

Research Brief

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ASSOCIATION BETWEEN EXPOSURE TO HURRICANE IRMA AND MORTALITY AND HOSPITALIZATION IN FLORIDA NURSING HOME RESIDENTS

Keywords: mortality, hospitalization, nursing homes, long-term care, disaster preparedness

Purpose of the Study: To better understand hospitalizations and mortality of long-stay (>90 days) and short-stay (<90 days) nursing home residents after Hurricane Irma in 2017.

Key Findings:

More nursing home residents died and were hospitalized in the 90-day period following Hurricane Irma in 2017 than in the 2015 control group that did not experience a hurricane.

Long-stay residents were especially at risk of hospitalization and mortality after Hurricane Irma, while short-stay residents were at risk of hospitalization, but not mortality.

Major Policy/Practice Implication: Nursing home residents are vulnerable to hospitalization and death following disasters, particularly long-stay residents who are more likely to have serious cognitive and functional impairments. Risks to this population may be underreported by governing agencies.

IMPORTANT BACKGROUND INFORMATION

Nursing home (NH) residents exposed to hurricanes are at greater risk of mortality and morbidity than unexposed residents, but less is known about the impact of hurricanes on specific populations of NH residents, such as long- and short-stay residents. Length of stay may be an important differentiating characteristic because short-stay residents are typically funded by Medicare to recover from an injury or hospitalization, while long-stay residents are likely to be funded by Medicaid and may have greater cognitive and/or functional impairments. Even more, hospitalizations and deaths among NH residents in the months following a hurricane may be underreported by governing agencies.

STUDY METHODS

The study population included all Florida NH residents 65 years and older in 2017 when Hurricane Irma hit the entire state. Researchers categorized residents as short-stay (<90 days) and long-stay (>90 days) and designated a similar 2015 control group who were not exposed to a disaster. Data were collected from Medicare and resident assessment records, and clustered by facility and residents who were in both 2015 and 2017 cohorts to reduce bias. They calculated hospitalization cumulative incidence and mortality rate at 30 days and 90 days after exposure, as well as risk difference between 2015 and 2017 to determine excess risk among the exposed group. They reported results per 1000 residents.

