

Number:	<i>To be determined</i>
Topic:	Thunder and Lightning Protocol
Effective:	February, 2009
Cross-Reference:	Halton Elementary & Secondary Physical Education Safety Guidelines – Curricular/ Intramural/ Inter-school Modules
Review/Revision Date:	As required
Responsibility:	Superintendent of Education.....

INTENDED PURPOSE:

In Canada, according to Environment Canada, lightning is most frequent in southern Ontario and there has been increasing frequency of thunder/lightning over the past years.

The writers of the Ontario Physical Education Safety Guidelines have recognized the increasingly higher incidence of lightning, the overall volatility of recent weather patterns and the effect of the weather on outdoor activities. Consequently, the revised Ontario Physical Education Safety Guidelines (2008), to which the Halton District School Board subscribes, address procedures related to lightning and student safety.

The Halton District School Board is committed to the safety of all students while participating in outdoor physical activities and athletic competitions. In the interests of safety, the following procedures must be followed in the event of the occurrence of thunder and/or lightning:

PROCEDURES:**Preparation For Outdoor Activities**

The in-charge person must monitor weather conditions prior to the time of activity (eg: local weather forecasts from radio/television; www.theweathernet.com; weather one-on-one 1 900 565 5555).

The in-charge person must be alert for Environment Canada weather warnings of severe thunderstorms which can produce lightning, rain, hail and strong winds.

When the activity takes place off school property, the in charge person must pre-plan for the location of the closest 'safe structures' (e.g. inside buildings, inside vehicles with a hard metal roof) and how much time it will take to access 'the safe structure' from activity field. (Where appropriate get permission beforehand to access safe structures in case of thunder/lightning.)

Detection And Response To Thunder/Lightning

- When lightning is seen, thunder is heard, or you feel or see your hair standing on end, the administrator/ teacher/intramural supervisor/coach must immediately suspend the activity/practice/game/competition and direct students/athletes and spectators (where applicable) to a safe shelter.
- When activities are taking place in water (e.g., swimming, boating), direct students to the shore immediately and to a safe shelter.
- The Coordinator of Health and Physical Education or designate on-site (e.g., administrator at an elementary regional event, or the convenor/in-charge person at a secondary regional event), is responsible for making the decision to stop regional/area interschool athletic activities (e.g., Football, Rugby, Field Hockey games/tournaments, cross country meets, track meets, relay meets).

Access Safe Shelter

- *In a building* – Use a substantial and permanent structure, not a flimsy shelter. Stay away from windows and doors and keep them closed.
- *In a vehicle* – Use a fully enclosed metal vehicle with windows up. (golf carts and convertibles are not safe because it is the outer shell of the vehicle that offers protection and not the rubber tires).
- *In the open* -- Where no safe structure is available in time, the in-charge person or designate must locate a low lying area such as a valley, a ditch or a depression and communicate the following to students:
 - Remove metal objects. Feet together, lower head, crouch down with only balls of feet touching the ground. Wrap arms around your knees. Do not lie flat on the ground.
 - If you are in a group, spread out, keeping several metres apart.
 - Avoid – trees, high ground, metal bleachers, fences, metal standards, light poles, golf clubs, bicycles, water (e.g., lakes and ponds).

Provide First Aid Assistance To Victims Of Lightning Strikes:

- Call 911 for immediate medical help
- Victims do not carry an electrical charge and can be safely handled.
- If breathing has stopped and where qualified to do so, administer cardio pulmonary resuscitation

Resume Activities

Wait a minimum of 30 minutes from the last visual observation of lightning or sound of thunder before resuming outdoor activities.

Mandatory Minimum Standards

*At all times, the above Board's lightning procedures are the mandatory minimum standards. In situations where a higher standard of care is presented (e.g. trip guides, facility/program coordinators) the higher standard of care is to be followed.

Lightning Information

(Sources: *Environment Canada, U.S. National Weather Service*)

- All thunderstorms produce lightning.
- Lightning can travel as far as 10 km and strike even when skies are blue.
- Lightning is attracted to tall, isolated objects like trees.
- Bodies of water attract electricity and lightning.
- Lightning injuries can lead to permanent disabilities or death.
- Nowhere outside is safe from lightning. (Open areas, activity fields, open water are all potentially dangerous places to be when lightning is present.)
- A large proportion of lightning deaths occur in, on or near open water and under trees.
- Apply the following lightning safety slogan:
 - If you see it flee it;*
 - If you hear it, clear it;*
 - When thunder roars, go indoors.*