



Accident Investigation

Presented by:

Information:

Please be advised this is an awareness information session, and is not representative as training under the requirements of the Canada Labour Code, Part II and Canadian Occupational Health and Safety Regulations.



Agenda

- Accident Causation
- Hazardous Occurrences
- 5 Steps of a Hazardous Occurrence Investigation
- Hazardous Occurrence Investigation Report (LAB 1070)



Learning objectives

- Accident Causal Model
- Investigative Process (5 Steps)
 - Step 1: Secure the Scene
 - Step 2: Notify People
 - Step 3: Collect Information
 - Step 4: Analyze Information
 - Step 5: Recommend and Report



Accident Causation

What is Accident Causation:

The factors that are the primary reasons behind an accident. For occupational health and safety professionals, determining causation factors in any workplace injury or accident is key. Understanding what caused an unsafe situation to occur is important in implementing measures to help **prevent a reoccurrence.**

“Accident causation factors can be described as the factors once identified and removed can eliminate hazards or accidents.”



Accident Causation

Multiple factors can cause an accident, including **mechanical** factors, **human** factors, and **environmental** factors.

- Mechanical factors can include faulty equipment, or using equipment other than the way in which it is intended
- Human factors can include loss of sleep, inattention or a lack of knowledge about safety measures, lack of training, or complacency
- Environmental factors can include excessive heat/cold, low-light conditions and slippery floors



Hazardous Occurrence

Definition:

Occurrence or task that has caused or could cause damage or harm the health and safety of workers.

Examples:

- A newly hired worker falls from his truck while attempting to install a tarp;
- Loss of hearing in a long-time employee possibly due to exposure to noise;
- Occurrence that could have caused an accident or an injury to an employee.



Hazardous occurrence

Hazards at work? What hazards?

- Physical : Fall, noise, heat
- Biological : Bacteria, viruses
- Chemical : Gas leak or product spill
- Security : Hold-up, terrorism, fire, explosion
- Ergonomic : Repetitive movements, seated work
- Psychosocial : Bullying, burnout



Hazardous Occurrence Investigation

1st role:

Identify the causes of the event in order to make the necessary corrections.

- E.g. Why did the employee fall from the truck?

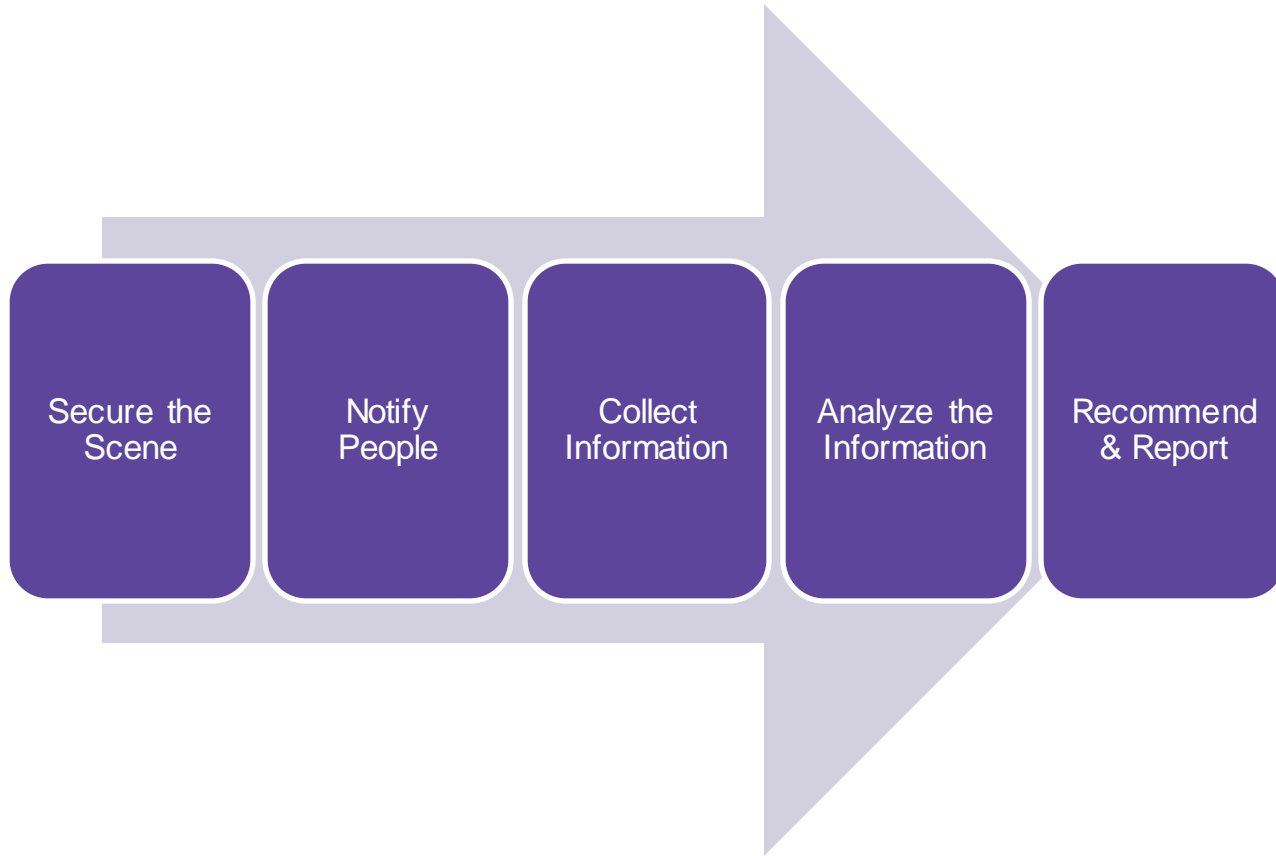
2nd role:

Important tool in the prevention, monitoring and management of occupational health and safety, with:

- Hazard Prevention Program;
- Preventive Maintenance Program;
- Employee Training Plan, etc.



Five Basic Steps in an Hazardous Occurrence Accident Investigation



Step 1:

Secure the Scene

- Assess the Scene for Safety
- Take immediate action to eliminate all risks to others
- Take immediate action to care for the injured worker(s)
- Secure the Scene (Caution Tape, Barriers)
- Manage the Scene
- Initiate the care of witnesses and survivors



Step 2:

Notify People

- Determine WHO needs to be notified
- Notify key players in the company
- Notify next of kin / family
- Assign/notify investigation team
- ESDC Labour Program – Follow Section 15.5 and 15.8 of the COHSR with Reporting Requirements and notification to the Head of Compliance and Enforcement
- Workplace Committee Members, Union Representative
- Police (Violent situation or criminal)



OHS responsibility sharing: Hazardous occurrence



COHSR -15.4 Hazardous occurrence investigation, employer must name...

A **qualified** person conducts the investigation into the hazardous occurrence:

- Must have the knowledge,
- training and
- experience for completing the work as he/she sees fit.

*Available training:



<https://www.ccohs.ca/>



QUESTION

At what level does the health and safety representative or the work place health and safety committee (WPHSC) participate in the investigation?

- A)** An employee member must sign the LAB1070
- B)** Management right, employer investigates the accidents
- C)** Active participation from the beginning to the end of the investigation



ANSWER

A) An employee member must sign the LAB1070

C) Active participation from the beginning to the end of the investigation



Hazardous occurrence

Reporting to the Labour Program (24 hours)

ATTENTION:

COSHR, Article 15.5

Report to the Labour Program as soon as possible (within 24 hours)

- Death of an employee;
- Disabling injury to two or more employees;
- Partial or total loss of a limb or its use;
- Permanent impairment of bodily function (vision, hearing);
- Explosion;
- Damage to a boiler or pressure vessel that results in fire or the rupture of the boiler or pressure vessel;
- Any damage to or free fall of an elevating device.

When in doubt report!

1-800-641-4049 (24/7):



Hazardous Occurrence

Reporting to the Labour Program (14 days)

COSHR, Article 15.8 (1)

The Hazardous Occurrence Investigation Report must be submitted to the Labour Program within 14 days, under the following circumstances:

- ✓ Disabling injury to an employee (with loss of time);
- ✓ Loss of consciousness due to exposure to any oxygen-deficient or toxic atmosphere or an electric shock;
- ✓ Need for rescue, revival or other similar emergency procedures (police, ambulance);
- ✓ Fire or explosion.

When in doubt report!

1-800-641-4049



QUESTION

What do you do if one of your employees dies from natural causes (e.g. stroke) in your workplace?

- A)** Natural cause: I do not have to inform the Labour Program
- B)** I contact the Labour Program as soon as possible (within 24 hours)
- C)** I submit the report to the Labour Program within 14 days



ANSWER

B

I contact the Labour Program
as soon as possible
(within 24 hours)



Step 3:

Collect Information

Scene:

- Photographs with notes / log
- Notes on environmental conditions (lighting, noise, housekeeping, weather)
- Map or diagram of the scene
- Equipment defects or lock-out / tag-out hardware and/or permits
- Contact information of persons at scene / witnesses



Step 3:

Collect Information

Reports / Documents:

- Training Records
- Job Descriptions
- Hazard Prevention Program / Job Hazard Analysis
- Maintenance records
- Equipment Manuals
- Contracts
- SDS
- Previous accidents / Near Miss reports
- Police Reports (if obtainable)
- Coroner's Reports / Toxicology (if applicable)



Step 3:

Collect Information

Interviews:

- Select a quiet and neutral place
- Ensure person is at ease and not in distress
- For direct witness, ask them to write in their words what they observed
- Use open ended questions (tell me, explain to me, etc.)
- Demonstrate attention to the person
- Probe for missing information by asking questions
- Summarize information once received
- Thank the person for their interview



Information Gathering

Who

- Who is injured? (Names/ Employees / Contractors / Persons)

What

- What does the accident involve?(Equipment / Materials / Machines)

When

- When did the accident occur? (Daylight, Night time, Beginning or end of shift)

Where

- Where did the accident occur? (Workplace, Off site, Building, Yard, Public Road)

Why

- Why did the accident occur? (Defective Tool, Inadequate Training, PPE, Mechanical Error, Human Error)

How

- How did this accident occur?(Accident Causal Model)



Step 4:

Analyze the Information

Review all information gathered

- Notes
- Photographs
- Interviews
- Documents

Immediate Causes: Apparent / obvious causes of the injury (e.g. Operating defective machinery or at improper speed, or without guarding)

Underlying or Root Causes: (e.g. Lack of training, knowledge, skills, inadequate supervision, inadequate PPE)

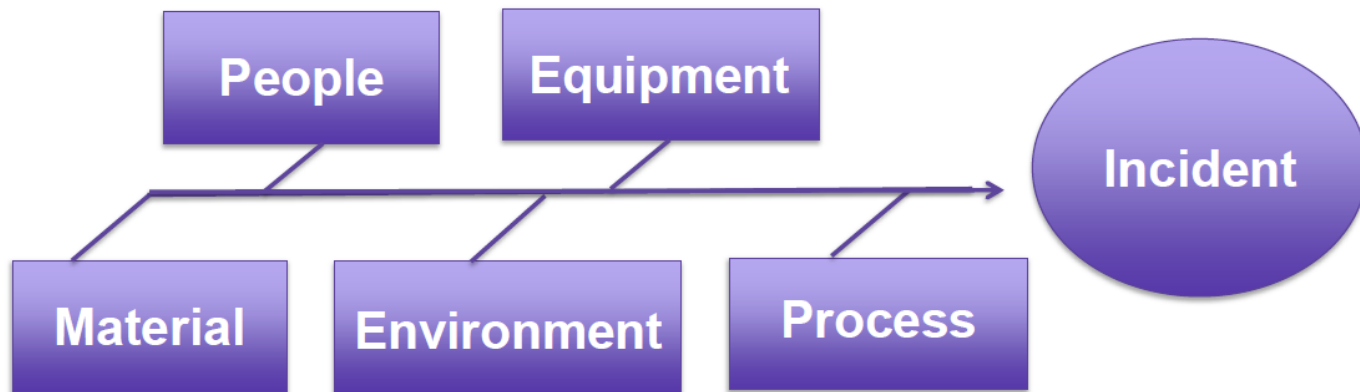


Step 4:

Analyze the Information

•Example no. 1

Method of 5M or of Ishikawa



<https://melba.io/fr/blog/methode-des-5-m>



Causes: Work components



Step 5:

Recommend and
Report

Recommendations

- Investigation team makes recommendations based on key contributing factors and underlying root causes
- Should be specific and include timelines

Corrective Actions

- Department Manager must follow up on corrective actions to ensure implementation
- Health and Safety Committee follows up



Hazardous occurrence investigation

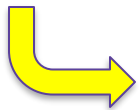
Priority Order (122.2 – COSHR 19.5 (1))

What must be done to address the situation and prevent it?

Prioritize the measures to be taken:



Eliminate hazards at the source



Reduce hazards to a minimum



Supply personal protective equipment and
implement administrative measures to manage the
hazard



Example of a Hazardous Occurrence Investigation Report (LAB 1070)



Employment and
Social Development Canada

Emploi et
Développement social Canada

SCHEDULE 1
(section 15.8)

HAZARDOUS OCCURRENCE INVESTIGATION REPORT

1. TYPE OF OCCURRENCE

- Explosion Loss of Consciousness
 Disabling Injury Emergency Procedure
 Other _____
Specify

2. Department file no.

Regional or District Office

Employer ID No.

Postal Code

H1H 1H1

Telephone Number

514-999-9999

3. Employer's name and mailing address

Transport Poutine
30 Sauce Road
Formageville, QC

Site of hazardous occurrence

Garage de Transport Poutine
30 Sauce Road
Formageville, QC

Date and time of hazardous occurrence

2016-09-01

1045

Weather (if applicable)

Rain

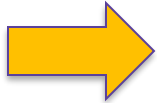
Witnesses

Supervisor's name

Jean Supervisor

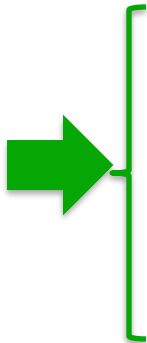
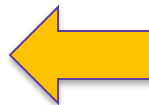
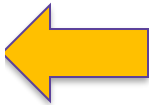
4. Description of what happened

Wanting to put the tarp on his truck, Joe climbed on top of the truck since it wasn't unrolling properly. When he pulled on the tarp and it unblocked, he fell.



Example of a Hazardous Occurrence Investigation Report (LAB 1070) – cont'd

5. Injured employee's name (if applicable)		Age	Occupation
Joe Neck-break			Trucker
		Years of experience in occupation	2m
Description of Injury		Gender	Direct cause of injury
Two broken legs, two broken arms			Fall from Truck
Was training in accident prevention given to injured employee in relation to duties performed at the time of the hazardous occurrence?			
<input checked="" type="radio"/> Yes <input type="radio"/> No Specify <u>Supervisor showed him how to do the task</u>			
6. Direct causes of hazardous occurrence			
The tarp roll was defective due to usage. The tarp was difficult to pull due to rain. The employee was not taught the three support points.			
7. Corrective measures and date employer will implement			
Following incident, revision of the training program for all employees			
Reasons for not taking corrective measures			
The roll should be changed by the end of the month.			
Supplementary preventive measures			
Posters have been placed in the garage to remind of the three points of support. Inspections of other trucks were conducted.			



Example of a Hazardous Occurrence Investigation Report (LAB 1070)-cont'd

8. Contact Information of person investigating		
Surname	Given Name	Telephone Number
Supervisor	Jean	(514) 999-9999
Title	E-Mail	
Director (OHS)		
Attestation: <input type="checkbox"/> I, hereby certify on behalf of my employer that the information contained in the Hazardous Occurrence Investigation Report (HOIR) is true and accurate in every respect to the best of my knowledge and belief.		
9. Work place committee's or health and safety representative's comments		
<div style="background-color: #e0e0ff; height: 40px;"></div>		
Work place committee member's or health and safety representative's information		
Surname	Given Name	Telephone Number
Knowing	Joe	(514) 999-9999
Title	E-Mail	
Trucker		
Attestation: <input checked="" type="checkbox"/> I, hereby certify that I have reviewed the Hazardous Occurrence Investigation Report (HOIR) completed by the Investigator, and have had the opportunity to provide comments on the information containing in the report.		

10. COPY 1 to the Minister of Labour, COPY 2 to the Work place Committee or Health and Safety Representative COPY 3 to the Employer

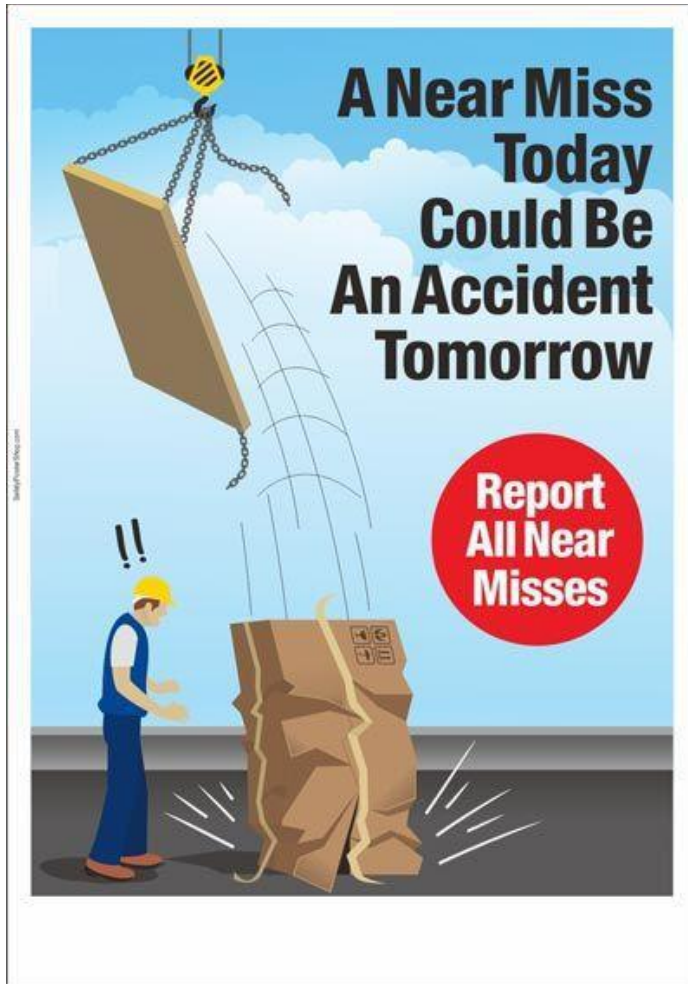


Recap of Steps : Investigation Process

- **Step 1: Secure Location**
- **Step 2: Advise people**
- **Step 3: Collect information**
- **Step 4: Analyse information**
- **Step 5: Recommendations and reports**



Requirement to Report Near Misses



- A near miss is a condition or unplanned event that didn't result in an injury, illness, or damage to equipment or property, but had the **potential or likelihood** to do so.

- Focusing on near misses helps **reduce the likelihood** of having major incidents or minimize the damage they might cause if they do occur.

It's all about **Prevention**



Are Employees Required to Report Near Misses?

Yes...

CLC Part II, section 126.(1)(g):

Report to the employer any thing or circumstance in a work place that is **likely** to be hazardous to the health or safety of the employee, or that of the other employees or other persons granted access to the work place by the employer;

COHSR 15.3: (Reports by Employees)

Where an employee becomes aware of an accident or other occurrence arising in the course of or in connection with the employee's work that has caused or is **likely** to cause injury to that employee or to any other person, **the employee shall, without delay, report the accident or other occurrence to his employer, orally or in writing.**

Employers must ensure Employees are informed in their duty to report, and have clear and simple instructions on how to report to the Employer.



Connect with us...

The Labour Program is working to determine the most effective ways to connect with stakeholders and partners.

- Social media (Twitter, LinkedIn, Facebook)
- Publish prosecutions online
- Linking information on the Canada.ca website (Health and Safety)

**1-800-641-4049 – Labour Toll Free Line
(For information or urgency 24/7)**

 **Follow us on Twitter @ESDC_GC**

www.Labour.gc.ca

