

<https://www.childrens.com/health-wellness/heat-stroke-symptoms-in-children>

Know the signs of heat exhaustion and heat stroke in kids

Heat stroke in children can occur without proper hydration or rest. Learn how to recognize heat exhaustion and heat stroke symptoms to keep your child safe.

During the hot summer months, it's important to know how to keep kids safe. Spending time outside is okay, as long as your child is protected by sunscreen with adequate SPF, but proper hydration, clothing and rest periods are key to avoiding heat illnesses such as heat exhaustion and heat stroke.

Heat exhaustion in children

Cases of heat stroke spike at the end of June and into July each year and continue through August. Troy Smurawa, M.D., Director of Pediatric Sports Medicine at the Children's HealthSM Andrews Institute for Orthopaedics & Sports Medicine, explains that heat exhaustion and heat stroke in children can be extremely serious.

"It's very important for parents, kids and athletes to be mindful of the heat," says Dr. Smurawa. "Oftentimes they don't recognize the effects of the heat and this can get them into trouble with heat illness."

Dr. Smurawa shares the signs of heat exhaustion and heat stroke and ways to keep your child safe this summer.

Symptoms of heat exhaustion in kids

Before heat stroke symptoms appear, kids often show signs and symptoms of milder heat illnesses such as heat cramps and heat exhaustion. This often occurs after a child has been exercising or playing in the heat and becomes dehydrated from losing excessive fluids and salt from sweating.

Signs of heat exhaustion in children may include:

- An elevated body temperature, usually between 100° and 104° Fahrenheit, Cool, clammy skin despite the heat, Goose bumps, Fainting, dizziness or weakness, Headache, Increased sweating, Increased thirst, Irritability, Muscle cramps, Nausea and/or vomiting

Children may be at a higher risk for heat exhaustion if they:

- Are overweight or obese, Are taking certain medications, Have a sunburn, Are sick

It's important to treat heat exhaustion immediately, as it can develop into heat stroke. If your child shows symptoms of heat exhaustion, you should:

- Bring your child to a cool, shaded place – preferably in an air-conditioned building or vehicle. Encourage him or her to drink cool fluids that contain salt (like sports drinks). Apply a cold wet towel or sponge to the skin. Gently stretch or massage sore muscles if your child complains of painful muscle cramps in his or her legs, arms or abdomen.

If your child is unable to drink or seems to be losing alertness, call your doctor or seek medical attention immediately.

Symptoms of heat stroke in kids

Heat stroke is a severe type of heat illness that occurs when a child's body creates more heat than it can release. This results in a rapid increase in core body temperature, leading to brain damage or death if not promptly treated.

Signs of heat stroke in children may include:

- A body temperature that rises dangerously high – above 104° Fahrenheit, Absence of sweating, Confusion, disorientation, Flushed, hot and dry skin (skin may be wet), Loss of consciousness, Nausea, vomiting, diarrhea, Rapid heartbeat and breathing, Severe headache, Seizures, Weakness and/or dizziness

Heat stroke is a medical emergency if your child has been outdoors, or in any hot environment, and shows symptoms of heat stroke, seek emergency medical treatment immediately. Take the following actions as soon as possible:

- Bring your child indoors or into the shade and undress him or her. Begin cooling rapidly by immersing him or her in a bathtub of cold water. If a bathtub is not available, apply cold towels over much of the body replacing them frequently. Avoid pushing fluids unless your child is conscious and alert.

Heat stroke in athletes

Heat stroke in athletes is not as common as heat exhaustion but is life-threatening. Athletes are at a higher risk when they are participating in intense sports practices or camps between noon and 6 p.m., the hottest parts of the day. If your child is an athlete, make sure he or she: · Takes frequent water breaks to rest and stay hydrated. Wears appropriate clothing that is light colored, lightweight and moisture wicking. Avoids outdoor exercise during peak sun hours, if possible.

Athletes are at a higher risk for heat exhaustion if they are poorly acclimatized to heat or if they have sickle cell trait (SCT). If you have concerns, talk to coaches and make sure they have a plan for hydration and emergencies.

Heat stroke in babies

Heat stroke in a baby is rare but very dangerous. Allowing a baby or child to stay outside too long in hot weather, ride in a hot car or sit in a parked car – which should never occur – can cause his or her body temperature to rise quickly.

Since babies and very young children can't tell you when they're uncomfortable, watch for unusual behaviors or concerning symptoms, such as:

- Restlessness, Rapid breathing, Lethargy, Irritability, Vomiting

How to prevent heat illness in kids

Parents can take simple steps to keep children safe from heat exhaustion and heat stroke. Enjoy outdoor activities during the cooler times of the day, such as early in the morning or later in the evening. Try to seek shade as much as possible when outside, especially when taking a rest or water break. Choose clothing that is loose-fitting, light-colored and moisture-wicking rather than heavy cotton. Consider choosing sun protective clothing for days when your child is outside for several hours at a time. Lastly, schedule frequent water breaks to cool off and avoid dehydration.

Between Families Newsletter

Please complete the following questionnaire

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True or False

1. True or False: A child suffering from heat stroke usually has a body temperature above 104 °F.
2. True or False: A child with heat stroke will always have sweat on their skin.

Fill in the Blank

3. Children showing early signs of heat exhaustion may experience symptoms such as _____ (clammy/cold) skin, headache, muscle cramps, and increased thirst.
4. Heat stroke is a medical _____ (emergency/warning) that requires immediate treatment.

Multiple Choice

5. Which of the following is not a typical symptom of heat stroke in children?
 - A. Confusion or disorientation
 - B. Rapid heartbeat and breathing
 - C. Excessive sweating
 - D. Seizures

6. What is not a recommended first step when treating a child with heat exhaustion?

- A. Move them to a shaded or air-conditioned area
- B. Encourage cool sports drinks
- C. Immediately immerse them in cold water
- D. Apply a cold, wet towel or sponge

True or False

7. True or False: Babies cannot tell you when they're overheated, so you should watch for signs like lethargy, irritability, or vomiting.

Fill in the Blank

8. Heat stroke in athletes often occurs during the hottest part of the day—between _____ and _____ p.m.

Multiple Choice

9. For immediate cooling of a child with suspected heat stroke, you should:

- A. Give them plenty of fluids, even if unconscious
- B. Wrap them tightly in a blanket
- C. Immerse them in cold water or apply frequent cold towels
- D. Wait 30 minutes to see if symptoms improve

10. Which of these is a risk factor that increases a child's likelihood of heat exhaustion?

- A. Wearing light-colored, moisture-wicking clothes
- B. Being sick or sunburned
- C. Drinking extra fluids
- D. Staying in the shade

Answer Key

- 1. True
- 2. False
- 3. Cool, clammy

4. Emergency

5. C

6. C

7. True

8. Noon and 6pm

9. C

10. B