

HAZARD IDENTIFICATION AND CONTROL

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6.1 Hazard assessment and identification

Hazards exist from four areas in your company:

People

- Improperly trained or poorly supervised
- Not paying attention to surroundings
- Not wearing the assigned or appropriate safety equipment
- Not following safe work practices

Equipment

- Poorly maintained or uninspected equipment
- Unguarded equipment
- Using or wearing improper or worn out equipment for the task

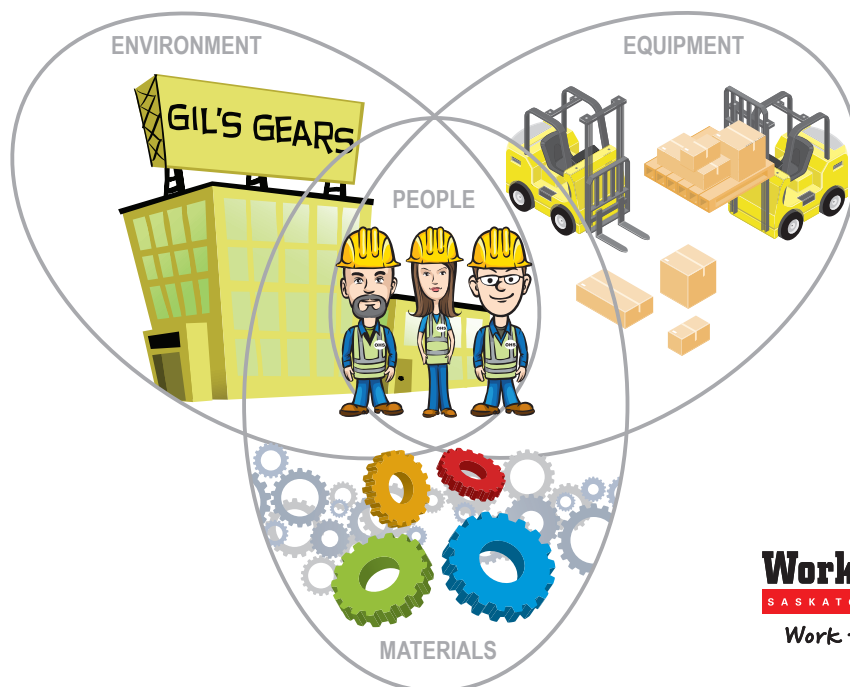
Materials

- Working with materials that are flammable or require special storage and handling
- Working with chemicals that are volatile or dangerous when inhaled or in contact with skin

Environment

- A wet floor
- Insufficient lighting
- Loud or constant sounds
- Inclement weather

A safety system is a process to help you identify seen and unseen hazards and risks in all four areas – risks from things that people are doing or NOT doing. It is also a way for them to report injuries and near misses and for you to track them.



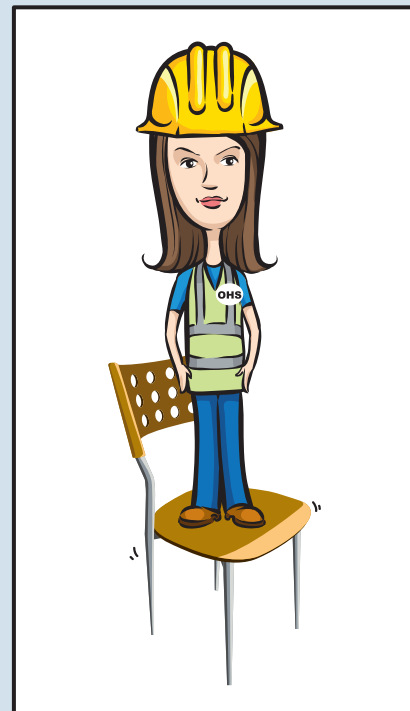
Examples of Health and Safety Hazards			
Chemical	Includes any form of chemical, such as compressed gases, solvents, lead and others.	Machine	Includes hazards from moving parts, like rotating shafts, belts and blades.
Physical	Includes noise, vibration, heat, cold and radiation.	Energy	Includes pneumatic or hydraulic pressure, steam, heat and electricity.
Ergonomic	Includes design of the workplace and jobs that involve repetition, force and posture.	Material Handling	Includes moving, stacking and storing of all goods including dangerous goods.
Biological	Includes organisms or toxic substances produced by living things that can cause illnesses or diseases in humans, such as bacteria, viruses and fungi.	Safe Work Responsibilities	Includes not following safe work procedures currently implemented, or working in an environment that does not have safe work practices in place or doesn't enforce them.

Risk Matrix... what is the chance it will happen?

The risk matrix determines the likelihood something WILL happen and the impact if the incident occurs.

Likelihood ↑	Very likely	Medium 2	High 3	Extreme 5
	Likely	Low 1	Medium 2	High 3
	Unlikely	Low 1	Low 1	Medium 2
	What is the chance it will happen?	Minor	Moderate	Major
		↓ Impact →		

During their OHS committee training, Rebecca and Jack learned how to use the risk matrix. They decided to apply it to one of Rebecca's common tasks. Quite frequently, Rebecca uses a chair from the break room on a concrete surface to reach all of the office supplies from a high shelf. They determine that the risk is high she will fall. She does the task weekly. The chair is not stable, so there is also a medium to high likelihood a fall could occur. They also determine that if she fell, the impact would be high: she could receive a long-term or permanent injury. To eliminate the risk, Jack and Rebecca complete an urgent purchase request for a proper step stool for the supply room.



6.2 Hazard control

Once you have identified tasks and their hazards, you can set them into this matrix. High-risk issues with high likelihood/high impact need immediate attention.

The next step is to develop and implement hazard controls. How you control a hazard depends on the circumstances. Consider the seriousness of the risk and then identify what controls are reasonable and practical in the circumstances.



Ways to deal with hazards

1. Elimination

Eliminate the workplace conditions, equipment, chemical or act that is causing the hazard. Elimination is the best method of control, but it's difficult to eliminate some hazards.

- Replace a toxic substance with a non-toxic substance.
- Replace broken tools.
- Insist workers wear personal protective equipment such as fall protection.

2. Substitution

Substitution is the process of replacing a hazard with a less hazardous method, equipment, chemical or condition.

- Replace a toxic substance with a less toxic substance.
- Purchase a stepladder for someone who stands on a chair to retrieve items from a shelf.

3. Engineering

Engineer ways to eliminate or contain hazards.

- Add ventilation to remove toxic fumes.
- Install adjustable-height ergonomic surfaces to eliminate strain from repetitive movements.

4. Administration

Create administrative policies and procedures that reduce exposure to hazards.

- Create specific job procedures for operating equipment.

5. Personal protective equipment (P.P.E.)

This is your final approach to reducing hazards. Personal protective equipment is your last line of defence.

- Personal protective equipment includes items such as safety glasses, steel-toed boots, work gloves and hard hats.

6.3 Inspections

An internal safety inspection identifies and controls hazards in the workplace before injuries, illnesses and incidents occur.

Examine workplace activities and conditions during this process. Identify situations with the potential to cause damage and/or injury and take corrective measures.



There are two main types of internal inspections:

Ongoing (informal) inspections

Ongoing inspections involve the regular monitoring of workplace activities. Often a problem can be resolved by discussing an unsafe act with your worker or by correcting the unsafe conditions.

Planned (formal) inspections

Planned inspections involve a structured event conducted by managers, supervisors or an inspection team made up of managers, supervisors and workers. Conduct these inspections on a regular basis (e.g., weekly, monthly, bi-monthly, quarterly, etc.).

Assign a priority level to hazards you observe based on your risk matrix.

- Extreme and high – require immediate action
- Medium – requires short and medium-term action
- Low – requires long-term action or could be dealt with quickly in the short term

Document inspections as official reports and file in your health and safety manual for future reference.

Inspections can take many forms depending on your business or industry:

- With each shift, users or operators should conduct pre-use inspections (e.g., forklift or fall arrest equipment inspections).
- Specialists and/or maintenance staff should conduct critical parts inspections on equipment such as cranes.
- OHS committee inspections – two or more committee members, including at least one worker rep conduct the inspection.
- Facilities inspection – senior management conducts inspection.

The best checklist for your workplace is one developed for your specific needs.

Why are workplace inspections important?

An inspection shouldn't be done just because there is an incident. Regular inspections prevent incidents. Inspections identify substandard conditions or practices before they cause an injury or equipment damage.

Regular workplace inspections:

- Help prevent injuries and illnesses.
- Identify and record hazards to change, and
- Help plan, report and monitor progress of the safety program.

Inspections are important because you:

- Listen to the concerns of workers and supervisors.
- Gain further understanding of jobs and tasks.
- Identify existing and potential hazards.
- Determine underlying causes of hazards.
- Monitor hazard controls (personal protective equipment, engineering controls, policies, procedures), and
- Recommend corrective action.

Who should do an inspection?

Daily or shift inspections are a routine part of a prevention plan. Train operators to do their own pre-use inspections before each shift. Maintenance staff or specialists should conduct critical parts inspections.

Health and safety committee members are the obvious choice to carry out formal inspections, especially if they have received training or certification.

Other criteria for selecting the inspection team are:

- Knowledge of regulations and procedures
- Knowledge of potential hazards, and
- Experience with work procedures involved.

You may wish to call upon special resources such as engineers, maintenance personnel, occupational hygienists, health and safety professionals, supervisors or managers to be a part of the inspection team. These experts may be able to help with certain aspects of an inspection, specific situations, or to help explain equipment or processes.

What should the final report have in it?

1. Be sure to enter the department or area inspected, the date and the inspection team's names and titles on top of the page.
2. To make a report, first copy all unfinished items from the previous report on the new report.
3. Write down the observed unsafe condition and recommended action. Number them consecutively.
4. State exactly what you or the inspector detected and accurately identify its location (e.g., instead of stating, "machine unguarded," state, "guard missing on upper pulley #6 lathe in North Building").
5. Assign a priority level to the hazards observed based on your risk matrix to indicate the urgency of the corrective action required. What are your action plans for the short, medium and long term?

On the next page is a sample Department Inspection Report that your business can use, or you can develop your own.

6.4 Investigation

Incident investigations

The purpose of an incident or near miss investigation is to determine the root cause of an incident and find a way to correct or prevent it.

Find out:

- What were the immediate causes of the incident?
- What was the root cause(s) of the incident?

Follow these steps when conducting incident investigations:

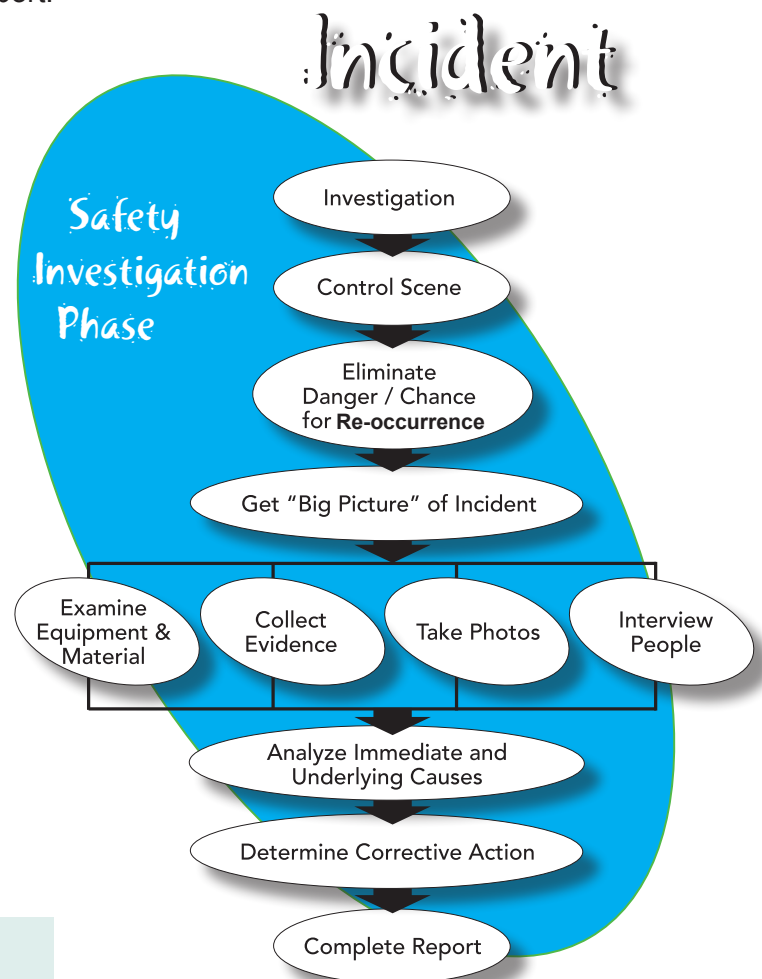
1. Take control of the scene.
2. Ensure that no further injury or damage occurs.
3. Investigate the incident, and
4. Complete an incident investigation report.

The key to a good investigation is asking the right questions. Watch out for conclusions or phrases like:

- *Worker was not paying attention.*
- *Worker should have known better.*
- *Accidents happen, or*
- *It was just an accident.*

As outlined in the *Saskatchewan Occupational Health and Safety Regulations, 1996*, you are **legally required to conduct an investigation** if a worker requires hospitalization for more than 24 hours, or if a worker is involved in an incident that causes or may cause death.

On the next page is a sample Incident Investigation Report that your business can use, or you can develop your own.





Incident Investigation Report

Date of investigation		Location	
Date of injury		Injured worker	
Time of injury (A.M./P.M.)		Supervisor	
LRWS notified?¹ No <input type="checkbox"/> Yes <input type="checkbox"/>		OHS committee notified? No <input type="checkbox"/> Yes <input type="checkbox"/>	
Injured worker's home address:			Phone:
Nature of injury reported (injured body part):			
Factors that led up to incident:			
Supervisor Comments:			
Names and addresses of witnesses and their comments (please use back for additional comments):			
Recommendations for corrective measures:			
Corrective measures taken? N/A <input type="checkbox"/> Yes <input type="checkbox"/>		To follow up on (date):	

Investigator Signature

CEO/Supervisor/Manager

1 Reasons to call the Ministry of Labour Relations and Workplace Safety (LRWS): when an incident causes serious, bodily injury or may cause the death of a worker; when a worker requires admittance to a hospital as an in-patient for 72 hours or more.

Dangerous occurrences include: the structural failure or collapse of a structure, scaffold, temporary falsework or concrete formwork, all or any part of an excavated shaft, tunnel, caisson, coffer dam, trench or excavation; the failure of a crane or hoist; the overturning of a crane or a unit of powered, mobile equipment that contacts an energized electrical conductor; the bursting of a grinding wheel; an uncontrolled spill or escape of a toxic, corrosive or explosive substance; a premature or accidental detonation of explosives; the failure of an elevated or suspended platform; and the failure of an atmosphere-supplying respirator.

Measurement

These are the basic reports you should maintain to monitor and evaluate that your safety efforts are working. Keep these reports on file:

- Inspections reports
- Incident investigation reports (injuries and near misses)
- First-aid logs
- OHS committee meeting minutes and staff list, and
- Training records for all employees.

What else can you do to help?

Communicate regularly with your staff to reinforce the importance of working safely and ensuring they have the information they need to work safely.

- Stop unsafe work and positively recognize and reinforce safe work habits.
- Make safety a regular topic at staff meetings.
- Have short tailgate or toolbox talk meetings. These are 5-15 minute onsite meetings to prepare workers to do the job safely.

Who can help?

Safety associations, the Ministry of Labour Relations and Workplace Safety (LRWS), Saskatchewan Occupational Health and Safety, and *WorkSafe Saskatchewan* are excellent resources when you are developing your safety program.



Remember to refer to the legal requirements for your industry when you are completing an Incident Investigation Report.

6.5 Training

Safety training is required to ensure that workers understand the hazards of their specific industry and learn how to work safely. For example:

- If you work with or in proximity to chemicals, you will need general and site-specific WHMIS training.
- If you supervise workers, you will need supervision and safety training.
- If you are on the occupational health committee, you will need OHC training.

WorkSafe Saskatchewan safety related training

www.worksafesask.ca

Phone: (306) 787-4370

Toll-Free: 1-800-667-7590

Email: worksafesask@wcbask.com

When creating a health and safety training policy to initiate and maintain a worker-training program it is important to include the following two elements:

Safety orientation

This is a critical part of your safety program! Introduce your workers to the health and safety program. New workers need to learn your company's commitment to safety and their own safe work responsibilities. All workers should take a basic WHMIS course. An online version is available through *WorkSafe Saskatchewan* at **www.worksafesask.ca/training/online-courses/online-whmis-training/**.

Job-specific training

Ensure your employees can do the job correctly. This type of training should take place when a worker is first hired and then again when assigned to new or different work.

This should entail three principles:

1. Show them.
2. Have them show you, and
3. Follow up.

Inform your new workers of their right to participate on your OHS committee.

Be sure they receive any additional job-specific safety training such as specific WHMIS, crane or forklift certification.