

**TAB E SECTION 11
EMERGENCY FACT SHEETS
EXTREME HEAT**

Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat-related illnesses. Recognizing the symptoms of heat disorders and knowing the first aid treatment can reduce the dangers of the sun.

BEFORE/PREVENTION

- ❖ **Learn about the risk of extreme heat in your area and how to plan for it by contacting your local emergency management office, National Weather Service office, or American Red Cross chapter.**
- ❖ **Extreme heat-specific supplies should include additional water, basic disaster supplies, people first aid kit and manual, and pet first aid kit – see “Saving the Whole Family”, AVMA 2000.**

- ❖ **Familiarize yourself with heat terms.**

- ◆ A **heat wave** is a prolonged period of excessive heat, often combined with excessive humidity. The National Weather Service steps up its procedures to alert the public during these periods when it anticipates an increase in human heat-related illnesses.
- ◆ A **heat index** is a number in degrees Fahrenheit (F) that tells how hot it really feels when relative humidity is added to the actual air temperature. Exposure to full sunshine can increase the heat index by 15 degrees.

- ❖ **Discuss extreme heat with your family.**

Everyone should know what to do in the places where they spend time. Some places may not be air conditioned or safe during a heat wave, so plan alternatives. Discussing extreme heat ahead of time will help reduce fear and anxiety, and lets everyone know how to respond.

- ❖ **Get training.**

Take an American Red Cross first aid course to learn how to treat heat emergencies and other emergencies. Everyone should know how to respond, because the effects of heat can happen very quickly.

- ❖ **Learn the types of heat disorders, the symptoms associated with each, and the first aid treatment for each these disorders.**

- ◆ **Sunburn:** Sunburn is an inflammation of the skin caused by overexposure to sunlight.
 - **Symptoms:** Skin redness and pain, possible swelling, blisters, fever, headaches.
 - **First Aid Treatment:** Apply ointment to unbroken blisters. Apply dry sterile dressing if broken. A physician should see serious cases.
- ◆ **Heat Cramps:** Heat cramps are muscular pains and spasms due to heavy exertion. Although heat cramps are the least severe, they are often the first signal that the body is having trouble with the heat.

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- **Symptoms:** Painful spasms usually in leg and abdominal muscles. Heavy sweating.
 - **First Aid Treatment:** Get the person to a cooler place and have him or her rest in a comfortable position. Lightly stretch the affected muscle and replenish fluids. Give a half glass of cool water every 15 minutes. Do not give liquids with alcohol or caffeine in them, as they can cause further dehydration, making conditions worse.
 - ◆ **Heat Exhaustion:** Heat Exhaustion typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.
 - **Symptoms:** Cool, moist, pale, or flushed skin; heavy sweating; headache; nausea or vomiting; dizziness; and exhaustion. Body temperature may be normal, or is likely to be rising.
 - **First Aid Treatment:** Get the person out of the heat and into a cooler place. Remove or loosen tight clothing and apply cool, wet cloths, such as towels or sheets. If the person is conscious, give cool water to drink. Make sure the person drinks slowly. Give a half glass of cool water every 15 minutes. Let the victim rest in a comfortable position, and watch carefully for changes in his or her condition.
 - ◆ **Heat Stroke (Sunstroke):** Heat stroke or Sunstroke is life threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly.
 - **Symptoms:** Hot, red skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. Body temperature can be very high – sometimes as high as 105 degrees F. If the person was sweating from heavy work or exercise, skin may be wet; otherwise, it will feel dry.
 - **First Aid Treatment:** Heat stroke is a life-threatening situation. Help is needed fast. Call 911 or your local emergency number. Move the person to a cooler place. Quickly cool the body. Immerse victim in a cool bath, or wrap wet sheets around the body and fan it. Watch for signals of breathing problems. Keep the person lying down and continue to cool the body any way you can. If the victim refuses water, is vomiting, or there are changes in the level of consciousness, do not give anything to eat or drink.
- ❖ **Install window air conditioners snugly.**
- ◆ Close any floor heat registers nearby.
 - ◆ Insulate spaces around air conditioner for a tighter fit.

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- ◆ Use a circulating or box fan to spread cool air.

- ❖ **Consider keeping storm windows up all year.**

Storm windows can keep the heat out of a house in the summer the same way they keep the cold out in the winter.

- ❖ **Check air-conditioning ducts for proper insulation.**

Insulation around ducts prevents cool air from leaking and keeps it directed through the vents.

- ❖ **Make sure your home is properly insulated.**

This will help you to conserve electricity and reduce your home's power demands for air conditioning. Weather-strip doors and windowsills to keep cool air inside, allowing the inside temperature to stay cooler longer.

- ❖ **Protect windows.**

Hang shades, draperies, awnings, or louvers on windows that receive morning or afternoon sun. Outdoor awnings or louvers can reduce the heat entering the house by as much as 80 percent.

- ❖ **Use attic fans.**

If you have a fan installed to vent warm air out of your attic, use the fan to help keep your home cool.

DURING

- ❖ **Dress in loose-fitting clothes that cover as much skin as possible.**

Lightweight, light-colored clothing reflects heat and sunlight and helps maintain normal body temperature.

- ❖ **Protect face by wearing a wide-brimmed hat.**

A hat will keep direct sunlight off your head and face. Sunlight can burn and warm the inner core of your body.

- ❖ **Avoid too much sunshine.**

Sunburn slows the skin's ability to cool itself. The sun will also heat the inner core of your body, resulting in dehydration. Use a sunscreen lotion with a high sun protection factor (SPF) rating.

- ❖ **Drink plenty of water and fluids even if you do not feel thirsty.**

Your body needs water to keep cool. Water is the safest liquid to drink during heat emergencies. Injury and death can occur from dehydration, which can happen quickly and unnoticed. Symptoms of dehydration are often confused with other causes. Persons who have epilepsy or heart, kidney, or liver disease; who are on fluid-restricted diets; or who have a problem with fluid retention should consult a doctor before increasing liquid intake.

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Avoid drinks with alcohol or caffeine in them. They can make you feel good briefly, but make the heat's effects on your body worse. This is especially true about beer, which actually dehydrates the body.

❖ **Avoid extreme temperature changes.**

A cool shower immediately after coming in from hot temperatures can result in hypothermia, particularly for elderly and very young people.

❖ **Eat small meals and eat more often.**

Large, heavy meals are more difficult to digest and cause your body to increase internal heat to aid digestion, worsening overall conditions. Avoid foods that are high in protein, such as meats and nuts, which increase metabolic heat.

❖ **Avoid using salt tablets unless directed to do so by a physician.**

❖ **NEVER leave children or pets alone in closed vehicles.**

Temperatures inside a closed vehicle can reach over 140 degrees F within minutes. Exposure to such high temperatures can kill in minutes.

❖ **Stay inside as much as possible. If your home does not have air conditioning, choose other places you can go to get relief from the heat during the warmest part of the day.**

Schools, libraries, theaters and other community facilities often provide air-conditioned refuge on the hottest day. Air conditioning provides the safest escape from extreme heat.

❖ **Slow down. Avoid strenuous activity. Plan changes in your daily activities to avoid strenuous work during the warmest part of the day.**

Postpone outdoor games and activities. Ill effects of heat can quickly overcome the healthiest people, if they perform strenuous work during the warmest parts of the day. Symptoms of dehydration are not easily recognized and are often confused with other causes. Dehydration occurs fast and makes you ill very quickly.

❖ **Take frequent breaks and use a buddy system if you must work outdoors.**

Frequent breaks, especially in a cool area or to drink fluids, can help people tolerate heat better.

Partners can keep an eye on each other and can assist each other when needed. Sometimes exposure to heat can cloud judgment. Chances are if you work alone, you may not notice this.

❖ **Plan to check on family, friends, and neighbors who do not have air conditioning or who spend much of their time alone.**

❖ **Keep heat outside and cool air inside.**

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Close any registers that may allow heat inside. Install temporary reflectors, such as aluminum foil covered cardboard, in windows and skylights to reflect heat back outside.

❖ **Conserve electricity.**

During periods of extreme heat, people tend to use a lot more power for air conditioning. Conserve electricity not used to keep you cool so power can remain available and reduce the chance of a community wide outage.

❖ **Vacuum air conditioner filters weekly during periods of high use.**

Air conditioner filters can become clogged or filled with dirt, making them less efficient. Keeping them clean will allow your air conditioner to provide more cool air.

DURING A DROUGHT

Curtail all water uses. Watering the lawn and washing the car are wasteful. When possible reuse water. Place a brick, or another large solid object, in your toilet tank to reduce the amount of water used in flushing. Farmers should contact the county Farmers Home Administration Office for disaster assistance information.