



Disaster Preparedness for Long-Term Care Facilities

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Hurricane Katrina of 2005 affected 120 of 300 nursing homes in the state of Louisiana, causing evacuation to other areas of the state. Many lessons were learned from this disaster.

DISASTER PLANS

Disaster plans should be reviewed every year, and disaster drills practiced on a regular basis. The plan should include verification of the evacuation shelter with which the nursing home contracts. When evaluating a shelter (or other facility) for evacuation, keep in mind that several rooms will be necessary for housing the staff and their children. There should be a written bus service contract in place for evacuation of residents. Emergency tags should be available and in place for buses providing the transportation, since nonemergency transportation to or from a disaster area is likely to be restricted.

Emergency supplies should always be kept separate from regular supplies and regularly inspected. A pharmacy provider for the facili-

ty should be chosen that maintains backup electronic pharmacy records in a separate geographic location to enable access to vital information after the disaster.

Emergency kits for each bus should be prepared in advance. A staff person should be designated to be the first one arriving to the evacuating site to direct activities. Other staff should be designated to stay to close up the facility and to be there to reopen it before the residents return after the disaster. To notify families regarding the evacuation, notification technology can be used (www.notification.com). This phone service enables recording of a message and delivering it to hundreds of pre-programmed telephones.

TRIAGE

Residents should be triaged for specific buses. Ambulatory residents should be loaded first, then wheelchair residents who need minimal assistance. Loading the most dependent residents last provides the capability of caring for them until departure and unloading them off the bus first. Buses should be staffed according to acu-

ity of the residents, using at least two staff members per bus. When possible, roommates should be placed together on the bus, as familiarity has been shown to reduce anxiety and agitation. When time allows, completion of a walk-through check, including all bathrooms, should be performed to ensure that no resident is left behind.

RESIDENT VITAL MEDICAL INFORMATION

Resident identification and vital medical information is critical. A notebook with pictures of each resident and copies of resident face sheets should be prepared with insurance carrier and current physician orders to accompany residents on the bus. A CD file with digital pictures of residents with name and contact information can be sent to any facility or hospital.

Identifying color-coded armbands (according to acuity level of the resident) should be placed on the residents during the disaster. Information should include the name of the resident, facility, cell

phone contact number, code status, diet, and attending physician. Families who remove their loved ones from a facility prior to mandatory evacuation should be given copies of medical records for use for admission to another facility outside of the disaster area, or when returning to the facility after the disaster event is over.

ADVANCE NOTICE OF A PENDING DISASTER

When there is advance notice of a disaster, extra medications and supplies should be ordered and organized in the medication carts. Proper storage of insulin and other refrigerator medications is critical, using necessary checklists. Each bus must have enough supplies, food, cold water (due to lack of air conditioning in some buses), towels, and oxygen tanks to operate independently for a period of 8-10 hours during transportation. Large equipment should be sent ahead of the buses with residents. Proper loading of equipment onto the buses is essential, since equipment necessary for use on arrival should be loaded last (eg, medication carts, oxygen tanks). Oxygen tanks should be properly secured on the bus. One specially tailored school bus with seats removed may be necessary for evacuating impaired mobility residents, such as those with specialized wheelchairs and those who are bed-bound.

COMMUNICATION

During and for some time after a disaster there may be no electricity,

phones, faxes, and Internet, and cell phones may not work due to towers being down or circuits overloaded. Buses can become separated on an evacuation route. Buses with built-in mapping systems are highly preferable during a disaster to enable communications between buses and the evacuating and receiving facilities. Alternatively, satellite phones or some form of radio communication is recommended for ongoing communication between facilities and to state/local/federal emergency communications systems. Facilities could also designate a common communications point, such as a local hospital, where messages could be sent for local physicians and emergency personnel.

INCONTINENCE

Incontinence can be a major issue when evacuating residents. Packing enough incontinence supplies to accommodate long distances is essential. However, it may be difficult to provide proper hygiene to residents with incontinence during transfer on the bus, keeping in mind that travel time may take 8-10 hours or longer. When notification is provided in advance, evacuating early shortens the length of time spent on buses. The longer a facility waits to evacuate, the longer the bus ride, making incontinence more of an issue.

FACILITY SECURITY

Maintaining security during and in the days following a disaster is essential to preventing drugs, food, and

money from being stolen from the evacuating facility. For facilities that close during and for a period of time after a disaster, it is highly preferable to have business interruption insurance to cover the cost of the facility mortgage, payroll, and other expenses until the facility reopens. In addition, a computer services contract for backup operation services is advisable and should be kept in a separate geographic location.

STAYING IN THE FACILITY DURING THE DISASTER

If mandatory evacuation is not considered to be necessary, and a decision is made to stay at the facility through a disaster, it is important to remember that power outages will occur for an undetermined period of time, resulting in loss of air conditioning and heating. Specific residents may be at risk for dehydration, heat stroke, or hypothermia. Stocking extra intravenous fluids is vital. Lack of electricity also equates to no working door alarms for dementia residents, resulting in potential elopement; lack of automatic door locks, which makes the facility vulnerable to outside looters; and the inability to have clean laundry available. Use of a large gasoline-powered generator during a disaster does not typically provide enough electricity to power a refrigerator to keep foods cool and ice machine to keep residents cool. In addition, gasoline may be too difficult to obtain to power the facility for extended periods of time. Instead, a large natural gas generator with backup is recommended. Last-

ly, facilities should have chain saws, tarps, and extraction and hand tools. Facilities also need access to an emergency transportation system for employees who may have difficulty getting to work after the disaster.

RECEIVING RESIDENTS FROM OTHER FACILITIES

If your facility is serving as a receiving facility during a disaster, the resident population could double overnight. Supplies should be pre-ordered for arriving evacuees. Residents should be triaged upon arrival. A color-coded armband system, as mentioned above, can assist in rapidly identifying the sickest residents. To care for the increased number of residents, they should be placed in rooms according to their needs (ie, residents requiring tube feeding, those who are bed-bound,

and those requiring full assistance). This enables those residents' rooms to be quickly stocked with necessary supplies and staff.

Close contact with the Medical Director is critical for administration of new orders, since these residents may not have access to their regular attending physicians. Every nursing station should have a posted listing of each evacuee with the current status of each resident (ie, in hospital, in facility) for quick reference relative to questions from family members calling in. Staff should be advised to stay overnight in the facility when possible during and shortly after a disaster, since transportation to and from work may be difficult or impossible. The arriving facility should be reminded to bring identifying information for each resident, including pictures and respective medicine adminis-

tration records. Facilities accepting evacuees should consider partnering with schools of nursing as a resource for extra manpower, which could also serve to meet the education needs of the nursing students.

In summary, the impact of Hurricane Katrina on nursing home residents and staff was significant. Many weaknesses in the disaster preparedness of nursing homes were identified during the days and weeks after the hurricane. The lessons learned in Louisiana may be of assistance to other LTC providers as they develop emergency preparedness plans for their facilities. ✧

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