Heat Disorders

Heat related disorders are illnesses caused by continued exposure to hot and humid environments, not drinking enough fluids, and/or your body failing to regulate its temperature correctly. People suffer from heat stress and heat related disorders when their bodies are unable to compensate and cool down through sweating. With sufficient heat, sweating is not enough to keep you cool, and your body temperature can rise quickly. Very high body temperatures can damage your brain and other vital organs. High humidity (moisture in the air), adds to heat stress, because it is harder for sweat to evaporate and cool your body. Heat stress and disorders are not uncommon. Some medicines can increase your risk for heat related illness. Ask your caregiver about your medicines during periods of intense heat.

Heat related disorders include:

- **Heatstroke**. When you cannot sweat or regulate your body temperature in an adequate way. **This is very dangerous and can be life threatening. Get emergency medical help.**
- **Heat exhaustion**. Overheating causes heavy sweating and a fast heart rate. Your body can still regulate its own temperature.
- **Heat cramps**. Painful, uncontrollable muscle spasms. Can occur during heavy exercise in hot environments.
- **Sunburn**. Skin becomes red and painful (burned) after being out in the sun.
- **Heat rash**. Sweat ducts become blocked, which traps sweat under the skin. This causes blisters and red bumps and may cause an itchy or tingling feeling.

PREVENTING HEAT STRESS AND HEAT RELATED DISORDERS

Overheating can be dangerous and life threatening. When exercising, working, or doing other activities in hot and humid environments, do the following:

- Stay informed by listening to and watching local broadcast weather and safety updates during intense heat.
- Air conditioning is the best way to prevent heat disorders. If your home is not air conditioned, spend time in air conditioned places (malls, public libraries, or heat shelters set up by your local health department).
- Wear light-weight, light colored, loose fitting clothing. Wear as little clothing as possible when at home.
- Increase your fluid intake. Drink enough water and fluids to keep your urine clear or pale yellow. DO NOT WAIT UNTIL YOU ARE THIRSTY TO DRINK. You may already be heat stressed, and not recognize it.
- If your caregiver has suggested that you limit the amount of fluid you drink or has prescribed water pills for a medical problem, ask how much you should drink when the weather is hot.
- Do NOT drink liquids with alcohol, caffeine, or lots of sugar. They can cause more loss of body fluid.
- Heavy sweating drains your body’s salt and minerals, which must be replaced. If you must exercise in the heat, a sports beverage can replace the salt and minerals you lose in sweat. If you are on a low-salt diet, check with your caregiver before drinking a sports beverage.
- Sunburn reduces your body's ability to cool itself and causes a loss of needed body fluids. If you go outdoors, protect yourself from the sun by wearing a wide-brimmed hat, along with sunglasses.
- Put on sunscreen of SPF 15 or higher, 30 minutes before going out. (The most effective products say "broad spectrum" or "UVA/UVB protection" on the label.) Reapply sunscreen frequently -- at least every 1-2 hours.
- Take added precautions when both the heat and humidity are high.
- Rest often.
- Even young and otherwise healthy people can become heat stressed and suffer from a heat disorder, if they participate in strenuous activities during hot weather.
- If you must be outdoors, try going out only during morning and evening hours, when it is cooler. Rest often in shady areas, so that your body's temperature can adjust.
- If your heart pounds or you are gasping for breath, STOP all activity. Go immediately to a cool area, or at least into the shade, and rest. This is especially true if you become lightheaded, confused, weak, or faint.
- Electric fans may make you comfortable, but they DO NOT prevent heat related problems.

SYMPTOMS

- Headache.
- Nosebleed.
- Weakness.
- You feel very hot.
- Muscle cramps.
- Restlessness.
- Fainting or dizziness.
- Fast breathing and shortness of breath.
- Excessive sweating. (There may be little or no sweating in late stages of heat exhaustion.)
- Rapid pulse, heart pounding.
- Feeling sick to your stomach (nauseous, vomiting).
- Skin becoming cold and clammy, or excessively hot and dry.

HOME CARE INSTRUCTIONS

- Lie down and rest in a cool or air conditioned area.
- Drink enough water and fluids to keep your urine clear or pale yellow. Avoid fluids with caffeine or high sugar content. Avoid coffee, tea, alcohol or stimulants.
- **Do not** take salt tablets, unless advised by your caregiver.
- Avoid hot foods and heavy meals.
- Bathe or shower in cool water.
- Wear minimal clothing.
- Use a fan. Add cool or warm mist to the air, if possible.
- If possible, decrease the use of your stove or oven at home.
- Monitor adults at risk at least twice a day, watching closely for signs of heat exhaustion or heat stroke. Infants and young children also require more frequent watching.
- Never leave infants, children or pets in a parked car, even if the windows are cracked open.
- If you are 65 years of age or older, have a friend or relative call to check on you twice a day during a heat wave. If you know someone in this age group, check on them at least twice a day.

SEEK IMMEDIATE MEDICAL CARE IF:

- You have a hard time breathing.
- You vomit or pass blood in your stool.
- You have a seizure, feel dizzy or faint, or pass out.
- You develop severe sweating.
- Your skin is red, hot and dry (there is no sweating).
- Your urine turns a dark color or has blood in it.
- You are making very little or no urine.
- You are unable to keep fluids down.
- You develop chest or abdominal pain.
- You develop a throbbing headache.
- You develop nausea or confusion.

IF YOU OBSERVE SOMEONE WHO MIGHT HAVE HEAT STROKE

This can be life threatening. Call your local emergency services (911 in the U.S.).

- If the victim is in the sun, get him or her to a shady area.
- Cool the victim rapidly, using whatever methods you have:
  - Place the victim in a tub of cool water or a cool shower.
  - Spray the victim with cool water from a garden hose, or sponge the person with cool water.
  - Wrap the victim in a cool, wet sheet and fan them.
- If emergency medical help is delayed, call the hospital emergency room or your local emergency services (911 in the U.S.) for further instructions.
- Sometimes a victim's muscles will begin to twitch from heat stroke. If this happens, keep the victim from

injuring himself. However, do not place any object in the mouth. Give fluids, **UNLESS** the muscle twitching makes it difficult or unsafe to do so. If there is vomiting, make sure the airway remains open by turning the victim on his or her side.

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