ACPS Athletic
Cold Management Guidelines
2019 - 2020
MONITORING COLD WEATHER

- Weather should be monitored by designated athletic department personnel, Athletic Trainer if present.
  - Cold weather is defined as any temperature that can negatively affect the body’s thermoregulatory system.
- Temperature, wind speed, and wind chill should be monitored.
  - Wet and windy conditions will reduce body temperature 3-5 times quicker.
- Athletic department personnel will use a Wind Chill Index Chart (chart 1) as a measurement for weather situations and make modifications to activities accordingly (table 1).
  - All temperature and wind speed measurements will be taken using the school's location on the Weather Channel website.
  - All activity modifications will be announced and communicated by athletic department personnel by 3:00 on the day of the event.

CHART 1: NWS WIND CHILL INDEX CHART

<table>
<thead>
<tr>
<th>Wind (mph)</th>
<th>40</th>
<th>35</th>
<th>30</th>
<th>25</th>
<th>20</th>
<th>15</th>
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<td>31</td>
<td>25</td>
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</table>

Frostbite Times

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})

Where, T = Air Temperature (°F) V = Wind Speed (mph) Effective 11/01/01
TABLE 1: ACTIVITY MODIFICATION

<table>
<thead>
<tr>
<th>TEMPERATURE/WIND CHILL</th>
<th>MODIFICATION</th>
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</thead>
<tbody>
<tr>
<td>25°F-16°F</td>
<td>Provide additional protective clothing, cover as much exposed skin as practical and provide opportunities and facilities for re-warming.</td>
</tr>
<tr>
<td>15°F- 1°F</td>
<td>Outside participation is limited to 30 minutes followed by a 10 minute warming period inside an enclosed structure before returning outside. Athletes must be aware of risk for cold injury and cover all exposed skin as possible.</td>
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<tr>
<td>0°F and below</td>
<td>No practice or conditioning session may take place outside.</td>
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</table>

** These guidelines may be modified for athletes in continuous motion such as long-distance runners. All athletes participating in outdoor activities in temperatures listed above are required to wear hats, gloves, pants, and long-sleeved tops.

*** All post-season event decisions are at the discretion of the VHSL and athletic department personnel.

EVENT MANAGEMENT
- Provide adequate food and fluids
- Provide warming facilities, if needed
- Provide additional clothing and equipment for varying conditions
- Implement exposure control and re-warming schedules as needed.
- Monitor environmental conditions and athletes regularly.

GENERAL SIGNS AND SYMPTOMS OF COLD INJURY
- Uncontrollable shivering
- Swollen extremities
- Confusion
- Fatigue
- Blurred vision
- Slurred speech
- Headache
- Dizziness
- Red or painful extremities
- Numbness/tingling of skin

SEEK MEDICAL ATTENTION IMMEDIATELY IF ANY OF THE FOLLOWING IS TRUE

Non-Emergency:
- The person’s fingers, toes, nose, or ears are numb
- Affected areas appear yellow-white or patchy blue

Call 911 if the victim is experiencing:
- Exceptionally cold skin
- Drowsiness, disorientation, or loss of consciousness
- Loss of muscle control
COMMON COLD INJURIES

Hypothermia

- Core body temperature below 95°F
  - Symptoms include:
    - Shivering
    - Impaired motor control
    - Decreased heart rate
    - Impaired mental function
    - Lethargy, amnesia
    - Pale, cold face and extremities
    - Slurred speech

- Treatment: Remove wet clothing, warm with dry insulating blankets, cover the head, and get to a warm environment. Provide warm beverages, avoid friction, and initially avoid warming extremities.

Frostnip/Frostbite

- Most susceptible body areas include fingers, toes, earlobes, and nose
  - Symptoms include:
    - Dry/waxy skin
    - Redness or mottled gray skin
    - Skin feels hard
    - Swelling
    - Limited movement
    - Transient tingling or burning

- Treatment: Re-warm slowly using warm water (avoid temperatures greater than 98°F to 104°F). If re-warming with water cannot be performed the affected area should be protected from further damage and referred to a medical facility.

Chillblain

- An exaggerated or uncharacteristic inflammatory response to cold exposure. Chillblain can occur with exposure to cold, wet conditions for more than 60 minutes in temperatures less than 50°F.
  - Symptoms include:
    - Red papules
    - Swelling
    - Tenderness
    - Itching
    - Burning

- Treatment: Remove wet or constrictive clothing. Wash, dry, and elevate the affected area. Cover the area with warm, loose, dry blankets or clothing.