Weekly Summary of Vermont COVID-19 Data

Reflecting cases identified between
March 5 – May 27, 2020

Date published: May 29, 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 the 7 days prior to publication; for example, May 7 through May 14

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.

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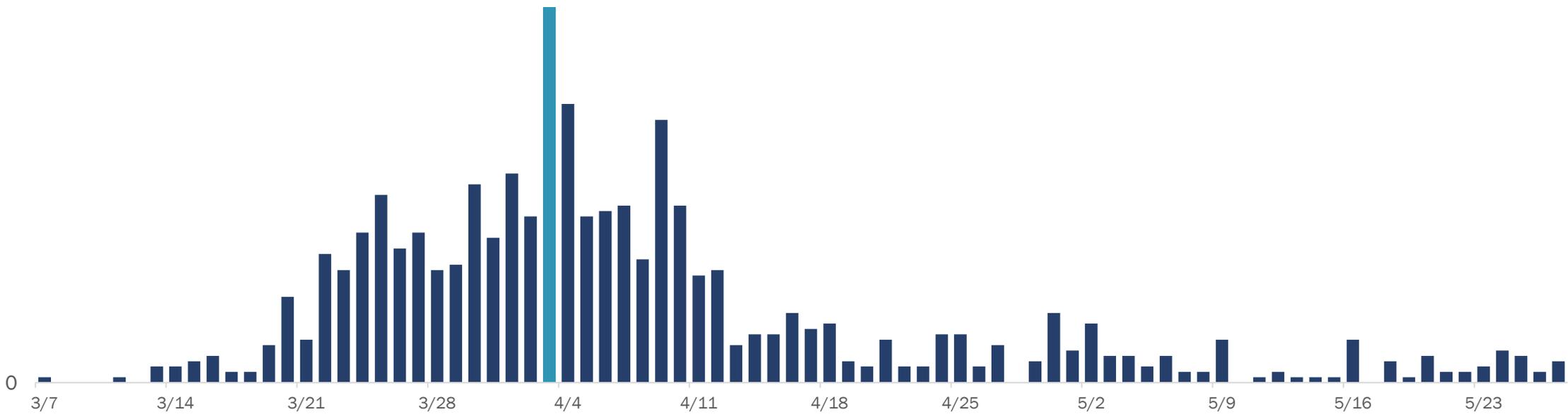
Click on a box below to jump to that section

COVID-19 in Vermont

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

Total Number of Cases in Vermont: 974

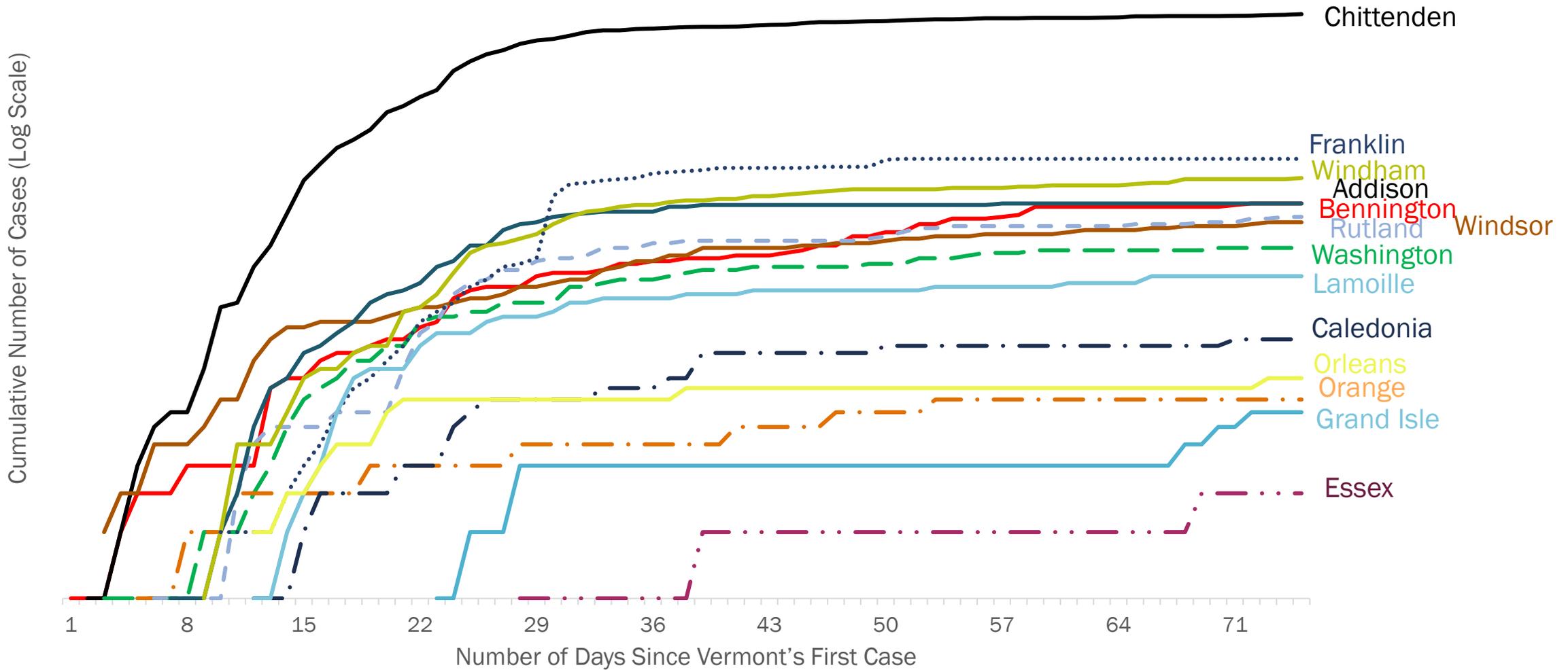The daily number of COVID-19 cases in Vermont peaked on April 3.

COVID-19 in Vermont

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

Growth over time by county (n=969)

Cumulative Number of Cases (Log Scale)

Number of Days Since Vermont's First Case

Chittenden
Franklin
Windham
Addison
Bennington
Rutland   Windsor
Washington
Lamoille
Caledonia
Orleans
Orange
Grand Isle
Essex

Cumulative cases are presented using a log scale to help compare the large number of cases in Chittenden County (n=449, roughly 50% 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.

Number of Tests

1200

0

Percent Positive

12%

0%
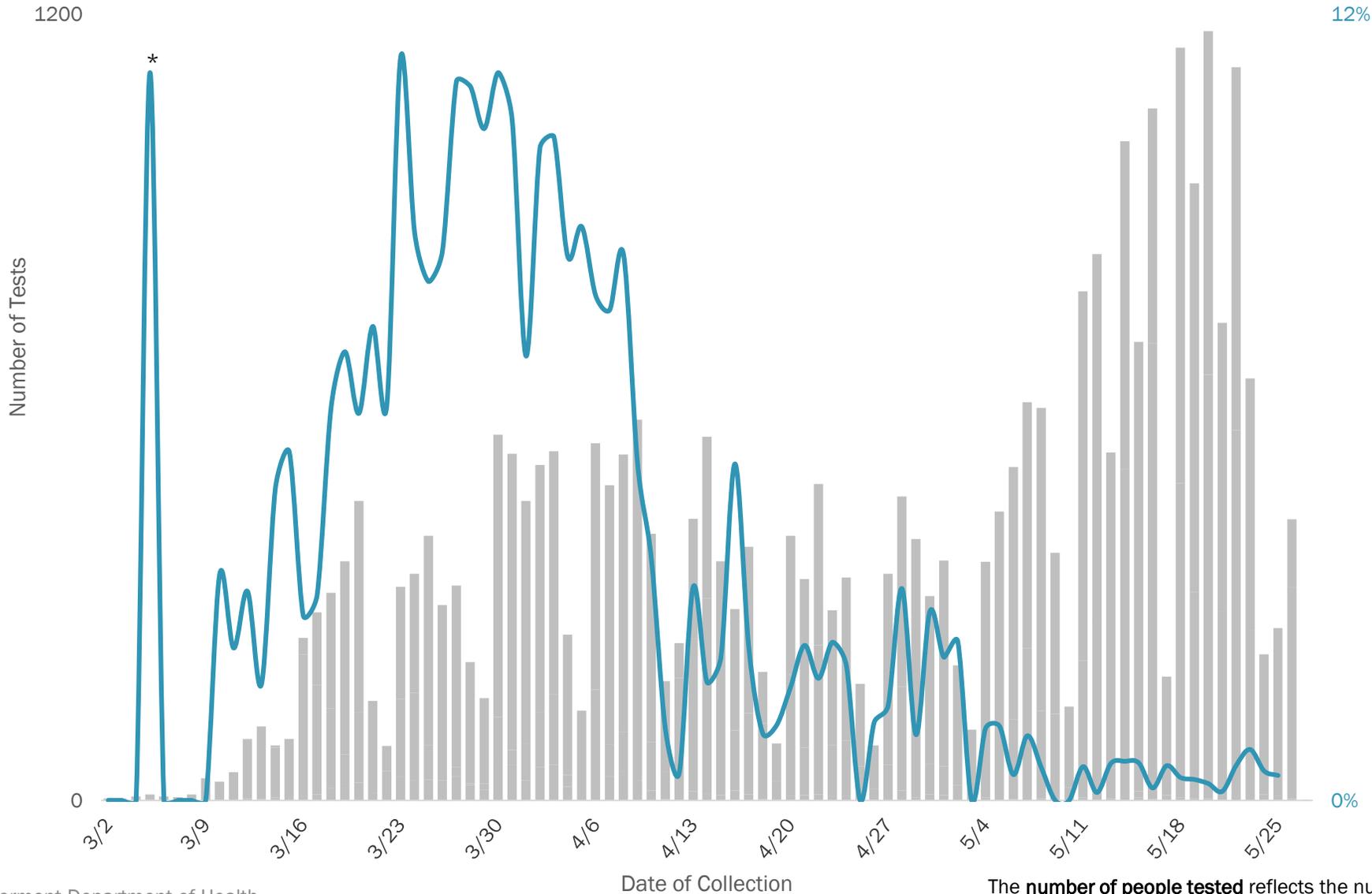
Percent Positive to Date

3%
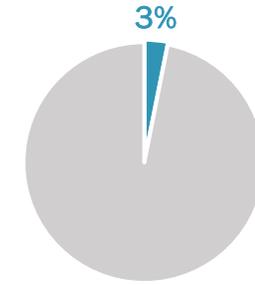
Percent Positive This Week (May 21 - May 27)

0.4%
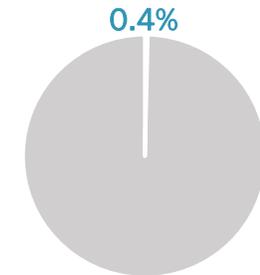
6,568 People Tested this Week	**7,386** Tests this Week
31,152 People Tested to Date	**35,378** Tests to Date

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

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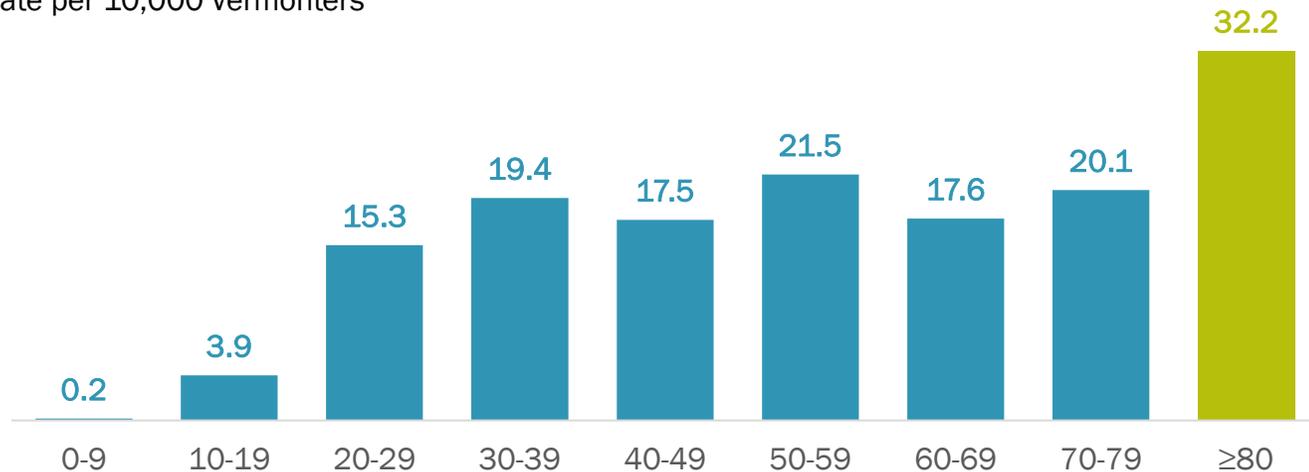*Not a stable estimate due to small numbers. There were 9 total tests and 1 was positive.

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. Neither of these numbers include serology testing.

COVID-19 in Vermont

7

Case Demographics

Who has been impacted by COVID-19 in Vermont?

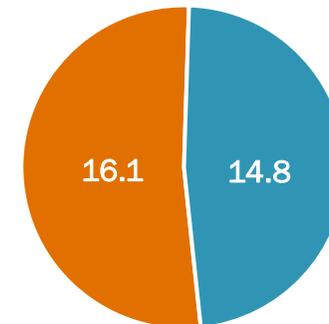# Rates of COVID-19 are disproportionately high among Vermonters 80 years and older.
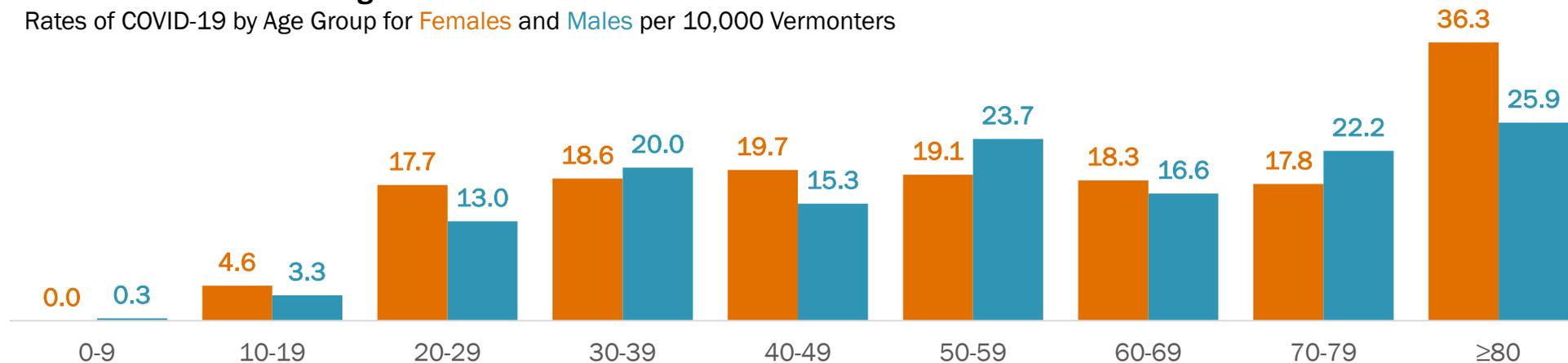
Rate per 10,000 Vermonters

Age Group	Rate
0-9	0.2
10-19	3.9
20-29	15.3
30-39	19.4
40-49	17.5
50-59	21.5
60-69	17.6
70-79	20.1
≥80	32.2

Females and males have similar rates of COVID-19.

Rate per 10,000 Vermonters
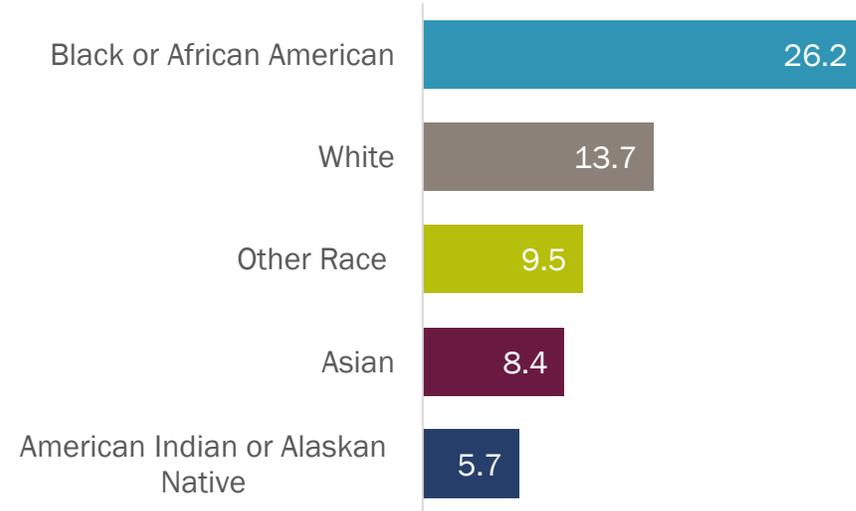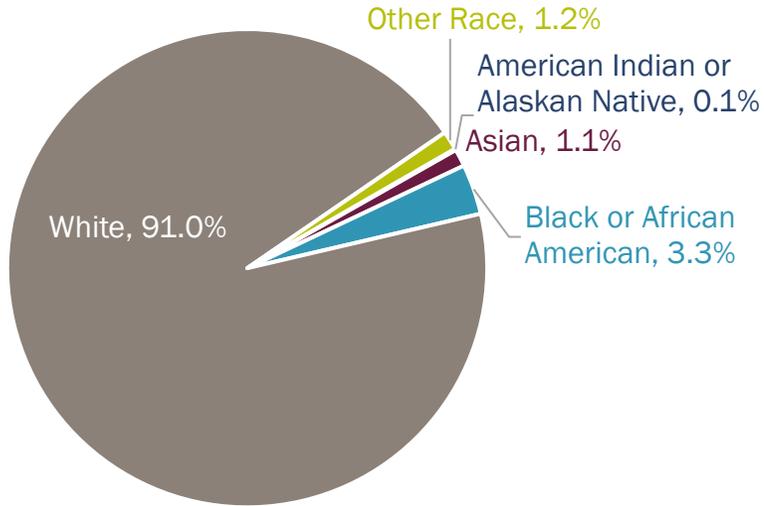

Females: 16.1, Males: 14.8

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

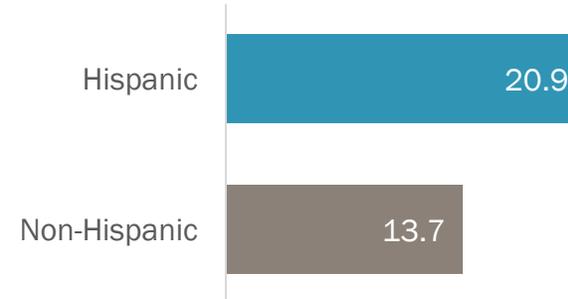Rates of COVID-19 by Age Group for Females and Males per 10,000 Vermonters

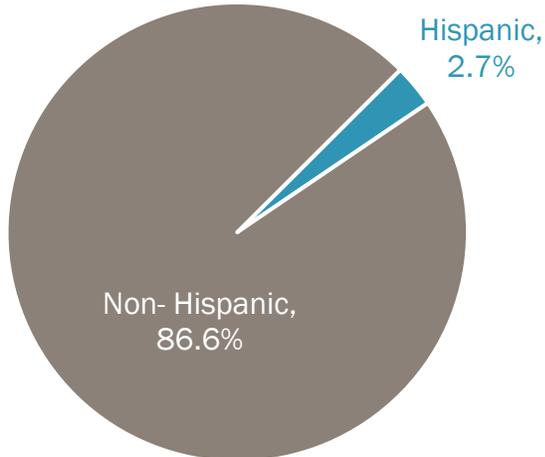| Age Group	Females	Males
0-9	0.0	0.3
10-19	4.6	3.3
20-29	17.7	13.0
30-39	18.6	20.0
40-49	19.7	15.3
50-59	19.1	23.7
60-69	18.3	16.6
70-79	17.8	22.2
≥80	36.3	25.9

Case Demographics

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

Rate per 10,000 Vermonters

Other Race, 1.2%

American Indian or Alaskan Native, 0.1%

Asian, 1.1%

White, 91.0%

Black or African American, 3.3%

Race	Rate
Black or African American	26.2
White	13.7
Other Race	9.5
Asian	8.4
American Indian or Alaskan Native	5.7

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

Rate per 10,000 Vermonters

Hispanic, 2.7%

Non- Hispanic, 86.6%

Ethnicity	Rate
Hispanic	20.9
Non-Hispanic	13.7

Vermont Department of Health

Note: Race is unknown in 3% of cases and ethnicity is unknown in 11% of cases.

Case Demographics

Approximately 64% of people* with COVID-19 have a pre-existing condition.

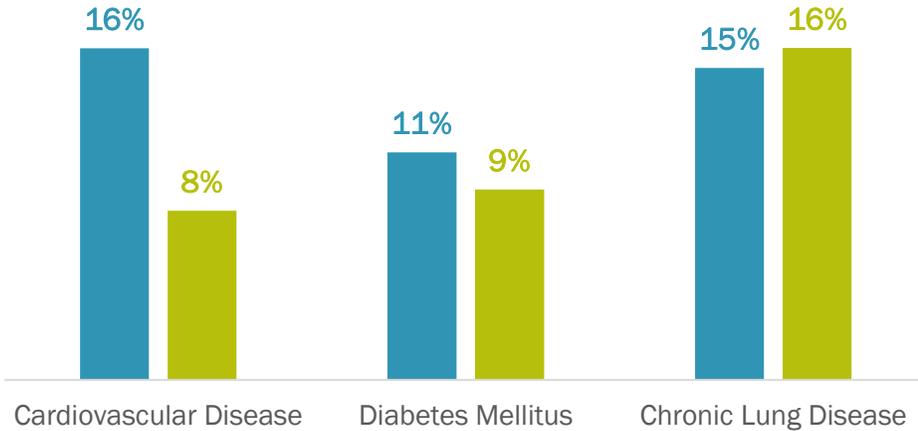*of the 771 people that the Health Department has pre-existing condition data.

Condition	Count	Percentage
Heart Disease	118	16%
Chronic Lung Disease (includes asthma and COPD)	111	15%
Chronic Liver Disease	7	1%
Chronic Kidney Disease	22	3%
Current/Former Smoker	209	27%
Diabetes	81	11%
Immunocompromised Condition	42	6%
Neurologic Condition/Intellectual Disability	32	4%
Other Chronic Condition**	252	34%
Pregnant	8	1%

51% 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.
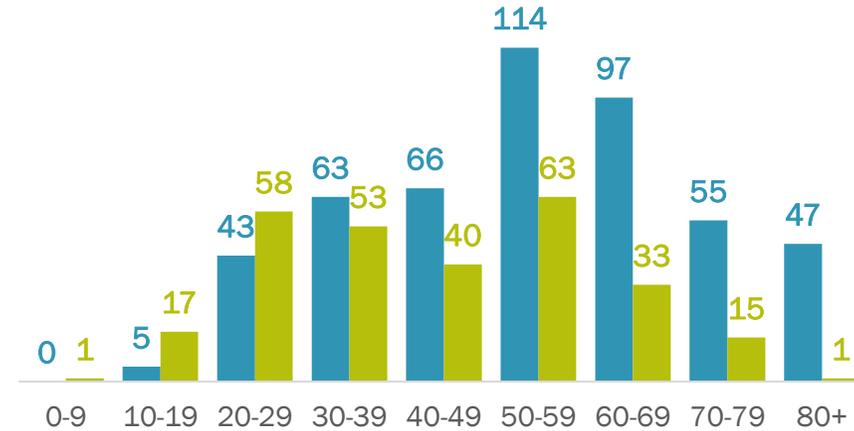
The Health Department has information about pre-existing conditions in 79% (771) of 974 total COVID-19 cases

Case Demographics

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

Cardiovascular Disease: 16% / 8%
Diabetes Mellitus: 11% / 9%
Chronic Lung Disease: 15% / 16%

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

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

Age	With	Without
0-9	0	1
10-19	5	17
20-29	43	58
30-39	63	53
40-49	66	40
50-59	114	63
60-69	97	33
70-79	55	15
80+	47	1

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

263, 54%
225, 46%
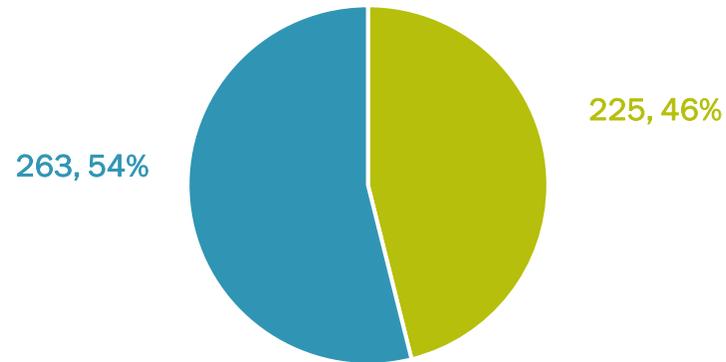
Vermont Department of Health

A higher percentage of COVID-19 patients with pre-existing conditions have been hospitalized than those without pre-existing conditions.
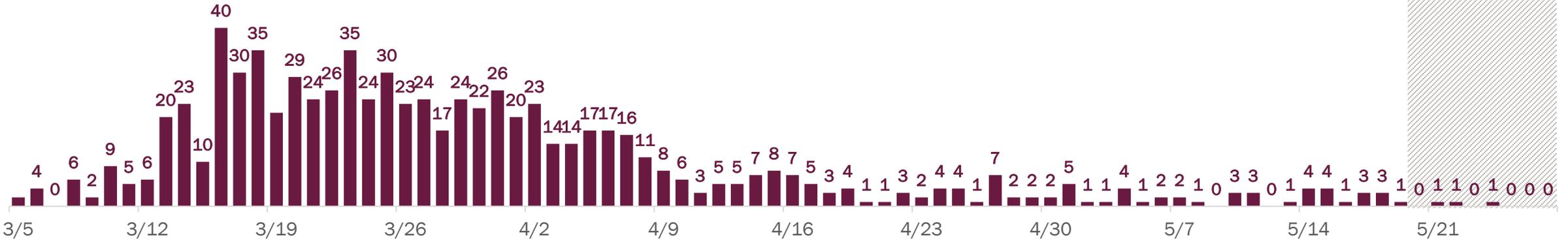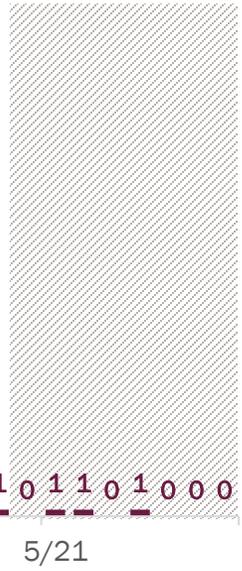
19%
4%

12
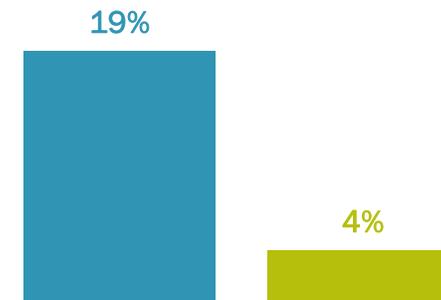
Clinical Course

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.

15 days
Average illness duration

Sign or Symptom	Percent of Symptomatic Cases
Cough	75%
Fatigue	71%
Headache	55%
Fever	55%
Muscle Pain	54%

Clinical Course

Most Vermonters with COVID-19 are not hospitalized.

Unknown = 93

Hospitalized = 121

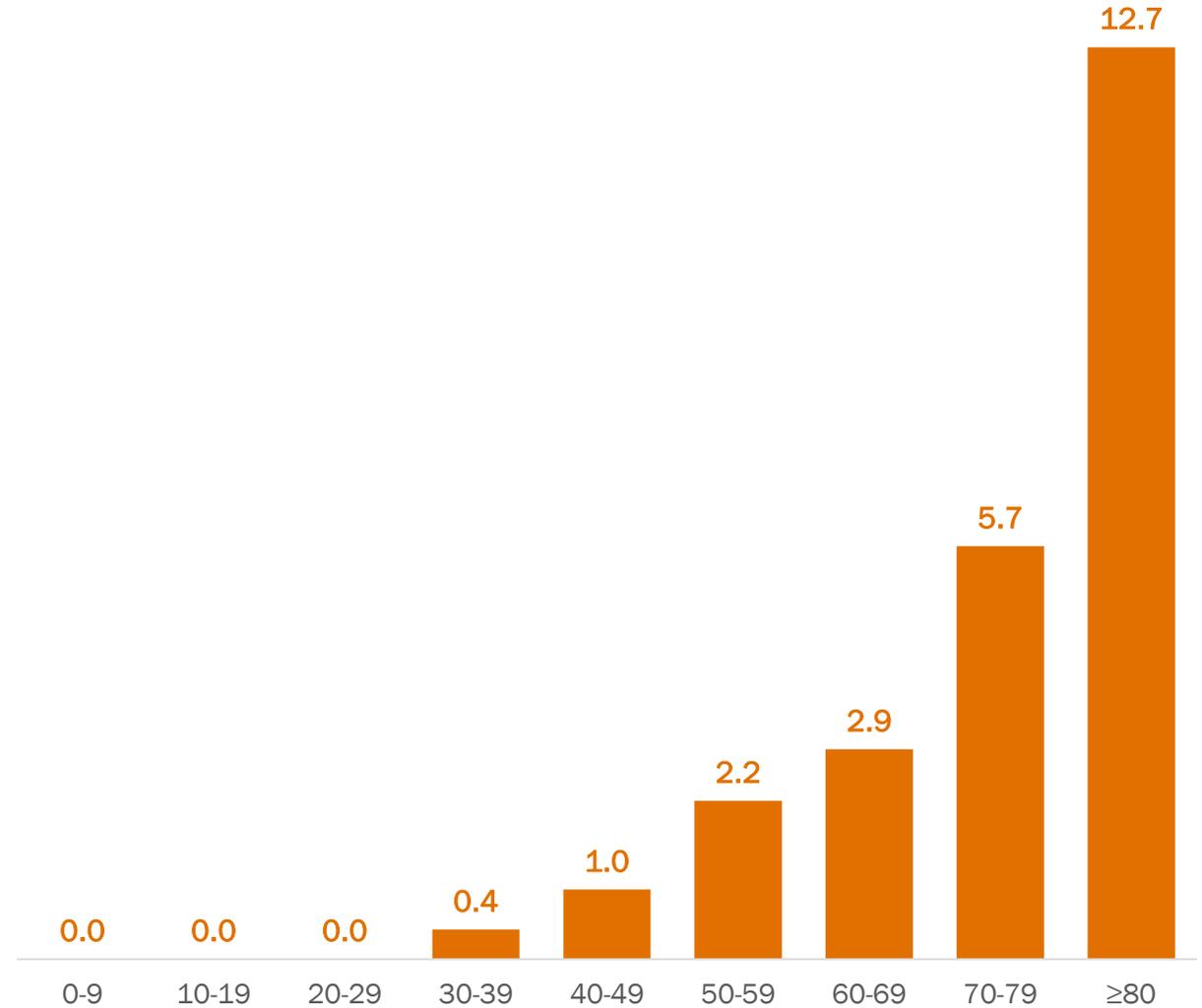Not hospitalized = 760
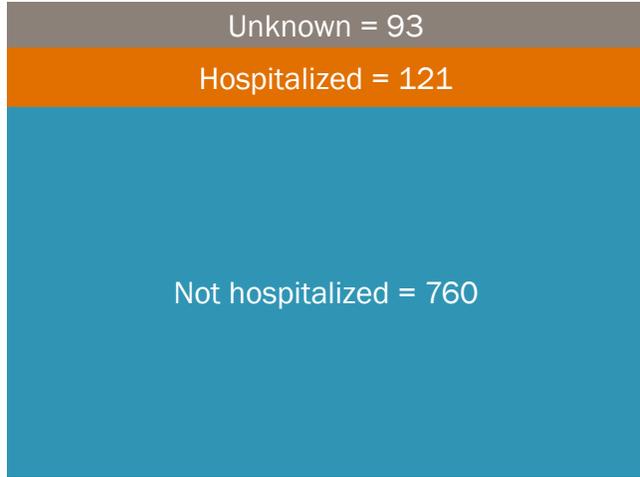
17%
Of those hospitalized who were on a ventilator

**37%**
Of those hospitalized who were in the ICU

8 days
Average hospital stay
(range: 0-39 days)

Vermonters 80 years and older are more likely to be hospitalized for COVID-19.
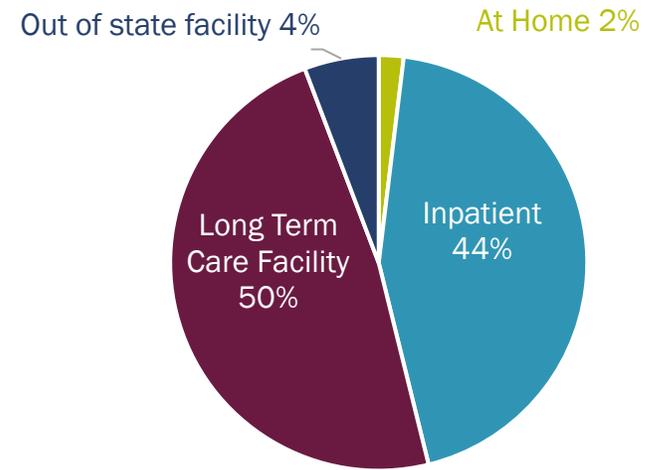
Rate per 10,000 Vermonters

Age	Rate
0-9	0.0
10-19	0.0
20-29	0.0
30-39	0.4
40-49	1.0
50-59	2.2
60-69	2.9
70-79	5.7
≥80	12.7

Clinical Course

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

Rate per 10,000 Vermonters

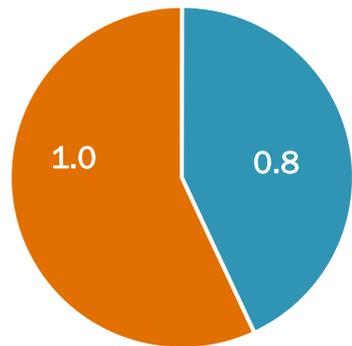| Age	Rate
0-9	0.0
10-19	0.0
20-29	0.0
30-39	0.1
40-49	0.1
50-59	0.2
60-69	0.9
70-79	3.6
≥80	8.7
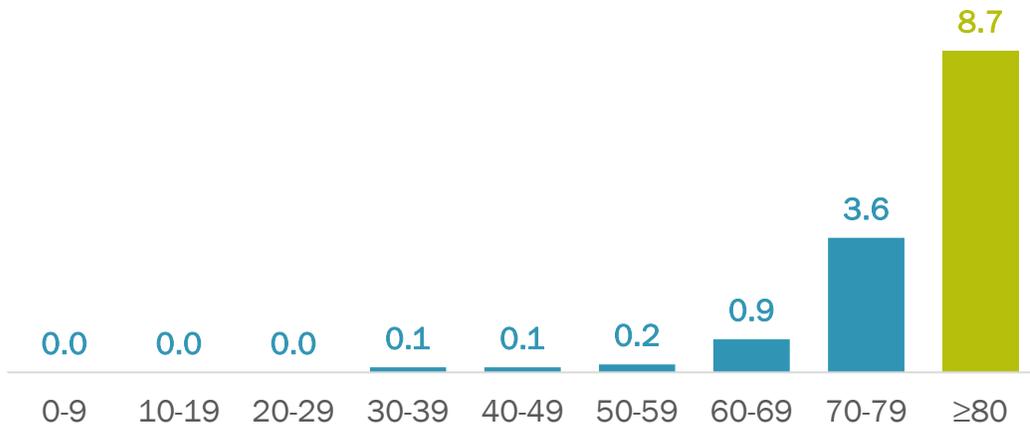
Most COVID-19 deaths occurred in an inpatient hospital setting or a long-term care facility.

Out of state facility 4%
At Home 2%
Long Term Care Facility 50%
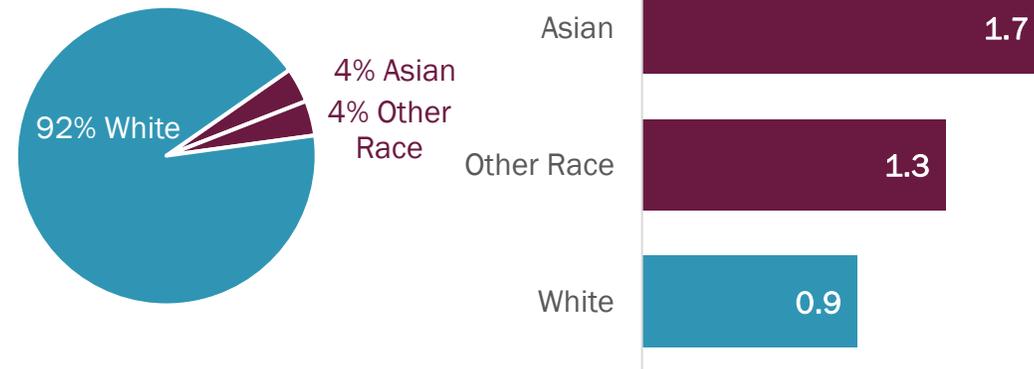Inpatient 44%

Males have similar rates of COVID-19 death than females.

Rate per 10,000 Vermonters

1.0   0.8

White Vermonters represent a majority of COVID-19 deaths. However the rate is higher among racial minorities.

Rate per 10,000 Vermonters

92% White
4% Asian
4% Other Race

	Rate
Asian	1.7
Other Race	1.3
White	0.9

Note: No deaths have identified as Hispanic or Latino.

Clinical Course

Outbreaks

How is COVID-19 impacting group settings?

What is an outbreak?

1. For congregate care facilities (long term care facility or skilled nursing facility):

   - A single resident with a positive COVID-19 laboratory test and one or more additional residents with respiratory illness
   OR
   - Two or more residents with at least two of the following symptoms: fever (temp ≥ 100°F), cough, difficulty breathing/shortness of breath

2. For other settings (residential communities, businesses):

   - Two or more epidemiologically-linked confirmed COVID-19 cases where there's an opportunity to stop transmission

Outbreaks

24% of COVID-19 cases are associated with an outbreak

159 cases among residents

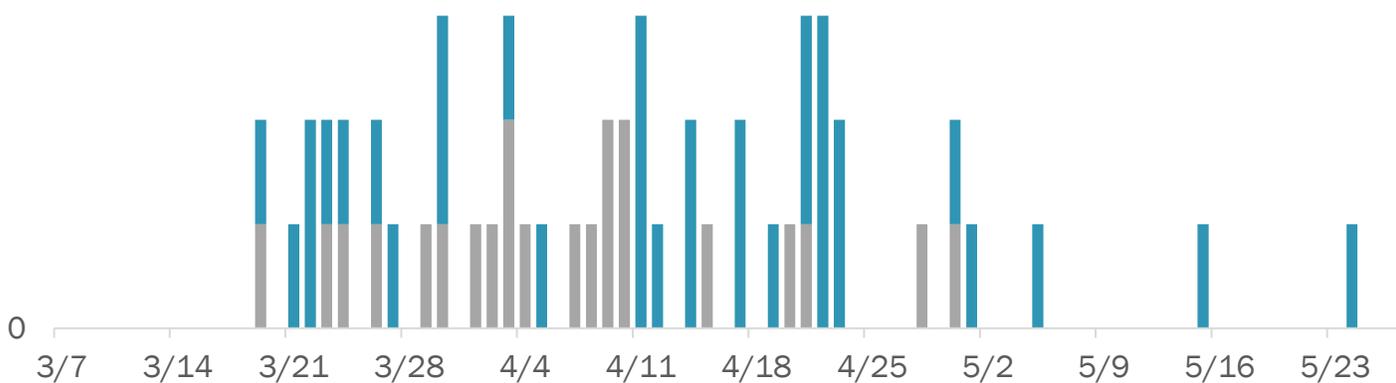**81** cases among staff
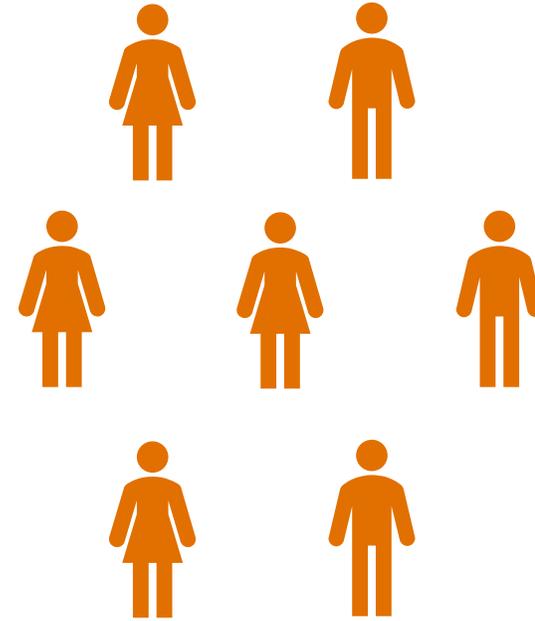
Outbreaks

5 Active

3 Resolved

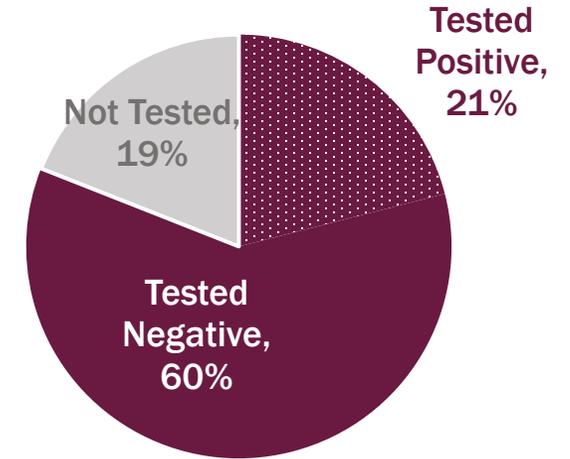**Vermont COVID-19 Cases Associated with an Outbreak Over Time**
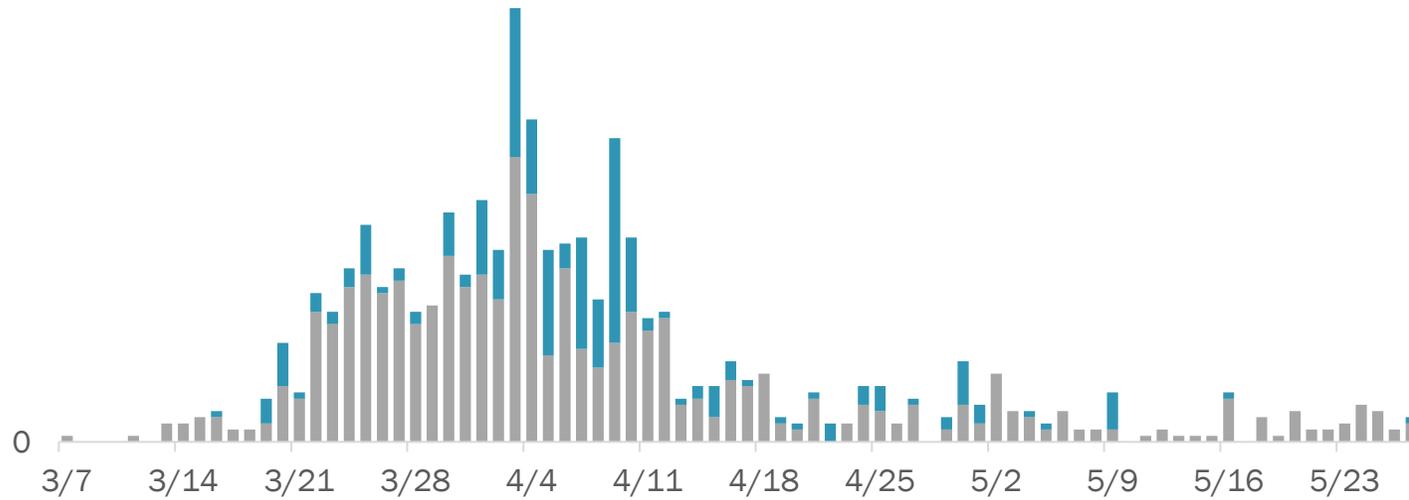
Vermont COVID-19 Deaths Associated with an Outbreak Over Time

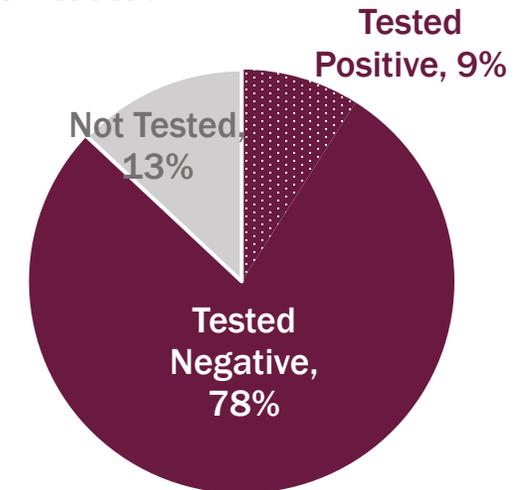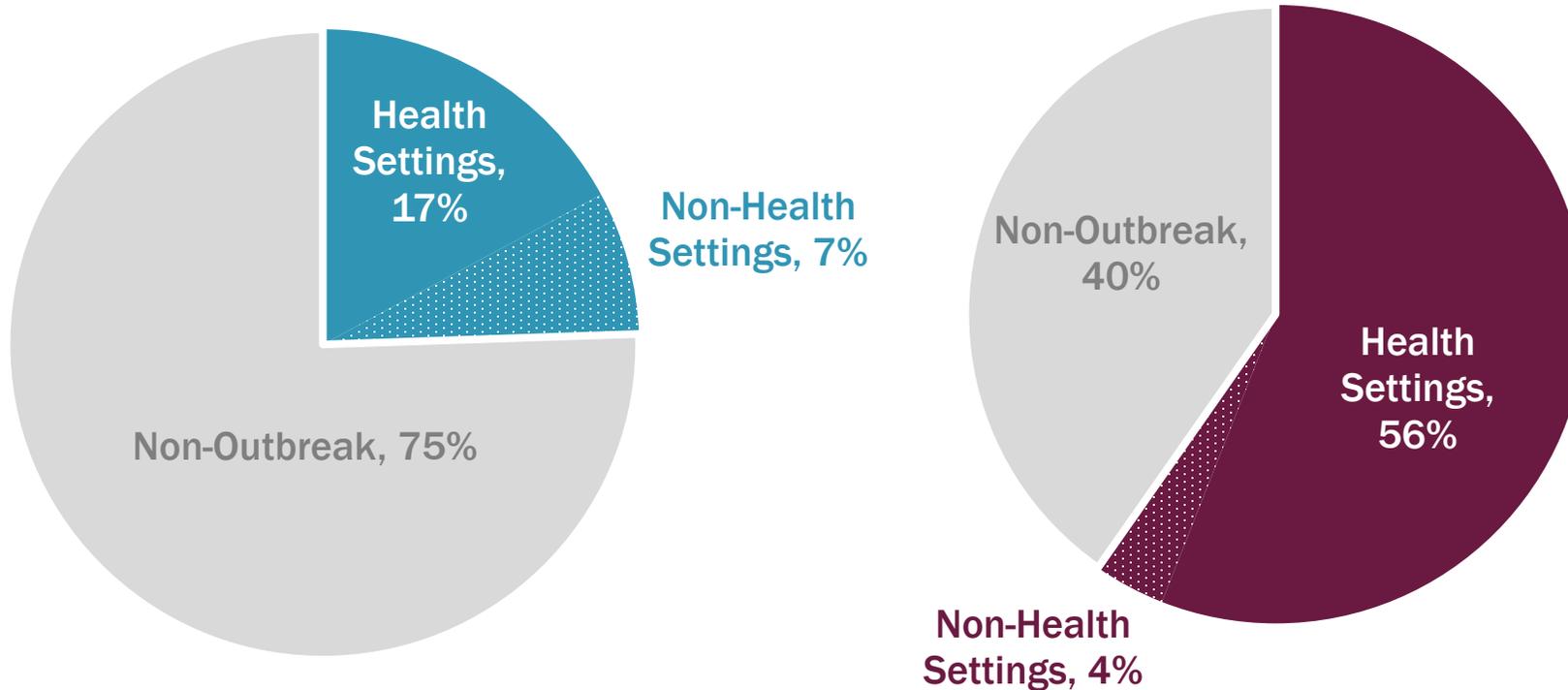**In facilities with an outbreak, 81% of residents have been tested.**

Tested Positive, 21%

Not Tested, 19%

Tested Negative, 60%

In facilities with an outbreak 87% of staff have been tested.

Tested Positive, 9%

Not Tested, 13%

Tested Negative, 78%

Outbreaks

While only 24% of all COVID-19 cases are associated with outbreaks, more than half of COVID-19-related deaths occur in outbreak settings.

Health Settings, 17%

Non-Health Settings, 7%

Non-Outbreak, 75%

Non-Outbreak, 40%

Health Settings, 56%

Non-Health Settings, 4%

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 5/27/2020.

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

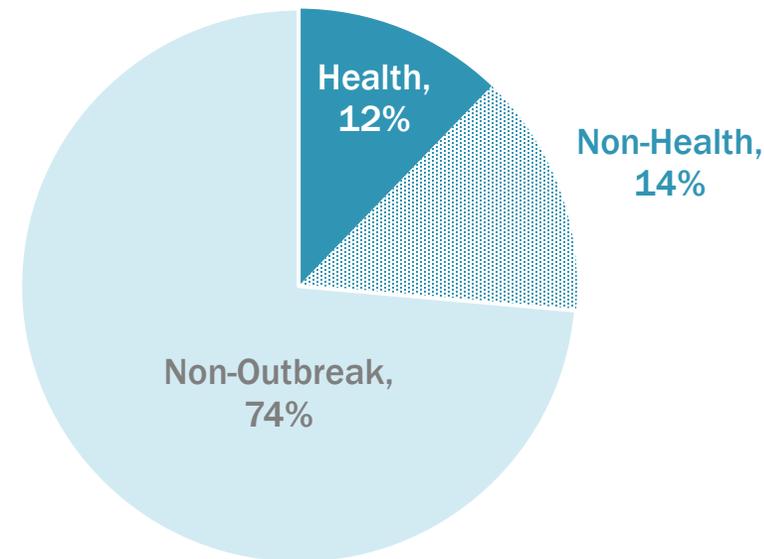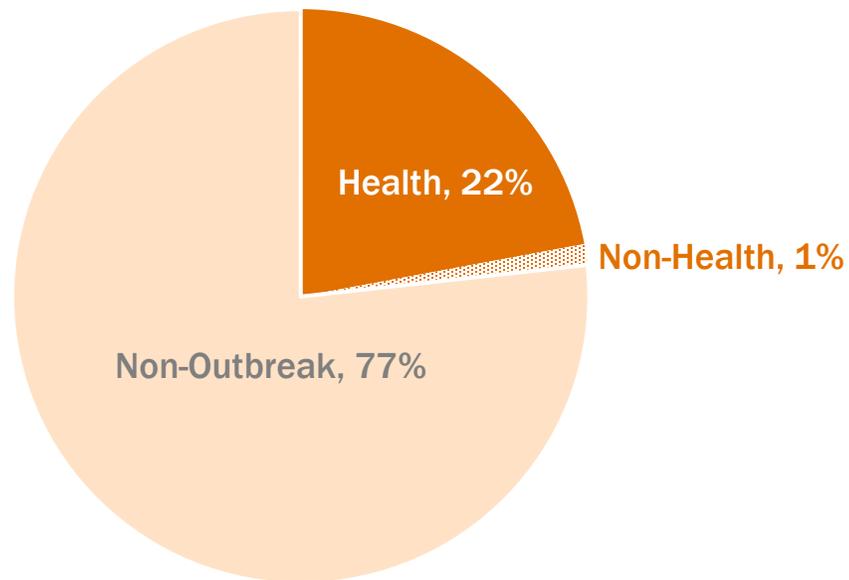**The percentage of females and males with COVID-19 that are associated with an outbreak is about even.**

23% of females with COVID-19 are associated with an outbreak.

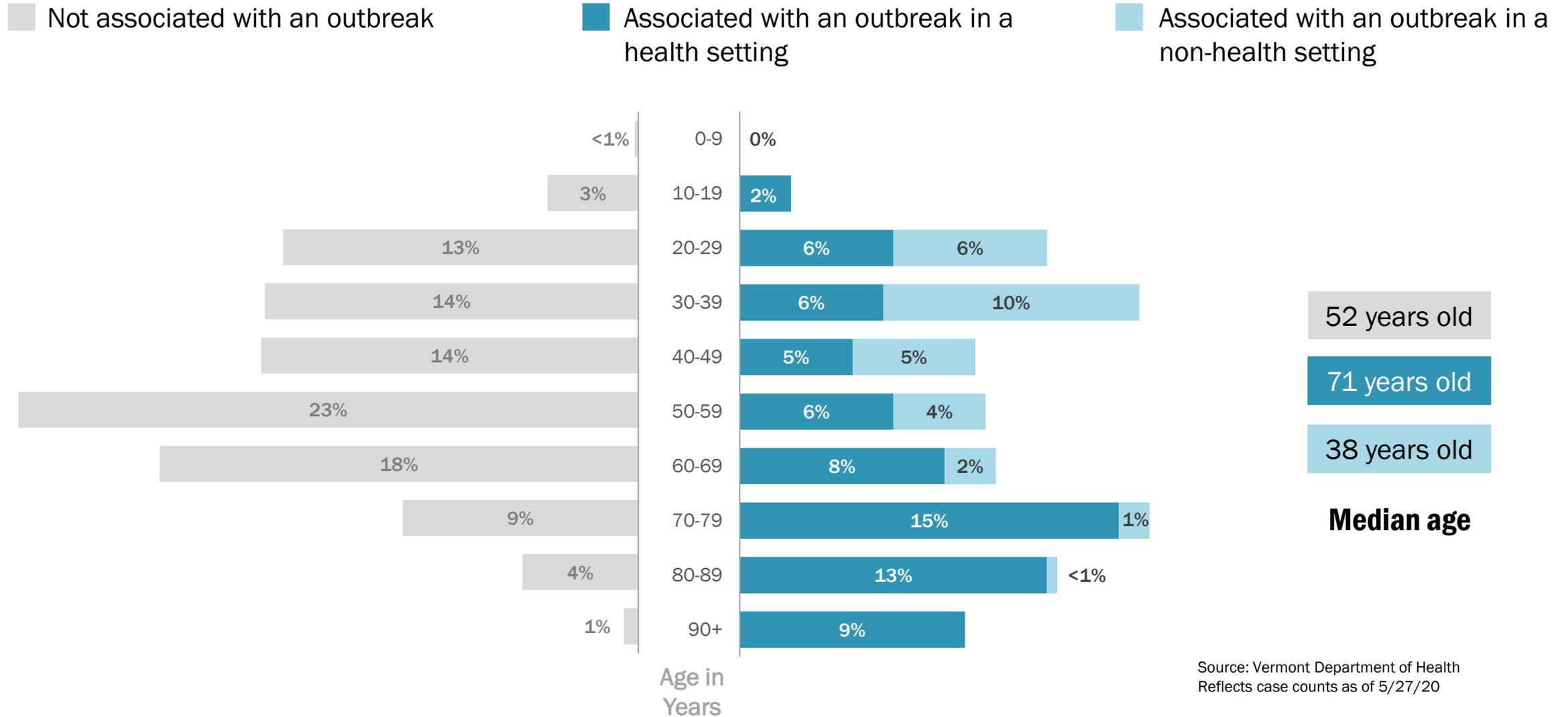**26%** of males with COVID-19 are associated with an outbreak.

But in underlined outbreak settings, females with COVID-19 are more likely to be associated with a health setting than non-health settings.

Health, 22%

Non-Health, 1%

Non-Outbreak, 77%

Health, 12%

Non-Health, 14%

Non-Outbreak, 74%

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 Cases by Outbreak Status and Age

Not associated with an outbreak

Associated with an outbreak in a health setting

Associated with an outbreak in a non-health setting

Not associated with an outbreak	Age in Years	Associated (health)	Associated (non-health)
<1%	0-9	0%	
3%	10-19	2%	
13%	20-29	6%	6%
14%	30-39	6%	10%
14%	40-49	5%	5%
23%	50-59	6%	4%
18%	60-69	8%	2%
9%	70-79	15%	1%
4%	80-89	13%	<1%
1%	90+	9%	

Age in Years

52 years old

71 years old

38 years old

Median age

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 is decreasing.

Syndromic surveillance from 13 of 14 Vermont hospitals and 2 urgent care centers. Monitoring this data acts as an early indicator of potential spikes of COVID-19 in the community.
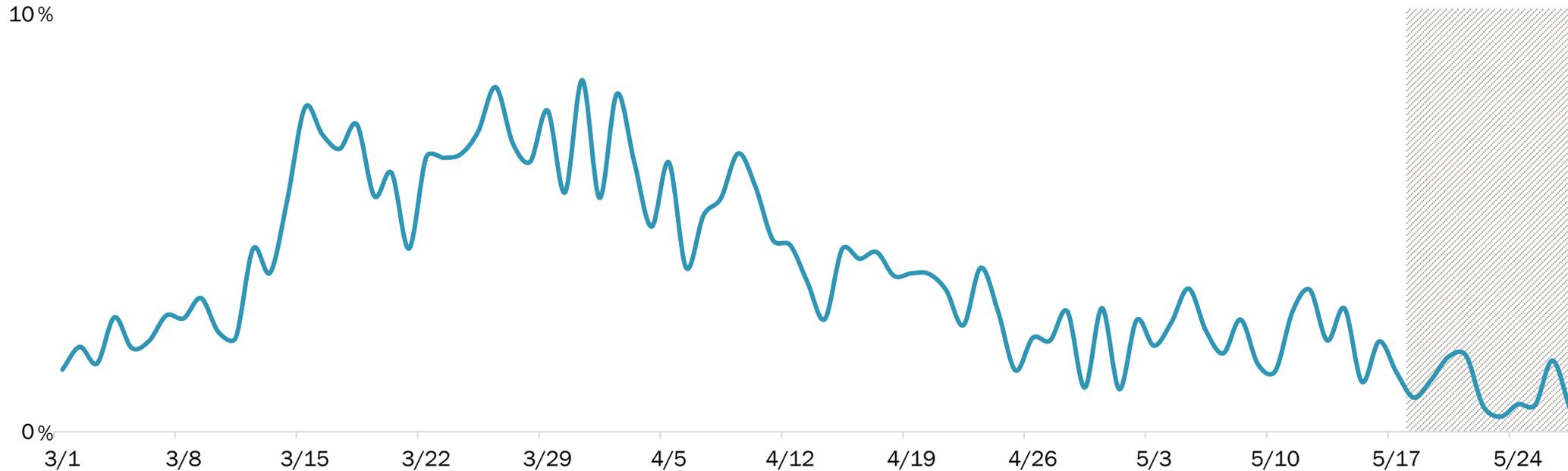
Interpret with caution, there is a chance for over or underestimation given the lag in reporting.

COVID-19-like illness diagnosis is determined using the patient's chief complaint and/or discharge diagnosis.

COVID-19-like illness is the presence of a fever with the addition of shortness of breath, difficulty breathing, or cough.

COVID-19-like illness excludes patients with an influenza discharge diagnosis.

*Please note: the query used to identify COVID-19-like illness in syndromic surveillance data changed on 5/28. This was to be consistent with the most up-to-date national definition provided by the CDC.

Syndromic Surveillance

Weekly Spotlight: Symptoms

No symptoms, 7%

Unknown, 8%

Symptoms, 85%

85% people with COVID-19 in Vermont have experienced symptoms
and 7% of people with COVID-19 in Vermont have not experienced symptoms.
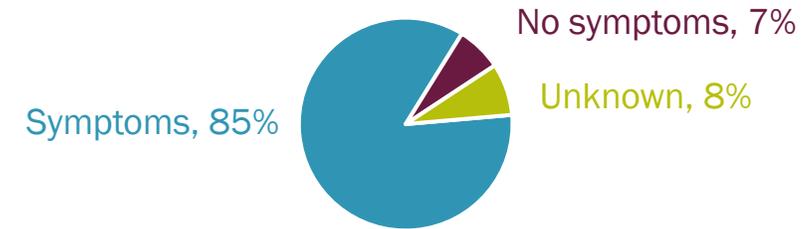
**The most common signs or symptoms of COVID-19 in Vermont are cough, fatigue, headache, fever, and muscle pain.**

Sign or Symptom	Percent of Symptomatic Cases
Cough	74%
Fatigue or Malaise	70%
Headache	55%
Fever	53%
Muscle Pain	53%
Loss of Smell or Taste	51%
Shortness of Breath	50%
Felt Feverish	50%
Loss of Appetite	47%
Chills or Rigors	47%
Other*	43%

*Other includes things like chest tightness, weakness, dizziness.

The proportion of cases without symptoms is generally higher among younger age groups, while the proportion of cases with symptoms is higher among older age groups.
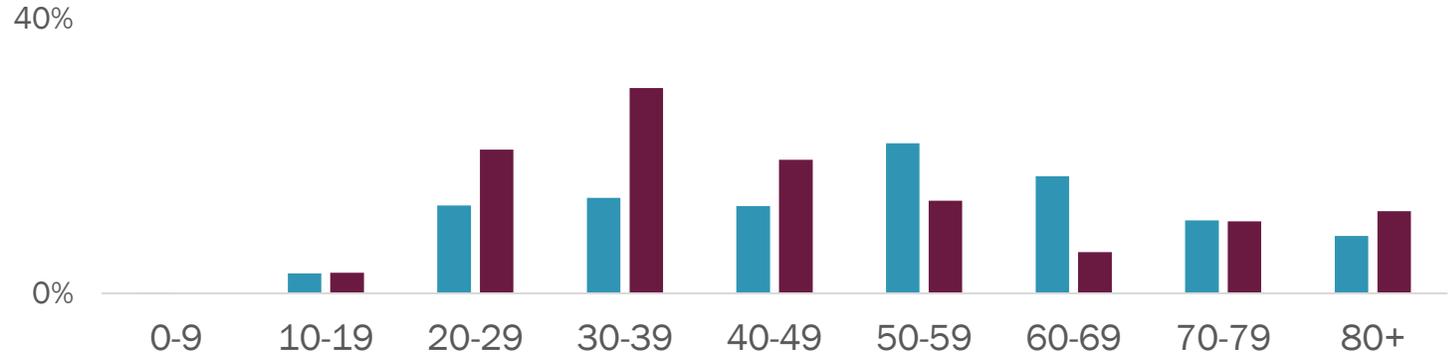
A larger proportion of females with COVID-19 have symptoms, while males with COVID-19 have symptoms and do not have symptoms about equally.

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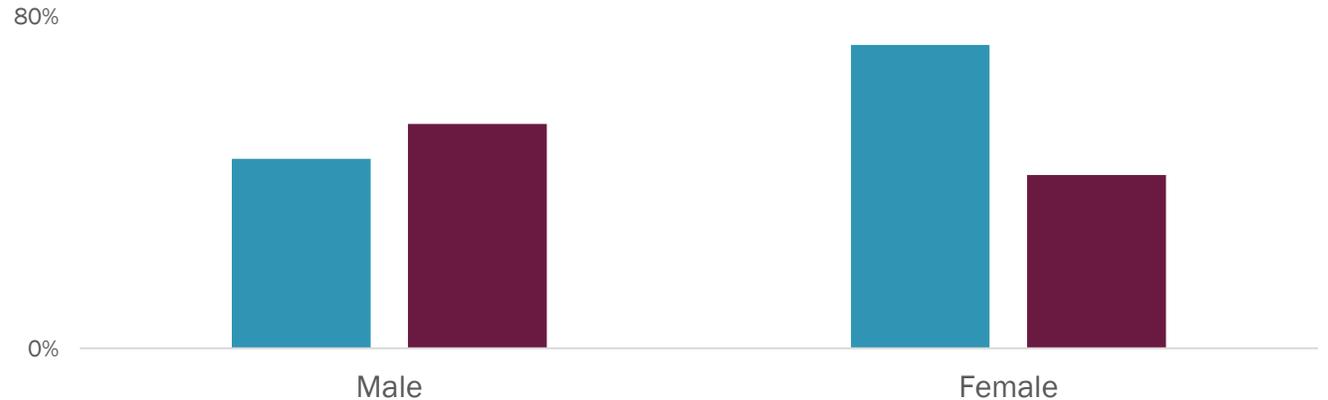
Learn more about COVID-19 in Vermont:

Web: www.healthvermont.gov/COVID-19

Email: AHS.VDHPublicCommunication@vermont.gov