Serious Injuries and Fatalities

Let's get serious about injury prevention

A Guide to Prevention
2025

WorkplaceNL

Health | Safety | Compensation

Legal

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Legislative requirements

Legislation is a minimum guide for developing OHS policies and procedures in workplaces. In addition to the legislation, best practices should be incorporated into all areas of workplaces to increase the effectiveness of the OHS program.

The majority of employers in Newfoundland and Labrador must follow provincial legislation for OHS:

- Occupational Health and Safety Act
- Occupational Health and Safety Regulations
- Other associated legislation

WorkplaceNL provides education about workplace health and safety to employers, workers and other persons as required by the Workplace Health, Safety and Compensation Act, 2022.

For official copies of the OHS Act and Regulations and the Workplace Health, Safety and Compensation Act, 2022, please contact:

Office of the King's Printer
Ground Floor
Confederation Building, East Block
St. John's, NL A1B 4J6
t 709.729.3649

www.servicenl.gov.nl.ca/printer/index.html

Official copies of the OHS Act and Regulations are available online at:

http://www.assembly.nl.ca/legislation/default.htm

Some employers fall under federal OHS legislation and must follow the Canada Labour Code - Part II (Code).

The Code applies to the following inter-provincial and international industries:

- Air transportation, including airlines, airports, aerodromes and aircraft operations.
- Banks, including authorized foreign banks.
- Grain elevators, feed and seed mills, feed warehouses and grain-seed cleaning plants.
- First Nations band councils and Indigenous self-governments (certain activities).
- Most federal Crown corporations, for example, Canada Post Corporation.
- Port services, marine shipping, ferries, tunnels, canals, bridges and pipelines (oil and gas) that cross international or provincial borders.
- Postal and courier services.
- Radio and television broadcasting.
- Railways that cross provincial or international borders and some short-line railways
- Road transportation services, including trucks and buses, that cross provincial or international borders.
- Telecommunications, such as, telephone, internet, telegraph and cable systems.
- Uranium mining and processing and atomic energy.
- Any business that is vital, essential or integral to the operation of one of the above activities.
- Federally regulated public sector including the federal public service and Parliament (such as, the Senate, the House of Commons and the Library of Parliament).

For an official copy of the Canada Labour Code please contact:

Department of Justice Canada
284 Wellington Street
Ottawa, ON K1A 0H8
t 613.957.4222 TDD/TTY: 613.992.4556

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1.0 Introduction

Serious injuries and fatalities (SIF) are devastating to workers and workplaces, and can have long lasting effects.

It is extremely important that the employer, supervisor and worker understand their roles and responsibilities to prevent serious injuries, and to know what to do when such tragedies happen.

What is a serious injury?

Serious injuries include fractures, amputations, sight loss, serious internal haemorrhages, burns that require medical attention, any injury caused by explosives, asphyxiation or poisoning by gas that results in a loss of physical control, or another injury that is likely to endanger life or cause permanent injury. Any injury that causes unconsciousness, results in substantial blood loss, or places life in jeopardy is also considered a serious injury.

SIF risk factors

Serious injuries and fatalities result from high-risk situations that continue without being controlled. SIF risk factors are present when the task is a high-risk activity, there is a lack of, or insufficient, management controls; and these conditions are allowed to continue.

Definition: Serious Injury (OHS Act section 54, and OHS Regulations section 10)

- Fracture of the skull, spine, pelvis, femur, humerus, fibula or tibia, or radius or ulna;
- Amputation of a leg, arm, hand, foot, finger or toe;
- Loss of sight of an eye;
- Loss of consciousness;
- Serious internal haemorrhage or substantial loss of blood;
- Burn that requires medical attention;
- Injury caused directly or indirectly by explosives;
- Asphyxiation or poisoning by gas resulting in a partial or total loss of physical control; **or**
- Another injury likely to endanger life or cause permanent injury, but does not include injuries to a worker of a nature that may be treated through first aid or medical treatment and the worker is able to return to his or her work either immediately after the treatment or at his or her next scheduled shift.

Definition: Serious Injury (WorkplaceNL)

- A claim for an injury type reportable under the Occupational Health and Safety Act that has more than four weeks in wage-loss benefits or more than $2,000 in health care benefits; or
- A fatality.

Prevention

Workplace injuries, disease and fatalities can be prevented by eliminating hazards or reducing risk to workers. Measures are put in place to prevent all incidents; however, workplace conditions that place workers at high risk for serious injuries and fatalities should be prioritized.

The first step to understanding possible exposures, risks and effects on workers is to identify and evaluate hazards. You should also examine the combination of hazards. For example, someone working at height may be at risk of injury. There is likely even more risk if they are working at height in a confined space.

The employer should provide guidance on SIF exposure by defining SIF within the organization, developing a process to evaluate risk, investigating incidents for SIF potential, and calculating the SIF Exposure Rate.

Next, the employer will need to eliminate or minimize risk factors in all routine and non-routine tasks at the workplace. Identify the high-risk tasks and eliminate the risk or lower it to as low

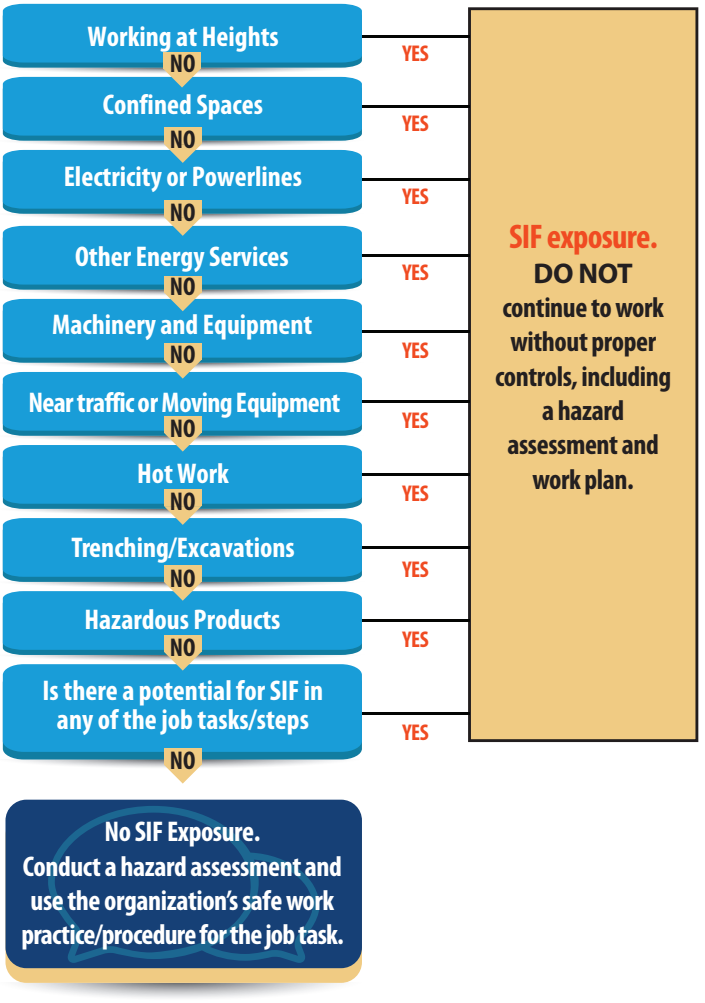
as reasonably possible; identify and correct the management controls that are lacking; then look at conditions in the workplace that are allowed to continue, and stop them from happening.

A few ways to start include:

- Conducting hazard assessments.
- Incorporating safety into the design and planning stages.
- Developing controls with worker representatives from each department that understand the work or perform the task.
- Creating an environment where workers feel comfortable to stop work and report issues.
- Enforcing the OHS program and its elements.
- Providing supervision, mentorship and coaching.
- Conducting regular checks to see if the health and safety system working.

Serious Injury and Fatality Exposure

Does the task involve:



Plan-Do-Check-Act model for SIF prevention

The Plan-Do-Check-Act (PDCA) model is a method used for continuous improvement.

It involves four steps:

- **Plan –** Establish objectives required to deliver the desired outcomes.
- **Do –** Carry out these objectives.
- **Check –** Review and evaluate the objectives for effectiveness.
- **Act –** Implement improvements based on the evaluation.

PLAN

Obtain leadership input and support for SIF prevention program

Develop a stragedy for SIF prevention

Determine an organizational risk profile and SIF definitions

Develop a communications plan for SIF prevention

DO

Educate and train workers on SIF prevention

Outline program expectations and long-term goals

Identify sources of data for SIF metrics

Identify precursers for SIF

Consider tools and technologies for SIF prevention

CHECK

Analyze and track trends in SIF metrics

Assess how well risks are being controlled

Obtain feedback from workers and leaders

ACT

Take action on lesons learned

Reevaluate the SIF metrics tracked

Identify additional sources of data for SIF metrics

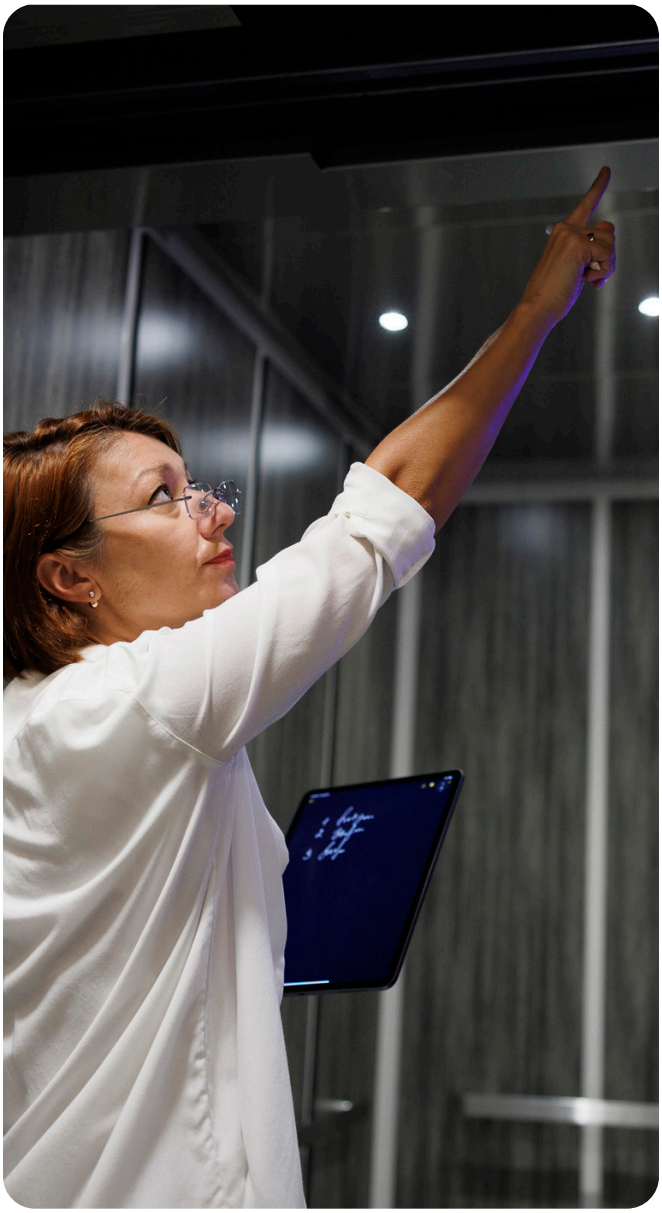
Reassess precursers for SIF

2.0 Hazard Assessment

Hazard Assessment

A hazard assessment is a formal, written document that takes a thorough look at the workplace including:

- **Hazard Recognition –** Identify hazards and risk factors that have the potential to cause harm.
- **Hazard Evaluation –** Analyze and evaluate the risk associated with that hazard.
- **Hazard Control –** Determine appropriate ways to eliminate the hazard, or control the risk when the hazard cannot be eliminated.



A hazard assessment evaluates current conditions to identify real and potential hazards. Conduct the assessment with workers who have expertise in the work processes, and in consultation with the OHS Committee, Worker Health and Safety Representative or Designate.

The hazard assessment helps employers determine what is reasonably practicable based on the probability of an event occurring, and its potential severity. An effective hazard assessment shows the extent to which risks were reduced by specific controls. Once a hazard assessment is completed, it is signed off by both the assessor and the employer/ manager to affirm the hazard assessment has been done competently, and the controls are appropriate for the risk.

Hazard Assessment Process

Evaluate & Monitor

1 Identify the hazard

What do I need to do?
- Observe the work area
- Consult workers
- Review work process

2 Evaluate the risk

What do I need to do?
- Consider the likelihood of an incident occurring
- Consider the potential injury severity

3 Find solutions

What do I need to do?
- Eliminate the hazard
- Lower the risk by:
  - changing work environment
  - writing policies/procedures

4 Implement/make recommendations

What do I need to do?
- Train workers
- Make someone responsible and follow-up

Step 1 – Identify hazards

The first step is to identify the hazards. In any workplace, people, equipment, materials, environment and process must all fit together properly, like pieces in a jigsaw puzzle. Each of these factors should be considered when recognizing, evaluating and controlling hazards.

People - Actions people take or do not take can create hazards in the workplace. Including management, employees, contractors, customers, the public and suppliers.

Equipment -Tools and machines that people work near. Including fixed machines, vehicles, materials handling, hand tools protective equipment and personal gear.

Materials - Raw materials, products, chemicals and other hazardous substances worker use, process or handle creating safety hazards when improperly stored, moved, installed or disposed.

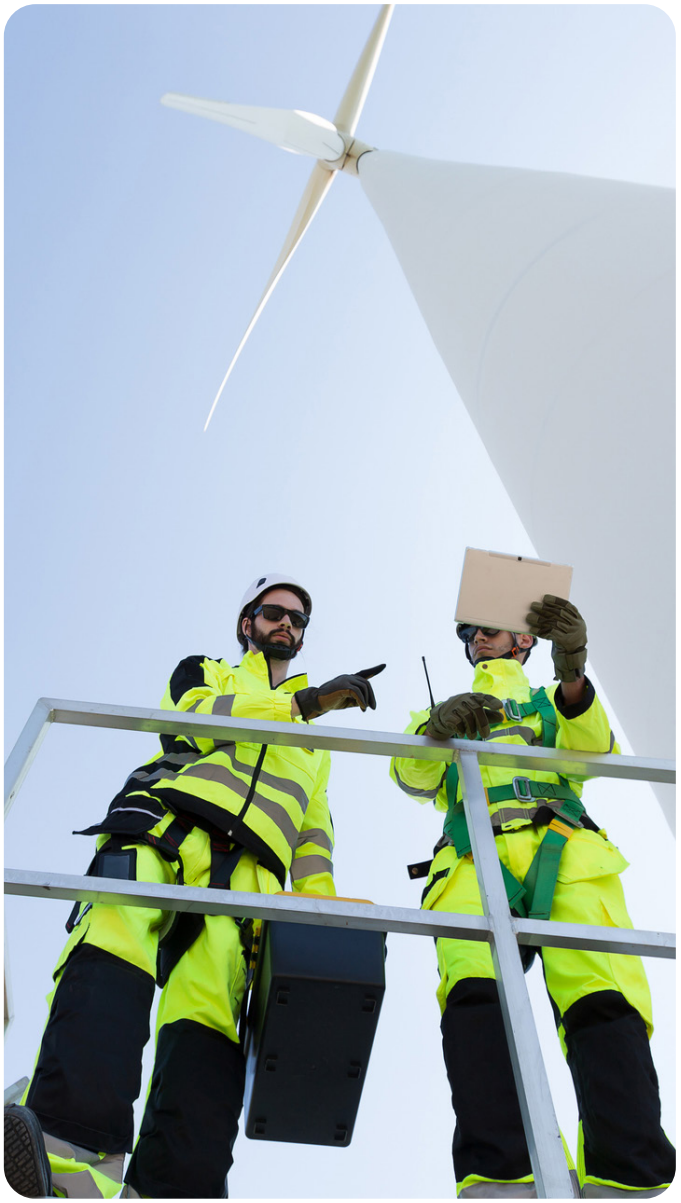
Environment - Workplace environments are where people, materials and equipment come together. Many aspects of that environment may adversely affect and alter potential hazards.

Process - How things are done in a workplace. What people are doing with the equipment and materials provided and if potential hazards are due to these processes.

Step 2 – Evaluate the risk

Evaluate each hazard you identify to determine how much risk it poses to workers as part of their work activity. This is an important step to determine the priority given to each hazard, which should be studied to determine the level of risk.

Evaluate the identified hazards to determine the risk of serious injuries or fatalities. This is an excellent opportunity to look at potential and identify precursors.



Online tools

Various risk evaluation matrixes and tools are available online – each specific to workplace activities.

Some are detailed, while others are not. Choose a risk matrix that is suitable to your workplace.

The following are samples of simple tools that you can use to help rank and prioritize risk.

Probability

The likelihood of an incident happening.

Questions to help determine how likely it is that an incident will occur:

1. What would happen if…?
2. How often has this happened in the past?
3. If this scenario did occur, how likely is it that it would result in injury/illness?
4. Is it likely that other negative effects would result?

Severity

How severe an injury or illness would be if the incident happened.

Questions to help you determine how severe an incident may be:

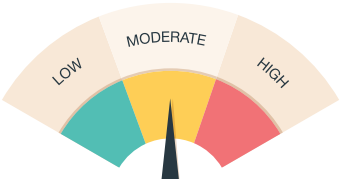
1. What will be the effect of the incident?
2. Is it likely the hazard will produce an immediate effect?
3. Could it be considered serious or severe?
4. Will it produce long or short-term effects?
5. Could it be fatal?
6. Could it be considered minor with no lost time from work?
7. How many people could be affected?
8. How much damage could result?

Risk

Severity	Unlikely (1)	Likely (2)	Very likely (3)
Permanent disability or fatality or significant property damage (4)	4 (MOD)	8 (HIGH)	12 (HIGH)
Serious injury, illness or property damage (3)	3 (LOW)	6 (MOD)	9 (HIGH)
Minor injury or property damage (2)	2 (LOW)	4 (MOD)	6 (MOD)
No injury or illness (1)	1 (LOW)	2 (LOW)	3 (LOW)

Probability

RISK = PROBABILITY x SEVERITY



Probability

Red: Very likely to occur immediately or within a short period of time

Orange: Likely to occur eventually

Green: Unlikely to occur

Severity

Red: Permanent disability or fatality or significant property damage

Orange: Minor injury or property damage

Green: No injury or illness

Ranking

High: very likely to occur within a short period of time, could result in serious injury/illness or fatality.

Moderate: will likely occur eventually, with minor injury.

Low: unlikely, no injury.

Step 3 – Find solutions

After you identify the hazards and evaluate the risks, you then put controls in place to eliminate the hazard or reduce the risk to workers. Employers notify supervisors and workers of hazards, supervisors tell workers about any hazards they may face and workers immediately report hazards to the employer and supervisor.

The hierarchy of controls is a list of ways to deal with or control workplace hazards. The options at the top of the list are the most effective because they address the hazard (the thing that may cause harm) rather than just reduce the risk (the harm that the hazard may cause).

Often, one level of control alone will not lower the risk level enough to fully protect the worker. For most high-risk activities, you need to supplement higher level controls with lower level controls.

Elimination – Physically remove the hazard.

Substitution – Substitute the task, tools, equipment or materials with something less hazardous.

Engineering – Design or modify the workplace or job task to reduce the source of exposure

Administrative – Safe work practices and procedures, education and training, job rotation, work schedules in shorter increments to reduce exposure time, medical surveillance, signage and labels.

PPE – Last line of defense, does not control the hazard, just protects the worker from impact. If the PPE fails, the worker is fully exposed to the hazard.

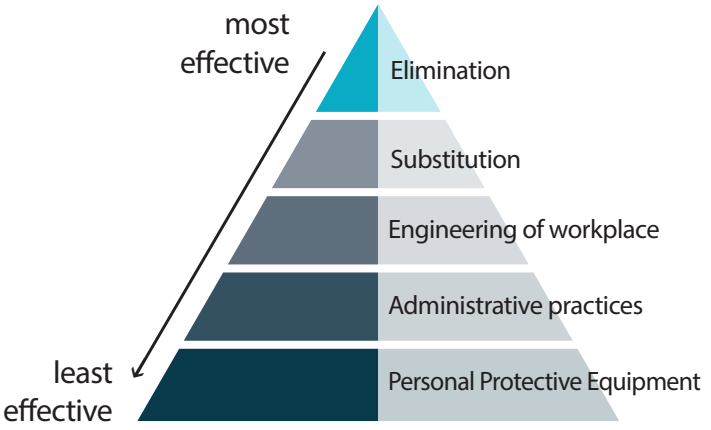
When choosing controls, start at the top. First, consider if you can eliminate or substitute the risk. If not, then consider engineering controls that can be put in place. For high-risk activities, use administrative practices and personal protective equipment (PPE) to supplement engineering controls - you should not use the lower level controls by themselves.

Choose your solutions according to risk, from step 2 above. The higher the risk rating:

- the greater the need to workplace design, policies and procedures

- the higher the priority in addressing the hazard.

Remember, you may immediately fix a work activity with a low risk rating if it has a quick solution.



Step 4 – Implement and make recommendations

By now, you have identified hazards, evaluated risks and found solutions to lower the risks. The next step is to implement the solutions or control measures.

Assign roles and responsibilities as you develop the plan to implement your solutions - everyone in the workplace must cooperate and participate to successfully implement the recommendations. Make changes to the workplace and work activities according to your plan.

Step 5 – Evaluate and monitor

Review and evaluate the controls that have been implemented to confirm if the hazard has been eliminated or if the risk is appropriately controlled. Continue to monitor to make sure the control continues to be effective.

Controls for high-risk activities, or those with potential for serious injury or fatality, need more attention. Closely monitor them to ensure they are effective.

3.0 Incident Investigation

Incident Investigation

Even when workplaces make every effort to protect the health and safety of workers, unplanned events may still occur. It is important to investigate the cause of these events so you can prevent it from happening again.

Incident investigations focus on uncovering the root cause(s) of the incident. If an investigator only assesses the immediate cause — without asking more probing questions — it will be challenging to develop corrective actions to prevent another such incident. Most incidents have a combination of causes, not just one specific cause.

Finding the root cause of an incident is critical to developing long-term and effective corrective actions.

The basic steps in investigating are: gather data, analyze all of the information, determine the immediate and root causes and make recommendations. Although the procedures are seemingly straightforward, each step can have its pitfalls. Keep an open mind during an investigation as preconceived notions may result in a biased investigation, while leaving some significant facts uncovered. Consider all possible causes. Making notes of ideas as they occur is a good practice, but do not make conclusions until after you have gathered all the data.

Step 1 – Secure and manage the scene

Make sure injured persons receive necessary medical aid, make sure the area the is safe for investigators to work in and preserve physical evidence. Make any necessary notifications, including, but not limited to, the OHS Division of Digital Government and Service NL, Government of Newfoundland and Labrador.

NOTE: Complete steps 2, 3 and 4 in any order.

Step 2 – Collect physical evidence

Survey the scene to obtain a quick overview and identify all witnesses. Use measuring tape, camera, and sketches to record the scene as found, and make note of the location of any objects or persons that may have been removed from the scene. List any equipment and material involved before, during, and after the incident, as well as environmental conditions at the time of the incident. This information should be verified by witnesses and other facts.

Step 3 – Interview witnesses

Conduct interviews as soon as possible after an incident, as details tend to fade over time. Interview workers who were directly involved, as well as any witnesses or bystanders. Keep witnesses apart and interview them separately; if they have an opportunity to discuss the event among themselves, individual perceptions may be lost in the normal process of accepting a consensus view where doubt exists about the facts.

Step 4 – Gather documents and records

Data can be found in documents such as technical data sheets, OHS Committee minutes, inspection reports, company policies, maintenance reports, past incident reports, safe work procedures, and training reports. Any relevant information must be studied to see what might have happened and what changes might be recommended to prevent recurrence of similar incidents.

This can include:

- Safe work practices and procedures
- Manuals, maintenance standards and records
- Inspection records
- Training records
- Hazard assessments
- Toolbox or crew meetings
- Similar incident or near miss reports
- OHS Committee minutes
- Policies
- Safety data sheets (SDS)
- Regulations
- Other documents that may be applicable

Step 5 – Root cause analysis

Organize the data and create a timeline to describe the incident. This will help visually organize the investigation information and identify when something went wrong. Analyze this information to determine what led to the incident. Seek to identify SIF precursors, as well as the immediate and root causes. The immediate cause(s) are the direct cause(s) or contributing factors of an incident. The root cause(s) are the underlying factor(s) or why the immediate cause occured.

Step 6 – Develop corrective actions

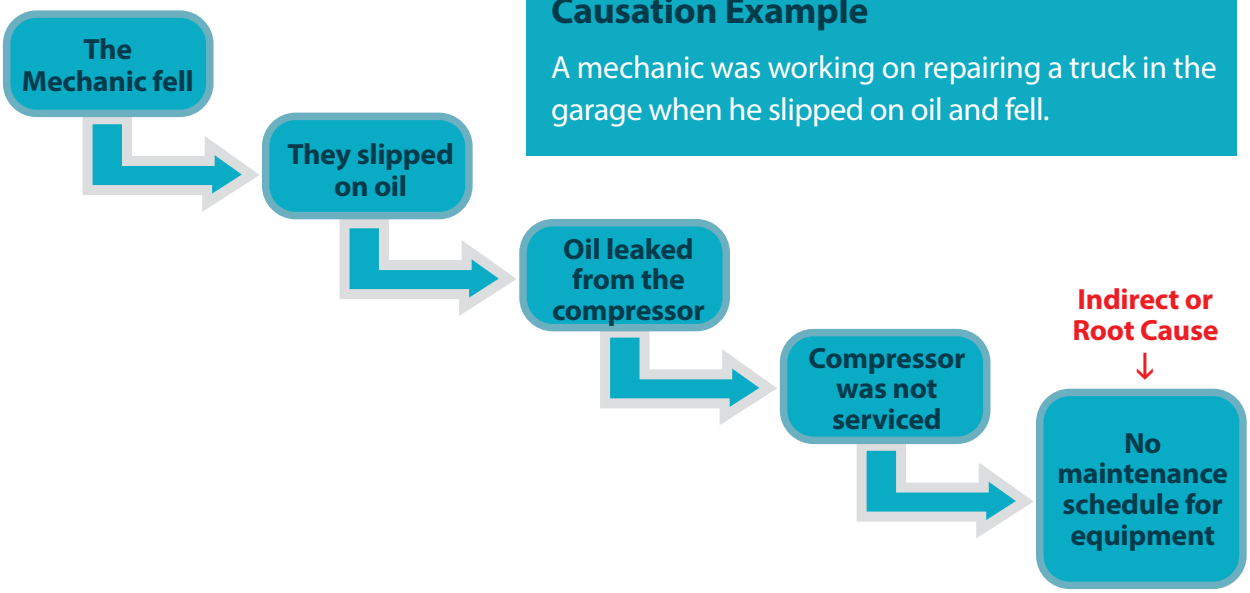
After you know what caused the incident, you can develop corrective actions. Focus on ways to correct the root causes. Assign someone appropriate to be responsible for the action, and a due date. Follow up to make sure action gets closed.

Step 7 – Monitor and evaluate

Communicate the findings and recommendations with all workers, supervisors and management. Present the information 'in context', so everyone understands how the incident occurred and the corrective actions taken to prevent it from happening again. Monitor all corrective actions that have been put in place to ensure they are effective. Adjust if needed.

Causation Example

A mechanic was working on repairing a truck in the garage when he slipped on oil and fell.



4.0 Incident Reporting

Steps to take when a serious injury or fatality occurs:

1

Notify first responders, or call 911.

Secure the incident scene.

2

Call OHS Division, Service NL at 709.729.4444, or 800.563.5471; and participate in any investigation they deem appropriate.

Notify the OHS Committee, Worker Health and Safety Representative or Designate.

3

Conduct an incident investigation to determine root cause.

Communicate the findings to workers.

Implement effective corrective actions to prevent recurrence.

4

Send a written report to the OHS Division within three days after a serious injury, and within five days after a fatality.

Workers send a Form 6 - Worker Report of Injury to WorkplaceNL using MyWorkplaceNL online services. Employers send a Form 7 - Employer Report of Injury to WorkplaceNL.

IMPORTANT: Remember to look at all incidents to determine if an incident had or continues to have the potential to cause a serious injury or fatality.

Definitions

Employer – A person who employs one or more workers.

Hazardous products – A product, material, mixture or substance classified under one or more of the hazard classes defined under the Canadian Hazardous Product Act.

National Work Injury Statistics Program (NWISP) – A national coding structure used by all Workers' Compensation Boards in Canada that enables jurisdictions to compare injuries.

Safety Data Sheet (SDS) – A safety data sheet (SDS) provided by a supplier that contains information required by the Hazardous Products Act (Canada), including potential hazards of a hazardous substance, instructions on how to work safely with it and actions to take in an emergency. An SDS should not be confused with the label; as it contains much more detailed information. Before using a hazardous product, it is essential to conduct a risk assessment by reading and fully understanding the SDS.

Supervisor – A person authorized or designated by an employer to exercise direction and control over workers of the employer.

Worker – A person engaged in an occupation.

Workplace inspection – To critically examine a workplace, work area, work process, work being performed or tools or equipment being used to identify and record hazards, and make sure that safety measures are adequate.

Useful contacts

OHS Division, Digital Government and Service NL

Serious Injury 24-hr Reporting Line
709.729.4444

Information and concerns on workplace safety and general inspections
709.729.2706 1.800.563.5471

WorkplaceNL Prevention Services
709.778.1552

General Inquires
709.778.1000

709.778.1000
1.800.563.9000
info@workplacenl.ca
www.workplacenl.ca

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