

How to Do It »

HYPOTHERMIA

Prevent, recognize, and treat this backcountry threat



Photo by Abby Wolfe.

Additional Resources

- *Medicine for Mountaineering*, The Mountaineers Books
- Wilderness Medicine training, including Wilderness First Aid (WFA) and Wilderness First Responder (WFR)

Tom Milne

Tom is a wilderness EMT and mountain guide who has run expeditions from the Amazon to Antarctica. He currently works for Remote Medical International.

Tom can be reached at tmilne@remotemedical.com.

Cool to cold temperatures, light precipitation, exposure to wind, extended time outside. It sounds just like a fall or winter hike in the Cascades! Unfortunately, these descriptors also characterize ideal conditions for hypothermia.

Hypothermia is a fairly common condition for mountain travelers. Mild hypothermia is a discomfort, but it's dangerous in that it can progress rapidly. Left untreated, it can lead to shock and it can be fatal. It's important to know how to prevent hypothermia, how to identify if someone is hypothermic, and how to treat that person.

As a mountain guide, I focus most of my efforts against hypothermia in the prevention stage. Like dehydration, it's much easier either to not allow it to happen, or to catch it early.

To understand prevention, it's best to know what causes hypothermia:

- Inadequate protection from exposure
- Lack of proper hydration and nutrition
- Improper planning for the activity or the conditions

When one is out exercising in cool weather, if the exercise rate is high enough and breaks are short, the body will keep itself warm (provided there is enough fuel and water on board). But down time due to unexpected delays, extended time out due to conditions or human factors, and lack of extra food and clothing are common situations that heighten risk of exposure. Hypothermia is often a secondary problem that arises after a separate issue, such as a twisted ankle or busted gear.

Look at the weather forecast and plan accordingly. Regardless of the forecast, if you will

be in mountainous terrain, having extra layers, food and water is always a good idea. I carry a very lightweight bivy sack as well. It only takes up a little space, but could be a lifesaver.

If someone in your group ends up with serious hypothermia, it's a true "stop and fix" situation. Unfortunately, in doing so you are putting more of the group at risk due to extended exposure to the same conditions. Picture a group huddled around a team member in the cold rain, on a windy mountain ridge with fading light.

Always remember that for the hiker, prevention is your first line of defense against hypothermia.

Preventative Steps

- Hydration and nutrition. Have extra snacks and water, and keep them handy.
- Proper clothing. Remember that "cotton kills."
- Proper layering. Know how and when to make adjustments.
- Good rest management. Pick rest stops that are sheltered, encourage eating and hydration at each stop, but keep break times short.

Even despite good planning, sometimes the best intentions don't pan out. Or, you may come across a hiker from another party who you may suspect is in trouble. What are the signs to look for?

Signs & Symptoms of Mild Hypothermia

- The "Umbls": stumbles, mumbles, grumbles, fumbles
- Shivering
- Changes in personality, especially quiet
- Body temperature that is lower than normal, but usually above 90 to 92 degrees F

Signs & Symptoms of Severe Hypothermia

- Body temperature below 90 degrees F
- No longer shivering, severe lack of coordination
- Incoherence
- Paradoxical undressing

Treatment of Mild Hypothermia

- Get out of areas of exposure
- Add insulating clothing layers
- Replace wet base layers with dry ones
- Exercise in short bursts to generate heat
- Treat dehydration and ensure that adequate energy is on board

Treatment of Severe Hypothermia

• A severely hypothermic patient is in a critical situation. Due to the potential for ventricular fibrillation, they must be treated very carefully. The best treatment involves protection from the elements and rewarming on the spot. ♦