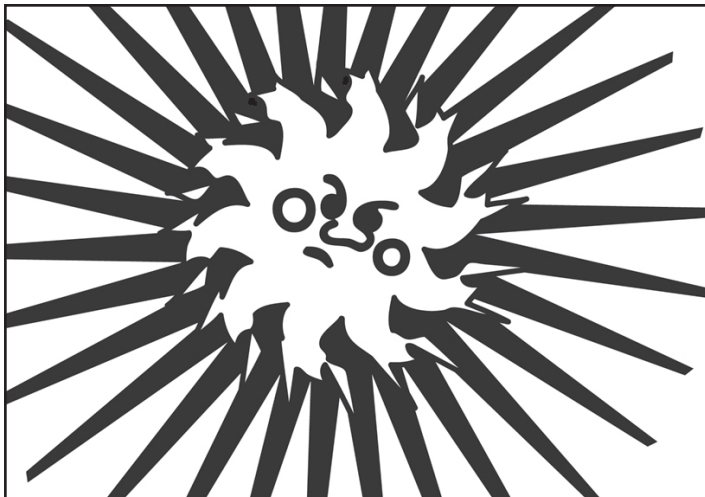


**ESP**

**FOCUS**

## Heat Wave



### It can get too hot!

During an average summer, some 200 people across the country die due to heat injuries from exposure to high summer temperatures.

Clearly, heat can be a force, particularly in Southern California, where temperatures exceeding 100 degrees in the suburban valleys and 110 degrees in the low desert areas are not uncommon during the summer and fall.

Heat-wave emergencies can strike very quickly. In 1995, for example, the city of Chicago's medical examiner received reports regarding the first heat-related fatalities at 9 p.m. on a Friday night. By 8 a.m. the following morning, an additional 87 people had died. These deaths were caused directly by the heat.

Exposure to sunlight is a mixed blessing. Although sun is necessary for life, exposure to ultraviolet (UV) radiation is potentially dangerous and can damage the skin. Varied burns result from prolonged exposure to UV rays, but some people also may burn from very little exposure. UV rays can significantly keep the skin from compensating for the excess heat.

Overexposure to heat or excessive exercise in the heat also can cause other injuries. The severity of such injuries increases with age; heat cramps in a younger person may be heat exhaustion in a middle-aged person, but may be heatstroke in an elderly person. This occurs because the person has not adapted to the heat and is unable to adjust to changes in the body.

The reverse side of this Focus Sheet offers recommendations designed to help you avoid heat-related death and injury wherever you live, work, or play.



**JULY**

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## Heat Conditions, Symptoms and First Aid

### What you might see in a heat injury

**1. Sunburn** is usually a first-degree burn that involves just the outer surface of the skin. Symptoms include redness and pain. Severe cases may cause swelling, blisters, fever of 102 degrees or above and headaches.

**First Aid:** Use ointments, as well as cool baths or compresses, for less severe cases. Don't break the blisters; if blisters do break, use a dry germ-free dressing. In severe cases consult a physician. Drink plenty of water.

**2. Heat cramps** often are related to dehydration. Symptoms include increased sweating with painful muscle spasms of the arms, legs and occasionally the abdomen.

**First Aid:** Remove the victim from the hot environment. Apply pressure on or gently massage the spastic muscles to relieve spasms.

**3. Heat exhaustion** is the inability to sweat enough to cool yourself. Symptoms include fatigue, weakness, dizziness, nausea or vomiting as well as cold, clammy, pale, red or flushed skin. A marked body temperature rise will not occur.

**First Aid:** Remove the victim from the heat. Lay the victim down and loosen the clothing. Apply cold compresses and cool the body by fanning the victim or placing the victim in a cool environment. Consult a physician if vomiting continues.

**4. Heatstroke** occurs when the body stops sweating but the body temperature continues to rise. Symptoms include visual disturbances, headache, nausea, vomiting, confusion and, as the condition progresses, delirium or unconsciousness. The skin will be hot, dry, red or flushed even under the armpits. This condition is a severe medical emergency that could be fatal.

**First Aid:** Consult a physician immediately or call 9-1-1. Remove clothing and place victim in a cool environment, sponge the body with cool water or place the victim in a cool bath. Continue the process until temperature decreases. **DO NOT PROVIDE FLUIDS** to an unconscious victim.

## Preventing Heat Injuries

### What you can do to prevent heat injuries

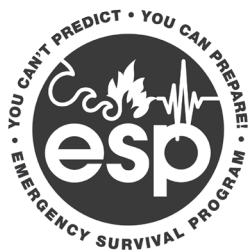
- Avoid the sun from 10:00 a.m. to 3:00 p.m. when the burning rays are strongest.
- Reduce physical activity.
- Wear a wide-brimmed hat and light colored, lightweight, loose-fitting clothes when you're outdoors. This type of clothing reflects heat and sunlight, which helps you maintain a normal body temperature.
- Avoid sudden changes of temperatures, (i.e., air out a hot car before getting into it).
- Avoid hot, heavy meals that include proteins. They increase your metabolism and water loss, and raise your body's natural way of cooling.
- Set your air conditioning thermostat between 75 and 80 degrees. If you don't have an air conditioner, take a cool bath or shower twice a day and visit air-conditioned public spaces during the hottest hours of the day.
- Drink plenty of fluids even if you aren't thirsty. Eight to 10 glasses of water a day are recommended. Drink even more if you are exercising or working in hot weather.
- Do not drink alcohol or caffeine since they are diuretics (i.e., promote water loss).
- Use a sunscreen with a sun protection factor (SPF) of at least 15 if you need to go out in the sun.

*Extracted and adapted from "Heat Illness Prevention," American College of Sports Medicine, Indianapolis, IN.*

This project was supported by FY07 UASI funding awarded by the California Emergency Management Agency, through FEMA/DHS.



This information sheet is produced as part of the Emergency Survival Program (ESP). ESP is an awareness campaign designed to increase home, neighborhood, business and school emergency preparedness. ESP was developed by the County of Los Angeles. The California Emergency Management Agency (Cal EMA) and representatives from Contra Costa, Imperial, Inyo, Kern, Los Angeles, Marin, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, and Ventura counties, Southern California Edison, the Southern California Earthquake Center and the American Red Cross assist in the development of campaign materials and coordination of the campaign.



## Emergency Survival Program (ESP)

# YOU CAN'T PREDICT. YOU CAN PREPARE!

Use the Emergency Survival Program's new list of actions as your guide for personal and community emergency preparedness.

### January

#### *Then and Now*

In large regional earthquakes, such as the 1906 San Francisco earthquake, or the terrorism acts of September 11, 2001, emergency response agencies might be overwhelmed. You, your neighbors, co-workers and classmates may be forced to take actions on your own. Take time now to learn about what happened then and how it can prepare you for the safety actions to take now.

### February

#### *Make a Plan*

Planning for an earthquake, terrorist attack, or other emergency is easier than you think. Make sure that your emergency plan includes evacuation and reunion plans; your out-of-state contact person's name and number; the location of your emergency supplies and other pertinent information. By planning now, you will be ready for the next emergency.

### March

#### *Make Disaster Kits*

Everyone should have disaster supplies kits stored in accessible locations at home, at work and in your vehicle. Having emergency supplies readily available can reduce the impact of an earthquake, a terrorist incident or other emergency on you and your family. Your disaster supplies kits should include food, water, flashlights, portable radios, batteries, a first aid kit, cash, extra medications, a whistle, fire extinguisher, etc.

### April

#### *Floods*

Storms can cause flash floods, create power outages and damage homes. Assemble emergency supplies to include sand bags; identify safe routes; and teach children to avoid areas of potential flooding. When flooding occurs, listen to the radio or watch television for information and instructions.

### May

#### *Terrorism*

Fear is a major tactic used by terrorists to achieve political and social objectives. But the terrorists are not in charge. You can fight back by taking many of the same actions you would to prepare for earthquakes, fires, and other emergencies. Start by having a family emergency plan. Also assemble emergency supply kits at home, at work, and in your car.

### June

#### *Public Health Emergencies*

Public Health Emergencies may be related to outbreaks of infectious diseases, food and waterborne illnesses, and other threats to the public's health and safety. Pandemic flu is of concern and health experts recommend the following to prevent the spread of flu: wash your hands with soap and water frequently; cover your cough and sneeze; stay home if you are sick. Stay away from others so they will not become sick. In autumn, get the flu shot!

### July

#### *Heat Wave*

Although sun is necessary, exposure to ultraviolet radiation is potentially dangerous and can damage skin. Heat injuries that can occur include sunburn, heat cramps, heat exhaustion and heatstroke. If your home is not air-conditioned, spend time in public facilities like public libraries, malls, and community centers that are air-conditioned. Never leave children or pets unattended in hot vehicles.

### August

#### *Drop, Cover, and Hold On!*

Learn what to do during an earthquake, whether you're at home, at work, at school or just out and about. Taking the proper actions, such as "Drop, Cover, and Hold On", can save lives and reduce your risk of death or injury. During earthquakes, drop to the floor, take cover under a sturdy desk or table, and hold on to it firmly. Be prepared to move with it until the shaking stops. If you are at the beach, move to higher ground.

### September

#### *Back to School*

Schools should have emergency plans to meet the threat of terrorism, earthquakes and other emergencies. They should be updated and exercised regularly. Emergency supplies, such as water, food and other basic items, are also an important part of school preparedness. If you are a parent or guardian, know your child's school emergency plan and make sure they have your updated emergency contact information.

### October

#### *Earthquakes*

No one knows when the next earthquake will happen, but we can reduce its impact by being prepared. Identify hazards and remove or reduce them. Store emergency supplies and replenish them annually. Educate your family where to drop, cover, and hold on and take a first aid course. Conduct practice drills on a regular basis.

### November

#### *Fire and Ice*

Preparedness is the key to surviving wildland fires and lethal winter storms. Timely preparation, including structural and non-structural measures to avoid the impacts of wildland fires and severe winter weather, can help reduce heavy repair expenditures following an event. Also remember to keep your car and other vehicles fueled and in good repair in case you are asked to evacuate. Have your emergency survival kit ready to go with you, just in case.

### December

#### *Landslides and Mudslides*

Significant property damage can be caused by landslides and mudslides. Prepare an evacuation kit to include important documents and irreplaceable items such as photographs. When it rains, monitor the amount of rainfall and look for warning signs of landslides and mudslides such as new springs, tilted trees or new holes in hillsides.

Additional campaign materials are available through your local County Office of Emergency Management.

[www.espfocus.org](http://www.espfocus.org)

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