

UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS

SUBJECT: MASS FATALITY PLAN

Procedure No: EP-08-012

PROCEDURE STATEMENT

This plan is guidance in the disposition of large numbers of human remains from University of Toledo Medical Center and Clinics as a result of a natural disaster, epidemic, pandemic or other catastrophic event.

PURPOSE OF PROCEDURE

The purpose of this plan is to outline the care and disposition of large numbers of human remains from University of Toledo Medical Center and Clinics.

PROCEDURE

- A. The coroner of Lucas County will be the lead agency in the management of human remains, unless the remains have been released as per the Coroner's protocols
- B. All human remains will be treated with respect and professionalism
- C. When death is the result of a disaster, the body does not pose a risk for infection (typically)
- D. Every effort must be taken to identify the bodies. As a last resort, unidentified bodies should be placed in individual niches or trenches, which is a basic human right of the surviving family members
- E. Mass cremation of bodies should never take place when this goes against the cultural and religious norms of the population. Cultural Considerations to be made should include: immediate cleansing of bodies and burial prior to sunset.
- F. Victims should never be buried in common graves
 1. To prepare for the possibility of mass fatalities during influenza pandemic, UTMC must:
 - a. Reassess current capacity for refrigeration of deceased persons.
 - b. Current capacity in the Hospital Morgue refrigeration unit is 4 adult persons. Additional space can be obtained in the School of Medicine anatomy lab cold storage (BHS 040B) consisting of 102 persons (17 units with 6 racks each) and of 48 persons (2 walk-in coolers each with space for 24 bodies) in the Simulation Center. Embalmed storage is available for 50 bodies in BHS 030. Temporary refrigeration or freezer units are the best solution for quick preservation of human remains.
 2. Primary Morgue overflow will be into refrigerated mobile units such as trailers or refrigerated rail containers that are commercially available. Remains will be stored on the floor of each trailer. Maximum capacity is 25 remains per trailer and 45 per rail car, as directed by coroner's office. The rail cars can go on the rail siding at the east side of UT-HSC campus. The rail cars and trailers that will be held on-site will be fueled by diesel.
 3. Secondary Morgue overflow shall be in a secure area where the remains can be covered in ice, as directed by the coroner's office.
 5. Remains that are contaminated by a chemical, biological or radiological agent will not be decontaminated at the hospital.
 6. Contaminated remains will be placed inside two body bags and marked with the appropriate warning label i.e., chemical, biological or radiological, and a description of the contaminate and the concentration.
 7. Remains deemed contaminated will be stored separate from other remains.
 8. All remains unless otherwise noted are to be managed using standard precautions as outlined by the blood borne pathogen plan.
 9. Determine the scope and volume and create a stockpile of supplies (e.g., body bags) needed to handle an increased number of deceased persons. There are 100 body bags in disaster supplies.

10. Once a determination is made, the Support Branch Manager who will be from Pastoral Care will need to request that the Logistics Chief have the cart delivered to the Cafeteria. The kit will be stored in the basement of the Emergency Department.
11. The following are materials that may be needed for the implementation of this plan:
 - a. Body bags (100) ED basement
 - b. Patient triage tags or other identifier tags (50)
 - c. Refrigerated trailers (1-5), need to be obtained via logistics
 - d. Refrigerated Rail Cars (1-5), need to be obtained via logistics
 - e. Electrical hook-ups for trailer and containers (as needed)
 - f. Fork lift (1), Dowling Hall Dock 5
 - f. Back hoe tractor (1-2), Facilities Support Building

SCALED PROVISIONS

- A. Small Scale Morgue Operations less than 100 bodies
 1. Use regular facilities such as anatomy and the cold rooms
 2. Remove racks in room if necessary and stack on floor
 3. Bodies are to be tagged and managed as per normal procedures
 4. UTMC Clinical Pathology is to be the primary responsible department
 5. UTMC Clinical Pathology staff should solicit help from other departments to expedite the removal of remains from the hospital to mortuaries or the coroner.
- B. Medium Scale operations 100-1000 bodies
 1. Refrigerated trailers are to be obtained by Materials management, or through the local EMA
 2. Trailers are to maintain temperature below 32 degrees F.
 3. Trailers are to be stationed in a secure but close area to the hospital.
 4. Examples are: Loading Dock, Fenced area of the Facility Support Building, or other similar area
 5. Trailers will have 24-hour security
 6. Bodies are to be placed within the trailer in body bags or similar container.
 7. Bodies are to be tagged and managed as per normal procedures
 8. UTMC Clinical Pathology is to be the primary responsible department
 9. UTMC Clinical Pathology staff should solicit help from other departments to expedite the removal of remains from the hospital to mortuaries or the coroner.
 10. Bodies are not to be stacked upon each other.
- C. Large Scale Morgue Operations (Mass Burial)
 1. Identify the dead, record the identification or collect and record evidence such as DNA that may lead to later identification of the bodies that may have to be buried in an unidentified state.
 2. Receive, label and impound property of the dead. Use the property as necessary for identification of the dead, and hold the property for the next of kin or the Public Administrator.
 3. Keep records of names and numbers of dead. It is essential to maintain a postmortem board containing all known information regarding all remains or parts of remains that may be identifiable (use OH Trac software).
 4. Receive telephone inquiries from or solicit relatives and friends of the dead or missing persons to assist in the identification. This function may be handled by American Red Cross personnel or volunteers who have been trained to provide relief for survivors in times of disaster. Members of the clergy within an area may provide assistance in dealing with relatives and friends, as well as assisting in notification of death.
 5. File and record emergency death certificates.
 6. Photograph, x-ray and chart teeth, determine the cause of death.
 7. Release bodies to mortuaries or a transportation service for transport to burial sites.
 8. Obtain all the necessary equipment, supplies and personnel to accomplish these tasks.

MASS BURIAL PLAN

- A. To prepare for the possibility of mass fatalities during influenza pandemic, hospitals must:
 - 1. Assess current capacity for refrigeration of deceased persons;
 - 2. Review current disaster plan for managing remains and temporary morgue overflow;
 - 3. Modify plans to address potential need to manage contaminated remains for days;
 - 4. Determine the scope and volume and create a stockpile of supplies (e.g., body bags) needed to handle an increased number of deceased persons.
- B. Mass burial may become necessary when the number of victims becomes a public health hazard and the dead cannot be:
 - 1. Adequately refrigerated or embalmed to prevent decomposition.
 - 2. Processed and identified.
 - 3. Released to the next of kin.
 - 4. Transported to and/or cared for by cemeteries, mausoleums, crematoriums, etc.
- C. The decision to begin mass burial must be made by the Coroner and County Health Commissioner in conjunction with the State Department of Health Services. Coordination also should be achieved with State OES, the County Emergency Operations Center, campus officials, city officials and religious leaders within the community.
- D. The site of mass burial also must be agreed upon by the above agencies, taking into consideration the number and location of dead to be buried. Ideally, an existing cemetery would be the most logical location of mass burial. The next consideration should be given to federal-, state-, county- or city-owned property or rights-of-way, such as:
 - 1. Parks and recreational areas;
 - 2. Flood control basins (weather permitting);
 - 3. Sides of freeways;
 - 4. Areas beneath high power lines.
- E. The final consideration should be given to privately owned property (except cemeteries), preferably large open fields such as are found in industrial or agricultural areas, etc.
- F. Access and egress also are important factors, along with the type of terrain and the need to facilitate later exhumations.
- G. These exhumations will be ordered to attempt to identify unknown bodies and for the re-interment of those identified by the next of kin in the cemetery of their choice. Bodies remaining unidentified must still be re-interred in a designated cemetery.
- H. Those bodies designated for mass burial should be processed to ensure that:
 - 1. Body has been rechecked for any type of jewelry or other item that may assist in identification.
 - 2. Postmortem information has been properly documented, especially scars, tattoos, deformities and other physical descriptions.
 - 3. Fingerprints have been taken; if not, fingers should be rechecked and prints taken if possible.
 - 4. Mandible and maxillary have been removed and placed into a properly marked container.
 - 5. DNA samples obtained
 - 6. An additional body tag has been attached, properly filled out and placed into a small, sealed plastic bag.
 - 7. If remains are not arterially embalmed, the body has been wrapped in celu-cotton or other absorbent material.
 - 8. Embalming fluid (2 to 3 gallons cavity fluid or 10% formalin) has been poured over remains.
 - 9. Body has been wrapped in plastic sheeting or body bag and tied/zipped to prevent leakage.
 - 10. A tag has been attached to the bag containing the body.
 - 11. If possible, body has been placed in a wooden or metal container for burial; that container has been marked (spray painted) with corresponding identification numbers.
 - 12. Exact location of each body buried must be recorded on grid maps, including dates, times and other information necessary for exhumations at a later time. Each burial site also must be marked (staked) with the correct corresponding identification numbers.

COUNSELING SERVICE

An information and/or counseling service staffed by American Red Cross workers, mental health workers, clergy and others experienced in Coroner activities should be established for relatives and friends of missing or deceased persons.

RELATED UTMC DOCUMENTS

- A. Code Yellow-Mass Casualty Plan
- B. Emergency Operations Plan
- C. Infectious Disease Agent Plan

Source: Safety & Health Committee

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