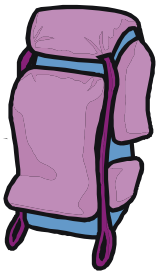
Summer Severe Weather

Summer Severe Weather in Ontario

Fact Sheet - Camping Safety in Ontario

Of the approximately 10,000 thunderstorms that occur in Ontario on average each year, only about 1% are "severe" and produce damage or injury.



Thunderstorms are a normal part of life in Ontario, but the severe thunderstorms that cause damage are relatively rare. The greatest risk posed by thunderstorms is the danger of being struck by lightning.

Thunderstorms can be frightening events. However, if you are aware of your surroundings and of current weather conditions and forecasts, you can plan appropriately and react quickly should threatening weather develop.

This pamphlet provides guidance to campers on how to reduce the risk of injury or death from summer severe weather. A little summer severe weather knowledge and preparation will go a long way towards minimizing possible panic and confusion during a summer severe weather event.

Campers should monitor the latest weather conditions especially when the forecast mentions thunderstorms. In that event, campers would be wise to avoid situations where appropriate shelter would be difficult to find should the forecast thunderstorm activity develop.

Monitoring local radio or television weather broadcasts is one way to stay informed. Another option is to listen to Environment Canada's Weatheradio broadcasts. Most of Ontario's Weatheradio network transmits continuous weather information on special VHF-FM frequencies. Compact, battery-powered Weatheradio receivers can be purchased from most electronics stores to monitor these broadcasts. At a few selected locations, low power broadcasts are transmitted on regular AM or FM bands. In Ontario, these broadcasts are accessible by 85% of the population. Environment Canada's Weatheradio Web site at http://www.msc.ec.gc.ca/msb/weatheradio/fact_sheet_e.cfm has a complete list of transmitter locations.

Every thunderstorm produces lightning. Lightning kills more Canadians than hail, wind, rain and tornadoes combined, making lightning safety the number one consideration. However, knowledge of the other dangers associated with thunderstorms is essential to ensure that campers are aware of, and seek out, the best shelter possible when summer severe weather threatens.

Environment Canada Environnement Canada

Canada

Thunderstorms are common in all parts of Ontario from late April to early October. Severe thunderstorms, which are comparatively rare, are identified by the dangerous phenomena they can produce:

Hail	2 cm (size of a nickel) or larger in diameter
Wind	Gusts of 90 km/h or more
Heavy Rain	50 mm of rain in less than one hour or 75 mm of rain in less than three hours
Tornado	One or more

Lightning Safety

The odds of being struck by lightning in Canada are lower than one in a million. Yet each year, six to 12 Canadians are killed by lightning and many more are injured.

One well-known lightning guideline is the "30-30" rule: **Take appropriate shelter when you can count 30 seconds or fewer between lightning and thunder, and remain sheltered for 30 minutes after the last thunder.**

30 Seconds:

When there are fewer than 30 seconds between the flash of lightning and the rumble of thunder, you should seek immediate shelter in a well-constructed building. If no such building is nearby, then the best choice is to get into a hard-topped vehicle such as a car, van or RV. If you are caught outside and cannot quickly get to a building or vehicle, then you should do the following:

- Avoid being the tallest object around;
- Avoid being NEAR the tallest object around (i.e. an isolated tree);
- Avoid being near objects that conduct an electrical charge (metal fence, power lines, golf clubs, fishing rod, etc.);
- Get out of, or off, the water.

30 Minutes:

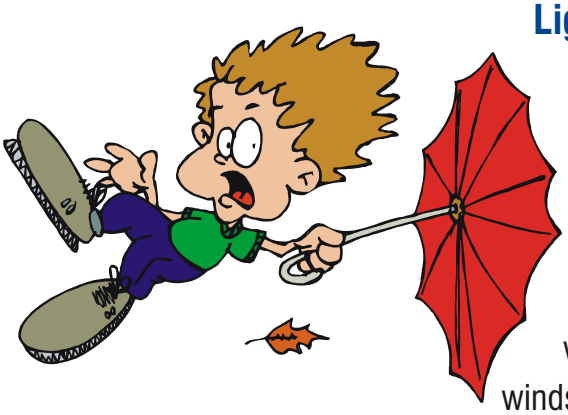
Maintain lightning safety precautions for 30 minutes after the last flash of lightning or rumble of thunder. There have been a number of documented cases of lightning striking the ground many kilometres away from a thunderstorm, even though the storm may be moving away.

Weather Safety — Where are your "Emergency Exits"?

Just as you would check for the closest fire exits when staying in a hotel, campsite safety also requires an awareness of your surroundings. This knowledge could save your life by helping you find appropriate shelter during a thunderstorm, either during the day or at night.

The key to summer severe weather safety is to make yourself as small a target as possible.

Lightning, Strong Winds, Hail



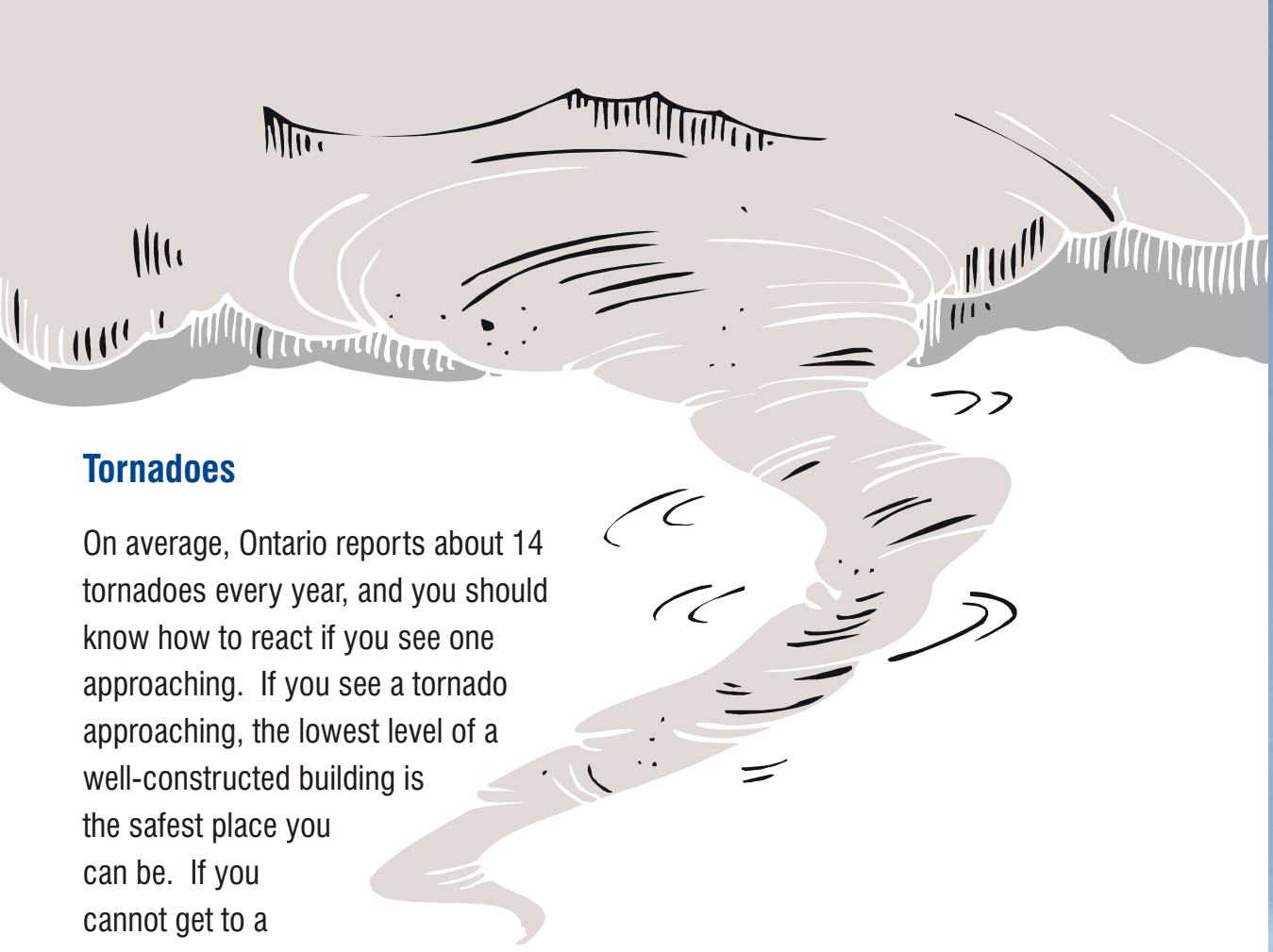
At the first sign of a thunderstorm, you should follow the lightning safety precautions outlined on the previous page. If you are at your campsite and some distance from a washroom or comfort station, a hard-topped vehicle will provide your next-best shelter. If sheltering in a vehicle, avoid touching anything metal inside and keep the windows rolled up. If the storm is particularly violent, with strong winds and/or large hail, crouch down low in the vehicle.

If you are caught outside and it is not possible to find shelter in a building or vehicle, go deep into a stand of trees and find the lowest-lying area. Crouch down and protect your head. If there are no trees or only solitary trees nearby, still look for the lowest lying area, crouch down and protect your head. Do not lie flat, as this increases your chances of being struck by lightning.

If you are camping without sturdy shelter or a vehicle nearby, it is even more important to survey your surroundings ahead of time to locate low-lying areas within nearby woods or fields that you can reach easily if required.

Heavy Rain/Flash Floods

Flash floods do not occur very often in Ontario, but there are a few precautions worth noting as thunderstorms can produce large amounts of rainfall in a short period of time. Do not camp next to streams or rivers, as very heavy rain can cause the levels to rise quickly. Do not cross swollen rivers or streams, as there could be strong undercurrents. If flash flooding does occur, get to higher ground immediately.



Tornadoes

On average, Ontario reports about 14 tornadoes every year, and you should know how to react if you see one approaching. If you see a tornado approaching, the lowest level of a well-constructed building is the safest place you can be. If you cannot get to a well-constructed building, then you should leave your tent or vehicle and seek shelter deep in a stand of trees in a low-lying area, lie down flat and protect your head. Seeking shelter in a vehicle is not a guarantee of safety during a tornado, because strong tornadoes can overturn vehicles. If you are in an open field, find the lowest lying area, lie down flat and protect your head.

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