



## Socorro ISD Athletic Cold Weather Plan

### Introduction

Cold injuries are a common result of exposure to cold environments during physical activity or occupational pursuits. Many individuals engage in fitness pursuits and physical activity year-round in environments with cold, wet, or windy conditions (or a combination of these), thereby placing themselves at risk of cold injuries. The occurrence of these injuries depends on the combination of 2 factors: low air or water temperatures (or both) and the influence of wind on the body's ability to maintain a normothermic core temperature, due to localized exposure of the extremities to cold air or surfaces (Cappaert et al., 2008).

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 exposure can be as serious as a subzero exposure. For this reason, Socorro ISD developed a cold weather plan using the wind chill factor instead of the ambient temperature. Wind speed interacts with ambient temperature to significantly increase body cooling. When the body and clothing are wet (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 a 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 always be covered to protect from the wind chill (WISD, 2018).

## **Cold Exposure:**

- Breathing of cold air can trigger asthma attack (bronchospasm)
- Coughing, chest tightness, burning sensation in throat and nasal passage
- Reduction of strength, power, endurance, and aerobic activity
- Core body temperature reduction, causing reduction of motor output

## **Cold Recognition:**

- Shivering, 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

## **Notification of temperature**

- Coaches and athletic trainers will obtain weather report from Weatherbug® app or website, using their location set by their GPS or by their location zip code.
- The weather report will be taken at 6:30 am for morning workouts, and 2:00 pm for afternoon workouts.
- The **“Feels Like”** of the day will determine which protocol will be followed.
- **“Feels Like”** readings will be taken before teams leave for competitions, and an hour by hour report will guide our decisions for the event.

## **Enforcement of Policies**

- Head Coach / Athletic Trainers will monitor time of exposure
- Athletic Trainers will report any violations to the Campus Coordinator
- Campus Coordinator will meet with the Head Coach
- Violations of policies will be reported to the Director of Athletics in writing.

## **[Socorro ISD High School Athletic Cold Weather Plan: Practice](#)**

### **“Feels Like” 33 to 35 degrees (W/Precipitation):**

- 35 minutes of exposure/20 minutes inside (may return outside after 20 minutes)
- 35 minutes exposure/20 minutes inside
- Dry clothing (socks, gloves)
- Athletes must be dressed in warm-ups with extremities covered

**“Feels Like” 32 Degree or Below (W/Precipitation):**

- All activities will be inside
- No outside exposure

**“Feels Like” Under 31 to 32 degrees (Dry):**

- 45 minutes exposure/ 15 minutes inside
- Athletes must be in warm-ups with extremities covered

**“Feels Like” 26 to 30 Degree (Dry):**

- 30 minutes of total exposure to chill factor
- 15 minutes inside for re-warming
- Warm-ups must always be worn, extremities covered

**“Feels Like” of 25 degrees:**

- No outside activity
- All work must be inside

**[Socorro ISD Middle School Athletic Cold Weather Plan: Practice](#)**

**“Feels Like” 39 to 45 degrees (W/Precipitation):**

- 35 minutes of exposure/20 minutes inside (may return outside after 20 minutes)
- 35 minutes exposure/20 minutes inside
- Dry clothing (socks, gloves)
- Athletes must be dressed in warm-ups with extremities covered

**“Feels Like” 38 degree or Below (W/Precipitation):**

- All activities will be inside
- No outside exposure

**“Feels Like” 35 to 38 degrees (Dry):**

- 45 minutes exposure/ 15 minutes inside for re-warming
- Athletes must be in warm-ups with extremities covered

**“Feels Like” 31 to 34 degree (Dry):**

- 30 minutes of total exposure to chill factor
- 15 minutes inside
- Warm-ups must always be worn, extremities covered

**“Feels Like” of Below 30 degrees:**

- No outside activity

**Cold Weather Plan—Games**

- Games to be postponed due to cold weather will be determined on a case by case basis by the Director of Athletics. Postponed games to be re-scheduled will be determined by the Head Coach of that sport as well as the Director of Athletics. A game date will be considered for rescheduling if the **“Feels Like”** is below 28.

**School Day Cancellation— Full Day**

- No travel or practice unless approved by the Director of Athletics and the Principal

**School Day Early Dismissal—Deteriorating Weather Conditions**

- Practice must be approved by the Director of Athletics and the Principal
- If approved practices should be over at 5:00pm



## Socorro ISD Athletic Hot Weather Plan

High temperatures can present a dangerous situation for student-athletes and coaches, but with reasonable precautions those situations can be mitigated. The SISD athletic department under the direction of the Athletic Director has adopted the following policies with regards to outdoor activities. The athletic trainers at each high school can be consulted for the official temperature and the proper course of action for each day. Whenever possible, the head coach of any middle school or high school sport and the athletic trainer should consult with each other as early as possible during an individual day for all concerned parties to be notified of possible changes to practice schedules/activities appropriately.

The following policies are the minimum standard for all outdoor activities within the SISD athletic realm. The use of more stringent policies is up to each individual head coach. Outdoor sports include but are not limited to: Football, Cross Country, Baseball, Softball, Soccer, Tennis, Golf and Track.

Campus athletic training staff and head coaches should collaborate prior to each practice to discuss specific conditions and planned activities for practice. Heat should be monitored using any weather app or an outdoor heat stress tracker if available.

When temperatures reach **95-98** degrees or heat index rises to 104 degrees.

- All Outdoor Sports - Practices will include a 5-minute break every 30 minutes of practice in shade if possible. Practice is not to exceed 3 hours total outdoor time. Water should always be available during practice.
- Football - Helmets off during breaks
- Cross Country - Runners should run a course where all athletes if possible, can be viewed by a coach at all times, preferably on campus.

When temperatures reach **99-103** degrees or heat index is between 105-109 degrees.

- All Outdoor Sports – Consider using grass fields if available. Practices will include a 5-minute break every 30 minutes of practice in shade if possible. Practice is not to exceed 2.5 hours total outdoor time. Water should always be available during practice.
- Football - Shorts and shoulder pads for practice should be considered. Helmets and shoulder pads off during breaks.
- Cross Country - Runners should run a course where all athletes if possible, can be viewed by a coach at all times, preferably on campus.

When the temperature is **above 104 up to 106** degrees or heat index is between 110-118 degrees.

- Middle School Athletics - ALL outdoor practices should be cancelled or postponed.

High School

- All Outdoor Sports - Practices will include a 5-minute break every 15 minutes of practice in shade if possible. Practice is not to exceed 1.5 hours total outdoor time. Water should always be available during practice.
- Football - Practices will be in t-shirts and shorts with helmet. Helmets off during breaks.
- Cross Country - Runners should run a course where all athletes can always be viewed by a coach, preferably on campus.

When the temperature reaches **106** degrees, or the heat index is over 119 degrees.

**ALL OUTDOOR PRACTICES SHOULD BE CANCELLED OR RESCHEDULED.**

**THIS POLICY APPLIES FOR ALL PRACTICES. GAMES WILL BE DETERMINED BY DIRECTOR OF ATHLETICS.**

**NOAA's National Weather Service**

**Heat Index**

Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

- Caution
- Extreme Caution
- Danger
- Extreme Danger

## Socorro ISD Lightning Plan

“Lightning is the most consistent and significant weather hazard that may affect interscholastic athletics. Within the United States, the National Severe Storms Laboratory (NSSL) estimates that 100 fatalities and 400-500 injuries requiring medical treatment occur from lightning strikes each year. While the probability of being struck by lightning is extremely low, the odds are significantly greater when a storm is in the area and the proper safety precautions are not followed.”

### A. Chain of Command

- The responsibility for removing athletes from a practice/scrimmage area due to the threat of lightning lies with the athletic trainer.
- In the event the athletic trainer is not present, the head coach or designated assistant coach will assume responsibility.
- The athletic trainer present will be responsible for monitoring the weather and advising the head coach or designated assistant coach on the situation.
- The responsibility for removing athletes from a game area due to the threat of lightning lies with the official, referee or umpire in charge.
- It is the responsibility of the athletic trainer present to inform the official, referee or umpire in charge and the visiting team’s athletic trainer or head coach of the lightning policy.
- It is also the responsibility of the athletic trainer present to monitor the weather and advise the official, referee or umpire in charge on the situation.

### B. Means of Monitoring Weather

- The SISD Athletic training Department utilizes lightning detection device and weather bug app. The devices should be used to determine if the lightning is too close for safe continuation of practice or game events.
- Flash/Bang Method: count the number of seconds which past between a lightning strike (flash) and the following sound of thunder (bang). Take the number of seconds between flash and bang then divide by five, the resulting number is the approximate distance, in miles, from the practice/ game area to the lightning flash. **(Example: 15 seconds would equal 3 miles.)**
- Flash/Bang method will be used in the absence/addition of other detection devices.

### C. Safe Locations from a Lightning Hazard

- Any fully enclosed, substantial building; ideally with plumbing, electrical wiring and telephone service which aid in grounding the building.
- If a substantial building is not available, a fully enclosed vehicle with a metal roof and the windows completely enclosed is a reasonable alternative.
- Cellular or cordless telephones should be used for summoning help during a thunderstorm. They are a reasonably safer alternative to land-line telephones.

#### **D. Unsafe Locations from a lightning Hazard**

- Small structures such as rain or picnic shelters or athletic storage sheds should be avoided during thunderstorms.
- Convertible vehicles and golf carts do not provide a high level of protection and cannot be considered safe from lightning.
- Locker-room shower areas, swimming pools (indoor and outdoor), land-line telephones and electrical appliances are also unsafe due to the possible contact with current carrying conduction.

#### **E. If No Safe Location is Available**

- Find a thick grove of small trees surrounded by taller trees or a dry ditch.
- Stay away from the tallest trees or objects (i.e. light poles, or flag poles), metal objects (i.e. fences or bleachers), individual trees, standing pools of water, and open fields.
- Assume a crouched position on the ground with only the balls of your feet touching the ground, head lowered and cover your ears. **DO NOT LIE FLAT!**
- A person who feels his/her hair stand on end or skin tingle should immediately assume the position described above.

#### **F. Suspension and Resumption of Athletic Activity**

- Suspension of athletic activity should occur when lightning is within **EIGHT** miles or the Flash/Bang ratio reaches forty (40) seconds.
- Flash/Bang can be used in conjunction with the Skyscan, if available, and local weather reports to make a sound decision.
- Resumption of athletic activity should not occur until thirty (30) minutes after the last lightning flash is seen.
- **As a minimum, the National Severe Storm Laboratory (NLSS) and NCAA Committee on Competitive Safeguards and Medical Aspects of Sports strongly recommend that by the time the observer obtains a Flash to Bang count of 30 seconds, all individuals should have left the athletics site and reached a safe structure or location. Athletic events may need to be terminated.**
- The existence of blue sky and the absence of rain are not protection from lightning. Lightning can and does, strike as far as 10 miles away from the rain shaft. It does not have to be raining for lightning to strike.
- *A typical thunderstorm can travel up to 30 miles per hour. Experts believe 30 minutes allows for thunderstorms to be about ten to twelve miles from the area. This minimizes the probability of a nearby, and dangerous, lightning strike.*

#### **G. Obligation to Warn**

- According to a basic principle of tort law, an individual has a duty to warn others of dangers that may not be obvious to a guest of that person.
- A public address message should be given warning spectators of SISD High School athletic events if lightning activity becomes an imminent danger in the immediate area.



## H. Pre-hospital Care of Lightning Strike Victims

- Activate the local emergency management system.
- Lightning strike victims do not carry a charge and are safe to assess.
- The first rule of CPR, make sure the scene is safe, applies as well. If need be move the victim to a safe location.
- It has been demonstrated that there is high success rate of resuscitating lightning strike victims using CPR. Thus, it is imperative to treat the “apparently dead” first by promptly initiating CPR.
- Secondary survey should include evaluating and treating these common injuries from lightning strikes: hypothermia, shock, fractures, and burns.

### References

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