

Mapping the Health Impact

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Identifying vulnerable populations is a key step in climate change adaptation. The North Carolina Building Resilience against Climate Effects grant used the Centers for Disease Control and Prevention guidelines to identify vulnerable populations to heat–related illness and wildfire health impacts. This tool demonstration will share basic aspects of identifying vulnerable populations to participants.

Geographic Information Systems, or GIS, was used to geographically identify areas of North Carolina with the highest vulnerability to heat and wildfire health impacts. Health data, exposure data, and adaptive capacity components were all mapped. Meetings with community members also contributed to mapping vulnerability and verifying the initial mapping results.

GIS identified vulnerable geographic regions within North Carolina for heat and wildfire health impacts. For heat–related illness, 11 counties within the Sandhills region were identified as vulnerable. For wildfire health impacts, 1 county was identified as most vulnerable. Multiple maps were needed for these projects, as subject matter experts and communities were asked to verify initial mapping results.

GIS is a powerful tool to focus adaptation work. This tool demonstration will show an experienced user (Kelly Squires) doing basic manipulations with one layer of the tool, and then show the final product. Participants will have the opportunity to ask questions about vulnerability mapping and GIS, with an emphasis on climate change and health.