



MANITOBA SOCCER ASSOCIATION REFEREE DEVELOPMENT



SEVERE SUMMER WEATHER GUIDELINES

The Manitoba Soccer Association is concerned for the safety of players, coaches, referees and spectators in any event under the jurisdiction of the Association. As such, the following information is provided as guidelines to be followed during any severe weather conditions that may jeopardize the safety of all those in attendance during outdoor games in the Province of Manitoba. These guidelines will greatly increase safety for everyone.

In any local soccer outdoor game where a Local Organizing Committee (LOC) Representative is not present, the referee is the ultimate authority regarding delaying, canceling or restarting a game due to weather. This is different than canceling a game due to field conditions, which in some situations the authority may rest with the facility operators.

Since severe weather conditions 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 impending threatening conditions.

Summer in Manitoba may bring different weather conditions that may include large hail, heavy rain, strong winds, tornados, heat, humidity and lightning.

EXTREME HEAT AND HUMIDITY

Southern Manitoba is particularly susceptible to weather conditions of 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 as perspiration which normally cools down the individual cannot evaporate as readily in moist, saturated air.

Since 1965, the Humidex has been adopted and use 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 sun stroke. Environment Canada has created the following table to relate the Humidex values to the comfort level that an individual will experience.





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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

*** Humidex Table from Environment Canada**

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 will provide the following guidelines to member Leagues and Associations with regard to matches played on summer days with high Humidex values. These guidelines will be based on the Humidex value, two hours prior to the scheduled kick off time.

On days where the Humidex value is between 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 a level between 40 - 45, the MSA recommends that member Leagues and Associations consider delaying kick off, postponing or cancelling the match. Should a member League or Association 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 a value of 46 and over, the MSA recommends Leagues and Associations to cancel matches with a scheduled kick off time where in all probability the Humidex will remain over the 46 threshold 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 and Association of such a decision either by telephone 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 Match Official assigned to the match will retain the authority at the venue 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 when compared to the air temperature. The surface temperature is also significantly





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higher on artificial turf when 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 surface temperatures of artificial fields, the decrease associated with irrigation results in a short-lived (20 minutes) effect.

LARGE HAIL

May occur mainly in severe thunderstorms and can cause injuries and damage. When hail occurs other severe weather phenomena might also happen. Take cover when severe weather threatens.

STRONG WINDS

They can reach over 100 km per hour causing damage to large areas with flying debris, which can cause injuries. These winds are often mistaken for tornados.

TORNADOS

Occasionally they can be strong and cause injury or death. The city is as much at risk as the rural areas. Most of the injuries are caused by flying debris. Take cover inside a solid building on the lowest floor or basement, under the stairs or a strong table away from windows and protect your head with cushions. Don't take cover in large gymnasiums or arenas as large roofs may collapse – bathrooms and hallways are better.

If outside is the only option, find a low area such as a ditch and lay down protecting your head.

LIGHTNING

When having to judge situations that include lightning, you can determine the distance of lightning in the area by counting the number of seconds between the flash and the first sound of the thunder and divide by five (5). This will give you the distance in miles from your location. For example, if an individual counts fifteen (15) seconds between seeing the flash and hearing the bang, fifteen (15) divided by five (5) equals three (3); therefore, the lightning flash is approximately three (3) miles away.

30/30 RULE

When you see lightning, count the time until you hear thunder. If this time is thirty (30) seconds or less, seek proper shelter. Wait thirty (30) minutes or more after hearing the



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last thunder before leaving the shelter. If you cannot see the lightning, just hearing the thunder is good back up rule.

Please note the following recommendations from Environment Canada:

- The existence of blue sky and absence of rain are not protection from lightning. Lightning can and does strike as far as ten (10) miles away from the rain shaft. It does not have to be raining for lightning to strike. Many lightning casualties occur in the beginning, as the storm approaches, because many people ignore initial precursors of high winds, some rainfall and cloud cover. Generally, the lightning threat diminishes with time after the last sound of thunder, but may persist for more than thirty (30) minutes.
- Lightning can strike ahead of the parent cloud – take action even if the thunderstorm is not overhead.
- Be aware of how close lightning is occurring. The flash-to-bang method is the easiest and most convenient way to estimate how far away lightning is occurring. Thunder always accompanies lightning, even though its audible range can be diminished due to background noise in the immediate environment and its distance from the observer.
- Lightning awareness should be increased with the first flash of lightning or the first clap of thunder, no matter how far away. This activity must be treated as a wake-up call to all. The most important aspect to monitor is how far away the lightning is occurring, and how fast the storm is approaching, relative to the distance of a safe shelter.
- Recognize that personal observation of lightning may not be sufficient. Additional weather information may be required to ensure consistency, accuracy and adequate advance warning.
- When larger groups are involved, the time needed to properly evacuate an area increases. As time requirements change, the distance at which lightning is noted and considered a threat to move into the area must be increased. Extending the range used to determine threat potential also increases the chance that a localized cell or thunderstorm may not reach the area giving the impression of a “false alarm”.
- Know where the closest “safe structure or location” is to the field or playing area and know how long it takes to get to that safe structure or location.
- Safe structure or location is defined as:
 - Any building normally occupied or frequently used by people, i.e., a building with plumbing and / or electrical wiring that acts to electrically ground the structure. Avoid using shower facilities for safe shelter and do not use the showers or plumbing facilities during a thunderstorm.
 - In the absence of a sturdy, frequently inhabited building, any vehicle with a hard metal roof (not a convertible or golf cart) and rolled-up windows can provide a measure of safety. A vehicle is certainly better than





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remaining outdoors. It is not the rubber tires that make a vehicle a safe shelter, but the hard metal roof which dissipates the lightning strike around the vehicle. Do not touch the sides of any vehicle!

- If no safe structure or location is within a 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 the ground, wrap your arms around your knees and lower your head. Minimize contact with the ground because lightning current often enters a victim through the ground rather than by a direct overhead strike. Minimize your body's surface area and the ground! Do not lie flat! If unable to reach safe shelter, stay away from the tallest trees or objects such as light poles or flag poles), metal objects (such as fences or bleachers), individual trees, standing pools of water, and open fields. Avoid being the highest object in a field. Do not take shelter under a single, tall tree.
- Avoid using the telephone, except in emergency situations. People have been struck by lightning while using a land-line telephone. A cellular phone or a portable remote phone is a safe alternative to land-line phones, if the person and the antenna are located within a safe structure or location, and if all other precautions are followed.
- When considering resumption of any athletics activity, it is recommended that everyone should ideally wait at least thirty (30) minutes after the last flash of lightning or sound of thunder before returning to the field.
- People who have been struck by lightning do not carry an electrical charge. Therefore, cardiopulmonary resuscitation (CPR) is safe for the responder. If possible, an injured person should be moved to a safer location before starting CPR. Lightning-strike victims who show signs of cardiac or respiratory arrest need emergency help quickly. Prompt, aggressive CPR has been highly effective for the survival of victims of lightning strikes.

For additional information the following website is helpful:

www.weatheroffice.gc.ca

*<http://www.ec.gc.ca/meteo-weather/default.asp?lang=En&n=86C0425B-1#h2>

**<http://turf.uark.edu/turfhelp/archives/021109.html>

