**Causes of Dehydration**

Many conditions may cause rapid and continued fluid losses and lead to dehydration:

* Fever, heat exposure, and too much [exercise](http://www.webmd.com/fitness-exercise/default.htm)
* [Vomiting](http://www.webmd.com/digestive-disorders/digestive-diseases-nausea-vomiting), [diarrhea](http://www.webmd.com/digestive-disorders/digestive-diseases-diarrhea), and increased urination due to infection
* Diseases such as [diabetes](http://www.webmd.com/diabetes/default.htm)
* The inability to seek appropriate water and food (as in the case of a disabled person)
* An impaired ability to drink (for instance, someone in a [coma](http://www.webmd.com/brain/coma-types-causes-treatments-prognosis) or on a respirator)
* No access to safe drinking water
* Significant injuries to [skin](http://www.webmd.com/skin-problems-and-treatments/picture-of-the-skin), such as burns or [mouth](http://www.webmd.com/oral-health/anatomy-of-the-mouth) sores, or severe skin diseases or infections (water is lost through the damaged skin)

**Symptoms of Dehydration**

The signs and symptoms of dehydration range from minor to severe and include:

* Increased thirst
* [Dry mouth](http://www.webmd.com/oral-health/guide/dental-health-dry-mouth) and [swollen tongue](http://www.webmd.com/oral-health/guide/tongue-problem-basics-sore-or-discolored-tongue-and-tongue-bumps)
* [Weakness](http://www.webmd.com/a-to-z-guides/weakness-and-fatigue-topic-overview)
* [Dizziness](http://www.webmd.com/first-aid/understanding-dizziness-basics)
* Palpitations (feeling that the [heart](http://www.webmd.com/heart/picture-of-the-heart) is jumping or pounding)
* Confusion
* Sluggishness [fainting](http://www.webmd.com/brain/understanding-fainting-basics)
* Fainting
* Inability to sweat
* Decreased urine output

Urine color may indicate dehydration. If urine is concentrated and deeply yellow or amber, you may be dehydrated.

**When to Seek Medical Care**

Call your doctor if the dehydrated person experiences any of the following:

* Increased or constant [vomiting](http://www.webmd.com/children/ss/nausea-vomiting-remedies-treatment) for more than a day
* Fever over 101°F
* [Diarrhea](http://www.webmd.com/digestive-disorders/diarrhea-10/slideshow-foods-to-avoid) for more than 2 days
* [Weight loss](http://www.webmd.com/diet/default.htm)
* Decreased urine production
* Confusion
* Weakness

Take the person to the hospital's emergency department if these situations occur:

* Fever higher than 103°F
* Confusion
* Sluggishness (lethargy)
* [Headache](http://www.webmd.com/migraines-headaches/default.htm)
* [Seizures](http://www.webmd.com/epilepsy/understanding-seizures-basics)
* Difficulty breathing
* Chest or abdominal pains
* Fainting
* No urine in the last 12 hours

**What Are the Heat-Related Illnesses?**

**Heat exhaustion** occurs when the body loses large amounts of water and salt through excessive sweating, particularly through hard physical labor or exercise. This loss of essential fluids can disturb circulation and interfere with brain function. Individuals who have heart, lung, or kidney problems or are on low-sodium diets may be particularly susceptible to heat exhaustion.

As in heat exhaustion, **heat cramps** can strike when the body loses excessive amounts of fluids and salt. This deficiency, accompanied by the loss of other essential nutrients such as potassium and magnesium, typically occurs during heavy exertion.

**Heat stroke**, the most serious of the heat-related illnesses, occurs when the body suffers from long, intense exposure to heat and loses its ability to cool itself. In prolonged, extreme heat, the part of the brain that normally regulates body temperature malfunctions. This decreases the body's ability to sweat and, therefore, cool down. Those who have certain medical conditions that decrease the body's ability to sweat -- such as scleroderma or cystic fibrosis -- may be at greater risk of developing heat stroke .

**What Can I do to Prevent Heat-Related Illnesses?**

When the heat index is high, it's best to stay in an air-conditioned environment. If you must go outdoors, you can prevent heat stroke by taking these steps:

* Wear lightweight, light-colored, loose-fitting clothing, and a wide-brimmed hat.
* Use a sunscreen with a sun protection factor (SPF) of 30 or more.
* Drink extra fluids. To prevent dehydration, it's generally recommended to drink at least eight glasses of water, fruit juice, or vegetable juice per day. Take additional precautions when exercising or working outdoors. The general recommendation is to drink 24 ounces of fluid two hours before exercise, and consider adding another 8 ounces of water or sports drink right before exercise. During exercise, you should consume another 8 ounces of water every 20 minutes, even if you don't feel thirsty.

Other strategies for preventing heat stroke include:

* Monitoring the color of your urine. Darker urine is a sign of dehydration. Be sure to drink enough fluids to maintain very light-colored urine.
* Measuring your weight before and after physical activity. Monitoring lost water weight can help you determine how much fluid you need to drink.

Avoid fluids containing caffeine or alcohol, because both substances can make you lose more fluids and worsen heat-related illness.

**Electrolytes Overview**

Electrolytes are the smallest of chemicals that are important for the cells in the body to function and allow the body to work. Electrolytes such as sodium, potassium, and others are critical in allowing cells to generate energy, maintain the stability of their walls, and to function in general. They generate electricity, contract muscles, move water and fluids within the body, and participate in myriad other activities.

**Why do I need them?**

Many people neglect consistent electrolyte replenishment because they've never had cramping problems. Even if you've been fortunate enough to have never suffered the painful, debilitating effects of cramping, you still need to provide your body with a consistent and adequate supply of electrolytes. Why? Because the goal in replenishing electrolytes is not so much to prevent cramping, but to maintain specific bodily functions at optimal levels. Cramping is your body's way of letting you know that, in terms of electrolytes, it's on empty. When you've reached that point, your performance has been severely compromised for some time. Consistent replenishment of electrolytes is just as important as the fuel you consume and the water you drink during exercise/physical labor.

**Can't I just use salt tablets?**

Salt tablets are not the best choice for electrolyte replenishment for two reasons:

1. They provide only two of the electrolytes your body requires - sodium and chloride. Your body needs a balance of sodium, calcium, potassium and magnesium.
2. They can oversupply sodium, thereby overwhelming the body’s complex mechanism for regulating sodium.

**Can’t I just drink Gatorade or other sports drinks?**

Gatorade and sports drinks are fine in smaller doses to help replenish some loss of liquid and sodium. However, sports drinks typically are high in sugar and do not contain the essential nutrients your body needs during exertion. By including an electrolyte tablet or \*powdered mix that contains a balanced electrolyte replacement, you greatly reduce your risk of dehydration (or hyponatremia – a condition of water intoxication, drinking so much water that it dilutes the sodium in the blood and overwhelms the kidney's compensation mechanism), your body will perform better, and you will ultimately feel better.

\*Examples of powdered mixes include: HEED by Hammer and Skratch by Skratch Labs

  