

Guide for Camping in Cold Weather Environments

Two Types of Cold:

Wet Cold: Temperature down to 14° F. (ground freezes at night and thaws during the day)
Dry Cold: Temperature below 14° F. (ground is always frozen)

Dealing with your Cold Weather Clothing:

Keep It Clean
Avoid Overheating
Wear It Loose in Layers
Keep It Dry

First Aid Points:

Dehydration:

Signs: First indicated by dark color of urine, followed by: slow motion, no appetite, sick Stomach, drowsiness, and higher temperature, followed by: dizziness, dry mouth, Tingling, and inability to walk.

Prevention: Drink plenty of liquids and use a normal amount of salt on your food. Do not Use alcohol.

Frostbite:

Signs: Uncomfortable sensation of coldness followed by numbness. There may also be Tingling, stinging, or aching sensations even cramping pain. The skin initially Turns red, then pale gray or waxy white. Frostbite can be classified by light or (superficial) or deep.

Prevention: Wear sufficient clothing for protection against cold and wind. Face should Also be protected against high winds. Keep body dry, and avoid perspiration By taking outer layer of clothing off when doing heavy work. Exercise Fingers, face, and toes during times of inactivity. Use buddy system to watch For signs.

First Aid: Light Frostbite: Cover area affected with warm hands or in armpits. Place toes On buddy's stomach. Be prepared for pain when thawing occurs.

Deep Frostbite: Evacuate to aid station or hospital by the quickest means Possible. To do not rub, bend, or massage any part of body. Do not walk on affected feet.

(In both cases, do not expose affected area to open fires.)

Trench Foot:

Signs: Foot and toes are pale and feel numb, cold, and stiff. Walking becomes difficult. If action is not taken the foot will swell and become painful. In extreme cases, Amputation may become necessary.

Prevention: Feet should be kept dry by wearing waterproof footgear. Socks and boots Should be cleaned daily. Foot powder should be applied when dry socks are Being put on.

First Aid: Foot should be handled gently. It should not be rubbed or massaged. The foot Washed with soap and water, dried, elevated, and allowed to be exposed to Room temperature. Do not walk on foot.

Snow Blindness:

Signs: Eyes feel gritty, may have pain in them. It will hurt when you move them.

Prevention: Wear sunglasses or sun goggles. If that is not available use black paint under Your eyes.

First Aid: Blindfold victim and keep in low-lit area for several days until pain is gone.

Hypothermia:

Signs: Confusion, Bizarre behavior, and withdrawal from group interaction. Victim may become unconscious with nearly undetectable breathing and pulse.

Prevention: Wear water-proof clothing items and footgear. Ensure body does not become Wet or cold.

First Aid: Evacuate to aid station or hospital. Prevent further cold exposure. Remove wet Clothing and rewarm by covering with blankets or sleeping bags.

Carbon Monoxide Poisoning:

Signs: Start with headache, dizziness, yawning, and may be sick to stomach. Later Your heart will throb or flutter. This may lead to death, get outside fast and stay Warm.

Prevention: Ensure all engines, heaters, and stoves are properly ventilated.

First Aid: Evacuation to Medical hospital if victim is not breathing. Begin mouth to Mouth resuscitation.

Individual Mobility:

Skis:

Afford greater speed than foot moving over open areas of land and trails.

Snowshoes:

Afford greater speed than foot but not then skis. Better for forested areas than Skis.

How Your Body Loses Heat

Conduction: Through the ground and anything you touch

Radiation: Into the air

Convection: Wind blows cold air past your skin, increasing evaporative heat loss.

Respiration: You breath in cold air, heat it up, and breath it out.

Evaporative: See phase changes of water.

Phase Changes of Water

Solid to liquid and liquid to vapor. It takes as much energy to melt water as it does to heat the water from freezing to 112 degrees F. It takes 600 calories to evaporate one liter of water at boiling point. When water is colder, it takes more. When you eat snow, your body has to melt it, then heat it to 98.6° when you melt snow for water, your stove/fire has to melt it, then heat it.

“It’s easier to stay warm than get warm. It’s easier to stay dry than get dry.”