

After the

Event: A Guide to Investigating Accidents

and Near Miss Events

**Safety and Environmental Protection Services** 

# **Executive Summary**

- 1. Accidents are primarily indicative of management failure. Recording and investigating the circumstances of accidents can, if acted upon, result in improvements in the safety management system. This is not only a legal requirement, but also ethical and makes good financial sense.
- 2. The University's Sickness Absence Policy and Statement of Health and Safety Policy both require Heads of Department to investigate accidents and cases of ill health within their area of responsibility
- 3. The circumstances of these events must be reported to SEPS without delay. Further investigation by SEPS may be necessary and if appropriate onward transmission to the regulatory authorities
- 4. The conclusions of the investigation form part of the review process of the University's safety management system.

#### **Introduction**

Universities are large, diverse organisations and every day accidents befall staff and students. Mostly these are trivial, but a few are serious requiring long and complex investigation in order top find out what happened, and to make sure these same circumstances don't arise in the future. an accident is obviously a calamity for those involved and their families, but for the University, there can be serious consequences. Failing to prevent accidents or allowing a situation to develop which results in ill health can be a criminal offence; there can be severe financial losses or insurance problems, and the reputation of the University can be sullied by bad publicity.

In December 2001 UCEA and UUK in their Code of Best Practice for University Health & Safety Management said, "...The process of accident reporting and investigation ... is the clearest opportunity for the University to learn what errors it is making in its health and safety management and to address these".

# This guidance will describe how departments should organise themselves to meet this requirement, covering *inter alia* how best to use this information for the planning and development of safety control strategies, so as to prevent future accidents, minimise the likelihood of occupational ill health, reduce financial loss and maintain the University's reputation.

Most accidents in the University are fortunately quite straightforward to investigate. The cause will be apparent, and remedial action simple to instigate. Investigators in most situations, therefore, will not need to study this guide in much depth. There will be some events, however, where their complexity or seriousness demands a full investigation by senior departmental staff, and then a full understanding of the principles and practice of accident investigation summarized herein should prove invaluable.

#### What is an Accident?

There is no single definition that is useful in all cases. For brevity, we shall use this definition: accident' – Accident: any undesired event, or sequence of events, causing (or with the potential to cause) injury, ill health or damage

This definition encompasses events where people are actually hurt, and also dangerous occurrences, the near miss, under  $RIDDOR^1$ . To what lengths must we go to record these 'undesired events'? Clearly the events that are reportable under RIDDOR must be recorded in all cases. At the more trivial end of the spectrum, it is harder to define what needs to be recorded. Some guidelines are appropriate. The examples given are for illustration only and are not intended to be prescriptive, nor is the list exhaustive.

#### What must be recorded: -

The purpose of recording accidents is to document events which caused, or which might have caused, injury and/or loss, in order to establish the immediate and underlying causes and identify a likely remedy for such situations. As a minimum, these classes of loss should include the following, but the scope could be enlarged to include other classes of loss such as environmental damage.

• Unplanned events *resulting* in injury or damage to the environment (air, water or land). In the case of injury to people, this ranges from serious personal injury (or even death) to the trivial. If properly investigated, even the apparently trivial accident may reveal shortcomings in risk control and management. The trauma need not be immediately obvious. Cumulative minor

<sup>&</sup>lt;sup>1</sup> This is the acronym for The Reporting of Injuries Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) SI 1995 Number 3163

trauma, such as work-related musculo-skeletal disorders<sup>2</sup>, and ill health such as allergies, poisoning and irradiation must be recorded too. In the case of damage to the environment, relevant events could range form major spills or destruction of habitat to small scale, localized events. As with people, damage to the environment may result from numerous small scale events, the effect of which is cumulatively damaging;

• Unplanned events with the *potential* to cause injury, ill health or damage to the environment. This may include such diverse events as fires and explosion, chemical or biological spillage or release, electrical faults, scaffolding collapse, fracture of an abrasive wheel etc.

#### What need not be recorded: -

- Injury sustained as a result of medical treatment, and the side effects of drug administration. Although SEPS might advise on the safety of a test rig involving human subjects, mistakes by students of medicine or dentistry acting under a régime of professional training resulting in injury to patients are the province of the academic advisor or ethical committee;
- Injury sustained as a result of sporting activity (unless this was due to a failure of University property, equipment, or shortcoming in training or supervision);
- An injury sustained by a student who injures himself with a kitchen knife while preparing a meal (unless the knife was provided by the University and thought to be faulty);
- An injury to someone while skating on a University roadway (unless the roadway was in some way to blame);
- Accidents on the way to work (unless on University property);
- An infectious disease (that is not related to a work activity), such as 'flu, contracted from a colleague.
- Fainting not associated with any work activity

<sup>&</sup>lt;sup>2</sup> Such as Work Related Upper-Limb Disorder (also called RSI and several cognate acronyms) and injury caused by some manual handling activities.

#### Arrangements for Recording, Investigating and Reporting Accidents

In law, it is for the University as a corporate entity to organise itself in order to fulfil its statutory obligations. In practice it is a responsibility of line management. The governing body bears legal responsibility as the employer, but delegates the various functions to those who manage on its behalf.

#### Responsibilities

The Secretary of the University Court is responsible for ensuring that procedures are devised and implemented so that: -

- There are effective plans for dealing with 'serious and imminent danger'<sup>3</sup>, including the provision of first-aid to any person suffering from injury or ill health on the University's premises;
- Any accident occurring on University premises or involving any University activities elsewhere is reported and recorded in an appropriate way;
- Any such accident is investigated promptly;
- The appropriate lessons are learnt both at the local and central University level;
- The legal requirements are fulfilled.

In practice these requirements are satisfied by the work of the Safety and Environmental Protection Services.

**Heads of Department** must ensure that any accident occurring during University activities under their control, wherever and whenever the activity takes place, or involving University premises or facilities assigned to them, is reported promptly *via* the agreed procedures to SEPS. They must therefore ensure that all staff and students for whom they are responsible are aware of the reporting system and of their duty to use it.

Heads of Department must also ensure that an appropriate investigation is carried out to determine the cause of an accident and to recommend remedial measures. The initial investigation should be made by the person immediately in charge of the work, but commensurately senior departmental personnel should investigate the more serious incidents. In order that the investigation is carried out properly, Heads of Department must ensure that investigators are appropriately trained.

Where there are reasonably practicable measures that can be taken to prevent recurrence, Heads of Department have a duty to ensure that these are implemented and subsequently monitored to check their effectiveness.

Under the Safety Representatives and Safety Committees Regulations 1977<sup>4</sup> safety representatives have the right to carry out an inspection and investigation following an accident and therefore, to assist in this, Heads of Department must ensure that the Safety Representatives receive appropriate information and "such facilities and assistance as [they] may reasonably require".

**Individual employees** and students, have a duty to be familiar with the University's procedures for the reporting of accidents and work-related ill health. They must use these procedures when necessary on their own behalf and are expected to act on the behalf of another person if the latter is unable to report because of incapacity following an accident. They must also co-operate with those whose duty it is to carry out investigations.

#### Investigation

Although the primary duty for investigation lies with the Heads of Department, SEPS will investigate certain accidents and cases of occupational ill health. The criteria for their

<sup>&</sup>lt;sup>3</sup> Reg 8 of the Management of Health and Safety at Work Regulations 1999. SI 1999 No 3242.

involvement in these cases are given in the UCEA Code of Best Practice for University Health and Safety Management are:

- Serious injuries, dangerous occurrences and cases of occupational ill health reportable under RIDDOR;
- Accidents leading to minor injuries, if their occurrence suggests deficiencies in safety arrangements or there is unusual prevalence of a specific type of accident in a particular area of the University;
- 'Non-injury' accidents which are non-reportable but their occurrence suggests a potentially serious deficiency in safety arrangements, and;
- Cases of non-reportable work-related ill health.

Where appropriate, SEPS will also investigate accidents and occurrences that have caused, or had the potential to cause, harm to the environment.

#### **Reporting to the Enforcing Authority**

SEPS must sometimes make a report to the enforcing authority. The reporting system must ensure that SEPS receives **immediate** notification so that the enforcing authority can be informed promptly. Time is of the essence: the University sometimes has only 24 hours to make an initial telephone report.

#### **Record Keeping**

The University is required by RIDDOR to keep records of reportable injuries, dangerous occurrences and diseases, essentially in perpetuity. However, the recording of details of **all** accidents and near-misses can be a valuable management tool. SEPS is responsible for the collection and storage of records, including records of investigations, although copies of relevant reports should also be kept within each Department. SEPS use these records for producing statistical data and reports to the Health, Safety and Environment Committee, and as part of the evidence amassed during the auditing of health and safety management in Departments.

#### **Accident Investigation**

#### Introduction

Accidents are a sign that the arrangements made to control risks have been ineffective. According to HSE at least 70% of accidents are preventable by management action. Accidents are therefore opportunities to learn from mistakes. These lessons cannot be learned unless the investigations are thorough, fully exploring the nature, cause, and potential harm of the event.

#### **Principles of Accident Investigation**

**Dealing with immediate risks**. There may be a need to treat the injured, make the area safe or initiate an emergency plan. Under several sets of Regulations<sup>5</sup> it is a legal requirement that specific arrangements are made for dealing with emergencies and events where there may be serious and imminent danger. The risk assessments made for example under the Management of Health and Safety at Work Regulations should identify the likely nature of foreseeable emergencies, and plans for dealing with them should be prepared. Once the emergency has been dealt with, the Inspector of the enforcing authority may require the scene to be left undisturbed until the investigation can be organised.

**Selecting the level of investigation**. Not all events need to be investigated to the same extent. At the Departmental level, guidance will be necessary so that the gravity of the event is reflected in the seniority of the personnel involved. While many accidents can be investigated by the Departmental Safety Coordinator or other nominee of the Head of Department, more serious incidents must involve the Head of Department personally. Involving senior staff in the investigation of significant events is a practical demonstration of their commitment to promoting and sustaining a positive health and safety culture.

By the end of the investigation, in order to be able to learn the appropriate lessons, we should know: -

- The way things were and how they came to be (the who, what, where, and when);
- What happened; the sequence of events that led to a particular outcome (the how, and with what result);
- Why things happened as they did. Analyse both immediate and underlying causes<sup>6</sup> (the why);
- Action needed to avoid a repetition.

#### Key Steps in the Investigation Process

#### Collect the Evidence: -

- From all relevant sources recognising:
  - o The importance of physical evidence, written evidence and personal testimony;
  - The difficulty in achieving objectivity and accuracy without bias;
  - That the investigator's behaviour and questions will determine the availability of evidence and influence the outcome of the investigation;
- From physical evidence by observation and measurement recognising:
  - o The need for varying levels of detail and accuracy depending on circumstances;
  - The personal limitations on expertise and the need for appropriate technical assistance in certain circumstances;
  - o The need to record information and evidence in an appropriate manner.

<sup>&</sup>lt;sup>5</sup> Reg 8, Management of Health and Safety at Work Regulations 1999; The Health and Safety (First Aid) Regulations 1981; Reg 27, The Ionising Radiation Regulations 1985; Regs 5(1)(b) and 9, The Diving Operations at Work Regulations 1981; The Fire Precautions (Workplace) Regulations 1997, SI 1997 No. 1840.

<sup>&</sup>lt;sup>6</sup> Immediate causes - includes the job being done at the time and the people involved. Immediate causes are those failures that lead directly to injury, ill health, environmental harm or loss.

- From documentary evidence recognising:
  - o Documents vary in their relevance, usefulness and reliability;
  - o Records are not always a reliable indication that the events occurred as stated;
  - That the records of events do not always give an indication of the standard to which the events or associated work were carried out.
- Personal testimony recognising:
  - That different people will give different versions of the same events;
  - The need to distinguish fact, opinion and point of view;
  - That personal accounts may differ from what is known to have happened, (e.g. from the analysis of physical evidence).
  - o That attitude and circumstances may influence individual interpretation of events.

With these caveats in mind, the investigator should: -

- Observe the scene;
- **Examine documents** relevant to the circumstances and the premises, plant and equipment, substances and work procedures involved, and;
- **Interview those involved** or who witnessed the event or the conditions leading up to the event.

#### Assemble the Evidence from Varying Sources by: -

- Placing the events in a sequence showing the links between the events and their relative importance, report and document an account of the event in a reasoned logical fashion to an appropriate level of detail;
- Judging the reliability of sources, and that the "truth" may not be always ascertainable;
- Recognizing that events have more than one cause and consequence;
- Suggesting reasons why people behaved as they did and showing how motive, cause and consequence may be linked.

In practice, evidence is assembled and hypotheses tested as it is collected. At the conclusion, however, a coherent picture should emerge in the form of a written report of the events to establish clearly what happened and why. The investigator must therefore test and assess the evidence in terms of its relevance, reliability and relative importance. Resolution of conflicting or incomplete evidence should be attempted but may be impossible. When evaluating individual behaviour the investigator should strive to understand *why* people behaved as they did, rather than simply note the error.

Compare Conditions with Suitable Standards. The objectives here are to decide: -

- Whether suitable standards had been set to control all the factors influencing the event;
- If standards existed, whether they were suitable and sufficient;
- If standards were suitable and sufficient, whether they were applied and implemented in practice.

**Establish Immediate and Underlying Causes** The above process of collection and comparison will lead to an understanding of the immediate and underlying causes that provoked the accident. The analysis of causes in the following table is not exhaustive, but is indicative of the factors that frequently feature in accidents in Universities.

	Immediate Causes	Underlying Causes
Premises	Access/egress; housekeeping; layout; floor conditions; obstructions; lighting; environmental conditions	Design; selection of workplace; repair/maintenance; cleaning
Plant & Substances	Machine guarding; condition of tools; hazardous substances; ventilation	Design; selection; commissioning; maintenance; personal protective equipment; storage and use of substances; risk assessment of hazardous substances
Procedures	Safe system of work; instructions issued - clarity and adequacy; supervision; safe movement of material or substances; personal protective equipment - selection and use	Safe system of work; emergency procedures; information and instructions - preparation and communication; supervision; transport/movement; contractors - competence and selection; monitoring arrangements
People	Suitability; competence/training; supervision; fitness	Selection/placement; induction or refresher training; cover for absence; safety culture/peer pressure; inadequate/absent supervision
Environment	Spills, escapes, other types of pollution or contamination	Safe system of work, maintenance of plant, and equipment, premises etc. Many causes in common with those above

From such an understanding recommendations can be proposed which identify:-

- Where standards and controls for risks and organisational elements are absent;
- Where standards are inadequate, and;
- Where standards are adequate but not properly implemented.

**Remediation**. The final step is to ensure that recommendations are prioritised and turned into objectives for people to implement, with the aim of preventing recurrence. An agreed timescale should be recommended, based on the seriousness of the event. The Departmental Safety Coordinator should monitor that the remedial action is being taken and is effective.

#### Appendix 1 ACCIDENT/INCIDENT REPORTING

#### Introduction

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) place a legal obligation on the University to report certain types of injury, occupational disease and dangerous occurrence to the relevant enforcing authority (the Health and Safety Executive or local Environmental Health Department) within specified time limits. Within the University, this function is carried out centrally by Safety & Environmental Protection Services.

To ensure that Safety & Environmental Protection Services is informed of accidents/incidents that have occurred, an internal reporting system operates.

#### **Internal Reporting Mechanism**

Following any accident, dangerous occurrence, fire suspected case of occupational disease or occupational ill health or pollution incident a University "Injury or Dangerous Occurrence Report" form should be completed. A supply of these forms can be obtained from Safety & Environmental Protection Services, Ext. 5532 or from the SEPS website (insert url). Full details of the incident should be recorded on this form as explained below.

On completion, the top two copies of the form should be forwarded to Safety & Environmental Protection Services without delay.

Further guidance on time limits appears below. The bottom copy should be retained on file within the department.

#### **Completion of the Report Form**

#### Who should complete the form?

Each department must determine the most effective procedure for completion of the form. This may vary amongst departments and will reflect the managerial and geographical structure of the department. In most cases it will be appropriate for the injured person's immediate supervisor or a more senior manager to complete the form after having discussed the incident with those directly involved. It is essential that reporting of the incident is not delayed if the injured person is off sick or away from work and, in this event, the form should be completed based on the best information available at the time. If significant new information comes to light after the report has been submitted this should be forwarded to Safety & Environmental Protection Services as soon as it is known. It is also important to ensure that, whoever completes the form, an appropriate senior line manager and the Departmental Safety Adviser are made aware of the incident so that further investigation and/or remedial action can be taken if required.

#### Subject of report (Section A)

Several terms such as "major injury", "over three-day injury" and "dangerous occurrence" are defined by RIDDOR and have a very specific meaning. Where incidents that fall within these definitions have occurred Safety & Environmental Protection Services is legally obliged to send a report to the relevant enforcing authority within 10 days of the incident. It is therefore particularly important that incidents of this type are reported to Safety & Environmental Protection Services promptly. If necessary, Departments should

contact the injured person at home to establish the nature of their injuries so that the correct reporting procedures can be followed.

- If there has been a fatal accident or, if anyone (including students or visitors to the University) has suffered a "major injury" Safety & Environmental Protection Services must be notified immediately by telephone. A written report on the "Injury or Dangerous Occurrence" form must be sent to Safety & Environmental Protection Services within three working days. A definition of the term "major injury" appears below.
- An "over three-day injury" is an injury which results in the person involved being unable to perform their normal work (i.e. absent from work) for more than three consecutive days excluding the day of the accident but including any weekends. (e.g. an accident on a Thursday would be an "over three-day injury" if the person involved was absent from work on the Friday and did not return to work on the Monday.) Telephone notification of these incidents is not required although a completed report form is needed.

In the case of "over three-day" injuries, Safety & Environmental Protection Services must report the incident to the enforcing authority within 10 days of its occurrence. In order that a report can be sent within this period it is essential that SEPS are kept informed of any accidents that are likely to result in absences of more than three consecutive days. If this is not certain at the time of the incident but seems likely, the report form should be marked to indicate this. The actual situation should then be confirmed by telephone to Safety & Environmental Protection Services either on the fourth day of absence or on the person's return to work if this occurs first.

- A "minor" injury should be taken to mean any non-trivial injury that does not fall within any of the categories above. Although these are not reported to the enforcing authorities it is University policy to record these as they provide valuable data on the type and prevalence of particular hazards within the University. Safety & Environmental Protection Services must also be informed if an incident that initially appears to have caused only minor injury subsequently results in an over three-day absence as indicated above as a report to the enforcing authority would then be legally required.
- Any "dangerous occurrence" that falls within the definitions in below must be notified to Safety & Environmental Protection Services by telephone immediately. This must be followed by a written report within 3 working days. Other "near misses" that do not fall within the definitions given should also be reported as dangerous occurrences if, taking into account all of the circumstances, the incident was likely to have resulted in serious personal injury or substantial damage to property or significant harm to the environment.

Details of the Incident

- Department in which the incident happened Report the department or unit in which the incident happened (not where the individual is employed). Give the full name of the department or unit; do not use abbreviations
- Exact Location Record the exact place where the incident occurred. Give room number or other precise description. Do not use abbreviations.
- Date Record the date on which the incident occurred.

- Time Record as accurately as possible the time at which the incident occurred.
- Name and telephone number of person to contact Enter information about a person who can be contacted, within the Department where the injured person is employed, who will be able to provide further information about the incident should this be required.

The injured person

- Give the name, home address and telephone number of any injured person, together with their sex and age. Indicate, using the boxes provided, if the injured person is a University employee, student, member of the public etc. If the injured person is employed by a contractor engaged in work for the University please indicate the name of the company employing them.
- Detail the nature of the injury and the part of the body affected.
- Record the trade, occupation or job title. (class/course being followed in the case of students).
- Indicate what led to the injury or condition
- Tick one box that best describes what led to the injury. If this is "Fall from a height" then enter an estimate of the distance through which the person fell. If none of the options describes the circumstances involved, tick the box labelled 'other' and give details of the agent(s) involved.

Was first-aid given?

• Indicate if the injured person was given first-aid. If so, enter the name of the person who provided first-aid.

Circumstances of incident and action taken to prevent recurrence

• Give full details of the events leading up to the accident, what the injured person was doing at the time and any agents involved. Ensure that the information provided is as complete as possible. If necessary continue the account on a separate sheet. In addition give details of any action that has been taken, or is proposed, to prevent a similar occurrence in future (e.g. modification to or repair of equipment or fabric, training etc.). If the person was taken to a hospital, indicate this here: this is especially important in the case of a member of the public who was taken to hospital, as this is also a 'reportable' event .

#### Definition of the terms "Major injury" and "Dangerous Occurrence"

Major injuries are: -

- Any injury, arising from an accident, which results in immediate hospital treatment being given.
- Any fracture, other than to the fingers, thumb or toes.
- Any amputation.
- Loss of sight (whether temporary or permanent)
- A chemical or hot metal burn to the eye or a penetrating injury to the eye.

- Any injury resulting from an electric shock or electrical discharge (including any electrical burn caused by arcing) leading to unconsciousness or requiring resuscitation or admittance to hospital for more than 24 hours.
- Loss of consciousness caused by asphyxia or by exposure to a harmful substance or biological agent
- Either of the following conditions which result from the absorption of any substance by inhalation, ingestion or through the skin-

(a) Acute illness requiring medical treatment(b) Loss of consciousness

• Acute illness which requires medical treatment where there is reason to believe that this resulted from exposure to a biological agent or its toxins or infected material.

Dangerous occurrences are: -

- Identification (by a certificated gas fitter) of a gas fitting or of any flue or pipe used in conjunction with that fitting that is in a condition likely to cause the death or major injury of any person through accidental leakage of gas, inadequate combustion or inadequate removal of combustion products.
- Any incident in which plant or equipment either unintentionally comes into contact with overhead power lines at a voltage exceeding 200 volts or causes an electrical discharge through close proximity to the conductors.
- Any electrical short circuit or overload attended by fire or explosion which results in the stoppage of plant for more than 24 hour and has the potential to cause the death of any person.
- The failure of any closed vessel or associated pipework where the internal pressure was above or below atmospheric pressure, where the failure has the potential to cause the death of any person.
- Any accident or incident that resulted or could have resulted in the release or escape of a biological agent likely to cause severe human infection or illness.
- Malfunction of breathing apparatus.
- Malfunction of radiation generators or ancillary equipment resulting in equipment failing to de-energise at the end of the intended period or the radioactive source failing to return to a safe position.
- Any explosion or fire resulting in the suspension of normal work for more than 24 hours.
- The sudden, uncontrolled releaseinside a building - of 100kg or more of a flammable liquid of 10kg or more of a flammable liquid at a temperature above its boiling point of 10kg or more of a flammable gas in the open air - release of 500kg of any of the substances above
- The sudden release or escape of any substance in a quantity sufficient to cause the death, major injury or any other damage to the health of any person.

# Appendix 2: Conducting an Effective Accident Investigation – Form for Departmental Use

Accident investigations should be completed as soon as possible after learning of an accident or near miss. If the injured person is an employee, his/her line manager should complete the form; if a undergraduate student, the class tutor should complete it; if a postgraduate the research supervisor. Fir incidents involving potential or actual harm to the environment, the Head of Department or nominee should carry out the investigation and complete the form.

Information obtained should be used to prevent accident recurrence

Workplace accidents, incidents and near misses should be investigated as soon as possible for several reasons

- 1. To prevent recurrence. It is important to take corrective action as soon as possible to help prevent other people from being injured;
- 2. To ensure valuable clues are not lost in the investigation and reconstruction of events. The accident scene is likely to change rapidly after the accident due to normal working activity and clean up and repairs that may follow an incident. Additionally, environmental factors such as weather and lighting also could factor into the incident and you will want to capture this information;
- 3. To get the facts from witnesses while the facts are still fresh. As time passes, facts may be lost or obscured though loss of memory or reshaped through one's own opinions or the opinions of peers. Sometimes, facts are changed to protect coworkers.

In addition to the normal investigative tools, such as investigation forms, tape measures, tape recorders, cameras, etc., it is important to approach accident investigations with a set of 'people-sensitive' tools or skills. These include an open mind and a genuine humanitarian concern for people. Some suggestions for conducting an investigation with people-sensitivity include: -

- Show concern for person's injury or near-miss, no matter how slight it may seem to you
- Conduct the investigation as soon as possible after the person has been attended to
- Explain the purpose of the investigation remember, you want to fix the system, not blame the person
- Use a friendly non-threatening approach
- When possible, discuss the accident at the scene to help jog people's memories
- Get witness's view of the incident before asking questions. Listen carefully, avoiding interruptions and distractions.
- Frequently restate facts to secure a correct understanding
- Use tact in clarifying discrepancies in people's recollection of the incident

- Avoid sarcasm, casting blame or threats
- Discuss the incident with other personnel and involve them in identifying ways to prevent recurrences
- Recognise that when personnel acted properly and include that in your investigation report
- Remember: because people's views might differ does not mean that somebody is not telling the truth. People give accounts of events from their perspectives, which, to them is correct.



# University of Glasgow Accident Investigation Form For Departmental Use

Department	Location
	On University Premises? Yes/No
Personal Injury or Illness	Property Damage?
Date Time	
	Property or environmental damage
NAME	
Age	Estimate Costs Actual Costs
Occupation	
Nature of Injury or Illness	Nature of Damage

**DESCRIBE.** Describe clearly what took place. Include the materials, equipment and people involved. If road traffic accident, complete diagram on page 4

**ANALYSIS**. Using the guide on the next page, question (why-what-where-when-who- how) each operating factor and the management controls involved. Describe each management deficiency contributing to the loss.

**PREVENTION**. Describe which controls required additional attention and what action

has or will be taken to prevent recurrence.



Investigated by	Date	Reviewed by	Date

Get the facts by studying the job and situation involved. Question each management control to determine the deficiencies and the corrective action that must be taken to control the actual causes of the loss. This questioning guide will assist but may not contain all the questions necessary.

<b>Operating Factors</b>	Management	Questioning Guide		
	Controls			
People		Who was involved?		
	Placement	What qualifications are necessary to perform this task? Who is most qualified? Why was this worker selected if not most qualified?		
	Training	What instructions or training were provided? What additional training is needed?		
	Enforcement	What instructions or rules were not followed? What additional rules or enforcement action should be established?		
Equipment		What equipment was involved?		
	Design and Arrangement	Why was this equipment used? What equipment should be used? What guards were or were not used? What arrangement problems were there? What additional design and arrangement controls are necessary?		
	Purchasing	How did the quality or hazards of the equipment contribute to the loss? What additional purchasing controls are necessary?		
	Maintenance	What maintenance problems were evident? When should maintenance be performance? How can maintenance be improved? What personal protective equipment is provided?		

		When should personal protective equipment be provided?
		What personal protective equipment should be provided?
Material		What material (cargo) was involved?
	Design and Arrangement	What design characteristics contributed to the loss? How should the material be designed? How was the material arranged, handled and used? How should the material arranged, handled and used? Where should the material be arranged?
	Purchasing	Why was the material being used? What material should be used?
Environment		What environmental factors (building, noise, vapour
		illumination, etc.) were involved?
	Design and Arrangement	Why was it designed and arranged this way? How should it be designed and arranged?
	Purchasing	What purchasing controls are necessary?
	Housekeeping	When should housekeeping be performed? How should housekeeping be improved?
	Maintenance	What maintenance problems are evident? When should maintenance be performed? How should maintenance be performed?

## Vehicle Accident Diagram

Use this part of the form to assist the description of events leading up to and following an accident on University or public roads involving motor or human powered vehicle(s). Show direction and position of vehicles, designating clearly point of contact

#### Instructions

- Show vehicles and direction of travel Your vehicle
  Other vehicles
  1
  2
  etc.
- Use solid line to show path of each vehicle before accident Dotted line after accident
- Give street names





# Safety and Environmental Protection Services Accident Investigation Form

Department	Location
NAME of IP	On University Premises? Yes/No
Accident Ref. No.	Property Damage?
Date Time	
	Property Damaged
Age	Estimated Costs Actual Costs
Occupation	
Nature of Injury or Illness	Nature of Damage

Investigated by	Date
Information obtained from	
Details of F2508	

Brief detail of Incident			

### **Agents Involved**

Plant + Machinery	
Chemicals/biological agents	-
Other agents	
Work Method	
Did the Work Method follow SOP?	
Local CoP?	
Supervision?	
IP Training?	
Other Instructions to IP	
Main Legal Requirements?	
Control Measures? Measure that could have been taken to prevent the Incident	
Action taken to prevent recurrence	
Any previous advice issued?	
Recommendations	

Signed \_\_\_\_\_ Date \_\_\_\_\_