Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – July 8, 2020

Date published: July 10, 2020. This summary will be updated every Friday.
Common Terms and Data Sources

This document contains information about people who have tested positive for COVID-19 in Vermont. You will find data presented in a few different ways throughout this document:

- **Count**: the number of people who have tested positive for COVID-19 (overall or in a particular group)
- **Rate**: the number of people who have tested positive for COVID-19 in a particular group, divided by the total number of people in that group. Using rates allows for more direct comparisons between groups.
- **Growth rate**: a measure of the percent change in COVID-19 cases over time; this tells us how quickly or slowly the disease is spreading in Vermont
- **Week**: for the purposes of this document, “this week” is defined as July 1 through July 8

For geographic information, please see the [COVID-19 Data Dashboard](https://vermont.gov/covid-data-dashboard) or [Town Map](https://vermont.gov/town-map). For more information on data sources, please see our [Data Notes](https://vermont.gov/data-notes) document.
COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.
Total Number of Cases in Vermont: 1,272

The daily number of COVID-19 cases in Vermont peaked on April 3.
Most counties have reached a plateau in the number of new cases.

Growth over time by county (n=1267)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=643, roughly 50% of all cases) to other counties. Using a log scale also helps visualize percent change. For the number of cases by county, see the Data Dashboard.
Percent of positive COVID-19 tests may indicate how prevalent the disease is in the population.

The highest percent of positive tests (11%) was on March 23, 28, and 30.

*Not a stable estimate due to small numbers. There were 9 total tests and 1 was positive.

Vermont Department of Health
Case Demographics

Who has been impacted by COVID-19 in Vermont?
Rates of COVID-19 are disproportionately high among Vermonters 80 years and older.
Rate per 10,000 Vermonters

Females and males have similar rates of COVID-19.
Rate per 10,000 Vermonters

There are differences in age and sex of Vermonters with COVID-19.
Rates of COVID-19 by Age Group for Females and Males per 10,000 Vermonters

Vermont Department of Health
White Vermonters represent the majority of COVID-19 cases. African American Vermonters have the highest rate.

Rate per 10,000 Vermonters

Non-Hispanic Vermonters represent the majority of COVID-19 cases. Hispanic Vermonters have the higher rate.

Rate per 10,000 Vermonters

Other Race includes people who identify as two or more races, or a race other than White, Asian, African American or Black, and American Indian or Alaskan Native.

Note: Race is unknown in 3% of cases (n = 34) and ethnicity is unknown in 10% of cases (n = 121).
Approximately 59% of people* with COVID-19 have a pre-existing condition.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>131</td>
<td>14%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>132</td>
<td>14%</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>9</td>
<td>1%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>26</td>
<td>3%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>225</td>
<td>23%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>97</td>
<td>10%</td>
</tr>
<tr>
<td>Immunocompromised Condition</td>
<td>45</td>
<td>5%</td>
</tr>
<tr>
<td>Neurologic Condition/Intellectual Disability</td>
<td>33</td>
<td>3%</td>
</tr>
<tr>
<td>Other Chronic Condition**</td>
<td>279</td>
<td>29%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>9</td>
<td>1%</td>
</tr>
</tbody>
</table>

* of the 966 people that the Health Department has pre-existing condition data for.

46% of people with a pre-existing condition have two or more conditions.

**Not mutually exclusive, includes things like arthritis, thyroid conditions, multiple free text entries.

The Health Department has information about pre-existing conditions in 76% (966) of 1,272 total COVID-19 cases.

Prevalence of select conditions in COVID-19 patients and Vermont adults.

- Cardiovascular Disease: 14%
- Diabetes Mellitus: 8%
- Chronic Lung Disease: 10%
- Cardiovascular Disease: 14%
- Diabetes Mellitus: 16%

Prevalence of pre-existing conditions is approximately equal between female and male COVID-19 patients.

Vermont Department of Health

COVID-19 patients with pre-existing conditions tend to be older than those without pre-existing conditions.

A higher percentage of COVID-19 patients with pre-existing conditions have been hospitalized than those without pre-existing conditions.
A chart showing the number of New Health Care Worker and All Cases by Day, indicating that health care worker cases peaked on April 4.

- **7 in 10 health care workers with COVID-19 are female.**
- **33% of health care workers with COVID-19 are associated with an outbreak.**

A pie chart showing that 1 in 6 Vermonters with COVID-19 are health care workers.

A bar chart illustrating that health care workers with COVID-19 tend to be younger than non-health care workers with COVID-19.

Vermont Department of Health
White Vermonters represent the majority of health care workers with COVID-19.

Most health care workers with COVID-19 are not hospitalized.

There are no reported deaths among health care workers.

Most health care workers with COVID-19 have symptoms.

Sign or Symptom among Health Care Workers with COVID-19 | Percent of Symptomatic Cases
--- | ---
Cough | 72%
Fatigue | 65%
Headache | 61%
Loss of Smell or Taste | 54%
Muscle Pain | 51%
Runny nose | 46%
Chills | 45%
Fever | 43%

Asymptomatic 14%
Unknown 1%
Symptomatic 84%

Case Demographics
- Black or African American 4%
- American Indian or Alaska Native 1%
- Asian 3%
- White 87%
- Other Race 1%

Not Hospitalized = 175
Hospitalized = 8
Unknown = 6
Clinical Course

What symptoms have Vermonters experienced? How many have been hospitalized? How many have died?
The day symptoms start is important to know when people with COVID-19 become infectious.

Illnesses occurring in this window may not be reported yet; median reporting lag = 6 days

Note: Date of symptom onset is not always known.

### Clinical Course

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Percent of Symptomatic Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>71%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>68%</td>
</tr>
<tr>
<td>Headache</td>
<td>53%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>51%</td>
</tr>
<tr>
<td>Fever</td>
<td>51%</td>
</tr>
</tbody>
</table>

14 days
Average Illness duration

Vermont Department of Health
Most Vermonters with COVID-19 are **not hospitalized**.

Vermonters 80 years and older are more likely to be **hospitalized** for COVID-19.

Rate per 10,000 Vermonters

**White Vermonters represent a majority of hospitalized COVID-19 cases.**

Hospitalization rates by race are similar.

Rate per 10,000 Vermonters

- **White** 93%
- **Asian** 3%
- **Black or African American** 2%
- **Other Race** 2%

**Unknown** = 85

**Hospitalized** = 130

**Not hospitalized** = 1057

**9 days**

Average hospital stay (range: 0-43 days)

**16%**

Of those hospitalized were on a ventilator

**35%**

Of those hospitalized were in the ICU

Please note 5 hospitalized persons are missing race information.

*The number of Asian, Black, and persons in the other race category is less than 5.*
Vermonters 80 years and older have higher rates of COVID-19 death than other age groups.
Rate per 10,000 Vermonters

Males and females have similar rates of COVID-19 death.
Rate per 10,000 Vermonters

Most COVID-19 deaths occurred in an inpatient hospital setting or a long-term care facility.

White Vermonters represent a majority of COVID-19 deaths.
Death rates by race are similar.
Rate per 10,000 Vermonters

Note: No deaths have identified as Hispanic or Latino.
Outbreaks

How is COVID-19 impacting group settings?
What is an outbreak?

1. For congregate care facilities (long term care facility or skilled nursing facility):
   - A single resident with a positive COVID-19 laboratory test and one or more additional residents with respiratory illness
     OR
   - Two or more residents with at least two of the following symptoms: fever (temp ≥ 100.4°F), cough, difficulty breathing/shortness of breath

2. For other settings (residential communities, businesses):
   - Two or more epidemiologically-linked confirmed COVID-19 cases where there’s an opportunity to stop transmission
31% of COVID-19 cases are associated with an outbreak

- 292 cases among residents
- 102 cases among facility staff

Outbreaks
- 5 Active
- 10 Resolved*

*Outbreaks where it has been >28 days since the last known exposure to a confirmed COVID-19 case, with no new cases OR 2 rounds of negative facility-wide testing one week apart.
Vermont COVID-19 Cases Associated with an **Outbreak** Over Time

The daily number of cases associated with an outbreak peaked on April 9.

Vermont COVID-19 Deaths Associated with an **Outbreak** Over Time
11 of 15 outbreaks have occurred within facilities.

In facilities with outbreaks, 95% of residents have been tested.

- Tested Positive, 23%
- Tested Negative, 72%
- Not Tested, 5%

In facilities with outbreaks, 85% of staff* have been tested.

- Tested Positive, 10%
- Tested Negative, 76%
- Not Tested, 15%

Values in these charts are rounded to the nearest whole number and therefore may not always add to 100%. Percentages by testing status are rounded to the whole number, but combined totals take into account the full percentages.

*Two facilities are excluded from this analysis due to missing information.

Examples of facilities include long-term care and other skilled nursing facilities, correctional facilities, and workplaces. Community outbreaks, including those occurring in senior independent living communities, are not represented on this slide.

Source: Vermont Department of Health
Reflects confirmed data as of 7/8/2020.
While only 31% of all COVID-19 cases are associated with outbreaks, more than half of COVID-19-related deaths occur in outbreak settings.

Values in these charts are rounded to the nearest whole number and therefore may not always add to 100% due to error introduced in rounding.

Source: Vermont Department of Health
Reflects confirmed data as of 7/8/2020.

Note: Examples of a health setting include long term care or assisted living facilities, therapeutic treatment centers, and behavioral health institutions. Examples of a non-health setting include correctional facilities, senior housing communities, businesses, and homeless shelters. Vermont has not experienced an outbreak in all health and non-health settings.
The percentage of females and males with COVID-19 that are associated with an outbreak is about even.

29% of females with COVID-19 are associated with an outbreak.

32% of males with COVID-19 are associated with an outbreak.

But in outbreak settings, females with COVID-19 are more likely to be associated with a health setting than non-health settings.

Values in these charts are rounded to the nearest whole number and therefore may not always add to 100% due to error introduced in rounding. Percentages by outbreak type are rounded to the whole number, but combined totals take into account the full percentages.

Source: Vermont Department of Health
Reflects case counts as of 7/8/20

Note: Examples of a health setting include long-term care or assisted living facilities, therapeutic treatment centers, and behavioral health institutions. Examples of a non-health setting include correctional facilities, senior housing communities, businesses, and homeless shelters. Vermont has not experienced an outbreak in all health and non-health settings.
Percent of Cases by Outbreak Status and Age

- Not associated with an outbreak
- Associated with an outbreak in a health setting
- Associated with an outbreak in a non-health setting

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Not associated with an outbreak</th>
<th>Associated with an outbreak in a health setting</th>
<th>Associated with an outbreak in a non-health setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>1%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>5%</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>20-29</td>
<td>15%</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>30-39</td>
<td>13%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>40-49</td>
<td>14%</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>50-59</td>
<td>22%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>60-69</td>
<td>17%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>70-79</td>
<td>9%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>80-89</td>
<td>9%</td>
<td>8%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>90+</td>
<td>5%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Examples of a health setting include long-term care or assisted living facilities, therapeutic treatment centers, and behavioral health institutions. Examples of a non-health setting include correctional facilities, senior housing communities, businesses, and homeless shelters. Vermont has not experienced an outbreak in all health and non-health settings.

Source: Vermont Department of Health
Reflects case counts as of 7/8/20
Syndromic Surveillance
What we can learn from emergency room and urgent care centers?
The percent of emergent care visits for COVID-19-like illness is decreasing.

Syndromic surveillance from 13 of 14 Vermont hospitals and 2 urgent care centers. Monitoring this data acts as an early indicator of potential spikes of COVID-19 in the community.

Interpret with caution, there is a chance for over or underestimation given the lag in reporting.

COVID-19-like illness diagnosis is determined using the patient’s chief complaint and/or discharge diagnosis.

COVID-19-like illness is the presence of a fever with the addition of shortness of breath, difficulty breathing, or cough.

COVID-19-like illness excludes patients with an influenza discharge diagnosis.

*Please note: the query used to identify COVID-19-like illness in syndromic surveillance data changed on 5/28. This was to be consistent with the most up-to-date national definition provided by the CDC.
Weekly Spotlight: COVID-19 Contact Tracing

This section focuses on contact tracing for COVID-19 in Vermont.
What is contact tracing?

Contact tracers reach out to people who have tested positive for COVID-19 and help them determine who they were in close contact with while they were contagious.

Contact tracers then follow up with those close contacts. Contact tracers let them know about their potential exposure to the virus, encourage them to get tested, and provide guidance on how long they should stay home (quarantine).

When people who may have been exposed to the virus stay home, they keep more people from being exposed and prevent the virus from spreading.

A blue circle represents cases and a gray circle represents contacts of cases.
Contact Tracing Network Diagram

Epidemiologists at the Health Department create network diagrams to see how cases, contacts and clusters are connected. Each circle represents a person, and each line represents a connection between two people.

This diagram is developed using Vermont case and contact data in PowerBi.
2,469 contacts have been identified.

172 contacts became a COVID-19 case. This means that this group of people knew to stay home, and likely did not spread the virus further.

Of the cases who have at least one contact, the average number of contacts per case is 3.6 people.

This number has grown over time.

<table>
<thead>
<tr>
<th>Month</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of contacts per case</td>
<td>2.7</td>
<td>3.7</td>
<td>4.8</td>
</tr>
</tbody>
</table>

The exposure type for contacts varies. The most common are **household** contacts. The second most common is when contacts and cases share a **communal space or social setting**.

Data on this slide reflects information collected from April 1, 2020 – July 8, 2020.
Learn more about COVID-19 in Vermont:

Web: www.healthvermont.gov/COVID-19
Email: AHS.VDHPublicCommunication@vermont.gov