NEW JERSEY, NEW YORK, and NEW YORK CITY Tracking Programs Aid in Disaster Response During Hurricane Sandy

What was the problem/situation?

Hurricane Sandy, a severe storm in October 2012, affected 24 states. The superstorm caused severe damage in many areas, especially in New Jersey (NJ), New York City (NYC), and other parts of New York State (NYS). Many communities in these areas experienced strong winds, heavy rainfall, widespread flooding, power outages, and damage to roads, bridges, buildings, and homes. As a result, millions of residents had no power, heat, or running water for multiple days during cold, fall weather.

Right after the storm, residents of these areas faced several health risks. The risks included carbon monoxide poisoning from improper use of generators or gas heaters; hypothermia from not having heat; worsening symptoms of heart and lung disease from exposure to cold temperatures; not having access to medical care; and foodborne illnesses from a lack of refrigeration caused by power outages.

How was Tracking involved?

Tracking programs offer experienced, skilled staff, provide easy access to health and environment data, and have existing technology systems that can be quickly adapted for new purposes. All of these make local tracking programs valuable partners during disasters or other emergency events. Tracking program staff from NJ, NYC, and NYS provided expertise and innovative strategies to assist with Hurricane Sandy surveillance and response.
New Jersey: Before the storm hit NJ, the state Tracking project and its partners quickly created and activated a real-time surveillance tool to track hurricane-related emergency room visits throughout the state. A few days before the storm, NJ was able to add a hurricane-related data feature to EpiCenter, the state health department’s existing real-time surveillance system.

Because of the magnitude of this storm, staying informed was critical as the state worked to allocate public health resources quickly. Dr. Jerry Fagliano of the New Jersey Environmental Public Health Tracking Program, commented, “I would have preferred a less dramatic test of this tool, but Hurricane Sandy really proved the utility of EpiCenter in tracking storm-related emergency visits.”

New York City: Like New Jersey, the NYC Tracking Program analyzed data from a real-time surveillance system of emergency department visits—as well as Poison Control Center data—to track health issues following the storm. NYC Tracking staff analyzed data collected in the field to inform factsheets and alerts for health care providers and the public. In addition, the Tracking staff helped direct responders conducting door-to-door outreach by developing maps of high-rise apartment buildings in flooded areas. The maps made it easier for the first responders to assess needs and provide assistance to residents remaining in those buildings despite a lack of utilities.

New York State: The NYS Tracking Program assisted in the state’s response to Hurricane Sandy by using its existing GIS capabilities to map locations of Disaster Recovery Centers for employees using tablets and other handheld devices. Having the maps made it easier for emergency responders and residents to find the centers and receive the services and support needed following the storm. The Tracking Program also developed a Web-based mapping application to help track and manage the needs of health care facilities following the storm. Workers were able to enter information related to supply management, patient capacity, and access. Tracking program staff members were also sent out to the facilities to assist with the emergency response efforts.
What action was taken to resolve the problem?

The efforts of the tracking staff, in partnership with other health department staff and other agencies, informed emergency and public health responses to meet residents’ needs following the storm. Technology, staff expertise, and strong working relationships from previous tracking program activities helped workers to assess important effects of the hurricane on residents and to prevent future public health effects resulting from the storm.

NJSHAD serves as the main data portal for NJDOH, providing public access to data and information from the entire New Jersey Department of Health, and hosts datasets for the New Jersey Environmental Public Health Tracking (NJEPHT) Program. NJSHAD provides static public health indicators which combine data and information, and dynamic custom public health query tools. The functionality, content, and utility of NJSHAD and the NJEPHT portal are constantly being enhanced.