Hazard Alert



Working on Ice

A Heavy Equipment Operator clearing snow to build an ice road had to make an emergency exit from the machine when it broke through the ice. The operator was outside of the area tested for safe ice thickness. The operator was able to escape. Work activity was stopped until an internal investigation could be completed.

Safe Work Practices

If you work on ice over water, take extreme caution and:

- Complete a Hazard Assessment with all workers involved: Identify and review the hazards, actions to minimize or eliminate them, rescue procedures and emergency plans.
- **Ensure testing is complete:** 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 previous 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.

The load-bearing capacity of ice depends on ice quality, thickness, ice and air temperatures, temperature changes, and exposure to sunlight.

When driving on ice: Maintain vehicle spacing of 30 metres. Do not wear a seat belt. Reduce vehicle speed as water depth and ice thickness decreases. Continuous vehicle travel will fatigue ice and lead to failure.

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



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What the OHS Legislation Says:

NWT and Nunavut Occupational Health and Safety Regulations

Section 32.

- (1) This section does not apply to
 - (a) highways built and maintained by the Department of Economic Development and Transportation; or
 - (b) roads that are built and maintained to an approved standard.
- (2) Before a worker is required or permitted to work or travel on ice that is over water or over other material into which a worker could sink more than 1 m, an employer shall have the ice tested to ensure that the ice will support the load that the work or travel will place on the ice.
- (3) The requirement of subsection (2) may be waived by the Chief Safety Officer if an employer or worker satisfies the Chief Safety Officer that other measures have been taken to eliminate or reduce the risk to the worker should the ice fail to support the load.

NWT and Nunavut Mine Health and Safety Regulations

Section 9.05.

- (1) Before special tasks may be performed, the manager shall ensure that a hazard analysis is conducted
 - (a) identifying and defining each operation;
 - (b) differentiating the steps involved in each operation; and
 - (c) determining the existing or potential hazards inherent in each step.
- (2) The manager shall prepare safe operating procedures for special tasks, which procedures shall include the elimination or minimizing of hazards by
 - (a) engineering controls;
 - (b) job training, and
 - (c) use of protective equipment.