



THE UNIVERSITY OF WESTERN AUSTRALIA

SCHOOL OF MECHANICAL AND CHEMICAL ENGINEERING

SAFETY AND HEALTH MANUAL

IN THE EVENT OF AN EMERGENCY PHONE

2222

EMERGENCY CONTACTS

EMERGENCY 2222

CALL THIS NUMBER FOR ALL EMERGENCIES AND GIVE THE FOLLOWING INFORMATION:

- ❑ THE TYPE OF EMERGENCY
- ❑ YOUR LOCATION (BUILDING AND ROOM NUMBER)
- ❑ YOUR NAME AND PHONE EXTENSION

AUTHORISED FIRST AID OFFICERS

VIEW CURRENT APPOINTMENTS:
<http://www.mech.uwa.edu.au/postgrads/safety/emergency.html>

EMERGENCY PHONE CONTACTS	
AMBULANCE	2222
FIRE	2222
HOSPITAL	(0) 9346 3380 (QE 2 'G Block' Emergency)
DOCTOR	2118 (UWA Medical Centre - office hours)
POISONS INFORMATION CENTRE	0 13 11 26 (24 hours)
SECURITY OFFICE	2222 (All after hours emergencies)
DEPUTY FIRE WARDEN	http://www.mech.uwa.edu.au/postgrads/safety/emergency.html
DEPARTMENTAL SAFETY OFFICER	http://www.mech.uwa.edu.au/postgrads/safety/emergency.html

FIRST AID FACILITIES AND FIRE ALARMS	
FIRE ALARMS ARE LOCATED ON EACH LEVEL IN EACH STAIRWELL	
MAJOR FIRST AID KITS LOCATED IN	G50/52 Ground Floor Materials Laboratories 181A First Floor Materials Laboratory
MINOR FIRST AID KITS LOCATED IN	G60 Workshop and 2 nd Floor central stair landing
SAFETY SHOWERS & EYE RINSES LOCATED IN	G50 Ground Floor Materials Labs. G28, 181A and 1.74.

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1. General Policy Statement and Health Management on Safety

This School fully endorses the UWA OSH policy. This handbook supplements the main UWA policy to provide and maintain safe and healthy working conditions, equipment and systems of work for all its staff, students contractors and visitors. To this end, information, instruction, training and supervision is provided as necessary. Responsibility is also accepted for the safety and health of other people who may be affected by the schools activities, as far as reasonably practicable.

The allocation of safety-related duties, the particular arrangements made to implement this policy and the way in which the policy is to be monitored is set out below.

A copy of this statement will be made available to all staff and students via the School's website.

The policy, the organisation and the arrangement for implementing it will be kept up to date to take account of changes in the Schools activities. This will be reviewed when necessary and confirmed by the Head of School. Following review, a copy of this document will be sent to the UWA Safety & Health Office (SHO).

Signed Copy by A/Professor Brett Kirk held on file in the Admin. Office

.....

Signed

Head of School

Dated:

2. The Organisation for Carrying Out the Policy

Ultimate responsibility for safety & health in the School lies with the Head of School. Successful management of safety and health can only be effectively achieved when the participation of staff at all levels in the school is built into all its processes for identifying and controlling risk.

For routine safety and health matters the line of responsibility follows the normal managerial lines in the School. Please refer to the School Organisational Chart in Appendix A.

All members of the school have a responsibility to co-operate with their colleagues to achieve a safe and healthy workplace, and to take reasonable care of themselves and others. They are required to work in accordance with this policy and associated procedures.

Responsibilities extend beyond minimum compliance with statutory obligations; there is a responsibility to encourage good practice and due concern.

Whenever a member of this School notices a safety or health problem that he or she is not able to put right, it must immediately be reported a person in authority.

To assist the Head of School in managing safety and health, there are key roles with specific duties as described below:

- Principle Laboratory/Workshop Supervisors – Assume responsibility for the areas under their control, conduct regular hazard/risk assessments, identify and manage all safety hazards and report to the Head of School at least annually. Assume responsibility for risk assessment of all manual handling hazards and implement strategies to reduce the level of risk in their area.
- Chief/Deputy Fire Warden – Report to the Head of School at least annually on all issues of fire and emergency response. Document and implement an emergency response plan for key identified risks. Organise warden training and ensure adequate area coverage throughout the year with provision for long-term sickness and leave.
- School Safety Officer – Advise the School on all aspects of Safety and Health, carry out monthly safety audits, assist in the development of policies and safety systems, chair the School Safety Committee.

- School Safety Representative – Represent the interests of employees in all areas of safety and health, identify workplace hazards, participate in safety audits.
- Radiation Safety Officer – Report to the Head of School at least annually on all aspects of Laser Safety, carry out laser safety audits and organise laser safety training.
- Biological Safety Officer – Report to the Head of School at least annually on all aspects of Biological Safety, carry out biological safety training and ensure that the PC2 Laboratory is operating to the required standard through inspections and consultation.
- First Aid Coordinator – Report to the Head of School at least annually on all First Aid matters, coordinate the activities of all First Aid Officers to ensure that first aid stocks are maintained, immunisation and retraining of FA Officers and first aid coverage is provided.

Duty of Care

For any event for which you have responsibility for the safety and health of others, you should familiarise yourself and those within your care with basic domestic safety arrangements, for instance, location of fire extinguishers and emergency exits. This is particularly important at the first meeting of a course.

3. The Arrangements for Safety and Health

3.1 Reporting & Investigating Safety or Health Issues

A member of the School noticing a safety or health problem that they are not able to put right themselves should immediately tell someone in authority, following the University's, [“resolving safety issues”](#) policy.

3.2 Consultation for Safety & Health

All members of the School are encouraged to raise concerns about safety and health with appropriate managers or supervisors. Additional formal consultation will take place through the School Safety Committee.

The membership of the School Safety Committee shall consist of the Head of School, School Safety Officer, Safety and Health Representatives, Student Representative, and those people with specific responsibilities for aspects of safety and health indicated in the policy.

The Committee shall be chaired by the Head of School, or his nominee, and shall meet four times per year. Minutes of meetings shall be made available to all members of School staff via the Internet.

The primary role of the School Safety Committee is to advise the Head of School on the implementation of matters relating to safety and health in the local area. This will be achieved by:

- 1) Consideration of reports on such matters as accidents and other incidents, safety inspections, and reports from those with delegated safety duties.
- 2) Assisting in the development of safety rules and safe systems of work.
- 3) Advising on the safety content of information and training for staff and students.
- 4) Monitoring of this policy.

3.3 Safety and Health Training

New Staff - The immediate manager or supervisor will ensure that all new members of staff are inducted for safety and health as soon as practicable, by using the [UWA guidance, Safety and Health Office checklist](#) and School checklist as a framework. Records of induction should be kept.

New Students - New students will be informed about the same points as part of their introduction to the School. Students should also be made aware of the [student guide to safety and health](#) produced by the SHO. Part-time students will be briefed by their course tutor and supported by written briefing materials.

The need for specialist training should be identified by managers and supervisors, and all requests for such training should be directed to either the Head of School or the School Safety Officer.

Members of the School will not be expected to undertake any procedure for which they have not been adequately trained.

3.4 Fire and Emergency Procedures

If the fire alarm sounds then the main building, lecture theatres and Science Reading Room are to be evacuated and no one should enter the building until authorised to do so.

Leave the building in an orderly fashion without delay and assemble at the James Oval or on the western side of Carpark number 14. Follow the instructions of fire wardens or emergency service personnel. Do not re-enter the building until instructed to do so.

**DO NOT USE LIFTS
IN EMERGENCY OR FIRE EVACUATION!**

ALARM TONES	ACTION
Alert Tone (1 minute) Voice Evacuation	Fire or emergency evacuation
Brief Alert Tone	Testing only - no action

A fire alarm is activated from either a fire detector or a break glass unit.

Simultaneous alarms will sound in the communication centre of the Fire Brigade Headquarters and in the University's Security and Central Control Room. A visual indication of the location is presented on the Fire Control Panel located in the west main entrance foyer.

IF A FIRE ALARM SOUNDS AT NIGHT OR ON A WEEKEND, ATTEMPT TO LOCATE THE SOURCE OF THE FIRE AND ASSIST INJURED PEOPLE. ALERT SECURITY ON 2222, ONLY TRY TO FIGHT THE FIRE IF IT IS SMALL. USE THE CORRECT EXTINGUISHER!

Portable Fire Extinguishers are located in prominent positions in passageways around the building. In some cases an extinguisher station will offer more than one type of extinguisher. Most extinguishers are Carbon Dioxide or Dry Chemical types. These are suitable for most types of fire, however, be aware that Dry Power may damage expensive instrumentation. Both types are suitable for electrical fires.

Beware! Do not use Water or Foam extinguishers on electrical fires and do not use Water extinguishers on flammable liquid fires.

3.5 Action in the Event of an Incident - First Aid Procedures

First Aid Officers and Fire Wardens will require to be trained in 'Emergency Procedures for Hydrofluoric Acid spills and exposure'. Hydrofluoric acid (HF) accidents, depending on the magnitude of the accident may require a coordinated response from both the First Aid and Fire Wardens.

HF accidents are defined in the following areas:

- Minor Spills
- Major Spills
- Skin exposure
- Eye exposure
- Fume inhalation

In each instance the priority will be on isolating the site of the accident to prevent further exposure, site evacuation (if necessary) and removing and treating individuals who have received exposure. First line responses include emergency showers, calcium gluconate gel and immediate hospitalisation in accordance with School of Mechanical Engineering ‘Safety Procedures for Hydrofluoric Acid’.

3.6 Risk Assessments – UWA Main Procedure

There is a legal requirement to assess risks. Where these are found to be significant, the assessment must be written. It is the responsibility of managers and supervisors to satisfy themselves that risk assessments:

- are conducted
- are completed to a consistent and reasonable standard
- relate to the actual work being undertaken
- are reviewed
- are supported by adequate and appropriately maintained records

It is the responsibility of persons in control of areas or activities to ensure risk assessments are carried out. A School risk assessment form is available from the [SHO website](#).

There are five principal steps in the process of carrying out a risk assessment:

- 1) Look for the hazards, ignoring the trivial and concentrating only on significant hazards, which could result in serious harm or effect multiple people.
- 2) Decide who might be harmed and how, thinking about people who may not be in the workplace all the time, e.g. cleaners, visitors and contractors.
- 3) Evaluate the risks arising from the hazards and decide whether existing precautions are adequate or more should be done.
- 4) Record your findings.
- 5) Review your assessment on a regular basis. For example:

If a laboratory procedure is carried out frequently the risk assessment

only needs to be undertaken once. A single risk assessment will cover the procedure being repeated over and over again. However, sooner or later you will need to review your assessment in the light of changes in substances and procedures that could lead to new hazards.

In an office environment, changes may be made to the layout and/or introduction of new electrical equipment i.e. kettle, heaters.

You will want to consider these sorts of changes in their own right and do whatever you need to reduce the level of risk.

3.7 Smoking Policy

The University is committed to ensuring that its staff, students, contractors and visitors are not exposed to tobacco smoke in its workplaces including its building and vehicles. In the interest of having a healthy workforce, staff who smoke are provided with assistance to quit smoking. Accordingly, managers and supervisors shall promote and ensure compliance with the Smoking Policy.

The School follows the University's [smoking policy](#).

3.8 Electrical Safety

The following arrangements for electrical safety apply to all electrical equipment in use in the School, including personal items.

Only electrical equipment that is properly installed and maintained should be used in the School. The indication that equipment has been properly maintained is that a label is attached to each item bearing a date after which it should no longer be used. This also applies to personal equipment held by staff, for example, a lamp, coffee percolator, overhead projector, etc. Items not bearing such a label, or where the date on the label has been passed, should be withdrawn from use and given to the appropriate manager or supervisor.

All portable appliances will be regularly inspected, tested and tagged. All members of the School should routinely check that their electrical appliances are not damaged and that there are no obvious signs of misuse such as damaged or discoloured plug tops and worn cables.

Any item that becomes faulty should be taken out of service and labelled and either discarded or sent for repair.

Equipment and furniture should be sited so as to avoid the need for leads to trail across floors. Where these cannot be avoided, proprietary rubber strips should be used to reduce the risk of tripping. The use of socket adaptors should be avoided wherever possible. Only mains power boards are permitted. Extension leads are seen as temporary measures to be used only until additional socket outlets have been provided.

School equipment held off-site will be included in periodic inspections and the holder being responsible for bringing it into the University.

3.9 [Purchasing Policy](#)

All materials and equipment acquired by the School, or by individuals for use at work, must comply with the standards, codes and regulations prescribed by law and University requirements. Only those that can be safely accommodated and used within the School may be obtained. The individual wishing to acquire the material or equipment should obtain all necessary information to enable the risk assessment to be undertaken in order to demonstrate compliance with the foregoing.

To monitor that the requirements of the purchasing policy are being followed, only colleagues who are authorised signatories must approve acquisitions. These are revised annually and details can be obtained from Financial Services.

3.10 Children

If under exceptional circumstances children are brought onto university premises they must be under immediate and close supervision of a parent or guardian at all times. They are not permitted in any workshop or laboratory where experimental or other work is being undertaken or other environment considered by the person in charge to be inappropriate.

3.11 Visitors and Contractors

Visitors to the School should be asked to report to the relevant unit office. The member of the unit who the visitor wishes to see will be telephoned from the office and asked to report to the office to meet their visitor and subsequently accompany them in the unit. The University policy on [visitor safety](#) should be followed.

3.12 Services and Facilities

The planning and undertaking of building, alteration and repair work, and the installation and maintenance of plant and equipment, by persons from outside the University needs to be adequately controlled to ensure the safety and health of members of the School. The University has a [safety and health policy for contractors](#).

3.13 General Office Safety

For routine office activities, with low risk of injury, no formal assessment of the work is necessary. Non-routine office activities should

be assessed, and where any significant hazards are identified, the results of the assessment should be recorded.

A copy of the [office safety checklist](#) is available from the SHO and individuals should use this to check the safety of their own office accommodation. Problems identified should be reported in the normal way.

Falls are the most prolific cause of injury in offices, accounting for almost half of all office injuries. Next come the handling and lifting of goods, materials and equipment, followed by stepping on, or striking against things; falling objects; machinery; transport; and the use of hand tools. Training in safe handling and lifting is available for any staff likely to lift equipment with any regularity. The maintenance of high standards of general housekeeping in offices goes a long way to preventing injuries. Care should be given to the general layout and storage of items to minimise the possible hazards. Particular attention should be given to: the condition of floors and floor coverings; trailing leads; storage of items, particularly heavy ones, on shelves above shoulder height; safe methods of reaching up.

3.14 Safety off Campus

Many School activities take place off University premises, including field trips and supervision in isolated areas. Staff and students have a responsibility to identify foreseeable risks and take appropriate action. Relevant aspects might include:

Field Trips - adequate competent supervision, including first aid training, appropriate protective clothing and sensible footwear, sufficient communications arrangements, availability of emergency equipment. Tutors responsible for fieldwork should familiarise themselves with the University guidance on fieldwork.

For all field trips a risk assessment must be produced.

Members of staff responsible for the placement of students should familiarise themselves with the University guidance on [placement of students](#).

3.15 Manual Handling

Manual handling is one of the most common and costly of workplace injuries. Manual handling involves the use of human effort to push, pull, carry, hold or restrain any object or animal. It does not just relate to the lifting of heavy objects.

UWA has a policy on manual handling which requires areas to undertake risk assessment of all manual handling hazards and implement strategies to reduce the level of risk. This includes but is not limited to the

provision of training, and ongoing supervision of staff and students involved in manual handling activities. Please refer to the School Policy and Procedures for Manual Handling.

- No one should undertake any manual handling task that they feel that they are unable to manage, if in doubt, do not do the task, seek assistance. A safety first mentality should be adopted.
- Be aware of the risk factors – the safety of the general environment i.e. is it cluttered, is lighting adequate, are there any slip or trip hazards? The characteristics of the load i.e. heavy, awkward, difficult to grasp. Be mindful of your own ability i.e. fatigue, unwell, lacking in coordination.
- Where possible use assistive equipment, such as trolleys and lifting devices. Please refer to the Mechanical Workshop for the availability of heavy lifting devices and trolleys.
- Always use correct manual handling technique – keep the spine neutral, bend with the knees using semi squat and avoid twisting, flexing forward with the spine, or sideways leaning of the spine.

Assistance with manual handling risk assessment and training in manual handling technique is provided by the Safety and Health Office, phone ext 2784. Staff are encouraged to phone if they have concerns.

Relying on training of staff is not as effective in reducing manual handling injuries as proper workplace design and provision of equipment – please keep this in mind!

3.16 Safety in the Use of Computer Workstations

Please refer to the UWA brochure ‘Working Comfortably with Computers’ and note that the same principles of adopting correct posture at the computer applies to lap tops as well as desk based computer monitors. Be aware that if you are working from home, you should also apply the same principles.

Most people to have difficulty checking whether they have correct posture when set up at a computer, even after reading a pamphlet! If needing assistance, or if at any time you start to develop symptoms, please contact the Occupational Therapist in the Safety and Health office. Since there are many computer ‘ergonomic’ accessories on the market, the UWA Safety and Health office provides free trial of equipment. It is a myth to think that using all things that are available will prevent problems, likewise what works for one person may not suit another. The professional opinion of an Occupational Therapist is warranted if you are having any difficulty with comfort at the computer.

3.17 Working Alone

Where individuals work after normal hours, they should adhere with the policy on working in isolation. The School also has a 'Working Alone' policy that needs to be adhered to.

3.18 Working from Home on UWA Business

Where staff have approval to work from home on a regular and ongoing basis, their manager or supervisor should ensure that they have received all information concerning safety and health and the management of sensitive University information.

The same duty of care applies to staff who work at home on University business, as when they work on-site. This arrangement can have significant repercussions on provision of equipment, at the very least the School/Area is charged with the responsibility of ensuring that the home based workplace is safe.

Staff who work from home on a regular basis should undertake a self-assessment of their working environment in accordance with the UWA working from home policy.

It is the managers and supervisors responsibility to ensure that a formal written agreement is in place to delineate who has responsibility for costs and equipment required to support the working from home arrangement. Please refer to the Working From Home policy.

The Senior Occupational Therapist in the UWA Safety and Health Office is available to provide assessment of home-based workplace environments in the event that there are any concerns. Please phone 6488 2784.

3.19 Safety in Workshops and Laboratories

It is the duty of supervisory academic and technical staff to familiarise themselves with the safety and health legislation and Codes of Practice which are relevant to the work being undertaken in their area of responsibility and to ensure that other members of staff and students comply with these requirements.

As part of their day-to-day responsibilities they will ensure that:

- safe methods of working exist and are implemented.
- staff, students and others under their supervision are instructed in safe working practices.
- new employees working within their School are given instruction in safe working practices.

- regular safety inspections are made.
- positive, corrective action is taken where necessary to ensure the safety and health of all staff, students and others.
- all plant, machinery and equipment in the area in which they work is adequately guarded, regularly maintained and in safe working order.
- all reasonable practicable steps are taken to prevent the unauthorised or improper use of all plant, machinery and equipment in the area in which they work.
- appropriate protective clothing and equipment, first aid and fire appliances are provided and readily available in the School in which they work.
- toxic, hazardous and highly flammable substances are correctly used, stored and labelled.
- they monitor the standard of safety and health throughout the unit in which they work, encourage staff, students and others to achieve the highest possible standards of safety and health and discipline those who consistently fail to consider their own well-being or the safety and health of others.
- all signs used meet the statutory requirements.
- they report, as appropriate, any safety and health concerns to the appropriate person in authority.

All work will be conducted in accordance with the University's Occupational Safety and Health Policy and any specific Codes of Practice relating to particular activities and industry specific standards.

3.20 Safety of Equipment

Where equipment related to safety and health, particularly personal protective equipment is provided by the School, there is a duty to ensure the equipment is appropriate for the intended use, clean, properly maintained and properly stored. The University guidance on [personal protective equipment](#) should be followed.

4. Monitoring of the Policy

Day to day monitoring of compliance is the responsibility of all those with managerial responsibility. Managers should also use reports of injury, near misses and sickness linked to work to determine whether existing arrangements require modification in order to prevent a recurrence.

Monitoring the effectiveness of the policy will be carried out by way of planned School/Unit inspections. This should follow the University policy on [inspecting the workplace](#).

INDEX OF USEFUL PHONE NUMBERS AND SERVICES

For all **Emergency** calls (24 hours per day) dial 2222

- **First Aid** View current appointments at:
<http://www.mech.uwa.edu.au/postgrads/safety/emergency.html>
 - **QE 2 Hospital**
 - Emergency Department (0) 9346 3380
 - **UWA Medical Centre**
 - Campus doctor Ext. 2118
 - **Poisons Information Centre**
 - Information service 24 hours (0) 13 11 26
 - **Security Office**
 - Assistance 24 hours Ext. 3020
 - **Telephone Help Desk** Ext. 1111
 - **Switchboard** Ext. 99
-
- **Services**
 - Departmental Laser Safety Officer - view current appointments at:
www.mech.uwa.edu.au/safetypeople/default.html
 - UWA Insurance Officer Grant Wallace Ext. 3214
 - Sexual Harassment
UWA Equity Office Ext. 2252 <http://www.acs.uwa.edu.au/hrs/equity>
 - Counselling Services Support Centre Ext. 2423
 - Postgraduate Students Officer Ext. 2292
 - International Students Officer Ext. 3941
 - UWA Safety and Health Policy
http://www.safety.uwa.edu.au/policies/occupational_safety_and_health
 - UWA Safety and Health Office <http://www.admin.uwa.edu.au/sho/>
 - School Safety information <http://www.mech.uwa.edu.au/safety/>

