

Health and Safety Code of Practice SCP7 Reporting and Investigation of Adverse Events

Relevant to: University staff, students, users of and visitors to the University	registral and Onler Operating Onler	esponsibility for Folicy.
	University staff, students, users of and to the University	elevant to:
Approved by: University Health and Safety Committee	University Health and Safety Committ	pproved by:
Responsibility for Document Review:Head of Safety, Health and Environment	t Head of Safety, Health and Environme	esponsibility for Document eview:
Date introduced: January 1999	January 1999	ate introduced:
Date(s) modified:January 2001, February 2004, June 2007, Apr 2012, September 2015, March 2018, March 2020	January 2001, February 2004, June 2 2012, September 2015, March 2018, 2020	ate(s) modified:
Next Review Date: March 2022	March 2022	ext Review Date:

RELEVANT DOCUMENTS

- Health and Safety at Work etc. Act 1974
- Management of Health and Safety at Work Regulations 1999
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
- INDG453 (rev 1) Reporting Accidents and Incidents at Work (Health and Safety Executive)
- HS(G)245 Investigating Accidents and Incidents (Health and Safety Executive)
- EH40/2005 (Fourth edition 2020) Workplace Exposure Limits (Health and Safety Executive)
- Pressure Systems Safety Regulations 2000
- Explosives Regulations 2014 (Amendment) 2016
- General Data Protection Regulation 2018

RELATED POLICIES & DOCUMENTS

- Liverpool John Moores University Health and Safety Policy Statement
- MCP1 Organisation for the Implementation of the Health and Safety Policy
- MCP2 Arrangements for the Implementation of the Health and Safety Policy
- SCP30 First Aid

THIS CODE OF PRACTICE FORMS PART OF THE UNIVERSITY'S HEALTH AND SAFETY POLICY AND REPLACES ALL PREVIOUS ISSUES

INDEX

- 1. Objective
- 2. Background
- 3. Definition of adverse events

4. Steps to take following an adverse event

- 4.1 Emergency response
- 4.2 Initial report
- 4.3 Initial assessment and investigation response

5. Reporting procedures

- 5.1 Accidents resulting in serious injuries or illness to staff/students/visitors
- 5.2 Fatal incidents/major accidents
- 6. Investigation of adverse events
- 7. Persons conducting investigations
- 8. Levels of investigation
- 9. Stages of investigation
- 10. Employee/student/contractor awareness
- 11. Statistics and monitoring
- 12. Accident investigation training

13. Recording

APPENDIX 1

Protocol for carrying out the investigation of adverse events

APPENDIX 2

Accidents, occupational diseases, dangerous occurrences and gas incidents reportable to the Health and Safety Executive (HSE) by the Safety, Health and Environment Department and Consultant Occupational Physician

APPENDIX 3 Dangerous occurrences

1. OBJECTIVE

The objective of this Code of Practice is to regulate the reporting and investigation of adverse events at Liverpool John Moores University (LJMU) and meet the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

The central focus of the University's Health and Safety Policy and its Health and Safety Strategy is to develop a positive health and safety culture characterised by communications based on mutual trust, by shared perceptions of the importance of health and safety and by confidence in the efficiency of preventative measures. Reporting and investigation of adverse events is consistent with the University's stated aim of being a university that recognises the importance of good governance to support the delivery of its strategic goals (Strategy Map 2017/2022).

The University recognises that accidents, ill health and incidents can result from failings in management control and are not necessarily the fault of individuals. Development of a culture supportive of health and safety will be encouraged to achieve adequate risk control.

2. BACKGROUND

Health and Safety investigations are an important tool in developing and refining the University's risk management system.

The University has a legal duty to report certain accidents and dangerous occurrences to the Health and Safety Executive, by virtue of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

RIDDOR 2013 introduced significant changes to the existing reporting requirements, mainly in the following areas:

- the classification of 'major injuries' to workers was replaced with a shorter list of 'specified injuries'
- the previous list of 47 types of industrial disease was replaced with eight categories of reportable work-related illness
- fewer types of dangerous occurrence require reporting

The specified injuries, work-related illnesses and dangerous occurrences that are reportable are detailed in Appendices 2 and 3 of this Code of Practice.

In its Guidance HS(G)245 Investigating Accidents and Incidents the Health and Safety Executive advises that all adverse events are reported, and investigated further, dependent on the potential consequences and likelihood of the adverse event recurring.

Regulation 5 of the Management of Health and Safety at Work Regulations 1999 requires LJMU to plan, organise, control, monitor and review its health and safety arrangements. Health and Safety investigations are an essential part of this process.

3. DEFINITION OF ADVERSE EVENTS

'Adverse event' includes the following events:

Accident

- an event which results in injury or ill health

Incident

- near miss: an event that, while not causing harm, has the potential to cause injury or ill health. This includes dangerous occurrences
- undesired circumstances: a set of conditions or circumstances that have the potential to cause injury or ill health (e.g. untrained nurses handling heavy patients)

Dangerous occurrence

- one of a number of specific, reportable adverse events, as defined by RIDDOR

4. STEPS TO BE TAKEN FOLLOWING AN ADVERSE EVENT

There are three steps to take following an adverse event: the emergency response; the initial report; and the initial assessment and investigation response.

4.1 Emergency response

- Take prompt emergency action (e.g. first aid) or contact 2222
- Make the area safe (in some cases this may need to be done first)
- Report the adverse event to the person responsible for health and safety that will decide what further action (if any) is needed; this person will be the supervisor/line manager in the area where the adverse event occurred

4.2 Initial report

- Preserve the scene
- Note the names of the people, equipment involved and the names of the witnesses
- Report the adverse event to the Safety, Health and Environment Department using the electronic adverse event reporting system (please see section 5 below)

4.3 Initial assessment and investigation response

• Safety, Health and Environment Department will report the adverse event to the regulatory body (usually the Health and Safety Executive) if appropriate and initiate further investigation if required

The University's First Aid procedures are detailed in SCP30 First Aid: <u>https://www.ljmu.ac.uk/staff/hsu/codes-of-practice-and-guidance-notes</u>

5. **REPORTING PROCEDURE**

Once the emergency response has concluded, as in Section 4.1 above, all adverse events should be reported to the Safety, Health and Environment Department as soon as possible, using the electronic adverse event reporting system located on the Safety, Health and Environment Department's website: <u>https://www.ljmu.ac.uk/staff/hsu</u>. In most cases, adverse events will be reported by First Aiders, local Health and Safety Officers, line managers and supervisors. There should be no self-reporting by injured parties.

5.1 Accidents resulting in serious injuries or illness to staff/students/visitors

As soon as the serious injury or illness is made known to the supervisor or manager, and the emergency response has concluded, the Safety, Health and Environment Department must be informed by the quickest possible means i.e. by telephone on 231 5540 or via email to <u>HSU@ljmu.ac.uk</u> outside of normal office hours.

When doing so, the following information must be provided to the Safety, Health and Environment Department, in order that it can notify the accident to the Health and Safety Executive (this is the information that is required by the Health and Safety Executive):

- Date and time of adverse event
- Location where the adverse event took place
- Name of injured/ill person
- His/her address (if known)
- Age
- Gender
- Job title (if applicable)
- Status (i.e. employee, student, visitor)
- Nature of the injury or illness
- Part of body affected by the injury or illness
- Whether the person died, had a major injury, prevented attending work for more than seven days
- If a member of the public, whether taken to hospital for more than 24 hours

The above information should then be reported to the Safety, Health and Environment Department using the electronic adverse event reporting system: <u>https://www.ljmu.ac.uk/staff/hsu</u>. The form is compliant with the General Data Protection Regulation.

If there has been property damage as a result of the adverse event, this should be reported to the Estate and Facilities Management Helpdesk on 5555. Please note that Property Damage claims should be made direct to the University's Insurance Officer, located in the Finance Department.

5.2 Fatal incidents/major accidents

In cases of fatal or major incidents the Vice-Chancellor, or his nominated representative, will conduct an investigation by the University and liaise with investigators appointed by the statutory enforcing authorities or approved agents or the University's insurers.

Note: Whenever any member of staff becomes aware of:

- (a) a disabling or fatal injury to a member of staff, student or member of the public on University property or caused by University activities, or
- (b) an incident where the normal business of the University is likely to be seriously disrupted, or
- (c) an incident likely to bring the University into disrepute

the member of staff will immediately inform Security Services on 2222, his/her supervisor/line manager and the Safety, Health and Environment Department. The Incident Management Team may be convened, dependent on the circumstances.

Employees will **not** provide information or give interviews to the media regarding any adverse event addressed in this Code of Practice. This is the responsibility of Corporate Communications.

6. INVESTIGATION OF ADVERSE EVENTS

All reportable injuries, diseases and dangerous occurrences will be formally investigated.

In addition, other adverse events will be investigated, dependent upon the consequences and likelihood of the adverse event recurring.

7. PERSONS CONDUCTING INVESTIGATIONS

A joint approach will be adopted where possible. Upon identifying the need for an investigation from information provided either via the electronic adverse event reporting system or directly to the Safety, Health and Environment Department, in the case of serious injuries or illness, the Safety, Health and Environment Department will assemble an investigation team. The investigation team will include people with the necessary investigative skills, e.g. information gathering, interviewing, evaluating and analysing.

Sufficient time and resource will need to be provided in order to carry out an effective investigation. The team will report to someone with the authority to make decisions and act on the investigation recommendations.

8. LEVELS OF INVESTIGATION

The level of investigation will be determined by the potential consequences and likelihood of the adverse event recurring (in the event of incidents), and the severity of the illness or injury, along with the potential consequences and likelihood of the adverse event recurring (in the event of accidents).

As a guide, the following may be appropriate:

- Low level investigation supervisor/line managers/Health and Safety Officer and staff representatives
- Medium level investigation supervisor/line managers/Health and Safety Officer/ Safety, Health and Environment Department and staff representatives
- *High level investigation* supervisor/line managers, Health and Safety Officer, Safety, Health and Environment Department and staff representatives

9. STAGES OF INVESTIGATION

There are four stages to the investigation. They are as follows:

- Step one gathering the information
- Step two analysing the information
- Step three identifying suitable risk control measures
- Step four the action plan and its implementation

Further detail is provided in Appendix 1 of this Code of Practice.

10. EMPLOYEE/STUDENT/CONTRACTOR AWARENESS

Each Director/Head of Service and, in the case of contractors, Estate and Facilities Management (or their authorised agents) will take the necessary steps to ensure that persons are aware of the need to report accidents properly.

11. STATISTICS AND MONITORING

The Safety, Health and Environment Department monitors all reported adverse events to identify any trends or areas of particular concern.

The Annual Health and Safety Report to the Executive Leadership Team (ELT) and the Employment Committee of the Board of Governors contains a section on adverse events.

All fire related incidents recorded by Security Services are relayed to the Safety, Health and Environment Department. Incident data is analysed and investigations take place, where appropriate. A report is provided to each meeting of the Fire Safety Management Group, University Health and Safety Committee and in the Annual Health and Safety Reports. This data, along with other adverse event data, is submitted to the Higher Education Statistics Agency on an annual basis.

The responsible Director of School/Service Team will monitor the progress and effectiveness of remedial action identified in investigation reports.

In the unlikely event that an occupational disease is reported to the Health and Safety Executive by the consultant Occupational Physician, he will also include it in the Occupational Physicians' Activity Reporting mechanism.

12. ACCIDENT INVESTIGATION TRAINING

Accident investigation training is delivered by the Safety, Health and Environment Department. The training is aimed at local Health and Safety Officers. Details of the training may be found on the Health and Safety Unit website: <u>https://www.ljmu.ac.uk/staff/hsu</u>

13. RECORDING

The Safety, Health and Environment Department keeps a record of:

- any accident, occupational disease or dangerous occurrence which requires reporting under RIDDOR; and
- any other occupational accident causing injuries that result in a worker being away from work or incapacitated for more than three consecutive days (not counting the day of the accident but including any weekends or other rest days).

It is noted that there is no longer a requirement to <u>report</u> over-three-day injuries, unless the incapacitation period goes on to exceed seven days.

APPENDIX 1

PROTOCOL FOR CARRYING OUT THE INVESTIGATION OF ADVERSE EVENTS

The following steps will be followed in carrying out investigations of adverse events. These are based on the guidance produced by the Health and Safety Executive in HS(G)245 Investigating Accidents and Incidents.

Step one

Gathering the information

- 1. Where and when did the adverse event happen?
- 2. Who was injured/suffered ill health or was otherwise involved?
- 3. How did the adverse event happen? Note any equipment involved.
- 4. What activities were being carried out at the time?
- 5. Was there anything unusual or different about the working conditions?
- 6. Were there adequate safe working procedures and were they followed?
- 7. What injuries or ill health effects, if any, were caused?
- 8. If there was an injury, how did it occur and what caused it?
- 9. Was the risk known? Was a risk assessment undertaken? If so, why wasn't the risk controlled?
- 10. Did the organisation and arrangement of the work influence the adverse event?
- 11. Was maintenance and cleaning sufficient? If not, explain why not.
- 12. Were the people involved competent and suitable?
- 13. Did the workplace layout influence the adverse event?
- 14. Did the nature or shape of the materials influence the adverse event?
- 15. Did difficulties using the plant and equipment influence the adverse event?
- 16. Was the safety equipment sufficient?
- 17. Did other conditions influence the adverse event?

Step two

Analysing the information

18. What were the immediate, underlying and root causes?

Step three

Identifying suitable risk control measures

- 19. What risk control measures are needed/recommended?
- 20. Do similar risks exist elsewhere? If so, what and where?
- 21. Have similar adverse events happened before? Give details.

Step four

The action plan and its implementation

- 22. Which risk control measures should be implemented in the short and long term?
- 23. Which risk assessments and safe working procedures need to be reviewed and updated?
- 24. Have the details of adverse event and the investigation findings been recorded and analysed? Are there any trends or common causes, which suggest the need for further investigation? What did the adverse event cost?

APPENDIX 2

ACCIDENTS, OCCUPATIONAL DISEASES, DANGEROUS OCCURRENCES AND GAS INCIDENTS REPORTABLE TO THE HEALTH AND SAFETY EXECUTIVE (HSE) BY THE SAFETY, HEALTH AND ENVIRONMENT DEPARTMENT AND CONSULTANT OCCUPATIONAL PHYSICIAN

1. WORK-RELATED ACCIDENTS

For the purposes of RIDDOR, an accident is a separate, identifiable, unintended incident that causes physical injury. This specifically includes acts of non-consensual violence to people at work.

A RIDDOR report is required only when:

- the accident is work-related and
- it results in an injury of a type which is reportable (as listed under section 1.1)

1.1 Types of reportable injury

Deaths

Deaths to workers and non-workers are reported by the Safety, Health and Environment Department, if they arise from a work-related accident, including an act of physical violence to a worker. Suicides are not reportable, as the death does not result from a work-related accident.

Specified injuries to workers

The list of 'specified injuries' in RIDDOR 2013 (Regulation 4) includes:

- a fracture, other than to fingers, thumbs and toes
- amputation of an arm, hand, finger, thumb, leg, foot or toe
- permanent loss of sight or reduction of sight
- crush injuries leading to internal organ damage
- serious burns (covering more than 10% of the body, or damaging the eyes, respiratory system or other vital organs)
- scalpings (separation of skin from the head) which require hospital treatment
- unconsciousness caused by head injury or asphyxia
- any other injury arising from working in an enclosed space, which leads to hypothermia, heat-induced illness or requires resuscitation or admittance to hospital for more than 24 hours

Over-seven-day injuries to workers

The Safety, Health and Environment Department will make a RIDDOR report where an employee, or self-employed person, is away from work or unable to perform their normal work duties for more than seven consecutive days (not counting the day of the accident)

Injuries to non-workers

The Safety, Health and Environment Department will make a RIDDOR report for workrelated accidents involving members of the public, or people who are not at work, if a person is injured and taken from the scene of the accident to hospital for treatment to that injury. There is no requirement to establish what hospital treatment was actually provided, and no need to report incidents where people are taken to hospital purely as a precaution when no injury is apparent.

2. REPORTABLE OCCUPATIONAL DISEASES

Diagnoses of certain occupational diseases, where these are likely to have been caused or made worse by their work, will be reported by the Consultant Occupational Physician. These diseases include:

- carpal tunnel syndrome
- severe cramp of the hand or forearm
- occupational dermatitis
- hand-arm vibration syndrome
- occupational asthma
- tendonitis or tenosynovitis of the hand or forearm
- any occupational cancer
- any disease attributed to an occupational exposure to a biological agent

The Consultant Occupational Physician will inform the HSE, providing the University has received a written statement prepared by a registered medical practitioner diagnosing the disease as one of those specified.

3. **REPORTABLE DANGEROUS OCCURRENCES**

The Safety, Health and Environment Department will make a RIDDOR report for dangerous occurrences, which are certain, specified 'near-miss' events (incidents with the potential to cause harm.) Not all such events require reporting. For a full, detailed list, please refer to Appendix 3 of this Code of Practice.

4. **REPORTABLE GAS INCIDENTS**

The Safety, Health and Environment Department will make a RIDDOR report if there is a death, loss of consciousness or someone is taken to hospital for treatment to an injury arising in connection with gas.

Gas engineers registered with the Gas Safe Register must provide details of any gas appliances or fittings that they consider to be dangerous to the extent that people could die, lose consciousness or require hospital treatment. This may be due to the design, construction, installation, modification or servicing, and could result in:

- an accidental leakage of gas
- inadequate combustion of gas
- inadequate removal of products of the combustion of gas

5. EXEMPTIONS

In general, reports are not required for deaths and injuries that result from:

- medical or dental treatment, or an examination carried out by, or under the supervision of, a doctor or registered dentist
- the duties carried out by a member of the armed forces while on duty
- road traffic accidents, unless the accident involved:
 - the loading or unloading of a vehicle
 - work alongside the road, e.g. construction or maintenance work
 - the escape of a substance being conveyed by the vehicle; or
 - a train

APPENDIX 3

DANGEROUS OCCURRENCES

SCHEDULE 1, RIDDOR REGULATIONS 2013

PART 1 - GENERAL

1. Lifting equipment

The collapse, overturning or failure of any load-bearing part of any lifting equipment, other than an accessory for lifting.

2. **Pressure systems**

The failure of any closed vessel or of any associated pipework (other than a pipeline) forming part of a pressure system as defined by regulation 2(1) of the Pressure Systems Safety Regulations 2000, where that failure could cause the death of any person.

3. Overhead electric lines

Any plant or equipment unintentionally coming into:

(a) contact with an uninsulated overhead electric line in which the voltage exceeds 200 volts; or

(b) close proximity with such an electric line, such that it causes an electrical discharge.

4. Electrical incidents causing explosion or fire

Any explosion or fire caused by an electrical short circuit or overload (including those resulting from accidental damage to the electrical plant) which either:

- (a) results in the stoppage of the plant involved for more than 24 hours; or
- (b) causes a significant risk of death.

5. Explosives

Any unintentional:

(a) fire, explosion or ignition at a site where the manufacture or storage of explosives requires a licence or registration, as the case may be, under regulation 9, 10 or 11 of the Manufacture and Storage of Explosives Regulations 2005; or

(b) explosion or ignition of explosives (unless caused by the unintentional discharge of a weapon, where, apart from that unintentional discharge, the weapon and explosives functioned as they were designed to), except where a fail-safe device or safe system of work prevented any person being endangered as a result of the fire, explosion or ignition.

- 6. The misfire of explosives (other than at a mine or quarry, inside a well or involving a weapon) except where a fail-safe device or safe system of work prevented any person being endangered as a result of the misfire.
- 7. Any explosion, discharge or intentional fire or ignition which causes any injury to a person requiring first-aid or medical treatment, other than at a mine or quarry.
- 8. The projection of material beyond the boundary of the site on which the explosives are

being used, or beyond the danger zone of the site, which caused or might have caused injury, except at a quarry.

9. The failure of shots to cause the intended extent of collapse or direction of fall of a structure in any demolition operation.

10. Biological agents

Any accident or incident which results or could have resulted in the release or escape of a biological agent likely to cause severe human infection or illness.

11. Radiation generators and radiography

The malfunction of:

(a) a radiation generator or its ancillary equipment used in fixed or mobile industrial radiography, the irradiation of food or the processing of products by irradiation, which causes it to fail to de-energise at the end of the intended exposure period; or
(b) equipment used in fixed or mobile industrial radiography or gamma irradiation, which causes a radioactive source to fail to return to its safe position by the normal means at the end of the intended exposure period.

12. Breathing apparatus

The malfunction of breathing apparatus:

(a) where the malfunction causes a significant risk of personal injury to the user; or(b) during testing immediately prior to use, where the malfunction would have caused a significant risk to the health and safety of the user had it occurred during use, other than at a mine.

13. Diving operations

The failure, damaging or endangering of:

(a) any life support equipment, including control panels, hoses and breathing apparatus; or (b) the dive platform, or any failure of the dive platform to remain on station, which causes a significant risk of personal injury to a diver.

- **14.** The failure or endangering of any lifting equipment associated with a diving operation.
- **15.** The trapping of a diver.
- **16.** Any explosion in the vicinity of a diver.
- **17.** Any uncontrolled ascent, or any omitted decompression, which causes a significant risk of personal injury to a diver.

18. Collapse of scaffolding

The complete or partial collapse (including falling, buckling or overturning) of:

(a) a substantial part of any scaffold more than 5 metres in height;

(b) any supporting part of any slung or suspended scaffold which causes a working platform to fall (whether or not in use); or

(c) any part of any scaffold in circumstances such that there would be a significant risk of drowning to a person falling from the scaffold.

19. Train collisions

The collision of a train with any other train or vehicle, other than a collision reportable under Part 5 of this Schedule, which could have caused the death, or specified injury, of any person.

20. Wells

In relation to a well (other than a well sunk for the purpose of the abstraction of water):

(a) a blow-out (which includes any uncontrolled flow of well-fluids from a well)

(b) the coming into operation of a blow-out prevention or diversion system to control flow of well-fluids where normal control procedures fail

(c) the detection of hydrogen sulphide at a well or in samples of well-fluids where the responsible person did not anticipate its presence in the reservoir drawn on by the well
(d) the taking of precautionary measures additional to any contained in the original drilling programme where a planned minimum separation distance between adjacent wells was not maintained; or

(e) the mechanical failure of any part of a well whose purpose is to prevent or limit the effect of the unintentional release of fluids from a well or a reservoir being drawn on by a well, or whose failure would cause or contribute to such a release.

21. Pipelines or pipeline works

In relation to a pipeline or pipeline works:

(a) any damage to, accidental or uncontrolled release from or inrush of anything into a pipeline

(b) the failure of any pipeline isolation device, associated equipment or system; or(c) the failure of equipment involved with pipeline works, which could cause personal injury to any person, or which results in the pipeline being shut down for more than 24 hours.

22. The unintentional change in position of a pipeline, or in the subsoil or seabed in the vicinity, which requires immediate attention to safeguard the pipeline's integrity or safety.

PART 2 - DANGEROUS OCCURENCES REPORTABLE EXCEPT IN RELATION TO AN OFFSHORE WORKPLACE

23. Structural collapse

The unintentional collapse or partial collapse of:

(a) any structure, which involves a fall of more than 5 tonnes of material; or
(b) any floor or wall of any place of work, arising from, or in connection with, ongoing construction work (including demolition, refurbishment and maintenance), whether above or below ground.

24. The unintentional collapse or partial collapse of any falsework.

25. Explosion or fire

Any unintentional explosion or fire in any plant or premises which results in the stoppage of that plant, or the suspension of normal work in those premises, for more than 24 hours.

26. Release of flammable liquids and gases

The sudden, unintentional and uncontrolled release:

(a) inside a building

(i) of 100 kilograms or more of a flammable liquid;

(ii) of 10 kilograms or more of a flammable liquid at a temperature above its normal boiling point;

(iii) of 10 kilograms or more of a flammable gas; or

(b) in the open air, of 500 kilograms or more of a flammable liquid or gas.

27. Hazardous escapes of substances

The unintentional release or escape of any substance that could cause personal injury to any person other than through the combustion of flammable liquids or gases.