

## E68 Medicolegal Death Investigations After Disasters: Newly Developed Tools to Improve Data Collection

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After attending this presentation, attendees will understand activities undertaken by the Centers for Disease Control and Prevention (CDC) to develop data collection tools for increasing the accuracy of identifying disaster-related deaths and associated risk factors during the death scene investigations after a natural disaster. In addition, attendees will understand how death scene data can improve public health emergency preparedness and response.

This presentation will impact the forensic science community by providing an overview of the work CDC has conducted thus far on developing a suite of supplemental disaster death scene investigation tools and by offering the forensic science community the opportunity to review and provide feedback on these new resources.

Data collected at the death scene are the foundation for identifying the cause and manner of any death; however, because of the complexities of a disaster, collecting information beyond what is routinely required for determining cause and manner of death may be needed to ensure that the death is appropriately attributed to a disaster. In recent disaster events, considerable disparities arose between the number of disaster-related deaths reported and recorded by state-based vital statistics departments and those reported by other agencies, including local, state, and federal state-based Emergency Operations Center(s), the National Oceanic and Atmospheric Administration-National Weather Service Storm Database, and the American Red Cross. Enhancing the data collected during disaster-related death investigation could improve the accuracy of reporting disaster-related deaths. To this end, CDC funded NORC at the University of Chicago to examine current practices in disaster-related medicolegal death investigation and convene a workgroup, comprised of medical examiners and coroners, forensic pathologists, death scene investigators, forensic anthropologists, and epidemiologists to collaboratively develop tools for investigators to use in a disaster-related scene investigation. Similar to the Sudden Unexplained Infant Death Investigation (SUIDI) guidelines, this project provides tools for death scene investigators and death certifiers to collect disaster-specific data, ultimately allowing for more accurate and consistent attribution of deaths to disasters.

The proposed disaster-related data collection tools will not replace routine data collection tools but will aid the death scene investigator in consistently collecting disaster-specific information. Supplemental tools were developed for frequently occurring disasters, such as hurricanes, tornados, and extreme heat and cold exposures. Examples include information about the scene (e.g., presence of basement or tornado shelter in home); information about the decedent (e.g., engagement in activities related to disaster preparation or clean up); and information about the disaster (e.g., weather conditions or ongoing alerts). In addition, a user guide was developed to assist investigators in using these tools.

Enhanced data collection practices at disaster-related death scenes will improve the public health sector's ability to identify risk and preventive factors associated with disaster-related deaths. Death scene investigation data

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in medical examiners' and coroners' reports can assist state and local public health officials to better target response and recovery efforts by identifying people at high risk of mortality and refine strategies to prepare, respond, and recover from future disaster events.

**Disaster, Investigation, Mass Fatality** 

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