



### SEVERE SUMMER WEATHER GUIDELINES Updated March 8, 2018

The safety of players, coaches, referees, management, and spectators is always the primary concern of the Manitoba Soccer Association (MSA) at any event under its jurisdiction. As such, the following guidelines are to be followed at outdoor games in which severe weather conditions threaten or occur.

In any MSA-sanctioned outdoor soccer game where a league or competition representative is not present, the referee is the ultimate authority regarding delaying, cancelling, or restarting a game due to weather. This is different than cancelling a game due to field conditions, where, in some situations, the authority may rest with the facility operators.

Since severe weather conditions (including extreme heat and humidity, thunder and lightning, large hail, strong winds, and tornados) may have serious consequences, referees are reminded to act responsibly and err on the side of caution. It is highly recommended that referees check weather conditions prior to departing for a game in order to be aware of any imminent threatening conditions. (See links at the end of this document for suggested sources of weather information.)

Once the referee (or league/competition representative) has determined that it is in the best interest of everyone to seek shelter due to the weather conditions, the referee must ensure that a team representative (i.e., coach or other team official) is made aware of the situation and advise them to have all players, team officials, and team spectators seek shelter. In addition, the referee needs to ensure the rest of the referee crew seeks shelter.

#### **EXTREME HEAT AND HUMIDITY**

Southern Manitoba is particularly susceptible to high temperatures and humidity. On days with high humidity, the average person will feel hotter compared to a drier day with the same air temperature since perspiration (which normally cools down the individual) cannot evaporate as readily in moist, saturated air.

Since 1965, the Humidex has been adopted and used throughout Canada. The Humidex combines the temperature and humidity into one number to better describe the perceived temperature that an average person is experiencing.

When the Humidex is high, individuals are at considerable risk of heat stroke, cramps, exhaustion, and sunstroke. Environment Canada has created the following table to relate the Humidex values to the comfort level that an individual will experience.











#### **Humidex Table**

Humidex	Degree of Comfort
20 - 29	No discomfort
30 - 39	Some discomfort
40 - 45	Great discomfort; avoid exertion
46 and over	Dangerous; possible heat stroke

Source: Environment Canada (<a href="https://www.canada.ca/en/environment-climate-change/services/seasonal-weather-hazards/spring-summer.html#humidex">https://www.canada.ca/en/environment-climate-change/services/seasonal-weather-hazards/spring-summer.html#humidex</a>)

An extremely high Humidex reading is defined by Environment Canada as one that is over 40. At that level, it is suggested that individuals avoid exertion.

Based on this information, the MSA has adopted the following guidelines for its Member Leagues with regard to matches played on summer days with high Humidex values. These guidelines were based on the Humidex value two hours prior to the scheduled kick-off time.

- On days where the Humidex value is 35-39, games will proceed as scheduled. A water break during each half may be allowed if agreed upon by the teams.
- When the Humidex value reaches 40-45, the MSA recommends that Member Leagues consider delaying kick-off, postponing the match, or cancelling the match. Should a Member League decide to go ahead with its scheduled matches, multiple water breaks will be permitted during the course of each half of play.
- If the Humidex value reaches 46 or greater, the MSA recommends Leagues cancel matches where, in all probability, the Humidex will remain over the threshold of 46 by kick-off. On such days, the MSA will reserve the right to withdraw the services of its match officials should it deem the weather conditions to be too dangerous for the players, Club Officials, and match officials. The MSA will inform its Member Leagues of such a decision either by telephone (call or message) or e-mail at least two hours prior to the scheduled kick-off time. If a match is not cancelled in advance due to this extreme Humidex value, the official assigned to the match will retain the authority regarding delaying, cancelling, or restarting a game due to weather (as is the case with all other weather issues).

Special consideration with regard to the cancellation of matches scheduled to be played on artificial turf should be made, as studies on artificial turfs have revealed that the surface temperature on artificial pitches can average 10-20 degrees Celsius higher compared to air temperature (<a href="http://turf.uark.edu/turfhelp/archives/021109.html">http://turf.uark.edu/turfhelp/archives/021109.html</a>). The surface temperature is also significantly higher on artificial turf compared to natural grass pitches. Accordingly, physical











activity on an artificial field could increase the incidence of heat stroke, muscle cramping, and overall athlete fatigue. Although the use of irrigation can reduce the surface temperatures of artificial fields, this decrease has a short-lived (20-minute) effect.

### THUNDER AND LIGHTNING "When thunder roars, go indoors."

If you can hear thunder, you can get hit by lightning. As soon as you hear thunder, quickly get to a safe location. More people are struck before and after a thunderstorm than during one. Be aware of how close lightning is occurring since large groups require more time to properly evacuate an area. Know where the closest safe structure or location is to the field and know how long it takes to get to that location. A safe structure or location is:

- Any building normally occupied by people (i.e., a building with plumbing/electrical wiring that acts to electrically ground the structure). Avoid using shower facilities for safe shelter, and do not use the showers or plumbing during a thunderstorm.
- In the absence of a safe structure, any vehicle with a hard, metal roof and rolled-up windows can provide a measure of safety. A vehicle is better than remaining outdoors.
- If no safe structure or vehicle is within reasonable distance, find a thick grove of small trees surrounded by taller trees, or a dry ditch. Assume a crouched position on the ground with only the balls of the feet touching ground, wrap your arms around your knees, and lower your head. Minimize contact with the ground as lightning currents often enter a victim through the ground rather than by direct overhead strike. Do not lie flat!
- If unable to reach safe shelter, stay away from the tallest trees or objects such as light poles, flag poles, fences, bleachers, individual trees, standing pools of water, and open fields. Do not take shelter under a single, tall tree.
- Avoid using the telephone, except in emergency situations. A cellphone is a safe alternative to landline phones, providing the caller is located within a safe structure or location, and all other precautions are followed.

Stay inside for 30 minutes after the last rumble of thunder. When considering resumption of any athletic activity, wait at least 30 minutes after the last flash of lightning or sound of thunder before returning to the field.

#### First aid for lightning victims:

Prompt, aggressive CPR has been highly effective for the survival of victims of lightning strikes. **Lightning victims do not carry an electrical charge and can be safely handled.** Call for help; victims may be suffering from burns or shock and should receive medical attention immediately. Call 911 or your local ambulance service. Give first aid. If breathing has stopped, administer cardio pulmonary resuscitation (CPR). Use an automatic external defibrillator (AED) if one is available.











#### **LARGE HAIL**

Large hail occurs mainly during severe thunderstorms and can cause injuries and damage. Other severe weather may occur concurrently with hail. When hail threatens, the recommendations for thunder and lightning should be followed. Be sure to avoid sheltering near any glass (e.g., windows, glass doors, or lights). If unable to enter a safe location or structure, crouch down facing away from the wind and use your hands to protect your head and neck. Be aware that hail (and heavy rain) may plug storm drains and cause localized flooding.

#### STRONG WINDS

Strong winds can reach over 100 km per hour causing damage to large areas with flying debris, which, in turn, can cause injuries. These winds are often mistaken for tornados. The referee (or league/competition representative) should take action once the winds impact the ability of the players to play the game and/or become dangerous.

#### **TORNADOS**

Tornados can be strong and cause injury or death. Most injuries are caused by flying debris. The referee (or league/competition representative) should take action when there is sight of a funnel cloud. Take cover inside a solid building on the lowest floor or basement, under the stairs, or under a strong table away from windows. Protect your head with cushions. Do not take cover in large gymnasiums or arenas since large roofs may collapse – bathrooms and hallways are recommended. If outside with no option to go indoors, find a low area (such as a ditch), lay flat on your stomach, and protect your head. Do not shelter in a car as it could flip.

#### **ADDITIONAL RESOURCES**

Environment Canada: Spring and Summer Weather Hazards

https://www.canada.ca/en/environment-climate-change/services/seasonal-weather-

hazards/spring-summer.html

Environment Canada: Lightning Safety and Preparedness Fact Sheet

http://www.ec.gc.ca/foudre-lightning/default.asp?lang=En&n=57412D67-1

Environment Canada: Lightening Danger Map for the Prairies

http://weather.gc.ca/lightning/index\_e.html?id=WRN#mapTop

Environment Canada: Weather Radar for:

Prairies: http://weather.gc.ca/radar/index e.html?id=WRN SW Manitoba: http://weather.gc.ca/radar/index e.html?id=XFW SE Manitoba: http://weather.gc.ca/radar/index e.html?id=XWL





