



Recommended Guidance for Fatality Management during COVID-19 Response

I. Background

SARS-CoV-2 is a novel coronavirus that has emerged and caused coronavirus disease (abbreviated as COVID-19) which has resulted in many fatalities across the state. As the COVID-19 pandemic progresses, it is possible that the fatality management resources of some local jurisdictions will become overwhelmed. If this occurs, existing resources will not be enough to meet the needs of the response (e.g., human remains storage capacity, funeral home storage capacity, elapsed time between death notification and transport, etc.), and local jurisdictions will need to implement local fatality management plans.

II. Purpose

This guidance provides recommendations for local jurisdictions dealing with mass fatalities caused by COVID-19.

III. Protective Measures for Persons Handling Human Remains

Persons handling a decedent who died of COVID-19 should follow routine infection prevention and control precautions. When transferring a body to a human remains pouch (body bag), follow [Standard Precautions](#), including additional PPE if splashing of fluids is expected. Disinfect the outside of the pouch with a [product on the EPA-approved list for use against SARS-CoV-2](#). Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.). Wear disposable nitrile gloves when handling the remains pouch. After removal of PPE, perform [hand hygiene](#) by washing hands with soap and water for at least 20 seconds or using an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water is not available. Soap and water should be used if the hands are visibly soiled.

IV. Care of Human Remains

Decedents should always be handled in a respectful manner. Human remains should be placed in a fully sealed impermeable human remains pouch prior to storage or removal. The decedent's body and the pouch should be clearly tagged with the individual decedent's identifying information. Complete labeling reduces the number of times persons need to open pouches to confirm the contents. Attention should be given to labeling with indelible markers and protecting labels from water damage.

V. **Temporary Morgue Strategy**

When the capacity of hospital morgues and other locations where human remains are stored in a jurisdiction are exceeded, it may be necessary to establish a temporary morgue. In larger jurisdictions a refrigerated warehouse may be needed, or in smaller jurisdictions, a secure, cool space such as an air-conditioned conference room with non-porous floors may be adequate. The following considerations are important when assessing the options for human remains storage:

- **Security:** location should be fully secured with access limited to a minimal number of staff. A log should be kept of all who access the storage site, including the date, time, and reason for access.
- **Access:** Ensure that human remains can be transported into and out of the location with ease. To the extent possible, any path traveled with a decedent should be devoid of stairs. Elevators on the access route should be large enough to accommodate a gurney, or similar transport equipment needs to be able to move in and out of the space. If used, refrigerated trucks/trailers will require appropriate ramps for loading and unloading.
- **Temperature:** Human remains should be stored between 37-44 F degrees and the temperature of the storage location should be monitored. If this temperature range is not achievable, space should be kept as cool as possible.
- **Placement:** Human remains should be stored on gurneys, pallets or on a non-porous floor (something that can be disinfected with a bleach solution). At no time should decedents be stacked on top of each other to prevent distortion of features (which could affect identification) and to allow easier moving and lifting of remains. Thought should always be given to establish and follow procedures that show respect for the decedent.
- **Privacy:** Human remains should be stored away from public view.
- **Ventilation:** As human remains decompose they will begin to smell. The storage location should not be connected into a main ventilation system that services other parts of the facility.
- **Pest Control:** Human remains should be placed on pallets to help prevent rodent/pest problems. Other pest control measure should be taken as necessary.

VI. **Refrigerated Truck/Trailer Strategy**

Refrigerated trucks or refrigerated trailers can also be used to temporarily store human remains. The following should be considered when using a refrigerated truck or trailer:

- A standard trailer without shelves should hold a minimum of 22 pouched remains. If shelving is installed at 3-3 ½ feet off the floor the number can be doubled.
- The interior (including the floor) needs to be metal (not wood).
- The refrigerated space on the truck or trailer should be kept at a temperature between 37-44 F degrees.
- Electricity and/or diesel or other fuel will be required to run the refrigerated unit.

- Refrigerated units will require enough space for parking, transport and access and exchange of units.
- Will require tailgate lift, use of forklift or loading dock location
- Must be secure 24 hours a day to ensure the chain-of-custody of the decedents and to ensure the respect of the families. This may require measures to ensure privacy, deploying lighting or cameras, setting up tents or covered walkways, etc.
- Truck drivers will be required for movement and transport of the unit.
- Refrigerated units will require maintenance to maintain ongoing operations.

VII. **Placement of Human Remains in a Refrigerated Truck/Trailer**

- When physically placing decedents inside a truck or trailer, decedents should always be handled in a manner denoting respect.
- Decedents should always be placed face up.
- Decedents should never be stacked.
- Different placement strategies and shelving can be used to increase the capacity of storage unit that is used. The Greater New York Hospital Association (GNYHA) website includes additional information on [Physical Placement Strategies](#).

VIII. **Human Remains Pouches and Alternatives During Shortages**

There are many types of human remains pouches or body bags of different thicknesses and sizes that are normally available. However, supplies of these products may be limited during the COVID-19 pandemic and alternatives to these standard products may need to be considered. When available, human remains pouches with the following specifications should be used:

- Handles on bag – for easy lifting
- Zipper on the top of the bag – to prevent leaking
- Durable – for long term storage

If human remains pouches or other types of body bags are not available, mortuary shrouds, which are normally a thinner white plastic material should be considered as an alternative. If these standard products are not available, consider using some of the following materials to temporarily store human remains:

- Plastic sheets
- Plastic bags
- Plastic tarps
- Sheets/blankets

Regardless of the type of human remains pouch, bag, or alternative items that are used to store human remains, it is important to disinfect the outside of the material with a [product on the EPA-approved list for use against SARS-CoV-2](#) if that material may have potentially been contaminated with the SARS-Cov-2 virus. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).

IX. **Resources**

- [ASPR TRACIE Fatality Management Topic Collection](#)
- [Healthcare Mass Fatality Management Guidelines - King County, WA](#)
- [GNYHA - New York City Mass Fatality Management Guidance](#)
- [ASPR TRACIE Fatality Management Technical Resources](#)