

Heat Stress FAQ's

1. What happens to the body as a result of exposure to extreme heat?

Under extreme heat a person's body temperature can rise quickly. The body would normally cool itself down by sweating. In these conditions the body's ability to cool itself are affected. If the humidity is high it keeps the sweat from evaporating quickly and prevents the body from releasing heat. High body temperatures may damage the brain and other vital organs.

2. Who is at a greater risk to develop a heat-related illness?

Infants and children (0-4) years of age, people who are 65 years of age and older, people who are overweight, and people who are ill or using certain medications and/or prescription drugs.

3. What is a heat stroke?

Heat stroke is the most serious heat-related illness. When the body's temperature rises rapidly this causes the sweating mechanism to fail and prevents the body from cooling down, resulting in a heat stroke. The body's temperature may rise to 106°F or higher within 10-15 minutes. A heat stroke can cause permanent disability or even death if emergency treatment is not provided quickly.

4. What are the warning signs of a heat stroke?

Warning signs of a heat stroke include:

- An extremely high body temperature of 103°F or above
- Red, hot, and dry skin (no sweating)
- A rapid, strong pulse
- Throbbing headaches
- Dizziness
- Nausea
- Confusion
- Unconsciousness

5. What should I do if I see someone with any of the warning signs of a heat stroke?

If you see anyone with any of the warning signs, you may be dealing with a life-threatening emergency. You should have someone call for medical assistance immediately while you begin to assist the victim by doing the following:

- Take the victim to a shady area.
- Start cooling the victim rapidly using whatever methods you can. For example; immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or

if the humidity is low, wrap the victim in a cool, wet sheet and fan him/her vigorously.

- Monitor the victim's body temperature and continue cooling efforts until the body temperature drops to 101-102°F.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
- Do not give the victim alcohol to drink.
- Stay and assist the victim until medical assistance arrives.

6. What is heat exhaustion?

Heat exhaustion is a milder form of heat-related illness that occurs after several days of exposure to high temperatures and an inadequate replacement of fluids. Elderly people, people who have high blood pressure, and people working or exercising in hot environments are most prone to heat exhaustion.

7. What are the warning signs of heat exhaustion?

The skin may be cool and moist. The pulse rate will be fast but weak and breathing will be fast and shallow. If heat exhaustion is untreated, it can progress to heat stroke.

The warning signs of heat exhaustion include the following:

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting

Seek medical attention if the symptoms worsen or last longer than one hour.

8. What steps can be taken to cool the body during heat exhaustion?

- Drink cool, non-alcoholic beverages.
- Rest.
- Take a cool shower, bath, or sponge bath.
- Stay in an air-conditioned environment.
- Wear lightweight clothing.

9. What are heat cramps?

People who sweat a lot during strenuous activity are prone to heat cramps. Heat cramps are muscle pains or spasms that occur in the abdomen, arms, or legs.

Sweating depletes the body's salt and moisture and causes painful cramps. Heat cramps may also be a sign of heat exhaustion. If you have heart problems or are on a low-sodium diet, seek medical attention for heat cramps.

10. What should I do if I have heat cramps?

Take the following steps only if medical attention is not necessary:

- Stop all activity and sit quietly in a cool place.
- Drink clear juice or a sports beverage.
- Do not return to strenuous activity for a few hours after the cramps subside. Further exertion may lead to heat exhaustion or heat stroke.
- If the heat cramps do not subside in 1 hour, seek medical attention.

11. What is heat rash?

Heat rash is a skin irritation that is caused by excessive sweating during hot, humid weather. It is most common in young children, but can occur at any age. Heat rash looks like a red cluster of pimples or small blisters. It is most likely to occur on the neck, upper chest, in the groin area, under the breasts, and in elbow creases.

12. What is the best treatment for heat rash?

Try to stay in a cooler, less humid environment. Keep the area affected with heat rash dry. Using a dusting powder may help to increase comfort.

13. Can medications increase the risk of heat-related illness?

People using certain prescription drugs or medications are at risk for heat-related illness and/or death. Some examples are: (1) psychotropics; which affect psychic function, behavior, or experience (e.g. haloperidol or chlorpromazine), (2) Medications for Parkinson's disease, which can inhibit perspiration, (3) tranquilizers such as phenothiazines, butyrophenones, and thiozanthenes; and (4) diuretic medications or "water pills" that affect the fluid balance in the body.

14. How effective are electric fans in preventing heat-related illness?

When temperatures are high in the 90's, fans will not prevent heat-related illness. A much better way to cool off is to take a cool shower or bath or moving to an air-conditioned area. Air conditioning is the strongest protective factor against heat-related illness.

Exposure to air conditioning for even just a few hours a day can reduce the risk for heat-related illness.

Consider visiting a shopping mall or public library for a few hours.

15. How can people protect their health when temperatures are extremely high?

Use common sense and remember to keep cool. You should drink plenty of fluids, replace salt and minerals, wear appropriate clothing, use sunscreen lotion, pace yourself during the day, stay cool indoors, schedule outdoor activities carefully, use the buddy system, monitor those at risk, and adjust to the environment.

16. How much should I drink during extreme hot weather?

During hot weather you need to drink more liquid than your thirst indicates. Regardless of your activity level try to increase your fluid intake. During heavy exercise in a hot environment, drink two to four glasses (16-32 ounces) of cool fluids each hour. Avoid drinks that contain alcohol because they actually cause you to lose more fluid.

17. Should I take salt tablets during hot weather?

Do not take salt tablets unless directed by your doctor. When you sweat heavily it removes the salt and minerals from your body. These are necessary for your body and must be replaced immediately. The easiest and safe way to do this is through your diet. Drink fruit juice or a sports beverage when you exercise or work in hot environments.

18. What is the best clothing for hot weather or a heat wave?

Wear as little clothes as possible when you are at home. Choose lightweight, light-colored, loose-fitting clothing. In the hot sun, a wide-brimmed hat can provide shade and help keep your head cool. If you need to go outdoors, be sure to apply sunscreen 30 minutes prior to going out and continue to reapply according to the package directions. Sunburn affects the body's ability to cool itself down and causes a loss of body fluids. It also causes pain and damages the skin.

19. What should I do if I work in a hot environment?

If you are not accustomed to working or exercising in a hot environment, start slowly and pick up the pace gradually. If exertion in the heat makes your heart pound and leaves you gasping for breath, you should STOP all activity. Get into a cool area or at least in the shade, and rest, especially if you become lightheaded, confused, weak, or faint.

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