“Tracking Injury Deaths Related to Hurricane Ike”
Texas Department of State Health Services
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Program Description
In 2008, Hurricane Ike, a Category 2 hurricane, made landfall in our state, producing substantial damage and destruction. Thirty-four counties were declared disaster areas by Federal Emergency Management Agency; 15 counties were under mandatory evacuation orders. Mortality surveillance was initiated with medical examiners (MEs); justices of the peace (coroners or JPs); forensic centers; public health officials; and hospitals. The objective was to provide timely statewide information that would be used to: 1) report the number of deaths attributed to the hurricane, 2) describe the cause of deaths, and 3) identify strategies to prevent or reduce future hurricane-related mortality. The findings are being used to promote improvements in public health preparedness planning and prevention efforts. There is no state ME; as such the state uses a mixed ME and JP system to investigate and report unnatural deaths from any causes (e.g., suicide, unattended death by physician, or unknown cause of death). In June 2008, the state health department and the Centers for Diseases Control and Prevention (CDC), provided two training workshops on disaster-related mortality to selected local, regional, and state public health staff. Based on the CDC’s disaster related mortality surveillance form and recommendation, the state health department developed a state-specific surveillance form to enhance the timely reporting of disaster-related deaths. During the response to the hurricane, MEs, JPs, public health officials, and practitioners were provided the case definition and reporting form and encouraged to report all hurricane-related deaths. A case was defined as any death that was directly or indirectly related to the hurricane among evacuees, residents, non-residents or rescue personnel in the declared disaster counties, counties along the coast or counties known to have evacuation shelters occurring September 8, 2008 through October 13, 2008. Completed forms were faxed or emailed to the state health department and entered daily into a secured database.

Innovative Characteristics & Program Impact
To overcome the limitations of normal death registration process during a disaster, the state, in cooperation with the CDC (Health Studies Branch), developed a more active and timely disaster-related mortality surveillance system and provided training workshops prior to hurricane season to regional and local public health staff. This mortality surveillance was a collaborative effort of the local, regional, state, federal agencies with MEs and JPs, and demonstrated the importance of active exchange of mortality information during a public health emergency. State injury staff provided “surge capacity” to coordinate statewide data collection and analysis. There were several barriers and obstacles: communicating a consistent case definition, collecting data from impacted areas with power outages (e.g., fax was off and on), and competing priorities for local officials (priority on search/rescue or disaster response vs. data reporting). Results indicated that injury, directly or indirectly related to the hurricane, was the leading cause of death. Carbon monoxide poisoning, drowning, and being hit by a fallen trees were the leading causes of injury-related deaths. Mortality surveillance following natural or manmade disasters is important in determining the magnitude, manner, cause, and circumstances of disaster related death. Information collected through the state’s hurricane-related mortality surveillance provided valuable daily information to the state health department, state emergency management officials, and the CDC regarding the characteristics of deaths in the state. The surveillance effort served as an early warning alert system, to detect mortality patterns where public health action could be initiated at the local, regional, or state levels. This surveillance information was also helpful in responding to media inquiries. Public health agencies can use these results to promote improvements in hurricane preparation, warning, and response activities (e.g., training, building the local capacity and equipping new technologies).