Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between
March 5 – October 21, 2020

Date published: October 23, 2020. This summary will be updated every Friday.

VERMONT
DEPARTMENT OF HEALTH

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 October 14 through October 21.

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.
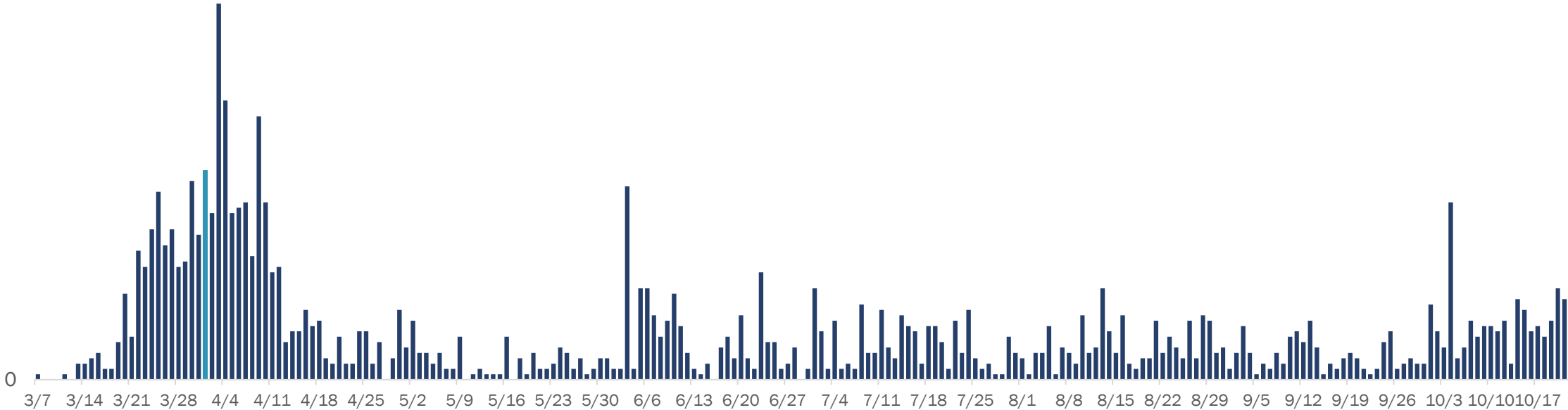
Table of Contents

Click on a box below to jump to that section

COVID-19 in Vermont

An overview of our number of cases and laboratory testing to date.

Total Number of Cases in Vermont: 1,987

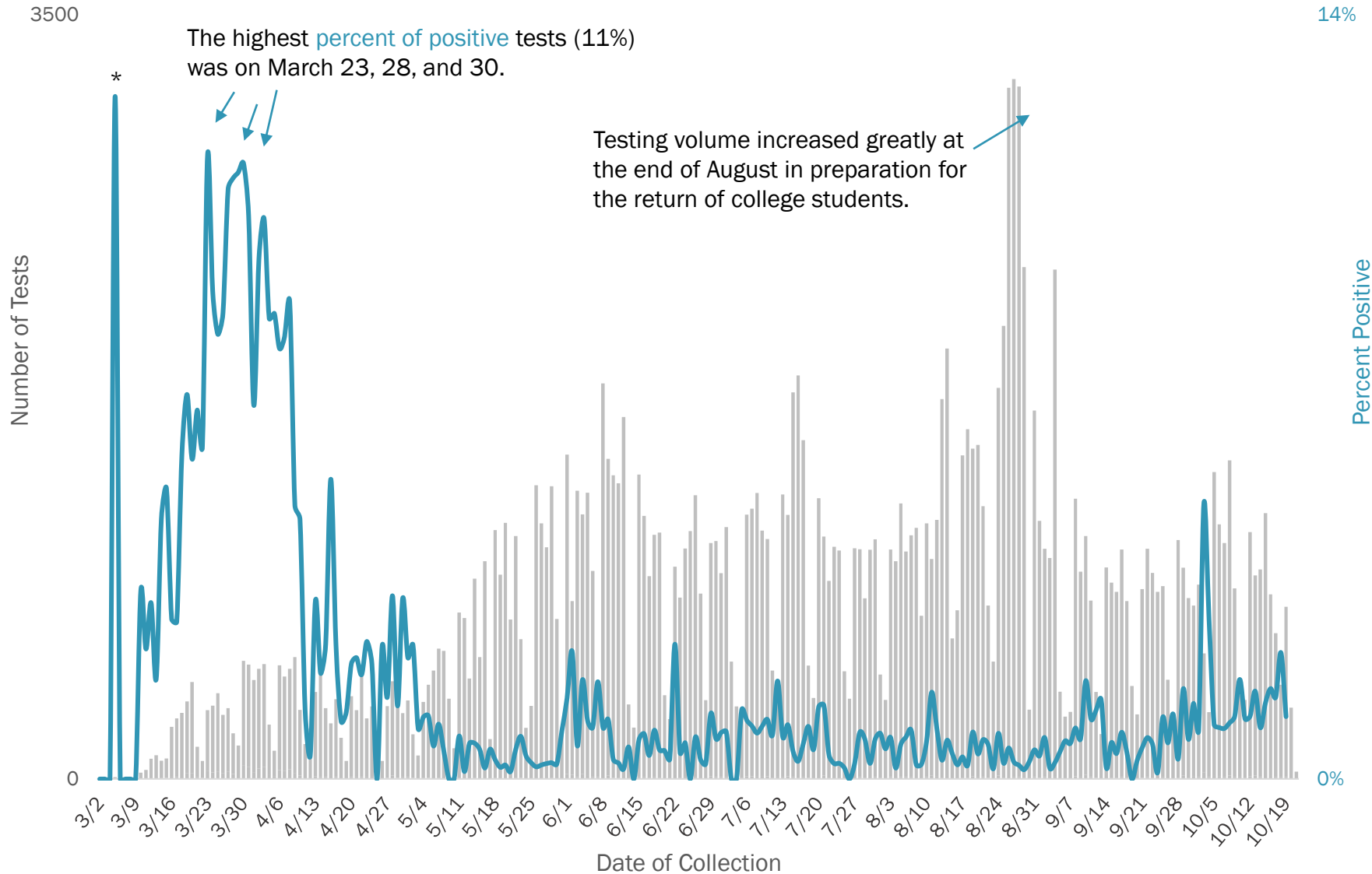**The daily number of COVID-19 cases in Vermont peaked on April 3.**

COVID-19 in Vermont

Most counties have reached a plateau in the number of new cases.

Growth over time by county (n=1,895)

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=921, roughly 46% 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.
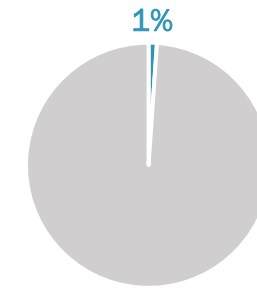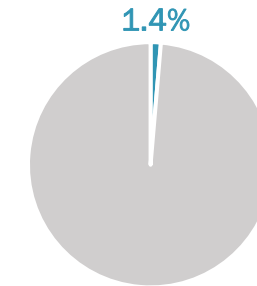
COVID-19 in Vermont
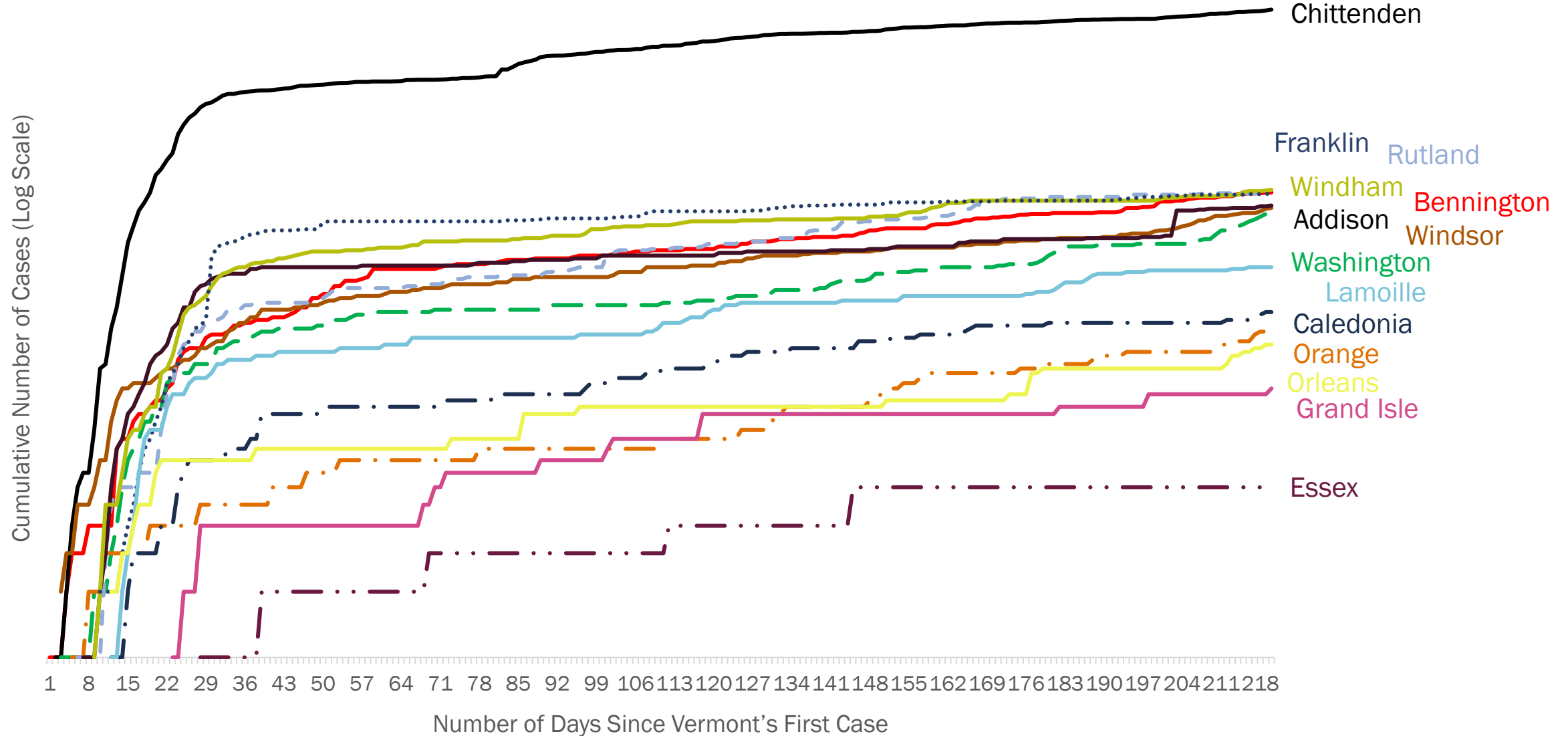
Percent of positive COVID-19 tests may indicate how prevalent the disease is in the population.

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.

Number of Tests

3500

0

Percent Positive

14%

0%

Date of Collection

3/2 3/9 3/16 3/23 3/30 4/6 4/13 4/20 4/27 5/4 5/11 5/18 5/25 6/1 6/8 6/15 6/22 6/29 7/6 7/13 7/20 7/27 8/3 8/10 8/17 8/24 8/31 9/7 9/14 9/21 9/28 10/5 10/12 10/19

Vermont Department of Health

*Not a stable estimate due to small numbers. There were 8 total tests and 1 was positive.

Percent Positive to Date

1%

Percent Positive This Week
(October 14 – October 21)

1.4%

7,936 People Tested this Week	32,536 Tests this Week
181,667 People Tested to Date	367,991 Tests to Date

COVID-19 in Vermont

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.

The proportion of people tested for COVID-19 in Vermont varies across age groups.

Bar chart showing percentage of people tested by age group:
- 0-9: 4%
- 10-19: 13%
- 20-29: 19%
- 30-39: 13%
- 40-49: 11%
- 50-59: 13%
- 60-69: 14%
- 70-79: 9%
- 80+: 4%

Age in Years
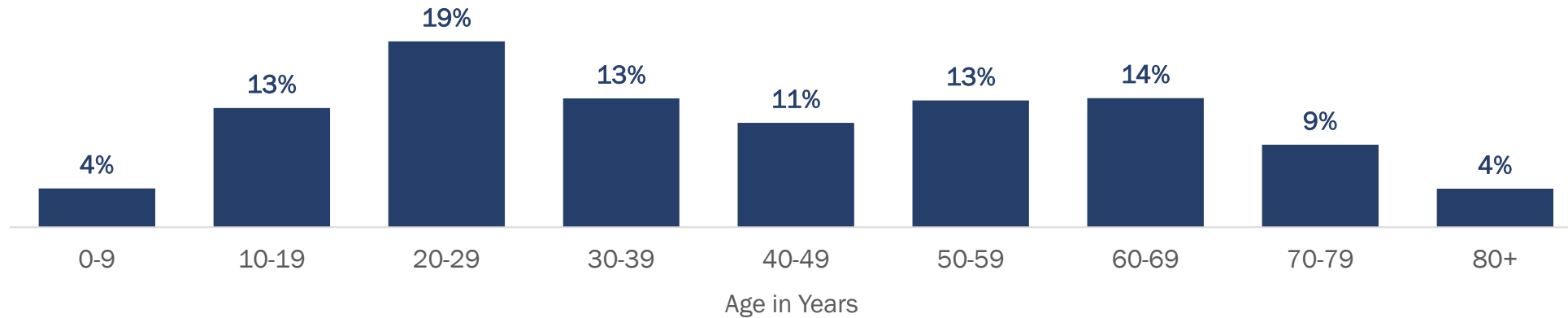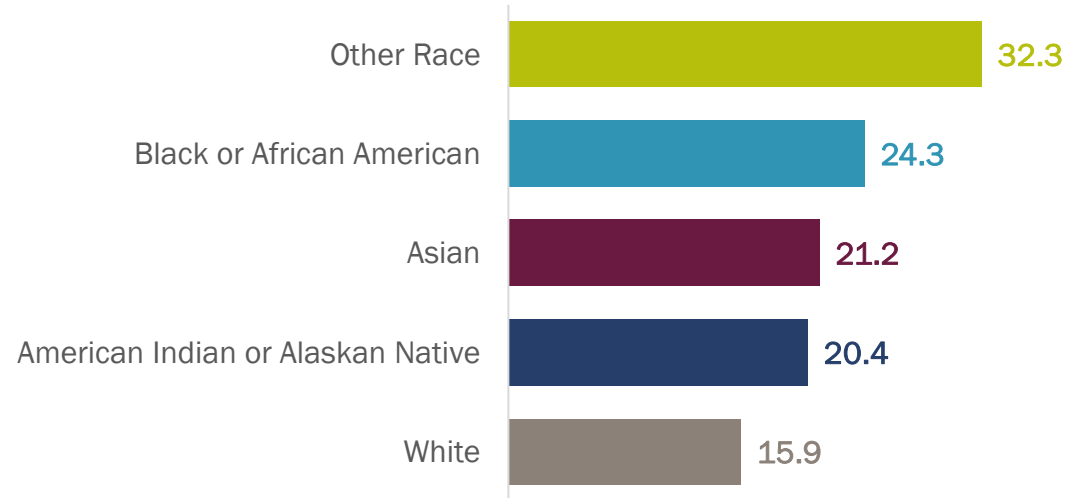
More females are tested than males for COVID-19.

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

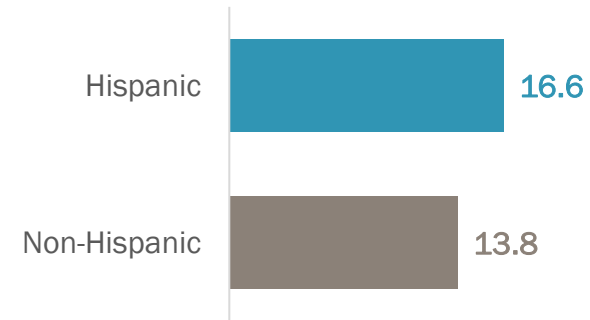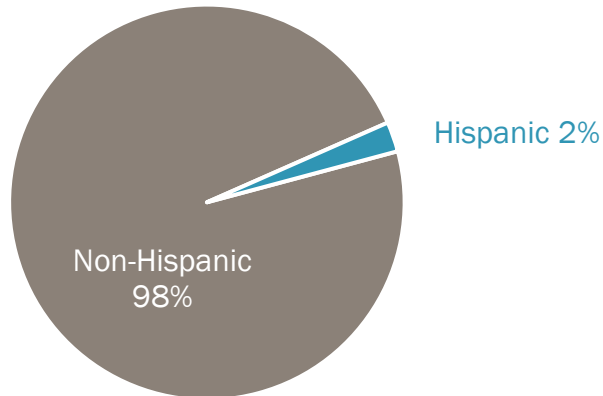**44%** of people tested for COVID-19 are male.

COVID-19 in Vermont

White Vermonters represent the majority of people tested in Vermont for COVID-19. Vermonters with **other race** have the highest rate of testing.
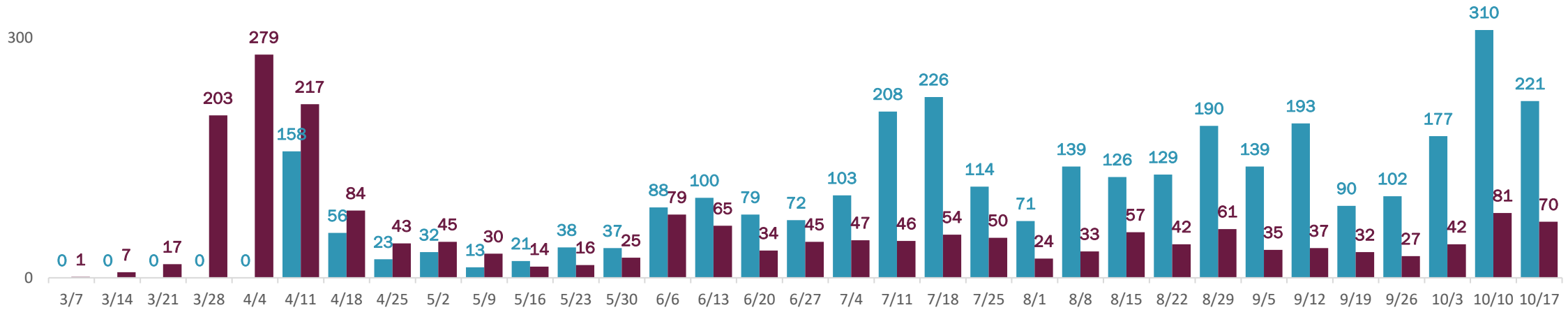
Rates per 100 Vermonters

American Indian or Alaskan Native 0%
Asian 2%
Black or African American 2%
Other Race 4%
White 91%

Other Race — 32.3
Black or African American — 24.3
Asian — 21.2
American Indian or Alaskan Native — 20.4
White — 15.9
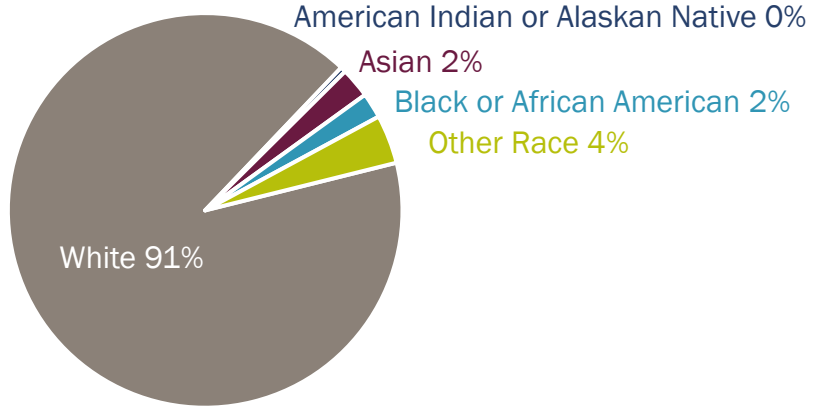
Non-Hispanic Vermonters represent the majority of people tested in Vermont for COVID-19. **Hispanic** Vermonters have the higher rate of testing.

Rates per 100 Vermonters

Hispanic 2%
Non-Hispanic 98%

Hispanic — 16.6
Non-Hispanic — 13.8

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.

COVID-19 in Vermont

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

65
Number of contact tracers trained

66
Cases interviewed last week

October 11 –October 17

221
Contacts named last week

October 11 –October 17

3
Average number of contacts per case*

*Since March 7

COVID-19 in Vermont

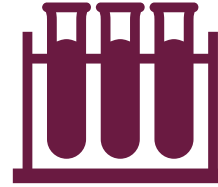# In the last two weeks (from October 4 to October 10):

81%
Of cases were interviewed within 24 hours

89%
Of cases provided their close contacts

54%
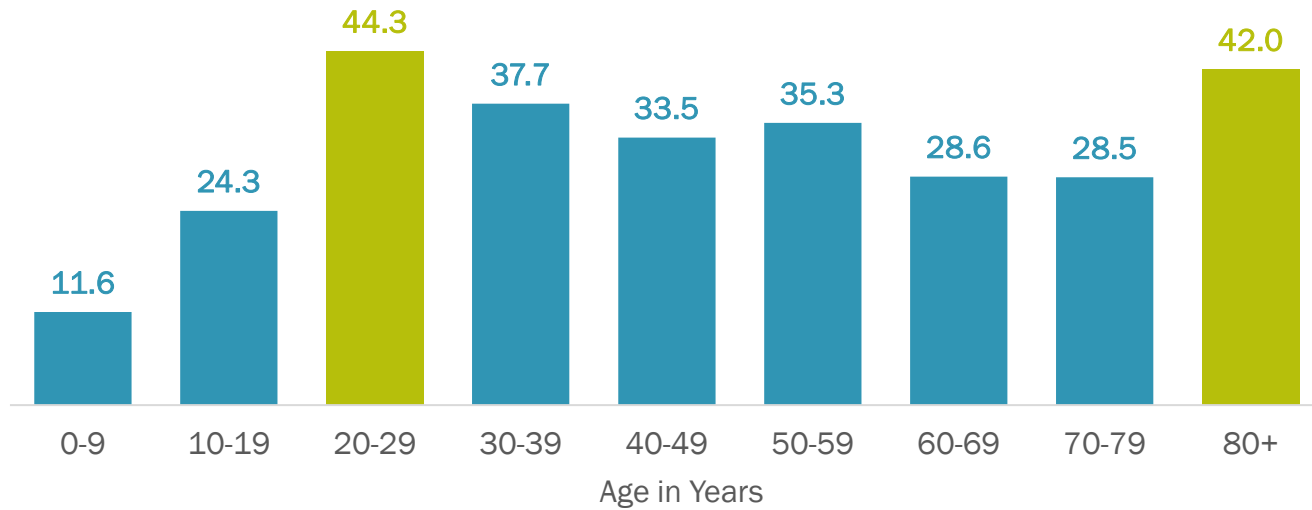Of contacts were tested within 14 days of exposure

11.1%
Of contacts became a case

COVID-19 in Vermont

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.
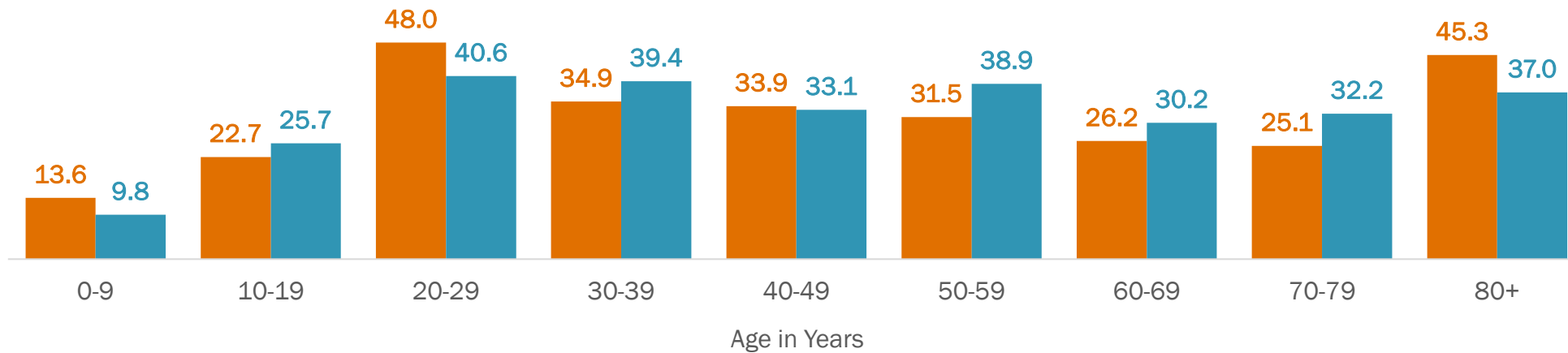
Rate per 10,000 Vermonters

11.6 — 0-9
24.3 — 10-19
44.3 — 20-29
37.7 — 30-39
33.5 — 40-49
35.3 — 50-59
28.6 — 60-69
28.5 — 70-79
42.0 — 80+

Age in Years

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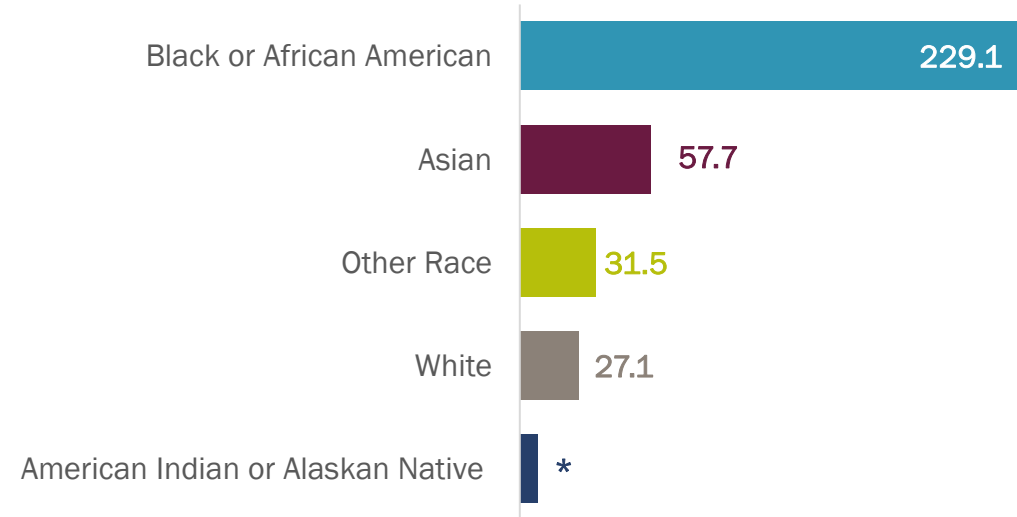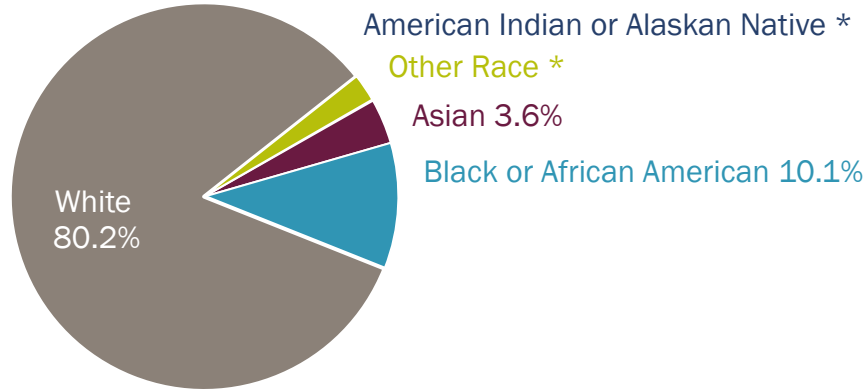
Rate per 10,000 Vermonters

31.0   32.1
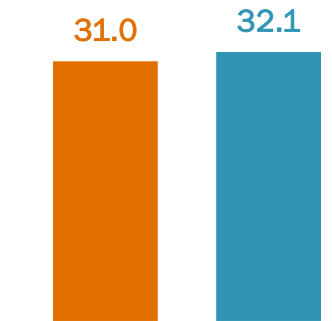
There are differences in age and sex of Vermonters with COVID-19.

Rates of COVID-19 by Age Group for Females and Males per 10,000 Vermonters

0-9: 13.6 / 9.8
10-19: 22.7 / 25.7
20-29: 48.0 / 40.6
30-39: 34.9 / 39.4
40-49: 33.9 / 33.1
50-59: 31.5 / 38.9
60-69: 26.2 / 30.2
70-79: 25.1 / 32.2
80+: 45.3 / 37.0

Age in Years

Vermont Department of Health

Case Demographics

White Vermonters represent the majority of COVID-19 cases. African American Vermonters have the highest rate.

Rate per 10,000 Vermonters

American Indian or Alaskan Native *

Other Race *

Asian 3.6%

Black or African American 10.1%

White
80.2%

	Rate per 10,000
Black or African American	229.1
Asian	57.7
Other Race	31.5
White	27.1
American Indian or Alaskan Native	*

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

Rate per 10,000 Vermonters
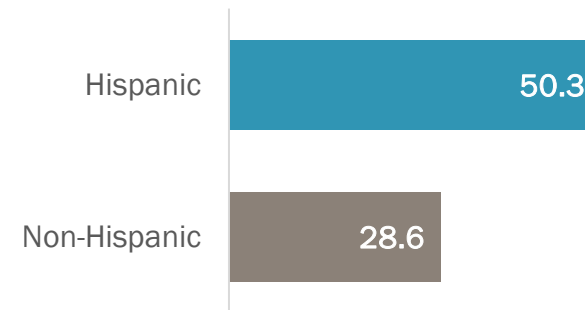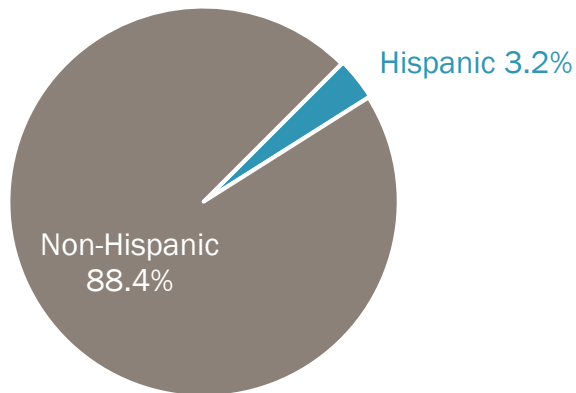
Hispanic 3.2%

Non-Hispanic
88.4%

	Rate per 10,000
Hispanic	50.3
Non-Hispanic	28.6

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 = 74) and ethnicity is unknown in 9% of cases (n = 176).
* Value suppressed due to small numbers.

Approximately 50% of people* with COVID-19 have a pre-existing condition.

*of the 1,637 people that the Health Department has pre-existing condition data for.

Condition	Count	Percentage
Heart Disease	157	10%
Chronic Lung Disease (includes asthma and COPD)	210	13%
Chronic Liver Disease	11	1%
Chronic Kidney Disease	38	2%
Current/Former Smoker	290	18%
Diabetes	122	7%
Immunocompromised Condition	56	3%
Neurologic Condition/Intellectual Disability	42	3%
Other Chronic Condition**	354	22%
Pregnant	15	1%

42% 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 82% (1,637) of 1,987 total COVID-19 cases.

Case Demographics

Prevalence of select conditions in COVID-19 patients and Vermont adults.
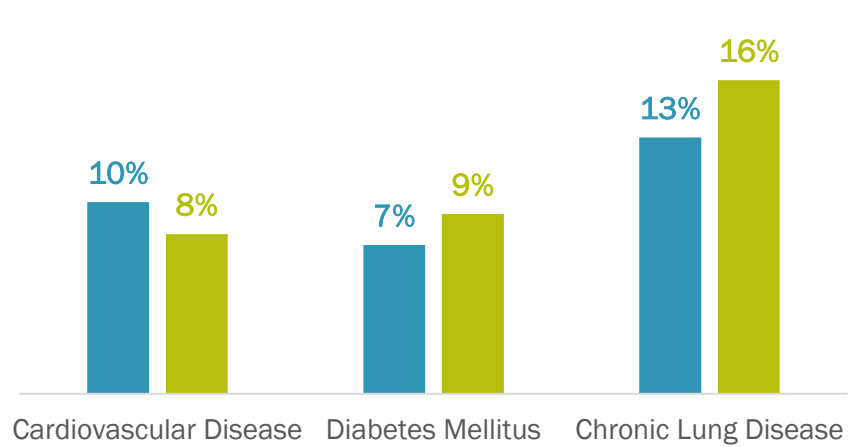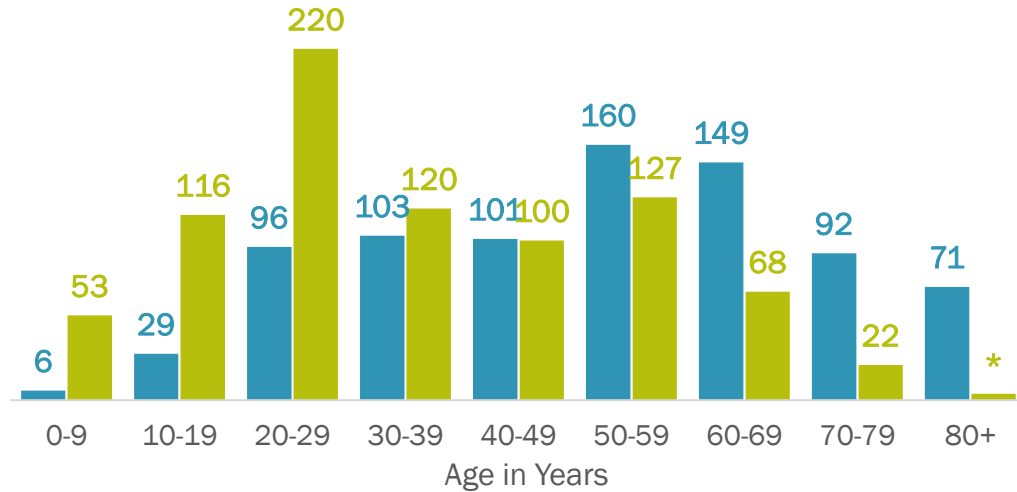

Data Source: Cardiovascular disease and diabetes, BRFSS 2018 annual report. Chronic lung disease, 3-4-50 Community profile (2016-2017 BRFSS).

Likelihood of having a pre-existing condition is approximately equal between female and male COVID-19 patients.
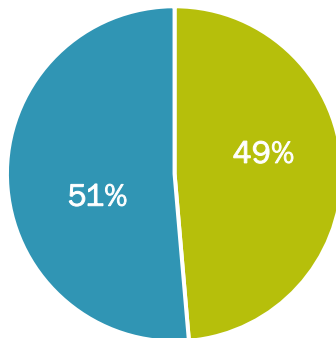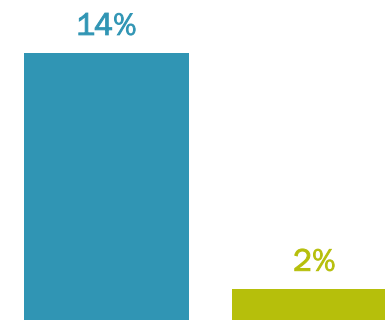

COVID-19 patients with pre-existing conditions tend to be older than those without pre-existing conditions.
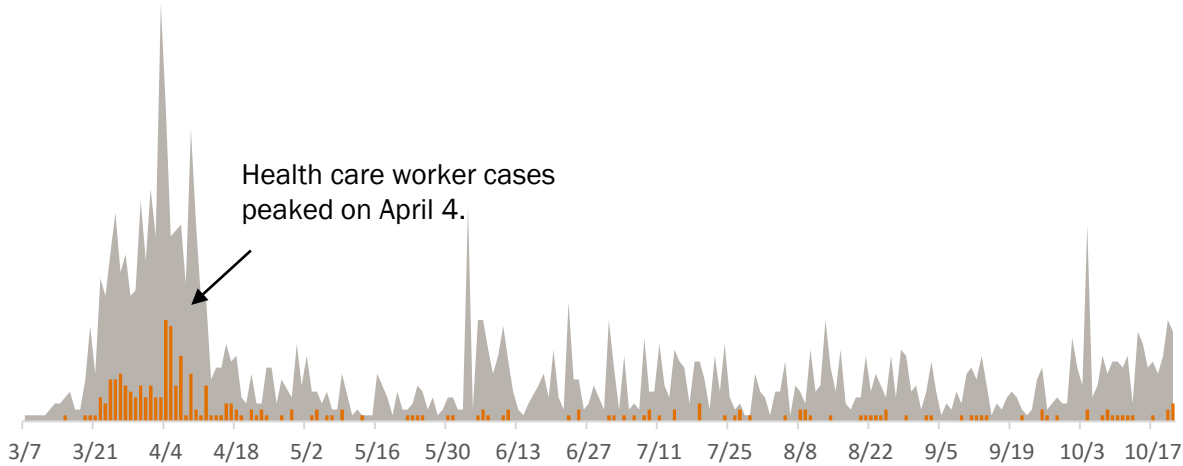

* Value suppressed due to small numbers.

A higher percentage of COVID-19 patients with pre-existing conditions have been hospitalized than those without pre-existing conditions.
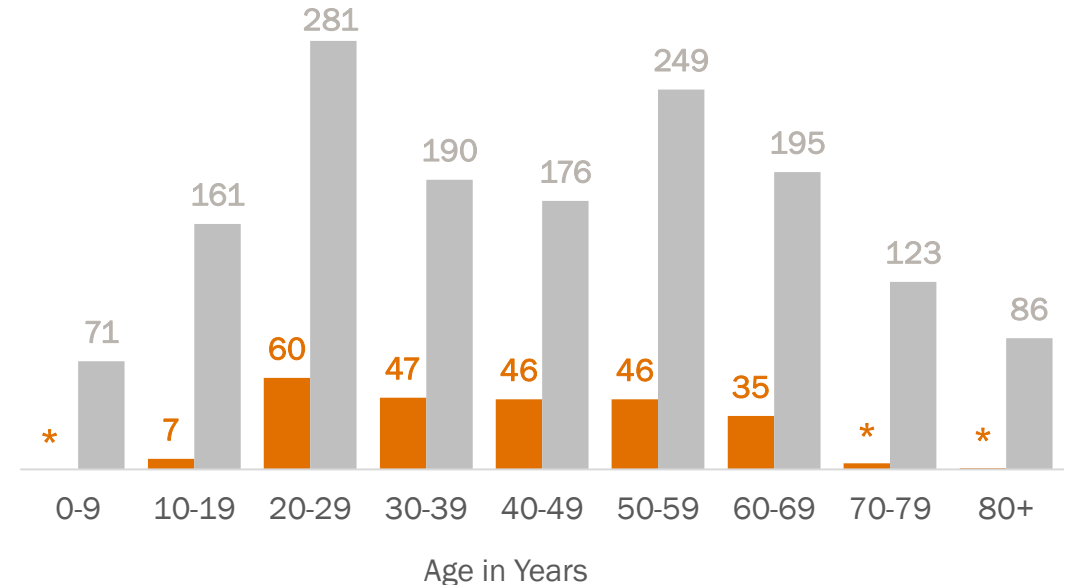
Case Demographics
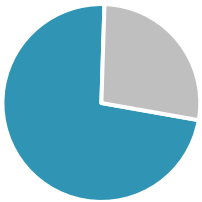
Number of New Health Care Worker and All Cases by Day

Health care worker cases peaked on April 4.

3/7 3/21 4/4 4/18 5/2 5/16 5/30 6/13 6/27 7/11 7/25 8/8 8/22 9/5 9/19 10/3 10/17

1 in 7 Vermonters with COVID-19 are health care workers.

73% of health care workers with COVID-19 are female.

30% 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.

Age	HCW	All
0-9	*	71
10-19	7	161
20-29	60	281
30-39	47	190
40-49	46	176
50-59	46	249
60-69	35	195
70-79	*	123
80+	*	86

Age in Years

* Value suppressed due to small numbers.

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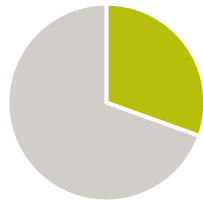
White Vermonters represent the majority of health care workers with COVID-19.

Other Race *
Black or African American 4%
American Indian or Alaskan Native *
Asian *

White
87%
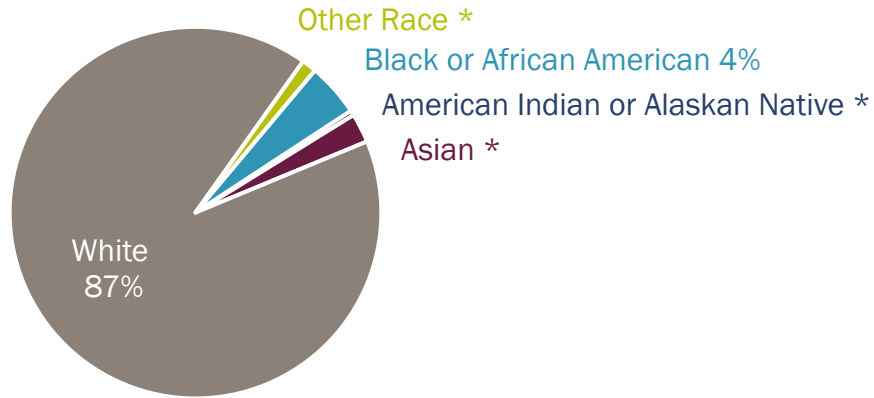
* Value suppressed due to small numbers.

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

Unknown = 7
Hospitalized = 11
Not Hospitalized = 228

There are no reported deaths among health care workers.

Most health care workers with COVID-19 have symptoms.

Asymptomatic 21%

Unknown 2%
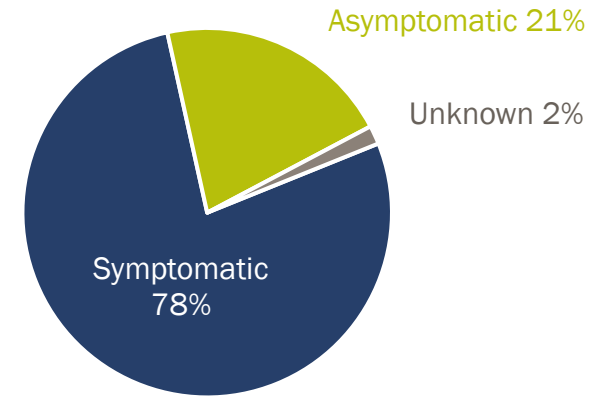
Symptomatic
78%

Sign or Symptom among Health Care Workers with COVID-19	Percent of Symptomatic Cases
Cough	70%
Fatigue	64%
Headache	61%
Loss of Smell or Taste	51%
Muscle Pain	48%
Runny nose	47%
Chills	42%
Fever	38%

Case Demographics

New and **Cumulative** Cases of Vermont Children (Age 19 and Younger) with COVID-19

256

Children represent 13% of Vermont's cases.

18% of children with COVID-19 are 18 or 19 years old.
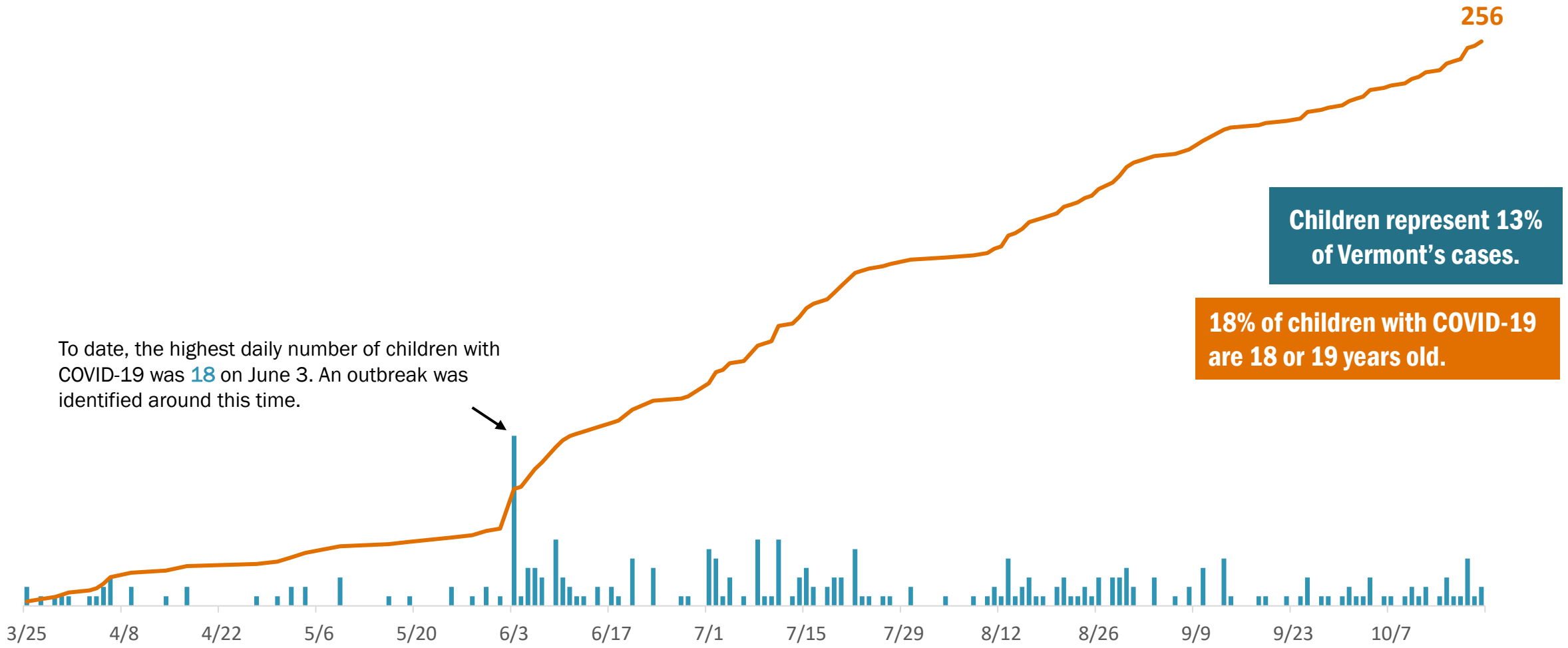
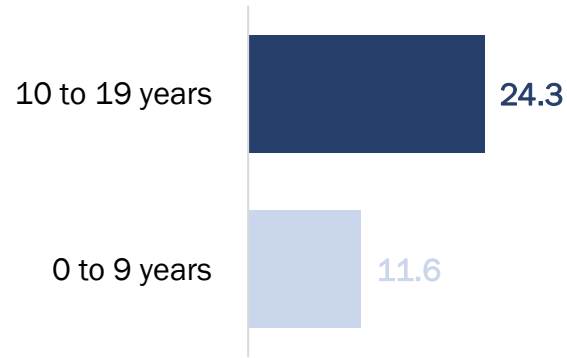To date, the highest daily number of children with COVID-19 was 18 on June 3. An outbreak was identified around this time.

3/25 4/8 4/22 5/6 5/20 6/3 6/17 7/1 7/15 7/29 8/12 8/26 9/9 9/23 10/7
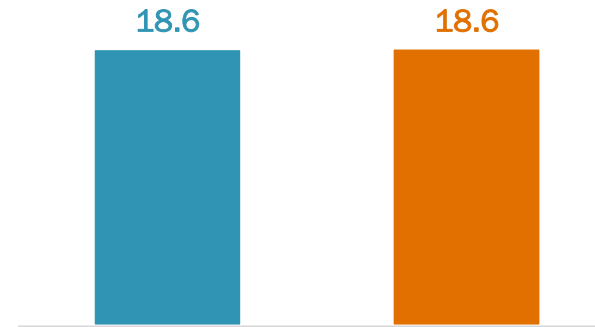
Vermont Department of Health

Case Demographics

Older children have a higher rate of COVID-19 compared to younger children.

Rate per 10,000 Vermonters 0-19 years old

10 to 19 years	24.3
0 to 9 years	11.6

Male and female children have similar rates of COVID-19.

Rate per 10,000 Vermonters 0 to 19 years old

18.6   18.6

Among children with COVID-19, Black, Indigenous and people of color represent a 41% of cases.

Black or African American 29%

White 60%

Asian 6%

Other Race 4%
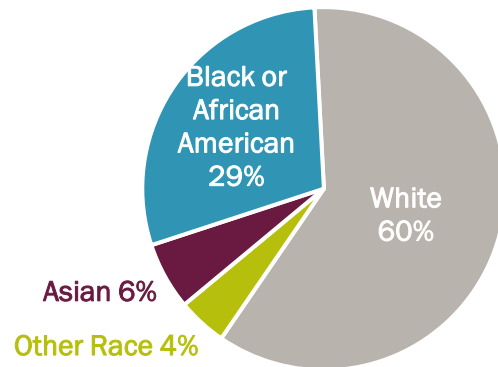
Among children with COVID-19, Black or African Americans have the highest rate.

Rate per 10,000 Vermonters 0 to 19 years.

Black or African American	257.6
Asian	49.1
Other Race	20.1
White	12.3

Case Demographics
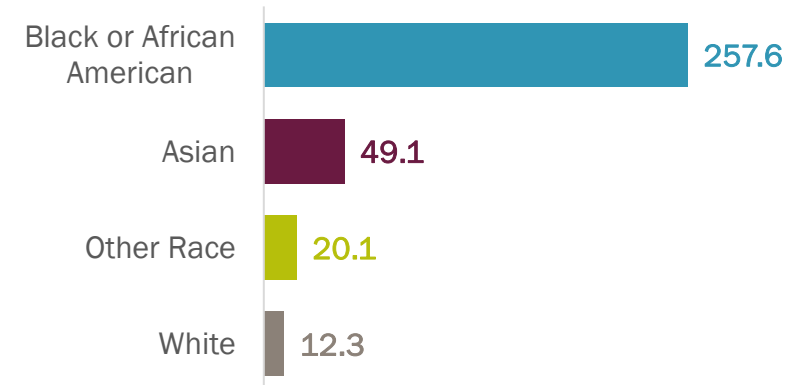
| Sign or Symptom	Percent of Children with Symptom
Headache	53%
Fatigue	46%
Cough	42%
Loss of smell or taste	31%
Sore throat	30%
Fever	27%
Muscle pain	25%

5 days
Average illness duration among children

There are no currently reported cases of multi-system inflammatory syndrome, hospitalizations, or deaths among Vermont's children with COVID-19.
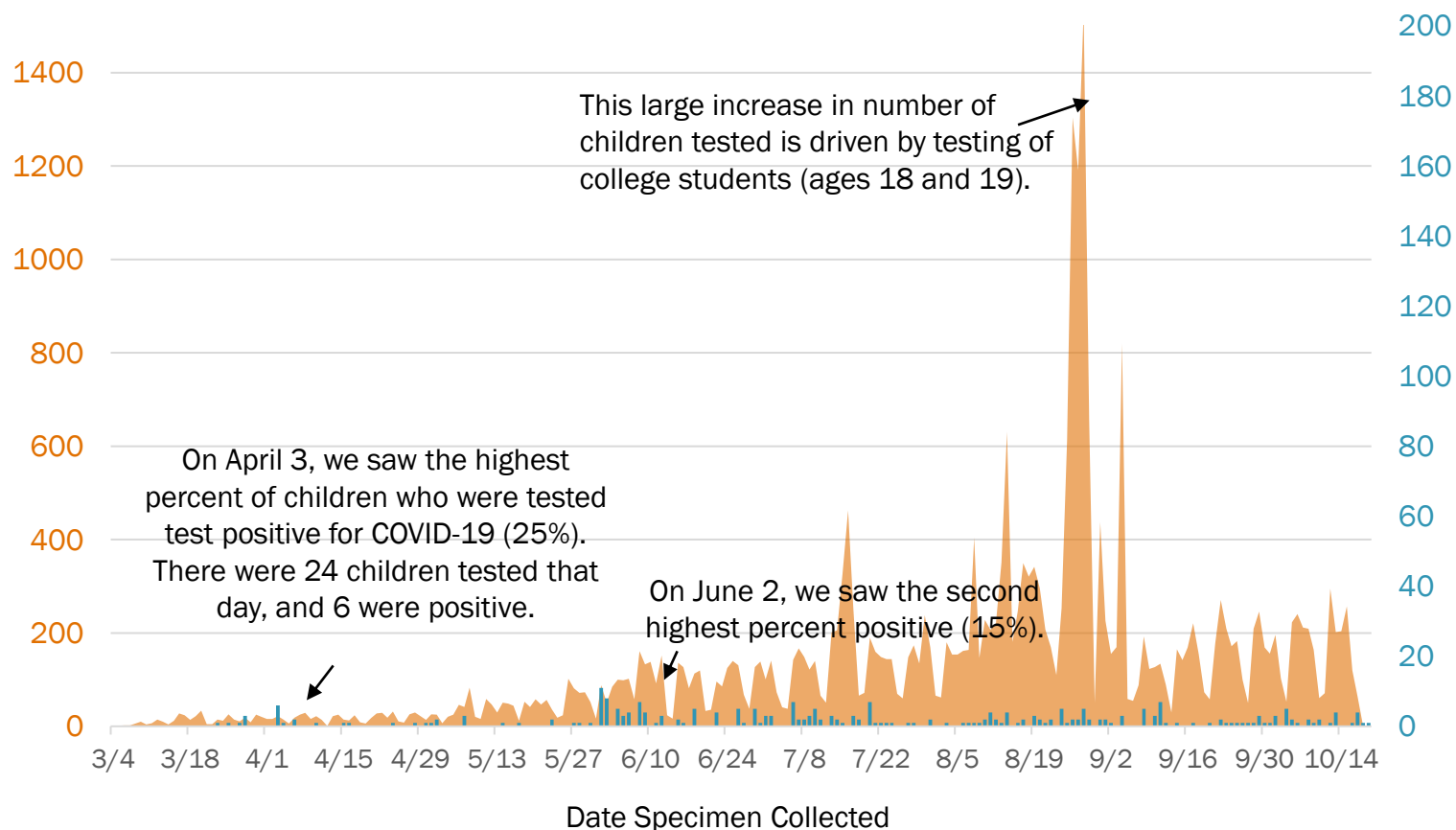
The percent of COVID-19 cases with no symptoms is higher among children. Less than half (44%) of cases among children had no symptoms reported.

■ Asymptomatic   ■ Symptomatic   ■ Unknown
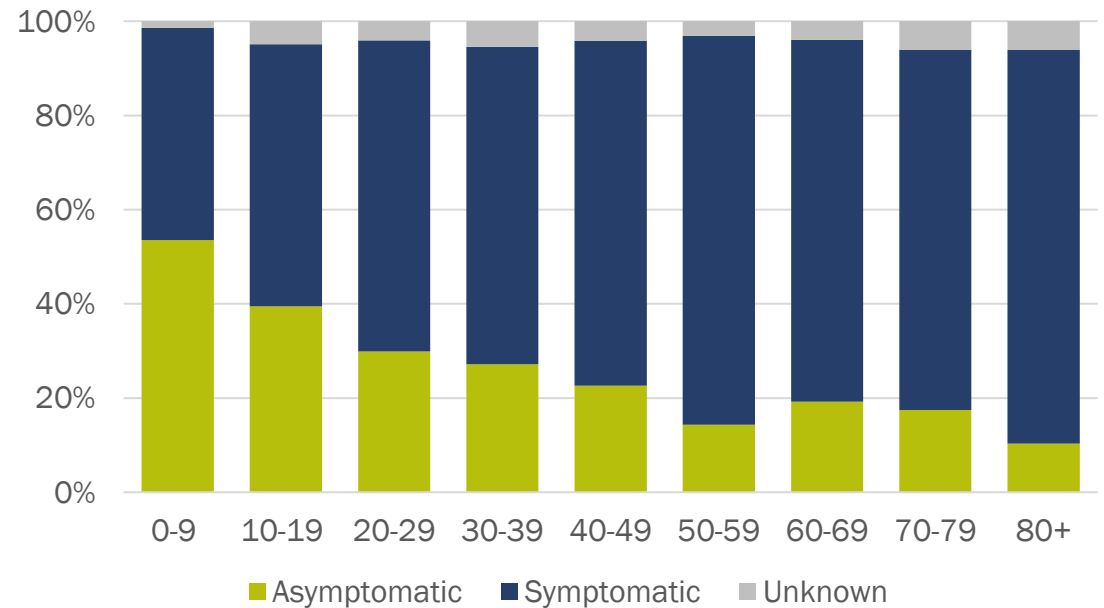
66% of children with COVID-19 had known contact with somebody else who had COVID-19.

34% of children with COVID-19 were part of an outbreak.

Case Demographics

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).

On April 3, we saw the highest percent of children who were tested test positive for COVID-19 (25%). There were 24 children tested that day, and 6 were positive.

On June 2, we saw the second highest percent positive (15%).

Date Specimen Collected

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

29,007 children have been tested for COVID-19.

Percent of tests positive among children is similar to adults.

Children	Adults
0.9%	1.2%
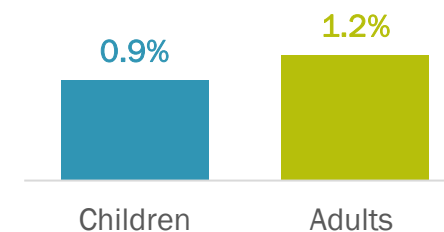
Percent of tests positive among younger children is similar to older children.

0-9 years	10-19 years
0.9%	0.9%

Case Demographics
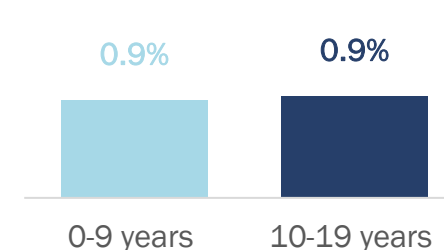
Clinical Course

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
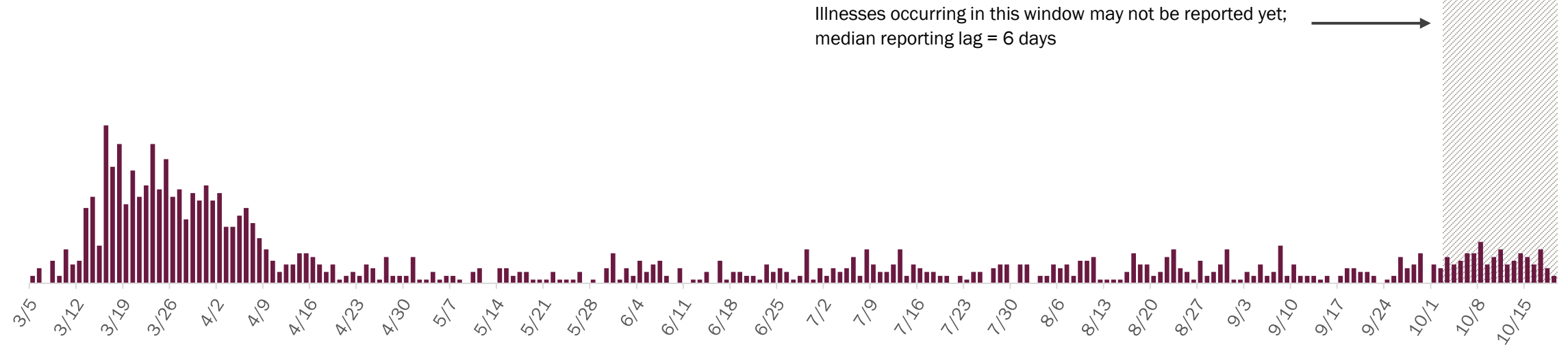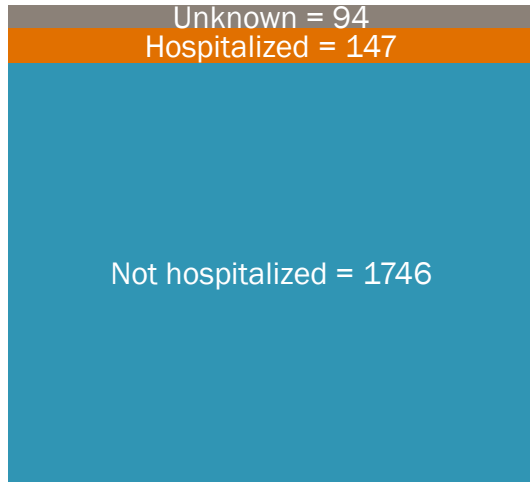

Note: Date of symptom onset is not always known.

12 days
Average illness duration

71%
Cases with symptoms

Sign or Symptom	Percent of Symptomatic Cases
Cough	65%
Fatigue	65%
Headache	54%
Muscle Pain	48%
Felt Feverish	46%
Loss of Smell/Taste	45%
Fever	43%

Clinical Course

Most Vermonters with COVID-19 are not hospitalized.

Unknown = 94
Hospitalized = 147
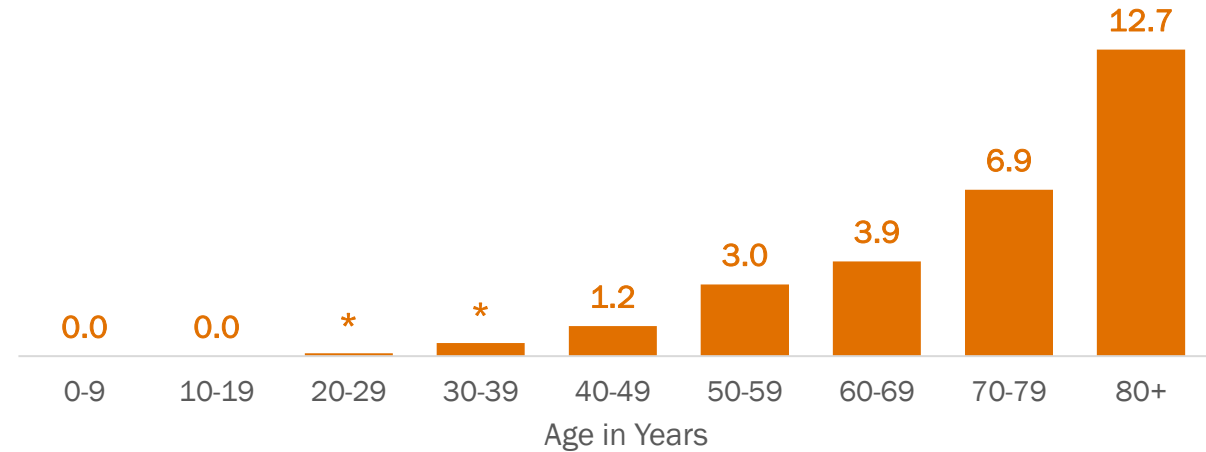
Not hospitalized = 1746

14%
Of those hospitalized were on a ventilator

34%
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

Age	Rate
0-9	0.0
10-19	0.0
20-29	*
30-39	*
40-49	1.2
50-59	3.0
60-69	3.9
70-79	6.9
80+	12.7

Age in Years

White Vermonters represent a majority of hospitalized COVID-19 cases.

Rate per 10,000 Vermonters

Black or African American *

Asian *

Other Race *

White
92%
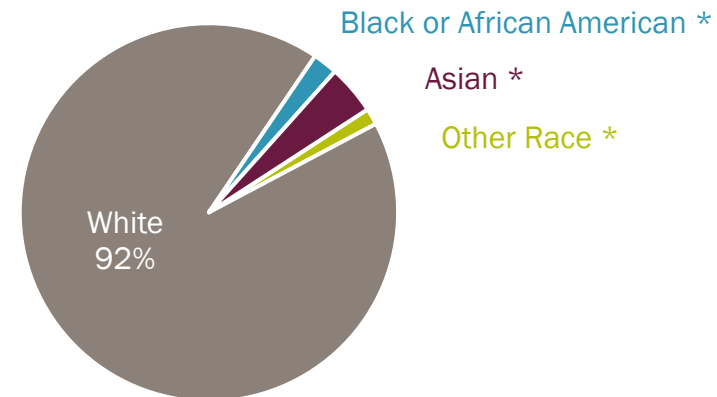
Please note 5 hospitalized persons are missing race information.
*Values suppressed due to small numbers.

Clinical Course

Vermonters 80 years and older have higher rates of COVID-19 death than other age groups.

Rate per 10,000 Vermonters

Age in Years

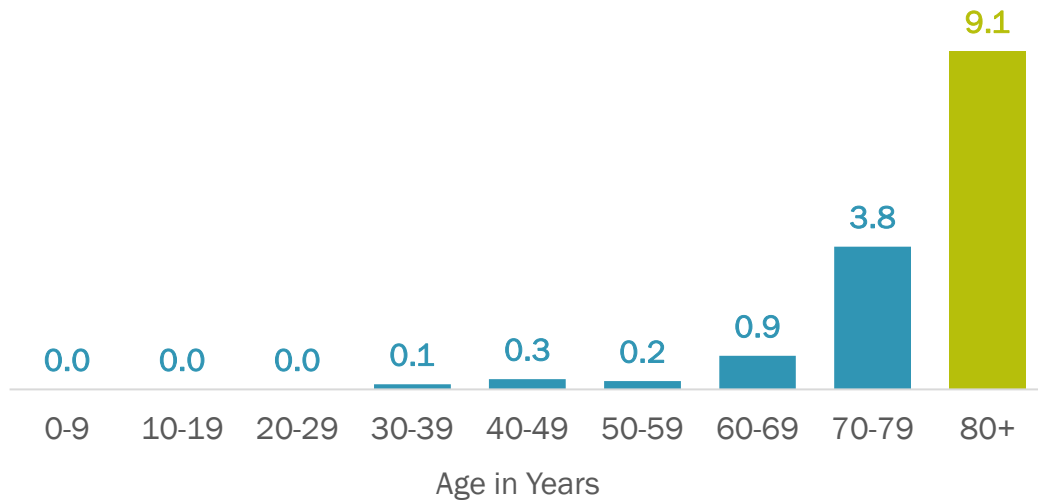**Males** and **females** have similar rates of COVID-19 death.

Rate per 10,000 Vermonters

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

Out of state facility 7%
Unknown 2%
Decedent's Home 2%
Long Term Care Facility 50%
Inpatient 39%
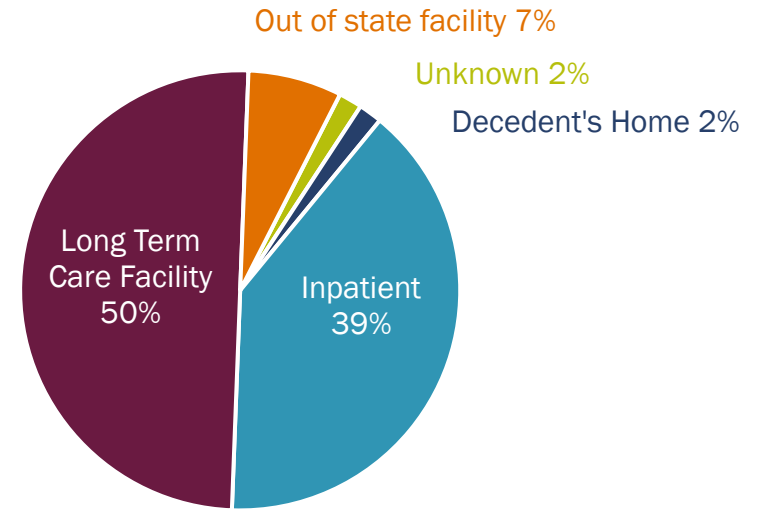
White Vermonters represent a majority of COVID-19 deaths. **Death rates by race are similar.**

Rate per 10,000 Vermonters

Asian 3%
Other Race 2%
White 95%

Asian 1.7
White 0.9
Other Race 0.8
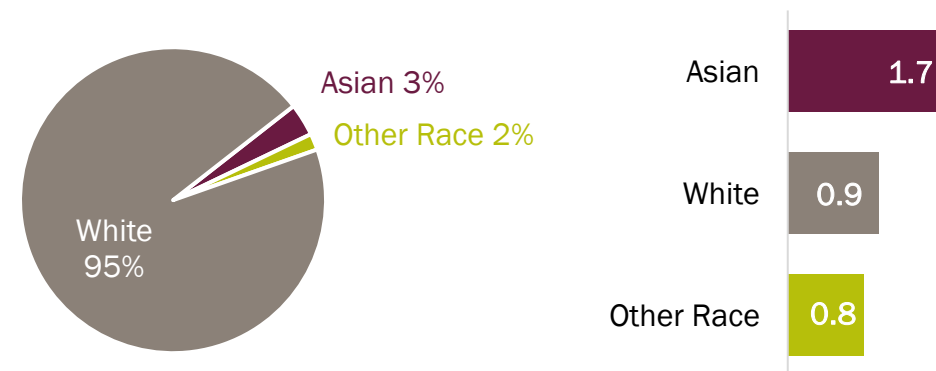
Note: No deaths have identified as Hispanic or Latino.

Clinical Course

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.

Vermont Department of Health

28
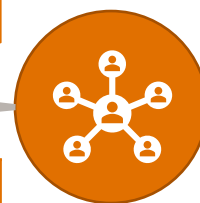
Outbreaks

28% of people testing positive for COVID-19 are associated with an outbreak.

Outbreaks
7 Active
28 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

81 cases among employees

Community

220 cases

Source: Vermont Department of Health
Reflects confirmed data as of 10/21/2020.

Outbreaks

Vermont COVID-19 Cases Associated with an Outbreak Over Time

The daily number of cases associated with an outbreak peaked on April 9.
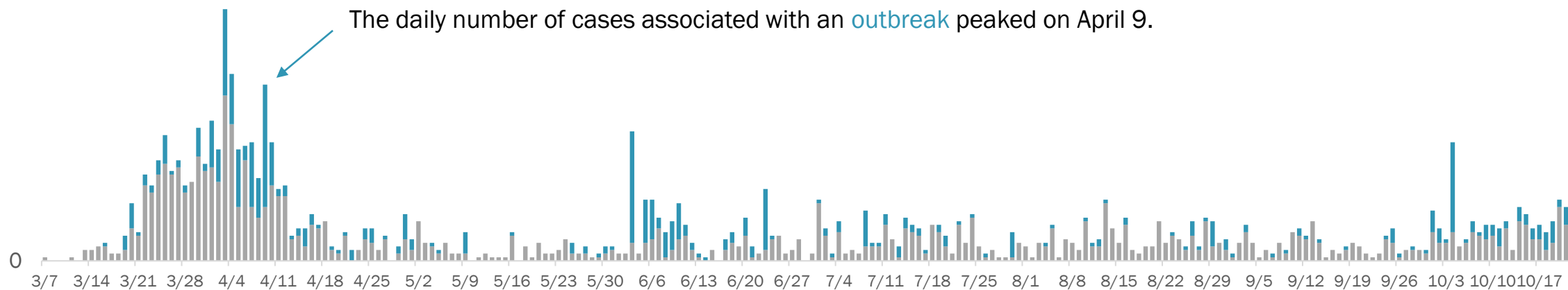
Vermont COVID-19 Deaths Associated with an Outbreak Over Time
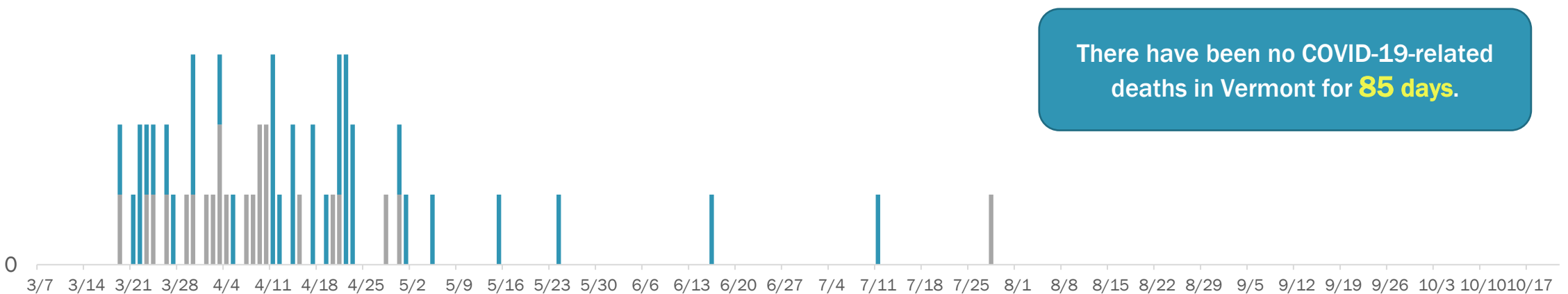
There have been no COVID-19-related deaths in Vermont for **85 days**.

Source: Vermont Department of Health
Reflects confirmed data as of 10/21/2020.

Outbreaks

While only 28% of all people testing positive for COVID-19 are associated with outbreaks, more than half of COVID-19-related deaths occur in outbreak settings.
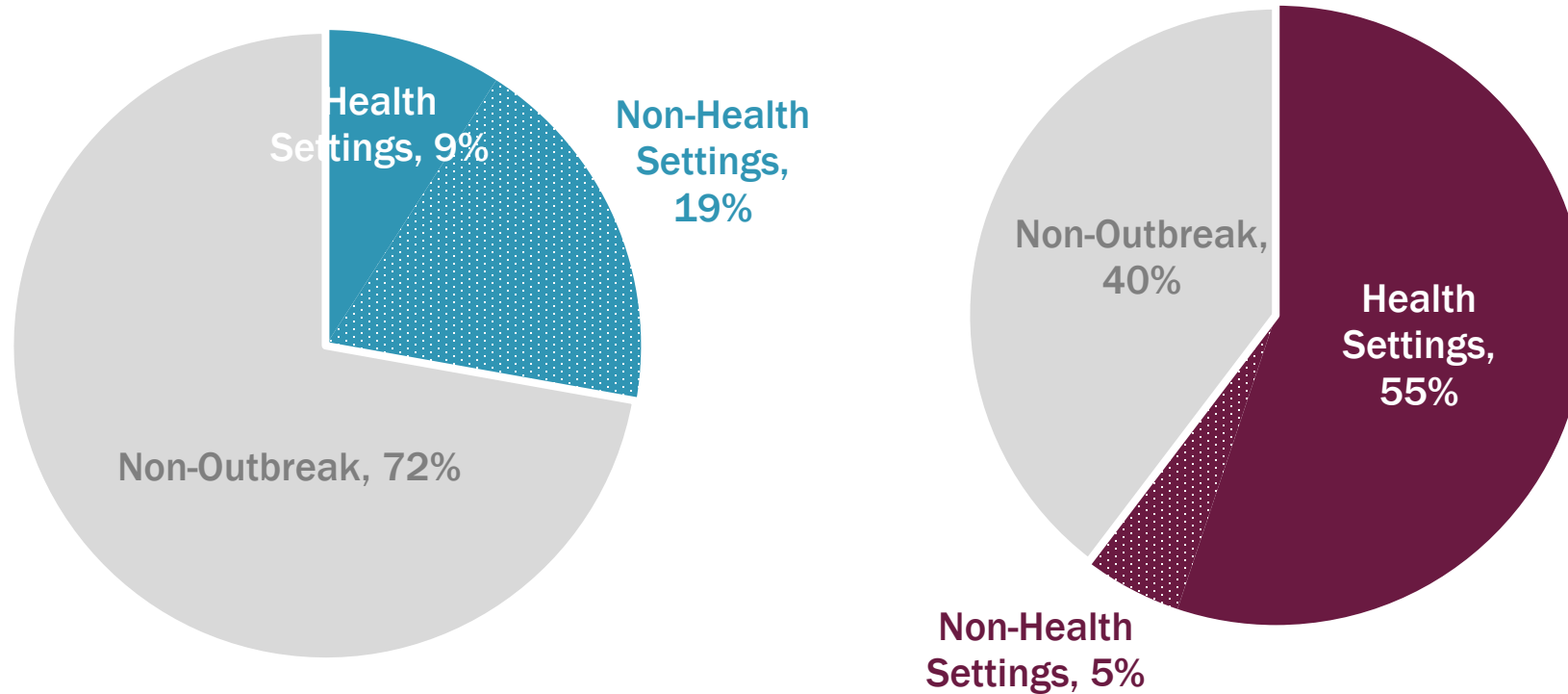
Health Settings, 9%

Non-Health Settings, 19%

Non-Outbreak, 72%

Non-Outbreak, 40%

Health Settings, 55%

Non-Health Settings, 5%

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 10/21/2020.

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.

Outbreaks

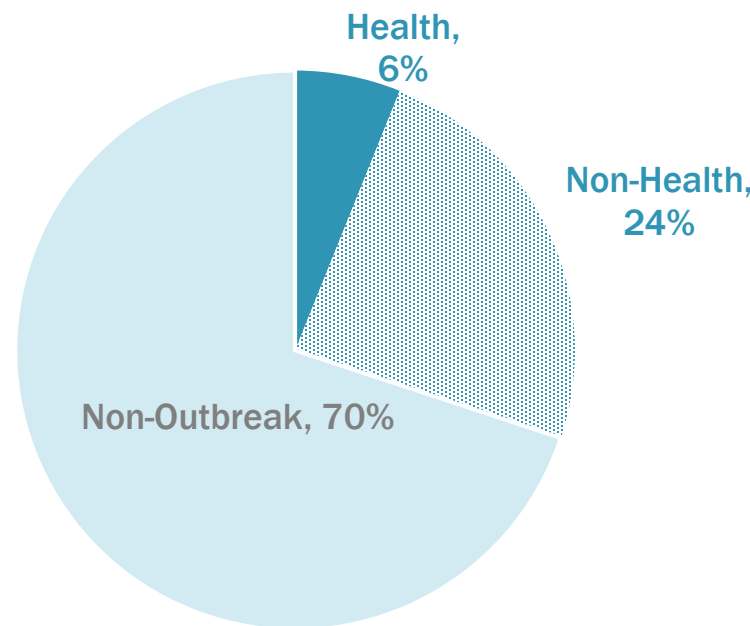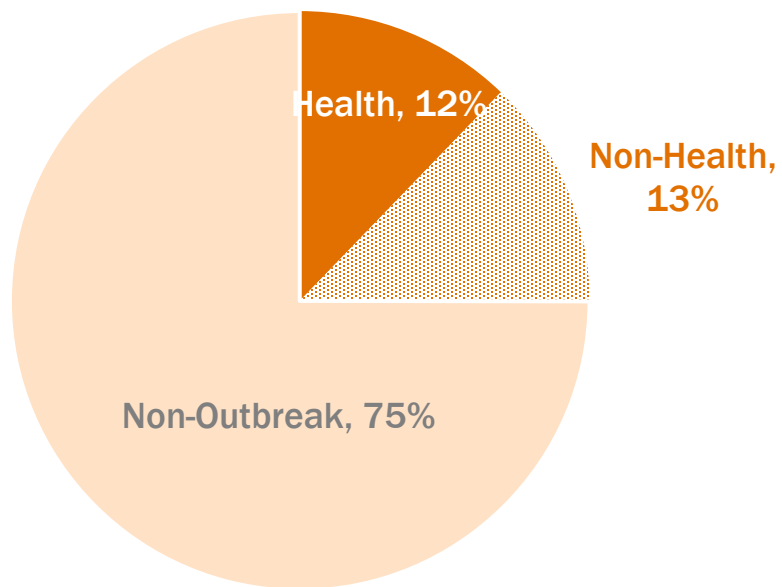# The percentages of females and males with COVID-19 that are associated with an outbreak is about even.

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

30% 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.

Health, 12%

Non-Health, 13%

Non-Outbreak, 75%

Health, 6%

Non-Health, 24%

Non-Outbreak, 70%

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 10/21/20

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.

Outbreaks

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**

Not associated	Age in Years	Health setting	Non-health setting
3%	0-9		6%
9%	10-19	1%	9%
20%	20-29	3%	12%
13%	30-39	3%	13%
12%	40-49	3%	11%
18%	50-59	3%	9%
14%	60-69	4%	6%
7%	70-79	7%	1%
4%	80-89	6%	<1%
<1%	90+	4%	

Age in Years

Median age

| 43 years old |
| 70 years old |
| 35 years old |

Source: Vermont Department of Health
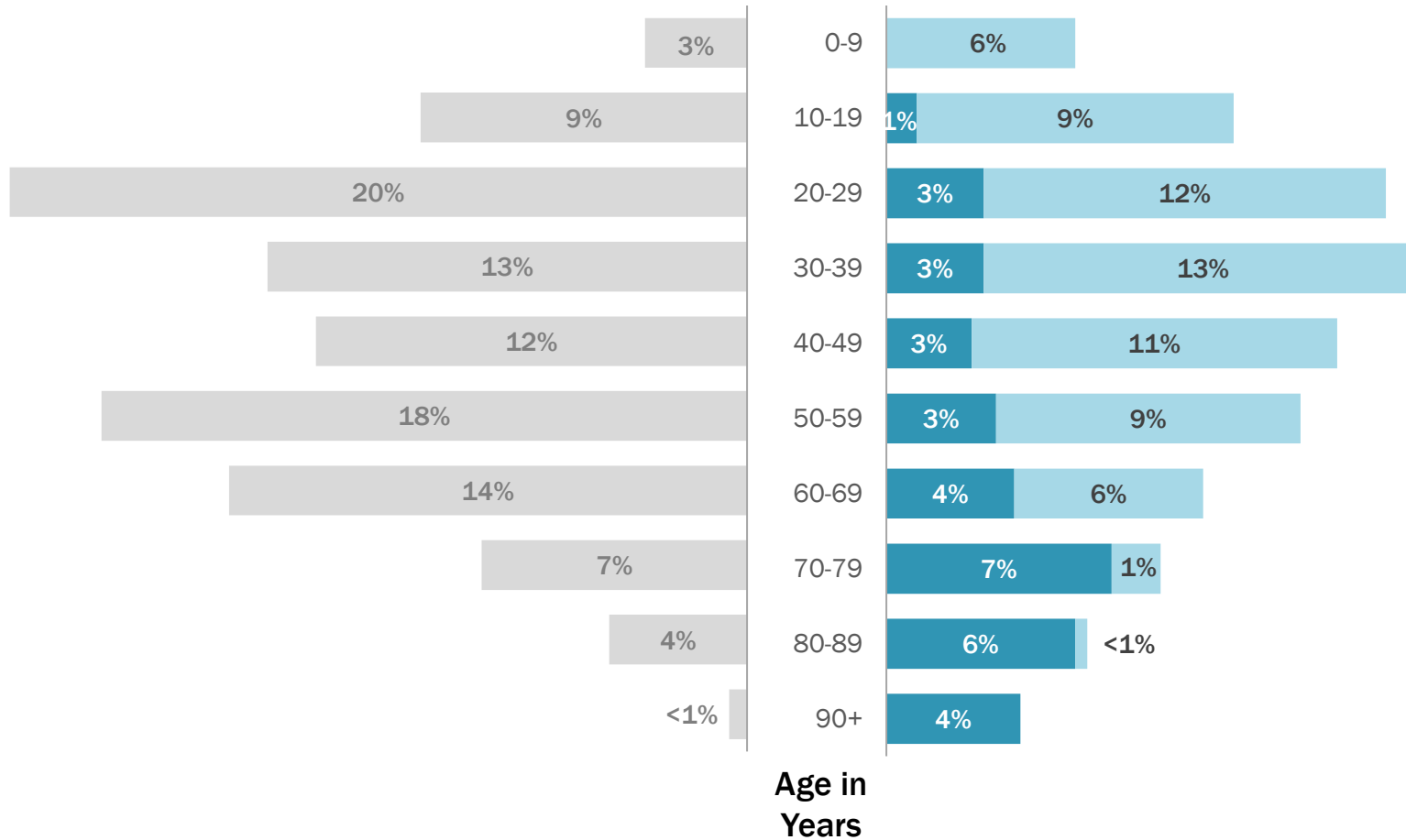Reflects case counts as of 10/21/20

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.

Outbreaks

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.
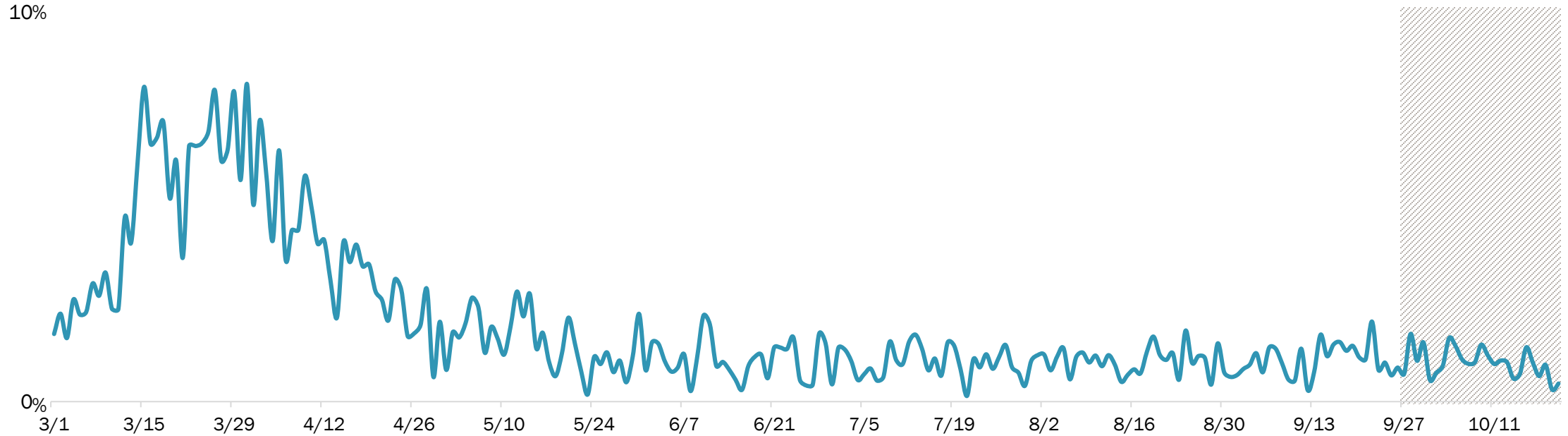
Interpret with caution, there is a chance for over or underestimation given the lag in reporting.

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.

Syndromic Surveillance

Weekly Spotlight: Lab Reporting

This section describes how the Health Department receives COVID-19 testing results from laboratories.

How does the Health Department receive lab results?

- Laboratories are required to report results to the Health Department for certain conditions, including COVID-19. Pertussis, salmonella, and hepatitis C are examples of other conditions that must be reported.

- Depending on the condition that's being tested, labs use and report different types of testing, like cultures, molecular testing (PCR), serology, antigen, and more.

- All facilities doing lab testing are required to report to the Health Department, including hospitals, reference labs, and places doing point-of-care testing for reportable conditions. Most results are required to be reported within 24 hours of result, like COVID-19. Some are required to be reported immediately, like anthrax.

- Lab results can be reported to the Health Department electronically or through a fax, which are then manually entered into the electronic system.

- For COVID-19, the Health Department requests both negative and positive results from labs, to understand the testing trends in our community. For most other diseases, the Health Department only requests a positive result.

For information about infectious disease reporting: https://www.healthvermont.gov/disease-control/disease-reporting/infectious-disease-reporting

Weekly Spotlight

The number of lab test reports for all reportable conditions received by the Health Department has increased 25 times from 2019 to 2020 so far.

The dramatic increase is due to testing efforts for COVID-19.

406,697

16,625

2019

2020*
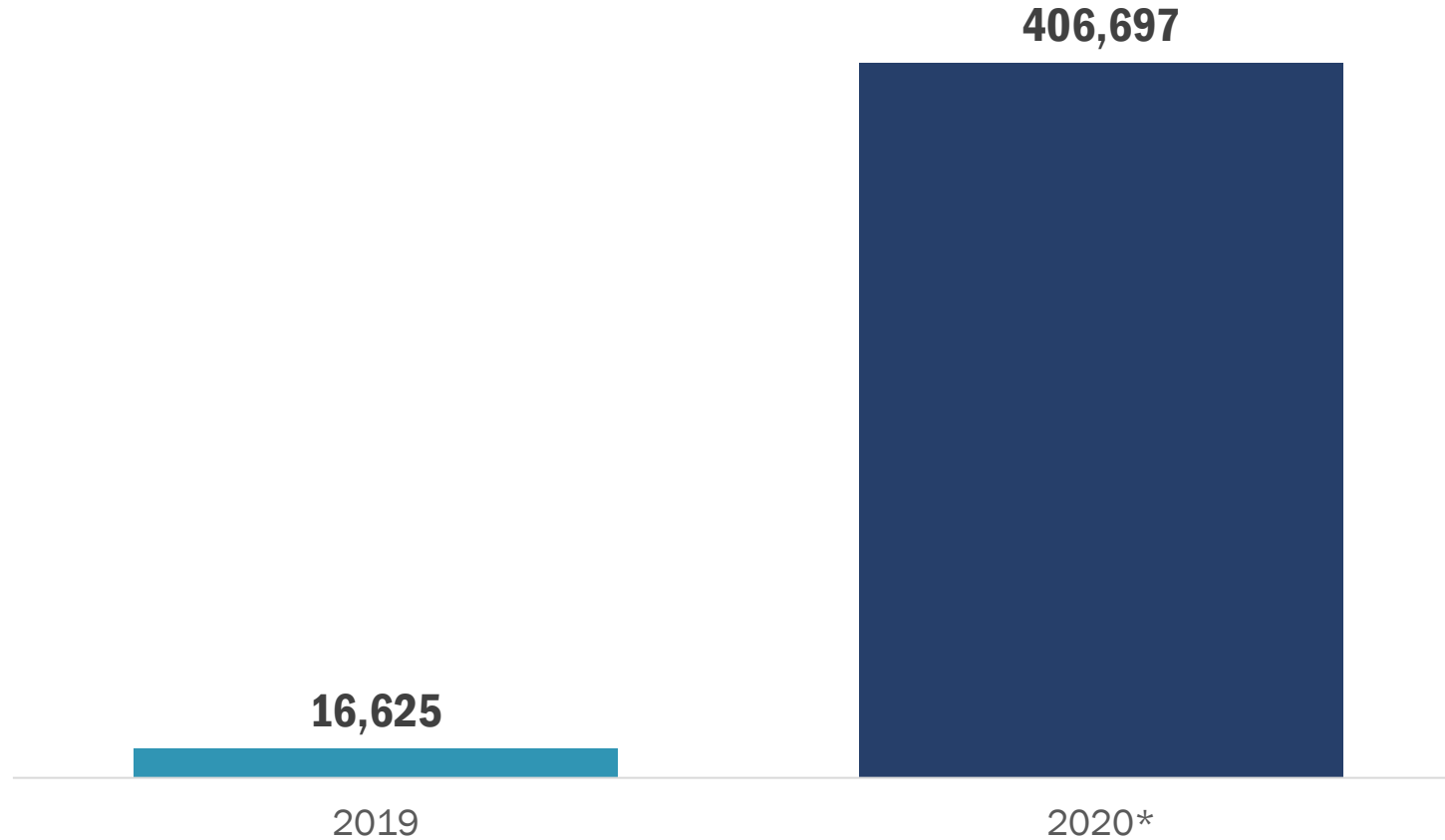
*Based on available data up to October 18.

Weekly Spotlight

Learn more about COVID-19 in Vermont:

Web: www.healthvermont.gov/COVID-19

Email: AHS.VDHPublicCommunication@vermont.gov

See more data: Weekly Data Summaries