

Appendix D- Hazards of Extreme Cold

Hazards of Extreme Cold

Exposure to the cold can be hazardous or even life-threatening. Extremities such as the ears, nose, fingers and toes lose heat the fastest. Exposed skin may freeze, causing frostnip or frost bite. In extreme conditions or after prolonged exposure to the cold, the body core can also lose heat, resulting in hypothermia.

If any persons are observed or suspected of exhibiting signs or symptoms of cold stress, immediately summon assistance, render first aid utilizing on-site resources and seek medical attention as applicable.

Cold Related Illness	Cause	Symptoms	Treatment	Prevention
Frostnip	A mild form of frost bite, only the skin freezes.	Skin appears yellowish or white but feels soft to the touch, painful burning or tingling sensation.	Bring person indoors, remove wet clothing, warm chilled body parts using warm water or body heat (do not rub or massage the area, or use heating pads/ radiators/ fire places). Seek medical if sensation does not return or signs of frostbite/ hypothermia. Do not re-expose area to the cold.	Cover exposed skin Dress warmly in layers of loose, dry clothing with a wind resistant outer layer Wear a coat, hat, mittens or insulated gloves, scarf, necktube or face mask, socks and insulated waterproof footwear
Frostbite	Freezing of body tissue (skin and underlying tissue).	Skin appears white and waxy and is hard to the touch. No sensation, area is numb.	GET MEDICAL ATTENTION. Do not walk on frost-bitten feet. Do not rub or massage the area. Remove anything that may restrict blood flow to the area, thaw the area using warm water or body heat (only thaw if you are sure the area will not freeze again). Apply loose dry dressing to the skin, leaving blisters intact. Elevate any thawed extremities above the level of the heart. Provide fluids.	Stay dry Keep active Take breaks in warm places/ indoors
Hypothermia	A potentially dangerous drop in body temperature, usually caused by prolonged exposure to cold temperatures.	Low body temperature (below 37°C), shivering, cold to the touch, slow/weak pulse, confusion and or memory loss, loss of muscular control/ coordination, slow shallow breathing, pale skin, low energy, drowsiness or exhaustion, slurred or mumbled speech, unconsciousness.	GET MEDICAL ATTENTION. Get the person indoors. Lay the person down and avoid rough handling. Gently remove wet clothing. Warm the person gradually and slowly.	