Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – June 24, 2020

Date published: June 26, 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 June 17 through June 24

For geographic information, please see the COVID-19 Data Dashboard or Town Map. For more information on data sources, please see our Data Notes document.
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COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.
Total Number of Cases in Vermont: 1,191

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=1186)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=599, 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.

The number of people tested reflects the number of individual people who have had confirmatory testing for COVID-19 in Vermont. Each person is only counted once. The number of tests reflects the number of specimens that have had confirmatory for COVID-19 in Vermont. This number may include multiple specimens for one person, the same person tested multiple times, etc. Neither of these numbers include serology testing.
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

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
White Vermonters represent the majority of COVID-19 cases. African American Vermonters have the highest rate.
Rate per 10,000 Vermonters

- White: 81.5%
- Black or African American: 9.3%
- Asian: 4.5%
- Other Race: 1.8%
- American Indian or Alaskan Native: 0.2%

Black or African American: 145.7
Asian: 44.7
White: 16.5
Other Race: 14.0
American Indian or Alaskan Native: 11.5

Non-Hispanic Vermonters represent the majority of COVID-19 cases. Hispanic Vermonters have the higher rate.
Rate per 10,000 Vermonters

- Non-Hispanic: 87.2%
- Hispanic: 3.4%

Hispanic: 32.9
Non-Hispanic: 16.9

Note: Race is unknown in 3% of cases and ethnicity is unknown in 9% of cases.
Approximately 60% of people* with COVID-19 have a pre-existing condition.

48% of people with a pre-existing condition have two or more conditions.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>128</td>
<td>14%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>125</td>
<td>14%</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>8</td>
<td>1%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>25</td>
<td>3%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>215</td>
<td>24%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>92</td>
<td>10%</td>
</tr>
<tr>
<td>Immunocompromised Condition</td>
<td>44</td>
<td>5%</td>
</tr>
<tr>
<td>Neurologic Condition/Intellectual Disability</td>
<td>33</td>
<td>4%</td>
</tr>
<tr>
<td>Other Chronic Condition**</td>
<td>272</td>
<td>30%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>9</td>
<td>1%</td>
</tr>
</tbody>
</table>

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

The Health Department has information about pre-existing conditions in 75% (899) of 1,191 total COVID-19 cases.

**of the 899 people that the Health Department has pre-existing condition data for.
Prevalence of select conditions in COVID-19 patients and Vermont adults.

![Chart showing prevalence of conditions]

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


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

![Pie chart showing gender distribution]

- Female: 287, 53%
- Male: 253, 47%

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

![Bar chart showing age distribution]

- 0-9: 15
- 10-19: 6
- 20-29: 31
- 30-39: 80
- 40-49: 67
- 50-59: 74
- 60-69: 68
- 70-79: 64
- 80+: 15
- 80+: 1

A higher percentage of COVID-19 patients with pre-existing conditions have been hospitalized than those without pre-existing conditions.

![Bar chart showing hospitalization rates]

- 18%
- 4%
7 in 10 health care workers with COVID-19 are female.

35% of health care workers with COVID-19 are associated with an outbreak.

1 in 5 Vermonters with COVID-19 are health care workers.

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.

<table>
<thead>
<tr>
<th>Sign or Symptom among Health Care Workers with COVID-19</th>
<th>Percent of Symptomatic Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>74%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>65%</td>
</tr>
<tr>
<td>Headache</td>
<td>60%</td>
</tr>
<tr>
<td>Loss of Smell or Taste</td>
<td>55%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>50%</td>
</tr>
<tr>
<td>Runny nose</td>
<td>47%</td>
</tr>
<tr>
<td>Fever</td>
<td>44%</td>
</tr>
<tr>
<td>Chills</td>
<td>44%</td>
</tr>
</tbody>
</table>

Case Demographics
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.

14 days
Average illness duration

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Percent of Symptomatic Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>72%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>67%</td>
</tr>
<tr>
<td>Headache</td>
<td>53%</td>
</tr>
<tr>
<td>Fever</td>
<td>52%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>51%</td>
</tr>
</tbody>
</table>

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

- Not hospitalized = 978
- Hospitalized = 129

16% Of those hospitalized were on a ventilator
35% Of those hospitalized were in the ICU
8 days Average hospital stay (range: 0-39 days)

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

- White 94%
- Other Race 2%
- Black or African American 2%
- Asian 2%

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 $\geq 100.4^\circ F$), 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
32% of COVID-19 cases are associated with an outbreak

Outbreaks

3 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.

276 cases among residents

102 cases among facility staff

Vermont Department of Health
The daily number of cases associated with an outbreak peaked on April 9.
11 of 13 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, 86% of staff* have been tested.

- Tested Positive, 9%
- Tested Negative, 77%
- Not Tested, 14%

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.

*Three 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 6/24/2020.
While only 32% of all COVID-19 cases are associated with outbreaks, more than half of COVID-19-related deaths occur in outbreak settings.

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.

30% of females with COVID-19 are associated with an outbreak.

33% 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.

Non-Outbreak, 70%

Health, 19%

Non-Health, 11%

Non-Outbreak, 67%

Health, 10%

Non-Health, 24%

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 6/24/20

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</th>
<th>Associated in a health setting</th>
<th>Associated in a non-health setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>5%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>10-19</td>
<td>1%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>20-29</td>
<td>4%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>30-39</td>
<td>4%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>40-49</td>
<td>3%</td>
<td>8%</td>
<td>21%</td>
</tr>
<tr>
<td>50-59</td>
<td>5%</td>
<td>5%</td>
<td>17%</td>
</tr>
<tr>
<td>60-69</td>
<td>5%</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>70-79</td>
<td>10%</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td>80-89</td>
<td>8%</td>
<td>&lt;1%</td>
<td>6%</td>
</tr>
<tr>
<td>90+</td>
<td>0%</td>
<td>1%</td>
<td>0%</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 6/24/20
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: Changes in COVID-19 Cases Over Time

This section focuses on how COVID-19’s effect on Vermonters has shifted over time.
When cases peaked in April, there were equal proportions of older and younger Vermonters with COVID-19.

But in a smaller peak in June, younger Vermonters with COVID-19 made up more of the total cases than older Vermonters.

*For this chart, older Vermonters are defined as those age 60 and older.

The proportion of females and males with COVID-19 has been about equal throughout the pandemic in Vermont.
As the **weekly number of tests** increased*, the proportion of positive cases with symptoms vs. positive cases without symptoms has shifted. In the smaller peak in June, cases of COVID-19 without symptoms made up more of the total cases than cases with symptoms.

*Testing recommendations have changed over time. Currently, people with mild symptoms or no symptoms at all can get tested. Early in the response, only people with symptoms could get tested.

The monthly rate of deaths among cases has steadily declined since April.
Learn more about COVID-19 in Vermont:

Web:  www.healthvermont.gov/COVID-19

Email:  AHS.VDHPublicCommunication@vermont.gov