

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

**Vermont Residents Testing Positive for SARS-CoV-2:
Clinical Overview of Deaths Between July 1, 2021 – September 9, 2021**

Between July 1 and September 9, 2021, 26 adult Vermont residents who tested positive for SARS-CoV-2 died. Of these 26 people, 13 were hospitalized at the time of death, eight were in long-term care facilities (LTCFs), and five died at a private residence. Information regarding age, sex, underlying medical conditions, and events leading up to the time of death are presented below according to location of death.

Of the 13 people hospitalized at the time of death, eight (62%) were over the age of 70 years, four were between the ages of 50-60 years, and one was less than 40 years old. Five were female and eight were male. Information on underlying medical conditions was available for 12 of the 13 people, and such conditions included: obesity or morbid obesity (5 or 42%), diabetes (42%), hypertension (75%), hyperlipidemia (42%), immunosuppression due to cancer chemotherapy or treatment with an immune modulator for a chronic medical condition (15%), and other conditions including a previous history of cigarette smoking, chronic obstructive pulmonary disease, emphysema, epilepsy, asthma, and dementia.

These 13 people were described as presenting for medical care with the following signs and symptoms:

| | General | Respiratory | Gastrointestinal | Notes | Hypoxia at presentation |
|---|-----------------|--|--|--|--------------------------------|
| 1 | Fever, weakness | | | Fall prior to arrival at hospital | Yes |
| 2 | | Dyspnea | | | Unknown |
| 3 | Weakness | Cough | | | Unknown |
| 4 | Fever | Tachypnea | | Altered mental status (disorientation) | Yes |
| 5 | | Cough, chest pain, shortness of breath | | | Yes |
| 6 | Fever | Cough | Nausea, vomiting, decreased appetite, diarrhea | | Yes |
| 7 | | Tachypnea | | | Yes |
| 8 | Fever, fatigue | Dyspnea on exertion, cough | Anorexia, diarrhea | | Unknown |

| | | | | | |
|----|----------------------------|----------------------------|--|---|---------|
| 9 | Fatigue, myalgias | Cough, tachypnea | | | Yes |
| 10 | Malaise, fatigue, weakness | | Decreased oral intake, diarrhea | Confusion, somnolence (fell at home prior to presentation)* | Unknown |
| 11 | | | Abdominal pain, nausea, vomiting, melena | Confusion** | Unknown |
| 12 | Fever, chills | Cough, shortness of breath | Nausea, diarrhea | Headache | Yes |
| 13 | | Cough, shortness of breath | | | Yes |

All of these 13 people had progressive worsening of respiratory status, with severe hypoxemia and respiratory failure resulting in death, with the exception of one person with suspected myocarditis* and another person with severe and extensive coagulopathy with irreversible ischemia of multiple organs**.

Of the eight people who were residents of a LTCF at the time of death, six (75%) were over the age of 70 years, and the other two were in their sixties. Five were male and three were female. Information on underlying medical conditions was available for all, and such conditions included: dementia, diabetes, hypertension, hyperlipidemia, chronic kidney disease, cardiomyopathy, obesity, dysphagia, atherosclerotic heart disease, asthma, chronic obstructive pulmonary disease, and atrial fibrillation.

Signs and symptoms were described as follows for six of the eight people in LTCFs (information for two people not available):

| | General | Respiratory | Gastrointestinal | Notes | Hypoxia at the onset of illness |
|---|---------|----------------------------|-----------------------|------------|---------------------------------|
| 1 | | Shortness of breath, cough | Decreased oral intake | | Yes |
| 2 | | Shortness of breath, cough | | In hospice | Unknown |
| 3 | Fatigue | | Diarrhea | In hospice | Yes |

| | | | | | |
|---|--------------------------|---------------------|--------------------|----------|---------|
| 4 | Fever, malaise, myalgias | Shortness of breath | Decreased appetite | Headache | Unknown |
| 5 | | Cough | | | Yes |
| 6 | | Cough | | | Yes |

All of these eight people had progressive worsening of respiratory status, with severe hypoxemic respiratory failure resulting in death.

Of the five people who died at a private residence, the age range was 23 to 78 years. Two were male and three were female. Information on underlying medical conditions was available for all, and such conditions included: diabetes, asthma, obesity, chronic substance abuse, hepatitis C infection, cigarette smoking, atrial fibrillation, immunosuppression due to chronic steroid use for rheumatologic condition, hyperlipidemia, hypertension, chronic obstructive pulmonary disease, and a familial coagulopathy (hypercoagulable).

Information regarding signs and symptoms was available for these five people as follows:

| | General | Respiratory | Gastrointestinal | Notes | Hypoxia prior to death |
|---|------------------------|--|------------------------------|-------------------------|------------------------|
| 1 | Fatigue | Shortness of breath | | Loss of taste and smell | Yes |
| 2 | Fever, chills, fatigue | Shortness of breath, cough, pleuritic chest pain | Vomiting, diarrhea, nausea | Confusion | Unknown |
| 3 | Fever, Malaise | | Diarrhea, decreased appetite | Loss of taste and smell | Yes |
| 4 | | Dyspnea | | In hospice | Unknown |
| 5 | | Cough, dyspnea | | In hospice | Unknown |

All of these five people had evidence of respiratory distress, with death apparently occurring subsequent to severe hypoxemia and respiratory failure.

REQUESTED ACTION:

Be aware of the characteristics (underlying medical conditions as well as signs and symptoms) of Vermont residents with SARS-CoV-2 infection who died during a recent two-month time period.

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.