

EXTREME HEAT EVENTS

CLIMATE & HEALTH

OVERVIEW

Extreme heat events in Minnesota are already occurring and are expected to become more common, more severe, and longer-lasting as our climate changes.

Minnesota experienced 5 heat episodes during the summer of 2011, worthy of a heat warning or advisory.

July 19, 2011 hit an all-time heat index record for Minnesota. Air temperature was 93°F and the heat index reached 130°F in Moorhead.

54 heat-related deaths occurred in Minnesota from 2000 - 2016.

EXTREME HEAT BASICS

WHAT IS AN EXTREME HEAT EVENT?

- An extended period of time with unusually hot temperatures
- Climate change is increasing the probability of both higher average and extreme temperatures

WHO IS MOST AT RISK?

- Persons 65 years or older (especially those living alone), children, persons with pre-existing disease conditions, persons taking certain medications, athletes, outdoor workers, and persons experiencing homelessness

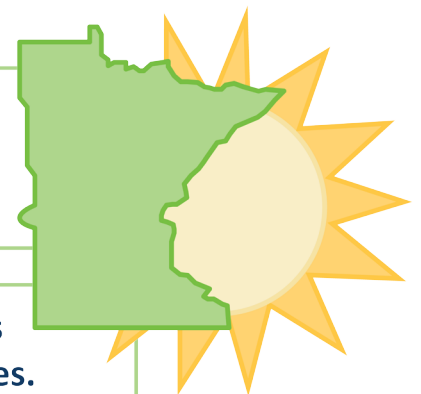
EXTREME HEAT AND CLIMATE CHANGE

Extreme heat events can be lead by high dew points.

Dew points may be rising.

Relief from extreme heat comes from overnight low temperatures.

Overnight low temperatures are rising.



HEALTH IMPACTS

EXTREME HEAT CAN CAUSE:

- Heat tetany (hyperventilation)
- Heat rash
- Heat cramps
- Heat exhaustion
- Heat edema (swelling)
- Heat syncope (fainting)
- Heat stroke
- Death

INDIVIDUAL STRATEGIES



STAY HYDRATED!

- Drink plenty of fluids, especially water
- Don't wait until you're thirsty to hydrate
- Avoid drinks high in sugar and alcoholic beverages



STAY COOL!

- Visit air-conditioned places if your home is hot
- Avoid fans to cool yourself when temperatures reach 90°F and higher
- Wear lightweight, light-colored, loose fitting clothing



IF YOU MUST BE OUTSIDE...

- Avoid exercising during the hottest hours (usually 10am-5pm)
- Rest often in the shade or air conditioning
- Take it easy and listen to your body



HELP OTHERS STAY SAFE

- Do not leave children or pets in the car
- Check on elderly neighbors or those living alone



STAY INFORMED

- Listen to the local news for the daily weather forecast
- Get heat and safety information from your local public health department

PUBLIC HEALTH STRATEGIES

DEVELOP A HEAT RESPONSE PLAN

- Heat response plans describe the roles and actions of government agencies and nongovernmental organizations for preventing illnesses and deaths from an extreme heat event

IDENTIFY HIGH-RISK AND VULNERABLE POPULATIONS

- Map at-risk populations to support the development of targeted outreach and prevention efforts

PREVENT HEAT-RELATED ILLNESSES AND DEATHS

- Plan with local partners to educate the public before extreme heat arrives and lead ongoing communication efforts
- Designate community “cooling centers” and activate a heat line
- Develop policies to prevent power and water shutoffs during heat events



PROTECTING OUR ENVIRONMENT PROTECTS OUR HEALTH

- 1. Use less energy** — install energy efficient appliances and support renewable energy (solar, wind, biofuels).
- 2. Burn less gas** — walk, bike, take transit, carpool, or telecommute at least twice a week.
- 3. Lower your “food print”** — eat less meat per week, buy locally-grown food, and consider growing some of your own food.