

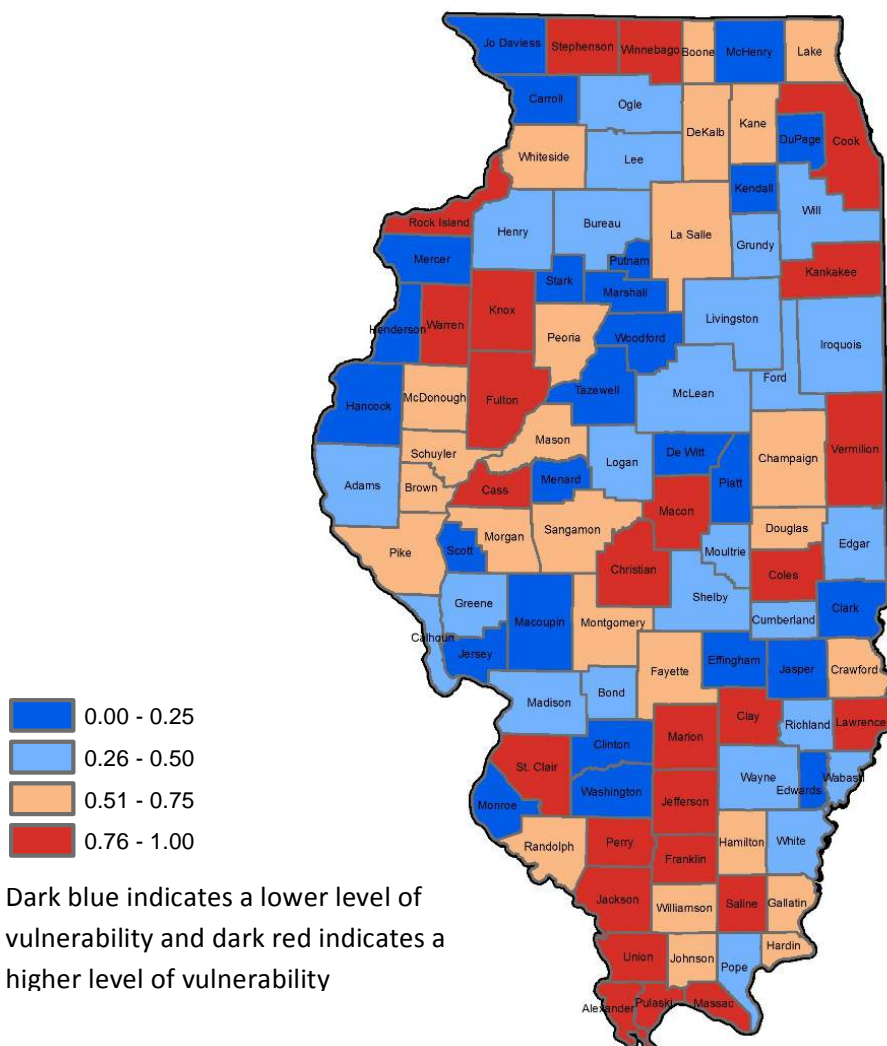
## Toolkit Addendum for Boone County Health Department

In addition to the suggested strategies and tools to strengthen existing heat illness prevention methods, this addendum provides information specific to Boone County Health Department to further assist your LHD in planning for extreme heat events. Included in this section are the following:

- Social vulnerability Index maps
- Heat hospitalization numbers and rates

### Social Vulnerability Index Maps

The Center for Disease Prevention and Control's (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) developed the Social Vulnerability Index (SVI). The SVI is a geospatial tool that was developed to help emergency response planners and public health officials identify and map the communities that will most likely need support before, during, and after a hazardous event. Using 2010 Census Tract data, it breaks vulnerability down into four themes – housing composition, socioeconomic status, minority status/language, and housing/transportation. It then combines the four themes to assess an area's overall vulnerability. Below is a map of the overall vulnerability for all counties in Illinois and maps of the four themes and overall vulnerability specifically for Boone County. For zip code specific maps, go to <http://svi.cdc.gov/map.aspx>

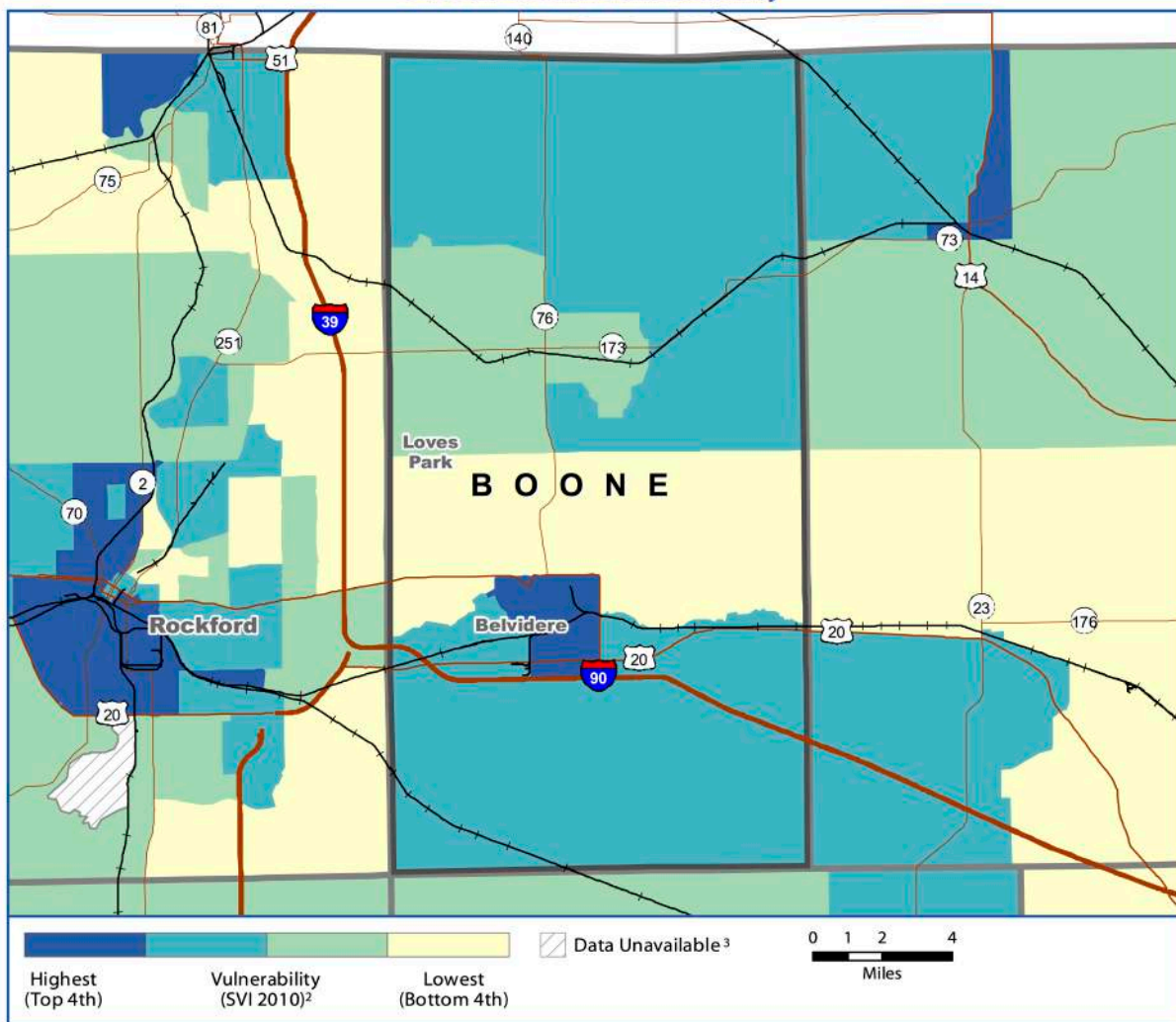


# Social Vulnerability Index 2010

Boone County, Illinois

PART 1

## Overall Social Vulnerability<sup>1</sup>



**Social vulnerability** refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **Social Vulnerability Index (SVI 2010)<sup>4</sup> County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. SVI 2010 groups **fourteen census-derived factors** into **four themes** that summarize the extent to

which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PRODUCED 3/18/2014

Agency for Toxic Substances and Disease Registry

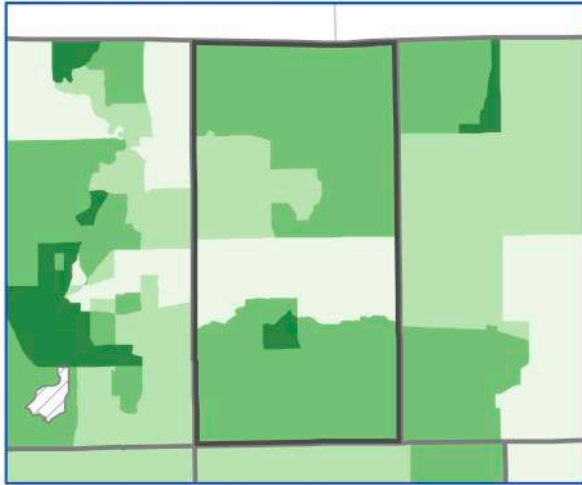
Division of Toxicology and Human Health Sciences



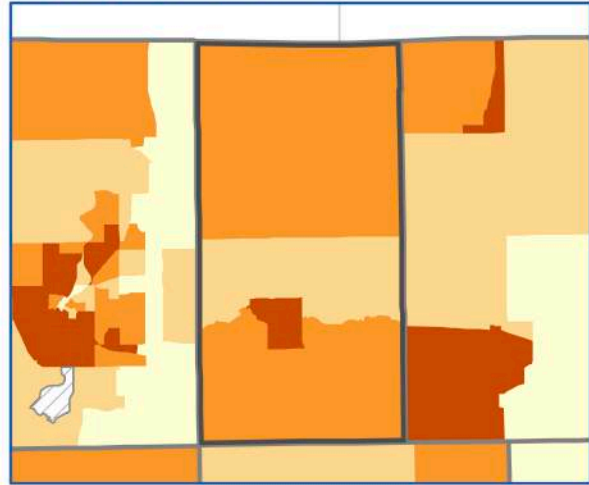
FINAL - FOR EXTERNAL USE

SVI Themes

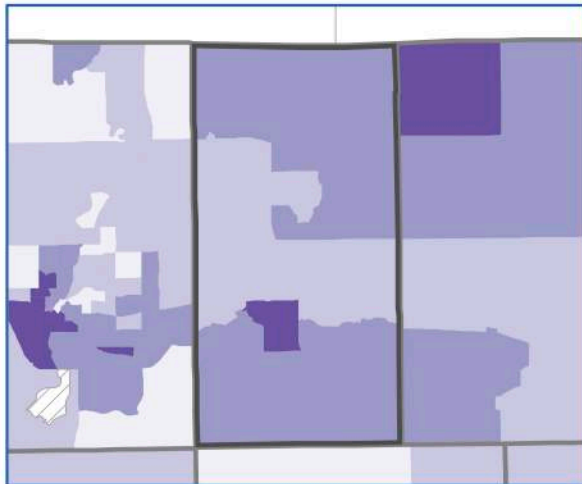
Socioeconomic Status<sup>5</sup>



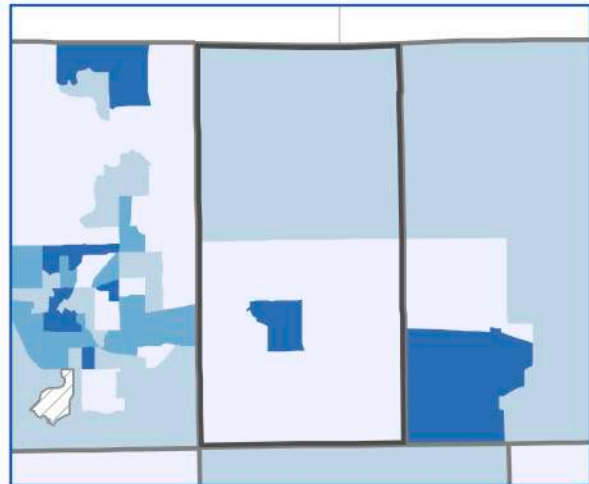
Household Composition<sup>6</sup>



Race/Ethnicity/Language<sup>7</sup>



Housing/Transportation<sup>8</sup>



Data Sources: <sup>1</sup>ATSDR GRASP.

Notes: <sup>2</sup>Overall Social Vulnerability: All 14 variables. <sup>3</sup>Census tracts with 0 population. <sup>4</sup>The SVI combines percentile rankings of US Census 2010 and American Community Survey (ACS) 2006-2010 variables, for the state of interest, at the census tract level. <sup>5</sup>Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. <sup>6</sup>Household Composition: Aged 65 and Over, Aged 17 and Younger, Single-parent Household. <sup>7</sup>Race/Ethnicity/Language: Minority, English Language Ability. <sup>8</sup>Housing/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.

Projection: Illinois Transverse Mercator NAD83 (ILGIC).

Reference: Flanagan, B.E., et al., A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011. 8(1).

### **Heat Illness in Boone County, Illinois**

Data from IDPH show that between 1987 and 2014, 17 people in Boone County were hospitalized for heat illness. The population of Boone County was 54,156 in the 2010 census. The rate of hospitalization for heat illness in Boone County is 1.45. The known risk factors for dying of heat stroke include living alone, lack of air conditioning, being elderly, and having chronic medical and psychiatric conditions. Doing strenuous work outdoors in the heat also puts people at risk for potentially fatal heat illness.