power outages and increased generator usage.[1] Improper generator use, including placement inside residential settings, was the primary cause for these reported CO exposures. These findings emphasize the need for effective, storm-related prevention messages concerning proper generator use, and underscore the need for ongoing prevention messages regarding the installation and maintenance of battery-powered CO detectors in homes.

In post-disaster situations, prevalence estimates of household generator usage have ranged from 18% to 31%,[6,7] indicating that a substantial number of persons affected by a storm could be at risk for CO exposure. Previous studies have shown that, in nondisaster situations, children are disproportionately affected by CO poisonings that result in emergency department visits. Women often make up the majority of persons exposed to CO, whereas men make up the majority of deaths.[8,9] Increased rates of CO toxicity in men have been attributed to engagement in high-risk activities, such as fuel-burning tool and equipment use.[9] The results described in this report indicate that, of storm-related CO exposures reported to poison centers in counties of southeast Texas that were declared disaster areas, approximately one third were in persons aged <1-17 years. Additionally, most CO exposures reported by poison centers, BioSense, and UHMS occurred among women (65%, 63%, and 53%, respectively).

These CO exposures occurred despite efforts to warn the public of CO-related hazards. TDSHS issued statewide press releases on CO poisoning and prevention within 1 day of hurricane landfall and again on day 3, and public health workers distributed CO-poisoning prevention materials at ice and water distribution locations. Public health officials in Houston distributed prevention materials to residents and evacuees returning to their homes, and during door-to-door community health assessments and, along with the Harris County Medical Examiner Office, produced a press release in both English and Spanish to warn residents about indoor generator placement. In addition, public health officials in Galveston distributed approximately 6,000 flyers containing CO-poisoning and prevention information.

The findings in this report are subject to at least three limitations. First, although CDC was able to match cases from mortality, emergency department, and hyperbaric oxygen treatment facility data sources, cases reported by poison centers could not be matched with those from other data sources because some poison center data were missing identifying information. This might have resulted in some duplication of cases. Second, estimates of nonfatal CO exposures in this report are likely underestimations of the overall number of CO exposures after Hurricane Ike; presumably, not all exposed persons contacted poison centers or sought treatment. Finally, data could be obtained for fewer than half of the patients receiving hyperbaric oxygen treatment.

CO exposure is preventable, yet it continues to pose a substantial public health problem in the wake of hurricanes. The public, especially those in the path of an impending storm, should be reminded that (1) installation of a battery-operated CO detector outside each sleeping area in the home and routine battery changes can save lives, and (2) generators should never be operated in a basement or garage and should be placed as far away from the home as possible. These surveillance results, in addition to results from previous post-disaster situations, can help in the development of public health interventions during storm preparation, warnings, and response periods.

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9 Available.

*Additional information available at http://www.uhms.org/cdc/tabid/418/default.aspx.
†Additional information available at http://www.cdc.gov/biosense.
‡Chief complaints could include "carbon monoxide," "CO exp," "CO intox," "CO poisoning," "CO2 poisoning," "COpoisoning," "exposicion a monoxido de carbono," "monoxido de carbono," and "O2 poisoning."

Announcement: Vision Health Initiative Website

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CDC HAS CREATED A NEW VISION Health Initiative website with information regarding vision and eye health, projects with diverse stakeholders, journal publications and reports, and vision health–related resources for professionals and consumers. The website includes an interactive map displaying state-specific vision and eye health statistics. With this tool, states that use the Behavioral Risk Factor Surveillance System visual impairment and access to eye care module can produce reports and presentations with data specific to their states. The website can be accessed at http://www.cdc.gov/visionhealth.

In 2004, approximately 3.3 million persons aged ≥40 years had blindness or visual impairment; this number is predicted to double by 2030 because of increases in diabetes and other chronic diseases and aging of the U.S. population.[1] With early detection and treatment, half of all blindness can be prevented or reversed.[2]

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