



## **Health Impacts of Climate and Weather: Influenza and Floods as Examples**

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The interest in understanding how the emergence and spread of infectious disease is controlled by environmental factors such as atmospheric condition has increased in the past two decades among public health officials, hydrometeorologists, scientists and policy makers. Given the strong linkage between climate and influenza, we studied the relationship between specific meteorological variables, namely temperature, humidity, precipitation, and radiation, and influenza morbidity and mortality at various temporal and spatial scales. The ultimate goal of the study is to make it possible to use weather and climate prediction at or before the beginning of the influenza season to provide valuable prediction of the characteristics of the season. Preliminary results will be presented.

The Federal Emergency Management Agency (FEMA) considers flooding "America's Number One Natural Hazard". Despite flood management efforts in many communities, U.S. flood damages remain high, due, in large part, to increasing population and property development in flood-prone areas. Floods are the leading cause of fatalities related to natural disasters in Texas and are considered as a serious health threat by Texas Department of State Health Services (DSHS). We examined flood fatalities that occurred in Texas between 1960 and 2008. Flood fatality statistics were extracted from several sources including DSHS. The data collected for flood fatalities include the date, time, gender, age, location, and weather conditions. Analysis reveals that most fatalities result from driving into flood water. A health education intervention strategy is proposed.