

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**NURSING HOME EMERGENCY
PREPAREDNESS AND RESPONSE
DURING RECENT HURRICANES**



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OBJECTIVES

1. To determine the national and Gulf State incidence of nursing home deficiencies for lack of emergency preparedness.
2. To examine the experiences of selected Gulf State nursing homes during recent hurricanes.
3. To review the emergency preparedness plans of selected Gulf State nursing homes and evaluate nursing home use of plans.

BACKGROUND

Federal law requires that Medicare and Medicaid-certified facilities have written plans and procedures to meet all potential emergencies and provide training to employees in emergency procedures. State surveys assess whether facilities meet these requirements. Four of the five Gulf States also have additional emergency preparedness requirements which are typically expected to be included in facility emergency plans.

For this study, we reviewed State survey data for emergency preparedness measures both nationally and for Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas) and visited selected communities to interview nursing home staff, local authorities, and other stakeholders. We also compared emergency plans for 20 selected nursing homes affected by hurricanes in the 5 Gulf States against a list of suggested provisions compiled from all Gulf State requirements and guidance, a variety of published works from authoritative sources such as the American Journal of Public Health, and other health care, elder care and emergency preparedness experts.

FINDINGS

Nationwide, 94 percent of nursing homes met Federal standards for emergency plans and 80 percent for sufficient emergency training in 2004-2005; compliance rates were similar for Gulf States. Among Gulf States, 94 percent of nursing homes met standards for planning and 79 percent met standards for emergency training of staff.

Multiple factors, including community evacuation orders, influenced the decision of selected nursing homes to evacuate or shelter.

Nursing home administrators and owners most often made the decision to evacuate or shelter in place, using information from local authorities

and their own past experiences. Mandatory evacuation orders had a strong influence on the decision to evacuate, but administrators and owners considered other factors as well, including the health of residents, risks of transporting, and availability of host facilities.

All 20 of the selected Gulf State nursing homes experienced problems, whether they evacuated or sheltered in place. In some cases, problems can be tied to a lack of effective emergency planning or failure to properly execute the emergency plans. In others, the circumstances of the hurricane and its effect on resources were such that prior planning may not have anticipated the specific problems encountered, and impromptu decisions and actions were required. Similar problems emerged for evacuated facilities across States and communities, including transportation contracts that were not honored, lengthy travel times, complicated medication needs, host facilities that were unavailable or inadequately prepared, inadequate staffing, insufficient food and water, and difficult reentry to facilities. Administrators from 5 of the 13 selected nursing homes that evacuated reported a negative impact on resident health, such as dehydration, depression, and skin tears. Facilities that sheltered in place encountered fewer problems, but still reported difficulty maintaining staffing, supplies, and facility services, and, as with the evacuated facilities, some additional problems were narrowly averted.

Administrators and staff from selected nursing homes did not always follow emergency plans and plans often lacked suggested provisions. Each of the 20 emergency plans reviewed met Federal requirements on the most recent State survey. However, administrators from 5 of the 20 facilities reported that they deviated from or worked beyond their emergency plans during the recent hurricanes, either because the plans were not updated or plans did not include instructions for particular circumstances. When comparing details of their plans to their reported actions, we found that there was a greater degree of deviation and supplementation of plans than stated by nursing home administrators.

Additionally, when we evaluated the completeness of plans against a list of suggested provisions, we found that they were often lacking a number of the provisions. For example, 6 of the 20 plans did not have instructions for evacuating to an alternative site, 9 plans did not have criteria or other guidance for making the decision to evacuate or shelter in place, 15 plans did not have information about the specific

needs of residents that would allow staff to modify plans according to residents' needs, and 11 plans did not have instructions for reentry following evacuation.

Lack of collaboration between State and local emergency entities and nursing homes impeded emergency planning and management.

Local emergency managers often provided guidance regarding the decision to evacuate or shelter in place, and four of five Gulf States require local emergency managers to review nursing home emergency plans. Some communities were more involved with nursing homes than others, but generally, nursing homes managed evacuation or sheltering in place without guidance or evacuation assistance from State and local emergency entities. Evacuation assistance came primarily from parent corporations, “sister” facilities, and resident and staff family members. Administrators from five nursing homes that evacuated and one nursing home that sheltered in place reported that problems with State and local government coordination during recent hurricanes contributed to problems that they encountered.

RECOMMENDATIONS

To improve nursing home emergency preparedness and ensure effective execution of plans, we recommend the following:

The Centers for Medicare & Medicaid Services (CMS) should consider strengthening Federal certification standards for nursing home emergency plans by including requirements for specific elements of emergency planning. CMS could develop a core set of required elements for inclusion in nursing home plans with corresponding changes to the Interpretive Guidelines for surveyors' use in evaluating emergency plans. These required elements should apply to all Medicare or Medicaid-certified facilities, and also be tailored to address specific local risks. In developing this set of core elements, CMS could collaborate with State emergency management entities, nursing home associations, and other parties knowledgeable about nursing home operations or emergency preparedness.

CMS should encourage communication and collaboration between State and local emergency entities and nursing homes. This effort could include providing guidance and technical assistance to States, facilitating a dialogue between nursing homes and emergency management authorities, and encouraging local emergency management review of facility emergency plans.

AGENCY COMMENTS

CMS concurred with both recommendations and outlined efforts underway to strengthen Federal certification standards and encourage collaboration between State and local emergency entities and nursing homes. These efforts include reviewing regulatory requirements and interpretive guidelines for potential revision, implementing a communication strategy to disseminate information among States, CMS and health care facilities, and developing guidance for improved collaboration among Federal, State and local emergency entities.

This evaluation was conducted in conjunction with the President's Council on Integrity and Efficiency (PCIE) as part of its examination of relief efforts provided by the Federal Government in the aftermath of Hurricanes Katrina and Rita. As such, a copy of the report has been forwarded to the PCIE Homeland Security Working Group, which is coordinating Inspectors General reviews of this important subject.

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BACKGROUND

Nursing home residents rely on nursing home staff to plan for and execute appropriate procedures to protect them during times of disaster. However, nursing home tragedies associated with recent hurricanes in the Gulf States have raised concerns about plans and coordination with State and local resources. In a congressional briefing, the Government Accountability Office indicated that “[h]urricanes Katrina and Rita were incidents of national significance that highlighted the challenges involved in evacuating vulnerable populations, including those in hospitals and nursing homes.”¹ This study of facility emergency planning and execution responds to a request from Senator Herb Kohl, ranking member of the U.S. Senate Special Committee on Aging.²

Federal Requirements for Nursing Home Emergency Preparedness

Sections 1819 and 1919 of the Social Security Act establish requirements for nursing home participation in the Medicare and Medicaid programs. The Secretary of the Department of Health and Human Services is responsible for ensuring that these requirements and their enforcement “are adequate to protect the health, safety, welfare, and rights of residents and to promote the effective and efficient use of public moneys.”³ Pursuant to Federal regulations, certified facilities are required to have “detailed written plans and procedures to meet all potential emergencies and disasters,” and must “train employees in emergency procedures when they begin work in the facility, periodically review procedures, and carry out unannounced staff drills.”⁴

The State Operations Manual also requires that facilities consider, in the development of plans and training, “geographic location and the types of residents served.”⁵ Potential emergencies and disasters include a wide range of conditions, from a localized to a community-wide event.

Localized events impact only a single facility, whereas a community-wide event may impact all facilities within a specific geographical area. Facilities may include in their written plans additional or more specific measures that are responsive to State and local authorities.⁶

Verification of Nursing Home Compliance with Requirements

The Omnibus Budget Reconciliation Act of 1987 established a survey and certification process for the Centers for Medicare & Medicaid Services (CMS) and States to verify that Federal standards are maintained in nursing homes certified for participation in the Medicare and Medicaid programs. CMS has responsibility for enforcement of these standards, and contracts with State agencies to survey each facility to certify compliance with Federal standards.⁷

Standard Surveys. State survey agencies are required to conduct standard surveys at least every 15 months or in abbreviated versions following complaints.⁸ The surveys include two measures of emergency preparation: having an emergency plan in place, and training staff in emergency procedures.⁹ To evaluate plans and training, CMS developed Interpretive Guidelines that instruct surveyors to ensure that the facility reviews its plan periodically and tailors it to the facility's geographic location and to the types of residents it serves.¹⁰

When State surveyors determine that the facility plan or training does not meet Federal requirements, they issue a "deficiency tag" that corresponds to specific regulations. The following are criteria stated in the surveyor guidelines for these tags:

- F517—"The facility must have detailed written plans and procedures to meet all potential emergencies and disasters, such as fire, severe weather and missing residents,"¹¹ and
- F518—"The facilities must train all employees in emergency procedures when they begin to work in the facility, periodically review the procedures with existing staff, and carry out unannounced staff drills using those procedures."¹²

Life Safety Code Surveys. States also conduct Life Safety Code (LSC) surveys, often in conjunction with standard surveys.¹³ The LSC component is a compilation of fire safety requirements published by the National Fire Protection Association¹⁴ and incorporated into Medicare and Medicaid regulations.¹⁵ Although the LSC focuses on fire safety planning and conducting fire drills, its provisions are relevant to

evacuation during other emergencies (such as the use of prescribed methods for carrying fragile, nonambulatory residents to safety). CMS Interpretive Guidance for LSC surveyors includes details regarding what the evacuation plan should include at a minimum, including questions for staff regarding the emergency plan, fire drill procedures, and details regarding fire drills.¹⁶ As with the standard surveys, to ensure adequate emergency preparedness, LSC surveyors issue deficiency tags when they determine that plans and training do not meet requirements. The following are criteria stated in the surveyor guidelines for these tags:

- K48—“There is a written plan for the protection of all patients and for their evacuation in the event of an emergency”; and
- K50—“Fire drills are held at unexpected times under varying conditions, at least quarterly on each shift. Staff are familiar with procedures and aware that drills are an established routine. Responsibility for planning/conducting drills is assigned only to competent persons who are qualified to exercise leadership.”¹⁷

Additional Federal Oversight in Emergency Preparedness

State and local authorities have primary responsibility for emergency management and the Federal Government plays a limited role. The Stafford Act specifies that the Federal Government assist State and local governments with their responsibilities during disasters by encouraging the development of comprehensive disaster preparedness and emergency assistance plans.¹⁸

Each local jurisdiction is required to develop an Emergency Operations Plan (EOP) that defines the scope of preparedness under the guidelines of the National Incident Management System.¹⁹ Guidance for development of the EOP specifies that the plan’s evacuation directions include specific provisions for evacuating special needs individuals, including nursing home residents.²⁰

Additionally, Federal law requires that States establish a Long Term Care Ombudsman Program, funded by the Administration on Aging (AoA), to advocate for the care of residents in long term care facilities. The ombudsman program is responsible for monitoring policies that pertain to residents in long term care facilities.²¹ As a networking organization, AoA coordinates Government and nongovernment agencies, outreach programs, public issue forums, and disaster relief. AoA also directs efforts between Federal, State, and local authorities to meet the needs of the elderly population.

Gulf State Requirements for Nursing Home Emergency Preparedness

Four Gulf States (Florida, Louisiana, Mississippi, and Texas) impose additional requirements for nursing home emergency planning.²² Compliance with these additional provisions is verified by State licensing agencies in their periodic review of facilities to renew State licensure. Florida and Texas have the most extensive additional requirements. Louisiana developed a model plan to provide guidance to nursing homes for emergency planning. Mississippi and Florida require facilities to use, as a minimum standard, criteria specified by Florida's Agency for Health Care Administration.²³ (Appendix A provides a summary of all Gulf State requirements.)

METHODOLOGY

For this study, we (1) analyzed national and Gulf State survey data indicating noncompliance with Federal requirements for emergency plans and training; (2) collected information about the experiences of a selection of nursing homes affected by four hurricanes in 2004 or 2005 (Ivan, Katrina, Rita, and Wilma), primarily through interviews with facility staff and community authorities; and (3) compared emergency plans from these selected nursing homes to a list of provisions compiled from informed sources. (See Appendix B for detailed methodology.)

National and Gulf State Deficiencies

We used CMS's Online Survey, Certification, and Reporting (OSCAR) data to determine the number of deficiencies nursing homes received for insufficient emergency plans and failure to adequately train staff for emergencies during calendar years 2004 and 2005 (nationally and specifically for Gulf States). OSCAR maintains information on the four most recent standard surveys as well as complaint-generated surveys.

Community and Nursing Home Selection

The process of nursing home selection began with the review of localities. Localities were chosen in a manner to ensure diversity in population size and proximity to a hurricane (see Box 1 on page 5 for hurricane details). Facilities within these localities were chosen in a manner to ensure diversity in size, ownership, and past State survey performance on emergency preparedness measures.²⁴ We selected a total of 20 nursing homes that experienced 1 of the 4 hurricanes, and were located in 9 counties across 5 Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas) with 4 nursing homes selected per

State. Eleven nursing homes evacuated before the hurricane, two sheltered in place and then evacuated after the hurricane, and seven sheltered in place and never evacuated. Selected localities included a large metropolitan area, several mid-size cities, and both suburban and rural communities.

| |
|--|
| <p>Box 1: Selected Hurricanes All selected hurricanes were <i>Category 3</i> at landfall, with winds of 111-130 miles per hour and storm surges of 9-12 feet above normal.</p> |
| <p>The map shows the Gulf of Mexico coastline from Texas to Florida. Four red hurricane symbols indicate landfall locations: Hurricane Rita on the Louisiana coast, Hurricane Katrina on the Mississippi coast, Hurricane Ivan on the Alabama coast, and Hurricane Wilma on the Florida coast. State names (Texas, Louisiana, Mississippi, Alabama, Florida) are labeled on the map.</p> |
| <p>Ivan (September 2004): 25 deaths and estimated financial loss of \$14 billion. Katrina (August 2005): 1,336 deaths and estimated financial loss of \$75 billion. Rita (September 2005): 62 deaths and estimated financial loss of \$10 billion. Wilma (October 2005): 5 deaths and estimated financial loss of \$12 billion.</p> |
| <p>Source: National Weather Service National Hurricane Center Tropical Prediction Center.</p> |

Data Collection

We performed site visits to each of the selected nursing homes to conduct interviews with administrators and staff and to collect facility emergency plans and training records. We also visited local government and aging services agencies in each nursing home’s city and county. During each visit, we interviewed government authorities and local nursing home ombudsmen and collected community emergency plans. For each State, we conducted telephone interviews with officials from the emergency management office, nursing home licensing division (responsible for surveying facilities), nursing home associations, departments of aging services, and long term care ombudsmen.

Evaluation of Nursing Home Emergency Plans—“Suggested Provisions”

To assess the content of emergency plans from selected nursing homes, we compiled a list of emergency plan provisions, suggested by a number of informed sources, to compare to the actual plans. A complete list of sources is provided in Appendix C and includes all Gulf State requirements and guidance, and a variety of published works from reputable sources such as the American Journal of Public Health. Additionally, we consulted with representatives from nursing home associations and emergency management agencies in all five Gulf States, and with other health care, elder care, and emergency preparedness experts.²⁵ These informed sources were fairly consistent in identifying key provisions which they believe should be included in an effective emergency plan and represent basic tenets of emergency management. We hereafter refer to this recommended list as “suggested provisions.” A complete list is provided in Appendix C. We then reviewed the emergency plans of the 20 selected nursing homes to determine whether they included each of the suggested provisions.

Data Limitations

Although we diversified our selection of nursing homes, the purposive method used does not allow inference of results either to the Gulf States or the Nation.

Quality Standards

This study was conducted in accordance with the “Quality Standards for Inspections” issued by the President’s Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency.

► FINDINGS

Nationwide, 94 percent of nursing homes met Federal standards for emergency plans and 80 percent for sufficient emergency training in 2004-2005; compliance rates were similar for Gulf States

Of the 16,125 nursing homes surveyed during 2004 and 2005, most met Federal standards, with 6 percent cited for planning deficiencies and 20 percent cited

for training deficiencies (see Table 1).²⁶ A greater proportion of the deficiencies issued for both inadequate emergency planning and training were from LSC surveys rather than standard surveys. The greater frequency of citations from LSC surveys may be a result of LSC surveyors focusing more directly on facility safety provisions, while standard surveyors cover a much broader range of issues addressing multiple aspects of nursing home resident health and well being.²⁷

Table 1. Nursing Homes Cited with Deficiencies for Emergency Planning and Training: National and Gulf States (2004-2005)

| NATIONAL | | | | | | |
|--|-----------------------------------|----------|-----------------------------------|----------|-----------------------------------|-------------|
| | 2004 | | 2005 | | Total** | |
| | Facilities (n = 15,135) | % | Facilities (n = 15,011) | % | Facilities (n = 16,125) | % |
| Planning Deficiencies | | | | | | |
| Standard Survey F517 | 168 | 1.1 | 161 | 1.1 | 307 | 1.9 |
| Life Safety Code K48 | 262 | 1.7 | 420 | 2.8 | 655 | 4.1 |
| Total Facilities with Planning Deficiencies* | 425 | 2.8 | 565 | 3.8 | 929 | 5.8 |
| Training Deficiencies | | | | | | |
| Standard Survey F518 | 467 | 3.1 | 438 | 2.9 | 851 | 5.3 |
| Life Safety Code K50 | 1,326 | 8.8 | 1,624 | 10.8 | 2,695 | 16.7 |
| Total Facilities with Training Deficiencies* | 1,685 | 11.1 | 1,954 | 13.0 | 3,265 | 20.3 |
| GULF STATES | | | | | | |
| | 2004 | | 2005 | | Total | |
| | Facilities (n = 2,375) | % | Facilities (n = 2,379) | % | Facilities (n = 2,526) | % |
| Planning Deficiencies | | | | | | |
| Standard Survey F517 | 13 | < 1 | 7 | < 1 | 20 | < 1 |
| Life Safety Code K48 | 62 | 2.6 | 80 | 3.3 | 135 | 5.3 |
| Total Facilities with Planning Deficiencies* | 75 | 3.2 | 87 | 3.7 | 155 | 6.1 |
| Training Deficiencies | | | | | | |
| Standard Survey F518 | 92 | 3.9 | 106 | 4.5 | 193 | 7.6 |
| Life Safety Code K50 | 194 | 8.2 | 211 | 8.9 | 381 | 15.1 |
| Total Facilities with Training Deficiencies | 276 | 11.6 | 301 | 12.7 | 535 | 21.2 |

*The total planning and training deficiencies is not the sum of the standard survey and LSC deficiencies because some facilities had one of each type, resulting in some overlap in the categories.
**Totals do not equal the sum of 2004 and 2005 because some nursing homes were cited in both years.
Source: Office of Inspector General analysis of OSCAR data for CYs 2004-2005.

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The proportion of nursing homes with emergency preparedness deficiencies in Gulf States was similar to the national level. Six percent of the 2,526 facilities surveyed in Gulf States during 2004 and 2005 were cited with deficiencies for not having adequate emergency plans in place, and 21 percent were cited for insufficient staff training. As at the national level, LSC surveyors issued the majority of deficiencies regarding emergency preparedness in the Gulf States. All of the 20 nursing homes we selected for onsite evaluation were determined by State surveyors to have adequate emergency plans in place in their most recent 2005 State survey. However, 3 of the 20 selected nursing homes were cited for not sufficiently training staff.²⁸

The current Federal survey standards and guidance to surveyors do not specify the content that emergency training should include. Nor do they require surveyors to ensure that emergency plans include specific instructions for evacuating and sheltering in place. Based on interviews with surveyors in Gulf States and documentation of actual deficiencies cited, nursing homes are commonly cited for inadequate emergency plans for the following reasons.²⁹ The plan:

- o does not account for all types of emergencies, e.g., hurricanes, fires;
- o does not include provisions for the care of residents, e.g., instructions for special needs residents; and/or
- o is not reviewed by staff and updated annually.

Additionally, nursing homes were cited for training deficiencies when staff were unable to demonstrate knowledge of procedures to surveyors, or when they were unable to produce records demonstrating that they provided training to all staff at the frequency required.

Multiple factors, including community evacuation orders, influenced the decision of selected nursing homes to evacuate or shelter in place

Of the 20 nursing homes we selected for onsite evaluation, 11 evacuated before the hurricane, 2 sheltered in place then

evacuated after the hurricane, and 7 sheltered in place and never evacuated. All nursing home administrators reported that an evacuation can cause physical and mental stress on nursing home residents, and consequently is not necessarily the best course of action for residents during hurricanes. Administrators also reported that sometimes sheltering in place is the safer (and also less expensive) alternative, particularly in the case of hurricanes during which storms

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can quickly shift and reduce risk to residents and staff. Administrators reported that they consider a wide range of factors in making the decision whether to evacuate or shelter in place, such as the storm's characteristics, the facility structure and location, the availability of resources, and the health status of residents.

Deciding to evacuate. For 9 of the 11 nursing homes that evacuated before the hurricane, administrators reported that they collaborated with facility owners in making the decision to evacuate. In the other two cases, emergency management authorities mandated evacuation.³⁰ In addition to these two mandatory evacuation orders, four facilities evacuated even though the evacuation order was “voluntary” or there was no order at all. We found differing interpretations of what mandatory or voluntary evacuation orders mean among both administrators and government authorities. But in most cases, facilities reported that a voluntary order was a “suggestion” to evacuate or served as a precursor to a mandatory order, and that a mandatory order meant the facility must evacuate or risk losing access to emergency services. Nursing home administrators often reported that they did not consider an evacuation order a clear mandate.

In the case of the two nursing homes that evacuated after initially sheltering in place, their decision to evacuate was based on circumstances after the storm passed. Administrators from these facilities reported that they were uncertain about their electricity and water supply, and were concerned with resident and staff safety in light of reduced police capability.

Deciding to shelter in place. Although the factors guiding decisions to shelter in place were similar to those for evacuation, circumstances caused these administrators and owners to determine that the risks were greater in evacuating than in sheltering in place. Administrators at these nursing homes reported the following: facility structure was sound enough to withstand expected high winds, location limited the degree of expected flooding, staff were proficient in emergency response and willing to shelter in place with residents, the community was likely to augment facility resources, and the poor condition of residents made travel dangerous, e.g., one facility had a large number of hospice patients. Additionally, some of these administrators reported that they were determined to avoid evacuating if possible due to negative past experiences with evacuation. Administrators from two of the nine nursing homes that sheltered in place reported that they did not

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evacuate in part because they were unable to locate enough space in other nursing homes to accommodate all residents.

All 20 of the selected Gulf State nursing homes experienced problems, whether they evacuated or sheltered in place

Administrators and staff in selected nursing homes reported a range of experiences, but similar problems emerged across States,

communities, and facilities. In some cases, reported problems could be tied to a lack of planning or failure to execute emergency plans. In others, the circumstances of the hurricane and its effect on resources and community services were such that prior planning may not have anticipated the specific problems encountered, and impromptu decisions and actions were required.

All 13 nursing homes that evacuated encountered problems in the process of leaving and returning to their facilities

Administrators of nursing homes that evacuated reported problems at each stage of the evacuation process, the most prominent including:

- o transportation contracts were not always honored,
- o evacuation travel took longer than expected,
- o medication needs complicated travel,
- o host facilities were unavailable or inadequately prepared,
- o facilities could not maintain adequate staff,
- o food and water shortages occurred or were narrowly averted, and
- o prompt return of residents to facilities was difficult.

Transportation contracts were not always honored. All 13 nursing homes that evacuated reported they had prior contracts for transportation (10 facilities provided documentation), but services were not available for 5 of these because the vehicles were in use by other parties in the hurricane's path. This reportedly happened in part because multiple nursing homes contracted with the same companies, typically the company used for routine ambulance services. These nursing homes often discovered the problem only days or hours prior to the evacuation, and were forced to find alternate transportation. Administrators from two nursing homes resorted to the telephone directory to locate transportation resources. Others were able to use connections with other nursing homes and within the community to secure assistance from sources, including churches, school districts, and taxicab companies.

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Evacuation travel took longer than expected. Four of the thirteen evacuated nursing homes had problems during the trips from their facilities to host facilities, and three of these were forced to move residents more than once. The median trip time to a host facility was 3 hours, but in the case of one facility evacuating from Houston prior to Hurricane Rita, the trip to the host facility took as long as 19 hours (see Box 2 for a description of the experience). Problems occurred primarily when trips took longer than anticipated, and either the weather, traffic, inadequate vehicles, or limits in supplies made residents and staff uncomfortable.

Box 2: The Experience of One Selected Nursing Home In Transit

The nursing home administrator and other staff reported that the facility emergency plan had minimal instructions for evacuation. For example, there was instruction regarding packing food, but no guidance regarding water or medication. The contracted transportation was unavailable and fewer than a quarter of staff remained to evacuate with residents. A mix of staff and borrowed vehicles was cobbled together in the final hours before the hurricane made landfall, and a nine-vehicle convoy began what normally would be a 2-hour trip to a campground.

The convoy was part of a widespread evacuation of a large metropolitan area. Traffic on all outbound highways was slow. Staff reported that temperatures reached 104 degrees and water among residents and staff quickly reached ration level. Other supplies were also inadequate. For example, one resident vomited early in the trip and staff had no cleaning materials. The drivers could not attempt an alternative route because none had maps. After 4 hours, one of the vans broke down and residents were unloaded and crowded into other vehicles. The next morning, after 12 hours on the road, another van broke down and residents were loaded into the remaining vehicles. Oxygen became low, and after calling the nearest town from a cell phone, the local emergency management service delivered an inadequate number of cylinders. Temperatures by midday again climbed over 100 degrees and the air conditioners in the two resident vans were inoperable.

Once the convoy got close to the camp, camp managers sent two replacement vans and residents were redistributed again; however, only one of the camp vans had air conditioning. All vehicles had been out of water for hours and staff were able to change incontinence supplies only once. Other than one resident who was given a nurse's personal insulin, none of the residents received medication. Residents arrived at the camp after 19 hours in transit. All residents survived, but several were treated for cuts and bedsores resulting from the trip.

Source: Summary of evacuation description reported by the facility administrator.

Medication needs complicated travel. Three of the thirteen evacuated facilities had problems with medication. Administrators reported this occurred because trips took longer than expected, medications were not readily available during transit, or medications were improperly packed and supervised. For example, during one evacuation staff had medication on the vehicles but had not packed the equipment needed to administer the medication. In another case, a resident became disruptive and required sedation, but his medication was located on a different vehicle. Staff from another selected nursing home kept medications in small plastic bags with individual residents, and had to prevent residents from inappropriately exchanging medications.

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Host facilities were unavailable or inadequately prepared. Twelve of the thirteen selected nursing homes that evacuated reported they had formal agreements with host facilities to temporarily house residents in the case of an evacuation (eight facilities provided documentation). The remaining nursing home had an informal, verbal agreement. Contracted host facilities were available when needed for 11 of the 13 selected nursing homes that evacuated. In the two cases where facilities were not available, the facilities either evacuated themselves or had already reached capacity with residents from other contracted nursing homes. These administrators sought alternatives, as they did for transportation, through connections with other nursing homes and community entities. In three Gulf States, nursing home associations and State human services offices actively sought facilities that could provide beds for nursing home residents throughout their States.

Seven of the selected nursing homes had agreements with multiple host facilities, meaning that residents were evacuated to different host sites depending on their needs and the availability of beds. For five of the seven facilities, these agreements were with nursing homes under the same ownership or within the same nonprofit network, but the other two facilities had agreements with alternative sources, such as schools, churches, and camps.³¹ When nursing homes had “sister” facilities, they often shared other aspects of emergency management, such as transportation, staff, and supplies.

Placing residents in alternative shelters not designed for the care of elderly and disabled posed particular challenges. When evacuated to other nursing facilities or hospitals, residents were integrated into the existing care routine and usually had access to necessary supplies, staff, and equipment, but when evacuated to schools, churches, or camps, staff had to create the proper environment. One nursing home had an agreement to shelter at a school and placed residents in a gymnasium on air mattresses that needed to be continually reinflated. At the same time, the generator failed at the school and water was shut off for 24 hours due to the storm. Because of these problems, residents returned to their facility and evacuated 3 days later to a host nursing home.

Even when placed in an adequate host facility, problems with resident care sometimes occurred. Administrators of three nursing homes that evacuated to other nursing homes or hospitals reported problems with supplies and inadequate staffing. One host nursing home lacked both

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beds and supplies to accommodate residents, and did not have locks needed to protect residents with Alzheimer's disease from wandering. A nursing home that evacuated to an unused portion of a full-service hospital encountered outdated facility structures and unusable medical equipment and supplies.

Facilities could not maintain adequate staff. Six of the thirteen nursing homes reported that they had staffing shortages during the evacuation, both at the host facility and when returning to the facility. In some cases, facilities had a fairly large number of staff but lacked staff with necessary qualifications. For example, one facility reported there were not enough registered nurses when they reached the host facility. In this case, the available nurses worked overtime but reported they were ultimately unable to fully cover all resident needs. Two selected nursing home administrators reported that some staff refused to assist with facility evacuation, but most administrators reported staff were available and dedicated to meeting the needs of facilities and residents. All evacuating nursing homes allowed staff to bring families along for the evacuation; a decision that administrators reported was critical to retaining staff during the evacuation.

Food and water shortages occurred or were narrowly averted. Two of the thirteen selected nursing homes reported shortages of food and water. This occurred even though the emergency plan for one of the facilities specified the amount of food needed. Other administrators reported many other potential shortages were averted by utilizing sources not in their emergency plans, such as local churches, and that these supplements often came a short time before supplies would have run out. As with staffing problems, food and water supply problems appeared to be caused at least in part by a lack of prior planning. For 8 of the 13 nursing homes that evacuated (including both of the facilities with shortages), the facility emergency plan specified the amount of food and water they should have if they sheltered in place, but did not specify the amounts that should be taken when evacuating. The emergency plans for 2 evacuated nursing homes did not address the provision of water during evacuation, and the plans for 10 did not address the amount or type of food to be packed.

Prompt return of residents to facilities was difficult. Ten of the thirteen nursing homes reported problems returning to their facilities after absences ranging in duration from 24 hours to several months. Difficulties ranged from scheduling staff to prepare the facility for

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residents' return to arranging transportation for residents who were provided housing out-of-State. Five of the thirteen facilities sustained damage from the hurricanes; three suffered relatively minor damage, such as broken windows and partial flooding, but the remaining two, both in Mississippi, were completely destroyed (see Figure 1 on page 14).³² Even when nursing homes did not suffer actual damage, administrators reported that their facilities often needed substantial cleaning and restocking before residents could return. Following hurricane Katrina, Louisiana required inspections by State licensing surveyors before residents could return.

Seven of the thirteen nursing homes reported problems with staffing upon reentry, either because staff were delayed or were unable to return to work due to the widespread disaster. In communities that were hit by Katrina, some staff were unable to assist because of the extreme difficulty in traveling and the extent of devastation to their own property. In these communities, city managers and other local leaders reported that there is still a lack of housing for low-income staff. Several staff from selected Louisiana and Mississippi nursing homes lost their homes and all belongings in the storm. To help administrators operate during the transition, one facility's owners sent staff from other facilities to fill in until new staff could be hired.

Figure 1. Photo of Destroyed Selected Nursing Home in Mississippi



Source: Office of Inspector General Photo 2006.

Administrators from 5 of the 13 nursing homes that evacuated reported a negative impact on resident health

Negative health effects were typically isolated to a small portion of residents and could not usually be linked to particular facility problems during evacuation. Of the administrators that reported a negative impact on resident health in their nursing homes, four reported that residents had physical problems and three reported that the evacuation was psychologically difficult, with some residents showing signs of depression (one facility reported both of these problems). Some of this negative impact was short term, as in the case of one nursing home where a lack of necessary provisions during evacuation, such as water, bandages, and incontinence supplies, caused residents to be uncomfortable and even temporarily dehydrated. In other cases, the impact was long term, such as a resident who was hospitalized due to a fall at the host facility caused by his unfamiliarity with his new environment, and residents who were reported to have developed skin tears and pressure sores during transport.

Nursing homes that sheltered in place encountered fewer problems, but they were severe enough that two of the nine facilities later evacuated

Facilities that sheltered in place most often reported problems with staffing and uncertainty over their access to community resources. In two cases, these problems caused the facilities to evacuate after the storm. Two nursing homes that sheltered in place and did not later evacuate also reported difficulties with staffing, yet neither of these problems appeared to be substantial. In both cases, administrators called in additional staff from their own roster or a “sister” facility to cover for staff that were leaving the area. None of the nine facilities that sheltered in place reported problems with supplies, but just as with the evacuated facilities, some shortages were narrowly averted. Facilities that sheltered in place received supplies such as food and water through donations from local authorities or service organizations.

Power was disrupted for five of the nine facilities that sheltered in place, with reported outages ranging from 2 hours to as long as 4 weeks. All of these facilities had generators that worked when they were needed. Some administrators reported that they plan to purchase larger generators for future storms because they found that providing air conditioning in high temperatures taxed their generators to the maximum or did not allow for more than lighting and fans. An administrator from one of the nine facilities that sheltered in place reported a negative impact on resident health—a tree fell into the

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facility. While this was reported to be traumatic for residents, it did not cause any injuries. However, as with other nursing homes in Florida, this administrator reported that luckily temperatures were fairly cool and residents were able to stay comfortable without air conditioning.

Administrators and staff from selected nursing homes did not always follow emergency plans and plans often lacked suggested provisions

All emergency plans from the 20 selected nursing homes met Federal requirements on their most recent State survey. However, we found that procedures followed by administrators and staff during the recent hurricanes were often inconsistent with these emergency plans. Also, the emergency plans were often missing a number of the 25 plan provisions suggested by our informed sources.

Administrators perceived their emergency plans as sufficient, but the procedures followed were often inconsistent with their plans

Administrators from all 20 selected nursing homes reported that they believed their facility emergency plans were sufficient for managing an emergency response. Additionally, our discussions regarding specific plan provisions suggested that administrators were often not fully aware of the contents of their emergency plans. For example, administrators of 9 of the 20 selected nursing homes indicated that their plans included ensuring adequate food, water, and medication when, in fact, none of these provisions were in their plans.

Administrators from 5 of the 20 selected nursing homes reported that they deviated from or worked beyond their emergency plans during the recent hurricanes, either because the plans were not updated with current information or did not include instructions for particular circumstances. Administrators from the remaining 15 nursing homes reported that they largely followed their emergency plans. However, when comparing details of their plans to their reported actions, we found that there was a greater degree of deviation and additions to plans than stated by administrators. For example, staff at one nursing home deviated from its transportation plan by evacuating to an uncontracted host facility closer than the contracted host to reduce resident travel time. In another case, nursing home staff added substantially to its emergency plan. That plan included only a very general description of evacuation procedures, but when faced with evacuation they created a lengthy impromptu plan which included

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detailed checklists for staff to use in packing supplies and transporting residents.

Further, nursing home administrators from our selected nursing homes did not always rely on plans as practical manuals for disaster management. In most cases, nursing home administrators reported that they and their staff improvised actions based on prior experience or their knowledge of the tasks required to meet residents' needs and ensure their safety. It is important to recognize, however, that facilities cannot guarantee that experienced staff members will be available and able to orchestrate a facility's response to a disaster.

Nursing home emergency plans were often missing a number of the 25 suggested plan provisions

Although these provisions are not required by CMS or all Gulf States, informed sources, such as State licensing agencies, nursing home associations, emergency managers, and elder care experts, maintain that these provisions strengthen preparedness. Although 15 of the 20 selected emergency plans included a majority of the 25 suggested plan provisions, the following are examples of suggested provisions that were missing (see Appendix C for a complete list of the provisions we used in this review and the number of emergency plans that had each):

- nine plans did not include criteria or other guidance for making the decision to evacuate or shelter in place;
- fifteen plans did not have information about the specific needs of residents that would allow staff to modify emergency plans according to residents' needs, such as special equipment (oxygen, feeding tubes), a measure of the level of resident's mobility, mental status, and bowel/bladder control, and other factors pertinent to transportation, security and care needs, e.g., Alzheimer's patients require locked units or alarms on doors;
- six plans did not include instructions for evacuation to an alternative site, such as transportation routes and care of residents in transit;
- six plans did not include a formal agreement for a host facility to house residents in the event of evacuation;
- seven plans did not include staff responsibilities for evacuating, such as descriptions of which staff are expected to evacuate with residents and under what circumstances;

- thirteen plans did not include provision for water needed during evacuation and six did not include provision for food, either the amount needed or details about transporting the supplies; and
- eleven plans did not include instructions for reentry following evacuation, such as determining who will inspect the facility to approve reentry, instructions for cleaning and repairs, plans for scheduling staff, and transportation for residents to return.

Lack of collaboration between State and local emergency entities and nursing homes impeded emergency planning and management

Nursing home administrators, local emergency management authorities, and other community entities reported

that limited collaboration in preparing for and managing nursing home emergency preparedness and response to hurricanes sometimes impeded nursing home access to resources and information.

When State and local authorities provided assistance to nursing homes, it was typically to review their emergency plans. Four of five Gulf States require nursing homes to submit plans to State or local emergency management agencies for review (Florida, Louisiana, Mississippi, and Texas). We found that these reviews vary in their rigor, but provide an additional layer of oversight by authorities knowledgeable about the specific needs of the area and its residents. Through the review process, emergency managers were often given the opportunity to make recommendations and follow up on resulting changes to the plans. For example, in Florida, emergency managers review nursing home plans to ensure that they meet State guidelines—if the reviewing emergency manager reports that plans do not meet these requirements, the facility can be found deficient by State surveyors. In some cases, reviews appeared to serve an ancillary purpose of helping to develop a line of communication between emergency management staff and nursing homes.

Limited collaboration caused communities and nursing homes to miss opportunities for better emergency management and restricted nursing home access to resources

Administrators from 5 of the 13 evacuated facilities reported that problems with government coordination during these hurricanes contributed to or exacerbated problems they encountered. For example, some local emergency staff did not return calls from nursing homes seeking assistance. Administrators, community leaders, and emergency managers largely reported that communities accept little responsibility

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for nursing homes during disasters. Some communities were more involved with nursing homes than others, but in general, nursing homes managed evacuation or sheltering in place without assistance from community authorities. Assistance came from parent corporations, “sister” facilities, or resident and staff family members.

Additionally, nursing homes are often not included in community emergency planning. In some cases, this lack of collaboration appears to be caused in part by the fact that nursing homes are categorized by community authorities as businesses rather than as health care institutions. For example, in one community, the city and county organized a task force to explore the needs of vulnerable citizens during disasters. The task force included representation from hospitals and ambulatory care centers, but not from nursing homes. In a smaller community in another State, the county emergency management plan includes provisions for hospitals but does not address nursing homes.

Nursing home administrators reported that they view transportation as the most pressing need for community collaboration during disasters. Of special concern is regulating transportation contractors who promise resources to many facilities, and making city and county transportation sources available to residents if needed. Local leaders and advocates frequently mentioned a desire to establish a more comprehensive community transportation plan, including building transportation networks, possibly even across States, and to consider engaging alternative transportation such as unused rail lines. Local authorities in all selected communities reported that they would be willing to participate in coordinating and providing transportation.

Another cause of difficulty is that community resources in place for other citizens might not be available to nursing home residents. According to local officials, four of the five Gulf States (Florida, Mississippi, Louisiana, and Texas) discourage or restrict nursing homes from using State special needs shelters as evacuation sites for their residents, reserving the shelters for homebound residents.³³ Nursing home residents in Alabama are permitted to evacuate to special needs shelters at the discretion of facility administrators. Community authorities also reported that transportation resources may be restricted for nursing home residents. In these cases, emergency managers assume that nursing home owners have planned for evacuation transportation, and community-based transportation sources are focused on the elderly and others living independently.

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The collaboration between community authorities and nursing homes in the same State sometimes differed substantially even though they were faced with similar storm conditions and resource limitations. The illustration in Box 3 on page 20 contrasts the experiences of nursing homes in two contiguous counties, one with substantial collaboration between the community and nursing homes both prior to and during the storm and the other with little collaboration or direct services.

Box 3. An Example of the Integration of Nursing Home and Community Emergency Planning

The first, more rural county had emergency management staff that works closely with nursing home administrators and have ongoing informal communication. In addition to reviewing plans, they advise nursing homes about improving plans and integrating with community plans as they evolve. Emergency managers knew the specific risk factors for each nursing home and were able to advise whether to evacuate, to designate special shelters, and to provide emergency generators. Prior to the storm, emergency managers in this county made contact with nursing homes to ensure that planned resources were in place and assisted the nursing homes with the evacuation and reentry processes.

In the other, more urban county, emergency managers and nursing homes have more formal relationships. They review nursing home emergency plans, but rely on the State to give nursing homes feedback regarding the adequacy of the plans. One nursing home administrator reported that "we are supposed to send our plan to the [agency], but we are not sure what they do with it." When the hurricane struck, this facility decided to shelter in place. They weathered the hurricane and flooding well, but during the aftermath, the lack of community support became apparent. This facility subsequently evacuated for security reasons and also helped with the evacuation of another facility in the same county that was unable to get help from the emergency management agency.

Source: Summary of interviews with various community and nursing home respondents.

State long term care ombudsmen rarely have a direct role in working with area nursing homes in emergency planning

All five Gulf States have long term care ombudsmen programs that serve as advocates for nursing home residents. These programs provide indirect assistance during disasters through their routine practice of monitoring occupancy of nursing homes and tracking resident locations. However, ombudsmen programs in four of the five Gulf States do not specifically work with nursing homes on emergency planning or disaster management. In Texas, the one State where the program does perform this role, local ombudsmen review nursing home emergency plans, offer technical assistance, and provide training to nursing home staff on quality of life issues and emergency procedures. In interviews, local ombudsmen from all five States expressed interest in joining community efforts to work with nursing homes regarding emergency management.

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State surveyors determined that, as of their most recent survey, each of the 20 selected Gulf State nursing homes complied with Federal standards for emergency planning. However, in comparing these plans to a list of suggested emergency plan provisions that we compiled from the informed sources, we found that few plans included all provisions. While these provisions are not required by CMS or Gulf States, numerous informed sources agree that these provisions are critical to an effective emergency plan and, left unaddressed, could jeopardize a nursing home's response in the face of a disaster.

Further, we found that nursing home administrators did not always understand or adhere to emergency plans during their hurricane evacuations. This finding, along with problems identified by these nursing homes during evacuation or sheltering in place, indicate that challenges exist in nursing home emergency planning and plan execution. These challenges center primarily on two areas: (1) nursing home emergency plans do not include all elements needed to guide staff decisions and actions during disasters, and (2) nursing homes are often not actively involved in the community-wide planning and coordination efforts critical to executing an effective disaster response.

To improve nursing home emergency preparedness and ensure effective execution of plans, we recommend the following:

CMS should consider strengthening Federal certification standards for nursing home emergency plans by including requirements for specific elements of emergency planning

While some Gulf States are making efforts to improve their emergency planning, not all of them currently require nursing home plans to include provisions considered critical to an effective emergency plan, according to State licensing agencies, nursing home associations, emergency managers, and elder care experts. In addition, current Federal standards for emergency plans provide only general guidance. Thus, to strengthen emergency planning and to better protect nursing home residents, CMS could develop a core set of required elements for inclusion in nursing home plans with corresponding changes to the Interpretive Guidelines for surveyors' use in evaluating emergency plans. These required elements could apply to all Medicare or Medicaid certified facilities and be tailored to address specific local risks or could apply to only those facilities in States considered by CMS most at-risk for wide area disasters, such as the hurricanes that recently struck the Gulf States.

Based on the experiences of our selected nursing homes, we suggest that, at a minimum, CMS should consider adding core elements to address the following areas. These elements would supplement the broad Federal requirement that nursing homes develop detailed written emergency plans and procedures:

- Plan for evacuation, including actionable details on travel; provision of supplies; transport of records, medications and belongings; agreement for host facility; and reentry to facility after evacuation.
- Plan for sheltering in place, including a backup source of electricity and sufficient supplies of food, water, and medications.
- Plan for addressing specific needs of residents, including needs of residents in hospice care, and of those with Alzheimer's disease, bowel/bladder problems, and limited mobility.
- Plan for adequate staffing levels, including clear expectations for relocation, if necessary, and for assistance with residents in an emergency; as well as including provisions for staff's family members.
- Plan for collaboration with emergency managers and other community entities to better assure success of emergency plans.

In developing this set of core elements, CMS could collaborate with State emergency management entities, nursing home associations, and other parties knowledgeable about nursing home operations or emergency preparedness. To assist nursing homes in incorporating the required elements into their plans, CMS could also create a guide for facility emergency preparedness that provides examples of plan language and considerations for evacuation and sheltering in place, such as CMS's manual of emergency preparedness for dialysis facilities issued in 2003.³⁴

CMS should encourage communication and collaboration between State and local emergency entities and nursing homes

To ensure that nursing homes protect residents with effective, community-specific responses to future disasters, CMS should encourage States to enhance community involvement in nursing home emergency planning and plan execution. We recognize that CMS is not responsible for community coordination of emergency efforts, but we feel that CMS's influence would be beneficial in assisting homes with this effort. CMS action could include providing guidance and technical assistance to States to open a dialogue between nursing home stakeholders and emergency management authorities, encouraging local

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emergency managers to review facility plans, and finding opportunities to raise the awareness of nursing homes' needs within the community and among government authorities involved in emergency management. This assistance to States should target issues of importance to both facilities and communities, such as transportation and distribution of resources during emergencies. In implementing this recommendation, CMS should consider engaging other relevant staff and resources in the Department, such as AoA's State Long Term Care Ombudsman Program and the Office of Public Health Emergency Preparedness.

AGENCY COMMENTS

CMS concurred with both recommendations and outlined efforts underway to implement them. In response to our recommendation that CMS consider strengthening Federal certification standards for nursing home emergency plans, CMS indicated that it was currently reviewing regulatory requirements and interpretive guidelines to determine how they can be strengthened and the most appropriate methods of improving the preparedness standards applicable to health care facilities. CMS also commented that it is in regular communication with States, accrediting organizations, and other stakeholders to determine effective approaches to improve preparedness, ensure the presence of contingency plans, promote coordination with State and local entities, and improve staff training in emergency preparedness.

In response to our recommendation that CMS should encourage communication and collaboration between State and local emergency entities and nursing homes, CMS reported that it plans to implement a communication strategy that will disseminate information among State survey agencies, CMS regional offices, and health care facilities. Additionally, CMS reported participation in several departmental and interagency workgroups that are developing recommendations and guidance for improved collaboration and coordination among Federal, State, and local emergency entities. For example, one workgroup is reviewing, assessing, and developing national definitions, recommendations, and targets to address emergency planning, hazard mitigation, and response and recovery for all aspects of health care. Another workgroup is developing recommendations and guidelines regarding the appropriate role, responsibilities, and functions of Survey and Certification central and regional offices, State agencies, and other

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State and local emergency management entities to ensure a coordinated and effective emergency response.

The full text of CMS comments is in Appendix E.

▶ E N D N O T E S

¹ Government Accountability Office draft report, “Evacuation of Hospitals and Nursing Homes” (GAO-06-443R). Preliminary findings reported in a briefing for congressional committees on February 16, 2006.

² Letter from Senator Herb Kohl, ranking member of the Special Committee on Aging, U.S. Senate, to Daniel R. Levinson, Inspector General, U.S. Department of Health and Human Services, September 26, 2005.

³ Social Security Act, sections 1819(f)(1) and 1919(f)(1).

⁴ 42 CFR §§ 483.75(m)(1) (plan) and (2) (training).

⁵ State Operations Manual (SOM), Appendix PP, Interpretive Guidelines for Long Term Care Facilities, guidance for 483.75(m).

⁶ Facilities may follow other standards, like those established by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which accredits some nursing homes. JCAHO 2006 Long Term Care Accreditation Standards for Emergency Management Planning.

⁷ 42 CFR § 488.308 (survey frequency) and 42 CFR § 488.330 (certification and compliance).

⁸ 42 CFR §§ 488.308(a), (e).

⁹ 42 CFR §§ 483.75(m)(1) and (2); SOM, Appendix PP, Interpretive Guidelines for Long Term Care Facilities.

¹⁰ State Operations Manual (SOM), Appendix PP, Interpretive Guidelines for Long Term Care Facilities, guidance for 483.75(m). The guidelines “provide guidance in conducting surveys and clarify and/or explain the extent of the regulations.”

¹¹ 42 CFR § 483.75(m)(1).

¹² 42 CFR § 483.75(m)(2).

¹³ 42 CFR § 488.110(a).

¹⁴ The National Fire Protection Agency is a private, nonprofit organization dedicated to reducing loss of life due to fire.

¹⁵ Social Security Act, sections 1819(d)(2) and 1919(d)(2).

¹⁶ Draft Life Safety Code Survey Interpretive Guidelines to replace Appendix I of the SOM.

¹⁷ Form CMS-2786R (03/04), Fire Safety Survey Report 2000 Code-Health Care, Medicare/Medicaid.

¹⁸ Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121(b)(2).

¹⁹ Local and Tribal National Incident Management System Integration, 1.0, U.S. Department of Homeland Security.

²⁰ Guide for All-Hazard Emergency Operations Planning (State/Local Guide 101), September 1996, Federal Emergency Management Agency.

²¹ 42 U.S.C. § 3058g(a)(3)(G)(i). The State Long Term Care Ombudsman Program is administered by the Administration on Aging.

²² References to “Gulf States” throughout this report include Florida, Alabama, Mississippi, Louisiana, and Texas.

²³ Agency for Health Care Administration Emergency Management Planning Criteria for Nursing Homes (AHCA 3110-6006).

²⁴ Our selection excludes nursing homes that are currently under criminal investigation.

²⁵ Sources of guidance included interviews with emergency managers in all five Gulf States and with professors of emergency management from Oklahoma State University, Seton Hall University, and the University of North Texas, as well as professors of aging services from Florida International University. Guidance was also drawn from published

works in *The Gerontologist*, Quick Response Research Report, *Southern Medical Journal*, and the *American Journal of Public Health*.

²⁶We counted each nursing home surveyed in 2004 and 2005 only once, although they were surveyed more than one time. These figures represent all facilities that were cited with the relevant deficiencies, whether they had a single citation or multiple citations.

²⁷ Life Safety Code surveys focus on ensuring that facilities meet “fire protection requirements designed to provide a reasonable degree of safety...the [requirement] covers construction and operational features designed to provide safety from fire, smoke, and panic.” Standard surveys assess: “[c]ompliance with residents’ rights and quality of life requirements; [t]he quality of care and services furnished...; and [t]he effectiveness of the physical environment to empower residents, accommodate resident needs, and maintain resident safety....” (SOM, Appendix P.)

²⁸ We did not have the most recent survey data when we selected nursing homes.

²⁹ Based on discussions with Gulf State Surveyors in March 2006 and a review of CMS Form 2567.

³⁰ Both were in Mississippi, where State law requires that the decision to shelter in place or evacuate is made by local emergency managers.

³¹ Emergency plans for 9 of the 20 selected homes included serving as a host facility for other facilities that evacuate.

³² One of the destroyed facilities will be rebuilt, but owners of the other facility determined that it would remain closed.

³³ Special needs shelters are temporary shelters for those with physical or mental conditions that make it difficult to utilize a public shelter.

³⁴ “Emergency Preparedness for Dialysis Facilities,” CMS Manual 11025, CMS, 2003.

Summary of Major Gulf State Requirements for Nursing Home Emergency Plans

| Table A1. Gulf State Requirements for Nursing Home Emergency Plans | | | | | |
|---|------------|-----------|-----------|-----------|-----------|
| State Requirements | AL* | FL | LA | MS | TX |
| Community coordination | | ✓ | ✓ | ✓ | ✓ |
| Hazard analysis | | ✓ | | ✓ | ✓ |
| Communication | | ✓ | | ✓ | ✓ |
| Direction and control | | ✓ | ✓ | ✓ | ✓ |
| Specific resident needs | | ✓ | ✓ | | ✓ |
| Staffing | | ✓ | ✓ | | ✓ |
| Emergency food, water, supplies | | ✓ | ✓ | ✓ | ✓ |
| Emergency power | | ✓ | | ✓ | ✓ |
| Medications | | ✓ | | ✓ | ✓ |
| Evacuation procedures | | ✓ | ✓ | ✓ | ✓ |
| Evacuation route | | ✓ | | | ✓ |
| Transportation | | ✓ | ✓ | ✓ | ✓ |
| Host facility agreement | | ✓ | ✓ | ✓ | ✓ |
| Transfer of medical records | | ✓ | | | ✓ |
| Reentry | | ✓ | | ✓ | |
| Document training and drills | | ✓ | ✓ | ✓ | ✓ |
| Reviewed annually | | ✓ | ✓ | | ✓ |
| Staff telephone lists | | ✓ | ✓ | | |
| Responding to family inquiries | | ✓ | ✓ | | |
| Individual identification of residents | | ✓ | | | |
| Designated area for supply storage | | | ✓ | | |

*Alabama relies on Federal requirements.
Source: Office of Inspector General analysis of State administrative code and requirements in four Gulf States, 2006.

DETAILED METHODOLOGY

Identification of Hurricane Impacted Sites

Hurricane-impacted sites were selected using information from the National Hurricane Center. Information was reviewed for all hurricanes that made landfall along the U.S. border during 2004 and 2005 and that were at least Category 3 strength on the Saffir-Simpson Scale, a 1 – 5 rating of intensity as measured by wind speed. A Category 3 hurricane has winds of 111 to 130 miles per hour and anticipated storm surge of 9 to 12 feet above normal. During the 2 years specified there were a total of 10 hurricanes that made landfall in the United States and 7 were of significant strength to require mass evacuation.

Four hurricanes in five States were selected for review: Ivan in Alabama, Rita in Texas, and Katrina in Louisiana and Mississippi. Wilma was selected out of the four hurricanes in Florida because it was the most recent that met our criteria (see Appendix D for detailed information about each of the selected hurricanes).

Site Selection

The counties included in our site visits were selected based on proximity to where the hurricane made landfall. To potentially identify differences within States, we made efforts to select two counties in each of the five states. Table B1 provides community, hurricane, and nursing home information for each county. Our final selection was as follows:

- Alabama—Baldwin and Mobile Counties were both significantly impacted when hurricane Ivan came ashore in Baldwin County.
- Florida—Collier County is the location in Florida where hurricane Wilma made landfall. Lee County is directly north of Collier County and was chosen because of its proximity to Collier County and the high number of nursing homes located there.
- Louisiana—Site selection in Louisiana was complicated by several factors. Katrina first made landfall in Plaquemines Parish, but this site was excluded because there is only one nursing home. St. Bernard Parish and Orleans Parish, the sites of numerous nursing home disasters, were excluded because most facilities were closed at the time of data collection. Jefferson and St. Tammany Parishes were chosen because of their locations—both experienced significant

impact from Katrina and had a sufficient number of nursing homes that were operational at the time of data collection.

- Mississippi—Hancock and Harrison Counties were the most severely affected by Hurricane Katrina. Hurricane Katrina made landfall at the border of Louisiana and Mississippi in Hancock County.
- Texas—Harris County is near where Hurricane Rita made landfall and includes a large metropolitan area. A second county was not selected because of the large size of Harris County and the option of selecting two distinct areas within this county for review.

Table B1: Selected Counties and Nursing Home Numbers

| State | County | Population* | Hurricane | Number of Nursing Homes | | | |
|--------------|-------------|-------------|-----------|-------------------------|----------------|---------------|------------|
| | | | | Evacuate Before | Evacuate After | No Evacuation | Total |
| AL | Baldwin | 156,701 | Ivan | 2 | 0 | 4 | 6 |
| AL | Mobile | 400,526 | Ivan | 2 | 0 | 14 | 16 |
| FL | Collier | 296,678 | Wilma | 3 | 0 | 7 | 10 |
| FL | Lee | 514,295 | Wilma | 2 | 0 | 16 | 18 |
| LA | Jefferson | 453,590 | Katrina | 8 | 5 | 0 | 13 |
| LA | St. Tammany | 213,553 | Katrina | 5 | 1 | 3 | 9 |
| MS | Hancock | 45,933 | Katrina | 1 | 1 | 0 | 2 |
| MS | Harrison | 192,393 | Katrina | 1 | 0 | 5 | 6 |
| TX | Harris | 3,644,285 | Rita | 35 | 0 | 36 | 71 |
| TOTAL | | | | 59 | 7 | 85 | 151 |

*Population information is based on 2004 Population Estimates from the U.S. Census Bureau.
Source: Office of Inspector General analysis of all nursing homes in selected counties, 2006.

Facility Selection

Twenty nursing homes (four in each state) were purposefully selected based on their diversity regarding a variety of factors, including size, ownership, and past State survey performance on emergency preparedness measures. OSCAR data were used to obtain lists of nursing homes that had deficiencies for emergency preparedness in surveys conducted in 2003 and 2004. We diversified the selection by the size of the facility, type of ownership, and whether it was a chain. (See Table B2 for nursing home details.)

| Table B2. Selected Nursing Home Characteristics | | | | | |
|---|----------|------|------------------------|-------|-------------|
| Facility ID | Evacuate | Size | Ownership | Chain | County |
| Alabama 1 | Before | 127 | For-profit Corporation | Yes | Mobile |
| Alabama 2 | No | 174 | For-profit Individual | Yes | Mobile |
| Alabama 3 | Before | 131 | For-profit Corporation | Yes | Baldwin |
| Alabama 4 | No | 75 | Nonprofit Corporation | Yes | Baldwin |
| Florida 1 | Before | 120 | Nonprofit Other | No | Lee |
| Florida 2 | No | 85 | Nonprofit Corporation | No | Lee |
| Florida 3 | Before | 97 | For-profit Corporation | No | Collier |
| Florida 4 | No | 117 | For-profit Corporation | Yes | Collier |
| Louisiana 1 | Before | 158 | For-profit Corporation | Yes | Jefferson |
| Louisiana 2 | After | 276 | For-profit Corporation | Yes | Jefferson |
| Louisiana 3 | Before | 116 | For-profit Corporation | No | St. Tammany |
| Louisiana 4 | No | 192 | For-profit Corporation | Yes | St. Tammany |
| Mississippi 1 | Before | 99 | For-profit Partnership | No | Hancock |
| Mississippi 2 | After | 132 | For-profit Corporation | Yes | Hancock |
| Mississippi 3 | Before | 180 | For-profit Corporation | Yes | Harrison |
| Mississippi 4 | No | 60 | For-profit Corporation | Yes | Harrison |
| Texas 1 | Before | 105 | Nonprofit Corporation | No | Harris |
| Texas 2 | Before | 120 | For-profit Partnership | Yes | Harris |
| Texas 3 | Before | 63 | For-profit Corporation | No | Harris |
| Texas 4 | No | 290 | Nonprofit Corporation | No | Harris |

Source: Information about facility size, ownership, chain status and location was obtained from the CMS Nursing Home Compare Web site, 2006.

Within each State, we selected two facilities that evacuated and two that sheltered in place. We subsequently found that two of the facilities that sheltered in place during the hurricane evacuated after the storm, and one of the facilities that we thought sheltered in place actually evacuated before the storm.

Data Collection

Database. We used CMS’s OSCAR database of State surveys to determine nursing homes in Gulf States and nationwide that received deficiencies in 2004 or 2005 for insufficient emergency plans and failure to adequately train staff for emergencies. OSCAR maintains information on the four most recent standard surveys of certified nursing facilities nationwide, as well as complaint-generated surveys. These data were obtained in March 2006.

Site Visits. Two team members completed site visits to each of the five States to conduct interviews and collect documentary evidence.

Interviews. We visited 20 nursing homes—4 in each of the 5 States. We used a structured interview protocol to conduct onsite interviews with administrators, directors of nursing, certified nursing assistants, and

other staff that were involved in execution of the emergency plans. We asked respondents about their emergency plans, staff training, evacuation orders during the specified hurricane, and what aspects of their plans contributed to positive and negative outcomes. We asked nursing homes about their decisions to evacuate or shelter in place, and their experiences before, during, and in the aftermath of the hurricane. During each site visit, we also used a structured interview protocol to interview relevant municipal and other officials in each of the cities and counties. These respondents are detailed in Table B3.

Interview questions included community emergency planning and response, the nature of evacuation orders, local requirements for nursing homes, assistance provided to nursing homes, implementation of emergency plans during the specified hurricane, and their reflections on the response of local nursing homes to the specified hurricane.

| Table B3. Community Entity Respondents | | | | | | |
|---|----------------|----------------|------------------|--------------------|--------------|--------------|
| Respondent Affiliation* | Alabama | Florida | Louisiana | Mississippi | Texas | Total |
| City Manager/Mayor's Office | 1 | 2 | 3 | 1 | 3 | 10 |
| County Emergency Managers | 2 | 2 | 2 | 2 | 1 | 9 |
| City Emergency Managers | 0 | 1 | 0 | 0 | 2 | 3 |
| Fire Department | 2 | 2 | 4 | 3 | 2 | 13 |
| Police Department | 2 | 2 | 1 | 2 | 1 | 8 |
| Area Agency on Aging | 1 | 1 | 2 | 1 | 1 | 6 |
| Long Term Care Ombudsman | 1 | 1 | 1 | 1 | 1 | 5 |
| Public Health Department | 2 | 1 | 0 | 2 | 1 | 6 |
| Nursing Home Surveyors | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | 11 | 12 | 14 | 12 | 12 | 61 |

Source: Office of Inspector General analysis of community officials where our selected nursing homes are located, 2006.
 *Totals reflect the number of respondent organizations. Many organizations sent more than one representative.

Documentary Evidence. At each of the 20 selected nursing homes, we obtained copies of emergency plans, transportation contracts, host agreements, training logs for 2005, and other relevant hurricane-related documents. We also obtained hurricane-related documents and copies of community emergency plans from community entity respondents in each of the locations of selected facilities.

Telephone Interviews. We conducted telephone interviews with officials from State agencies for each of the five States where our selected nursing homes are located. For each State, we interviewed officials from the emergency management office, the nursing home licensing division that surveys facilities, nursing home associations (often multiple), departments of aging services, and Long Term Care

Ombudsman Program. We used a structured interview protocol to ask questions about their roles and responsibilities for emergency planning, actions taken during the specified hurricane, the nature of evacuation orders, State nursing home requirements, and assistance provided to nursing homes for development and execution of emergency plans. We requested and received copies of State Administrative Codes for nursing home emergency preparedness, model plans, guidance they provide to nursing homes, and other relevant documents.

We also interviewed State surveyors to obtain information regarding how they review emergency plans and emergency training procedures, and how they determine deficiencies and their scope and severity.

Data Analysis

Quantitative Analysis. For our review of survey deficiencies, we used standard and complaint survey data from January 1, 2004, through December 31, 2005, to obtain frequencies for deficiencies F517, F518, K48, and K50. Whenever possible, interview and documentary evidence data were quantified and entered into Microsoft Access or Microsoft Excel and analyzed quantitatively using frequencies.

Qualitative Analysis. We analyzed interview responses and documentary evidence using qualitative analysis methods.

- *Interview Responses.* Interview notes were entered into a Microsoft Access database, then reviewed to identify issues and themes.
- *Documentary Evidence.* Each emergency plan, transportation contract, host agreement, and other documentation was reviewed by two analysts to determine whether they included the suggested provisions described in Table C1 of Appendix C. Analysts compared review results and conferred to reach consensus regarding discrepancies.
- *Cross-Source Analysis.* Information from documentary evidence was compared with interview responses where relevant. For example, responses regarding contracts were compared with documentary evidence of the contract. Interview responses were also compared across sources. For example, the nature of the evacuation order as perceived by both community leaders and nursing home staff.

Data Limitations

Although steps were taken to diversify our selection of hurricanes, communities, and nursing homes, their purposive selection does not allow inference of results either to the Gulf States or the Nation.

Suggested Provisions for Nursing Home Emergency Plans

To assess the content of emergency plans from selected nursing homes, we compiled a list of suggested emergency plan provisions to compare to the actual plans. We generated the list from our review of provisions suggested by a number of informed sources, listed by category below. Table C1 describes each of the suggested provisions and also indicates the number of selected nursing homes' emergency plans that included that provision. Each provision was suggested by at least two sources and most provisions were suggested by many of the sources.

Informed sources used to compile the suggested provisions were:

- *State Requirements and Guidelines:* State requirements were obtained from Florida Administrative Code, Chapter 59A; Mississippi Administrative Code, Section E; Louisiana Survey Criteria for Nursing Home Emergency Preparedness Plans HHS-NH-06; and Texas Administrative Code, Title 40, Part 1, Chapter 19, Subchapter D, Rule §19.326. State guidelines were Florida's Agency for Health Care Administration's Emergency Management Planning Criteria for Nursing Homes, Mississippi Emergency Disaster Planning Criteria for Nursing Home Facilities and Personal Care Homes, and the Louisiana Model Nursing Home Emergency Plan.
- *Professional Associations:* Information from professional associations included the American Health Care Association; the Florida Health Care Association; a hurricane summit held in Tallahassee, Florida, in February 2006 sponsored by the John A. Hartford Foundation and the American Association of Retired Persons; and the 2006 Long Term Care Accreditation Standards for Emergency Management Planning issued by the Joint Commission on Accreditation of Healthcare Organizations.
- *Expert Interviews:* Interview respondents included emergency management agency officials in Gulf States, professors of emergency management from Oklahoma State University, Seton Hall University, the University of North Texas, and professors of aging services from Florida International University.
- *Professional Publications:* Articles reviewed were from Quick Response Research Report, Southern Medical Journal, and American Journal of Public Health.

Table C1. Suggested Provisions Contained in 20 Selected Nursing Home Emergency Plans

| Provision | Description of Provision | Number of Plans (n=20) |
|---|---|------------------------|
| General Provisions | | |
| Hazard Analysis | Details specific vulnerabilities of the facility, such as close proximity to water and low elevation; accounts for various threats to the facility. | 17 |
| Direction and Control | Establishes a command post in the facility; defines management for emergency operations. | 15 |
| Decision Criteria | Includes factors to consider in deciding to evacuate or shelter in place. | 11 |
| Communication | Specifies clear communication protocols and backup plans. | 11 |
| Staff Family Members | Indicates whether staff family can shelter at the facility and evacuate. | 7 |
| Community Coordination | Procedures for working with local emergency manager; submitting plan. | 7 |
| Specific Resident Needs | Contains lists that include resident medical and personal needs. | 5 |
| Provisions for Sheltering in Place | | |
| Securing the Facility | Details measures to secure building against damage; especially for facilities sheltering in place. | 17 |
| Emergency Power | Specifies backup power, including generators and accounts for maintaining a supply of fuel. | 19 |
| Food Supply | Details the amounts and types of food on hand. | 19 |
| Water Supply | Details having potable water available (recommended amounts vary). | 18 |
| Staffing | Designates key personnel in emergencies and prepares assignments. | 17 |
| Medication | Specifies maintaining extra pharmacy stocks of common medications. | 15 |
| Serving as a host facility | Describes hosting procedures and details ensuring 24-hour operations. | 9 |
| Provisions for Evacuation | | |
| Transportation Contract | Includes current contract(s) with vendors for transportation. | 17 |
| Evacuation Procedures | Details contingency plans, policies, roles, responsibilities, and procedures. | 14 |
| Host Facility Agreement | Includes current contract(s) to facilities, relocation to “like” facilities. | 14 |
| Food Supply | Describes adequate supply and logistical support for transporting food. | 14 |
| Medications | Describes logistics for moving medications—including specification for moving them under the control of a registered nurse. | 14 |
| Transfer of Medical Records | Details having the resident’s medical records available; describes logistics for moving medical records. | 14 |
| Staffing | Specifies procedures to ensure staff accompany evacuating residents. | 13 |
| Resident Personal Belongings | Includes list of items to accompany residents. | 12 |
| Reentry | Identifies who authorizes reentry, procedures for inspecting facility, and details transportation from the host facility. | 9 |
| Water Supply | Specifies amount of water taken and logistical support. | 7 |
| Evacuation Route | Identifies evacuation routes and secondary routes, includes maps and specifies expected travel time. | 5 |

Source: Office of Inspector General analysis of content of expert interviews, professional publications, professional association guidance, and State regulations and review of 20 selected Gulf State nursing home emergency plans, 2006.

DESCRIPTIONS OF SELECTED HURRICANES

Prior to selecting communities and nursing homes, we selected four hurricanes that affected the Gulf States during 2004 and 2005: Ivan, Katrina, Rita, and Wilma (see Table E1 for hurricane characteristics).¹

| Table D1. Selected Hurricanes and Their Characteristics | | | | | | | | | |
|---|-----|----------|------------------------------|-----------|----------|-------------|----------------|--------|---------|
| Name | Cat | Date | Location | Max Surge | Rain | U.S. Deaths | Est. Cost | Notice | |
| | | | | | | | | Watch | Warning |
| Ivan | 3 | 09/16/04 | Gulf Shores, Alabama | 15 ft | 3-7 in | 25 | \$14.2 Billion | 51 hrs | 42 hrs |
| Katrina | 3 | 08/29/05 | Louisiana/Mississippi Border | 28 ft | 10-12 in | 1,336 | \$75 Billion | 44 hrs | 32 hrs |
| Rita | 3 | 09/24/05 | Louisiana/Texas Border | 15 ft | 15 in | 62 | \$10 Billion | 58 hrs | 40 hrs |
| Wilma | 3 | 10/24/05 | Cape Romano, Florida | 8 ft | 7 in | 5 | \$12.2 Billion | 38 hrs | 32 hrs |

Source: National Weather Service, National Hurricane Center, 2006.

Ivan. Ivan reached Category 5 strength 3 times before making landfall as a Category 3 hurricane just west of Gulf Shores, Alabama, on September 16, 2004, costing approximately \$14.2 billion in damage. The eye diameter was 40-50 Nautical miles, resulting in high winds over a narrow area near the Alabama/Florida border. The high surf and wind caused extensive damages to Innerarity Point and Orange Beaches in Alabama.

Katrina. Katrina was the costliest and third deadliest hurricane in the United States since 1900, and one of the most devastating natural disasters in U.S. history. While in the Gulf of Mexico, Katrina reached Category 5 intensity; however, it weakened to Category 3 (just below the Category 4 threshold) when it made landfall near the Pearl River at the Louisiana/Mississippi border on August 29, 2005. Over 1.2 million people along the Gulf coast from Louisiana to Alabama were under an evacuation order, but the number that actually evacuated is unknown.

The storm surge penetrated at least 6 miles inland in many parts of coastal Mississippi and up to 12 miles inland along bays and rivers, crossing Interstate 10 in many locations. Interstate 10 is often the barrier used for mandatory evacuation, with everything south being evacuated. In addition to the Gulf storm surge, Lake Ponchartrain rose

¹ National Weather Services National Hurricane Center Tropical Prediction Center, 2006.

and pushed several feet of water into communities along its northeastern shores, and strained the levee system in New Orleans. Eventually the levees were breached, flooding over 80 percent of New Orleans to depths up to 20 feet.


An estimated 1,336 deaths have been directly or indirectly attributed to Katrina. As of December 2005, more than 4,000 persons were still reported missing, so it is probable that the number of direct fatalities may never be known. Katrina left 3 million people without electricity, some for several weeks. The economic ramifications have been widespread and could be long lasting.

Rita. Rita also reached Category 5 strength over the Gulf of Mexico, weakening to Category 3 prior to making landfall near the Texas/Louisiana border on September 24, 2005. According to the National Weather Service, Rita produced a storm surge of 15 feet. In the wake of Katrina, the approach of Rita led to one of the largest evacuations in U.S. history. The number of evacuees in Texas may have exceeded 2 million. Seven fatalities were directly related to Rita, and an additional 55 indirectly related, including more than 20 evacuating nursing home residents killed in a bus accident.

Wilma. Wilma made landfall in southwestern Florida near Cape Romano on October 24, 2005, as a Category 3 hurricane. Coastal Collier County experienced storm surges up to 8 feet. It moved quickly across southern Florida and damage was unusually widespread. Not only was Wilma responsible for 5 deaths, it also caused the largest disruption of electrical service ever in Florida, with an estimated 98 percent of south Florida losing electrical service.

▶ A P P E N D I X E

AGENCY COMMENTS

 DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services

5 JUL 31 10:28
OFFICE OF INSPECTOR GENERAL
JUL 28 2006

Administrator
Washington, DC 20201

TO: Daniel R. Levinson
Inspector General
Office of Inspector General

FROM: Mark B. McClellan, M.D., Ph.D. *Mark McClellan*
Administrator

SUBJECT: Office of Inspector General Draft Report: "Nursing Home
Emergency Preparedness and Experiences During Recent
Hurricanes," (OEI-06-06-00020)

Thank you for the opportunity to review and comment on the above referenced Office of Inspector General (OIG) draft report regarding nursing home preparedness in the Gulf States during the recent hurricanes. The OIG's thorough assessment utilized multiple sources of information, such as survey data both nationally and for the Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas); on-site interviews of nursing home staff, local authorities and other stakeholders; emergency plans for twenty selected nursing homes that were affected by hurricanes in the five Gulf States; and a list of suggested emergency preparedness provisions compiled from recommendations of a variety of informed sources.

The Centers for Medicare and Medicaid Services (CMS) appreciates the contributions and valuable input by the OIG to ensure resident and staff safety. We have reviewed your findings and recommendations. Your recommendations are consistent with steps we are already taking to improve emergency preparedness. Our plan of action to your recommendations follows.

OIG Recommendation

CMS should consider strengthening Federal certification standards for nursing home emergency plans by including requirements for specific elements of emergency planning.

CMS Response

We concur. We have been reviewing our regulatory requirements and interpretive guidelines to determine whether and how they can be strengthened. The OIG report is extremely helpful as we complete this review. Regulatory changes may be undertaken as a long-term strategy while other strategies can be taken in the short-term to ensure resident and staff safety.

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Several workgroups within CMS have been reviewing the current Federal emergency preparedness requirements to determine the most appropriate methods of improving the preparedness standards applicable to health care facilities. The CMS also participates in the National Fire Protection Association (NFPA) and is supporting efforts by the NFPA to promote enhanced preparedness. We are also in regular communication with States and Accrediting Organizations to determine the most effective approaches that will improve preparedness, ensure the presence contingency plans, promote coordination with State and local entities, and improve staff training regarding emergency preparedness.

OIG Recommendation

CMS should encourage communication and collaboration between State and local emergency entities and nursing homes.

CMS Response

We concur. We are planning to implement a communication strategy to disseminate policies, procedures, interpretive guidance, and other communications with State Survey Agencies (SAs), CMS Regional Offices and health care facilities. The CMS will encourage State and local emergency agency collaboration and coordination through such communications.

The CMS is also participating in several Department of Health and Human Services (DHHS) and interagency workgroups that are developing recommendations and guidance for improving coordination and collaboration among Federal, State and local emergency entities. In particular, the DHHS Long-Term Healthcare Working Group, supported by the Department of Homeland Security, includes representatives from various emergency response agencies, such as Federal Emergency Management Agency, National Disaster Medical System, Veterans Affairs, U.S. Coast Guard, Centers for Disease Control and Prevention, Public Health Services, Administration on Aging, Administration for Children and Families, and CMS, as well as State Office of Emergency Management and health care provider associations representatives.

The purpose of this workgroup is to review, assess and develop national definitions, recommendations and targets for all aspects of health care (both facility and community-based) to address emergency planning, hazard mitigation, response and recovery.

Another workgroup, the CMS Survey and Certification Interagency Role and Integration Workgroup, is in the process of developing recommendations and guidelines regarding the appropriate role, responsibilities and functions of Survey and Certification Central and Regional Offices, SAs, and other State and local emergency management entities to

assist in the development and partnering that must occur to implement a coordinated, collaborative and effective emergency response.

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Again, we thank the OIG for their suggestions and welcome the opportunity to make such improvements in the Medicare and Medicaid programs. These suggestions will be incorporated into the implementation process for Medicare and Medicaid with a consideration for the need to provide quality care to nursing home residents during both stable and disruptive events.

► A C K N O W L E D G M E N T S

This report was prepared under the direction of Judith V. Tyler, Regional Inspector General for Evaluation and Inspections of the Dallas regional office, and Kevin Golladay, Deputy Regional Inspector General of the Dallas regional office. Other principal Office of Evaluation and Inspections staff who contributed include:

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