

Conduct an Investigation Into Workplace Incidents Learner Guide

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BEFORE YOU GET STARTED...

Dear Learner,

This Learner Guide contains all the information to acquire all the knowledge and skills leading to the unit standard:

Title: Conduct an investigation into workplace incidents

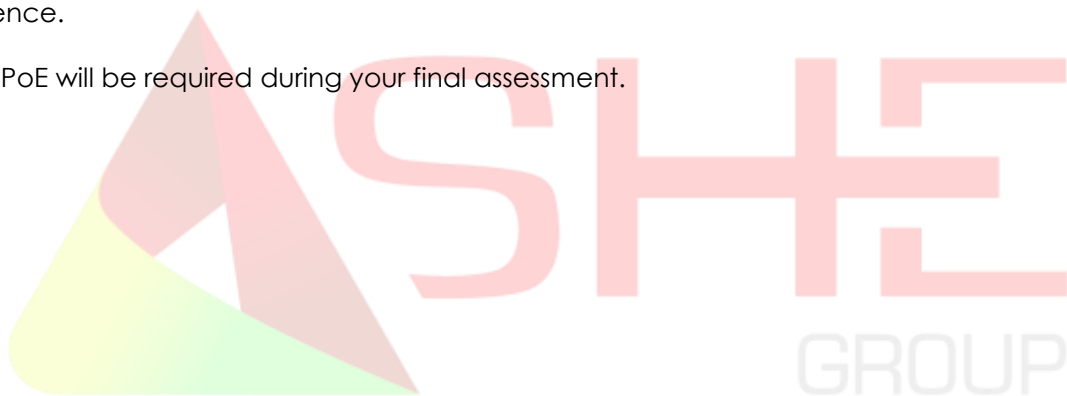
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The full unit standard is attached. Please read the unit standard at your own time. Whilst reading the unit standard, make a note of your questions and aspects that you do not understand, and discuss it with your facilitator.

This Learner Guide contains all the information, as well as the activities that you will be expected to do during the course of your study.

Please keep the activities that you have completed and include it in your Portfolio of Evidence.

Your PoE will be required during your final assessment.



THE LEARNING EXPERIENCE...

The Purpose: This unit standard is intended to enable learners to demonstrate the ability to conduct investigations into workplace incidents. The competency includes all the activities required to successfully conduct incident investigations.

People credited with this unit standard are able to:

- Identify potential hazards in the work area.
- Limit damage to persons or property in the case of an emergency.
- Follow procedures that apply to illness or injury in the work area.



WHAT IS THE ASSESSMENT ALL ABOUT?

Assessment takes place at different intervals of the learning process and includes various activities. Some activities will be done before the commencement (Baseline) of the program whilst others will be done during programme (Formative) delivery and other after completion (Summative) of the program.

You will be assessed during the course of your study. This is called formative assessment.

You will also be assessed on completion of this unit standard. This is called summative assessment.

Before your assessment, your assessor will discuss the unit standard with you. The assessment experience should be user friendly, transparent and fair. Should you feel that you have been treated unfairly, you have the right to appeal. Please ask your Assessor about the appeals process and make your own notes.

Your activities must be handed in from time to time on request of the facilitator and the assessor. Sources of information to complete these activities should be identified by your facilitator.

Please note that all completed activities, tasks and other items on which you were assessed must be kept in good order as it becomes part of your Portfolio of Evidence for final assessment.

Enjoy this learning experience...

MODULE 1 – EXPLAIN THE SPECIFIED REQUIREMENTS PERTAINING TO CONDUCTING AN INVESTIGATION INTO WORKPLACE INCIDENTS

Learning Outcomes:

After completing this module, the learner would be able to ensure:

- The relevant standards for an investigation into workplace incidents are explained.
- The extent of the investigation is explained.
- The relevant hazards and risks likely to be encountered during the investigation are described.
- The purpose of conducting investigations into workplace incidents is described.

The relevant standards for an investigation into workplace incidents are explained. (SO1-AC1)

Evidence exists which indicates that preventing incidents and maintaining quality is best achieved by implementing a management system designed to control losses. An effective management system is based on a framework of specific principles, performance standards and activities that have proven to be successful in achieving the desired results. The prevention and control of undesired incidents is the heart of safety, health and environmental systems, and understanding the causes and consequences of incidents is the key control for any organization.

Workplace incident can be defined as an unexpected event that did not cause injury or damage this time but had the potential. "Near miss" or "dangerous occurrence" is also terms for an event that could have caused harm but did not.

The term "accident" can be defined as an unplanned event that interrupts the completion of an activity, and that may (or may not) include injury or property damage.

An incident usually refers to an unexpected event that did not cause injury or damage this time but had the potential. "Near miss" or "dangerous occurrences" are also terms for an event that could have caused harm but did not.

Please note: The term incident is used in some situations and jurisdictions to cover both an "accident" and "incident". It is argued that the word "accident" implies that the event was related to fate or chance. When the root cause is determined, it is usually found that many events were predictable and could have been prevented if the right actions were taken --

making the event not one of fate or chance (thus, the word incident is used). For simplicity, we will use the term accident to mean all of the above events.

The information that follows is intended to be a general guide for supervisors or joint occupational health and safety committee members. When accidents are investigated, the emphasis should be concentrated on finding the root cause of the accident rather than the investigation procedure itself so you can prevent it from happening again. The purpose is to find facts that can lead to actions, not to find fault. Always look for deeper causes. Do not simply record the steps of the event.

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

Investigation procedures need to be systematic.

For any investigation the team should:

- Act as soon as possible after the incident
- Visit the scene before physical evidence is disturbed
- Not prejudge the situation
- Not remove anything from the scene
- enquire if anyone else has moved anything and
- take photographs and/or sketches to assist in reconstructing the incident.

Sample Regulations, codes, standards focused on management systems for incident prevention:

- Occupational Safety and Health Administration – 29CFR1910.119 Process Safety Management of Highly Hazardous Chemicals
- International Organization for Standardization – 14001:2004 Environmental Management System
- International Organization for Standardization - ISO 9001:2015 - Quality management systems
- International Organization for Standardization - OHSAS 18001:2007 – Occupational Health and Safety Assessment Series

EXAMPLE - Incident Report

Incident reports must be submitted to the Safety Manager within 24 hours by the Supervisor

Department / Site:		Incident date:	
		Incident time:.....	
		Normal shift finish time:.....	
Location of Incident:		Date of report:	
Witnesses :			
Please attach signed witness statement forms for all Level 2 & Level 3 incidents involving personal injury			
Supervisor name and surname :			
Description of Incident (add additional documentation and sketches for Level 2 & Level 3 incidents as per section 4.3 of incident reporting and investigation procedure):			
Injury or Illness		Part of body injured :	
Name of Injured:	Occupation of injured:	Date of Birth of injured:	
Length of service in this job:	Was person performing normal duties:	Hours on shift prior to accident	
Date of resumption of Work :		Object/equipment/substance inflicting harm :	
Anticipated absence if not back :			
Injury Management (To be completed by First aider).		Name of First Aider:	
Body Part Affected:	Head <input type="checkbox"/> Neck <input type="checkbox"/> Trunk <input type="checkbox"/> Arm <input type="checkbox"/> Hand <input type="checkbox"/> Fingers <input type="checkbox"/> Leg <input type="checkbox"/> Ankle <input type="checkbox"/> Foot <input type="checkbox"/> Eye <input type="checkbox"/> Back <input type="checkbox"/> Chest <input type="checkbox"/> Multiple <input type="checkbox"/> Others :(Define).....		
Nature of Injury / Disease:	Fractures <input type="checkbox"/> Dislocation <input type="checkbox"/> Sprain / Strain <input type="checkbox"/> Amputation <input type="checkbox"/> Laceration <input type="checkbox"/> Bruising <input type="checkbox"/> Abrasion <input type="checkbox"/> Burn <input type="checkbox"/> Puncture Wound <input type="checkbox"/> Poisoning / Toxic Effect <input type="checkbox"/> F/Body <input type="checkbox"/> Internal Injuries <input type="checkbox"/> Other.....		
Signs, Symptoms & Treatment:			
Injury Status :	Site First Aid <input type="checkbox"/>	Clinic First Aid <input type="checkbox"/>	Doctor <input type="checkbox"/>
Hospital <input type="checkbox"/>	Full Duties <input type="checkbox"/>	Alt Duties <input type="checkbox"/>	Lost Time <input type="checkbox"/>
Other Incident or Property Damage :			
Describe nature of damage :		Cost Estimates:	
Object/equipment/substance related:	Person with most control of item : Occupation:		
Evaluation of Loss Potential if not corrected :			
Loss Severity Potential <input type="checkbox"/> Major <input type="checkbox"/> Minor <input type="checkbox"/> Serious		Probability of Occurrence <input type="checkbox"/> Frequent <input type="checkbox"/> Occasional <input type="checkbox"/> Seldom	

The extent of the investigation is explained (SO1-AC2)

Incident investigations are conducted whenever and wherever incidents occur. The investigation team is usually based near the incident scene to allow them to more efficiently collect data by conducting interviews, gathering physical evidence, and so forth. Analysis of the root causes of incidents may occur anywhere, but being near the personnel involved in the management of the personnel is preferable, as it helps foster discussions with personnel. Companies decide what combinations of consequences and frequencies are appropriate to trigger each type of incident feedback process:

- Formal investigation (root cause analyses [RCAs])
- Less formal investigation (apparent cause analyses [ACAs]), and
- Trending of incident data with no immediate

The extent of the investigation should be that unsafe conditions will be uncovered as well as causes. The extent should be detailed enough to find the errors that are causes. Therefore, it is necessary to extend the investigation to reveal some underlying factors in a chain of events that ends in an incident.

The important point is that even in the most seemingly straightforward incidents, seldom, if ever, is there only a single cause. For example, an "investigation" which concludes that an incident was due to worker carelessness, and goes no further, fails to seek answers to several important questions such as:

- Was the worker distracted? If yes, why was the worker distracted?
- Was a safe work procedure being followed? If not, why not?
- Were safety devices in order? If not, why not?
- Was the worker trained? If not, why not?

The relevant hazards and risks likely to be encountered during the investigation are described. (SO1-AC3)

In responding to incident scene, the investigator may find the possibilities of being exposed to different types of hazards or safety conditions, e.g. Bio-hazards, Chemical hazards, or Physical hazards. A hazard is considered the lack of safety or degree of risk to an exposure situation. Safety is the first duty to consider in any investigation or task. Proper training and experience will assure safe and expeditious results in investigation.

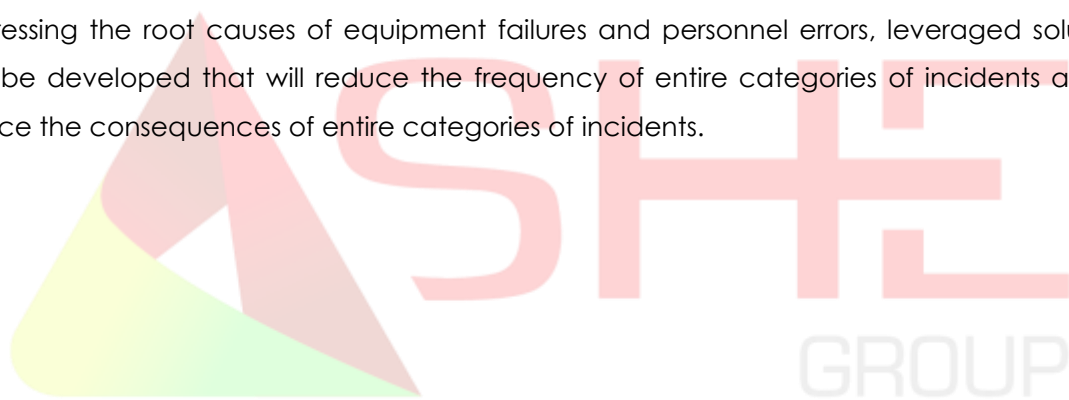
As with any investigation, the first step is to evaluate the site and the situation in order to initiate a plan of operation.

The scene recognition includes the plan of action, manpower, proper equipment, and communications.

The purpose of conducting investigations into workplace incidents is described. (SO1-AC4)

The prime objective of accident investigation is prevention. Finding the causes of an accident and taking steps to control or eliminate it can help prevent similar accidents from happening in the future.

Conducting investigations is a way of learning from incidents that occur over the life of a company and communicating the lessons learned to both internal personnel and other stakeholders. Depending upon the depth of the analysis, this feedback can apply to the specific incident under investigation or a group of incidents sharing similar root causes at one or more departments. Limited investigations may only provide feedback concerning the specific incident scenario by only focusing on the causal factors (sometimes referred to as direct causes) of an incident. Addressing the causal factors can reduce the frequency of the direct causes of the incident and/or reduce the consequences of future similar incidents. Thorough investigations can provide feedback on the performance by identifying and addressing the root causes of equipment failures and personnel errors, leveraged solutions can be developed that will reduce the frequency of entire categories of incidents and/or reduce the consequences of entire categories of incidents.



MODULE 2 - PREPARE TO GATHER DATA FOR THE INVESTIGATION

Learning Outcomes:

After completing this module, the learner would be able to:

- The purpose and extent of the investigation is verified.
- The persons, tools, equipment, and material are verified as fit for purpose and available.
- The relevant hazard and risk control measures for workplace incident data gathering and the consequences of not conforming to specified requirements, in preparing for data gathering are explained

The purpose and extent of the investigation is verified (SO2-AC1)

The purpose and extent of the investigation is to explore in detail the wrongdoing, and to determine what happened, what were the causes, who was responsible, what actions should be taken to correct the current situation, and what actions should be taken to ensure that a similar wrongdoing does not occur in the future. Examine the evidence in depth, and to determine specifically whether misconduct has been committed, and the seriousness of the misconduct.

When incidents are investigated, the emphasis should be concentrated on finding the root cause of the accident so you can prevent it from happening again. The purpose is to find facts that can lead to actions, not to find fault. Always look for deeper causes. Do not simply record the steps of the event.

The persons, tools, equipment, and material are verified as fit for purpose and available. (SO2-AC2)

Management have extremely critical roles to play, and certain types of things which must be done at that level for the organization to have an effective investigation program. Management should develop policies and procedures for investigations must be set from the beginning, and clearly identifying roles and responsibilities. Provide resources, tools, equipment and material for investigations.

This includes:

- Training for investigators

- Providing adequate time and personnel

An investigation should be conducted by someone or a group of people who are:

- Competent and experienced in incident action models
- Competent and experienced in investigation techniques
- Knowledgeable of any legal or organizational requirements
- Knowledgeable in occupational health, safety and environmental fundamentals
- Knowledgeable in the work processes and procedures
- Able to conduct interviews
- Knowledgeable of requirements for documents, records, and data collection
- Able to analyse the data gathered to determine findings and reach recommendations

Members of the team include:

- Employees with knowledge of the work
- Supervisor of the area or work, and persons involved and the current conditions.
- Safety officer
- Health, Safety and Environment committee
- SHE representative

Tools

Tools that may be needed for the investigation: PPE/PPC, Pencil, paper, camera or recording device, tape measure, etc. and should be immediately available for the investigation.

The relevant hazard and risk control measures for workplace incident data gathering and the consequences of not conforming to specified requirements, in preparing for data gathering are explained. (SO2-AC3)

The intent is to fix the hazard immediately and safely, if competent to do so, and there is no danger to yourself or others. Incident data gathering requires an organization to deal with outputs that fail to conform to specified requirements.

Where the hazard cannot be fixed immediately, promptly notify your supervisor/ manager, and isolate the site where there is immediate risk of injury, investigate the reasons for the hazard being present.

Many data collection systems place the primary emphasis on the technical causes of accidents. There is usually a very detailed description of the process in which the accident occurred, together with an in-depth analysis of the technical failures that are seen as the

major causes. The human or system failures that may have contributed to the accident are usually treated in a brief manner. Technically oriented reporting systems are very common where engineers who may be unfamiliar with human factors principles, will not unnaturally, tend to focus on the technical causes of accidents unless provided with very clear guidelines or training to allow them to consider the human causes.

Where data collection systems do address human error, they are generally driven by the traditional safety engineering view and focus on the outcomes of errors, which are usually assumed to be due to basic human weaknesses such as inattention or lack of motivation and commitment. The outputs from traditional data collection systems may be both descriptive and statistical. Descriptive information about specific accidents may be used to emphasize the implications of frequently occurring and potentially dangerous behaviours such as entering confined spaces without carrying out checks to test for toxic gases or violating operating instructions. Generally, little attempt is made to identify any systemic causes of these behaviours. The statistical information is in the form of combined data such as lost time accidents.



MODULE 3 – GATHER AND EVALUATE DATA

Learning Outcomes:

After completing this module, the learner would be able to:

Learning Outcomes:

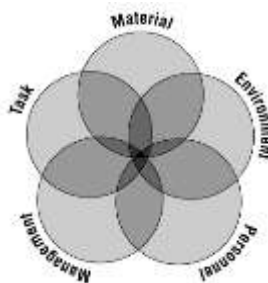
- Data is gathered according to the requirements for the intended type of investigation.
- The prevailing conditions at the scene of the incident are determined by using accepted data gathering methods.
- The data gathered is evaluated in order to establish variances between actual and required standards and procedures.
- The causes of the incident are identified through interpretation of these variances.
- The importance of identifying the causes of the incident being investigated and the consequences of non-compliance with any of the required steps are explained.

Data is gathered according to the requirements for the intended type of investigation (SO3-AC1)

The main purpose of gathering information is to establish facts that describe the sequence of events that occurred before, during and after the incident. Clear and complete information enables investigators to re-create events with accuracy and understand what happened.

Ensure to question workers in a co-operative manner. This must be a fact-finding exercise; do not assign blame. Ensure that the evidence is factual about actions that were seen, heard or done.

The model shown below attempts to illustrate that the causes of any incident can be grouped into five categories –



When using this model, possible causes in each category should be investigated.

Each category is examined more closely below.

These are sample questions only:

<p style="text-align: center;">Task</p> <p>The actual work procedure will be used at the time of the incident. The investigation team will look for answers to questions such as:</p>	<p style="text-align: center;">Material</p> <p>Possible causes resulting from the equipment and materials used, investigators might ask:</p>
<p>Was a safe work procedure used?</p> <p>Had conditions changed to make the normal procedure unsafe?</p> <p>Were the appropriate tools and materials available?</p> <p>Were they used?</p> <p>Were safety devices working properly?</p> <p>Was lockout used when necessary?</p> <p>an important follow-up question is "If not, why not?"</p>	<p>Was there an equipment failure?</p> <p>What caused it to fail?</p> <p>Was the machinery poorly designed?</p> <p>Were hazardous products involved?</p> <p>Were they clearly identified?</p> <p>Was a less hazardous alternative product possible and available?</p> <p>Was the raw material substandard in some way?</p> <p>Should PPE have been used?</p> <p>Was the PPE used?</p> <p>Were users of PPE properly educated and trained?</p> <p>Should the answer reveal an unsafe condition; the investigator must ask why this situation was allowed</p>
<p style="text-align: center;">Work Environment</p> <p>The situation at the time of the incident</p>	<p style="text-align: center;">Personnel</p> <p>The physical and mental condition of individuals directly involved must be explored, also the psychosocial environment they were working within.</p>
<p>What were the weather conditions?</p> <p>Was there poor housekeeping?</p> <p>Was it too hot or too cold?</p> <p>Was excessive noise a problem?</p> <p>Was there adequate light?</p>	<p>Did the worker follow the SWP?</p> <p>Were workers experienced to do the task?</p> <p>Were workers competent to do the task?</p> <p>Can they physically do the work?</p> <p>Were they medically fit?</p>

Were hazardous gases, dusts, or fumes present?	Were they tired? Was fatigue an issue? Were they under stress (work or personal)? Was there pressure to complete tasks?
Management	Management
Management holds the legal responsibility for the safety of the workplace and management systems must always be considered in an incident investigation.	
Were safety rules or SWP communicated and understood by all employees? Were written procedures available? Were the safe work procedures being enforced? Was there adequate supervision at all times? Were workers competent to do the work? Had hazards and risks been previously identified and assessed? Had a Risk assessment been developed to eliminate the hazards or control the risks?	Were unsafe conditions corrected? Was regular maintenance of equipment carried out? Were regular safety inspections carried out? Had the condition or concern been reported beforehand? Was action taken?

The prevailing conditions at the scene of the incident are determined by using accepted data gathering methods.

(SO3-AC2)

There are several methods used to gather data about an incident:

- Inspection of the accident scene
- Interviews of witnesses
- Gathering of document, procedures, practices and processes evidence
- Drawing of plans, taking photographs
- Collecting physical evidence for forensic analysis

Inspection of the accident scene - The first thing to do is to survey the scene to identify hazards. Then, identify the pieces of information you need to gather.

Interviews of witnesses - Every effort should be made to interview witnesses. In some situations witnesses may be your primary source of information because you may be called upon to investigate an incident without being able to examine the scene immediately after the event. Witnesses may be under severe emotional stress or afraid to be completely open for fear of blame, Witnesses should be kept apart and interviewed as soon as possible after the incident.

If witnesses have an opportunity to discuss the event among them, perceptions may be lost in the normal process of accepting a consensus view where doubt exists about the facts.

Witnesses should be interviewed alone. You may decide to interview a witness at the scene where it is easier to establish the positions of each person involved and to obtain a description of the events. On the other hand, it may be preferable to carry out interviews in a quiet office where there will be fewer distractions. The decision may depend in part on the nature of the incident.

Gathering information of procedures, practices and processes evidence:

Physical factors – Did mechanical, environmental (e.g., weather) material (defective equipment) or other factors contribute to the incident?

Human factors – Did a person (e.g., worker, supervisor) fail to do something that contributed to the incident?

Organizational factors – Do you see or hear things that caused you to wonder if policies and/or procedures were in place, or that insufficient training, inadequate supervision or improper motivations are factors.

Drawing of plans, taking photographs - Take photographs - Photographs are the best way to document information. Make sketches - Sketches of the scene are valuable tools because they convey information that photos usually can't. Start with not-to-scale sketches drawn at the site. Use the measuring tape in your kit to measure distances, or estimate using your paces. Later, use your measurements to build a scale diagram.

Collecting physical evidence for forensic analysis - Most items of evidence will be collected in paper containers such as packets, envelopes, and bags. Liquid items can be transported in non-breakable, leak proof containers. Arson (the burning of a building or other property for a criminal or malicious reason) evidence is usually collected in air-tight, clean metal cans. Moist or wet evidence (blood, etc.) can be collected in plastic containers at the accident scene and transported back to an evidence receiving area.

After the initial investigation is complete the team should:

- *Identify, label and keep all evidence. For example, tools, defective equipment, fragments, chemical samples etc.*
- *check to see if there have been any 'near misses' in similar circumstances*
- *note down all sources of information*
- *keep records to show that the investigation was conducted in a fair and impartial manner*
- *review all potentially useful information, including design specifications, operating logs, purchasing records, previous reports, procedures, equipment manuals, job safety analysis reports, records of training and instruction of the people involved and experiences of people in similar workplaces/industries and*
- *reconstruct the incident (while ensuring that another incident does not occur) to assist in verifying facts, identifying what went wrong and what can be done to prevent it happening again.*

The data gathered is evaluated in order to establish variances between actual and required standards and procedures. (SO3-AC3)

Analysing information involves examining it in ways that reveal the patterns, trends, etc. that can be found within it. That may mean subjecting it to statistical operations that can tell you not only what kinds of relationships seem to exist among variables, but also to what level you can trust the answers you're getting. It may mean comparing your information to that from a control or comparison figures, etc. to help draw some conclusions from the data. The point, in terms of your evaluation, is to get an accurate assessment in order to better understand the overall situation.

There are two kinds of data you're able to be working with, although not all evaluations will necessarily include both. Quantitative data refer to the information that is collected as, or can be translated into, numbers, which can then be displayed and analysed mathematically. Qualitative data are collected as descriptions, sketches, opinions, quotes, interpretations, etc., and are generally either not able to be reduced to numbers or are considered more valuable or informative if left as descriptions. As you might expect, quantitative and qualitative information needs to be analysed differently.

Quantitative data are typically collected directly as numbers. Some examples include:

The frequency (rate, duration) of specific behaviours or conditions

Survey results (e.g., reported behaviour, or outcomes to environmental conditions; ratings of satisfaction, stress, etc.)

Qualitative data

Unlike numbers or “hard data,” qualitative information tends to be “soft,” meaning it can't always be reduced to something definite.

Qualitative data can sometimes be changed into numbers, usually by counting the number of times specific things occur in the course of observations or by assigning numbers or ratings to dimensions (e.g., importance, satisfaction, ease of use).

The challenges of translating qualitative into quantitative data have to do with the human factor.

Quantitative analysis is considered to be objective – without any human bias attached to it – because it depends on the comparison of numbers according to mathematical calculations. Analysis of qualitative data is generally accomplished by methods more subjective – dependent on people's opinions, knowledge, assumptions, and inferences (and therefore biases) – than that of quantitative data.

The causes of the incident are identified through interpretation of these variances. (SO3-AC4)

For simpler incidents, brainstorming and checklists may be sufficient to identify root causes.

Investigation into the incident must include:

- Immediate causes
- Basic causes
- Lack of control
- Inadequate risk assessment

The table assists to measure actual incident events and compare with required standards and procedures.

Example

DIRECT CAUSES	
1. Unsafe conditions	2. Unsafe behaviours
Guards/barriers	Operating equipment
Protective equipment	Equipment not secured
Tools, equipment or material	Operating speed
Noise	Horseplay

UNDERLYING CAUSE	

1. Workplace factors	2. Personal factors
Improper/inadequate risk assessment	Lack of knowledge
Improper/inadequate supervision	Improper motivation
Improper/inadequate inspection	Lack of skill
Improper/inadequate tools and equipment	Abuse of misuse

1. Procedures	2. Training
No procedure	No training
Procedure not available	Task was not analysed
Procedure not used or followed	Decision was made not to train on task
Facts are wrong	Required training missed

ROOT CAUSES – '5 Whys' Method

'Why' is asked to find each preceding trigger until we supposedly arrive at the root cause of the incident. Also known as a Why Tree, it is a simple form of root cause analysis. By repeatedly asking the question, 'Why?' you peel away layers of issues and symptoms that can lead to the root cause.

It can be used whenever the real cause of a problem or situation is not clear.

Steps to take action based on Root Cause Analysis:

- Define the problem
- Collect data
- Ask why
- Identify corrective actions
- Identify solutions that will help the problem from recurring
- Implement the solution

The importance of identifying the causes of the incident being Investigated and the consequences of non-compliance with any of the required steps explained. (SO3-AC5)

The importance of conducting a proper investigation will ensure that we identify and record all the facts and use them to prevent future incidents.

Accidents are investigated to find out why and how they happened-not to fix blame.

Knowing how and why an accident occurred is one of the best ways to prevent future accidents. It's also important to investigate near-misses. Near-misses are warnings that help us identify problems so we can avoid accidents.

Employee cooperation can make a big difference in providing a safe workplace.

Accidents should be investigated when the facts are fresh in everyone's mind.

Undisclosed workplace hazards not only affect your company which can result in costs and liability for your company.

Consequences of non-compliance include:

- The cause of the incidents not identified to prevent similar incidents in the future
- Not complying to legal requirements
- Unknown costs of an incident
- Not complying with applicable regulations (e.g., occupational health and safety regulations etc.)
- Workers compensation claims not processed

MODULE 4 – PERFORM POST-INVESTIGATION FUNCTIONS

Learning Outcomes:

After completing this module, the learner would be able to:

- The findings, recommendations, and remedial action are reported
- The identified sub-standard acts and conditions reported are dealt with accordingly
- Remedial action is evaluated and recorded accordingly
- The consequences of non-compliance with any of the above are explained

The findings, recommendations and remedial action are reported.

(SO4-AC1)

The team should identify and document the responsibility for the necessary corrections, corrective actions or preventative actions. These should be reviewed to ensure all necessary actions are identified.

Determining recommendations and conclusions: This checklist may help the investigators when determining the recommendations.

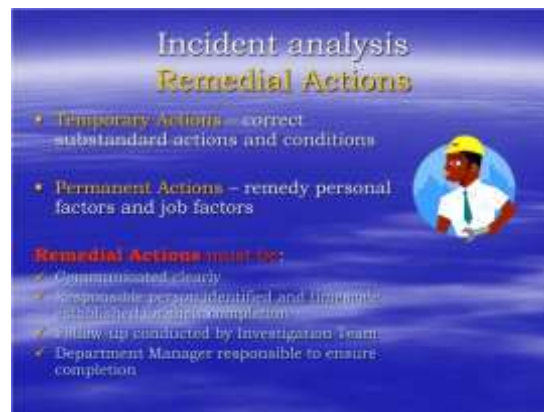
What systems failed?

- How can we prevent failure or make it less likely?
- How can we detect approaching failure?
- How can we detect failure when it occurs?
- How can we control failure and minimise the consequences?
- What does the system do?
- Why do we do this?
- What could we do instead?
- How else could we do it?
- Which persons failed?
- How can we make failure less likely?
- What is the purpose of the person's action?
- What specific items in the system triggered the accident/incident?

Based on the results of the evaluation, the responsible person should develop, prioritize, approve, track and complete all actions in a timely manner to effectively make recommendations.

The recommended actions must now be prioritized based on the significance and impact of each issue. The levels of significance and impact of each identified issue defined during the evaluation are major factors in determining the amount and priority of resources (budget, personnel, time, etc.) utilized to implement the actions and the degree of tracking of and reporting on the status of actions to successful completion.

To improve safety, it is important to develop and implement remedial measures that better address the causes and consequences of incidents.



The identified sub-standard acts and conditions reported are dealt with accordingly. (SO4-AC2)

After reporting on sub-standard acts and conditions it is important to ensure that they are dealt with accordingly. Look ahead to see how the risk of similar incidents can be reduced. Use your knowledge and the knowledge and expertise of workers when identifying potential solutions. Based on this information, recommend changes that are practical, will improve health and safety in the workplace, and upon which everyone can agree.

Your recommendations may be related to:

- Policy/procedure revision or development training
- Equipment repair, maintenance or replacement supervision
- Specific for the identified safety problems – fix what does not work.
- Effective and sound – fix an existing problem without creating any new safety problem.
- Practical – they will work and are not unachievable
- Affordable – are within available resources.
- Credible – can be trusted to work.
- Ranked according to priority. If not all recommendations can be carried out at once, identify which ones are most important.
- Based on consultation. Worker expertise can be very helpful in achieving these goals.

Remedial action is evaluated and recorded accordingly.

(SO4-AC3)

Management is responsible for evaluating and acting on the recommendations in the accident investigation report.

Follow-up actions include:

- Respond to the recommendations in the report by explaining what can and cannot be done (and why or why not).
- Develop a timetable for corrective actions.
- Monitor that the scheduled actions have been completed.
- Check the condition of injured worker(s).
- Inform and train other workers at risk.
- Re-orient worker(s) on their return to work.

A report will be produced and signed by management, health and safety committee and representatives from the employee side.

The consequences of non-compliance with any of the above are explained (SO4-AC4)

Failure to comply with recommendations made by the incident investigators will result in the increase in the likelihood of the incident recurring. Remedial action is meant to reduce likelihood or even eliminate likelihood of the incident recurring. When employees find that management is taking no action to correct the incident then they are demotivated as their safety at workplace will not be prioritised. Employee morale decreases and productivity falls.