

## ***Suggestions for Preventing Heat Stress***

Hot weather is a part of life in many places, but long stretches of record-breaking heat are unusual. During long heat waves heat stress, injuries and deaths climb dramatically. However, steps can be taken to prevent these problems.

### **Take Extra Precaution if it's Humid**

According to health experts, when humidity is added to hot weather, it becomes significantly more dangerous. Heat and humidity are a dangerous combination, because they interfere with the body's ability to sweat. Since sweat is the way humans and animals cool off, this extra stress to the system is very dangerous. Long exposure to high heat stress can result in heat cramps or heat exhaustion. If this heat stress continues, heat stroke and death may be the result.

### **Symptoms of Heat Stress**

Whether heat stress is mild or severe, the body will provide warning signals. Heat exhaustion is a serious medical condition and signs of it include:

- ❖ profuse sweating
- ❖ fainting
- ❖ paleness
- ❖ fast, shallow breath
- ❖ muscle cramps
- ❖ a weak, rapid pulse
- ❖ tiredness
- ❖ nausea or vomiting
- ❖ headache
- ❖ dizziness
- ❖ weakness

If left unchecked, heat exhaustion can progress to heat stroke. Heat stroke occurs when the body cooling system fails. At this point, sweating stops and the body temperature quickly rises to over 106° F. Heat stroke is a very serious, life-threatening condition. Symptoms to watch for are:

- ❖ very high body temperature  
(over 105° F.)
- ❖ throbbing headache
- ❖ failure to sweat
- ❖ red, dry skin
- ❖ rapid pulse
- ❖ confusion
- ❖ nausea
- ❖ unconsciousness
- ❖ seizures

## Heat Index Chart

Humidity	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
<b>80</b>							80	82	83	84	84	85	86	87	88	89	90
<b>85</b>	82	83	84	84	85	86	87	88	90	92	93	94	95	97	98	100	105
<b>88</b>	84	5	87	88	90	91	93	94	95	97	98	100	104	106	110	113	117
<b>90</b>	86	87	88	90	92	94	96	97	98	100	103	106	110	113	116	120	124
<b>92</b>	87	89	91	93	94	96	98	100	102	105	108	111	115	120	124	128	130+
<b>94</b>	91	92	94	95	97	100	103	105	108	111	115	120	125	130+			
<b>96</b>	93	95	97	98	101	104	107	109	113	118	123	128	130+				
<b>98</b>	95	97	99	101	104	107	110	114	118	123	129	130+					
<b>100</b>	96	98	101	104	107	110	115	120	125	130	130+						
<b>101</b>	97	100	102	105	108	112	118	123	128	130+							
<b>102</b>	98	101	104	107	110	116	121	127	130+								
<b>103</b>	100	103	106	108	113	120	125	130	130+								
<b>104</b>	101	104	107	110	117	123	128	130+									
<b>105</b>	102	105	108	112	119	126	130	130+									

**Instructions:**  
Find the humidity on the top line. Then, draw a line down to the current temperature to find the **heat index**.

**Very Warm 80-90, Hot 90-105, Very Hot 105-130, Extremely Hot 130+**

### Who is Most at Risk?

Prolonged heat stress can be fatal to anyone. However, people over 60 seem to suffer the highest risk of death from it. This is especially true if seniors are frail or have pre-existing medical conditions like heart disease, respiratory problems, or diabetes.

Babies and young children are also vulnerable to heat stress. It is always dangerous to leave a child unattended in a car or enclosure, but this is even more risky during a heat wave. Children who communicate or display any symptoms of heat stress require immediate attention.

There are other people who run a higher than average risk of suffering from heat stress. For example, athletes, military personnel, manual laborers, farm workers, diabetics and people who are obese may become sick from overexertion.

Alcoholics and others who abuse substances are another higher risk group. Finally, anyone who is not used to high temperatures and humidity may become ill during prolonged heat waves.

Pets can also suffer from heat stress. Give them plenty of clean water. Outdoor pets need a shady, cool place to get out of the hot sun. Indoors, if an air conditioner is not running, be sure that pets have enough fresh air circulating to keep them cool. For other tips on pet care during heat waves, contact your local Humane Society.

## Ways to Avoid Heat Stress

Common sense is a good defense against a severe heat wave. Take steps necessary to keep cool. Help those who need special assistance – for example, young children, people with certain disabilities, or the very elderly. In extreme heat, here are some good common sense tips to remember:

- ❖ Drink two to five times more than the usual amounts of water. (This may be supplemented with non-sugar, non-caffeine, non-alcoholic beverages.)
- ❖ Use SPF-15 or higher.
- ❖ Limit physical activity. If exertion is required, take frequent breaks. Also, heed warning signs such as a pounding heart or shortness of breath, and stop to rest in a cool place.
- ❖ Wear loose fitting, lightweight clothing, and a hat that protects your face from the sun.
- ❖ Try to stay in air conditioned places. If you don't have an air conditioner, go to a public place with one. Fans and evaporative coolers may also help with cooling.
- ❖ Adopt a co-worker as a buddy if you work at a high heat stress job.
- ❖ Choose cooler early morning or evening hours for outdoor activities.
- ❖ Listen to weather forecasts and cut back on unnecessary exertion on hot, humid days.
- ❖ Check in twice a day with friends or loved ones who are over 65 or at high risk for heat stress because of other factors.

## Helping Those with Heat-Related Illnesses

When a friend or loved one shows signs of heat exhaustion, help him/her to cool off gradually. One of the best ways to do this is to drink non-alcoholic, low sugar, caffeine-free beverages. Remember that without enough water, the body will not function properly. Other “cool down” treatments may include resting in an air conditioned place, wearing less clothing, and taking a cool shower.

Heat stroke is a serious illness and requires immediate emergency medical attention. The first thing to do when you suspect that someone is suffering from heat stroke is call “911”. After contacting emergency responders, use any means available to start the cool down process. For example, move the person to a shady area, loosen clothing, and fan vigorously. If a garden hose is available, immerse the person in water. Keep cooling efforts going until emergency responders arrive. The goal is to bring the person's body temperature down to 101-102° F. Remember, getting medical help for a heat stroke victim is urgent, because heat stroke can result in death.