Heat Related Illnesses

At this time of year, the human body struggles to maintain a normal core temperature of 98.6°F. When the body overheats, it us usually able to compensate.

Adding physical exertion causes large amounts of blood to flow toward the skin, so the body can cool itself through perspiration. If the blood is not cooled, it remains in the skin, and does not return to vital organs, so they can perform their functions. The body reacts to this overheating by going into heat exhaustion.

Untreated heat exhaustion can escalate to a life-threatening condition known as heat stroke.

Heat related illnesses are usually preventable. Becoming familiar with their signs and symptoms can be vital.

Source: www.howstuffworks.com

Heat Exhaustion

Heat Exhaustion Symptoms
Heat exhaustion is characterized by heavy sweating, muscle cramps, headache, dizziness, weakness, paleness, tiredness, clammy skin, confusion, nausea, vomiting, and just feeling “sick.”

Heat Exhaustion Treatment
- Move to a cool area (shade or air conditioned environment).
- Drink cool water, a little at a time.
- Lay on your back, if you are not nauseous, and raise your feet about six inches.
- Loosen or remove heavy clothing.
- Cool your skin with a spray of water or damp cloth, a cool shower or sponge bath.
- If you observe someone suffering from heat exhaustion, and they do not begin to recover with the above steps, call for help.

Heat Stroke

Heat Stroke Symptoms
Heat stroke is characterized by high body temperature; red, hot, dry skin with no sweating; rapid, strong pulse, throbbing headache, dizziness, nausea, confusion, seizures, unconsciousness. An untreated heat stroke victim can die from shock.

Heat Stroke Treatment
While awaiting professional medical help, take immediate action:
- Move the victim to a shaded area.
- Cool their skin rapidly with water or ice, or immerse them in a tub of cool water, spray with a hose, sponge with water. Continue until medical help arrives.
- Elevate their feet about six inches, unless they are going to vomit. Lay them on their side, if you or they think they might vomit.
- If they are conscious and alert, give them water, a little at a time. Do not give the victim alcohol or caffeine.
Protect Your Skin from Sunburn

Follow these tips to prevent sunburn:

- **Avoid midday sun.** If your shadow is shorter than you, you are more likely to sunburn. Plan outdoor activities before 10:00 a.m. or after 4:00 p.m.

- **Wear a wide-brimmed hat and protective clothing** made of tightly woven, dark colored fabric to block the sun. But be careful of heat exhaustion. (See *Heat Hazards*, p.1.)

- **Be careful near reflective surfaces.** Concrete, sand, water, and snow increase exposure of the sun by reflecting 85-90% of the UV rays that strike them. Apply sunscreen even while under a beach umbrella.

- **Protect your skin** from sun exposure even in the cooler, cleaner, thinner air of higher altitudes, and in humid tropical climates. The sun’s rays are more intense in those areas.

- **Apply sunblock to burn-prone areas:** ears, nose, neck, and hands.

  Check with your doctor if skin reactions occur. Sunlight can interact with certain chemicals or medications (antibiotics, colognes, and perfumes), and can cause your skin to become sensitive to the sun.

  After exposure, apply moisturizing products that contain vitamin E and aloe to replenish the skin. Sunlight causes 80% of premature skin aging.

- **Sunglasses protect your eyes from:**
  1. **Ultraviolet rays** in sunlight that damages the cornea and the retina. Good sunglasses can eliminate all UV rays.
  2. **Intense light**—When the eye receives too much light, it naturally closes the iris. Once it has closed the iris as far as it can, the next step is squinting. If there is still too much light, as there can be when sunlight is reflecting off of snow, the retina is damaged. Good sunglasses block as much as 97% light from entering the eyes.
  3. **Glare**—Certain surfaces, such as water, can reflect lots of light. Bright spots can be distracting or can hide objects. Polarized sunglasses can completely eliminate this kind of glare.
  4. **Specific light frequencies**—Certain frequencies of light can blur vision, while others can enhance contrast. The right color sunglasses can eliminate those frequencies.

- **Driving Quiz Winner!**


Protect Your Eyes with Sunglasses

A good pair of sunglasses will protect your eyes in 4 ways.

- **Look for a tint that absorbs or blocks 70-90% of light.** For most purposes, like going to the beach or driving. Tints that block less than 60% offer only mild protection. Light reflected from surfaces like a flat road or smooth water is generally horizontally polarized. Horizontally polarized light is blocked by vertically polarized lenses, reducing annoying and sometimes dangerous glare. Polarized lenses are recommended for driving in daylight and at night and can reduce the glare from the car hood or highway. Polarized sunglasses can also be used indoors by light-sensitive persons or by those exposed to bright light through windows.

- **Drawbacks to Polarized Lenses:** Some purport polarized lenses are not satisfactory for sports such as downhill skiing because they may not provide the contrast the eye needs to distinguish ice patches or moguls. They may also react adversely with liquid crystal displays (LCDs) on the car dashboards or in digital screens on automatic teller machines. Viewed through polarized lenses from a certain angle LCDs can be invisible.
Avoid Heat Related Illness

Follow these tips to avoid heat related illness

- **Learn the symptoms.**
- **Slowly build tolerance** to the heat and work/activity (usually up to two weeks).
- **Perform heaviest work during the coolest part of the day.** If you must work when it is hot, rest frequently in shady areas, to cool your body.
- **Work in pairs** and watch for symptoms in your partner.
- **Drink plenty of fluids** (16–32 ounces) of cool fluids each hour. **Keeping hydrated is important!**
- **Avoid caffeine or alcohol.** (They encourage the body to lose fluids.)
- **Avoid large meals** before working in a hot environment (Digestion retains blood in the body core, and does not allow it to circulate to the skin where it can be cooled.)
- **Wear light colored, light weight, loose fitting cotton clothes**, including a wide-brimmed hat for shade. Avoid a dark colored tightly-woven, close-fitting cap that doesn’t allow air to circulate around your head.
- **Avoid sunburn.** It affects the body’s ability to cool itself and causes a loss of body fluids. Use sun screen with an SPF of 15 or higher. Apply it 30 minutes before going outdoors and re-apply every two hours. Cover ear tips, back of neck and nose with sun screen. Apply and SPF 15 lip balm to the lips. Wear UVA/UVB sunglasses. (When using bug repellent, apply it after sun screen.)
- **Familiarize yourself with medications you take** that could either react with the sun or act as diuretics. If you are asthmatic, keep prescribed inhalers available.

**Tanning Caution**

Repeated exposure to ultraviolet sunlight can cause melanoma, a dangerous form of cancer. Regular use of sunscreen with an SPF of 15 or higher during the first 18 years of life can lower by up to 78% the risk of certain types of skin cancer.

Skin cancer is the most common form of cancer in the U.S. Protect yourself and your family by learning the signs. Consult your doctor if you see any of these cancer warnings:

- A skin growth that increases in size.
- A mole, birthmark, or beauty mark that changes color, increases in size or thickness, changed texture, or has an irregular outline.
- A spot or growth that continues to itch, hurt, crust, scab, erode, or bleed; and an open sore or wound on the skin that does not heal, persists for more than four weeks, or heals, then reopens.

From 1979 to 1999 more people in this country died from extreme heat (8,015 deaths in the United States) than from hurricanes, lightning, tornadoes, floods, and earthquakes combined. Because most heat-related deaths occur during the summer, people should be aware of who is at greatest risk and what actions to take to prevent heat-related illness or death.

**People who are elderly, very young, or suffer from mental illness or chronic diseases are at highest risk.** However, even young and healthy individuals can succumb to heat if they participate in strenuous physical activities during hot weather.

Air-conditioning is the number one protective factor against heat-related illness and death. If a home is not air-conditioned, spending time in public facilities that are air-conditioned can reduce risk for heat-related illness. (See Protect Your Skin, page 2.)

Periodic checking with neighbors who do not have air conditioning could save a life. By knowing who is at risk and what prevention measures to take, heat-related illness and death can be prevented.

Source: www.cdc.gov/nceh/hsb/extremeheat.
Outdoor Worker Safety

Working outside can expose you to natural and manmade dangers. Take these precautions to protect yourself.

- **Wear clothing that covers the skin**, but is not loose enough to get caught in machinery.
- **Avoid lightening** by going indoors or inside a closed vehicle during thunderstorms. Avoid trees, open water, and metal objects.
- **Know the signs of overexposure** to heat and cold, and act promptly to get relief.
- **Read power machinery instructions** before operating, repairing, or refueling.
- **Keep fuel containers closed** when not in use, and check to ensure they don’t leak.
- **Wear personal protective equipment** (PPE), such as goggles and boots.
- **Remove debris or rocks** before mowing or cutting.
- **Don’t use metal near power lines** (tools, ladders, etc.)
- **Learn to identify poisonous plants** such as ivy, oak, or sumac. Don’t touch them or your skin, clothes, or tools that have come into contact with the plants. Wash any exposed areas with soap and water.
- **Get medical attention immediately for a sting or bite** that causes trouble with breathing or swallowing. Repel insects by covering skin (tuck pants into shoes); wearing repellants on skin, clothes, and shoes; not using colognes, or scented soaps or hair products.
- **Watch for spiders** when working near woodpiles or basements.
- **Know the identity of pesticides and herbicides**, and read the material safety data sheets (MSDS) for them. Wear the recommended PPE. Monitor fellow workers who are using these chemicals every two hours.


Prevent Swimming-Related Illness

You Can Choose to Swim Healthy!

Here are six “PLEAs” to help you promote Healthy Swimming.

1) **Please don’t swim when you have diarrhea**, and don’t allow diapered children with this condition in the water. Germs spread in the water and make other people sick.

2) **Please don’t swallow pool water**, and try to avoid even having water get in your mouth.

3) **Please practice good hygiene.** Shower before swimming, wash your hands after using the toilet or changing diapers. Germs on your body end up in the water.

4) **Please take kids on bathroom breaks** or check diapers often. Waiting to hear “I have to go” may mean that it’s too late.

5) **Please change diapers** in a bathroom and not at poolside. Germs can spread to surfaces and objects in and around the pool and spread illness.

6) **Please wash your child** thoroughly (especially the rear end) with soap and water before swimming. We all have invisible amounts of fecal matter on our bottoms that end up in the pool.

Source: http://www.cdc.gov/healthyswimming
Drowning Statistics

In a child’s hands a gun may get fired, and the bullet may injure someone, and the injury may be fatal. But an unsupervised toddler who falls into a pool will drown.

Home pools are great recreation for families. Yet they are also dangerous, especially for children. More hazardous, in fact, for your toddler than a loaded gun lying on a coffee table.

Drowning is the number one cause of death for children under five in Florida, Arizona, and California, with a ranking of number two for over a dozen other states. Government statistics indicate that for every drowning there are eleven near drowning incidents, many result in totally disabling brain damage.

Who was in charge?

The majority of parents involved were responsible people who thought it could never happen to their family. They were careful, and had close supervision over their children.

The following chart indicates who was in charge of the children who drowned in swimming pools.

- Sitter 14%
- Other Adult 10%
- Siblings 7%
- Parent 69%

What were they doing?

At the time of the drownings, those supervising the children were doing the following: chores 39%, socializing 18%, talking on the telephone 9%.

You wouldn’t leave a loaded gun within the reach of a child. Take precautions to protect your children around not only swimming pools, but all water.

Save A Child from Drowning

Safeguard your children around the pool.

Be an absolute dictator about pool use. Let your children know, without doubt, it’s your way or not at all. Set definite pool rules for its use, and more important, when it is not to be used.

Provide layers of protection: Supervision by persons trained in cardio-pulmonary resuscitation (CPR) and rescue techniques, locks on doors of the pool area, alarms on access doors, a fence separating the pool area from your home and all access entrances, water survival training for children when they are capable of crawling or walking to the pool. With layers of protection, all must fail before a drowning can occur.

Retrain on water survival every year. If you do not have your child (particularly under age 3 years) in the water over the winter months, provide refresher training each year.

Ignore the phone. Your child’s life is not worth knowing who is calling. Yet a pool side telephone could be an invaluable aid if an accident occurs.

Eliminate child lures. Don’t leave objects in the pool that could attract your child. Keep anything that could be used for climbing away from the fence (tables, chairs, etc.).

Search the pool first. If you miss your child, always check the pool first, even if you think he has no access. Seconds can make the difference between death, recovery, or just survival. Drowning happens quickly, without warning. There is no cry for help. Seventy-seven percent of the children had been seen five minutes or less before being missed, and subsequently discovered in the pool.
Avoid Cuts & Scrapes

But treat them promptly when they do occur.

Dozens of tools, materials, and situations present cutting or scraping risks. There are cutting hazards everywhere—kitchen, office, warehouse, shops, etc. Counteract risks and avoid injury by following safe work practices, and wearing recommended protective clothing.

- **Paper:** Handle and fold paper carefully, use a rubber finger guard, keep the hand holding the paper well away from the cutting edge of a paper cutter, and store the cutter with the blade closed.

- **Glass or metal:** Wear gloves or use a broom and dustpan to pick up broken glass or metal cuttings.

- **Tools:** Keep work surfaces neat, store implements where they belong, with sharp edges sheathed or turned away from a potential user. Pass a sharp tool to another person handle first. Avoid pulling a knife, scraper, box-cutter, etc., toward your body.

- **Packages:** Wear gloves when opening cardboard cartons. When removing metal bands, use the proper cutters, and hold a gloved hand over the end that might fly when cut.

- **Power tools:** Use them only for operations to which they are suited, always use guards, never disengage or bypass a guard. Place material to be cut on a firm rest, never across your knee. Disconnect power before cleaning saws, changing blades, or making depth or bevel adjustments.

- **Rough, heavy materials, and obstacles:** Wear gloves when lifting materials from a cement surface, when handling materials like cement blocks, and when carrying materials through narrow aisles or doorways (either by hand or with a hand truck or wheelbarrow). Source: OSHA Compliance Advisor, Issue No. 447, 2003, Business & Legal Reports, July 8, 2002.

### Treating cuts & scrapes

Even a careful person may get a scrape or cut. Treat it immediately—and properly. Even an untreated scratch can invite serious infection. Blood poisoning and tetanus are two of the most common killers that can enter the body through a small, harmless-looking cut, because there are often incredibly numerous germs on things we work with, and even on our skin. So don’t delay treatment until break time, or until you get home; act at once. The American Medical Association provides the following tips on care of minor cuts and abrasions:

- Never put your mouth over the wound or breathe on it; this just gives germs more opportunity to infect it.
- Don’t allow fingers or any soiled material, such as a used handkerchief, to touch the wound.
- Immediately cleanse the area with soap and warm water, wiping away from the wound.
- Hold a sterile pad firmly over the wound until the bleeding stops; replace the pad and bandage as necessary to keep the area clean and dry.