus that causes COVID-19.

Congregate settings

A setting where a number of people reside, meet or gather in close proximity for a period of time. Examples include homeless shelters, prisons, detention centers, schools and workplaces.

Cumulative

Consisting of accumulated parts created by successive additions - In the context of this report "cumulative" refers to the total number of things (cases, vaccinations, deaths, ect) that have occurred during the time frame referenced.

Fully Vaccinated

For the purposes of this report an individual is considered fully vaccinated after receiving two doses of either the Pfizer-BioNTech COVID-19 vaccine (COMIRNATY) or the Moderna COVID-19 vaccine, or after receiving one dose of the Janssen (Johnson & Johnson) COVID-19 vaccine.

High density workplaces

Workplace settings in which individuals are there for long time periods (e.g., for 8-12 hours per shift), and have prolonged close contact (within 6 feet for 15 minutes or more).

Hospitalizations

Number of confirmed & pending COVID-19 patients receiving inpatient hospital care or utilizing an inpatient hospital bed (e.g., observation status) AND being treated for COVID-19 related complications. This metric is not cumulative; only report current counts at the time the user updates VHASS. This metric excludes confirmed inpatients in the hospital for primary reasons other than COVID-19 complications.

ICU hospitalizations

Number of confirmed & pending COVID-19 patients receiving inpatient hospital care and are utilizing an Intensive Care Unit (Adult CC) bed for treatment related to COVID-19 complications. This metric is not cumulative; only report current counts at the time the user updates VHASS. This metric excludes confirmed inpatients in the hospital for primary reasons other than COVID-19 complications.

Independent living facilities

Housing arrangements and communities for older adults that range from apartment-style communities to housing co-ops. It is designed for seniors who can still live independently

Locality

A community in which people live. The Commonwealth of Virginia is divided into 95 counties, along with 38 independent cities that are considered county-equivalents for census purposes. For the purpose of this report, the term "Locality" is used to refer to one of these 133 independent communities. The boundaries of the Richmond City Health Department and Henrico Health Department closely align with the boundaries of the Richmond City and Henrico County localities, but that is not the case with many other health districts across the state.

Long-term care facilities

Housing facilities for people with disabilities or for adults who cannot or who choose not to live independently.

NCHS

The National Center for Health Statistics who releases bridged-race population estimates of the resident population of the United States for use in calculating the Nation's official vital statistics

PCR

PCR stands for polymerase chain reaction. The test isolates genetic material from a patient sample and duplicates it many times, allowing for the presence of COVID-19 genetic material to be detected if present. The PCR test is the strongest and most reliable COVID-19 test currently available.

Percent positivity

For each event is calculated by dividing the number of tests yielding a 'Detected' result by the summed number of 'Detected' and 'Not Detected' results, and then multiplying this number by 100 to get a percent.

Population Estimate

Unless otherwise stated, population totals are based on 2019 data from the National Center for Health Statistics (NCHS). Please note- this is a change from some previous reports which used aggregated Census data regarding population by age group.

Probable Case

A probable case is an individual who has not had a confirmatory test performed but has: a positive antigen test, or clinical criteria of infection and is at high risk for COVID-19 infection (e.g. healthcare worker)

Provider Category

Health Department, Pharmacy, Health System, Community Provider, Safety Net, Other Locality

Race/Ethnicity

Prioritizes Hispanic Ethnicity over Patient stated Race, consolidates into groups: Hispanic, Asian & Pacific Islanders, White, Black, Native American & Unreported

Resident

Person(s) who self-indicate, through census enumeration, medical documentation, or registration information that their primary residence is within the locality or health district referenced

Richmond catchment area

Hospital jurisdictions that serve the population of the greater Richmond metropolitan area: these include the hospital jurisdictions of Hanover, Henrico, Chesterfield, and Richmond City.

Sara Alert

Virginia based voluntary contact monitoring platform; individuals can update local health departments on their health status during the period of time they are participating in public health monitoring. The Sara Alert system is secure and always contacts users from the same phone number or email: 844-957-2721 or notifications@saraalert.org.

Social Vulnerability

The potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. More information on the CDC's Social Vulnerability Index can be found at https://svi.cdc.gov/

Spread

COVID-19 spreads when an infected person breathes out droplets and very small particles that contain the virus. These droplets and particles can be breathed in by other people or land on their eyes, noses, or mouth. In some circumstances, they may contaminate surfaces they touch. People who are closer than 6 feet from the infected person are most likely to get infected.

Suspect Case

Meets supportive laboratory evidence, with no prior history of being a confirmed or probable case.

For suspect cases, jurisdictions may opt to place them in a registry for other epidemiological analyses or investigate to determine probable or confirmed status.

Tested Count

Represents all individuals who received a 'Detected', 'Not Detected', or 'Inconclusive' result (Records from individuals who registered for an event but who were not tested were removed prior to this analysis).

Testing Encounter

Instance where COVID-19 test is administered to a person in the community via a known provider.

Vaccination Percentage

The number of individuals vaccinated divided by estimated population of a referenced community, locality or health district - Whether "Vaccinated" refers to "Fully vaccinated" or "At least one dose" should be clarified in the specific metric.

VEDSS

Virginia Electronic Disease Surveillance System (VEDSS) is the primary data system used by the Virginia Department of Health (VDH) for disease surveillance. VEDSS is used to track COVID-19 cases and laboratory reports.

Ventilator utilizations

The number of Ventilators currently in use to treat patients diagnosed with COVID-19 amongst hospitals within the Richmond Catchment Area.

VHASS

The Virginia Healthcare Alerting and Status System (VHASS) is the data system used to collect information on hospital status, resources, and critical care capabilities. VHASS helps in the distribution of critical emergency management information needed by Virginia hospitals and healthcare providers.

VIIS

The Virginia Immunization Information System (VIIS) is Virginia's statewide immunization registry that contains immunization data of persons of all ages.

ZCTA

ZIP Code Tabulation Areas (ZCTAs) are generalized areal representations of United States Postal Service (USPS) ZIP Code service areas.