

# SAFETY TIPS



## Snowmobiling

Each year, tragic and avoidable snowmobile deaths occur across Canada. Snowmobiles are high-speed vehicles that operate in a hazardous natural environment. Riders are at risk of personal injury and fatalities due to collisions and immersion in cold water.

### Important Facts:

- A Canadian Red Cross report examining 246 snowmobile-related deaths over a period of 10 years found that snowmobile immersion deaths were largely preventable.
- The major risk group for snowmobile immersion deaths was 15- to 45-year-old males, with a peak among 25- to 34-year-olds.
- Snowmobiling accounts for 55% of immersion deaths.
- Snowmobiling incidents occurred while riders were travelling on ice, going off-road or off bridges, and 60 per cent of incidents occurred on lakes.
- Alcohol was a factor for 58 per cent of fatalities.
- Only 4 per cent of snowmobiling fatalities were wearing a flotation device such as a lifejacket or survival suit.
- Other immersion deaths involving motor vehicles on ice include ATV's and ice fishing using a road vehicle.
- Among deaths from immersion while on ice, 41 per cent resulted from open holes in the ice, and 40 percent from falling through thin ice.

### Tips:

#### **It's important to know your terrain and wear the proper safety equipment**

- Survey the area you are riding in and identify the potential danger spots.
- Avoid snowmobiling in the dark, when it is more difficult to detect unsafe conditions.
- Wear a helmet, a personal flotation device in case of unexpected submersion, and clothing appropriate for the conditions in order to prevent frostbite and hypothermia.
- Carry rescue equipment such as ice picks, a rope, a cell phone (in a waterproof container), rope and a first aid kit. Other safety equipment to be considered includes flashlight, waterproof matches/lighter, tool kit, candles and survival blanket.
- Do not consume alcohol before or during a snowmobile outing and ensure you are not tired.

**Always verify the ice conditions and ensure that ice is at least 25 centimetres thick before embarking on it with a snowmobile.**

Snowmobiles are heavy and require thick ice for support. Always snowmobile with a buddy, wear a personal flotation device (PFD), follow the shoreline, and leave 15 metres between travelling snowmobiles.

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- Check with local authorities regarding ice conditions before venturing out.
- Ensure that the ice across the entire area is a uniform and safe thickness.
- Clear, blue ice is the strongest; grey ice is unsafe as it indicates the presence of water.
- Avoid ice that has recently frozen, thawed, and then frozen again.
- Ice conditions can change very quickly—if you are returning from a day of riding, check the ice again before crossing.

## **How to check ice thickness:**

- If possible go with another person to measure the ice thickness.
- Always wear an appropriate floatation device in case you fall through the ice.
- While one person drills a hole, the other person should stay a safe distance away. If the ice is at least 25 cm thick, both people can move farther onto the ice to make further measurements.
- Measure the thickness of the ice along the inside of the hole.
- The ice thickness must be measured every few metres, as it will vary in different sections of the ice surface. This will ensure that the whole area is safe for travel.
- Carry a pole, axe or long branch to support yourself on the edges of the ice in case you fall through, or to use as a reaching assist.
- Always carry a throwing or reaching device.
- The ice should be checked regularly.

## **Learn to identify conditions that lead to unsafe ice**

- Snow cover can insulate the ice and keep it from freezing completely.
- Vehicles traveling on ice may cause shock waves in the water below the ice. This can weaken the ice.
- Use caution near pressure ridges in the ice.
- When ice goes through a freeze-thaw-freeze cycle it becomes weak and unsafe until it freezes solid again.
- Mist rising can be a sign of open water.
- Watch out for protruding objects or air holes that can indicate weak ice.
- The ice may be thinner near dark objects which are at the edge of the ice or that protrude.

## **Always snowmobile with others.**

- Avoid going out on the ice alone; always ride with at least one other snowmobile to ensure rescue is an option.
- Discuss rescue procedures in advance to ensure all riders know how to perform a rescue safely.

## **Create a trip plan**

Tell someone:

- the names of everyone in the group
- whose snowmobile is being used

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- where you are going, and why
- when you are leaving
- when you expect to reach your destination
- any stops you plan to make along the way
- when you plan to come back

## **Take a Red Cross first aid class to learn the signs, symptoms and treatment of cold-related emergencies**

If someone is suffering from a cold-related emergency, remove them from the elements, provide first aid treatment and seek medical assistance immediately.

- Do not over-exert yourself or stay outside for extended periods of time. Watch for signs of frostbite and hypothermia.
  - **Frostbite:** a medical condition in which localized damage is caused to skin or other tissues because of extreme cold.
  - **Hypothermia:** a core, or internal, body temperature of less than 35°C, characterized by uncontrolled shivering, slurred speech, apathy, slow breathing, clumsiness, and drowsiness. It is caused by exposure to cold or cold stress in either air or water for extended periods of time. If someone is suffering from hypothermia, call 911 immediately. Someone suffering from hypothermia should be treated gently. Find shelter, remove any wet clothing and warm the body up slowly.

[Learn more about frostbite and hypothermia](#)