

HEAT STROKE: SIGN, SYMPTOMS, PREVENTION AND CURE.

What is heat stroke?

Heat stroke is a medical condition where during extreme heat or prolonged exposure to sunlight, the body temperatures reaches 40°C or 104°F or more with altered consciousness, neurological symptoms and loss of self-regulation of body temperatures (the preventive or cooling mechanisms do not function in an otherwise normal human being). It is also called as sunstroke and hyperthermia.

In children the core body temperatures may rise above 40.5°C or 105°F indicating heat stroke.

Remember heat stroke is a medical emergency.

What are the symptoms of heat stroke?

Symptoms of heat stroke are:

High body temperature: A core body temperature of 104 F (40 C) or higher, is the main sign of heatstroke.

Altered mental state or behavior: Dizziness, Confusion, agitation, slurred speech, irritability, delirium, seizures, fainting and coma can all result from heatstroke.

Alteration in sweating: In heatstroke brought on by hot weather, the skin becomes hot and dry to touch. However, in heatstroke brought on by strenuous exercise, skin may feel dry or slightly moist.

Nausea and vomiting: There may also be a feeling of sickness and nausea or vomiting may also occur.

Flushed skin: The skin may turn red and dry as the body temperature increases.

Muscle cramps: There may be painful muscle spasms in the arms, legs, or abdomen, indicating the need for immediate help.

Rapid breathing: The breathing pattern may also disturb, becoming rapid and shallow.

Racing heart rate: The pulse may be significantly increased because intense heat overburdens the heart to help cool the body.

Headache: There may also be a throbbing headache.

These above mentioned symptoms can develop quickly, within minutes, or over several hours or days.

How to diagnose heat stroke?

Heat stroke is diagnosed by observing the signs and symptoms specific to heat stroke.

History of exposure to extreme temperatures or prolonged sunlight is very important.

Treatment/management tips for heat stroke.

Treatment involves lowering the person's core body temperature.

If someone is having seizures, is confused or is unconscious because of heat stroke then this is a medical emergency and an ambulance should be called quickly. Immediate action to cool the overheated person should be taken while waiting for emergency treatment.

The body temperature can be lowered by getting the patient to a cool, shady or air-conditioned area and removing any unnecessary clothes.

Wet the skin and fan air over the patient.

Apply ice packs to their neck, back, armpits and groin. These are areas rich with blood vessels close to the skin and cooling them may reduce body temperature.

Get them to drink water, fruit juice or a sports rehydration drink providing they are conscious and able to swallow.

Monitor body temperature with a thermometer and continue cooling efforts until the body temperature drops to 101^o to 102^oF.

How to prevent Heat stroke?

It's always best to prevent heat stroke in the first place by being aware of heat wave warnings issued by the meteorological department.

Try to keep going out into the sun between 11am and 3pm.

If you have to go out in high temperatures take precautions like wearing loose fitting cool light colored clothes and drinking extra fluids - before increasing liquid intake check with your doctor if you have epilepsy or heart, kidney or liver disease, are on fluid-restricted diets, or have a problem with fluid retention.

Avoiding extreme physical exertion when working outdoors and also try to avoid exercising.

If possible, re-arrange your day to make the most of the time when it's coolest - either early morning or after sunset.

Try also to keep your home cool by pulling curtains during the day, avoiding rooms that face south, using fans and by opening a window at night for ventilation. Insulating materials should also be used during construction where needed.

Keep indoor plants and bowls of water in the house as evaporation helps cool the air.

Try to keep yourself cool with cold non-caffeinated and non-carbonated drinks and cold foods with high water content.

Take cool showers or baths, or sprinkle cold water over your skin and clothing or keep a damp cloth on the back of your neck.

Who is at risk for heat stroke?

Those most susceptible (at risk) individuals to heat stroke include:

- Infants.
- The elderly (often with associated heart diseases, lung diseases, kidney diseases, or who are taking medications that make them vulnerable to dehydration and heat strokes).
- Athletes.
- Individuals who work outside e.g. laborers etc. who physically exert themselves under the sun.
- Infants, children, or pets left in cars.

By Dr. Muhammad Younus Jamal.