

Incident and accident investigation

Employers' duty

Employers have a duty to investigate incidents and accidents at work and a duty to revise risk assessments in the light of investigations. The Management of Health and Safety at Work Regulations 1999, Regulation 5, "Health and Safety Arrangements", states that: "(1) Every employer shall make and give effect to such arrangements as are appropriate, having regard to the nature of his activities and the size of his undertaking, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures."

The associated Approved Code of Practice (ACOP) says that: "Employers should measure what they are doing to implement their health and safety policy, to assess how effectively they are controlling risk, and how well they are developing a positive health and safety culture. Monitoring includes:

... **(b) adequately investigating the immediate and underlying causes of incidents and accidents to ensure that remedial action is taken, lessons are learnt and longer term objectives are introduced."**

Trade union appointed safety representatives have the right to "**investigate potential hazards and dangerous occurrences at the workplace ... and to examine the causes of accidents and the workplace:**" (SRSC Reg 4(1)(a)), and to **make representations to their employer** on these matters (SRSC Reg 4(1)(c).

Employers are required under MHSW Reg 3(1)(a) to "**make a suitable and sufficient assessment of ... the risks to the health and safety of his employees to which they are exposed at work**". Reg 3(3) requires risk assessments to be reviewed where there is reason to believe they are no longer valid, or there has been a significant change in the matters to which it relates. The associated ACOP at paragraph 26(a), draws attention to near misses and defects in plant or equipment, and identifies **accidents, ill health and dangerous occurrences as events that should trigger a review of risk assessments.**

Accident Investigation

Accidents, cases of ill health, dangerous occurrences, near misses and property damage can have high human and financial costs. They often cause unnecessary misery, threaten someone's livelihood and may affect the viability of the company. It is vital therefore that employers put in place arrangements for identifying, recording and investigating **all** relevant incidents.

These should:

- ascertain both immediate and underlying causes (there is rarely a single cause)
- put in place measures to prevent a recurrence; this may need to be done straightaway
- reappraise existing risk assessments
- review control standards and success in meeting them
- identify activities or jobs causing the greatest number of incidents - of particular value in larger firms and groups
- satisfy legal reporting and recording duties
- obtain details which might be needed if the incident becomes subject to an insurance claim or legal action

These arrangements should be set out in the company health and safety policy. They form part of the firm's monitoring system and are an essential feature of successful health and safety management.

Early priorities after an incident are of course to treat the injured, deal with the immediate emergency and make the workplace safe. During rescue, clearing up and investigation care must be taken to avoid the destruction of any evidence which might be required during investigation.

Why investigate?

The main aim of investigation is to pin-point the causes of incidents and take prompt and effective action to prevent recurrence. Key points to consider during investigation are:-

- the organisation including relevant policies, standards, procedures and rules
- the job including, where relevant, the substances, procedures, equipment and premises in use
- personal factors including people's behaviour, suitability and competence to carry out the work

Incidents need examining in sufficient depth so that immediate causes and the underlying failures of systems for managing health and safety are identified. As well as immediate and early remedial action it may be necessary to make longer-term changes.

Improvements might include:

- giving training in manual handling techniques
- substituting a wash-up solvent with something less hazardous
- changing a make-ready procedure or other system of work
- instituting health surveillance, eg for people working with UV curable materials
- providing an interlocking guard
- amending the health and safety policy and risk assessments

Which incidents?

Be guided by the significance of the incident when deciding what to investigate and on the type and depth of the investigation. Consider not only the actual consequences but also the potential outcome. The more serious the event or greater its potential, the greater is the effort to be applied.

Incidents needing investigation include:

- (a) all injuries, dangerous occurrences and cases of occupational ill health;**
- (b) fires and spillages;**
- (c) near misses and property damage** - these incidents, which can also cause loss and may be potentially very serious, merit investigation; the remedial action taken may help prevent an injury in the future.

How do you find out about such incidents?

A robust approach to learning from incidents rests on not only on a positive safety culture but on having an environment in which people are actively encouraged to

report incidents including near misses, are thanked by managers for doing so and are informed about what action has been taken as a result. It is also important to check other sources such as first-aid treatment and health records, maintenance reports etc to help identify incidents.

Effective procedures need to be in place so that managers at the appropriate level can be notified and decisions made about any immediate remedial action and about the nature of the investigation.

Who should investigate?

Normally line managers will investigate with help as appropriate from the health and safety adviser/ competent person, medical or nursing adviser and technical staff such as in-house engineers and equipment or materials suppliers. The level of management involved will generally be related to the actual or potential significance of the injury, ill health or loss but, in most cases, there will be an immediate inspection, possibly by the supervisor who can ensure that important evidence is not lost.

Safety representatives are entitled to carry out inspections where there has been a reportable accident or dangerous occurrence or where a reportable disease has been contracted. Employers or their representatives may be present during these inspections. Employers need to provide reasonable facilities for independent investigation by safety representatives and private discussions with the employees they represent.

In practice the best approach is normally a joint inspection between employers and safety representatives. The main purpose is after all to determine the causes so that the necessary remedial action can be taken. The advantages of a 'team' approach to investigation, involving safety representatives, are that this brings practical experience to the process, team members learn about investigation techniques and about general principles of health and safety management, and they can become powerful advocates for securing implementation of any resulting recommendations for action.

Training in incident investigation techniques is necessary, including, for example, gathering witness evidence via interviews and using structured methods to put evidence together and to test hypotheses about what happened and why. In practice the bulk of evidence used in investigations comes from witness interviews. Managers and safety representatives need to understand how to approach witnesses, for example, using 'open' not 'closed' questions and recognising that they may have been traumatised, particularly where the accident involved serious injuries.

Checklist for incident investigation

Use the following checklist to structure investigations and written reports. It is intended as a guide and is not comprehensive. Be sure to establish at an early stage whether immediate action is needed. For example, it may be necessary to withdraw a machine or substance from use or stop an activity. The most important first step is to gather key facts about the event and circumstances surrounding it by: interviewing witnesses before their recollection of events alters; gathering all necessary physical evidence; and identifying and securing key documents (for example, recent inspection records, training records etc).

Obtain basic facts

- names of injured employee(s)/witnesses/ people early on the scene
- condition of plant
- substances in use or present

- layout
- place, time, conditions
- exactly what happened just before the event and as it unfolded
- injury/ill health damage/process disruption
- make use of cameras, sketches, measurement to record the undisturbed scene

Establish circumstances

- what was being done at the time and what happened?
- immediate causes
- events leading up to the incident
- any evidence linking cause of ill health to work
- competence, eg what instructions and training were given before the event and how much experience in the job did the people involved (including managers and supervisors) have?
- what were the established methods of work and procedures?
- behaviour and actions of individuals
- role of supervision and management
- has something similar happened (or nearly happened) before?

Identify preventive measures

- assess/reassess the risk
- question the adequacy of existing physical safeguards and work methods and discrepancies with those intended
- reappraise the intended safeguards and work methods - do they satisfy the intentions of the company health and safety policy and do they meet the standards given in PIAC or PABIAIC or other authoritative guidance?

Establish whether initial management response was adequate

- prompt and appropriate action such as making safe and dealing with any continuing risks, electrical isolation, suitable fire fighting, effective first-aid response and correct spillage procedures

Identify the underlying causes

These might include:

- management or supervision failure
- lack of competence
- inadequate training
- shortcomings in original design
- inadequate performance standards set by firm
- absence of a system for maintenance

Determine action needed to prevent a recurrence

In deciding on the right course of action, employers need to think whether the outcome could have been more serious and what prevented this from happening. Examples of action are:

- improve physical safeguards
- provide and use local exhaust ventilation
- use mechanical handling aids such as pile turners and mobile lifts
- introduce better test and maintenance arrangements
- improve work methods
- provide and use personal protective equipment
- make changes to supervision and training arrangements
- review similar risks in other departments
- set up a system to assess the risks from new plant and substances at the planning stage
- review procedures involving contractors
- update standards and policies
- introduce monitoring and audit systems

Implement, analyse, and review

Once the initial action is taken, management need to:

- identify underlying causes and corrective action
- implement follow-up action promptly
- check that follow-up action has been taken (standard report forms can help)
- analyse data systematically to identify trends and features - safety representatives and company safety committees will find this useful
- question the overall response - did it fully reflect the risks?
- review performance periodically

They can then make sound decisions for the future.