Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between March 5 – December 16, 2020

Date published: December 18, 2020. This summary will be updated every Friday.
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 December 9 through December 16.

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. For information on cases in schools, see [COVID-19 Cases in Vermont K-12 Learning Communities While Infectious](#).

**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.
- As of December 4, 2020 the Weekly Summary includes both probable and confirmed cases of COVID-19.
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COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.
Total Number of **Confirmed** and **Probable** Cases in Vermont: 6,149
Most counties continue to see new cases.
Growth over time by county (n=5,405)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=1,898, roughly 35% 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 increase in percent positive is a combination of increased number of people testing positive, as well as a change in how UVM is reporting results due to their network issues.

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

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

- White: 91.6%
- American Indian or Alaskan Native: 0.4%
- Asian: 2.2%
- Black or African American: 2.0%
- Other Race: 3.9%

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

- Non-Hispanic: 98%
- Hispanic: 2%

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.
Contact tracers speak with both cases and their close contacts each week.

Number of contact tracers trained: 65
Cases interviewed last week: 584
Contacts named last week: 854
Average number of contacts per case*: 3.1

The number of confirmed cases may not match the number of cases interviewed. There is not always clean overlap between the week in which a case is confirmed and in which that case is interviewed (i.e., a case confirmed on Saturday afternoon may not be interviewed until Sunday morning).
In the last two weeks (from November 29 to December 12):

- 82% of cases were interviewed within 24 hours.
- 77% of cases provided their close contacts.
- 43% of contacts were tested within 14 days of exposure.
- 13% 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>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>46.6</td>
<td>48.5</td>
</tr>
<tr>
<td>10-19</td>
<td>90.2</td>
<td>91.4</td>
</tr>
<tr>
<td>20-29</td>
<td>141.1</td>
<td>130.4</td>
</tr>
<tr>
<td>30-39</td>
<td>109.8</td>
<td>112.6</td>
</tr>
<tr>
<td>40-49</td>
<td>103.1</td>
<td>112.4</td>
</tr>
<tr>
<td>50-59</td>
<td>101.7</td>
<td>105.4</td>
</tr>
<tr>
<td>60-69</td>
<td>81.7</td>
<td>92.6</td>
</tr>
<tr>
<td>70-79</td>
<td>83.4</td>
<td>98.0</td>
</tr>
<tr>
<td>80+</td>
<td>130.1</td>
<td>104.0</td>
</tr>
</tbody>
</table>

Females and males have similar rates of COVID-19.

Rate per 10,000 Vermonters

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>100.1</td>
<td>100.1</td>
</tr>
<tr>
<td>10-19</td>
<td>94.3</td>
<td>94.3</td>
</tr>
</tbody>
</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>
<thead>
<tr>
<th>Age in Years</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>48.5</td>
<td>44.8</td>
</tr>
<tr>
<td>10-19</td>
<td>91.4</td>
<td>88.0</td>
</tr>
<tr>
<td>20-29</td>
<td>150.7</td>
<td>130.4</td>
</tr>
<tr>
<td>30-39</td>
<td>112.4</td>
<td>112.6</td>
</tr>
<tr>
<td>40-49</td>
<td>105.4</td>
<td>92.6</td>
</tr>
<tr>
<td>50-59</td>
<td>112.6</td>
<td>98.0</td>
</tr>
<tr>
<td>60-69</td>
<td>104.0</td>
<td>77.3</td>
</tr>
<tr>
<td>70-79</td>
<td>135.8</td>
<td>84.0</td>
</tr>
<tr>
<td>80+</td>
<td>108.2</td>
<td>84.6</td>
</tr>
</tbody>
</table>
White Vermonters represent the majority of COVID-19 cases. African American Vermonters have the highest rate.

Rate per 10,000 Vermonters

- White: 80.1%
- Black or African American: 4.8%
- Asian: 4.7%
- Other Race: 1.6%
- American Indian or Alaskan Native: 0.1%

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

Rate per 10,000 Vermonters

- Hispanic: 2.2%
- Non-Hispanic: 88.4%

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 9% of cases (n = 532) and ethnicity is unknown in 16% of cases (n = 964).

* Value suppressed due to small numbers.
Approximately 40% of people* with COVID-19 have a pre-existing condition.

*of the 4,908 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>Other Chronic Condition**</td>
<td>649</td>
<td>13%</td>
</tr>
<tr>
<td>Current/Former Smoker</td>
<td>562</td>
<td>11%</td>
</tr>
<tr>
<td>Chronic Lung Disease (includes asthma and COPD)</td>
<td>533</td>
<td>11%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>301</td>
<td>6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>289</td>
<td>6%</td>
</tr>
<tr>
<td>Immunocompromised Condition</td>
<td>77</td>
<td>2%</td>
</tr>
<tr>
<td>Neurologic Condition/Intellectual Disability</td>
<td>118</td>
<td>2%</td>
</tr>
<tr>
<td>Pregnant</td>
<td>33</td>
<td>1%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>60</td>
<td>1%</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>18</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

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

32% of people with a pre-existing condition have two or more conditions.

The Health Department has information about pre-existing conditions in 80% (4,908) of 6,149 total COVID-19 cases.
Prevalence of select conditions in COVID-19 adult patients and Vermont adults.


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

Likelihood of having a pre-existing condition is greater among female compared to male COVID-19 patients.

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

- 1 in 8 Vermonters with COVID-19 are health care workers.

- Health care worker cases peaked on December 2.

- 78% of health care workers with COVID-19 are female.

- 34% of health care workers with COVID-19 are associated with an outbreak.

- Health care workers with COVID-19 tend to be younger than non-health care workers with COVID-19.

The Health Department has information about healthcare worker status in 87% (5,368) of 6,149 total COVID-19 cases.
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>63%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>62%</td>
</tr>
<tr>
<td>Headache</td>
<td>59%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>50%</td>
</tr>
<tr>
<td>Runny Nose</td>
<td>50%</td>
</tr>
<tr>
<td>Loss of Smell or Taste</td>
<td>46%</td>
</tr>
<tr>
<td>Chills</td>
<td>36%</td>
</tr>
<tr>
<td>Fever</td>
<td>29%</td>
</tr>
</tbody>
</table>

* Value suppressed due to small numbers.
Children represent 16% of Vermont’s cases.

30% of children with COVID-19 are 18 or 19 years old.

An outbreak was identified around this time.

Our highest daily number of all cases to date.

New and Cumulative Cases of Vermont Children (Age 19 and Younger) with COVID-19
Older children have a higher rate of COVID-19 compared to younger children.
Rate per 10,000 Vermonters 0-19 years old

- 0 to 9 years: 46.6
- 10 to 19 years: 90.2

Female and male children have similar rates of COVID-19.
Rate per 10,000 Vermonters 0 to 19 years old

- Female: 72.4
- Male: 68.7

Among children with COVID-19, Black, Indigenous and people of color represent 19% of cases.

- White: 78%
- Black or African American: 12%
- Other Race: 3%
- Asian: 8%

Among children with COVID-19, Black or African Americans have the highest rate.
Rate per 10,000 Vermonters 0 to 19 years

- Black or African American: 367.0
- Asian: 229.2
- White: 56.2
- Other Race: 45.6
### Symptoms and How Children Contract COVID-19

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Percent of Children with Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runny nose</td>
<td>51%</td>
</tr>
<tr>
<td>Headache</td>
<td>47%</td>
</tr>
<tr>
<td>Cough</td>
<td>41%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>40%</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>36%</td>
</tr>
<tr>
<td>Loss of smell or taste</td>
<td>29%</td>
</tr>
<tr>
<td>Muscle pain</td>
<td>26%</td>
</tr>
<tr>
<td>Fever</td>
<td>21%</td>
</tr>
</tbody>
</table>

#### Average illness duration among children

**5 days**

Among Vermont’s children with COVID-19, there are currently no reported cases of multi-system inflammatory syndrome or deaths, and there are fewer than six hospitalizations.

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#### Case Demographics

The percent of COVID-19 cases with no symptoms is higher among children. Less than half (33%) of cases among children had no symptoms reported.

![Case Demographics Chart](chart.png)

- **Asymptomatic**
- **Symptomatic**
- **Unknown**

**68% of children with COVID-19 had known contact with somebody else who had COVID-19.**

**19% of children with COVID-19 were part of an outbreak.**
The number of children tested for COVID-19 and the number of children who tested positive have increased over time.

This large increase in number of children tested is driven by testing of college students (ages 18 and 19).

Total tests represents the total number of children tested. Please note that <1% individuals tested are missing age. They are excluded from these analyses.

40,315 children have been tested for COVID-19.

Percent of tests positive among children is similar to adults.

Children: 2.3%
Adults: 2.5%

Percent of tests positive among younger children is similar to older children.

0-9 years: 2.1%
10-19 years: 2.4%
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

<table>
<thead>
<tr>
<th>Sign or Symptom</th>
<th>Percent of Symptomatic Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatigue</td>
<td>59%</td>
</tr>
<tr>
<td>Cough</td>
<td>58%</td>
</tr>
<tr>
<td>Headache</td>
<td>53%</td>
</tr>
<tr>
<td>Runny Nose</td>
<td>47%</td>
</tr>
<tr>
<td>Muscle Pain</td>
<td>46%</td>
</tr>
<tr>
<td>Loss of Smell/Taste</td>
<td>41%</td>
</tr>
<tr>
<td>Felt Feverish</td>
<td>38%</td>
</tr>
<tr>
<td>Sore Throat</td>
<td>36%</td>
</tr>
</tbody>
</table>

Note: Date of symptom onset is not always known.

10 days
Average illness duration

71%
Cases with symptoms
Most Vermonters with COVID-19 are **not hospitalized**.

Not hospitalized = 5190

Hospitalized = 243

Unknown = 716

9% Of those hospitalized were on a ventilator

30% Of those hospitalized were in the ICU

**7 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.

Please note 10 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

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

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

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.
22% of people testing positive for COVID-19 are associated with an outbreak

Outbreaks
42 Active
57 Resolved*

*See previous page for definitions of resolved outbreaks.

Congregate Care & Living
452 cases among residents
238 cases among facility staff

Schools and Child Care
46 cases among children and staff

Workplace
130 cases among employees

Community
446 cases

Source: Vermont Department of Health
Reflects confirmed data as of 12/16/2020
The daily number of cases associated with an outbreak peaked on December 1. Outbreak-associated cases had previously peaked on April 9.

Source: Vermont Department of Health
Reflects confirmed data as of 12/9/2020
While only 22% of all **people testing positive** for COVID-19 are associated with an outbreak, 70% 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.

Source: Vermont Department of Health

Reflects confirmed data as of 12/16/2020
A similar percentage of females and males with COVID-19 are associated with outbreaks

- **22%** of females with COVID-19 are associated with an outbreak.
- **22%** of males with COVID-19 are associated with an outbreak.

**Females with COVID-19 are more likely to be associated with outbreaks in health settings than males.**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Health</th>
<th>Non-Health</th>
<th>Non-Outbreak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>13%</td>
<td>9%</td>
<td>78%</td>
</tr>
<tr>
<td>Non-Females</td>
<td>6%</td>
<td>15%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Values in these charts are rounded to the nearest whole number and therefore may not always add to 100%. Percentages by outbreak type are rounded to the whole number, but combined totals consider 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.

Source: Vermont Department of Health
Reflects case counts as of 12/16/2020
Percent of People Testing Positive for COVID-19 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

Age in Years

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Not Associated</th>
<th>Associated in Health Setting</th>
<th>Associated in Non-Health Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>5%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>10-19</td>
<td>12%</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td>20-29</td>
<td>20%</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>30-39</td>
<td>13%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>40-49</td>
<td>12%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>50-59</td>
<td>16%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>60-69</td>
<td>13%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>70-79</td>
<td>6%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>80-89</td>
<td>2%</td>
<td>11%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>90+</td>
<td>&lt;1%</td>
<td>6%</td>
<td>&lt;1%</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.

Source: Vermont Department of Health
Reflects case counts as of 12/16/2020
Syndromic Surveillance
What we can learn from emergency room and urgent care centers?
The percent of emergent care visits for **COVID-19-like illness** has increased slightly since late October.

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 by County

This section focuses on percent positivity, or percent of positive tests, by county. Percent positivity is a metric used to determine the current transmission levels of COVID-19 in the community.
Each county has a 2% or lower percent positivity since March.

Since October 1, percent positivity has increased in every county except Chittenden. Essex and Orange counties have the highest percent positivity since March and since October 1.

* Data as of 12/8.
Learn more about COVID-19 in Vermont:

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