

# BC Soccer Extreme Weather Guidelines

February 22, 2024

#### Overview

Participant health and safety is a high priority for BC Soccer; thus, it is recommended to err on the side of caution if ever in doubt in any situation regarding the health and safety of participants.

The BC Soccer Extreme Weather Guidelines serve as a guidance for member organizations, affiliates, team officials, players, and match officials (registered referees) of BC Soccer. The Guidelines outlines considerations in assessing Extreme Weather conditions for the practice of soccer activities, promote awareness of potential health impacts, and provide additional information about the Extreme Heat, Extreme Cold, Preventative Measures & Potential Risk.

#### Extreme Heat Guidelines

- Step 1 Determine Location
   Go to <a href="https://www.theweathernetwork.com/ca">https://www.theweathernetwork.com/ca</a> and find your specific location.
- Step 2 Determine Temperature (Projected Temperature) Check the current temperature with specific focus on the "feels like" temperature which accounts for the humidity in measuring temperature
- 3. Step 3 Review the EHE Activity Chart (below) for appropriate Activity Modifications.

Humidex Value	Discomfort at rest	Risk	Recommended modifications
Below 24 C	None	Low	N/A
25C to 27C	None	Low to Moderate	N/A
		Moderate - Athletes should be	Games - Drink Breaks every 30
28C to 31C	Some	monitored	Minutes
	High - Athletes should be monitored	Games - consider reduced game	
		closely	length, re-schedule kick-off or
32C to 36C	High	closely	cancellation
38C +	EXTREME	EXTREME	ALL ACTIVITY CANCELLED

#### **Extreme Heat Events (EHE) Activity Chart**

4. Step 4 – Games, Tournament Play, Training and Practices

Where possible, matches should be scheduled for cooler times of the day.

Playing in hot conditions both increases the risk of heat illness and impairs performance.
 Event organizers should attempt to organize matches at a time where less heat stress and exposure is expected. They should reschedule matches where the heat stress is extreme.

Important notes related to game play:

- the match official (registered referee) reserves the final right to cancel the game if the conditions are considered dangerous, in their opinion.



- Referee to write on game sheet reason for an abandonment with EHE Humidity Value, time & date and number calculated.
- If temperature increases dramatically during a game referees and team officials are advised to use their discretion. Record all decisions and relevant information on the game sheet.
- If possible, ttempt to modify playing surfaces, natural surfaces will radiate less heat

Important notes related to training and practices:

- Team Officials should consider if the conditions are considered dangerous and if so, reschedule practice or postponing practice until a later time.
- If temperature increases dramatically during training or a practice, Team Officials are advised to use their discretion and be responsible.
- Team Officials should have an Emergency Action Plan that is shared with all participants (see link here for template).
  - Team Officials are encouraged to complete the <u>NCCP Emergency Action Plan e-</u> <u>learning activity</u> on creating and using an Emergency Action Plan (EAP).

#### Laws of the Game Allowance

Law 7 within the Laws of the Game allowance for medical stoppages permitted by competition rules, e.g. 'drinks' breaks and 'cooling' breaks.

Definitions in Law:

- 'Drinks' break Competition rules may allow 'drinks' breaks (of no more than one minute) for players to rehydrate; these are different from 'cooling' breaks
- 'Cooling' break In the interests of player welfare and safety, competition rules may allow, in certain weather conditions (high humidity and temperatures), 'cooling' breaks (usually ninety seconds to three minutes) to allow the body's temperature to fall; these are different from 'drinks' breaks

#### **Preventive Measures**

Lightweight, breathable clothing is needed when training and playing in hot conditions.

- This type of clothing allows evaporative cooling to occur (evaporation of sweat). Heavier items of clothing can limit heat loss through this source

Ensuring players are hydrated.

- Importantly even well-hydrated players can be affected by heat illness.
- Hydration includes consuming water and fluids that contain sodium and potassium as this is lost with sweating.
- Prior to the start of training/games consume up to 2000ml of fluid
- Rule of thumb: when playing or training, drinking at least 500 ml for every 20 lbs of body weight is recommended. Thus, someone weighing 140 lbs should drink at least 3500 ml of fluid per day.

#### Other factors to consider in determining risk include (but are not limited to):

Not being acclimatized	Fitness Level (Unfit)
Hypo hydration	Hyper hydration
Use of a variety of medications or supplements	Persons with persistent, disabling mental illness
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Certain medical conditions (cardiac, lung)

### Early warning signs to consider include (but are not limited to):

Flushed faceHyperventilation or shortness of breath<br/>Dizzin<br/>Tingling armsDizzin<br/>Goose<br/>ChillinessConfusion, agitation, uncooperativenessPoor of<br/>Confusion, agitation, uncooperativeness

Dizziness Goose bumps (hair on arms standing on end) Poor coordination

#### Potential Risks of Extreme Heat Events (Heat Exposure)

Heat Cramps - these are the mildest form of heat trauma, commonly related to low body sodium and chloride levels.

- Signs & Symptoms include weakness, muscle cramps, collapse with low blood pressure.
- Treatment is aimed at replacing the salt loss and can be oral or by intravenous if vomiting is a
  problem. Having athletes put a little extra salt on their food the day before and day of game can
  be a helpful way to avoid this condition.

Heat Exhaustion - this is a more severe medical event as follows.

- Signs & Symptoms include weakness, irritability, collapse, unable to sweat adequately to promote body cooling, my proceed in the more ominous heat stroke and a fine rash is often present.
- Treatment is to remove athlete to a cooler environment, use ice baths, fans.

Heat Stroke - THIS IS A MEDICAL EMERGENCY - it is due to a failure of the heat-controlling mechanism. It may occur merely as a result of exposure to heat.

- Signs & Symptoms include mental confusion, headache, poor coordination, delirium, convulsions and death. The body temperature may be 106 F or 40.5 C or higher, the skin is usually hot and dry as the sweating mechanism has failed.
- Treatment Call 911 and transport to a local Hospital. Rapid cooling is the goal using wet towels, spray mist, sponge baths and removal from the heat. This condition could cause the athlete to go into shock and coma may follow so immediate medical attention is required.

#### **Extreme Cold Guidelines**

- Step 1 Determine Location
   Go to <u>https://www.theweathernetwork.com/ca</u> and find your specific location.
- Step 2 Determine Temperature (Projected Temperature) Check the current temperature with specific focus on the "feels like" temperature which accounts for the windchill in measuring temperature
- 3. Step 3 Review the ECW (Extreme Cold Weather) Modifications.

#### **Extreme Cold Weather Chart**

Temperature	Conditions	Risk	Recommended
			modifications



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3 C Wind Chill or Warmer	Without Precipitation With precipitation	Low risk Low risk	Proceed with activities as normal
0 to 2 C Wind Chill	Without Precipitation	Medium risk	No more than 60 minutes outside per game or practice
	With Precipitation	High risk	No more than 40 minutes outside per game or practice
-1 to -3 C Wind Chill	Without Precipitation	High risk	No more than 30 minutes outside per game or practice
	With Precipitation	Extreme risk	All outdoor activity cancelled or moved indoors
-4 C or colder wind chill	Without Precipitation With precipitation	Extreme risk Extreme risk	All outdoor activity cancelled or moved indoors

- 4. Step 4 Games, Tournament Play, Training and Practices Where possible, halves should be shortened, or games should be cancelled or rescheduled.
  - Playing in cold conditions both increases the risk of cold related illness and impairs
  - performance. It is important that players can take more breaks to heat up and get out of the cold.

# Important notes related to game play:

The Match Official reserves the final right to abandon the game if the conditions are considered dangerous, in their opinion.

- Referee to write on game sheet reason for an abandonment with Wind Chill Temperature, time & date and number calculated.
- If the temperature decreases dramatically during a game, referees and team officials are advised to use their discretion. Record all decisions and relevant information on the game sheet.

# Important notes related to training/practices:

- Team Officials should consider if the conditions are considered dangerous and if so, reschedule practice or postponing practice until a later time.
- If temperature decreases dramatically during training or a practice, Team Officials are advised to use their discretion and be responsible.



- Team Officials should have an Emergency Action Plan that is shared with all participants (see link here for template).
  - Team Officials are encouraged to complete the <u>NCCP Emergency Action Plan e-</u> <u>learning activity</u> on creating and using an Emergency Action Plan (EAP).

#### **Preventive Measures**

Dress appropriately. When temperatures drop and wind increases, the body loses heat more rapidly. Layering clothing is recommended and very effective as it can be added or removed based on body temperature and changing environmental conditions.

- Layers around the body core to insulate, as well as pants, and long sleeves or sweatshirts are recommended
- Gloves, and toques or hats are recommended to protect hands and ears
- Wicking socks that do not hold moisture inside are recommended (Cotton absorbs moisture, wool is a better alternative)

Stay Dry. Precipitation can add to the risk of illness during cold weather.

- If players do get wet during training or play, remove wet clothing and replace it with dry clothing, especially if the player will remain our of play for a prolonged period of time.

Fuel up and Stay Hydrated.

- Cold exposure requires more energy from a body, additional caloric intake may be required
- Cold weather can reduce our ability to recognize that we are becoming dehydrated. Though the thirst reflex is not activated in the cold, make a conscious effort to hydrate before, during, and after activity.

## Other factors to consider in determining risk include (but are not limited to):

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Not being acclimatized	Fitness Leve
Hypo hydration	Hyper hydra
Use of a variety of medications or supplements	Persons wit
Certain medical conditions (cardiac, lung)	

Fitness Level (Unfit) Hyper hydration Persons with persistent, disabling mental illness

## Potential Risks of Extreme Cold Weather

Frostnip – this is a non-freezing injury of the skin, usually of the fingers, toes, ears, cheeks and chin.

- Signs & Symptoms include redness, numbness and tingling, but no tissue freezing occurs
- Treatment is done by gently rewarming the skin with clothing or skin contact. Do not rub the skin to rewarm

Chillblain – this is a more significant nonfreezing injury of the skin, similar to frostnip

- Signs & Symptoms include swelling in addition to the redness, numbness and tingling of frostnip
- Treatment is done by gently rewarming the skin with clothing or skin contact. Do not rub the skin to rewarm

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Frostbite - this is what happens when skin and tissue actually begins to freeze

- Signs & Symptoms include edema, mottled gray skin, tingling or burning, blisters and numbness or loss of sensation
- Treatment is done by gently rewarming the skin with warm water. Do not rub or massage the frostbitten area, this may increase the damage. Do not use heating pads, heat lamps, or the



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- heat of a stove or fireplace since skin is numb and can be easily burned.
- If any of the symptoms persist for longer than a few hours, seek medical attention.

Hypothermia – THIS IS A MEDICAL EMERGENCY- this is the result of the internal body temperature dropping to 95 F or 35 C or less. It can be fatal if not detected promptly and treated properly.

- Signs & Symptoms begin with feelings of intense cold, shivering and behaviour that is more quiet and disengaged than normal. As the condition worsens, the individual may seem confused, sleepy, and may begin slurring speech. Additional signs include shivering vigorously or suddenly not shivering, increased blood pressure, lethargy, and impaired mental function.
- Treatment- call 911 and try warming the center of the body. Ensure they are dry and cover them with layers of blankets, clothing, or towels to contain their body heat. Warm non-alcoholic beverages can also help.

#### Safe Sport Statement

BC Soccer believes that everyone involved in soccer has the right to participate in safe and inclusive environments free of abuse, harassment, discrimination, and to enjoy the sport at whatever level or capacity they participate in. The welfare of everyone involved in soccer is the foremost consideration and in particular, the protection of children in the sport is the responsibility of everyone involved.

#### **About BC Soccer**

Established in 1904, BC Soccer is the largest provincial sports organization (PSO) in BC and the third largest soccer-specific PSO in Canada with over 150,000 participants, consisting of registered players, coaches, referees, administrators and soccer leaders. As a professional not-for-profit society and a member of Canada Soccer, BC Soccer is committed to providing the widest opportunities for existing and potential participants, as well as provide support in the most effective and appropriate way for current players, parents, volunteers, member clubs, leagues, and districts.

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