



# Facts about Extreme Heat and Cold

## From the Branch-Hillsdale-St. Joseph Community Health Agency

### Extreme Heat and Cold

**Heat** Be aware of yours and others' risk for heat stroke, heat exhaustion, heat cramps and fainting. To avoid heat stress, you should:

- Drink a glass of fluid every 15 to 20 minutes and at least one gallon each day.
- Avoid alcohol and caffeine. They both dehydrate the body.
- Wear light-colored, loose-fitting clothing.
- When indoors without air conditioning, open windows if outdoor air quality permits and use fans.
- Take frequent cool showers or baths.
- If you feel dizzy, weak, or overheated, go to a cool place. Sit or lie down, drink water, and wash your face with cool water. If you don't feel better soon, get medical help quickly.
- Work during cooler hours of the day when possible, or distribute the workload evenly throughout the day.

Heat stroke is the most serious heat illness. It happens when the body can't control its own temperature and its temperature rises rapidly. Sweating fails and the body cannot cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. **Heat stroke can cause death or permanent disability if emergency care is not given.**

Warning signs of heat stroke vary but can include:

- Red, hot, and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness, nausea, confusion, or unconsciousness
- An extremely high body temperature (above 103°F)

If you suspect someone has heat stroke, follow these instructions:

- Immediately call for medical attention.
- Get the person to a cooler area.
- Cool the person rapidly by immersing him/her cool water or a cool shower, or spraying or sponging him/her with cool water. If the humidity is low, wrap the person in a cool, wet sheet and fan him/her vigorously.
- Monitor body temperature and continue cooling efforts until the body temperature drops to 101-102°F.
- Do not give the person alcohol to drink. Get medical assistance as soon as possible.
- If emergency medical personnel do not arrive quickly, call the hospital emergency room for further instructions.

### *Cold*

Hypothermia happens when a person's core body temperature is lower than 35°C (95°F). Hypothermia has three levels: acute, subacute, or chronic.

- **Acute hypothermia** is caused by a rapid loss of body heat, usually from exposure to cold water.
- **Subacute hypothermia** often happens in cool outdoor weather (below 10°C or 50°F) when wind chill, wet or too little clothing, fatigue, and/or poor nutrition lower the body's ability to cope with cold.

- **Chronic hypothermia** happens from ongoing exposure to cold indoor temperatures (below 16°C or 60°F). The poor, the elderly, people who have hypothyroidism, people who take sedative-hypnotics, and drug and alcohol abusers are prone to chronic hypothermia, and they typically:
  - misjudge cold
  - move slowly
  - have poor nutrition
  - wear too little clothing
  - have poor heating system

### Causes of Hypothermia

- Cold temperatures
- Improper clothing, shelter, or heating
- Wetness
- Fatigue, exhaustion
- Poor fluid intake (dehydration)
- Poor food intake
- Alcohol intake

### Preventing Hypothermia

- Everyone, especially the elderly and ill, should have adequate food, clothing, shelter, and sources of heat.
- Electric blankets can help, even in poorly heated rooms.
- Wear layers of clothing, which help to keep in body heat.
- Move around. Physical activity raises body temperature.

Water cooler than 75°F (24°C) removes body heat more rapidly than can be replaced. The result is hypothermia. To avoid hypothermia:

- Avoid swimming or wading in water if possible.
- If entering water is necessary:
  - Wear high rubber boots in water.
  - Ensure clothing and boots have adequate insulation.
  - Avoid working/playing alone.
  - Take frequent breaks out of the water.
  - Change into dry clothing when possible.

### Helping Someone Who Is Hypothermic

As the body temperature decreases, the person will be less awake and aware and may be confused and disoriented. Because of this, even a mildly hypothermic person might not think to help himself/herself.

- Even someone who shows no signs of life should be brought quickly and carefully to a hospital or other medical facility.
- Do not rub or massage the skin.
- People who have severe hypothermia must be carefully rewarmed and their temperatures must be monitored.
- Do not use direct heat or hot water to warm the person.
- Give the person warm beverages to drink.
- Do not give the person alcohol or cigarettes. Blood flow needs to be improved, and these slow blood flow.

## **The Branch-Hillsdale-St. Joseph Community Health Agency**

*Your Community Partner in Public Health*

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