

The HEAT is on: How to avoid the nasty side-effects of warm weather exercise.

The dry heat of the arid Colorado summer will soon be upon us. Many of us will be throwing on our running shoes, strapping on a bicycle helmet, or heading down to our favorite park for some overdue fun in the sun. Yet, this dry Colorado heat could result in a lot more than a good sweat.

Every summer thousands of people experience heat injuries. Heat injuries are caused by an overexposure to the heat, or an inability of the body's cooling mechanisms to properly regulate our body temperature. Heat injuries are like an environmentally-induced fever, and can be seriously life-threatening. So as you prepare to hit the road, a little information and some smart planning could make sure you stay out of 'hot water'.

Keeping your cool.

The first step in avoiding heat injuries is prevention. Take special precautions based on your environment. You are at risk during periods of Elevated temperatures, full sun, and high humidity. You are especially at risk if you are exercising or doing strenuous work (i.e. yard work) in these conditions.

Following these simple precautions can make sure your fun doesn't end too soon:



Full Sun: Avoid the sun's peak intensity (10am-3pm).

Elevated temperature: Wear loose-fitting, light-colored clothing.

High humidity: Drink lots of water and wear moisture-wicking fabrics.

When exercising or doing yard work in any of these conditions make sure to stay hydrated, take plenty of little breaks, and whenever possible use shade to your advantage.

The heat is on.

Learning to identify the symptoms of heat-injuries could save your life. Or the life of someone you know. Heat injuries are classified into three types:

Heat Cramps

Heat cramps are brief, but excruciating muscle cramps/spasms resulting from overheating, dehydration, poor conditioning to the activity, and electrolyte imbalance. They are the least dangerous of the heat injuries.



If heat cramps arise:

1. Remove yourself (or the person) from the hot environment.
2. Rest the cramping muscle.
3. Replace fluids by mouth. Water is best, but sports drinks can also be used.
4. ***If the cramp persists, get to your local hospital as it may be a serious episode requiring intravenous (IV) re-hydration.***

Heat Exhaustion

Heat exhaustion occurs when the body is unable to cool itself (either due to high heat or humidity), and overheating results. Heat exhaustion is particularly common in persons who are not conditioned to the

heat, or when weather increases the regional heat above its usual level (“heat waves”).

People exercising or working in the heat, the elderly, and small children are at particular risk of developing heat exhaustion. In heat exhaustion, the body becomes so dehydrated and overheated that the disturbances occur in blood circulation causing a mild form of shock (i.e. exhaustion). This isn't considered a medical emergency, but it is a serious event that should be treated seriously.

There are six major symptoms to look out for:

1. Cool, clammy skin.
2. Dizziness, weakness, or fainting.
3. “Cotton mouth” and excessive thirst.
4. Elevated body temperature.
5. Increased resting pulse rate.
6. Nausea and light-headedness.

What to do:

1. Remove yourself from the hot environment. Go indoors or seek out shaded areas.
2. Loosen or remove clothing to assist in cooling.
3. Replace fluids slowly using cooled water. If water isn't available, use any fluid.
4. Lie down with the legs elevated.
5. Avoid alcoholic or caffeinated beverages.

Heat exhaustion also occurs during the summer boating sessions when hot weather, and excessive consumption of alcohol mimic the dehydration that occurs during physical activity.

Heat Stroke

Heat stroke is a rapidly developing condition whereby the body's cooling mechanism, controlled by the brain, has been shut off. This causes a rapid increase in body temperature (>105° F) that results in brain damage and damage to the internal organs. For lack of a better explanation, your body essentially cooks inside its own skin. This is, of course, a life threatening condition and an immediate medical emergency.

What to look for:

Risk Factors

1. A history of a sweating disorder (diagnosed medical condition).
2. Medical prescriptions including antihistamines, antidepressants, or high blood pressure medications.
3. Infants and the elderly are more prone to develop heat stroke.

Signs & Symptoms

1. Hot, dry skin (no sweating) that is bright red.
2. Conscious but disoriented or unconscious and unresponsive to verbal commands.
3. Constricted pupils.
4. Rapid pulse rate and high blood pressure followed by dramatic decrease in both pulse and blood pressure.
5. Vomiting.

What to do:

Heat stroke is a medical emergency and should never be treated in the home. Activate 911

emergency medical services (EMS) immediately and tell them you suspect heat stroke.

While waiting for EMS to arrive you may do the following:

1. Cover the patient in wet towels or sheets.
2. Aggressively fan the patient.
3. Give cool beverages if the patient is not vomiting.
4. Place in a cold water bath. The patient could lose consciousness at any moment; so constant monitoring is required.

Heat stroke, although serious, is relatively uncommon. Recognizing the signs could mean the difference between life and death.

Physical activity in any environment carries with it certain risks. Knowledge is power and could help you avoid exposing yourself to serious injury. Colorado is all about outdoor fun, but try to limit your sun exposure and always drink lots of water. Enjoy our beautiful parks and keep moving. That's one sure way to be 'living life better'.

Yours in good health,

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