

Natural disasters cause challenges for healthcare organizations because of circumstances such as limited communication, restricted transportation, and the emotional toll of the devastation. For oncology nurses and providers, disasters present unique challenges, like maintaining chemotherapy treatment schedules and adhering to research protocols for clinical trial participants. To ensure continuity of care, nurses can provide patients with critical medical information that will be needed if they are displaced, use electronic health records, maintain current copies of patient contact lists and treatment schedules, and stock up on supplies and medications.

#### AT A GLANCE

- Common challenges following natural disasters include limited communication, restricted transportation, and increased psychological distress.
- Individuals with chronic illnesses, including cancer, are at greater risk for adverse health outcomes during and following natural disasters.
- For patients on clinical trials, communicating with clinical trial sponsors and working with colleagues in other states to coordinate patient care for displaced and nondisplaced patients are crucial.

#### KEYWORDS

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# Natural Disasters

## A Louisiana Gulf perspective of maintaining patient care

Maria Nix, MSN, BSN, RN, and Daphne Caldwell, RN, OCN®

**H**urricanes, floods, fires, cyclones, tsunamis, and other natural disasters take a devastating toll on communities through loss of life and have dire effects on infrastructure, such as water supply, electricity, roads, and telecommunication. Disasters create complicated challenges for healthcare providers who care for patients with limited resources during the events, such as restricted communication, limited transportation, and the emotional toll of the devastation. Particularly for oncology care providers, disasters present unique challenges, like maintaining chemotherapy and radiation treatment schedules and adhering to research protocols for clinical trial participants (Joseph et al., 2007). Joseph et al. (2007) used Hurricane Katrina in 2005 as an example to describe challenges experienced during a natural disaster and identified lessons learned that can be applied to other disasters.

### The Impact of Natural Disasters and Challenges for Survivors

Each natural disaster is a reminder of overwhelming devastation. Hurricane Katrina, a Category 5 hurricane that was considered to be one of the most devastating and costly hurricanes in U.S. history, made landfall in 2005, affecting lives and communities in its path along the Gulf Coast (Federal Emergency Management Agency [FEMA], 2006; Rudowitz, Rowland, & Shartzer, 2006). In addition to the loss of homes, jobs, and access to health care and prescription medications in the months after the storm, Rudowitz et al. (2006) demonstrated the psychological distress experienced

by survivors, including anxiety, depression, and symptoms of post-traumatic stress. Hurricane Katrina caused a storm surge that destroyed a large part of the infrastructure in New Orleans, Louisiana, and flooded nearly the entire city and surrounding areas, displacing more than a million people (FEMA, 2006; Rudowitz et al., 2006) and affecting an estimated 23,500 people with cancer (Joseph et al., 2007). The historic hurricane left a lasting impression on all who experienced it firsthand.

In September 2017, when Category 4 Hurricane Maria hit Puerto Rico, the island was still recovering from Hurricane Irma weeks earlier, which already had left much of the island without power. Hurricane Maria left residents isolated on the island, with closed roads and bridges; limited supplies of food, water, and power; and limited access to medications and communication. The effects took a toll on the physical, emotional, and mental health of Puerto Rican residents, including concern for loved ones because of lack of communication, anxiety from loss and uncertainty, and illnesses and infections from poor sanitation (Lopez-Candales, Hernandez-Suarez, Osterman-Pla, & Conde-Santiago, 2018). A survey of Hurricane Maria survivors conducted by Kishore et al. (2018) demonstrated that 31% of survey respondents reported issues with access to health care, and nearly one-third of deaths following Hurricane Maria were attributed by family members to limited access to health care.

### Ochsner Health System and Hurricane Katrina

Ochsner Health System (2018) is the largest not-for-profit academic healthcare