

Running in the Cold

All the signs and symptoms of winter are in the air. Although dealing with heat may present greater difficulties for the runner, winter weather comes with its own set of special problems, especially in transition months when there can be wide fluctuations in temperature over short periods of time.

Hypothermia

When the air temperature is lower than the body temperature, the body loses heat to the environment. The body's natural metabolic heat production is generally sufficient to replace lost heat and maintain a normal core body temperature.

However, when the environmental gradient is severe enough, and the body has insufficient protection from heat loss, the core body temperature can drop-at 97 degrees it is called hypothermia. Symptoms include shivering, euphoria, confusion and behavior that resembles drunkenness.

If core temperature continues to fall, there is lethargy, muscular weakness, disorientation, hallucinations, depression or hostile behavior. If body temperature dips below 88 degrees, the situation becomes deadly-shivering may stop, and the patient may slip into a coma if emergency treatment is not given.

For distance runners, exhaustion and dehydration can further complicate hypothermia. During transition months when temperatures can change dramatically, a runner may be sweaty and unprepared with warm clothing for suddenly cold temperatures. In cooler temperatures runners may also give less attention to replacing lost fluids.

Frostbite

Frostbite results from freezing of the fluids in the skin and subcutaneous tissues after exposure to freezing temperatures. Dehydration and low skin temperatures due to exposure restrict blood flow as blood viscosity increases -- slower than molasses in January. Frostbite can happen in a hurry, within minutes of exposure depending on the weather. Skin suffering frostbite can look white, yellow or purple; doesn't hurt; and feels hard and cold to the touch.

Skin that has frozen will suffer more damage if thawed and refrozen. This is important to know since there may be an effort to treat the frostbite while still out in the cold. If there is no chance of re-freezing, the skin can be warmed with warm water, wrapped, and the frostbitten individual taken for medical care.

Protect Yourself

The desire to run unencumbered by layers of clothes should not override your better sense. In cold weather or situations in which the temperature may fall, precautions should be taken. Long runs of an hour or more in cool or rainy weather increase risk. Wear layers; cover exposed skin including hands, ears and nose; stay hydrated; and know the symptoms of hypothermia and frostbite.