Pandemic Influenza Plan – Mass Fatality Management

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INTRODUCTION

Current Missouri state plans include the Missouri State Emergency Operations Plan (SEOP), Emergency Support Function (ESF) 8 Public Health and Medical Plan, the Missouri Department of Health and Senior Services (DHSS) Emergency Operations Plan, Annex K.1.9 – Mass Fatality Management, and the Missouri Pandemic Influenza Response Plan that contains this annex.

The SEOP, ESF-8 Plan describes capability of Missouri Mortuary Operations Response Team (MO MORT 1), to include the Victim Information Center (VIC) and deployment of advance team and references MO MORT 1 Morgue Standard Operating Guidelines (SOG's) and the state's VIC Plan.

The DHSS Emergency Operations Plan, Annex K.1.9 – Mass Fatality Management outlines the basic response actions to be taken by the department during a mass fatality/mortuary affairs event. (See Annex K.1.9 – Mass Fatality Management for specific details.)

The Missouri Pandemic Influenza Response Plan, that contains this annex, outlines the pandemic specific response actions to be taken by DHSS during a mass fatality/mortuary affairs event.

OBJECTIVE

To meet the demand for disposition of human remains during a pandemic influenza in order to allow communities and health care facilities to focus on protecting the health of the living.

BACKGROUND

The State of Missouri has a mixed medical legal death investigation system. This system is made up of county level coroners in the rural areas of the state, and in some cities such as Jefferson City, Joplin, St. Joseph and Cape Girardeau, with medical examiners covering the metropolitan areas of Kansas City, Columbia, Springfield, and St. Louis. These county coroners and medical examiners (MEs) are responsible for investigating sudden or violent deaths and providing accurate, legally defensible determinations of the manner and cause of these deaths. These vital duties require very close interaction with judicial, public safety and local public health agencies (LPHAs). There are slight variances in the statutory descriptions of the coroner/medical examiner duties and responsibilities. See Chapter 58, RSMo (http://revisor.mo.gov/main/OneChapter.aspx?chapter=58) for further information. DHSS will coordinate with the MO Coroners Association and the Medical Examiners Association in the event of an influenza pandemic to examine needs and establish protocols.

The coroner is an elected position, every four years, at the county level. State of Missouri statutes do not require elected coroners to possess medical licensure or maintain any medical legal certifications. Any such requirements are the self-imposed responsibility of the individual holding the office. Missouri statutes outline the type of reportable cases, jurisdictional requirements and authority for the appointment of deputy coroners. See Chapter 58, RSMo (http://revisor.mo.gov/main/OneChapter.aspx?chapter=58) for further information.
The medical examiner is an appointed position by the county/city governing body. State of Missouri statutes specify that a medical examiner must be a physician duly licensed to practice

by the Missouri State Board of Healing Arts. Missouri statutes also outline the type of reportable cases, jurisdictional requirements and authority for the appointment of medical examiner assistants. See Chapter 58, RSMo (http://revisor.mo.gov/main/OneChapter.aspx?chapter=58) for further information. A forensic pathologist usually performs any autopsies requested or required by a coroner/medical examiner office. The forensic pathologist is a licensed physician with certifications by the American Board of Pathology in anatomic/clinic pathology and forensic pathology.

The determination as to whether an autopsy will be performed or not is at the sole discretion of the county coroner/medical examiner from whose jurisdiction the deceased is located or was transported from excluding any requirements outlined in the Missouri Child Fatality Review Panel (CFRP) system (http://revisor.mo.gov/main/OneChapter.aspx?chapter=58). The State of Missouri mandated the CFRP system in 1991**.** This system ensures that child deaths (birth through age 17) are comprehensively reviewed.

GENERAL CONSIDERATIONS

In the event of an influenza pandemic, local jurisdictions may have to be prepared to handle a rapidly escalating increase in the number of fatalities. The total number of fatalities (including influenza and all other causes) occurring within any local jurisdiction during a severe six to eight week pandemic wave may be as high as that which typically occurs over six months in the inter-pandemic period.

Due to the prolonged time frame and the scope of area affected by a severe pandemic event, it is likely that regional, state, and federal resources will be limited in their ability to provide assistance. Therefore, it is the intent of this plan to not only outline issues, processes and actions to be taken at the state level within the DHSS and the State Emergency Management Agency (SEMA), but also to provide information and action steps, specific to a moderate to severe pandemic event, that local jurisdiction representatives like coroners/medical examiners, LPHAs, hospitals, funeral directors, elected officials and religious representatives can utilize to assist them in local planning efforts to prepare for such a situation.

In order to identify planning needs for the management of mass fatalities during a pandemic, it is important to examine each step in the management of a body under normal circumstances and then to identify what the limiting factors will be when the number of bodies increase over a short period of time. The table in Attachment A identifies the usual steps. Possible solutions or planning requirements are discussed in further detail in this chapter.

In a mass fatality/mortuary affairs event primary responsibility falls to the local coroner/medical examiner. However, in a pandemic event people will die from a known disease process, influenza. Therefore, it is possible that once a pandemic event has occurred, many cases will be identified as natural deaths and coroner/medical examiner jurisdiction will be waived. Deceased that are found at home or outside of an approved health care facility will still need to be reported to the local coroner/medical examiner, but most likely jurisdiction will be waived unless there are indications found of a suspicious death or other unusual circumstance.

Public health, vital records registrars, hospitals, funeral directors, embalmers and cemetery service providers all have secondary roles and responsibilities that are crucial to the overall success of any response and handling of a pandemic mass fatality/mortuary affairs event.

In order to develop guidelines or adjust existing plans to suit the pandemic situation, local pandemic planners should ensure that the following persons are involved in mass fatality planning:

- Coroner/Medical Examiner.
- LPHA Administrator/Director and the local vital records registrar.
- Sheriff and/or local law enforcement.
- First Responder community providing emergency medical services.
- Representatives of the mortuary services and/or the local funeral director.
- Representatives from local health care facilities.
- Representatives of local religious and ethnic groups.
- Social Service agencies and non-governmental organizations providing such services.
- Mental health representatives.

Existing disaster plans may include provisions for mass fatalities but should be reviewed and tested regularly to determine if these plans are appropriate for the relatively long period of increased demand which may occur in a pandemic, as compared to the shorter response period required for most disaster plans.

CONTINUITY OF OPERATION PLANS

In preparation for emergencies, it has become an essential activity for all public and private entities to develop and maintain Continuity of Operation Plans (COOP). Therefore, it is recommended that pandemic planning efforts include development of COOP plans. These plans would not only address internal failures and compromises of infrastructure, but would provide guidance to continuing daily activities and essential vital records functions in the event a large portion of an entity's employees are unable to attend work. (See Attachment A.)

ROLES AND RESPONSIBILITIES

Missouri Mortuary Operations Response Team (MO MORT 1)

According to the current SEOP, ESF-8 Public Health and Medical Plan, when a local mass fatality event surpasses the capabilities of local resources, assistance can be requested through the local Emergency Management Agency from SEMA for the MO MORT 1. The MO MORT 1 is an Emergency Support Function 8 resource supported by DHSS, and in the event of a severe pandemic that overwhelms local resources, the MO MORT 1 would be deployed through the State Emergency Operations Center (SEOC) under the direction of SEMA and DHSS. In the event multiple local jurisdictions were overwhelmed, SEMA and DHSS would ask for the appointment through Executive Order of a State Medical Examiner to oversee local activities, the MO MORT 1, and any deployed federal mortuary assets. The MO MORT 1 maintains a large cache of equipment and supplies that would be released to backfill local supply shortages, and trained personnel could assist local jurisdictions in assessing needs and in providing expert advice and technical consultation in response.

Funeral Directors
It is recommended that all funeral directors coordinate with their local coroners/medical examiners and become involved in their disaster and pandemic planning activities with respect to the management of mass fatalities at the local level. Accepted practice for pandemic influenza planning has recommended that funeral directors consider it a part of their professional standards to make contingency plans for what would happen if they were incapacitated or overwhelmed.

Pre-pandemic interval
- Become knowledgeable in local integrated pandemic influenza mass fatality plan.
- Develop a surge plan to address staffing, temperature controlled temporary storage space, and supplies needed for the expected mass fatality.
- Coordinate with LPHA infection control practices to be employed during a pandemic influenza.
- Ensure that system is in place to track the disposition and location of all remains released.
- Understand the proper death certificate completion and filing protocols.

Pandemic interval
Implement the surge plan.
- Adhere to infection control guidelines including Personal Protective Equipment (PPE)
- Communicate with healthcare facilities, coroners/MEs, and cemeterians.
- Implement death certificate completion and filing protocols in accordance with the local pandemic influenza mass fatality plan.
- Keep the Coroner/ME informed about the capacity to accept new remains.

Funeral Homes and Crematoriums
In a severe pandemic, each individual funeral home could expect to handle about six months work within a six to eight-week period. That may not be a problem in some communities, but funeral homes in larger cities may not be able to cope with the increased demand.

Individual funeral homes should be encouraged to make specific plans during the pre-pandemic period regarding the need for additional human resources during a pandemic situation. Crematoriums will also need to look at the surge capacity within their facilities. Most crematoriums can handle about one body every four hours and could probably run 24 hours to cope with increased demand. Cremations have fewer resource requirements than burials and, where acceptable, this may be an expedient and efficient way of managing large numbers of bodies during a pandemic. Geographic Information System (GIS) mapping of funeral directors in Missouri is located at: http://arcg.is/1Sh4YRB.

Health Care Facilities
Pre-pandemic interval
- Healthcare facility mass fatality plans should be included in the local jurisdiction's integrated pandemic influenza mass fatality plan and must also integrate with the healthcare facility's overall pandemic influenza plan.
- Since a marked increase in deaths in hospitals, nursing homes and other institutions is likely, facilities should plan for more rapid processing of bodies.

- Facilities should evaluate their current morgue capabilities, including cooler space, as well as assess what their surge capabilities are and where additional temporary morgue space can be established.
- Health care entities should also work with the LPHA pandemic planners, coroner/medical examiner office and funeral directors to ensure that they have access to the additional supplies (e.g., body bags) and preplan what can be done to expedite the steps, including the completion of required documents (e.g., vital records), necessary for efficient deceased management during a pandemic.

During the pandemic interval, the health care facilities should:
- Implement the plan for identifying, tagging, tracking and storing remains until their release to funeral firm or coroner/ME.
- Ensure that each death certificate is medically certified.
- Keep coroner/ME informed on the number of remains awaiting removal.
- Promptly report required mortality data to the DHSS.

Coroners and Medical Examiners

County Coroners, Medical Examiners, and Troop (Region) Directors are identified at the Missouri Coroners' and Medical Examiners' website at: http://www.mcmea.org/. Coroner/Medical Examiner mutual aid is described in the Missouri System Concept of Operational Planning for Emergencies (MOSCOPE). Annex E is currently under revision.

Pre-pandemic interval:
- Develop a continuity of operations plan (COOP).
- Develop a surge plan addressing staff and supply needs, including PPE, body bags necessary to identify, tag, track, collect, store, and transfer remains resulting from a pandemic.
- Consult with LPHA regarding infection control practices to be employed during a pandemic influenza.
- Assess the capacity of the existing morgue facilities to provide adequate temperature controlled space for storage and processing of remains.
- Work with the local emergency management to identify a suitable temporary mortuary facility.
- Plan for:
  - Recovery of remains within jurisdiction from all places of death including residence, healthcare facility, penal institute and other locations.
  - Designating a space within the morgue to be set aside for the identification of unknown decedents.
  - Protocol for release of remains to funeral firms for burial or to cemeterians for cremation or temporary interment.
  - Maintenance of records for each remain released.
- Clearly understand and educate staff about the death certificate completion as defined in the plan for use during a pandemic.

During the pandemic interval:
- Implement COOP, operational and surge plans.
- Open temporary morgue facility(ies) where indicated.

- Implement infection control guidelines according to the current Centers for Disease Control and Prevention (CDC) and DHSS recommendations.
- Timely inform LPHA if remains begin to accumulate to unsafe levels.
- Ensure remains are identified, tagged, tracked and stored until released to funeral directors or cemeterians.
- Timely complete and file death certificates according to the established protocol in the pandemic influenza mass fatality plan.

Missouri DHSS

For the mass fatality management, DHSS will utilize the Emergency Response Plan, SEOP (ESF-8 Public Health and Medical), and the processes of response as outlined in the Concept of Operations of the Pandemic Influenza Response Plan to guide the health response.

Pre-pandemic period

- Coordinate with coroner/medical examiner on support for influenza-related preparations. (SEOP, ESF-8 Public Health and Medical).
- Work with county coroner/medical examiner and mortuary service providers to review resources and evaluate need for activation of local Emergency Operations Plan (EOP) and local Mass Fatality Plan.
- Review mass fatality/mortuary affairs related public information messaging templates for most current and accurate information.
- Coordinate mass fatality/mortuary affairs related public information messaging with DHSS Public Information Officers (PIO)**.**
- Prepare Executive Order for the activation of a State Medical Examiner**.**
- Identify potential regulatory and statutory barriers to mass fatality management.
- Inform relevant professional groups and health care facilities about the process for completing and filing death certificates during a pandemic.
- Develop a plan to promptly collect mortality information due to pandemic influenza from healthcare facilities.
- Review requirements for autopsy and post-mortem testing in the context of a pandemic.
- Conduct trainings and exercises**.**

Pandemic Interval

- Implement procedures for filing death certificates and burial permits.
- Work with county coroner/medical examiner and mortuary service providers to locate resources in the community to meet unanticipated needs and issues.
- Share event related Health Alert information and updates with county coroner/medical examiner and mortuary service providers.
- Coordinate mass fatality/mortuary affairs related public information messaging with DHSS PIOs and Joint Information Center (JIC).
- Continue work with county coroner/medical examiner and mortuary service providers and Emergency Medical Departments (EMDs) on mass fatality needs and resources and assist with obtaining and establishing alternate morgue sites as required.
- Deploy MO MORT 1 resources and personnel to assist local communities.
- Activate State Medical Examiner to provide coordination of response through SEOC.
- Request Federal Assistance and assistance from other states, as needed and available.

PLANNING FOR TEMPORARY MORGUES

Additional temporary cold storage facilities may be required during a pandemic for the storage of bodies prior to their transfer to funeral homes. Each municipality should preplan, in cooperation with hospitals, funeral homes and adjacent jurisdictions, to identify sites that are suitable for temporary morgues or collection sites based on local availability and requirements. The resource needs (e.g., body bags) and supply management for temporary morgues should also be addressed.

A temporary morgue must be maintained between 35-39 degrees F. Examples are vacant public buildings, warehouses and hangers that can be cooled and secured. Communities should avoid schools, churches and other facilities that may have an emotional impact on the community. If a food establishment is used, the building may never be used for food again, so consider the cost in loss of business and resulting liability for any business. Community planners should include all funeral home establishments in their area in planning efforts to help determine their capacity to store remains. Other types of temporary cold storage to be considered may include refrigerated trucks, cold storage lockers or arenas.

Refrigerated trucks can generally hold 25 to 30 bodies without additional shelving. To increase storage capacity, temporary wooden shelves can be constructed of sufficient strength to hold the bodies. Shelves should be constructed in such a way that allows for safe movement and removal of bodies (i.e., storage of bodies above waist height is not recommended). If shelving is used a mechanical lift system will most likely need to be in place. To reduce any liability for business losses, municipalities should avoid using trucks with markings of a supermarket chain or other companies, as the use of such trucks for the storage of bodies may result in negative implications for business.

Consideration should be given to rooms that can be cooled down or that can be cooled by portable air-cooling units. Memorandum of Understandings (MOUs) with local generator and refrigeration equipment providers should be sought to provide equipment for surge capacity. If nothing else is available, consideration can be given to freezer use.
To establish a temporary morgue, the following information should be considered for space:

- Facility availability for timeframe necessary.
- Non-porous flooring or disposable flooring.
- Room for office space.
- Hot and cold water.
- Heat and/or air-conditioning.
- Electricity.
- Communication capabilities (multiple phone lines, fax line).
- Tractor-trailer accessible.
- Security for site and especially for entrances.
- Removed from public view.
- Ability to retrofit for cold storage.

Remember, the decomposition process begins immediately following death, cooling a body only slows the process. If the body is not going to be cremated, plans to expedite the embalming process should be considered since, in the case of a pandemic, bodies may have to be stored for an extended period of time.

Note: Embalming is not required by law, so consideration can also be given to natural burials which do not require embalming.

Knowing your community's and surrounding communities' surge capacity will assist planning efforts. A survey was conducted in March 2007 of hospitals across the State of Missouri regarding their refrigerated morgue capacity, temporary on-site capacity, and temporary off-site capacity. A table in Attachment C outlines this information.

Consider family concerns regarding temporary holding. A number of religious and ethnic groups have specific directives about how bodies are managed after death, and such needs should be considered. Different religious groups, and others with specific cultural requirements, have specific directives for the treatment of bodies and for funerals. If remains are held in temporary holding locations, relatives should be notified of the process and how their decedent is identified and tracked so that future funeral services and burials may be planned by the families when normal funeral operations are able to resume. Consult the Mental Health Annex of this plan for additional considerations.

CAPACITY OF AND ACCESS TO VAULTS

A vault is a non-insulated storage facility for remains that have already been embalmed, put into caskets and are awaiting burial. Once embalmed or cremated there is no reason to store the bodies. The bodies are either interred or given to the families for final disposition.

In preparation for a pandemic, each community should identify the capacity of existing vaults and address access issues for temporary storage. In addition, the need for the creation of new temporary vaults to meet the increased demand during a pandemic should be addressed. These temporary vaults should be non-insulated, have some security features, such as covered windows, and locks on doors.

Twenty (20) body refrigerated trailers and twenty-four (24) body Mortuary Enhanced Remains Cooling (MERC) cooling systems are pre-positioned throughout the state. GIS mapping of trailers is located at: http://arcg.is/1Sh4YRB.

DEATH REGISTRATION

Death registration is a local public health/vital records responsibility and each agency has state laws, and regulations, as well as local administrative practices to register a death. Moreover, there is a distinction between the practices of pronouncing and certifying a death. In Missouri, only physicians and coroners/medical examiners may certify death.

In a pandemic situation, with the increased number of deaths, each jurisdiction must have a body collection plan in place to ensure that there is no unnecessary delay in moving a body to the (temporary) morgue. If the person's death does not meet any of the criteria for needing to be reported to a coroner/medical examiner, then the person could be moved to a holding area soon after being pronounced dead. Then, presumably on a daily basis, a physician could be designated to complete the death certificate.

Funeral directors generally have standing administrative policies that control when they may collect a body from the community or an institution such as a hospital. Evaluation of the current

processes and identification of answers should include consideration of the regional differences in resources, geography and population.

AUTOPSIES

The county coroner/medical examiner will be responsible for remains. If the decedent was hospitalized, hospital care usually provides enough information to complete a Certificate of Death without performing an autopsy. However, just because a death was unattended does not mean an autopsy is necessary. Many deaths in a pandemic will not require autopsies since autopsies are not indicated for the confirmation of influenza as the cause of death. The county coroner/medical examiner will make the final decision regarding the need for an autopsy after discussions with the LPHA, local law authorities and/or the forensic pathologist(s) that perform their autopsies.

When a family/next of kin requests an autopsy to determine if influenza was a contributing cause of death, it is important to note that post mortem testing at the State Public Health Laboratory is relatively unproductive when used on deceased persons and will not be considered in most cases. Any questions regarding this should be referred to the Medical Epidemiologist or the State Epidemiologist.

Autopsies may be ordered for the first few cases in a geographic area. Pathology samples to go to the CDC are to be coordinated through the State Epidemiologist and State Public Health Laboratory Virology Unit.

At the point when the LPHA determines that no further information will be obtained by continued autopsies, the remains will be maintained in the counties as planned by each county. This decision will be made after consultations with the DHSS and the county/city public health agency, pathologists and coroners/medical examiners. Coroner/medical examiners' offices where autopsies are performed will be unable to store or dispose of remains and, without prior agreement, will immediately return remains to the county sending the case. Collection sites described later in this guide should be established for counties that are unable to handle their fatalities.

Further guidance will be available at the medical examiner's offices where autopsies are done and through local public health agencies.

Increased fatality situations may obscure homicides as deaths occur in homes. Suspected homicides, accidents, suicides, violent and sudden deaths and other unexpected or suspicious deaths are required to be reported as usual to the local coroner/medical examiner and referred for autopsy as required.

INFECTION CONTROL

Infection control and occupational health guidelines provide general recommendations on infection control for health care facilities and non-traditional sites during a pandemic. In general human remains pose no threat with regard to pandemic influenza to the community or those who handle them provided universal precautions are observed. It should also be noted that dead bodies do not cause epidemics. Nonetheless, personnel who handle human remains should receive proper vaccinations for both seasonal and pandemic influenza when the vaccine is available and if they have no contraindications for vaccination. Health care workers are expected

to be a priority risk group for vaccination during a pandemic. The Occupational Safety and Health Administration (OSHA) pandemic influenza plan designates mortuary scientists as health care workers.

Funeral homes should take special precautions with deaths from influenza. Visitations could be a concern in terms of influenza transmission among attendees, particularly in smaller communities. It is the responsibility of public health to place restrictions on the type and size of public gatherings if this seems necessary to reduce the spread of disease. This may apply to funerals and religious services. The LPHA should plan in advance for how such restrictions would be enacted and enforced, and for consistency and equitability of the application of any bans. Families requesting cremation of their deceased relative are much less likely to request a visitation, thus reducing the risk of spreading influenza through public gatherings.

Individuals who are assigned to transport and care for the deceased should be provided the following information and necessary PPE:

- Routinely wear single layer gloves and a surgical/procedure mask (a particulate respiratory mask if handling the body immediately after death).
- If there is risk of splash or spray from blood/body fluids, wear a disposable long-sleeved, cuffed protective gown that is waterproof. The cuffs should be covered by gloves. A surgical cap and eye/face barrier should also be worn. Wear waterproof shoe covers if required.
- Do not smoke, eat or drink when handling the body.
- Avoid wiping your eyes, mouth or nose with your hands.
- Remove all PPE after handling each body and wash hands thoroughly.
- Decontaminate all surfaces and any equipment used to transport the dead body with an U.S. Environmental Protection Agency (EPA) registered disinfectant: https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants.

POSTMORTEM CARE

Human remains should be placed and transported in an enclosed plastic pouch. If a pouch is not available, one can cover or wrap the body with a sheet to eliminate the possibility of any leakage escaping into the environment. The complete name of the deceased, address of death scene, county of death, time of death, next of kin phone number and other pertinent information should be printed clearly on a tag that is securely affixed to the exterior of the pouch or cover. In the absence of a tag, this information should be written on the exterior of the pouch or cover with a magic marker.

Following containment of the body, PPE should be removed and placed in a Bio Hazard bag or plastic bag marked “Bio Hazard” and the bag disposed of in an authorized manner or container.

Upon arrival of the removal vehicle at the collection point or funeral home, removal equipment should be properly sanitized.

TRANSPORTATION

Under normal conditions, bodies are usually removed from the death scene by a coroner/medical examiner designee or by the funeral home of the next of kin’s choice. However, in a pandemic situation, it may be necessary to utilize additional transport sources and types of vehicles. No special vehicle or driver license is needed for transportation of a body. Emergency medical

services should not be contacted solely for the transportation of persons who have been pronounced legally dead.

Chapter 194, RSMo, addresses the transportation of remains by common carriers (such as passenger trains, buses and airplanes), but does not address transportation by family members. Transporting and disposing of remains by other than family members or for business purposes is deemed to be the practice of funeral directing and is subject to Chapter 333, RSMo, and attendant regulations. Therefore, there are no restrictions on family members transporting bodies of family members, if they have an official copy of the death certificate.

Records should be kept identifying the names of personnel that transported the body and the location where the body was transferred. Bodies should be covered so they are out of public view during transport. Transportation of remains to other states or countries for disposition requires compliance with the laws of other states or countries and applicable federal laws. Contact the DHSS Bureau of Vital Records or the LPHA for additional guidance.

Transportation of bodies from their place of death to their place of burial in rural and isolated communities may become an issue, especially if this requires air transport. Local pandemic planners should consult existing plans for these communities and determine what changes can be made to meet the increased demand during a pandemic.

SUPPLY MANAGEMENT

This plan does not recommend that funeral directors order excessive amounts of supplies such as embalming fluids, body bags, etc., but that they have enough on hand in a rotating inventory to handle the first wave of the pandemic (that is enough for six months of normal operation). Fluids can be stored for years, but body bags and other supplies have a limited shelf life. Cremations generally require fewer supplies since embalming is not required. Families having multiple deaths are unlikely to be able to afford multiple higher-end products or arrangements. Funeral homes could quickly run out of lower-cost items (e.g. inexpensive caskets such as cloth and some wooden caskets) and should be prepared to provide alternatives. Through funding from the federal government directed through DHSS, the Missouri Mortuary Operations Response Team (MOMORT-1) purchased and has available for a mass fatality event significant quantities of supplies.

MENTAL HEALTH ISSUES

Medical examiners, coroners, responders, funeral home personnel and others working with decedents, may feel overwhelmed by the numbers of deaths occurring, working with family members of the deceased and personal effects that serve as reminders of the living. Self-care and reaching out to others in the profession for support are vital. When responders are overwhelmed, taking needed brief healthful breaks and time for family will assist them in staying emotionally fit and responsive. Needed support may be provided by one's faith community, family or through professional mental health resources available through local mental health providers. The list of community mental health centers is available at: https://dmh.mo.gov/mental-illness/help/community-mental-health-centers. The Missouri crisis hotline number available 24 hours per day for persons in a mental health crisis is called the 988 Suicide and Crisis Lifeline. Individuals can call or text 988 for help.

SPECIAL POPULATIONS

A number of religious and ethnic groups have specific directives about how bodies are managed after death, and such needs must be considered as a part of pandemic planning. Different religious groups, and others with specific cultural requirements, have specific directives for the treatment of bodies and for funerals. The wishes of the family will provide guidance, however, if no family is available local religious or ethnic communities can be contacted for information. The following resources may also be of assistance:

- National Resource Center for Advancing Emergency Preparedness for Culturally Diverse Communities at www.diversitypreparedness.org/.

As a result of these special requirements, some religious groups maintain facilities such as small morgues, crematoriums and other facilities, which are generally operated by volunteers. Religious groups should be contacted to ensure these facilities and volunteers are prepared to deal with pandemic issues. Religious leaders should be involved in planning for funeral management, bereavement counseling and communications, particularly in ethnic communities with large numbers of people who do not speak the official languages.

RESOURCES:

The following data sets will be added to this plan as a linked resource through the GIS as they are completed.

- Missouri Cemeteries
  - Data compiled from:
    - U.S. Geological Survey-GNIS
    - Missouri Department of Economic Development –Professional Registration: Cemetery Registration
      - Endowed
      - Non-Endowed
      - Not-for-profit
      - Municipal
- Missouri Parks
  - Data compiled from:
    - U.S. Geological Survey-GNIS
- Missouri Licensed Funeral Homes
  - Data compiled from:
    - Missouri Department of Economic Development –Professional Registration
- Missouri Licensed Crematoriums
  - Data compiled from:
    - Missouri Department of Economic Development –Professional Registration
- Missouri Coroners/Medical Examiners
  - Data compiled from:
    - Missouri Coroner/Medical Examiner Website
- Missouri Licensed Funeral Directors
  - Data compiled from:
    - Missouri Department of Economic Development –Professional Registration
- Missouri Licensed Embalmers
  - Data compiled from:
    - Missouri Department of Economic Development –Professional Registration

ADDITIONAL REFERENCES

1. Canadian Pandemic Influenza Plan, "Guidelines for the Management of Mass Fatalities During an Influenza Pandemic", February 2004.
2. Southwest Public Health District, Albany, GA.; "Pandemic Influenza Response Plan, Mass Fatality Plan", June 15, 2006.
3. Guidance on Preparing Workplaces for an Influenza Pandemic, US Department of Labor, Occupational Safety and Health Administration, OSHA 3327-05R, 2009 www.osha.gov/Publications/OSHA3327pandemic.pdf (accessed August 19, 2009).

STATUTORY CITATIONS

1. Missouri Revised Statutes, Chapter 58, Coroners and Inquests.

Continuity of Operations
Essential Vital Records Needs and Functions in a Mass Fatality Event

The following is intended to provide suggestions in the development of Continuity of Operation (COOP) plans for local public health/vital records in the event of mass fatalities resulting from major disasters or a pandemic.

A COOP plan should include recognition of the need to relocate operations to another location. This need may occur from either facility compromise or a need to function out of a satellite location. Action should be taken to identify possible pre-designated sites. Remember: sites utilized for other activities such a Mass Care and Point of Distributions (PODs) have similar characteristics, so beware of the same locations being designated with multiple roles. The primary and back-up sites should include, or have available, equipment and materials necessary to operate until the primary site is functional again. Copies of the COOP plan should be available at the designated primary site and any pre-designated alternate site. Listed below is a list of basic office supply items that should be considered for a vital records go-kit.

Local Registrars
Local registrars should expect to continue issuance of certified copies of vital records depending on the incident and availability of staff and resources. In the event these activities can be performed, the following items should be considered for a vital records go-kit.

Supplies
- Supply of vital records security paper
- Copier
- Certification Statements
- Supply of birth/death applications
- Basic office supplies (stapler, black pens, pencils, white paper, steno pad, etc.)
- Envelopes (window, plain, brown)
- Receipt books
- Lock box

Registration
All vital records registration is centralized and managed within the Bureau of Vital Records in Jefferson City and accessible by data providers remotely through the Missouri Electronic Vital Records (MoEVR) system. Local registrars should anticipate the Bureau of Vital Records being able to provide and facilitate registration services.

Fees
Local Registrar will be responsible for securing fees taken in for their facility.

State Vital Records Office
Staff in the State Vital Records Office would maintain the following primary duties:

Primary Vital Records Duties
- Registration of birth and deaths.
- Issuance of certified copies and collection/securing fees.
- Training (non-vital records personnel to assist in an emergency).
- Missouri Electronic Vital Records (MoEVR) Help Desk support for data providers.

Supplies
- Laptop computer and portable printer if available.
- Supply of Standard vital records forms.
- Supply of vital records security paper.
- Copier.
- Hand Seal.
- Certification Statements.
- Registrar's signature stamp.
- Date stamps.
- Black ink pads, black ink.
- Map of Missouri.
- Reference book including: "Where to Write for Out-of-State Vital Records", listings of Missouri funeral home establishments, hospitals, coroners/medical examiners, LPHAs and Missouri statutes and regulations pertaining to vital records.
- Supply of vital records applications
- Basic office supplies (stapler, black pens, pencils, white paper, steno pad, etc.).
- Envelopes (window, plain, brown).
- Receipt books.
- Lock box.
- Flashlight and batteries.

Registration
- Bureau of Vital Records staff will assist as assigned by the coroner/medical examiner in the collection of information pertaining to registration of death certificates.
- Assigned Vital Records staff will be responsible for maintenance and security of all completed death certificates.
- Certificates will be processed and registered as soon as reasonably possible.
- Bureau of Vital Records staff will provide troubleshooting assistance to data providers using MoEVR.

Issuance of Certificates
- Assigned vital records staff will be responsible for issuance of certified copies of death certificates for victims of mass fatalities. Other requests will be processed according to established procedures, if functional at primary site.
- At primary site, if mainframe system is unavailable for daily operations to issue computer certifications, applications and fees for certified copies may be taken and mailed at the earliest possible convenience.

Fees

- If primary site is not functional, two assigned Bureau of Vital Records staff should be responsible for securing fees, signing, and issuing receipts and balancing. Both will balance and sign balance sheet.
- Local Registrar will be responsible for securing fees taken in for their facility.

Training

- A resource manual that includes basic training should be accessible if vital records staff is limited. Functions that could be performed by non-vital records staff are:
  - Review of paper certificates for completeness and accuracy.
  - Duplicate copies from copier.
  - Certify documents.
  - Mail certificates.
  - Number and date stamp certificates.
  - Answer phone.
  - Review of entries on certificates for blanks and/or inconsistencies, (such as age not calculated to agree with date of birth on death certificates, or no age given but a date of birth is).
  - Provide information on how to obtain copies of certificates and fees using guide sheet that should be available.
  - Provide information on obtaining certificates from other offices using reference list that should be available with out-of-state vital records offices, other local registrars, etc.

Attachment B

Usual Process for Deceased Management

Steps	Requirements	Limiting Factors	Planning for Possible Solutions/Expediting Steps
Pronounced	Person legally authorized to perform this task.	If death occurs in the home, then one of these people will need to be contacted. Availability of people able to do this task.	Provide public education on how to activate or access medicolegal systems in place. Consider best utilization of medical and EMS resources currently in place. Consider planning for on-call system 24/7 specifically for this task.
Death Certified	Person legally authorized to perform this task.	Legally, may not necessarily be the same person that pronounced the death.	Consider having one authorized person perform this task en masse to improve efficiency. Ensure redundant backup is identified and outlined in plan. Consider need for or ability to do faster scene processing. Consider possible time delay between scene processing/certification and body pickup. Consider need for public education on altered standards due to pandemic event.
Body Pickup	Person(s) trained and authorized to perform this task.	Staffing and transport conveyance availability. Contracted transport resource availability.	Consider best utilization of resources "collecting" bodies and time associated with response and transport.
Body Wrapped	Person(s) trained to perform this task. Body bags	Supply of human and physical (body bags) resources.	Consider developing a rotating six-month inventory of body bags, given their shelf life. Consider training or expanding the role of current staff to include this task if not already a part of duties. Consider providing this service at location where body is found, in conjunction with pronouncement, if legally authorized. Otherwise, include in body pickup and transportation.

Steps	Requirements	Limiting Factors	Planning for Possible Solutions/Expediting Steps
Morgue Storage	Suitable facility that can be maintained between 35-39° F.	Capacity of such facilities.	Identify and plan for possible temporary morgue sites. Consider unavailability of reefer units. Consider portable air coolers and tents.
Autopsy if required	Person qualified to perform autopsy and suitable facility with equipment.	Availability of human and physical resources may be required in some circumstances.	Ensure that physicians and families are aware that an autopsy is not required for confirmation of influenza as cause of death.
Cremation*	Suitable vehicle of transportation from morgue to crematorium. Availability of cremation service. A cremation certificate.	Capacity of the crematorium/speed of process. Availability of coroner/medical examiner to issue certificate for cases under their jurisdiction.	Identify alternative vehicles that could be used for mass transport. Examine the capacity and surge capacity of crematoriums within the jurisdiction. Discuss and plan appropriate storage options if the crematorium becomes backlogged. Discuss and plan expedited cremation certificate completion process.
Embalming**	Suitable vehicle for transportation to the morgue. Trained person. Suitable location.	Availability of human and physical resources. Capacity of facility and speed of process.	Consult with service provided regarding the availability of supplies and potential need to stockpile or develop a rotating six-month inventory of essential equipment/supplies. Consider what to do if shortage of embalming fluid occurs in pandemic event. Discuss capacity and potential alternate sources of human resources to perform this task e.g. retired workers or students in training programs. Consider “recruiting” workers that would be willing to provide this service in an emergency.

Steps	Requirements	Limiting Factors	Planning for Possible Solutions/Expediting Steps
Death Certificate Issuance	Person legally authorized to perform this task.	Legally, may not necessarily be the same person that pronounced or certified the death.	Consider having appropriate amount of authorized person(s) to perform this task to improve efficiency and speed processing. Ensure redundant backup is identified and outlined in plan. Consider need for public education on altered standards due to pandemic event.
Funeral Service	Appropriate location(s), casket (if not cremated), funeral director.	Availability of caskets. Availability of location for service and visitation.	Contact suppliers to determine lead time for casket manufacturing and discuss possibilities for rotating six-month inventory. Consider what to do if shortage of caskets occurs in pandemic event. Locate and acquire additional locations for surge and visitation. Consider alternate plans if Isolation/Quarantine issues arise.
Transportation to temporary vault or burial site	Suitable vehicle and driver.	Availability of human and physical resources.	Identify alternate vehicles that could be used for this purpose. Consider use of volunteer drivers.
Temporary vault storage	Access to and space in a temporary vault.	Temporary vault capacity and accessibility.	Expand capacity by increasing temporary vault sites.
Burial	Grave digger, space at cemetery.	Availability of grave diggers and cemetery space.	Identify sources of supplementary workers.

* Cremated bodies are not usually embalmed; families may choose to have a funeral service followed by cremation or to have the body cremated first and a memorial service later.

** Bodies to be buried may be embalmed, but legally are not required to be. Consideration should be given to need to be stored in a temporary vault prior to burial.

Hospital Regions: Body Storage Capacity

Region	Number of Hospitals	Morgue Refrigerated Storage Capacity	Temporary On-Site Capacity	Temporary Off-Site Capacity
A	34	61 bodies	152 bodies	103 bodies
B	8	6 bodies	74 bodies	112 bodies
C	47	115 bodies	402 bodies	132 bodies
D	26	10 bodies	117 bodies	315 bodies
E	10	16 bodies	54 bodies	2 bodies
F	15	119 bodies	148 bodies	518 bodies
G	4	3 bodies	6 bodies	0 bodies
H	9	2 bodies	143 bodies	114 bodies
I	5	7 bodies	26 bodies	0 bodies