

Lightning Facts

- The average lightning strike is 6 miles / 9.6 kilometers long.
- Many lightning deaths and injuries occur with clear skies overhead and a lightning storm in the distance.
- Lightning kills over 100 people a year.
- People struck by lightning receive a severe electrical shock and may be burned but do not carry an electrical charge; therefore, they can be handled safely and should be given the required first aid immediately.

Wind Facts

Wind is the movement of air from areas of high pressure to areas of low pressure, in other words wind is moving air that moves things in the direction of least resistance. As such a wind storm is a major atmospheric disturbance characterized by large, moving air masses.

It has been found that winds blowing at 35 kilometers per hour will make small trees sway or unfirm trees blow down and 94 kilometer per hour winds will cause large trees to blow down.

Wind Speed (km/hr)	Beaufort Scale Description Equivalency	Level of Disturbance
<20	Dust and loose paper raised; small branches move	1 (Low)
20-40	Strong breeze; large branches in motion	2 (Medium)
40-65	Needles and small branches fly in the air	3 (High)
65+	Twigs broken off trees; whole trees in motion; inconvenience felt when walking against the wind	4 (Very High)

Emergency Procedures

Step 1 – Recognize the Problem

- Dark, towering, or threatening clouds.
- Distant lightning and thunder.
- Increase in wind speeds.
- Weather warnings from Environment Canada or local media sources.
- Reports of lightning from workers.

Emergency Procedures (continued)

Step 2 – Evaluate the Hazard

- The lightning is within 6 miles or 9.6 kilometers of the worksite. This is equivalent to 30 seconds between the lightning flash and the thunder bang.
- Wind speed increases rapidly and debris becomes airborne.

Step 3 – Activate the Warning System

- The Foreman or Supervisor should activate the Warning System – Radio Contact.

Step 4 – Assist Workers to Safety

- The Foreman or Supervisor should cease their current activity and assist the workers to safety.

Step 5 – Follow-up

The Foreman/Supervisor and their designates should tour the worksite once the storm has passed. There are several reasons for this:

1. To ensure that all stranded workers are safe and uninjured.
2. To provide first aid and other medical treatment to any injured individual.
3. To survey any damages, which could create additional hazards to workers.

Lighting Do's and Don'ts

Do's

- Maintain a distance of 5 metres apart if in groups.
- Stay away from metal objects, including your vehicles, machinery, metal fences, etc.
- Move away from water.
- Crouch down in a depression or low area. When crouching, remain kneeling, bend forward and put your hands on your knees.
- Inform all workers of the potential of adverse weather if predicted by local weather forecasts.
- Inform workers of the emergency procedures if they hear thunder or see lightning.

Don'ts

- **Don't** stand near tall structures.
- **Don't** take shelter under sunshades or trees or in small camp buildings.
- **Don't** take shelter next to water bodies, electrical lines or metal fences.
- **Don't** use washroom facilities, or electrical appliances.
- **Don't** remain standing in an open area – lightning strikes the tallest object.
- **Don't** lie flat on the ground.