

Session Speakers

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Session Title

Health Vulnerabilities to Climate Extremes

Session Description

Assessing health vulnerabilities in the face of extreme climate events informs planning, preparedness, and mitigation to offset impacts. Developing comprehensive strategies for data is key. This session will highlight statewide efforts at identifying vulnerable populations, data evaluation and monitoring of these vulnerabilities, and strategies for health providers in understanding how events impact human well-being. First, Clean Air Carolina and its AirKeepers will discuss a statewide monitoring network designed to serve both the gathering of data about real-time exposure and connecting impacted communities with information needed to protect their health and advocate for change. Clean Air Carolina is leading the way in creating a community level monitoring network across the entire state of North Carolina, with at least one sensor in every county by December 2018. The data collected through this program will allow scientists, health experts, and environmental advocates to leverage this information to fight air pollution, engage individuals, and promote better outcomes. The second presentation will discuss various sources for determining impacts from extreme events, such as the NOAA Storm Events Database, and the particular challenges in utilizing these data sources to determine impacts such as injuries, fatalities, and agricultural and property losses. The third presentation focuses on the specific vulnerability of nursing home patients. Due to their inherent vulnerability, institutionalized older adults often face disproportionate harm during hazardous events. To mitigate this harm, a spatial vulnerability of nursing homes located throughout the Southeast was assessed using a social-ecological approach of vulnerability theory and GIScience. This presentation discusses the results to date of this assessment. The final presentation focuses on a conceptual model of how hurricanes and major flooding can influence the location, movement, and ultimate human exposure to chemicals, particularly among vulnerable populations. This presentation draws from recent studies as well as those on Hurricane Fran, Floyd, Matthew, and Florence.