

Hypothermia

Hypothermia, also commonly known as exposure, is probably the greatest threat to outdoors enthusiasts. Fortunately, since the problem has been studied thoroughly and received much publicity, fewer and fewer deaths have occurred from this major problem.

Essentially, hypothermia is the loss of body heat. When body temperature drops more than three degrees below the usual 98.6 degrees Fahrenheit, certain changes occur, and the lower the body temperature drops, the worse these changes become. Unless reversed, hypothermia can lead to death.

However, as stated above, most outdoors people have been indoctrinated against this, and in most cases it is no more complicated than telling your children to wear warm coats when they go outside in the winter. The problems come when people go on hikes or other outings on a warm, sunny day, and then a cold rainstorm comes and they are not prepared for the cold and wetness.

In addition, hypothermia is also a greater threat when you are exposed to wind. The cooling effect the wind has is called wind chill (Figure 1). Because more body heat is lost when you are wet, many cases of hypothermia occur when people are both wet and exposed to wind.

Thus the importance of having everyone in a camping group always carry rain gear, a warm sweater or jacket, and the other Ten Essentials when leaving the campsite (Figure 2). If you are camping at higher elevations, the weather can turn cold faster than at or near sea level. Many, many campers have never given a thought to hypothermia because they are so well equipped. To repeat, always carrying the proper clothing and rain gear is the best prevention.

U.S. Customary Wind Chill Chart												
Estimated Wind Speed in MPH	Actual Thermometer Reading (F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	Equivalent Temperature (F)											
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-36	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(Wind speeds greater than 40 mph have little additional effect)	LITTLE DANGER* (for properly clothed person)				INCREASED DANGER* (for properly clothed person)				GREAT DANGER*			
	*DANGER FROM FREEZING OF EXPOSED FLESH											

Figure 1



Figure 2

While prevention is relatively simple, except in the case of campers who might be stubborn to the point of stupidity (and you should find someone else to camp with in this case), a great deal of research is still being conducted to test various ways of speeding the recovery of hypothermia victims.

Basically, hypothermia is broken down into several stages (Figure 3). The first stage, which usually sends people in search of a warmer coat or a wool hat, is shivering.

The next stage is violent, uncontrollable shivering and difficulty in speech. Then, unless checked, the shivering decreases and muscles become stiff. The victim makes erratic movements and cannot think clearly.

If the condition is allowed to continue, the victim becomes irrational and loses contact with reality. Unconsciousness is the next step. Death is the last.

As with any response to one's environment, hypothermia affects each individual differently. One camper may be shivering miserably while the other, dressed in identical clothing, will be standing around with coat unzipped, complaining that he or she is too warm. It is not a sign of weakness to get cold easily. It is simply due to the physiological differences among us.

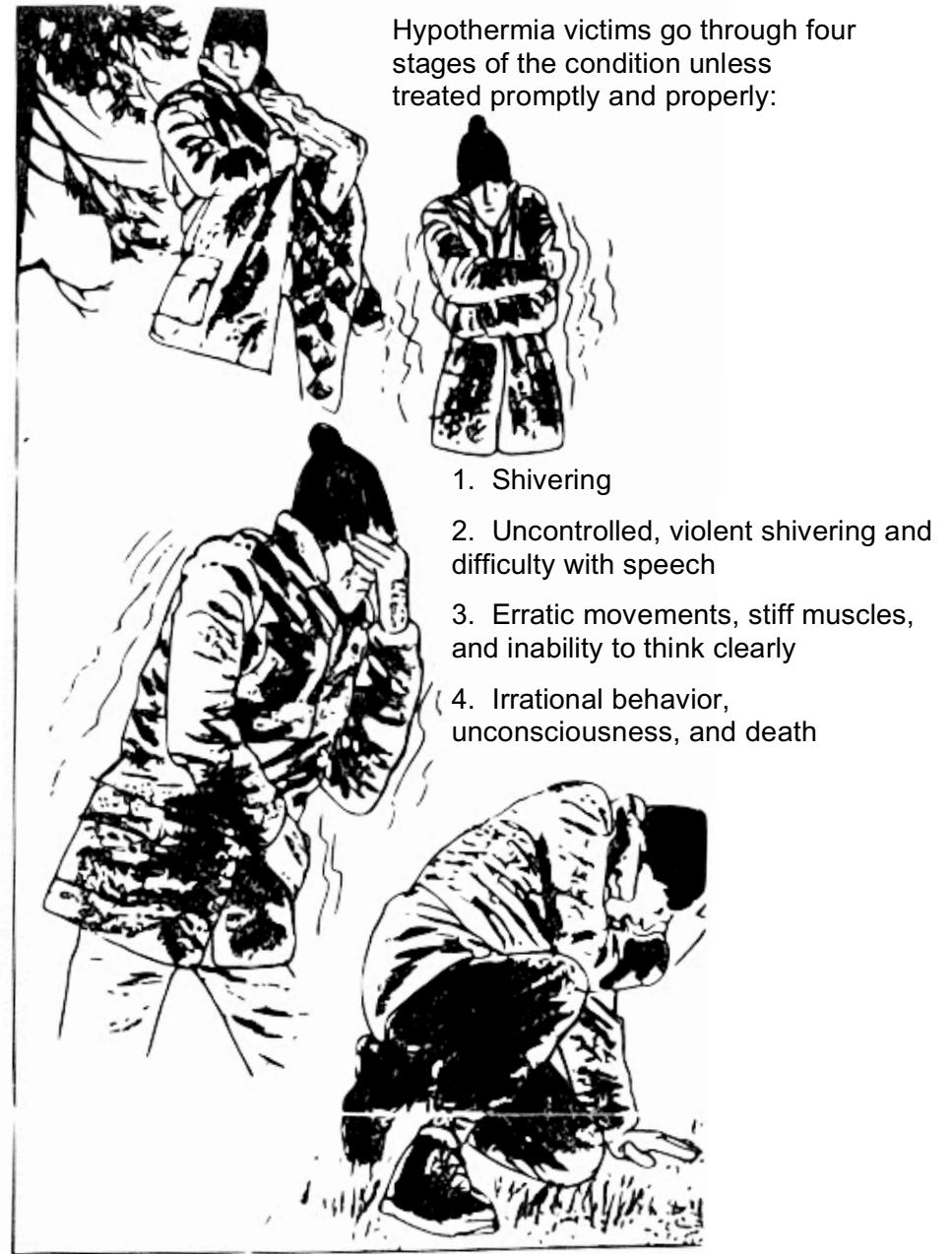


Figure 3

It is essential to act quickly (Figure 4). Watch other members of your group for the first signs of shivering and emotional withdrawal. Get them into dry, warm clothing, feed them hot drinks and high-energy foods, such as chocolate energy bars, and make them walk. Stoke up the fire. And remember that this is no time to tease or ridicule the sufferer.

Some researchers on the subject say it is best to keep the chilled person moving about, building up body heat with warm drinks (nonalcoholic) and energy-producing foods, and making the body restore its own internal heat. Most researchers say this is the most important part of the recovery process: to help the body restore its own heat by exercises, warm liquids, and high-energy foods.

Barring dunkings in cold water, few campers will suffer from the more advanced stages of hypothermia if they follow the basic rules of dressing properly for the weather conditions.

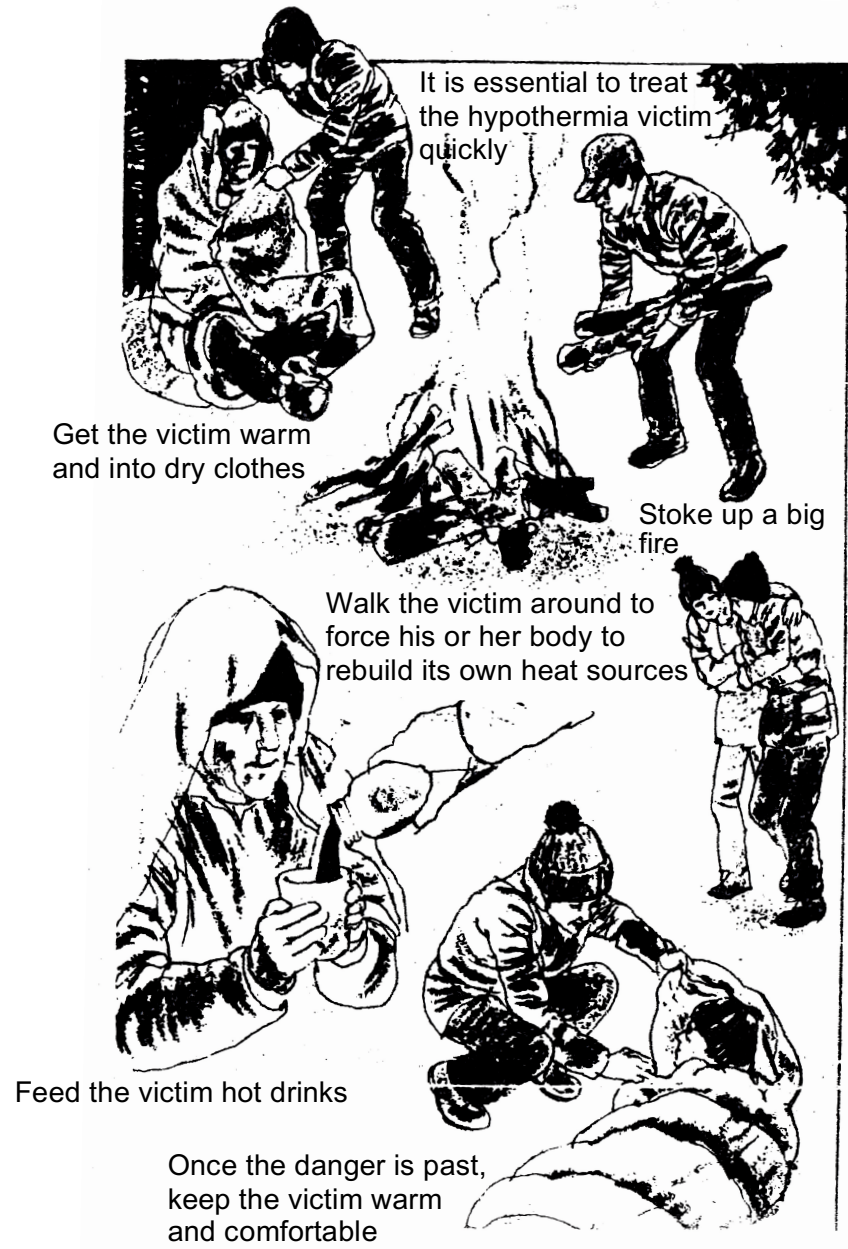


Figure 4