

UTILITY OUTAGES

PLANNING CONSIDERATIONS

Identify all critical operations, including:

- Utilities including electric power, gas, water, hydraulics, municipal and internal sewer systems, wastewater treatment facilities, etc.
- Security and alarm systems, elevators, lighting, life support systems, heating, ventilation, and air conditioning systems, electrical distribution system, etc.
- Medical equipment
- Pollution control equipment
- Telephone and Communication systems, both data and voice networks
- Transportation systems, including air, highway, rail, and waterway
- Determine the impact of service disruption
- Ensure that key safety and maintenance personnel are thoroughly familiar with all building systems
- Establish procedures for restoring systems. Determine need for back up systems
- Establish preventive maintenance schedules for all systems and equipment

TELEPHONE AND COMMUNICATION INTERRUPTIONS

An interruption to telephone and communication requires immediate response. One of the biggest problems is to determine whether the problem is with the telephone/communication provider or within the long term care facility. Many digital phone systems will not work when electric power fails. Additionally, circuit boards and the phones themselves may fail. Consult the telephone directory and systems manuals to troubleshoot the problem. Alternate telephone systems include pay phones, cell phones and others that may not be hooking into the facility system. Develop a troubleshooting plan of action. Telephone and communication equipment providers have a variety of maintenance plans available for the repair and/or replacement of equipment.

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Power failure, lack of gas or water, may require positive actions on the part of the staff of the long term care facility. The cause and duration of the interruption will affect the type of responses. It may be nothing more than providing extra blankets for the residents to keep warm. However, it could be evacuation of the facility. Whether or not a particular long term care facility can continue to operate when faced with a sudden and prolonged loss of one or more of the primary utilities, depends on the degree of limitation of normal operations and the amount of pre-planning on the part of the facility. Any time evacuation becomes an option, use information contained on the current HCFA Form 672 and/or 802 to help estimate transportation requirements.

Loss of utilities may be caused by any number of natural and man-made emergencies. In the event of or prior to a utility outage, the following actions should be taken.

WATER OUTAGE:

- Develop water emergency procedures.
- Call local water company emergency service.
- Access emergency water back up supply and designate use
- Immediately restrict use of available water in the facility.
- Inventory the community for the location of water tanks and tankers to rent or borrow.
- Know from whom or where in the community the facility can purchase bottled and bulk containers of water and ice.
- Determine the number of gallons of safe (potable) drinking water that will be required each day for residents and staff. A general guideline for determining baseline daily fluid needs is to multiply the resident's/patient's body weight in kilograms (kg) x 30ml (2.2lbs = 1kg), except for residents with renal or cardiac distress, or other restrictions based on physician orders. For example, the average 150 lb. person will require about 2,000ml (about ½ gallon) per day.
- Potable water will be required for washing dishes, personal hygiene and resident care, etc.
- Non-potable water will be required to flush toilets and for cleaning.
- Inform the local Emergency Management Coordinator of the problem. If the outage is to be lengthy, request temporary use of water pumps and tankers.
- If the local Emergency Management cannot provide water pumps and tankers, ask them to contact the Kansas Division of Emergency Management for assistance.
- If auxiliary water is not available, and the water outage is to be of extended duration, evacuate residents in **accordance with your evacuation plan.**
- **Call on volunteer resources as needed.**

GAS OUTAGE:

- In the winter months, make sure the residents are warmly dressed when there is a gas outage (if the facility is heated by gas).
- Call local gas company emergency service.
- Appoint a staff member to turn off the gas at the main valve.
- As a safety measure, open windows to prevent gas accumulation and possible explosion.
- Do not turn on any light switches. Instead, use a flashlight.
- Lanterns, a torch, electrical sparks, and cigarettes are flammable and could cause an explosive fire.
- If there is an alternate bottled gas emergency system installed, have it activated.
- Inventory your community for the location of bottled gas for sale.
- If the decision is made to evacuate residents, do so in accordance with the evacuation plan.
- Inform the local Emergency Management Coordinator of the problem.
- Call on volunteer resources as needed.

POWER OUTAGE:

- Call local power company emergency service.
- Make sure that flashlight and portable radios are in good working order.
- Assure all staff aware of location of emergency tote. (usually stored in med room)
- In the winter months, make sure the residents are warmly dressed when the electricity is off (if the facility is heated by electricity).
- Inventory the community for the location of generators to rent or borrow.
- Inform the local Emergency Management Coordinator of the problem. If the outage is to be lengthy and the facility does not have an emergency generator, request temporary use of one.
- If the local Emergency Management Coordinator cannot provide a generator, ask them to contact the Kansas Division of Emergency Management for assistance.
- If the decision is made to evacuate residents, do so in accordance with your evacuation plan.
- Call on volunteer resources as needed.

LOCATION OF MAIN CONTROLS FOR UTILITIES

A trained staff member, and an alternate, should be designated and available at all times, to be able to operate utility controls such as water, gas and power into the long term care facility. The Disaster Response and Recovery Plan should clarify who has the authority to turn off the utilities and under what circumstances. The location of all utility controls should be on a floor plan of the facility.

OPERATION OF EMERGENCY GENERATOR

Long term care facilities depend on power services (electrical and gas) to provide adequate services to residents. Having a dedicated emergency generator ensures the facility's ability to continue to operate uninterrupted in case of power failure. Generators must be tested regularly. The Disaster Response and Recovery Plan should outline the persons trained and responsible for operating this equipment. Clear instructions must be posted near the generator explaining how to activate it and how to maintain it. Generator systems must meet life safety codes as specified in NFPA 99.