DEPARTMENT OF THE ARMY
BRAVO COMPANY, TRAINING SUPPORT BATTALION
UNITED STATES ARMY SOLDIER SUPPORT INSTITUTE
10000 HAMPTON PARKWAY
FORT JACKSON, SOUTH CAROLINA 29207-7025

REPLY TO ATTENTION OF:

ATSG-SB-B 27 October 2009

MEMORANDUM FOR RECORD

SUBJECT: POLICY STATEMENT #15 Prevention of Cold Weather Related Injuries

1. References;

a. AR 385-10, 23 August 2007, The Army Safety Program

b. TRADOC Regulation 350-6, Appendix H-11, 08 May 2007, Prevention of Heat and Cold Casualties

c. FJ Regulation 350-14, 14 September 2006, Cold-Weather Casualties and Injuries

d. SSI Commander's Safety Policy Memorandum # 8, 26 October 2003

2. Mission. Our mission, as leaders, is to prevent cold weather related injuries through sound risk management techniques and vigilant supervision.

3. Background.

a. Winter temperatures in South Carolina have been and can be below 32º F at which point freezing can occur, especially with the wind chill factor.

b. During the 2007-2008 cold weather season, the Armed Forces Health Surveillance Center (AFHSC) reported 238 cold injury cases among active duty Soldiers of which 50% were frostbite, 29% unspecified, 11% immersion foot, and 10% hypothermia. Hypothermia causes over 650 deaths per year in the U.S. civilian population. **Be Aware, Stay Alert!**

4. Definitions and Symptoms of Cold Weather Injuries.

a. **Chilblain:** Swollen, red skin (or darkening of the skin in dark-skinned soldiers). Tender, hot skin, usually accompanied by itching caused by repeated exposure of exposed skin for prolonged periods from 20°- 60°F with high humidity (for those not acclimated to the cold weather).

b**. Hypothermia:** Shivering may or may not be present. Drowsiness, mental slowness, lack of coordination that could progress to unconsciousness, irregular

heartbeat, and death caused by prolonged cold exposure and body-heat loss. This may occur at temperatures above freezing, especially when a person's skin or clothing is wet.

c. **Frostbite**: Numbness in affected area with tingling, blistered, swollen, or tender areas. Pale, yellowish, waxy-looking skin (grayish in dark-skinned soldiers). Frozen tissue that feels wooden to the touch caused by freezing of exposed skin, such as fingers, toes, ears, and other facial parts and/or exposure of skin to metal, extremely cool fuel and POL*, wind chill, and tight clothing, particularly boots.

d. **Immersion foot (trench foot):** Cold, numb feet may progress to hot w/shooting pains with swelling, redness, and bleeding caused by prolonged exposure of feet to wet conditions at 32°− 60°F. Inactivity and damp socks and boots (or tightly laced boots that impair circulation) speed onset and severity.

e. **Dehydration:** Dizziness, weakness, blurred vision caused by a depletion of body fluids.

f. **Hyponatremia:** "Water intoxication" or over-hydration is a condition that occurs when there is a less than normal concentration of sodium in the blood, caused by inadequate excretion of water or by excessive water in the circulating bloodstream. Soldiers should not drink more than 1 quart of water per hour. Symptoms of hyponatremia include repeated vomiting, seizures, and high output of clear urine. IN severe cases, the Soldier may develop confusion and lethargy, leading to muscle excitability, convulsions, coma, and possible death. If there is no improvement within 30 minutes and the Soldier doesn't improve to 100% in 60 minutes, then treat the Soldier like a heat casualty. **When in doubt…regardless...Evacuate!**

g. **Snow Blindness:** Pain, red, watery or gritty feeling in the eyes caused by burning of the cornea of the eye by exposure to intense UV rays of the sun in a snow-covered environment.

h. **Carbon Monoxide Poisoning:** Headache, confusion, dizziness, excessive yawning and/or cherry red lips and mouth (in light skinned individuals); grayish tint to lips and mouth (in dark skinned individuals); unconsciousness caused by replacement of oxygen with carbon monoxide in the blood stream from burning fuels without proper ventilation.

5. Guidance.

a. Soldiers assigned or attached to B.CO, TSB, should drink 1.0 quart of water per hour and no more than 12 quarts of water a day. Our Soldiers must replace electrolytes in

their bodies lost through exercise and sweating. Sports drinks should be served with each meal; it is a good source of electrolytes. Consumption of sports drinks are taken into

account when enforcing water intake guidelines. Teach Soldiers to do a self-check of their hydration levels by observing their urine color and checking it against the posters provided. Urine that is bright/dark yellow or orange indicates low hydration levels. Soldiers with light yellow or clear urine have good hydration levels and should continue drinking fluids regularly. Another good indicator of dehydration is if a Soldier cannot spit easily. Leaders need to ensure Soldiers consume 4500 calories/day/soldier. This is equivalent to three meal packets in Meal-Cold Weather (MCW) or three to four MREs

b. Screen, identify and mark Soldiers as previous cold weather casualties. This includes left running shoe as part of the PT uniform. Check our Soldiers and, if in doubt, mark them in accordance with Fort Jackson Regulation 350-6, Appendix 1, paragraph h(2).

c. Cover exposed skin because it is more likely to develop frostbite. Avoid wet skin (common around the nose and mouth). Inspect hands, feet, face and ears frequently for signs of frostbite. Change into dry clothing at least daily and whenever clothing becomes wet. Wash and dry feet and put on dry socks at least twice daily.

d. During unit coordination meetings, leaders need to war game their procedures for evacuating Soldiers and should discuss the symptoms of Frostbite and Hypothermia. Successive physical events over a week's time can contribute to dehydration in Soldiers. Especially watch Soldiers during road marches and review unit straggler control options during Cardio-Respiratory PT sessions, monitoring the wind chill and coordinating proper uniform. Remember the acronym C-O-L-D when wearing clothing in cold weather (C: Keep it Clean; O: avoid Overheating; L: wear clothing Loose and in Layers; D: keep clothing Dry).

e. Adequate hydration takes time. It cannot be done just prior to an event. Consider pre-hydrating prior to physical training and foot marches.

f. Watch for Soldiers with excessive sweating in relation to other Soldiers conducting the same training. This may indicate the first signs of dehydration. Train Soldiers on the proper use of cold weather clothing.

g. Develop systems to ensure Soldiers are checking their buddies for cold weather related injuries. Consider using the "Buddy Check" card system.

h. Combat Lifesaver Qualified Cadre should start an IV after 911 has been notified when warranted. Sections should have, as a minimum, one (1) combat lifesaver and bag per Division Inventory. During cold weather training, Soldiers who exhibit signs and

symptoms of cold weather injuries must be evaluated by medical personnel.

i. Maintain contact with range control during all training events to include local training areas (i.e. battalion and company) to ensure wind chill temperature is considered and monitored.

j. Company cadre will have trunk radio communication at all training events. This is to facilitate evacuation in case of an emergency.

6. Emergency Communication.

a. Dial 911 to evacuate Soldiers. Ensure to ask for the Fort Jackson Emergency Services when using a cell phone on post.

b. If land line is not available, contact Range Control via trunk radio (i.e. PT, FM's, FTX,)

c. Ensure company base stations are properly manned and operational to facilitate communications with all companies executing training.

d. Leaders need to war game straggler control and communication with all companies executing training.

7. Training. Units will conduct cold weather related injury prevention training annually. Ensure new Soldiers receive this training within 30 days of in-processing. Focus on prevention, identification of symptoms and first aid procedures. During the winter season, our primary concern at Fort Jackson is the prevention of cold weather related injuries.

8. **BOTTOM LINE:** If a Soldier displays symptoms of a cold weather related injury such as hypothermia or hyponatremia, etc., do not hesitate to call 911 and evacuate to a medical facility. If in doubt, evacuate. A situation can quickly become life threatening if a Soldier is suffering from hypothermia or hyponatremia. Soldiers are an important asset; let's do our best to prevent cold weather related injuries.

9. ***One Team, One Mission!***

PAUL A. NOCE
CPT, AG
Commanding