KEY TAKEAWAYS 2

1.0 COVID-19 SNAP SHOT 4
1.1 Total Tests & Percent Positivity by Modality in Richmond and Henrico 4
1.2 Confirmed Cases, Hospitalizations, Fatalities, & Probable Cases by County 4
1.3 Current COVID-19 Richmond Catchment Area Hospitalizations 5

2.0 COVID-19 CASES 6
2.1 Summary of Cases 6
2.2 Case Reporting Trends by Date 6
2.3 Cases by Age Group by County 9
2.4 Cases & Population Proportions by Race & Ethnicity by County 11

3.0 Hospitalizations & Fatalities 12
3.1 Summary of Hospitalizations & Fatalities 12
3.2 COVID-19 Hospitalization, ICU, & Ventilator Utilization (VHASS) 12

4.0 VACCINATION 13
4.1 Vaccine Summary 13
4.2 Percentage of Vaccination Goals Reached by Population 13
4.3 Vaccinations by Locality as of December 20, 2021 14
4.4 Vaccine Distribution by Age Group over Time 14
4.5 Vaccine Distribution by Race/Ethnicity over Time 16
4.6 Vaccine Distribution Maps 18
   Vaccination Percentage by Census Tract 18
   COVID-19 Case Rate per 100k & Low Vaccination Percentage Tracts 19
   Social Vulnerability & Low Vaccination by Census Tract 20

5.0 Glossary 21
KEY TAKEAWAYS

Cases
Cases have been increasing 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.

<table>
<thead>
<tr>
<th>District</th>
<th>This Week</th>
<th>Last Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henrico</td>
<td>235.78</td>
<td>225.50</td>
</tr>
<tr>
<td>Richmond</td>
<td>223.49</td>
<td>161.87</td>
</tr>
</tbody>
</table>

Hospitalizations & Fatalities
Among Richmond City and Henrico residents, hospitalizations based on confirmed dates of admission for the past two months have continued to fluctuate between less than 5 and 10 per week per district. Fatalities since the middle of October have also fluctuated between less than 5 and 6 deaths per week per district. Data related to hospitalizations and deaths are subject to sizable amounts of lag.

Richmond & Henrico

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Cumulative Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20-29 Year Olds 80+</td>
</tr>
<tr>
<td>Sex</td>
<td>Female</td>
</tr>
<tr>
<td>Race</td>
<td>Latino &amp; Black</td>
</tr>
</tbody>
</table>

Richmond Catchment Area: Hospital Status Board Trends

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Hospitalizations</th>
<th>ICU Hospitalizations</th>
<th>Ventilator Utilizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td><strong>January 1st, 2021</strong> →</td>
<td><strong>Last 4 Weeks</strong> November 22nd, 2021 →</td>
<td><strong>&gt;</strong></td>
</tr>
</tbody>
</table>

- *10 out of 11 hospitals in the Richmond Catchment Area are operating at a ‘Normal’ clinical status, while 1 is operating at “Level 1” 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>67.4%</td>
<td>60.6%</td>
<td>22.0%*</td>
</tr>
<tr>
<td>Region</td>
<td>69.1%</td>
<td>62.3%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

*Last week this was mistakenly reported as 24.8% - We are investigating why

<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 on December 20, 2021.

<table>
<thead>
<tr>
<th>Modality</th>
<th>Richmond City</th>
<th>Henrico County</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tests</td>
<td>Positivity</td>
<td></td>
</tr>
<tr>
<td>PCR*</td>
<td>351,666</td>
<td>7.8%</td>
<td></td>
</tr>
<tr>
<td>Antigen</td>
<td>96,124</td>
<td>5.9%</td>
<td></td>
</tr>
<tr>
<td>Total (PCR, antigen, and antibody)</td>
<td>453,219</td>
<td>7.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>548,235</td>
<td>8.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>191,375</td>
<td>7.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>751,065</td>
<td>8.3%</td>
<td></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 (December 20)</td>
<td>671</td>
<td>911</td>
<td>23004</td>
</tr>
<tr>
<td>All cases</td>
<td>26433</td>
<td>38166</td>
<td>1023698</td>
</tr>
<tr>
<td>Confirmed cases</td>
<td>20409</td>
<td>26310</td>
<td>749459</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>951</td>
<td>1229</td>
<td>37424</td>
</tr>
<tr>
<td>Deaths</td>
<td>331</td>
<td>662</td>
<td>12694</td>
</tr>
<tr>
<td>Probable cases</td>
<td>6024</td>
<td>11856</td>
<td>274239</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>25</td>
<td>55</td>
<td>2436</td>
</tr>
<tr>
<td>Deaths</td>
<td>49</td>
<td>82</td>
<td>2442</td>
</tr>
<tr>
<td>Case rate per 100,000</td>
<td>11470.9</td>
<td>11536.9</td>
<td>11993.4</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>242</td>
<td>101</td>
</tr>
<tr>
<td>Pending Hospitalizations</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Confirmed - ICU</td>
<td>59</td>
<td>17</td>
</tr>
<tr>
<td>Pending - ICU</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Confirmed - Ventilators</td>
<td>31</td>
<td>288</td>
</tr>
<tr>
<td>Pending - Ventilators</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

Within the 11 hospitals that comprise the Richmond catchment area, there are currently 101 total available hospital beds, 17 available adult ICU beds, and 288 available ventilators. Based on the VHASS hospital dashboard on December 20, 2021, 10 hospitals in the Richmond Catchment area are operating at normal clinical status, while 1 is operating at Level 1 clinical status.

*A clinical status of “normal” indicates that hospital clinical resources are operating within normal conditions. A clinical status of Level 1 indicates that hospital clinical resources are operating at Level 1 surge conditions. The hospital activates procedures to provide a rapid in-patient intake capability (i.e. stop elective procedures, expedite early discharges and utilize 100 percent of staffed beds). 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 in both districts have increased over the past few weeks after recent lows in late October and early November. There is a 7-day total case rate of 223.49 new cases per 100,000 population in Richmond and 235.78 new cases per 100,000 population in Henrico. In both Richmond City and Henrico County, the level of community transmission is still considered High according to the CDC Covid Data Tracker.

In both districts, females comprise a higher proportion of cases. In Richmond, 20-29 year olds continue to lead case counts both cumulatively and in the last four weeks. In Henrico, individuals 80 and older lead cumulatively, but 0-9 year olds comprise the highest case rate in the last four weeks, followed by 10-19 year olds and 20-29 year olds. Regarding race and ethnicity, the highest incidence of cases in Richmond is still among Black individuals, both cumulatively and in the last four weeks. In Henrico, cases are highest both cumulatively and over the last four weeks among White individuals. Cases in the last four weeks are disproportionately high for White individuals but disproportionately low for Black individuals, while cumulatively, the reverse is true. 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.

2.2 Case Reporting Trends by Date

Source: VDH COVID-19 Cases & Testing Locality Dashboard

<table>
<thead>
<tr>
<th>Number of New Cases Reported</th>
<th>7-Day Average Number of Daily New Cases Reported</th>
<th>7-Day Average Number of New Daily Cases Reported, Rate per 100,000 Population</th>
<th>Total Number of New Cases per 100,000 Population within last 14 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>93</td>
<td>96</td>
<td>41.9</td>
<td>468.1</td>
</tr>
</tbody>
</table>

Select Date Range (Affects Bar Chart)
- Past 90 Days

Report Date Daily Cases Counts for past 90 Days
Richmond City
Amidst some notable fluctuations, cases in Richmond City generally decreased from late August through late October. During the month of November, daily new cases showed minor upticks and a plateauing trendline. Data from December indicates a notable increase in daily cases beyond peaks in mid-September. All data is subject to lags in reporting.

<table>
<thead>
<tr>
<th>Number of New Cases Reported*</th>
<th>130</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-Day Average Number of Daily New Cases Reported</td>
<td>130</td>
</tr>
<tr>
<td>7-Day Average Number of New Daily Cases Reported, Rate per 100,000 Population</td>
<td>39.5</td>
</tr>
<tr>
<td>Total Number of New Cases per 100,000 Population within last 14 days</td>
<td>496.9</td>
</tr>
</tbody>
</table>

From late August through the first few weeks of November, daily new cases generally decreased. During the month of November, the trend in daily new cases experienced a gradual increase. This increase has accelerated in December to new recent peaks. All data is subject to lags in reporting.
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 10-19 have the highest case rates in the last four weeks, closely followed by individuals aged 20-29. Individuals aged 20-29 have the highest case rate cumulatively.
- Cases for individuals in the 60-79 age group are notably down in the last four weeks compared to cumulatively.
- Cases among those 80 and over are higher than those 60-79 in the last four weeks.
• In Henrico, individuals aged 0-19 have the highest case rates in the last four weeks. Individuals aged 80+ the highest case rate cumulatively followed by those 20-29.

• Case burdens for individuals 40 and over are notably down in the last four weeks compared to cumulatively.
2.4 Cases & Population Proportions by Race & Ethnicity by County

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

COVID-19 Case Distribution by Race and Ethnicity in the Last 4 Weeks (November 22, 2021 – December 19, 2021)-
and Cumulatively through December 19, 2021 Richmond City, VA

- In the last 4 weeks of Richmond, the case burden for Black individuals (51.1%) is disproportionately high relative to their population percentage (47.0%), while the case burden for White and Latino individuals is disproportionately low (38.0% and 5.9% respectively) relative to their population percentage (42.8% and 7.3% respectively).

COVID-19 Case Distribution by Race and Ethnicity in the Last 4 Weeks (November 22, 2021 – December 19, 2021)-
and Cumulatively through December 19, 2021 – Henrico County, VA

- In Henrico in the last four weeks case burdens for White individuals (52.4%) are proportional to their share of the population (53.2%). So too is the case burden for Black individuals (30.1%) proportional to their share of the population (31.2%).

* NCHS population estimates are not available for Two or More Races (292 total cases) or Other Race (540 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)

Cumulative: N = 26433
12.2% Not Reported For Race/Ethnicity
Last 4 Weeks: N = 1534
21.5 Not Reported For Race/Ethnicity

Cumulative: N = 38166
21.1% Not Reported For Race/Ethnicity
Last 4 Weeks: N = 2548
12.8% Not Reported For Race/Ethnicity
3.0 Hospitalizations & Fatalities

3.1 Summary of Hospitalizations & Fatalities
Among Richmond City and Henrcio residents, hospitalizations based on confirmed dates of admission for the past two months have continued to fluctuate between less than 5 and 10 per week per district. Fatalities since the middle of October have also fluctuated between less than 5 and 6 deaths per week per district. Data related to hospitalizations and deaths are subject to sizable amounts of lag.

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

*Counts Displayed in Above Metric - Hospitalizations: 24,371 of 99,779; ICU Hospitalizations: 6,336 of 24,677; Ventilator Utilizations: 3,287 of 13,486*

- Hospitalizations, ICU Hospitalizations, and Ventilator Utilizations in the Richmond Catchment area overall decreased with some fluctuations from late September through the first half of November. Since then, hospitalizations have risen and fallen in late November through early December and have risen again in the past two weeks. All data is subject to lags in reporting.
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 December 20, 69.1% of the region’s population has received at least one dose of the vaccine. 62.3% of the region’s population has been fully vaccinated. A growing number of 22.1% had received a booster in the region. Approximately 67.4% of the combined Richmond City and Henrico County population has received at least one dose and 60.6% of the two districts’ combined population has been fully vaccinated. 22.0% of the 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 was recently met by individuals aged 30 and over and all groups 12+ are now over 70% in the “at least one dose” category.

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

4.2 Percentage of Vaccination Goals Reached by Population

<table>
<thead>
<tr>
<th></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>Richmond</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-11</td>
<td>15,198</td>
<td>3,336 (22%)</td>
<td>2,298 (15.1%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>12-17</td>
<td>11,150</td>
<td>6,669 (59.8%)</td>
<td>5,805 (52.1%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>18+</td>
<td>190,750</td>
<td>126,689 (66.4%)</td>
<td>114,177 (59.9%)</td>
<td>42,506 (22.3%)</td>
</tr>
<tr>
<td>65+</td>
<td>31,809</td>
<td>25,686 (80.8%)</td>
<td>23,694 (74.5%)</td>
<td>13,276 (41.7%)</td>
</tr>
<tr>
<td>Henrico</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-11</td>
<td>28,406</td>
<td>8,790 (30.9%)</td>
<td>5,749 (20.2%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>12-17</td>
<td>25,954</td>
<td>19,186 (73.9%)</td>
<td>17,251 (66.5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>18+</td>
<td>256,660</td>
<td>209,943 (81.8%)</td>
<td>192,420 (75%)</td>
<td>73,126 (28.5%)</td>
</tr>
<tr>
<td>65+</td>
<td>52,720</td>
<td>49,609 (94.1%)</td>
<td>45,969 (87.2%)</td>
<td>27,725 (52.6%)</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.
4.3 Vaccinations by Locality as of December 20, 2021
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>Chesterfield</td>
<td>Chesterfield</td>
<td>352,802</td>
<td>251,636</td>
<td>225,455</td>
<td>78,578</td>
</tr>
<tr>
<td></td>
<td>Colonial Heights</td>
<td>17,370</td>
<td>10,764</td>
<td>9,405</td>
<td>3,101</td>
</tr>
<tr>
<td></td>
<td>Powhatan</td>
<td>29,652</td>
<td>17,613</td>
<td>16,081</td>
<td>5,802</td>
</tr>
<tr>
<td>Chickahominy</td>
<td>Charles City</td>
<td>6,963</td>
<td>6,970</td>
<td>6,632</td>
<td>1,418</td>
</tr>
<tr>
<td></td>
<td>Goochland</td>
<td>23,753</td>
<td>18,224</td>
<td>16,970</td>
<td>6,644</td>
</tr>
<tr>
<td></td>
<td>Hanover</td>
<td>107,766</td>
<td>77,320</td>
<td>71,717</td>
<td>24,790</td>
</tr>
<tr>
<td></td>
<td>New Kent</td>
<td>23,091</td>
<td>14,754</td>
<td>13,573</td>
<td>4,820</td>
</tr>
<tr>
<td>Henrico</td>
<td>Henrico</td>
<td>330,818</td>
<td>240,180</td>
<td>216,783</td>
<td>77,937</td>
</tr>
<tr>
<td>Richmond</td>
<td>Richmond City</td>
<td>230,436</td>
<td>138,126</td>
<td>123,576</td>
<td>45,292</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,122,651</td>
<td>775,587</td>
<td>700,192</td>
<td>248,382</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 Distribution by Age 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.**

- Individuals 65 and over in Richmond, 45 and over in Henrico, and 65 and over in Henrico represent the three highest vaccination percentages, with uptake near or over 80%.
- In most cases, older age groups within a locality have achieved higher vaccination percentages than younger age groups in the same locality.
- Henrico age groups have achieved higher vaccination percentages than their corresponding Richmond age groups and many younger age groups in Henrico have achieved higher percentages than older age groups in Richmond.
- After later access to vaccination, individuals 12 to 17 have seen a notable increase in vaccinations while the pace of new vaccinations amongst individuals 18 to 29 have slowed (outside of a minor increase in pace in August), leading to the younger age group surpassing the older one in both Richmond and in Henrico. The pace of vaccinations among individuals 12 to 17 has since slowed in recent months.
- All data is subject to lags in reporting, particularly in recent weeks.
4.5 Vaccine Distribution by Race/Ethnicity over Time

Adjustments have been made to the underlying calculations for this metric. As a result i) group and sub-group percentages may appear lower than they did in previous reports ii) figure totals (N) are now in alignment with the counts of individuals with at least one dose, as shown in section 5.3.

The following charts track vaccination percentages by race and ethnicity 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.**

- Through spring, White individuals and Asian or Pacific Islander individuals generally had higher vaccination percentages in both Richmond and Henrico.
- White individuals maintained the highest vaccination percentage through early April in Richmond and late April in Henrico before Asian or Pacific Islander individuals surpassed them for the highest percentages.
- In early months, vaccination percentages of both Latino and Black individuals were lower, with Black individuals still comprising the lowest vaccinated percentage as of today.
- Latino individuals saw an acceleration in vaccination rates beginning in early March after a slow start and have since surpassed White individuals in vaccine uptake in both Richmond and Henrico. They also possess the highest vaccination percentage overall in Richmond, between about 81% and 94%.
- In Henrico, Asian or Pacific Islander individuals and Latino individuals have reached vaccination percentages between 84% and 94%, while White individuals fall around 72% and Black individuals fall between 59% and 64%.
- Vaccination percentages are notably lower in both Richmond and Henrico for Black individuals.
- All data is subject to lags in reporting, particularly in recent weeks.
Vaccination rates are underestimates due to individuals not disclosing race/ethnicity or reporting "Other Race" (1777 and 9425 vaccinations, respectively). American Indian individuals (1009 vaccinations) excluded due to unreliable vaccination rate calculations.
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 (December 20th, 2021)

*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 20th, 2021)

*Percentage of population receiving at least one dose
Social Vulnerability & Low Vaccination by Census Tract
Richmond City, VA & Henrico County, VA (December 20th, 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 into 5 groups, each containing 19

*Percentage of population receiving at least one dose*
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 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 Estimate)*100,000

Community Transmission
Refers to when an individual is infected with the COVID 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 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.