

## Section II: Vulnerability Assessment and Mitigation

### 1. Hazard Vulnerability Analysis

\_\_\_\_\_ (*facility name*) should conduct a thorough Hazard Vulnerability Analysis to help determine what events or incidents may negatively impact its operations. While it is impossible to forecast every potential threat, it is important to identify as many potential threats as possible to adequately anticipate and prepare to manage a crisis or disaster situation.

\_\_\_\_\_ (*facility name*) should utilize a quantitative tool, the Hazard Vulnerability Assessment (HVA), which was developed by the American Society of Healthcare Engineering (ASHE) of the American Hospital Association (©2001). The HVA utilizes a rating system for the probability, risk, and preparedness for various hazards and situations.

**Assumptions:** For the purpose of this *All Hazards Emergency Plan*, it is assumed that the following threats may potentially impact all facilities:

- Fire/Explosion
- Flood
- Bomb Threat
- Tornado/Hurricane/Severe Weather
- Power Failure/Utility Disruption
- Workplace Violence/Security Threat
- Law Enforcement Activity
- Missing Resident
- Internal Hazardous Materials Spill/Leak
- Pandemic Episode
- Unknown Acts of Terrorism

**Unique Threats:** Based on the facility's geographic location, past history, proximity to other structures and operations, proximity to transportation corridors, as well as other unique factors, it is essential to identify all threats that can potentially impact the facility.

\_\_\_\_\_ (*facility name*) should utilize a risk assessment tool to determine hazards and vulnerabilities for its County and surrounding areas.

The \_\_\_\_\_ (*county name*) County Emergency Management Coordinator will be contacted for guidance and assistance in determining the hazards and vulnerabilities for the facility.

The following is a tool that will aid in completing the Hazard Vulnerability Assessment, as it takes into consideration the proximity that \_\_\_\_\_ (*facility name*) is within specific probable hazardous areas. (The bolded terms in the Geographic Hazardous Areas column pertain to events that could potentially pose as dangers, if the hazardous areas are close to the facility.)

<b>Geographic Hazardous Areas</b>	<b>Proximity to Facility:</b>	<b>Potential Hazard (Y/N)</b>
Busy Roadways— <b>Elopement, Haz Mat</b>		
Wooded Areas— <b>Elopement, Fire</b>		
Bodies of Water— <b>Elopement</b>		
Designated Truck Routes— <b>Haz Mat</b>		
Railroad— <b>Elopement, Haz Mat</b>		
Airport— <b>Terrorism Target, Mass Casualty</b>		
Dam— <b>Terrorism Target Mass Casualty</b>		
Military Bases/Installations— <b>Explosion, Haz-Mat, Terrorism Target</b>		
Pipelines— <b>Explosion, Haz Mat</b>		
Gas Stations— <b>Explosion, Haz Mat</b>		
Industrial Areas/Distribution Centers/Trucking Terminals— <b>Explosion, Haz Mat</b>		
Chemical Plants— <b>Explosion, Haz Mat, Terrorism Target, Mass Casualty</b>		
Nuclear Plants— <b>Explosion, Haz Mat, Terrorism Target, Mass Casualty</b>		
Bulk Fuel Storage/Tank Farms (Oil, Gasoline, Propane, Natural Gas, etc.)— <b>Explosion, Haz Mat, Terrorism Target, Mass Casualty</b>		
Refineries— <b>Explosion, Haz Mat, Terrorism Target, Mass Casualty</b>		
Sewage Treatment Plants— <b>Haz Mat, Terrorism Target, Mass Casualty</b>		
Agricultural Processing Plants/Storage Facilities (Grain Silos)— <b>Haz Mat, Explosion</b>		
Public Swimming Pools— <b>Elopement, Haz Mat</b>		
Schools— <b>Law Enforcement Activity</b>		
Jails/Prisons— <b>Civil Unrest, Law Enforcement Activity</b>		
Any Immediately Adjacent Operation posing a threat:		
Any Operation in the general area posing a threat:		

The Hazard Vulnerability Tool should be completed to identify hazards and the direct/indirect effect these hazards could have for \_\_\_\_\_ (*facility name*):

### *Instructions to Complete the Hazard Vulnerability Analysis Tool*

1. Evaluate every potential event in each of the categories for probability, risk, and preparedness. Add events as necessary.

**Probability:** Evaluate each event as the likelihood of it occurring. Issues to consider in determining probability are:

- Known risk
- Historical data
- Manufacturer/vendor statistics

**Risk:** Evaluate the potential impact that any given hazard may have on the facility. Issues to consider are:

- Threat to life and/or health
- Disruption of services
- Damage/failure possibilities
- Loss of community trust
- Financial impact
- Legal issues

**Preparedness:** Evaluate the current level of preparedness to manage each disaster. Issues to consider are:

- Status of current plans
- Training status
- Insurance
- Availability of backup systems
- Community resources

2. Multiply the ratings for each event in the area of probability, risk, and preparedness to give a total score for each hazard. A hazard that does not have a probability of occurring is scored zero and will result in a zero for the total score.
3. List the hazards in descending order of the total scores will prioritize the hazards most in need of attention and resources for emergency planning.

\_\_\_\_\_ (*Facility*) will evaluate the final prioritization and determine a cutoff value, where no action will be taken for particular hazards. There will be some risk for those hazards.

The Hazard Vulnerability Assessment should be reviewed at least annually.

### Hazard Vulnerability Assessment

EVENT	PROBABILITY				RISK				PREPAREDNESS			TOTAL	
	HIGH	MEDIUM	LOW	NONE	LIFE THREAT	HEALTH/ SAFETY	HIGH DISRUPTION	MODERATE DISRUPTION	LOW DISRUPTION	POOR	FAIR		GOOD
SCORE	3	2	1	0	5	4	3	2	1	3	2	1	
<b>NATURAL EVENTS</b>													
Hurricane Winds													
Tornado													
Severe thunderstorm													
Snow fall													
Blizzard													
Ice storm													
Earthquake													
Temperature extremes													
Drought													
Flood, external													
Wild fire													
Landslide													
Epidemic/pandemic													
Dam failure													
Explosion/munitions													
Nuclear power plant incident													
<b>HUMAN EVENTS</b>													
Elopement													
Work place violence													
Security threat													

EVENT	PROBABILITY				RISK					PREPAREDNESS			TOTAL
	HIGH	MEDIUM	LOW	NONE	LIFE THREAT	HEALTH/ SAFETY	HIGH DISRUPTION	MODERATE DISRUPTION	LOW DISRUPTION	POOR	FAIR	GOOD	
SCORE	3	2	1	0	5	4	3	2	1	3	2	1	
Hazmat exposure, external													
Terrorism, chemical													
Terrorism, biological													
Hostage situation													
Civil disturbance/ community violence													
Labor action													
Bomb threat													
<b>TECHNOLOGICAL EVENTS</b>													
Electrical failure													
Generator failure													
Transportation failure													
Fuel shortage													
Natural gas failure													
Water failure													
Sewer failure													
Steam failure													
Fire alarm failure													
Communications failure													
Medical gas failure													
Medical vacuum failure													
HVAC failure													
Information systems failure													
Fire, internal													

EVENT	PROBABILITY				RISK					PREPAREDNESS			TOTAL
	HIGH	MEDIUM	LOW	NONE	LIFE THREAT	HEALTH/ SAFETY	HIGH DISRUPTION	MODERATE DISRUPTION	LOW DISRUPTION	POOR	FAIR	GOOD	
SCORE	3	2	1	0	5	4	3	2	1	3	2	1	
Flood, internal													
Hazmat exposure, internal													
Unavailability of supplies													
Structural damage													
Other													

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## 2. Facility Disaster Preparedness Assessment

\_\_\_\_\_ (facility name) will conduct a thorough Disaster Preparedness Assessment on an annual basis to determine the readiness of the physical plant and associated supplies/provisions within the facility that will be utilized to manage a crisis or disaster situation.

A continual supply of emergency items and equipment should be maintained in quantities that can accommodate the needs of the resident census, staff members, and their family members in the situation of a shelter-in-place or evacuation situation. The supplies are stored in the following location (s): \_\_\_\_\_. They should be labeled as Emergency Supplies and, where needed, stored together according to the emergency (e.g. chemical spill supplies). Staff members are aware of the location of supplies and location of keys.

See **Appendix 5** for Dietary Menus. In epidemic/pandemic emergencies, supplies and personal protective equipment may be needed for 6 weeks or longer. Procedures are in place for securing and storing needed additional supplies and resources.

### Sealed Emergency Water Supply

	Number of Supplies Needed (Residents and Employees)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)
<b>Location of Emergency Water Supply:</b>					
<b>One Gallon of Potable Water per Person per Day is the Suggested Minimum</b>	<i>Example: 1 x 110 residents + 90 employees = 200 gallons needed per day</i>				
<b>Seven-Day Supply of One-Gallon Jugs of Water (Seven days is the suggested minimum)</b>	<i>Example: 7 days x 200 gallons = 1,400 gallons needed for 7 days</i>				
<b>Bulk Water Storage (Five Gallon Jugs or Greater)</b>					

### Ability to Shelter/Evacuate Staff Family

\_\_\_\_\_ (facility name) has the following policy regarding its ability to shelter and/or evacuate staff family:

**Yes**       **No**      Staff family will be allowed to shelter in place in the facility for \_\_\_\_\_ time.  
Special considerations include the following:

\_\_\_\_\_

\_\_\_\_\_

**Yes**       **No**      Staff family will be allowed to evacuate with the facility staff/residents.  
Special considerations include the following:

\_\_\_\_\_

\_\_\_\_\_

*Sealed Food Supply*

	<b>Number of Supplies Needed (Residents and Employees)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>
<b>Location of Emergency Food Supply for 7 Days:</b>					
<b>Ready-to-Eat Canned Meats</b>					
<b>Ready-to-Eat Canned Soups/Stews</b>					
<b>Ready-to-Eat Canned Vegetables</b>					
<b>Ready-to-Eat Canned Fruits</b>					
<b>Juices/Gatorades</b>					
<b>Powdered Drinks (Kool-Aid, Tang, etc.)</b>					
<b>Carnation Instant Breakfast</b>					
<b>Dry Cereals</b>					
<b>Peanut Butter</b>					
<b>Crackers</b>					
<b>Coffee and Tea</b>					
<b>Powdered Milk</b>					
<b>Evaporated Milk</b>					
<b>Instant Potatoes</b>					
<b>Instant Puddings</b>					
<b>Macaroni and Cheese</b>					
<b>Nonfood Items: Paper Plates, Cups, Napkins, and Plastic Utensils</b>					
<b>Plastic Bags</b>					
<b>Ice</b>					

*Emergency Equipment and Medical Supplies*

	<b>Number of Supplies Needed</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>
<b>Wheelchairs</b>					
<b>Walkers &amp; Canes</b>					
<b>Portable/Folding Chairs (for Staging Area)</b>					
<b>Oxygen Concentrators</b>					
<b>IV Poles</b>					

	<b>Number of Supplies Needed</b>	<b>Total Number of Supplies on</b> <hr/> <b>(date)</b>	<b>Total Number of Supplies on</b> <hr/> <b>(date)</b>	<b>Total Number of Supplies on</b> <hr/> <b>(date)</b>	<b>Total Number of Supplies on</b> <hr/> <b>(date)</b>
<b>Feeding Pumps</b>					
<b>Suction Machines</b>					
<b>Bedside Commodes</b>					
<b>Adaptive Devices</b>					
<b>A Five-Seven Day Supply Should be Maintained:</b>					
<b>First Aid Supplies</b>					
<b>Band-Aids</b>					
<b>Gauzes and Bandages</b>					
<b>Alcohol/Hydrogen Peroxide</b>					
<b>Neosporin</b>					
<b>Disposable gloves</b>					
<b>Disposable gowns</b>					
<b>Surgical masks</b>					
<b>Eyewash Saline Solution</b>					
<b>Incontinence Products</b>					
<b>Barrier Cream</b>					
<b>Sanitizing Wipes</b>					
<b>Hand Sanitizer</b>					
<b>Medication Cups/Straws</b>					
<b>Nutritional supplements</b>					
<b>Catheter supplies</b>					
<b>Ostomy supplies</b>					
<b>Sterile 4X4s</b>					
<b>Alcohol/Peroxide</b>					
<b>First Aid Tape</b>					
<b>Syringes</b>					
<b>Kling/Ace Bandages</b>					
<b>Glycerine swabs</b>					
<b>Normal saline</b>					
<b>Insulin supplies</b>					

*Emergency Equipment and Supplies*

	<b>Number of Supplies Needed (Residents and Employees)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>	<b>Total Number of Supplies on _____ (date)</b>
<b>Location of Emergency Supplies:</b>					
<b>Flashlights and Batteries</b>					
<b>Whistles</b>					
<b>Portable Radio, NOAA Radio, and Batteries</b>					
<b>Mechanics Tool Box</b>					
<b>Utility Knife</b>					
<b>Non-Electric Can Openers</b>					
<b>Blenders/Food Processors</b>					
<b>Coolers</b>					
<b>Digging Tools: Shovels, Picks</b>					
<b>Supply of Duct Tape</b>					
<b>Heavy-Duty Plastic Sheeting</b>					
<b>Tarps</b>					
<b>Garbage Bags for Sanitation</b>					
<b>Cleaning Disinfectant Solutions</b>					
<b>Extra Supply of Bleach</b>					
<b>Approved Heavy-Duty Extension Cords</b>					
<b>Fire Extinguishers</b>					
<b>Fire Blankets</b>					
<b>Extra Sleeping Provisions (Pillows, Blankets, etc.)</b>					
<b>Matches in Waterproof Container</b>					
<b>Sewing Kit</b>					
<b>Portable Emergency Generators</b>					
<b>Fans</b>					
<b>Toilet Paper</b>					
<b>Hand Washing Soap</b>					
<b>Wind-up Alarm Clock</b>					
<b>Two-way Radios</b>					
<b>Storage Bags–Red Bags</b>					
<b>Chemical Light Sticks</b>					

	Number of Supplies Needed (Residents and Employees)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)	Total Number of Supplies on _____ (date)
(breakable light sticks)					
Box Cutters, Packing Tape, and String					
Hardhats and Work Gloves					
Caution Tape- Caution Cones					
Chainsaw (s)					
Reflective Vests					
Resident ID Bracelets					
Writing Utensils, Note Pads, Scissors, and Tape					
Spools of Twine					
Portable Cots					
Air Mattresses					
Cleaning Materials: bleach, sponges, mops, rags, etc.					
Analog Telephone					
Cell Phone Battery Charger					
Minimum 3 Days Fuel for Generator					
Minimum 3 Days Fuel for Vehicles					

***Emergency “Go Box” for the Facility***

\_\_\_\_\_ (facility name) should establish an Emergency “Go Box” and place it in secure locations throughout the facility, so that the Administrator and/or Incident Commander can grab it in an emergency situation. The “go-box” should contain at least the following items:

<b>Emergency Go Box Items for Facility</b>	
<b>Boxes are located:</b> _____	
✓	Item
	Cell phone & phone charger
	Two-way radios
	Cash/credit cards
	Additional keys for the facility
	Emergency key contacts list
	List of employees with information for payroll purposes
	List of employees contact/emergency numbers
	Copies of facility floor plans (enlarged)
	Badges for visitors/Pens/Pads/Blank Avery labels/ Colored Sharpe Markers

	Incident Command Structure (ICS) Facility Action Cards ( <b>See Appendix 17</b> )
	N95 Masks/Latex gloves
	Working gloves/duct tape
	Colored t-shirts or reflective vests/incident commander vest
	Restraints for emergency purposes ONLY

### 3. Alternate Facility (Relocation Site) Assessment

\_\_\_\_\_ (*facility name*) should establish multiple alternate facility sites when a complete evacuation of the facility is required. In some cases and depending on the situation, relocation may occur to a suitable facility within the same region for a short-term basis.

In the event however, that a disastrous situation strikes an entire geographical area, an alternate facility is identified that is at least 50 miles away from the facility.

It is essential that the alternate facilities meet basic requirements for safety and security of the residents and staff members. An alternate facility must provide the same level of care or higher to the residents, whether it be another nursing facility or hospital. A thorough evaluation of an Alternate Facility should be conducted to ensure that the facility meets the appropriate needs of the residents.

It will be assured that the alternate facility providers are trained to the needs of the chronic, cognitively impaired and frail population, as well as knowledgeable of methods to minimize transfer trauma with provisions for mental/behavioral health and grief counseling.

### 4. Crisis Public Relations—Staff Members, Family of Residents, and Community

In advance of an impending crisis or disaster situation, including an epidemic/pandemic episode, it is important for \_\_\_\_\_ (*facility name*) staff members, residents, family members, and the community-at-large to understand that the facility has developed a relationship with local emergency responders as well as the \_\_\_\_\_ County Emergency Management Agency to properly plan, prepare, respond, and recover from such situations.

\_\_\_\_\_ (*facility name*) has designated an individual to adequately educate staff members, residents, family members, and other applicable members/organizations within the community to understand that the facility has initiated a comprehensive program to address issues pertaining to All Hazards Emergency Management in order to lessen its perceived burden on the community.

The following persons will be official spokesperson with alternates designated:

Name/Contact Information	Title	Department

In advance of a crisis or disaster scenario that may require the facility to evacuate or shelter-in-place (SIP) and present media and public relations issues/concerns, the following points should be considered:

- Identify standardized ways of disseminating information (regular briefings, scheduled press conferences, etc.), as well as what to release, when to release it, whom to release it to, and why to release information
- Appropriate training should be provided to anyone in the organization who may deal with the media or perform public relations duties, keeping in mind:
  - Residents want to know:
    - How will they be protected
    - How they will be kept informed
    - How they can help or be involved
    - How soon normalcy will be reestablished

- Family Members/Responsible Parties want to know:
  - How their loved ones will be protected
  - Who is in charge
  - Who will be providing the most accurate information about the facility's status
  - Their own responsibility during an emergency event
  - The decision the facility is making that effect their loved ones
  - How their loved ones are doing
  - How they can help or be involved
  - How soon normalcy will be reestablished<sup>1</sup>
- Appropriate training should be provided to all employees to clearly define responsibilities and limitations regarding contact with the media and the release of information as part of the employees' conditions of employment
- Factors that should be considered when releasing information should balance:
  - Protection of the privacy, health, and welfare of the residents
  - When the information cannot be released, the release should be refused with an explanation. If delays are encountered, the media should be so advised
  - Addressing the public's need for information and reassurance, including:
    - Requesting that the public be advised not to come to the scene
    - Methods of apprising them of the situation
    - Anticipated "next steps"
    - Coordination of messages to residents, physicians, and staff members
    - Coordination of messages for handling the "worried well" (volunteers, separate locations, family members)
- KY Association of Health Care Facilities (KAHCF) and KY Association of Homes and Services for the Aging (KAHSA) can assist with communications during times of disasters. (see **Appendix 4: Contacts List**)

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<sup>1</sup> Florida Health Care Association Emergency Guide for Nursing Homes, Part I Comprehensive Emergency Management Plan, 2007, page 13.