PANDEMIC INFLUENZA MASS FATALITY RESPONSE GUIDANCE

A guidance document, including templates and other tools, to assist local jurisdictions with mass fatality planning during a pandemic event.

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1.0 GENERAL

During a widespread natural disease outbreak or a pandemic, such as an influenza pandemic, local authorities will have to be prepared to manage additional deaths due to the disease, over and above the number of fatalities from all causes currently expected during the inter-pandemic period. Within any locality, the total number of fatalities from the outbreak (including influenza and all other causes) occurring during a 6- to 8-week pandemic wave is estimated to be similar to that which typically occurs over six months in the inter-pandemic period. This guideline aims to assist local planners and funeral directors in preparing to cope with large-scale fatalities due to an influenza (or other naturally occurring disease) pandemic. A number of issues have been identified, which should be reviewed with the local medical professionals and institutions, coroner's district offices, local authorities, including police, Emergency Medical Services (EMS), vital statistics offices, city or county attorneys, funeral directors, and religious groups/authorities.

The Ohio Department of Health, Office of Health and Vital Statistics, is responsible for the distribution of this document and notifying the Ohio State Coroners Association (OSCA) and the Ohio Funeral Directors Association of any changes in policy, laws, or practices which impact this plan.

The Ohio Department of Health, Office of Health and Vital Statistics, will be responsible for periodically reviewing and updating this plan to ensure the most accurate and up-to-date information is included.

1.1 PURPOSE/ASSUMPTIONS

This document which is a compilation of information obtained from numerous entities contains guidelines to help local jurisdictions prepare to manage the increased number of deaths due to a natural disease event, such as an influenza pandemic. In a pandemic, the number of deaths will be over and above the usual number of fatalities that a locality would typically see during the same time period. This document will become an attachment to the Ohio Emergency Management Operations Plan Emergency Support Function 8 (October, 2005) and will become an additional resource for local jurisdictions to use for mass fatality planning.

Utilizing a pandemic influenza outbreak as an example, assuming three pandemic waves of six weeks each and a five percent crude annual all causes death rate (similar to 1918), about 5,500 deaths per week per wave would occur in Ohio (this is more than 2 ½ times the usual rate of about 2,100 deaths per week). Local mortuary affairs entities in the state may not be able to meet this demand even if they were to remain fully operational; however, they too may be impacted and may lose staff to illness, family illness, death, and refusal to work.

Ohio does have its own Disaster Mortuary Operations Response Team (DMORT), and the federal DMORT teams will not be available during an outbreak because the members, who are all volunteers performing similar functions in their own communities, will be needed at home. Mutual aid will not be available for the same reasons. The capacity of existing morgues in the state would be exceeded in weeks one or two of the initial wave of pandemic influenza activity.

• For purposes of this natural disease outbreak plan, a *mass fatality* is any number of fatalities that is greater than the local mortuary affairs system can handle.

- The *Mortuary Affairs System (MAS)* is a collection of agencies, all working within a common system that cares for the dead. MAS addresses the entire spectrum of operations which includes search, investigation of scene and interviewing of witnesses, recovery, presumptive (tentative) and positive identification services, releasing of remains, and final disposition by the Next-of-Kin's (NOK) funeral services. MAS workers will operate processing points during a mass fatality event that include MAS collection points, personal effects depots, and records libraries. The MAS, through the integration of local or regional funeral services agencies, is also responsible for preparing remains for final disposition including the coordination of the shipment of remains (developed by local health departments in conjunction with local EMA offices).

1.2 MYTHS VERSUS FACTS IN DEAD BODY MANAGEMENT

Obtaining solid factual and scientifically based data to build your individual plans is the cornerstone for success. This section will address the facts of fatality management and address some of the most common myths surrounding human remains.

A. Facts on normal death management:

I. Under normal conditions, 86-90 % of the fatalities in Ohio are not coroner cases because these deaths are natural diseases occurring under natural circumstances. Non-coroner deaths are managed by the local law enforcement (if death occurred out of medical treatment facilities), EMS, treating physicians, hospitals, funeral directors, cemetery or cremation owners and the individual families.

II. A separate death pronouncement in Ohio is NOT required for the completion of the death certificate; the certifying physician would also pronounce the individual dead. Many states document the pronouncement of the death on the death certificate. There are however regulations as to who in Ohio can officially pronounce a person dead. Ohio Administrative Code 4731-14-1 states that the following individuals can pronounce or be a competent observer.

Ohio Administrative Code 4731-14-1 – Who can pronounce a person dead

(A) For purposes of this rule, a "physician" refers to an individual holding a current certificate to practice medicine and surgery or osteopathic medicine and surgery.

(B) Only an individual holding a current certificate to practice medicine and surgery or osteopathic medicine and surgery issued under section 4731.14 of the Revised Code, a training certificate issued under section 4731.291 of the Revised Code, a visiting medical faculty certificate issued under section 4731.293 of the Revised Code or a special activities certificate issued under section 4731.294 of the Revised Code, in Ohio can pronounce a person dead.

(C) An individual as defined in paragraph (A) of this rule may pronounce a person dead without personally examining the body of the deceased only if a competent observer has recited the facts of the deceased's present medical condition to the physician and the physician is satisfied that death has occurred.

(D) For purposes of this rule a competent observer shall mean:(1) A registered nurse holding a current license issued under Chapter 4723. of the Revised Code;

(2) A licensed practical nurse holding a current license issued under Chapter 4723. of the Revised Code;

(3) An EMT-B holding a current certificate pursuant to section 4765.30 of the Revised Code;

(4) An EMT-I holding a current certificate pursuant to section 4765.30 of the Revised Code;

(5) A paramedic holding a current certificate pursuant to section 4765.30 of the Revised Code;

(6) A physician assistant holding a current certificate to practice issued under Chapter 4730. of the Revised Code who has met all requirements of Chapter 4730. of the Revised Code;

(7) A chiropractor holding a current certificate issued under Chapter 4734. of the Revised Code;

(8) An individual authorized to pronounce a person dead under paragraph (B) of this rule or a person holding a current certificate to practice podiatric medicine and surgery in Ohio.

(9) A coroner's investigator as referenced in section 313.05 of the Revised Code.

III. Each death requires an investigation by competent and trained personnel to ensure the cause of death is a result of a natural disease such as the influenza strain versus death by other mechanisms (e.g. fall, homicide, abuse, etc.)

IV. Funeral directors working with religious leaders are the only State of Ohio licensed service providers that offer final disposition and memorial services for the families by providing a burial or cremation with a ceremony.

V. Large numbers of deaths (more than the current system can handle) within a confined timeframe could backlog the entire death management system in the state including police investigators, hospital morgues, funeral homes, vital statistics offices, cemeteries, crematories, and the coroner. The entire process of managing the fatalities may take an extended period of time to completely resolve.

B. Myths surrounding fatality management

1. Myth 1: It is best to limit information to the public on the magnitude of the tragedy.
Reality: Restricting the public to information during a disaster creates a lack of confidence and distrust in our government by the population.

2. Myth 2: Because a pandemic event may also cause a mass fatality event, the local county coroner's are in charge of all the dead bodies and the localities do not have a role in human remain management.
Reality: The local county coroner's do not have jurisdictional authority over naturally occurring disease deaths. Physicians are required to sign death certificates for patients they treated. All licensed physicians in Ohio can sign death certificates for their patients who die of naturally occurring diseases and there is no requirement for the local county coroner to assume jurisdiction over the remains. In most cases, the most efficient way to manage large numbers of deaths is to keep the remains available locally to the physicians, families and the funeral service personnel who can manage the human remains.

The following chart displays the medical and funeral resources available in the State of Ohio at the time of publication.

Table #1: Resources in the State of Ohio for handling deceased individuals		
Skill Set	Total # In Ohio	Total # Of Coroner staff
Doctors of Medicine and Surgery	41,095*	170**
Interns and Residents	5,151 *	0
Funeral Establishments	1,184 ***	0
Funeral Service Providers	3,027***	0
Funeral Service Interns	124***	0
Crematories	98***	0
Embalmers	12***	0

*Estimated number of providers by the Ohio State Medical Board (2009)
**Estimated number provided by the OSCA (2009)
***Estimated number of providers by the Ohio Board of Embalmer's and Funeral Directors (2009)

3. Myth 3: The dead bodies of persons who die from natural disease outbreaks will pose the threat of additional disease causing epidemics.
Reality: According to the World Health Organization publication "Environmental health in emergencies and disasters: a practical guide", there is a minimal risk for infection from dead bodies. In this document published in 2002, WHO established that: 'Dead or decayed human bodies do not generally create a serious health hazard, unless they are polluting sources of drinking-water with faecal matter, or are infected with plague or typhus, in which case they may be infested with the fleas or lice that spread these diseases." Dead bodies will usually carry an influenza virus for between 1 to 48 hours after death.

4. Myth 4: The fastest way to dispose of bodies and avoid the spread of disease is through mass graves or cremations. This can create a sense of relief among survivors.
Reality: The risk of disease from human remains is low and should not be used as a reason for mass graves. Mass graves do not allow individual family members to grieve and perform the religious or final acts for their loved ones as an individual, private ceremony. Cremations may violate certain ethnic or religious practices resulting in increased anguish and anger for the survivors. Each jurisdiction needs to partner with their faith based community to plan for this possible modification to traditions.

5. Myth 5: It is impossible to identify a large number of bodies after a tragedy.
Reality: With the advancements in forensic procedures, such as fingerprinting and DNA technology, identification of human remains has become much more precise. Visual identification and comparison can and have been utilized in the "normal" death cases; however, there are circumstances where scientifically based identification methods must be applied, such as fingerprints, dental, medical implants, etc. Law enforcement and coroner staffs can apply forensic studies on individual identification cases when needed. The complications in forensic studies lie in the fact that ante mortem records and samples are required for comparisons.

6. Myth 6: Eliminating the requirements to complete and certify death certificates for disaster victims will speed up the healing process for the victims' families.
Reality: These documents are required to collect insurance, settle estates, award guardianship of minors and ownership of property, re-marriage, as well as many other legal issues that will benefit survivors. Failure to properly document and certify an individual's death will cause severe hardships on the surviving family members.

7. Myth 7: The Ohio State Coroner's Association runs and operates the Ohio Funeral Directors Association, the crematories and cemeteries in Ohio.
Reality: The OFDA and other human remains management companies are privately owned and operated.

8. Myth 8: The Ohio Department of Health mandates to families how they must dispose of all human remains following a disaster.
Reality: The authority and directions of any next of kin shall govern the disposal of the body. However, the Director of Health, in consultation with the Governor, shall have the authority to determine if human remains are hazardous to the public health. If the Director of Health determines that that the person died from a communicable disease, the state and local health jurisdiction, with direction from the Director of Health, shall authorize the immediate disposition of the remains, through burial or cremation within twenty four hours of death (ORC 3707.19). It is anticipated that an influenza strain may meet the criteria of "communicable disease" because of its ability to be spread to others. However, since we do not know what will cause a pandemic, normal precaution should always be followed.

9. Myth 9: During a known pandemic influenza (PI) event, all deaths can be assumed to be from the PI disease process and no medico-legal death investigations are necessary.
Reality: During a PI event, communities will experience cases where their citizens die from accidents, suicides, homicides, and sudden unexplained deaths which are NOT related to the PI event. Basic investigations into each death by community resources are necessary to differentiate between deaths from PI versus other activity (violence, other disease related, suicide, etc.).

10. Myth 10: All deaths occur in hospitals.
Reality: Data collected from the Ohio Department of Health, Office of Vital Statistics shows for 2008 that sixty percent of the deaths in Ohio occur outside of medical treatment facilities. Local police, coroner's offices, fire and/or EMS are normally involved in each of these deaths to verify that death has actually occurred and to ensure the death is from a natural disease and not a result of suspicious or violent activity or in other words a Coroner's case.

11. Myth 11: HIPAA regulations prevent the Red Cross, medical staff and institutions from releasing information to the public, police, funeral directors and other governmental agencies even during disasters.
Reality: The following paragraphs are from the HIPAA regulations:

> a. Coroners and medical examiners. A covered entity may disclose protected health information to a coroner or medical examiner for the purpose of identifying a deceased person, determining a cause of death, or other duties as authorized by law. A covered entity that also performs the duties of a coroner or medical examiner may use protected health information for the purposes described in this paragraph. 45 CFR §164.512 (g) (1).
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> b. Funeral directors. A covered entity may disclose protected health information to funeral directors, consistent with applicable law, as necessary to carry out their duties with respect to the decedent. If necessary for funeral directors to carry out their duties, the covered entity may disclose the protected health information prior to, and in reasonable anticipation of, the individual's death. 45 CFR §164.512 (g) (2).
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> Following Hurricane Katrina, CDC and the U.S. Public Health Service conceded that law enforcement officials may also receive patient's demographic data for the purposes of solving missing persons reports in a disaster. 45 CFR §164.512 (f) (2).

1.3 THE DEATH MANAGEMENT PROCESS

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 human remains under non-pandemic circumstances and to identify what the limiting factors when the number of dead increases over a short period of time. The following table identifies the non-pandemic death management steps. Possible solutions or planning requirements are discussed in further detail in the sections that follow this table.

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Table 1. Mortuary affairs system planning guide. (Ohio Department of Health, Office of Health and Vital Statistics)

Requirements	Steps	**Possible Limiting Factors**	**Possible Solutions & Expediting Steps**
Death Reporting / Missing Persons	□If death occurs in the home/business/community then a call-in system needs to be established to take the increase in death calls. □ Citizens call local 911 to request a Check on the Welfare Call for others □ 911 or other system needs to be identified as the lead to perform this task.	□Availability of people able to do this task normally 911 operators □Availability of communications equipment to receive and manage large volumes of calls/inquiries. □Availability of trained "investigators" to check into the circumstances of each report and to verify death is natural or other.	□Provide public education about the call centers, what information to have available when they call, and what to expect from authorities when a death or missing persons report is made. □Consider planning an on-call system 24/7 specifically for this task to free up operators for 911 calls on the living.
Search for Remains	□If death occurs in the home/business; then law enforcement will need to be contacted. □Person legally authorized to perform this task.	□Law enforcement officers' availability.	□Consider deputizing and training (through the investigations units of law enforcement) of people whose sole responsibility is to search for the dead and report their findings. □Consider having community attorneys involved in the legal issues training for the groups identified.
Recovering Remains	□Personnel trained in recovery operations and the documentation required to be collected at the "scene". □Personal protection equipment such as coveralls, gloves and surgical masks. □Equipment such as stretchers and human remains pouches.	□Availability of trained people to perform this task. □Availability of transportation assets. □Availability of interim storage facility.	□Consider training volunteers (e.g. Medical Reserve Corps [MRC]) ahead of time. □Consider refrigerated warehouses or other cold storage as an interim facility until remains can be transferred to the family's funeral service provider for final disposition.
Death Certified	□Person legally authorized to perform this task. □If a death due to a natural disease and decedent has a physician, physician notified of death. □If trauma, poisoning, homicide, suicide, etc., coroner case.	□The lack of availability or willingness of attending physicians to certify deaths for their patients. □The lack of willingness to pay for a certification of death as imposed by some of Ohio's physicians.	□When possible, arrange for "batch" processing of death certificates for medical facilities and treating physicians.

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Requirements	Steps	**Possible Limiting Factors**	**Possible Solutions &Expediting Steps**
Decedent Transportation to the morgues	□In hospital: trained staff and stretcher. □Outside hospital: informed person(s), stretcher and vehicle suitable for this purpose.	□Availability of human and physical resources. □Existing workload of local funeral directors and transport staff. □Ohio's requirement to be registered with the Office of Vital Statistics Registration of Surface transportation and removal services.	□In hospital: consider training additional staff working within the facility. □Consider keeping old stretchers in storage instead of discarding □Look for alternate suppliers of equipment that could be used as stretchers in an emergency e.g., trolley manufacturers. □modify permit requirements for the PI event. □Outside hospital: provide public education or specific instructions through a toll-free phone service on where to take remains and other MA information.
Transportation	□To cold storage, mortuary affairs holding location and/or burial Site. □From hospitals to morgues, funeral homes or other locations. □Suitable covered refrigerated vehicle and driver.	□Availability of human and physical resources. □Existing workload of local funeral directors and transport staff. □Ohio's requirement to have a transport certificate to transport dead bodies over the roadway.	□Identify alternative vehicles that could be used for this purpose. □Identify ways to remove or completely cover (with a cover that won't come off) company markings of vehicles used for MA operations. □Consider use of volunteer drivers. □Consider setting up a pickup and delivery service for all the hospitals with set times, operating 24/7. □Consider finding resources to assist funeral homes in transporting remains so they can concentrate on remains preparations for the families.

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Requirements	Steps	**Possible Limiting Factors**	**Possible Solutions &Expediting Steps**
Cold storage	□Suitable facility that can be maintained ideally at 34 to 37 degrees F.	□Availability of facilities and demand for like resources from multiple localities. □Capacity of such facilities. □Inability to utilize food storage or preparation facilities after the event.	□Identify and plan for possible temporary cold storage sites and/or equipment close to where the body originated for the convenience of identification, family and funeral home.
Autopsy *if required or requested*	□Person qualified and authorized 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 when the outbreak is identified.
Funeral service	□Appropriate location(s), casket (if not cremated). □Funeral director availability. □Clergy availability. □Cultural leaders availability.	□Availability of caskets. □Availability of location for service and visitation.	□Contact suppliers to determine lead time for casket manufacturing and discuss possibilities for rotating 6 month inventory. □Consult with the OFDA to determine surge capacity and possibly the need for additional sites (use of religious facilities, cultural centers, etc.)
Body Preparation	□Person(s) trained and licensed to perform this task.	□Supply of human and material resources. □Supply of human remains pouches. □If death occurs in the home: the availability of these requirements.	□Consider developing a rotating 6 month inventory of human remains bags and other supplies, given their shelf life. □Consider training or expanding the role of current staff to include this task. □Provide public education on the funeral service choices during a pandemic.

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Requirements	Steps	**Possible Limiting Factors**	**Possible Solutions &Expediting Steps**
Cremation	□Suitable vehicle of transportation from morgue to crematorium. □Availability of cremation service. □A cremation certificate issued by a local registrar or sub registrar.	□Capacity of crematorium and speed of process. □Availability of local Registrars or sub registrars to issue a burial transit permit for cremation.	□Identify alternate vehicles to be used for mass transport. □Examine capacity of crematoriums within the jurisdiction. □Discuss and plan for appropriate storage options if the crematoriums are backlogged. □Discuss and plan expedited cremation certificate completion processes.
Embalming	□Suitable vehicle for transportation from morgue. □Trained person to perform. □Embalming equipment and supplies. □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 6 month inventory of essential equipment/supplies. □Discuss capacity and potential alternate sources of human resources to perform this task such as retired workers or students in training programs. □Consider "recruiting" workers that would be willing to provide this service in an emergency.
Temporary storage	□Access to and space in a temporary vault. □Use of refrigerated warehouses, or other cold storage facilities.	□Temporary vault capacity and accessibility.	□Expand capacity by increasing temporary vault sites.
Burial	□Grave digger and equipment. □Space at cemetery. □ Burial Transit Permit	□Availability of grave diggers and cemetery space.	□Identify sources of supplementary workers. □Identify sources of equipment such as backhoes and coffin lowering machinery. □Identify alternate sites for cemeteries or ways to expand cemeteries.

Steps	Requirements	Limiting Factors	Possible Solutions &Expediting Steps
Temporary Interment	Person to authorize temporary interment. Location for temporary interment. Grave diggers and equipment.	Availability of grave diggers and temporary interment space. Availability of funeral directors, clergy, and cultural leaders for guidance and community acceptance. Specific criteria as to when authorization may occur and procedures to follow prior to the internment. Availability of resources after the event to disinter and to place remains into family plots.	Identify locations that will be suitable for temporary interment space. Consider using the global positioning system for individual remains location.
Behavioral Health	Prepare public and responders for mass fatality possibilities prior to pandemic Assist responders and other MA workers during pandemic and in post pandemic periods	The pandemic will virtually affect the entire nation. A shortage of mental health people will complicate the ability to assist people. Many people will be doing MA tasks that they are mentally unprepared for and will require assistance.	Train first responders and a portion of the Citizen Reserve Corps in crisis intervention techniques to assist MA teams during the pandemic. Set up clinics to assist the public separate from the MA workers and first responders.
Event and Community Recovery	Persons to authorize re-interment. Grave digger and equipment. Clergy and cultural leaders.	Availability of funeral directors, clergy, and cultural leaders for guidance. Existing code requirements to have a court order for the disinterment of human remains. Ohio's requirement to have a burial-transit permit to transport bodies out of state.	Consider that the public may want to erect a monument at the temporary interment site(s) after the pandemic is over.

1.4. SCOPE

This document is intended to provide guidance for Ohio's coordination and response to mass fatalities as the result of an influenza pandemic or any other natural disease outbreak occurring which is not terrorist related or due to a laboratory accident.

1.5. DIRECTION AND CONTROL

Incident Command- The Ohio Department of Health (ODH) through the Office of Health Preparedness/Prevention and the local jurisdictions will use the Incident Command System (ICS) as outlined in the National Incident Management System (NIMS) and directed by the National Response Plan (NRP) to work with other agencies and organizations in a coordinated manner based on the size and scope of the public health emergency**.**

Emergency Management- ODH as well as the local jurisdictions will coordinate with the Ohio Emergency Management Operations Center (OEOC) and local jurisdiction Emergency Operations Center (EOC) and their emergency management personnel. ODH provides statewide coordination and support for mass fatality issues to the OEOC. There are local health districts and hospitals in Ohio which have first-line responsibility for response to public health-related emergencies. If local health districts are overwhelmed during emergencies, they may request support through the local Emergency Operations Center to the Ohio Emergency Operations Center (OEOC) Emergency Support Function-8 (ESF – 8).

1.6. ADDITIONAL UNKNOWN FACTORS

The following geographic, economic and social factors as well as physical and demographic limitations may play a part in these situations and should be considered:

- Lack of available treatment services (i.e., dialysis, chemotherapy, oxygen, etc.) may produce additional deaths not calculated in the estimates.
- Reporting of the above deaths as a result of a pandemic influenza would not directly be attributed to the flu but be a possible consequence of the flu.
- Lack of available prescription drugs (i.e., hypertension, psychotropic, etc.) may produce additional deaths not calculated in the estimates.
- If parents or caregivers die during the pandemic event, identification methods and subsequent processes to receive and care for children or dependents of the deceased should be identified.
- Lack of available knowledge of populations with limited or no contact with mainstream society (i.e. Amish, Somali).
- The unknown number of unclaimed bodies.

2.0. GENERAL PLANNING ASSUMPTIONS

• *Communities should plan to be self-sufficient and should not rely on federal assets.*

- The pandemic will spread quickly and may impact regions throughout the United States virtually simultaneously.

- Traditional sources of support, such as mutual aid, state or federal (e.g., Disaster Mortuary Operation Team (DMORT), Disaster Portable Mortuary Unit (DPMU)) assistance will be severely constrained or unavailable.

- The Ohio State Coroner's Association will assist with multi-county coordination of local county coroner's when assisting localities in the identification of the dead after a fingerprint check by law enforcement fails to produce identification and they will assume jurisdictional authority over those decedents who did not have an attending physician.

• *Funeral home capacity will be saturated quickly.*

- Communities need to work with key stakeholders to determine which agency (ies) or department(s) will be responsible for tracking and storing the deceased once funeral home capacity is exceeded.

- Communities need to work with key stakeholders to be aware of local facilities that house large populations (i.e. group homes, jails) in close proximity to each other, to maximize resources and plan for possible surges.

• *Communities should plan to improvise to compensate for scarce resources.*

– Just-in-time inventory as well as reduced industrial capacity due to illness and death will result in shortages especially of non-essential products.

• *In order to reduce influenza transmission, usual funeral/memorial practices may need to be modified.*

- Social distancing factors should be considered (e.g., use of internet-based services, limiting number of attendees).

- Family members living in the same household as the deceased may be in quarantine.

• *Due to the large number of deaths occurring over a short period of time, customary funeral/memorial practices may need to be adapted.*

- Religious and cultural leaders should work with funeral service personnel to create strategies to manage the surge of deaths such as abbreviated funerals, rapid burial/cremation with memorial services postponed to the interpandemic phase, etc.

• *Up to 40% of the workforce may be absent due to illness, death, fear, or caring for those who are ill.*

- The lack of workers in all areas may severely limit the functions necessary to manage operations during a pandemic event. Planning should include prioritizing the necessary functions and making contingencies for limited services being available.

• *There will be a demand for information from friends and family members – especially from those no longer living in the area.*

- A centralized mechanism for keeping track of the deceased (and the hospitalized) should be developed. Ohio will utilize the Electronic Death Reporting System (EDRS) to track deceased individuals and may use the Ohio Disease Reporting System (ODRS) to track those who are hospitalized.

– A communications/information strategy should be created.

2.1. MASS FATALITY PLANNING

2.1.1. Establishing Planning Teams

Most public health and healthcare agencies have limited experience dealing with mass fatalities. Three pandemic waves of six weeks each, using a five percent crude annual all causes death rate (similar to the influenza pandemic of 1918) will produce about 5,500 deaths per week per wave in Ohio. These death rates far exceed the normal 2,100 deaths per week in Ohio under normal circumstances. Planning considerations should include both the anticipated deaths as well as the deaths which occur under normal circumstances. This mortality rate will overwhelm the local mortuary affairs system in one or two weeks, especially if the state and its localities have not prepared or failed to prepare properly for the event. A planning tool kit to assist local jurisdictions in identifying and documenting responsibilities and resources required (both human and material) during a mass fatality incident are located in Appendix III.

In order to develop guidelines or adjust existing plans for a pandemic situation, localities need to identify a lead agency for the pandemic planning and response, and ensure that the following groups are involved in local planning:

- The elected officials or community leadership
- The local jurisdiction's district attorney's office or legal counsel
- The local health commissioner, local planners, and local vital records offices
- The county emergency management agency
- Representatives of the community's local funeral directors, cemetery owners, and cremation owners
- Representatives from department of finance
- Representatives from department of social services
- Representatives from department of public works
- Representatives from department of environmental health
- Representatives from local health care facilities
- Representatives from the local medical associations
- Representatives from department of transportation
- Representatives of local religious and ethnic groups
- Representatives of local law enforcement

- Representatives from local fire and EMS

- Owners of potential cold storage facilities which may be utilized for remains and their refrigeration or HVAC specialists

2.1.2 Reviewing Existing Local Plans

Existing local disaster plans may include provisions for mass fatalities but should be reviewed and tested regularly to determine if these plans are appropriate. The plans should acknowledge the relatively long period of increased demand characteristic of a pandemic, as seen in the response period required for most disaster plans (e.g. Operations for the 9/11 attack on New York continue 6 years later). There are currently no national plans to recommend mass burials or mass cremations. This would only be considered under the most extreme circumstances. The use of the term *mass burial* infers that the remains will be interred and never be disinterred and identified. Therefore, the term mass burial should not be used when describing final disposition operations since some jurisdictions may consider temporary internment as an option. All plans should outline the specific duties to be performed, agencies responsible for performing these duties and the resources needed.

2.1.3. Prophylaxis and/or Vaccinations

If the medical community is receiving prophylaxis and/or vaccinations, then mortuary affairs system (MAS) personnel should be included along with other first responders as a priority group since they will be having direct contact with bodies and bodily fluids but more importantly with the surviving family members of individuals known to have had the disease. At this point the body fluids would be considered blood borne pathogens and appropriate personal protection equipment must be utilized. Providing prophylaxis to the MAS community workers may cause them to respond when needed (as seen in the initial AIDS/HIV outbreak in the 1980's and the SARS outbreak in 2004) and for those that don't, they may become ill and add to the number of incapacitated or deceased.

2.1.4 Location of Death, Cause of Death and Certification of Death Considerations

Of those with a serious case of influenza, it is anticipated that most will seek medical services prior to death. However, whether or not people choose to seek medical services will partly depend on the lethality and the speed at which the pandemic strain kills. According to the Ohio Department of Health Office of Vital Statistics, in Ohio during a non-pandemic period, the majority of deaths (60.2 percent) occur in the place of residence, including nursing homes and other long-term care facilities (of the 106,740 deaths in 2006, only 39.8 percent occurred in hospitals). Hospitals, nursing homes and other institutions (including non-traditional sites) must plan for more rapid processing of human remains. These institutions should work with local pandemic planners and County Coroners to ensure that they have access to the additional supplies (e.g., human remains pouches) and can expedite the steps, including the completion of required documents, necessary for efficient human remains management during a pandemic.

Planning should also include a review of death documentation requirements and regulatory requirements that may affect the timely management of corpses. Consideration for handling remains from death due to causes other than pandemic influenza must be taken into account. There will still be other diseases, traffic accidents, suicides, homicides and natural cause deaths. During the 1918 influenza pandemic only 25% of the deaths were reported as influenza. This is suspected to be a low percentage as in many cases influenza may have brought on the death of a person who was ill due to another disease or injury. There may be an increase in suicides and euthanasia by family members as well as elder abuse and child abuse cases during the event.

For those cases where the coroner must be engaged, the location of death determines which local coroner's office requires notification. Local police homicide or forensic divisions and hospital emergency rooms normally keep a current list of on-call coroners.

2.1.5 Cold Storage Considerations

In order to manage the increase in natural death fatalities, some counties (regions) will find it necessary to establish temporary cold storage facilities. Plans should be based on the population of the locality (ies) and capacity of existing facilities compared to the projected demand for each municipality. Local planners should make note of all available facilities including those owned by religious organizations. Access to these resources should be discussed with these groups as part of the planning process during the interpandemic period. In the event that local funeral directors are unable to handle the increased numbers of corpses and funerals, it will be the responsibility of county MAS planning teams and their EOC to make appropriate arrangements. Individual counties or regions should work with local funeral directors to plan for alternative arrangements.

2.1.6 Decedent Identification Requirements

Each locality should establish identification parameters. Localities or agencies that have custody of the body are responsible for the identification of the dead and the notification of the death to the NOK. Normally law enforcement and/or hospitals perform this function. In some cases, it will be impossible to utilize the conventional means to identify the dead because of the lack of identification on the body or reliable witnesses, decomposition, or mitigating circumstances. Local police departments should attempt to find fingerprint files on the unidentified persons first in the Law Enforcement Automated Database System (LEADS), (the county coroner's may not have access to this data base) and if unsuccessful, they can request identification support from county coroner's through the OSCA. Localities will be required to assist in ante mortem data collection including the sharing of missing person's reports and the retrieval of medical and dental records during the identification process.

Foreign, undocumented nationals and homeless individuals will require much greater effort to be identified. The Ohio State Coroners Association may want to develop a method of separating those that will pose significant identification problems requiring a longer time to identify. These remains may have to be put into temporary storage until awaiting identification at a later date. The fact that some remains will never be identified must be planned for and information and DNA collected for possible identification at a later date.

2.1.7. Private Partners Concerns

Funeral homes, crematories, cemeteries and transporters may be overwhelmed, within the first few weeks. Very quickly, there may be a shortage of cold storage facilities, human remains pouches, personnel and vehicles to handle the dead and funeral homes may run out of supplies. For example, there may be a shortage of;

- Caskets
- Litters
- Transportation vehicles
- Embalming supplies and equipment

- Headstones
- Vaults
- Cremation is a slow process and a backlog of remains awaiting cremation will likely require temporary storage until they can be cremated
- Urns
- Available cemetery plots
- Staff & equipment to dig graves

3.0 CONCEPT OF OPERATIONS

3.1. GENERAL DEATH SURVEILLANCE FOR AN EMERGING PANDEMIC OR NATURAL DISEASE OUTBREAK

To determine if influenza, pandemic flu, emerging infection or bioterror agent is present in Ohio, the local coroner in the county where the death occurs will take jurisdiction in a **limited number** of cases to establish the "sentinel" 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/suspected" cases of pandemic flu in Ohio. The ODH will conduct necessary testing to confirm the pandemic influenza virus. Once confirmed limited testing may still be conducted by ODH.
- A suspected death from flu of someone traveling through Ohio or a citizen from Ohio who has traveled elsewhere and has been at risk of contracting the flu.
- The first diagnosed case in a hospital that needs confirmation of the virus in tissue.

The local county coroner will assume jurisdiction over all of the deaths described in these specific scenarios above. Remains should not be released to the NOK if the death resulted from one of the scenarios listed. The coroner will release remains to the NOK 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 coroner in that locality.

3.2 THE OHIO STATE CORONER'S ASSOCIATION AND LOCAL CORONER'S ROLE IN THE ESTABLISHED NATURAL DISEASE OUTBREAK OR PANDEMIC EVENT

Additionally as a pandemic develops and becomes established within the state, the local county coroner's will take jurisdiction over the following deaths:

- Cases in which there is no attending physician, e.g., the decedent had no physician or medical treatment facility which treated them or the decedent's physician is licensed out of state.

- The identity of the decedent is unknown and the normal investigative procedures completed by hospital, social services, police or law enforcement agencies, including fingerprinting, have not positively identified the deceased.

- Coordinating confirmation of identity with local police departments.

- The death is sudden and unexplained (e.g., does not meet the typical flu case definition).

- Death of an inmate or person in correctional custody.

- Regular coroner cases as defined by ORC 313.12, If a biologic agent is introduced as an instrument of terror, as opposed to a disease occurring naturally in the population, the Federal Bureau of Investigation (FBI) will be the lead agency, however the dead bodies will come under the jurisdiction of the local county coroner's as homicides.

313.12 Notice to coroner of violent, suspicious, unusual or sudden death.

(A) When any person dies as a result of criminal or other violent means, by casualty, by suicide, or in any suspicious or unusual manner, when any person, including a child under two years of age, dies suddenly when in apparent good health, or when any mentally retarded person or developmentally disabled person dies regardless of the circumstances, the physician called in attendance, or any member of an ambulance service, emergency squad, or law enforcement agency who obtains knowledge thereof arising from the person's duties, shall immediately notify the office of the coroner of the known facts concerning the time, place, manner, and circumstances of the death, and any other information that is required pursuant to sections 313.01 to 313.22 of the Revised Code. In such cases, if a request is made for cremation, the funeral director called in attendance shall immediately notify the coroner.

(B) As used in this section, "mentally retarded person" and "developmentally disabled person" have the same meanings as in section 5123.01 of the Revised Code.

3.3. PERSONAL PROTECTIVE EQUIPMENT AND PERSONAL PRECAUTIONS

3.3.1. Removal of Decedent from Health Care Facility/Home/ Other Institutions

 Recommended personal protective equipment (PPE)

  NIOSH-certified N95 mask if removing human remains immediately after death

  Fluid-resistant long-sleeved gown

  Gloves

  Eye protection if splashing is expected

  Place human remains in an impermeable human remains bag prior to transfer to funeral home, holding facility, or the county coroner. Be sure to clean the outside of the human remains bag with a disinfectant (e.g., 70% alcohol). Possible infection can occur from immediately after death up to 48 hours.

Note: Persons who had contact with the deceased person who died of an infectious disease should be considered infectious as well until otherwise tested. Those persons recovering remains or conducting death investigations who have contact with the survivors should ensure self-protection practices similar to the PPE recommendations for the health care community.

3.3.2. AUTOPSIES

Most deaths in an influenza pandemic would not require autopsies since autopsies are not indicated for the confirmation of influenza as the cause of death. However, for the purpose of public health surveillance (e.g., confirmation of the first cases at the start of the pandemic), respiratory tract specimens or lung tissue for culture or direct antigen testing could be collected post-mortem. Serological testing is not optimal but could be performed if 8-10 ml of blood can be collected from a subclavian puncture post-mortem. Permission will be required from NOK prior to a private or public hospital performing this function. The county coroner does not require permission from the NOK if the case meets the criteria as a coroner's case under Ohio laws (ORC 312).

Autopsy Risks - Biosafety is critical for autopsy personnel who might handle human remains contaminated with a pandemic influenza virus. Infections can be transmitted at autopsies by percutaneous inoculation (i.e., injury), splashes to unprotected mucosa, and inhalation of infectious aerosols. As with any contact involving broken skin or body fluids when caring for live patients, certain precautions must be applied to all contact with human remains, regardless of known or suspected infectivity. Even if a pathogen of concern has been ruled out, other unsuspected agents might be present. Thus, all human autopsies must be performed in an appropriate autopsy room with adequate air exchange by personnel wearing appropriate personal protective equipment (PPE).

Standard Precautions are the combination of PPE and procedures used to reduce transmission of all pathogens from moist body substances to personnel or patients. These precautions are driven by the nature of an

interaction (e.g., possibility of splashing or potential of soiling garments) rather than the nature of a pathogen. In addition, transmission-based precautions are applied for known or suspected pathogens. Precautions include the following:

- *airborne precautions* --- used for pathogens that remain suspended in the air in the form of droplet nuclei that can transmit infection if inhaled;

- *droplet precautions* --- used for pathogens that are transmitted by large droplets traveling 3--6 feet (e.g., from sneezes or coughs) and are no longer transmitted after they fall to the ground; and

- *contact precautions* --- used for pathogens that might be transmitted by contamination of environmental surfaces and equipment.

All autopsies involve exposure to blood, a risk of being splashed or splattered, and a risk of percutaneous injury. The propensity of postmortem procedures to cause gross soiling of the immediate environment also requires use of effective containment strategies. All autopsies generate aerosols. Furthermore, postmortem procedures that require using devices (e.g., oscillating saws) that generate fine aerosols can create airborne particles that contain infectious pathogens not normally transmitted by the airborne route.

Personal Protection Equipment- For autopsies, standard precautions can be summarized as using a surgical scrub suit, surgical cap, impervious gown or apron with full sleeve coverage, a form of eye protection (e.g., goggles or face shield), shoe covers, and double surgical gloves with an interposed layer of cut-proof synthetic mesh). Surgical masks protect the nose and mouth from splashes of body fluids (i.e., droplets >5 μm). They do not provide protection from airborne pathogens. Because of the fine aerosols generated at autopsy, autopsy workers should wear N-95 respirators, at a minimum, for all autopsies, regardless of suspected or known pathogens. However, because of the efficient generation of high concentration aerosols by mechanical devices in the autopsy setting, powered air-purifying respirators (PAPRs) equipped with N-95 or P100 high-efficiency particulate air (HEPA) filters should be considered. Autopsy personnel who cannot wear N-95 respirators because of facial hair or other fit limitations should wear PAPRs.

Waste Handling- Liquid waste (e.g., body fluids) can be flushed or washed down sanitary drains without special procedures. Pretreatment of liquid waste is not required and might damage sewage treatment systems. If substantial volumes are expected, the local wastewater treatment personnel should be consulted in advance. Solid waste should be appropriately contained in biohazard or sharps containers and incinerated in a medical waste incinerator.

3.3.3. Funeral Precautions

Funeral Precautions- Visitations could be a concern in terms of influenza transmission amongst funeral attendees. 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 local health district should plan in advance for how such restrictions would be enacted, and enforced, and for consistency and equitability of the application of any bans. The Ohio Revised Code limits services to adult members of the immediate family at grave site or the new concept being seen, the virtual funeral service a web based program for the memorial services. Family members should take some precautions when viewing their

loved ones. The following recommendations may reduce the potential risk of virus transmission from the decedent:

- Funeral/mortuary staff should observe proper precautions when handling deceased individuals to minimize the spread of disease.
- Family members may view the human remains. If individual died while infectious, family members should wear gloves, gowns, and perform hand hygiene.
- Before touching the human remains, the area should be disinfected (e.g., 70% alcohol).
  - Special attention should be given to funerals, where mourners of the decedent, potentially having acquired the disease from the decedent or in the community, are now congregating potentially allowing for transmission of pandemic influenza.
- Alcohol-based sanitizers and tissues should be made available.
- Funeral homes should consider environmental cleaning.
- Other strategies should be considered during the funeral process (e.g., videoconferences).

3.4. PREPARATIONS FOR FUNERAL HOMES, CEMETERIES, AND CREMATORIA

In an influenza pandemic, each individual funeral home should plan to have to handle approximately six months work within a 6 to 8 week period. Some funeral homes may not be able to manage the increased demand. Individual funeral homes should be encouraged to make specific plans during the interpandemic period regarding the need for additional human and non-human resources during a pandemic situation. For example, working through the local citizen corps council, obtain volunteers from local service clubs or churches or even contractors with heavy equipment may be able to take on tasks such as digging graves, under the direction of current staff. In addition, many localities have received grant funding for citizen response groups such as community emergency response team (CERT) teams or auxiliary police teams. Funeral homes should also consider their ability to store limited additional supplies which may be needed during a pandemic event. Items which may be in short supply such as embalming fluid, caskets, and urns should be a consideration. If obtaining and storing these types of supplies is not feasible, alternate methods of accomplishing the same function should be developed.

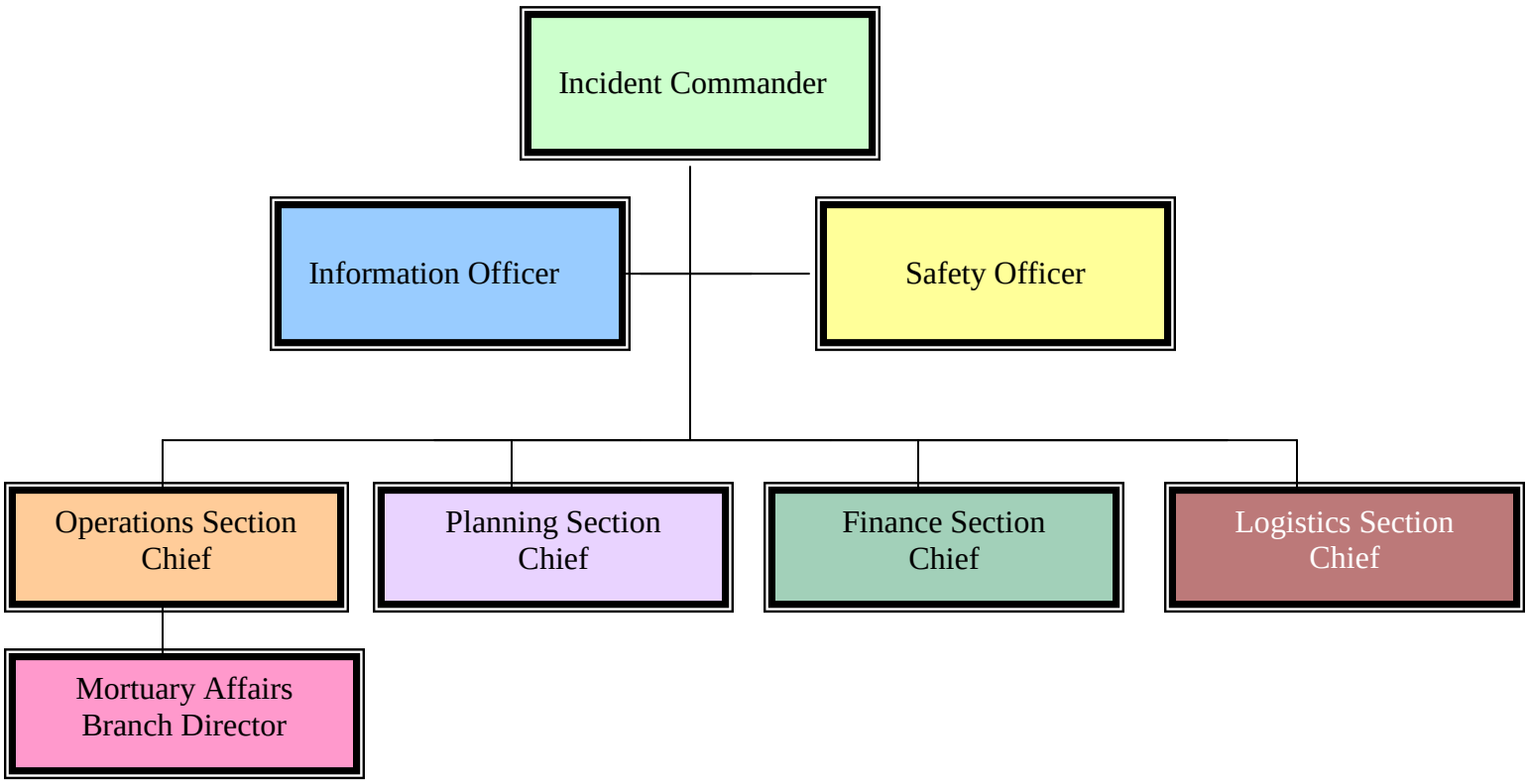
Localities should conduct a gap analysis which includes the private mortuary sector and determine if their volunteer groups could fill gaps identified in the funeral service industry. Crematoriums will also need to look at the surge capacity within their facilities. Most crematoriums can handle about one body every seven hours and could probably run 24 hours to manage the increased demand. As of 2009, Ohio has 98 crematories so the total number of cremations which can be completed per day would only total about 300.

3.5 ESTABLISHING A MORTUARY AFFAIRS BRANCH IN THE INCIDENT RESPONSE PLAN

Establish a Mortuary Affairs Branch into your community's incident command structure for a pandemic event. The Mortuary Affairs Branch would normally fall under the Operation Section Chief in the Incident Command Structure.

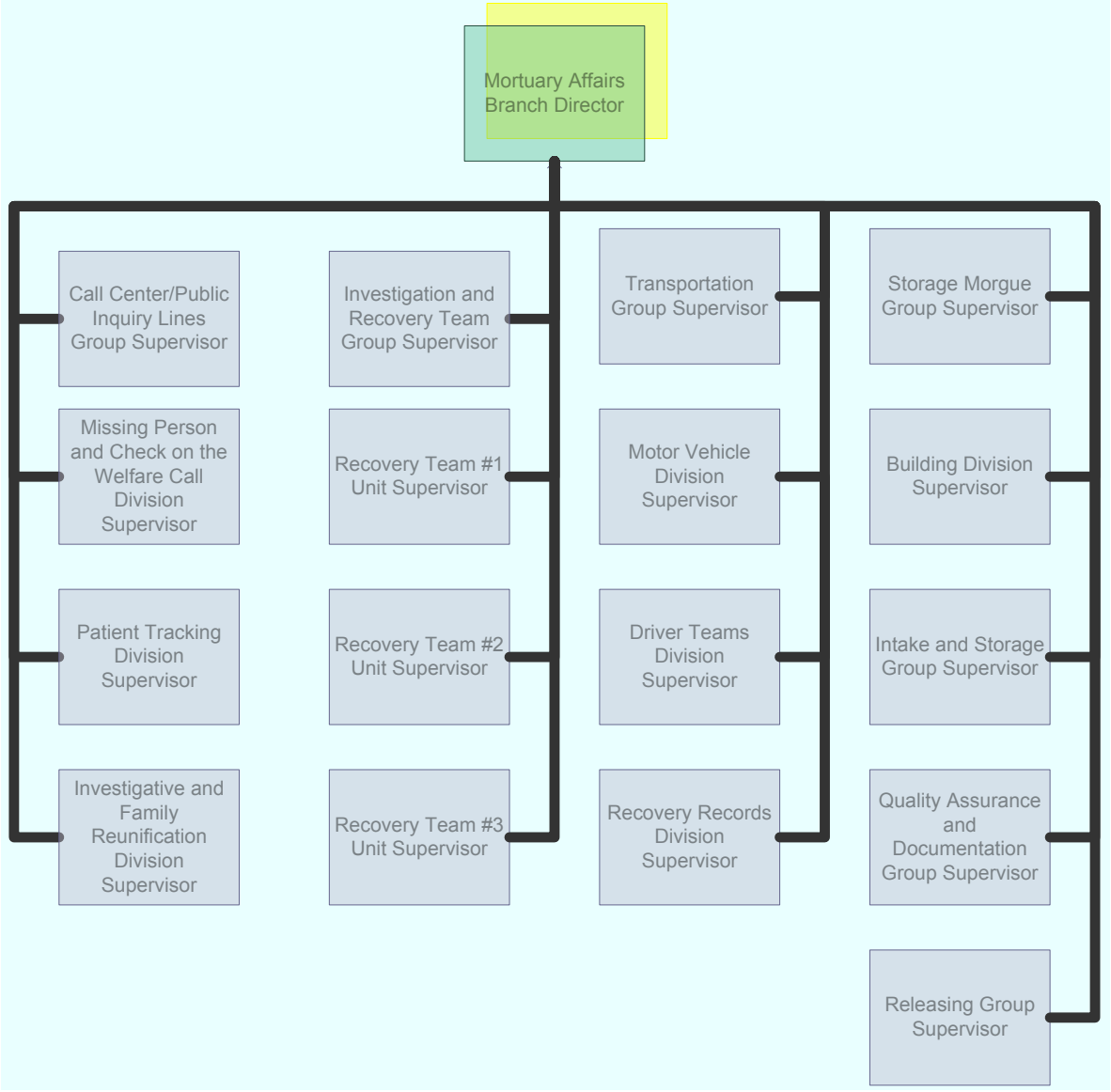
The following organizational charts are suggested for consideration by localities:

Chart 1. Incident Command Structure with Mortuary Affairs Branch



*Virginia Natural Disease Outbreak and the Pandemic Influenza Mass Fatality Response Plan

Chart 2. Suggested Mortuary Affairs Branch Structure in a Natural Disease Event within ICS



* Virginia Natural Disease Outbreak and the Pandemic Influenza Mass Fatality Response Plan

3.5.1 Duties to be preformed

Localities or regions should identify the functional tasks required for the circumstances and identify the agencies or personnel required to run the sections or branches. Listed below are the main duties of the Mortuary Affairs Branch. Attached to this document are sample job action sheets which outline specific duties, and activities related to the Mortuary Affairs Branch (Appendix V).

3.5.1.1 Mortuary Affairs Branch Director: Responsible for managing all aspects of the Mortuary Affairs Branch mission from the time of activation through the return to normal operations including all resources (e.g., personnel and equipment). Reports directly to the Operations Section Chief.

A. Description of Duties

1. Manages and ensures proper and timely completion of the overall mortuary affairs (MA) function of identification and mortuary services for deceased victims. Interacts with the lead Law Enforcement Agency and Planning Section Chief.

2. Ensures that supplies and support necessary to accomplish MA mission objectives and activities are identified, coordinated with the Incident Command System and made known to the Emergency Operations Center at both the local and state level.

3. Supervises subordinates.

4. Interacts with the lead Law Enforcement Agency and the private entities of the funeral services in the community.

5. Ensures all coroner cases encountered are reported to the local coroner.

6. Ensures the completion of all required reports and maintenance of records.

7. Will coordinate with the Public Information Officer (PIO) for the incident concerning all press releases about the deceased.

8. Participates in the after action review.

3.5.1.2 Call Center/Public Inquiry Lines Group Supervisor: Responsible for the establishment of call-in centers for the reporting of the dead and inquiries into the welfare of individuals.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.

2. Receives all reports for missing persons and death related information from citizens, hospitals, and other medical treatment facilities as well as vital records offices.

3. Ensures Investigation and Recovery Teams receive all reported scenes of death information.

4. Ensures the referral of all missing persons reports which are required to be maintained by law enforcement in accordance with Ohio law.

5. In coordination with local law enforcement, may collect all reports of patient admissions and transport for the purposes of clearing the official missing persons list and the reunification of family members.

6. Supports the investigative missing persons and family reunification supervisor with data, personnel and records maintenance.

B. Some recommendations to consider:

1. A separate phone line for missing persons and reports of deaths may be utilized to free 911 operators for live safety activities.

2. Utilized local law enforcement who have the knowledge, skills and expertise to manage the missing persons units established. They also have a legal responsibility to take reports of missing children without delay, enter the information into the LEADS system which transfers information to the Ohio Missing Children's Clearing House managed by the Ohio Attorney General's Office.

3. Hospitals and other established in-patient medical treatment facilities should be encouraged to visualize patients official government identification cards before admission or treatment, and to report their patients by name and other data to the call center. By centralizing this function, hospitals could be assisted in reuniting families, and notifying the Next of Kin (NOK) of illness/death.

3.5.1.3 INVESTIGATION AND RECOVERY TEAM GROUP SUPERVISOR: Established for non-hospital/medical treatment facility deaths.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.
2. Receives all reports for death related information from Call Center.
3. Ensures dispatch of appropriate resources to reported scenes of death.
4. Responsible for conducting scene investigations into the circumstances of death.
5. Responsible for notifying the NOK of death.
6. Responsible for collecting demographic data on the deceased, and reporting that data to the Investigative and family reunification unit.
7. Responsible for notifying and coordinating with attending physicians for the completion of death certificates.
8. Responsible for reporting all recovered human remains to the Call Center's Investigative and Family Re-unification Unit.
9. Recovers the remains from the death scene and coordinates transportation services to the appropriate location.
10. Responsible for ensuring each human remain and personal effects bag is tagged with a unique identifier or full name and demographic information.

B. Recommended Staffing:

1. Investigation and Recovery Unit
2. 1 Search Team Leader
3. 2 Evidence Specialists (Photographers and scribes)
4. 4 Assistants to recover remains (one designated as Team Leader)
5. 1 Safety Officer Assistant

C. Physical Considerations Equipment

1. Radios or other communication equipment
2. Heavy work gloves (leather)
3. Latex or Nitrile gloves
4. PPE (level D) including eye protection (should meet ANSI 287.1)
5. Re-hydration supplies, drinking water and light food
6. Heavy boots (with steel toe/shank, water resistant)
7. Clip boards, pens, paper, and appropriate forms
8. Camera kits with film, batteries or battery chargers, memory cards as appropriate
9. Global positions system (GPS) Unit
10. Laptop PC with windows and Microsoft Office Suite
11. Tyvek Suits
12. Toe tags and permanent markers or ODH EMS triage tags with bar coded serial numbers

D. Areas for Consideration:

1. For bodies found out in the open, there are no restrictions for government agents entering public domain. It should be noted that entering of private homes or businesses pose potential legal issues which should be discussed with the legal department.

2. Even during a known and documented pandemic, deaths must still be investigated by trained individuals to determine if death was caused by natural disease (e.g. no violence, trauma, suspicious circumstances, etc.). This function is normally conducted by police agencies at the local level. Local police investigative staff should be included in the local planning process.

3. For bodies found in homes, businesses and other private property, a search must be done by an authorized agent, normally law enforcement. If the government, or a government authorized agent, enters such a facility, plans should be in place to ensure the property is secured or turned over to a legally authorized agent of the victim. Local locksmiths may be useful for entering and securing private property. It is recommended the locality's attorneys be involved in the planning process for recovery team policies.

4. Each decedent should have an initial examination to ensure there are no apparent injuries. If injuries are found, the police should be notified immediately (if not already present) and the scene should be protected from further disruption or intrusion.

5. Each decedent should have an individual case file (or investigative report as done by police) which is started in the "field" and retained by the local government. As part of the case file, field notes should be taken in all circumstances. The notes should allow for any agency to have enough information to allow for a re-construction of the circumstances and event in case the death becomes suspicious or questioned at a later date. At a minimum, the following information should be completed:

- First, middle, last name and suffix
- Sex, race/ethnicity, color of eyes, (hair, height, and weight if unidentified)
- Home address, city, state, zip code, and telephone number
- Location of death and place found (place of origination of the body before movement to the hospital or other facility)
- Place of employment and employer's address
- Date of birth, social security number (or driver's license number) & age
- Next-of-Kin (or witness) name, contact number and address
- Name of attending physician as indicated by family, witnesses, bills or insurance documents.
- List of existing prescriptions found at the scene and the name of the physician who prescribed them.
- Witness's statements and all their contact information.
- Names and contact information for investigators, drivers, or other "response" personnel for each case.
- Complete list of personal effects, all which accompany remains to a governmental morgue.

6. Hospital and/or medical treatment facility deaths.

a. Decedents who die while patients in a medical treatment facility will normally have a confirmed identification. However, since families and friends do share insurance company cards with each other, and since unknown individuals may come into a hospital, hospitals should ensure at least a government issued photographic identification confirmation process is in place before a death certificate is certified by the attending physician.

b. Treating physicians in the medical treatment facilities should sign the death certificates for their patients and release the death certificates with the remains to the family's funeral home with the body within 24 hours of death.

c. To ensure appropriate death certification occurs at medical treatment facilities, a position could be established with the sole purpose to ensure death certificates are completed and certified.

EXCERPT FROM OHIO REVISED CODE 3705.16

The medical certificate of death shall be completed and signed by the physician who attended the decedent or by the coroner or medical examiner, as appropriate, within forty-eight hours after the death or fetal death. A coroner or medical examiner may satisfy the requirement of signing a medical certificate showing the cause of death or fetal death as pending either by stamping it with a stamp of the coroner's or medical examiner's signature or by signing it in the coroner's or medical examiner's own hand, but the coroner or medical examiner shall sign any other medical certificate of death or supplementary medical certification in the coroner's or medical examiner's own hand.

3.5.1.4 TRANSPORTATION GROUP: Responsible for the resources and personnel required for the pick-up and transportation of human remains from places of death to the cold storage facilities or a funeral home.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.
2. Acts on the requests from the Investigation and Recovery Team Director and/or the hospital morgue facilities.
3. Ensures dispatch of appropriate resources to provide respectful removal of human remains.
4. Documents all human remains and accompanying personal effects and field paperwork.
5. Checks and logs each toe tag on all remains collected and items of personal effects.
6. Transports and delivers remains, personal effects and documentation to the appropriate morgue.
7. Closely coordinates with the Logistics Branch to ensure adequate supplies are readily available.

B. Recommended Staffing

1. Transportation group supervisor
2. Three (3) teams of 3-Transportation Unit Specialists (one designated as Team Leader)
3. Transportation Dispatcher
4. Motor Vehicle Division Supervisor
5. Drivers

C. Physical Considerations Equipment

1. Radios or other communication equipment
2. Heavy work gloves (leather)
3. Latex or Nitrile gloves
4. PPE (level D) including eye protection (should meet ANSI 287.1)
5. Re-hydration supplies, drinking water and light food
6. Heavy boots (with steel toe/shank, water resistant)
7. Clip boards, pens, paper, and appropriate forms
8. Human remains pouches of various sizes (infant, child, adult, adult X-Large)
9. Toe tags or EMS triage tags
10. Motor vehicles for remains transport (vans, station wagons, etc.)
11. Waterless hand sanitizer
12. Permanent markers
13. "Church carts" or litters for body removal

D. Areas For Consideration:

1. If the family of the deceased is available, they can identify which funeral home they wish to hire for their services. If possible, that funeral home or its sub-contractor will provide transportation services from the place of death to the appropriate morgue facility.

ORC 9.15 Burial or cremation of body at expense of township or municipal corporation.

When the body of a dead person is found in a township or municipal corporation, and such person was not an inmate of a correctional, benevolent, or charitable institution of this state, and the body is not claimed by any person for private interment or cremation at the person's own expense, or delivered for the purpose of medical or surgical study or dissection in accordance with section 1713.34 of the Revised Code, it shall be disposed of as follows:
(A) If the person was a legal resident of the county, the proper officers of the township or municipal corporation in which the person's body was found shall cause it to be buried or cremated at the expense of the township or municipal corporation in which the person had a legal residence at the time of death.
(B) If the person had a legal residence in any other county of the state at the time of death, the superintendent of the county home of the county in which such body was found shall cause it to be buried or cremated at the expense of the township or municipal corporation in which the person had a legal residence at the time of death.
(C) If the person was an inmate of a correctional institution of the county or a patient or resident of a benevolent institution of the county, the person had no legal residence in the state, or the person's legal residence is unknown, the superintendent shall cause the person to be buried or cremated at the expense of the county.
Such officials shall provide, at the grave of the person or, if the person's cremated remains are buried, at the grave of the person's cremated remains, a stone or concrete marker on which the person's name and age, if known, and date of death shall be inscribed.

A political subdivision is not relieved of its duty to bury or cremate a person at its expense under this section when the body is claimed by an indigent person.

2. If Next-of-Kin is not available, cannot be identified, claim to be indigent, or if they cannot decide on a funeral home, communities, usually through the local health department, have contracts/agreements with licensed funeral directors to handle the final disposition of a decedent. In a pandemic event, there is a greater chance that NOK will be difficult to find and contact because they may have been affected negatively by the pandemic.

3. In a pandemic event, funeral homes and transporters could be overwhelmed and may require augmentation from the local or regional government.

4. If vehicles are to be used for collecting remains certain guidelines should be observed:

- The vehicle shall have all markings removed if it is a commercial business due to public perception.
- The vehicle shall be covered so the people or the press cannot see into the bed of the vehicle.
- Bodies shall not be stacked on top of each other in the vehicle under any circumstances.
- The vehicle must be refrigerated. Air conditioning will not suffice.
- Loading and unloading of the vehicle shall be accomplished discretely when possible. Tarps or other ways of blocking the view may be used. The top must also be covered to prevent observance from the air.
- The interior area used to store bodies should have a double plastic lining
- After use, or if the plastic lining is grossly contaminated and must be changed, disposal should be in accordance with the Occupational Safety and Health Administration's Blood Borne Pathogens Standard (29 CFR 1910.1030).
- Shelving should not be made of wood or materials where bodily fluids may be absorbed. Metal or plastic shelving that may be cleaned is acceptable. A method of securing the body within the shelf should be required.

5. Persons coordinating transportation should set up a schedule with hospitals for remains transfer to the storage morgue. Schedules should be set up and operate on a 24 hour basis. State and Federal Departments of Transportation (DOT) Requirements must be satisfied for the transportation of human remains.

6. Death certificates and burial transit permits will most likely be required for transportation across state lines and will require approval of receiving state(s). Transportation across international lines (Canada and Mexico) may require U. S. Department of State approval and the receiving nation's approval.

7. Quarantine measures may affect the movement of human remains. For example, can remains move into, through, or out of a quarantined area? If movement is prohibited, then temporary storage must be developed. While quarantine is designed to protect the public's health, plans must still be made for removing the dead.

3.5.1.5. Storage Morgue Team: Responsible for the set-up and management of the storage morgue for the locality or region. Receives, stores, and releases human remains and their personal effects to the legal next of kin (or their funeral home), or legally authorized person(s)/agency for final disposition.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch director.
2. Checks the documentation on remains, personal effects and accompanying paperwork to ensure all data is consistent for remains.
3. Maintains a complete log of all remains and personal effects being stored and released from the facility.
4. Documents all human remains and accompanying personal effects and documentation.

5. Checks and logs each toe tag on all remains collected and associated personal effects.
6. Receives and files the signed NOK's release of human remains and funeral home contract forms.
7. Ensures each remain and each bag of personal effects are released with the funeral home or family signature. Maintains a file of all signed release documents.

B. Recommended Staffing

1. Storage Morgue Manager
2. 1 Refrigeration Specialists
3. 3 Facility Maintenance Team (with one facility manager)
4. 3 Admitting team and documentation specialists
5. 1 Releasing Supervisor
6. 6 Body Escorts

C. Equipment

1. Tables
2. Chairs
3. Laptops with Windows XP or greater and Window's Office Suite Software
4. Telephones
5. Fax machines
6. Paper
7. Gloves
8. N95 masks
9. Tyvek suits- various sizes
10. Human remain pouches in various sizes in case of damage to existing bags
11. Gurneys, church carts or litters to move remains
12. File cabinets
13. Log books
14. Photocopier
15. Bar code label makers and readers

D. Planning Considerations:

1. Additional temporary cold storage facilities may be required during a pandemic for the storage of corpses prior to their transfer to funeral homes. Cold storage facilities require temperature and biohazard control, adequate water, lighting, rest facilities for staff, and office areas and should be in communication with patient tracking sites and the emergency operations center. A cold storage facility must be maintained at 34 – 37^{o} F. However, corpses will begin to decompose in a few days when stored at this temperature.
2. If the legal NOK does not wish to have the decedent cremated, plans to expedite the embalming (if desired by the NOK) process should be developed since, in the case of a pandemic, bodies may have to be stored for an extended period of time. In counties where a timely burial is not possible due to frozen ground or lack of facilities, corpses may need to be stored for the duration of the pandemic wave (6 to 8 weeks).
3. Local jurisdictions should be aware of the impact of rapid (within 24 hours) burial orders should it be necessary due to the contagious nature of the disease.

4. The ODH recommends communities work together in a regional manner. This is especially true when identifying and acquiring refrigeration resources, as there will be high demand and few resources. Each region (or county) should make pre-arrangements for cold storage facilities based on local availability and requirements. The resource needs (e.g. human remains pouches) and supply management for cold storage facilities should also be addressed. The types of temporary cold storage to be considered may include refrigerated trucks, cold storage lockers or refrigerated warehouses. Refrigerated trucks can generally hold 25-30 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 but may be required (ensure enough staffing is available to avoid injuries). These shelves will be contaminated with biological material and will require special handling after the event. To reduce any liability for business losses, using trucks with markings of a supermarket chain or other companies should be avoided, as the use of such trucks for the storage of corpses may result in a negative image of the company and unwanted damage to their business.

4. Using local businesses for the storage of human remains is not recommended and should only be considered as a last resort. The post-pandemic implications of storing human remains at these sites can be very serious, and may result in negative impacts on business with ensuing liabilities.

5. There should be no media, families, friends or other onlookers permitted at the temporary morgue site due to potential legal concerns. Families should make arrangements with their funeral homes to conduct viewings of the remains at the home or medical facility of death, prior to removal, at the grave site or at the crematory. (If responders can take a facial photograph, when appropriate for viewing, and keep the photo in the case files, the photo could be utilized to meet families' needs of viewing or viewing for identification purposes.)

3.6. DEATH REGISTRATION

In Ohio, death registration is a process governed by Ohio laws, regulations, and administrative practices to register a death. All death registration is completed through the Ohio Department of Health, Office of Vital Statistics electronic death registration system (EDRS).

Natural disease outbreaks occurring under normal circumstances (e.g. not terrorist related) do not normally fall under the legal jurisdiction of the county coroner's. In these circumstances, the determination of cause and manner of death as well as the certification of death is expected to be completed by the decedent's treating physicians in accordance with Ohio state law (ORC 3705.16). Except in unusual circumstances, death from Pandemic Influenza (PI) will fall directly on physicians throughout the state to complete the cause of death section of the death certificate. Since the same physicians will be treating patients for regular symptoms and PI symptoms, they could be overwhelmed quickly during this time. This document is designed to assist local jurisdictions with planning for and distribution of materials to prepare business partners (funeral directors, physicians, etc.) in dealing with fatality management issues. Educational documents contained in Appendix IV can be distributed by the physician to their patients as precautionary measures or to educate them in how to handle health issues at home. In addition, documents which will assist the physician in completing a death certificate during a PI event are contained in Appendix IV.

For natural deaths, the funeral directors complete the demographic portion of the death certificate through the EDRS system and then forward the paper death certificate to the attending physician of the decedent for certification of the cause of death. For non-natural deaths, the funeral directors complete the demographic portion of the death certificate through the EDRS system and the coroner completes the certification of the cause of death through the EDRS system and prints the death certificate for filing. Ohio has local registrars who register all death certificates in the city or county where the death occurs. Should the local registrar system be overwhelmed or become non-functional during a pandemic event, the state will activate its Pandemic Influenza Mass Casualty Aftermath Plan to assist the local registrars in filing death records.

Ohio law also requires a burial transit permit to be issued for every death that occurs in the state. Dispositions other than cremation can be completed on the EDRS system and printed in the office of the funeral director however, under normal circumstances; cremations require a completed death certificate prior to issuance of a burial transit permit. Ohio law (ORC 3707.19) does have a provision to allow for cremation of a deceased individual if they have died of a communicable disease. This provision may preclude the need for a completed death certificate prior to the issuance of a burial transit permit.

ORC 3707.19 Disposal of body of person who died of communicable disease.

The body of a person who has died of a communicable disease declared by the department of health to require immediate disposal for the protection of others shall be buried or cremated within twenty-four hours after death. No public or church funeral shall be held in connection with the burial of such person, and the body shall not be taken into any church, chapel, or other public place. Only adult members of the immediate family of the deceased and such other persons as are actually necessary may be present at the burial or cremation.

Local registrars may or may not be available during a pandemic event to register death certificates. Local health departments may require the local registrars to perform other duties to help support the local health department and to assist in supporting the living. As a contingency, the Ohio Department of Health, Office of Vital Statistics has developed a Pandemic Influenza Mass Casualty Aftermath Plan to address the possible shortage of registration sites for death certificates and the issuance of certified copies of death certificates (Appendix I). Portions of this plan will be activated as necessary during a pandemic event.

3.7. SUPPLY MANAGEMENT

Counties should recommend to funeral directors that they not order excessive amounts of supplies such as embalming fluids, human remains pouches, 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 human remains pouches and other supplies may 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 exhaust lower-cost items (e.g. inexpensive caskets) and should be prepared to provide alternatives.

3.8. PSYCHOSOCIAL/RELIGIOUS CONSIDERATIONS

Many individuals may suffer from psychosocial issues due to a pandemic mass fatality incident. In addition, persons who survive such an event may also need assistance in working through their experience. Jurisdictions should plan for the need of experienced counselors during and after the incident. Should consecutive waves of the pandemic influenza occur, differing levels of assistance might be needed to treat ongoing and new symptoms of stress, depression and mental illness.

During a pandemic event, many individuals will turn to their religious leaders for guidance and support. Most religious and ethnic groups have very specific directives about how bodies are managed after death, and such

needs must be considered as a part of pandemic planning. Christian, Indian Nations, Jews, Hindus, and Muslims have specific directives for the treatment of bodies and for funerals. The wishes of the family will provide guidance, if no family is available, local religious or ethnic communities can be contacted for information. Counties should contact the religious and cultural leaders in the pandemic planning stages and develop plans. Counties should document what is culturally and religiously expectable, what can be compromised and what practices are strictly forbidden.

As a result of these special requirements, some religious groups maintain facilities such as small morgues, crematoria, 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 also be involved in planning for funeral management, bereavement counseling, and communications, particularly in ethnic communities with large numbers of people who do not speak English or Spanish.

3.9. SUGGESTIONS FROM THE OHIO FUNERAL DIRECTORS ASSOCIATION (OFDA)

It is recommended that all funeral directors contact their county coroner and Health Departments to become involved in their disaster and pandemic planning activities with respect to the management of mass fatalities at the local level. Funeral directors should consider it a part of their professional standards to make contingency plans if they were incapacitated or overwhelmed. The National Funeral Directors Association recommends that members begin thinking about state and local responses to the possible outbreak of a flu pandemic. Specifically, members are urged to:

- Protect yourself. Ensure that you and your staff are up to date with vaccinations against influenza, hepatitis, pneumonia and other infectious diseases.

- Consider how you can prepare for as many as two to three times the normal number of deaths over a six-month period. Do you have adequate supplies on hand or can you assure that they will be readily available if needed?

- Make contact with local medical examiners or coroners to discuss the possibility of a pandemic and how you, locally, will respond.

3.10 STORAGE AND DISPOSITION OF HUMAN REMAINS

Bodies can be transported and stored (refrigerated) in impermeable bags (double-bagging is preferable), after wiping visible soiling on outer bag surfaces with 0.5% hypochlorite solution. Storage areas should be negatively pressured with 9--12 air exchanges/hour. Local emergency management agencies, funeral directors, and the state and local health departments should work together to determine in advance the local capacity (bodies per day) of existing crematoriums and soil and water table characteristics that might affect interment. For planning purposes, a thorough cremation produces approximately 3--6 pounds of ash and fragments and takes approximately 7 hours to complete.

4.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

ODH OFFICE OF PUBLIC HEALTH PREPAREDNESS

LAW ENFORCEMENT AGENCIES

OHIO STATE CORONERS ASSOCIATION

HOSPITALS

FUNERAL HOMES AND CREMATORIES

The following table identifies roles and responsibilities of different agencies within the pre-pandemic, pandemic and post-pandemic period. The list is not all inclusive and is subject to change, based on the future planning considerations.

Table 2. Roles and responsibilities of some agencies involved with pandemic mass fatality planning and execution. (Ohio Department of Health, Office of Health and Vital Statistics)

Agency	**Pre-pandemic** Interpandemic and Pandemic Alert **period**	**Pandemic Period**	**Post-Pandemic Period**
ODH Office of Public Health Preparedness	**Identify needs to ensure that the plan is finalized and logistical systems are in place for implementation as needed.**	**Ensure mass fatality issues are communicated to affected stakeholders through the Emergency Operations Center (EOC).** **Maintain contact with the county coroners** **Establish if Funeral Directors Association representation is required at the state Emergency Operations Center.**	**Conduct evaluation of the response as it relates to handling mass fatalities.** **Utilize findings to identify areas of improvement.**

PANDEMIC INFLUENZA MASS FATALITY RESPONSE GUIDANCE PLAN

Agency	Pre-pandemic Interpandemic and Pandemic Alert period	Pandemic Period	Post-Pandemic Period
ODH Office of Public Health Preparedness (con't)	**Establish a relationship with relevant agencies, including the OSCA, Ohio Funeral Directors Association, and law enforcement.** **Develop a Planning Guide for Funeral Homes to assist in their planning on how to reduce and deal with the impact of the high number of fatalities on the sector.** **Maintain liaison with relevant agencies and provide technical advice as to how to deal with the effects of a mass fatality event due to the pandemic.**	**Establish representation at the State Emergency Operations Center.** **Ongoing communication with relevant agencies in order to address issues as they come up.** **Ongoing monitoring of necessity of measures to protect public health (e.g. restricting attendance at funerals).** **Ongoing communication with the general public through media and other appropriate channels to inform them regarding the above public health measures.** **Ensure provision of psychosocial support to the families of the ill and deceased.** **Provide care for ownerless pets and livestock through animal shelters, or other**	**Conduct evaluation of response as it relates to dealing with mass fatalities.** **Utilize findings to identify areas of improvement.**

ODH Office of Public Health Preparedness/Prevention (con't)		**animal protection groups.** **Open ODH hot line to provide information and/or referrals.** **Information related to fatalities is also going to be posted on ODH's web site.**	
Law Enforcement Agencies	**As one of the lead agencies for dealing with mass fatalities, law enforcement at all levels should be involved in developing a pandemic mass fatality response plan as part of the State Influenza Pandemic Response Plan.** **Ensure systems are in place to implement the pandemic mass fatality response plan as needed.**	**Establish representation at the State Emergency Operations Center.** **Implement the Pandemic Mass Fatality response plan as outlined.**	**Conduct evaluation of the response as it relates to handling mass fatalities.** **Utilize findings to identify areas of improvement.**
Ohio State Coroners Association (OSCA)/Local County Coroner's	**Participate and provide expert advice to the development of the mass fatality plan and recommendations for dealing with the impact of**	**Ensure communication with State EOC and county EOC related to mass fatality issues.** **Based on the needs assessment, provide**	**Provide input to the response evaluation and help identify "best practices" for future implementation.**

Ohio State Coroners Association (OSCA) (con't)	**mass fatalities due to a pandemic in the state and county.** **Ensure systems are in place to implement the pandemic mass fatality response plan when needed.**	**consultative advice on identification of morgue site and/or temporary short-term storage facility.** **Provide advice on notification of the next of kin, if required.** **Provide advice on temporary interment locations and procedures if needed.**	
Hospitals	**As part of pandemic influenza planning, develop specific plans for dealing with high mortality rates in hospitals due to pandemic.**	**Based on need, enlarge morgue capacity or adapt alternate space to accommodate a higher than normal mortality rate.** **Notify local Health department and ODH of all deaths with influenza as the cause or contributing cause.**	**Provide input to the response evaluation and help identify "best practices" for future implementation.**

Funeral Homes and Crematoriums	**Develop preparedness plans to address issues such as supplies, equipment, vehicles and personnel shortages.** **Raise issues of concern with OFDA, ODH or through the Board of Embalmers and Funeral Directors and/or the Ohio State Medical Board, the OSCA or OEMA** **A six months inventory of supplies in stock should be developed and maintained.** **Implement preparedness plans.**	**Maintain a six months inventory of supplies in stock.**	**Provide input to the response evaluation and help identify "best practices" for future implementation.**

4.1 STATE GOVERNMENT

4.1.1 Governor's Office

- May declare an establishment of temporary internment sites
- May order the closing of temporary interment sites and relocation of human remains to cemeteries

4.1.2 Ohio Department of Health

- Meet daily or as needed to discuss situation.

- Provide information to key organizations regarding pandemic influenza.
    - o Write an article for the Ohio Funeral Directors Association for distribution to their licensees and members via newsletters, websites, etc.
- Utilize the Health Alert Network (HAN) and the Ohio Public Health Communications System (OPHCS) to communicate with county health officials, OSCA, hospitals, physicians, laboratory directors, community health centers, childcare centers, schools and the media.
- Provide influenza training to local county coroner's, funeral directors, funeral homes, and MA workers.
- Develop public education programs and materials on how the Mortuary Affairs system is handling mass fatality and where the Mortuary Affairs collection points are located.
- Review update and maintain this document.
- Coordinate needs assessment of current morgue capacity across Ohio.
    - o Morgue capacity at healthcare facilities.
        - Ask Ohio Hospital Association to conduct survey of morgue capacity at hospitals.
    - o Assessing morgue capacity in non-healthcare facilities.
    - o Assist localities in surge capacity using refrigerated warehouses, trucks, and other storage methods.

4.1.3 Office of Vital Statistics

- Establish a voluntary "acute death reporting system" with sentinel county registrars.
    - o Report number of influenza and pneumonia deaths as a proportion of the total number of deaths by week.
    - o This system would be activated during Pandemic Phase 6 when cases are in the United States.
- Mandatory pediatric influenza death reporting.
- Ease filing locations and time requirements throughout the state during the Pandemic Phase.
- Assist localities in tracking of human remains in the storage morgues and the personal effects depot record and tracking operation.

4.1.4 Public Information Office (PIO) or the Communications Group

- Create press releases for the media concerning mortuary affairs system goals and the implementation of temporary interment sites.
- Conduct press conferences as appropriate to explain the need for mass fatality procedures, delay of death certificates, funerals and MA processes/procedures.
- Develop public education programs and materials on how the Mortuary Affairs system is handling mass fatality and where the Mortuary Affairs collection points are located.
- Utilize the Health Alert Network (HAN) and the Ohio Public Health Communications System (OPHCS) to communicate with county health officials, OSCA, hospitals, physicians, laboratory directors, community health centers, childcare centers, schools and the media.
- Review update and maintain this annex.

4.1.5 State Board of Embalmers and Funeral Directors

- Oversee and assist in the management of increased deaths and burial activities.

4.2 LOCAL GOVERNMENT

4.2.1. Local/County Health Departments

- Implement isolation and quarantine as needed and coordinate requirements for the movement of human remains inside and outside of the quarantine area.
- Coordinate efforts, resources and activities through the county EMA.

4.3 PRIVATE ORGANIZATIONS & OTHER ENTITIES

4.3.1 Ohio Funeral Directors Association (OFDA)/ local funeral directors

- Assist the localities in the coordination of mortuary services.
    - o Transportation, preparation and disposition of deceased persons.
    - o Acquisition of funeral supplies.

o Assist clergy support for funerals.

o Provide family support.

• Assist in communication with key partners.

o Provide education and updates on pandemic influenza to members of OFDA.

o Serve as liaison to the National Funeral Directors Association.

o Serve as liaison to religious and cultural leaders and provide ethnic funeral consultation.

4.3.2 Ohio Hospital Association/local hospitals

o Coordinate mortality activities with local jurisdictions.

- Ohio Hospital Association to conduct survey of morgue capacity at hospitals.
- Share findings with local health jurisdictions to determine total morgue capacity.
- Hospitals should complete and test their mass fatality plans to ensure the effectiveness of plans Hospitals should utilize the Ohio Hospital Association Mass Fatality Tool Kit to complete their plans. (Appendix II).

4.3.3 Physicians & Other Certifying Entities

- Will distribute documents to educate the public on pneumonia and influenza (PI).
- Will distribute documents which identify that the patient was seen by a physician for PI.
- Reference Doctor's Visit Verification Form (Appendix IV).
- Physician's will complete cause of death section of death certificate utilizing the sample death certificates (Appendix IV).

5.0 POST-PANDEMIC RECOVERY

After a pandemic wave is over, it can be expected that many people will remain affected in one way or another. Many persons may have lost friends or relatives, will suffer from fatigue and psychological problems, or may have incurred severe financial losses due to interruption of business. The Federal and Ohio State Governments have the natural role to ensure that mass fatality response concerns can be addressed and to support "rebuilding the society".
The post-pandemic period begins when the Director of the Ohio Department of Health declares that the influenza pandemic is over. The primary focus of work at this time is to restore normal services, demobilize pandemic mass fatality response activities, review their impact, and use the lessons learned to guide future planning activities.

- Demobilize MA emergency operations.
- Move remains from the temporary interment location (if utilized) to final resting place.
- Religious ceremonies conducted during reinterment and at the closing of the temporary interment locations.
- Closing, cleanup, and restoration of temporary interment locations.
- Determine when mortuaries and funeral homes can resume normal operations.
- Provide grief counseling to MAS staff and public as needed.
- Redeploy human and other resources as needed.
- Finalization of personal effects.
- Process record keeping for financial purposes.
- Evaluate and revise the mass fatality plans as required.

In addition to the above responsibilities, an overall assessment of the mortuary affairs system, including the burden from human death, and financial costs of the pandemic ought to be undertaken.

6.0 REFERENCES

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6.1 STATE PANDEMIC PLANS USED AS REFERENCES:

- Arizona
- California
- Colorado
- Kansas
- North Carolina
- Maine
- Oregon
- Rhode Island
- Virginia
- Washington
- Wisconsin

6.2 INTERNATIONAL PANDEMIC PLANS USED AS REFERENCES:

- Australia
- Canada
- European Union
- Toronto City

• New Zealand

ACRONYMS

ANSI-American National Standards Institute
CERT-Community Emergency Response Team
CFR- Code of Federal Regulations
DMORT- Disaster Mortuary Operations Response Team
DOT- Department of Transportation
DPMU- Disaster Portable Mortuary Unit
EMS- Emergency Medical Services
EP&R- Emergency Preparedness and Response Division
GPS- Global Positional System
HAN- Health Alert Network
HEPA- High-Efficiency Particulate Air
HIPAA- Health Insurance Portability and Accountability Act
HVAC- Heating, Ventilation, and Air Conditioning System
ICS- Incident Command System
LEADS- Law Enforcement Automated Database System
MA- Mortuary Affairs
MACPs- Mortuary Affairs Collection Points
MAS- Mortuary Affairs System
MMRS- Metropolitan Medical Response System
NIMS- National Incident Management System
NIOSH- National Institute of Occupational Safety and Health
NOK- Next-of-Kin
NRP- National Response Plan
ODH- Ohio Department of Health
OFDA- Ohio Funeral Directors Association
OPHCS – Ohio Public Health Communications System
OSCA- Ohio State Coroners Association
PAPRs- Powered Air-Purifying Respirators
PI- Pandemic Influenza
PIO- Public Information Office
PPE- Personal Protective Equipment
WHO- World Health Organization

PANDEMIC INFLUENZA MASS FATALITY RESPONSE GUIDANCE PLAN

Appendices

Appendix I - Pandemic Influenza Mass Fatality Aftermath Plan

Appendix II - Ohio Hospital Association Mass Fatality Tool Kit

Appendix III – Local Jurisdiction Planning Tool Kit

Appendix IV – Physician Tool Kit

Appendix V – Mortuary Affairs Branch – Job Action Sheets

Ohio Department of Health

Office of Vital and Health Statistics

Pandemic Influenza Mass Fatality

Response Guidance Plan

Appendix I

Pandemic Influenza Mass Fatality Aftermath Plan

Ohio Department of Health

Pandemic Influenza
Mass Fatality Aftermath Plan

October 14, 2009

Prepared By
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I. Introduction

Influenza viruses are unique in their ability to cause sudden, pervasive infection in all age groups on a global scale. The importance of influenza viruses as biological threats is due to a number of factors, including a high degree of transmissibility, the presence of a vast reservoir of novel variants (primarily in aquatic birds), and unusual properties of the viral genome. Rapid rates of evolution in the genes which encode the major antigens of the virus -- the hem agglutinin (HA) and neuraminidase (NA) surface proteins -- lead to the emergence of annual influenza epidemics which kill, on average, approximately 20,000 Americans. More importantly, segmentation of the virus genome has periodically led to reassortment (exchange) of gene segments between animal and human viruses during chance co-infections, resulting in the sudden and unpredictable emergence of pandemics.

Three such pandemics occurred during the 20th century, one of which -- the infamous "Spanish flu" of 1918 -- was responsible for more than 20 million deaths worldwide, primarily in young adults. Although mortality rates associated with the more recent pandemic of 1957 (A/Asia [H2N2]) and 1968 (A/Hong Kong [H3N2]) were reduced in part by antibiotic therapy for secondary bacterial infections and more aggressive supportive care, both were associated with high rates of morbidity and social disruption. Moreover, based on rates of illness and complications observed in these pandemics, the Centers for Disease Control and Prevention (CDC) has preliminarily estimated that economic losses associated with the next pandemic may range from ~$71 billion to ~$166 billion, depending on the attack rate. To prepare for the next pandemic, an event considered by many experts to be inevitable, public health officials from around the world have begun to devise strategies by which influenza-related morbidity, mortality, and social disruption might be reduced. This process was revisited in the U.S. in 1993, when the Federal government convened a panel of experts from the public and private sectors to review and revise the initial plan developed in 1978 and to assess the nation's current capacity to respond to the next pandemic.

The World Health Organization (WHO) has defined phases of a pandemic to assist with planning and response activities.

Pandemic Phase Definition	No new influenza subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals.
Pandemic Alert Period	Human infections with a new subtype, which may include large clusters, but human-to-human spread still localized.
Pandemic Period	Increased and sustained transmission in the general population.
Second Wave	Recrudescence of epidemic activity within several months following the initial wave of infection

However, this document identifies the procedures for mitigating the consequences of a Pandemic Flu Mass aftermath.

II.Situation and Assumptions

The worldwide pandemic flu outbreak is estimated to last 18-24 months in duration and estimates of the death toll are as high as five million individuals in the United States. The following assumptions will be used in determining this plan:

1. There is no current timeframe for an outbreak in the United States or Ohio.
2. We will assume an estimate of one hundred thousand additional deaths (in comparison with approximately 109,000 deaths occurring annually in Ohio) may occur in Ohio due to this outbreak.
3. We will assume that a surge of deaths will occur during a three – four month period.
4. We will assume that approximately 80 percent of the total deaths will occur during this three - four month period (80,000).
5. We will assume that 5-40 percent of all vital statistics employees statewide will report to work.
6. Development of vaccination for cure will take at least 6-9 months.
7. During this period, assistance at the state level for vital statistics will be minimal for desk or walk-in services.

III.Preparations

Substantial preparation is necessary on both the state and local level to ensure that the State of Ohio is prepared to handle a mass fatality situation. State guidance in preparing local or regional mass fatality plans is crucial to effective situation management. Please reference the Pandemic Influenza Mass Fatality Guidance Plan.

A. Electronic Death Registration System (EDRS)

The EDRS is available for coroners and funeral directors. This application:

a) Allows the following users to register death records and print the required certificates, burial permits and ancillary documents:
   1. Coroners
   2. Funeral directors
   3. Some hospitals
   4. Local registrars

b) Provides the following features:
   1. Ability to self-register
   2. High availability (24x7 support)
   3. Provide interface to ODRS (Ohio Disease Reporting System) for surveillance to develop and implement a mechanism for receiving timely information on influenza, pneumonia- or other respiratory infection-related causes of death.

4. Printing certificates – Addition of time stamp, sequence number for local registrars.
5. Registrars and sub registrars may print burial permits.

B. Material supply

In order to complete the documents required for reporting and legal purposes due to death events, the following material will be distributed to the regional offices for distribution in registering a death event. An initial quantity of documents/supplies will be stored at the regional offices according to estimates of the number of fatalities which might occur in that region.

A. Required documents/supplies

a. Death Certificate forms (150,000)
b. Provisional Death Certificate forms (50,000)
c. Burial Transit Permits (100,000)
d. Supplementary Medical Certification (25,000)
e. Fetal Death Certificate forms (10,000)
f. Affidavit of correction forms (10,000)
g. Certificate of Service forms (5,000)
h. Security Paper – death (500,000 approx.)
i. Copier toner (supplied by Regional office)
j. Certification machines (one extra per regional office)
k. CD with all forms listed above (except fetal death form)

B. Mode of distribution of documents/supplies

The following services will be counted on as a mode of distributing additional documents and supplies should the need arise. However, these services can be counted on only if these services are available during the crisis period.

a. U.S. Postal Service
b. Expedited delivery service companies

C. Procedural changes to be implemented for mass casualties

a. Modified state procedures to temporarily suspend registration, amending and issuing birth certificates.
b. Override any statutes as declared by the state/federal authorities.
c. Divert state staff to assist with technical questions.
d. Redistrict local offices into regional offices as outlined in **Appendix A.**
e. Activate Emergency Sub-Registrar plan. Utilizing the Ohio Public Health Communications System (OPHCS) as outlined in **Appendix B.**
f. Implement the use of the Burial Permit Issuance plan as outlined in **Appendix C.**
g. Utilize unique death certificate numbering sequences for regional offices as outlined in **Appendix D**.

h. Activate the Emergency Module in the EDRS system for the specific pandemic event which is occurring.
i. Continue the process of scanning images and linking to EDRS data.
j. If users cannot enter electronic data into EDRS, they will be required to enter paper based records, which will then be entered into EDRS by the local registrar, sub-registrar or emergency sub-registrar.

D. Develop plan to activate sub and emergency sub-registrars to assist in filing death certificates

a. Keep a current list of all sub and emergency sub-registrars.
b. Provide training on acceptance of death certificates for filing.
c. Divide sub and emergency sub-registrars into regions according to the county/city they reside. Utilize the same regional offices as used for local registrars.

IV. Projected Outcomes

Successful registration of death and fetal death certificates will occur with all reported deaths being registered within a reasonable time after the death. Ohio law currently allows for a five day registration period. The Office of Vital Statistics will monitor the death record once entered and saved in EDRS. Completion of the death certificate may be delayed for an undetermined amount of time due to the lack of availability of physicians to sign the death certificate.

1. Vital Statistics staff members (local and state) will assist in filing death certificates.
2. Cause of death information available to the Ohio Disease Reporting System (ODRS) team for surveillance of disease outbreak and its relativity to cause of deaths reported Adequate documents/supplies for field users to complete and register death records.
3. As the events are occurring, EDRS has the ability to provide statistical data for post death events once the event is filed.

V. Staffing

Following staffing concerns will be managed:

1. Help desk phones will be routed to team members who are available.
2. 5-20% of state staff will be available during this phase.
3. Availability of phone book for people to directly contact the SME people.
4. Identify local offices which could be potential bottlenecks in process.
    a. Identify offices with 3 or less vital statistics staff members.
    b. Identify offices with 4-6 vital statistics staff members.
    c. Identify offices with 7 or more vital statistics staff members.
    d. Develop daily call tree by state staff to ensure adequate coverage for regional offices.
    e. State staff to direct resources from one regional office to another as needed.

VI. Risk and Concerns

1. Tracking paper based records in EDRS especially since the Office of Vital Statisticsmayl be understaffed.
2. Handling a large number of users registering records through the ODH gateway.
3. Providing necessary infrastructure to provide high availability and support a load of at least 1,000 concurrent users. System capacity may be an issue.
4. Managing burial and cremation.
5. Security of our documents.
6. Possible lack of state staff for guidance.
7. Possible confusion by sub-registrars and emergency sub-registrars in filing of death certificates.

VII. Appendix

Following appendices to be used:

A. Regional Registration Districts

B. Activation of Local, Deputy, Sub-Registrar and Emergency Sub-Registrar System

C. Burial Transit Permit Issuance Plan

D. Death Certificate Numbering Sequence Plan

Appendix A

Activation of Regional Registration Districts

Activate registrar, sub-registrar, and emergency sub-registrar

In the event of a mass fatality, the Ohio Department of Health, Office of Vital Statistics, will issue a high alert through the Ohio Public Health Communications System (OPHCS) to all local registrars, deputy registrars, sub-registrars and emergency sub-registrars. This alert will activate the Regional Registration Districts throughout Ohio as necessary as well as activating the Emergency Sub-Registrar System. The electronic notice sent out by OPHCS will notify all local, deputy, sub and emergency sub-registrars that they have been placed into service and will outline their duties and direct them to the Electronic Death Registration System (EDRS) Support Site for detailed instructions.

Regional Registration Districts

Regional Registration Districts are located in sixteen (16) different cities throughout Ohio. Two (2) districts are located in each of the eight (8) Preparedness regions of the state. A map showing each office as well as a listing of each Regional Registration District is located in ***Appendix* B**

Activate Regional numbering Sequence

Once the Regional Registration Districts and all authorized individuals have been activated, the Regional Numbering Sequence will be utilized by those registering death certificates. Please see detailed instructions in ***Appendix D***

Appendix B

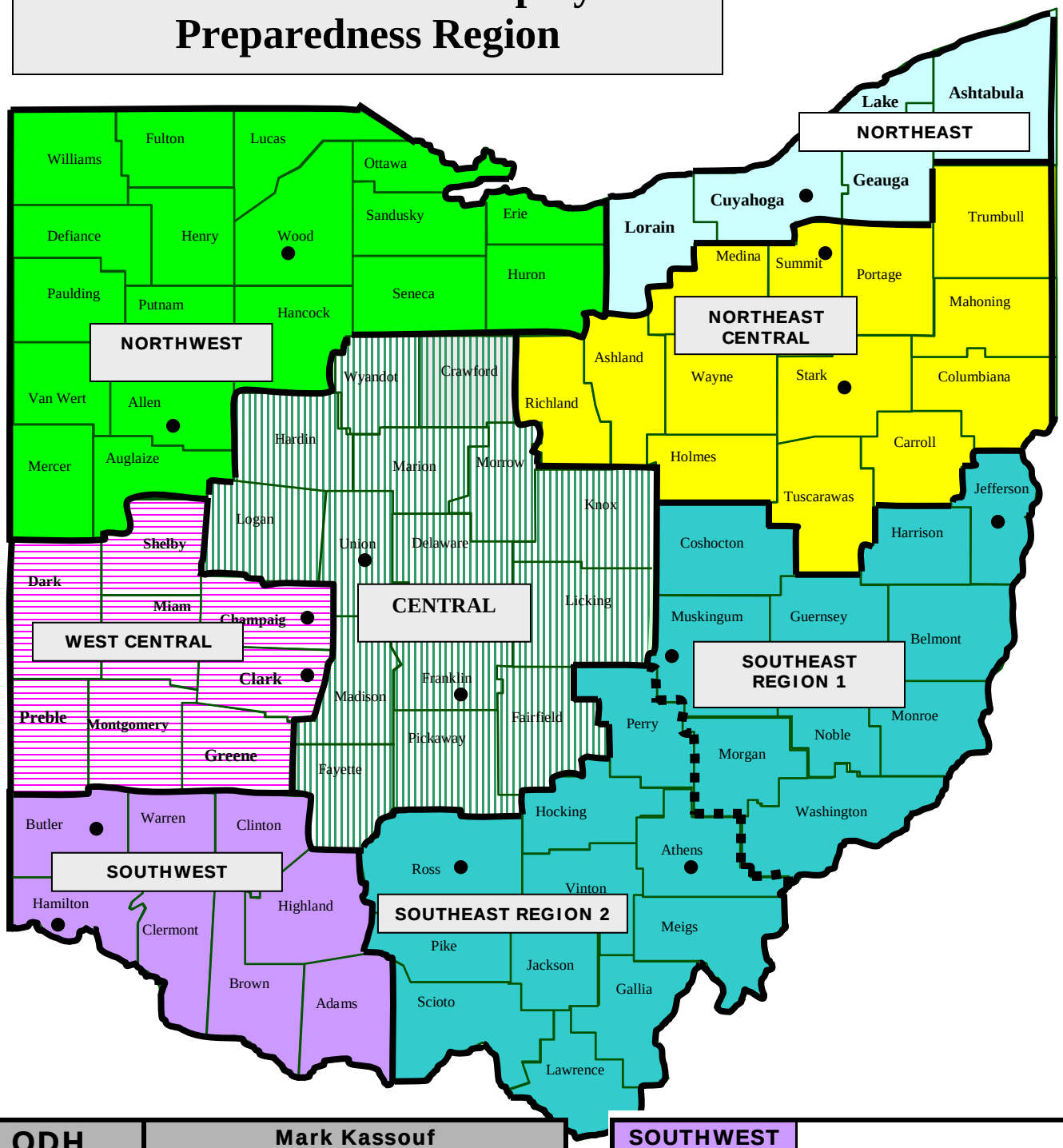
Activation of Local, Deputy, Sub-Registrar and Emergency Sub-Registrar System

The Ohio Department of Health, Office of Vital Statistics in conjunction with the Ohio Funeral Directors Association (OFDA) has coordinated an effort to recruit and train Ohio funeral directors who wish to assist in issuing burial transit permits and filing Ohio death certificates during a mass fatality incident.

In the event of a mass fatality, the State Office of Vital Statistics will issue a high alert through the Ohio Public Health Communications System (OPHCS) to all local registrars, deputy registrars, sub-registrars and emergency sub-registrars. This alert will activate the Regional Registration Districts throughout the state as necessary as well as activating the Emergency Sub-Registrar System. The electronic notice sent out by OPHCS will notify all emergency sub-registrars that they have been placed into service and will outline their duties and direct them to the Electronic Death Registration System (EDRS) Support Site for detailed instructions.

Funeral directors who volunteer for this system will join local registrars, deputy registrars and existing sub-registrars in accepting death and provision death certificates for issuance of the burial transit permit through the Electronic Death Registration System (EDRS). These authorized individuals will also have the responsibility for filing death certificates according to the procedures outlined in ***Appendix*** D.

Ohio Mass Fatality Regional Vital Statistics Offices Map by Preparedness Region



ODH Primary Contact	Mark Kassouf Assistant State Registrar (614) 644-0156 mark.kassouf@odh.ohio.gov
SOUTHEAST 1	Muskingum & Jefferson Counties
SOUTHEAST 2	Athens & Ross Counties
NORTHWEST	Allen & Wood Counties
CENTRAL	Franklin & Union Counties

SOUTHWEST	Butler & Hamilton Counties
WEST CENTRAL	Clark & Champaign Counties
NORTHEAST CENTRAL	Stark & Summit Counties
NORTHEAST	Cuyahoga County

Appendix C

Burial Transit Permit Issuance

In the event of a mass fatality situation, the registering of death certificates may be delayed due to many factors, however the need for disposition of deceased individuals will continue to occur. Since state law requires the issuance of a burial transit permit for final disposition of a deceased person, the following procedure will be utilized to issue the permit.

When the final disposition of a deceased person is about to occur, the funeral director or other person in charge of the final disposition will complete a death certificate utilizing the (EDRS). The funeral director or other person in charge of final disposition of the decedent will contact either a local registrar of Vital Statistics, sub-registrar of Vital Statistics or an emergency sub-registrar to file the death certificate and obtain a burial transit permit.

If a complete death certificate cannot be generated from the EDRS system, enough information to generate a provisional death certificate must be entered (deceased person's full name, date of death, date of birth and gender). The funeral director or other person in charge of the final disposition will contact a local registrar, sub-registrar or an emergency sub-registrar to notify them that a Provisional Death Certificate has been completed in the EDRS system and that a burial transit permit needs to be issued. The local, sub or emergency sub registrar will than enter the EDRS system, review the provisional information and print a burial transit permit. The burial transit permit can be faxed, mailed or picked up by the requestor.

Appendix D

Numbering Sequence

In the event of a mass fatality situation and the activation of a regional vital statistics operation, a standard numbering system for the registration of death certificates will be implemented. This numbering system will be utilized by all authorized individuals in each region to file death certificates. Authorized individuals will consist of the local registrar/deputy registrar of vital statistics, sub-registrars of vital statistics and emergency sub-registrars. Emergency sub-registrars will be called upon when a regional registration district is activated by the Office of Vital Statistics.

The numbering sequences for each region will consist of a four digit year followed by a one position alphabetic region code (A-H), a four digit identification number (local registrars will use their PRDN, all others will be assigned a four digit number) and a five digit sequential number starting with the number 00001.

Example: 2006-A-9100-00001

Each authorized individual (local registrar/deputy registrar, sub-registrar, emergency sub-registrar) will use their own numbering sequence independent of each other to file the death certificates and forward the completed and filed certificates to the regional office. This process removes the need for coordination between authorized individuals in filing and numbering certificates and will keep the numbering sequence from being corrupted or duplicated.

Lack of coordination or communications during a pandemic should not affect this process as each authorized individual will number their own certificates with their unique numbering sequence. This numbering sequence will offer an audit trail that will identify the region of death as well as the person who prepared and filed the death certificate; this will also assist when additional information is required in the future.

Authorized individuals will start with the five digit sequence number 00001 and add one digit for each death certificate which they register (00002, 00003, 00004, etc.) so that each certificate has a unique sequence of numbers (example: 2006-A-9100-00001, 2006-A-9100-00002, 2006-A-9100-00003, etc.)

Ohio Department of Health

Office of Vital and Health Statistics

Pandemic Influenza Mass Fatality

Response Guidance Plan

Appendix II

Ohio Hospital Association Mass Fatality Tool Kit

FLOW CHART

DEATH CERTIFICATE PROCESS

For deaths occurring in _____County.

Death Certificates (DC)

- DC applications filled out via EDRS (Electronic Death Registration System) by funeral directors, hospitals, or by the coroner.
- Physician or coroner attests to the causes of death.
- Once DC is complete, funeral directors or the coroner file DC applications (including out of state residents) with local public health registrar in the city or county where the death occurred.

Local Public Health Registrars

- Stationed in city and county health districts across Ohio.
- File completed DC, a legal document thereafter, and issue burial permit.
- Pass all DCs to the State Vital Statistics Office (V.S.).
- Certified DC copies are available to general public for a fee.

State Vital Statistics Office (Data Collection & Analysis Unit)

- Responsible for collecting DCs and chronological registration of all DCs in _____ County (coroner cases may contain pending causes of death).
- Original DCs are scanned images and then are archived at the State Office. Originals DCs are maintained at the State Office of Vital Statistics.
- Certified DC copies are available to general public for a fee.

FATALITY TRACKING FORM

Adapted from HICS Form 254.

INCIDENT NAME				DATE / TIME PREPARED				OPERATIONAL PERIOD DATE/TIME		
MRN OR TRIAGE NUMBER	NAME	SEX	DOB/ AGE	NEXT OF KIN NOTIFIED YES / NO	ENTERED: YES / NO		HOSPITAL MORGUE		FINAL DISPOSITION, RELEASED TO:	
					REDDINET	EDRS	IN DATE/TIME	OUT DATE/TIME	CORONER, MORTUARY, COUNTY MORGUE, OR OTHER (LIST)	DATE/TIME
COMPLETED BY HOSPITAL MFI UNIT			NAME							

Purpose: Account for decedents in a mass fatality disaster **Origination:** Hospital Mass Fatality Unit **Copies to:** Patient Registration Unit Leader and Medical Care Branch Director

HICS 204 - BRANCH ASSIGNMENT LIST					
1. INCIDENT NAME	2. SECTION	3. BRANCH		4. OPERATIONAL PERIOD DATE: TIME:	
5.PERSONNEL					
SECTION CHIEF			BRANCH DIRECTOR		
6. UNITS ASSIGNED THIS PERIOD					
Name	Name	Name	Name	Name	Name
Leader	Leader	Leader	Leader	Leader	Leader
Location	Location	Location	Location	Location	Location
Members	Members	Members	Members	Members	Members

7. KEY OBJECTIVES

8. SPECIAL INFORMATION / CONSIDERATION

9. PREPARED BY (BRANCH DIRECTOR)	10. APPROVED BY (PLANNING SECTION CHIEF)	11. DATE	12. TIME

13. FACILITY NAME

HOSPITAL MASS FATALITY INCIDENT (MFI) MANAGEMENT UNIT

The purpose of a Hospital MFI Management Unit is to have a centralized location where all mass fatality information is being processed in your facility in response to a mass-casualty event, pandemic outbreak, terrorist attack, or large natural disaster. Functions include:

- Decedent identification (if not already done upon admittance)
- Family / next of kin notification
- Coroner, County morgue or mortuary notification/contact
- Tracking decedents who die in the hospital to disposition out of the hospital
- Managing morgue capacity
- Managing surge morgue capacity

It is suggested that the MFI Unit be located in the hospital incident command structure (HICS) Operations Section Medical Care Branch, and that the MFI Unit Leader reports directly to the Medical Care Branch Director. The MFI Unit will coordinate information with the Patient Registration Unit and the Casualty Care Unit, particularly for those patients identified as expectant. The MFI Unit will also coordinate information with the Planning Section Situation Unit Patient Tracking Manager. During a disaster, it may not be possible for your facility to staff all positions; however they are identified here to help illuminate the roles and responsibilities that should be addressed.

In addition to a MFI Unit Leader recommended essential disciplines are identified in the table. Due to the sensitive nature of decedent processing, ensure all staff receive psychological support if needed. Be cautious in the use of hospital volunteers who may not have had experience or exposure to mass fatality situations.

Administrative Task Force	Morgue Task Force
▪ Decedent identification staff ▪ Decedent tracking staff ▪ Liaison to HICS Patient Tracking Officer and other HCC contacts ▪ Data entry staff for Electronic State Death Registration System (ESDRS) ▪ Liaison to Public Health, other relevant County agencies and mortuaries ▪ Liaison to families ▪ Death Certificate coordinator (a physician with responsibility to coordinate with other physicians to ensure death certificates are signed to expedite decedent processing) ▪ IT support	▪ Morgue supervisor ▪ 1-2 morgue assistants (Minimum of two morgue task force members to safely move decedents) ▪ Infection control staff, as needed ▪ Morgue staff to maintain each morgue area ▪ Facilities/engineering to maintain the integrity of surge morgue areas ▪ Security for all morgues

MFI UNIT LEADER
JOB ACTION SHEET

Mission: Collect, protect, identify and track decedents.

Date: _____ Start: _____ End: _____ Position Assigned to: _____ Initial: _

Position Reports to: Medical Care Branch Director Signature: _____

Hospital Command Center (HCC) Location: _____ Telephone: _____

Fax: _____ Other Contact Info: _____ Radio Title: _____

Immediate (Operational Period 0-2 Hours)	**Time**	**Initial**
Receive appointment and briefing from the Medical Care Branch Director. Obtain MFI Unit activation packet.		
Read this entire Job Action Sheet and review incident management team chart (HICS Form 207). Put on position identification.		
Notify your usual supervisor of your HICS assignment.		
Determine need for and appropriately appoint MFI Unit staff, distribute corresponding Job Action Sheets and position identification. Complete a unit assignment list.		
Document all key activities, actions, and decisions in an Operational Log (HICS Form 214) on a continual basis.		
Brief MFI Unit staff on current situation; outline unit action plan and designate time for next briefing.		
Confirm the designated MFI Unit area is available, and begin distribution of personnel and equipment resources. Coordinate with the Medical Care Branch Director.		
Regularly report MFI Unit status to Casualty Care Unit Leader.		
Assess problems and needs; coordinate resource management.		
Use your Death Certificated Coordinator physician or request an on-call physician from the Casualty Care Unit Leader to confirm any resuscitatable casualties in Morgue Area.		
Obtain assistance from the Medical Devices Unit Leader for transporting decedents. Assure all transporting devices are removed from under decedents and returned to the Triage Area.		
Instruct all MFI Unit Task Force members to periodically evaluate equipment, supply, and staff needs and report status to you; collaborate with Logistics Section Supply Unit Leader to address those needs; report status to Medical Care Branch Director.		
Coordinate contact with external agencies with the Liaison Officer, if necessary.		
Monitor decedent identification process.		
Enter decedent information in EDRS, if appropriate.		
Assess need for establishing surge morgue facilities.		

Immediate (Operational Period 0-2 Hours)	Time	Initial
Coordinate with the Patient Registration Unit Leader and Family Information Center (Operations Section) and the Patient Tracking Manager (Planning Section).		
Contact the Medical Care Branch Director and Security Branch Director for any morgue security needs.		
Document all communications (internal and external) on an Incident Message Form (HICS Form 213). Provide a copy of the Incident Message Form to the Documentation Unit.		

Intermediate (Operational Period 2-12 Hours)	Time	Initial
Maintain master list of decedents with time of arrival for Patient Tracking Manager.		
Assure all personal belongings are kept with decedents and/or are secured.		
Assure all decedents in MFI Areas are covered, tagged and identified where possible.		
Monitor death certificate process.		
Meet regularly with the Casualty Care Unit Leader for update on the number of deceased; status reports, and relay important information to Morgue Unit staff.		
Implement surge morgue facilities as needed.		
Continue coordinating activities in the Morgue Unit.		
Ensure prioritization of problems when multiple issues are presented.		
Coordinate use of external resources; coordinate with Liaison Officer if appropriate.		
Contact the Medical Care Branch Director and Security Branch Director for any morgue security needs.		
Develop and submit a MFI Unit action plan to the Medical Care Branch Director when requested.		
Ensure documentation is completed correctly and collected.		
Advise the Medical Care Branch Director immediately of any operational issue you are not able to correct or resolve.		
Ensure staff health and safety issues being addressed; resolve with the Safety Officer.		

Extended (Operational Period Beyond 12 Hours)	Time	Initial
Continue to monitor the MFI Unit's ability to meet workload demands, staff health and safety, resource needs, and documentation practices.		
Coordinate assignment and orientation of external personnel sent to assist.		
Work with the Medical Care Branch Director and Liaison Officer, as appropriate on the assignment of external resources.		
Rotate staff on a regular basis.		

Extended (Operational Period Beyond 12 Hours)	Time	Initial
Document actions and decisions on a continual basis.		
Continue to provide the Medical Care Branch Director with periodic situation updates.		
Ensure your physical readiness through proper nutrition, water intake, rest, and stress management techniques.		
Observe all staff and volunteers for signs of stress and inappropriate behavior. Report concerns to the Employee Health & Well-Being Unit Leader. Provide for staff rest periods and relief.		
Upon shift change, brief your replacement on the status of all ongoing operations, issues, and other relevant incident information.		

Demobilization/System Recovery	Time	Initial
As needs for the MFI Unit decrease, return staff to their normal jobs and combine or deactivate positions in a phased manner, in coordination with the Demobilization Unit Leader.		
Ensure the return/retrieval of equipment/supplies/personnel.		
Debrief staff on lessons learned and procedural/equipment changes needed.		
Upon deactivation of your position, brief the Medical Care Branch Director on current problems, outstanding issues, and follow-up requirements.		
Upon deactivation of your position, ensure all documentation and MFI Unit Operational Logs (HICS Form 214) are submitted to the Medical Care Branch Director.		
Submit comments to the Medical Care Branch Director for discussion and possible inclusion in the after-action report; topics include: • Review of pertinent position descriptions and operational checklists • Recommendations for procedure changes • Section accomplishments and issues		
Participate in stress management and after-action debriefings. Participate in other briefings and meetings as required.		

Documents/Tools

- Incident Action Plan
- HICS Form 207 – Incident Management Team Chart
- HICS Form 213 – Incident Message Form
- HICS Form 214 – Operational Log
- Mass Fatality Incident Activation/Operational Plan
- Mass Fatality Incident / Morgue Unit Assignment List
- Fatality Tracking Form
- Decedent Information and Tracking Card
- Hospital emergency operations plan
- Hospital organization chart
- Hospital telephone directory
- Key contacts list (including Coroner, Public Health, Mental Health, Red Cross, Emergency Management)
- Radio/satellite phone

MFI MANAGEMENT UNIT EQUIPMENT AND SUPPLIES CHECKLIST

Equipment and supplies for the MFI Unit may include the following. Be sure to identify where items are stored and how to access the storage area.

Consideration	Consideration
Distance from the morgue ▪ Location of MFI Unit: ▪ Distance from Morgue: *Notes*: **Secure with limited access** ▪ # of security staff required: ▪ Security equipment required: ▪ Description of how access is limited: *Notes*: **Phone lines** ❑ Incoming phone ❑ Outgoing phone ❑ Fax machine ❑ Fax paper and toner ▪ Total number of phones: *Notes*: **ESDRS access/terminal** ❑ Laptop or desktop computer ❑ Access to internet ❑ ESDRS access established ❑ ESDRS access established (via internet for authorized individuals) ▪ Total number of computers: *Notes*:	**Tables and chairs** ❑ # tables procured (based on layout needs) ❑ # chairs procured (based on layout needs) *Notes*: **Office supplies** ❑ Notepads, loose paper, sticky notes, clipboards ❑ Plastic sleeves ❑ Pens, pencils, markers, highlighters ❑ Stapler, staple remover, tape, packing tape, white out, paper clips, pencil sharpener ❑ Extension cords, power strips, surge protectors, duct tape *Notes*: **Printer and Copier** ❑ Printer and cables, copier ❑ Paper ❑ Toner *Notes*: **Forms and Documents** ❑ Hospital MFI Plan ❑ Decedent Information and Tracking Card ❑ Fatality Tracking Form ❑ ESDRS User Guide (ODH to provide) ❑ Internal and external contact lists *Notes*:

Legend:
- ❑ Check boxes to indicate completion
- ▪ These bullets require you to add your information

FACT SHEET

HUMAN REMAINS STORAGE MYTHS AND TRUTHS: THE BAD IDEAS

WHY STACKING IS NOT RECOMMENDED

- Demonstrates a lack of respect for individuals.
- The placement of one body on top of another in cold or freezing temperatures can distort the faces of the victims, a condition which is difficult to reverse and impedes visual identification.
- Decedents are difficult to manage if stacked. Individual tags are difficult to read and decedents on the bottom can not be easily removed.

WHY FREEZING IS NOT RECOMMENDED

- Freezing causes tissues to dehydrate which changes their color; this can have a negative impact on the interpretation of injuries, as well as on attempts at visual recognition by family members.
- Rapid freezing of bodies can cause post-mortem injury, including cranial fracture.
- Handling bodies when they are frozen can also cause fracture, which will negatively influence the investigation and make the medicolegal interpretation of the examination results difficult.
- The process of freezing and thawing will accelerate decomposition of the remains.

WHY ICE RINKS ARE NOT RECOMMENDED

- Ice rinks are frequently brought up as possible storage sites. As previously mentioned, freezing has several undesirable consequences.
- A body laid on ice is only partially frozen. It eventually will stick to the ice making movement of the decedent difficult.
- Management and movement of decedents on solid ground is challenging in good circumstances. Workers having to negotiate ice walkways would pose an unacceptable safely risk.

WHY PACKING IN ICE IS NOT RECOMMENDED

- Difficult to manage due to ice weight and transport issues.
- Large amounts are necessary to preserve a body even for a short time.
- Difficult to resource or obtain during an emergency.
- Ice is often a priority for emergency medical units.
- Results in large areas of run off water.

FACT SHEET

HUMAN REMAINS STORAGE MYTHS AND TRUTHS:

OTHER ISSUES NOT DIRECTLY RELATED TO HOSPITAL STORAGE

Packing with Chemicals

- Some substances may be used to pack a decedent for a short period. These chemicals have strong odors and can be irritating to workers.
- Powdered formaldehyde and powdered calcium hydroxide may be useful for preserving fragmented remains. After these substances are applied, the body or fragments are wrapped in several nylon or plastic bags and sealed completely.

Embalming

- The most common method.
- Not possible when the integrity of a corpse is compromised, i.e., it is decomposed or in fragments.
- Embalming requires a licensed professional with knowledge of anatomy and chemistry.
- Expensive, considerable time involved for each case.
- Used to preserve a body for more than 72 hours after death; transitory preservation is meant to maintain the body in an acceptable state for 24 to 72 hours after death.
- Embalming is required for the repatriation or transfer of a corpse out of a country.

Temporary Interment - *Not a mass grave*

- Temporary burial provides a good option for immediate storage where no other method is available, or where longer-term temporary storage is needed.
- While not a true form of preservation this is an option that might be considered when there will be a great delay in final disposition.
- Temperature underground is lower than at the surface, thereby providing natural refrigeration.
- Temporary burial sites should be constructed in the following way to help ensure future location and recover of bodies.
- Trench burial for larger numbers.
- Burial should be 5 feet deep and at least 600 feet from drinking water sources.
- Leave 1 foot between bodies.
- Lay bodies in one layer only. Do not stack.
- Clearly mark each body and mark their positions at ground level.
- Each body must be labeled with a metal or plastic identification tag.

FACT SHEET

HUMAN REMAINS STORAGE MYTHS AND TRUTHS: THE GOOD IDEAS

All delays between the death and autopsy hinder the medical legal processes. All storage options should weigh the storage requirements against the time it takes to collect information that is necessary for identification, determination of the cause and circumstances of death, and next of kin notification.

WHY REFRIGERATION IS RECOMMENDED

- Most hospital morgues' refrigeration capacity will be exceeded during a disaster, especially if there are many unidentified bodies or remains recovered in the first hours of the event.
- Refrigeration between 38° and 42° Fahrenheit is the best option.
- Large refrigerated transport containers used by commercial shipping companies can be used to store up to 30 bodies. (Laying flat on the floor with walkway between).
    - Enough containers are seldom available at the disaster site.
    - Consider lightweight temporary racking systems. These can increase each container or room's capacity by 3 times.
- Refrigeration does not halt decomposition, it only delays it.
    - Will preserve a body for 1-3 months.
    - Humidity also plays a role in decomposition. Refrigeration units should be maintained at low humidity.
    - Mold can become a problem on refrigerated bodies making visual identification impossible and interfering with medicolegal processes.

WHY DRY ICE IS AN OKAY RECOMMENDATION

Dry ice (carbon dioxide (CO_2) frozen at –78.5° Celsius) may be suitable for short-term storage.

- Use by building a low wall of dry ice around groups of about 20 remains and then covering with a plastic sheet.
- About 22 lbs of dry ice per remains, per day is needed, depending on the outside temperature.
- Dry ice should not be placed on top of remains, even when wrapped, because it damages the body.
- Expensive, difficult to obtain during an emergency.

- Dry ice requires handling with gloves to avoid “cold burns.”
- When dry ice melts it produces carbon dioxide gas, which is toxic. The area needs good ventilation.

SURGE MORGUE EQUIPMENT AND SUPPLIES CHECKLIST

Equipment and supplies for the surge morgue areas may include the following. Be sure to identify where items are stored and how to access the storage area.

Consideration	Your Facility Notes / How to Access Equipment
Staff Protection ☐ Personal protective equipment (minimum standard precautions) ☐ Worker safety and comfort supplies ☐ Communication (radio, phone)	▪ Storage area: ▪ How to access: ▪ *Notes*:
Decedent Identification ☐ Identification wristbands or other identification ☐ Method to identify each decedent (pouch label, tag or rack location) ☐ Cameras (may use dedicated digital, disposable, or instant photo cameras) ☐ Fingerprints ☐ X-rays or dental records ☐ Personal belongings bags / evidence bags ☐ DNA Swab	▪ Storage area: ▪ How to access: ▪ *Notes*:
Decedent Protection ☐ Human remains pouches ☐ Plastic sheeting ☐ Sheets	▪ Storage area: ▪ How to access: ▪ *Notes*:
Decedent Storage ☐ Refrigerated tents or identified overflow morgue area ☐ Storage racks ☐ Portable air conditioning units ☐ Generators for lights or air conditioning ☐ Ropes, caution tape, other barricade equipment	▪ Storage area: ▪ How to access: ▪ *Notes*:

Note about Human Remains Pouches

The _____County EMS /EMA Agency has ____ human remains bags _____ as part of its cache

INSERT HOSPITAL NAME OR LOGO
Hospital Address
Telephone and Fax Numbers

First Letter of Decedent Last Name: _____

DECEDENT INFORMATION AND TRACKING CARD

INCIDENT NAME	**OPERATIONAL PERIOD**

MEDICAL RECORD / TRIAGE #	**DATE**	**TIME**	**HOSPITAL LOCATION PRIOR TO MORGUE**	
FIRST	**MIDDLE**	**LAST**	**AGE**	**GENDER**

IDENTIFICATION VERIFIED BY
☐ DRIVERS LICENSE ☐ STATE ID ☐ PASSPORT ☐ BIRTH CERTIFICATE
OTHER:_____

IDENTIFICATION #:
_____

ADDRESS (STREET ADDRESS, CITY, STATE, ZIP)

LISTED IN REDDINET □ YES □ NO	**RECORD CREATED IN EDRS** □ YES □ NO	**DEATH CERTIFICATE SIGNED** □ YES □ NO

PHOTO ATTACHED TO THIS CARD □ YES □ NO	**FINGERPRINTS ATTACHED TO THIS CARD** □ YES □ NO

NEXT OF KIN NOTIFIED? □ YES □ NO	**NAME**	**RELATION**	**CONTACT TEL**

STATUS	LOCATION	DATE / TIME IN	DATE / TIME OUT
HOSPITAL MORGUE			
HOSPITAL MORGUE			
HOSPITAL MORGUE			
HOSPITAL MORGUE			

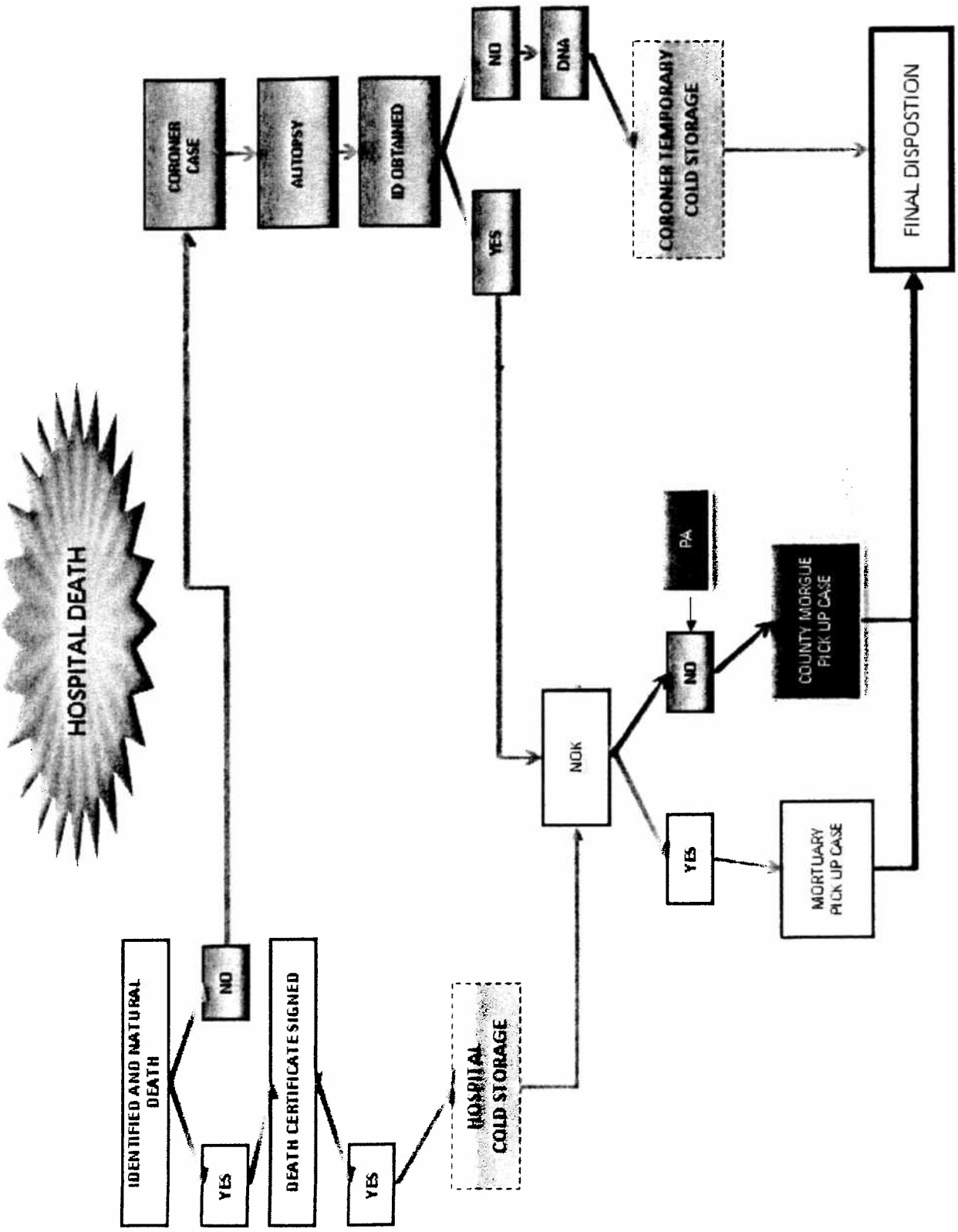
FINAL DISPOSITION	DATE / TIME	NAME OF RECIPIENT	SIGNATURE OF RECIPIENT
RELEASED TO: □ CORONER □ COUNTY MORGUE □ MORTUARY □ OTHER: _____	**DATE** **TIME**		

LIST PERSONAL BELONGINGS	**STORAGE LOCATION**

ORIGINAL ON FILE IN MFI UNIT
COPY WITH DECEDENT
COPY TO MEDICAL CARE BRANCH DIRECTOR

Form Revised: May 2008

FLOW CHART: DEATH AT A HOSPITAL



HICS 259 – HOSPITAL CASUALTY/FATALITY REPORT

1. INCIDENT NAME	2. DATE	3. TIME	4. OPERATIONAL PERIOD DATE/TIME

5. NUMBER OF CASUALTIES/FATALITIES

	Adult	Pediatric *(<18 years old)*	Total	Comments
Patients seen				
Waiting to be seen				
Admitted				
Critical care bed				
Medical/surgical bed				
Pediatric bed				
Discharged				
Transferred				
Expired				

6. PREPARED BY (Patient Tracking Manager):	7. FACILITY NAME

Subject: EMERGENCY MANAGEMENT	Page 1 of 7	Policy No.
Title: MASS FATALITY SURGE PLAN	Revision of:	Effective Date:

I. PURPOSE

A mass fatality incident (MFI) results in a surge of deaths above the normal. In a major disaster or pandemic event, local systems of decedent management will be impacted. Hospital mortuary capacity may be significantly exceeded and normal healthcare operations may be impacted if MFI decedent management is not effectively addressed.

The purpose of this plan is to define authority and procedures for the identification and safeguarding of decedents, their property, family notification process, death certificate processing, tracking, storage, and final disposition.

II. PERSONS AFFECTED

This plan applies to all **(insert hospital name)** employees, members of the medical staff and house staff, students, agency personnel, volunteers, and contracted vendors. All persons mentioned above will be knowledgeable of this plan and their responsibilities under the plan

III. ASSUMPTIONS

- The **(insert local jurisdiction)** Coroner/Medical Examiner determines the circumstances, manner and cause of all violent, sudden, or unusual deaths.
- The **(insert local jurisdiction)** Coroner/Medical Examiner is the lead agency to manage a MFI; however it is not solely responsible for all aspects of response to an MFI.
- The Coroner/Medical Examiner, Department of Public Health, and Hospitals have limited fatality surge space or equipment.
- Major disasters with a significant community impact may result in lengthy period of time before local agencies and private mortuaries can respond, process, and recover decedents.
- Disposition of human remains requires a death certificate.
- During disaster, individual deaths are to be registered via the defined State process into the Electronic Death Registration System (EDRS).
- The Ohio Department of Health will need to streamline the Electronic State Death Registration System process in pandemic as the system may be overwhelmed.
- A Provisional Death Certificate may be evoked on a short term basis if the EDRS is overwhelmed by the Ohio Department of Health.
- Significant community psychosocial and cultural considerations will need to be anticipated and addressed during a MFI.
- The public expects a hospital to respond to an emergency situation in an

appropriate, efficient, and timely manner, regardless of the nature of the incident.

- A significant and appropriate effort will be extended by family/friends/the local community to locate the victims involved in the MFI. This effort may result in a call volume surge of the hospital telephone systems and calls forwarded to care units directly.
- It can also be anticipated that the concerned loved ones will present themselves at hospital campus gateways (e.g. the ED and Main Lobby) which will require incident management to allow for minimal impact to hospital operations.
- Family Assistance Centers will serve as an information collection area and a coordination site for information concerning safe disposition of human remains and the return of the remains as designated by family members. Activation of these centers should be requested through the local Emergency Operations Center.

IV. POLICY AND AUTHORITY

(Insert name) Hospital follows the Hospital Incident Command System (HICS) model when managing response to emergencies. It is the responsibility of the **(insert hospital name)** Incident Commander (IC) to coordinate activities related to decent management with the lead MFI local agency(s). This includes the local **(insert jurisdiction)** Emergency Management Agency and the **(insert jurisdiction)** Coroner/Medical Examiner.

V. GENERAL INFORMATION

A. HICS is scalable. The HICS IC is activated to the scale of the MFI and if necessary, a Command Center will be established in the **(insert location here).**

B. Hospital Mass Fatality Incident Unit is the Hospital's centralized MFI Unit within the hospital in which all mass fatality information will be processed in response to the mass casualty incident.

C. The all-hazard job action sheets for HICS positions can be found in the Command Center and departmental Emergency Preparedness Binder.

D. **Labor Pool**: If authorized by the Incident Commander, available personnel without a definite assignment within departmental plans who are released by the manager will report to the Labor Pool location **(insert location here).**

E. **Transport equipment**: Upon activation of this plan, carts will be delivered to the hospital units to facilitate decedent transport to the mortuary or the identified surge mortuary site.

F. **Supplies and Equipment**: Decedent management disaster supplies and equipment will be delivered to the mortuary or identified surge mortuary site.

G. A communications radio is to be provided to the MFI Unit Leader.

VI. **PROCEDURE**

Activation of Mass Fatality Incident: Triggers

- A community incident has occurred and/or is evolving. The hospital emergency department (ED) has been informed of multiple injuries, or similar syndrome illnesses, and/or multiple casualties experienced by local officials that exceeds 50 victims **(may chose to insert a EMS Plan Level here)**
- The ED or inpatient care unit reports an unusual and significant spike in patient deaths that exceeds the normal and is resulting in operational challenges in the provision of healthcare to the living.
- The Hospital Pathology Department reports the hospital morgue has exceeded capacity, is anticipated to exceed capacity, and decedent decompression via local jurisdiction processes are impacted by a mass casualty community event.
    - **(Insert Hospital name)** morgue capacity currently is (**insert value**).
    - **(Insert name)** County Death Levels are:
        - Ordinary (**insert #)** deaths/day for one week
        - Sustainable (**insert** #)/day for one week
        - Excessive (i**nsert #**)/day
        - Critical (**insert #)** or more per day
- The Hospital Pathology Department requests fatality surge assets or alternate site surge space to accommodate a surge of fatalities.
    - Fatality surge assets are located **(insert location here)**. Fatality surge equipment/assets are listed in **Appendix (___)** of this plan.
    - Alternate morgue surge locations sites have been pre-identified and are listed in **Appendix (___)** of this plan.

Notifications

- The HICS General Alarm/Communication Plan will be activated as per policy.
- The **(insert jurisdiction name)** Coroner/Medical Examiner will be notified of the MFI at **(insert hospital name)** by the MFI Unit Leader.
- The local Emergency Management Agency or Liaison Officer will be contacted by the hospital Liaison to coordinate regarding community relocation, public communication expectations (e.g. the common telephone number to be used by the community) and related to the locally established Family Assistance Center location of operations ***(Consider Appendix re FAC)***
- The American Red Cross will be notified as per protocol of the MFI which is impacting the community and **(insert hospital name).**
- Normal channels of ED to EMS communications will be utilized as per usual.

Activation of the Hospital Mass Fatality Incident Management Unit HICS Roles

- IC Assigns Operations Section Chief Role
- Medical Care Branch Director (MCBD) Assigned
- MFI Unit Leader Role Assigned and Reports to MCBD

Overall MFI Unit Responsibilities and Functions

- Decedent identification if not already done upon admittance.
- Family/next of kin notification.
- Coroner/Medical Examiner, County morgue, ongoing contacts.
- Tracking decedents who die in the hospital to disposition out of the hospital.
- Managing morgue capacity and surge morgue capacity.

Staffing Considerations of the Hospital Mass Fatality Incident Management Unit

The nature of the decedent management and processing can be difficult for even the more experienced healthcare provider. The IC and MFI unit leader should take care to assure those assigned to the MFI have had some experience with death and fatality situations. The use of non-staff volunteers is not advised. Further, it is essential that all staff receive psychological support if needed.

It is possible that the MFI event could trigger individual's remembrances of past personal traumatic events that they have experienced. The leader must be cognizant of such and observe staff for behavioral changes that require assistance and support from the psychosocial professionals made available during the MFI.

If the MFI operation extends beyond 12 hours it is important that the unit leader assess workload demands and hours worked in the MFI. It is important that proper nutrition, water intake, rest, and stress management techniques are incorporated in the MFI operations.

Staffing Recommendations

- MFI Unit Leader will be appointed by the Medical Care Branch Director
  - The MFI Unit Leader Job Action Sheet is included in **Appendix (__)**
- MFI Unit Staff may include and need to be requested as follows:
  - Registration and forms clerical support.
  - Security
    - To secure morgue and alternate morgue site(s).
    - To secure decedent's belongings until Next of Kin (NOK) can retrieve.
    - Set up a security perimeter using cones/rope to restrict access to media, bystanders, and non essential personnel but permit credentialed MFI staff and NOK into/out of perimeter.
  - Medical Records Department: Death Certificate Coordinator
    - Staff for electronic entry of death certificate into the Electronic Death Registration System (EDRS).
  - Physician to confirm any resuscitatable casualties in the Morgue Area.
  - Staff for storage device assistance and transport/lifting of decedents.
  - Staff to assist in contacting Next of Kin (NOK) (consider social worker, mental health, and chaplain roles to assist).

Incident Coordination: Internal Points of Contact for Hospital Mass Fatality Incident Unit

- Operations Medical Care Branch Director-overall direction and ongoing incident communication.
- Security Branch Director-contact for security needs of morgue.
- Casualty Care Unit Leader-report current/ongoing status of morgue.
- Medical Devices Unit Leader –to obtain assistance for transport/supply equipment.
- Patient Care Registration Unit Leader-identification and registering decedents.
- Family Information Center-morgue decedent tracking/identification information

exchange.
- Patient Tracking Manager in Planning Section
- Employee Health and Unit Well Being Leader-for staff experiencing stress.
- Safety Officer-for any employee safety issues and concern.

Operations of MFI Unit

Identification and Tracking Procedures

Decedent's identification should be verified with a photo ID if available. If a photo ID is not available or identification cannot be confirmed, a photograph and/or finger prints will be obtained at the hospital. This should be undertaken immediately upon death if not performed upon admittance to the hospital. DNA Swabs may also be collected as per direction for the MCBD.

The Decedent Information and Tracking Card (DITC) is to be completed. A photo or fingerprint card may be attached to this. One copy will be kept on file in the MFI Unit, a copy will accompany the decedent, and a copy will be sent to the Medical Care Branch Director.

The Fatality Tracking Form (HICS Form 254) is to be completed for each decedent and originates in the hospital's MFI. Copies are to be forwarded to the Patient Registration Unit Leader and Medical Care Branch Director.

Next of Kin (NOK) ***Discuss viewing at hospital in MFI situation***
If NOK are identified and contact information is available, the MFI will contact the NOK. *Hospital HIPAA Compliance Officers are to assist the MFI if there is any question/issue related to validity of NOK or legal custody of a child aged decedent.* In circumstances where identity is unknown or unable to be confirmed it is important that the DITC be completed and photograph included on the DITC.

If the MFI allows for NOK viewing of the decedent, it is important that support is made available to the NOK as defined in the Hospital Disaster Plan.

Death Certificate Completion and EDRS Procedure

Death certificates (DC) are the permanent legal record of fact and cause of death. Physicians must complete the medical portion of the death certificate within 48 hours of death. Death certificates can be filled out via the Ohio EDRS application only by funeral directors, hospitals, or by the Coroner. Once the DC is completed and verified, the Public Health registrars or sub-registrars issue a burial transit permit. The DC is forwarded to the local Vital Records Office (VRO) which is responsible for collection, registration, and archiving the death certificates.

In a MFI or pandemic event, the Ohio Department of Health will provide direction if the EDRS is overwhelmed and if an alternate death certificate is to be employed. The hospital Liaison Officer will communicate externally with ODH if this issue needs to be addressed.

Personal Property for Custody Procedures and Criminal Evidence Collection

The decedent's personal possessions may be evidence of a crime and will need to be collected and maintained for transfer to legal officers and authorities. If the decedent's personal belonging are not co-located with the decedent, the DITC should be used to catalog information as to where the belongings are being secured.

Human Remains Management Procedures

Decedents require the usual identification tagging performed by the hospital. This may include waterproof identification labels, pre-numbered mental tags, or plastic tags/bracelets with a unique identification system. Writing on body bags is not acceptable as the writing can be erased in transport and storage. Bodies should be placed in body bags. If body bags are no longer in supply, plastic sheets and bags should be used. Linen bed sheets used as a shroud can also be used.

Bodies should not be stacked as it will cause distortion which may impact identification of the victim and demonstrates a lack of respect to individuals. Racking systems are acceptable and allow for improved space utilization for decedent management.

Cold storage of bodies at a temperature of 37-42 degrees is recommended as decomposition can occur within 12 to 48 hours in hot temperatures. It is not recommended to store bodies directly in or on ice. Refrigerated facilities and/or vehicles could serve as temporary storage units as provided by the local jurisdiction.

(Can reference as **Appendix (__)** if decide to insert Fact Sheet on Human Remains)

MFI Unit Documents and Tools

HICS Forms and Documents are to be used in a MFI. These forms are included within **Appendix (__)** and include:

- Incident Action Plan
- HICS Form 207-Incident Management Team Chart
- HICS Form 213-Incident Message Form
- HICS Form 214-Operations
- Mass Fatality Incident Activation/Operational Plan
- Mass Fatality Incident/Morgue Unit Assignment List
- Fatality Tracking Form
- Decedent Information and Tracking Card

Deactivation/Demobilization of MFI Unit

As the fatalities decrease and/or decedent management processes for the hospital and jurisdiction return to normal, the MFI Unit will be deactivated in a phased manner. The MFI Unit will be debriefed by the MFI Leader. The MFI Unit Leader upon deactivation will brief the Medical Care Branch Director on current issues or follow-up requirement. Documents completed during the MFI activation will be provided to the MCBD.

Family Assistance Centers

(Discuss with your local EMA related to capability and local plans. Insert pertinent information here.)

VII. EXTERNAL AGENCY REVIEW

A copy of this plan will be submitted to the local **(insert name)** Public Health Department local **(insert name)** Coroner/Medical Examiner, and local **(insert name)** Emergency Management Agency upon origination and thereafter as revision occur.

VIII. APPENDICES

- Alternate Morgue Site Locations and Set Up Tab
- Equipment and Assets for MFI
- LA MFI Planning Template
- Key Contacts Listing
- MFI Unit Check List
- Decedent Info and Tracking Card
- Fatality Tracking Form
- MFI Leader Job Description
- Example Death Certificate
- Instructions on use of EDRS
- Fact Sheets
- HICS Forms

Signatures

_____

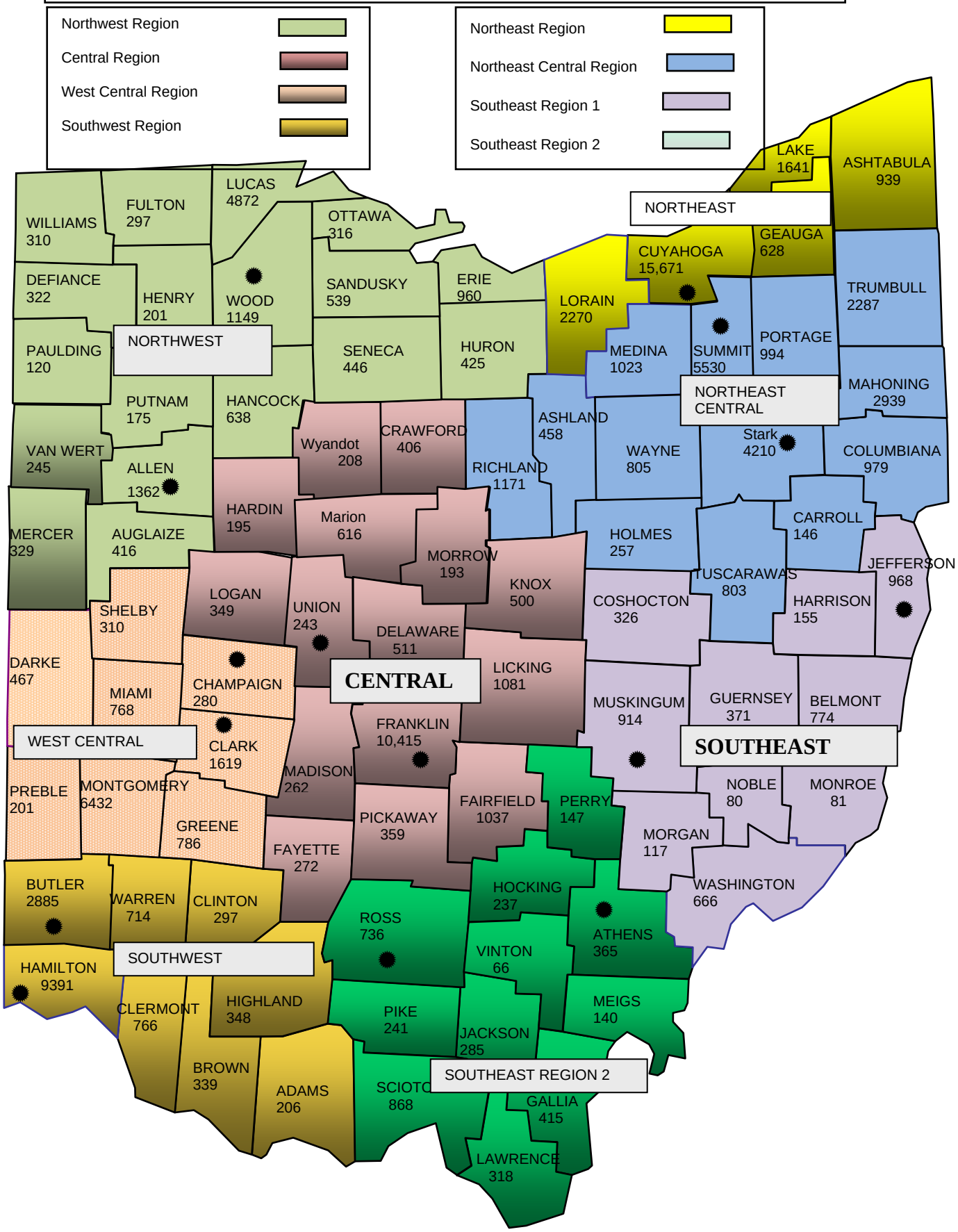
Title

Ohio Department of Health
Office of Vital and Health Statistics
Pandemic Influenza Mass Fatality
Response Guidance Plan

Appendix III

Local Jurisdiction Planning Tool Kit

Number of Deaths by Ohio County 2007



Total Deaths = 106,599

Revised 10/31/08

County and Municipal Fatality Management (FM) Plan Template

County: **Population:**

Date Completed:

EMA Contact:

EMA Contact Phone:

1. Identify local partners who will assist in planning and responding to a fatality management incident.

Local Partners	Contact Name	Title	Office Phone/ Cell Phone	E-mail address
Community Leaders (County Commissioner, Mayor, Coroner, Council/Trustees)				
EMA				
Dept. of Health				
Law Enforcement (Police, Sheriff)				
Coroner/ME				
Funeral Home				
Faith-based and Religious Partners				
EMS				
Local Hospital, Nursing Homes, Hospice, etc.				

Dispatch/911				
Fire				
City/County (Finance, Legal, Social Services, Public Works, Environmental Health, etc.)				
Other Business Partners (Cemetery, Crematory, Cold Storage Facilities, etc.)				
Other				

2. List local fatality management capabilities/resources.

Total # of Funeral Homes in the county	
Total # of Hospitals in the county	
Total # of crematories in county	
Total # of Morgue spaces in county (coroner/ME, hospital, funeral home, etc.)	
Maximum # of bodies which can be processed in one day	
What is the trigger to call for help outside of your county?	
Total # of Morgue spaces in county (coroner/ME, hospital, funeral home, etc.)	

3. Identify potential temporary storage.

Cold Storage

Organization	Contact Name	Title	Office Phone	E-mail address

Non-Cold Storage

Organization	Contact Name	Title	Office Phone	E-mail address

4. Identify potential local transportation to pick up decedents from home and other collection points.

Organization	Contact Name	Title	Office Phone	E-mail address

5. Identify specific people to report uniform daily death count data for the entire county to state public health.

Organization	Contact Name	Title	Office Phone	E-mail address

6. Identify who is responsible for community education of the county's emergency procedures for deaths at home.

Organization	Contact Name	Title	Office Phone	E-mail address

7. Identify specific people who will communicate information to the general public/media.

Organization	Contact Name	Title	Office Phone	E-mail address

8. Give a copy of this completed County and Municipal Fatality Management (FM) Plan Template to the State of Ohio by e-mailing it to mark.kassouf@odh.ohio.gov.

Date Given to the State of Ohio	County Fatality Management Contact Name	Office Phone	E-mail Address

OHIO FUNERAL DIRECTORS ASSOCIATION
REGIONAL AND DISTRICT REPRESENTATIVES

OFFICERS

PRESIDENT	Thomas Fleming	Fleming & Billman Funeral Directors, Inc.			tfleming@fleming-billman.com
(128)		49 West Jefferson Street	Jefferson	44047	(440) 576-4055
		P.O. Box 201			Fax (440) 576-3075
PRESIDENT-ELECT	Terry Reardon	Higgins-Reardon Funeral Homes, Inc.			terry7830@aol.com
(170)		4303 Mahoning Avenue	Youngstown	44515	(330) 792-2353
					Fax (330) 792-6098
TREASURER	John W. Evans	Evans Funeral Home			john@norwalkfuneral.com
(153)	CFSP	314 East Main Street	Norwalk	44857	(419) 668-1469
					Fax (419) 663-6149
SECRETARY	Mark Merz, CFSP	Neville Funeral Home			glsctyrunr66@yahoo.com
(123)		7438 Airport Highway	Holland	43528	(419) 865-8879
					Fax (419) 865-8569
IMMED PAST PRES	Walt Lindsey	Byerly-Lindsey Funeral Home			walt@byerly-lindsey.com
(163)	CFSP	123 North Market Street	Loudonville	44842	(419) 994-3030
					Fax (419) 994-1043

REGIONAL DIRECTORS

NORTH	Ben Easterling, Jr.	Swigart Easterling Funeral Home, Inc.			swigarteast2356@sbcglobal.net
(164)		624 Cherry Street East	Canal Fulton	44614	(330) 854-2356
					Fax (330) 854-5125
NORTHEAST	Anthony Quahliero	Kirila Funeral Home			ajqjr@sbcglobal.net
(134)		258 Poland Avenue	Struthers	44471	(330) 750-1321
					Fax (330) 755-9950
NORTHWEST	**ELECTION YET TO BE HELD**				
SOUTHEAST	. Chris Williams, CFSP	Watters Funeral Home			wattersfuneralhome@sbcglobal.net
(172)		37501 State Route #78	Woodsfield	43793	(740) 472-1440
					Fax (740) 472-1486
SOUTHWEST	Kevin Brown	Turner & Son Funeral Home			thekbrowns@aol.com
(171)		127 North High Street, PO Box 127	Hillsboro	45133	(937) 393-2124
					Fax (937) 393-2028

DISTRICT PRESIDENTS

1.	**ELECTION YET TO BE HELD**				
2. Scott Baltzell		Wappner Funeral Directors			sbaltzell@wappner.com
(102)		100 South Lexington-Springmill Road	Mansfield	44906	(419) 529-2323
					Fax (419) 529-2367
3. Jon Neeper		Chamberlain-Huckereide Funeral Home			osuneep@yahoo.com
(103)		920 North Cable Road	Lima	45805	(419) 229-2300
					Fax (419) 229-2352
4. Lori A. Hicks		Baker-Stevens Funeral Home			lori.hicks@carriageservices.com
(104)		1500 Manchester Avenue	Middletown	45042	(513) 422-5404
					Fax (513) 422-5406
5. Jonathan Stuchell		T.P. White & Sons Funeral Home			stuchell@fuse.net
(105)		2050 Beechmont Avenue	Cincinnati	45230	(513) 543-3780
					Fax (513) 231-5730
6. Darol F. Billick		Bersticker-Scott Funeral Home			dfbcmb@bex.net
(106)		3453 Heatherdowns Blvd	Toledo	43614	(419) 382-3456
					Fax (419) 382-5080

(OFDA System Speed Dial)

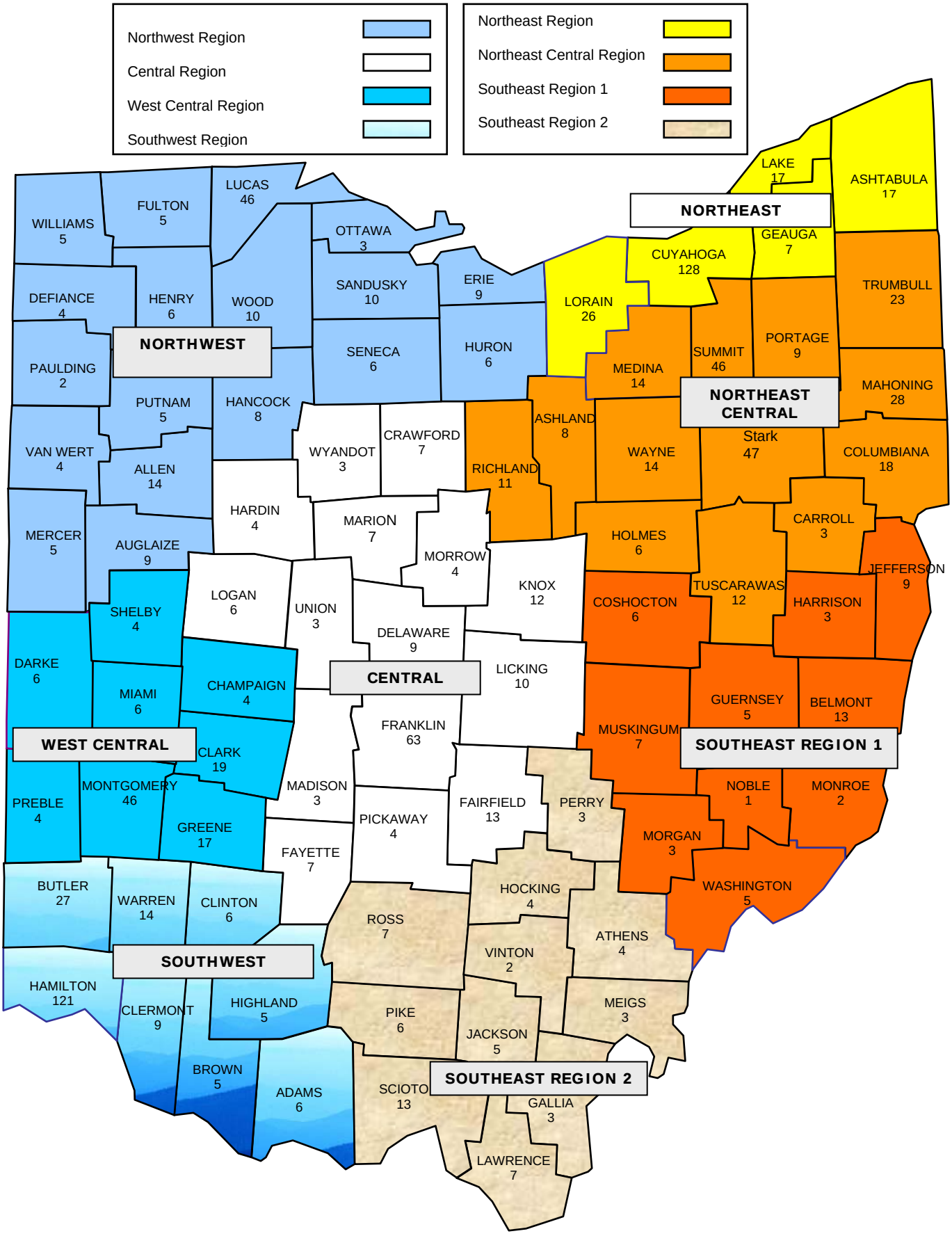
DISTRICT PRESIDENTS (CONTINUED)

7. Rindy Crates (107)	Crates Funeral Home 630 North Main Street	Arlington	45814	DMC55@verizon.net (419) 365-5262 Fax (419) 365-5056
8. Scott Mason (108)	Adams-Mason Memorial Chapel 791 East Market Street	Akron	44305	(330) 535-9186 Fax (330) 535-3050
9. Brian Wolfe (109)	Swart Funeral Home, Inc. 207 East Central Avenue	West Carrollton	45449	(937) 859-3686 Fax (937) 859-8042
10. Dawn Little (110)	Ralph F. Scott Funeral Home 1422 Lincoln Street	Portsmouth	45662	ralphfscott@verizon.net (740) 353-4161 Fax (740) 353-4048
11. Shane Smith (111)	L. Eugene Smith & Son Funeral home 327 N. S. Street	Wilmington	45177	smithfh@earthlink.net (937) 382 2323 Fax (937) 382 2008
12. Bryan Chandler (112)	Chandler Funeral Home 609 West Street	Caldwell	43724	info@chandlerfuneralhome.net (740) 732 1311 Fax (740) 732 4220
13. John Bope (113)	Bope Thomas Funeral Home 203 South Columbus Street, PO Box 188	Somerset	43783	(740) 743-1652 Fax (740) 743-1697
14. Sue Jones (114)	Rutherford-Corbin Funeral Home, Inc. 515 High Street	Worthington	43085	sue@rutherfordfuneralhome.com (614) 885-4006 Fax (614) 885-5111
15. Chelsey Santucci (115)	Rossi & Santucci Funeral Home 4700 Market Street	Boardman	44512	italycns1@yahoo.com (330) 781-0652 Fax (330) 788-5966
16 D. Scott Reed (116)	Reed Funeral Home 705 Raff Road S.W.	Canton	44710	(330) 477-6721 Fax (330) 477-0058
17. Bob Cool, Jr. (117)	Boyer & Cool Home for Funerals 1124 Fifth Street	Lorain	44052	bobgcool@aol.com (440) 244-5288 Fax(440) 244-5289/CALL
18. Mitchell Sleek (118)	McIntire-Davis & Greene Funeral Home 216 E. Larwill Street	Wooster	44691	(330) 262-7771 Fax (330) 262-7781
19. Joan Billman (119)	Fleming & Billman Funeral Directors Inc. 323 South Broadway	Geneva	44041	jbillman@windstream.net (440) 576-4055 Fax (440) 576-3075
20. Michael Kumin (120)	Berkowitz Kumin Bookatz Memorial Chapel 1985 Staylor Road	Cleveland Heights	44118	michael.kumin@yahoo.com (216) 932-7900 Fax (216) 932-0123

EX-OFFICIO

Ken Cahall, CFSP (148)	Cahall Funeral Home 204 West State Street	Georgetown	45121	kacahall@msn.com (937) 378-6384 Fax (937) 378-1364
Jack Moreland (141)	Moreland Funeral Home 55 East Schrock Road	Westerville	43081	(614) 891-1414 Fax (614) 891-1822
Thomas Rue, CFSP (146)	Littleton & Rue Funeral Home & Crematory 830 North Limestone Street	Springfield	45503	tom@littletonandrue.com (937) 323-6439 Fax (937) 323-6307
Dwayne Spence, CFSP (151)	Dwayne R. Spence Funeral Home 650 West Waterloo Street	Canal Winchester	43110	drs843@aol.com (614) 837-7126 Fax (614) 837-8096
Keith Walker, CFSP (162)	Walker Funeral Home 5155 West Sylvania Avenue	Toledo	43623	keith@walkerfuneralhomes.com (419) 841-2422 Fax (419) 841-6556

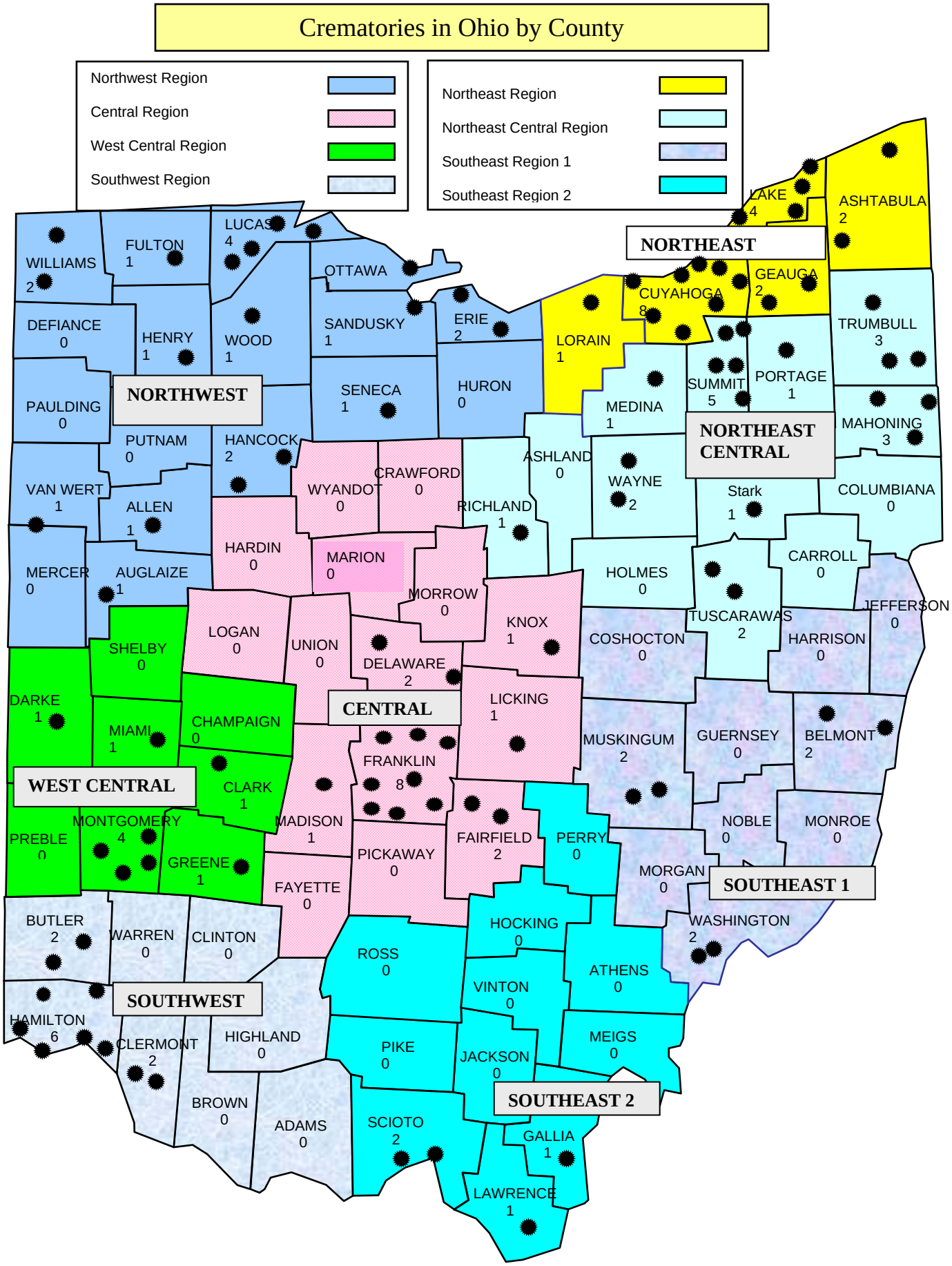
Ohio Nursing Homes per County



Total Nursing Homes = 1,156

Revised 8/13/2009

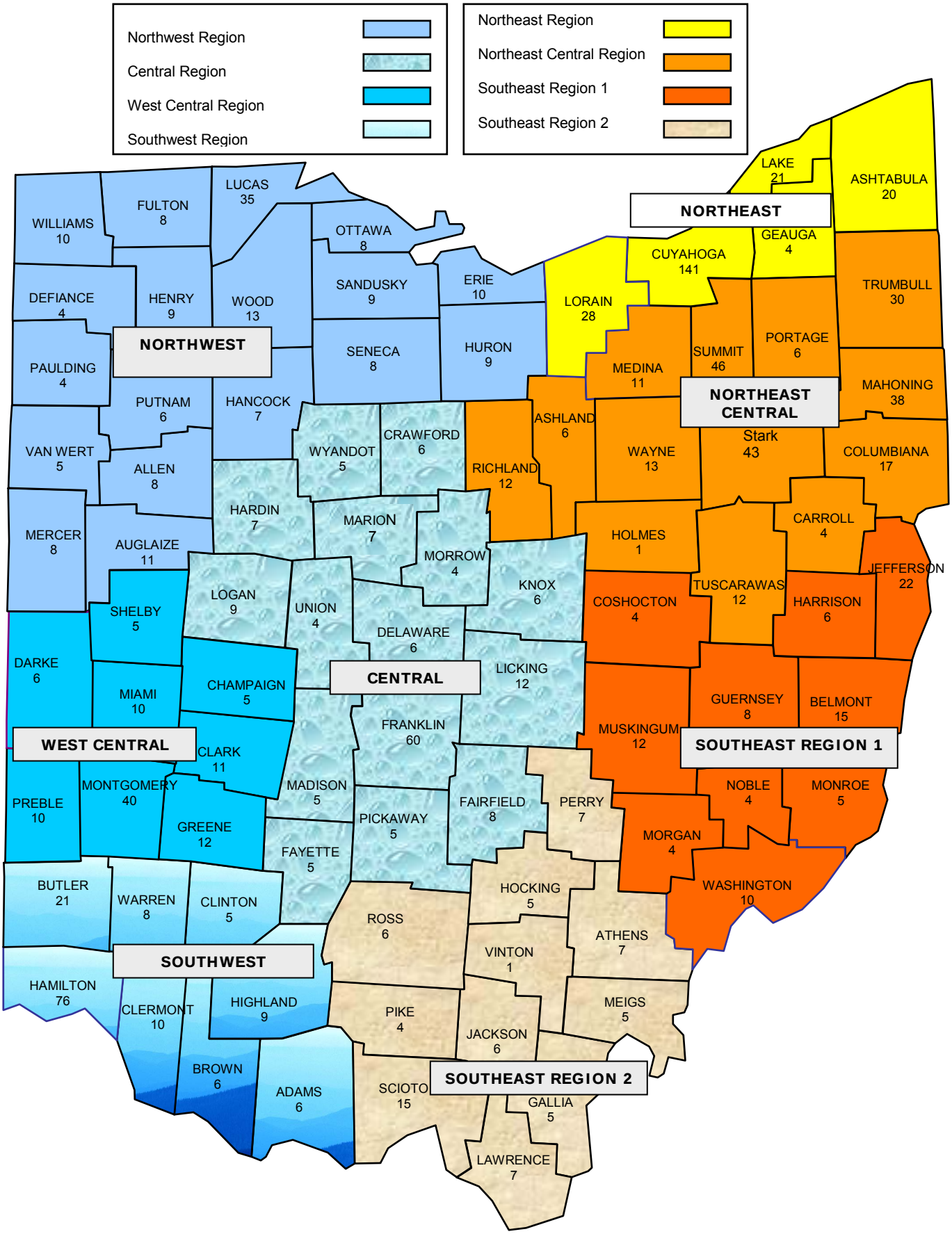
Crematories in Ohio by County



Total Crematories = 98

Revised 7/2/2009

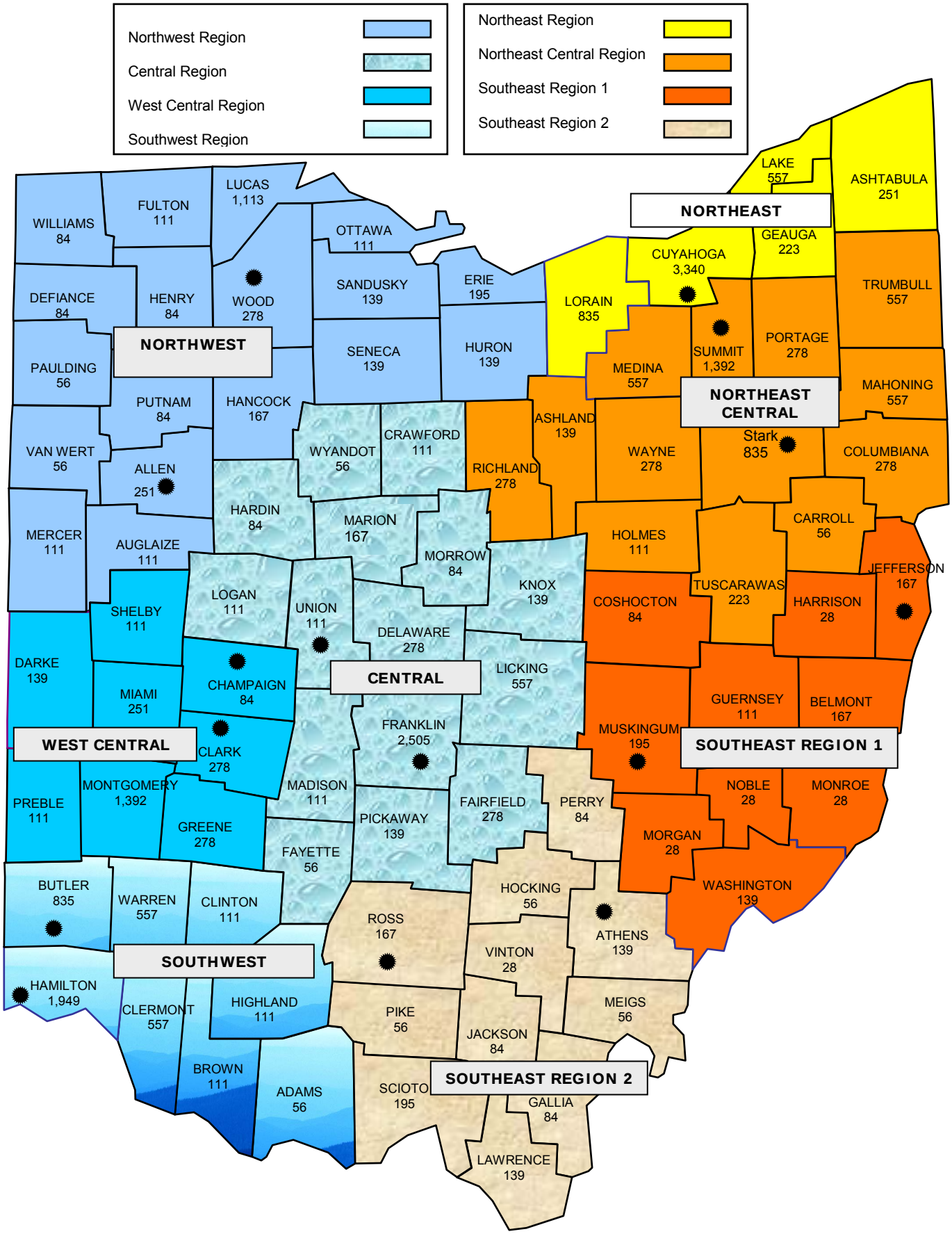
Ohio Funeral Homes per County



Total Funeral Homes = 1,172

Revised 7/9/2009

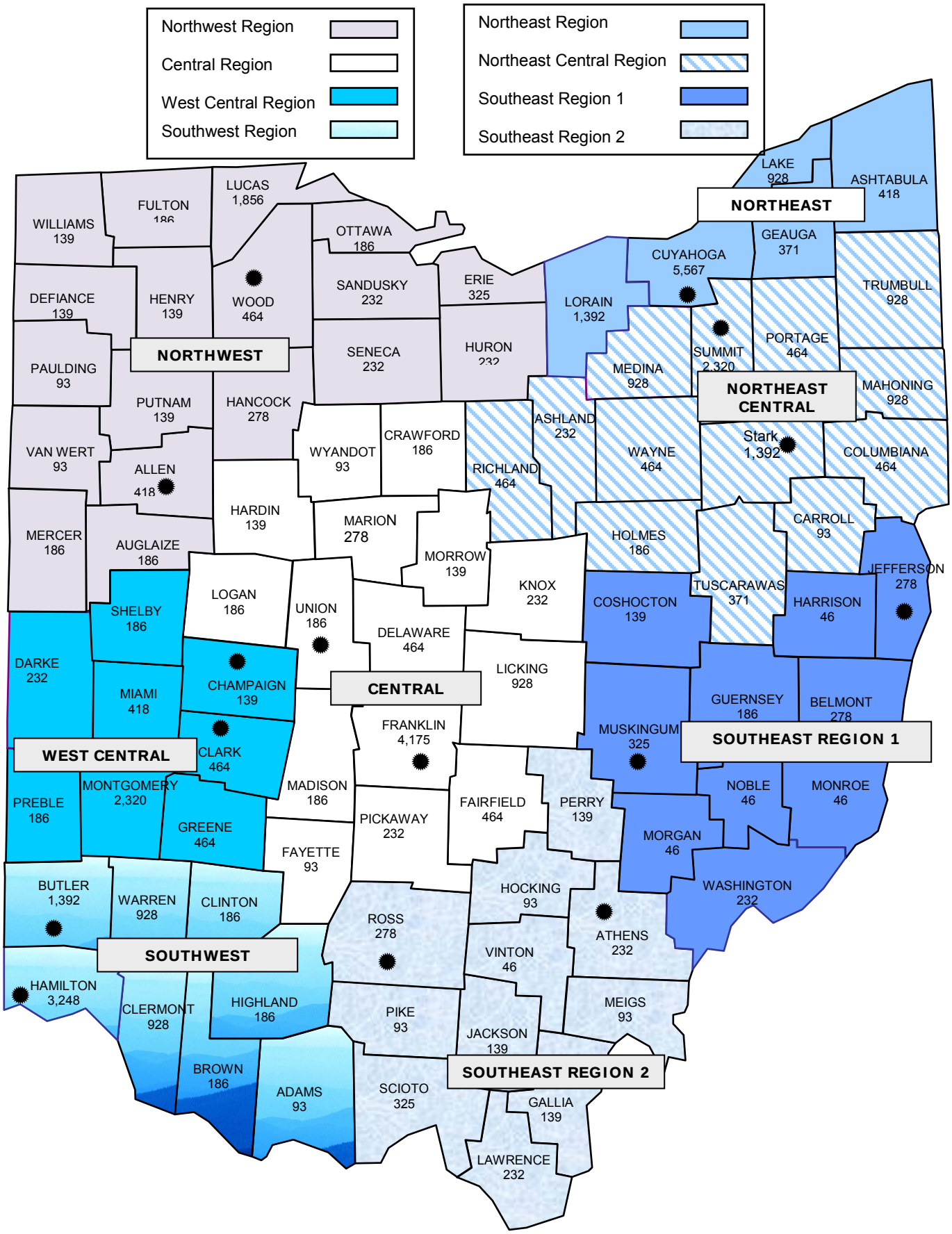
Mass Fatality Numbers at 15 % Attack Rate using CDC's FluAid 2.0 Program



Total Deaths = 27,836

Revised 11/01/2007

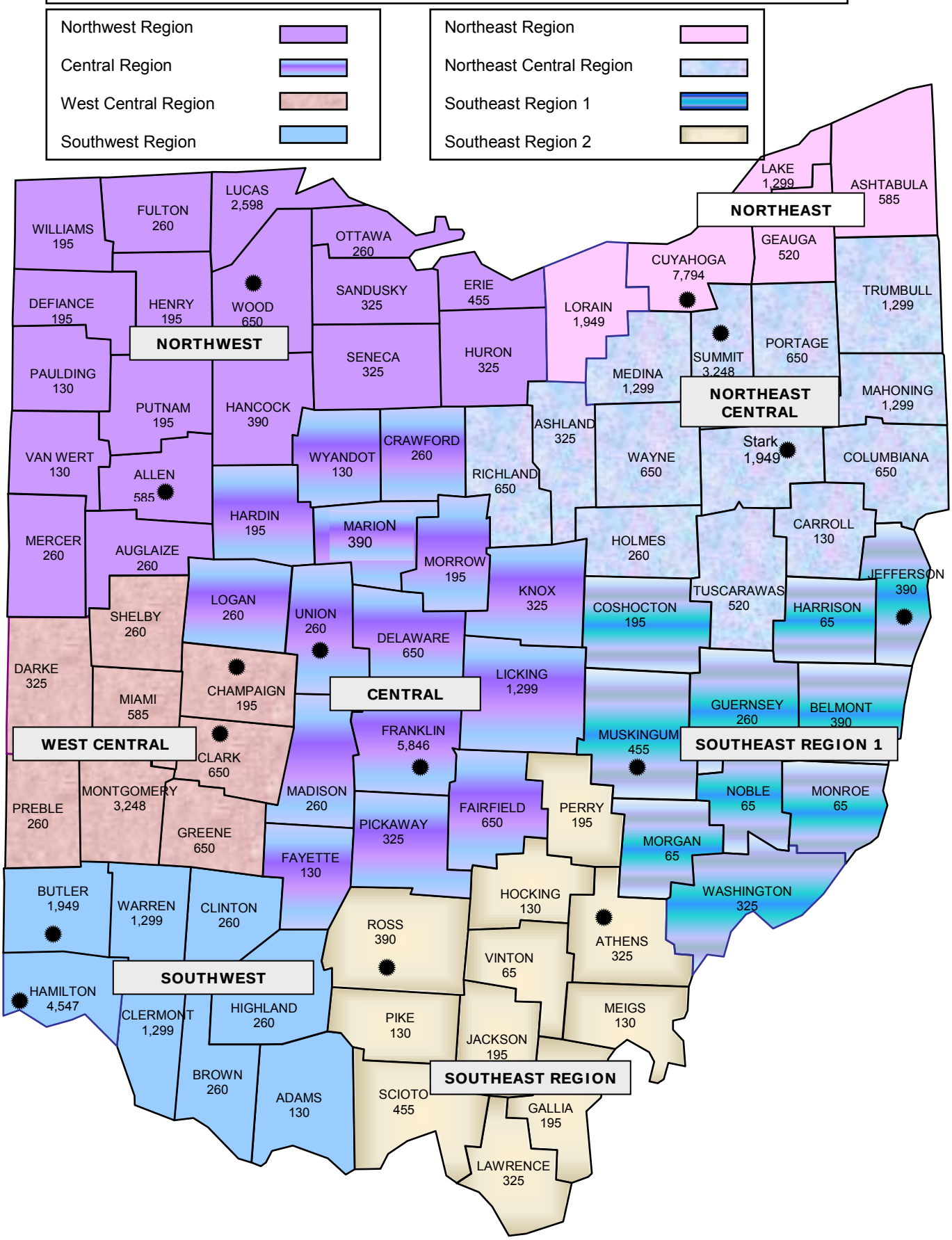
Mass Fatality Numbers at 25% Attack Rate Using CDC's Flu Aid 2.0 Program



Total Deaths = 46,393

Revised 10/29/2007

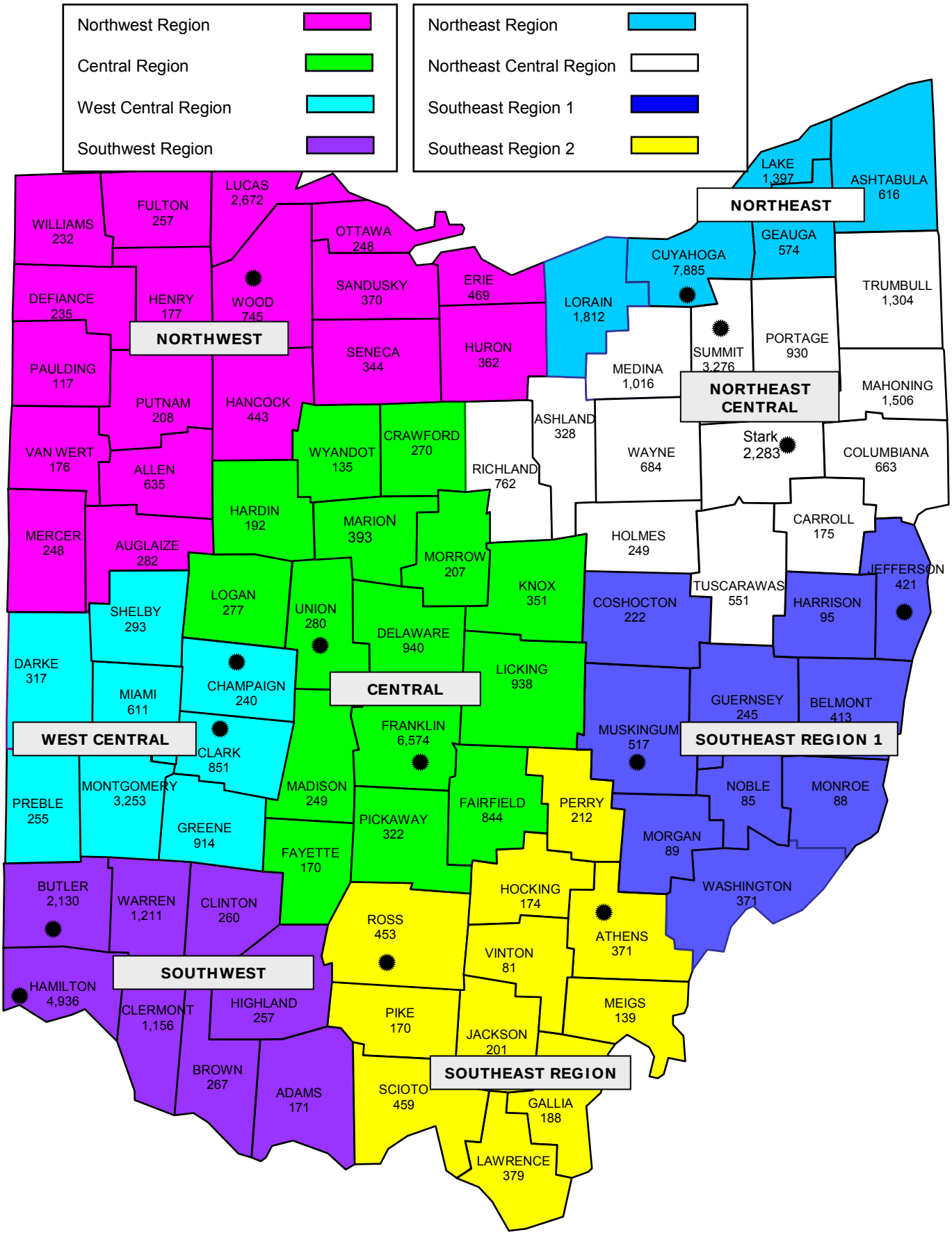
Mass Fatality Numbers at 35 % Attack Rate using CDC's FluAid 2.0 Program



Total Deaths = 64,950

Revised 11/02/2007

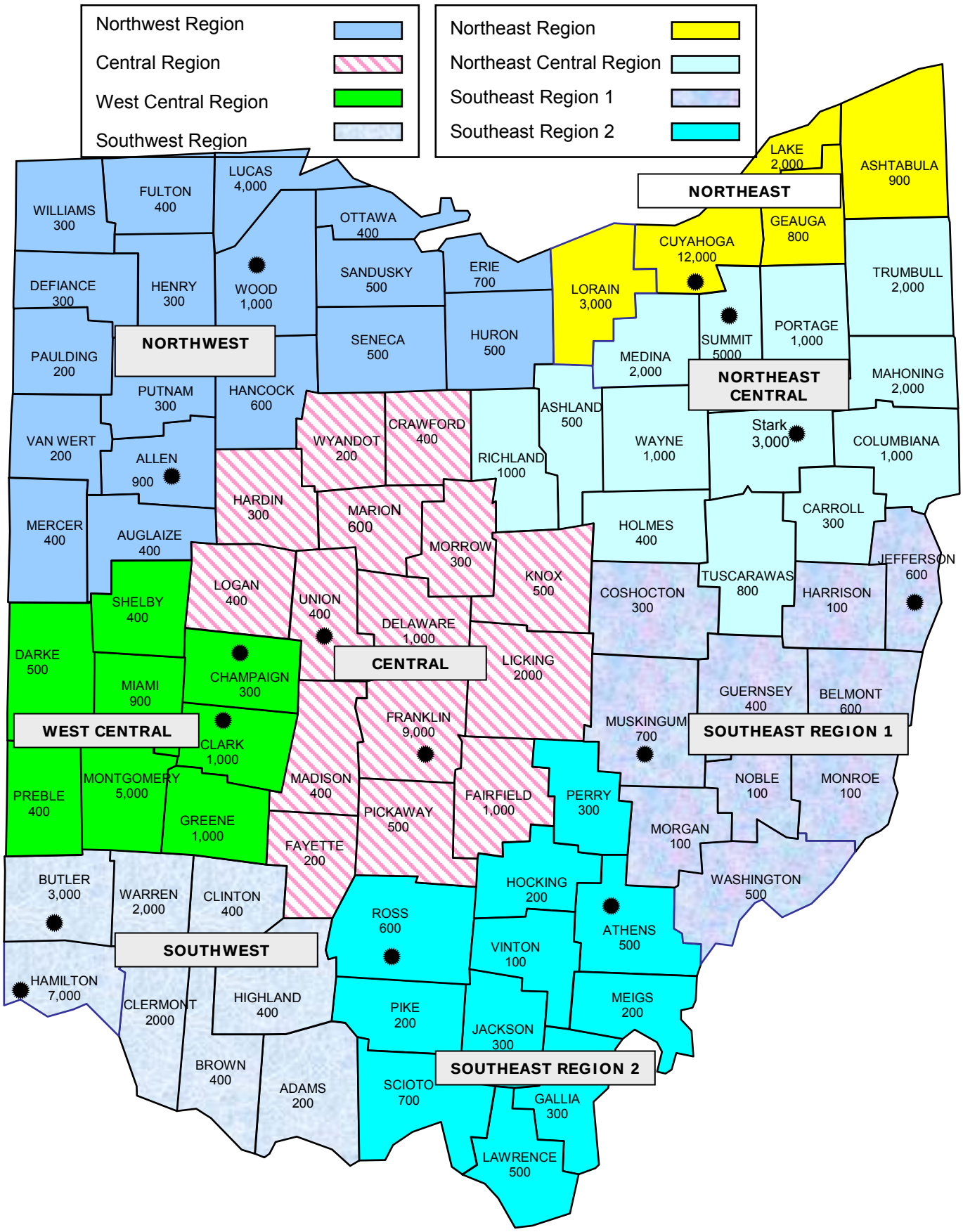
Mass Fatality Numbers at .6 % of County Population



Total Deaths = 68,868

Revised 04/10/2009

Mass Fatality Numbers by County Using 100,000 Total Deaths



Revised 10/29/2007

Total Deaths = 100,000

Geographic Area	Estimates of Mass Fatality Deaths Per Ohio County - Pandemic Influenza				
	Population Percentages	15% Attack Rate	25% Attack Rate	35% Attack Rate	100,000
Ohio	11, 478,006	27,836	46,393	64,950	100,000
Adams County	0.2	56	93	130	200
Allen County	0.9	251	418	585	900
Ashland County	0.5	139	232	325	500
Ashtabula County	0.9	251	418	585	900
Athens County	0.5	139	232	325	500
Auglaize County	0.4	111	186	260	400
Belmont County	0.6	167	278	390	600
Brown County	0.4	111	186	260	400
Butler County	3	835	1392	1949	3000
Carroll County	0.2	56	93	130	200
Champaign County	0.3	84	139	195	300
Clark County	1	278	464	650	1000
Clermont County	2	557	928	1299	2000
Clinton County	0.4	111	186	260	400
Columbiana County	1	278	464	650	1000
Coshocton County	0.3	84	139	195	300
Crawford County	0.4	111	186	260	400
Cuyahoga County	12	3340	5567	7794	12000
Darke County	0.5	139	232	325	500
Defiance County	0.3	84	139	195	300
Delaware County	1	278	464	650	1000
Erie County	0.7	195	325	455	700
Fairfield County	1	278	464	650	1000
Fayette County	0.2	56	93	130	200
Franklin County	9	2505	4175	5846	9000
Fulton County	0.4	111	186	260	400
Gallia County	0.3	84	139	195	300
Geauga County	0.8	223	371	520	800
Greene County	1	278	464	650	1000
Guernsey County	0.4	111	186	260	400
Hamilton County	7	1949	3248	4547	7000
Hancock County	0.6	167	278	390	600

Geographic Area	Estimates of Mass Fatality Deaths Per Ohio County - Pandemic Influenza				
	Population Percentages	15% Attack Rate	25% Attack Rate	35% Attack Rate	100,000
Ohio	11, 478,006	27,836	46,393	64,950	100,000
Hardin County	0.3	84	139	195	300
Harrison County	0.1	28	46	65	100
Henry County	0.3	84	139	195	300
Highland County	0.4	111	186	260	400
Hocking County	0.2	56	93	130	200
Holmes County	0.4	111	186	260	400
Huron County	0.5	139	232	325	500
Jackson County	0.3	84	139	195	300
Jefferson County	0.6	167	278	390	600
Knox County	0.5	139	232	325	500
Lake County	2	557	928	1299	2000
Lawrence County	0.5	139	232	325	500
Licking County	2	557	928	1299	2000
Logan County	0.4	111	186	260	400
Lorain County	3	835	1392	1949	3000
Lucas County	4	1113	1856	2598	4000
Madison County	0.4	111	186	260	400
Mahoning County	2	557	928	1299	2000
Marion County	0.6	167	278	390	600
Medina County	2	557	928	1299	2000
Meigs County	0.2	56	93	130	200
Mercer County	0.4	111	186	260	400
Miami County	0.9	251	418	585	900
Monroe County	0.1	28	46	65	100
Montgomery County	5	1392	2320	3248	5000
Morgan County	0.1	28	46	65	100
Morrow County	0.3	84	139	195	300
Muskingum County	0.7	195	325	455	700
Noble County	0.1	28	46	65	100
Ottawa County	0.4	111	186	260	400
Paulding County	0.2	56	93	130	200
Perry County	0.3	84	139	195	300

Geographic Area	Estimates of Mass Fatality Deaths Per Ohio County - Pandemic Influenza				
	Population Percentages	15% Attack Rate	25% Attack Rate	35% Attack Rate	100,000
Ohio	11, 478,006	27,836	46,393	64,950	100,000
Pickaway County	0.5	139	232	325	500
Pike County	0.2	56	93	130	200
Portage County	1	278	464	650	1000
Preble County	0.4	111	186	260	400
Putnam County	0.3	84	139	195	300
Richland County	1	278	464	650	1000
Ross County	0.6	167	278	390	600
Sandusky County	0.5	139	232	325	500
Scioto County	0.7	195	325	455	700
Seneca County	0.5	139	232	325	500
Shelby County	0.4	111	186	260	400
Stark County	3	835	1392	1949	3000
Summit County	5	1392	2320	3248	5000
Trumbull County	2	557	928	1299	2000
Tuscarawas County	0.8	223	371	520	800
Union County	0.4	111	186	260	400
Van Wert County	0.2	56	93	130	200
Vinton County	0.1	28	46	65	100
Warren County	2	557	928	1299	2000
Washington County	0.5	139	232	325	500
Wayne County	1	278	464	650	1000
Williams County	0.3	84	139	195	300
Wood County	1	278	464	650	1000
Wyandot County	0.2	56	93	130	200
Totals	100	27,836	46393	64950	100000

Possible Resources for Use During a Mass Fatality Incident

1. Death Reporting/Missing Persons - Possible Resources

    - Reversible 911, 211, 311
    - posters/flyers to businesses
    - hospital reporting protocol
    - postal service
    - funeral directors (procedures)
    - Red Cross.

2. Search for Remains - Possible Resources

    - Post mortem kits (local distribution)
    - law enforcement
    - medical reserve corps
    - postal workers
    - fire fighters
    - meter readers
    - township trustee volunteers
    - department of transportation
    - National Guard.

3. Recovering Remains - Possible Resources

    - Coroners
    - funeral directors
    - law enforcement
    - fire fighters
    - department of transportation
    - National Guard.
    - The coroner's have cache of personal protection equipment.

4. Death Certified - Possible Resources

    - Physician visit verification form
    - sample of death certificates
    - coroners
    - hospitals
    - Doctors.

5. Decedent Transportation to the morgues- Possible Resources

   - EMS, private ambulances
   - fire department
   - police department
   - coroner
   - department of transportation
   - buses
   - trucks or vans
   - horse trailers
   - other trailers
   - Family members.

6. Morgue Facilities - Possible Resources

   - Bails of straw w/ dry ice
   - ice skating rinks
   - vacant grocery store freezers/coolers
   - old vacant morgues/cooling facilities
   - cold storage facilities
   - mobile tents
   - fairgrounds
   - refrigerated & non-refrigerated trailers.

7. Transportation - Possible Resources

   - Public may volunteer through citizen reserve corps, all individuals transporting will need training on working with families/the public, additionally they should be required to have a certified document showing they have been trained/qualified, and must have an photo identification id badge present when transporting deceased individuals, they will also need to have a documentation sheet for the deceased body which should list what personal affects were received to identify the body (ex: driver's license) .

8. Cold Storage- Possible Resources

   - Mobile Tent Trailers w/bails & dry ice
   - Vacant grocery stores (ex: Big Bear, Giant Eagle, etc...)
   - Refrigerated trucks
   - Ice Skating Rinks
   - Cold storage facilities (such as: Stouffer's, Macy's or places that store fur coats)
   - abandoned schools.

9. Autopsy - Possible Resources

    - Coroners and their deputies, smaller counties may want to check with their coroner's office to inquire if they have deputies, and should make sure their deputies are willing to accept responsibility for going out into the community during a mass fatality.

10. Funeral Service - Possible Resources

    - (What will the pulse of your community accept?)
    - Religious and Ethnic leaders need to be involved in planning
    - local television station services
    - local radio stations broadcasts
    - mass services
    - online/virtual services
    - grave site services
    - mass memorial services
    - abbreviated services
    - no services (people may not be permitted to gather to attend any services).

11. Body Preparation - Possible Resources

    - OFDA interns may volunteer (if they are legally permitted to do so during this time)
    - what will you do when embalming fluids and caskets are gone?
    - Surface embalming may be a consideration
    - you will also need handouts and online resources available to the public.

12. Cremation - Possible Resources

    - Need to identify crematories within your communities, they are very limited throughout the state (please reference Ohio crematories map)
    - how many maximum bodies are they capable of cremating per day, there are to kinds some may be able to do 4 per day most only 3 per day
    - for transportation (please reference transportation appendix)
    - where will you temporarily store them? (please reference cold storage appendix)
    - exploring accelerated cremation death certificate process (if legally permitted during this time); perhaps the coroner's could do this (if legal).

13. Embalming - Possible Resources

- Funeral homes that presently embalm may allow others to do (if legal/permission received)
- Embalming fluid is very limited - immediate burials may be an alternative if can't embalm, remove or store.
- Check for resources in the community if available you may be able to stockpile supplies, with rotation schedule of supplies.
- May be able to recruit retired embalmers and intern embalmers (if legal & willing to do so) and perhaps contract embalmers?

14. Temporary Storage - Possible Resources

- Mobile Tent Trailers
- Vacant storage facilities for embalmed bodies (such as: empty stores, space rentals, garages, boarded up/condemned vacant houses with basements.

15. Burial - Possible Resources

- Will need a cemetery assessment for your area/community, also suspending legal requirements for caskets/vaults.
- Look for possible expansions of cemeteries, fairgrounds/publicly owned property
- mass graves (only a last resort and authorized by Governor)
- temporary interment (only a last resort and authorized by Governor)
- private cemeteries
- Owned land/private property.

16. Temporary Interment - Possible Resources

- Current Ohio law states once a body has been interred it cannot be disinterred except through legal processes. Consider mass graves, private cemeteries, private owned land/property, etc.... This may be messy and difficult to organize & complete. Will need identification markers for temporary interment may consider global positioning devices.

17. Behavioral Health - Possible Resources

- Behavioral health workers - local city and county Mental Retardation & Developmental Disabilities Agencies, to be available for general public, 1st responders, etc... .
- Please keep in mind anyone associated with this event will be overwhelmed in an already overwhelmed profession. Will need to have a plan in place to assist orphans/human services for individuals. Also consider stray and orphaned animals.

18. Event and Community Recovery - Possible Resources

- Authorization for disinterment must be done through probate court.
- Religious and Ethnic leaders will need to be involved with the planning and follow through
- Community Memorial Service may help the community to recover from a mass fatality incident

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
1. Death Reporting / Missing Persons	If death occurs in the home/business/community then a call in system needs to be established. If death occurs in a hospital/nursing home/hospice setting then a separate call system needs to be established Procedures need to be in place to be aware of unusual situations which might indicate a home death	Availability of people able to do this task normally 911 operators, 211 operators, police, sheriff, etc.	Provide public education about the call centers, what information to have available when they call, and what to expect from authorities when a death or missing persons report is made. Mortuary Affairs Call Center/Public Inquiries Line Train Postal Worker's to recognize possible problems when delivering mail to elderly, home bound, etc.			
	Citizens call local 911 to request a check on the welfare call for others	Availability of communications equipment to receive and manage large volumes of calls/inquires.	Consider planning an on call system 24/7 specifically for this task to free up operators for 911 calls on the living.			
	911 or other system needs to be identified as the lead to perform this task.	Availability of trained "investigators" to check into the circumstances of each report and to verify death is natural or other.				
2. Search for Remains	If death occurs in the home/business then law enforcement will need to be contacted.	Law enforcement officers' availability.	Consider deputizing and training (through the investigations units of law enforcement) of people whose sole responsibility is to search for the dead and report their findings. Activate Mortuary Affairs Investigation and Recovery Team			
	Person legally authorized to perform this task.		Consider having community attorneys involved in the legal issues training for the groups identified.			
3. Recovering Remains	Personnel trained in recovery operations and the documentation required to be collected at the "scene".	Availability of trained people to perform this task.	Consider training volunteers (e.g. MRC) ahead of time.			

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
	Personal protection equipment such as coveralls, gloves and surgical masks.	Availability of transportation assets.	Consider refrigerated warehouses or other cold storage as an interim facility until remains can be transferred to the family's funeral service provider for final disposition.			
	Equipment such as stretchers and human remains pouches.	Availability of interim storage facility.				
4. Death Certified	Person legally authorized to perform this task.	The lack of availability or willingness of primary treating physicians to certify deaths for their patients.	When possible, arrange for "batch" processing of death certificates for medical facilities and treating physicians. Induce fines equal to the Local Coroner's fees for those treating physicians who refuse to sign for their patients or charge a family (funeral home) for such services.			
	If a death due to a natural disease and decedent has a physician, physician notified of death.	The lack of willingness to pay for a certification of death as imposed by some of Ohio's physicians.				
	If trauma, poisoning, homicide, suicide, etc., Coroner case.	If body cannot be picked up in a short period of time, decomp may start	Utilize Post Mortem Kits supplied to each county for temporary containment of decedent			
5. Decedent Transportation	In hospital: trained staff and stretcher.	Availability of human and physical resources.	In hospital: consider training additional staff working within the facility.			
to the morgues	Outside hospital: informed person(s), stretcher and vehicle suitable for this purpose.	Existing workload of local funeral directors and transport staff.	Consider keeping old stretchers in storage instead of discarding			
		Ohio's requirement to be registered with the Office of Vital Statistics to obtain a Burial/Transit Permit Registration of Surface transportation and removal services may be necessary Activate Mortuary Affairs Transportation Group	Make a listing of all entities who can be used as transportation resources. Training and memorandums of understanding will need to be in place.			

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
			□Look for alternate suppliers of equipment that could be used as stretchers in an emergency e.g., trolley manufacturers.			
			□Eliminate permit requirements for the PI event.			
			□Outside hospital: provide public education or specific instructions through a toll-free phone service on where to take remains and other MA information.			
6. Morgue Facilities	□Coroner morgue storage capability □ Hospital morgue storage capability □ Funeral home morgue storage capability	□ No or limited morgue storage capability by coroner, hospital or funeral home □ More bodies than morgue can handle	□Temporary morgue sites identified which will be able to store decedents (MOU) □ Utilization of state mobile morgue resources to store bodies			
7. Transportation	□To cold storage, Mortuary Affairs holding location and/ or burial Site.	□Availability of human and physical resources.	□Identify alternative vehicles that could be used for this purpose.			
	□From hospitals, homes, nursing homes, hospice facilities, etc. to morgues, funeral homes or other locations.	□Existing workload of local funeral directors and transport staff.	□Identify ways to remove or completely cover (with a cover that won't come off) company markings of vehicles used for MA operations.			
	□Suitable covered (preferably refrigerated) vehicles and drivers.	□Ohio's requirement to have a transport certificate to transport dead bodies over the roadway.	□Consider use of volunteer drivers.			
	□ Develop plan to respectfully transport deceased individuals	□ Activate Mortuary Affairs Transportation Group	□Consider setting up a pickup and delivery service for all the hospitals with set times, operating 24/7.			
			□Consider finding resources to assist funeral homes in transporting remains so they can concentrate on remains preparations for the families.			
8. Cold storage	□Suitable facility that can be maintained ideally at 34 to 42 degrees F.	□Availability of facilities and demand for like resources from multiple localities.	□Identify and plan for possible temporary cold storage sites and/or equipment close to where the body originated for the convenience of			
		□Capacity of such facilities.				

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
		□Inability to utilize food storage or preparation facilities after the event.	identification, family and funeral home.			
9. Autopsy *if*	□Person qualified to perform autopsy and suitable facility with equipment.	□Availability of human and physical resources.	□Ensure that physicians and families are aware that an autopsy is not required for confirmation of influenza as cause of death when the outbreak is identified.			
required or		□May be required in some circumstances.				
requested						
10. Funeral service	□Appropriate location(s), casket (if not cremated).	□Availability of caskets. □ Voluntary/mandatory quarantine which could limit the number of individuals who can attend a service	□Contact suppliers to determine lead time for casket manufacturing and discuss possibilities for rotating 6 month inventory. □ Investigate alternative methods of conducting a funeral or memorial service			
	□Funeral director availability.	□Availability of location for service and visitation.	□Consult with the OFDA to determine surge capacity and possibly the need for additional sites (use of religious facilities, cultural centers, etc.)			
	□Clergy availability.	□ Inability to follow religious rites during a pandemic event	□ Meet with religious leaders during your planning to discuss acceptable and unacceptable functions. Make sure that the religious community understands that the situation will dictate what can and cannot be done			
	□Cultural leaders availability.	□ Cultural leaders may be ill or busy tending to the ill or worried well	□ Work with cultural leaders to identify additional individuals who can assist			
11. Body Preparation	□Person(s) trained and licensed to perform this task.	□Supply of human and material resources.	□Consider developing a rotating 6 month inventory of body bags and other supplies, given their shelf life.			
		□Supply of human remains pouches.	□Consider training or expanding the role of current staff to include this task.			

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
		□If death occurs in the home: the availability of these requirements.	□Provide public education on the funeral service choices during a pandemic.			
12. Cremation	□Suitable vehicle of	□Capacity of Crematorium and speed of process.	□Identify alternate vehicles to be used for mass transport.			
	transportation from	□Availability of local Coroner's to issue cremation or burial at sea certificate.	□Examine capacity of crematoriums within the jurisdiction.			
	morgue to crematorium.		□Discuss and plan for appropriate storage options if the crematoriums are backlogged.			
	□Availability of cremation service.		□Discuss and plan expedited cremation certificate completion processes.			
	□A cremation certificate issued by the Ohio Coroner's Office.					
13. Embalming	□Suitable vehicle for	□Availability of human and physical resources.	□Consult with service provided regarding the availability of supplies and potential need to stockpile or develop a rotating 6 month inventory of essential equipment/supplies.			
	transportation from morgue.	□Capacity of facility and speed of process.	□Discuss capacity and potential alternate sources of human resources to perform this task such as retired workers or students in training programs.			
	□Trained person to perform.		□Consider "recruiting" workers that would be willing to provide this service in an emergency.			
	□Embalming					
	Equipment and supplies.					
	□Suitable location.					
14. Temporary	□Access to and space in a temporary vault.	□Temporary vault capacity and	□Expand capacity by increasing temporary vault sites.			
storage	□Use of refrigerated warehouses, or other cold storage facilities.	Accessibility.				

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
15. Burial	Grave digger and equipment.	Availability of grave diggers and cemetery space.	Identify sources of supplementary workers.			
	Space at cemetery.		Identify sources of equipment such as backhoes and coffin lowering machinery.			
			Identify alternate sites for cemeteries or ways to expand cemeteries.			
16. Temporary Interment (if authorized by the Governor)	Person to authorize temporary interment.	Availability of grave diggers and temporary interment space.	Identify locations that will be suitable for temporary interment space.			
	Location for temporary interment.	Availability of funeral directors, clergy, and cultural leaders for guidance and community acceptance.	Consider using the global positioning system for individual remains location.			
	Grave diggers and equipment.	Specific criteria as to when authorization may occur and procedures to follow prior to the internment.				
		Availability of resources after the event to disinter and to place remains into family plots.				
17. Behavioral Health	Prepare public and responders for mass fatality possibilities prior to pandemic	The pandemic will virtually affect the entire nation. A shortage of mental health people will complicate the ability to assist people.	Train first responders and some Citizen Corps people in crisis intervention techniques to assist MA teams during the pandemic.			
	Assist responders and other MA workers during pandemic and in post pandemic periods	Many people will be doing MA tasks that they are mentally unprepared for and will require assistance.	Set up clinics to assist the public separate from the MA workers and first responders.			
18. Event and Community Recovery	Persons to authorize re-interment.	Availability of funeral directors, clergy, and cultural leaders for guidance.	Consider that the public may want to erect a monument at the temporary interment site(s) after the pandemic is			

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
	Grave digger and equipment.	Existing code requirements to have a court order for the disinterment of human remains.	over.			
	Clergy and cultural leaders.	Ohio's requirement to have a burial-transit permit to transport bodies out of state.				
1. Death Reporting/Missing Persons - Possible Resources		2. Search for Remains - Possible Resources		3.Recovering Remains - Possible Resources		
Reversible 911, 211, 311, posters/flyers to businesses, hospital reporting protocol, postal service, funeral directors (procedures) & Red Cross		Post mortem kits (local distribution), law enforcement, medical reserve core, postal workers, fire fighters, meter readers, township trustee volunteers, department of transportation, & national guard		Coroners, funeral directors, law enforcement, fire fighters, department of transportation, & national guard. The coroner's have funds for personal protection equipment.		
4. Death Certified - Possible Resources		5. Decedent Transportation to the morgues- Possible Resources		6. Morgue Facilites - Possible Resources		

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
Physician visit verification form, sample of death certificates, coroners, hospitals & doctors		EMS, private ambulances, fire department, police department, coroner, department of transportation, buses, trucks, vans, horse trailers, other trailers & family members		Bails of straw w/ dry ice, ice skating rinks, grocery store freezers/coolers, old vacant morgues/cooling, cold storage facilities, mobile tents, fairgrounds, refrigerated & non-refrigerated trailors		
7. Transportation - Possible Resources		8. Cold Storage- Possible Resources		9. Autopsy - Possible Resources		

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
Public may volunteer through citizen reserve core, all individals transporting will need training on working with families/the public, additionally they should be required to have a certified document showing they have been trained/qualified, and must have an photo identification id badge present when transporting deceased individuals, they will also need to have a documentation sheet for the deceased body which should list what personal affects were received to identify the body (ex: driver's license) .		Mobile Tent Trailors w/bails & dry ice, Vacant grocery stores (ex: Big Bear, Giant Eagle, etc…), Refer trucks, Ice Skating Rinks, Cold storage facilities (such as: Stouffer's, Macy's or places that store fur coats), and abandoned schools		Coroners and their deputies, smaller counties may want to check with their coroner's office to inquire if they have deputies, and should make sure their deputies are willing to accept responsibility for going out into the community during a mass fatality.		
10. Funeral Service - Possible Resources		11. Body Preparation - Possible Resources		12. Cremation - Possible Resources		

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
(What will the pulse of your community accept?), local television station services, local radio stations, mass services, online/vertual services, grave site services, mass memorial services, abbreviated services, no services (people may not be permitted to leave their premises to attend any services).		OFDA interns may volunteer (if they are legally permited to do so during this time), what will you do when embalming fluids and caskets are gone? Surface embalming may be a consideration, you will also need handouts and online resources available to the public.		Need to indentify crematories within your communities, they are very limited throughout the state (please reference ohio crematories map), how many maximum bodies are they capable of cremating per day, there are to kinds some may be able to do 4 per day most only 3 per day, for transportation (please reference transportation appendix), where will you temporarily store them? (please reference cold storage appendix), exploring accerlated cremation death certificate process (if legally permitted during this time), perhaps the coroner's could do this (if legal).		
13. Embalming - Possible Resources		14. Temporary Storage - Possible Resources		15. Burial - Possible Resources		

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
Funeral homes that presently embalm may allow others to do (if legal/permission received), embalming fluid is very limited - immediate burials may be an alternative if can't embalm, remove or store. Check for resources in the community if available you may be able to stockpile supplies, with rotation schedule of supplies. May be able to recruit retired embalmers and intern embalmers (if legal & willing to do so) and perhaps contract embalmers?		Mobile Tent Trailors, Vacant storage facilities for embalmed bodies (such as: empty stores, space rentals, garages, boarded up/condemned vacant houses with basements.		Will need a cemetery assessment for your area/community, also suspending legal requirements for caskets/vaults. Look for possible expansions of cemeteries, fairgrounds/publicly owned property, mass graves, temporary interment, private cemeteries, & owned land/private property.		
16. Temporary Interment - Possible Resources		17. Behavioral Health - Possible Resources		18. Event and Community Recovery - Possible Resources		

Steps	Requirements	Limiting Factors	Possible Solutions & Expediting Steps	Entity/Agency's Responsible	Human Resources Needed	Non-Human Resources Needed
Current Ohio law states once a body has been interred it cannot be uninterred except through legal processes. Consider mass graves, private cemeteries, private owned land/property, etc… . This may be messy and difficult to organize & complete. Will need identification markers for temporary interment may consider global positioning devices.		Behavioral health workers - local city and county Mental Retardation & Developemental Disablities Agencies, to be available for general public, 1st responders, etc… . Please keep in mind anyone associated with this event will be overwhelmed in an already overwhelmed profession. Will need to have a plan in place to assist orphans/human services for individuals. Also consider stray and orphaned animals.		Authorization for interment must be done through probate court.		

Mortuary Supply Order to County Coroners

Geographic Area		Body Bags Large	Body Bags XL	PPE Suits X Large	PPE Suits X Large	Gloves Large	Gloves X Large	Masks w/vent	Masks w/o vent	Masks w/o vent	Glasses	Glasses
		5/case	4/case	25/case	25/case	100/box	100/box	100/case	300/case	200/case	units	units
	Total Units Ordered	9350	1000	10000	10000	144000	63200	20000	40500	19200	21494	1920
	Population/Percentages	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County	Units per County
Ohio	11, 478,006	Body Bags Large	Body Bags XL	PPE Suits X Large	PPE Suits XX Large	Gloves Large	Gloves X Large	Masks w/vent	Masks w/o vent	Masks w/o vent	Glasses	Face Masks
Adams County	0.2	20	4	25	25	300	100	100	0	160	43	0
Allen County	0.9	80	8	100	100	1300	600	100	0	640	193	0
Ashland County	0.5	50	4	50	50	700	300	100	0	480	107	0
Ashtabula County	0.9	80	8	100	100	1300	600	100	0	640	193	0
Athens County	0.5	50	4	50	50	700	300	100	0	480	107	0
Auglaize County	0.4	40	4	50	50	600	300	100	0	160	86	0
Belmont County	0.6	55	4	50	50	900	400	100	0	480	129	0
Brown County	0.4	40	4	50	50	600	300	100	0	160	86	0
Butler County	3	275	28	300	300	4200	1800	600	1200	0	645	0
Carroll County	0.2	20	4	25	25	300	100	100	0	160	43	0
Champaign County	0.3	30	4	25	25	400	200	100	0	160	64	0
Clark County	1	90	12	100	100	1400	600	100	600	0	215	0
Clermont County	2	180	20	200	200	2900	1300	400	900	0	430	0
Clinton County	0.4	40	4	50	50	600	300	100	0	160	86	0
Columbiana County	1	90	4	100	100	1400	600	100	600	0	215	0
Coshocton County	0.3	30	4	25	25	400	200	100	0	160	64	0
Crawford County	0.4	40	4	50	50	600	300	100	0	160	86	0
Cuyahoga County	12	1115	120	1200	1200	17000	7600	2400	6600	320	2579	288
Darke County	0.5	50	4	50	50	700	300	100	0	480	107	0
Defiance County	0.3	30	4	25	25	400	200	100	0	160	64	0
Delaware County	1	90	12	100	100	1400	600	100	600	0	215	0
Erie County	0.7	65	4	75	75	1000	400	100	0	640	150	0
Fairfield County	1	90	8	100	100	1400	600	100	600	0	215	0
Fayette County	0.2	20	4	25	25	300	100	100	0	160	43	0

Franklin County	9	835	88	900	900	13000	5700	1800	4800	320	1934	288
Fulton County	0.4	40	4	50	50	600	300	100	0	160	86	0
Gallia County	0.3	30	4	25	25	400	200	100	0	160	64	0
Geauga County	0.8	75	8	75	75	1100	500	100	0	640	172	0
Greene County	1	90	12	100	100	1400	600	100	600	0	215	0
Guernsey County	0.4	40	4	50	50	600	300	100	0	160	86	0
Hamilton County	7	650	68	700	700	10000	4400	1400	3900	320	1505	192
Hancock County	0.6	55	4	50	50	900	400	100	0	480	129	0
Hardin County	0.3	30	4	25	25	400	200	100	0	160	64	0
Harrison County	0.1	15	4	25	25	100	100	100	0	160	21	0
Henry County	0.3	30	4	25	25	400	200	100	0	160	64	0
Highland County	0.4	40	4	50	50	600	300	100	0	160	86	0
Hocking County	0.2	20	4	25	25	300	100	100	0	160	43	0
Holmes County	0.4	40	4	25	25	600	300	100	0	160	86	0
Huron County	0.5	50	4	50	50	700	300	100	0	480	107	0
Jackson County	0.3	30	4	25	25	400	200	100	0	160	64	0
Jefferson County	0.6	55	4	50	50	900	400	100	0	480	129	0
Knox County	0.5	50	4	50	50	700	300	100	0	480	107	0
Lake County	2	180	20	200	200	2900	1200	400	1200	0	430	96
Lawrence County	0.5	50	4	50	50	700	300	100	0	480	107	0
Licking County	2	180	20	200	200	2900	1200	400	1200	0	430	96
Logan County	0.4	40	4	25	25	600	300	100	0	160	86	0
Lorain County	3	275	28	300	300	4200	1900	500	1800	0	645	0
Lucas County	4	375	40	400	400	5800	2500	800	1800	0	860	192
Madison County	0.4	40	4	25	25	600	300	100	0	160	86	0
Mahoning County	2	180	20	200	200	2900	1300	400	1200	0	430	96
Marion County	0.6	55	4	50	50	900	400	100	0	480	129	0
Medina County	2	180	20	200	200	2900	1300	400	1200	0	430	96
Meigs County	0.2	15	4	25	25	300	100	100	0	160	43	0
Mercer County	0.4	40	4	25	25	600	300	100	0	160	86	0
Miami County	0.9	80	8	100	100	2300	600	100	0	640	193	0
Monroe County	0.1	15	4	25	25	100	100	100	0	160	21	0
Montgomery County	5	465	48	500	500	7200	3000	1000	2400	0	1075	192
Morgan County	0.1	15	4	25	25	100	100	100	0	160	21	0
Morrow County	0.3	30	4	25	25	400	200	100	0	160	64	0
Muskingum County	0.7	65	4	75	75	1000	400	100	0	640	150	0
Noble County	0.1	15	4	25	25	100	100	100	0	160	21	0
Ottawa County	0.4	40	4	25	25	600	300	100	300	160	86	0
Paulding County	0.2	20	4	25	25	300	100	100	0	160	43	0

Perry County	0.3	30	4	25	25	400	200	100	0	160	64	0
Pickaway County	0.5	50	4	50	50	700	300	100	0	480	107	0
Pike County	0.2	20	4	25	25	300	100	100	0	160	43	0
Portage County	1	90	12	100	100	1400	600	100	600	0	215	0
Preble County	0.4	40	4	25	25	600	300	100	0	160	86	0
Putnam County	0.3	30	4	25	25	400	200	100	0	160	64	0
Richland County	1	90	12	100	100	1400	600	100	600	0	215	0
Ross County	0.6	55	4	50	50	900	400	100	0	480	129	0
Sandusky County	0.5	50	4	50	50	700	300	100	0	320	107	0
Scioto County	0.7	65	4	75	75	1000	400	100	0	640	150	0
Seneca County	0.5	50	4	50	50	700	300	100	0	320	107	0
Shelby County	0.4	40	4	25	25	600	300	100	0	160	86	0
Stark County	3	275	28	300	300	4300	1900	500	1500	0	645	192
Summit County	5	465	48	500	500	7200	3000	1000	2400	0	1075	192
Trumbull County	2	180	20	200	200	2900	1300	400	1200	0	430	0
Tuscarawas County	0.8	75	4	75	75	1100	500	100	0	640	172	0
Union County	0.4	40	4	25	25	600	300	100	300	160	86	0
Van Wert County	0.2	20	4	25	25	300	100	100	0	160	43	0
Vinton County	0.1	15	4	25	25	100	100	100	0	160	21	0
Warren County	2	180	20	200	200	2900	1300	400	1200	0	430	0
Washington County	0.5	50	4	50	50	700	300	100	0	320	107	0
Wayne County	1	90	12	100	100	1400	600	100	600	0	215	0
Williams County	0.3	30	4	25	25	400	200	100	0	160	64	0
Wood County	1	90	12	100	100	1400	600	100	600	0	215	0
Wyandot County	0.2	20	4	25	25	300	100	100	0	160	43	0
State of Ohio		10										
Totals	100	9350	1000	10000	10000	144000	63200	20000	40500	19200	21494	1920
		5/case	4/case	25/case	25/case	100/box	100/box	100/case	300/case	160/case		96/case
	Vendor	Aramsco	Aramsco	Aramsco	Aramsco	Direct Resource	Direct Resource	Aramsco	Direct Resource	Aramsco	Allstate	Direct Resource

ODH CREMATORY LIST

Report generated on 7/1/2009 at 3:09:18 PM

credential Id	name	address1	address 2	city	zipcode	phone	County
CREM-000102	LIMA CREM SVC	1488 ELIDA RD		LIMA	45805	(419) 223-6861	Allen
CREM-000028	ASHTABULA COUNTY CREMATION SERVICE	4524 ELM AVE		ASHTABULA	44004	440-992-2191	Ashtabula
CREM-000043	FAMILY CARE GROUP CREMATION CENTER	49 W JEFFERSON ST		JEFFERSON	44047	(440) 576-7066	Ashtabula
CREM-000008	CRIDERSVILLE CREMATORY	311 W MAIN ST		CRIDERSVILLE	45806-2299	419-645-4501	Auglaize
CREM-000002	BAUKNECHT-ALTMEYER CREMATORY	441 37TH ST		BELLAIRE	43906	740-676-1611	Belmont
CREM-000040	CRUMMITT & SON	329 N SECOND ST	POB 277	MARTINS FERRY	43935	740-633-9381	Belmont
CREM-000126	CREMATION CONCEPTS	4976 WINTON RD		FAIRFIELD	45014	(513) 829-6935	Butler
CREM-000067	WOODSIDE CEMETERY & ARBORETUM	1401 S WOODSIDE BLVD		MIDDLETOWN	45044	513-422-3291	Butler
CREM-000052	NORTHFIELD CREMATION SERVICE	830 N LIMESTONE ST		SPRINGFIELD	45503	(937) 323-6439	Clark
CREM-000063	TUFTS SCHILDMEYER CREMATORY	1668 SR 28		GOSHEN	45122	(513) 722-2430	Clermont
CREM-000057	SOUTHWEST OHIO CREMATORY	529 MAIN ST		MILFORD	45150	513-347-7387	Clermont
CREM-000115	HILLCREST MEM PARK CEMETERY ASSOC	26200 AURORA RD		BEDFORD HTS	44146	(440) 232-0035	Cuyahoga
CREM-000119	CREMATION SVC INC	1612 LEONARD ST		CLEVELAND	44113	(216) 861-2334	Cuyahoga
CREM-000109	GREAT LAKES CR	4701 HINCKLEY INDUSTRIAL PKWY		CLEVELAND	44109	(216) 398-8400	Cuyahoga
CREM-000079	GREENFIELD CR	5475 LAKE CT		CLEVELAND	44114	216-391-6628	Cuyahoga
CREM-000012	LAKEWOOD CREMATORY	1575 W 117TH ST		CLEVELAND	44107	216-221-3380	Cuyahoga
CREM-000064	UNIVERSITY CIRCLE CREMATORY	2165 E 89TH ST		CLEVELAND	44106	216-791-0770	Cuyahoga
CREM-000032	BUSCH CREMATORY	7501 RIDGE RD		PARMA	44129	440-842-7800	Cuyahoga

CREM-000066	WEST SHORE CREMATION	2914 DOVER CENTER RD		WESTLAKE	44145	440-871-0711	Cuyahoga
CREM-000114	OAKWOOD CREM	131 W OAKWOOD ST		BRADFORD	45308	(937) 473-3331	Darke
CREM-000099	MID OHIO CREM SVC	1510 W WILLIAM ST		DELAWARE	43015	(740) 362-1611	Delaware
CREM-000034	CENTRAL OHIO CREMATION SERVICE	450 W OLENTANGY ST		POWELL	43065	(614) 792-1471	Delaware
CREM-000013	NORTH COAST CREMATORY	410 MAIN ST		HURON	44839	(419) 433-5225	Erie
CREM-000014	OHIO CREMATION SERVICES	2001 COLUMBUS AVE		SANDUSKY	44870	(419) 625-8816	Erie
CREM-000018	RIVER VALLEY CARING CREMATORY	227 UNION ST		LANCASTER	43130	740-653-0652	Fairfield
CREM-000058	DWAYNE R SPENCE FUNERAL HOME	550 HILL RD N		PICKERINGTON	43147	(614) 837-7126	Fairfield
CREM-000033	CAPITOL CREMATORY	848 N PEARL ST		COLUMBUS	43201	(614) 267-0531	Franklin
CREM-000035	CENTRAL OHIO CREMATION SERVICE	515 HIGH ST		COLUMBUS	43085	614-885-4006	Franklin
CREM-000037	COLUMBUS CREMATORY	229 E STATE ST		COLUMBUS	43215	(614) 224-6105	Franklin
CREM-000007	COOK & SON - PALLAY CREMATORY	1631 PARSONS AVE		COLUMBUS	43207	614-444-7861	Franklin
CREM-000019	JERRY SPEARS CREMATORY	2693 W BROAD ST		COLUMBUS	43204	614-274-5092	Franklin
CREM-000073	O R WOODYARD CO	1346 S HIGH ST		COLUMBUS	43207	(614) 221-7746	Franklin
CREM-000122	NEWCOMER CR	3393 BROADWAY		GROVE CITY	43123	(614) 539-6166	Franklin
CREM-000093	OHIO CREMATORY	7915 E MAIN ST		REYNOLDSBURG	43068	(614) 755-9500	Franklin
CREM-000091	CREMATION CENTER	419 W ELM ST		WAUSEON	43567	(419) 335-6031	Fulton
CREM-000009	GALLIPOLIS VAULT COMPANY INC	1151 SR 141	POB 126	GALLIPOLIS	45631	(740) 446-3357	Gallia
CREM-000125	PRIVATE CR LLC	116 SOUTH STREET		CHARDON	44024	(440) 285-2182	Geauga
CREM-000068	TRI-COUNTY CREMATION SVC, INC	12524 CHILLICOTHE RD	PO BOX 806	CHESTERLAND	44026-0806	440-729-1908	Geauga

CREM-000116	TOBIAS CREM	3970 DAYTON-XENIA RD		BEAVERCREEK	45432	(937) 252-3122	Greene
CREM-000003	BAXTER CREMATION SERVICE	909 E ROSS AVE		CINCINNATI	45217	513-641-1010	Hamilton
CREM-000036	CINCINNATI CREMATION CO	525 W MARTIN LUTHER KING	DR	CINCINNATI	45220-2408	513-861-1021	Hamilton
CREM-000017	FARES J RADEL CREMATORY	5950 KELLOGG AVE		CINCINNATI	45228	513-231-2000	Hamilton
CREM-000105	FINAL WISHES	3700 GLENMORE AVE		CINCINNATI	45211	(513) 389-1800	Hamilton
CREM-000094	GREATER CINCINNATI CREMATORY	1919 THINNES AVE		CINCINNATI	45214	(513) 244-9040	Hamilton
CREM-000020	SPRING GROVE CEMETERY & ARBORETUM	4521 SPRING GROVE AVE		CINCINNATI	45232	513-681-7526	Hamilton
CREM-000046	KNOLLCREST CEMETERY ASSOCIATION INC	214 W HARDIN ST		FINDLAY	45840	(419) 422-2323	Hancock
CREM-000088	TRI-COUNTY CREMATORY	407 N COUNTYLINE ST		FOSTORIA	44830	(419) 435-6694	Hancock
CREM-000117	S & S CREMATORY	209 N WILHELM ST		HOLGATE	43545	(419) 592-3010	Henry
CREM-000128	OHIO FUNERAL SUPPORT SVCS	201 NEWARK RD		MT VERNON	43050	(740) 392-6956	Knox
CREM-000070	NORTHSHORE CREM SVCS INC	26 RIVER ST		MADISON	44057	440-428-4401	Lake
CREM-000030	BLESSING CREMATION CENTER	9340 PINECONE DR		MENTOR	44060	440-352-8100	Lake
CREM-000076	BRUNNER CREM CO	8466 MENTOR AVE		MENTOR	44060	440-255-3401	Lake
CREM-000124	FOREST CITY CR	28890 CHARDON RD		WILLOUGHBY HILLS	44092	(440) 516-5555	Lake
CREM-000103	OHIO RIVER VALLEY CR	625 STATE ROUTE 775		PROCTORVILLE	45669	(740) 886-6164	Lawrence
CREM-000121	LICKING CO CREM SVC	1249 HEBRON RD		HEATH	43056	(740) 522-3716	Licking
CREM-000039	CROMCO SERVICES INC	840 INFIRMARY RD		ELYRIA	44035	440-323-2528	Lorain
CREM-000061	TOLEDO MEMORIAL PARK	6382 MONROE ST		SYLVANIA	43560	(419) 882-7151	Lucas
CREM-000110	HISTORIC WOODLAWN CREM	1502 W CENTRAL AVE		TOLEDO	43606	(419) 472-2186	Lucas

CREM-000097	QUALITY FUNERAL CHOICES	6061 TELEGRAPH UNIT T		TOLEDO	43612	419-470-1029	Lucas
CREM-000060	TOLEDO CREMATION SERVICE	1021 WARWICK AVE		TOLEDO	43607	(419) 537-8713	Lucas
CREM-000108	MADISON CREM	103 N MAIN ST		LONDON	43140	(740) 852-2345	Madison
CREM-000081	VALLEY CREM SVCS	3701 STARR S CENTRE DR		CANFIELD	44406	330-533-5541	Mahoning
CREM-000024	WESTERN RESERVE CREMATION SERVICE	26 SEXTON ST		STRUTHERS	44471	330-750-0239	Mahoning
CREM-000047	LAKE PARK CREMATORY	1459 E MIDLOTHIAN BLVD		YOUNGSTOWN	44502	330-782-4221	Mahoning
CREM-000075	NORTH COAST CREM CO	3300 CENTER RD		BRUNSWICK	44212	330-225-1770	Medina
CREM-000016	PREMIERE CREMATORY	333 W HIGH ST		PIQUA	45356	937-773-3161	Miami
CREM-000096	MIAMI VALLEY CREMATORY	5555 PHILADELPHIA DR		DAYTON	45415	(937) 274-1151	Montgomery
CREM-000112	WOODLAND CEMETERY & ARBORETUM CREM	118 WOODLAND AVE		DAYTON	45409	(937) 228-3221	Montgomery
CREM-000083	NEWCOMER CR	3940 KETTERING BLVD		KETTERING	45439-2019	937-293-4141	Montgomery
CREM-000101	BELL CR	1019-1027 S MAIN ST		MIAMISBURG	45342	(937) 866-2444	Montgomery
CREM-000113	SRS SERVICES	8376 W PIKE		HOPEWELL	43746	(740) 450-4147	Muskingum
CREM-000042	E & J CREMATORY	6360 DRESDEN RD		ZANESVILLE	43701	740-452-6751	Muskingum
CREM-000120	NORTHCOAST CR LTD	501 WEST ST		GENOA	43430	(419) 855-3328	Ottawa
CREM-000005	BISSLER & SONS CREMATORY	628 W MAIN ST		KENT	44240	(330) 673-5857	Portage
CREM-000069	NORTH CENTRAL OHIO CREMATION SVCS	98 S DIAMOND ST		MANSFIELD	44902	419-522-5211	Richland
CREM-000123	RIVERVIEW CR	425 E STATE ST		FREMONT	43420	(419) 332-6409	Sandusky
CREM-000092	SOUTHERN OHIO VAULT CO INC	502 SHALE HOLLOW DR		NEW BOSTON	45662	(740) 352-3447	Scioto
CREM-000098	DAEHLER CREM	915 9TH ST		PORTSMOUTH	45662	(740) 353-4146	Scioto

CREM-000118	ENGLE-SHOOK CR	135 N WASHINGTON ST		TIFFIN	44883	(419) 447-1221	Seneca
CREM-000006	C R W CREMATORY	4225 16TH ST SW	POB 80233	CANTON	44710	330-477-0499	Stark
CREM-000026	ADAMS-MASON CREMATORY	791 E MARKET ST		AKRON	44305	330-535-9186	Summit
CREM-000027	AKRON VAULT & CREMATORY	2399 GILCHRIST RD		AKRON	44305	330-784-5475	Summit
CREM-000021	SUMMIT CREMATION SERVICE	85 N MILLER RD		AKRON	44333-3792	330-867-4141	Summit
CREM-000100	COUNTY CREMATORY	3475 COPLEY RD		COPLEY	44321	(330) 666-1138	Summit
CREM-000053	NORTHLAWN CREMATORY	4724 STATE RD		PENINSULA	44264	(330) 929-2884	Summit
CREM-000129	BROOK PARK CREM CTR	6919 WARREN-SHARON RD		BROOKFIELD	44403	(330) 448-2412	Trumbull
CREM-000104	OAK MEADOW CREM SVCS INC	795 PERKINS JONES RD		WARREN	44483	(330) 637-0238	Trumbull
CREM-000054	PARK AVENUE CREMATION SERVICE	533 N PARK AVE		WARREN	44481	330-394-4656	Trumbull
CREM-000085	TOLAND-HERZIG CREMATORY	803 N WOOSTER AVE		DOVER	44622	(330) 343-6132	Tuscarawas
CREM-000086	TUSCARAWAS VALLEY CREM SVC	5600 N WOOSTER AVE NW		DOVER	44622	(330) 343-5506	Tuscarawas
CREM-000127	VAN WERT CREM	722 S WASHINGTON ST		VAN WERT	45891	(419) 238-1112	Van Wert
CREM-000095	TWIN-STATES CREMATION SERVICE	1021 PIKE ST		MARIETTA	45750	(740) 373-5331	Washington
CREM-000023	TWIN STATES CREMATION SERVICE	700 MAIN ST	POB 427	NEW MATAMORAS	45767	740-865-3448	Washington
CREM-000084	REMEMBRANCE CREMATION CENTER	7067 CLEVELAND RD	PO BOX 761	WOOSTER	44691	330-345-5665	Wayne
CREM-000082	WOOSTER CR LLC	216 E LARWILL ST		WOOSTER	44691	(330) 262-7771	Wayne
CREM-000077	NORTHWEST OHIO CREM SVC	225 E HIGH ST		BRYAN	43506	419-636-1189	Williams
CREM-000078	TRIBUTE CREM SVC	860 W MULBERRY ST		BRYAN	43506	(419) 636-3525	Williams
CREM-000107	REMEMBRANCE CREMATORY	1460 W WOOSTER ST	PO BOX 648	BOWLING GREEN	43402	(419) 352-2171	Wood

98 Items Found

Recommendations for Temporary Morgue Site

Space Recommendations:

- Facility available for the time frame necessary
- Retrofit capability and cost considered
- Space requirements
    - Less than 100 fatalities – 6,000 sq. ft. facility
    - 101-200 fatalities – 8,000 sq. ft. facility
    - More than 200 fatalities 10,000 sq. ft. facility
- Non-porous flooring or disposable flooring
- Room for two 400-600 sq ft office spaces
- Tractor-trailer accessible
- Showers
- Hot and cold water
- Heat or air conditioning (depending upon season)
- Electricity (110 volt, 300 amps minimum)
- Drainage
- Ventilation
- Restrooms
- Space for staff support and rest
- Parking areas for staff and trucks
- Dock for delivery
- ADA compliant entrances/exits

Communications:

- Communication capabilities, including multiple telephone lines capability and satellite
- Internet capability
- Marc's Radios
- Short wave (HAM) radio transmitter/receiver
- Cellular phone service area

Security Considerations:

- Secure entrances into general area
- Secure entrances into facility with uniformed guards
- Security for entire site
- Removed from public view
- Removed from the Family Assistance Center in a "need to know" location

Ohio Department of Health
Office of Vital and Health Statistics
Pandemic Influenza Mass Fatality
Response Guidance Plan

Appendix IV

Physician Tool Kit

Dr. All Right
123 Smith Street
Columbus, Ohio 43215
614-555-5555

Doctor's Visit Verification – You have been treated by the above listed physician for the condition listed below.

Document Version Control

Date	Diagnosis

Please Post this Notification on your Refrigerator and follow up in two weeks with your doctor if not better

Prepared by: [Name]

Dr. All Right
123 Smith Street
Columbus, Ohio 43215
614-555-5555

Doctor's Visit Verification – You have been treated by the above listed physician for the condition listed below.

Document Version Control

Date	Diagnosis

Please Post this Notification on your Refrigerator and follow up in two weeks with your doctor if not better

Prepared by: [Name]

Home Care Guidance: Physician Directions to Patient/Parent

July 16, 2009 10:00 AM ET

You will probably be sick for several days with fever and respiratory symptoms.
Take Medications as Prescribed:

- Take all of the antiviral medication as directed.
- Continue to cover your cough and wash your hands often, even when taking antiviral medications, to prevent spreading influenza to others.
- Call the office if you (or your child) experience any side effects; i.e. nausea, vomiting, rash, or unusual behavior.
- Take medications for symptom relief as needed for fever and pain such as acetaminophen (Tylenol®) and ibuprofen (Advil®, Motrin®, Nuprin ®), and cough medicine. These medicines do not need to be taken regularly if your symptoms improve.
- Do ***not*** give aspirin (acetylsalicylic acid) or products that contain aspirin (e.g. bismuth subsalicylate – Pepto Bismol) to children or teenagers 18 years old or younger.
- Children younger than 4 years of age should not be given over-the-counter cold medications without first speaking with a health care provider.

Seek Emergency Care
If your child experiences any of the following:

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough

In adults, emergency warning signs that need urgent medical attention include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve but then return with fever and worse cough

Follow These Home Care Recommendations:

- Stay home for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer
- Drink clear fluids (such as water, broth, sports drinks, electrolyte beverages for infants) to keep from being dehydrated.
- Dishes can be done in dishwasher or with hot soapy water.
- Throw away tissues and other disposable items used by the sick person in the trash. Wash your hands after touching used tissues and similar waste.
- Have everyone in the household wash hands often with soap and water, especially after coughing or sneezing. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose and mouth. Germs spread this way.

Ohio Department of Health
VITAL STATISTICS

Reg. Dist. No. 18
Primary Reg. Dist. No. 1801
Registrar's No.

CERTIFICATE OF DEATH

Type or print in permanent blue or black ink

State File No.

83098

DECEDENT

1. Decedent's Legal Name(Include AKA's if any)(First Middle, LAST, suffix): SHESA DEAD
2. Sex: Female
3. Date of Death (Mo/Day/Year): June 09, 2009
4. Social Security Number: 888-88-8888
5a. Age (Years): 54
5b. Under 1 Year Months / Days
5c. Under 1 day Hours / Minutes
6. Date of Birth (Mo/Day/Year): February 13, 1955
7. Birthplace(City and State or Foreign Country): CLEVELAND, OHIO
8a. Residence State: OHIO
8b. County: CUYAHOGA
8c. City or Town: CLEVELAND
8d. Street and Number: 123 Smith Street
8e. Apt. No.:
8f. Zipcode: 44136
8g. Inside City Limits?: Yes
9. Ever in US Armed Forces?: No
10. Marital Status at Time of Death: Never Married
11. Surviving Spouse's Name (If wife, give name prior to first marriage):
12. Decedent's Education: BACHELORS DEGREE (E.G., BA, AB, BS)
13. Decedent of Hispanic Origin: No
14. Decedent's Race: White
15. Father's Name: WILLIAM LIVE
16. Mother's Name (prior to first marriage): EVA JONES
17a. Informant's Name: WILLIAM LIVE
17b. Relationship to Decedent: Father
17c. Mailing Address (Street and Number, City, State, Zip Code): 3939 Jones Street COLUMBUS, OHIO 43202
18a. Place of Death: Hospital - Inpatient
18b. Facility Name (If not Institution, give street & number): METRO HEALTH MEDICAL CENTER
18c. City or Town, State and Zip Code: CLEVELAND, OH 44109
18d. County of Death: CUYAHOGA

DISPOSITION

19. Signature of Funeral Service Licensee or Other Agent:
20. License Number (of licensee): 006969
21. Name and Complete Address of Funeral Facility: RIPEPI FUNERAL HOME INC 5762 PEARL RD PARMA, OH 44129
22a. Method of Disposition: Burial
22b. Date of Disposition: June 12, 2009
22c. Place of Disposition (Name of Cemetery, Crematory, or other place): Greenlawn Cemetery
22d. Location (City/Town and State): CLEVELAND, OH

REGISTRAR

23. Registrar's Signature:
24. Date Filed:
25a. Name of Person Issuing Burial Permit: DEAN, LEVORNE
25b. District No.: 1800
25c. Date Burial Permit Issued:

CERTIFIER

26a. Certifier (Check only one)
☐ Certifying Physician — To the best of my knowledge, death occurred at the time, date, and place; and due to the cause(s) and manner stated
☒ Coroner — On the basis of examination and/or investigation, in my opinion, death occurred at the time, date, and place; and due to the cause(s) and manner stated
26b. Time of Death: 0600
26c. Date Pronounced Dead (Mo/Day/Year): 06/09/2009
26d. Was case referred to coroner?: Yes
26e. Signature and Title of Certifier: M. D.
26f. License number: 35.067601
26g. Date Signed:
27. Name (Last, First, Middle) and Address of Person who Completed Cause of Death: MILLER, FRANK P, 11001 CEDAR AVE CLEVELAND, OH 44106

CAUSE OF DEATH

28. Part I. Enter the disease, injuries, or complications that caused the death. Do not enter the mode of dying, such as cardiac or respiratory arrest, shock, or heart failure. List only one cause on each line. Type or print in permanent blue or black ink.

		Approximate Interval Between Onset and Death
Immediate Cause (Final disease or condition resulting in death)	a. Pneumonia	2 DAYS
Sequentially list conditions, if any, leading to immediate cause. Enter Underlying Cause (Disease or injury that initiated events resulting in a death)	b. Due to (or as Consequence of) Influenza Type A (H1N1)	6 DAYS
	c. Due to (or as Consequence of)	
	d. Due to (or as Consequence of)	

Part II. Other significant conditions contributing to death but not resulting in the underlying cause given in Part I.

29a. Was An Autopsy Performed?: No
29b. Were Autopsy Findings Available Prior To Completion Of Cause of Death?: Not Applicable
30. Did Tobacco Use Contribute to Death?: No
31. If Female, Pregnancy Status: NOT PREGNANT WITHIN LAST YEAR.
32. Manner of Death: Natural
33a. Date of Injury (Mo/Day/Year):
33b. Time of Injury:
33c. Place of Injury (e.g., Decedent's home, construction site, restaurant, wooded area):
33d. Injury at Work?:
33e. Location of Injury (Street and Number or Rural Route Number, City or Town, State):
33f. Describe How Injury Occurred:
33g. If Transportation Injury, Specify:

HEA 2724 Rev. 01/07

Reg. Dist. No. 18
Primary Reg. Dist. No. 1801
Registrar's No.

Ohio Department of Health
VITAL STATISTICS

CERTIFICATE OF DEATH

Type or print in permanent blue or black ink

State File No.

83052

DECEDENT

1. Decedent's Legal Name (Include AKA's if any) (First Middle, LAST, suffix)		2. Sex	3. Date of Death (Mo/Day/Year)
IMA REALLY DEAD		Male	April 25, 2008

4. Social Security Number	5a. Age (Years)	5b. Under 1 Year: Months / Days	5c. Under 1 day: Hours / Minutes	6. Date of Birth (Mo/Day/Year)	7. Birthplace (City and State or Foreign Country)
888-88-8888	58			January 01, 1950	CLEVELAND, OHIO

8a. Residence State	8b. County	8c. City or Town	8d. Street and Number	8e. Apt. No.	8f. Zipcode	8g. Inside City Limits?
OHIO	CUYAHOGA	CLEVELAND	123 Smith Street		44136	Yes

9. Ever in US Armed Forces?	10. Marital Status at Time of Death	11. Surviving Spouse's Name (If wife, give name prior to first marriage)
No	Never Married	

12. Decedent's Education	13. Decedent of Hispanic Origin	14. Decedent's Race
DOCTORATE DEGREE OR PROFESSIONAL DEGREE	No	White

15. Father's Name	16. Mother's Name (prior to first marriage)
HESA DEAD	SHESA LIVE

17a. Informant's Name	17b. Relationship to Decedent	17c. Mailing Address (Street and Number, City, State, Zip Code)
HESA DEAD	Father	333 Jones Street CLEVELAND, OHIO 44123

18a. Place of Death	18b. Facility Name (If not Institution, give street & number)	18c. City or Town, State and Zip Code	18d. County of Death
Hospital - Inpatient	METRO HEALTH MEDICAL CENTER	CLEVELAND, OH 44109	CUYAHOGA

DISPOSITION

19. Signature of Funeral Service Licensee or Other Agent	20. License Number (of licensee)	21. Name and Complete Address of Funeral Facility
	006332	R A FRANKLIN INC MEMORIAL CHAPEL C/O UPS STORE SHAKER HEIGHTS, OH 44120-372

22a. Method of Disposition	22b. Date of Disposition	22c. Place of Disposition (Name of Cemetery, Crematory, or other place)	22d. Location (City/Town and State)
Burial	April 29, 2008	All Saints Cemetery	CLEVELAND, OH

REGISTRAR

23. Registrar's Signature	24. Date Filed

25a. Name of Person Issuing Burial Permit	25b. District No.	25c. Date Burial Permit Issued
DEAN, LEVORNE	1800	

CERTIFIER

26a. Certifier (Check only one)

- [X] Certifying Physician — To the best of my knowledge, death occurred at the time, date, and place; and due to the cause(s) and manner stated.
- [ ] Coroner — On the basis of examination and/or investigation, in my opinion, death occurred at the time, date, and place; and due to the cause(s) and manner stated.

26b. Time of Death	26c. Date Pronounced Dead (Mo/Day/Year)	26d. Was case referred to coroner?
1215	04/27/2008	No

26e. Signature and Title of Certifier	26f. License number	26g. Date Signed
M. D.	35.000000	April 27, 2008

27. Name (Last, First, Middle) and Address of Person who Completed Cause of Death
DOE, JOHN, 2222 Smith Street CLEVELAND, OH 44101

CAUSE OF DEATH

28. Part I. Enter the disease, injuries, or complications that caused the death. Do not enter the mode of dying, such as cardiac or respiratory arrest, shock, or heart failure. List only one cause on each line. Type or print in permanent blue or black ink.

		Approximate Interval Between Onset and Death
Immediate Cause (Final disease or condition resulting in death)	a. Respiratory Failure	2 DAYS
Sequentially list conditions, if any, leading to immediate cause.	b. Due to (or as Consequence of) Pneumonia	3 DAYS
Enter Underlying Cause (Disease or injury that initiated events resulting in a death)	c. Due to (or as Consequence of) Probable Influenza A (H1N1)	5 DAYS
	d. Due to (or as Consequence of)	

Part II. Other significant conditions contributing to death but not resulting in the underlying cause given in Part I.

29a. Was An Autopsy Performed?	29b. Were Autopsy Findings Available Prior To Completion Of Cause of Death?
☐ Yes ☐ No	☐ Yes ☐ No ☐ Not Applicable

30. Did Tobacco Use Contribute to Death?	31. If Female, Pregnancy Status	32. Manner of Death
☐ Yes ☐ Unknown ☐ No ☐ Probably	☐ Not pregnant within past year ☐ Pregnant at time of death ☐ Not pregnant, but pregnant within 42 days of death ☐ Not pregnant, but pregnant 43 days to 1 year before death ☐ Unknown if pregnant within the past year	☐ Natural ☐ Homicide ☐ Accident ☐ Pending Investigation ☐ Suicide ☐ Could not be determined

33a. Date of Injury (Mo/Day/Year)	33b. Time of Injury	33c. Place of Injury (e.g., Decedent's home, construction site, restaurant, wooded area)	33d. Injury at Work?
			☐ Yes ☐ No

33e. Location of Injury (Street and Number or Rural Route Number, City or Town, State)

33f. Describe How Injury Occurred:

33g. If Transportation Injury, Specify:
☐ Driver/Operator ☐ Pedestrian ☐ Passenger
☐ Other:

HEA 2724 Rev. 01/07

Ohio Department of Health
Office of Vital and Health Statistics
Pandemic Influenza Mass Fatality
Response Guidance Plan

Appendix V

Mortuary Affairs Branch – Job Action Sheets

INCIDENT COMMAND SYSTEM

ICS POSITION: INVESTIGATION AND RECOVERY TEAM GROUP SUPERVISOR

JOB ACTION SHEET

INVESTIGATION AND RECOVERY TEAM GROUP SUPERVISOR:

Established for non-hospital/medical treatment facility deaths.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.
2. Receives all reports for death related information from Call Center.
3. Ensures dispatch of appropriate resources to reported scenes of death.
4. Responsible for conducting scene investigations into the circumstances of death.
5. Responsible for notifying the NOK of death.
6. Responsible for collecting demographic data on the deceased, and reporting that data to the Investigative and family reunification unit.
7. Responsible for notifying and coordinating with primary care physicians for the completion of death certificates.
8. Responsible for reporting all recovered human remains to the Call Center's Investigative and Family Re-unification Unit.
9. Recovers the remains from the death scene and coordinates transportation services to the appropriate location.
10. Responsible for ensuring each human remain and personal effects bag is tagged with a unique identifier or full name and demographic information.

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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
Initial Commander:	Date/Time:
Relief Commander:	Date/Time:

	ACTIVITIES	TIME
01	**Recommended Staffing:** 1. Investigation and Recovery Unit 2. Search Team Leader 3. Evidence Specialists (Photographers and scribes) 4. Assistants to recover remains (one designated as Team Leader) 5. Safety Officer Assistant	
02	**Physical Considerations Equipment** 1. Radios or other communication equipment 2. Heavy work gloves (leather) 3. Latex or Nitrile gloves 4. PPE (level D) including eye protection (should meet ANSI 287.1) 5. Re-hydration supplies, drinking water and light food 6. Heavy boots (with steel toe/shank, water resistant) 7. Clip boards, pens, paper, and appropriate forms 8. Camera kits with film, batteries or battery chargers, memory cards as appropriate 9. GPS Unit 10. Laptop PC with windows and Microsoft Office Suite 11. Tyvex Suits 12. Toe tags and permanent markers or ODH EMS triage tags with bar coded serial numbers	
03	**Areas of Concern:** 1. For bodies found out in the open, there are no concerns for government agents entering public domain. It should be noted that entering of private homes or businesses pose legal issues which should be discussed with the legal department. 2. Even during a known and documented Pandemic, deaths must still be investigated by trained individuals to determine if death was caused by natural disease (e.g. no violence, trauma, suspicious circumstances, etc.). This function is normally conducted by police agencies at the local level. Local police investigative staff should be included in the local planning process.	

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	3. For bodies found in homes, businesses and other private property, a search must be done by an authorized agent, normally law enforcement. If the government, or a government authorized agent, enters such a facility, plans should be in place to ensure the property is secured or turned over to a legally authorized agent of the victim. Local locksmiths may be useful for entering and securing private property. It is recommended the locality's attorneys be involved in the planning process for recovery team policies. 4. Each remain should have an initial examination to ensure there are no apparent injuries on the deceased. If injuries are found, the police should be notified immediately (if not already present) and the scene should be protected from further disruption or intrusion. 5. Each decedent should have an individual case file (or investigative report as done by police) which is started in the "field" and retained by the local government. As part of the case file, field notes should be taken in all circumstances. The notes should allow for any agency to have enough information to allow for a re-construction of the circumstances and event in case the death becomes suspicious or questioned at a later date. At a minimum, the following information should be completed: □ First, middle, last name & suffix □ Sex, race/ethnicity, color of eyes, (hair, height, and weight if unidentified) □ Home address, city, state, zip code, & telephone number □ Location of death and place found (place of origination of the body before movement to the hospital or other facility) □ Place of employment and employer's address □ Date of birth, social security number (or driver's license number) & age □ Next-of-Kin (or witness) name, contact number & address	

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	□ Name of primary care physician as indicated by family, witnesses, bills or insurance documents. □ List of existing prescriptions found at the scene and the name of the physician who prescribed them. □ Witness statements and all their contact information. □ Names and contact information for investigators, drivers, or other "response" personnel for each case. □ Complete list of personal effects (with photographic documentation if possible); all which accompany remains to a governmental morgue. 6. Hospital and/or medical treatment facility deaths. a. Decedents who die in medical treatment facilities will normally have a confirmed identification. However, since families and friends do share insurance company cards with each other, and since unknown individuals may come into a hospital, hospitals should ensure at least a government issued photographic identification confirmation process is in place before a death certificate is certified by a primary care physician. b. Treating physicians in the medical treatment facilities should sign the death certificates for their patients and release the death certificates with the remains to the family's funeral home with the body within 24 hours of death. c. To ensure appropriate death certification occurs at medical treatment facilities, a position could be established with the sole purpose to ensure death certificates are completed and certified.	
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INCIDENT COMMAND SYSTEM

ICS POSITION: STORAGE MORGUE TEAM

JOB ACTION SHEET

Storage Morgue Team: Responsible for the set-up and management of the storage morgue for the locality or region. Receives, stores, and releases human remains and their personal effects to the legal next of kin (or their funeral home), or legally authorized person(s)/agency for final disposition.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch director.
2. Checks the documentation on remains, personal effects and accompanying paperwork to ensure all data is consistent for remains.
3. Maintains a complete log of all remains and personal effects being stored and released from the facility.
4. Documents all human remains and accompanying personal effects and documentation.
5. Checks and logs each toe tag on all remains collected and associated personal effects.
6. Receives and files the signed NOK's release of human remains and funeral home contract forms.
7. Ensures each remain and each bag of personal effects are released with the funeral home or family signature. Maintains a file of all signed release documents.

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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
Initial Commander:	Date/Time:
Relief Commander:	Date/Time:

	ACTIVITIES	TIME
01	**Recommended Staffing** 1. Storage morgue manager 2. Refrigeration specialists 3. Facility maintenance team (with one facility manager) 4. Admitting team and documentation specialists 5. Releasing supervisor 6. Body escorts	
02	Physical Considerations Equipment Tables 2. Chairs 3. Laptops with Windows XP or greater and Window's Office Suite Software 4. Telephones 5. Fax machines 6. Paper 7. Gloves 8. N95 masks 9. Tyvex suits- various sizes 10. Human remain pouches in various sizes in case of damage to existing bags 11. Gurneys, church carts or litters to move remains 12. File cabinets 13. Log books 14. Photocopier 15. Bar code label makers and readers	
03	**Planning Considerations:** 1. Additional temporary cold storage facilities may be required during a pandemic for the storage of corpses prior to their transfer to funeral homes. Cold storage facilities require temperature and biohazard control, adequate water, lighting, rest	

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	facilities for staff, and office areas and should be in communication with patient tracking sites and the emergency operations center. A cold storage facility must be maintained at 34 – 37 ^{o} F. However, corpses will begin to decompose in a few days when stored at this temperature. 2. If the legal NOK is not going to have the remains cremated, plans to expedite the embalming (if desired by the NOK) process should be developed since, in the case of a pandemic, bodies may have to be stored for an extended period of time. In counties where a timely burial is not possible due to frozen ground or lack of facilities, corpses may need to be stored for the duration of the pandemic wave (6 to 8 weeks). 3. The ODH recommends communities work together in a regional manner. This is especially true when identifying and acquiring refrigeration resources, as there will be high demand and few resources. Each region (or county) should make pre-arrangements for cold storage facilities based on local availability and requirements. The resource needs (e.g. human remains pouches) and supply management for cold storage facilities should also be addressed. The types of temporary cold storage to be considered may include refrigerated trucks, cold storage lockers or refrigerated warehouses. Refrigerated trucks can generally hold 25-30 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 but may be required (ensure enough staffing is available to avoid injuries). These shelves will be contaminated with biological material and will require special handling after the event. To reduce any liability for business losses, using trucks with markings of a supermarket chain or other companies should be avoided, as the use of such	

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	trucks for the storage of corpses may result in a negative image of the company and unwanted damage to their business. 4. Using local businesses for the storage of human remains is not recommended and should only be considered as a last resort. The post-pandemic implications of storing human remains at these sites can be very serious, and may result in negative impacts on business with ensuing liabilities. 5. There should be no media, families, friends or other onlookers permitted on the temporary morgue site. Families should make arrangements with their funeral homes to conduct viewings of the remains at the home or medical facility of death, prior to removal, at the grave site or at the crematory. (If responders can take a facial photograph, when appropriate for viewing, and keep the photo in the case files, the photo could be utilized to meet families' needs of viewing or viewing for identification purposes.)	
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
INCIDENT COMMANDER (CONTINUED)	DATE:

	ACTIVITIES	TIME
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INCIDENT COMMAND SYSTEM

ICS POSITION: CALL CENTER/PUBLIC INQUIRY LINES GROUP SUPERVISOR

JOB ACTION SHEET

Call Center/Public Inquiry Lines Group Supervisor: Responsible for the establishment of call-in centers for the reporting of the dead and inquiries into the welfare of individuals.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.

2. Receives all reports for missing persons and death related information from citizens, hospitals, and other medical treatment facilities as well as vital records offices.

3. Ensures Investigation and Recovery Teams receive all reported scenes of death information.

4. Ensures the completion of all required reports and maintenance of records especially all missing person's reports which are required to be maintained by law enforcement in accordance with Ohio law.

5. Collects all reports of patient admissions and transport for the purposes of clearing the official missing persons list and the reunification of family members.

6. Supports the investigative missing persons and family reunification supervisor with data, personnel and records maintenance.

B. Some recommendations to consider:

1. A separate phone line for missing persons and reports of deaths may be utilized to free 911 operators for live safety activities.

2. Police have the knowledge, skills and expertise to manage the missing persons

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units established. They also have a legal responsibility to take reports of missing children without delay, enter the information into the LEADS system which transfers information to the Ohio Missing Children's Clearing House managed by the Ohio Attorney General's Office.

3. Hospitals and other established in-patient medical treatment facilities should be encouraged to visualize patients official government identification cards before admission or treatment, and to report their patients by name and other data to the call center. By centralizing this function, hospitals could be assisted in reuniting families, and notifying the NOK of illness/death.

PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
Initial Commander:	Date/Time:
Relief Commander:	Date/Time:

	ACTIVITIES	TIME
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
INCIDENT COMMANDER (CONTINUED)	DATE:

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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
INCIDENT COMMANDER (CONTINUED)	DATE:

	ACTIVITIES	TIME
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DATE_____ TIME_____RECEIVED BY_____

INCIDENT COMMAND SYSTEM

ICS POSITION: MORTUARY AFFAIRS BRANCH DIRECTOR

JOB ACTION SHEET

Mortuary Affairs Branch Director: Responsible for managing all aspects of the Mortuary Affairs Branch mission from the time of activation through the return to normal operations including all resources (e.g., personnel and equipment). Reports directly to the Operations Section Chief.

A. Description of Duties

1. Manages and ensures proper and timely completion of the overall MA function of identification and mortuary services for deceased victims. Interacts with the Lead Law Enforcement Agency and Planning Section Chief.

2. Ensures that supplies and support necessary to accomplish MA mission objectives and activities are identified, coordinated with the Incident Command System and made known to the Emergency Operations Center at both the local and state level.

3. Supervises subordinates.

4. Interacts with the Lead Law Enforcement Agency and the private entities of the funeral services in the community.

5. Ensures all coroner cases encountered are reported to the local coroner.

6. Ensures the completion of all required reports and maintenance of records.

7. Will coordinate with the PIO for the incident concerning all press releases about the deceased.

8. Participates in the after action review.

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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
Initial Commander:	Date/Time:
Relief Commander:	Date/Time:

	ACTIVITIES	TIME
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
INCIDENT COMMANDER (CONTINUED)	DATE:

	ACTIVITIES	TIME
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
INCIDENT COMMANDER (CONTINUED)	DATE:

	ACTIVITIES	TIME
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DATE_____ TIME_____RECEIVED BY_____

INCIDENT COMMAND SYSTEM

ICS POSITION: TRANSPORATION GROUP

JOB ACTION SHEET

TRANSPORTATION GROUP: Responsible for the resources and personnel required for the pick-up and transportation of human remains from places of death to the cold storage facilities or the Funeral Homes.

A. Description of Duties

1. Reports to the Mortuary Affairs Branch Manager.
2. Acts on the requests from the Investigation and Recovery Team Director and/or the hospital morgue facilities.
3. Ensures dispatch of appropriate resources to provide respectful removal of human remains.
4. Documents all human remains and accompanying personal effects and field paperwork.
5. Checks and logs each toe tag on all remains collected and items of personal effects.
6. Transports and delivers remains, personal effects and documentation to the appropriate morgue.
7. Closely coordinates with the Logistics Branch to ensure adequate supplies are readily available.

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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**
Initial Commander:	Date/Time:
Relief Commander:	Date/Time:

	ACTIVITIES	TIME
01	**. Recommended Staffing** 1. Transportation group supervisor 2. Multiple teams of 3-Transportation Unit Specialists (one designated as Team Leader) 3. Transportation Dispatcher 4. Motor Vehicle Division Supervisor 5. Drivers	
02	Physical Considerations Equipment 1. Radios or other communication equipment 2. Heavy work gloves (leather) 3. Latex or Nitrile gloves 4. PPE (level D) including eye protection (should meet ANSI 287.1) 5. Re-hydration supplies, drinking water and light food 6. Heavy boots (with steel toe/shank, water resistant) 7. Clip boards, pens, paper, and appropriate forms 8. Human Remains Pouches of various sizes (infant, child, adult, adult X-Large) 9. Toe tags or EMS triage tags 10. Motor vehicles for remains transport (vans, station wagons, etc.) 11. Waterless hand sanitizer 12. Permanent markers 13. “Church carts” or litters for body removal	
03	**Areas of Concern:** 1. If the family of the deceased is available, they can identify which funeral home they wish to hire for their services. If possible, that funeral home or its sub-contractor will provide transportation services from the place of death to the appropriate morgue facility. 2. If NOK is not available, cannot be identified, claim to be	

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	indigent or if they cannot decide on a funeral home, communities, usually through the local health department, have contracts/agreements with licensed funeral directors to handle the final disposition of a decedent. In a pandemic event, there is a greater chance that NOK will be difficult to find and contact because they may have been affected negatively by the pandemic. 3. In a pandemic event, funeral homes and transporters could be overwhelmed and may require augmentation from the local or regional government. 4. If vehicles are to be used for collecting remains certain, guidelines should be observed: •The vehicle shall have all markings removed if it is a commercial business. • The vehicle shall be covered so the people or the press cannot see into the bed of the vehicle. •Bodies shall not be stacked in the vehicle under any circumstances. • The vehicle must be refrigerated. Air conditioning will not suffice. • Loading and unloading of the vehicle shall be accomplished discretely. Tarps or other ways of blocking the view may be used. The top must also be covered to prevent observance from the air. • The interior area used to store bodies should have a double plastic lining • After use, or if the plastic lining is grossly contaminated and must be changed out, disposal should be in accordance with the Occupational Safety and Health Administration's Blood borne Pathogens Standard (29 CFR 1910.1030). • Shelving should not be made of wood or materials where bodily fluids may be absorbed. Metal or	

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	plastic shelving that may be cleaned off is acceptable. A method of securing the body within the shelf should be required. 5. Persons coordinating transportation should set up a schedule with hospitals for remains transfer to the storage morgue. Schedules should be set up and operate on a 24 hour basis. State and Federal Department of Transportation (DOT) Requirements must be satisfied for the transportation of human remains. 6. Death certificates and burial transit permits will most likely be required for transportation across state lines and will require approval of receiving state(s). Transportation Across international lines (Canada and Mexico) may require State Department approval and the receiving nation's approval. 7. Quarantine measures may affect the movement of human remains. For example, can remains move into, through, or out of a quarantined area? If movement is prohibited, then temporary storage must be developed. While quarantine is designed to protect public health, plans must still be made for removing the dead.	
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**	
INCIDENT COMMANDER (CONTINUED)	DATE:	
ACTIVITIES		TIME
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PUBLIC HEALTH EMERGENCY CHECK LIST	**INCIDENT COMMANDER**	
INCIDENT COMMANDER (CONTINUED)	DATE:	
ACTIVITIES		TIME
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DATE_____ TIME_____RECEIVED BY_____