Table of Contents

Vermont Case Data                 Pg. 3
Education Data                   Pg. 22
Vermont Hospitalization Data     Pg. 29
Vermont Fatality Data            Pg. 33
Vermont Vaccination Data         Pg. 37
Regional Data                    Pg. 48
National Data                    Pg. 51
Restart Vermont                  Pg. 60
Vermont Case Data
After declining last week, Vermont’s 7-day average increased to a new high.

Note: data delays reported 9/14-9/16
Vermont COVID-19 Case Increase Following Labor Day Weekend

Vermont’s 7-Day average increased 27% since the start of Labor Day

Source: VDH—9/20/21 (*10 days starting on 9/4/21 and 14 days ending on 9/21/21)
The not fully vaccinated case rate has increased 21% in the last 7 days.

The fully vaccinated rate has increased 7% during the same period.
Hospitalization rates among those not fully vaccinated are **4x higher** & **increasing 2x as fast** as those fully vaccinated.
Vermont Test Positivity: Delta Wave

Daily test positivity

Source: VDH—September 21, 2021
Vermonters Diagnosed with COVID-19 by Week

Source: Vermont Department of Health (week calculated as Tuesday to Monday)
Estimated Active Cases of COVID-19 in Vermont

Source: Vermont Dept. of Health—September 20, 2021
COVID-19 $R_t$ in Vermont

Source: Covidestim—Covid-19 Nowcasting—September 21, 2021
Estimated vs Detected COVID-19 Cases in Vermont

This figure shows both the number of detected cases (gray) and an estimate of the true number of infections.

Source: Covidestim—Covid-19 Nowcasting—September 21, 2021
Infections, Hospitalizations, & Deaths by Percentage of State Population Vaccinated

Source: Covid Act Now—September 13, 2021; Measures last 14 days

Bottom Third Vaccinated States  Middle Third Vaccinated States  Top Third Vaccinated States  Vermont

Infections per 100K  Hospitalizations per 100K  Deaths per 100K

Source: Covid Act Now—September 13, 2021; Measures last 14 days
Active Cases in Vermont Counties

Source: Vermont Dept. of Health—September 21, 2021; DFR Active Case Algorithm (per million)
Age of Infected Vermonters

Median age of COVID positive individuals in VT over the last 14 days.

Source: VDH—September 21, 2021
Vermont Case Rate By Age (7-Day Average)

Source: VDH—September 20, 2021
Covid-19 case rates increased this past week.

Orleans County reporting scattered outbreaks and high degree of community spread.
Active COVID Cases per Million in Vermont Regions

For the purpose of this analysis, Vermont has been split into four regions: Burlington Metro (Chittenden, Franklin, Grand Isle), Northeast Kingdom (Caledonia, Orleans, Essex), Central (Lamoille, Washington, Addison, Orange), and Southern (Rutland, Windsor, Bennington, Windham).

Source: VDH & DFR Active Case Algorithm — September 13, 2021
## Fall 2021 Higher Education Restart

<table>
<thead>
<tr>
<th>Higher Education Institutions Reporting</th>
<th>Enrollment</th>
<th>Students Fully Vaccinated</th>
<th>Students Not Fully Vaccinated (No Exemption Granted)</th>
<th>Students with Unknown Vaccine Status</th>
<th>Students Granted Vaccine Mandate Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 of 16</td>
<td>28,624</td>
<td>27,103</td>
<td>371</td>
<td>456</td>
<td>694</td>
</tr>
<tr>
<td></td>
<td></td>
<td>94.7%</td>
<td>1.3%</td>
<td>1.6%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Week 1: **37 positive cases** out of 12,623 tests  
Week 2: **36 positive cases** out of 7,434 tests  
Week 3: **43 positive cases** out of 3,053 tests  
Week 4: **68 positive cases** out of 6,497 tests  

Source: Vermont Higher Education Institutions—September 20, 2021
Vermont Higher Education Cases By Semester

Source: Vermont Higher Education Institutions—September 21, 2021 - Created with Datawrapper
## Active Outbreaks in Long Term Care Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Total COVID-19 Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernon Green Nursing Home, Vernon</td>
<td>30</td>
</tr>
<tr>
<td>Green Mountain Nursing and Rehab, Colchester</td>
<td>22</td>
</tr>
<tr>
<td>Mansfield Place, Essex</td>
<td>18</td>
</tr>
<tr>
<td>Vermont Veterans Home, Bennington</td>
<td>17</td>
</tr>
<tr>
<td>Centers for Living and Rehab, Bennington</td>
<td>15</td>
</tr>
<tr>
<td>Vernon Hall Assisted Living, Vernon</td>
<td>12</td>
</tr>
<tr>
<td>Equinox Terrace, Manchester</td>
<td>10</td>
</tr>
<tr>
<td>Long Term Care Facility A</td>
<td>6</td>
</tr>
<tr>
<td>Long Term Care Facility B</td>
<td>6</td>
</tr>
<tr>
<td>St. Joseph Kervick Residence, Rutland</td>
<td>Not Shown</td>
</tr>
</tbody>
</table>

**Total** 136
Vermont Cases, Hospitalizations & Deaths
By Vaccination Status Since January 1, 2021

Cases
- Not Fully Vaccinated (86%)
- Fully Vaccinated (14%)

Hospitalizations
- Not Fully Vaccinated (86%)
- Fully Vaccinated (14%)

Deaths
- Not Fully Vaccinated (77%)
- Fully Vaccinated (23%)

Source: Vermont Dept. of Health—September 18, 2021; Note vaccinated VT population more than 2x unvaccinated population
VT Weekly COVID-19 Infection Forecast

Calculated as a 7-day sum. Gray bands represent 50% and 95% confidence intervals. Since projections are only released once a week, the actual number may appear to over or undershoot the forecast.

Source: CDC Ensemble Model—September 20, 2021 - Note: in recent weeks the CDC ensemble has only forecasted out two weeks
Vermont Hospitalization Data
Statewide Covid-19 Hospitalizations

Hospitalization rate increasing, but Vermont continues to have fewest hospitalizations per capita nationally.

On average, 80% of all recent hospitalizations among the unvaccinated.
On average, 84% of all recent critical care stays among the unvaccinated.

Source: Vermont Department of Health—September 21, 2021
New Hospitalizations per 100,000 Residents, by Age

0-17 years 18-49 years 50-69 years 70+ years

Vermont

Source: US Dept. of Health & Human Services; 7-day average - September 20, 2021
Vermont Fatality Data
Weekly Covid-19 Deaths In Vermont

Source: Vermont Department of Health—September 20, 2021 (week ending)
Monthly Covid-19 Deaths In Vermont

Source: Vermont Department of Health—September 20, 2021; deaths attributed to month in which death occurred rather than reported
VT Weekly COVID-19 Deaths Forecast

Calculated as a 7-day sum. Gray bands represent 50% and 95% confidence intervals. Since projections are only released once a week, the actual number may appear to over or undershoot the forecast.
Vermont Vaccination Data
Vermont Vaccination

87.4% of eligible Vermonters have started vaccination.

+2,188 since last week.

481,449 Vermonters with at least 1 dose.

69,501 eligible Vermonters still to be vaccinated.

Source: CDC—September 20, 2021
### Vermont CDC Vaccine Scorecard

<table>
<thead>
<tr>
<th>Metric</th>
<th>Figure</th>
<th>State Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doses Administered per 100K</td>
<td>142,562</td>
<td>1</td>
</tr>
<tr>
<td>% At Least 1 Dose (Eligible Population)</td>
<td>87.4%</td>
<td>3</td>
</tr>
<tr>
<td>% Fully Vaccinated (Eligible Population)</td>
<td>78.1%</td>
<td>1</td>
</tr>
<tr>
<td>% At Least 1 Dose (Full Population)</td>
<td>77.2%</td>
<td>1</td>
</tr>
<tr>
<td>% Fully Vaccinated (Full Population)</td>
<td>69.0%</td>
<td>1</td>
</tr>
<tr>
<td>% Fully Vaccinated (65 &amp; Over)</td>
<td>95.1%</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: CDC—September 20, 2021
Vermont is 1st in the Country in Vaccines Administered Per 100K

Source: CDC—September 20, 2021
87.4% of Eligible Vermonters Have Started Vaccination, Placing Vermont 3rd Nationally
78.1% of Eligible Vermonters Are Fully Vaccinated, Placing Vermont 1st Nationally

Source: CDC—September 20, 2021
77.2% of Vermonters Have Started Vaccination, Placing Vermont 1st Nationally

Source: CDC—September 20, 2021
69.0% of Vermonters Fully Vaccinated, Placing Vermont 1st Nationally

Source: CDC—September 20, 2021
95.1% of 65 & Over Vermonters Fully Vaccinated, Placing Vermont 1st Nationally

Source: CDC—September 20, 2021
Vermonters initiating vaccination decreased 6.6% in the last week.
Vermont Vaccination Progress
By Age Band

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Partially Vaccinated</th>
<th>Fully Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-15</td>
<td>7.50%</td>
<td>65.71%</td>
</tr>
<tr>
<td>16-17</td>
<td>6.37%</td>
<td>70.91%</td>
</tr>
<tr>
<td>18-21</td>
<td>7.03%</td>
<td>53.91%</td>
</tr>
<tr>
<td>22-29</td>
<td>7.39%</td>
<td>66.62%</td>
</tr>
<tr>
<td>30-39</td>
<td>7.95%</td>
<td>83.00%</td>
</tr>
<tr>
<td>40-49</td>
<td>6.55%</td>
<td>82.39%</td>
</tr>
<tr>
<td>50-59</td>
<td>5.42%</td>
<td>85.03%</td>
</tr>
<tr>
<td>60-64</td>
<td>5.25%</td>
<td>90.86%</td>
</tr>
<tr>
<td>65-69</td>
<td>3.20%</td>
<td>96.68%</td>
</tr>
<tr>
<td>70-74</td>
<td>3.41%</td>
<td>100%*</td>
</tr>
<tr>
<td>75+</td>
<td>3.41%</td>
<td>97.10%</td>
</tr>
</tbody>
</table>

Source: Vermont Dept. of Health—September 21, 2021; *based on 2019 census estimates; state data may differ from CDC reporting
Regional Data
Regional Cases

10.1% Increase in New Cases

New Cases September 7th to September 13th

- Vermont: 1,050
- Rhode Island: 2,279
- Maine: 2,438
- New Hampshire: 2,799
- Connecticut: 3,937
- Quebec: 5,088
- Massachusetts: 12,261
- New York: 33,627

Total: 63,212

New Cases September 14th to September 20th

- Vermont: 1,509
- Rhode Island: 2,427
- New Hampshire: 2,805
- Maine: 3,405
- Quebec: 5,280
- Connecticut: 5,507
- Massachusetts: 13,436
- New York: 35,526

Total: 69,895
Weekly Regional Cases

Sources: State Health Departments & CTV National News (Quebec) (includes: CT, ME, MA, NH, NY, QC, RI & VT)
National Data
COVID-19 is now the deadliest pandemic in recorded US history with 676,000+ fatalities.

Source: CDC—September 20, 2021
National COVID-19 Cases

-21.9% Decrease
Over the last 7 days

137,295
7-Day Average

Source: Covid Tracking Project; NYT & CDC—September 21, 2021
Change in National Covid-19 Growth

% Growth Change (7-day Avg)

cases increasing

cases decreasing

Chart: Vermont DFR Modeling Team • Source: CDC • Created with Datawrapper
US Weekly COVID-19 Infection Forecast

Calculated as a 7-day sum. Gray bands represent 50% and 95% confidence intervals. Since projections are only released once a week, the actual number may appear to over or undershoot the forecast.
National COVID-19 Hospitalizations

-5.7% Decrease
Over the last 7 days

94,008
7-Day Average

Source: Covid Tracking Project; NYT & CDC—September 21, 2021
Vermont has among the lowest percentage of hospital beds in use for Covid-19 in US

Source: HHS—September 20, 2021
National COVID-19 Deaths
(Caution: Labor Day Related Data Anomalies)

+10.5% Increase
Over the last 7 days

2,087
7-Day Average

Source: Covid Tracking Project; NYT & CDC—September 21, 2021
US Weekly COVID-19 Deaths Forecast

Calculated as a 7-day sum. Gray bands represent 50% and 95% confidence intervals. Since projections are only released once a week, the actual number may appear to over or undershoot the forecast.

Source: Centers for Disease Control and Prevention—September 20, 2021
RESTART VERMONT

Reopening Metrics

1. Syndromic Surveillance (*retired*)
2. Viral Growth & Reproductive Rates
3. Percentage of New Positive Tests
4. Hospital & Critical Care Bed Capacity
Data Point 1: Syndromic Surveillance

- **Summary:** Percentage of visits with COVID-19 like illness and Influenza diagnosis
- **Warning Flag:** Percentage of visits exceeding 4% for multiple consecutive days

Vermont Department of Health no longer updating syndromic surveillance on a weekly basis.
Viral Growth & Reproductive Rates

Vermont Coronavirus Growth Rate

- Rolling 3-Day Avg % Growth
- Rolling 7-Day Avg % Growth

Source: Vermont Department of Health
Percentage of New Positive Tests

Percent Tests Yielding New Positive COVID-19 Cases

- % Positive Tests
- 5% Positive Warning
- Rolling 7-day Avg

Source: Vermont Department of Health
Hospital & Critical Care Beds

ICU Use & Capacity

- Open ICU Buffer
- COVID ICU
- non-COVID ICU

% of ICU

Source: Vermont Department of Health
Vermont Testing

7-Day Rolling Test Average

Source: Vermont Department of Health; results reported to VDH daily