TO: Health Care Providers and Facilities
FROM: Office of the Chief Medical Examiner

**Coronavirus Disease 2019 (COVID-19): Guidelines for Death Certification and Disposition of Remains for Health Care Providers/Facilities**

**Introduction**
During a COVID-19 outbreak in Vermont, an increased number of fatalities would be expected. Deaths from COVID-19 are due to a natural disease process, and although the number of these deaths may become large, they do not fall under OCME statutory authority. Therefore, these deaths may be certified by local physicians (see Death Certification below). The function of the Office of the Chief Medical Examiner (OCME) will be to support local resources. As with any fatality, three main processes must be accomplished: identification of the deceased, certification of death, and disposal/disposition of the remains. The OCME, along with partner agencies, will facilitate these processes.

It is expected that most persons dying from COVID-19 will die in a hospital or other health care facility (e.g. nursing home or hospice facility). There may be some deaths outside of a health care setting (i.e. “outpatient” deaths). The processes for these two groups of fatalities are as follows.

**Health Care Facility Deaths:** Since these individuals will presumably be identified and have a known or presumed natural death due to COVID-19, the decedent’s physician will be responsible for certifying the death (see Death Certification guidelines below), and the health care facility will facilitate disposition of remains to funeral directors (see Disposition of Remains below).

**Outpatient Deaths:** Deaths occurring outside a health care facility will come to the attention of authorities by the usual means – typically, a telephone call to local police or emergency services who will then notify the OCME. If preliminary investigation suggests no foul play and a natural death without concern for COVID-19, and if the deceased is properly identified, the body may be transported to a local funeral home/crematory with subsequent certification by either the decedent’s physician or the OCME (as per routine procedures). If preliminary investigation identifies “flu-like” symptoms at the time of death and/or risk for COVID-19, the OCME will be notified and assume jurisdiction to determine the need for laboratory confirmation and autopsy.

If there is any suggestion of “foul play” or an unnatural death, the usual procedures regarding unexpected or violent deaths will proceed, involving Police, State’s Attorneys and the OCME.
If there is an issue with identification of the deceased, the body will need to be transported to the OCME for further work-up.

**Death Certification**

Deaths related solely to COVID-19 should be certified as such, and whether the diagnosis was laboratory confirmed or presumed based on clinical history and/or circumstances should be indicated\(^1\). Indicating the causal pathway (mechanism) leading to death in Part I of the certificate is encouraged. For example, in cases when COVID-19 infection causes acute respiratory distress syndrome due to pneumonia, these can be included on lines A and B followed by Coronavirus Disease 2019 (COVID-19) on line C in Part I (See Example 1 below). If the decedent had other chronic conditions such as COPD or asthma that may have also contributed, these conditions can be reported in Part II (Contributory conditions).

Scenarios and recommended certification examples follow.

1. An otherwise healthy person presents with flu-like and respiratory symptoms and has laboratory confirmation of COVID-19. They develop pneumonia which progresses to acute respiratory distress syndrome and they subsequently die:

   **Part I. Cause of Death:**
   A. Acute respiratory distress syndrome
   B. Pneumonia
   C. Coronavirus Disease 2019 (COVID-19), laboratory confirmed

2. An otherwise healthy person, presents with flu-like or respiratory symptoms and is suspected of having COVID-19 based on clinical evaluation and circumstances, but has NO laboratory confirmation of COVID-19, subsequently dies:

   **Part I. Cause of Death:** Coronavirus Disease 2019 (COVID-19), presumed

3. Patient with a chronic underlying condition (e.g., diabetes, atherosclerotic cardiovascular disease, emphysema) who may be more susceptible to dying as a result of being infected with COVID-19, presents with flu-like and respiratory symptoms and has laboratory confirmation of COVID-19, subsequently dies:

   **Part I. Cause of Death:** Coronavirus Disease 2019 (COVID-19), laboratory confirmed
   **Part II. Contributory conditions:** List all relevant underlying diseases.

4. Patient with a chronic underlying condition (e.g., diabetes, atherosclerotic cardiovascular disease, emphysema) who may be more susceptible to dying as a result of being infected with COVID-19, presents with flu-like or respiratory symptoms and is suspected of having COVID-19 based on clinical evaluation and circumstances, but has NO laboratory confirmation of COVID-19:

   **Part I. Cause of Death:** Coronavirus Disease 2019 (COVID-19), presumed
   **Part II. Contributory conditions:** List all relevant underlying diseases.
Disposition of Remains
Following proper identification and death certification, remains will be released for final disposition. In accordance with current, routine processes for remains not under jurisdiction of the OCME, the health care facility where the patient died will facilitate disposition of remains to funeral directors according to wishes of the next of kin or pre-arrangements made by the patient. Inform the funeral director of the COVID-19 status.

Body Handling and Storage
Most often, spread of COVID-19 from between living persons happens with close contact (i.e., within about 6 feet) via respiratory droplets produced when an infected person coughs or sneezes, similar to the spread of influenza. This route of transmission is not a concern when handling deceased human remains outside the setting of autopsy or other activities that may aerosolize potentially infectious tissues or fluids. Postmortem handling activities should be conducted using Standard Precautions, focusing on preventing direct contact with infectious material/fluids and embalming chemicals, percutaneous injury, and the hazards of moving heavy remains. Personal protective equipment (PPE) should include disposable nitrile gloves, a long-sleeved fluid-resistant or impermeable gown, and a plastic face shield or face mask with goggles to protect exposed skin, eyes, nose, and mouth from contact or splashes of potentially infectious bodily fluids. An N95 mask is not necessary when handling the remains of persons who have died from COVID-19 outside the setting of an autopsy or other aerosol-generating procedure.

Deceased persons should be secured in sealed body bags, which are clearly identified with the deceased demographic information (full name, date of birth and date and place of death). Ideally bodies should be in heavy-duty “trauma bags” which have handles to facilitate body movement. Medium-duty bags can be used if necessary. Disinfect the outside of the body bay with an EPA-registered hospital disinfectant applied according to the manufacturer’s recommendations. Wear disposable nitrile gloves when handling a body bag containing remains. After PPE has been removed, wash hands immediately with soap and water for 20 seconds. If hands are not visibly dirty and soap and water are not available, an alcohol-based hand sanitizer that contains 60%-95% alcohol may be used.

1 Cause of death statements for deaths due to other viruses, such as the influenza virus, should also indicate whether the diagnosis was laboratory confirmed or presumed.
2 CDC recommendations for Standard Precautions can be found at https://www.cdc.gov/oralhealth/infectioncontrol/summary-infection-prevention-practices/standard-precautions.html

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 that 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.