Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – July 22, 2020

Date published: July 24, 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 15 through July 22

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.
COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.
Total Number of Cases in Vermont: 1,377

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=1,320)
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 8 total tests and 1 was positive.

Percent Positive to Date

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. Percent positive is the number of people with laboratory confirmed COVID-19 divided by the total number of people tested. None of these numbers include serology or antigen testing.

Percent Positive This Week (July 15 – July 22)

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

Females and males have similar rates of COVID-19.
Rate 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

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 = 35) and ethnicity is unknown in 10% of cases (n = 125).
Approximately 57% of people* with COVID-19 have a pre-existing condition.

46% 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>132</td>
<td>12%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>145</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>28</td>
<td>3%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>237</td>
<td>22%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>100</td>
<td>9%</td>
</tr>
<tr>
<td>Immunocompromised Condition</td>
<td>48</td>
<td>5%</td>
</tr>
<tr>
<td>Neurologic Condition/Intellectual Disability</td>
<td>35</td>
<td>3%</td>
</tr>
<tr>
<td>Other Chronic Condition**</td>
<td>291</td>
<td>27%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>10</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 78% (1,068) of 1,377 total COVID-19 cases.
Prevalence of select conditions in COVID-19 patients and Vermont adults.

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

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.

Vermont Department of Health
1 in 6 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.

Number of New Health Care Worker and All Cases by Day

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.

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>72%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>64%</td>
</tr>
<tr>
<td>Headache</td>
<td>60%</td>
</tr>
<tr>
<td>Loss of Smell or Taste</td>
<td>54%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>51%</td>
</tr>
<tr>
<td>Runny nose</td>
<td>47%</td>
</tr>
<tr>
<td>Chills</td>
<td>44%</td>
</tr>
<tr>
<td>Fever</td>
<td>42%</td>
</tr>
</tbody>
</table>
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.

Note: Date of symptom onset is not always known.

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Percent of Symptomatic Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>70%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>66%</td>
</tr>
<tr>
<td>Headache</td>
<td>53%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>51%</td>
</tr>
<tr>
<td>Fever</td>
<td>49%</td>
</tr>
</tbody>
</table>

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

Note: Date of symptom onset is not always known.

13 days
Average illness duration
Most Vermonters with COVID-19 are not hospitalized.

Of those hospitalized were on a ventilator

35% Of those hospitalized were in the ICU

16% Of those hospitalized were in the ICU

9 days Average hospital stay (range: 0-43 days)

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

Clinical Course

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Hospitalized</th>
<th>Not hospitalized</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>10-19</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>20-29</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>30-39</td>
<td>1.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>40-49</td>
<td>2.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>50-59</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>60-69</td>
<td>6.1</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>70-79</td>
<td>13.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>≥80</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Other Race 2%

Black or African American 2%

Asian 3%

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?
Outbreaks can occur in many types of places. Here is what outbreak means in these places:

**Community Settings**

3 or more COVID-19 cases involving more than one family or household where the cases:
- have an illness start date or positive test within 14 days, and
- are linked through contact or location, and
- are not linked to another outbreak, and
- there is no other more likely source of exposure.

**Educational Settings**

2 or more COVID-19 cases among students or teachers/staff with known connections in the educational setting, where the cases are connected by:
- having an illness start date or a positive test within 14 days, and
- not living together or having close contact with each other in another setting, and
- there is no other more likely source of exposure.

**Congregate Care or Living Settings***

One resident or staff member with COVID-19, and one or more residents or staff with whom they had contact with respiratory illness.

or

Two or more facility residents and/or staff with an illness start date or positive test within 14 days.

*Examples include long-term care and other residential care facilities, correctional facilities and homeless shelters.

**Workplaces**

2 or more COVID-19 cases among employees at the same workplace, where the cases are connected by:
- having contact with each other, and
- an illness start date or positive test within 14 days, and
- not living together or having close contact with each other in another setting, and
- there is no other more likely source of exposure.
29% of COVID-19 cases are associated with an outbreak

Outbreaks
4 Active
12 Resolved*

*Resolved outbreaks are those where it has been >28 days since the last known case of COVID-19.

303 cases among residents
102 cases among facility staff

303 cases among residents
102 cases among facility staff
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

There have been no COVID-19-related deaths in Vermont for 36 days.
11 of 16 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 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 7/22/2020.
While only 29% 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 7/22/2020.

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.

28% of females with COVID-19 are associated with an outbreak.

31% 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.

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 7/22/20
Vermont Department of Health

Outbreaks

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>2%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>6%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>16%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>14%</td>
<td>3%</td>
<td>11%</td>
</tr>
<tr>
<td>40-49</td>
<td>13%</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>50-59</td>
<td>20%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>60-69</td>
<td>16%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>70-79</td>
<td>8%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>80-89</td>
<td>4%</td>
<td>7%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>90+</td>
<td>&lt;1%</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

Median age: 49 years old

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 7/22/20
**Syndromic Surveillance**

What we can learn from emergency room and urgent care centers?
The percent of emergent care visits for COVID-19-like illness remains steady.
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 Source of Exposure

This section focuses on how people with COVID-19 may have been exposed to the virus.
What is source of exposure?

Source of exposure is how someone may have gotten COVID-19. We learn this by interviewing the person who tests positive for COVID-19. Types of exposures fall into these categories:

**Household**: having direct contact with someone with COVID-19 at your home or place of residence.

**Healthcare worker**: being a healthcare worker and working with patients known to have COVID-19.

**Community contact**: having direct exposure to someone in your community known to have COVID-19.

What does it mean if the source of exposure is unknown?

Unknown source of exposure is when we are unable to determine how someone became infected with COVID-19. This happens when no epidemiologic link to a confirmed COVID-19 case is established. When many cases have an unknown source of exposure, a community may be dealing with widespread community transmission.

Please note: In 11% of Vermont’s cases, we do not have information on whether the source of exposure is known or unknown, and they are not included in these analyses. For example, when the person cannot be reached.

The majority of Vermont’s COVID-19 cases have a known source of exposure.

- **69%** Known
- **31%** Unknown
The percent of COVID-19 cases with a **known** source has increased since March, while the percent of COVID-19 cases with an **unknown** source of exposure has decreased since March.

The percent of cases with an unknown source of exposure may indicate the level of spread within a community.
There are 846 COVID-19 cases with a known source of exposure.*

405 were part of an outbreak.

128 had community contact with a case.

304 had household contact with a case.

68 had healthcare contact with a case.

Number of COVID-19 Cases with a Known Source of Exposure by Age Group

*Data are not mutually exclusive. Someone with COVID-19 may have multiple sources of exposure.
There are **380 COVID-19 cases with an unknown source of exposure.**

Most cases with an unknown source of exposure are in counties that have the most number of cases.

**Number of COVID-19 Cases with an Unknown Source of Exposure by Age Group**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 9</td>
<td>1</td>
</tr>
<tr>
<td>10 to 19</td>
<td>12</td>
</tr>
<tr>
<td>20 to 29</td>
<td>54</td>
</tr>
<tr>
<td>30 to 39</td>
<td>51</td>
</tr>
<tr>
<td>40 to 49</td>
<td>59</td>
</tr>
<tr>
<td>50 to 59</td>
<td>75</td>
</tr>
<tr>
<td>60 to 69</td>
<td>64</td>
</tr>
<tr>
<td>70 to 79</td>
<td>37</td>
</tr>
<tr>
<td>80+</td>
<td>27</td>
</tr>
</tbody>
</table>
Learn more about COVID-19 in Vermont:

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