Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – September 30, 2020

Date published: October 2, 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 23 through September 30.

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.
COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.
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=1,747)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=837, roughly 48% 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.

*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.
While the majority of people tested in Vermont for COVID-19 are white, the rates are similar across racial groups.

Rates per 100 Vermonters

While the majority of people tested in Vermont for COVID-19 are non-Hispanic, the rates are nearly the same across ethnic groups.

Rates per 100 Vermonters
Contact tracers speak with both confirmed cases and their close contacts each week.

Number of contact tracers trained: 65

Cases interviewed last week: 27

Contacts named last week: 91

Average number of contacts per case*: 3

*Since March 7
In the last two weeks (from September 13 to September 26):

- 100% Of cases were interviewed within 24 hours
- 90% Of cases provided their close contacts
- 51% Of contacts were tested within 14 days of exposure
- 6% 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

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>21.4</td>
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<td>20-29</td>
<td>37.5</td>
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<td>30-39</td>
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<td>50-59</td>
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<td>60-69</td>
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<tr>
<td>70-79</td>
<td>26.4</td>
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<tr>
<td>≥80</td>
<td>39.8</td>
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</tbody>
</table>

Females and males have similar rates of COVID-19.

Rate per 10,000 Vermonters

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<td>28.1</td>
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<td>10-19</td>
<td>21.8</td>
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<td>20-29</td>
<td>42.9</td>
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<td>30-39</td>
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<td>33.9</td>
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<tr>
<td>40-49</td>
<td>27.8</td>
<td>26.5</td>
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<tr>
<td>50-59</td>
<td>33.2</td>
<td>29.8</td>
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</table>

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

<table>
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<th>Males</th>
</tr>
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<tbody>
<tr>
<td>0-9</td>
<td>12.2</td>
<td>8.9</td>
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White Vermonters represent the majority of COVID-19 cases. African American Vermonters have the highest rate.

Rate per 10,000 Vermonters

- White: 80.8%
- Black or African American: 9.9%
- American Indian or Alaskan Native: *%
- Asian: 3.8%
- Other Race: *

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

Rate per 10,000 Vermonters

- Non-Hispanic: 89.1%
- Hispanic: 3.4%
- Other Race: *

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 3% of cases (n = 57) and ethnicity is unknown in 8% of cases (n = 133). * Value suppressed due to small numbers.
Approximately 52% of people* with COVID-19 have a pre-existing condition.

* of the 1,430 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>148</td>
<td>10%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>192</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>36</td>
<td>3%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>286</td>
<td>20%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>120</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>336</td>
<td>23%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>14</td>
<td>1%</td>
</tr>
</tbody>
</table>

44% 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 81% (1,430) of 1,755 total COVID-19 cases.
Prevalence of select conditions in **COVID-19 patients** and Vermont **adults**.

- Cardiovascular Disease: 10%, 8%
- Diabetes Mellitus: 8%, 9%
- Chronic Lung Disease: 13%, 16%


**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.

Vermont Department of Health
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 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.

Vermont Department of Health

* Value suppressed due to small numbers.
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 | 71%
Fatigue | 64%
Headache | 62%
Loss of Smell or Taste | 52%
Muscle Pain | 50%
Runny nose | 46%
Chills | 43%
Fever | 41%

* Value suppressed due to small numbers.
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

12 days
Average illness duration

72%
Cases with symptoms

### Clinical Course

<table>
<thead>
<tr>
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<th>Percent of Symptomatic Cases</th>
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</thead>
<tbody>
<tr>
<td>Cough</td>
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</tr>
<tr>
<td>Fatigue</td>
<td>65%</td>
</tr>
<tr>
<td>Headache</td>
<td>54%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>50%</td>
</tr>
<tr>
<td>Felt Feverish</td>
<td>47%</td>
</tr>
<tr>
<td>Loss of Smell/Test</td>
<td>46%</td>
</tr>
<tr>
<td>Fever</td>
<td>44%</td>
</tr>
</tbody>
</table>

Note: Date of symptom onset is not always known.
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

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

![Bar chart showing age distribution of COVID-19 deaths]

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

![Bar chart showing gender distribution of COVID-19 deaths]

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

![Pie chart showing location of COVID-19 deaths]

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

![Pie chart showing race distribution of COVID-19 deaths]

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.

**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.

**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.

**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.
26% of COVID-19 cases are associated with an outbreak

**Outbreaks**

- **3 Active**
- **26 Resolved***

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

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

**Schools and Child Care**
- **7** cases among children and staff

**Workplace**
- **43** cases among employees

**Community**
- **166** cases
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 **64 days**.

Source: Vermont Department of Health
While only 26% 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.

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.

27% 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.

Source: Vermont Department of Health
Reflects case counts as of 9/30/20

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.
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Syndromic Surveillance

What we can learn from emergency room and urgent care centers?
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.

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.
Weekly Spotlight: Syndromic Surveillance

What can visits to emergency rooms and urgent care centers tell us about COVID-19 in Vermont?
What is syndromic surveillance data and what can it tell us about COVID-19?

• **Syndromic surveillance** is used to identify potential COVID-19 clusters or spikes in the community early on.

• It means collecting near real-time data from emergency departments and urgent care centers.

• For COVID-19, we look at the percent of emergency care visits where the patient’s chief complaint is COVID-19-like symptoms or if a patient’s discharge diagnosis includes coronavirus.

• Syndromic data represents visits, not people. For example, if someone visited an emergency department three times, they would be represented in the data through three unique visits.

• As we enter flu season, it is important to look at visits for COVID-19-like illness and influenza-like-illness together, because the symptoms for flu and COVID-19 are similar. For more information on seasonal flu trends, see our [Flu Activity and Surveillance web page](https://www.flu.gov/).
In March, there was a significant increase in visits for COVID-like illness, leading to a spike in COVID-19 cases. This helps confirm that syndromic surveillance data can be an early indicator for COVID-19 transmission in Vermont.
Who is visiting emergency departments and urgent care centers for COVID-19-like illness?

Rates for COVID-like illness visits are higher for females compared to males.
Rates per 10,000 ED/Urgent Care Visits for Females and Males

Rates for COVID-like illness visits are higher for children age 9 and under, but represent a small fraction of visits.
Rates per 10,000 ED/ Urgent Care Visits by age group.

Rates for COVID-like illness are similar for white non-Hispanic and Black, Indigenous and people of color (BIPOC).
Rates per 10,000 ED/Urgent Care Visits for White non-Hispanic and BIPOC.

Why are the rates so high for children age 9 and under?
Young children who go to the hospital represent about 6% of all emergency department and urgent care visits. The symptoms of COVID-like illness are common among all of us, particularly young children. Parents may be more likely to seek urgent care for young children than they would be for their older children or themselves.
What else do we know about our visits for CLI?

2:00 pm

Average time people are visiting the ED and urgent care for CLI

Fever was mentioned in approximately 63% of CLI visits.

Cough was mentioned in approximately 58% of CLI visits.

Rutland Regional, Southwestern Medical, and University of Vermont Medical Center have seen the greatest number of CLI visits.
Learn more about COVID-19 in Vermont:

Web:  www.healthvermont.gov/COVID-19

Email:  AHS.VDHPublicCommunication@vermont.gov