General Housekeeping

- Emergency evacuation procedures
- Restroom location
- Mobile phones

OHS Division

www.uq.edu.au/ohs
ohs@uq.edu.au
Training Objectives

- Introduction to the Work Health and Safety (WHS) Legislation, terminology
- Responsibilities for Supervisors and Managers
  - Risk Management
  - Supervision and Training
  - Incident Reporting and Investigation
- Offences and penalties
- Consultation and assistance

Work Health & Safety Act 2011

Applies to:
- All workplaces except those under Coal Mining, Mining and Quarrying, Gas and Geothermal
- All people in the workplace i.e. workers, contractors, students, visitors, volunteers and outworkers

PCBU (Person Conducting Business or Undertaking) must ensure:
- The health and safety of each of their workers
- His/her own work health and safety
- The health and safety of others is not affected by the PCBU's activities

Assigned Responsibilities

- PCBU (Person conducting business or undertaking)
- Officers (those with substantive decision making powers e.g. VC, COO, Executive Deans)
- Supervisors and Managers
- Individuals
- Designers, manufacturers, importers...
Position Descriptions - Responsibilities

- OHS responsibilities vary with role at UQ and must be incorporated into staff Position Descriptions (PDs)
  - What is that person's OHS responsibilities?
  - Have relevant training requirements been included in their duties?
- PPL 2.10.04 Staff Responsibilities for OHS
  - 2.10.04 Staff Responsibilities for Occupational Health and Safety
- OHS responsibilities must be discussed during annual performance appraisal (R&D program)
  - PPL 5.70 Performance Management and Grievance Procedures

PPL 2.10.04 Section 5.3 ‘Supervisors’

The OHS responsibility of supervisors is as follows:
- To undertake effective OHS measures to ensure compliance with the WHS Act and related legislative requirements.

Performance criteria:
- Provide OHS information, training and supervision
- Undertake Risk Assessments
- Ensure application of appropriate risk control measures
- Implement a scheme for hazard and accident follow-up

Supervisors v’s Managers

- Supervisors will have direct reporting relationships to them and specific responsibility for their staff and students. Required to ensure a safe system of work is in place for their team members (regardless of workplace).
- Managers may be responsible for a specific area or program
  - The persons involved in the program or that use the specific facility or equipment must still report to their Supervisor.
  - The Manager of these facilities and activities must ensure a safe system of work and must communicate this to the persons involved, including the Supervisors (e.g. induction).
  - Supervisors must satisfy themselves that appropriate safe systems of work have been developed and implemented by the Manager.
Risk Management

- Determine what **hazards** are involved in your work area and your projects (including those of your staff and students)
- Determine what **risks** are associated with those hazards
- Assign a **rating** to those risks that allows you to prioritise your attention to those tasks, activities or projects with higher risk (this is the process of Risk Assessment)
- Apply measures to **control** those risks, focusing on the higher risk tasks first
- **Review** the control measures to see if they really are working

The Realisation of Harm

Identifying Hazards and their Risks

- Hazard means a situation or thing that **has the potential** to cause harm to a person.
  - Hazards at work may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights, a repetitive job, bullying at the workplace
  - Risk is the **possibility** that harm (death, injury or illness) might occur when **exposed** to a hazard.
  - **A Risk Assessment** involves consideration of the **harm** that could happen if someone is **exposed** to a hazard; and the **likelihood** of it happening.
  - *e.g.* will a person suffer hearing loss working with noisy machinery?
Hazard and Risks examples

• Poor visibility (hazard), may cause you to break your nose (likelihood) if/when you bump into another person in a busy corridor...
• Name another hazard and likelyhood in this picture.
• The hazard is welding light. The risk is the likelihood that a worker might be blinded (maybe permanently) because of exposure to that light
• Name another hazard in this picture.

How to rate those risks – so you can prioritise

Ideally you should rate the risks in your workplace and prioritise your actions according to the risk rating.

When rating risks, think of the hazard, the exposure of the worker to that hazard, and the likelihood (or probability) that the worker will be harmed, and how severe that harm may be (e.g. first aid v’s death)

You should take into account existing controls when making this assessment.

If the risk is high – consider what you can do to lower it!

Risk Assessments - Supervisors

• Direct your workers to perform risk assessments relevant to their area and their activities – before work starts, or immediately if work has already started
• Review and approve risk assessments and provide advice on suggested control measures. Supervisors are responsible for ensuring that risk assessments are of sound quality and effectively eliminate or minimise the risk so far as is reasonably practicable
• Ensure the control measures are implemented and effective
• Ensure that all workers have read and understood the risk assessments and have adequate opportunity to ask questions
• Review risk assessments regularly (e.g. after an incident; following introduction of new equipment; every 5 years)
Options to get you started (depending on your level of experience):

1. Self-directed / self-paced learning
   • Via the UQ Risk Management Training Database

2. Assisted Training
   • Via the UQ Staff Development program
   • Enrol in a training session via, [https://staffdevelopment.hr.uq.edu.au/course/OWS010](https://staffdevelopment.hr.uq.edu.au/course/OWS010)

3. Complete a risk assessment
   • On the LIVE UQ Risk Management Database

Would you do what you ask your workers to do?

WorkSafe Victoria

Would you do what you ask your workers to do?
• A light hearted way to remind managers and supervisors about a very serious message -- make safety a priority when supervising workers.

Runtime: 30s
[http://www.youtube.com/watch?v=dqRVQvOWfh4&feature=related&list=PL9E1CA7327E609C55](http://www.youtube.com/watch?v=dqRVQvOWfh4&feature=related&list=PL9E1CA7327E609C55)

Considering Control Measures

In deciding how to control risks, all persons involved in the tasks/activities must be consulted to ensure appropriate control measures are selected, and to increase the level of acceptance of changes that may be required.

Consider the following:
• What are the existing safety controls? Are they effective?
• Do the controls protect everyone from harm?
• What additional controls are required?
• Degree of harm that would occur (e.g. paper-cut v’s death)?
• What is the availability of suitable ways to eliminate or minimise the hazard or risk?
• The cost of eliminating or minimising the hazard or risk (i.e. cost benefit analysis)
• Consider the current climate and available knowledge
The most important step in managing risks involves eliminating them so far as is reasonably practicable, or if that is not possible, minimizing the risks so far as is reasonably practicable. PPE should be the final consideration, not the first line of defence.

Controls in the workplace

- **Engineering controls** (e.g. ventilation, fume cabinets, Biosafety cabinets, sensors, limiters)
- **SOPs** — standard or safe operating procedures and should include emergency procedures. These can be for projects, activities and for operating equipment (manuals)
- **Training and Supervision** (e.g. inductions, assessment of competency, certificate to operate, instruction on hygiene practices)
- **Protective clothing and equipment - PPE** (lab-gowns, enclosed shoes, safety glasses, ear-muffs)

Prescribed methods and systems of control

- Some systems of control may be specified in legislation
  - Regulations and Ministry notices (set by the Government)
  - Mandatory, must be followed
- Codes of Practice and Australian Standards
  - May be mandatory or advisory
- Organisational Documents i.e. UQ - PPL – Section 2. OHS
  - Policies – mandatory for that organisation, must be followed
  - Procedures – mandatory for that organisation, must be followed
  - Guidelines – advisory
- Where these documents are available, they should be your first point of call
  - If there are no prescribed or advisory documents or systems, then it is up to you to determine an appropriate way to discharge the WHS obligation, taking reasonable precautions and exercising proper diligence
  - Your Work Health and Safety Manager, Coordinator and OHS Advisors should be consulted
Review the control measures

The following questions should be asked:

- Are the control measures working effectively in both their design and operation?
- Have the control measures introduced new problems?
- Are people using these controls or avoiding them – why?
- Is the frequency and severity of health and safety incidents reducing over time?

You should consult with the works and observe them in action! Periodic monitoring should also indicate if controls are working.

**Remember – As new legislation is introduced, or new information becomes available, it may mean existing controls need to be reviewed and upgraded.**

Safe Work Procedures

- Do you have SOPs? Are they
  - Safe Operating Procedures or
  - Standard Operating Procedures
- Are they adequate?
  - i.e. do they describe the method of operation plus what NOT to do? Do they outline the dangers?
  - e.g. a high speed centrifuge has the potential to be damaged and to 'blow out' if the tubes are not balanced properly (Note: newer centrifuges will have stop mechanisms in place)
- Has the SOP been described to person?
- Have you observed the person working to the SOP?
- When do you review these SOPs?
  - after an incident,
  - if anything in the method or equipment changes, or
  - persons state they cannot follow the SOP

Training

- Training Needs Analysis (TNA) has been developed by the OHS Division to aid you in determining what training is required for your staff and students
  - The OHS Division has a plethora of training available online via UQ eLearning (Blackboard) and face-to-face via the UQ Staff Development Program
  - Safety Manager/WHSC, Building Manager, Facility Manager (as appropriate) should be contacted to arrange a local safety induction (to your school / site / building / facility) for your new workers
  - Supervisors are responsible for delivering/organising training for equipment or chemicals specific to your project and for project specific tasks
  - You can delegate this training to a competent person – however you must be satisfied that they are competent (verify experience/qualifications)
  - e.g. If you have a Floor Manager, Lab Manager or Research Assistant, they may provide training for some common use equipment e.g. centrifuges, biosafety cabinets, fume cabinets (if they are competent to do so)
Training Needs Analysis

Example: Lab workers

Online OHS Training Modules

Mandatory OHS training
- General Workplace Safety Training [5 year refresher]
- Annual Fire Safety Training [annual refresher]

Other OHS training that may be required, depending on role at UQ
- Biosafety [2 year refresher]
- Chemical Safety
- Compressed Gases Safety
- Computer Workstations - Design & Adjustment
- Field Safety
- Hand Tool Safety
- Laboratory Safety Induction
- Risk Management Training
- X-Ray Safety Training

https://learn.uq.edu.au/

OHS Staff Development Program

Categories of training:
- Biosafety 2 courses
- Chemical Safety 5 courses
- Ergonomics and Manual Tasks 5 courses
- Fire and Emergency 4 courses
- Governance and Consultation 5 courses
- Occupational Health 3 courses
- Radiation Safety 2 courses
- Safe Work Environment 5 courses

http://www.uq.edu.au/staffdevelopment/ohs
Supervision

- Direct supervision is required for:
  - Anyone that has not been inducted and has not yet received the required training (e.g., as identified via Training Needs Analysis), and is not considered ‘competent’ in the particular task, activity or situation
  - Visitors
  - Contractors you or your unit has engaged (P&F Contractors receive central training)

- The questions an investigator would ask:
  - Is supervision adequate i.e., is the person really being supervised or are they working in the lab where a lab manager, supervisor or a postdoc happen to be doing work at the same time? (This means they are not ‘working alone’ but this does not constitute supervision)
  - Who is doing the supervising and demonstrating tasks – are they competent?
  - Who has determined competency of the person being supervised so that they no longer need supervision – how did they determine competency, do they have proof, and are they competent to do so?

A NOTE: on Design, Modifications etc of EQUIPMENT

Duties of Designers, manufacturers, owners, importers and suppliers of plant structures or substances

If you re-design or modify the equipment, or arrange to have it re-designed or modified – then YOU are the Designer and are obliged under the Act to:

- ensure it is designed to be safe and without risk to health if properly used
- ensure it is constructed to be safe and without risk to health if properly used
- ensure it is appropriately tested and examined
- ensure appropriate information about its safe use is developed and available. This includes operating manuals, any issues with the equipment, training requirements, etc.

Incident investigation - Supervisors

Incidents can and do occur. After any injury has been taken care of the following must be addressed:

- Notify the Safety Manager/WHSC and ensure an incident report is lodged
- Arrange a follow-up investigation
  - What went wrong and why? Learnings?
- Review (and update):
  - risk assessments,
  - control measures (including equipment and PPE),
  - SOPs,
  - Worker’s training and supervision.
- Record recommendations/actions in the UQ Incident Reporting Database

If the injury or incident is substantial it may be regarded as a ‘notifiable incident’ and the Regulator will become involved. The OHS Division must be notified immediately. You must be available to answer any questions the Regulator may have.
**Recommendations and Actions**

- Ensure that recommendations are effective and achievable
- Actions should be followed-through and closed-out

**Inspector’s (Regulator) Powers**

For the purposes of monitoring or enforcing compliance with the WHS Act, an Inspector may:
- Search
- Inspect, measure, test, photograph or film
- Take a thing or sample
- Utilise necessary equipment or materials for exercise of powers.
- Copy a document
- Make enquiries
- Require occupant to give assistance

They may issue an improvement notice* or a prohibition notice*

[to fix ASAP v’s no work in that area or thing until it’s rectified]

**Incident example ... UCLA Chemical Incident**

The Sheri Sangi Case was the first criminal case resulting from an academic laboratory accident

Video: [www.youtube.com/watch?v=m56QkvHuV10](www.youtube.com/watch?v=m56QkvHuV10)
- Video includes Inspector interrogation of the Supervisor.
- Runtime: 6 mins 27s

Agreement Reached in Lab Fire Case

- The supervisor faced criminal charges. He accepted a deal and will pay $10,000, develop and teach a lab-safety course, speak about the importance of lab safety, and volunteer 800 hours of his time in a hospital setting.
- A review after 5 years will determine whether he has met the conditions of the deal and if the charges against him will be dismissed. Violation of the agreement could result in the case going to trial.
Incident example University of SA

SA Uni fined $37,500 for lab explosion.
The Uni of SA has been fined $37,500 and costs for failing to provide safe plant and failing to have a system in place to ensure plant was checked before first use. Uni of SA research assistant Dr Alexander Beddows and PhD student Ian Young. Plants were both struck by projectiles from a pressure vessel when it exploded. They were operating the vessel for the first time. Beddows had designed and assembled the vessel, which was not tested in pressure vessels. The bolts used to fasten the vessel were too low and of the wrong size.

Incident example ...

Oven Heated – Reaction Vessels

Summary of Incidents

There were incidents of incidents involving heated and reaction vessels, commonly known as heated reaction vessels, which have exploded in a series causing serious injury. These vessels are fixed volume and often heated, built up a pressure of over hundreds of atmospheres. This has caused extensive damage and injuries. The reactor vessels were constructed on a student's student's university, and were being used to carry out laboratory experiments. The pressure vessel was not designed or built properly and the vessel was not properly rendered.

Offences under the WHS Act

[Section 30 to 34 of the WHS Act]

Any individual including Supervisors may be liable

- Category 1 Offence reckless exposure of a person to a risk of death, serious injury or illness. Prosecution in District Court
- Category 2 Offence any duty holder fails to comply with a health and safety duty that exposes a person to a risk of death, serious injury or illness
- Category 3 Offence any duty holder fails to comply with a health and safety duty

* Category 2 and 3 prosecution in Magistrates court
* Volunteers exempt from prosecution
* If no prosecution launched for Cat 1 or 2 offence by regulator within 6 months a "person" may request a prosecution
Penalties for breach of Health and Safety duties

<table>
<thead>
<tr>
<th>Category</th>
<th>Corporation</th>
<th>Individual as PCU or officer</th>
<th>Individual as worker or other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1</td>
<td>$3 million</td>
<td>$600,000, five years jail or both</td>
<td>$300,000, five years jail or both</td>
</tr>
<tr>
<td>Category 2</td>
<td>$1.5 million</td>
<td>$300,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Category 3</td>
<td>$500,000</td>
<td>$100,000</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

Workers - Responsibilities

PPL 2.10.04 Staff Responsibilities for Occupational Health and Safety

- Compliance with safe working procedures
- Use of appropriate personal protective equipment and safety systems provided by the employer
- Participate in risk assessments
- Attend required training
- Report WHS problems

* Take the opportunity to review your worker’s performance of the above at their annual performance appraisal

Work Health and Safety Co-ordinator

WHSC Functions PPL 2.10.06 Work Health and Safety Co-ordinator Role and Function

- Are available to advise Supervisors and Workers on the use of the UQ Risk Management Database, and are required to audit at least 20% of active Risk Assessments for the purposes of system integrity and quality control.
- Provide general OHS advice (may also deliver OHS inductions/training).
- Must conduct annual workplace inspections.
- Must report work injury, illness, dangerous event or immediate risk to workplace health and safety to employer/principal contractor, and will be involved in incident investigations
- May be asked to assist an inspector on incident investigations.
- Act as executive officer for the local OHS Committee.
- Have regular contact with the OHS Division specialist OHS Advisors.
Health and Safety Representatives

[Section 50/57 of WHS Act]

- A worker that represents peers/co-workers, not appointed by the employer (compared with WHS Coordinator)
- Any worker or group of workers can request the formation of a “Designated Work Group” (DWG) and a HSR to represent their safety concerns
- Employer to facilitate election if asked

PPL 2.10.05 Work Health and Safety Representative Role and Function

HSR Functions and Entitlements

- Inspect the workplace or any area where a worker from that Designated Work Group (DWG), is conducting work
- Accompany an Inspector
- Be present at an interview with a worker from their DWG on WHS matters with the PCBU or an Inspector with their consent
- Monitor compliance on health and safety matters
- Represent the DWG in relation to, and investigate any health and safety matters
- May issue Provisional Improvement notices (PIN) if trained to do so

Faculty/Institute OHS Committees

PPL 2.10.01 Occupational Health and Safety Committees

- Provides a consultative forum
- Refer matters of OHS Policy to Executive Manager and OHS Division
- Review and disseminate University OHS Policies to relevant personnel
- Ensure OHS is an agenda item on all Board meetings
- It can serve as an avenue to escalate any OHS issues. If financial aid is required for an OHS issue, you may request the OHS Committee consider a ‘minor works request’ which must be accompanied by a ‘hazard identification form’. Ask your WHSC or download from OHS website www.uq.edu.au/ohs "report a hazard"
Summary of OHS Databases

OHS Databases are accessible via the OHS homepage
http://www.uq.edu.au/ohs/

1. Risk Management Database
2. Incident Reporting Database** Remember we now use UQSAFE – Incident! (handout available)
3. Chemwatch (Chemical Safety Data Sheets)

UQ Reportal (OHS Training Records)
• http://www.mis.admin.uq.edu.au/

END

Thankyou

Questions?