# Forensic Sciences Resources

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### **Trained Field Teams**

- Mass fatality event
  - ♦ Pandemic events?
- ♦ Tasks of trained field teams
  - ♦ Documentation of decedent location GPS

  - ♦ Prepare for storage and transport
  - Trained in the various processing procedures and proper chain of custody methods



#### **SMORT**

- - Main component of field teams
- Activated whenever a catastrophic event poses a threat having the potential to produce a disaster or major emergency situation resulting in mass fatalities

#### **Trained Field Teams**

#### **\$SMORT**

- Assist the local Coroner and ADFS in decedent recovery at the scene, and mobile work site and autopsy site duties
- Actual duties will vary depending on the nature of the event, the necessity of decontamination, number and condition of the decedents, and the distance between the scene, mobile work site, and autopsy site

### **Trained Field Teams**

- SMORT team members will be trained in the necessary techniques to perform all potential duties.
  - Certified by multiple agencies in various aspects of their expected duties.
  - SADFS will assist with training.

### Augmenting Field Team Staff

- Numbers needed?
  - Nature of event
  - ∜Size of event

  - **∜**Weather
- Sufficient to allow rotation of staff
- Law Enforcement, Funeral Home staff, and Emergency Response Personnel



### Augmenting Field Team Staff

- **ADFS** 
  - Sequested by Coroner & District Attorney

  - ♦ One or two staff Pathologist, Death Investigator, Autopsy Technician
- - Should be requested if the need is greater than SMORT & ADFS can manage.

#### Mobile Work Sites

- - \$Pandemic events?
- Initial processing of decedents after recovery and scene documentation
- Sextent of the initial processing
  - Necessity of decontamination
  - Number and condition of the decedents
  - Size of trained field team +/- assistance



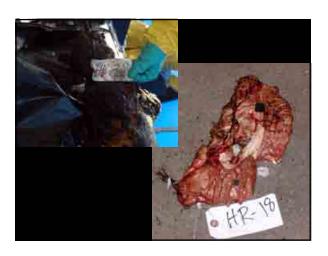
### Mobile Work Sites

- ♦The initial process may include
  - ♦ Photography
  - Documentation of clothing and personal effects
  - Fingerprinting
  - Sevidence processing and documentation
  - ⋄Possibly DNA card collection



#### Mobile Work Sites

- The decedents will be labeled with a unique identifying number
  - ∜Single recovery team HR01
  - ∜Multiple recovery teams HRA01
- Place in body pouches for storage and transport to the one of the ADFS Regional Morgues



#### Mobile Work Sites

- - Without cold storage decomposition advances rapidly
  - Within 12 to 48 hours in hot climates, decomposition will be too advanced to allow facial recognition
  - Cold storage slows the rate of decomposition and preserves the body for identification.
  - Refrigeration between 2°C and 4°C is the best option.



### Mobile Work Sites

- **\$Logistical issues** 
  - ♦ Time delays
  - Sufficient amount of necessary supplies
  - ♥Decedent storage at scene
  - \$Transportation of decedents to autopsy site
  - ∜Food
- Soverwhelming event DMORT

# State Morgue - Autopsy Sites

SADFS has three fixed morgue sites with various capabilities that will manage up to a maximum of 30 decedents before outside assistance will be necessary.

∜Huntsville

∜Storage – 4 decedents

Autopsy – 1 case

**∜**Montgomery

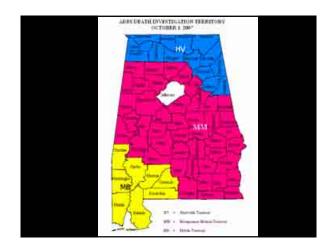
∜Storage – 25 decedents

Autopsy – 5 cases

**∜**Mobile

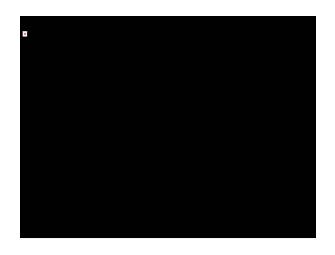
Storage − 15 decedents

Autopsy – 5 cases















### State Morgue – Autopsy Sites

- - ♥ Decedent storage
  - ⋄Time delay in team member assembly
  - Time delay in receiving antemortem decedent information

  - ∜Food



### State Morgue – Autopsy Sites

- SAssistance SMORT may be requested to provide assistance at the morgue
  - ♦ Decedent handling
  - **\$Photography**
- Soverwhelming event
  - DMORT will be requested if the need is greater than SMORT & ADFS can manage.

#### **Protection of Staff**

- ♦ Pandemic event
  - Soloves when touching decedent and contaminated items
  - Mask and eye protection when potential to generate splashes or sprays of body fluids
  - Wash hands after decedent contact



#### Protection of Staff

The recovery of bodies from confined, unventilated spaces should be approached with caution. After several days of decomposition, potentially hazardous toxic gases can build-up. Time should be allowed for fresh air to ventilate confined spaces.

#### Protection of Staff

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- Victims are normally killed by injury, drowning, or fire
- Victims are not likely to be sick with epidemic-causing infections (i.e., plague, cholera, typhoid, and anthrax)
- Few victims will have chronic blood infections (hepatitis or HIV), tuberculosis, or diarrheal disease
- Most infectious organisms do not survive beyond 48 hours in a dead body. An exception is HIV which has been found six days postmortem

#### Protection of Staff

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- Field teams work in hazardous environments (e.g., collapsed buildings and debris) and may also be at risk of injury and tetanus
- Team members handling human remains have a risk through contact with blood and feces (bodies often leak feces after death) from the following
  - Hepatitis B and C, HIV, Tuberculosis, Diarrheal disease



#### Protection of Staff

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- Anyone handling a decedent or evidence at the scene, mobile work site, or state morgue <u>must</u> wear the minimum protective gear at all times
- Protective gear for the scene and mobile work site to be provided by either State Emergency Management Agency &/or SMORT

#### Protection of Staff

#### ♦ The minimum protective gear

- ♦Shoe covers or impervious boots
- Face masks are unnecessary, but should be provided when there is a potential to generate splashes or sprays of body fluids



#### Protection of Staff

- Additional protective gear will be directed by Emergency Response Personnel
- - Adequate amount of different sizes of protective gear at the scene, mobile site, and autopsy site
  - ♦ Proper training in wearing protective gear
  - ♦ Disposal of used protective gear

#### **Documentation**

- ♦ Pandemic event
- - Sevent information will be the same
  - SAgreed upon time of incident
  - Substitution Agreed upon time of death for all decedents that did not survive initial event

#### **Documentation**

- Field team will document the necessary decedent information at the scene with the assistance of first responders and Law Enforcement.
- Coroner and Law Enforcement Agency will provide the necessary event and decedent information to complete the ADFS Report of Death Investigation Form (DFS-18).

#### **Documentation**

- The decedent's unique identifying number will serve as reference point
- Antemortem information collected for identification will be assigned a unique identifying number (i.e. MP01)
- Active spreadsheet to follow and ultimately link the decedent and missing person into one case file with unique case number



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### **Body Identification**

- ♦ Pandemic event
  - Identification will start with the local Law Enforcement and Coroner.
  - ♦ If additional assistance is requested, then ADFS will assume responsibility
- Mass fatality event
  - Method of identification of decedents will be determined by the state of the decedents at the time of examination, both at the mobile work site and autopsy site

### **Body Identification**

- Methods of identification used will include but not limited to:

  - ♦ Dental radiograph/chart comparison

  - **♦DNA** comparison
- General body stature and personal effects used for preliminary identification

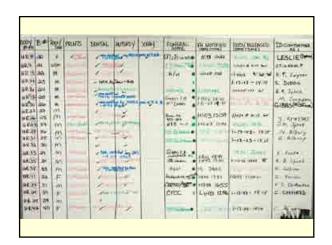
### **Body Identification**

- Shocal Law Enforcement will be required to obtain antemortem samples for the comparison process
  - ∜Fingerprints
  - ♦ Dental records
- Unique identifying number assigned



### **Body Identification**

- Process may begin at the mobile work site depending on the necessity of decontamination and number and condition of the decedents
- Process will include documenting clothing and personal effects, taking fingerprints, and identification photographs
- ♦DNA samples may be taken



## **Body Identification**

- Process will be completed at the autopsy site





### **Body Identification**

- - Time frame from event to final identification is dependent on

    - Initial processing time
    - ♦ Decedent examination time

    - ⋄ Time for actual identification process

#### Conclusion

- ♥Pandemic event

  - SADFS assist identification issues
- - - \$Assisted by local personnel & ADFS
  - Mobile work site
    - ∜Initial processing of decedents
    - Sextent determined by event
    - Storage of decedents

### Conclusion

- - State morgue/autopsy site
    - Main work site for decedent examination and identification
    - SADFS has three fixed sites with varied capability
    - ∜SMORT to assist
  - Staff protection
    - ∜Risk from environment and decedents
    - ∜Minimum gear to be augmented as needed
    - ⇔Hand washing!

#### Conclusion

- - ♦ Documentation

    - Decedent information vs. missing person information
  - - ∜Mobile site vs. Autopsy site

