



INTRODUCTION TO INCIDENT INVESTIGATION

A course book for the NEBOSH HSE
Introduction to Incident Investigation

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Foreword



ELEMENT 1.1

ELEMENT 1.2

ELEMENT 1.3

The International Labour Organization (ILO) estimates that each year there are more than 2.78 million deaths worldwide as a result of workplace incidents or work-related diseases. In addition to this it also estimates that there are 374 million non-fatal work-related injuries and illnesses per year. The harm caused to individuals and the financial cost to organisations due to injury and ill health is immense.

The health and safety regulator for Great Britain, the Health and Safety Executive (HSE), estimates that annually there are approximately 31 million working days lost, and the cost to the British economy of workplace injuries and ill health is around £15 billion per annum.

It is, therefore, extremely important that organisations learn lessons from workplace incidents. The ultimate aim of an incident investigation is to prevent recurrence of the same incident or, indeed, a more serious incident happening in the future.

Some compliance obligations (eg, the health and safety management system ISO 45001) also state that incidents must be investigated and actions taken to prevent the incident from happening again.

However, over time, HSE Inspectors from the British regulator have observed that incident investigation, in some organisations, is not always carried out to the highest standard. This NEBOSH HSE Introduction to Incident Investigation qualification aims to equip students with the knowledge, understanding and skills to carry out a solo investigation of a non-complex workplace incident; students will also be able to contribute to team incident investigations for large-scale incidents.

ELEMENT 1.4

ELEMENT 1.5

A guide to the symbols used in this course book

KEY TERMS

Definitions of key terminology.



ELEMENT 1.1

FURTHER INFORMATION

Information that is relevant to the topic being discussed that students may like to read/know. This information helps to illustrate the topic being discussed.



ELEMENT 1.2

CASE STUDY

Real scenarios that give context to points made in the text.



ELEMENT 1.3

ACTIVITY

Carry out an activity to reinforce what you have just learned.



ELEMENT 1.4

THOUGHT PROVOKER

Thought provokers are used to get you to think about what you have learned and relate it to your own experience.



ELEMENT 1.5

ASSESSMENT

At this stage students will need to undertake their assessment. Please refer to the INV 'Guidance and information for students and internal assessors' document for further information. This document can be downloaded from the NEBOSH website www.nebosh.org.uk.



Incident terminology, arguments for investigations and management system requirements



This chapter will introduce students to some key terminology used in incident investigation via the 'key terms' box. It will also look at the types of injuries likely to be encountered in the workplace. The chapter then goes on to explore the moral, legal and financial reasons for investigating incidents along with health and safety management system requirements for investigating incidents. It also looks at why monitoring and acting on near-miss data is important within an organisation. The final part of the chapter will look at why it is important to co-operate with regulators and the role of insurers in incident investigations.

Learning outcome

- Understand incident terminology, the moral, legal and financial arguments for investigations and management system requirements.

Key terminology

KEY TERMS



Incident

Occurrence arising out of, or in the course of, work that could or does result in injury/ill health/damage. An incident where injury/ill health/damage occurs is sometimes referred to as an 'accident'.

Dangerous occurrence

One of several specific, reportable adverse events as defined in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

As detailed in HSG245: 'Investigating accidents and incidents'

ACTIVITY



Think about the impact an injury and time off work would have on you, your colleagues, your work activities and family. Note down what could be affected by your incapacity.



Types of injury

KEY TERMS



Near miss

An event not causing harm, but has the potential to cause injury or ill health.

<http://www.hse.gov.uk/toolbox/managing/accidents.htm>

Major injuries are those that could cause you lasting and debilitating harm, including:

- head trauma;
- resulting injuries from falls from height;
- broken bones, including bones that are chipped or fractured;
- full dislocations of joints such as hip, shoulder, knee, spine or elbow; and
- blunt or penetrating trauma.



Minor injuries that may require some first-aid attention would include:

- cuts;
- skin or eye irritation from contact with a substance;
- persistent cough;
- burns that do not require skin grafting/surgery;
- sprains and strains, or ligament damage;
- whiplash-type injuries; and
- partial dislocations of joints such as shoulder, knee or elbow.



Near misses

As we can see from the key terms, near misses are incidents where no injury/harm has occurred. Even though near misses are not normally reportable under local legislation, it is still important to record them.

Examples of near misses (where no injury or harm was caused) include:

- tripping over a trailing cable;
- falling down a step;
- an unattended ladder slipping down a wall due to lack of securing; and
- falling over uneven ground.



Dangerous occurrences

Dangerous occurrences under UK legislation include:

- a collapse or partial collapse of a scaffold over five metres tall;
- an overturn of any load-bearing part of lifting equipment;
- contact with overhead power lines;
- fire or explosion that closes a premises for more than 24 hours; and
- accidental release of a flammable substance of certain quantities.

Please note that this is not an exhaustive list of dangerous occurrences under RIDDOR. These types of dangerous occurrences are often reportable under country-specific legislation, eg RIDDOR in the UK. Other parts of the world may have similar regulations. However, you should bear in mind that this book is looking at minimal/low-level investigations so it is very unlikely that you would be carrying out an investigation of one of these 'reportable' examples. You are more likely to carry out investigations where minor or no injuries have occurred. Examples of these might be:

- a fall from a step-ladder causing a sprained ankle; or
- a hammer falling off a shelf and hitting someone on the arm causing bruising.

Property damage is not normally a reportable incident under RIDDOR. The exception to this is a fire caused by electrical short circuit or overload where an organisation is shut down for 24 hours or more. However, details of any property damage from an incident should be recorded. There are several reasons for this including insurance and maintenance requirements. This information may also be required should a prosecution or civil claim be brought against the organisation.

There are also workplace diseases that are reportable, such as carpal tunnel syndrome and occupational asthma, as well as other diseases such as leptospirosis or Legionnaires' disease.

Why do we investigate incidents?



The primary reason for investigating accidents and incidents is to identify the contributory causes to **prevent recurrence**. If the incident is reportable within the country's legal framework, we would have to ensure that relevant information surrounding the circumstances of the incident is gathered to pass on to the relevant regulatory authority. The same would apply for the organisation's insurance company if there was a chance for injured parties to seek compensation for the harm caused to them, or potentially claiming on company insurance directly for damage to equipment or property.

Moral, legal and financial arguments for investigations

The legal argument

Although incident investigation is not explicit in legislation, organisations in many countries will have a legal obligation to carry out 'suitable and sufficient' risk assessment. In the UK, this duty falls under the Management of Health and Safety at Work Regulations. An incident that goes un-investigated would potentially show that the risk assessment for that work activity was not suitable and sufficient. However, even where there is no legal duty to investigate or carry out a risk assessment, it is still good practice to do so.

The penalties in terms of fines and imprisonment apply to both individuals and organisations who do not operate within the law. Investigating effectively can demonstrate to the courts that you are taking steps to ensure a similar event cannot occur again.

There are differing standards of health and safety around the world. However, organisations that cause harm to workers may have to fully disclose the circumstances surrounding an incident, especially where enforcement agencies/injured parties are looking to take legal action or seek compensation.

As mentioned earlier, certain categories of injury or incident are legally reportable. In the UK, this falls under RIDDOR.

Categories of injury or incident that are usually reportable are:

- fatalities;
- specified injuries;
- injuries causing more than seven days' absence from work/normal working duties;
- occupational diseases; and
- dangerous occurrences.





Fire caused by an electrical short circuit or overload resulting in the stoppage of production for more than 24 hours is classed as a dangerous occurrence in the UK

Where the regulators are involved in the incident investigation, the regulator will normally be responsible for giving the all-clear for the incident site to be restored to its normal condition. In the UK, in the case of a fatality, it will be the police who must give the all-clear for the site to be restored to its original condition. When an incident occurs:

- organisations must take steps to ensure that the evidence and scene are not disturbed until permission is given by the relevant authority;
- the internal investigation may continue alongside any external enquiry.

It is important for organisations to co-operate fully with external regulators/enforcement agencies when incidents are being investigated. Co-operation may be seen as a mitigating factor by judges when sentencing; this could lead to a lower level of fine/penalty if the organisation is found guilty of an offence. If the regulator intends to prosecute, they will inform the dutyholder as soon as there is enough evidence to support a prosecution.

FURTHER INFORMATION



The Reporting of Injuries, Diseases and Dangerous Occurrence Regulations 2013¹ cover England, Scotland and Wales. Northern Ireland has its own set of regulations, the Reporting of Injuries, Diseases and Dangerous Occurrence Regulations (Northern Ireland) 1997.² The regulations put duties on employers, including self-employed people or the responsible person for a work premises, to report certain serious incidents, occupational diseases and dangerous occurrences. Each of these categories is discussed later in this book. Full guidance on the Regulations can be found in the British HSE's Guide to the Regulations (INDG453), <http://www.hse.gov.uk/pubns/indg453.pdf>. Guidance on Northern Ireland's Regulations can be found here: <https://www.hseni.gov.uk/publications/riddor-guidance>.

In England, Scotland and Wales, these incidents are reported to the British Health and Safety Executive (HSE). Incidents in Northern Ireland are reportable to the HSENI. Other parts of the world may have similar regulations.

As a best practice guidance, the International Labour Organization has produced a 'best practice' Code of Practice, 'Recording and notification of occupational accident and diseases',³ which provides guidance and information to those people who may be engaged in setting up systems, procedures and arrangements.

The Code of Practice includes information on what should be done at both national and enterprise (organisational) level. The Annexes to the Code of Practice list what should be reportable. Annexes A and B contain a list of occupational diseases; Annexes F–I contain a list of industrial accidents.

Students who are located outside of the UK are advised to make themselves familiar with any local legislation which is relevant to their place of work.

CASE STUDY



As stated earlier in this book, organisations located in the UK are subject to RIDDOR legislation. Failure to report an incident can result in prosecution. For example, in 2015 a contractor was digging out a basement of a house. Cracks appeared in the structure so the contractor contacted a structural engineer for advice; advice which he subsequently ignored. This resulted in the ground floor of the house collapsing into the basement. The contractor failed to report this as a dangerous occurrence.

The HSE subsequently prosecuted the contractor under RIDDOR and other health and safety legislation. The contractor was found guilty and received a prison sentence of two months, which ran concurrently with a sentence of five months that he received for another health and safety offence. The contractor was also ordered to pay costs of £7000.⁴

References

- 1 Reporting accidents and incidents at work: A brief guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR), INDG453, HSE Books <http://www.hse.gov.uk/pubns/indg453.pdf>
- 2 The Reporting of Injuries, Diseases and Dangerous Occurrences: Guidance on Regulations, HSENI <https://www.hseni.gov.uk/sites/hseni.gov.uk/files/publications/%5Bcurrent-domain%3A%5D/riddor-guidance-on-regulations-hsa-31.pdf>
- 3 International Labour Organization's 'Recording and notification of occupational accidents and diseases' Code of Practice https://www.ilo.org/safework/info/standards-and-instruments/codes/WCMS_107800/lang--en/index.htm
- 4 RIDDOR prosecution <https://www.shponline.co.uk/in-court/builder-jailed-after-house-collapse/>
- 5 Benefits of investigating incidents case study: Slippery store entrance in wet weather - supermarket entrance matting <http://www.hse.gov.uk/slips/experience/store-entrance.htm>

Introduction to Incident Investigation follows the syllabus for the NEBOSH HSE Introduction to Incident Investigation qualification. It provides the knowledge you need to help you gain the qualification.

The book also contains activities and case studies to illustrate the areas covered by the syllabus. It can be used as part of your studies during a taught course or as a study aid for e-learning, distance learning and revision sessions.

The information is also valuable as a reference source for those putting incident investigation techniques into practice at work.



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