

Hazard Alert



Working or driving on ice-covered water

A Heavy Equipment Operator, while clearing snow on an ice road, went down with the equipment when it suddenly broke through the ice surface. The operator was not able to escape and died as a result of the incident.

Hazards

Working or driving on ice-covered water may involve hazards such as:

- Failure to test the ice prior to performing work.
- Not knowing or having measurements including:
 - Thickness of the ice cover
 - Gross vehicle weight (GVW) which includes equipment, fuel cargo, and people
 - Minimum ice thickness required for GVW
 - Maximum load allowed on ice cover
 - Maximum vehicle speed on ice cover
 - Minimum distance between vehicles
 - Maximum parking time on ice cover
- Not enough understanding of the different types of ice and their conditions.
- Using the wrong equipment and materials.
- Lack of safety plans, procedures, and guidelines.
- Not having enough education and training about the danger of working on or around ice-covered water.

Precautionary Measures

While working on ice-covered water, the following measures can help prevent incidents:

- Identify hazards and understanding safety precautions and basic rescue procedures.

The WSCC is committed to safety. For more information on workplace health and safety, call us toll-free or visit our website.



wscn.nt.ca 1.800.661.0792

Workers' Safety
& Compensation Commission

Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ
Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ Δἰῶβἰῶ

wscn.nu.ca 1.877.404.4407

- Understand the condition of the ice, its work-load capacities, and ways to test it.
- Note sudden and extreme changes in temperature and related ice behaviour.
- Identify cracks and signs that indicate thin or hazardous ice locations.
- Work with another person at all times.
- Wear personal protective equipment and dressing for the weather conditions.
- Complete and confirm ice thickness is adequate to support the load weight or travel strain placed on the ice. Ice strength depends on factors such as cracks/seams, air temperature over the past several days, and ice colour.

Important – Ice Color Indicators:

- Clear blue ice is generally the strongest.
- White opaque ice (snow ice) has high air content and its strength depends on its density. Low density indicates weaker ice.
- Grey ice indicates the presence of water due to thawing and is not reliable as a load-bearing surface.

When driving on ice:

- Maintain safe vehicle speed for the thickness of ice and depth of water.
- Do not wear a seat belt.
- Reduce vehicle speed as water depth and ice thickness decreases.
- Always have the means to break a window to escape the vehicle or equipment in an emergency. Pressure will build once in the water making it impossible to open doors or hatches.

Source: Working and driving on ice-covered water - Canada.ca

