# Investigation of accidents and incidents

# Joint Occupational Health & Safety Committee Foundation Course

August 1, 2015 to December 31, 2015
Interim module



# Learning objectives

### By the end of this workshop you will be able to:

- Explain the legal requirements for conducting incident investigations and preparing reports
- Apply the process for investigating accidents and incidents to:
  - Accurately describe the incident and analyze the facts
  - Determine causes or causes of the incident
  - Identify unsafe conditions, acts or procedures that significantly contributed to the incident
  - Recommend corrective actions to prevent the recurrence of similar incidents

# Injuries and claims

### 2014 key statistics

- Injuries reported. 146,814
- Claims first paid this year. 102, 791
- Work-related death claims. 173
- Occupational disease claims. 3,075
- Days lost from work. 2.6 million

**146, 814** injuries reported

**2.6 million** days lost from work

# What is an accident?

An **accident** is an unplanned, unwanted event that disrupts the orderly flow of the work process. It involves the motion of people, objects or substances.

## What is an incident?

### The term "incident":

- Includes an accident or other occurrences which resulted in or had the potential for causing an injury or occupational disease.
- Relates to any undesired or unwanted event that could (or does)
  degrade the efficiency of the business operation. This may include
  accidents, quality or production problems or security breaches such
  as theft.

# What is an accident or incident investigation?

An accident or incident investigation is the analysis and account of an incident based on information gathered by a thorough examination of **all factors** involved.



# Immediate notice of certain accidents

- Serious injury to or death to a worker
- Major structural failure or collapse
- Major release of hazardous substances
- Required by regulation to be reported
  - Blasting accident causing personal injury
  - Dangerous incident involving explosives, whether or not there is personal injury
  - Diving incident, as defined by regulation

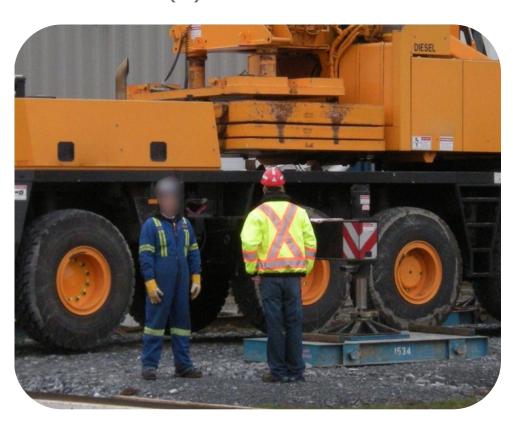
# Preservation of evidence

Section 172(2) of the Workers Compensation Act



# Incidents that must be investigated

Section 173(1) of the *Act* 





# Investigation process

Section 174 of the Workers Compensation Act

- Investigator's qualifications
- Availability of witnesses

# Intent of the investigation

### Preliminary investigation

Identify any unsafe conditions, acts, or procedures – as far as possible –
in order to ensure that work can be continued or resumed safely during
the interim period between the incident and the conclusion of the full
investigation.

### Full investigation

- Determine the cause or causes of the incident.
- Analyze the facts and circumstances of the incident to identify the underlying factors that led to the incident.
- Identify the underlying factors that made the unsafe conditions, acts, or procedures possible and identify health and safety deficiencies.

# Incident Investigation Report

Yes

No

#### RESET **Incident Investigation Four-Part Report** Please refer to the companion <u>quick quide</u> for assistance completing the investigation and this form. Employer's information Employer's name WorkSafeBC account number Employer's head office address City Province Postal code Employer's contact (name/phone/email) Section 1 Report stage Please select any or all that apply Preliminary report ☐ Interim corrective action report ☐ Full report Full corrective action report Report date (yyyy-mm-dd) Report date (yyyy-mm-dd) Report date (yyyy-mm-dd) Report date (yyyy-mm-dd) Note: Save each report separately so you don't overwrite and lose the previous report. Type of occurrence 1. Please select any or all that apply Serious injury to or death to a worker Dangerous incident involving explosives other than blasting incident Diving incident, as defined by regulation Major structural failure or collapse ■ Major release of hazardous substance Injury requiring medical treatment ■ Blasting accident causing personal injury Minor injury or no injury but had potential for causing serious injury 2. If none of the above apply, don't submit this report to WorkSafeBC. Instead, check one of the following and keep this report on file. Minor injury (e.g., first-aid-only injury) ☐ Other — required by company policy (spedfy) Full Incident Investigation Report copy to WorkSafeBC See the companion guick guide for instructions to submit this form. Is a full report required? If yes, date submitted (yyyy-mm-dd)

# What to investigate

- Serious and major incidents or accidents
- Minor and near-miss incidents which had the potential to cause serious injury, illness or death.

All accidents and incidents with the potential for loss should be investigated.

# What to Report

Required report	When it is required	Who gets a copy	Legislatio n
Report of the preliminary investigation	Within 48 hours of the incident	WorkSafeBC (only on request)	s. 175(2)
Report of the corrective action determined to be necessary by the preliminary investigation	As soon as practicable	<ul> <li>The joint committee or worker health and safety representative</li> <li>If there is none, the report must be posted at the workplace</li> </ul>	s. 175(4)
Report of the full investigation	Within 30 days of the occurrence	WorkSafeBC	s. 176(2)(b)
Report of the corrective action taken as a result of the full investigation	As soon as practicable	<ul> <li>The joint committee or worker health and safety representative.</li> <li>If there is none, the report must be posted at the workplace.</li> </ul>	s. 176(5)

# What the investigation must establish?

- What
- When

- Who
- Why
- Where
- How



### Incident causation

- Usually there are multiple factors that contribute to an incident.
- Your task is to identify the underlying factors that made the unsafe conditions, acts or procedures possible.



# Investigation procedure

#### Procedure overview

- Visit the scene, gather and record evidence
- Conduct interviews
- Evaluate evidence
- Identify unsafe conditions, acts and procedures, and determine causation
- Write the incident investigation report
- Recommend and implement corrective actions
- Follow-up

# Basic investigation kit

- Digital camera, with flash
- Tape measure
- Clipboard and pad of paper
- Straight edge
- Pens and pencils
- Incident investigation form
- Investigation checklist
- Flashlight
- 'Do no enter' tape



# Visit the scene

 Keep the accident scene as undisturbed as possible Analyze the situation





## **Interviews**

### Who to interview

- People who were at the accident scene
  - The injured worker
  - Witnesses
- Anyone who can give relevant information
  - Supervisor
  - Trainer



## **Evaluation**

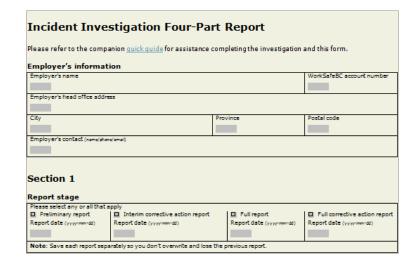
- Be objective
- List events in chronological order
- Consider all contributing factors
- Use a checklist
- Consider whether evidence is direct, circumstantial or hearsay
- Do not jump to conclusions

# Common investigation errors and pitfalls

- Believing carelessness is a cause
- Assuming contradictory evidence indicates falsehood
- Conducting court room interviews
- Asking for signed statement
- Looking for only one basic cause
- Neglecting the personal feelings of others
- Violating confidentiality

# Report writing

- Include a brief outline of the events
- Describe events in chronological order
- Attach diagrams, photos, manufacturers' specification or related documentation
- Be specific about dates, times and incident details
- Recommendations for corrective action should address the underlying causes of the accident, not the symptoms



# Reporting timelines

Report	When it is required	
Report of the preliminary investigation	Within 48 hours of the incident	
Report of the corrective action determined to be necessary by the preliminary investigation	As soon as practicable	
Report of the full investigation	Within 30 days of the occurrence unless extension granted by WorkSafeBC	
Report of the corrective action taken as a result of the full investigation	As soon as practicable	

### Exercise

### Does the sample report in Appendix 8 include

- A description of the incident, and of the sequence of events that preceded the incident?
- Information about the person injured and any witnesses?
- Detail of any third party involvement, such as workplace visitors, contractors, or members of the public?
- A description of the unsafe conditions, acts or procedures which significantly contributed to the incident?
- The cause or causes of the incident?
- The interim corrective actions taken?

# Follow-up

- Ensure that a specific person has been assigned to implement corrective action
- Establish a system to follow-up to ensure the corrective action was implemented and effective
- Post the corrective action report, or provide it to the joint committee or worker representative



# Summary

- Go to the scene
- Get the facts
- Listen for clues
- Look for possible causes
- Identify unsafe acts, conditions and procedures
- Recommend corrective actions

