



# Unionville-Milliken Soccer Club

## UMSC INCLEMENT WEATHER POLICY

### Section 1

### Lightning Safety / Severe Weather Policy

#### 1.0 PURPOSE

The safety of players, coaches, management and spectators is the primary concern in any weather event that occurs during all matches sanctioned by the Unionville Milliken Soccer Club (“UMSC”). This Policy has been defined with information provided by the OSA, and the Referee Association.

#### 2.0 OBJECTIVES

By understanding and following the information below, the safety of everyone shall be greatly increased. Ultimately the referee has the final say over delaying or restarting a match due to weather. Waiting to stop play or not waiting to start play may result in a serious injury or loss of life.

Referees are expected to act responsibly when dealing with such events during matches they are controlling. When lightning is detected, you can determine the distance of lightning in your area by counting the number of seconds between the flash and the first sound of the thunder and dividing by five(5). This will give you the distance in miles from your location. Remember, if you are in a higher elevation, the lightning can come upon you much quicker and your reaction time is greatly hindered.

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

#### 4.0 Additional Information

Please note the following recommendations from Environment Canada:

4.1 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.

4.2 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.

4.3 Generally, the lightning threat diminishes with time after the last sound of thunder, but may persist for more than thirty (30) minutes.

4.4 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.



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4.5 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.

4.6 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.

4.7 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.

4.8 Recognize that personal observation of lightning may not be sufficient. Additional weather information may be required to ensure consistency, accuracy and adequate advance warning.

4.9 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”.

4.10 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.

4.11 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.

4.12 A vehicle is certainly better than 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!

4.13 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!

4.14 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.



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4.15 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.

4.16 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.

4.17 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.

4.18 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.weatheroffice.gc.ca)



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## Section 2

### Hot Weather Policy – Avoiding and Preventing Heat Related Injuries

#### 1.0 PURPOSE

The safety of players, coaches, management and spectators is the primary concern in any weather event that occurs during all matches sanctioned by the Unionville Milliken Soccer Club (“UMSC”). This Policy has been defined with information provided by the OSA, and the guidelines which have been prepared by the American College of Sports Medicine (ACSM).

#### 2.0 OBJECTIVES

By understanding and following the information below, the safety of everyone shall be greatly increased. Following these guidelines, and preparing for playing may help avoid and prevent heat related injuries, but there are always risks involved that are dependent on each individual. . Ultimately the referee has the final say over delaying or restarting a match due to weather.

The goal in participating in hot weather is to avoid fluid loss from the body or dehydration. Water not only accounts for some 98% of our body composition, but functions to help deliver oxygen to working muscles, and keeps the body from overheating during strenuous activity. Hard working muscles generate heat which is dissipated through the act of sweating. Evaporation of sweat on the skin allows the body to get rid of this heat and cool it off.

#### 3.0 KEY GUIDELINES FOR SOCCER PARTICIPATION IN THE HEAT:

- 3.1 Avoid dehydration and make sure you pre-hydrate: Don’t wait till you feel thirsty because the body will not be able to tell you in time that you are dehydrated, here are some practical recommendations:
  - 3.1.1 2 hours before exercise, drink at least 16 oz or 500 ml (an average bottle of water)
  - 3.1.2 1 hour before exercise, drink at least 08 oz or 250 ml (half an average bottle of water)
  - 3.1.3 During the exercise, drink at least 4 to 8 oz every 15 -20 minutes
  - 3.1.4 Immediately after the exercise, drink at least 16 oz or 500 ml of water or an Electrolyte replacing drink
  - 3.1.5 1 hour after a training session or game consider drinking 16 oz or 500 ml of skim milk or chocolate milk for protein and muscle repair
- 3.2 As a rule of thumb you should drink at least 500 ml for every 20 lbs of body weight, therefore, someone weighing 140 lbs needs to drink at least 3500 ml of fluid per day if training or playing that day.
- 3.3 Drinking carbohydrate and electrolyte fluids may be beneficial in avoiding heat trauma.
- 3.4 Wearing light breathable clothing is advised.

#### 4.0 ADDITIONAL INFORMATION



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4.1 Other risk factors which could predispose a soccer player to heat injury. Listed below are the major risk factors but this is by no means an exhaustive list:

1. Not being acclimatized
2. Unfit
3. Hypo hydration
4. Hyper hydration
5. Use of a variety of medications or supplements
6. Persons with persistent, disabling mental illness
7. Certain medical conditions (cardiac, lung)

4.2 How can you tell if one of your soccer players is experiencing heat injury? Below is a list of the early warning signs to look for and again this is not an exhaustive list:

1. Flushed face
2. Hyperventilation or shortness of breath
3. Headache
4. Dizziness
5. Tingling arms
6. Goose bumps (hair on arms standing on end)
7. Chilliness
8. Poor coordination
9. Confusion, agitation, uncooperativeness

4.3 A preseason or pre-event conditioning program, when combined with an 8 to 14 day period of acclimatization, may further reduce the risk of heat injury.

4.4 There are 3 main types of heat injury identified in the medical literature:

1. Heat Cramps these are the mildest form of heat trauma and are 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.
2. 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, may proceed in the more ominous heat stroke and a fine rash is often present.
  - Treatment - remove athlete to a cooler environment, use ice baths, fans.
3. 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.



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- 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.

### Reference:

American College of Sports Medicine POSITION STAND. Exercise and Fluid Replacement, Medicine & Science in Sports & Exercise, 2007

Acknowledgements: Dr. Rudy Gittens Past Medical Director, Canadian Soccer Association, Submitted by: Dr. Robert Gringmuth Chair, OSA Medical Advisory Committee