

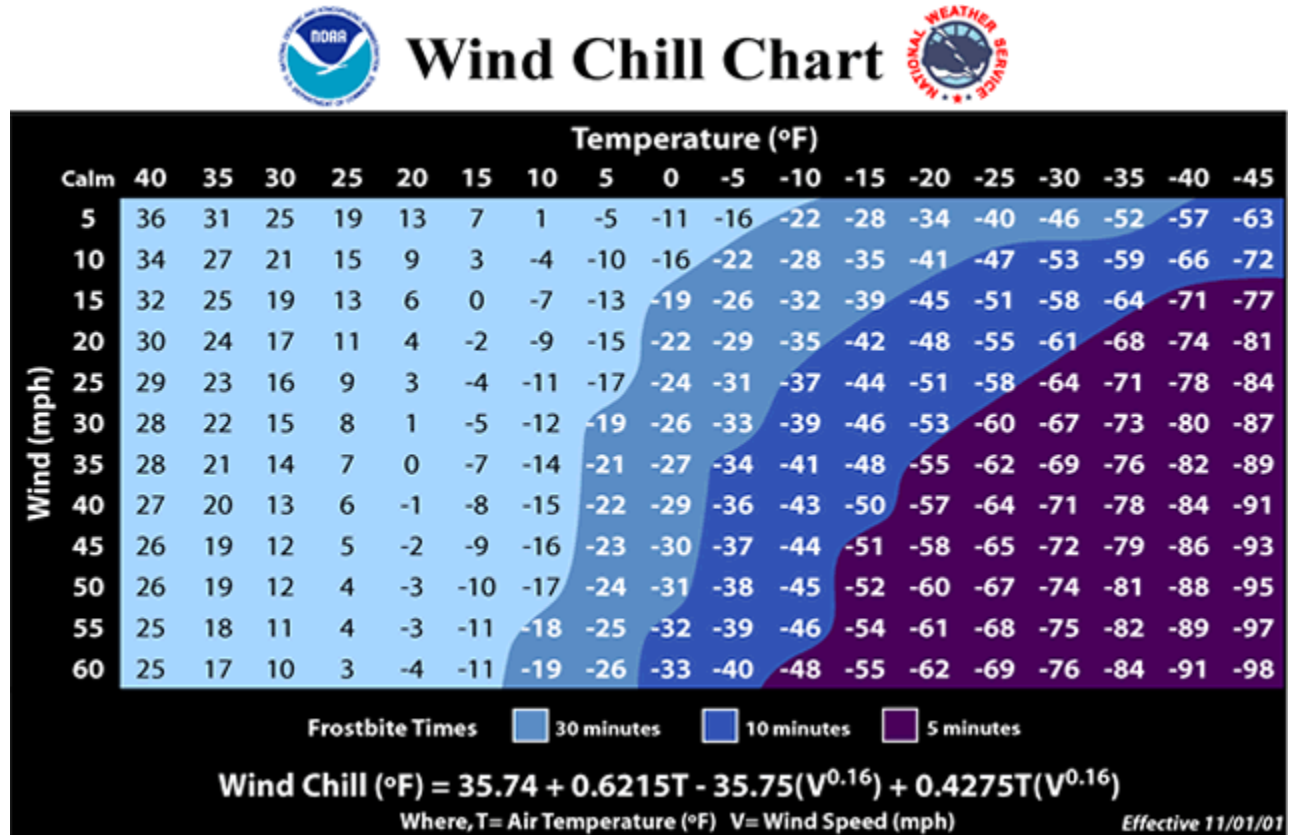
MSHSAA Cold Weather Guidelines

Exercise can be performed safely in most cold weather environments without having cold weather illnesses or injuries. [\(1\)](#) However, a risk management strategy should be developed before the season starts and implemented during the season.

(a) Before the season starts:

- i. Each school district should have a Cold Weather Policy for sports and activities that are active outdoors. A Cold Weather Policy should include the following:
 - Who determines when to cancel or modify practices, games and events & how do they communicate that to the team and support staff.
 - When to cancel practices, games and events.
 - When to modify the time or location of practices, games and events.
 - When to do abbreviated introduction and extended rewarming for halftime.
 - Where to provide a warm halftime location. This may include the bus.
 - What warming stations on the sideline are allowed (be aware of burns, Carbon Monoxide poisoning and electrical hazards, especially in the rain).
- ii. Schools should have an Emergency Action Plan (EAP) for each location and cold weather emergencies should be a part of the Pre Event Medical Meeting for each outdoor sport and activity that has events that take place in colder temperatures.
- iii. Coaches should have first aid training that includes:
 - How to prevent cold injuries.
 - How to recognize signs and symptoms of cold injury.
 - How to treat cold injuries.
 - How to properly dress for cold weather conditions (layers). [\(1-6\)](#)
- iv. Other things to consider:
What will the school provide to accommodate for cold weather conditions?
 - Overcoats or sideline coats for players not on the field.
 - If it is raining and cold: Dry towels, rain gear/ponchos, or canopy tent(s).
 - Encourage participants to bring extra pairs of dry clothing.
- v. Each sport should review and summarize health concerns related to cold for each of their athletes. The MSHSAA Pre-Participation Documentation – Annual Requirements (All Sports & Activities) is a resource that may be used for this task. Coaches may also ask if anyone on the team has health concerns related to the cold. If available, the athletic trainer(s) that provide care for a school should review a summary of each team's medical conditions. Any athlete with a history of cold injury or predisposing medical conditions should be identified. These may include but are not limited to: Hypothermia, Frostbite, Raynaud Syndrome, Cold Urticaria (Hives from the cold), chilblains, immersion foot, Exercise-induced Bronchospasm, Anorexia Nervosa, Cardiovascular Disease and Spinal Cord Injuries [\(2\)](#) Extra care should be taken to monitor their health status when they participate in cold weather activities and sports.

- (b) **During the season:** Coaches, administrators and athletic trainers should monitor the ambient temperatures, wind speed and precipitation.



<https://www.weather.gov/images/safety/windchill21.gif> As of January 10, 2024

The above figure from (<https://www.weather.gov/safety/cold-wind-chill-chart>) indicates the amount of time (30 min, 10 min & 5 min) to Frostbite depending on the wind speed and ambient temperature. Wind and low temperature can accelerate the chances of hypothermia. Being wet also significantly increases the risk of hypothermia. (1)

The following guidelines are used by the NCAA (3) and is recommended by the NATA Position Statement. (2) Wind-chill temperature should be considered when planning activities in cold weather. Conditions should be constantly reevaluated for change in risk, including the presence of precipitation and the amount of time spent in the cold:

- A Wind chill of 30°F and below: Be aware of the potential for cold injury and notify appropriate personnel of the potential.
- A Wind chill of 25°F and below: Provide additional protective clothing, cover as much exposed skin as practical, and provide opportunities and facilities for rewarming.
- A Wind chill of 15°F and below: Consider modifying activity to limit exposure or to allow more frequent chances to rewarm.
- A Wind chill of 0°F and below: Consider terminating or rescheduling.

The school district or teams may strongly consider canceling or making alterations to practices, games and events at temperatures warmer than the above guidelines considering the situation and the participants involved. Coaches/sponsors need to make sure their team and any students they are responsible for are appropriately dressed and wearing adequate layers. (1-6) Consider allowing athletes that do not participate to remain supervised indoors especially if they have cold related medical conditions or are inadequately dressed.

Acclimatization considerations: Short, intense cold exposures (less than 1 hour) a few times per week, will produce habituation. Longer exposures of more than 8 hours with moderate cold conditions for more than 2 weeks are required to induce the hypothermic form of acclimation. (6) This may be accomplished in some circumstances but not practical in most Missouri extracurricular activities.

Learning what clothing works best in the cold is an individual process that depends on exercise intensity, cold tolerance and the environment. Having too much clothing on, that causes excessive sweating, clothing that restricts movement or not enough clothing should be avoided. A good way to figure out what clothing is best for each individual is by practicing in the cold and trying different combinations of layers of clothing. Coaches should allow their team to make clothing adjustments during practices and to rewarm when necessary.

Remind athletes to stay hydrated in cold weather. Sweat turns to vapor more easily in the cold, eliminating a visual cue to hydrate and cold environments also increase urine output. (5) Dehydration might impair cognitive function and cause athletes to use poor judgment. (6)

Missouri junior high sports and activities should consider being more cautious because younger individuals are less cold tolerant than older and larger individuals. These Guidelines are for Missouri State High School Activity Association and is not meant for other organizations sports or activities.

References:

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3. <http://www.ncaapublications.com/productdownloads/MD15.pdf> THE NATIONAL COLLEGIATE ATHLETIC ASSOCIATION P.O. Box 6222 Indianapolis, Indiana 46206-6222 317/917-6456 NCAA.org Twenty-fifth Edition August 2014
4. <https://www.weather.gov/safety/cold-wind-chill-chart>
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6. Technical Bulletin: Prevention and Management of Cold-Weather Injuries; Headquarters, Department of the Army, April 2005. <https://apps.dtic.mil/sti/tr/pdf/ADA433435.pdf>