**Winter Travel Course**

**Cold Weather Ailments**

**Snow blindness**

* **Ultraviolet radiation. (Atmosphere is thinner). Could cause permanent damage.**
* **Sunburned cornea & surface of the eye. (Read quote).**
* **UVA sunglasses, 90% with side shields.**
* **Cover with sterile dressing to prevent eye movement.**

**Sunburn**

* **Sun block. (SPF 15-min.). Atmosphere is thinner at altitude-blocks less UV.**
* **Hats, scarves/handkerchiefs. (Watch out for cloudy days).**
* **Long sleeved shirts. Tetracycline & oral medicine for diabetes can increase sun sensitivity & burn.**

**Frostbite**

* **Constriction of surface blood vessels. Blood from extremities is drawn to warm core.**
* **Brain, heart, lungs. Freezing injuries to blood vessels & surrounding tissues.**
* **Hat.**
* **Mittens.**
* **Hands, feet, ears & nose. Superficial to severe-dull, pale or waxy.**
* **Warm by placing frostbitten part against warm skin.**

**Dehydration**

* **Perspiration. More subject to chilling. Can lead to hypothermia.**
* **1 liter every 2 hours. (Minimum).**
* **Don’t wait until you feel thirsty. Electrolyte imbalance-fatigue.**
* **Lack of water can cause dizziness.**

**Blisters**

* **Hotspots. (Tape)**
* **Moleskin cut into a doughnut shaped cushion.**
* **Dry socks.**
* **Water resistant boots.**

**Mechanisms of heat loss**

* **Conduction-Direct contact. (Sitting on cold ground, snow).**
* **Convection-Wind chill or moving water.**
* **Radiation-Transfer of heat from the body.**
* **Evaporation-Perspiration, up to 20 percent of heat loss.**

**Hypothermia**

* **Most deaths occur in the 30-50F degree range.**
* **Mild shivering, goose bumps, cold, difficulty using hands.**
* **Body temperature falls below 95F to 93F. Uncontrollable shivering.**
* **Below 92F to 90F shivering stops.**
* **Impairs mental & physical ability.**
* **Umbles: Stumble, Mumble, Bumble, Fumble Moderate-slurred speech.**
* **Irrational behavior.**
* **Severe-shivering stops, victim often feels “warm,” unresponsive.**
* **Exposed skin is very cold and may be blue.**

**Prevention of Hypothermia**

* **Warm up with increased exercise, drink warm drinks, and change wet clothes.**
* **Good boots, sealed with snow-seal, gaiters, extra socks.**
* **Wear a hat; remember-when your feet are cold, put on a hat.**
* **Dress in layers of fleece or wool. (No cotton).**

**What is the opposite of Hypothermia?**

**Can it occur in winter conditions?**

**How to avoid?**

**Other Medical conditions**

* **Inform trip leader before outing (in private) if you have any medical conditions.**
* **Be physically prepared.**