

Heat Exhaustion and Heat Stroke Symptoms

Heat exhaustion symptoms

Often pale with cool, moist skin

Sweating profusely

Muscle cramps or pains

Feels faint or dizzy

May complain of **headache**, weakness, thirst, and **nausea**

Core (**rectal**) temperature elevated-usually more than 100°F-and the **pulse** rate increased

Heat stroke symptoms

Unconscious or has a markedly **abnormal** mental status (**dizziness**, confusion, hallucinations, or **coma**)

Flushed, hot, and **dry skin** (although it may be moist initially from previous sweating or from attempts to cool the person with water)

May have slightly elevated **blood pressure** at first that falls later

May be hyperventilating

Rectal (core) temperature of 105°F or more

Heat Exhaustion and Heat Stroke Treatment

Self-Care at Home

Home care is appropriate for mild forms of heat exhaustion. Heat stroke is a medical emergency, and an ambulance should be called immediately.

For mild cases of heat exhaustion

Rest in a cool, shaded area.

Give cool fluids such as water or sports drinks (that will replace the salt that has been lost). Salty snacks are appropriate as tolerated.

Loosen or remove clothing.

Apply cool water to skin.

Do not use an alcohol rub.

Do not give any beverages containing alcohol or [caffeine](#).

Heat stroke (do not attempt to treat a case of heat stroke at home, but you can help while waiting for medical assistance to arrive.)

Call 911 immediately

Move the person to a cooler environment, or place him or her in a cool bath of water (as long as he or she is conscious and can be attended continuously).

Alternatively, moisten the skin with lukewarm water and use a fan to blow cool air across the skin.

Give cool beverages by [mouth](#) only if the person has a normal mental state and can tolerate it.

Medical Treatment

The treatment is directed at cooling the patient in a controlled fashion while making sure that the patient stays hydrated and that their blood flow is normal.

Treatment of heat exhaustion

Because heat exhaustion generally develops gradually, a person will often be dehydrated. Usually they may be given something to drink, and

a cool sport beverage (with 6% or less **glucose**) should be used. IV fluid may be used if the person does not tolerate oral replacement (if he or she cannot keep anything down).

The patient should stay in a cool environment and avoid strenuous activity for several days.

Treatment of heat stroke

Treatment is aimed at reducing the patient's core temperature to normal as quickly as possible.

The doctor may use immersion, evaporative, or invasive cooling techniques.

In the evaporative technique, **cold** or ice packs may be placed in the armpits or **groin**. The skin is kept moist with cool fluid, and fans are directed to blow across the body.

An IV will be started and fluids are given rapidly.

The patient's **urine** output will be monitored.

Treatment will continue until the patient's body core temperature is 101.3-102.2°F (38.5-39°C) and then stopped to keep from making the patient too cold.

The patient most likely be admitted to the hospital for further blood tests and observation.

Prevention

Avoid heat exhaustion by not engaging in strenuous activity in hot, humid environments. People who are not used to the heat should be particularly

careful. Intersperse periods of rest in a cool environment with plenty of available fluids to drink. Avoid strenuous activities during the hottest part of the day.

Heat stroke often occurs in people who are unable to modify their environments: infants, the elderly, and bed-ridden people. People who are taking many types of blood pressure, [allergy](#), or depression medication may also be particularly at risk and should avoid hot environments.

People in supervisory positions such as coaches, trainers, and lifeguards should be trained to specifically recognize signs of heat illness and what preventive measures to take.