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LIGHTNING SAFETY AT LARGE OUTDOOR VENUES

Lightning flashes over two million times a year across Canada, about once every three seconds during the more intense summer months. Because light travels faster than sound, lightning can be an early, and deadly, indicator of an approaching thunderstorm and other severe weather. Local summer storms can develop quickly. Precise, local forecasts cannot be issued months in advance for planning purposes.

Environment Canada has developed a Lightning Danger Map for when thunderstorms are forecast. The lightning danger map uses information from recent lightning strikes to create high danger zones indicated in red. The danger zones help show you where the lightning risk is greatest.

A **Lightning Safety Plan** needs to be developed for large outdoor events and should include:

- **An emergency alerting strategy**
Such a strategy should include a variety of methods to ensure both organizers and attendees can be easily alerted to severe weather. It is important that all key personnel understand what types of weather circumstances would cause an evacuation to occur before or during the event.
- **Scheduling activities at times less likely to experience thunderstorms**
Thunderstorm activity often peaks in the mid afternoon to early evening but can vary depending where you are in the country and time of year. Find out when lightning activity is most likely to occur in your area and if possible, schedule activities outside these hours or time of year. This can help reduce the need to delay or reschedule.
- **A well advertised safe location plan including enough time for people to reach a safe location**
Depending on the size and type of the venue, it could take a number of minutes to a number of hours to evacuate people to a safe location. Event staff and volunteers should be well informed of the evacuation procedures ahead of time. A safe location would be an enclosed building with plumbing and wiring or a hard topped vehicle like a car or bus.
- **Monitoring the weather**
A knowledgeable individual should be made responsible for monitoring forecasts, weather warnings and Environment Canada's Lightning Danger Maps. Summer severe storms can pop up quickly and unexpectedly, so they should be constantly aware of developments leading up to and during the event. This person or those they advise should have the authority to take action to evacuate, delay or cancel the event at any time, based on severe weather. It is important that activities do not resume until at least 30 minutes after the last rumble of thunder is heard.



Opening ceremonies Scout Jamboree, Quebec.
© Environment Canada, 2007; Photo : Stephanie Meyn

As always with lightning it is important to remember:

When thunder roars, GO INDOORS!

For more information on lightning, visit Environment Canada's Lightning website at
www.ec.gc.ca/foudre-lightning

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