Efficient Warm Up and Environmental Health Factors For Officials

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Why Should We Warm Up?

- **Injury Prevention**
- **Increases**
  - Heart Rate
  - Blood Flow
  - Joint Mobility
- **Mental Preparation**
Dynamic Stretching

- **Moving** through a range of motion (ROM) while you stretch
  - **Compound movements** – involving more than one joint
  - Mimic movements associated with the activity

- Assist with increasing:
  - **Heart Rate**
  - **Blood Flow**
  - **Joint lubrication (synovial fluid)**

- Done **before activity**
Bodyweight Dynamic Warm-Up

Complete 1 round of this bodyweight circuit before your workout to prepare your body for strength training.

- Quadruped Reaches x 6-10 reps each side
- Quadruped Thoracic Rotations x 6-10 reps each side
- Pause Hip Bridge (2 sec) x 6-10 reps
- Side-Lying Hip Abduction x 6-10 reps each side
- Hollow to Superman x 6-10 reps each
- Prone Fly x 20 reps
- BW Push-up x 6-10 reps
- Mountain Climbers x 6-10 reps each side
- BW Lateral Lunge x 6-10 reps each side
- BW Reverse Crossover Lunge x 6-10 reps each side
- Jumping Jacks x 20 reps
- Burpee x 6-10 reps

More like this available at voltathletics.com

Squat Mobility Primer

Complete 1 round of this circuit before your workout to prime your hips, knees, and ankles for squating.

- Lunge Position Mobilization
  - 30 sec each side
  - Gently push knees out to side
  - Use exhale to increase stretch
- BW Lunge to Twist
  - 6-8 reps each leg
  - Step into lunge, then twist both ways
  - Pause briefly in center position
- BW Prisoner Squat
  - 10 reps
  - Keep torso upright
  - Sink hips into full squat
- Band Lateral Walk
  - 10 steps one direction, then switch
  - Elevate band in hips and knees
  - Do not allow leg in band
- Band Good-morning
  - 10 reps
  - Push hips back, keep back flat
  - Squeeze glutes to stand up
- Band Squat
  - 10 reps
  - Push knees out against band
  - Drive through heels to stand up
- DB Lateral Lunge (5-sec hold)
  - 6-8 reps each leg, alternating
  - Big lateral step, bend one knee deeply
  - Hold for 6 full sec at bottom
- DB Goblet Front Squat (15-sec hold)
  - 6-8 reps
  - Hold DB to chest, sink into full squat
  - Hold for 6 full sec at bottom

More like this available at voltathletics.com
Dynamic Warm Up
Lacrosse specific

(US Lacrosse, 2012)
Static Stretching

- **Holding** a position with an elongated muscle for a period of about 5-30 seconds
  - Usually involving one joint at a time

Assists with:

- Increasing Flexibility (muscle/joint)
- Cooling down from an activity
- Flushing muscles of nutrients

Best performed after activity
Static Stretching

- Gastrocnemius
- Soleus
- Psoas
- Hamstrings
- Adductors
- Adductors
- Adductors
- Quadriceps
- Gluteals
- Triceps
- Pectorals
Other options to assist you with warming up

- **Heat Treatment**
  - Hot pack, heated blanket, topical cream, hot bath/shower, heated car seat
  - Use before activity - increase blood flow, loosen muscles up. **Vasodilator**

- **Cold Treatment**
  - Ice, cold bath, ice bucket, topical cream
  - Use after activity/injury - decreases blood flow, reduces inflammation. **Vasoconstrictor**
Environmental Health Factors

East Meadow, NY Monthly Weather

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Cold-Related Injuries

- Hypothermia, Frostbite, Dehydration

**Signs and Symptoms:**
- Numbness, tingling, burning sensation
- Loss of sensation
- Shivering
- Pale skin leading to red, blue, or purple skin coloring
- Skin blistering
Cold-Related Injuries

- Reduce the risk of injury:
  - **Stay Dry**
    - wear wicking fabric close to the body, water resistant/breathable outer layers
  - **Stay Hydrated**
  - Avoid alcohol, caffeine and nicotine
**WIND CHILL PROCEDURES**

Administration of Wind Chill Procedures:
- Feels Like Temperature (Wind Chill) will be checked 1 hour before the contest/practice by a certified athletic trainer, athletic director, or school designee when the air temperature is 39 degrees (Fahrenheit) or lower.
- Download WeatherBug app to your phone or log into [www.weatherbug.com](http://www.weatherbug.com).
- Enter zip code or city and state in the location section of the app or on-line.
- If the Feels Like temperature (wind chill) is 10 degrees or below, the athletic trainer, athletic director, or school designee must re-check the Feels Like (wind chill) at halftime or midway point of the contest. If the Feels Like (wind chill) temperature is -11 degrees (Fahrenheit) or lower, the contest will be suspended.

Please refer to the following chart to take the appropriate actions:

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<th>Full activity. No restrictions</th>
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<td><strong>RECOMMENDED</strong></td>
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<td>Wind Chill Caution: Feels Like Temp (wind chill) above 40 degrees</td>
<td>Stay adequately hydrated. Notify coaches of the threat of cold related illnesses. Have students and coaches dress in layers of clothing.</td>
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<td>Wind Chill Watch: Feels Like Temp (wind chill) 39 degrees to 20 degrees</td>
<td>Stay adequately hydrated. Notify coaches of the threat of cold related illnesses. Have students and coaches dress in layers of clothing. Cover the head and neck to prevent heat loss.</td>
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<td>Wind Chill Warning: Feels Like Temp (wind chill) 19 degrees to 10 degrees</td>
<td>Stay adequately hydrated. Notify coaches of the threat of cold related illnesses. Have students and coaches dress in layers of clothing. Cover the head and neck to prevent heat loss. Consider postponing practice to a time when the Feels Like temp is much higher. Consider reducing the amount of time for an outdoor practice session.</td>
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<td>Wind Chill Alert: Feels Like Temp (wind chill) -11 degrees or lower</td>
<td>No outside activity, practice or contest, should be held.</td>
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**Special Note:** Alpine Skiing will be exempt from this policy and will follow the regulations of the host ski center where the practice or event is being held.

Approved May 1, 2010
Updated July 27, 2016
Heat-Related Injuries


Signs and Symptoms:

- Painful cramps
- Flushed, moist skin
- Nausea, vomiting, dizzy, diarrhea, headache, fatigue, weakness, confusion, anxiety
- Fast/slow, weak pulse (HR)
- Cool, dry skin (heat stroke)
- Blistering on the skin (sunburn)
- Temperature, 98.6 normal, heat stroke > 102
Heat-Related Injuries

- Reduce the risk of injury:
  - **Acclimatization** (10-14 days)
  - Wear **light clothing**, breathable, stay-dry material
  - **Hydrate** (water breaks)
  - **Sunscreen**
  - **Shelter**

- If experiencing heat-related s/s:
  - **Stop activity**, seek shade/shelter, small sips of water, remove restrictive clothing
  - Ice – **neck, arm pits, groin**, cold water immersion if possible
HEAT INDEX PROCEDURES

Administration of Heat Index Procedures:
- Feels Like Temperature (Heat index) or THI using a Wet Bulb indicator on the field will be checked 1 hour before the contest/practice by a certified athletic trainer, athletic director, or school designee when the air temperature is 80 degrees (Fahrenheit) or higher.
- Download WeatherBug app to your phone or log into www.weatherbug.com. Schools may also use a Wet Bulb indicator on the field that will be used.
- Enter zip code or city and state in the location section of the app or on-line or determine the THI by using a Wet Bulb indicator.
- If the Feels Like temperature (heat index) or the Wet Bulb Indicator is 90 degrees or above, the athletic trainer, athletic director, or school designee must re-check the Feels Like temperature (heat index) or Wet Bulb indicator at halftime or midway point of the contest. If the Feels Like temperature (heat index) or Wet Bulb indicator is 96 degrees (Fahrenheit) or more, the contest will be suspended.

Please refer to the following chart to take the appropriate actions:

| Heat Index Caution: Feels Like Temp (Heat Index) or Wet Bulb indicator 80 degrees to 85 degrees | Full activity. No restrictions |
| Heat Index Watch: Feels Like Temp (Heat Index) or Wet Bulb indicator 86 degrees to 90 degrees | Provide ample water and multiple water breaks. Monitor athletes for heat illness. Consider reducing the amount of time for the practice session. |
| Heat Index Warning: Feels Like Temp (Heat Index) or Wet Bulb Indicator 91 degrees to 95 degrees | Provide ample water and water breaks every 15 minutes. Monitor athletes for heat illness. Consider postponing practice to a time when Feels Like temp is much lower. Consider reducing the amount of time for the practice session. 1 hour of recovery time for every hour of practice (ex. 2hr practice = 2hr recovery time). Light weight and loose fitting clothes should be worn. For Practices only Football Helmets should be worn. No other protective equipment should be worn. |
| REQUIRED: Feels Like Temp (Heat Index) or Wet Bulb indicator 96 degrees or greater | No outside activity, practice or contest, should be held. Inside activity should only be held if air conditioned. |
Thank you!

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References


National Strength and Conditioning Association Squat Mobility primer

National Strength and Conditioning Association Body weight dynamic warmup

US Lacrosse Dynamic Warm up video (2012)


New York State Public High School Athletic Association (NYSPHSAA)