Hurricane disaster plans should be reviewed every year before each hurricane season.

Homes need assistance in developing disaster plans. Although plans may look good on paper, they may not be in practice.

At the beginning of hurricane season, meet with your staff, make lists of supplies needed, and make assignments for responsibilities (who calls families, who packs supplies.)

Check your physical property and its surrounding areas for anything that could cause damage to your building before the hurricane season.

Each season verify the evacuation shelter the nursing home is contracted to. Contracting with evacuation shelters can be a difficult task. Many places are concerned about liability issues with the elderly.

In planning shelter needs, consider that you will need several rooms for staff and possibly their children.

Contract with two evacuation sites: one east and one west depending on how the hurricane is moving.

In planning when to evacuate, keep in mind the day of the week. Usually there is less staff on the weekend making evacuation more difficult.

It is critical to review your bus service contract. When all the homes from one area contract with local bus services, these services become overextended. The end result is that a home may be without buses. One idea is to contract a bus service from the geographic location a home is evacuating to. Because the Office of Emergency Preparedness (OEP) may restrict buses coming into an area under evacuation, it is beneficial for OEP to issue emergency tags to nursing homes to be placed on buses coming in to evacuate residents.

Listen to weather reports and attend OEP meetings. Keep yourself updated on the conditions.

Consider stocking extra common medicines before hurricane season.

Keep designated hurricane supplies separate from regular supplies.

When choosing a pharmacy provider, ensure that they maintain backup electronic pharmacy records in a separate geographic location to enable access to vital information after the storm.

It is not necessary to wait for a “mandatory evacuation.” Leave as early as possible. Leaving early means less travel time; shorter time to deal with incontinent residents, less time for immobility, and cell phones may actually work (circuits not overloaded yet).

Notify staff, medical director and pharmacy once the decision has been made to evacuate.

Alert your transportation early. Have buses and ambulances on “stand-by.” This allows for a smoother departure. Keep them updated on your evacuation status.

Make up emergency kits for each bus.

Appoint a staff person to be the first on arrival to direct activities at the evacuation site.

Designate some staff to stay to close the facility and be there to reopen it before the residents return.

To notify families regarding the evacuation, notification technology (such as www.notification.com) could be used. This phone service allows one to record a message and have that one message delivered to hundreds of pre-programmed telephones.

One facility got the local radio station to notify the public of their evacuation, and announce when supplies and help were needed for their home.
Tips and Lessons Learned for Nursing Home Evacuations
Hurricane Preparedness - Advance Planning

- Consider using buses with a built-in seats.
- One you leave.
- away (i.e., How equip
- dangerous on a bus.
- Provide each bus with enough fluids (water, Gatorade
- buses do not have air c
- In
- Checkli
- Order extra medicat
- Placing
- t
- Having your facility keep
- each resident and copies o
- Resident
- Co
- an anxiety
- Staff your buses by acuity of your resi
- Persons who need
- Triage
- on the ar
- Sipper
- mouth
- up to departure and load the
- m band
- on the bus,
- Tri
- m band on the
- camer
- Placing
- the
- home on the receiving end.
- Although color coding could be very helpful, it was noted that a resident with low acuity could become high acuity, thus the bracelet may be misleading. One idea is to rectify this: if the acuity increases, place an additional colored armband that represents the current status. Triage according to the highest color-coded arm band on the resident.
- Have a bus list that consists of names of everyone on the bus, including all residents and staff.

Identification
- Resident identification and vital medical information is critical. Make a notebook(s) with pictures of each resident and copies of resident face sheets, insurance carrier and current MD orders to keep on the bus. Records must be set up in a way that allows you to gather pertinent information quickly. Consider having your facility keep many notebooks, they can be distributed via each bus, to the evacuation site(s), and even to OEP, if necessary.
- Having a picture of the resident is critical, especially if they are confused. Digital pictures would offer the option of sending identifying information to any facility or hospital. Keep your digital pictures stored on a CD file where name and contact information is matched with the picture.
- Placing identifying armbands on the residents before evacuation is very helpful. Vital data could be put on the arm band, such as: the name of facility resident is from, cell phone contact number, code status, diet, etc. Arm bands could also be color-coded according to the acuity level of the resident. This assists the home on the receiving end. Although color coding could be very helpful, it was noted that a resident with low acuity could become high acuity, thus the bracelet may be misleading. One idea is to rectify this: if the acuity increases, place an additional colored armband that represents the current status. Triage according to the highest color-coded arm band on the resident.

Supplies/Equipment
- Order extra medications/organize med carts. Don’t forget the insulin and other refrigerator medications. Checklists are helpful.
- In the bus, have ice water in the ice chest with small towels for wiping people down in the heat (some buses do not have air conditioning).
- Each bus must have enough supplies, food, oxygen tanks, etc. to operate independently.
- Provide each bus with enough fluids (water, Gatorade, supplements) for all residents and staff on that bus. Sipper cups and sports bottles work well. Some directors of nursing feel usage of straws can be dangerous on a bus.
- If possible, send large equipment ahead. This allows set-up before you arrive at the evacuation site.
- How equipment is loaded on the buses should be planned carefully. Look at equipment you want right away (i.e., med cart) when you arrive to the destination and equipment you need up to the moment you leave. You may want to stock that last.
- Make sure oxygen tanks are very secure on the bus.

Buses
- One home preferred school buses for evacuation (although no air conditioning) because staff is able to take out the seats to accommodate specialized wheelchairs, and mattresses for the bed bound. The vinyl seats are easier to clean after incontinent episodes.
- Consider using buses with a built-in mapping system to prevent buses from getting lost on the road.
Buses can get separated on an evacuation route. Communication between buses and the facility is critical. Cell phones can be used but may not work if circuits are overloaded. In addition, hurricanes can knock down cell towers. Satellite phones or some form of radio communication is recommended for ongoing communication.

**Incontinence**

- Incontinence can be a big issue when evacuating. There may be no bathroom on the bus. It may be difficult to change a resident on a bus. Travel time could be hours. If unable to change a resident, there is a risk residents sharing a seat may be exposed to other’s urine. Evacuating early shortens the length of time in a bus. The longer a facility waits to evacuate, the longer the bus ride, making incontinence more of an issue.
- Incontinence is also an issue upon arrival to the shelter site. Shelter sites may have limited bathrooms to accommodate a large number of elderly residents. With few bathrooms and limited staff, one home had an entire gym floor covered with urine by morning time. This created a fall hazard and an infection control risk.

**WEATHERING THE HURRICANE: SHELTERING IN PLACE**

**Communications**

- Communications are a vital issue, not only during the hurricane, but also in the aftermath. There may be no electricity, no phones, no faxes, no Internet, and cell phones may not work -towers down, or circuits overloaded.
- Lack of communications means a nursing home can’t contact a physician, hospital or ambulance service.
- When communications are absent, it is recommended that local or state OEP or law enforcement needs to physically check on facilities to find if there are needs to be met.
- To improve communication, facilities could designate a common communications point, such as a local hospital, where messages for local physicians, emergency personnel etc., could be left.
- Some radio system is needed for communications between facilities to state/local emergency communications.
- Lack of communications ties up the whole health care system. Many hospitals or affected facilities could not discharge or admit to each other because of the lack of ability to communicate.

**Security**

- Call in the National Guard early. In the days following the storm, as nursing homes sheltered in place, there was a fear of people breaking in to get drugs, food, and money. Some facilities reported people breaking into cars and siphoning gas out of vehicles.
- Procuring security was difficult since local law enforcement was pulled to other areas. In addition, there were no security personnel available for hire. This made the nursing homes feel vulnerable.

**Power**

- A gas generator to run a refrigerator is not enough power for a nursing home. Facilities should get a natural gas generator with back up to supply enough power. Fuel is too difficult to get after a hurricane. No power equates to: no air conditioning (dehydration risks) or no heating, no working door alarms for dementia residents (potential elopement), no automatic door locks (vulnerable to outside looters), and no laundry. Consider a generator large enough to also power your ice machine, which is crucial to keep residents and medicine cool.
- New nursing home buildings should be designed so that if a building loses power, the building can still have adequate ventilation without electricity.

**Vital Identification and Records**

- There is a need to have vital medical records accessible across health care settings to be used for catastrophic events. After the storm, many admissions to the homes came from families who had taken people out of other living arrangements (i.e., assisted living, home health, personal care attendant), and could not return home. Many of these admissions came without any paperwork (diagnosis, meds, etc). It would be helpful if, in the face of an approaching storm, such individuals were given copies of their medical records.
Supplies

- It may be difficult to get necessary services, such as pharmacy, supplies, etc. With no computer or fax service, getting goods was difficult. Some manual backup system is needed. Examples: one pharmacy would not send medications until the facility faxed billing information prior to their filling the prescriptions, without fax capabilities this was not an option; one supplier’s computers were down so they would not send out supplies.
- Pharmacy providers need to have some type of backup computer records stored in a separate geographic location to obtain vital prescription information.
- OEP needs to consider pharmacies as a vital service and to ensure their operation after the hurricane.
- If communications are down, providers, such as food distributors, may need to call on the homes in person.
- Three to five days of provisions were not enough for those who stayed in from the storm and calling for more provisions was difficult.
- Recommend that a home have the following supplies on hand: a chain saw, tarps, ice, and plenty of IV solutions (if no air conditioning to prevent dehydration).

Transportation

- Facilities need access to an emergency transportation system. After the storm, employees had difficulty getting to work. Their vehicles had sustained damage or trees were blocking them in. If staff can’t get to work, it compounds the issues of overflowing hospitals because homes can not take in more residents.

**SERVING AS AN EVACUATION SHELTER**

- Realize the impact serving as a shelter could mean. Your resident population could double overnight.
- Pre-order supplies for arriving evacuees if possible.
- Triage residents upon arrival. Color-code armband system could assist in rapidly identifying sickest residents.
- To care for the increased number of residents, place them in rooms according to their needs (i.e., residents requiring tube feedings in one room, bedbound full assist together). This enables that room to be quickly stocked with needed supplies and staff for those residents.
- Maintain close contact with the medical director for new MD orders.
- At every staff phone, post the evacuee nursing home’s resident list with current status of each resident i.e., in home/hospital. This enables staff to advise families quickly of where their loved one is.
- It’s recommended staff stay overnight in the home; getting to and from work became too much of a challenge.
- It is critical that the arriving facility bring identification of the residents and medicine sheets. Pictures of the resident are helpful.
- Partner with schools of nursing to use as a resource to man shelters or help out in the nursing homes. Some schools of nursing use this as part of their clinical training.
- Call local law enforcement and possible security early in the home’s parking lot. Some facilities received so many evacuees they could not take anymore, yet people kept seeking assistance for food, medicine, etc.
- Accepting numerous evacuees was difficult for the permanent residents. They felt that they had limited space and nursing services because of this.
- Residents need to know they can file a claim with FEMA if personal belongings in their room were lost.
- For facilities that closed because of the hurricane, it may be helpful for them to have business interruption insurance to cover their mortgage, payroll, etc., while their operations are down. In addition, consider a computer services contract for backup services in a separate geographic location, in the event of a disaster.