



Excessive Heat - An Underrated Problem

Many people do not realize how deadly a heat wave can be. In contrast to the visible, destructive, and violent nature of floods, hurricanes, and tornadoes, a heat wave is a "silent killer". In 1995 alone, 1021 Americans perished in heat waves, including 633 in Illinois and 57 in Missouri.

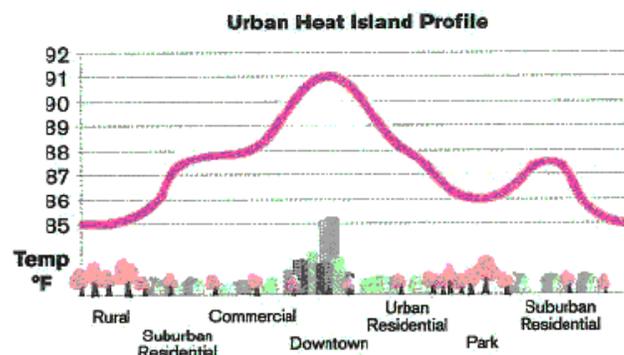
[The Centers for Disease Control and Prevention](#) (CDC) reports that for the period 1979 - 2002, excessive heat exposure due to weather conditions caused **4780** deaths in the United States. That produces an average of 208 deaths a year from excessive heat. That is more than double the current 30 year average of deaths from flooding (92), the current leader in other weather related deaths

What is a Heat Wave?

A heat wave is a period of excessive heat lasting two days or more that leads to illnesses and other stresses on people with prolonged exposure to these conditions. High humidity, which often accompanies heat in Missouri, can make the effects of heat even more harmful. While heat related illness and death can occur due to exposure to intense heat in just one afternoon, heat stress on the body has a cumulative effect. Consequently, persistence of a heat wave increases the threat to public health.

The Urban Heat Problem

Most heat-related deaths occur in cities. Brick and mortar buildings, asphalt streets, and tar roofs absorb daytime heat and slowly release it at night. Consequently, temperatures in urban areas can be warmer than rural areas by several degrees both day and night. Some basic comparisons done by the staff at the NWS St. Louis has found that the temperature in the City of St. Louis often averages about 2 - 5 degrees higher than the temperature at Lambert St. Louis International Airport. This is commonly called the urban "heat island" effect. In addition to the burden of heat, stagnant conditions often develop during heat waves, with pollutants increasing in concentration near the ground and contributing further to public health problems during heat waves



Socioeconomic factors also place urban residents under extra risk. Some people in cities do not have air conditioning, while people in high crime areas may be afraid to open their windows or venture out to cooler public buildings.