The purpose of this booklet is to assist local authorities in preparing to manage the increased number of deaths due to a natural disease pandemic, that is, deaths that are over and above the usual number of fatalities that usually occur in a locality. The OCMF web page shows tables of the estimated increase in the number of deaths as calculated for three attack rates of pandemic flu for each locality and local health planning district and by Virginia Department of Emergency Management (VDEM) Regions. http://www.vdh.virginia.gov/medexams/

The jurisdictional authority for the management of natural deaths due to a natural disease pandemic such as pandemic influenza lies with local authorities. However, when a biologic agent is introduced as an instrument of terror, as opposed to a disease residing naturally or arising in the population, the deaths will come under the jurisdiction of the Office of the Chief Medical Examiner (OCME) as homicides due to a "biologic bullet". A mass fatality event may be defined as any incident involving 12 or more sudden, unexpected or violent fatalities or an event with the potential to produce 12 or more fatalities. Mass fatality events that come under the jurisdiction of the Chief Medical Examiner are those due to violent or unnatural circumstances such as explosion, fire or plane crash or fatalities due to a terrorist attack by biological, chemical or physical agents occurring under accidental, suicidal or homicidal circumstances. Mass fatality events due to natural diseases occurring under natural, non-criminal circumstances such as pandemic influenza, SARS, or meningitis do not come under the jurisdiction of the Medical Examiner except under the circumstances described in the section below.

WHEN SHOULD FLU DEATHS BE REPORTED FOR INVESTIGATION BY THE MEDICAL EXAMINER SYSTEM?

To determine if avian influenza, pandemic flu, emerging infection or bioterror agent has arrived in Virginia, the OCMF takes jurisdiction in a Limited number of cases to establish the index case in the following situations:

- A death that meets criteria for an emerging infection and needs to be confirmed by culture of blood and tissues. This includes the first "native" cases of pandemic flu in Virginia.
- Avian influenza and bird deaths in which a poultry worker where illness is suspected as flu to confirm flu has been contracted from poultry.
- Any flu-like illness resulting in the death of a family member/companion of a poultry worker to prove human to human transmission. The worker should also be tested if not done so previously.
- A death of a traveler from elsewhere suspicious for flu or a citizen from VA who has traveled elsewhere and has been at risk (e.g., China)
- The first diagnosed case in a hospital that needs documentation of virus in tissue.

The Medical Examiner will assume jurisdiction over all of the deaths described in these specific scenarios above based on the Code of Virginia § 32.1-277 to 32.1-288. Reports should not be sent to the next-of-kin if the death resulted from one of the scenarios listed. The Medical Examiner will release remains to the next-of-kin after investigation and examination.

Otherwise, all homicides, accidents, suicides, violent and sudden and unexpected or suspicious deaths are required to be reported as usual to the local Medical Examiner who represents the Office of the Chief Medical Examiner in that locality.

PLANNING CONSIDERATIONS

As part of planning, each community and private/public medical institution should review the normal procedures followed for managing natural deaths in their community. All local health department agents involved in the management of the remains of natural deaths should examine their facilities and procedures for healthcare facility and non-healthcare facility deaths to identify where limiting factors and gaps are likely to occur during a pandemic.

PRONOUNCING DEATH

There is standard training in Virginia for an official pronouncement of death procedure when someone dies. However, the Code of Virginia does specify who may pronounce death if a pronouncement procedure is carried out. Otherwise, the presumption is that any citizen can identify someone who is clearly dead and if there is doubt that death has occurred, will treat the person as alive. Therefore, persons who are clearly dead should not be transported to a hospital, further overwhelming an already stressed medical care system and generating an unnecessary charge for families. If there are a large number of deaths occurring out of the healthcare facilities that are attended by private physicians, the趙ical Medical Examiner may designate the facility that can be cooled until the bodies are picked up by funeral homes and the attendings notified to sign the death certificate.

CERTIFICATION OF DEATH

Pronouncement of death and certification of death are different functions. Certification of death is the actual signing of a death certificate stating the cause of death and may only be performed by a physician licensed in Virginia or a designee. Death certificates are, by Code, to be signed and given to the funeral director within 24 hours for each death. For a homicide facility death, in the absence of an attending physician, § 32.1-263C authorizes an associate physician, the chief medical officer of the institution or a pathologist who performed an autopsy on a deceased to sign the death certificate. In the event there are multiple deaths occurring over a short interval, a healthcare facility may wish to designate a single physician, familiar with the patients' records, as responsible for expeditiously signing death certificates. If the decedent never had a physician, the OCME will assume jurisdiction over the death.

FILING THE CERTIFICATE OF DEATH

VA Code § 32.1-263 directs funeral directors to file the certificate with the registrar of vital records (a component of the local health department) within 3 days and prior to final disposition of the body or removal of the remains from the Commonwealth. Communities may wish to develop an arrangement with the local registrar and each medical examiner to expedite the filing of a large number of death certificates.

IDENTIFICATION OF THE DECEDENTS

Personal identification of a decedent is an important function for the completion of death certificates and to return a body to the appropriate next of kin. Identification efforts are best carried out locally where the decedent is known. To secure proper identification of the decedent:
- All who interface with decedents are encouraged to record official personal identification information in the patient's record and maintain this information in the patient's police report and/or medical record. If a deceased patient entered the system without an official photo identification, and the identically nor established, healthcare facility will report this person to the patient's local police department. There is a possibility the deceased has been reported missing by a family member who can visually identify the decedent. There is no standard missing persons reporting protocol for Virginia (except for children) and each police department will have its own procedures. There is an Unidentified Person Registry at the federal level in the National Crime Information Center (NCIC) that may be utilized by law enforcement if local efforts fail or the decedent is not local. Hospitals may want to work out protocols with local law enforcement especially for fingerprints comparison, which is a rapid reliable method of identification.

The minimum information needed for personal identification is:
- First, Middle, Last Name & Suffix
- Race/Ethnicity
- Date of Birth
- Social Security Number & Age
- Next of Kin (or Witness) Name, Contact # & Address

For out of hospital deaths, police will use normal investigatory techniques for identifying the deceased. If after an investigation by both police and the healthcare facility, identification of a hospitalized decedent remains unclear, requesting a complete forensic examination, or police may notify the OCME for assistance. The complete report and all medical records of the deceased as well as the activities taken to secure identification are necessary for the OCME to accept the case. Additional information (ante mortem records, dental records, X-rays, fingerprints) and sampling for DNA may be required for final identification. The OCME will require assistance from the police and medical institutions for this process.

Local Medical Examiners, working under the authority of the Chief Medical Examiner, will view locally and certify the usual natural deaths and flu deaths of persons whose identity is secure but who have no attending or treating physician to certify the death. These deaths may be transported directly to a local or regional holding location for examination by a Local Medical Examiner. These local Medical Examiner cases do not need to enter overburdened hospitals or Medical Examiner District Offices.
HANDLING REMAINS

As a rule, human remains pose no significant threat to the community or those who handle them provided universal precautions are observed. Planters should ensure that all personnel involved in human remains handling are properly protected by being classified as “responders” and by receiving proper immunizations and anti-viral medication as appropriate, training, and personal protective equipment.

The standard procedure is to inform persons handling the body and funeral homes if a patient died of the pandemic event or any other infectious disease as defined by the Board of Health (HIPAA regulations paragraph § 164.512 SECTION G. and VA Code 32.1-37.1).

All personnel who handle pandemic related remains should utilize the recommendations of the World Health Organization for personal protective equipment when exposed to infectious agents including the H5N1.

- Disposal, long-sleeved, cuffi d gown (waterproof if possibly exposed to body fluids)
- Single-layer non-sterile ambidextrous gloves which cover the cuffs of the long sleeve gown.
- Surgical mask (a particulate respirator if handling the body immediately after death)
- Surgical cap and face shield if splashing of body fluids is anticipated.
- Waterproof shoe covers if required.
- Proper hand washing is always recommended when handling remains.


POSTMORTEM CARE OF REMAINS

Human remains should be placed in fully sealed impermeable human remains pouches prior to removal. The body and pouch should be clearly tagged with the individual decedent’s identifiers such as name, date of birth, SSN, location of origination, medical record number etc. Complete labeling reduces the number of times laboratory staff needs to open pouches to confirm the contents.

MANAGING PERSONAL EFFECTS (PE)

Hospitals should continue their standard procedures for inventorying the personal effects of patients to document and receipt them in such a way as to ensure patient ownership, complete accountability and enable retrievability. If PE access occurs the remains in the human remains pouches, ensure that the funeral director and family are made aware of this so that effects may be safely retrieved before cremation or final disposition. Funeral directors and others should sign a receipt for the items as well as the body.

TRACKING OF REMAINS

If the name of the deceased is known, seal and label each body, body bag, clothing and personal effects bag and medical record with the deceased’s name and date of birth. If the name is unknown, mark each of the above with a unique identifier (i.e. Hope Hospital #1, Hope Hospital #2, Hope Hospital #3, etc.), with the chart number, and the address of origination. DO NOT use John or Jane Doe. If bar coded triage tags are available, ensure each item listed above is marked with the same barcode number.

When moving, storing, and/or releasing remains and personal effects, keep detailed records like that of a chain of evidence for each individual body and personal effects bag. Ensure dates, times, persons involved and locations are recorded. A simple spreadsheet may be used to list the decedent names, delivery date and by whom, date in and date out, removal date and by whom, personal effects received or none, death certificate completed, or the name of the attending who will sign the death certificate. Keep these records as part of the official record for the response as there may be questions by families of decedent about the identity, correct release of bodies and loss of personal effects in such large scale events.

STORAGE CONSIDERATIONS

When planning for fatality surge capacity the ideal temperature for storing and preserving human remains is between 34-17°F. Increasing capacity can be simple as contracting with a refrigerated truck company. If trucks are used, ensure the company names are covered up, the interior of the trailer is metal for later decontamination and the contract includes fueling, truck drivers and refrigeration maintenance. Ramps may also be required if there is no loading dock that can receive tractor-trailers. A normal 40’ trailer can hold 22 bodies stacked 3.5 feet high. If the floor the number can be doubled and transporter back injuries avoided. If trucks are unavailable, remains may be stored in a cooled room on the floor or on tables. Avoid stacking remains on top of each other to prevent distortion of features and to allow easier moving of remains to a place for family viewing.

Ideally, localities should preplan, in cooperation with hospitals and adjacent jurisdictions, to identify sites that are suitable for holding facilities. Examples are warehouses, hangers, and empty public buildings that lend themselves to cooling and proper security. Communities should avoid schools and churches, which may have an emotional impact on the community. Ensure costs are also taken into consideration. If a food establishment is used, the building will never be used for food again. The cost in loss of business may be considerable.

Funeral home establishments may already have the space and capacity to store remains and additional refrigerated trailers. Community planners should be inclusive and include ALL funeral homes in their areas. The following are important for establishing a regional holding morgue.

Space considerations:
- Facility available for the time frame necessary
- Not-porous flooring or disposable flooring
- Room for office spaces
- Tractor-trailer accessible
- Hot and cold water
- Heat or air conditioning (depending upon season)
- Electricity
- Communication capabilities, including multiple telephone and fax lines capability
- Secure entrances into general area and into entrances of facility with uniformed guards
- Security for entire site
- Removed from public view

TRANSPORT OF REMAINS

Most communities contract with funeral homes to transport remains. The anticipated workload for the funeral homes will be extensive and additional resources can be simply as contracting with a refrigerated truck company. If trucks are used, ensure the company names are covered up, the interior of the trailer is metal for later decontamination and the contract includes fueling, truck drivers and refrigeration maintenance. Ramps may also be required if there is no loading dock that can receive tractor-trailers. A normal 40’ trailer can hold 22 bodies stacked 3.5 feet high. If the floor the number can be doubled and transporter back injuries avoided. If trucks are unavailable, remains may be stored in a cooled room on the floor or on tables. Avoid stacking remains on top of each other to prevent distortion of features and to allow easier moving of remains to a place for family viewing.

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TO CONTACT THE MEDICAL EXAMINER

Local Medical Examiners may be contacted through most hospital emergency rooms or through the local police department. The Medical Examiner District Office 24/7 numbers are:
- Central District: 804-786-3174
- Northern District: 703-530-2600
- Tidewater District: 757-683-8366
- Western District: 540-561-6615

For a copy of this document and more information about fatality management visit our website at: http://www.vdh.virginia.gov/medexam/LOCAL MEDICAL EXAMINERS AND PHONE

NOTES:
- Service/Product/Phone numbers
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