

# Reference Notes

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## Too Hot to Handle: The Dangers and Treatment of Heat Stroke

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Heat waves are more than just uncomfortable; they are potentially deadly events for the elderly, young children, people without access to air conditioning, those with respiratory illness, and pets. In 2003 a heat wave in Europe caused the death of nearly 50,000 people. With high temperatures increasing this summer be sure you're prepared to both prevent and treat heat-related illnesses.

Heat stroke is a deadly condition, but has many warning signs including its precursor: heat exhaustion. Signs of heat exhaustion include excessive sweating, feelings of nausea, vomiting, muscle cramps, clammy skin, loss of color to the skin, feeling faint or dizzy, and a rapid, weak pulse. Treatment for this condition is fairly easy and does not necessarily require professional medical attention if treated quickly. Heat exhaustion should first be treated by getting the affected person into a cool, shaded area. If possible have them lay down with their feet elevated to increase blood flow. Replenish lost fluids and salts (sports drinks are actually excellent for this, but avoid them *before* heat exhaustion as the extra sugar can cause dehydration). DO NOT give patient drinks

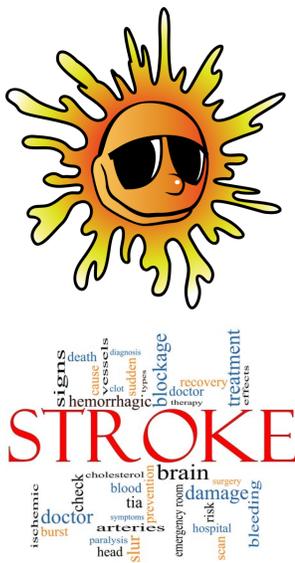
with caffeine or alcohol as this can worsen the condition. Watch for improvement of vital signs, normal heart rate is 60-100 bpm in adults and slightly faster in children, temperatures should be between 98.6-100.4, breathing should be steady and come easily. If vital signs do not improve, call emergency help immediately as symptoms will likely progress into the much more dangerous range of heat stroke.

Heat stroke is treated in much the same way though emergency help should be contacted as soon as possible. There are times when heat stroke is not preceded by heat exhaustion, such as when persons are exercising and working in the heat, are under the influence of drugs, alcohol, are taking certain medications, or have chronic illnesses, especially those that affect the respiratory or circulatory systems. Symptoms of heat stroke include agitation or confusion, extremely rapid and/or uneven pulse, temperatures over 104, unresponsiveness, loss of consciousness, and hot, dry skin. Other than similar treatment for heat exhaustion, use ice packs under the armpits and groin or wa-

ter mist and fans to cool down the patient, a cold wet sheet or cloths are also helpful. Do not allow patient to lose consciousness, CPR may be necessary. If not treated immediately, heat stroke can lead to permanent brain damage, poor kidney function, loss of consciousness, and death.

Prevention is the best way to avoid heat stroke. Avoid work or exercise during the hottest part of the day and eat lighter meals. If you must work or be in the heat, wear sunscreen to prevent sunburn, drink water regularly, rest in shade, wear head coverings and light colored, loose clothing, and have someone with you to watch each other for signs of heat exhaustion or heat stroke. Never ever leave someone who can't get out of the car themselves in the car for any amount of time. This includes pets, children, and the elderly, all of whom are especially vulnerable to heat stroke. Care instructions and warning signs for pets have not been provided here, but are available from resources found in the following pathfinder.

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**Article and Pathfinder written by Amy Campbell, Librarian I, Bertha Pleasant Williams Library—Rosa Parks Avenue Branch**

**LaRuth Martin & Suzanne Horton, Editors**

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### Works Cited:

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## Pathfinder: Hot Stuff

### Research Notes:

Given frequent changes in medical and health information, it's always advisable to speak to your doctor about any medical concerns. However, learning about the dangers of heat stroke and other hot weather ailments is crucial to preventing and quickly treating a potentially dangerous condition. Be careful when reading or listening to medical advice. It is easy enough to pick up information from an article at the grocery store checkout line, but chances are those articles haven't been thoroughly researched or researched at all. There are plenty of verified websites and other resources that offer good medical prevention and treatment advice, but when in doubt, don't hesitate to call a professional. With heat stroke, emergency medical care is crucial to proper treatment and may prevent death.

The good news is

that heat stroke is mostly preventable. Here are some resources to prepare yourself and others *before* the situation gets too hot to handle. And don't forget the best resource of all: Montgomery City County Public Library, where you can cool off and learn more about heat-related illness.

### Helpful Apps

First Aid – American Red Cross (Android and iOS) – Free! First aid tips and techniques. Extremely useful when on the go.

Pet First Aid – American Red Cross (Android and iOS) – Free! Just like First Aid, but for your pets.

Alabama SAF-T Net (Android and iOS) - Free! Keep track of weather alerts and daily temperatures.

KidSafeAlert - (Android

and iOS) - Free! Set an "alarm" on your phone to remind you of your child or pet in the car if you stop moving for 5 minutes. Or, install on your child's phone to allow them to contact their emergency contacts if they're stuck in a car or unsafe situation.

The following health guides for pets, people, and children have been reviewed and contain specific information on heat stroke. They are also good to have on hand as general health references for you and your family.

### General Health Guides

Litin, Scott C. Editor-in-chief. *Mayo Clinic Family Health Book*, 4th ed. Minnesota: Mayo Clinic, 2009.

Piazza, Gina M. Editor. *First Aid Manual*, 5th ed. New York: DK Publishing, 2014.

### Health Guides for Cats

### and Dogs

Adelman, Beth. Editor. *Cat Owner's Home Veterinary Handbook*, 3rd ed. New Jersey: Wiley Publishing, Inc., 2008

Adelman, Beth. Editor. *Dog Owner's Home Veterinary Handbook*. 3rd ed. New Jersey: Wiley Publishing, Inc., 2007.

Copeland, Sue M. and John A. Hamil. *Hands-on Dog Care: The Complete Book of Canine First Aid*. Arizona: Doral Publishing, Inc., 2000.

### Useful Websites

<https://www.osha.gov> - several great printable information posters and training guides.

<http://www.mayoclinic.org>  
<http://www.webmd.com>  
<http://www.petmd.com>  
<http://www.avma.org>  
(American Veterinary Medical Association)