Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – October 7, 2020

Date published: October 9, 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 September 30 through October 7.

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.

**Please Note:** On October 1, the denominators used to calculate rates by race and ethnicity were switched over from 2018 American Community Survey estimates to 2019 Vermont Department of Health estimates based on Census data. This change was made to be more consistent with how the Health Department typically calculates rates. The relatively large change in rates for some racial groups in the October 2, 2020 Weekly Summary is due to this change in methodology.
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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: 1,838

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=1,830)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=863, roughly 47% 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.

Testing volume increased greatly at the end of August in preparation for the return of college students.

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.

*Not a stable estimate due to small numbers. There were 8 total tests and 1 was positive.
The proportion of people tested for COVID-19 in Vermont varies across age groups.

More females are tested than males for COVID-19.

56% of people tested for COVID-19 are female.

44% of people tested for COVID-19 are male.
White Vermonters represent the majority of people tested in Vermont for COVID-19. Vermonters with other race have the highest rate of testing.

Rates per 100 Vermonters

Non-Hispanic Vermonters represent the majority of people tested in Vermont for COVID-19. Hispanic Vermonters have the higher rate of testing.

Rates per 100 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.

Vermont Department of Health
Contact tracers speak with both **confirmed cases** and their **close contacts** each week.

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Tracers Trained</th>
<th>Cases Interviewed Last Week</th>
<th>Contacts Named Last Week</th>
<th>Average Number of Contacts Per Case*</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 27 – October 3</td>
<td>65</td>
<td>37</td>
<td>138</td>
<td>4 (Since March 7)</td>
</tr>
</tbody>
</table>

*Since March 7
In the last two weeks (from September 20 to October 3):

- 98% of cases were interviewed within 24 hours
- 78% of cases provided their close contacts
- 48% of contacts were tested within 14 days of exposure
- 4% of contacts became a case
Case Demographics

Who has been impacted by COVID-19 in Vermont?
Rates of COVID-19 are highest among Vermonters 20-29 and 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

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. Race is unknown in 4% of cases (n = 66) and ethnicity is unknown in 8% of cases (n = 152).
* Value suppressed due to small numbers.
Approximately 52% of people* with COVID-19 have a pre-existing condition.

* of the 1,473 people that the Health Department has pre-existing condition data for.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>149</td>
<td>10%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>198</td>
<td>13%</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>11</td>
<td>1%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>37</td>
<td>3%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>275</td>
<td>19%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>121</td>
<td>8%</td>
</tr>
<tr>
<td>Immunocompromised Condition</td>
<td>55</td>
<td>4%</td>
</tr>
<tr>
<td>Neurologic Condition/Intellectual Disability</td>
<td>39</td>
<td>3%</td>
</tr>
<tr>
<td>Other Chronic Condition**</td>
<td>342</td>
<td>23%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>15</td>
<td>1%</td>
</tr>
</tbody>
</table>

43% 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 80% (1,473) of 1,838 total COVID-19 cases.
Prevalence of select conditions in COVID-19 patients and Vermont adults.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cardiovascular Disease</th>
<th>Diabetes Mellitus</th>
<th>Chronic Lung Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Disease</td>
<td>10%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>8%</td>
<td>9%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Likelihood of having a pre-existing condition 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.
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.

31% of health care workers with COVID-19 are associated with an outbreak.

1 in 7 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
Most health care workers with COVID-19 are not hospitalized.

There are no reported deaths among health care workers.

* Value suppressed due to small numbers.

Most health care workers with COVID-19 have symptoms.

Sign or Symptom among Health Care Workers with COVID-19 | Percent of Symptomatic Cases
---|---
Cough | 71%
Fatigue | 65%
Headache | 62%
Loss of Smell or Taste | 52%
Muscle Pain | 50%
Runny nose | 47%
Chills | 43%
Fever | 40%

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

Vermont Department of Health
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>67%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>67%</td>
</tr>
<tr>
<td>Headache</td>
<td>55%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>50%</td>
</tr>
<tr>
<td>Felt Feverish</td>
<td>48%</td>
</tr>
<tr>
<td>Loss of Smell/Test</td>
<td>47%</td>
</tr>
<tr>
<td>Fever</td>
<td>45%</td>
</tr>
</tbody>
</table>

12 days
Average illness duration

69%
Cases with symptoms
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.

Rate per 10,000 Vermonters

- Of those hospitalized were on a ventilator: 15%
- Of those hospitalized were in the ICU: 35%
- Average hospital stay (range: 0-43 days): 9 days

Please note 5 hospitalized persons are missing race information. *Values suppressed due to small numbers.
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 collection date 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.

Resolved when no new COVID-19 positive tests or people with COVID-like illness occur after 28 days from the last positive test or illness start date (whichever is later).

### Educational Settings
2 or more COVID-19 cases among children/students or teachers/staff with known connections in the educational setting, and the cases:
- have an illness start date or a positive test collection date within 14 days, and
- do not live together or have close contact with each other in another setting, and
- there is no other more likely source of exposure.

Resolved when no new COVID-19 positive tests or people with COVID-like illness occur after 28 days from the last known exposure to the school.

### Congregate Care or Living Settings*
One resident or staff member with COVID-19, and one or more residents or staff with respiratory illness who have had contact with each other.

or

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

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

Resolved when no new COVID-19 positive tests occur after 28 days from the last positive test or illness start date (whichever is later).

### Workplaces
2 or more COVID-19 cases among employees at the same workplace, and the cases:
- had contact with each other in the workplace, and
- an illness start or positive test collection date within 14 days, and
- do not live together or have close contact with each other in another setting, and
- there is no other more likely source of exposure.

Resolved when no new COVID-19 positive tests or people with COVID-like illness occur after 28 days from the last known exposure to the workplace.
27% of people testing positive for COVID-19 are associated with an outbreak

Outbreaks
6 Active
27 Resolved*

*See previous page for definitions of resolved outbreaks.

Congregate Care & Living
- 160 cases among residents
- 84 cases among facility staff

Schools and Child Care
- 7 cases among children and staff

Workplace
- 77 cases among employees

Community
- 175 cases

Source: Vermont Department of Health
Reflects confirmed data as of 10/07/2020.
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 71 days.

Source: Vermont Department of Health
Reflects confirmed data as of 10/07/2020.
While only 27% of all people testing positive for COVID-19 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 10/07/2020.

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 percentages of **females** and **males** with COVID-19 that are associated with an outbreak is about even.

- **25%** of females with COVID-19 are associated with an outbreak.
- **29%** of males with COVID-19 are associated with an outbreak.

But in **outbreak settings**, **males** with COVID-19 are more likely to be associated with non-health settings than 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 10/07/20
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.
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.
Weekly Spotlight: Percent Positivity

This section focuses on percent positivity, a metric used to determine the current transmission levels of COVID-19 in the community.
What is percent positivity and what can it tell us about COVID-19?

• Percent Positivity is a metric that helps public health officials determine the current transmission levels of COVID-19 in the community.

• There are two common ways to calculate percent positivity:

\[
\text{Percent Positivity of People} = \frac{\text{Number of new positive individuals daily}}{\text{Number of individuals tested}}
\]

\[
\text{Percent Positivity of Tests} = \frac{\text{Number of positive tests daily}}{\text{Number of specimens tested}}
\]

• What is the difference? The percent positivity of people reflects only the number of individuals who are tested, even though they may be tested more than once.

• The Health Department currently reports on the Percent Positivity of People. The percent positivity of people only includes PCR testing. It does not include antigen or serology testing.
Vermont’s percent positivity has remained low since May. It has not surpassed Vermont’s 5% **threshold of concern** since late April.

As prevalence is low and testing volume is high, percent positivity by people has been slightly higher than percent positivity by tests.

High percent positivity in March due to small testing numbers.
Vermont’s percent positivity of people, and percent positivity of tests, has remained one of the lowest in the United States since May.
Learn more about COVID-19 in Vermont:

Web: www.healthvermont.gov/COVID-19
Email: AHS.VDHPublicCommunication@vermont.gov
See more data: Weekly Data Summaries