



MASTER GARDENER PROGRAM

THINKING SAFE AND GREEN



**AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY**

#3

HEAT ILLNESS AWARENESS

Information given here is intended for use by program representatives, master gardeners, and those they train.

According to the National Weather Service, an average of 235 heat-related fatalities occurred annually between 1975 and 2004. Moreover, about 25,000 heat-related illnesses or injuries occurred from 1991-2000. Children are at greater risk for heat stress because their bodies have a larger surface area per pound of weight. Youth that are vigorously exerting themselves in summer heat are at higher risk for contracting heat illness. By taking several simple precautions, people can control and/or reduce exposure to conditions that may cause heat illness. **English and Spanish language safety videos on heat illness are available for loan from the ANR Environmental Health & Safety Library at <http://safety.ucanr.org>.**



Heat Illness Disorders and Symptoms

1. Heat Stroke - sweating stops and the body fails to regulate its temperature. Victims may die if they don't receive immediate medical treatment. Characterized by: mental confusion, fainting, or seizures; hot dry skin usually reddish in color; and high body temperature.
2. Heat Exhaustion - profuse sweating results in dehydration. Characterized by: fatigue, dizziness, and nausea; pale and moist skin; and possibly slightly elevated temperature.
3. Heat Cramps - cramping thought to be due to loss of salt through sweating. Characterized by muscle spasms in arms, legs, and abdomen during or following physical activities.
4. Heat Syncope - dehydration while standing still causes blood pooling in lower portions of the body. Characterized by fainting while standing still.
5. Heat Rash - occurs under hot and humid conditions where sweat does not evaporate readily. Characterized by irritated/itchy skin with prickly feeling and small red bumps on skin.

Treatments for Heat Illness Disorders

1. Heat Stroke - call 911 immediately, soak victim's clothing with cool water, move victim to shaded and cool area, fan victim to increase cooling of their body.
2. Heat Exhaustion - have victim rest in shaded and cool place and drink fluids. Do not serve caffeinated fluids such as soft drinks, iced tea, or coffee.
3. Heat Cramps - have victim rest and drink non-caffeinated fluids.
4. Heat Syncope - have victim rest in a shaded and cool place, and drink non-caffeinated fluids.
5. Heat Rash - wash and dry skin. Wear loose clothing and keep skin dry.

Precautions to Prevent Heat Illness Disorders

1. Master gardeners and others should acclimatize themselves to the prevailing weather conditions.
2. Always drink plenty of fluids such as water and sports drinks. During warm weather, plan to have at least one quart of water available per person per hour of the outdoor activity. Avoid caffeinated drinks.
3. Wear a summer hat with a brim and loose-fitting, light-colored, and lightweight clothing like cotton.
4. Schedule vigorous activities during coolest portions of the day and take frequent breaks on hot days.
5. If someone is feeling symptoms of heat illness, they should take a rest period in a shaded area. Master gardeners should help find access to shade – this may be any area where the affected person is protected from direct sunlight, such as under an umbrella, a portable structure, or inside a ventilated building or vehicle.



Example of shade area to reduce chance of heat illness. Courtesy of Calaveras County CE.

If a treated victim does not recover from heat illness in a reasonable amount of time, promptly seek medical attention. Plan ahead to know how to summon medical assistance and direct emergency responders to your location or how to transport the heat illness victim to a medical service provider.

Any incidents of heat illness shall be promptly reported to the master gardener's county Cooperative Extension office.