

## **Lessons Learned**

- 1. Temperature control is a basic safety issue for nursing homes residents. Losing air conditioning in hot weather can result in serious health consequences, even death, for nursing home residents. However, federal regulations don't require emergency power to be capable of maintaining safe temperatures in nursing homes. In the case of the Hollywood Hills nursing home in Florida, work-around measures like spot-coolers—which are allowed under current federal regulations—made conditions even worse.
- Inadequate regulatory review allowed for non-functional emergency plans. Long-term care facilities are required to have some form of emergency plan, but those plans are not subject to a thorough reviewand-approval process by state or federal regulators. The investigation found plans omitted basic information such as who is responsible for evacuation decisions, emergency procedures in case power or temperature control is lost, and even accurate descriptions of likely emergencies. As a result, when disaster struck, instead of following a well-considered plan, decisions were improvised, putting residents at greater risk.
- 3. Greater preparation is needed when sheltering-in-place during **natural disasters.** There are risks associated with moving residents to an alternative facility ahead of an anticipated natural disaster. However, sheltering-in-place also carries risks, and this report details examples of nursing homes that sheltered-in-place without adequate preparation for scenarios such as power loss or flooding.
- Federal temperature control rules are decades old and not based on modern science. Federal rules state that 71 to 81 degrees is a "safe and comfortable" temperature for long-term care facilities. Yet, this rule, in place since the 1980s, is based on standards developed by heating and air-conditioning industry engineers—not medical experts. The rule also doesn't account for the effect that humidity has on the human body, as measured by the heat index. The National Oceanic and Atmospheric Administration cautions that temperatures as low as 80 degrees poses health risks to the general population when coupled with high humidity. Senior citizens are more susceptible to the risks of heat stress than other adults.
- 5. Threats to at-risk populations were not accounted for in power restoration priority.

Power restoration plans in Broward County prioritized restoring infrastructure over nursing homes, which fails to account for the threat losing power poses for at-risk populations in these facilities. Hollywood Hills repeatedly contacted the power company—as well as state officials yet electricity was not restored until it was too late. The process for establishing power restoration priorities should be revisited to ensure that the loss of power does not lead to loss of life in nursing homes.

## **Key Recommendations**

These eight recommendations are among 18 the report makes to improve nursing home safety during natural disasters

- 1. Revising the Safe and Comfortable Temperature Standard: CMS should revise its "safe and comfortable" temperature standard, to reflect health- and evidence-based risks that high temperatures pose for nursing home residents. The standards should also incorporate modern heat index guidelines.
- 2. Make It Clear that the Safe and Comfortable **Temperature Standard Applies in Emergencies:** CMS should issue guidance to state regulators and nursing homes that makes it clear the safe and comfortable temperature standard strictly applies during emergency situations.
- 3. Emergency Power Capable of Maintaining Safe Temperatures: CMS should specifically require nursing homes to install emergency power capacity capable of maintaining the safe and comfortable temperature standard.
- 4. Warnings for Alternative Temperature Controls: CMS, state and local officials should issue warning guidance on the improper use of alternative means of maintaining temperatures, such as spot coolers, to prevent these devices from making conditions worse as they did at Hollywood Hills.
- 5. Highlight the Vulnerability of Seniors in Heat **Emergencies:** Senior citizens are uniquely vulnerable to irreversible health consequences and death related to heat stress. CMS should make this risk visible by instituting requirements and guidance that require facilities caring for senior citizens to specifically prepare for heat emergencies, particularly those located in regions of the country where they are likely to occur.
- 6. Coordination with Electricity Providers: Because of the vulnerability of seniors to heat stress, CMS, state and local officials should coordinate with electricity providers to ensure that higher priority is given to nursing homes when considering requests to restore power during emergencies, especially those in which heat may be an aggravating factor. These planning efforts should include appropriate contingencies for facility evacuations if power cannot be restored in a timely manner.



- 7. Effective Review and Approval of Emergency Plans: CMS, states, and local governments must re-examine their processes for reviewing and approving long-term care facilities' emergency plans to ensure that they are complete, accurate, and protective of residents' health and safety. CMS and states should ensure that emergency plans actually address the specific hazards identified in the facility's hazards assessments, and ensure that emergency managers have proper training and qualifications to carry out their roles and responsibilities.
- 8. Shelter-in-Place/Evacuation Warnings: CMS, states and local governments need to more clearly define what it means to issue mandatory orders to shelter-inplace or to evacuate. They also must make clear what responsibility nursing home administrators have to protect their residents whether or not such orders are issued. If a nursing home decides to shelter-in-place than it needs to have trained staff and equipment to ensure that nursing home residents are safe. It also must be able to continually reassess that decision and the level of safety provided.