INCIDENT INVESTIGATION

LEARNING OUTCOME

On successful completion of this unit, participants will be able to describe the legislative requirements of the Work Health and Safety legislation relating to incident investigation.

ASSESSMENT CRITERIA

Application

- The statutory and minimum requirements and terms relating to the investigation of workplace incidents are implemented.
- Processes for incident notifying and recording are developed and applied in accordance with the legislation.
- The approved *Incident Report* form is accurately completed in accordance with the legislation.

Investigation

- Gather investigation equipment and resources.
- Prepare for incident investigation according to best practices.
- Relevant parties are consulted.
- Observe incident scene to include legislative requirements.
- Collect data.

Evaluation and Analysis

- Workplace incidents are evaluated against previous incidents, trends and patterns and according to best practice.
- Information collected from an incident investigation is analysed.
- Develop control measures from the result of the evaluation and analysis to prevent incidents from occurring.
- Control measures are documented according to best practice.

Prevention

- Control measures are implemented, monitored and reviewed in accordance with the documented evaluation and analysis.
- Ensure relevant parties receive appropriate advice and training on correct preventative procedures and measures.

REFERENCES

- Work Health and Safety Act 2011 Part 3 – Incident Notification
- Work Health and Safety Act 2011 Schedule 5 – Definitions
- Work Health and Safety Regulation 2011 Part 12.4 Incident Notification

ATTACHMENTS

Incident Investigation Scenario

INCIDENT INVESTIGATION

LEGISLATIVE REQUIREMENTS

The legislative requirements for the recording and notification of a workplace incident are detailed in Part 3 of the Work Health and Safety Act 2011 (WHS Act). To understand the requirements of this part of the Act, we need to review the definitions of the incident.

Incident Terms and Definitions

The following are defined in Sections 36 and 37 of the Work Health and Safety Act 2011:

Dangerous incident - an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to

(a) an uncontrolled escape, spillage or leakage of a substance; or
(b) an uncontrolled implosion, explosion or fire; or
(c) an uncontrolled escape of gas or steam; or
(d) an uncontrolled escape of a pressurised substance; or
(e) electric shock; or
(f) the fall or release from a height of any plant, substance or thing; or
(g) the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use under an Act; or
(h) the collapse or partial collapse of a structure; or
(i) the collapse or failure of an excavation or of any shoring supporting an excavation; or
(j) the inrush of water, mud or gas in workings, in an underground excavation or tunnel; or
(k) the interruption of the main system of ventilation in an underground excavation or tunnel; or
(l) any other event prescribed under an Act; but does not include an incident of a prescribed kind.

Serious injury or illness - of a person means an injury or illness requiring the person to have

(a) immediate treatment as an in-patient in a hospital; or
(b) immediate treatment for—
   (i) the amputation of any part of his or her body; or
   (ii) a serious head injury; or
   (iii) a serious eye injury; or
   (iv) a serious burn; or
   (v) the separation of his or her skin from an underlying tissue (for example, degloving or scalping); or
   (vi) a spinal injury; or
   (vii) the loss of a bodily function; or
   (viii) serious lacerations; or
(c) Medical treatment within 48 hours of exposure to a substance; and includes any other injury or illness prescribed under an Act but does not include an injury or illness of a prescribed kind.

For **prescribed illnesses** the following is detailed in Section 699 of the WHS Regulation 2011.

(a) Any infection to which the carrying out of work is a significant contributing factor, including any infection that is reliably attributable to carrying out work –
- (i) With microorganisms; or
- (ii) That involves providing treatment or care to a person; or
- (iii) That involves contact with human blood or body substances; or
- (iv) That involves handling or contact with animals, animal hides, skins, wool or hair, animal carcasses or animal waste products;

(b) the following occupational zoonoses contracted in the course of work involving handling or contact with animals, animal hides, skins, wool or hair, animal carcasses or animal waste products –
- (i) Q fever;
- (ii) Anthrax;
- (iii) Leptospirosis;
- (iv) Brucellosis;
- (v) Hendra Virus
- (vi) Avian Influenza;
- (vii) Psittacosis.

With an understanding of the terminology, the Work Health Safety Officer (WHSO) should now be able to advise their employer on the reporting and notification procedures detailed in the Act.

SUMMARY OF RECORDING/NOTIFICATION PROCEDURES

Duty to notify of notifiable incidents (WHS Act 2011 Section 38)

(1) A person who conducts a business or undertaking must ensure that the regulator is notified immediately after becoming aware that a notifiable incident arising out of the conduct of the business or undertaking has occurred.

(2) The notice must be given as required under this section and by the fastest possible means.

(3) The notice must be given

- (a) by telephone; or
- (b) in writing.

Example - The written notice can be given by facsimile, email or other electronic means.

(4) A person giving notice by telephone must

- (a) give the details of the incident requested by the regulator; and

(b) if required by the regulator, give a written notice of the incident within 48 hours of that requirement being made.

(5) A written notice must be in a form, or contain the details, approved by the regulator.

(6) If the regulator receives a notice by telephone and a written notice is not required, the regulator must give the person conducting the business or undertaking

(a) details of the information received; or

(b) an acknowledgement of receiving the notice.

(7) A person conducting a business or undertaking must keep a record of each notifiable incident for at least 5 years from the day that notice of the incident is given to the regulator under this section.

Duty to preserve incident sites (WHS Act 2011 Section 39)

(1) The person with management or control of a workplace at which a notifiable incident has occurred must ensure so far as is reasonably practicable, that the site where the incident occurred is not disturbed until an inspector arrives at the site or any earlier time that an inspector directs.

(2) In subsection (1) a reference to a site includes any plant, substance, structure or thing associated with the notifiable incident.

(3) Subsection (1) does not prevent any action

(a) to assist an injured person; or

(b) to remove a deceased person; or

(c) that is essential to make the site safe or to minimise the risk of a further notifiable incident; or

(d) that is associated with a police investigation; or

(e) for which an inspector or the regulator has given permission.

Record of the incident

The person conducting a business of undertaking must keep a record of each notifiable incident for at least five (5) years from the date notified to WHSQ.

Recording and investigating non-notifiable incidents

A non-notifiable incident is one that does not result in a person suffering from a serious bodily injury or death and is not a dangerous event.

While you do not have to notify Workplace Health and Safety Queensland about non-notifiable incidents, it is important to record and investigate all incidents including 'near misses' so action can be taken to prevent similar incidents occurring in the future.

How to record a non-notifiable incident

It is recommended that the record be made on the approved form within three days of the person making the record becoming aware of the incident.

The record should be kept for at least 2 years but longer if practicable.

Employers, self-employed people and principal contractors who fail to make a record of a particular incident at the workplace will not commit an offence if they:

- did not know about the incident
- were incapacitated by the work caused illness or work injury; and
- make a record as soon as possible after recovery.

Who needs to record non-notifiable incidents

If the incident is a work caused illness, or work injury, the following persons must make a record of it:

- if it happened to a worker - the worker's employer
- if it happened to an employer - the employer
- if it happened to a self-employed person - the self-employed person
- if it happened at a construction workplace - the principal contractor

If the incident is a dangerous event, the following persons must make a record of it:

- if it happened at a workplace - the employer or self-employed person
- if it happened at a construction workplace - the principal contractor

If the workplace incident involves:

- an employer or
- self-employed person, or
- a worker of an employer

At a construction workplace, the PCBU must give the principal contractor any help the principal contractor may reasonably require to complete an approved form.

FIRST RESPONSE

Ensure that emergency services have been contacted.

It is critical that persons conducting a first response to an incident properly fulfill all responsibilities in relation to ensuring that the incident scene is secured and not interfered with; that those things which may become evidence are untouched, remain in situ, recordings are made; and witnesses are dealt with in the appropriate manner. This includes not allowing them to congregate and confer about what they witnessed and also obtaining their relevant particulars.

The most crucial thing to understand in relation to responding to incidents in the first instance is that, regardless of whether this is an incident which is required to be reported to the Regulator, the incident scene must be secured, untouched from the time of the incident (having regard to the exemption circumstances outlined in section 39 WHS Act 2011). Those things which may become evidence relative to the causation of the incident must remain uncontaminated AND this includes the recollection of witnesses, which is why they must be segregated and not allowed to confer about the incident until they have provided a statement – in particular those instances where the matter is notifiable and an Inspector will be attending to interview them. What the Inspector requires is that (if there are 10 witnesses for example) they should be able to obtain 10 independent recollections of the witnesses and NOT 10 recollections of a 'group recollection'.

INCIDENT INVESTIGATION PRINCIPLES

There are many 'investigation methodologies' in use, all attempting the same outcome that being the collection of all the possible causational factors involved in the occurrence of an incident.

For a workplace incident to have occurred there must have been at least one single cause to have taken place. However, it has been proven many times in the past that these types of events are usually the direct result of a combination of causes, which could include:

- The work methods / systems of work
- The environment where the work is being conducted
- The equipment being used by the workers at the time
- The way in which the organisation is structured
- The climate that is in existence at the time of the incident
- The worker themselves
- Training

Those persons investigating such incidents must keep an open mind throughout the entirety of the investigation. They should not be quick to dismiss one or any of the possible causes when conducting their preliminary investigations. It may not become evident until much later in the investigation that one or more of the possible causes did in fact contribute towards the cause of the incident.

WHAT SHOULD THE WHSO LOOK FOR

Environment where the work is being conducted

Person's Conducting a Business or Undertaking (PCBU) have a duty to ensure hazards do not affect the health and safety of their workers, or any other person who enters the workplace. Environmental conditions include:

- climate; ultra-violet (UV) or radiation exposure
- lighting, vibration, or noise
- chemicals, fumes/gases or biological or health/hygiene
- electricity

As part of their workplace safety duty, PCBUs must:

- identify all hazards

- assess the risks these hazards create
- decide on measures to control the risks
- implement appropriate risk treatment measures
- monitor the risk treatment measures and review the process

The equipment and/or plant used by the workers

The investigation should consider and identify if an incident resulted from inadequate training and instruction in the correct use of the particular piece of equipment or plant, or to implement the appropriate safety procedures and control measures to prevent such an incident from occurring.

The work methods/safe systems of work

These documents must ensure that potential hazards are not only identified, but work practices also eliminate them. Workers must be made aware of their content, and may even require specific training in order to carry out the job requirements.

For a system of work to be successfully implemented and to achieve the desired result the following steps should be taken:

- the PCBU needs to identify the job task, analyse the task, and then break that task into chronological steps
- consideration must then be given to each of these individual steps to ensure that safety and efficiency has been achieved
- the necessary control measures to achieve both safety and efficiency must be developed
- such control measures then need to be continually monitored as to their success or their failure and modified accordingly
- these task procedures should be documented and the PCBU should also insist on the workers and management using the same

The way in which the organisation is structured

A well-structured organisation will usually have either non-existent or minimal incidence of injuries to their workers. To achieve this, organisations should have proactive measures in place, and where incidents do occur, reactive measures to address and improve the process (monitor and review).

The workplace climate in existence at the time of the incident

The climate in which a workplace operates may also be a contributing factor in the cause of a workplace incident. Factors may include:

- job losses, requiring the remainder of the workforce to take on additional tasks or duties
- production rates to remain the same even though the number of workers has diminished
- constraints to budgets, by reducing the funds usually put aside for maintenance of plant and equipment, training of staff, and implementing required safety needs

- peer pressure exerted on others by co-workers to ignore safety procedures
- failure to wear the required personal protective equipment

The worker

Adequate training and instruction must be provided to workers prior to undertaking a set task. PCBUs cannot simply assume that one of their workers automatically possesses the appropriate knowledge and skills just because they were a ‘tradesperson’.

Every worker is unique in their own skills and abilities. When a PCBU is to assign tasks to a worker, they should consider:

- the worker’s knowledge and skill level
- qualifications
- instructions given to them
- type of task undertaken (complex, simplistic, repetitive)
- their capacity to interpret those instructions
- the worker’s attitudes and perceptions towards the PCBU
- the worker’s ability to understand instructions in the language in which they are given

REASONS FOR CONDUCTING AN INCIDENT INVESTIGATION

Incidents and near misses highlight areas for improvement in the workplace health and safety system. The primary purpose of investigation is to determine what the areas for improvement in the system are and to ensure that an incident will not happen again, i.e. prevention of similar incidents. Other secondary considerations are as follows:

- Establishing common patterns or trends.
- Communication of particular hazards amongst employees.
- Assist in the selection of priorities for preventive measures.
- Evaluate the effectiveness of preventive measures.

PROCEDURES USED TO CONDUCT AN INCIDENT INVESTIGATION

The investigation should follow a sound plan that has been developed and tested before an incident occurs. The plan should guide the WHSO, investigating workers or management from the moment they learn of the incident until they release the final report.

All work injuries, work related illnesses and dangerous events should be investigated, regardless of the extent of injury or property damage. However, the level of investigation will vary on the extent of injury/damage or potential of the incident.

The following incident investigation plan provides a guide on how to manage an incident that occurs within your workplace and assumes that the WHSO is on-site at the time of the incident.

Pertinent information to obtain regarding the incident:
- What happened
- How it happened
- When did it happen
- Who did it; who did it happen to
- Why did it happen
- Where did it happen
- Injured persons

Action Plan

Step 1: **Visit the scene of the incident**.

Step 2: **Immediate Actions.**
Take all steps necessary to:
a) provide emergency rescue and/or medical help for the injured persons; and
b) prevent or minimise the risk of further incidents or physical harm.

Step 3: **Notification.**

In the event of a fatality:

a) Notify The Regulator (WHSQ) and Police immediately.

b) Secure the incident scene.

In the event of dangerous incident, serious injury or Illness:

a) Notify WHSQ on the prescribed form or verbally immediately.

b) Secure the incident scene.

Step 4: **Collect information at the scene.**

Where matters are notifiable to the Regulator, the WHSO should proactively secure the scene and identify and manage relevant witnesses to assist with the Regulators role to investigate when in attendance. The WHSO may gather initial information from witnesses, particularly to identify if any further likely risks need to be immediately managed

For an internal investigation (not report to the Regulator) the WHSO should then:

a) Identify the people who were involved in the incident, including eye witnesses.

b) Make comprehensive visual records or complete sketches of incident scene.

c) Determine what plant may have been involved in the incident and collect all relevant records, i.e. maintenance records, operating procedures, training records of staff who use and maintain the plant and any plant modification details.

Step 5: **Determine the facts.**

The following practical concepts should be at the forefront of the WHSO's mind when undertaking investigative activity in relation to an incident**.**

It is imperative that the WHSO remember at all times that even an internal investigation as to the cause of an incident may at some later date be reviewed in a judicial environment.

Continuity – refers to any items which may become 'evidence' in their internal investigations. They may have a role in this with WHSO investigations also, if they have to take possession of something, or assist with the conveying of an item to a WHSQ office or a secure holding yard; keep guard of something until appropriate means attends to convey (tow truck etc).

Consistent – conduct their investigations in the same way each time, dealing with those involved in the same manner

It is important to understand that where a WHSO may speak to a witness and they have a concern that this person's actions etc may have been a causational factor for the incident, they should attempt to record exactly what the person tells them, using the exact words that the persons says and the exact words that they use when speaking to them. This information can later be included in any formal interviews. This information can also be on-forwarded to an Inspector undertaking formal investigations into an incident. The WHSO should be aware, at all times, that interactions had with witnesses/other persons following an incident may later be called into account in any future court proceedings.

Why is it that we interview people and obtain statements from them?

- To find out what happened. What caused the incident.
- To find information to make sure there are no reoccurrences
- Adherence to workplace policy and procedures
- Use of PPE by workers
- Guarding of plant / operation of plant etc
- Are any other persons required to be involved; is the Regulator to be notified?
- Are other internal experts required to assist with the investigation? Are external experts going to be required?
- To formally document and record a witnesses recollection of the circumstances of an incident.
- To formally document and record a witnesses actions.

Formal documentation and recording of a witnesses recollection and actions must be done at the earliest time. If this is a notifiable incident the WHSO should limit their interactions as set out previously and allow the Inspector to conduct the witness interviews and obtain the statements. Following that time the WHSO can speak freely with the witnesses. For internal investigations it is suggested that the WHSO obtain the statements of witnesses as soon as possible.

Step 6: **Identify causal factors.**
Complete the causal factor checklist and identify corrective measures to prevent a recurrence. Corrective measures should be based on the hierarchy of controls.

Step 7: **Written Investigation Report.**
Develop a written incident investigation report and submit it to management. Complete the prescribed notification form as soon as you become aware of an incident and attach it to the investigation report. The report must clearly identify the causal factors and have both immediate and long term controls to prevent future occurrences. The controls must be based on the Hierarchy of Controls. Immediate controls may be training and personal protective equipment, but long term controls should be developed to 'eliminate' the risk and make a safe workplace.

Step 8: **Statistical Records.**
Record incident details in a form for future statistical analysis, i.e. Australian Standard 1885.1-1990 provides a system that will assist in the production of consistent and comparable information on work injury and disease occurrence at the workplace.

INTERVIEWING AND COMMUNICATION SKILLS

Although some workers and PCBU's may be concerned about disciplinary action being taken against them as a result of an incident, the WHSO should at all times understand that effective listening skills combined with the ability to relate to individuals is the corner stone of all investigative interviewing techniques.

It is imperative that witnesses to an incident be kept separated and not allowed to confer about their recollections of an incident until they have provided their statements. For a notifiable incident, no in-depth interviewing of witnesses should be undertaken by the WHSO prior to the arrival of a WHSQ Inspector. Witnesses should be, so far as is practicable, kept apart until they have provided their statements. As above individual recollection is what is required, not retelling of a group recollection.

Therefore, in investigating incidents you will need to exercise communication skills to ensure that you obtain the confidence and cooperation of those involved in an incident investigation.

Here are some basic principles you may find helpful when interviewing as part of your incident investigation:

Environment

a) Location:
Where possible, the interview should take place in an environment comfortable to the person being interviewed. This may be the workplace, the canteen, or similar familiar ground.

While the manager's office may offer privacy, many workers can feel uncomfortable. In some circumstances it may be necessary to interview at the site of the incident and you may need to take into account the effect this may have.

b) Numbers:
Where possible, interviews should be conducted on a one-to-one basis. With two or more involved, there is the danger of the interview becoming an interrogation.

However, the interviewee may wish to have a friend or health and safety representative (HSR) present for support and, as this should have a positive impact, the request should be agreed to.

c) Time:
You should make sure that sufficient time is allowed so that the interview is not rushed or pressured.

Structure

a) Purpose:
It is important to explain the purpose of the interview. Incidents can cause anxiety about what will happen to the information they give in an interview.

You need to ensure that the person you are interviewing understands the purpose of the interview and you make this the first objective of the interview.

This requires you to be clear on the purpose: to obtain information for the OHS committee so that the health and safety system can be improved to prevent the incident happening again.

There are a number of ways in which a successful interview can be conducted. One such method involves using what are known as 'Kipling's six honest serving men'. These were suggested by Rudyard Kipling as being the basis for the successful conclusion of any investigative matter.

They are simply:

- WHAT
- WHERE
- WHEN
- WHY
- WHO
- HOW

For example:

- What did you see? What documents did you see/know about? Etc.
- Where were you when the incident occurred?
- When did the incident occur?
- Why – were you there?
- Who was with you? Who did you see?
- How do you know this?

b) Concerns:
The interview needs a structure if you are going to achieve your purpose. This structure needs to take into account the fact that you and the interviewee may have different concerns. Your concern is to find out why the health and safety system failed.

The interviewee's concern may be to blame, criticise, avoid being blamed or just tell their story. If your interviewee feels that their story is not being listened to, you might not get their confidence and cooperation.

The first rule of the interview is to allow the person to tell their story. After that story has been told and you have indicated that you understand their story, you can then ask questions that information given has not covered.

Note - Certain industries employ many workers from a non-English speaking background. Most of these workers will have no, or very limited, English language ability. Employers will usually employ some staff fluent in the applicable language. These persons can assist the WHSO in their investigations to determine the cause of an incident; those involved etc. WHSO should be aware that an Inspector will require the services of an accredited interpreter should formal investigations commence into the incident.

c) Summarise:
When you have gained all the information you can, you need to summarise it into a report. If there is any disagreement you need to sort this out early.

After the summary has been written, it may be again worthwhile to repeat the purpose of the interview and inform the interviewee of what is going to happen to this information.

PREVENTATIVE PROCEDURES AND MEASURES

Investigation of accidents is a reactive process. An incident has occurred and a person and/or property may have been damaged. The incident is investigated for many reasons. If the investigation is conducted well and the basic causal factors are clearly identified, the implemented control action should prevent further incidents of the type encountered from occurring again within the organisation. Once each causal factor has been clearly identified, then the risk management process can be implemented. The causal factor becomes the hazard. The hazard must be analysed and the risk assessed. The control measure should be developed based on the hierarchy of control. For each causal factor there should be an applicable control measure. In some circumstances one control measure may eliminate or minimise the risk associated with a number of causal factors.

The completed incident report and outcomes should be clearly explained in either a training program or information sheets to relevant parties. In this case, relevant parties will be the injured persons, witnesses, management and workers involved in the process. In many large organizations, there is a system for notifying staff when an incident has occurred within the workplace. This may be through a warning/flashing light system located at the entry to the workplace or notification via the intranet system. Once staff are aware an incident has occurred, they are generally able to find out the incident and the outcomes through an information bulletin produced by management or through the intranet system within the organization. It is extremely important that information regarding the incident be promulgated to all persons concerned to minimise the risk.

CLASSIFICATION SYSTEM FOR INJURIES AND ILLNESSES IN THE WORKPLACE

Recording of Work Injuries

Incident reports are a necessary measure of the success of a Workplace Health and Safety program. Although incident reports are a negative performance indicator i.e. they measure system failures, they are none the less useful for identifying trends.

A further purpose of reporting and recording is to establish a suitable basic level of documentation of occurrences to satisfy possible future litigation needs for factual data.

Records should include the results of investigations, the controls implemented to prevent a reoccurrence and a review of the controls to ensure their effectiveness.

Collation of Information

Effective information collection systems should have the following objectives:

- Provide information on the nature and extent of injury and disease at the workplace.
- Provide a comprehensive set of data for the management of occupational health and safety at the workplace and at enterprise level.
- Assist in the efficient allocation of resources.
- Identify appropriate preventive strategies.
- Provide data to monitor the effectiveness of preventive strategies.

Australian Standard 1885.1-1990 provides a system which will assist in the production of consistent and comparable information on work injury and disease experience at the workplace and throughout an enterprise.

Examining the Data:

Once the information on individual cases has been gathered and summarised, a number of questions can be answered.

Other Sources of Statistical Information

In some instances, individual PCBU's may find it useful to compare their injury and disease experience with that of their particular industry as a whole.

WorkCover Queensland, through its Claims Experience Advisory Branch can provide information to all employers (policy holders) within the State.

The data relates to WorkCover claims for injuries or illnesses, and presents information which can be obtained only from that Branch. When summarised in the form shown on the following tables it can be very valuable.

Workplace Health and Safety Queensland also provide incident statistics and information can be found at www.worksafe.qld.gov.au

Version	Date	Author
1	30/06/2018	WHSQ