



Athletic
Trainers
Association

Championship Medical Handbook

Updated October 2026



NAIA Championship Medical Handbook

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Championship Medical Handbook

Medical Director/Host Athletic Trainer Duties & Responsibilities

Introduction

On behalf of the NAIA and our 65,000 student-athletes, we would like to sincerely thank you for your willingness to serve as the Medical Director/Host Athletic Trainer for our NAIA Championship Events. Your service and commitment to the health and safety of our student-athletes is commendable and we are appreciative of your commitment and professional service for this event. We have provided this handbook for your use as you organize the healthcare for the event. Throughout the document, we provide direction and support for you as you develop your plan to meet the needs of the student-athletes under your care. If there are questions or concerns at any time, please feel free to reach out to me. My role with the NAIA is to support you and assure optimal patient care for our events.

Sara Eckinger
Director, Student-Athlete Experience & Development
seckinger@naia.org
816.595.8116

Qualifications

The term "Medical Director" is synonymous with the term "Host Athletic Trainer." The Medical Director for all NAIA Championship events must be an appropriately credentialed Athletic Trainer (BOC Certified and state licensed - if required). The NAIA recognizes that at many of our events, the healthcare for the championship is a collaborative process and the sports medicine team is made up of multiple healthcare professionals with the goal of optimal patient care. We encourage and support this collaboration and the inter-professional practice that occurs as the result of your leadership.

Duties and Responsibilities

The Medical Director will serve as the AT for teams that do not provide their own onsite health care. In addition, the Medical Director will facilitate care and provide support for visiting AT's. The Medical Director is responsible for recruiting appropriate numbers of AT's to adequately cover all of the venues (practice and competition, multiple fields/courts, etc.) with healthcare for the event.

Specific Duties of the Medical Director include:

- ❑ Develop the [Emergency Action Plan \(EAP\)](#) for the event including:
 - Championship Venue Address
 - Medical Staff names and contact information
 - Directions to regional healthcare facilities
 - Medical chain of command
 - Emergency Care resources
 - Acknowledgement of [NAIA Medical Policies](#)
- ❑ Contact local physicians and regional hospitals/healthcare facilities to notify them of the event, times, dates, location(s). It is recommended that the following be part of the

physician coverage for the event; orthopedist, family practitioner, and internist (onsite or on call). Additionally, physician care is required **onsite** for the following championship events:

- Cheer and Dance
- Football
- Lacrosse
- Wrestling

- ❑ Secure EMS/Ambulance care (in collaboration with the Tournament Director) **onsite** for the following championship events:

- Cheer and Dance
- Cross Country
- Basketball
- Football
- Lacrosse
- Soccer
- Track and Field (including the Marathon)

- ❑ Develop a coordinated communication plan to address:

- Emergency Preparedness
- Role of the Medical Director/Host Athletic Trainer and services provided
- [NAIA Medical Policies](#)
- Communication with the Games Committee and NAIA Sport Manager
- Pre-event meeting for all AT's and support staff to review EAP
- Site of AT Clinic and hours of availability

- ❑ Organize and manage an onsite Athletic Training clinic which typically includes the following patient care resources:

___Therapy Table(s)	___Biohazard container(s)	___Ice/Ice bags
___Splints/crutches	___Electrical Modalities	___Medical Tent at outside venue
___Taping Table(s)	___Taping Supplies	___Cart for patient transport
___First-Aid supplies	___Stretcher/Immobilization supplies	

- ❑ Additionally, the following emergency care resources are **required** at all venues:

- AED
- Pocket and/or BV Masks
- Splints
- First Aid Supplies
- Biohazard Equipment
- Crutches
- Spine Board and Immobilization Equipment

- ❑ In addition to those listed above, the following emergency care resources are **required** for all **outdoor** championship venues:
 - Lightning Detection System
 - Weather App
 - Severe Weather Monitoring Capabilities
 - In regions where heat and humidity are a concern, cold water immersion capability is required

- ❑ Develop a Medical Packet to be available for each team's AT and/or coach that includes:
 - EAP for the event
 - List of the medical resources and supplies that will be provided at the championship site Athletic Training Clinic

- ❑ Concerning return to play decisions, the NAIA recognizes that many teams at championship events will be traveling with their own athletic trainers. The role of the Host Medical Director in those situations is to facilitate care and provide support. Return to Play (RTP) decisions will be the responsibility of the team's athletic trainer. In the event that a team does not have their own athletic trainer, the Host Medical Director has the final authority for RTP decision making.

- ❑ Work with the Host Site Administrator/Tournament Director to coordinate administration of the following sideline/bench/dugout supplies:
 - Hydration Stations (water and cups)
 - Ice containers, ice bags, & ice
 - Garbage bags/cans
 - Bench towels (if deemed necessary)

NAIA Sport Manager Requirements and Responsibilities

- ❑ Provide names of participating schools to Host Medical Director as soon as available.
- ❑ Assist in the completion and forwarding of all athletic training documentation/forms between host medical directors and participating institutions (and their ATs).
- ❑ Provide needed tournament information and coordinate communication between Host Medical Director, Tournament Director, Games Committee, Athletic Trainers, Participating Teams and Officials.

HOST SITE (COLLEGE OR CITY) REQUIREMENTS AND RESPONSIBILITIES

- ❑ Designate an appropriately credentialed Athletic Trainer in the area to act as the Host Medical Director.
- ❑ Work with the NAIA and Host Medical Director to secure necessary access and passes for medical staff.
- ❑ Work with Host Medical Director to:
 - Have on-site phone/cell phone/radio availability for emergencies at practice and event venues
 - Establish an Emergency Action Plan for site(s) and event.
- ❑ Provide Sideline (per bench) and Locker Room supplies including:
 - Water coolers with ice and water
 - Cups
 - Ice chest with ice and ice bags
 - Biohazard bag, disinfectant solution, clean-up kit
 - Trash bag/can
 - Bench towels
 - Hand sanitizing station

APPENDIX A



NAIA Championship Event Emergency Action Plan

Please complete this form (pages 6-9) and return to Sara Eckinger (seckinger@naia.org).
This document must be completed by the Head Site Athletic Trainer.

DEADLINES

National Championship Final Round: 3 weeks prior

Opening Round campus sites: As soon as possible upon notification NAIA

Championship Event: _____

NAIA Championship Venue Name: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Medical Staff	Name	Phone
Host Medical Director (AT)		
Athletic Trainer		
Athletic Trainer		
Physician		
Campus/Venue Security		
Regional EMS		

Name of nearest Hospital: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Distance from venue: _____

Name of Nearest Urgent Care or Minor Emergency center: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Distance from venue: _____

Date, Time, and Place of pre-event meeting for all AT's and support staff to review EAP:

VENUE DIAGRAM

Please show the aerial layout of the facility. Diagram must include AT clinic location, emergency supplies location, traffic flow, locker rooms, EMS parking location, physician's expected location, multiple fields (if applicable), and any other significant surroundings.

IN THE EVENT OF AN EMERGENCY

In the event of an emergency, the Host Medical Director or their designee will activate EMS and provide appropriate information about the emergency including but not limited to:

- Nature of the emergency
- Services required
- Location of the patient
- Onsite care being provided
- Other information as requested

In an emergency, the following individuals are responsible for:

1. Immediate care of patient
 - a. Name: _____
 - b. Phone: _____
2. Scene safety/crowd control
 - a. Name: _____
 - b. Phone: _____
3. Emergency equipment retrieval (onsite)
 - a. Name: _____
 - b. Phone: _____
4. Necessary documentation
 - a. Name: _____
 - b. Phone: _____
5. Directing EMS to the scene (if necessary)
 - a. Name: _____
 - b. Phone: _____

ONSITE EMERGENCY CARE EQUIPMENT

Emergency Equipment <i>Required for all Venues</i>	Location
AED and Pocket or BV Masks	
Spine Board and Immobilization Equipment	
Splints	
First Aid Supplies	
Biohazard Equipment	
Crutches	

Emergency Resources <i>Additional requirements for all Outdoor Venues</i>	Monitored By
Lightning detection system	
Weather app	
Heat Stress Meter (WBGT capable)	
Severe weather monitoring	
NAIA Lightning and Air Quality Policies	

In addition, as the Medical Director for the event, I have reviewed and will utilize/implement the following NAIA ATA/Championship Medical Policies (as indicated). Please initial the box after each of the policies listed below:

Concussions	
Lightning	
Air Quality	
Heat & Humidity	

Heat-Related Illness Action Plan:

As part of implementing the NAIA Heat & Humidity Policy, the Medical Director must confirm that an event-specific plan is in place to prevent, recognize, and respond to heat-related illness.

☐ **I confirm that an action plan is in place to address heat-related illness during this event.**

Briefly describe the event-specific action plan, including procedures for recognition, treatment, cooling, and emergency medical response:

SPORT-SPECIFIC ADDITIONAL REQUIREMENTS FOR NATIONAL CHAMPIONSHIP EVENT EMERGENCY PREPAREDNESS

- Baseball –
 - Ambulance on-call. Ensure appropriate AT services for number of fields used (i.e. appropriate response time is possible for each field).
- Baseball Opening Round –
 - Ambulance on-call. Ensure appropriate AT services for number of fields used (i.e. appropriate response time is possible for each field).
- Basketball –
 - Ambulance on-site. Provide radios for direct communication between Host ATs, court and EMS.
- Basketball First and Second Rounds –
 - Ambulance on-site, or alternatively if that is not achievable, EMT on-site. Provide radios for direct communication between Host ATs, court, and EMS.
- Bowling –
 - Ensure appropriate AT service for the number of lanes used.
- Cheer and Dance –
 - Ambulance on-site. Provide radios for direct communication between host medical staff, competition mat, practice area mats and EMS. Physician on-site.
- Cross Country –
 - Ambulance on-site. Ensure appropriate AT service throughout course in addition to the finish line.
- Football –
 - Ambulance on-site. Provide radios for direct communication between home and visiting medical staff, field and EMS. Physician on-site.
- Football Opening Rounds –
 - Ambulance on-site. Provide radios for direct communication between home and visiting medical staff, field and EMS. Physician on-site.

- Golf –
 - Ensure appropriate AT services throughout course in addition to the clubhouse.
- Lacrosse –
 - Ambulance on-site. Provide radios for direct communication between host medical staff, field and EMS. Physician on-site.
- Soccer –
 - Ambulance on-site. Provide radios for direct communication between host medical staff, field and EMS. Physician on-call.
- Soccer First and Second Rounds –
 - Ambulance on-site, or alternatively if that is not achievable, EMT on-site. Provide radios for direct communication between host ATs, field, and EMS.
- Softball –
 - Ambulance on-call. Ensure appropriate AT service for number of fields used (i.e. appropriate medical supervision and appropriate response time is possible for each field).
- Softball Opening Round –
 - Ambulance on-call. Ambulance on-call. Ensure appropriate AT service for number of fields used (i.e. appropriate medical supervision and appropriate response time is possible for each field).
- Swimming & Diving –
 - Ambulance on-call. Host Medical Director will work closely with facility lifeguards to ensure appropriate patient care.
- Tennis –
 - Ensure appropriate AT service for number of courts used (i.e. appropriate medical supervision and response time is possible for each court).
- Track & Field (including the Marathon) –
 - Ensure appropriate AT services for the entire site (including all venues as well as different locations on the track). Ambulance on-site for high-risk events like the Pole Vault and Steeplechase.
 - Ensure appropriate AT services throughout the course in addition to the finish line.
 - Contact and secure an interdisciplinary medical staff for the marathon which may include but not limited to:
 - Physicians, nurses, paramedics, PAs, EMS, ATs, NPs, and PTs.
- Volleyball –
 - Ensure appropriate AT service for the number of courts used (i.e. appropriate medical supervision and response time is possible for each court).
- Volleyball Opening Round –
 - Ensure appropriate AT service for the number of courts used (i.e. appropriate medical supervision and response time is possible for each court).
- Wrestling –
 - Ambulance on-call. Ensure appropriate AT service for the number of mats used (i.e. appropriate medical supervision and response time for each mat). Physician on-site.

Ambulance Availability

An ambulance designated as “on-call” must have a response time of 12 minutes or less to the championship venue. If the anticipated ambulance response time exceeds 12 minutes, an ambulance must be on-site for the duration of the championship/event.

GENERAL INFORMATION

Is the Host Medical Director responsible for the safety of spectators at the venue?

☐ Yes ☐ No

If the response is No, then who is responsible for the safety of the spectators at the event?

Name and Contact Info: _____

We recognize that many teams at NAIA Championship events will be traveling with their own ATs. The role of the Host Medical Director in those situations is to provide support. RTP decisions will be the responsibility of the team's AT. In the event that a team does not have their own AT, the Host Medical Director and/or physician has the final authority for RTP decision-making.

APPENDIX B

NAIA Championship Outdoor Events Air Quality Medical Policy

Whenever there are concerns about air quality related to the health and safety of student-athletes at NAIA outdoor Championship events, the AirNow tool provided by the US Environmental Protection Agency is the primary tool to be used to make decisions about the efficacy of outdoor physical activity. AirNow is a centralized data system that provides, consistent, high-quality reports on the air quality throughout the US. The Air Quality Index (AQI) is a color-coded index informing users about the quality of the air and its relationship to health. There is a direct link of increased health risk for asthmatics as well as others with cardiac conditions such as heart attacks, strokes, and irregular cardiac rhythms when engaging in physical activity with poor air quality.

It is the responsibility of the host Medical Director/Athletic Trainer at NAIA Championship events to determine when an event should be suspended and when it is safe to return to play as the result of air quality concerns. The AT is to notify the NAIA Championship Manager who, in collaboration with the appropriate personnel (i.e. games committee), will implement the predetermined action plan for both player and spectator safety.

The following criterion shall be used when making decisions about air quality:

1. When the AQI is between 101 – 150, student-athletes with preexisting conditions such as those mentioned above should be closely monitored by the host medical director and/or the student-athletes' athletic trainer (if they are present). If there are any signs or symptoms of distress, the student-athlete is to be medically withdrawn from the competition. General air quality warnings need to be provided to the spectators, guests, and coaches at the venue describing the risk of prolonged exposure to poor air quality.
2. When the AQI is at 151 – 200, student-athletes with preexisting medical conditions should be removed from participation as the air quality is unhealthy; meaning that some members of the general public may experience adverse health effects and that participants from sensitive groups (respiratory and cardiac preexisting conditions) may experience more serious health effects. General air quality warnings need to be provided to the spectators, guest, and coaches at the venue describing the risk of prolonged exposure to poor air quality.
3. When the AQI is at 201 or greater, outdoor physical activity will be discontinued as the rating is very unhealthy; meaning that a health alert is in effect and there is increased risk of adverse health effects for everyone. General air quality warnings need to be provided to the spectators, guest, and coaches at the venue describing the risk of prolonged exposure to poor air quality.
4. When the AQI drops below 200, and the forecast indicates that weather patterns are favorable for the air quality to remain below that threshold, return to play is permissible.
5. In the event that a championship event is not in a geographical area where AirNow is available, the host Medical Director/Athletic Trainer will predetermine what regional resources are available to inform air quality decisions and communicate those resources and indicators to the NAIA Championship Manager as well as other appropriate personnel (i.e. games committee).

Below is a copy of the AQI from AirNow at: <https://www.airnow.gov/aqi/aqi-basics>

AQI Basics for Ozone and Particle Pollution		
Daily AQI Color	Values of Index	Description of Air Quality
Good Green	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Moderate Yellow	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups Orange	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Unhealthy Red	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy Purple	201 to 300	Health alert: The risk of health effects is increased for everyone.
Hazardous Maroon	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.
<i>Note: Values above 500 are considered beyond the AQI. Follow recommendations for the "Hazardous category." Additional information on reducing exposure to extremely high levels of particle pollution is available here.</i>		

Resources:

1. Information about the Air Quality Index and its relationship to health are available at: <https://www.airnow.gov/air-quality-and-health> (2018)
2. Publications for Health Professionals concerning air quality are available at: <https://www.airnow.gov/health-professionals-publications> (2018)
3. NCAA Competitive Safeguards and Medical Aspects of Sports guidance on practice and competition in poor air quality conditions is available at: <http://www.ncaa.org/sport-science-institute/air-quality> (2018)

APPENDIX C

NAIA Championship Events Concussion Medical Policy

According to the 5th International Conference on Concussion in Sport consensus statement, a sports related concussion (SRC) is defined as a traumatic brain injury induced by biomechanical forces. The common characteristics of a concussive head injury include:

1. Causation by either a direct blow to the head, neck, face, or anywhere else that may transmit a force to the head.
2. SRC result is a rapid onset with short-lived disruption of neurological function that typically resolves spontaneously.
3. The neuropathological changes are usually manifest in functional disturbances rather than structural injury.
4. SRC can result in a wide range of signs and symptoms. Recovery from a SRC is frequently sequential and in some cases may be prolonged.

If a student-athlete at an NAIA Championship event is suspected to have sustained a concussion, the following actions will take place:

1. The student-athlete will be removed from all activity (practice and/or competition)
2. The student-athlete will be evaluated by the Host Medical Director/Athletic Trainer or the student-athletes own athletic trainer (if they are present with the team). The Host Medical Director (AT) and/or onsite team physician has unchallengeable medical authority regarding the student-athletes' management and return to play, in consultation with the student-athletes own athletic trainer if they are present. Immediate concussion assessment will include the following:
 - a. Symptom screening.
 - b. Physical Examination (including c-spine) and Neurological Assessment.
 - c. Cognitive Assessment.
 - d. Balance Assessment.
3. This structured examination/assessment will follow a standardized concussion assessment process such as the SCAT5® Sports Concussion Assessment Tool.
4. If a concussion is confirmed the student-athlete will not be allowed to return to practice or play until they have progressed through a post-concussion management plan. In addition, the EAP will be activated if any of the following are evident:
 - a. Suspected spinal injury.
 - b. Glasgow Coma Scale of < 13.
 - c. Focal Neurological Deficit indicative of intracranial trauma.
 - d. Prolonged Loss of Consciousness.
 - e. Repeated vomiting.
 - f. Worsening mental status as indicated by deteriorating neurological signs or symptoms.
5. Additionally, for all cases of a diagnosed concussion, the injured student-athlete and another team representative (responsible adult) will be provided with instructions on concussion follow-up care and management. Those instructions must be documented along with the individual injury report indicating the diagnosis of the concussion.

6. The concussed student-athlete will be required to follow a graduated return-to-play (RTP) program including a return-to-learn plan. Student-athletes will not be allowed to RTP until they have completed the graduated RTP protocol and have been released by an appropriately licensed healthcare professional trained in the evaluation and management of SRC.

Resources:

1. Consensus statement of concussion in sport-the 5th international conference on concussion in sport held in Berlin, October 2016;_
<https://bjsm.bmj.com/content/bjsports/early/2017/04/28/bjsports-2017-097699.full.pdf>
2. NATA Concussion Webpage of Position Statements, Resources, and Initiatives;_
<https://www.nata.org/practice-patient-care/health-issues/concussion> (Oct. 2018)
3. NCAA Concussion Webpage of Educational Resources, Best Practices, and Data and Research related to concussions; <https://www.ncaa.org/sport-science-institute/concussion> (Oct. 2018)

APPENDIX D

NAIA Championship Outdoor Events Lightning Safety Medical Policy

Whenever there are concerns about severe weather, specifically lightning safety, related to the health and safety of student-athletes at NAIA outdoor Championship events, multiple tools and resources must be considered for use in making decisions about the efficacy of continuing with the outdoor physical activity. Best practices in making determinations on continuation to play include the following:

1. Players, spectators, and event officials at NAIA Championship events should be reminded/informed over the PA system throughout the event that lightning safety through prevention is important. Simple slogans like: "When thunder roars, go indoors," or "If you can hear it, clear it."
2. For outdoor events where inclement weather is possible, designate a "weather watcher." This person's primary responsibility is to actively monitor for threatening weather. Indicators of possible inclement weather include: high winds, darkening clouds, or lightning and/or thunder activity. This person reports directly to the event Medical Director/Athletic Trainer. This individual monitors the weather through a two pronged approach. They should watch/monitor local weather forecasts and know understand local weather patterns. In addition, they should be in contact with regional representatives from the National Weather Service (NWS) at www.weather.gov, or through local weather forecasting agencies in order to acquire accurate, real time information about weather concerns in that region.
3. In addition, there are a number of commercially available (typically for a fee) weather monitoring/notification resources to consider using as an adjunct in determining severe weather. The WeatherSentry Sports and Recreation monitoring system by DTN claims to provide real time weather information, including forecasts, precision lightning detection, wet bulb globe forecasts, and storm corridor information. The Thor Guard System is another commercial product that is widely used at golf facilities throughout the country. This product claims to be able to predict lightning before it actually strikes, allowing for early intervention in decision making. Additionally, weather apps like WeatherBug (including Spark) or the Weather Channel's App are highly rated tools that provide helpful information to inform critical safety decisions.

***" Notification systems may be useful as supplements, but they should never replace the designated weather watcher and NWS monitoring."**

It is the responsibility of the host Medical Director/Athletic Trainer at NAIA Championship events to determine when an event should be suspended and when it is safe to return to play as the result of lightning. The host medical director (or their designee) has unchallengeable authority to suspend play. The AT is to notify the NAIA Championship Manager who, in collaboration with the appropriate personnel (i.e. games committee), will implement the predetermined action plan for both player and spectator safety.

The following criterion shall be used when making decisions about lightning safety:

6. When lightning is within 8 – 10 miles, steps need to be taken to evacuate players, spectators and game officials from the venue until the threat of the storm has passed. Additionally, if severe thunderstorms are in the vicinity or if lightning /thunder has been observed (lightning strikes have been reported as far as 25 miles from the edge of a storm front) the venue must be cleared until the storm passes. Thunder may be hard to hear because of things like crowd noise. Lightning has the ability to strike even when blue sky is visible and there is no rainfall.
7. Everyone needs to be directed to a **safe location** away from the lightning hazard. Safe locations include fully enclosed buildings. In the event that access to this type of building is unavailable, buses, cars, and vans are considered safe alternatives. Please note that **unsafe locations** include structures like shelters, dugouts, storage sheds, picnic areas, tents, concessions, press boxes, etc.
8. Activities shall be suspended until at least 30 minutes following the last lightning strike and sound of thunder. The 30-minute clock restarts in the event that additional lightning is seen or thunder is heard.

Resources:

4. The National Weather Service website: <https://www.weather.gov/safety/lightning-safety-overview> (2018)
5. NATA Position Statement on lightning safety: https://www.nata.org/sites/default/files/2013_lightning-position-statement.pdf (2013)

APPENDIX E

NAIA Championship Events Heat and Humidity Medical Policy

Scope

This policy applies to all staff members (e.g., athletic trainers, physicians, and administrators) of who are associated with NAIA Championship events, where heat and humidity pose a health risk during NAIA Championship.⁵

Monitoring

1. Monitoring of student-athletes safety should be continuous during NAIA Championship events.⁴
2. Athletic trainers, coaches, administrators and other athletics personnel should be educated annually on the signs and symptoms of exertional heat illness.⁴

Environmental Monitoring and Activity Modification/Cancellation

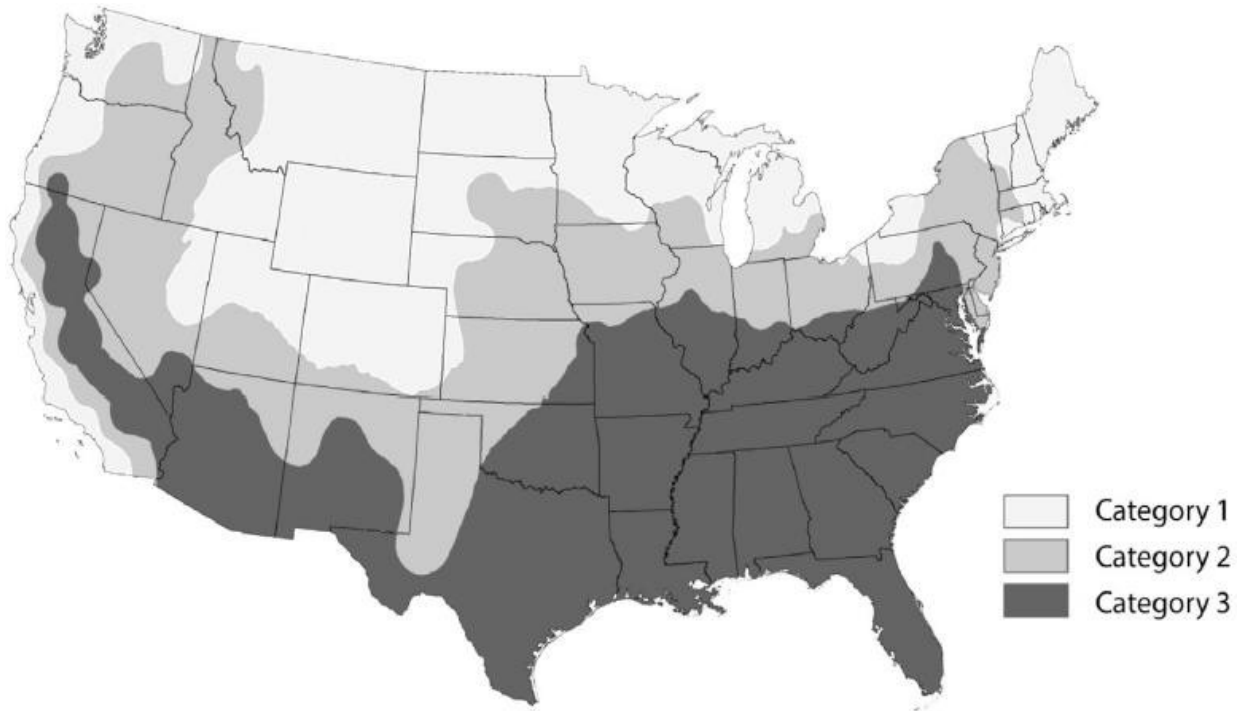
1. Environmental monitoring is multifaceted and will include utilizing a **WBGT** device, in conjunction with the National Weather Service Heat Index Chart (see *Appendix 1*)¹.
2. Environmental monitoring will occur any time it is warm outside (i.e. over 70° F).⁴
3. Environmental monitoring and activity modifications may be necessary for certain types of indoor facilities.
4. Monitoring of WBGT will occur every 30 minutes beginning at least 30 minutes prior to the scheduled Championship event, under the direction of the Host Medical Director and will include a **qualified healthcare professional** (QHP - i.e. certified athletic trainer, team physician, etc.).⁴
5. Modifications will be made in accordance with the best practice guidelines for each regional category.
 - a. *Regional categories identifying the location of championships can be seen in Figure 1.*²
 - b. *Figure 2 (below)^{2,4,6} delineates the specific modifications that may be made for each colored flag zone. Each color represents a different level of risk:*
 - *Green Minimal risk*
 - *Yellow Moderate risk – be attentive of changing conditions*
 - *Orange Risk is increasing thereby requiring increased monitoring of environmental conditions*
 - *Red Activity should be stopped until environmental conditions improve*
 - *Black Severe environmental concerns and all activities must be curtailed*

Within each flag zone, modifications may be made for each sport category defined below.

- i. *Equipment Intensive Sports- Defined as wearing protective equipment as required by the sport's rules and regulations that limit the body's natural evaporation of body heat (i.e. Football, Men's Lacrosse).*
- ii. *Time-Restricted/Dependent Endurance Sports- Defined as endurance sports that are required by the sport's rules and regulations to be time-restricted by periods, halves, time-outs, match breaks, etc. (i.e. Men's & Women's Soccer, Women's Lacrosse, Men's & Women's Tennis).*
- iii. *Endurance Sports- Defined as an endurance sport that, per sport's rules and regulations, once started cannot be paused due to nature of the sport.*
- iv. *Anaerobic Sports- Defined as any sport, per sport's rules and regulations that naturally has frequent periods of rest and opportunities for hydration.*

6. Modifications are meant to be fluid, meaning if the environment gets more oppressive, the modifications get stricter. However, if environmental conditions improve, the modifications will be in line with the changing environmental conditions.⁴

FIGURE 1: Regional Categorization of risk zones based on heat and humidity typical in identified zones.



Guidelines/Recommendations for Hydration and Rest Breaks

1. Rest time should involve both unlimited hydration (water or electrolyte drinks) and rest without any activity involved.⁵
2. For equipment intensive sports, helmets should be removed during rest time.⁵
3. Recommended that the site for the rest should be in a “cooling zone” and not in direct sunlight.⁵
4. When the WBGT reading is greater than 86°F (30°C) it is recommended:
 - a. Ice towels be available at the “cooling zone”.⁵
 - b. Access to cooling mechanisms (shower, cold tub, ice, etc.) must be available for the benefit of any player showing early signs of heat illness.⁵
5. To ensure individuals begin activities fully hydrated, a pre- and post- activity measurement of bodyweight is recommended, but not required, to be recorded.⁵
6. Participants should be encouraged to eat and drink appropriate sodium-containing fluids and food to help them replace sodium lost in sweat, etc.⁵

FIGURE 2: Activity Guidelines based on WBGT readings

Cat 3	Cat 2	Cat 1	Activity Guidelines
< 82.0	< 79.7	< 76.1	Activities proceed as normal, per sport regulations.
82.0 – 86.9*	79.9 – 84.6	76.2 – 81.0	Use discretion for intense or prolonged exercise.
87.1 – 90.0	84.7 – 87.6*	81.1 – 84.0	For Equipment Intensive Sports: The transition times following the 1st and 3rd quarters should be extended 2 minutes. Water should be allowed on the field and helmets to be removed for all play stoppage (i.e. injuries, measurements, etc.). Additional breaks are to be left to the discretion of the game officials, coaches, and medical staff collectively. Ice towels can be available. For Time-Restricted Endurance Sports: All other sports, additional hydration breaks will be left to discretion of the game officials and medical staff, collectively prior to the start of the game. For Endurance Sports: Water and sports drinks will be provided at the start/finish lines of the event, at least 1 hour prior to the start to the event. Cooling tubs will be available. For Anaerobic Sports: Addition of water breaks will be left to discretion of the officials/umpires and medical staff, collectively prior to the start of the game.
90.1 – 91.9	87.7 – 89.6	84.1 – 86.0*	For Equipment Intensive Sports: A 5-10 minute break after the first possession change and at the halfway point of each quarter shall be utilized. Timeouts and the transition times following the 1st and 3rd quarters should be extended. Water should be allowed on the field and helmets to be removed for all play stoppage (i.e. injuries, measurements, etc.). Ice towels can be available. For Time-Restricted Endurance Sports: A 5-10 minute water break will be between the 20-25 minute mark of each half, when there is a stoppage of play and at the discretion of the head referee. Ice towels can be available. For Endurance Sports: Water and sports drinks will be provided at the start/finish lines of the event, at least 1 hour prior to the start to the event. Cooling tubs will be available. Shaded tents and/or ability to cool in an air-conditioned facility is recommended. For Anaerobic Sports: Water and if available, sports drinks in each dugout. Ice towels can be available.
≥ 92.0	≥ 89.7	≥ 86.1	No outdoor events, delay competition until WBGT decreases into a colored category.

* Soccer specifically, when the WBGT reaches 86 degrees, or higher, hydration breaks must be inserted at the 25-30 minute mark & hydration breaks at the 70-75 minute mark for a minimum of 2 minutes each. Reference the NAIA Men's and Women's Soccer Official Rules at

https://naia.arbitersports.com/Groups/109470/Library/files/MWSOPR_2019_Rules_Interpretations_Hydration_Breaks_082719.pdf

Resources

1

Title: National Weather Service Heat Index Chart Normal & High Heat/Low Humidity

Authors: The National Oceanic and Atmospheric Administration

Direct Link: <https://www.weather.gov/media/unr/heatindex.pdf>

2

Title: Regional Heat Safety Thresholds for Athletes in Contiguous States

Authors: Grundstein, Andrew; Williams, Castle; Phan, Minh; Cooper, Earl

Direct Link: https://ksi.uconn.edu/wp-content/uploads/sites/1222/2018/08/RegionalWBGT_2015_AppliedGeography.pdf

3

Title: NATA Position Statement: Exertional Heat Illnesses

Authors: Casa, Douglas; DeMartini, Julie; Bergeron, Michael; Csillan, Dave; Eichner, Randy; et. Al.

Direct Link: <https://www.nata.org/sites/default/files/externalheatillnesses.pdf>

4

Title: Sports Medicine Policies and Procedures: Exertional Heat Illness Template Policies & Procedures

Authors: Korey Stringer Institute, University of Connecticut

Direct Link: <https://ksi.uconn.edu/prevention/sports-medicine-policies-procedures/>

5

Title: BOC Guiding Principles for AT Policy and

Procedures DevelopmentAuthors: Board of Certification

Direct Link:

https://www.bocatc.org/system/comfy/cms/files/files/000/000/529/original/Guiding_Principles_for_AT_Policies_and_Procedures.pdf

6

Title: Andrews Institute Heat Safety Guidelines 2018-2019

Authors: Andrews Institute Orthopaedics & Sports Medicine; Lowery, Jeremy

Direct Link: https://okaloosaschools.com/files/_site/dept/athletics/heat-policy-2018.pdf

Definitions

- ***Acclimatization*** – The process of gradually increasing the intensity of activity in a progressive manner to ensure the body's physiological adaptation to tolerate exercise in the heat. Individuals must maintain adequate hydration.⁵
- ***Wet Bulb Globe Temperature*** – The WBGT is a measurement tool that uses ambient temperature, relative humidity, wind, and solar radiation from the sun to get a comprehensive measure that can be used to monitor environmental conditions during exercise. WBGT is different than heat index, as it is a more comprehensive measurement of environmental heat stress on the body.⁵
- ***Walk Through*** – A period of time where players are reviewing positional strategy and rehearsing plays. Players do not experience contact and thus they do not wear equipment and the intensity of the activity is minimal often involving walking. This period of time shall last no more than one hour. It is not considered part of the practice time regulation. It may not involve conditioning or weight room activities. Players may not wear protective equipment during the walk through.⁵
- ***Rest Breaks*** – This period of time occurs during practice and is a non-activity time that is in a 'cool zone' out of direct sunlight.⁵
- ***Qualified Health Care Professional (QHP)*** - As defined by the American Medical Association (AMA), "is an individual who is qualified by education, training, licensure/regulation (when applicable), and facility privileging (when applicable) who performs a professional service within his/her scope of practice and independently reports that professional service."⁵

Appendix 2:

Reference Chart for Heat Index:

Provided and developed by the National Weather Service and the National Oceanic Atmospheric Association. Recommended to utilize the below Heat Index Chart in the case that a WGBT is unavailable.

		Temperature in Degrees Fahrenheit																			
		68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2
Relative Humidity (%)	0	59.0	60.8	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2
	5	60.8	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0
	10	62.6	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8
	15	64.4	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6
	20	66.2	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4
	25	68.0	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2
	30	69.8	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2	
	35	71.6	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2		
	40	73.4	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2			
	45	75.2	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2				
	50	77.0	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2					
	55	78.8	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2						
	60	80.6	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2							
	65	82.4	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2								
	70	84.2	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2									
	75	86.0	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2										
	80	87.8	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2											
	85	89.6	91.4	93.2	95.0	96.8	98.6	100.4	102.2												
	90	91.4	93.2	95.0	96.8	98.6	100.4	102.2													
	95	93.2	95.0	96.8	98.6	100.4	102.2														
	100	95.0	96.8	98.6	100.4	102.2															
		96.8	98.6	100.4	102.2																

NOTE: This table is compiled from an approximate formula which only depends on temperature and humidity. The formula is valid for full sunshine and a light wind. Table adapted from Bureau of Meteorology.

APPENDIX F

NAIA Championship Events Cold Weather Medical Policy

Background

Cold environmental injuries (frostbite, chilblains, and hypothermia) should not be the only area of concern when considering scheduling athletics in the cold. All injuries can occur at an increased rate due to exercising at low environmental temperatures and can also impair how the body responds to mental and physical tasks.^{4,5} As theorized in many studies, cold exposure may be the contributing factor for injuries throughout the musculoskeletal system, including intervertebral disks.¹⁰ One study found that for every 1.8°F decrease in muscle temperature there was a 4-6% decline in performance markers and an increase in muscle lactate levels.^{4,5} Prolonged exposure to the cold environment most often leads to cold extremities. Studies have concluded these cold extremities quickly lose sensation and proprioception once the tissue temperature starts to lower which negates and impairs the gait and balance control of the body (i.e. individuals lose track of their spatial awareness for their body).^{5,10} With this impairment, individuals put themselves inadvertently at-risk for sprains, strains, concussions, and other common athletic injuries.^{1, 8, 10}

It was also noted in various studies that mental tasks were negatively affected due to shivering from the cold environment.^{3, 7, 9-12} Cold exposure has shown hindrances in mental performance, such as choice reaction, memory, and associate learning tasks.^{7, 9, 11-12} Mental performance can include recalling offenses, defenses, short-term play calling, assignments, etc. which can all affect the rate at which an individual suffers injury during sport (i.e. collisions, delayed reactions, etc.).

Individuals who are subject to wetness and dampness (caused by precipitation, convection, or evaporation) carry an increased risk of body heat loss.¹³ To combat these environmental cold conditions and risks, more clothing can be recommended, however studies have stated that more clothing can reduce performance due to the resistance in movement causing an increase in energy demands.^{1, 4-6, 8} These studies have concluded to improve performance, working memory, executive function, and attention-orientated tasks (therefore mitigating the risk of injury), proper acclimatization should occur by exposing individuals to cold environments over a 10-day window working up to 2 hours of performance in 50°F.^{7, 9, 11} Due to the nature of the Championship events, acclimatization is not practical for all those who qualify. As the weather can be unpredictable, it is in the interest of the health and safety of student-athletes, to formulate an environmental cold medical policy to mitigate the number of injuries that occur due to the cold.¹⁴

Scope

This policy applies to all staff members (e.g., athletic trainers, physicians, and administrators) of who are directly associated with NAIA Championship events, where cold weather could pose a health risk during NAIA Championship events.

Monitoring

It is recommended that all cold-weather monitoring will be conducted via weather meters (i.e. Kestrel), the National Weather Service's Wind Chill temperature chart, and the National Weather Service's Wind Chill Calculator.² This chart and link to the calculator can be referenced in the appendix. Monitoring of student-athletes' safety should be continuous during NAIA Championship events.⁴ Athletic trainers, coaches, administrators, and other athletic personnel should be educated annually on the performance deficits caused by cold that can lead to injuries, and how to appropriately monitor.

****It is unclear in the literature at exactly what rate fallen precipitation (defined as rain, sleet, snow, and/or ice), in concurrence with the air temperature and wind rate, conditions become unsafe for participants. However, it is evident that precipitation significantly increases the risk of environmental cold injury.^{1,3-8} Therefore, in circumstances involving precipitation, decisions regarding participation restrictions will be made by the host school's sports medicine and/or athletic training staff on an individual basis based upon the current championship conditions.****

Environmental Monitoring and Activity Modification/Cancellation

1. Environmental monitoring is multifaceted and will include utilization of a weather monitoring device, in conjunction with the National Weather Service Wind Chill Chart and National Weather Service Wind Chill Calculator.²
2. Environmental monitoring will occur any time it is cold outside. (i.e. <41°F)
3. Monitoring of wind chill will occur every 30 minutes beginning at least 60 minutes prior to the scheduled Championship event, under the direction of the Host Medical Director and will include a qualified healthcare professional (QHP- i.e. certified athletic trainer, team physician).
4. Modifications will be made in accordance with the best practice guidelines for each sport-type category.
 - a. Sport-specific categories identifying the category each sport falls under can be referenced in Figure 1.
 - b. Figure 2 delineates the specific modifications that may be made for each colored flag zone. Each color represents a different level of risk:
 - i. Green: Minimal Risk
 - ii. Light Blue: Moderate Risk/Be attentive of changing conditions
 - iii. Blue: Risk is increasing thereby requiring increased monitoring of environmental conditions
 - iv. Navy: Modifications to activity are suggested based on the type and demands of the sport
 - c. Within each flag zone, modifications may be made for each sport category defined below.
 - i. Endurance Sports- Defined as an endurance sport that, per sport's rules and regulations, once started cannot be paused due to nature of the sport (i.e. cross country, marathon, long-distance Track events).
 - ii. Equipment Intensive Sports- Defined as wearing protective equipment as required by the sport's rules and regulations that conserve body heat (i.e. Football, Men's Lacrosse).
 - iii. Time-Restricted/Dependent Endurance Sports- Defined as endurance sports that are required by the sport's rules and regulations to be time-restricted by periods, halves, time-outs, match breaks, etc. (i.e. Men's & Women's Soccer, Women's Lacrosse, men's & women's tennis).
 - iv. Anaerobic Sports- Defined as any sport, per sport's rules and regulations that naturally has frequent periods of rest and opportunities for rewarming (baseball, softball, Track & Field, Golf).
 - d. Modifications are meant to be fluid, meaning if the environment gets more oppressive, the modifications get stricter. However, if environmental conditions improve, the modifications will be in line with the changing environmental conditions. Further, if environmental conditions decline, decisions regarding event continuation and/or postponement will be made by the host championship director in conjunction with the NAIA site supervisor, and hosting medical director based upon the current championship conditions.

Category 4	Category 3	Category 2	Category 1
Baseball Softball Field Events Golf	Soccer Women's Lacrosse Tennis Women's Flag	Football Men's Lacrosse	Cross Country Track

*Sports have been categorized based on exercise type, estimated maximum heart rate, and estimated exposure to cold environment

NAIA Championship Cold Weather Activity Chart (Read in Wind-Chill, Fahrenheit)

Cat 4	Cat 3	Cat 2	Cat 1	Activity Guidelines
<40	<32	<30	<25	Activities proceed as normal, per sport regulations. Be aware of cold injuries, recommended to provide dry spaces and towels (if there precipitation) for athletes to re-warm during breaks and team huddles.
39.9-35.0	31.9-26.0	29.9-24.0	24.9-19.0	Activities proceed as normal, per sport regulations. Baseball and Softball should be kept to single games. Be aware of cold injuries, must provide dry spaces and towels (if there precipitation) for athletes to re-warm during breaks and team huddles.
34.9-32.0	25.9-22.0	23.9-20.0	18.9-15.0	Be on alert for cold injuries and dehydration. All athletes should be allowed to wear 1 additional layer of clothing not normally allowed during competition and practices. For Anaerobic Sports: Addition of re-warming and hydration timeouts will be left to discretion of the officials/umpires and medical staff, collectively, prior to the start of the game. Game play should be no more than 45 minutes without a 5 minute rewarming break. Heaters, or a warming shelter (> 65 degrees), should be available during rewarming breaks. For Time-Restricted Endurance Sports: Provide dry towels and rewarming stations (must have heaters available on sidelines); Gameplay must stop every 45 minutes for 5 minutes of rewarming and hydrating. For Equipment Intensive Sports: Provide dry towels and rewarming stations. Must be heaters available on sidelines at minimum, if indoor shelter (>65 degrees) unavailable for rewarming. For Endurance Sports: Water and sports drinks will be provided at the start/finish lines of the event, at least 1 hour prior to the start to the event. Warming stations and drying towels will be available at the finish line for rewarming.
≤31.9	≤21.9	≤19.9	≤14.9	Be on alert for cold injuries and dehydration. All athletes should be allowed to wear 2 additional layers of clothing not normally allowed during competition and practices. For Anaerobic Sports: Addition of re-warming and hydration timeouts will be left up to the discretion of officials/umpires and medical staff. Game play should be no more than 30 minutes without a 5 minute rewarming break. Heaters or a warming shelter (> 65 degrees) should be available during rewarming breaks. For Time-Restricted Endurance Sports: Provide dry towels and rewarming stations (must have heaters available on sidelines); Gameplay must stop every 30 minutes for 5 minutes of rewarming and hydrating. For Equipment Intensive Sports: No more than 45 minutes of gameplay without a 5 minute rewarming break. Provide dry towels and rewarming stations. Must be heaters available on sidelines at minimum, if indoor shelter (>65 degrees) unavailable for rewarming. For Endurance Sports: Water and sports drinks will be provided at the start/finish lines of the event, at least 1 hour prior to the start to the event. Warming stations and drying towels will be available at the finish line rewarming.

*Rewarming breaks can take place in between innings, possession changes, and timeouts so long as they are adequate timing to meet the above criteria

Resources

1

Title: National Athletic Trainers' Association Position Statement: Environmental Cold Injuries

Authors: Cappaert, A.; Stone, Jennifer; Castellani, John W.; Krause, Bentley Andrew; Smith, Daniel et. Al.

Direct Link: <https://natajournals.org/doi/pdf/10.4085/1062-6050-43.6.640>

2

Title: Watch/Warning/Advisory Definitions & Wind Chill Chart

Authors: National Oceanic and Atmospheric Administration (NOAA)

Direct Link: <https://www.weather.gov/lwx/WarningsDefined>; <https://www.weather.gov/safety/cold-wind-chill-chart>

3

Title: Environmental Cold Injuries

Authors: Athletic Trainers' Society of New Jersey

Direct Link: <https://www.atsnj.org/articles/environmental-cold-injuries>

4

Title: Prevention of Cold Injuries during Exercise Authors: Castellani, John W; Young, Andrew J; Ducharme, Michel; Ciesbrecht, Gordon; Glickman, Ellen; et al.

Direct Link: https://journals.lww.com/acsm-msse/Fulltext/2006/11000/Prevention_of_Cold_Injuries_during_Exercise.19.asp

5

Title: ACSM Expert Consensus Statement: Injury Prevention and Exercise Performance during Cold-Weather Exercise Authors: Castellani, John W.; Egin, Clare M.; Ikaheimo, Tiina; Montgomery, Hugh; Paal, Peter; et al.

Direct Link: https://journals.lww.com/acsm-csmr/Fulltext/2021/11000/ACSM_Expert_Consensus_Statement_Injury_Prevention.11.aspx?context=FeaturedArticles&collectionId=1

6

Title: Prevention of Cold Weather Injuries

Authors: Commandant of the Marine Corps; Department of the Navy

Direct Link: <https://www.marines.mil/portals/1/Publications/MCO%203470.1A.pdf?ver=2012-10-11-163623-947>

7

Title: Effect of Repeated Exposures to Cold on Cognitive Performance in Humans

Authors: Makinen, Tiina M.; Palinkas, Lawrence A.; Reeves, Dennis L.; Paakkonene, Tiina; Rintamaki, Hannu; et.al.

Direct Link:

<https://pubmed.ncbi.nlm.nih.gov/16309719/#:~:text=The%20results%20suggest%20that%20cold,through%20the%20mechanism%20of%20arousal.>

Resources

8

Title: De-Thawing the Best Practices for Cold Weather

Authors: Higgins, Claire

Direct Link: <https://pubs.royle.com/publication/?i=&p=&l=&m=14775&l=1&ver=&view=&pp=>

9

Title: Acute Cold Exposure and Cognitive Function: Evidence for Sustained Impairment

Authors: Muller, Matthew D.; Gunstad, John; Alosco, Michael L.; Miller, Lindsay A.; Updegraff, John; et Al.

Direct Link: <https://pubmed.ncbi.nlm.nih.gov/22506538/>

10

Title: Cold Exposure and Musculoskeletal Disorders and Diseases

Authors: Pienimaki, Tuomo

Direct Link:

<https://pubmed.ncbi.nlm.nih.gov/12078965/#:~:text=The%20results%20indicated%20that%20musculoskeletal,time%20in%20cold%20environment%20increases.>

11

Title: The Impact of Environmental Stress on Cognitive Performance: A Systematic Review

Authors: Martin, Kristy; McLeod, Emily; Periard, Julien; Rattray, Ben; Keegan, Richard; et. Al.

Direct Link: <https://pubmed.ncbi.nlm.nih.gov/31002273/>

12

Title: A Meta-Analysis of Performance Under Thermal Stress

Authors: Ross, Jennifer M.; Szalma, James L.; Hancock, Peter A.

Direct Link: <https://pubmed.ncbi.nlm.nih.gov/17915603/>

13

Title: Bearing the Cold-Tips for Cold Weather Exercise

Authors: Hartman, Jason E

Direct Link: <https://www.nasca.com/education/articles/tsac-report/bearing-the-coldtips-for-cold-weather-exercise/>

14

Title: Participating in Cold Weather: Minimizing the Risk of Injuries

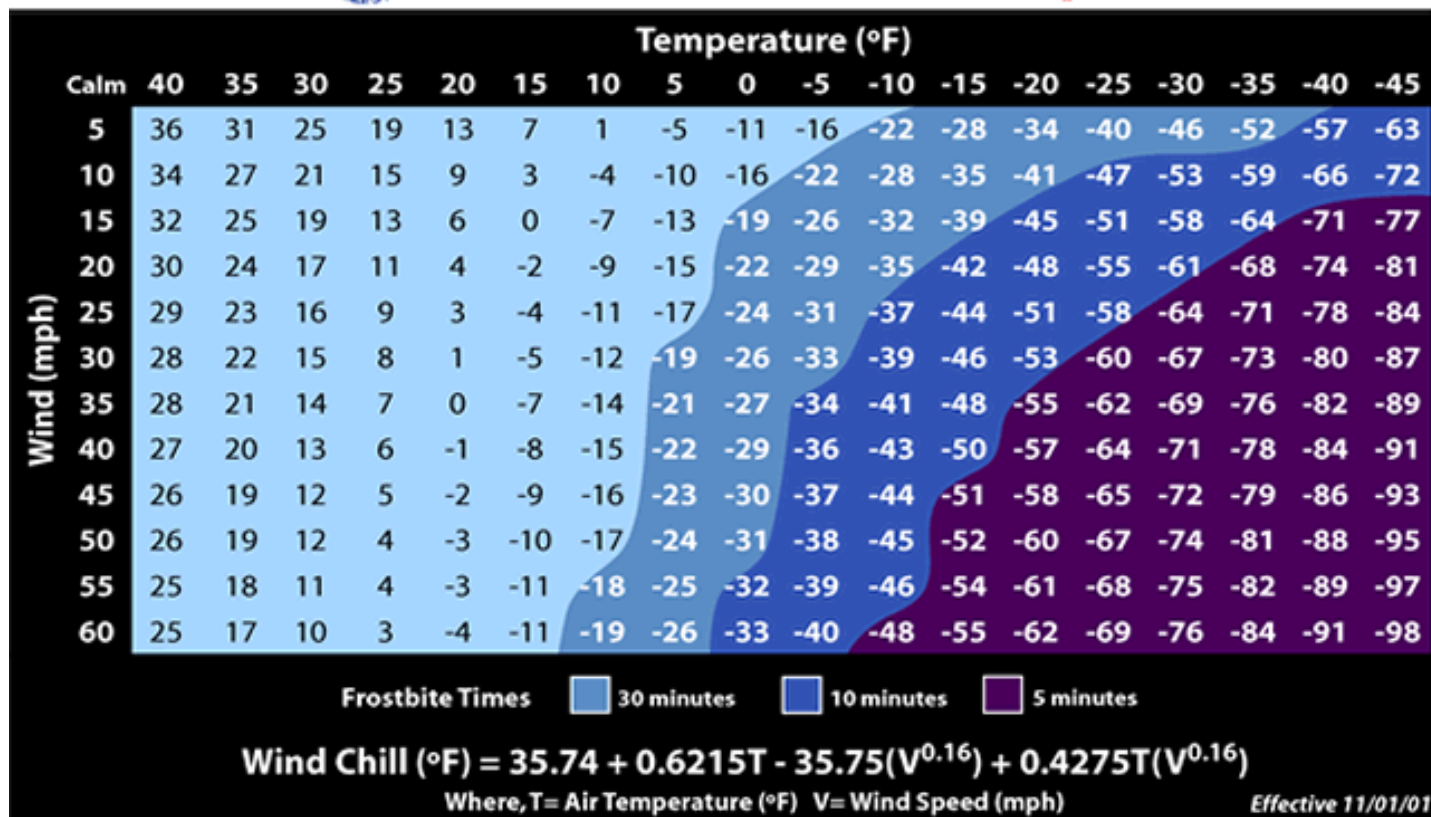
Authors: Young, Lynne

Direct Link: <https://www.nfhs.org/articles/participating-in-cold-weather-minimizing-the-risk-of-injuries/#:~:text=How%20to%20treat%3A%20Remove%20wet,Frostbite%20occurs%20when%20tissues%20freeze.>

Appendix 1:



Wind Chill Chart



ENVIRONMENTAL COLD INJURIES

SYMPTOMS:

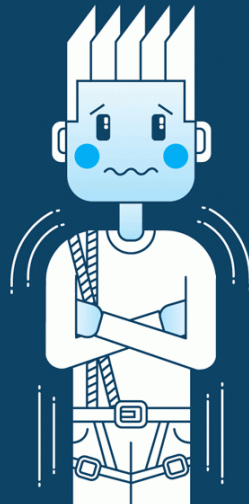
- **Mild:** Vigorous shivering, increased blood pressure, fine motor skill impairment, lethargy, apathy and mild amnesia
- **Moderate or severe:** No more of shivering, very cold skin, depress vital signs, impaired mental function, slurred speech, unconsciousness and gross motor skill impairment

WHAT TO DO:

- Remove wet or damp clothing then insulate the body, including the head, with warm, dry clothing or blankets.
- Move the athlete to a warm shelter, protected from wind and rain.
- Apply heat only to the trunk and heat transfer areas of the body, such as armpits, chest wall and groin.
- Don't rewarm the extremities – it could send cold blood to the core and lead to a drop in core temperature, which may cause cardiac arrhythmias and death.
- Provide warm fluids and foods.
- Avoid applying friction massage to tissue, which can increase damage if frostbite is present.

Hypothermia

OCCURS WHEN THE CORE BODY TEMPERATURE REACHES BELOW 95 DEGREES.



SYMPTOMS:

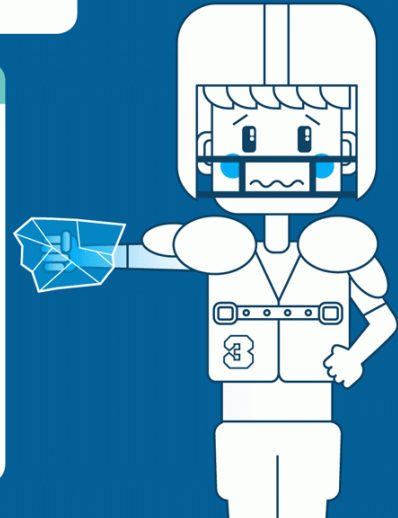
- **Mild:** Swelling, redness or mottled gray skin appearance, stiffness and momentary tingling or burning
- **Deep:** Edema, mottled gray skin appearance, tissue that feels hard and does not rebound, blisters and numbness or loss of sensation

WHAT TO DO:

- Rule out the presence of hypothermia.
- Rewarm the tissue if there isn't a chance of refreezing.
- Immerse the affected tissue into a warm bath of gently circulating water for 15 to 30 minutes.
- Rewarming should be done slowly, so water temperature shouldn't exceed 98 degrees.
- Thawing will be complete when the tissue is pliable and color and sensation have returned.
- Note that rewarming can be painful, so a physician may prescribe pain medication.

Frostbite

- THE FREEZING OF BODY TISSUE.
- A LOCALIZED RESPONSE TO A COLD, DRY ENVIRONMENT THAT CAN BE WORSENERD BY SWEAT COOLING THE TISSUE.



SYMPTOMS:

Small red bumps, swelling, tenderness, itching and pain

WHAT TO DO:

- Remove wet or constrictive clothing.
- Gently wash and dry the area.
- Elevate the area and cover with warm, loose, dry clothing or blankets.
- Don't disturb the blisters or apply friction massage.
- Avoid lotions, creams or high levels of heat.
- Avoid any weight bearing on the affected area.

Chilblain

- A NONFREEZING INJURY OF THE EXTREMITIES.
- OCCURS WITH EXTENDED EXPOSURE TO COLD, WET CONDITIONS.



SYMPTOMS:

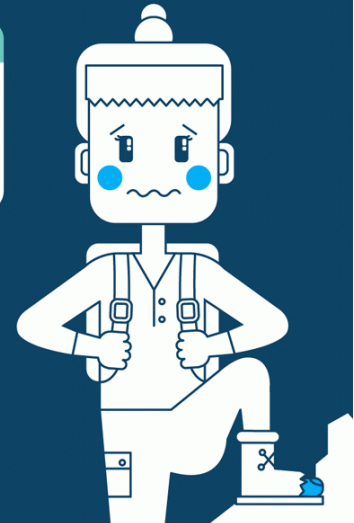
Burning, tingling or itching, loss of sensation, bluish or blotchy skin, swelling, pain or sensitivity, blisters, skin fissures and maceration

WHAT TO DO:

- Thoroughly clean and dry the feet.
- Apply warm packs or soak the affected area in warm water for approximately five minutes.
- Put on clean dry socks.
- Allow footwear to dry before reusing.

Immersion Foot

- A NONFREEZING INJURY OF THE EXTREMITIES ALSO KNOWN AS "TRENCH FOOT."
- OCCURS WITH PROLONGED EXPOSURE TO COLD, WET ENVIRONMENTS.



Staying warm, staying safe

- Wear insulated clothing that also allows moisture to evaporate.
- Dress in layers that can be adjusted with changes in the weather.
- Use external heaters.
- Take regular indoor breaks.

- Maintain a well-balanced diet
- Stay hydrated with water or sports drink.
- Have extra shoes, socks and gloves available to replace wet clothing.

- Athletes who are young, old, diabetic, women or African-American should take extra precaution as they are at greater risk.

Source: National Athletic Trainers' Association