WHERE OHIOANS ARE MOST VULNERABLE TO DISASTER OR OUTBREAK

BY **DEVIN KEITHLEY**

Knowing where the most vulnerable populations live is crucial in preparing for disasters. Identifying these communities can help in estimating the amount of needed supplies or emergency response, communicating and mobilizing for evacuations or finding the best location for community outreach centers to provide beds, testing or financial assistance. The COVID-19 pandemic and resulting recession are the most recent highlight of how vulnerable some Ohioans are in the face of catastrophe.

The Centers for Disease Control and Prevention (CDC) developed the Social Vulnerability Index (SVI) to aid local officials in identifying areas that may need support. Social vulnerability is the degree to which a community exhibits certain social conditions that may affect its ability to prevent human suffering and financial loss in the event of natural disaster, man-made ecological disaster or disease outbreak like the current pandemic.

The CDC identified 15 demographic and economic factors in its social vulnerability model. These factors include low income, poor education, overcrowding, lack of transportation options, as well as concentrations of especially vulnerable populations such as older adults, children, people with disabilities, people of color and those with limited English. The resulting overall score is a percentile ranking of counties or census tracts that estimates the social vulnerability of a community. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). The map to the right and the bar chart below show which parts of Ohio are more or less socially vulnerable.

The SVI data show that Ohioans living in the urban cores of cities are considerably vulnerable, due in part to overcrowding and the concentration of poverty in those neighborhoods. Poorer Appalachian communities also tend to be at risk, particularly in rural southern Ohio where a relatively large share of families live in mobile homes, which are considered especially vulnerable. By targeting these most vulnerable areas, community leaders, policymakers and public health officials can build resiliency and buffer communities against future losses and damage. Preparing in advance can have wide-ranging impacts, including reducing deaths and illness, lowering costs associated with rebuilding and repairing damage and helping to more efficiently allocate resources to address trauma.

Population by Social Vulnerability & Typology





