LITTLE LEAGUE BASEBALL CANADA

Policy

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Governance

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Human ***R***esources

Operational

Administration

Preamble

The Board of Directors of Little League Baseball Canada (LLBC) seeks a weather policy that allows for various types of weather conditions across the country for leagues and tournaments to follow.

Policy

Tournament Directors are responsible for ensuring that the Organizing Committee and volunteers are aware of the Little League Baseball Canada (LLBC) Weather Protocol and what to do when weather threatens a tournament site.

This protocol is based upon Environment Canada standards at http://weather.gc.ca/canada_e.html. Each situation is different and local knowledge of weather patterns and access to local forecasters is the key to safety. These are general guidelines to follow when weather threatens.

Lightning

The first and most important thing to remember is that if you can hear thunder, you are within striking distance of lightning. Take shelter immediately, preferably in a house or all-metal automobile (not convertible top). If caught outside far from a safe shelter, stay away from tall objects such as trees, poles, wires and fences. Take shelter in a low-lying area.

For organized outdoor activities, Environment Canada recommends those in charge have a lightning safety plan and that they follow the plan without exception. The plan should give clear and specific safety guidelines in order to eliminate errors in judgment. Prior to an activity or event, organizers should listen to the latest forecast to determine the likelihood of thunderstorms. Environment Canada is a good source of up-to-date weather information. Once people start to arrive, the guidelines in your league's lightning safety plan should be followed.

A thunderstorm is approaching or nearby. Are conditions safe, or is it time to head for safety? Not wanting to appear overly cautious, many people wait far too long before reacting to this potentially deadly weather threat. The safety recommendations outlined here are based on lightning research and the lessons learned from the unfortunate experiences of thousands of lightning strike victims.

Thunderstorms produce two types of lightning flashes - 'negative' and 'positive'. While both types are deadly, the characteristics of the two are quite different. Negative flashes occur more frequently, usually under or near the base of the thunderstorm where rain is falling. In contrast, positive flashes generally occur away from the center of the storm, often in areas where rain is not falling. There is no place outside that is safe in or near a thunderstorm. Consequently, people need to stop what they are doing and get to a safe place immediately. Small outdoor buildings including dugouts, rain shelters, sheds, etc., are NOT SAFE. Substantial buildings with wiring and plumbing provide the greatest amount of protection. Once inside, stay away from windows and doors and anything that conducts electricity such as corded phones, wiring, plumbing, and anything connected to these. In the absence of a substantial building, a hard topped metal vehicle with the windows closed provides good protection. Occupants should avoid contact with metal in the vehicle and, to the extent possible, move away from windows.

Safety Plan

Lightning safety plans should specify that someone be designated to monitor the weather for lightning. The 'lightning monitor' should not include the coaches, umpires, or game officials, as they are not able to devote the attention needed to adequately monitor conditions. The lightning monitor must know the plan's guidelines and be empowered to ensure that those guidelines are followed.

Any person attending the activity who sees lightning needs to report it to the lightning monitor or a game official. If reported to a game official, the game official must inform the lightning monitor immediately so that the lightning monitor can activate the lightning safety plan.

The lightning monitor should be monitoring the Environment Canada website at http://weather.gc.ca/lightning/index_e.html. On the map, lightning strike areas are indicated in RED. If the area the activity is taking place in is red you are in immediate danger and must get to safety.

The sooner activities are stopped and people get to a safe place, the greater level of safety. In general, a significant lightning threat extends outward from the base of a thunderstorm cloud about 10 to 15 kilometres. Therefore, people should move to a safe place when a thunderstorm is 10 to 15 kilometres away. Also, the plan's guidelines should account for the time it will take for everyone to get to a safe place. Here are some criteria that could be used to halt activities.

- If lightning is observed: The ability to see lightning varies depending on the time of day, weather conditions, and obstructions such as trees, mountains, etc. In clear air and especially at night, lightning can be seen from storms more than 15 kilometres away provided obstructions don't limit the view of the thunderstorm.

- If thunder is heard: Thunder can usually be heard from a distance of about 15 kilometres, provided that there is no background noise. Traffic, wind, and precipitation may limit the ability to hear thunder less than 15 kilometres away. If you hear thunder, though, it's a safe bet that the STORM is within 15 kilometres.

- If the time between lightning and corresponding thunder is 30 seconds or less: This would indicate that the thunderstorm is 10 kilometres away or less. As with the previous two criteria, obstructions, weather, noise and other factors may limit the ability to use this criterion. In addition, the lightning monitor must diligently monitor any lightning. In addition to any of the above criteria, activities should be halted if the sky looks threatening. Thunderstorms can develop directly overhead and some storms may develop lightning just as they move into an area.

- Watch for severe weather. Keep an eye on the sky. Observe in which direction the storm appears to be traveling. Lightning can strike several kilometres from the storm.

- Do not resume play until 30 minutes after the last lightning strike in the area. For example, if lightning is seen, activities are stopped and everyone takes shelter for 30 minutes. If within 5 minutes or 25 minutes another lightning strike is seen, then the 30-minute clock starts again until there has been a clear 30 minutes without any lightning strikes from the time the last one was seen.

- Have a Lightning Safety Plan. Find a safe place where you can wait out the storm, preferably in a building or a vehicle. Keep a cell phone for emergencies. Download and print a copy of the Lightning Safety Tips from Environment Canada's website http://weather.gc.ca/lightning/index_e.html

Hazardous Weather

From hail and heat waves, to thunderstorms and tornadoes, severe weather in Canada takes many different forms in the summer months. Similar to a lightning safety plan you should include a hazardous storm plan.

Where there is a threat of high winds, as in the case of a tornado, your first priority is to take shelter. Go to the basement or to a small interior room in the centre of the house, such as a closet, bathroom or hallway, on the lowest floor of the building. If this is not an option, take cover under a stairway or sturdy table and use a cushion or mattress to protect your head. Stay away from all windows, doors and exterior walls, in particular those facing the storm, and avoid buildings with large, unsupported roofs such as arenas, supermarkets, and barns. If you are boating or swimming, head for land immediately.
Do not travel. If you are in your car, open the windows slightly and park off the road with your brakes set, away from tall objects and power lines. Do not leave your car if there are downed lines nearby. In the event of a tornado, abandon your vehicle and move at a right angle to the storm's path. If this is not possible, find a low-lying area, such as a ditch, and lie flat. Hang onto a small tree or shrub if you can.

Wind Safety

- Stay alert … the tendency is to hunch over and look down when facing strong wind; you may not see a wind projectile approaching.
- Listen for Environment Canada warnings of all types.
- Watch for signs of wind in the sky …
    - swirls of dust on the ground or approaching waves on water
    - shelf clouds beneath thunderstorms are often associated with strong gusty winds.
- Seek shelter, preferably indoors away from outside walls, especially large glass surfaces. Avoid large open spans in buildings such as gymnasiums or malls.

Safety Tips: High wind in combination with heavy rain can increase the risk of tree limb breakage or trees uprooting. After heavy winds, check your property for dead branches and damage. With winds between 60 and 70 km/h, you will have difficulty with balance and walking against the wind. Twigs and small branches could also blow off trees and cause a hazard, so stay inside until it is safe.

Tornado – Nature's dangerous wonder
A tornado is a violently rotating column of air extending between a cloud base and the surface (when over water, it is called a waterspout). While often depicted as a funnel with the narrow end on the bottom, there is no typical tornado. Tornadoes exhibit a high degree of variability in their appearance, strength, speed, direction of movement, and duration.

Most tornadoes develop in the late afternoon and early evening but may occur outside of this timeframe, including overnight.

While wide, damaging, straight-line thunderstorm winds are often confused with tornadoes, tornadoes can produce some of the highest wind speeds on the planet. The majority of Canadian tornadoes have maximum wind speeds under 180 km/h, but a small percentage can be considerably stronger with devastating impacts. Although Doppler radar is a major aid to weather forecasters in the prediction of larger tornadoes, many smaller ones are very difficult to forecast.

Tornado Safety:

- Monitor Environment Canada watches and warnings and keep an eye on the sky – tornadoes can develop very rapidly.
- When a tornado threatens, take shelter immediately – preferably in the lower level of a sturdy building. Mobile home residents should go to their shelter area.
- Flying glass and other debris pose the greatest danger to human safety.
- If caught outdoors with no shelter available, lie flat in a ditch, ravine or other low lying area and shield your head with your arms.
- Recent research has shown that tornado winds finding their way into a building through open doors and windows can lead to large internal pressures and greater damage. When a watch is issued, that is the time to ensure that all doors and windows are closed.

Hail – Don't let it put a dent in your plans!

Hail is formed when updrafts in thunderclouds carry raindrops upward into extremely cold areas of the atmosphere, where they freeze and merge into lumps of ice. When the lumps become too heavy to be supported by the updraft, they fall to the ground at speeds of up to 100 km/h or more.
Hailstones as large as grapefruit have been reported in Canada, but even smaller hail can be dangerous and can cause extensive damage in a matter of minutes.
The Prairies are especially vulnerable to hail, receiving more severe hail events and more damage to crops and personal property than from all other summer severe weather events combined including tornadoes, severe thunderstorm winds and heavy rains. Ontario is the other hail-prone area of Canada with over one quarter of the summer severe weather events due to hail.

Hail Safety:

- Routinely monitor the Environment Canada weather forecasts, watches and warnings for thunderstorms (which may include hail).
- When hail or thunderstorms threaten, seek shelter in a solid building and stay away from windows, glass doors or skylights.
- If you are in a vehicle, find a place to safely pull off roadways and protect yourself from possible shattered glass.
- If caught outdoors and there is no available shelter, crouch down, face away from the wind and protect your head and neck with your hands.
- Look out for flooded areas. Excessive hail (when combined with heavy rain) can plug storm drains and suddenly create local flooding.
- Remember the danger of lightning. When outside stay away from tall objects such as large trees, towers, metal fences or poles.

Heat and Humidity

Humidity is the amount of water vapor in the air. In forecasting, relative humidity describes the percentage of moisture in the air in comparison to how much there is when the air is saturated. The higher

the reading, the greater the likelihood of precipitation, dew and fog. Relative humidity is normally highest at dawn, when the temperature is at its lowest point of the day.

High humidity makes people feel hotter than they would on a drier day. That's because the perspiration that occurs to cool us down cannot evaporate as readily in moist, saturated air. To better describe how hot it feels in such circumstances, Canadian meteorologists developed the humidex, a parameter that combines temperature and humidity in order to reflect the perceived temperature.

Heat and Humidity Safety

It is important to stay safe during such extreme temperatures. Avoid working or exercising intensely if it is very hot or humid outside, and head for cooler conditions if your body becomes overheated. If working outdoors is an absolute necessity, drink plenty of liquids and take frequent rest breaks. Be sure to maintain salt levels in your body and avoid high-protein foods. Also ensure that pets are protected from the heat and have plenty of water to drink. Watch for signs of serious medical conditions, such as heat exhaustion and heat stroke.

You know your area of the country the best. Monitor your weather locally through Environment Canada.

Information provided by Little League Baseball and Environment Canada