University Occupational Health and Safety Guidance Notes

UNDERTAKING AN INCIDENT INVESTIGATION

1. PURPOSE

This Guidance Note provides information on undertaking an incident investigation, to determine immediate, underlying and root causes and to identify corrective and preventative actions. This Guidance Note does not address incident reporting.

2. DEFINITIONS

2.1 Immediate cause The obvious reason for an adverse event. May include unsafe actions, or lack of action, and unsafe conditions that led to the incident occurring.

2.2 Underlying cause Factors that enabled the unsafe actions and / or conditions to occur. Most underlying causes are related to the way the organisation managed health and safety and how people perceive risk.

2.3 Root cause Factors that may cause conditions that could result in an incident. If the root cause is dealt with the undesirable event would be prevented.

3. INCIDENT INVESTIGATION

Investigation processes will differ dependent on the nature of the incident. The following sections provides fundamental information and guidance to support the incident investigator/investigation team. It is essential that investigations are sufficiently broad to assess the full range of technical, human and administrative factors involved in the incident even if some factors are outside the responsibilities of the area where the incident occurred.

3.1 Planning

3.1.1 Information, Instruction and Training

The person(s) investigating the incident should have the adequate skills, experience, knowledge and training necessary to complete the investigation.

SIRIS Incident Reporting and Investigation training is provided by SHaW. This online training course must be undertaken by staff who are responsible for incident investigation. The training is bookable via the online DAT booking system and includes training on undertaking an incident investigation and the use of SIRIS.

3.1.2 Managing an Incident Investigation

Incident investigations are managed and recorded through SIRIS. Only staff who have access to SIRIS and have the relevant system permissions are authorised to manage an investigation.

The fundamental purpose of an incident investigation is to provide a tool for improving health and safety management. It is also to:

- Identify the immediate, underlying and root causes;
- Identify and implement preventative and corrective actions to prevent a recurrence;
- Reconsider existing risk assessments;
- Review the effectiveness of risk control measures;
- Identify tasks causing the greatest number of incidents;
- Ensure compliance with legal requirements for incident reporting, recording and investigation;
- Obtain details which might be needed if the incident later becomes subject to an insurance claim or legal action.

Incidents that do not actually result in injury or ill health, may still require investigation. If injury or significant damage could have resulted, these should be reported and investigated.

3.1.3 The Incident Investigation Team

Who is part of the investigation process depends on the severity (or the potential severity) of the incident. Departments should consider in advance of any potential incident, who within their department should be part of the investigation team. Consideration should be given during selection to the knowledge, skills and training that each individual has. The

team does not need to be extensive, but a Lead Investigator should be assigned, with the lead investigator reporting to the HoD.

Where an investigation team is required it should comprise a number of individuals who are not all (ideally) directly involved in planning or managing the tasks associated with the incident. Depending on the level of the investigation required, supervisors, line managers, those in a health and safety role (e.g. DSC, Head of Technical Services), trade union safety representatives, worker representatives and senior management could all be considered. Some members of the team may be involved in directly responding to the incident in which case they may wish to delegate their investigation responsibilities to other appropriate members of staff. In some instances, it may be necessary to call on the help of a specialist outside the department.

In the event of a major incident (e.g. an incident involving multiple serious injuries) or an incident involving a fatality, the University Secretary and Compliance Officer will convene an Incident Response Team with assigned investigation roles and responsibilities.

All RIDDOR reportable incidents are investigated by SHaW who will work collaboratively with departmental leads to investigate the incident.

3.2 The Incident Investigation Process

The investigation must begin as soon as possible after the incident is reported, and it is safe to do so, and after any immediate medical needs of persons involved have been attended to.

3.2.1 Secure and Preserve the Incident Site

The site of the incident should be made safe and secured and where practicable nothing at the site should be disturbed until all necessary information has been collected. The site must only be disturbed where this is necessary to prevent further injury, loss or contamination.

3.2.2 Inspect the Incident Site

Early inspection if safe to do so is critical, however there may be unavoidable delays due to the undertaking of any external authorities attending the site.

Where appropriate, photographs or video footage may be taken, and equipment held for further examination or testing. Where equipment cannot be removed from the scene of the incident, it will be suitably signed as ‘Do not touch - out of use pending investigation’. No person is permitted to tamper with equipment placed out of use pending investigation.

3.2.3 Releasing the Incident Site

Once all relevant information has been gathered from the scene, a formal handover of the incident site from the investigation team leader to the person responsible for the area should take place. The area may not necessarily be immediately put back into operational use following handover, as corrective actions including the review of risk assessments may be required before the area is made partially/fully operational.

3.2.4 Determine and Collate Information

3.2.4.1 Interviewing Witnesses and Other Key Personnel

The purpose of an taking witness statements is not to apportion blame, but to establish the cause to identify actions necessary to prevent a recurrence and to continually improve the University’s health and safety standards.

Ideally the lead investigator will conduct the interview with an additional person present who is nominated as a scribe. The interviewee may wish to request to be accompanied by another person such as a translator, safety representative, or a buddy. With the exception of a translator, persons who accompany the interviewee must not interact with the interviewer. It is important that both the interviewee and interviewer are comfortable and don’t feel intimidated by who and how many people are present.

Typical information to gather whilst talking a witness account include:

- The events leading up to the incident;

- What was being done at the time, was this unusual or different from normal?
- What were the immediate causes of the incident – how did it happen?
- If investigating a case of disease or ill health, is there any evidence linking this to work activities?
- What instruction, training and supervision had been provided to those involved?
- What were the established methods of work and procedures?
- What was the behaviour and actions of individuals before, during and after the incident?
- What was the role of supervisors and managers in the activities concerned?

When undertaking an interview, it is useful to remember P.E.A.C.E.

P - Plan and prepare

- Venue for interview – a suitable mutual location should be used.
- Timing for Interview.
- Witness Support - Witnesses may seek support from their health and safety representative and any other individual as required.
- Interview witnesses separately.

E - Engage and explain

- Introduce yourself.
- Explain the reason for the investigation.
- Ask the witness what their role is.
- Explain the format of the interview.
- Take notes during the interview.
- Ask if the witness has any questions.

A - Account

- The main part of the interview, to learn what the witness saw. Do not interrupt the witness when they provide their account. When they have done this, then ask questions and request clarification.
- Ask 'Open' questions, avoiding ‘yes’ or ‘no’ answers
- Ask questions with 'Who', 'What', 'Why', 'When', 'Where', 'How'.
- 'Leading' questions should not be asked For example: Do not ask "how fast was the truck travelling?". Instead ask "how would you describe the speed of the truck?"
- Do not make statements when interviewing a witness, such as "the accident was caused by going too fast" as this may appear to be telling the witness what to say. It is not a question.
- Do not ask hypothetical questions or 'What if' questions. There is no answer to a hypothetical question.
- It is better to ask for an informed opinion based on the witness’s credibility, experience and qualifications.

C - Closure

- Thank the witness.
- Provide a summary of the interview.
- Ask the interviewee to confirm that they have understood everything and that the accounts have been accurate.
- Explain what will happen next.
- Ask if the witness has any questions.

E - Evaluate

- What have you learned?
- Do you need to ask further questions of the witness?
- Do you need further clarification?

3.2.4.2 Gather documented information

Once statements have been taken documentation relevant to the current incident should be gathered, this may include:

- Risk assessments (including general and specific e.g. COSHH, DSEAR, Manual handling);
- Training records;
- Safe systems of work;
- Maintenance records;
- Previous incident reports.

3.2.5 Review current risk control measures

It is important to establish if the existing risk control measures meet current standards and are adequate to effectively control risks. Through this process additional corrective and preventative control measures may be identified, which could include:

- Improving physical safeguards or safety features or modifying a workplace layout;
- Improving existing work methods or introducing new safe working procedures;
- Providing additional safety equipment e.g. lifting aids, personal protective equipment;
- Undertaking or reviewing risk assessments;
- Updating written health and safety rules, standards or policies, communicating these to employees / students, as appropriate;
- Improving communications systems;
- Making changes to or providing extra training, supervision or information sources;
- Introducing better testing, maintenance or cleaning arrangements;
- Introducing inspection, monitoring and audit systems;
- Reviewing similar risks in other areas.
- Reviewing whether the hierarchy of controls was followed

3.2.6 Analyse findings and establish the causes

The information gathered through inspecting the incident site, witness statements and reviewing documentation will assist in identifying the cause of the accident. The immediate, underlying and root causes of the incident must be determined.

Immediate causes are the obvious cause of an incident and fall into two categories:

1) Behaviour related e.g. failure to comply with procedures/rules; not wearing PPE; using equipment incorrectly.
2) Worksite conditions e.g. fabric of the building; poorly maintained equipment; environmental conditions.

Underlying causes are factors that allow the unsafe condition to occur. Underlying causes may include:

- Poor behavioural safety culture;
- Insufficient supervision;
- Job factors e.g. poor working environment and equipment; lack of suitable procedures and systems of work.
- ‘System’ or ’organisational’ reason for an adverse event happening, eg pre-start-up machinery checks not carried out by supervisors; the hazard not adequately considered via a suitable and sufficient risk assessment; production pressures are too great etc

The root cause is usually an administrative failure. Root causes may include:

- Management, planning and organisational failings e.g. poor management of risk due to inadequate safety management arrangements, poor/no planning and insufficient resources.
- Personal factors e.g. poor behaviour; ill-health; competency. Often linked to job and management/organisational factors.
- Workers may know the health and safety rules but may break them for many reasons e.g. time pressures;
- Not speaking the language.

Things to consider when analysing the findings to determine the cause include:

- Has the problem been reported previously, when, by whom, what action was taken?

- Were University policies, procedures and training being followed?
- What was the level of competence of those involved – including the nature of any training, instruction or information provided? Was this adequate?
- Was this risk identified and had a suitable and sufficient risk assessment been completed, with relevant hazards identified?
- Were control measures and safety equipment identified by the risk assessment in place and being implemented – are they still in place and effective?
- Was communication between the relevant parties adequate and effective e.g. was the risk assessment shared with the persons undertaking the task?
- Are there any shortcomings in the original installation or design, if relevant?
- Were adequate performance standards set and monitored by management?
- Was there an adequate system for maintenance and cleaning of premises or equipment?
- Were systems of work that individuals were expected to follow being followed in practice? Were these systems workable and realistic (if not, why not?)
- Was suitable personal protective equipment provided, was it effective (if not, why not?)
- Is record keeping adequate?

3.2.7 Creating an action plan and implementing recommendations

Once actions to prevent a recurrence of the incident have been identified, they should be recorded and assigned to someone responsible for implementing the improvements required.

Within SIRIS actions may be assigned as part of:

1) The Incident – as part of the DSC Review actions may be created and assigned to appropriate personnel.
2) The Investigation – for incidents where a full investigation is required (either a department level investigation or SHaW led investigation) actions may be created and assigned to the appropriate personnel.

Actions should be SMART:

- **Specific** in terms of what needs to be achieved and how
- **Measurable** in terms of outcome (e.g. % change)
- **Achievable**, agreed and assigned to a delegated person
- **Relevant** and realistic objectives applicable to the area and those who work there
- **Timescales** for assigned objectives are achievable

Actions should deal effectively with not only the immediate and underlying causes but also the root causes. Actions must be completed within the agreed timescale and prior to the investigation being closed.

3.2.8 Wider Learning Value

Lessons learned should be shared by other groups carrying out similar activities within the Department/School, or more widely across the University. Should information and recommendations from the investigation be of relevance to the wider University community rather than just the Department/School then they should be shared. Sharing of information may be by reporting into a Faculty Safety, Health and Wellbeing Committee, or by a Health and Safety Alert issued by SHaW. Specialist Safety Forums and other platforms will also be used to share lessons learnt.

3.2.9 Closing the Investigation

Only when all actions have been complete can the investigation be closed off. SHaW are responsible for closing all investigations via SIRIS through which records are kept and maintained.