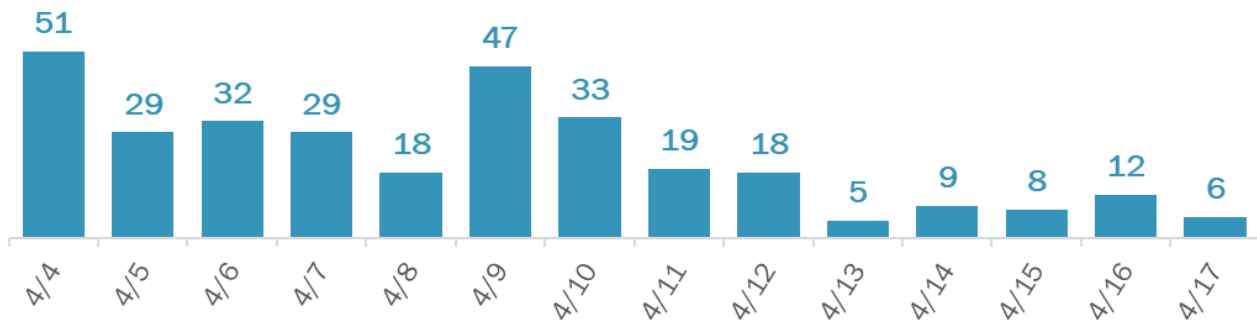


TO: Vermont Health Care Providers and Health Care Facilities
FROM: Jennifer S. Read, MD, Medical Epidemiologist

**Overview of Vermont Residents Testing Positive for SARS-CoV-2:
April 4-17, 2020**

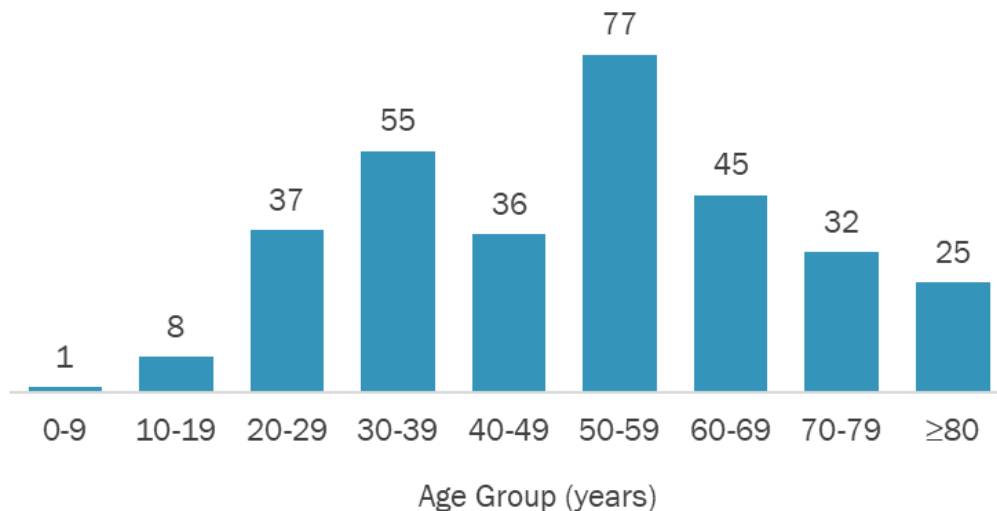
Between April 4 and April 17, 2020, a total of 316 Vermont residents tested positive for SARS-CoV-2, the etiologic agent for novel coronavirus 2019 (COVID-19) disease (figure).

Number of New COVID-19 Cases Among Vermont Residents



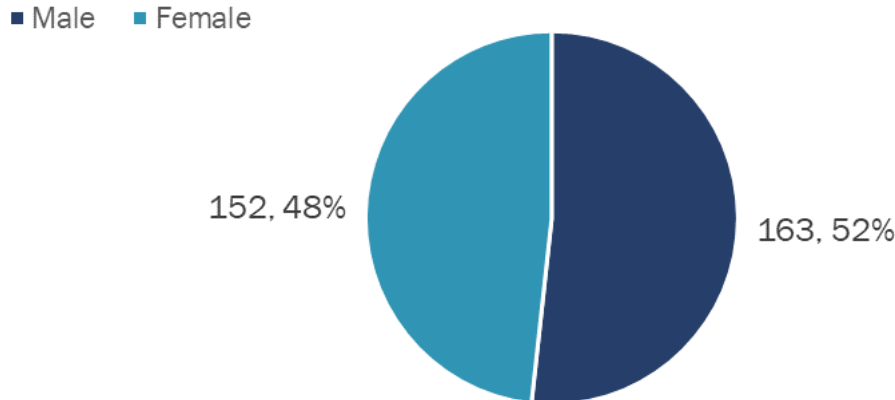
The median age was 53 years (range: 5-95 years; interquartile range: 35-64 years) (figure).

**Distribution of Vermont Resident
COVID-19 Cases by Age Group**



Information on sex was available for all except one case. The distribution by sex is shown (figure).

Distribution of Vermont Resident COVID-19 Cases by Sex



Information on the distribution of race and ethnicity is shown in the following two tables:

Race Distribution Among Vermont Resident COVID-19 Cases		
Race is determined by either provider report or self-disclosure during interview. n=286 (30 have unknown race)		
Race	Count	Percent
American Indian or Alaskan Native	1	0.3%
Asian	3	1.0%
Black or African American	8	2.8%
White	266	93.0%
Other	8	2.8%

Ethnicity Distribution Among Vermont Resident COVID-19 Cases		
Ethnicity is determined by either provider report or self-disclosure during interview. n=253 (63 have unknown ethnicity)		
Ethnicity	Count	Percent
Hispanic	8	3.2%
Non-Hispanic	245	96.8%

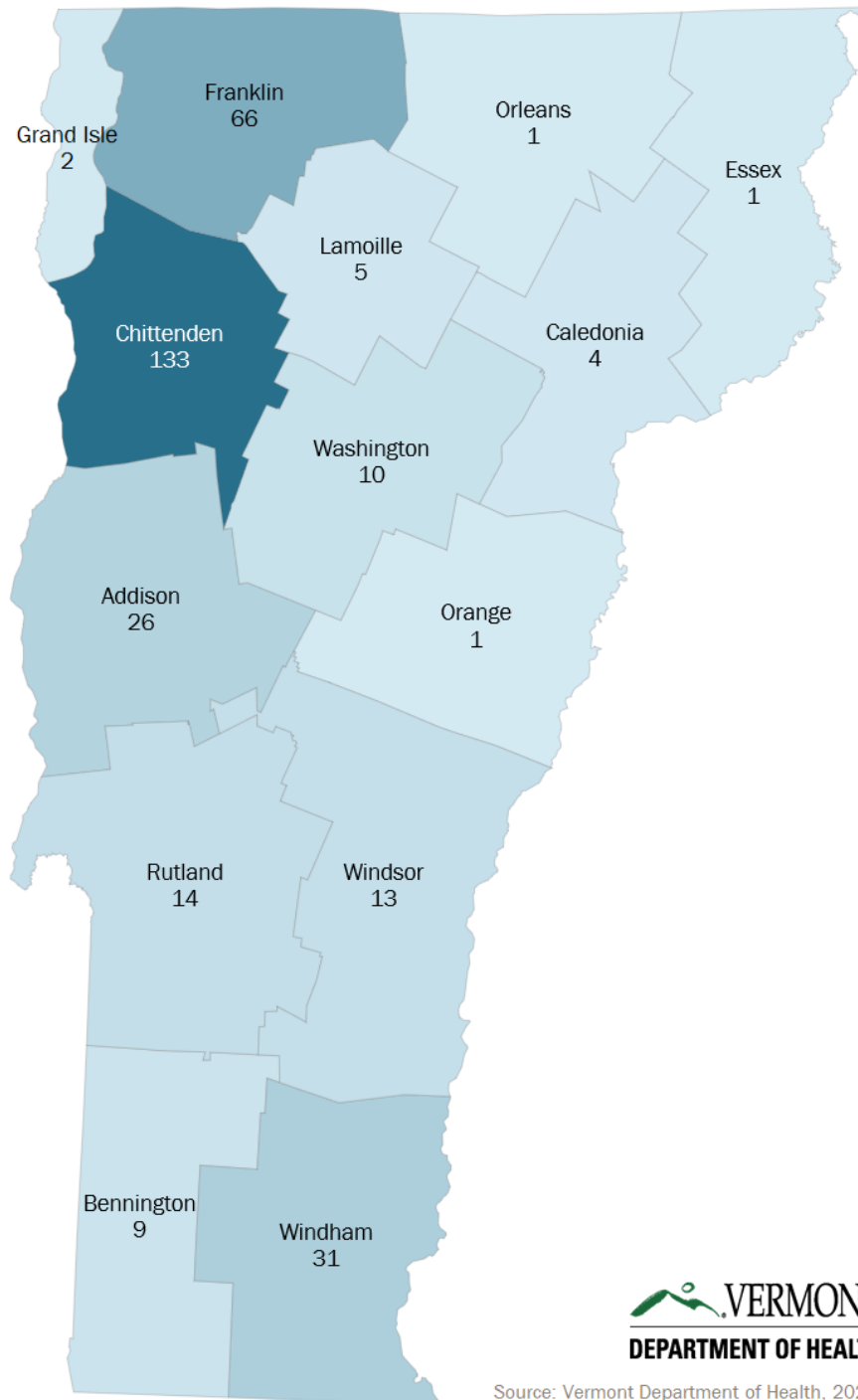
The geographic distribution of cases is shown in the following two figures:

Vermont Resident COVID-19 Cases by County

April 4 - April 17, 2020

*Vermont residents who tested positive for COVID-19.

**Some cases may still be under investigation and county not assigned yet.

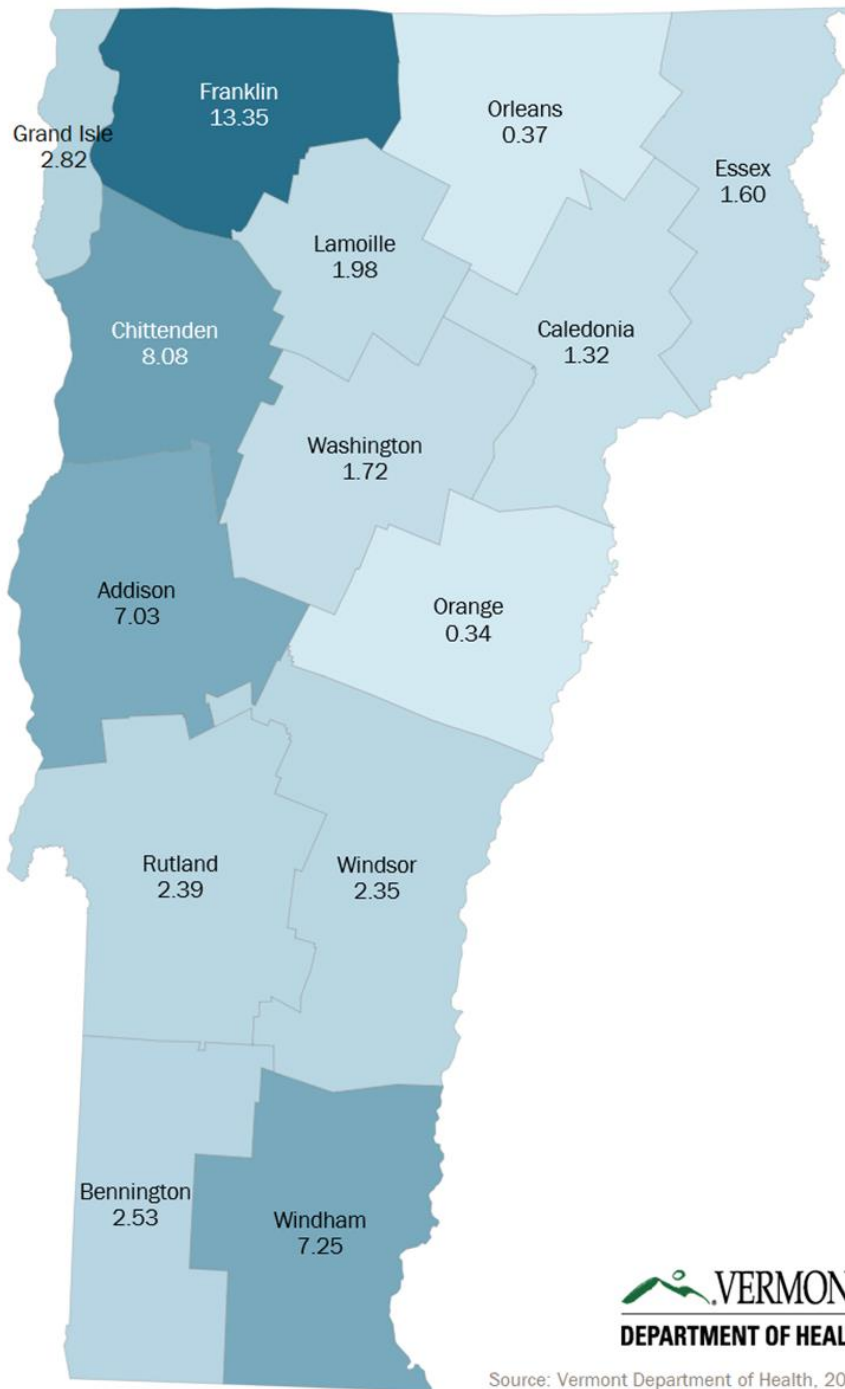


Vermont Resident COVID-19 Rates by County

April 4 – April 17, 2020

*Vermont residents who tested positive for COVID-19.

**Number of cases per 10,000 population. Caution should be used when interpreting rates in counties with small populations.



In order to characterize the clinical epidemiology of these infections, a systematic sample of 29 individuals who tested positive for SARS-CoV-2 was assembled. As before, the systematic sample included cases who did or did not die subsequent to their COVID-19 diagnosis. Characteristics and clinical features of these 29 cases are delineated below.

Seven cases were related to congregate settings where at least one resident/inmate or staff member had previously tested positive for SARS-CoV-2 and therefore universal testing of residents and staff had been implemented:

- **Four cases were residents of or staff at long-term care facilities (LTCFs).** Of the three who were residents, all three had multiple and significant co-morbidities including chronic obstructive pulmonary disease, hypertension, obesity, rheumatoid arthritis with chronic steroid use, and chronic kidney disease. One was a former smoker. Each of these individuals was symptomatic, with one or more of the following signs/symptoms: nausea, vomiting, fever, cough, malaise, and chills. One individual was a LTCF staff member and was asymptomatic.
- **Three cases were inmates at a correctional facility.** One case was asymptomatic, and the other two had one or more of the following signs/symptoms: myalgia, fever, cough, chills, headache, sore throat, decreased appetite, vomiting, weakness, and fatigue.

The remaining 22 cases had the following characteristics:

- Co-morbidities: Twelve (54%) had one or more chronic medical conditions:
 - Obesity or morbid obesity: 5
 - Current or former tobacco smoking: 4
 - Hypertension: 4
 - Diabetes: 3
 - Hypo- or hyperthyroidism: 3
 - History of cerebrovascular accident with sequelae: 2
 - Developmental delay: 1
 - Asthma: 1
 - Inflammatory bowel disease (Crohn's), using immune modulator: 1
 - History of cancer, status post bone marrow transplant, with chronic leukopenia: 1
 - Other: 5
- Contact with known COVID-19 patients: 9 (41%)
- Travel outside of Vermont (Florida): 1 (4%)
- Health care workers: 4 (18%)
- Location of patient when testing ordered and subsequent disposition:
 - Telephone/Telemedicine visit: 16 (73%)
 - (Discharged to) home: 16
 - Emergency Department: 4 (18%)
 - Discharged to home: 3
 - Hospitalized: 1 (subsequently discharged to home)

- Outpatient clinic/office: 2 (9%)
 - Discharged to home: 2
- Signs and Symptoms: One person was asymptomatic, but the other 21 individuals had one or more of the following signs/symptoms:
 - Cough: 14 (67%)
 - Fever: 12 (57%)
 - Fatigue: 11 (52%)
 - Shortness of breath: 8 (38%)
 - Dysgeusia and/or anosmia: 7 (33%)
 - Decreased appetite: 7 (33%)
 - Myalgia: 7 (33%)
 - Chills: 5 (23%)
 - Malaise: 4 (19%)
 - Pharyngitis: 4 (19%)
 - Diarrhea: 4 (19%)
 - Nasal congestion or rhinorrhea: 4 (19%)
 - Abdominal pain: 3 (14%)
 - Nausea: 3 (14%)
 - Headache: 2 (5%)

Summary: This overview of Vermont residents addresses individuals with laboratory-confirmed COVID-19 disease from April 4-April 17, 2020. The median age in this cohort is similar to that of the previously reviewed cohort (March 21-April 3, 2020). The incidence rates by county have shifted somewhat from the previously reviewed cohort (for example, now higher incidence in Franklin and Windham Counties). A similar proportion of cases in this systematic sample were in congregate settings as compared with the previously reviewed cohort. Outside of congregate settings, over half of cases had chronic medical conditions, a greater proportion than the previous cohort had contact with a known COVID-19 patient, and a lesser proportion had recent travel outside of Vermont. A similar proportion of cases were health care workers. Outside of congregate settings, all testing was conducted in outpatient settings, with telephone/telemedicine visits representing the most common (73%) location of the patient when the testing was ordered. Cough remains the most common clinical feature, followed by fever and fatigue, with nasal congestion or rhinorrhea much less commonly reported. About a third of cases described shortness of breath, dysgeusia and/or anosmia, decreased appetite, or myalgia (all occurring more commonly in this more recent cohort than the previous one). Several other signs and symptoms occurred in less than a quarter of cases during the time period under review.

If you have any questions, please contact the HAN Coordinator at 802-859-5900 or vthan@vermont.gov

HAN Message Type Definitions

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: Provides important information for a specific incident or situation may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service Message: Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.