

UNH Sport Club Weather Guidelines

Cold Weather*

*All temperatures are with wind-chill included.

** It is important to remember proper hydration at all times but especially during the cold weather months. Be sure to provide plenty of opportunities for re-hydration.

30° F and below: Be aware of the potential for cold injury

- See *Cold Injuries: Signs and Symptoms*

25° F and below: Provide additional protective clothing, cover as much exposed skin as practical (no shorts or short sleeved shirts and be sure athletes wear gloves and hats) and provide opportunities and facilities for re-warming

- Re-warming opportunities shall be provided with no penalty to the athlete at their request. Be sure that the athletes are made away of this opportunity. Please remember that every individual is different and what each persons body can handle is different.

15° F and below: Modify activity to limit exposure to weather and allow more frequent chances to re-warm.

- No one should be outdoors for more than 30 minutes (30 is preferred, 45 minutes is maximum) straight
- Allow re-warming periods of a minimum of 15 minutes indoors (with or without activity) after each 30 minute outdoor activity bout
- Everyone should be appropriately dressed (Shorts and short sleeve shirts **should not** be worn. Gloves, hats and any additional warm clothing necessary should be worn)
- If any athlete expresses the need to warm up they are to be allowed sufficient re-warming time without penalty
- If any athlete is exhibiting signs and symptoms of a cold illness they are to be escorted inside right away and appropriate medical personnel are to be called immediately

10° F and below: No outdoor practices are to be held

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Wind Chill Chart



		Temperature (°F)																
Calm		40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
Wind (mph)	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	

Frostbite Times 30 minutes 10 minutes 5 minutes

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})
 Where, T= Air Temperature (°F) V= Wind Speed (mph) *Effective 11*

Cold Injuries: Signs and Symptoms

***Proper hydration is important at all times but special attention should be paid to proper hydration in extreme heat and cold. Evidence suggests the normal thirst mechanism is blunted with cold exposure so athletes should be encouraged to hydrate even if they are not thirsty.*

- **Chilblain**
 - Exposure to cold, wet conditions for more than 60 minutes at temperatures less than 50° F and the presence of small erythematous papules, with edema, tenderness, itching, and pain. Upon re-warming, the skin may exhibit inflammation, redness, swelling, itching, or burning and increased temperature.

- **Hypothermia**
 - **Mild**-- Vigorous shivering, increased blood pressure, rectal temperature less than 98.6° F but greater than 95° F, fine motor skill impairment, lethargy, apathy, and mild amnesia
 - **Moderate/Severe**-- Cessation of shivering, very cold skin upon palpation, depressed vital signs, rectal temperature between 90° F and 95° F for moderate hypothermia or below 90° F for severe hypothermia, impaired mental function, slurred speech, unconsciousness, and gross motor skill impairment

- **Frostbite**
 - **Superficial**--edema, redness or mottled gray skin appearance, stiffness, and transient tingling or burning
 - **Deep**-- edema, mottled or gray skin appearance, tissue that feels hard and does not rebound, vesicles, and numbness or anesthesia

- **Immersion (Trench) Foot**
 - Exposure to cold, wet environments for 12 hours to 3 or 4 days, burning, tingling or itching, loss of sensation, cyanotic or blotchy skin, swelling, pain or sensitivity, blisters, and skin fissures or maceration

** Adapted from the NATA Position Statement: Environmental Cold Injuries*

UNH Sport Club Lightning Guidelines

“It is incumbent on all individuals, particularly those who are leaders in athletics and recreation, to appreciate the lightning hazard, learn the published lightning-safety guidelines, and act prudently, wisely, and in a spirit that will encourage safe behavior in others.”

-NATA Position Statement: Lightning Safety for Athletics and Recreation

30-30 Rule

Seeking a safe structure or location at the first sign of lightning or thunder activity is **highly recommended**. By the time the flash-to-bang count approaches 30 seconds all individuals should already be inside or immediately seek a safe structure. *All individuals have the right to leave an athletic site or activity, without penalty, in order to seek a safe structure or location if they feel they are in danger.*

- *Flash-to-Bang Method*

To use the flash-to-bang method, the observer begins counting when a lightning flash is sighted. Counting is stopped when the associated thunder (bang) is heard. Divide this count by 5 to determine the distance to the lightning flash in miles.

EX: A 30 second count is a 6 mile distance.

- Outdoor activity is not to resume until 30 minutes after the last sound of thunder or flash of lightning. The 30 minute clock is reset every time a flash of lightning or clap of thunder occurs.
 - This 30 minute to return to activity rule is to be followed regardless of what the weather may look like outside (blue skies, clouds breaking, etc).

Chain of Command

- The Certified Athletic Trainer (ATC) is the individual who is responsible for making the call to postpone play and remove individuals from outdoor activity.
 - In the event that an ATC is not present, a member of the campus recreation professional staff is responsible to make the call.
 - In the even that campus recreation professional staff is not present, the coach (if a coach is not present, the team captain) is responsible for making the call.

Safe Locations

- The primary choice for a safe location from the lightning hazard is any substantial, frequently occupied building. The secondary choice for a safer location from lightning hazard is a fully enclosed vehicle with a metal roof and the windows closed. It is important not to touch any part of the metal framework of the vehicle while inside it during ongoing thunderstorms. **Convertible cars and golf carts do not provide protection from lightning danger.**
 - **Memorial Field**
 - Whittemore Center/Hamel Recreation Center
 - **Bremner Field/Tennis Courts/Rugby Pitch/Softball Field**
 - Field house
- It is very important that all other on/off campus outdoor activities identify safe indoor locations in case of lightning or thunder.

Unsafe Locations

- Outside and highest point of a open field
- Out on the open water
- Trees, flag poles and light poles (under or near)
- Rain or picnic shelters
- Athletic storage sheds
- Indoor/outdoor pools
- Avoid showering, using plumbing facilities and locker room shower areas
- Avoid landline telephones

Lightning Strike Injury

Mechanisms

- *Direct Strike*
 - Occurs when lightning directly hits the individual. This most commonly occurs to the head.
- *Contact Injury*
 - Occurs when the victim is touching an object that is in the pathway of a lightning current.
- *Side Flash*
 - Occurs when lightning strikes an object near the victim and then jumps from that object to the victim. This is the main danger to a person who is sheltered under an isolated, tall tree.
- *Step Voltage*
 - Occurs when the lightning current flowing in the ground radiates outward in waves from the strike point. If one of the individual's feet is closer to the strike than the other, a step voltage is created. Placing one's feet close together while in the crouched position and not lying flat on the ground are crucial in reducing the likelihood of injury from a step voltage or ground current.
- *Blunt Injury*
 - Lightning current can cause violent muscular contractions that throw its victims many meters from the strike point. Explosive and implosive forces created by the rapid heating and cooling by the lightning current are also enough to produce traumatic injuries.

Care and Treatment

In the event that someone is struck by lightning, 911 is to be called immediately. Once 911 has been called, perform the following steps in order:

1. Survey the scene for safety.
2. Carefully move the victim to a safe area if needed. (if a storm is still going on, it is important to move to safety to avoid further injury to victim or medical personnel)
3. Evaluate and treat from apnea (not breathing) and asystole (no heartbeat).
4. Evaluate and treat for hypothermia and shock.
5. Evaluate and treat for fractures.
6. Evaluate and treat for burns.

**Adapted from the NATA Position Statement: Lightning Safety for Athletics and Recreation*