

# Machine Safety – Know The Laws of Your Province



Machine safety regulations are critical for protecting workers from injuries caused by the operation, maintenance, or malfunction of machinery in the workplace. These regulations require employers to ensure that machinery is equipped with appropriate safety features, such as guards, emergency stop systems, and lockout mechanisms. Compliance includes regular inspections, maintenance, and employee training in safe operation practices. Across Canada, machine safety requirements vary by province and territory, reflecting the country's diverse industrial needs and legislative frameworks. By adhering to these regulations, employers contribute to a safer working environment and demonstrate a commitment to preventing workplace accidents and injuries.

## **FEDERAL**

In federally regulated workplaces, machine safety is governed by **29 CFR §1910.212** under the [Code of Federal Regulations](#). These regulations mandate that employers ensure machinery is equipped with appropriate safeguards to protect workers from hazards such as moving parts, flying debris, or point-of-operation risks.

### **General requirements for all machines.**

#### **(a) Machine guarding**

(1) **Types of guarding.** One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks. Examples of guarding methods are—barrier guards, two-hand tripping devices, electronic safety devices, etc.

(2) **General requirements for machine guards.** Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible. The guard shall be such that it does not offer an accident hazard in and of itself.

(3) **Point of operation guarding.**

(i) Point of operation is the area on a machine where work is actually performed upon the material being processed.

(ii) The point of operation of machines whose operation exposes an employee to injury shall be guarded. The guarding device shall be in conformity with any appropriate standards therefore, or, in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

(iii) Special hand tools for placing and removing material shall be such as to permit easy handling of material without the operator placing a hand in the danger zone. Such tools shall not be in lieu of other guarding required by this section but can only be used to supplement protection provided.

(iv) The following are some of the machines which usually require point of operation guarding:

(a) Guillotine cutters.

- (b) Shears.
- (c) Alligator shears.
- (d) Power presses.
- (e) Milling machines.
- (f) Power saws.
- (g) Jointers.
- (h) Portable power tools.
- (i) Forming rolls and calenders.

(4) **Barrels, containers, and drums.** Revolving drums, barrels, and containers shall be guarded by an enclosure which is interlocked with the drive mechanism, so that the barrel, drum, or container cannot revolve unless the guard enclosure is in place.

(5) **Exposure of blades.** When the periphery of the blades of a fan is less than seven (7) feet above the floor or working level, the blades shall be guarded. The guard shall have openings no larger than one-half (1½) inch.

(b) **Anchoring fixed machinery.** Machines designed for a fixed location shall be securely anchored to prevent walking or moving. **Section 1910.212.**

**Further details on the Code of Federal Regulations can be found at [Ecfr.gov](https://www.ecfr.gov).**

## **ALBERTA**

In Alberta, employers have specific obligations under the [Occupational Health and Safety Code](#) to ensure machine safety in the workplace pursuant to **Part 25 – Sections 362(1) to 385.**

### **Part 25: Tools, Equipment, and Machinery**

## **Safeguarding requirement – Employer responsibilities**

If contact is likely between moving parts of machinery, electrically energized equipment, or part of the work process and a worker's clothing, personal protective equipment, jewellery, hair, or any other thing that may cause a hazard to workers, an **employer must** ensure that:

- (a) the worker's clothing, personal protective equipment, and any other thing fits closely to the body,
- (b) the worker does not wear bracelets, rings, dangling neckwear, a wristwatch, or similar articles, and
- (c) the worker's head and facial hair is short or confined and cannot be snagged or caught. **Section 362(1).**

If contact is likely between moving parts of machinery, electrically energized equipment, or part of the work process and a worker's clothing, personal protective equipment, jewellery, hair, or any other thing that may cause a hazard to workers, **a worker must:**

- (a) wear clothing, personal protective equipment, and any other thing that fits closely to the body,
- (b) not wear bracelets, rings, dangling neckwear, a wristwatch, or similar articles, and
- (c) have head and facial hair that is short or confined and cannot be snagged or caught. **Section 362(2).**

## **Machines close together**

An **employer must ensure** that a worker is not in danger because the machines installed at a worksite are close to each other or to a worker. **Section 363.**

## **Moving workers**

An **employer must ensure** that machinery or equipment used to

move, raise, or lower workers is designed by the manufacturer or certified by a professional engineer as being appropriate for that purpose. **Section 364.**

### **Starting machinery**

An **employer must ensure** that an alarm system is installed if:

(a) a machine operator does not have a clear view of the machine or parts of it from the control panel or operator's station, and

(b) moving machine parts may endanger workers. **Section 365(1).**

The alarm system must effectively warn workers that the machine is about to start. **Section 365(2).**

### **Preventing machine activation**

An **employer must** install a positive means to prevent the activation of equipment if:

(a) a worker is required, during the course of the work process, to feed material into the machine, or

(b) a part of the worker's body is within the danger zone of the machine. **Section 366.**

### **Operator responsibilities**

Before starting machinery, an operator **must** ensure that starting the machinery will not endanger the operator or another worker. **Section 367(1).**

While operating machinery, an operator **must** ensure that its operation will not endanger the operator or another worker. **Section 367(2).**

### **Controls**

An **employer must ensure** that an operational control on

equipment:

(a) is designed, located or protected to prevent unintentional activation, and

(b) if appropriate, is suitably identified to indicate the nature or function of the control. **Section 368.**

### **Immobilizing machinery**

A worker **must** not leave a machine, or a part of or extension to a machine, unattended or in a suspended position unless the machine is immobilized and secured against accidental movement. **Section 369.**

### **For more information:**

- Description of tools, equipment, and machinery including best measures to ensure machine safety in their use and operation. **Section 370(1) to 383(4).**

**Further details on the Occupational Health And Safety Code can be found at [Alberta.ca](http://Alberta.ca).**

## **BRITISH COLUMBIA**

In British Columbia, employers must follow the [Workers' Compensation Act Occupational Health and Safety Regulation](#) to maintain machine safety in the workplace pursuant to **Part 12 – Section 12.**

### **Safeguarding requirement – Employer Responsibilities**

Unless elsewhere provided for in this Occupational Health and Safety Regulation, the employer **must** ensure that machinery and equipment is fitted with adequate safeguards which:

(a) protect a worker from contact with hazardous power transmission parts,

(b) ensure that a worker cannot access a hazardous point of operation, and

(c) safely contain any material ejected by the work process which could be hazardous to a worker. **Section 12.2.**

## **Standards**

The application, design, construction and use of safeguards, including an opening in a guard and the reach distance to a hazardous part, **must** meet the requirements of *CSA Standard Z432-94, Safeguarding of Machinery*. **Section 12.3.**

## **Effectiveness of safeguards**

A safeguard **must** be capable of effectively performing its intended function. **Section 12.4.**

## **Fixed guards**

A fixed guard **must** not be modified to be readily removable without the use of tools. **Section 12.5.**

## **Lubrication**

A guard **must** be designed, where practicable, to allow lubrication and routine maintenance without removal of the guard. **Section 12.6.**

## **Repealed**

**Sections 12.7 to 12.9.**

## **Identifying unsafe equipment**

An unsafe tool, machine or piece of equipment **must** be removed from service and identified in a manner which will ensure it is not inadvertently returned to service until it has been made safe for use. **Section 12.10.**

## **Operating controls**

(1) Powered equipment other than portable powered tools or mobile equipment **must** have:

(a) starting and stopping controls located within easy reach of the operator,

(b) controls and switches clearly identified to indicate the functions they serve,

(c) controls positioned, designed, or shielded as necessary to prevent inadvertent activation,

(d) if two-hand controls are installed, controls designed to require concurrent use of both hands to operate the equipment, and to require both controls to be released before another machine cycle can be initiated, and

(e) control systems meeting the requirements of this Regulation.

(2) Portable powered tools and mobile equipment must have operating controls conforming to an appropriate standard acceptable to the Board.

(3) A remote-control device that operates mobile equipment must be equipped with a failsafe or stop mechanism that becomes operational if the remote-control device fails.

**Section 12.11.**

### **Machinery location**

A machine must be located or safeguarded so that operation of the machine will not endanger workers using normal passage routes about the workplace or operating an adjacent machine.

**Section 12.12.**

### **Marking physical hazards**

A physical hazard must be marked in a manner that clearly identifies the hazard to the affected workers. **Section 12.13.**



## **Restraining devices**

Effective means of restraint must be used:

- (a) on a connection of a hose or a pipe if inadvertent disconnection could be dangerous to a worker,
- (b) if unplanned movement of an object or component could endanger a worker, or
- (c) to secure an object from falling and endangering a worker.

After 3 consecutive months of employment, the employer becomes liable to pay an employee an amount equal to one week's wages as compensation for length of service. **Section 12.15.**

**For more information:**

- **Section 12.1.**
- Description of tools, equipment, and machinery, including best protective measures employed in their use and operation. **Sections 12.16 to 12.43.**

**Further details on the EMPLOYMENT STANDARDS ACT can be found at [BCLaws.gov.bc.ca](http://BCLaws.gov.bc.ca).**

## **MANITOBA**

In Manitoba, the [Manitoba Workplace Safety and Health Act and Regulation](#) mandates that employers ensure machine safety pursuant to **PART 16 – Section 16.1 to 16.13**

### **Part 16 – Machines, Tools and Robots**

#### **Safe work procedures**

(1) An **employer must:**

- (a) develop and implement safe work procedures respecting all machines and tools used in the workplace;

- (b) train workers in the safe work procedures; and
  - (c) ensure that workers comply with the safe work procedures.
- Section 16.2(1).**

(2) The safe work procedures must include practices and procedures dealing with the lockout of machines used in the workplace. **Section 16.2(2).**

### **Duty to inform workers**

An **employer must** ensure that a worker is:

- (a) informed of any risks associated with a machine or tool used in the workplace; and
- (b) provided with information, instruction and training in the safe use and operation of the machine or tool. **Section 16.3.**

### **Machine and tool safety**

(1) An **employer must** ensure that any machine or tool in the workplace is:

- (a) capable of safely performing the functions for which it is used; and
- (b) used, inspected and operated in accordance with:
  - (i) the manufacturer's specifications, and
  - (ii) the safe work procedures for the workplace. **Section 16.4(1).**

(2) An **employer and the supplier** of any machine or tool **must ensure** that the installation, testing, repair, and maintenance of or any modification to any machine or tool is carried out in accordance with:

- (a) the manufacturer's specifications; or
- (b) the specifications certified by a professional engineer.

## **Section 16.4(2).**

**(3)** An **employer and a supplier must** ensure that any machine or tool under his or her control is inspected at regular intervals to ensure that, so far as reasonably practicable, the machine or tool is capable of:

**(a)** withstanding any stress that is or is likely to be imposed on it; and

**(b)** safely performing the functions for which it is used.

## **Section 16.4(3).**

### **Operating controls**

An **employer must** ensure that:

**(a)** the operating controls of a machine:

**(i)** are readily and clearly identifiable,

**(ii)** are located within reach of the operator, and

**(iii)** cannot be activated by inadvertent contact; and

**(b)** subject to subsection 16.19(1), a machine is equipped with a stopping device that is:

**(i)** readily and clearly identifiable, and

**(ii)** located in the direct view and within reach of the operator at all times. **Section 16.8.**

### **Unattended or suspended machines**

An **employer must ensure** that a worker does not leave a machine or any part of a machine unattended or in a suspended position unless the machine or part has been:

**(a)** immobilized and secured against movement; or

**(b)** enclosed by a safeguard to prevent access by any other

worker to the machine or part. **Section 16.13.**

**For more information:**

- Worker Apparel. **Section 16.9.**
- Starting a Machine. **Section 16.10.**
- Warning System. **Section 16.11(1).**
- **Section 16.12.**

**Further details on the Manitoba Workplace Safety and Health Act and Regulation can be found at [Gov.MB.ca](http://Gov.MB.ca).**

## **NEW BRUNSWICK**

In New Brunswick, employers must comply with the [Occupational Health and Safety Act](#) to ensure machine safety pursuant to Sections 235 to 238, 241, and 242.

### **Employer's Role with Mechanical Safety**

#### **Machines and manufacturer's specifications**

An **employer shall** ensure that a machine is erected, installed, assembled, started, operated, used, handled, stored, stopped, serviced, tested, cleaned, adjusted, maintained, repaired, and dismantled in accordance with the manufacturer's specifications. **Section 235(1).**

#### **Manufacturer's rated capacity or other limitations**

An **employer shall** ensure that the manufacturer's rated capacity or other limitations on the operation of a machine or any part of it, as set out in the manufacturer's specifications or in any relevant specifications certified by an engineer, are not exceeded. **Section 235(2).**

#### **Manufacturer's rated capacity or other limitations**

An **operator of a machine shall** not exceed the manufacturer's rated capacity or other limitations referred to in

subsection (2). **Section 235(3).**

### **Inspections and defects**

An **employer shall** ensure that a machine is regularly inspected for defects and that a defective machine that may cause injury to an employee is removed from service until repaired. **Section 236.**

### **Starting and Stopping Machines**

An **employer shall** ensure that the operational controls on a machine are:

- (a) located and protected in such a manner as to prevent unintentional activation, and
- (b) suitably identified so as to indicate the nature of each control mechanism. **Section 237(1).**

Where a pedal is used to activate a control device on a machine, an **employer shall** ensure that the pedal is guarded so that it cannot be struck accidentally and activate the machinery. **Section 237(2).**

An **employer shall** ensure that each pair of active and idler pulleys on a machine is equipped with a permanent belt shifter that has a mechanical means of preventing the belt from creeping from the idler pulley to the active pulley. **Section 237(3).**

Where there is not a clear view of a machine or parts of it from the control panel or operator's station and moving parts of the machine may endanger an employee when the machine is started, an employer shall ensure that:

- (a) an alarm system is installed, and
- (b) the alarm system gives an effective warning before start-up of the machine so that an employee is made aware of the

imminent start-up. **Section 237(4).**

An **employer shall** ensure that an operator of a machine has unimpeded access in the operator's immediate work area to the means of stopping the machine. **Section 237(5).**

An **employer shall** ensure that a machine not driven by an individual motor or prime mover is equipped with a clutch, idler pulley or other means of quickly disengaging the power source. **Section 237(6).**

### **Starting and stopping machines**

An **operator of a machine shall** ensure that the start-up, stopping or operation of the machine does not endanger any person. **Section 238.**

### **Contact of employee with machines**

An **employer shall** ensure that sufficient space is provided around a machine in order to ensure the safety of employees while the machine is being operated or while cleaning, maintenance, adjustments, or repairs to the machine are being carried out. **Section 241(1).**

Where an employee or the employee's clothing may come into contact with moving parts of a machine or a moving machine, the **employee shall (Section 241(2)):**

- (a) wear close fitting clothing,
- (b) confine or cut head and facial hair, and
- (c) not wear jewelry, rings, dangling neckwear, or similar items.

**Further details on the Occupational Health and Safety Act can be found at [Laws.gnb.ca](https://laws.gnb.ca).**

## **NEWFOUNDLAND & LABRADOR**

In Newfoundland and Labrador, the **Occupational Health and Safety Act** requires employers to maintain machine safety pursuant to **Part VIII – Sections 87 to 126**.

### **Safe Machinery and Equipment – Employer Responsibilities**

(1) An **employer shall** ensure that each tool, machine and piece of equipment in the workplace is:

(a) capable of safely performing the functions for which it is used; and

(b) selected, used and operated in accordance with:

(i) the manufacturer's recommendations and instructions, where available,

(ii) safe work practices, and

(iii) the requirements of these regulations.

(2) Except as otherwise provided in these regulations, the installation, inspection, testing, repair, maintenance, or modification of a tool, machine, or piece of equipment **shall** be carried out:

(a) in accordance with the manufacturer's instructions or a standard acceptable to the minister; or

(b) as specified by a professional engineer.

(3) Where equipment or a structure is dismantled in whole or in part and subsequently reassembled, it shall not be used until completely checked and found to be safe for operation or occupancy. **Section 88(1) to (3)**.

### **General Requirements for Employer**

Except as otherwise provided in these regulations, an **employer**

**shall** ensure that machinery and equipment is fitted with adequate safeguards that:

(a) protect an employee from contact with hazardous power transmission parts;

(b) ensure that an employee cannot access a hazardous point of operation; and

(c) safely contain material ejected by the work process that could be hazardous to an employee. **Section 89.**

## **Standards**

(1) The application, design, construction and use of safeguards, including an opening in a guard and the reach distance to a hazardous part, **shall** meet the requirements of CSA Standard Z432 "Safeguarding of Machinery".

(2) A safeguard **shall** be capable of effectively performing its intended function. **Section 90(1)(2).**

## **Guards**

(1) A fixed guard shall not be modified to be readily removable without the use of tools.

(2) A guard shall be designed, where practicable, to allow lubrication and routine maintenance without the removal of the guard. **Section 91(1)(2).**

## **Identifying unsafe equipment**

An unsafe tool, machine, or piece of equipment **shall** be removed from service and identified in a manner that ensures that it is not inadvertently returned to service until it has been made safe for use. **Section 92.**

## **Operating controls**

(1) Powered equipment other than portable powered tools or



mobile equipment **shall** have:

- (a) starting and stopping controls located within easy reach of the operator;
- (b) controls and switches clearly identified to indicate the functions that they serve;
- (c) controls positioned, designed or shielded to prevent inadvertent activation;
- (d) where two-hand controls are installed, controls designed to require concurrent use of both hands to operate the equipment, and to require both controls to be released before another machine cycle can be initiated; and
- (e) control systems meeting the requirements of these regulations.

(2) Portable powered tools and mobile equipment **shall** have operating controls that conform to an appropriate standard acceptable to the minister. **Section 93(1)(2).**

**For more information:**

- Machinery Location. **Section 94.**
- Marking of Hazards. **Section 95.**
- Piping Systems. **Section 96.**
- Restraining Devices. **Section 97.**
- Exception for custom work. **Section**
- Description of power actuated and pneumatic tools including protective measures in their use. **Sections 98 to 126.**

Further details on the Occupational Health and Safety Act can be found at [Ohsguide.workplaceNL.ca](https://www.ohs.nova Scotia.ca/ohsguide/workplaceNL.ca).

## **NOVA SCOTIA**

In Nova Scotia, under the [Occupational Health and Safety Act](https://www.ohs.nova Scotia.ca/ohsguide/workplaceNL.ca),

employers are responsible for machine safety pursuant to **Sections 84 to 103.**

### **Mechanical Safety Responsibilities for Employers**

**(1)** An **employer shall** ensure that a machine that may be a hazard to the health or safety of a person at the workplace is erected, installed, assembled, started, operated, used, handled, stored, stopped, inspected, serviced, tested, cleaned, adjusted, maintained, repaired, and dismantled in accordance with the manufacturer's specifications, or where there are no manufacturer's specifications, the specifications certified by an engineer.

**(2)** An **employer shall** ensure that the maximum capacity, speed, load, depth of operation, or working pressure or any other limitation set out in the manufacturer's specifications or in an engineer's specifications, for the operation of a machine, tool or equipment under the circumstances prevailing at the time of operation, shall not be exceeded.

**(3)** Where a defect is identified with a machine or supplies that affects the safe operation of the machine, an **employer shall** ensure that:

(a) the machine is not operated until repaired; and

(b) until repaired or replaced, the machine and supplies are clearly identified as defective. **Section 84(1).**

**(1)** An **employer shall** ensure that an operator of a machine or tool is a competent person.

**(2)** An **employer shall** ensure that a person responsible for maintaining a machine or tool is a competent person. **Section 85(1)(2).**

### **Contact with machines**

**(1)** An **employer shall** ensure that adequate space is provided

around a machine to ensure the safety of a person while the machine is being:

(a) operated; or

(b) cleaned, adjusted, repaired, or otherwise maintained.

**(2)** No person **shall** be near a rotating shaft, spindle, gear, belt, or other possible source of entanglement:

(a) while wearing any article of clothing or jewellery that in the circumstances presents a hazard to a person in the workplace; or

(b) with hair that is not confined closely to the head by suitable headwear. **Section 86(1)(2).**

### **Starting and Stopping Machines**

**(1)** An **employer shall** ensure that the operational controls on a machine are:

(a) located and protected in such a manner as to prevent unintentional activation; and

(b) adequately identified so as to indicate the nature of each control mechanism.

**(2)** An **employer shall** ensure that a machine is designed with adequate means to prevent unintentional movements that may present a hazard to a person in the workplace.

**(3)** Where there is not a clear view of a machine or parts of it from the control panel or operator's station and the moving parts of the machine may endanger a person at the workplace when the machine is started:

(a) an **employer shall** ensure that an alarm system is installed that shall give an effective warning, with an adequate time delay, before the start-up of the machine so that a person at the workplace is made aware of the imminent start-up; and

(b) where reasonably practicable, the person that is to start the machine or parts of it shall ensure that a visual inspection is done of the complete exterior of the machine or parts of it to ensure no person is endangered by the start-up.

**(4) An employer shall ensure that an operator of a machine has unimpeded access in the operator's immediate work area to the means of stopping the machine. Section 88.**

**For more information:**

- Chain saws. **Section 90**; Automotive pits. **Section 91**; Tire repair and mounting. **Section 92(1)**; Conveyors. **Sections 93, 94, 95**; Abrasive wheels and grinders. **Sections 97, 98, 99, 100**; Compressed air used for cleaning. **Section 101**; and Space heating equipment. **Section 102 and 103.**

**Further details on the Occupational Health and Safety Act can be found at [Novascotia.ca](http://Novascotia.ca).**

## **NORTHWEST TERRITORIES & NUNAVUT**

In the Northwest Territories and Nunavut, the **Occupational Health and Safety Regulations** outline employer responsibilities for machine safety pursuant to **Sections 140 to 148.**

### **Employer Responsibilities for Machine Safety**

#### **Manufacturer's Specifications**

An **employer or supplier shall** ensure that machines or other equipment under this Part are constructed, repaired, inspected, tested, maintained, and operated in accordance with the manufacturer's specifications or an approved standard.

#### **Operation by Worker**

(1) An **employer shall**, in respect of machines at a work site,

ensure that:

- (a) the machines are operated only by a competent worker; and
- (b) workers are informed of any hazard associated with, and trained in the safe use of, the machines.

(2) Before starting a machine, an **operator shall** ensure that the operator and any other worker will not be endangered by starting the machine.

(3) If a worker or a worker's clothing could make contact with a moving part of a machine, an employer shall ensure that the worker:

- (a) wears close-fitting clothing;
- (b) confines or cuts short any head and facial hair; and
- (c) does not wear dangling neckwear or jewellery, rings or other similar items. **Section 142 (1).**

### **Operating Controls**

(1) If reasonably possible, an **employer or supplier shall** ensure that operating controls on a machine:

- (a) are located within easy reach of the operator; and
- (b) cannot be activated by accidental contact.

(2) If reasonably possible, an **employer or supplier shall** ensure that stopping devices on the machine are:

- (a) located in the direct view and within easy reach of the operator; and
- (b) readily identifiable.

(3) If a worker is required or permitted to feed material into a material forming press, punch, shear, or similar machine, an employer or supplier shall:

(a) if reasonably possible, install a positive means to prevent the activation of the machine if any part of the worker's body could be injured by moving parts of the machine when activated; or

(b) if it is not reasonably possible to comply with paragraph (a), install safeguards to prevent the worker from contacting a moving part of the machine. **Section 143 (1).**

### **Unattended and Suspended Machines**

(1) An **employer shall** not require or permit a worker to leave unattended or in a suspended position any machine or any part of a machine unless the machine or part has been

(a) immobilized and secured against accidental movement; or

(b) enclosed by a safeguard to prevent access by any other worker to the machine or part.

(2) A **worker shall** not leave unattended or in a suspended position any machine or any part of a machine unless the machine or part has been:

(a) immobilized and secured against accidental movement; or

(b) enclosed by a safeguard to prevent access by any other worker to the machine. **Section 144 (1).**

### **For more information:**

- Warning Systems. **Section 146(1)(2)(3).**
- Maintaining Machines in Motion. **Section 148.**

**Further details on the Occupational Health and Safety Regulations can be found at [Justice.gov.NT.ca](https://www.justice.gov.nt.ca).**

## **ONTARIO**

In Ontario, employers must adhere to the **Occupational Health**

**and Safety Act Sections 25 to 31** and related regulations (**Regulation 851: Industrial Establishments – Sections 7, 27, 29, 33, 46, 74, 75, 76**) to ensure machine safety in the workplace.

### **Duties of employers**

(1) An **employer shall** ensure that:

- (a) the equipment, materials, and protective devices as prescribed are provided;
- (b) the equipment, materials, and protective devices provided by the employer are maintained in good condition;
- (c) the measures and procedures prescribed are carried out in the workplace;
- (d) the equipment, materials, and protective devices provided by the employer are used as prescribed; and
- (e) a building, structure, or any part thereof, or any other part of a workplace, whether temporary or permanent, is capable of supporting any loads that may be applied to it:
  - (i) as determined by the applicable design requirements established under the version of the Building Code that was in force at the time of its construction,
  - (ii) in accordance with such other requirements as may be prescribed, or
  - (iii) in accordance with good engineering practice, if subclauses (i) and (ii) do not apply. **Section 25.**

### **Duties of supervisor**

(1) A **supervisor shall** ensure that a worker:

- (a) works in the manner and with the protective devices, measures, and procedures required by this Act and the

regulations; and

(b) uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn. **Section 27(1).**

### **Duties of workers**

(1) A worker shall:

(a) work in compliance with the provisions of this Act and the regulations;

(b) use or wear the equipment, protective devices, or clothing that the worker's employer requires to be used or worn;

(c) report to his or her **employer or supervisor** the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker; and

(d) report to his or her **employer or supervisor** any contravention of this Act or the regulations or the existence of any hazard of which he or she knows. **Section 28(1).**

### **Material Handling**

Machinery, equipment or material that may tip or fall and endanger any worker **shall** be secured against tipping or falling. **Section 46.**

### **Maintenance and Repairs**

Machinery, equipment, or material that is temporarily elevated and under which a worker may pass or work **shall** be securely and solidly blocked to prevent the machinery, equipment or material from falling or moving. **Section 74.**

A part of a machine, transmission machinery, device or thing shall be cleaned, oiled, adjusted, repaired, or have maintenance work performed on it only when:



- (a) motion that may endanger a worker has stopped; and
- (b) any part that has been stopped and that may subsequently move and endanger a worker has been blocked to prevent its movement. **Section 75.**

Where the starting of a machine, transmission machinery, device, or thing may endanger the safety of a worker:

- (a) control switches or other control mechanisms **shall** be locked out; and
- (b) other effective precautions necessary to prevent any starting **shall** be taken. **Section 76.**

**For more information:**

- Duties of Suppliers. **Section 31.**
- Pre-Start and Safety Review. **Section 7.**
- Machine Guarding. **Section 27.**

**Further details on the Occupational Health and Safety Act and Regulation 851: Industrial Establishments can be found at [ontario.ca/laws](https://www.ontario.ca/laws) and [ontario.ca](https://www.ontario.ca).**

## **PRINCE EDWARD ISLAND**

In Prince Edward Island, the [Occupational Health and Safety Act General Regulations](#) – Part 30 Sections 30.3 to 30.16 mandates employers to ensure machinery safety to reduce machine-related hazards.

### **Part 30 – Mechanical Safety – Employers' Responsibilities**

#### **General provisions respecting machinery**

(1) The **employer shall** ensure that machinery is erected, installed, assembled, started, operated, used, handled, stored, stopped, serviced, tested, adjusted, maintained, repaired, and dismantled in accordance with the manufacturer's

specifications.

## **Specifications**

(2) The **employer shall** ensure that the manufacturer's rated capacity or other limitations on the operation of the machinery or any part of it, as set out in the manufacturer's specifications or in any relevant specifications certified by an engineer are not exceeded and are clearly marked on the machinery in a location clearly visible to the operator.

(3) An operator of machinery **shall** not exceed the limitations described in subsection (2).

## **Inspection**

(4) The **employer shall** ensure that machinery is regularly inspected for defects and machinery which could cause injury to workers is removed from service until repaired. **Section 30.3.**

## **Starting machinery**

(1) The **employer shall** ensure that operational controls on machinery are:

(a) located and protected in such a manner as to prevent unintentional activation;

(b) suitably identified so as to indicate the nature of each control mechanism.

## **Pedals**

(2) Where a pedal is used to operate a clutch or belt shifter, the **employer shall** ensure that it is so guarded that it cannot be struck accidentally so as to activate the machine.

## **Pulleys**

(3) The **employer shall** ensure that each pair of active and

idler pulleys is equipped with a permanent belt shifter provided with a mechanical means of preventing the belt from creeping from the idler to the active pulley.

## **Alarm system**

(4) The **employer shall** ensure that:

(a) where moving machine parts may endanger workers when the machine is started and there is not a clear view of the machine or parts from the control panel or operator's station, an alarm system is installed; and

(b) the alarm system gives an effective warning before start up of the machine so that workers are made aware of the imminent start-up. **Section 30.4.**

## **Stopping machinery**

(1) The **employer shall** ensure that the operator of any machine has unimpeded access in the immediate area of the workers work area to the means of stopping that machine.

(2) The **employer shall** ensure that every power driven machine not driven by an individual motor or prime mover is equipped with a clutch, idler pulley or other means of quickly disengaging the power sources. **Section 30.5 (1)(2).**

## **Contact with machinery**

(1) The **employer shall** ensure that sufficient space is provided around individual machines or process units in order to ensure the safety of workers while operations, adjustments or repairs are being carried out.

## **Clothing**

(2) Where a worker or the worker's clothing might come into contact with moving parts of machinery, the **worker shall**:

(a) wear close fitting clothing;

(b) confine head or facial hair; and

(c) avoid wearing dangling neckwear, jewellery, rings or similar items. **Section 30.8(1)(2).**

**For more information:**

- Servicing of equipment or machines. **Section 30.7.**
- Cutting or shaping machinery. **Section 30.12.**
- Saws, band saws, circular saws. **Section 30.13.**
- **Section 30.14.**
- **Section 30.15.**
- **Section 30.16.**
- Emergency stop devices. **Section 16(2).**

**Further details on the Occupational Health and Safety Act General Regulations can be found at [princeedwardisland.ca](http://princeedwardisland.ca).**

## **QUÉBEC**

In Québec, the [Regulation Respecting Occupational Health and Safety – Division XXI Sections 174 to 199](#) requires employers to ensure machine safety by implementing adequate safety measures, maintaining equipment, and training employees to use machinery safely.

### **Division XXI – Machine Safety**

**Choosing means of protection:** A machine must be designed and manufactured in such a way as to render its danger zones inaccessible. If this is not possible, the resulting risks must be eliminated or reduced to the lowest possible level by installing at least one of the following means of protection, as the case may be:

(1) where access to the danger zone is not required during normal operation of the machine:

(a) a fixed guard;

(b) a movable interlocking guard with or without a locking device;

(c) sensitive protective equipment;

(d) a self-closing guard;

(2) where access to the danger zone is required during normal operation of the machine:

(a) a movable interlocking guard with or without a locking device;

(b) sensitive protective equipment;

(c) a self-closing guard;

(d) a two-hand control device;

(e) a guard with a start function;

(f) a manually adjustable guard. **Section 177.**

**Proper working condition:** Machines and means of protection must be kept in proper working condition in accordance with the manufacturer's instruction manual or, where applicable, with the elements specified by an engineer pursuant to section 174 and with trade practice. **Section 180.**

**Attributes of means of protection:** A guard or protective device must be designed and installed in accordance with trade practice and must, in particular:

(1) be constructed in a sufficiently robust manner to withstand the stresses to which it can be subjected;

(2) remain effective while the machine is being used by being held firmly in place while taking its environment into account;

(3) be located at a safe distance from the danger zone;

(4) not give rise to any additional risk or be in itself a source of danger because, for example, of sharp edges or angular parts;

(5) not be easily bypassed or rendered inoperative. **Section 181.**

**Removal or replacement of a means of protection:** Except in the cases provided for in this Division, a means of protection may not be removed.

Where a means of protection must be replaced, the new means of protection must provide a level of safety at least equivalent to that of the original part. **Section 186.**

**Control mode:** Where, for setting, maintenance, inspection, or other work on a machine, a guard has to be displaced or removed or a protective device has to be neutralized, and where it is necessary for the purpose of those operations for the machinery or part of it to be put into operation, worker safety must be ensured using a specific control mode which:

(1) disables all other control modes;

(2) allows operation of elements presenting a risk for worker health and safety only by continuous actuation of an enabling device, a two-hand control device or a hold-to-run control device;

(3) allows operation of the elements presenting a risk for worker health and safety only in reduced risk conditions for instance, at reduced speed, under reduced power or force or in a step-by-step mode, for example, with a limited movement device;

(4) prevents voluntary or involuntary action on the machine's sensors from triggering a function presenting a risk for worker health and safety. **Section 188.**

**For more information:**

- Manufacturer's instruction manual. **Section 174.**
- Compliance of a machine. **Section 175.**
- Safety precautions. **Section**
- Control devices. **Section 187.**
- Starting a machine. **Section 191.**
- Emergency stop. **Section 193.**
- Group of machines in a control system. **Section 194.**
- Work in a danger zone. **Section 196.**

**Further details on the Regulation Respecting Occupational Health and Safety can be found at [legisquebec.gouv.qc.ca](http://legisquebec.gouv.qc.ca).**

## **SASKATCHEWAN**

In Saskatchewan, employers are required by the [\*\*Occupational Health and Safety Regulations\*\*](#) – **Part 10 Sections 10-1 to 10-19** to ensure machine safety. This includes providing protective safeguards, conducting inspections, and offering necessary training to prevent accidents and injuries.

### **Machine Safety – Part 10**

An **employer or contractor shall** ensure that:

- (a) Machines are operated only by a competent worker; and
  - (b) Workers are informed of any risk associated with, and trained in the safe use of, the machines.
- (2) Before starting a machine, an operator shall ensure that neither the operator nor any other worker will be endangered by starting the machine.
- (3) If a worker or a worker's clothing may contact a moving part of a machine, an employer or contractor shall ensure that the worker:
- (a) Wears close-fitting clothing;
  - (b) Confines or cuts short any head and facial hair; and

(c) Do not wear dangling neckwear or jewellery, rings or other similar items. **Sections 10-1(1).**

### **Operating controls**

If reasonably practicable, an **employer, contractor, or supplier shall** ensure that operating controls on machines:

- (a) are located within easy reach of the operator; and
- (b) cannot be activated by accidental contact.

(2) If reasonably practicable, an **employer, contractor, or supplier shall** ensure that stopping devices on machines are:

- (a) located in the direct view and within easy reach of the operator; and
- (b) readily identifiable.

(3) if a worker is required to feed material into a material-forming press, punch, shear, or similar machine, an **employer, contractor, or supplier shall**:

- (a) if practicable, install a positive means to prevent the activation of the machine while any part of the worker's body could be injured by moving parts of the machine; or
- (b) if it is not practicable to comply with clause (a), install safeguards to prevent the worker from contacting a moving part of the machine. **Section 10-2(1).**

### **Unattended and suspended machines**

An **employer or contractor shall** not require or permit a worker to leave unattended or in a suspended position any machine or any part of a machine unless the machine or part has been:

- (a) immobilized and secured against accidental movement; or
- (b) enclosed by a safeguard to prevent access by any other



worker to the machine or part.

(2) A **worker shall** not leave unattended or in a suspended position any machine or any part of a machine unless the machine or part has been:

(a) immobilized and secured against accidental movement; or

(b) enclosed by a safeguard to prevent access by any other worker to the machine or part. **Section 10-3(1).**

### **Warning systems**

If the circumstances described in subsection (2) exist, an **employer or contractor shall** install:

(a) an audible alarm system that provides a warning of sufficient volume and for a sufficient period before start-up of the machine to give workers timely notice of the imminent start-up; or

(b) a distinctive and conspicuous visual warning system to alert workers of the imminent start-up of the machine.

(2) Subsection (1) applies if:

(a) a worker may be endangered by moving machine parts when a machine is started; and

(b) the operator of the machine does not have a clear view from the operating position of all parts of the machine and of the surrounding area in which there is a potential danger.

(3) An **employer or contractor shall** place adequate, appropriate and clearly visible warning signs at each point of access to a machine that starts automatically. **Section 10-5(1).**

### **For more information:**

- Cleaning of machine or other equipment in motion.

**Section 10-7(1).**

▪ **Section 10-8(1).**

▪ Air-actuated fastening tools. **Section 10-9.**

▪ Explosives – actuated **Section 10-10(1).**

▪ Grinding machines. **Section 10-12(1).**

▪ Chain saws. **Section 10-13(1).**

▪ **Section 10-14, 10-15.**

▪ Band saws. **Section 10-16(1).**

▪ Cut-off saws. **Section 10-17.**

▪ Pushblocks and pushsticks. **Section 10-18.**

▪ Hand-fed planners and joiners. **Section 10-19(1).**

**Further details on the Occupational Health and Safety Regulations can be found at [saskatchewan.ca](http://saskatchewan.ca).**

## **YUKON**

In Yukon, employers are obligated under the [Occupational Health and Safety Act](#) – Sections 3(1)(a) and 8 and the [Workplace Health and Safety Regulations](#) – Part 6 Section 6.02 to 6.10 to ensure the safety of machinery in the workplace.

### **Health And Safety Duties of Employers to Ensure Machine Safety**

(1) Every **employer shall** ensure, so far as is reasonably practicable, that:

(a) the workplace, machinery, equipment, and processes under the employer's control are safe and without risks to health;  
**Section 3.**

### **Operation and Maintenance of Mobile Equipment**

**Mobile equipment shall:**

(a) be maintained in safe operating condition in accordance with the manufacturer's recommendation and applicable regulations.

**Not for use:**

(b) be properly identified, if unsafe for use, in a manner that ensures that it is not used until repaired and made safe for use.

**Records:**

(c) have maintenance records for any service, repair or modification and the records **shall** be reasonably available to the operator and maintenance personnel during work hours, and

(d) be operated, inspected, repaired, maintained and modified in accordance with this Regulation, the manufacturer's instructions, or in the absence of such instructions, in accordance with good engineering practice.

**Inspection:**

(e) be inspected regularly and inspections **shall** include, but not be limited to:

1. tires for tread wear, rock bruises, and tread and sidewall cracking,
2. steering system,

iii. braking system,

1. lights and signal devices, and
2. all glass.

**Servicing:**

(f) be serviced, maintained, and repaired when the equipment is not operating, unless continued operation is essential to the process and a safe means is provided.

**Off road:**

(g) only be used off maintained roads if the equipment is appropriate and safe for this use considering factors such as

the nature of the travel road and surface, the slope of the travel surface, curves, super-elevation, and the activities to be undertaken. **Section 6.02.**

### **Operator Training and Responsibilities**

Workers **shall** only operate mobile equipment if:

#### **Training:**

(a) they have received adequate training in the safe use and operation of the equipment.

#### **Competence:**

(b) they have demonstrated competency in operating the equipment to a supervisor or a qualified person.

#### **Air brakes:**

(c) where mobile equipment has air brakes, they hold a valid air brake certificate or a driver's license with an air brake endorsement, or evidence of successful completion of a course of instruction on air brake systems by an organization acceptable to the director.

#### **Instructions:**

(d) they are familiar with the operating instructions for the mobile equipment.

#### **Authorization:**

(e) they have been authorized by a supervisor to operate the equipment.

#### **Trainees:**

(f) where the workers are trainees, they are under the direct supervision of a supervisor or a qualified person. **Section 6.03.**

## **Operator's responsibility**

Operators of mobile equipment **shall** ensure that they:

(a) operate the equipment safely, maintain full control of the equipment while operating and comply with these Regulations governing the operation of the equipment,

(b) inspect the mobile equipment in accordance with instruction from the employer and the manufacturer before starting it, and

(c) record the inspection in a logbook or other similar recording system, and report any defects to the supervisor or the employer for the required repairs and corrective measures.

**Section 6.04.**

**For more information:**

- Standards for mobile equipment. **Section 6.06.**
- Warning signal device. **Section 07.**
- Worker uses lights. **Section 6.08.**
- Rearview mirrors. **Section 6.09.**
- Replacement windows. **Section 6.10(4).**

**Further details on the Occupational Health and Safety Act and Workplace Health and Safety Regulations can be found at [laws.yukon.ca](http://laws.yukon.ca) and [wcb.yk.ca](http://wcb.yk.ca).**