This course was developed by the American College of Emergency Physicians (ACEP) in conjunction with the U.S. Department of Homeland Security (DHS) under the 2005 Competitive Training Grant Program to assess and enhance health care facilities’ preparedness and response to disasters (natural and technological). The program will strengthen the preparedness capabilities of local health care providers, as directed in Homeland Security Presidential Directive 8 (HSPD-8).
Healthcare facilities must be ready to tackle anything that comes their way. In times of disaster, whether natural or technological, facilities must remain open, operational, and continue carrying out their functions. At times, the situation may escalate to a level that endangers the health and/or safety of the facility’s patients, staff, visitors, and physical plant. When this occurs, evacuation of the endangered areas is necessary. Safety and continuity of care among evacuees during a disaster depend on planning, preparedness, and mitigation activities performed before the event occurs. At the completion of the course, hospitals and other healthcare providers with inpatient or resident beds will have basic training and tools to develop an evacuation plan.

This awareness level course takes the participant through the stages of preparing for a facility evacuation. It begins by performing an assessment of possible vulnerabilities and the resources available to a facility. Next, the course walks the learner through the development of a functional plan for a healthcare facility, and identification of key personnel positions implemented when a facility evacuates and the roles and responsibilities of each. The course concludes by addressing recovery issues, both plan development and operational. Case studies to illustrate key course topics.
LESSON ONE: Assessing Risks
Objectives

- Upon completion of this lesson, the participants will be able to identify three (3) policies or practices that can be put in place to decrease a facility’s overall vulnerability.

Terminal Learning Objective (TLO):
- Upon completion of this lesson, the participants will be able to identify three (3) policies or practices that can be put in place to decrease a facility’s overall vulnerability.

Enabling Learning Objectives (ELO):
- Upon completion of this lesson, the participants will be able to identify the two (2) main types of mitigation activities with 100% accuracy.
- Upon completion of this lesson, the participants will be able to identify three (3) ways a hazard vulnerability analysis contributes to the effectiveness of mitigation activities with 100% accuracy.
- Upon completion of this lesson, the participants will be able to list at least five (5) components of an effective community disaster preparedness assessment with 100% accuracy.
- Upon completion of this lesson, the participants will be able to describe how Memoranda of Understanding (MOUs) can augment response resources with 100% accuracy.
Hazard Vulnerability Analysis (HVA)

- Perform facility HVA
  - Identify potential hazards, threats and adverse effects
  - Use the Community Healthcare Disaster Preparedness Assessment Tool
  - Assess impact of incidents on facility
- Collaborate with community
  - Identify common vulnerabilities
  - Plan ways to mitigate

When done correctly the hazard vulnerability analysis should identify the major weaknesses in your facility and the surrounding area.

The Community Healthcare Disaster Preparedness Assessment Tool (found at www.acep.org/CHDPA) can be used as resources to clarify potential hazards and threats. The tool include components such as:
- Infrastructure and Logistics
- Preparedness Training
- Incident Management System
- Continuity of Operations
- Mutual Aid Agreements
- Alternative Care Sites

The commonalities from your facility's analysis, local analysis, and regional/state analysis are the areas that should be high on your list of priorities to address. Working together with your established community partners, you can address these problems through planning and mitigation efforts.

It is important to note that agencies should each conduct their own HVA's (independently from each other), and compare results once the analysis is complete. If agencies share common vulnerabilities, they
Mitigation involves any activities that reduce or eliminate the impact of an incident and can either be structural or non-structural. Mitigation can be implemented before, during, or after an incident occurs.

**Structural mitigation** entails making physical changes, also known as “hardening”, to reduce the risks associated with a given incident.

Examples of structural mitigation include, keeping critical resources in elevated locations to ensure their safety in a flooding event, installing fire proof doors to protect areas and prevent the spread of a fire in your facility, and constructing ‘safe rooms’ where patients and staff can congregate while waiting to be evacuated.

**Non-structural mitigation** is achieved through policy development and implementation, including community integration.

For example, the fire doors that we installed in our structural mitigation example do us no good if they are left open, so we implement a policy that doors are to be kept close at all times. Other forms of non-structural mitigation include the implementation of a facility evacuation plan, and more importantly drilling the plan so that all involved are comfortable with their responsibilities.

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<th>Types of Mitigation</th>
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<tr>
<td><strong>Structural</strong></td>
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<td>– Physical changes to reduce risks</td>
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<tr>
<td><strong>Non-structural</strong></td>
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<td>– Policies and procedures</td>
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<td>– Training and exercises</td>
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Effective mitigation is also dependent on community involvement. Healthcare facilities are integral parts of their local communities, especially in times of disaster. This is a key point to keep in mind when developing your facility’s evacuation plan. Your local office of emergency management might already have plans in place involving your facility and its expectations in response to an incident. When developing your facility’s plans, it is very important to ensure that the facility’s plans fit into the community’s plans. This can be accomplished through planning with local community partners. Regional hospital consortiums and state hospital associations can be used as venues for conducting this collaborative process.

Planning is a process that takes time, and time is an asset that few people have in excess, especially in the middle of an incident. It is important that planning is conducted prior to an event, and all parties involved are aware of their roles and responsibilities expected of them. Local emergency management offices are a great resource to use to assist in community partner planning and community mitigation.
Community response is an integral part of evacuation planning. Identifying response partners and insuring they understand their role in a hospital evacuation is imperative to the success. Additionally these response partners can offer mitigation approaches specific to the community that can be incorporate into the hospital evacuation plan.

Local emergency management and elected officials may expect essential services (e.g. the emergency department) will remain intact and operation even after patient evacuation takes place. Planning must address the expectations that community partners have of your facility and the functions they can provide. Response partners need to understand the facilities limitations and have an idea when they might expect certain limitations from the facility.
Questions to Consider

- What are the major weaknesses in your facility and the surrounding area?
- Which stakeholders should be brought together in your community planning process?
- What mitigation techniques can be used to minimize your facility's major weaknesses
Memoranda of Understanding (MOU)

- Formalizes resource sharing between each participating party in an incident
- Established prior to incident
- Avoid same vendor resource dependency

Memoranda of Understanding should be utilized to address resource gaps as identified through the hazard vulnerability assessment process.

MOUs facilitate hospital request for certain resources and services that have been agreed upon prior to the occurrence of an incident, and are considered to be a legally binding contract between the involved parties. It is important to ensure that you understand the laws and regulations that apply to your jurisdiction before entering into an MOU.

MOU’s are living documents and should be revisited or revised on a predetermined basis or when changes occur in supply, demand, or intent. It is important to ensure that the stated requirements still address the facility’s identified gaps, and that all parties listed in the document are still capable of meeting the intent of the MOU. In the case of events, such as, Hurricanes, Tornadoes, Flu, etc., a review prior to the season is one instance which would deem review.

Regional events can place multiple facilities in an evacuation situation; therefore consideration must be given to vendor selection. The reason reduces the likelihood that supply lines are affected by the event. For example if all of the hospitals in an affected area use the same vendor, a rationing situation could result.
For example, in an evacuation transportation will be key resource. A complete evacuation will place a large strain on transportation resources within the community. Therefore determining your facility’s transportation needs prior to an incident and developing MOUs can help meet those resource needs.

Patient population, patient acuity, and pre-assessed facility risks will determine the needed evacuation equipment, allow this equipment to be located and reserved through MOUs. It is important that these MOUs should be reviewed on a periodic basis do to the rapid technological advances in medical equipment, a facility’s needs or the supplier’s supply pool may change frequently. When developing the plan, the facility should create and included a schedule outlining when each section of the plan is due to be review and updated, including MOUs. Plans are living documents, constantly being revised, updated, and changed. If a review schedule is not included, it is easy for the plan (or parts thereof) to become stagnant and outdated.

Other common MOUs include those dealing with expendable supplies, personnel and receiving facilities.

Several states have already established state-wide MOUs for the sharing of these recourses. Inquire with your local office of emergency management for more details.
Questions to Consider

- What MOUs are in place in your facility?
- Who at your facility manages/controls the MOUs?
  - Where are the documents physically located?
- How often are your facility’s MOUs reviewed/used?
- What additional MOUs are needed?
This lesson addresses the components needed when developing a comprehensive evacuation plan, and provides detailed examination of certain crucial areas. The lesson concluded with an evaluation of multiple evacuation case studies.
Terminal Learning Objective (TLO):
- Upon completion of this lesson, the participants will be able to identify four (4) crucial components in developing an emergency evacuation plan.

Enabling Learning Objectives (ELO):
- Upon completion of this lesson, the participants will be able to list three (3) elements required in the development of a comprehensive emergency management plan with 100% accuracy.
- Upon completion of this lesson, the participants will be able define the 96 hour principle to ensure facility sustainability immediately after an incident with 100% accuracy.
- Upon completion of this lesson, the participants will be able to identify three (3) criteria for deciding to shelter-in-place during an emergency incident with 100% accuracy.
- Upon completion of this lesson, the participants will be able to recall the differences between partial facility evacuation and total facility evacuation with 100% accuracy.
- Upon completion of this lesson, the participants will be able to list the two (2) key factors for deciding between sheltering-in-place and facility evacuation during an emergency event with 100% accuracy.
Critical Plan Components

- Activation
  - Define criteria and for decision to activate the plan
  - Define how plan is activated and integrated within the facility
  - Define type/level of evacuation to occur
  - Describe the phases of implementation

- Identification of Alternate Sites(s) – Receiving Facilities
  - Identify written documentation that confirms the commitment of these facilities
  - Define process for updating agreements

- Evacuation Resources
  - Identify resources/equipment available to move patients from rooms/floors
  - Identify procedures for inventory control of resources/equipment
  - Define protocol for staff training on equipment use
  - Define protocol for on-going assessment of patient status to determine equipment and transportation needs

- Continuity of Care Resources
  - The plan must address how continuity of care will be maintained during an evacuation for patients at all levels of clinical complexity and disability.
  - How to maintain continuity of care if the usual equipment is not available
  - How equipment identified as necessary to provide continuity of care can be moved with the patient
  - How will isolation precautions be maintained (both for patients and staff)
  - How will staff train and drill on this process
Critical Plan Components

- External transport resources
- Patient evacuation
- Tracking destination/ arrival of patients
- Family/ Responsible party notification

External Transportation Resources
- Identify pre-designated areas to congregate patients
- Develop lists with numbers, types, and transportation needs of patients
- Describe the process for requesting transportation to coordinate vehicle needs
- Identify alternate transportation resources
- Reference documentation that confirms commitment of required transportation resources
- Define the process for reaffirming and updating agreements and plans

Patient Evacuation
- Specify the protocol to assure the patient destination is compatible to the patient acuity
- Identify methods for communicating specific patient care needs and risks
- Identify the resources necessary to address patient needs during transport
- Document staff training and exercises on the traffic flow and movement of patients to a staging area

Tracking Destination. Arrival of Patients
- Patient identification device (wristband, RFID, etc) must be attached to all patients
- Describe the process to track the arrival of each patient at the destination

Family/ Responsible Party Notification
- Protocol for emergency notification to public safety for immediate response must be clearly written and educated to staff
- Define who (title, not name) is responsible to keep current listings of contact numbers in accessible locations

Reference
California Hospital Association; “Hospital Evacuation Checklist” retrieved from http://www.calhospitalprepare.org/sites/epbackup.org/files/resources/HospitalEvacuationPlanChecklistCHA07092008.doc

Additional Government Agency Notifications
- Protocol for emergency notification to public safety for immediate response must be clearly written and taught to staff
- Protocol for emergency notification of patient evacuation to department of health and local EMS must be clearly written and taught to staff
- Define who (title, not name) is responsible to keep current listings of contact numbers in accessible locations

Transport of Records, Supplies and Equipment
- Describe the procedure for transport of medication administration records and patient care/medical records
- Describe measures taken to protect patient confidentiality
- Describe the process to transport essential patient equipment and supplies
- Describe the protocols for the transfer of patient specific medications and records to receiving facility
- Protocols for transfer of controlled substances
A key component of any evacuation plan is knowing when it should be activated. Identifying a facility’s strengths and more importantly, its weaknesses can assist in identifying critical areas. Failures in these areas would call for some form of evacuation. The facility’s 96-hour assessment identifies how well critical areas of the facility can operate for the 96-hour period after the occurrence of an event. All of these factors weigh on the decision on whether a facility should evacuate, and what type of evacuation should occur: shelter-in-place, partial, or complete.

Depending on the circumstances surrounding the event, an evacuation decision can be made either pre- or post-event.
When an event occurs, a facility should be able to function without assistance for 96 hours immediately following the event. (The Community Healthcare Disaster Preparedness Assessment Tool, found at www.acep.org/CHDPA, contains formulas that can be used in the 96-hour assessment to determine the quantities of many needed materials.)

Multiple commercial assessments are available for use, but an assessment also can be created for a specific facility.

In the planning process, critical resources for patient care must be identified. This includes both clinical resources (medical resources used in direct treatment of patients), facility resources (such as HVAC systems, water, electricity and gas), and staff resources (manpower to care for patients and the resources required to carry out their duties).

The Joint Commission has also identified six critical areas that are important for planning. These areas are a good starting point for the development of your own 96-hour assessment.
Whether a facility participates in The Joint Commission (TJC) accreditation process or not, the critical areas outlined by TJC for hospital preparedness are important to consider when performing preparedness and 96-hour assessments of a facility.

These areas can be good starting points for plan or assessment development.
- Communications (TJC Standard EM.02.02.01)
- Resources & Assets (TJC Standard EM.02.02.03)
- Safety & Security (TJC Standard EM.02.02.05)
- Staff Responsibilities (TJC Standard EM.02.02.07)
- Utilities Management (TJC Standard EM.02.02.09)*
- Patient & Clinical Support Activities (TJC Standard EM.02.02.11)

Reference
Patient needs should be identified and determinations need to be made as to what clinical specialties are required. Facilities catering to the clinical specialties need to be contacted and arrangements made to transfer the previously identified patients. (MOUs should already be developed with these facilities).

In large healthcare systems, many different facilities may be owned and operated by one parent agency. When evacuating a facility, it is easiest to evacuate to a facility within the same healthcare system if possible.

A healthcare facility is to identify two sets of alternate care sites:

a) The first set is to include facilities that are **geographically close** to the healthcare facility in those cases where the hazard has affected only the healthcare facility.
b) The second set is to include facilities that are **geographically distant** from the healthcare facility in those cases where the hazard has affected the entire area around the healthcare facility.

The healthcare facility on-site Transport Unit Leader is to triage the patients as they are being transported to the various alternate care sites. Evacuation Acuity Level 1 and 2 patients have priority for transport.

The healthcare facility is to identify facilities in sequential order that it will use these facilities to shelter evacuated patients, based on the acuity level of the patients that the alternate facility can manage.

The following is an example of a list of facilities to be used in sequential order:

a) Hospitals (for evacuation acuity levels 1,2,3,4)
b) Skilled nursing facilities (for evacuation acuity levels 2,3,4)
c) Clinic buildings (for evacuation acuity levels 3,4)
d) Hotels (for evacuation acuity levels 3,4)

To avoid serious logistical issues, the alternate care sites should be a building that is already being used for medical purposes (e.g., clinics and nursing homes) or buildings that are set up to shelter people and take care of their needs (e.g., hotels versus schools or community centers).
In an event that might disrupt or cause damage to pre-identified critical areas, the first option that should always be considered is sheltering-in place. Based on the facility’s 96-hour assessment, the facility should already know how well it can support needed functions for the four days (96-hours) following the event.

If the facility is unable to support needed functions, or the 96-hour period is running out, the facility should begin to consider evacuation. Evacuation can either be partial or complete depending on the circumstances of the event and the resources available at the facility.
Sheltering-in-Place is a protective action strategy that is taken to maintain patient care within a facility and to limit the movement of patients, staff and visitors to protect people and property. Sheltering-in-place is preferred to patient evacuation, but should only be conducted when safe and feasible. Building and event conditions should be considered when making the decision between sheltering-in-place and evacuating.

If a decision is made to shelter-in-place because of an internal and/or external environmental hazard, a facility’s incident management staff notifies local authorities, if appropriate, and makes an assessment for the need to initiate environmental engineering interventions.

The primary decisions are:
- How to protect patients, staff and visitors by moving to a more secure area will be made by the facility’s incident management staff in collaboration with the response agency’s incident management staff
- If sheltering-in-place is expected to last for more than 24 hours, the incident management system should inform all departments that all resources are to be conserved
Evacuation

- **Horizontal/ Vertical**
  - Evacuation beyond corridor fire doors and/or smoke zones into adjacent secure area
- **Partial**
  - Evacuation of certain groups of patients/residents or areas within facility
- **Complete**
  - Evacuation of entire facility

**Horizontal/ Vertical evacuation** is evacuation beyond corridor fire doors and/or smoke zones into an adjacent secure area.

**Partial evacuation** is evacuation of certain groups of patients and/or residents or evacuation of areas within a facility.

**Complete evacuation** is evacuation of an entire facility.

When evacuation procedures begin, they should be implemented at the lowest possible level to have the least impact on a facility. As the situation escalates, the level of evacuation can escalate as needed.

If smoke is seen in a wing, patients should be horizontally evacuated out of the wing into a smoke-safe room. Once the source of the smoke is found, the decision can be made to continue evacuation efforts with a partial or full evacuation (in the event of a fire). If the smoke was from something minor, the situation can be controlled and corrected and patients can be returned to their rooms or taken to another part of the facility, if it is going to take time to correct the situation.
When making the decision on whether to shelter in place or evacuate there are two factors that must be considered.

1) Nature of the event:
   - Expected time of arrival: Is there enough time to safely evacuate before it hits?
   - Magnitude: Can the facility withstand the force of the event?
   - Area of impact: Will other facilities in the area be affected reducing available beds to evacuate to?
   - Duration: Does the facility have enough supplies to shelter-in-place for the duration of the event?

2) Anticipate effects on both the facility and the surrounding community given the nature of the event and the results of HVA and 96-hour assessment.

In a post-event decision making scheme, a damage assessment should be conducted to assess the situation and structural integrity of the facility. This information is crucial when deciding whether to shelter-in-place or evacuate.
Staff should be prepared to evacuate from the area all patients, along with visitors and staff, according to the level of acuity of the patients.

**Evacuation Level 4:** Self-sufficient patients. Patients who are ambulatory, require minimal nursing care and are candidates for rapid discharge to home or to a temporary shelter(s).

**Evacuation Level 3:** Ambulatory patients. Patients who require moderate nursing care and require assistance in evacuation.

**Evacuation Level 2:** Non-ambulatory patients. Patients who require frequent supportive nursing care and observation (e.g. post-operative patients, step-down unit patients).

**Evacuation Level 1:** Non-ambulatory patients. Patients who require continuous nursing care and observation (i.e. ICU, Telemetry, isolation rooms and other patients with special needs).

This numbering system is used to be in compliance with the National Incident Management System (NIMS) where a higher number indicates a lesser degree of intensity and a lower number indicates a higher degree of intensity.
The incident management team will determine which floors and/or smoke zones are evacuated first and in which order.

Those floors that are most in danger or the floors where the incident occurred are to be evacuated first. Then adjacent floors are evacuated.

Otherwise, evacuation starts at the top floor and work downward.

In all incidents, patients are to be evacuated according their Evacuation Category Level.
Methods of Patient Evacuation

- Elevators (if permitted)
- Ambulatory patients
  - Stairs accompanied by staff
- Non-ambulatory patients
  - Special Equipment
- Patients who cannot be evacuated
  - Ethical Issues

A healthcare facility should continue to use elevators as long as they are serviceable and permitted by local ordinances and other relevant governing agencies.

Ambulatory patients are guided down the stairs, accompanied by a staff person based on the acuity of the patients. For example, ambulatory patients, needing assistance, may be assisted with belts or “fore and aft” carry, shoulder-to-shoulder human chain, mother carries baby, etc.

Non-ambulatory patients may need special equipment such as stair chairs, stokes baskets, and evacuation sleds. The staff assigned to assist these patients should be trained with this equipment and be comfortable in its use.

There are some patients who cannot be moved with the resources available. In these situations, ethical issues can arise. What will happen to patients who are left behind? Will there be equipment, supplies and personnel that can be left behind with the patients? What is the risk of leaving patients behind compared to trying to evacuate them and possibly injuring them?

These questions should be identified and addressed as effectively as possible prior to an evacuation event occurring. Developing a workgroup who can identify and address these issues is one possible way to address this.
Factors to consider in deciding to begin pre-event evacuation

Event Characteristics
- Arrival: determining when the event will hit can be used to determine when evacuation must occur
- Magnitude: by knowing the expected magnitude of an event when it reaches a facility, facility decision makers can know what damage to expect and what preparations should be taken, as well as what supplies will be needed on-hand
- Area Impacted: the number and type of medical facilities in the impacted area can create complications in evacuation efforts
- Duration: used to make a decision to shelter-in-place or evacuate

Anticipated Effects
- On patient care resources
  - Water and heat resources
  - Electricity
  - Building and structural integrity
- On surrounding environment
  - Road conditions
  - Security
  - Community building resources
  - Evacuation status of other facilities
  - Current evacuation orders
  - Availability of local emergency response agencies

Reference
AHRQ Hospital Evacuation Decision Guide, pg. 39-41; Publication #10-0009, May 2010
As soon as possible, a post-event situation assessment should be conducted. Post-event evacuation is almost identical to pre-event evacuation.

Assessments are performed looking at the same resources and conditions and determinations are made related to the safety of the environment for patients, staff and visitors.

Safety is the primary goal, so as decisions are made the question should be asked, “Is this in the best interest of the patient and the safest of all available alternatives?”

The post-event situation assessment can have one of three outcomes:
- No threat to patient/staff safety
- Immediate threat to patient/staff safety
- Potential or evolving threat to patient/staff safety
  - Wait and reassess
  - Start evacuation

Reference
AHRQ Hospital Evacuation Decision Guide; “Post–Event Evacuation Decision Guide”, pg. 46; Publication #10-0009, May 2010
The decision about the type of evacuation to use (shelter-in-place, horizontal/vertical or complete) is based on when information is received and when actual evacuation is to occur.

**Pre-Event**
Pre-event evacuation occurs in advance of an impending disaster, before a facility structure and surrounding environment are significantly compromised. As an event progresses and conditions deteriorate, the opportunity for a safe evacuation diminishes, and eventually decision teams must decide whether or not to evacuate the facility or to shelter-in-place.

Decision whether to preemptively evacuate or shelter-in-place requires consideration of two factors:
- The nature of an event, including its expected arrival time, magnitude, area of impact and duration; and
- The anticipated effects on both the hospital and community, given the nature of an event and the results of pre-disaster assessments.

**Post-Event**
Post-event evacuation occurs after a disaster has caused substantial damage to a facility or surrounding community. As soon as possible after an event, building integrity, critical infrastructure, and other environmental factors must be assessed to determine whether or not a facility can continue to provide appropriate medical care to patients or should be evacuated.

Reference
AHRQ Hospital Evacuation Decision Guide, pg. 2; Publication #10-0009, May 2010
When a decision is made to evacuate, the evacuating facility must notify proper authorities. This is often the duty of senior administrators, but can be done by anyone in the command structure. It is important to designate the task in the planning process to ensure that it does not get overlooked or repeated by multiple parties calling to relay the same information.

Some of the more common agencies to be notified include:

**City/County Office of Emergency Management**
This would be the local level office of emergency management. This office needs to know your facility’s status to ensure that their response plans do not conflict with your facility’s evacuation plans.
If the reason for evacuation is internal, they still should be notified. They can activate resources that can assist the facility and make the process easier.

**State Department of Health**
The state department governing healthcare should be notified as soon as possible. They too have resources at their disposal that can assist with the evacuation process.

**The Joint Commission**
-If the facility participates in The Joint Commission accrediting standards, it is important to notify the commission when a decision to evacuate is made.
When the time comes to evacuate, each patient must be evaluated to determine the order in which they should be evacuated—evacuation triage.

Most healthcare professionals are all familiar with the concept of patient triage, but in an evacuation scenario patient triage differs from other traditional triage methods.

One method of triage is to assign acuity levels to patients. This can be done at each shift change and become part of the patient’s record.

After patients have been triaged, transportation appropriate for their acuity level needs to be arranged. In patients with low acuity levels, public transportation (buses or trains) may be used. This allow transfer of a large number of patients at one time and does not tie-up ambulances that may need to be used for patients with higher acuity levels.

As patients are triaged and assigned to a means of transport, documentation must be maintained and tracking methods must be implemented. It is critical for logistical and financial purposes that detailed records are kept for patients and that accurate tracking methods are in place. Accurate tracking also ensures continuity of care and allows for families to know where their loved ones are located.
Facilities should make every effort to pre-identify and use only authorized vehicles for patient transport. However, circumstances may be such that authorized vehicles are not available. Facilities may need to resort to using private vehicles. The use of private vehicles poses risks to facilities and those being transported. The following protocols are examples of the efforts that can be made to “authorize” drivers of private vehicles.

All vehicles need to be documented before being sent to a healthcare facility from a Remote Vehicle Staging Area. The Remote Vehicle Staging Supervisor will verify the following information for each vehicle before it is sent to a healthcare facility:
- License Tag Number of the Vehicle
- Proof of Insurance
- Driver’s License Number

Communication is crucial at this point of the transportation process. The Vehicle Staging Supervisor must have a clear line of communications with the Transportation Officer. In addition to the above vehicle information, the Staging Supervisor must confirm that the correct patient is transported by the correct vehicle to the correct location. This process can be assisted with a redundant system where the Vehicle Staging Supervisor receives assignments from both the Transportation Officer and the transporting crew. The information from both sources should match before the patient is released and transported.

Primary and alternate transport routes between facilities should be identified before an event and be placed in the facility’s emergency plan. The plan should state which routes should be taken and/or avoided to provide the safest transport and best care for the patient. If a transport vehicle ‘goes missing’ it can be easily tracked by searching along the pre-designated routes. Pre-designated routes also allow for better estimation of transport and arrival times.
A master roster should be developed of all patients to be evacuated. Use the roster to track patients, their belongings and resources as they are moved. When transfer occurs, the patient can be tracked through their name and ID number. The use of a central location for information flow allows for accurate record keeping and ease of tracking.

Communication is crucial at this point of the transportation process. The Vehicle Staging Supervisor must have a clear line of communications with the Transportation Officer. In addition to the needed vehicle information (previous slide), the Staging Supervisor must confirm that the correct vehicle is transporting the correct patient. This process can be assisted with a redundant system where the Vehicle Staging Supervisor receives assignments from both the Transportation Officer and the transporting crew. The information from both sources should match before the patient is released and transported.
When transfer occurs, the patient can be tracked through their name and ID number. The use of a central location for information flow allows for accurate record keeping and ease of tracking.

Consider using this list of sending information:
- Name of sending facility
- Evacuation category level number
- Patient name
- Date of birth
- Patient medical record number
- Receiving facility (destination site, if known)
- Time discharged from the assembly area(s)
- Equipment sent with the patient
- Whether or not family has been notified about transport of patient to another destination
- Name of primary attending physician
- Diagnosis
- Type of isolation (if applicable)
- Special considerations/ precautions (e.g. police hold, mental health, suicide watch, etc.)
- Other information or directives (code status such as a DNR or living will)

The healthcare facility should ensure that any equipment transported with a patient is clearly identified as property of the sending facility so it can be returned at the appropriate time.
Patient Tracking

- System in place to identify and track patients
  - Wristbands
  - Radio frequency identifier chips (RFID)
- Patient transfer request coordinated from central location
  - Emergency Operations Center (EOC)
  - Regional Medical Operations Center

Each healthcare facility must have a system in place to identify and track patients in an evacuation process. This may involve anything from temporary wristbands to radio frequency identification chips (RFID). There are many different systems and brands available. Whatever the system it must be integrated with all areas of patient care including medical records, laboratory, and radiology, and be compatible with responding agencies and receiving facilities. Often the decision about what system to use is made on an area level to ensure compatibility. Each facility should contact their local office of emergency management to find out what system their area uses.

Patient transfer requests should be coordinated from a central location such as the emergency operations center or regional medical operations center.

Transport officers on-site should coordinate with a transport officer in the EOC to uphold unity of command (one message from one person). This allows clear communication of the resources (available space for specific acuity levels) available (communicated from receiving facilities) and needed (communicated from the evacuating facility). This can assist in proper distribution and tracking of patients from facility to facility.

A similar process should be repeated when the transport is complete and the patient is being dropped off at the receiving facility. Before patient care is transferred, the Transport Officer at the receiving facility should communicate with the Transport Officer at the EOC to ensure all of the proper information is relayed and recorded. This should include:
- Patient identification number
- Name of receiving facility
- Room number/ bed assignment
- Confirm receipt of patient medical records (including last meds administered)
- Name and unit number of transport service
- Hard equipment transferred with patient

This information ensures the right patient is taken to the right place, assists with family member inquiries, tracks equipment, and eases reimbursement issues. In hectic times reporting should just include the critical information (patient ID, receiving facility name, and bed assignment), and all additional information can be recorded and reported at a later time.
No matter what the circumstances, your facility’s staff is the most valuable resource you have. Although safety and care of patients are a major concern in evacuation, the safety of the staff comes first. If the safety of the facility’s staff is compromised injuries can occur resulting in a reduction in workforce and an increase in patient count. Your facility’s plan should include sections that recognize potential safety concerns and outline ways to mitigate the effects they may cause.

As with any other facility resource that is relocated in an evacuation event, relocated staff must be accurately tracked and accounted for. Whether the facility is experiencing a horizontal or vertical evacuation and staff are relocated to different units/ floors, or staff are reassigned to different facilities in a complete evacuation, they need to be tracked and accounted for. A useful accountability method is the use of a central reporting location. When an employee leaves their assigned area, they check in with the resource (logistics) officer for that area. The resource officer will update the central employee database (can be electronic or at a centralized location) and note whether the employee is out of service (going on break or going home) or if they are leaving the unit and being relocated to another unit/ facility. If the employee is relocated, they should check in with the logistics officer in their new unit upon arrival. This process not only assists the logistics group with staff tracking, but also assists the finance/ admin group in tracking staff hours when it comes time for reimbursement.

If staff are relocated to alternate facilities, consideration needs to be give to how they will be reunited with their personal belongings at their home facility. Upon the end of their shift, staff will need to have access to their cars in order to go home. In addition, many staff will need access to purses, backpacks, or briefcases that contain their car and house keys. Plan development needs to account for these issues. If staff are not able to rest at the end of their shift (either at home or other pre-designated location), they are less effectiveness diminishes later operational periods.

As staff are transferred to alternate facilities problems can arise with privileging, credentialing, and protocols. Decisions need to be made in the planning process as to which set of protocols transferred staff will practice under, and if privileges will be extended to transferred physicians. These problems can be mitigated by keeping evacuated patients in the same facility system, but if this is not possible the agreed upon decisions should be articulated in the MOUs developed with the receiving facilities. The MOUs should also address who is responsible for the safety of the staff members once they are practicing at an alternate facility should they be injured?
Questions to Consider

- Who at your facility can order an evacuation?
- What would the sequence of patient evacuation be in your facility? By acuity level or by floor and why?
- What alternative care sites are available to accommodate your patient population in an evacuation situation?
Children’s Hospital in New Orleans withstood Hurricane Katrina and the resulting flood, and had sufficient potable water, generator, fuel, staff and supplies to shelter-in-place for many days.

Conducting a thorough hazard vulnerability analysis allows for plans to be developed to address critical areas. Children’s Hospital was able put plans into place to address possible vulnerabilities allowing them to safely and effectively shelter-in-place during Hurricane Katrina.

Reference
AHRQ Hospital Evacuation Decision Guide, pg. 14; Publication #10-0009, May 2010
Photo: Children’s Hospital, New Orleans, 2010 http://www.chnola.org/content/Locations.htm
The hospital’s location allowed it to be essentially untouched by the storm. However, when the city water failed, it became impossible to fill the cooling tower. The hospital, then, lost air conditioning. This forced an evacuation of the facility due to the heat of the Louisiana summer.

When developing plans and performing preparedness assessments, water is routinely placed on the assessment. Although plans for water are addressed, all of its uses are commonly forgotten. Not only is it needed for patient care, but it is also needed to ensure the operation of facility functions such as the HVAC systems. When developing plans and conducting assessments (preparedness assessment of 96-hour assessment), ensure that all water needs are met to keep patients and staff safe and the facility operational.

Reference
AHRQ Hospital Evacuation Decision Guide, pg. 14; Publication #10-0009, May 2010 Photo: Children’s Hospital, New Orleans, 2010 http://www.chnola.org/content/Locations.htm
Although patients, most staff and family members were evacuated within 4 days of the Hurricane Katrina strike due to lack of city water and air conditioning, the VA Medical Center in New Orleans was able to keep limited electrical power available because its backup generators did not fail and remained several inches above water. They remained operational until power was restored three weeks after the storm.

At the same time, generators at Charity Hospital failed requiring this hospital to operate on backup generators only.

Tulane University Hospital’s backup generators failed jeopardizing many critical research tissue and blood samples.

Most facilities have generators that supply power to essential functions in event of power outage, but this is not sufficient. Generators should be placed in locations that minimize vulnerabilities to facility-specific hazards. If the facility is in a flood prone area, generators should be elevated (placed on the roof) to ensure they remain operational if lower portions of the facility flood. If the facility is in an area with high winds or prone to tornadoes, roof placement may not be the best option. In addition, it is important to ensure that adequate supplies of fuel are kept on hand, and that generators are tested on a regular basis. Some generators are scheduled to automatically activate and run tests on themselves on a scheduled basis. Facilities with these types of generators should monitor fuel levels closely to ensure supply is maintained as fuel is consumed in scheduled tests.

Providing backup power is a critical function. Continuation of power in a general outage can reduce or even eliminate a facility’s need to evacuate. Since this resource is so vital, backup generators are also common. Backup generators are usually smaller and provide power only to the most essential functions to buy time while an evacuation is occurring. Maintaining backup generators is as important as it is on main generators.

Reference
AHRQ Hospital Evacuation Decision Guide pg. 15; Publication #10-0009, May 2010
Mount Auburn Hospital in Cambridge, Massachusetts, began to evacuate patients within hours of boiler failure in December, 2005.

In another instance, an explosion at a New Jersey hospital destroyed both the boiler and the chiller also prompted evacuation. Hospital administrators quickly realized that they had a problem and there was a strong likelihood for the problem to escalate. They were proactive and made the decision to evacuate quickly and early and were able to move everyone to safety.

Both facilities had clear evacuation triggers in their plans. When a trigger was reached, the plans were put into place without hesitation.

Reference
AHRQ Hospital Evacuation Decision Guide pg. 15; Publication #10-0009, May 2010
Photo: Mount Auburn Hospital, 2010 from http://nerej.com/27523 (C) 2010
One day after Hurricane Katrina made land fall, Kindred Hospital in New Orleans lost its water supply, and the hospital administrator decided to evacuate the facility.

The evacuation, however, was delayed because of civil unrest and looting in the neighboring area. Many of the ambulances sent to pick up patients were forced to turn back before reaching the hospital because of security concerns. Additional private security staff sent by Kindred corporate headquarters to protect the hospital were also delayed in their arrival.

Although plans may be in place, every situation is different. A facility must be able to adapt to any situation and have backup plans to assist in meeting unforeseen needs.

Reference

AHRQ Hospital Evacuation Decision Guide, pg. 17; Publication #10-0009, May 2010
Hospitals closely monitor track of Hurricane Rita

The University of Texas Medical Branch (UTMB) initiated its hurricane preparedness procedures on Sunday, September 18, 2005, 5 days prior to landfall of what was then Tropical Storm Rita. When Rita was officially classified as a hurricane on Monday and was headed toward UTMB’s location on the upper Texas coast, the medical center initiated census reduction efforts to discharge as many ambulatory patients as possible.

Reference
AHRQ Hospital Evacuation Decision Guide; “Hospitals Closely Monitor Track of Hurricane Rita”, pg. 35; Publication #10-0009, May 2010
Hospitals closely monitor track of Hurricane Rita

On Tuesday, 3 days prior to landfall, the incident command center opened in accordance with UTMB’s emergency operations plan. All unit-level emergency plans were also activated, biosafety level three and four labs were closed and decontaminated. Medical students and nonessential personnel were dismissed. Late Tuesday evening, a teleconference was held between UTMB and the Texas Department of Public Safety’s Division of Emergency Management, during this session the Department guaranteed UTMB adequate ground and air transportation for a full evacuation, if the evacuation decision was made by 7:00 am the following morning.

From Tuesday evening until the time of the final decision on Wednesday, UTMB assessed and triaged patients, copied medical records, and assembled patient medical lists, and contacted a large hospital network to determine the number of transfers they could accept. At 7:00 am Wednesday, 2 days prior to landfall of Hurricane Rita, a hospital-wide evacuation was ordered.

By having plans in place, conducting an accurate pre-assessment, and closely monitoring the arrival, magnitude, and area of impact of the approaching hurricane, the incident management team and administration of UTMB were able to make sound decisions and pre-evacuate the facility. They were able to work with local and state agencies to obtain the resources they needed for a well organized and successful evacuation.

Reference
AHRQ Hospital Evacuation Decision Guide: "Hospitals Closely Monitor Track of Hurricane Rita", pg. 35; Publication #10-0009, May 2010
Galion Community Hospital (Ohio) received a bomb threat at 9:30 am one Wednesday morning in 1999. After the threat was announced over the hospital’s intercom system, members of the Incident Command System (ICS) team met to discuss a possible evacuation. Meanwhile local police and fire department officials worked with the facility’s engineers to search the building for a bomb.

An hour later, the hospital received a second threat. Within the next five minutes, the evacuation decision was made based on recommendations from a consultant, police, and fire department officials.

The ICS team acted quickly and worked in conjunction to assess the current situation. After the first threat, they deemed the situation to be a potential or evolving threat to patient and staff safety. Teams swept the facility and found no evidence of a bomb.

The ICS team used the ‘wait and reassess’ decision method until the situation had changed or the felt the threat had passed. When the second threat was received, the ICS team deemed the threat to be great enough upon reassessment to start evacuation procedures.

Working in conjunction with first responders and other community resources the facility was safely evacuated and cleared of any hazards.

When using the wait and reassess method it is very important to have the evacuation triggers clearly identified and clear assessment intervals. These criteria will assist in clear decision making when conditions change and evacuation process must be started.

References
AHRQ Hospital Evacuation Decision Guide; “Bomb Threat at Galion Community Hospital”, pg. 35; Publication #10-0009, May 2010
Deciding to Shelter-in-Place

Despite rising flood waters and disrupted roadway systems, Innovis Health administrators, in Fargo, ND, decided to shelter-in-place during the March, 2009 flood and continued providing care, even though the hospital was in an area where officials requested a complete evacuation. A key factor in this decision was the hospital’s ability to remain in operation for up to 10 days without city water, power, sewer or other services—capabilities that had been intentionally designed when the hospital was constructed in 2000. Due to their pre-assessment and planning, the hospital was able to stay open throughout the incident.

Sheltering-in-place was standard operating procedure at many of New Orleans’ hospitals, and most did not consider preemptive evacuation prior to landfall of Hurricane Katrina.

Administrators at Children’s Hospital in New Orleans regularly updated the facility’s adverse weather plan, “Code Gray,” and coordinated with the State of Louisiana Emergency Operations Preparations whenever there was advance warning of a category 3 or higher hurricane. Children’s Hospital had sufficient generators and fuel on-site to maintain HVAC, and staff moved necessary equipment to the second floor in case of flooding. As Hurricane Katrina approached and strengthened, staff moved all patients to higher floors. Children’s evacuated following the subsequent flood, at great risk to its tiny and fragile patients.

In the years since this event, Children’s Hospital administrators have taken steps to “harden” the hospital so that evacuation will never again be necessary. Investments in security, backup water sources and other infrastructure should make sheltering-in-place a safe option during future hurricanes and floods.

Reference
AHRQ Hospital Evacuation Decision Guide; “Deciding to Shelter-in-Place”, pg. 37, Publication #10-0009, May 2010
Pre-Event Evacuation Decisions

- Merit Care Hospital: Fargo, ND
  - March 2009 area flooding
  - Reduction of patient census to high-risk patients only
  - Full evacuation ordered prior to nearby river’s cresting
  - Evacuated early to avoid competition for transportation

Pre-Event Evacuation Decisions
During a flood of the Red River in March, 2009, administrators at Merit Care Hospital in Fargo, ND, first reduced patient census to 180 high-risk patients who would have the most difficulty during an evacuation. When the predicted height of the river’s crest rose dramatically and a nearby dyke was jeopardized, Merit Care administrators decided to fully evacuate. A key factor in this decision was the concern that a later evacuation would force the hospital to compete for available ambulances and busses with other evacuating groups.

Rising water from the Cedar River and uncertainty with the eventual crest, led to the evacuation of Mercy Medical Center in Cedar Rapids, IA in June, 2008. Administrators initiated an evacuation of all 176 patients upon determining that the facility was likely to lose power.

In October, 2007, rapid spread of wildfires in San Diego County, CA caused the evacuation of 77 patients from Pomerado Hospital, as administrators closely monitored the conditions of the fire throughout the afternoon and evening. The decision to evacuate was made because the fire was visible from the hospital’s grounds, and there was concern that the fire department might not be able to protect the building because of the community-wide nature of the disaster.

Reference
AHRQ Hospital Evacuation Decision Guide; “Pre-Event Evacuation Decision”, pg. 37; Publication #10-0009, May 2010
Because elevators were not operating, patients at Memorial Hermann Hospital in Houston, TX, were carried down 10 flights of stairs on backboards with no overhead lighting or air conditioning. Up to five infants were secured to a backboard and carried at once. Multiple adults were needed to carry each adult patient. To avoid injuries, evacuation was temporarily halted when staff and volunteers were exhausted.

During post-hurricane flooding in New Orleans, water entered elevator shaft “wells” at the VA Medical Center in New Orleans, making the elevators unusable even though power was not interrupted.

In each of these examples, the facility's elevators were no longer usable. At Memorial Hermann, power failed and backup generators could not supply the power needed to power the elevators, so a stairway evacuation ensued.

At the VA Medical Center, staff had planned for power issues and were able to keep power to the facility including the elevators. What they did not plan on was the large amounts of water pooling in the elevator shafts creating an unsafe environment.

Whatever plans are in place for evacuation, it is important that the facility has plans and conducts training related to stairwell evacuation.

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Reference

AHRQ Hospital Evacuation Decision Guide; “Out of Service Elevators,” pg. 24; Publication #10-0009, May 2010
An unexpected and abnormally high rainfall during the summer of 2008 led to a levee break in southern Indiana, causing water to surge and breach riverbanks and dams.

Columbus Regional Hospital was forced to immediately evacuate because the basement of the hospital quickly filled with water from nearby Haw Creek and power was lost.

The full evacuation of 157 patients occurred within 3 hours. The main floor of the hospital was submerged under eight inches of water by the time evacuation was completed.

Due to good planning and training, Columbus Regional Hospital was able to quickly and safely evacuate their patients when their facility became unsafe.

Reference
AHRQ Hospital Evacuation Decision Guide; “Columbus Regional Hospital Evacuates,” pg. 47; Publication #10-0009, May 2010
This lesson will explore the incident management structures that should be implemented in the evacuation process, the staff positions that fill the structure, and the responsibilities of each position.
Terminal Learning Objective (TLO):
- Upon completion of this lesson, participants will be able to list four (4) of the key positions in an incident management system needed to facilitate a facility evacuation.

Enabling Learning Objectives (ELO):
- Upon completion of this lesson, participants will be able to list the three (3) operational periods of facility evacuation.
This example Incident Management Team Chart for immediate response to complete or partial evacuation, depicts positions that should be activated in the incident management system for the immediate response period (0-2 hours).

Reference:
Evacuation: Immediate

- Incident Commander
  - Activate facility emergency operations plan
  - Appoint Command Staff and Section Chiefs
- Command Staff
  - PIO
    - Conduct regular media briefings on situation status and appropriate patient information
    - Oversee patient family notifications of evacuation, transfer or early discharge

Command Staff

Incident Commander
- Activate the facility emergency operations plan and the incident management structure
- Appoint Command Staff and Section Chiefs
- Determine type of evacuation needed—immediate vs. delayed; vertical, horizontal, or complete
- Order organized and timely evacuation of the facility

PIO
- Conduct regular media briefings on situation status and appropriate patient information
- Oversee patient family notifications of evacuation, transfer or early discharge

Reference:
Liaison Office
- Communicate with local emergency management agency, Fire, EMS and law enforcement about facility status and evacuation order

Safety Officer
- Oversee immediate stabilization of facility
- Recommend areas for immediate evacuation to protect life
- Ensure safe evacuation of patients, staff and visitors

Reference:
Evacuation: Immediate

Operations Section
- Implement emergency life support procedures
- Determine needed evacuation type
- Patient prioritization
- Prepare patient records for transfer
- Discharge appropriate patients
- Coordinate transportation
- Implement evacuation plan

Reference:
Planning Section
- Track patients and personnel including evacuation location and receiving facility
- Establish operational periods, incident objectives and develop Incident Action Plan with Incident Commander
- Ensure documentation of all actions and activities

Logistics Section
- Determine needed resources (i.e. transportation)
- Obtain, disperse, and track all resources until they are turned over to the operations section
- Ensures accountability of all resources

Reference:
As the evacuation progresses, the situation moves into the **intermediate response period** (2-12 Hours). In this period, Finance and Administration is activated along with the Security Branch Director in the Operations Section.

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**Reference:**

Command Staff

Incident Commander
- Notify hospital Board, CEO and other internal authorities of situation status and evacuation

Liaison
- Integrate with external agencies, including healthcare facilities

PIO
- Continue staff, patient, visitor and media briefings
- No new duties for this positions in this time period

Safety Officer
- Conduct ongoing analysis of existing response practices for health and safety issues related to staff, patients and facility; implement corrective actions to address

Reference:
Operations Section
- Ensure appropriate patient care and management during evacuation
- Continue facility security, traffic and crowd control
- Ensure family notification of patient transfer
- Continue facilitating discharges
- Continue to communicate patient information and status to receiving facilities

Reference:
Evacuation: Intermediate

- Planning Section
  - Patient and personnel documentation and tracking
  - Update/revise Incident Action Plan
- Logistics Section
  - Provide supplemental staffing
  - Monitor damage/ initiate repairs
  - Initiate salvage operations

Planning Section
- Continue patient and personnel tracking and documentation
- Update and revise the Incident Action Plan
- Ensure complete documentation of activities, decisions and actions

Logistics Section
- Supply supplemental staffing to key areas to facilitate evacuation
- Provide food, water, and rest periods for staff
- Monitor facility damage and initiate repairs, as appropriate, as long as it does not hinder evacuation of the facility
- Initiate salvage operations of damaged areas and relocate equipment from evacuated areas to secure areas or to other facilities

Reference:
Evacuation: Intermediate

- Finance Section
  - Track costs and expenditures of response and evacuation
  - Track estimates of lost revenue due to evacuation of facility

Finance/ Administration Section
- Track costs and expenditures of response and evacuation
- Track estimates of lost revenue due to evacuation of the facility

Reference:
After 12 hours, the response moves into the **extended response period**. In this period all sections see the addition of personnel.

The operations section activates the Business Continuity Branch Director. The Resource Unit Leader, Documentation Unit Leader, and Demobilization Unit Leader are added to the Planning Section. The Logistics Section adds the Service Branch Director and the Finance/Admin Section add its first personnel, Compensation and Cost Unit Leaders.

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**Reference:**
Command Staff

Incident Commander
- Meet with Command Staff and Section Chiefs to update evacuation progress and situation status

Liaison Officer
- Continue to update local emergency management, Fire, EMS and law enforcement officials on situation status and evacuation progress

Safety Officer
- Continue ongoing evaluation of evacuation practices for health and safety issues related to staff, patients, and facility, and implement corrective actions

Reference:
Evacuation: Extended

- Operations Section
  - Ensures patient care and management for patients waiting evacuation
  - Secure all areas, equipment, supplies and medications
  - Continue business continuity and recovery actions

Reference:
Evacuation: Extended

Planning Section
- Continue to track patients and staff locations
- Track material and equipment transferred to other hospitals
- Prepare a demobilization plan and deactivate Hospital Command Center positions and staff when they are no longer necessary
- Discuss staff utilization and salary practices during evacuation and closure of the facility with Human Resources; provide information to employees when determined
- Continue to ensure documentation of actions, decisions and activities
- Update and revise Incident Action Plan

Logistics Section
- Maintain information technology security
- Support evacuation of supplies (medical, food, water, other equipment)
- Assess and secure utility systems

Finance and Administration
- Continue to track and report response costs and expenditures and lost revenue

Reference:
**Questions to Consider**

- Who in your organization would fill the roles of Incident Commander, Planning Chief, Logistics Chief, and Operations Chief?
  - Who are their backups in case they are away from the facility?
- If the event extends several days (as is usually the case), how would your incident management teams transition between response and operational periods?

**Response Period** – the functions and objectives that you are trying to carry out at the current point in time

**Operational Period** – the length of the shift that responders work (usually three 8 hour shifts or two 12 hour shifts per day)
This lesson will present the recovery structure for incident management teams. It will identify needed positions in the structure and the responsibilities for each of the positions.
Terminal Learning Objective (TLO):
- Identify incident management team roles and tasks in demobilization and recovery after an emergency evacuation.

Enabling Learning Objectives (ELO):
- Explain the composition and functions of operations assessment teams in recovery after an emergency evacuation with 100% accuracy.
- List the key tasks that need to be accomplished by each of the incident management team members during demobilization and recovery after an emergency evacuation.
Demobilization/System Recovery
As the evacuation incident comes to an end, each branch and position has specific responsibilities to close out the event.

Reference:
Command Staff

Incident Commander
- Assess if criteria for partial or complete reopening of the facility are met
- Orders reopening and repatriation of patients
- Oversees restoration of normal hospital operations

The incident commander is the last one to stand down their position. They will often still be working with the hospital administration months after an event has occurred, and all other positions have been stood down.

Reference:
Demobilization/ System Recovery

- Command Staff
  - PIO
    - Conduct final media briefing announcing incident termination
  - Liaison Officer
    - Notify local agencies of event termination and facility reopening
  - Safety Officer
    - Oversee safe return to normal operations and repatriation of patients

Reference:
Demobilization/ System Recovery

- Operations Section
  - Restore patient care and management activities
  - Repatriate evacuated patients
  - Re-establish visitation and non-essential services

Reference:
Assessment teams are an effective way of evaluating a closed facility to determine its status, what needs to be accomplished in the recovery process, and when it is fit to be reopened. They consist of experts that can evaluate a specific function of the facility, report back on its status, and identify exactly what must be done to make it safe and operational again.

When developing a team, first decide what functional area the team will be assessing (suggestions are provided on the next page). Then identify facility experts (those who are familiar with all of the intricacies of the facility) and technical experts (those who are familiar with the intricacies of the function being evaluated). In some instances, these may be the same people.

All assessment teams might not be able access the facility at the same time. Also, due to limited resources and/or overlapping expertise, members may serve on multiple assessment teams. In these cases, command staff need set recovery priorities and development an order for the assessment teams.
The teams tour the entire facility (internal and external) inspecting any areas that fall under their assigned function. The teams should note the condition of the item/area, whether it is safe or not, any repairs that should be made (if repairable), and what course of action should be taken to safely bring their area into a functional status (develop a plan). This information should be reported back to the administration and incident commander.

Sub teams can (and should) be developed to assist with specific functions/inspections.
Here are eight suggested teams each with its own specific functions and areas of expertise. The members that comprise the teams should understand a facility’s pre-event status. This way they have a point of reference when evaluating the post-event status.

Involving pre-event staff members also ensures they know the intricacies of the facility.
Logistics
Implement and confirm facility cleaning and restoration, including:
- Structure
- Medical equipment certification
- Provide debriefing and mental health support
- Inventory supplies, equipment, food, and water needed to return to normal levels

Reference:
Planning Section

- Finalize the Incident Action Plan and demobilization plan
- Compile a final report of incident and hospital response and recovery operations
- Ensure appropriate archiving of incident documentation
- Write after-action report and corrective action plan

Reference:
Demobilization/ System Recovery

- Finance Section
  - Compile final response, recovery cost and expenditure, estimated lost revenues
  - Submit to Incident Commander for approval
  - Contact insurance carriers to assist documenting structural and infrastructure damage and initiate claims

Reference:
Questions to Consider

• What types of disasters has your facility experienced that required demobilization/systems recovery?
• What assessment teams does your facility have established for use during the demobilization/systems recovery phase?
This lesson provides a summary of the course. It will highlight the course content that the participant should take away from.
Terminal Learning Objective (TLO):
- Upon completion of this lesson, participants will be able to identify the four (4) phases of evacuation with 100% accuracy.

Enabling Learning Objectives (ELO):
- Upon completion of this lesson, participants will be able to list three (3) phases of assessing risk with 100% accuracy.
- Upon completion of this lesson, participants will be able to list four (4) key evacuation planning components with 100% accuracy.
- Upon completion of this lesson, participants will be able to list the three (3) phases of facility evacuation with 100% accuracy.
- Upon completion of this lesson, participants will be able to list two (2) phases of recovery with 100% accuracy.
Assessing Risks

- Hazard Vulnerability Analysis (HVA)
- Mitigation
- Memoranda of Understanding (MOUs)
Key Planning Components

• Activation
• Alternate care sites
• Patient evacuation
• Notifications
• Patient transport
• Patient treatment
• Staff Concerns
Evacuating the Facility

- Immediate: 0-2 Hours
- Intermediate: 2-12 Hours
- Extended: 12+ Hours
Recovering

• Demobilization
• Assessment teams
Course Completion

- Post-test
- Course evaluation
- Completion Certificate
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*Course Guide: Hospital Evacuation: Principles and Practices ARW-214-W*