Cold Weather/Wind Chill Guidelines

1. Exposure to severe cold weather is not only uncomfortable for athletes, but it can potentially impair performance and even become life threatening. Conditions created by cold weather exposure include frostbite and hypothermia. Wind chill, which is the perceived decrease in air temperature felt by the body on exposed skin due to the flow of air, can impair performance when muscle temperature declines. When temperature or wind-chill (which is lower than actual temperature) reaches 25° F, frostbite can occur in 30 minutes or less. Hypothermia frequently occurs at temperatures above freezing. A wet and windy 30-50 degree exposure may be as serious as a sub-zero exposure.
2. Frostbite is the freezing of superficial tissues, usually of the face, ears, fingers, and toes. Hypothermia, a significant drop in body temperature, can lead to profound exhaustion and energy depletion. The resulting failure to the temperature-regulating mechanisms constitutes a medical emergency.
3. Precipitation can have an added effect on body temperature. When the body and clothing are wet (whether from sweat, rain, snow, or immersion), the cooling is even more pronounced due to evaporation of the water held close to the skin by the wet clothing.
4. Clothing is one of the most important aspects of keeping the athlete's body warm. Athletes should dress in layers and try to stay dry. Layers can be added or removed depending on temperature activity and wind chill. Moisture, whether from perspiration or precipitation, significantly increases body heat loss. Athletes should layer themselves with wicking fabric next to the body, followed by lightweight pile or wool layers for warmth. Athletes should use a wind-block garment to avoid wind chill during workouts. Heat loss from the head and neck may be as much as 50% of total heat loss; therefore, the head and neck should be covered during cold conditions. Other extremities should be covered at all times to protect from the wind chill.
5. Also, coaches and athletes should be aware that hydration is important during cold weather activity. Cold exposure/activity requires similar hydration to room temperature; however, the thirst reflex is not activated. It is recommended that athletes make concerted efforts before and after practice to hydrate. Cold exposure/activity requires more energy from the body therefore an additional calorie intake may be required.
6. Recognizing early signs of cold-induced stress may prove to be important in preventing cold weather-related injuries. The following signs and symptoms are considered to be early warning signs:
    a. Shivering
    b. Abnormal sensation in the extremities (e.g. numbness, pain, or burning sensation)
    c. Disorientation
    d. Slurred speech
7. Athletic Trainers, administrators and coaches should regularly check the temperature/wind chill. The following precautions will be in effect for all outdoor practices and team workouts. Games will be governed by game officials and NCISAA rules and regulations. Athletic trainers should encourage proper warming apparel and use of sideline warming devices, if available.

    a. **Precipitation Conditions** (Includes rain, sleet, and/or snow)

TABLE 1:	

Wind Chill Factor 36°-50°	● Be aware of the possibility of cold-related injuries. ● Outside participation allowed with appropriate attire.
Wind Chill Factor 33°-35° F	● 45 minutes of outside exposure than 20 minutes inside a gym or locker room (may return outside after 20 minute warm-up period) ● Maximum of 90 minutes outside exposure ● Keep clothing dry, particularly socks, gloves. ● Athletes must be dressed in layers with extremities covered.
Wind Chill Factor 32° F or lower	● All practices will be inside. ● No outside exposure

b. **Dry Conditions** (No precipitation)

TABLE 2:	
Wind Chill Factor 32°-50°F	● Be aware of the possibility of cold-related injuries.
Wind Chill Factor 26-32° F	● 45 minutes of exposure then 20 minutes inside gym or locker room (may return outside after 20 minutes) ● Maximum outside exposure time of 90 minutes ● Athletes must be in layers with extremities covered.
Wind Chill Factor 15°-25°F	● 30 minutes of exposure/20 minute warm-up period inside gym or locker room/30 minutes of exposure ● Maximum outside exposure time of 90 minutes ● Athletes must be dressed in warm-ups with extremities covered. ● Wet clothing must be changed during the warm-up period.
Wind Chill Factor 15° F or lower	● All practices will be inside. ● No outside exposure

Wind Chill Chart