KEY TAKEAWAYS

Cases
Cases appear to have **plateaued** in both Richmond and Henrico in recent weeks. In both localities, the level of community transmission is considered **High** according to the [CDC Covid Data Tracker](https://covid.cdc.gov/covid-data-tracker).  

<table>
<thead>
<tr>
<th>7-day total case rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
</tr>
<tr>
<td>Henrico</td>
</tr>
<tr>
<td>Richmond</td>
</tr>
</tbody>
</table>

**Hospitalizations & Fatalities**

Among hospitals in the Richmond Catchment Area, **hospitalizations** have **decreased** since their peak in January. An initial decrease can also be seen for **ICU hospitalizations** and **ventilator utilizations** in the same time period. **Fatalities** appeared to rise in January in both districts. **Data related to deaths are subject to sizable amounts of lag.**

<table>
<thead>
<tr>
<th>Richmond Catchment Area: Hospital Status Board Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Period</td>
</tr>
<tr>
<td>January 1st, 2021→</td>
</tr>
<tr>
<td>Last 4 Weeks February 7th, 2022→</td>
</tr>
</tbody>
</table>

- *7 out of 11 hospitals in the Richmond Catchment Area are operating at a ‘Conventional’ clinical status, while 2 are operating at ‘Crisis’ status and 2 are operating at ‘Contingency’ 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.

<table>
<thead>
<tr>
<th>Location</th>
<th>≥ 1 Dose</th>
<th>Complete</th>
<th>Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond City &amp; Henrico County</td>
<td>70.7%</td>
<td>65.6%</td>
<td>34%</td>
</tr>
<tr>
<td>Region</td>
<td>72.4%</td>
<td>67.2%</td>
<td>34.2%</td>
</tr>
</tbody>
</table>

**Vaccination Demographic Trends**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Richmond City</th>
<th>Henrico County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Groups</td>
<td>30+</td>
<td>12+</td>
</tr>
<tr>
<td>Sex</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Asian/Pacific Islander &amp; Latino</td>
<td></td>
</tr>
</tbody>
</table>
1.0 COVID-19 SNAP SHOT

1.1 Total Tests & 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](https://www.vdh.virginia.gov/health/) on March 7, 2022.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Positivity</th>
<th>Tests</th>
<th>Positivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCR*</td>
<td>495,862</td>
<td>6.2%</td>
<td>544,310</td>
</tr>
<tr>
<td>Antigen</td>
<td>141,892</td>
<td>5.0%</td>
<td>222,299</td>
</tr>
<tr>
<td>Total (PCR, antigen, and antibody)</td>
<td>644,396</td>
<td>5.7%</td>
<td>777,945</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>CASE STATUS</th>
<th>RICHMOND CITY</th>
<th>HENRICO COUNTY</th>
<th>VIRGINIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cases this week (March 7th)</td>
<td>149</td>
<td>145</td>
<td>11,669</td>
</tr>
<tr>
<td>All cases</td>
<td>43,768</td>
<td>63,389</td>
<td>1,648,179</td>
</tr>
<tr>
<td>Confirmed cases</td>
<td>32,472</td>
<td>41,386</td>
<td>1,175,830</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>1,007</td>
<td>1,300</td>
<td>44,791</td>
</tr>
<tr>
<td>Deaths</td>
<td>399</td>
<td>763</td>
<td>15,809</td>
</tr>
<tr>
<td>Probable cases</td>
<td>11,296</td>
<td>22,003</td>
<td>472,349</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>32</td>
<td>63</td>
<td>2,803</td>
</tr>
<tr>
<td>Deaths</td>
<td>68</td>
<td>107</td>
<td>3,251</td>
</tr>
<tr>
<td>Case rate per 100,000</td>
<td>18993.6</td>
<td>19161.3</td>
<td>19309.7</td>
</tr>
</tbody>
</table>

*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 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.

<table>
<thead>
<tr>
<th></th>
<th>TOTAL IN USE FOR COVID-19</th>
<th>CURRENTLY AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmed Hospitalizations</td>
<td>103</td>
<td>106</td>
</tr>
<tr>
<td>Pending Hospitalizations</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Confirmed - ICU</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Pending - ICU</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Confirmed - Ventilators</td>
<td>15</td>
<td>341</td>
</tr>
<tr>
<td>Pending - Ventilators</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

*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.

Between the 11 hospitals that comprise the Richmond catchment area, there are currently 106 total available hospital beds, 31 available adult ICU beds, and 341 available ventilators. Based on the VHASS hospital dashboard on March 7, 2022, 7 hospitals in the Richmond Catchment area are operating at Conventional clinical status, two hospitals are operating at Crisis clinical status, and two hospitals are operating at Contingency clinical status.

*A clinical status of “conventional” indicates that the spaces, staff, and supplies used are consistent with daily practices within the hospital.
*A clinical status of “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.
*A clinical status of “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

After recent highs in January, 2022, cases in both districts appear to be following a downward trend heading into the month of March. In Richmond, on March 7th, the 7-day total case rate was 105.02 new cases per 100,000 population, while in Henrico the 7-day total case rate was 104.29 new cases per 100,000 population. Additionally, in both Richmond and Henrico, the level of community transmission has been High for weeks, according to the CDC Covid Data Tracker.

Female individuals in both Richmond and Henrico comprise a higher proportion of cases compared to male individuals, both in the last four weeks and cumulatively.

In Richmond, 20-29 year olds have the highest case rate by age group over the last four weeks, followed by 30-39 year olds. Individuals aged 20-29 have the highest cumulative case rate in Richmond. In Henrico, individuals 20-29 showed the highest cumulative case rate, individuals 0-9 showed the highest case rate in recent weeks.

Regarding race and ethnicity, the highest proportion of cases over the last four weeks is amongst White individuals in both Richmond and Henrico. Black individuals in both Richmond and Henrico have comprised a lower proportion of cases over the past four weeks than their population proportion. In both localities, cases have been disproportionately high cumulatively for Latino individuals, but over the last four weeks, the case burden for Latinos in Richmond has been lower than or approximately equal to their estimated proportion of the population.
2.2 Case Reporting Trends by Report Date

Case counts by report date show the day to day change in cumulative count of cases within an area. It does not attempt to show the number of cases by the date the individuals got sick.

Source: VDH COVID-19 Cases & Testing Locality Dashboard

<table>
<thead>
<tr>
<th>Number of New Cases Reported</th>
<th>76</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-Day Average Number of Daily New Cases Reported</td>
<td>38</td>
</tr>
<tr>
<td>7-Day Average Number of New Daily Cases Reported, Rate per 100,000 Population</td>
<td>16.3</td>
</tr>
<tr>
<td>Total Number of New Cases per 100,000 Population within last 14 days</td>
<td>228.7</td>
</tr>
</tbody>
</table>

Report Date Daily Cases Counts for past 90 Days Richmond City

- Large amounts of COVID-19 case data from the month of January (2022) was processed in February, and thus the most recent peak shown above could be artificially inflated.
- Despite the notable peak during January, data from February indicates a downward trend in cases per day in Richmond City, despite a slight uptick during the last week.
Recent case data by report date suggests a downward trend in cases per day in Henrico County, following the most recent uptick in late January. Minor upticks were noted during the last week of February and the first week of March.
2.3 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.

- In Richmond City, individuals aged 20-29 have the highest case rates in the last four weeks, followed by individuals aged 30-39. Individuals aged 20-29 have the highest case rate cumulatively.
In Henrico, individuals aged 0-9 have the highest case rates in the last four weeks, followed by those aged 30-39. Individuals aged 20-29 have the highest case rate cumulatively followed by those 30-39.
In the last 4 weeks in Richmond, the case burden for Black individuals (41.7%) is noticeably below their population percentage (47%), a large reduction from the cumulative percentage (56%), and the case burden for White individuals (50.2%) is noticeably higher than their population proportion (42.8%). The case burden for Latino individuals (5.3%) is lower than their population percentage (7.3%).
In Henrico in the last four weeks the case burden for Black individuals (26.4%) is lower than their proportion of the population (31.2%). The case burden for White individuals (59.9%) is high, relative to their proportion of the population (53.2%). The recent case burden has fallen slightly more heavily on the Asian or Pacific Islander population (7.6%) than has the cumulative burden (6.3%), however both fall under the population percentage (9.4%).
3.0 Hospitalizations & Fatalities

3.1 Summary of Hospitalizations & Fatalities

Among hospitals in the Richmond Catchment Area, hospitalizations have decreased over the past seven weeks after reaching new all-time peaks in January. A decrease followed by a plateau can also be seen for ICU hospitalizations and ventilator utilizations in the same time period. Fatalities declined in October and November after recent peaks of around 40 per month in both Richmond and Henrico in September before rising to counts around 20 in both localities in December and a peak around 40 in Richmond and around 80 in Henrico in January. However, data related to deaths are subject to sizable amounts of lag.

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

- Hospitalizations, ICU Hospitalizations, and Ventilator Utilizations in the Richmond Catchment area showed an overall decrease from late September through mid-December besides a couple of notable fluctuations.
- Starting in mid-December, there was a sharp rise in Hospitalizations to new all-time peaks, along with relatively moderate corresponding increases in ICU Hospitalizations & Ventilator Utilizations to new recent peaks.
- Recent weeks have shown a marked decrease in Hospitalizations, while ICU Hospitalizations and Ventilator Utilizations have shown a more gradual decrease.
4.0 VACCINATION

4.1 Vaccine Summary
In Richmond City and Henrico County Health Districts, anyone aged 5 or older is eligible to receive a vaccine.

As of March 8, 72.4% of the region’s population has received at least one dose of the vaccine. 67.2% of the region’s population has been fully vaccinated. A growing number of 34.2% had received a booster in the region. Approximately 70.7% of the combined Richmond City and Henrico County population has received at least one dose and 65.6% of the two districts’ combined population has been fully vaccinated. 34% of the region’s population has also received a booster.

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 65 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 Group as of March 8th, 2022

<table>
<thead>
<tr>
<th>County</th>
<th>Age Group</th>
<th>POPULATION</th>
<th>PEOPLE WITH AT LEAST ONE DOSE</th>
<th>PEOPLE FULLY VACCINATED</th>
<th>PEOPLE WITH BOOSTER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5-11</td>
<td>15,198</td>
<td>4,994 (32.9%)</td>
<td>4,017 (26.4%)</td>
<td>* (0%)</td>
</tr>
<tr>
<td></td>
<td>12-17</td>
<td>11,150</td>
<td>7,058 (63.3%)</td>
<td>6,180 (55.4%)</td>
<td>1,257 (11.3%)</td>
</tr>
<tr>
<td>Richmond</td>
<td>18+</td>
<td>190,750</td>
<td>130,113 (68.2%)</td>
<td>120,452 (63.1%)</td>
<td>61,564 (32.3%)</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>31,809</td>
<td>25,792 (81.1%)</td>
<td>24,208 (76.1%)</td>
<td>16,746 (52.6%)</td>
</tr>
<tr>
<td></td>
<td>5-11</td>
<td>28,406</td>
<td>13,025 (45.9%)</td>
<td>10,852 (38.2%)</td>
<td>* (0%)</td>
</tr>
<tr>
<td></td>
<td>12-17</td>
<td>25,954</td>
<td>19,944 (76.8%)</td>
<td>17,986 (69.3%)</td>
<td>3,894 (15%)</td>
</tr>
<tr>
<td>Henrico</td>
<td>18+</td>
<td>256,660</td>
<td>213,720 (83.3%)</td>
<td>201,213 (78.4%)</td>
<td>104,819 (40.8%)</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>52,720</td>
<td>49,620 (94.1%)</td>
<td>47,129 (89.4%)</td>
<td>33,838 (64.2%)</td>
</tr>
</tbody>
</table>

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.
### 4.3 Vaccinations by Locality as of March 8th, 2022

Source: vdh.virginia.gov

<table>
<thead>
<tr>
<th>HEALTH DISTRICT</th>
<th>LOCALITY</th>
<th>TOTAL POPULATION</th>
<th>PEOPLE WITH AT LEAST ONE DOSE</th>
<th>PEOPLE FULLY VACCINATED</th>
<th>PEOPLE WITH BOOSTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chesterfield</td>
<td>352,802</td>
<td>264,494</td>
<td>241,410</td>
<td>120,154</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Colonial Heights</td>
<td>17,370</td>
<td>11,451</td>
<td>10,118</td>
<td>4,849</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Powhatan</td>
<td>29,652</td>
<td>18,212</td>
<td>16,884</td>
<td>8,665</td>
</tr>
<tr>
<td>Chickahomyin</td>
<td>Charles City</td>
<td>6,963</td>
<td>7,119</td>
<td>7,123</td>
<td>2,236</td>
</tr>
<tr>
<td>Chickahomyin</td>
<td>Goochland</td>
<td>23,753</td>
<td>18,769</td>
<td>18,154</td>
<td>9,804</td>
</tr>
<tr>
<td>Chickahomyin</td>
<td>Hanover</td>
<td>107,766</td>
<td>80,004</td>
<td>77,491</td>
<td>39,369</td>
</tr>
<tr>
<td>Chickahomyin</td>
<td>New Kent</td>
<td>23,091</td>
<td>15,421</td>
<td>14,918</td>
<td>7,517</td>
</tr>
<tr>
<td>Henrico</td>
<td>Henrico</td>
<td>330,818</td>
<td>251,619</td>
<td>234,360</td>
<td>121,024</td>
</tr>
<tr>
<td>Richmond</td>
<td>Richmond City</td>
<td>230,436</td>
<td>145,370</td>
<td>133,714</td>
<td>69,958</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1,122,651</strong></td>
<td><strong>812,459</strong></td>
<td><strong>754,172</strong></td>
<td><strong>383,576</strong></td>
</tr>
</tbody>
</table>

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 Uptake by County, Age Group, and Racial/Ethnic Group Over Time

The following charts track vaccination percentage by age group over time since vaccinations first began in mid-December. **Note: These plots exclude individuals under 12, so the total vaccinations reported for each plot will not match the numbers reported in other sections.** All vaccination percentages are based on NCHS population estimates, which are subject to some variability. Lags in data reporting can occur.

Richmond

- Overall vaccination percentage in Richmond continued to increase over the past year. The overall vaccination percentage is now over 70% beginning with a surge in March and April 2021.
- Vaccination percentage rose most quickly among individuals 65 and over, a group with consistently higher vaccination percentages than other age groups.
- One can observe that, over the past year, vaccination among individuals 30 to 64 is similar to the overall trend, with a slower trend for individuals 18 to 29 and a delayed increase for individuals 12 to 17 corresponding to when 12 to 15 year olds became eligible.
- Among race and ethnicity groups through spring 2021, vaccination percentage increased fastest among White and Asian or Pacific Islander individuals before slowing down with some fluctuations since then. Meanwhile, the trend was initially slower among Latino individuals, but it did not slow nearly as noticeably and they now constitute the highest vaccinated percentage.
- The overall trend for vaccinations has been slowest for Black individuals and for individuals 18 to 29 in Richmond.
- All vaccination percentages are based on NCHS population estimates, which are subject to some variability. Lags in data reporting can occur, as indicated by the gray region in recent days.
Percentage of Individuals 12 and Over with At Least One Dose (N=144,164) as of March 6, 2022 - Richmond City

By Age Group (n=137,171)

By Race & Ethnicity (n=125,860)

*Age group of "Null" value: n=1,999

*Race/ethnicity group of "Unknown" or "Other Race" value: n=17,643
Henrico

- Overall vaccination percentage in Henrico has continued to steadily increase. The overall percentage currently is over 80% of the population.
- A large proportion of individuals 65 and over were vaccinated in February and early March 2021 before the trend slowed in spring. They continue to have the highest percentage of vaccinations.
- Over the past year, vaccination among individuals 30 to 64 is similar to the overall trend, with the actual increase being somewhat faster among older individuals than younger individuals, while individuals 12 to 17 saw a drastic increase in vaccination percentage when 12 to 15 year olds became eligible.
- Trends in vaccination percentage among race and ethnicity groups were initially fastest among White individuals in February and March 2021 before a rise in vaccination percentage amongst Asian and Pacific Islander individuals in April. Latino individuals appear to have since achieved the highest percentage of vaccinated individuals in fall 2021, though still close to the overall percentage for Asian or Pacific Islander individuals; both groups are over 85% vaccinated.
- Black individuals maintained similar trends as other race and ethnicity groups in the first three months of 2021 but did not see the same degree of increased trends in spring. They currently possess the lowest vaccination percentage at about 65%.
Percentage of Individuals 12 and Over with At Least One Dose (N=250,130) as of March 6, 2022 - Henrico County

By Age Group (n=233,664)

By Race & Ethnicity (n=214,678)

*Age group of “Null” value: n=3,441

*Race/ethnicity group of “Unknown” or “Other Race” value: n=33,755
4.5 Booster Uptake by County, Age Group, and Racial/Ethnic Group Over Time

The following charts track vaccination booster percentage by age group over time. All vaccination percentages are based on NCHS population estimates, which are subject to some variability. Lags in data reporting can occur.

Richmond

- The overall percentage of the population having received a booster has risen steadily since late October 2021, with no noticeable increase in the overall trend when all adults became eligible or when the Omicron variant was announced. Currently about 35% of the population is boosted.
- Individuals 65 and over have seen by far the fastest growth overall, though the trends for 30 to 44 year olds and 45 to 64 year olds have been higher in winter 2021/2022. Individuals 18 to 29 represent the lowest boosted percentage among all age groups in Richmond, just as they do for the primary vaccination series.
- Boosted percentages among White and Asian or Pacific Islander individuals have increased generally in line with one another and are at around 40%, while boosted percentages among both Latino individuals and Black individuals have increased at a slower but similar rate (currently near 20%).
Boosted Percentage of Adult Population (N=67,027) as of March 6, 2022 - Richmond City

By Age Group (n=65,725)

By Race & Ethnicity (n=63,350)

*Age group of "Null" value: n=0

*Race/ethnicity group of "Unknown" or "Other Race" value: n=3,263
Henrico

- Overall boosted percentage has steadily increased since late October 2021, with no noticeable change after all adults became eligible or after the Omicron variant was announced. The boosted percentage of the population is over 40%.
- Boosted percentage by age group is spread out, with 60% of individuals 65 and over boosted but less than 30% of individuals 18 to 29 having received boosters.
- Individuals 30 and over have increased steadily in boosted percentage since late October 2021, but the trend for 18 to 29 year olds has sloped upwards since December 2021.
- White individuals were observed to have the fastest early rate of new vaccinations, but the trend for Asian or Pacific Islanders sloped upwards when all adults became eligible for the booster and when the Omicron variant was announced. White individuals and Asian or Pacific Islander individuals now have a similar boosted percentage at around 40%.
- Black individuals and Latino individuals have had similar slow, steady trends in new vaccinations and are at just over 20% boosted.
Boosted Percentage of Adult Population (N=115,732) as of March 6, 2022 - Henrico County

By Age Group (n=111,209)

By Race & Ethnicity (n=109,062)

*Age group of "Null" value: n=0

*Race/ethnicity group of "Unknown" or "Other Race" value: n=5,654
4.6 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.

These percentages are estimations, and are solely intended for use in the planning and facilitation of outreach events.

Vaccination Percentage by Census Tract
Richmond City, VA & Henrico County, VA (March 6th, 2022)

*Percentage of population receiving at least one dose
*Percentages over 100% are likely due to population figures being slightly out of date
Social Vulnerability & Low Vaccination by Census Tract
Richmond City, VA & Henrico County, VA (March 6th, 2022)

- **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 into 5 groups, each containing the same number of observations (census tracts).

*Percentage of population receiving at least one dose*
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 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: \(((\text{Confirmed Cases} + \text{Probable Cases})/\text{Population Estimate})*100,000\)

Community Transmission
Refers to when an individual is infected with the 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, etc) 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 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.