

# Working On Ice OHS Requirements – Know The Laws of Your Province



Operations that have to be carried out over frozen bodies of water or icy surfaces can be extremely hazardous, especially when they're carried out with trucks and other vehicles and heavy mobile equipment. OHS regulations in 7 jurisdictions (Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Nunavut, and Saskatchewan) specifically address the issue and set out safety measures employers must take before requiring or allowing workers to work on ice. While not spelled out, similar requirements are implied in the OHS laws of the other 7 jurisdictions via drowning protection, hazard assessment, and the general duty to protect workers against foreseeable hazards.

Here's a summary of the OHS requirements, or lack thereof, in each part of Canada.

## FEDERAL

No specific OHS requirements for work on or over ice.

## ALBERTA

1. No specific OHS requirements for work on or over ice. However:

2. An employer must ensure that a worker riding an all terrain vehicle, snow vehicle, motorized trail bike or motorcycle, or a small utility vehicle at a work site wears protective headwear that meets one of the following:

- a. U.S.A. Federal Motor Vehicle Safety Standard FMVSS 218, Motorcycle Helmets 1993 OCT.
- b. BSI Standard BS 6658: 05, Specification for Protective Helmets for Vehicle Users.
- c. Snell Memorial Foundation Standard M2005, 2005 Helmet Standard for Use in Motorcycling (OHS Code, Sec. 236(1)).

3. Exception: The above doesn't apply to small utility vehicles with seatbelts and rollover protection (OHS Code, Sec. 236(1.1)).

4. An employer and a blaster using explosives to control avalanches must implement safety measures (OHS Code, Sec. 515(1)).

5. During avalanche control activities involving the hand deployment of explosives an employer and a blaster may permit:

- a. Explosives to be primed away from the location of the blasting activity; and
- b. More than one explosive at a time to be primed (OHS Code, Sec. 515(2)).

6. An employer and a blaster must ensure that explosives are primed:

- a. As close to the location of the intended detonation as reasonably practicable; and
- b. In a safe, sheltered location where only the blaster and workers necessary to perform the priming activities are present (OHS Code, Sec. 515(3)).

7. An employer and a blaster must ensure that primed explosives are kept in separate day boxes from pull wire fuse

lighters or other ignition sources (OHS Code, Sec. 515(4)).

8. An employer and a blaster must ensure that a pull wire fuse lighter is not connected to the safety fuse assembly of a primed explosive until immediately before the intended detonation (OHS Code, Sec. 515(5)).

## **BRITISH COLUMBIA**

1. No specific OHS requirements for work on or over ice. However:

2. An employer at a workplace where a person doing work may be exposed to avalanche risk must ensure that no work is carried out until:

a. A qualified person completes a written avalanche risk assessment that considers:

- i. The topography and vegetation in the area of the workplace.
- ii. The snow conditions in the area of the workplace.
- iii. The history of avalanches in the area of the workplace.
- iv. The nature and duration of work activities to be carried out at the workplace.
- v. The extent, if any, to which the nature and duration of work activities to be carried out at the workplace may affect the topography, vegetation or snow conditions in the area of the workplace.
- vi. The nature of the workplace and the buildings and structures at the workplace.

b. If the avalanche risk assessment finds an avalanche, a written avalanche safety plan is developed by a qualified person to eliminate the risks and implemented (OHS Regs, Sec. 4.1.1).

3. If eliminating the risks associated with an avalanche is

not practicable, the avalanche safety plan must include measures and procedures to minimize those risks, including an avalanche safety program that provides for:

- a. Regular monitoring of weather, snow and avalanche conditions in the area of the workplace, at intervals the qualified person considers will be effective.
- b. Implementation of closures or other measures, as specified in the avalanche safety program.
- c. Safe work procedures to be followed at the workplace (OHS Regs, Sec. 4.1.1(6)).

4. The employer must make a copy of the avalanche safety program readily available to each person who administers or implements the avalanche safety program for the workplace (OHS Regs, Sec. 4.1.1(7)).

5. Whenever there's a significant change in the avalanche hazards or risks, the employer must do the following, unless the change is already addressed by the avalanche safety plan:

- a. Ensure that a qualified person reviews the avalanche risk assessment and avalanche safety plan; and
- b. Make the changes to the risk assessment and safety plan that the qualified person deems necessary (OHS Regs, Sec. 4.1.1(8)).

6. If the avalanche safety plan includes procedures applicable to a person's work at the workplace, the employer must provide information and training to the person in the procedures, and the person must comply with the procedures (OHS Regs, Sec. 4.1.1(9)).

7. The above requirements don't apply if compliance isn't practicable when carrying out the following types of work:

- a. Work that:
  - i. Is carried out intermittently.

- ii. Involves moving through the workplace without stopping for a significant length of time in a particular area of the workplace.
- iii. Has minimal potential to trigger an avalanche.

- b. Work related to an emergency.
- c. Work carried out to complete an avalanche risk assessment.
- d. Work carried out to develop an avalanche safety plan (OHS Regs, Sec. 4.1.2(2)).

8. However, even if one of the exceptions in Item #7 applies, the employer must ensure that:

- a. Written safe work procedures are in place to minimize the risks associated with an avalanche.
- b. The person at risk understands the avalanche risks and is trained in the necessary safety procedures (OHS Regs, Sec. 4.1.2(3)).

9. The required safe work procedures must be developed by a qualified person and list:

- a. The qualifications and training a person must have to be eligible to carry out the work.
- b. The procedures the person must follow to identify and address risks associated with an avalanche.
- c. The requirements the person must comply with when using equipment (OHS Regs, Sec. 4.1.2(4)).

## **MANITOBA**

1. An employer must ensure that a worker required or permitted to work at a place where the risk of drowning exists is provided with and wears appropriate PPE suitable to the workplace situation to protect the worker from hypothermia if rescue or removal from cold or icy water may not be achieved immediately (WSH Regs, Sec. 6.17(1)(d)).

2. The above requirement applies if the worker is required or permitted to work on ice that's over either:
  - a. Water that's more than one metre deep.
  - b. Any other material into which a worker could sink more than one metre (WSH Regs, Sec. 6.17(6)).
3. If a worker is required or permitted to use powered mobile equipment on ice, an employer must:
  - a. Develop and implement safe work procedures for the use of powered mobile equipment on ice.
  - b. Train workers in those safe work procedures.
  - c. Ensure that workers comply with those safe work procedures (WSH Regs, Sec. 22.34(1)).
4. The above safe work procedures must include:
  - a. Procedures for testing the thickness of the ice to ensure that it will support the load to be placed on it:
    - i. Before any work begins.
    - ii. As often during the work as necessary to ensure that there is no risk to the safety of the workers.
  - b. A plan for dealing with an emergency arising from powered mobile equipment breaking through the surface of the ice (WSH Regs, Sec. 22.34(2)).
5. An employer must ensure that powered mobile equipment used on ice has its weight, when fully fueled, legibly marked on it (WSH Regs, Sec. 22.35(1)).
6. An employer must ensure that the weight of an attachment that's attached to powered mobile equipment used on ice is legibly marked on the attachment (WSH Regs, Sec. 22.35(2)).
7. An employer must ensure that powered mobile equipment is not refueled while it is on ice (WSH Regs, Sec. 22.36).

8. When building a winter road on ice, an employer must ensure that a worker in a pilot vehicle accompanies workers operating powered mobile equipment on the ice (WSH Regs, Sec. 22.37(1)).

9. The pilot vehicle must be equipped with a means of communication that enables the operator to communicate with:

a. The workers who will implement the plan for dealing with an emergency arising from powered mobile equipment breaking through the ice; or

b. The applicable emergency response services (WSH Regs, Sec. 22.37(2)).

## **NEW BRUNSWICK**

1. If an employee works on ice and the water under the ice is more than 1 m in depth, an employer and contractor must each test the ice before beginning any work and after as necessary to ensure that the ice will support any load placed on it (OHS General Regs, Sec. 51(6)).

## **NEWFOUNDLAND & LABRADOR**

1. The employer of a worker who is to travel over or work on ice that's above water more than one metre deep at any point, must ensure the ice supports the load to be placed on it (OHS Regs, Sec. 27(1)).

2. To comply with the above requirement, the employer must test the ice before work begins, and as often during the work as necessary to ensure the worker's safety (OHS Regs, Sec. 27(2)).

## **NOVA SCOTIA**

No specific OHS requirements for work on or over ice.

## **NORTHWEST TERRITORIES**

1. Before a worker is required or permitted to work or travel on ice that's above water or other material into which a worker could sink more than 1 metre, an employer must have the ice tested to ensure that it will support the load that the work or travel will place on the ice (OHS Regs, Sec. 32(2)).

2. Exceptions: The above requirement doesn't apply to:

a. Highways built and maintained by the Government of the Northwest Territories; or

b. Roads that are built and maintained to an approved standard (OHS Regs, Sec. 32(1)).

3. The above requirement 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 (OHS Regs, Sec. 32(3)).

## **NUNAVUT**

1. Before a worker is required or permitted to work or travel on ice that's above water or other material into which a worker could sink more than 1 metre, an employer must have the ice tested to ensure that it will support the load that the work or travel will place on the ice (OHS Regs, Sec. 32(2)).

2. Exceptions: The above requirement doesn't 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 (OHS Regs, Sec. 32(1)).

3. The above requirement 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 (OHS Regs, Sec. 32(3)).

## **ONTARIO**

No specific OHS requirements for work on or over ice.

## **PRINCE EDWARD ISLAND**

No specific OHS requirements for work on or over ice.

## **QUÉBEC**

No specific OHS requirements for work on or over ice.

## **SASKATCHEWAN**

1. Before a worker is required or permitted to work or travel on ice that's over water or over other material into which a worker could sink more than 1 metre, an employer or contractor must have the ice tested to ensure that the ice will support any load that the work or travel will place on the ice (OHS Regs, Sec. 3-23(1)).

2. The above requirement doesn't apply to ice roads built and maintained by the Ministry of Highways and Infrastructure (OHS Regs, Sec. 3-26(2)).

## **YUKON**

No specific WSC or OHS requirements for work on or over ice.