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

Update Regarding Use of Pulse Oximeters to Monitor Novel Coronavirus 2019 (COVID-19) Among Individuals with Laboratory-Confirmed SARS-CoV-2 Infection

As announced in the June 1, 2020 Health Update, the Vermont Department of Health initiated a public health program intended to allow more rapid detection of clinical deterioration of people who have COVID-19 through the use of pulse oximeters at home.

Earlier detection of hypoxemia in people with COVID-19 could prompt earlier medical evaluation and, as indicated, supportive care such as provision of supplemental oxygen. In turn, it is hoped that more rapid initiation of supportive care for people with COVID-19 will also result in better clinical outcomes, including decreased mortality.

People newly diagnosed with COVID-19 are contacted by Vermont Department of Health staff and are interviewed regarding symptomatology. **All people interviewed are counseled to contact their primary care provider or the nearest emergency department if they develop dyspnea or if their oxygen saturation reading is less than 92%.**

Through this program, people are asked in the same interview about whether or not they have a pulse oximeter at home.

- **If they do,** they will be asked to use their pulse oximeter to monitor their oxygen saturation values throughout the day.

- **If they do not** already have a pulse oximeter at home, they will receive one within 24-48 hours, and will be asked to monitor their oxygen saturation values.

Subsequently, all people with COVID-19 are contacted regularly over the next several days to learn about the presence of various symptoms along with oxygen saturation results.

During the initial implementation of the Health Department's pulse oximetry program (through October 2020), only approximately 20% of people with COVID-19 chose to accept the Health Department's offer of a pulse oximeter. Of note, participation in the program occurred in a greater proportion of those who were symptomatic and those who had one or more underlying medical conditions. Of those enrolled in the program, only half actually reported their oxygen saturation values.

Therefore, changes to the program have been instituted to address challenges encountered during this initial implementation period, including the following:

- Additional training was provided to Health Department staff who conduct the initial interviews with people with COVID-19 to increase their ability to explain and answer questions about the purpose of the program and how to use the pulse oximeter.

- Although most people with COVID-19 in Vermont have English as their preferred language, approximately 15 other preferred languages have been listed by people with COVID-19. Interviews of people who have a preferred language other than English are conducted with the use of translation services. Also, instructions for the pulse oximeters are now available in multiple languages.

- Increased awareness of the availability of the pulse oximetry program is being addressed through the use of poster displays and handouts at SARS-CoV-2 testing sites throughout the state.

REQUESTED ACTIONS:

1. Be aware of this pulse oximetry program for laboratory-confirmed COVID-19 cases.

2. Anticipate contact by COVID-19 patients in your practice or health care system if they develop dyspnea and/or hypoxemia while self-monitoring at home.

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.