

## Morbidity and Mortality Weekly Report (MMWR)

# Notes from the Field: Carbon Monoxide Exposures Reported to Poison Centers and Related to Hurricane Sandy — Northeastern United States, 2012

## Weekly

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Hurricane Sandy made landfall as a post-tropical cyclone along the coast of southern New Jersey on Monday, October 29, 2012. In the wake of Sandy, state and federal public health agencies have observed an increase in the number of exposures to carbon monoxide (CO) reported to poison centers. CO is imperceptible and can cause adverse health effects ranging from fatigue and headache to cardiorespiratory failure, coma, and death (1). CO poisoning is a leading cause of mortality and morbidity in post-disaster situations, when widespread power outages occur and risky behaviors, such as improper placement of generators and indoor use of charcoal grills, increase (2,3).

As of November 6, a total of 263 CO exposures related to Hurricane Sandy had been reported to poison centers in eight states: 80 in New York, 61 in New Jersey, 44 in Connecticut, 39 in Pennsylvania, 27 in West Virginia, eight in Virginia, three in Maryland, and one in Delaware. Four of the reported exposures, all in Pennsylvania, resulted from the use of a generator in a garage and were fatal. This likely is an underestimation of the total number of fatal cases; larger numbers of CO-related deaths have been reported in the media. Where symptom information was available (n = 182), the most frequently reported symptoms were headache (69 cases, 37.9%), nausea (44 cases, 24.2%), and dizziness (36 cases, 19.8%). For comparison, the total number of CO exposures reported to poison centers and related to Hurricane Irene during August 28–September 2, 2011, was 49.

CO exposures can be prevented by 1) placing generators as far from homes as possible, but also at a safe distance from any nearby dwellings; the recommended distance for generator placement outside a home is a minimum of 25 feet (7.6 m) (3); 2) never using a generator, grill, camp stove, or other gasoline or charcoal-burning device inside a home, basement, garage, or outside near an open window; 3) never heating homes with a gas oven or by burning charcoal; 4) ensuring that fuel-burning space heaters are properly vented; 5) installing a battery-operated or battery back-up CO alarm in the home; and 6) leaving the building and dialing 911 if a CO alarm sounds, if CO poisoning is suspected, or if any person begins to feel dizzy, light-headed, or nauseous. More information about CO poisoning is available at <http://www.cdc.gov/co/guidelines.htm>. For suspected cases of CO poisoning and other exposures, persons should call their regional poison center at 1-800-222-1222.

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