Cold exposure can be uncomfortable, impair performance and even become life threatening. Conditions created by cold exposure include frostbite and hypothermia. Wind chill can make activity uncomfortable and can impair performance when muscle temperature declines. Frostbite is the freezing of superficial tissues, usually of the face, ears, fingers, and toes. Hypothermia a significant drop in body temperature occurs with rapid cooling, exhaustion and energy depletion. The resulting failure to the temperature-regulating mechanisms constitutes a medical emergency.

Hypothermia frequently occurs at temperatures above freezing. A wet and windy 30-50 F degree exposure be as serious as a subzero exposure. For this reason Frisco ISD is developing cold weather guidelines using the wind chill factor instead of the ambient temperature. See website for a wind chill factor chart.

Wind speed interacts with ambient temperature to significantly increase body cooling. When the body and clothing are wet (whether from sweat, rain, snow, or immersion), the cooling is even more pronounced due to the evaporation of the water held close to the skin by the wet clothing.

Clothing is one of the most important parts of keeping the athlete’s body warm. Athletes should dress in layers and try to stay as dry as possible. Layers can be added or removed depending on temperature, activity and wind chill. 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 for the head and neck should be covered during cold conditions. Other extremities should be covered at all times to protect from the wind chill.

**Cold Exposure:**
- Breathing of cold air can trigger an asthma attack (bronco spasm)
- Coughing, chest tightness, burning sensation in throat and nasal passage
- Reduction of strength, power, endurance, and aerobic capacity
- Core body temperature reduction, causing reduction of motor output

**Cold Recognition:**
- Shivering is a means for the body to generate heat
- Excessive shivering contributes to fatigue, loss of motor skills
- Numbness and pain in fingers, toes, ears, and exposed facial tissue
- Drop in core temperature; athlete exhibits sluggishness, slowed speech, disoriented

**General Guideline:**
- Wind Chill Factor will be assessed prior to practices
HIGH SCHOOL ATHLETIC COLD WEATHER GUIDELINES: PRACTICE PROTOCOL

Wind Chill Factor 33-35° F with Precipitation:
- 35 min. of exposure/20 min. inside gym (may return outside after 20 min.)
- Dry clothing (socks, gloves)
- Athletes must be dressed in warm-up with extremities covered

Wind Chill Factor 31-32° F (Dry):
- 45 min. exposure/15 min. inside gym (may return outside after 20 min.)
- Athletes must be in warm-ups with extremities covered

Wind Chill Factor 32° F or lower with precipitation:
- All practices will be inside
- No outside exposure

Wind Chill Factor 30° F (Dry):
- 30 min. of total exposure to chill factor
- 15 min. inside
- Warm-ups must be worn with all extremities covered at all times

Wind Chill Factor of 25° F or lower:
- No outside practices
- All work must be inside

Junior High Athletic Cold Weather Guidelines:

Wind Chill Factor less than 45° F with precipitation:
- 35 min. of exposure 20/minutes inside gym (may return outside after 20 min.)
- Dry clothing (Socks, gloves)
- Athletes must be dressed in warm-up with extremities covered

Wind Chill Factor less than 35° F:
- All practices inside

Administrative Regulation: Outdoor Competition Cold Weather

Games to be postponed due to cold weather will be determined on a case by case basis by the Frisco ISD Administration.

Postponed games to be re-scheduled will be determined by the Head Coach of that sport as well as the Athletic Director or Assistant Athletic Director. An outside sport game date will be considered for rescheduling if the following occurs:

* Wind chill reaches 25 degrees or less, with precipitation.

* Wind chill is less than 20 degrees, without precipitation.
FISD ATHLETIC DEPARTMENT
HOT WEATHER GUIDELINES

Practice of competition in hot and humid environmental conditions poses special problems for student-athletes. Heat stress and resulting heat illness is a primary concern in these conditions. Although deaths from heat illness are rare, constant surveillance and education are necessary to prevent heat-related problems. The following practices should be observed.

General Considerations for Risk Reductions
1. Encourage proper education regarding heat illnesses (for athletes, coaches’ parents, medical staff, etc.) Education about risk factors should focus on hydration needs; acclimatization, work/rest ratio, signs and symptoms of exert ional heat illnesses, treatment, dietary supplements, nutritional issues, and fitness status.
2. Assure that onsite medical staff has authority to alter work/rest ratios, practice schedules, amount of equipment, and withdrawal of individuals from participation based on environment and/or athlete’s medical conditions.

General Guidelines:
1. Gradual acclimatization of the athlete to hot/humid conditions is a must. We advise that student-athletes should gradually increase exposure to hot and/or humid environmental conditions over a period of 7 to 10 days to achieve acclimatization.
2. Clothing and protective gear can increase heat stress. Dark colors absorb solar radiation, clothing, and protective gear interfere with the evaporation of sweat and other avenues of heat loss. During acclimatization process, student athletes should practice in T-shirts, shorts, socks, and shoes. Rubberized suits should never be worn.
3. To identify heat stress conditions on the field of play, regular measurements including ambient temperature and relative humidity will be taken 30 minutes prior to practice and every 30 minutes throughout practice. The website below includes a heat index table. Use this table to assess the heat index.

http://www.weatherimages.org/data/heatindex.html
4. Unlimited access to drinking water will be provided throughout practices and competitions.

Specific Guidelines
Heat index of less than 100:
- Water breaks every 30-45 min.

Heat index of 100-105:
- Full pads
  - Water breaks every 30 min.
  - Break duration 1 period (5 min.)
- Shorts/shirts/helmets.
  - Water breaks every 40 min.
- Cardiovascular Conditioning: remove helmets.
Heat index of 106-110:

Football
- Full pads
  - Water breaks every 20 min.
  - Practice will not exceed 1 hr. 45 min.
- Shorts/shoulder pads/helmets
  - Water breaks every 30 min.
  - Practice will not exceed 2 hr.
- Athletes allowed to remove helmets while not in contact with drills.
- Cardiovascular Conditioning: remove shoulder pads and helmets.

Cross Country/Men’s and Women’s Track
- Long Distance runners must be directly supervised by coaches at all times.
- Water breaks every 30 min.
- Practice will not exceed 2 hr.
- Track and Field athletes- Water breaks every 30 min.
- Practice will not exceed 2 hr.

Baseball, Softball, Soccer and Tennis
- Water breaks every 30 min.
- Practice will not exceed 2 hr.

Off season Programs
- 45 minutes total of heat exposure with a minimum of 1 water break

Heat Index of 111-115:

Football
- Shorts/Shoulder Pads/Helmets only
  - Water breaks every 20 min.
  - Practice not to exceed 2 hr. total
- Cardiovascular Conditioning duration and intensity decreased.
  - Remove shoulder pads and helmet

Cross Country/Men’s and Women’s Track
- Long Distance runners must be directly supervised by coaches at all times.
- Water breaks every 20 min.
- Practice will not exceed 2 hr.

Baseball, Softball, Soccer and Tennis
- Water breaks every 20 min.
- Practice will not exceed 2 hr.

Off season Programs
- 30 minutes total of heat exposure with a minimum of 1 water break
Heat Index of 116-117:
  Football
  - Shorts/Shirt/Helmets only
    - Water breaks every 20 min.
    - Practice not to exceed 1 hr. 30 min. total
  - NO Cardiovascular Conditioning
  Cross Country/Men’s and Women’s Track
  - Long Distance runners must be directly supervised by coaches at all times.
  - Water breaks every 15 min.
  - Practice will not exceed 1 hr. 30 min..
  Baseball, Softball, Soccer and Tennis
  - Water breaks every 20 min.
  - Practice will not exceed 2 hr.
  Off season Programs
  - 30 minutes total of heat exposure with a minimum of 1 water break.

Heat Index of 118-120:
  All sports:
  - No outside practice will be allowed in any sport

Junior High Athletics:

Guidelines to follow:

Heat index of less than 100:
  - Water breaks every 30-45 min.

Heat index of 100-106:
  - Full pads
    - Water breaks every 20 min.
    - Practice will not exceed 1 hr. 30 min.
  - Shorts/shoulder pads/ helmets
    - Water breaks every 30 min.
    - Practice will not exceed 1 hr. 45 min.
  - Athletes allowed to remove helmets while not in contact with drills.
  Cardiovascular Conditioning: remove shoulder pads and helmets. Decrease duration and intensity.

Heat index of 106-110:
  Football
  - Shorts/Shoulder Pads/Helmets only
    - Water breaks every 15 min.
    - Practice not to exceed 1 hr. 30 min. total
    - No cardiovascular conditioning.

No outside practice when temperature exceeds 109° F and/or heat index is 111° F.
<table>
<thead>
<tr>
<th><strong>Air Quality Index</strong></th>
<th><strong>Guidelines to Follow</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Good: <strong>Code Green</strong></td>
<td>No action taken</td>
</tr>
<tr>
<td>Moderate: <strong>Code Yellow</strong></td>
<td>No limit to exercise, but watch those that may be affected: Asthma</td>
</tr>
<tr>
<td>Unhealthy for Sensitive Groups: <strong>Code Orange</strong></td>
<td>2 ½ hr practice limit, but watch those that may be affected: Asthma</td>
</tr>
<tr>
<td>Unhealthy: <strong>Code Red</strong></td>
<td>2 hr practice limit, but watch those that may be affected: Asthma</td>
</tr>
<tr>
<td>Very Unhealthy: <strong>Code Purple</strong></td>
<td>1 ½ hr practice limit, but watch those that may be affected: Asthma</td>
</tr>
</tbody>
</table>