

SEVERE WEATHER POLICY

Approved by the Board of Directors May 31, 2021

1 Introduction

A [2019 Canadian study](#) contains some stark conclusions – particularly that Canada’s climate has warmed and will warm further in the future. (NRCAN Canada’s Changing Climate Report). The report presents evidence to suggest an increased likelihood of extreme weather events, which in a sport context identifies a risk that archery tournament organizers must be prepared to manage.

Severe weather is that which may or will have an immediate impact on the safety of participants, judges, staff, spectators or the venue.

Severe weather may be defined as, but is not limited to, the following conditions:

- Lightning,
- Excessive heat,
- Excessive winds
- Excessive rain.

The Rule Book of Archery Canada refers to the possibility of disruption or cancellation of a tournament due to weather. This severe weather policy has been developed for use at all national events and to serve as a guide for local event organizers when making a decision to postpone, disrupt or cancel a tournament as a result of an extreme weather event.

2 Responsible individuals

The World Archery and Archery Canada Rule Book provide some guidance on who is responsible leading up to and during the tournament to take a decision to disrupt or cancel a tournament in Book 2 for Target (3.12.1.7.) and Book 4 for Field and 3D (26.2.2.). Prior to the start of the Tournament, the organizer of the tournament has a responsibility to monitor weather for the area where the tournament is to take place. At all times, should the head of the Organizing Committee, the DOS or head judge, and/or the Technical Delegate identify any conditions which in their opinion raise the risk level beyond that reasonably expected when participating in the sport of archery, then they should reschedule, delay, disrupt or cancel the tournament. (see

3 Lightning:

Each year lightning kills two to three Canadians and injures approximately 180 others. Outdoor recreational enthusiasts account for 70% of the victims killed and 62% of the injuries. (Environment Canada).

3.1 To plan for a safe day, check the weather forecast first. If the event is held in a region that can typically be affected by lightning or if lightning producing storms are forecasted, then a tournament official should be assigned to monitor the weather forecasts. When a severe storm is on the horizon, Environment Canada will issue weather warnings on their website and through radio and television stations.

3.2 Watch the skies for developing thunderstorms and listen for thunder. When deemed necessary, one of the responsible individuals on the day of the tournament will monitor forecasts, weather warnings and Environment Canada's Lightning Danger Maps (https://weather.gc.ca/lightning/index_e.html). For Archery Canada organized events, a lightning detector shall be part of the standard venue equipment, and it is a recommendation for tournament organizers in such areas to have one on hand.

3.3 Sound alert and get to a safe place. If a weather statement or local conditions indicate a thunderstorm is imminent, the responsible individual has the authority to take action to alert all participants to suspend play and take shelter.

Lightning often strikes outside the area of heavy rain and may strike as far as 16km (10 miles) from any rainfall. Depending on atmospheric conditions, you can hear thunder from as far away as 20 km, or as close as 8 km (Environment Canada). **The first and most important thing to remember is that if you can hear thunder, you are within striking distance of lightning, suspend play, clear the Field of Play and take appropriate shelter.** When a lightning detector is used and indicates lightning within 16km (10 miles), even if thunder is not heard, the Field of Play should be cleared.

The best shelter would be located in a substantial building, i.e. buildings with wiring and plumbing are the safest. Once inside, stay away from windows, doors and anything that conducts electricity such as corded phones, wiring, appliances, plumbing and anything connected to these.

In the absence of a building at the event site, hard-topped metal vehicles with the windows closed also provide good protection. Avoid contact with metal in the vehicle and try to keep away from windows.

Finally, if you absolutely cannot get to safety, you can slightly lessen the threat of being struck with the following tips.

- Get out of open fields: If you are caught in an open field, do not lay flat on the ground. If you cannot seek shelter, kneel on the ground with your feet together, your hands on your knees and your body bent forward (Canadian Red Cross). Do not lie flat on the ground.
- Stay away from tall, isolated trees or other tall objects. If you are in a forest, stay near a lower stand of trees.
- Place your bow and other conductive items well away from you.
- If you are in a group, spread out to avoid the current traveling between group members.

3.4 Continue delay for 30 minutes. Tournament activities will resume no less than 30 minutes after the last rumble of thunder.

3.5 First Aid. Giving first aid to lightning strike victims while waiting for professional medical attention can save their lives. It is safe to touch a lightning strike victim. People struck by lightning DO NOT carry a charge. Follow these steps immediately to help save the life of a lightning strike victim:

- Call 911 at once.
- Check if the victim is breathing. Begin CPR if necessary.
- If possible, move the victim to a safer place. Be aware that the thunderstorm may still be dangerous. Don't let the rescuers become victims.

Canadian Lightning Danger Map - The Canadian Lightning Danger Map (CLDM) represents areas at greatest risk of being struck by lightning in the next 10 minutes

https://weather.gc.ca/lightning/index_e.html

Hazards and Emergencies - <https://www.getprepared.gc.ca/>

For more information: Environment Canada Lightning safety and preparedness fact sheet

4 Excessive Heat:

Climate modelling indicates Canadian cities will see an increase in the number of hot days (with a temperature high of 30°C) in the future. Archery being an “outdoor” sport, the risk of heat exposure is ever present. Archers are responsible for their own safety and should take appropriate precautions such as wearing appropriate clothing, hats and long sleeve shirts, use sun screen and drink water on a regular basis.

4.1 Postponement/Cancelation. Environment Canada issues Heat and Humidex Advisories when temperatures are expected to reach or exceed 30°C/ 86°F and/or the

Humidex value (a combination of humidity and temperature) is expected to reach or exceed 40 on the Humidex scale of perceived temperature. Environment Canada developed a humidex rating chart to announce when heat and humidity may be uncomfortable to people which is an effective guide for assessing risk. (see appendix 1).

If at 6.00 pm the day prior, the humidex reading forecast by Environment Canada exceeds 40C, the competition must be rescheduled or cancelled by the responsible individuals (see section 2).

4.2. Time of Day. If a heat advisory has been issued, tournament scheduling should avoid the hottest part of the day (usually 11 am-3 pm).

4.3 Monitor. Archery Canada tournaments shall have the necessary equipment to monitor ambient temperatures and humidity throughout the competition. For local monitoring, either Humidex or Heat index (see Appendix 3) may be used. On the day of the event the ambient temperature shall be monitored as follows:

- Thirty (30) minutes prior to the start of activity, temperature and humidity readings should be taken at the practice /competition site,
- The information should be recorded, and these records shall be available for inspection upon request,
- The temperature and humidity should be factored into the humidex/Heat index rating chart.
- If a reading is determined whereby activity is to be decreased (above 38 degrees ambient/humidex/Heat Index), then re-readings would be required every thirty (30) minutes to determine if further activity should be disrupted or preventative steps taken, or if an increased level of activity can resume,
- When ambient temperature/humidex/Heat index are between 31C-39.9C notice for participants to take added precautions, stay hydrated, and take breaks in shaded areas when possible and organizers will follow the guidelines in section 7.

4.4 First Aid. Heat-related emergencies occur when the body becomes dehydrated, which may result in an increased body temperature. Heat cramps, heat exhaustion, or heat stroke, can happen to anyone who stays in the summer heat and sun for too long. When someone appears to be suffering from heat related distress:

1. Remove from heat,
2. Direct the victim to loosen tight clothing,
3. If necessary, take steps to cool them off by pouring water on torso or immersion in the case of heat stroke,
4. Provide a cool drink if conscious.

Watch for symptoms of heat illness, such as:

- Dizziness or fainting
- Nausea or vomiting
- Headache
- Rapid breathing and heartbeat
- Extreme thirst
- Decreased urination with unusually dark yellow urine
- Changes of behaviour in children

Heat stroke is a medical emergency. Call 911 or your local emergency number if heat stroke is suspected.

Spring and Summer Weather Hazards – [Environment Canada](#)

Heat related emergencies – [Canadian Red Cross](#)

5. Excessive Wind:

Excessive wind (60-65km/hr or more with gusting up to 90km/hr or more) is a condition that results in target stands, umbrellas, tents and other venue equipment to fall over or be blown away. This is dangerous to all people in the vicinity and competition should be delayed/postponed until winds subside.

5.1 Tornadoes

Each year on average, about 43 tornadoes occur across the Prairies and about 17 occur across Ontario and Quebec. The peak of the season is June through August.

- [Environment Canada](#) provides up to date information on tornado conditions, storm maps and weather warnings.
 - **A tornado warning** means a tornado is already occurring or will occur soon in your area. Evacuate if advised to do so.
 - **A tornado watch** means a tornado is possible in your area. Stay alert for more information.
- If a tornado watch or warning has been issued for the area of a tournament prior to the start, the tournament should be postponed until the warning or watch has been lifted.

5.1.1 Watch for danger signs:

- Dark, often greenish or orange-grey skies.
- Large hail.
- Large, dark, low-lying, rotating or funnel-shaped clouds.
- Roaring noise – similar to the sound of a freight train.

5.1.1 If there is the threat of a tornado while the tournament is taking place, stop all play, direct all participants to take cover.

- If possible, move at a right angle to the storm's path.

- Find a low-lying area, such as a ditch, and lie flat. Hang onto a small tree or shrub if you can, and/or shield your head with your arms.
- If you are in a car, mobile home or other temporary shelter, get out immediately and head for safety. It is unsafe to stay in your vehicle as it could be picked up, blown over or roll over you.

6. Excessive Rain:

Excessive rain is a condition that results in scorecards becoming illegible or the field becoming flooded. Neither of these situations is conducive to a well-run event and competition management should weigh the possible continuation of competition.

In the case of 3D and Field events, with course layouts that have targets situated on an inclined or declined area, consideration should be given to slip and trip hazards, and the risk of injury or damage of equipment during severe rain.

In cold and wet conditions consideration should also be given to hypothermia.

As power is required for many tournaments consideration should be given to the hazard of water and electricity and appropriate action taken.

7. Communication:

Whenever there is a threat of severe weather, the policy for handling such needs to be announced prior to the start of competition.

7.1 Pretournament announcement. There will be a “place holder” in the DOS script for this announcement.

The severe weather announcement shall contain, but is not limited to the following:

- A description of the severe weather conditions that will cause a delay, postponement, or cancellation of part or all of the remainder of the event,
- The safest and nearest location for shelter where participants, staff and spectators are advised to relocate,
- The location of first aid or medical and
- The mode or method that the event management will use to communicate any re-start, postponement or cancellation of the day's event(s).

7.2 Postings. The Archery Canada Extreme Weather Poster should be posted in a visible location that may be seen by all participants as a reminder of warning signs and what they should do in the case of an extreme weather event.

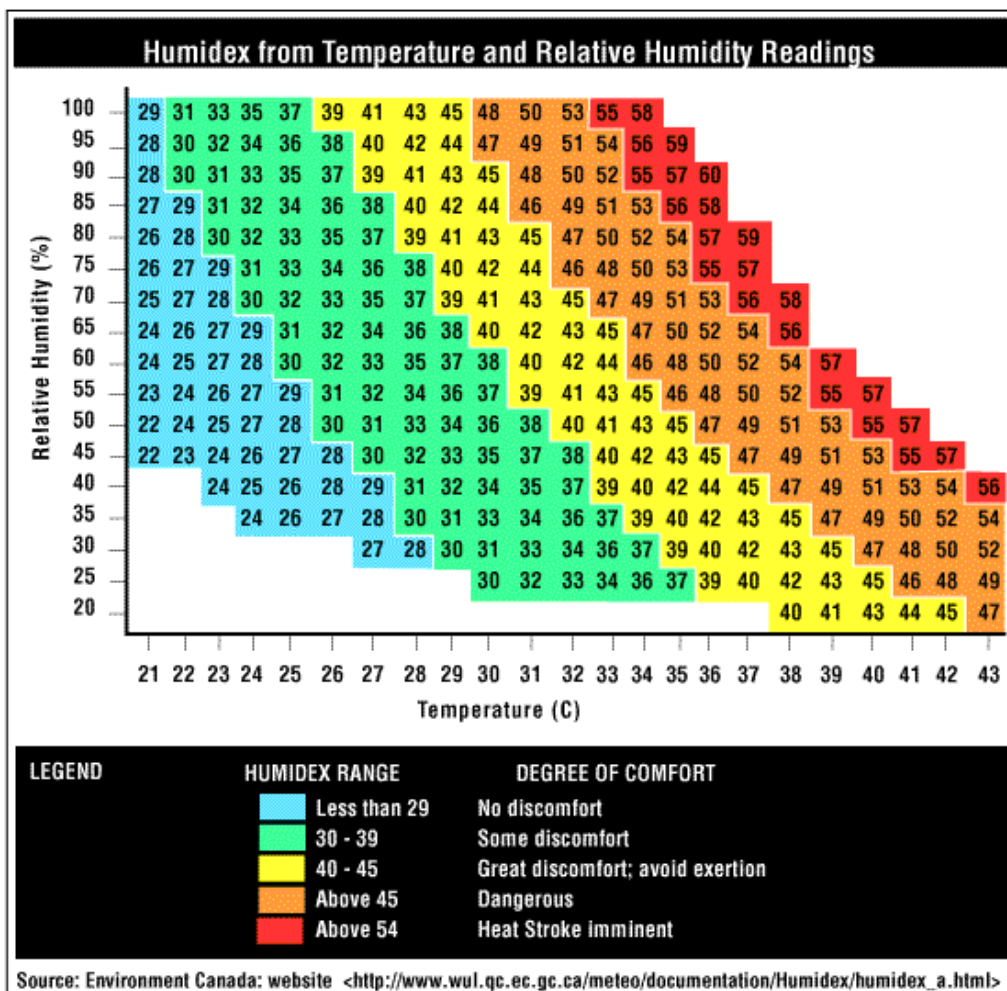
Appendix 1: Definitions

Delay - a smaller increment of time, i.e. 15 or 30 minutes, after which competition may resume.

Disruption/Postponement - a larger increment of time, i.e. 2+ hours, after which competition may resume.

Cancellation - a point at which the current competition phase is stopped and the determination is made that the schedule cannot be adjusted to complete the phase.

Appendix 2: Environment Canada's Humidex Comfort Ratings



Appendix 3: NOAA Heat Index

NOAA national weather service: heat index

		Temperature															
		80 °F (27 °C)	82 °F (28 °C)	84 °F (29 °C)	86 °F (30 °C)	88 °F (31 °C)	90 °F (32 °C)	92 °F (33 °C)	94 °F (34 °C)	96 °F (36 °C)	98 °F (37 °C)	100 °F (38 °C)	102 °F (39 °C)	104 °F (40 °C)	106 °F (41 °C)	108 °F (42 °C)	110 °F (43 °C)
Relative humidity	40%	80 °F (27 °C)	81 °F (27 °C)	83 °F (28 °C)	85 °F (29 °C)	88 °F (31 °C)	91 °F (33 °C)	94 °F (34 °C)	97 °F (36 °C)	101 °F (38 °C)	105 °F (41 °C)	109 °F (43 °C)	114 °F (46 °C)	119 °F (48 °C)	124 °F (51 °C)	130 °F (54 °C)	136 °F (58 °C)
	45%	80 °F (27 °C)	82 °F (28 °C)	84 °F (29 °C)	87 °F (31 °C)	89 °F (32 °C)	93 °F (34 °C)	96 °F (36 °C)	100 °F (38 °C)	104 °F (40 °C)	109 °F (43 °C)	114 °F (46 °C)	119 °F (48 °C)	124 °F (51 °C)	130 °F (54 °C)	137 °F (58 °C)	
	50%	81 °F (27 °C)	83 °F (28 °C)	85 °F (29 °C)	88 °F (31 °C)	91 °F (33 °C)	95 °F (35 °C)	99 °F (37 °C)	103 °F (39 °C)	108 °F (42 °C)	113 °F (45 °C)	118 °F (48 °C)	124 °F (51 °C)	131 °F (55 °C)	137 °F (58 °C)		
	55%	81 °F (27 °C)	84 °F (29 °C)	86 °F (30 °C)	89 °F (32 °C)	93 °F (34 °C)	97 °F (36 °C)	101 °F (38 °C)	106 °F (41 °C)	112 °F (44 °C)	117 °F (47 °C)	124 °F (51 °C)	130 °F (54 °C)	137 °F (58 °C)			
	60%	82 °F (28 °C)	84 °F (29 °C)	88 °F (31 °C)	91 °F (33 °C)	95 °F (35 °C)	100 °F (38 °C)	105 °F (41 °C)	110 °F (43 °C)	116 °F (47 °C)	123 °F (51 °C)	129 °F (54 °C)	137 °F (58 °C)				
	65%	82 °F (28 °C)	85 °F (29 °C)	89 °F (32 °C)	93 °F (34 °C)	98 °F (37 °C)	103 °F (39 °C)	108 °F (42 °C)	114 °F (46 °C)	121 °F (49 °C)	128 °F (53 °C)	136 °F (58 °C)					
	70%	83 °F (28 °C)	86 °F (30 °C)	90 °F (32 °C)	95 °F (35 °C)	100 °F (38 °C)	105 °F (41 °C)	112 °F (44 °C)	119 °F (48 °C)	126 °F (52 °C)	134 °F (57 °C)						
	75%	84 °F (29 °C)	88 °F (31 °C)	92 °F (33 °C)	97 °F (36 °C)	103 °F (39 °C)	109 °F (43 °C)	116 °F (47 °C)	124 °F (51 °C)	132 °F (56 °C)							
	80%	84 °F (29 °C)	89 °F (32 °C)	94 °F (34 °C)	100 °F (38 °C)	106 °F (41 °C)	113 °F (45 °C)	121 °F (49 °C)	129 °F (54 °C)								
	85%	85 °F (29 °C)	90 °F (32 °C)	96 °F (36 °C)	102 °F (39 °C)	110 °F (43 °C)	117 °F (47 °C)	126 °F (52 °C)	135 °F (57 °C)								
	90%	86 °F (30 °C)	91 °F (33 °C)	98 °F (37 °C)	105 °F (41 °C)	113 °F (45 °C)	122 °F (50 °C)	131 °F (55 °C)									
	95%	86 °F (30 °C)	93 °F (34 °C)	100 °F (38 °C)	108 °F (42 °C)	117 °F (47 °C)	127 °F (53 °C)										
100%	87 °F (31 °C)	95 °F (35 °C)	103 °F (39 °C)	112 °F (44 °C)	121 °F (49 °C)	132 °F (56 °C)											

Key to colors: Caution Extreme caution Danger Extreme danger

The above policy has been developed with content from the USA Archery Severe Weather Policy.