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University

Safety, Sustainability and Resilience Handbook

For Staff and Postgraduate Students



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Section 1: General Information





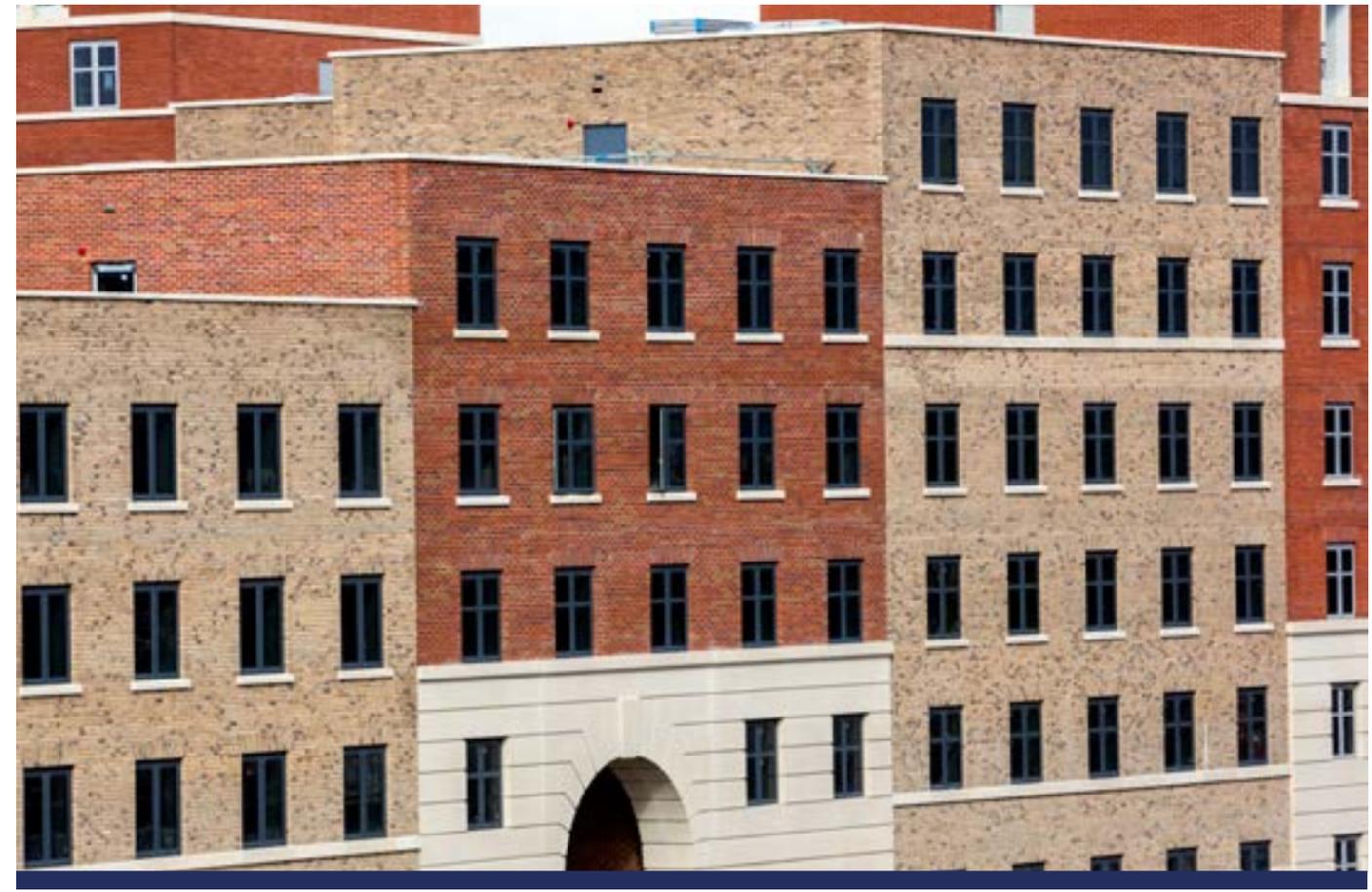
INTRODUCTION

Swansea University is committed to ensuring all activities undertaken in its premises, or by staff and students working off site i.e. field trips or site visits, are carried out to the highest possible standards to ensure safety and protect health and the environment.

This handbook is for all Swansea University staff and post graduate students. The handbook is for guidance on general safety, health and environment at Swansea University and should be used in conjunction with the University website which will provide further detailed information, along with guidance and templates for specific hazards.

Please take a few minutes to read the handbook and familiarise yourself with the University's rules and emergency procedures. If you have any questions, or are unsure of anything contained in the handbook, contact your H&S/Environmental Lead or line manager/supervisor.

The University has dedicated support within the Health and Safety, Resilience and Sustainability teams for further advice and guidance.



ACCESS TO CAMPUS

If you are responsible for any visitors to the University, you have a duty to consider and ensure their personal safety whilst on campus, taking into account any special requirements.

Visitors are expected to follow University safety procedures at all times. Visitors are not to enter laboratories, lecture theatres or any other room on campus without permission.

When you are hosting a meeting or running a course, ensure everyone knows the exit routes and evacuation assembly points for the building. Ensure the visitors are aware of the health, safety and welfare arrangements for the building.

NORMAL WORKING HOURS



Normal working hours at the University are 8:00am - 6:00pm Monday - Friday. To have access outside of normal working hours, permission is to be obtained from your manager/supervisor and Security informed.

OUT OF HOURS

For further information contact Security on:
Singleton: 01792 (60)4271
Bay: 01792 (60)6010
Email: security@swansea.ac.uk



ADVERSE EVENT REPORTING

ADVERSE EVENTS ARE DEFINED AS THE FOLLOWING:

- **Accident:** an event that results in injury, ill health or damage to the environment;
- **Incident:**
 - **Near miss:** an event that does not cause any harm, but had the potential to cause injury, ill health (including dangerous occurrences) or damage to the environment;
 - **Undesired circumstance:** a set of conditions or circumstances that have the potential to cause injury or ill health or damage to the environment. For example untrained lab technicians handling chemicals
- **Dangerous occurrence:** one of a number of specific, reportable adverse events (this means the event must be reported to the HSE within statutory time limits), as defined in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

The University has a duty to control all risks that arise from its undertakings, by ensuring appropriate control measures have been implemented and are being followed to reduce risks to an acceptable level to prevent adverse events.

When an adverse event occurs it is important to investigate it so the root cause/s can be identified and determine how to prevent it in the future. For example, this will include reviewing current controls and risk assessments. It is possible to learn lessons from near misses that can in turn prevent costly accidents in the future.

The University encourages all employees, students, contractors, visitors and others associated with the University to report adverse events that arise out of their undertakings, including activities that take place off campus e.g. meetings, visits or field/site visits.

An adverse event can be reported via the following Web link: <http://www.swansea.ac.uk/healthsafety/reportit/>

If the incident is serious i.e. a fatality or major injury you must protect the scene and contact Security immediately on: **333**

If you require further assistance contact your Health & Safety Lead /Environmental Officer in the first instance. Alternatively contact Corporate Responsibility (CR)

Telephone: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk or sustainability@swansea.ac.uk

If out of normal working hours contact Security on **333**.

FIRST AID

If you require minor first aid assistance please contact a local College or PSU First Aider.

Please make yourself aware of your local First Aiders. There are signs in all buildings displaying details of first aid arrangements.

For more serious injuries or emergencies dial 333.

Contact Security if you are unable to contact your First Aider for assistance, this includes out of hours.



To access reporting forms and further information please visit:

<http://www.swansea.ac.uk/healthsafety/adverseevents/>

Send all completed adverse event reporting forms to: adverseevent@swansea.ac.uk

A completed copy of the adverse event report form will be sent to CR who will arrange for it to be investigated if required, and report to the Health and Safety Executive (HSE) or Natural Resources Wales (NRW) if applicable.

Environmental and near miss incidents may also be investigated.

HEALTH AND WELLBEING

STAFF WELLBEING

With so much of your waking life spent at work, it can have a massive impact on your overall health and wellbeing. At Swansea University the health and wellbeing of our staff is vital to us. We want every day to be a good one.

We know happy, healthy and motivated colleagues are more likely to deliver personal and collective goals, maintaining a positive work life balance. Singleton Campus and the park are great places to explore at lunchtime, and the Bay Campus has the dunes and beach of Crymlyn Burrows on its doorstep. We organise regular walks and activities to help you discover some hidden gems.

Consider taking out a Santander bike or trying a new activity at the University's gyms and sports centres, and all sorts of activities from knitting groups to book clubs are advertised on our community forum. The University has a range of useful services to support you.

OCCUPATIONAL HEALTH CENTRE

Provides support and advice for all colleagues, striving to ensure health is not adversely affected by our work. Our friendly occupational health team of qualified nurses and doctors offer services to promote the physical and mental wellbeing of employees.

Occupational Health Centre

Singleton Campus, ground floor of Penmaen building

08:30 to 16:30 (Monday to Friday)

Contact us-

Telephone: 01792 (29)5538
Email: occupational-health@swansea.ac.uk

Call or email us to arrange a consultation. All information provided is treated confidentially.

Please note: our occupational health service supports health issues and concerns associated with the workplace only. Therefore, other health concerns should be pursued with your GP.

HEALTH AND WELLBEING ACADEMY

Our state-of-the-art Health and Wellbeing Academy, at the College of Human and Health Sciences offers support, advice and information to help people improve their health and wellbeing through early identification and diagnosis of conditions.

The services offered complement those provided by the NHS and allow people to make informed and positive lifestyle choices to improve their health and wellbeing.

Services include: osteopathy, audiology, bereavement care, cardiology and pregnancy related services including, breastfeeding support, hypnobirthing, postnatal support and positive parenting.

Many of our services and support groups are free of charge, whilst our paid for services offer fantastic discounts for staff and students.

Health and Wellbeing Academy, Glyndwr Building, Singleton Campus

Contact us: Call: 01792 518600 or
Email: HWAcademy@swansea.ac.uk

Find out more: www.swansea.ac.uk/hwa

STAFF COUNSELLING SERVICE

The University provides confidential individual counselling sessions for employees with professionally trained, experienced counsellors and psychotherapists. We are committed to protecting your health, safety and welfare and provide this service to assist you in dealing with issues both within and external to the work place.

- Counsellors and therapists adhere to a professional code of ethics and practice.

- Employees are normally offered up to six 50-minute sessions, though in certain cases this number can be extended.

- These are some of the problems you may wish to talk about: stress, anxiety, depression, panic, difficulties associated with loss or illness, relationships, work problems, professional or educational achievements.

Contact us: All members of University staff can contact us directly to request an appointment call: 01792 644668

Find out more: <http://www.swansea.ac.uk/personnel/current-staff/health-and-wellbeing/staff-counselling-service/>

This service is run by the Swansea Counselling Co-op, which is an independent group of psychotherapists, contracted to operate the University Staff Counselling Service.



HEALTHY WORKING

In recent years a variety of major international research has produced compelling evidence that sitting for more than 4 hours each day leads to:

- Enzymes responsible for burning harmful blood fats shutting down
- Reduced calorie burning (Metabolic rate)
- Disrupted blood sugar levels
- Increased insulin and blood pressure levels
- Leg muscles switch off

Irrespective of your level of physical activity, the result leads to increased risks of:

1. Heart disease
2. Diabetes
3. Obesity
4. Cancer
5. Back ache
6. Dementia
7. Depression
8. Muscle degeneration

WAYS TO REDUCE THE AMOUNT OF INACTIVE TIME:

- Eat your lunch away from your desk
- Join in with a nature trail or exercise class at lunchtime
- Go over and speak to your colleagues instead of phoning or emailing them
- Stand during phone calls
- Move around and take a break from your computer every 30 minutes
- Use the stairs
- Have standing or walking /moving meetings

The way you set up your workstation and the equipment you use can make a significant difference to your ergonomic posture. It is important when using a laptop, PC, tablet/ mobile device that you maintain a good posture.

When joining the University or if there is a significant change to your workstation you should complete a self assessment of your workstation layout. If you identify any issues, or you have a health condition that requires specialist support, please report this to your line manager and H&S Lead for your College/ PSU. The checklist is available on the H&S website.

PREGNANCY, NEW PARENTS AND BREASTFEEDING

It is important to review working conditions for individuals who are pregnant and breastfeeding. As pregnancy is a dynamic state involving continuous changes and developments, the same working conditions may raise different health and safety issues for different individuals at different stages of pregnancy, and again on returning to work after childbirth or whilst breastfeeding.

Individuals should inform their line manager and HR of their pregnancy as soon as possible to ensure their working environment and activities are reviewed and any extra controls are implemented to protect the pregnant individual. The review will be repeated during key stages of the pregnancy and upon the return to work to protect the pregnant individual, new parent and their baby.



SWELL

SWell is a voluntary staff engagement programme recognising positive sustainable contributions of individuals and teams across campus. The scheme helps staff members participate in activities that improve the University's environment and our personal wellbeing.

HOW DOES IT WORK?



Register your name and staff email address on SWell at www.swell.teamjump.co.uk.

Once you have registered, login to your SWell account online or download the SWell app (Google Play or App Store) and select from a wide range of activities to participate in to earn green reward points.

HERE ARE JUST SOME OF THE ACTIVITIES YOU CAN TAKE PART IN:

- Maximising your recycling whilst at work
- Taking time out for your wellbeing at lunchtime away from your desk,
- Going to a fitness class or having a walk around campus.
- Perhaps you could donate your unwanted clothes to the British Heart Foundation on campus
- Travel between campuses by bus or cycle.

Whatever you decide, just fill in your weekly activity log either on the website or using the SWell app to keep earning those green reward points (<https://swell.teamjump.co.uk/about>). Gain enough points and you win vouchers or can choose to donate to a local charity.



SMOKING

The University promotes a safe and healthy working environment. If you smoke please be respectful of others' health and do not litter. We operate smoke free campus arrangements:

Smoking (Including E-cigarettes and vaping) is prohibited:

- In buildings, on balconies or in any substantially enclosed spaces
- Within 5 metres of buildings
- In work vehicles, hire or own vehicles used for work purposes.

To ensure the health and safety of people on campus, smoking is only permitted in designated areas and must not be in contravention of the prohibited places above.

DO YOU WANT TO QUIT? WE CAN HELP!

Join our FREE 7 week programme today...

Our Health and Wellbeing Academy and Public Health Wales have teamed up to provide an on campus Help Me Quit programme.

BENEFIT FROM:

- FREE Nicotine Replacement Therapies worth over £250 (patches, gums and more)
- Flexible programme start to suit you
- Small group sessions with like-minded people facing the same challenge
- Professional support in a relaxed and friendly environment

Sessions are every Wednesday at Singleton Campus and Bay Campus.

DESIGNATED SMOKING AREAS

Bay Campus	Singleton Campus
Gower Square	South side of the mall opposite Kier Hardy building
Margum Square	Between the side of the Glyndwr and Grove buildings
Predestrian area (northeast corner of Innovation Hub and southwest corner of ISM)	Opposite the main entrance of the Margam Building
Ourside food court terrace	East side of the Richard Price building (opposite Preseli building reception)
Courtyard of residences (designated areas)	



Contact us through Help Me Quit

Telephone: 0800 085 2219 or
Email: helpmequit@wales.nhs.uk

Find out more:

www.helpmequit.wales



TRAVEL TO OUR CAMPUSES

Working in partnership with Traveline Cymru, the Welsh Government funded public transport information, the University have developed an online tool for all of your travel needs which includes a journey planner. To start travelling sustainably today visit: myunijourney.traveline.cymru/swansea-university

CYCLING & WALKING (ACTIVE TRAVEL)

Cycling is a great, sustainable way to travel to either campus. There are numerous dedicated cycle routes that serve Swansea Bay (www.cycleswanseabay.org.uk). The Bay and Singleton Campuses are joined by the red 'central line' route which has an estimated travel time of 27 minutes.

Remember if you are cycling the 3 steps to beating the thieves are:

1. LOCK IT
 2. MARK IT
 3. REGISTER IT (LIST).
- For further information contact sustainability@swansea.ac.uk

If you want to walk or cycle to the University and you want company to travel with, register on the website below to find like-minded colleagues/peers: www.swanseauni.liftshare.com

Walking is the cheapest form of transport as Swansea has excellent cycling and walking routes which is a great way to see the area www.visitswanseabay.com/walkingroutes

The University holds Active Travel events throughout the calendar year which includes bike maintenance sessions, Dr Bike and cycle training which are open to employees and students.

GET AROUND SWANSEA WITH SANTANDER CYCLES

Following an intense crowdfunding contest against four other UK universities, Swansea University has brought Santander Cycles to the city.

Bikes are stationed at convenient locations across Swansea, including both university campuses. Find out more at: santandercycles.co.uk/swansea

BUS TRAVEL

The University and First Cymru have negotiated a new ticket for students and employees for the 'Swansea City' area. This means that an academic year bus pass for students travelling within Swansea and between the campuses will cost just £310 in 2017/18. For current staff prices visit the website below. Bus passes can be purchased from the Travel Shop in Fulton House or via the First Cymru 'mTickets' app - download from Google Play or App Store.

TRAVEL BY CAR

The University encourages all of its employees and students to use public transport as much as possible - sustainability is at the heart of the University's ethos.

However, we appreciate that some employees/students are unable to use public transport due to where they live, their childcare arrangements, their disabilities or for other reasons.

There is no parking for students at the Bay or Singleton Campus in line with University policy, except for students with disabilities.

www.swansea.ac.uk/estates-and-facilities-management/ourservices/traveloptions

FOR MORE INFORMATION ABOUT TRAVEL AT SWANSEA UNIVERSITY

Visit www.swansea.ac.uk/estates-and-facilities-management/ourservices/traveloptions



TRAFFIC MANAGEMENT

DRIVING ON CAMPUS

There is a site-wide speed limit of 15mph on campus.

Drive carefully and considerately on campus. There are a large number of pedestrians and cyclists on site so consider their safety.

Do not park your vehicle anywhere other than a designated carpark.

Ensure you adhere to the road traffic signage and markings displayed around campus at all times.

The Campus operates a one-way system for traffic in designated zones. Please follow the signs.

CAR PARKING

Swansea University operates a parking permit scheme for employees. There are limited spaces across the campuses. Permits are allocated on a first come first served basis.

BAY CAMPUS KEY INFORMATION

- The drop off point for all vehicles entering campus to drop off employees, students or visitors is the Visitor Carpark.
- The contracted taxi service drop off/pick up point is on Severn Way outside the dining hall and bar. All other taxi services will pick up/drop off at the Visitor Carpark.
- The crèche drop off/pick up point is on Severn Way outside the crèche.

- University service bus stops are outside the residences on Tawe Way. All other bus services can be accessed on Fabian Way outside the campus.
- The Main Car park has designated parking for motorcycles.
- There is an electric vehicle charging point on the Bay Campus.

SINGLETON CAMPUS KEY INFORMATION

Follow road markings and signage at Singleton Campus for the following:

- Employee, student and visitor drop off/pick up point outside Fulton House.
- Contracted taxi service pick up/drop off points outside Fulton House.
- Loading bays for deliveries are clearly marked.
- University bus stops are located at the front of Fulton House.
- There is an electric vehicle charging point on Singleton Campus.

FOR MORE INFORMATION ON CAR PARKING VISIT:

www.swansea.ac.uk/estates-and-facilities-management/ourservices/traveloptions



LONE WORKING & WORKING OFF CAMPUS

LONE WORKING

A lone worker is defined as someone who works on their own, an individual who undertakes work activities without direct or close supervision or direct contact with other colleagues. In practical terms, you are considered a lone worker if you have neither visual nor audible communication with someone who can summon assistance in the event of an accident, emergency or illness.

It is essential that if anyone works alone that they have procedures in place to raise an alarm through either act or omission. If the activity includes a potential hazard lone working is not permitted. All lone working activities must be covered by an approved risk assessment and the lone worker will require access to the SafeZone App. Further information on lone working arrangements can be found on the Health and Safety webpages (www.swansea.ac.uk/healthsafety/)

OFF-SITE WORKING

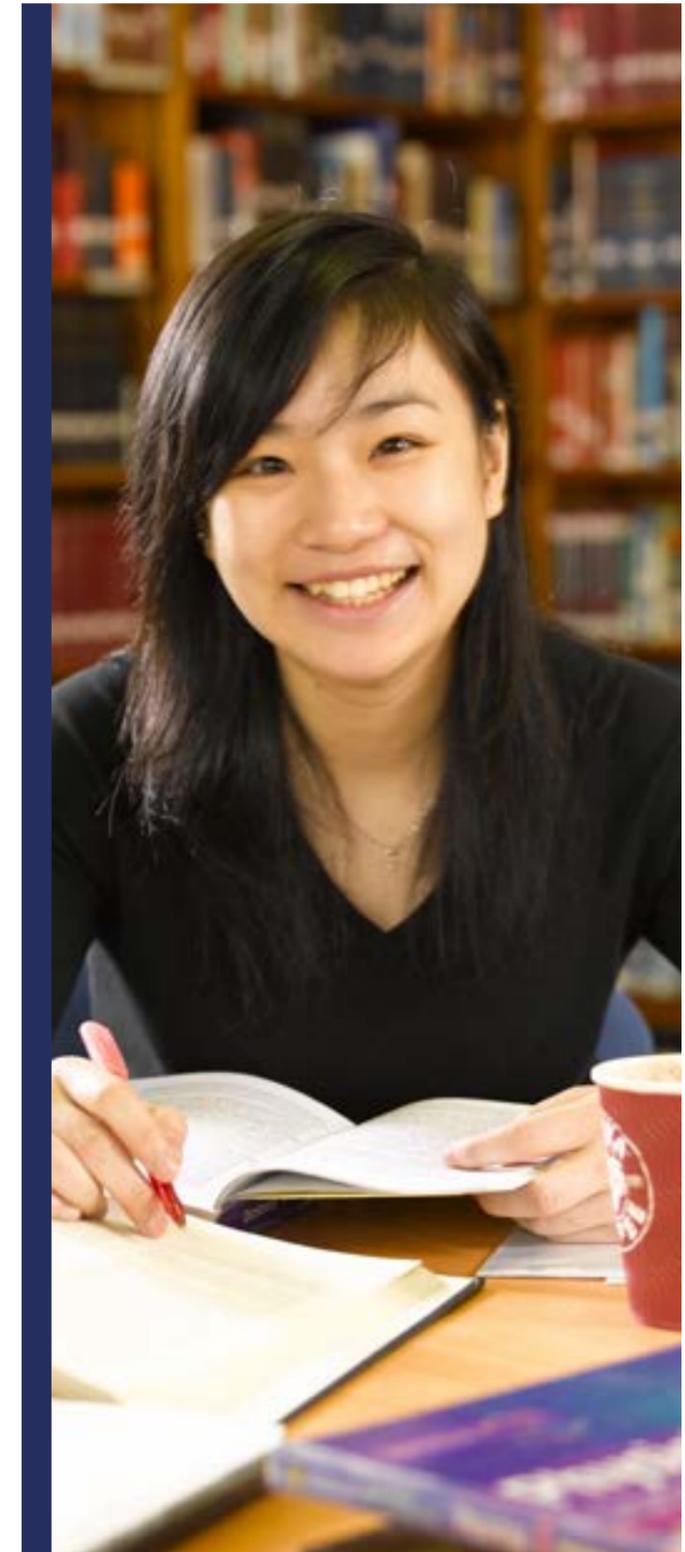
We are responsible for your safety while you are on University business. Inform your manager or supervisor in advance if you are working off-site. Familiarise yourself with the safety arrangements of any third-party site you are visiting and where appropriate, a risk assessment must be completed before the commencement of the activity/visit. If you do not feel that safety is managed, make this known and if appropriate steps are not taken then stop the visit.

OVERSEAS WORKING

If you are to work abroad on University business make sure an appropriate risk assessment is completed before you leave and is approved by your line manager/ supervisor. It is important that you check the University's Intranet blackboard module (International Travel Guide) to access all the information you need, this includes a link provided by our insurers UMAL with up to date, detailed information on the risk status of a country/city. In addition, you must follow the appropriate health advice by getting vaccinations or medication (e.g. malaria tablets) as recommended. You must also ask for the insurance documentation before you travel. Email the team: Insurance@swansea.ac.uk

IF YOU HAVE ANY QUERIES, PLEASE EMAIL:

healthandsafety@swansea.ac.uk



RISK MANAGEMENT

Swansea University promotes sensible risk management. This means concentrating efforts on reducing risks which could lead to significant injury, ill health, damage to the environment and/ or the University's reputation. We also consider those risks which are more likely to have an impact due to the frequency of which they can occur even if the outcome is not significant.

TO ACHIEVE SENSIBLE RISK MANAGEMENT CONSIDER THE FOLLOWING:

- Sensible risk management is not about creating mountains of paper, but rather about identifying sensible controls to reduce the risks present in the work/study environment to help protect the University's community.
- Sensible health and safety and environmental processes are a great enabler to innovation and learning, and can provide foresight into future concerns that can be overcome before they become a problem.
- The 'risk assessment' is the process that enables this to happen. The time taken to carry out a risk assessment must be proportionate to the level of the risk.
- The aim is to safeguard our community and environment not simply to be 'compliant'.

RISK ASSESSMENT IS BROKEN DOWN IN TO 5 STEPS:

1. Identify the hazards
2. Identify who might be harmed and how
3. Evaluate the risk and decide on controls
4. Record significant findings and implement
5. Review and update as necessary

For further information on risk management:
Swansea University Website: www.swansea.ac.uk/healthsafety/riskmanagement/
HSE Website: www.hse.gov.uk/risk/

RISK MANAGEMENT IS NOT ABOUT:

- Scaring people by exaggerating or publicising trivial risks;
- Stopping important research and learning activities where the risks are managed;
- Creating a totally risk-free society;
- Generating useless paperwork mountains.

TRAINING

A big part of risk management is risk assessment. More information on risk assessment is available for you through training courses offered by the CR team. Courses can be booked via the ABW system for staff. Postgraduate students need to email healthandsafety@swansea.ac.uk to book on to training.

By attending the training and adhering to the five steps it will help you complete suitable and sufficient risk assessments which will in turn help protect our community.

IF YOU REQUIRE ANY FURTHER ASSISTANCE:
Contact your Health & Safety Lead /Environmental Officer in the first instance.
Alternatively contact Health and Safety:
Telephone: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk

14001

The Swansea University Sustainability Policy outlines the University's commitment to ensure its research, teaching activities and operations promote and support a sustainable future for all. To help achieve this, the University has a formal environmental management system (EMS) that is coordinated by the Sustainability and Staff Well-being team. The University's EMS is certified to ISO14001:2015, which is a globally recognised framework for environmental management.

The Sustainability Policy, endorsed by the Vice Chancellor, is the core of the University's EMS and is supported by a sustainability strategy and associated objectives and targets, which everyone has a part to play to support and deliver.

The EMS is a structured operational tool that the Sustainability and Staff Wellbeing team utilise to implement the Sustainability Policy and manage environmental aspects and their associated impacts on the surrounding environment and people. Its structure is based upon the PDCA (Plan, Do, Check, Act) cycle.

In practice, the EMS will take the form of environmental procedures, guidance documents, performance measures, training and operational controls at a central and College/ Professional Service Unit level. Routine audits are undertaken to assess elements of the EMS (known as clauses) and to ensure that the EMS is effective and remains relevant.

To find out further information about environmental management

- Please contact sustainability@swansea.ac.uk
- Visit the Sustainability webpages
- Get in touch with the EMS team via "Contact Us"



HEALTH AND SAFETY POLICY AND ARRANGEMENTS

As a University we are always striving for continual improvement to achieve and promote a positive health and safety culture and performance. To help us achieve this within the University we have a formal health and safety management system and structure, which is supported by a Health and Safety Team.

Call: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk

POLICY

The Health and Safety Policy and statement of intent are the heart of the formal health and safety structure within the University. The policy has been endorsed by the Chair of Council and the Vice Chancellor, which is supported by a formal organisation structure, detailing how the roles and responsibilities cascade through the University's management and supporting committee structure.

Further information on roles and responsibilities and the committee structure within the University, including the terms of reference for the committees and supporting College/ PSU Steering Groups, can be found in the Health & Safety Policy.

POLICY ARRANGEMENTS

Our hazard specific policy arrangements interpret legislation and outline the method of compliance for the University's staff and students. As well as outlining how to comply with legislation, we have also provided useful tools to make it easier for both staff and students to do so.

Where hazard specific policy arrangements do not exist, the University expects compliance with recognised national and international standards. Health and Safety guidance documents are available to help you achieve this. However, if you require further advice please contact your Health & Safety Lead or Health and Safety Team.

For further information on Health and Safety:
www.swansea.ac.uk/healthandsafety



BIODIVERSITY

WILDLIFE ON AND OFF CAMPUS

Swansea University has a wealth of habitats, from the beach and dunes of the Bay to the woodland and gardens of Singleton. Spending time with nature has been shown to be good for your health and wellbeing, so we encourage you to explore, and organise regular walks and activities to help you discover some hidden gems.

Crymlyn Burrows, next to the Bay Campus is of national importance for its wildlife and has been designated a Site of Special Scientific Interest (SSSI). The dunes have a wonderful array of wild flowers including some very rare plants as well as lizards and ground nesting birds, while the beach is important for wading birds. The area also supports some very rare invertebrates such as the strandline beetle and dune tiger beetle; driftwood along the top of the beach is essential for their survival – please don't burn it!

Damaging the site is a criminal offence under the Wildlife and Countryside Act, so please help us to protect the site by following these simple rules:

- Do not light any fires or barbecues in the SSSI – you can have barbecues on the beach near campus, but always bring your own fuel and don't leave any rubbish.
- Leave all driftwood where it is – please don't collect it for fires
- Do not leave litter – always use the bins provided
- This area is used by the public, including families, so please take extra care not to leave any broken glass
- Do not damage, disturb or take away any flowers or animals
- Shore birds are particularly vulnerable to disturbance – please do not approach flocks of birds on the beach

GET INVOLVED

There are lots of opportunities to get involved – Crymlyn Burrows Conservation Volunteers meet every Wednesday afternoon during term time to carry out habitat and footpath improvement, wildlife surveys and litter picks and there is a monthly beach clean at the Bay on the first Wednesday of every month. There are various wildlife surveys conducted at Singleton too.

GULLS AT SINGLETON

Many of the buildings at Singleton have gulls nesting on the roof through the spring and summer. They are a part of our wildlife but can cause alarm and worry at times. Encouraging them to approach people by deliberate feeding or dropping litter has led them to try to mug unsuspecting people for their lunch, even causing injury. Please don't feed the gulls. Also, every nesting season, some young gulls will leave the nest early and be seen on the ground. Gulls make excellent parents and in most cases will continue to feed and defend their chicks, even away from the nest. It can be tempting to "rescue" these birds, but they are best raised by their parents. Parents will dive-bomb suspected threats, including humans so please don't approach. If you are sure that they have been orphaned or abandoned, email sustainability@swansea.ac.uk for advice.

For more information visit our web pages or to report any interesting wildlife sightings please email wildlife@swansea.ac.uk.



POSITIVE PURCHASES

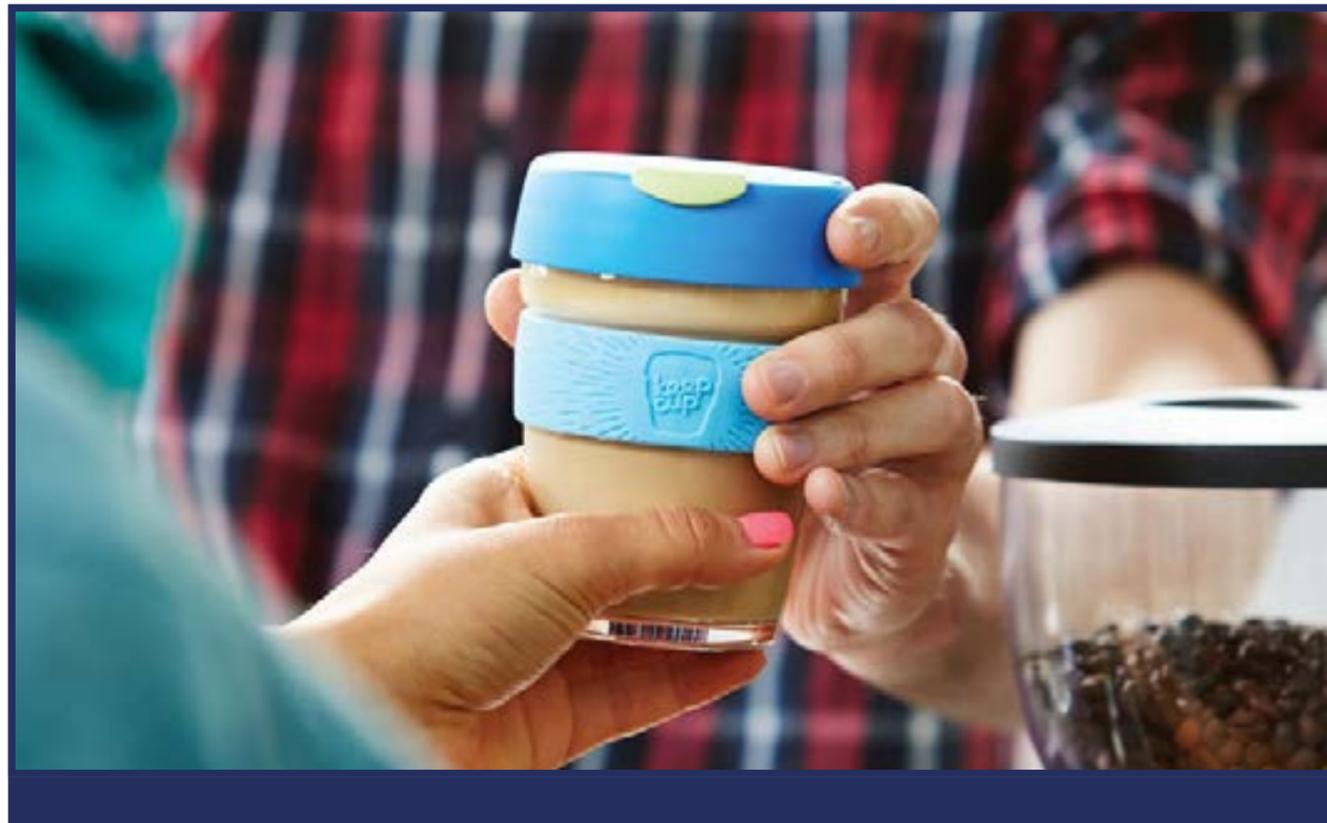
We buy a wider range of good and services at the University, from stationary, to research equipment, travel options and IT. It is important to remember there can be positive and negative: economic, social and environmental impacts from everything we buy and the services we use throughout their life cycles, for example:

- Raw material and manufacturing impacts of furniture or IT, such as deforestation or human rights infringements.
- Carbon emissions from transportation and delivery of goods or use of travel services.
- Wastes and emissions, during and at the end of products use.
- Community benefits such as community engagement and investment from responsible construction projects.

POSITIVE PURCHASING MEANS:

- Removing or minimising the negative impacts and maximising the benefits, when we make the choice of whether to and what to buy, or what services to use.
- Working with our suppliers and service providers to reduce impacts and raise standards in a responsible manner.

For more information or to get in touch, please visit the Positive Procurement webpages and the Procurement pages of the Finance website.



RECYCLING & WASTE COLLECTION

RECYCLING AND WASTE COLLECTION

Swansea University is committed to embedding a culture of waste prevention, reuse and recycling throughout its campuses, ensuring it upholds its legal duty of care, and manages its waste in accordance with the Waste Framework Directive.

The University is currently on target to meet its ambitious recycling targets as set out in the Sustainability Strategy, which are aligned with the Welsh Government target of 70% recycling by 2025. At the end of the 2016/17 academic year the University had achieved a 60% diversion rate, segregating 53% of the total waste for recycling (659 tonnes), 7% food waste (88 tonnes) for anaerobic digestion, with the remaining 40% of non-recyclable waste (487 tonnes) sent for energy recovery.

This was achieved by the implementation in 2016 of an improved waste and recycling system that saw key wastes segregated at source. The new system allows you to recycle single waste streams around the campus. These are:



All staff, students and visitors to the University are required to segregate their waste for recycling in line with the University's Sustainability Policy.

All essential guidance on recycling, waste disposal, and collection can be found on the Waste and Recycling webpage, including the following guidance;

- Waste Guidance Notes for non-hazardous and chemical and clinical healthcare wastes
- Waste Electrical and Electronic Equipment (WEEE) Disposal Procedure
- Furniture and Equipment Reuse, Donation and Collection Procedure
- Skip Request and Exchange Procedure
- Green Guide

Please contact estates-waste@swansea.ac.uk to discuss your disposal requirements.

IN ADDITION WE ALSO RECOMMEND THAT YOU:

- Consider donating items you no longer need or want to charity for re-use.
- Try to avoid purchasing things that are heavily packaged. Alternatively request that suppliers collect waste packaging, particularly for large orders where a lot of cardboard and packaging waste will be generated.
- Use re-usable shopping bags instead of disposable carrier bags.
- Buy products made from recycled materials whenever possible



RESOURCE MANAGEMENT

ENERGY

Swansea University's energy bills amounted to £3.33 million during the 2016/17 academic year, to heat, light and power its buildings and facilities. Electricity charges were £2.18M, Gas charges were £1.33M and £32K was charged for Heating Oil.

The associated carbon emissions amounted to 18,218 tonnes with Singleton Campus & Hendrefoelan Student Village emitting 13,538 tonnes and the Bay Campus 4,680 tonnes. Swansea University continuously aims to reduce its environmental impact by investing in low carbon and renewable technologies and energy saving projects, both large and small scale.

How employees use electrical equipment at the University makes a significant difference to our environmental performance. Please assist in reducing our carbon emissions by following some simple guidelines.

YOUR COMPUTER

Consider changing the power saving settings on your Laptop or PC by going to Start>Settings>Control Panel>Power Options and setting your:

- Monitor to switch off after 5 minutes
- Your PC to go into standby after 30 minutes
- Switch off your PC and monitor when you leave your room or workspace
- Switch off your printer, scanner and photocopier when you leave your room or workspace
- Remember to switch equipment off at the plug since PCs, especially laptops, use energy when they are shut down but plugged in. This will also reduce the risk of overheating and fire.

OTHER ELECTRICAL ITEMS

- Only heat the amount of water required when boiling a kettle
- Use the hydro-boil heaters when they are provided, as these are more energy efficient than an electric kettle
- Turn TVs and ancillary items off at the plug when you have finished watching. Do not leave them on standby
- Unplug your mobile phone charger when not in use since it will continue to consume electricity

LIGHTING

- Only switch on lighting when needed and switch it off when there is sufficient day light
- Switch off lights when you leave your room or when the workspace is vacant
- Report defective lights to the E&FM Helpdesk (tel.295240). Broken lights can still consume energy when they are faulty

HEATING AND COOLING

Where heating controls are present;

- Set heating thermostats to a maximum of 20°C
- Set air cooling thermostats to a minimum of 23°C
- Set thermostatic radiator valves to a maximum of "3" and remember to turn them off when leaving the room for long periods
- Turn radiators down or off if your workspace is too hot
- Close all windows when leaving your room or workspace, which will also improve security
- Keep doors and windows closed in areas with air cooling.



IS IT REALLY WORTH IT?

You can probably think of lots of reasons not to engage in energy saving measures, but are they based on fact or fiction? Check them out at <http://www.nef.org.uk/knowledge-hub-landing> and remember that all those small actions will add up to make a big difference.

THE POWER OF GREEN

Environmentally friendly technologies are becoming ever more popular in today's carbon conscious world. Consider:

- Using solar power to charge your mobile phone and other gadgets.
- Connecting your peripherals to your desktop PC (but not your laptop) and external items to your television through a power-down plug so that they aren't on or in standby when your PC and TV are off.
- Using an eco-kettle, which only boils the amount of water needed even if it is full

WATER

Swansea University's water supply and sewage charges amounted to over £650K during the 2016/17 academic year. Singleton Campus consumed over 269 million litres of mains water and the Bay Campus consumed over 18 million litres. Water is a precious resource and needs to be conserved, but it also allows pollutants to be transported quickly and in large volumes to the wider environment. As each campus is close to the sea, we need to be able to act very quickly in response to any spillages that could be washed into our drains. Please help us by following these guidelines.

ONLY USE THE WATER YOU REALLY NEED

Running taps can waste up to 6 litres of water a minute. Keep tap water in the fridge to cool instead of running the tap until it is cold
Don't leave the tap running – turn it off whilst not in use to maximise water savings

TELL US ABOUT LEAKS AND DRIPPING TAPS

A dripping tap can waste up to 140 litres of water a week – that's enough for 4 showers! Let the E&FM Helpdesk (tel.295240) know immediately if you observe any dripping taps or water leaks.

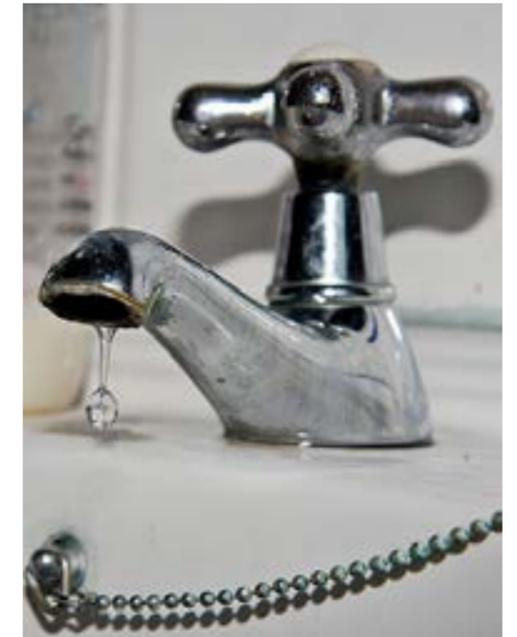
LET NOTHING BUT WATER GO DOWN THE DRAIN

Fats, oils and grease can cause blockages in drains and sewer pipes as they solidify, which can cause sewer water to back-up the drains. Even dairy products, such as milk and cream, are highly polluting to aquatic environments as they starve the water of oxygen as they degrade. Please don't allow anything but water to go down the plughole.

REPORT SPILLAGES IMMEDIATELY

The impacts of spills can be minimised if there is a co-ordinated and adequate reaction. The University has a Spill Response procedure and there may be local arrangements in place for labs & workshops. Remember to report the incident as an Adverse Event.

Let the Estates &FM Helpdesk and/or your local environmental co-ordinator or Environmental Officer know immediately if you have any concerns regarding potential pollution events to the water courses.



Let the Estates &FM Helpdesk and/or your local environmental co-ordinator or Environmental Officer know immediately if you have any concerns regarding potential pollution events to the water courses.



ELECTRICAL SAFETY

Three of the worst type of electrical hazards are: faulty or worn out equipment, exposure of live electrical parts to water and careless or unskilled workmanship. None of these hazards need arise.

Staff and postgraduate students should never attempt to interfere or repair electrical equipment, unless it is part of your job role and you are trained to safely carry out the repair. Any plant/equipment found not to be working or in a dangerous condition should be reported immediately to your Health and Safety Lead, who will arrange for a repair or replacement by suitably qualified technical staff. The plant/equipment should be taken out of use until it is assessed.

Do not attempt to modify equipment which is not completely disconnected from the main. If in doubt contact your Health and Safety lead for advice.

All electrical equipment is to be serviced by qualified technical staff, or by Estates & Facilities Management (E&FM) appointed contractors.

E&FM Helpdesk: 01792 (29)5240

PORTABLE APPLIANCE TESTING (PAT)

E&FM arrange regular testing to all university owned portable electrical and electronic equipment across the University. If you decommission a piece of equipment or purchase something new, please ensure that the testing engineers are informed when they visit your area in order to update the equipment register.

VISUAL INSPECTION

In addition to the portable appliance testing regime, users should carry out their own visual inspections of any electrical appliances they use by looking for signs of the following:

- Impact damage to plug casing, such as cracks or chips.
- Bent or loose plug pins.
- Burn marks or discolouration on the plug.
- Cuts, cracks or signs of wear to the cable covering.
- Non-standard joints or connections.
- Discolouration or other signs of heating or burning on the cable.
- Kinks or bulges, particularly in areas where the cable may frequently be twisted or folded.
- Loose cable grip, visible coloured insulation, cable wires visible where the cable enters the plug.
- Damage to the appliance where the cable enters.
- Physical damage to the outer cover of the appliance.

HIGH VOLTAGE (OVER 600V)

Staff or postgraduate students requiring the use of high voltage equipment as part of their work or research, are to inform the Health and Safety Lead and a risk assessment is to be completed prior to the start of any work.



EXTERNAL SUPPLIES

From time to time there may be a need to supply electrical power to a temporary external structure, such as a marquee, covered stage, seating, etc.

When establishing an external power supply, manage the risk using the following:

- 1)** A generator;
- 2)** A large mains supply temporarily connected from a building to the marquee – you would require an electrician;
- 3)** Extension leads run from a building to the marquee (for short durations of around a week). This method should only be selected if options 1 & 2 cannot be achieved.

If you need advice and support in establishing a suitable electrical supply contact E&FM.

TEMPORARY ELECTRICAL SUPPLY

The minimum requirements for anyone wanting a short term temporary electrical supply using extension leads will be:

- The installation must be RCD protected;
- The supply cable must be continuous, with no inter-connecting plugs, from the supply source (building socket) to inside its destination: Marquee, tent, Portakabin etc.;
- Cables must be kept at a high level to negate trip hazards and to reduce the risk of damage to the cable;
- All the equipment/ appliances used must be fit for purpose and have undergone a portable appliance test;
- Supplies must be switched off when the unit is not occupied;
- Cables must be unplugged and pulled back into the building overnight.

GENERAL ELECTRICAL SAFETY & HOUSEKEEPING

- Cables must not be trailed loosely across the floor or hang, they are to be strapped and secured in bundles either above head height on a purpose built gantry or along walls.
- Extension leads must not be 'daisy chained' across the room to power a piece of equipment. This must be avoided and an alternative achieved.
- Extension leads must be fully unwound when in use. Failing to fully unwind the reel can cause it to overheat, and in some cases catch fire.
- Do not use electrical equipment in or near water.
- Cables and leads must be of a suitably covered material and adequately protected in environments where corrosive chemicals or solvents are used.
- Adequate earths and suitable fuses should be used. Do not rely on simple soldered joints for an earth connection but use a screw as well – the soldered joint may be dry.
- Do not use cube adapters. These devices can easily be electrically overloaded and the weight of too many plugs and cables can loosen them from the socket and cause overheating which could lead to a fire.



REPORTING DEFECTS (BUILDING/PLANT)

The process for reporting defects or placing a works order is as follows:

1. Direct your works order/report of defects to:

Email: wshelpdesk@swansea.ac.uk
Telephone: 01792 (29)5240
Helpdesk hours: 8:30 - 16.30 (Monday - Friday)

ALL OUT OF HOURS EMERGENCIES WILL BE HANDLED BY THE SECURITY DESK

TELEPHONE: SINGLETON: 01792 (60)4271
BAY: 01792 (60)6010

2. All works requests require a description of works and as accurate a location as possible.
3. All works requests for NEW works must be accompanied by an authorised departmental charge code.
4. The works requests are then placed in order of priority and are placed into one of four categories depending on the urgency.

PERMITS TO WORK

Access permits are issued by E&FM from:

Singleton Campus: Talbot Building, Room 004.

Bay Campus: Tower Nanhyfer Workzone (1st floor)

All day to day permits need to be logged in the permit diary together with all relevant information. They should be requested 24 hours in advance.

Only emergency permits will be considered on demand.

Where roof access is required a secondary College/PSU permit may also be required on certain buildings.

CONSTRUCTION DESIGN & MANAGEMENT (CDM)

If you carry out or instruct contractors to carry out 'construction work' you have duties within the Construction Design & Management regulations 2015.

'Construction work' includes building, fitting out, running electrical or data cables, running events, putting up marquees, and some maintenance work.

It is important to remember that if you procure or carry out any work such as this that you will be a dutyholder and are required to have knowledge and understanding of the CDM Regulations 2015 and the supporting HSE L153 Document prior to commencing any project.

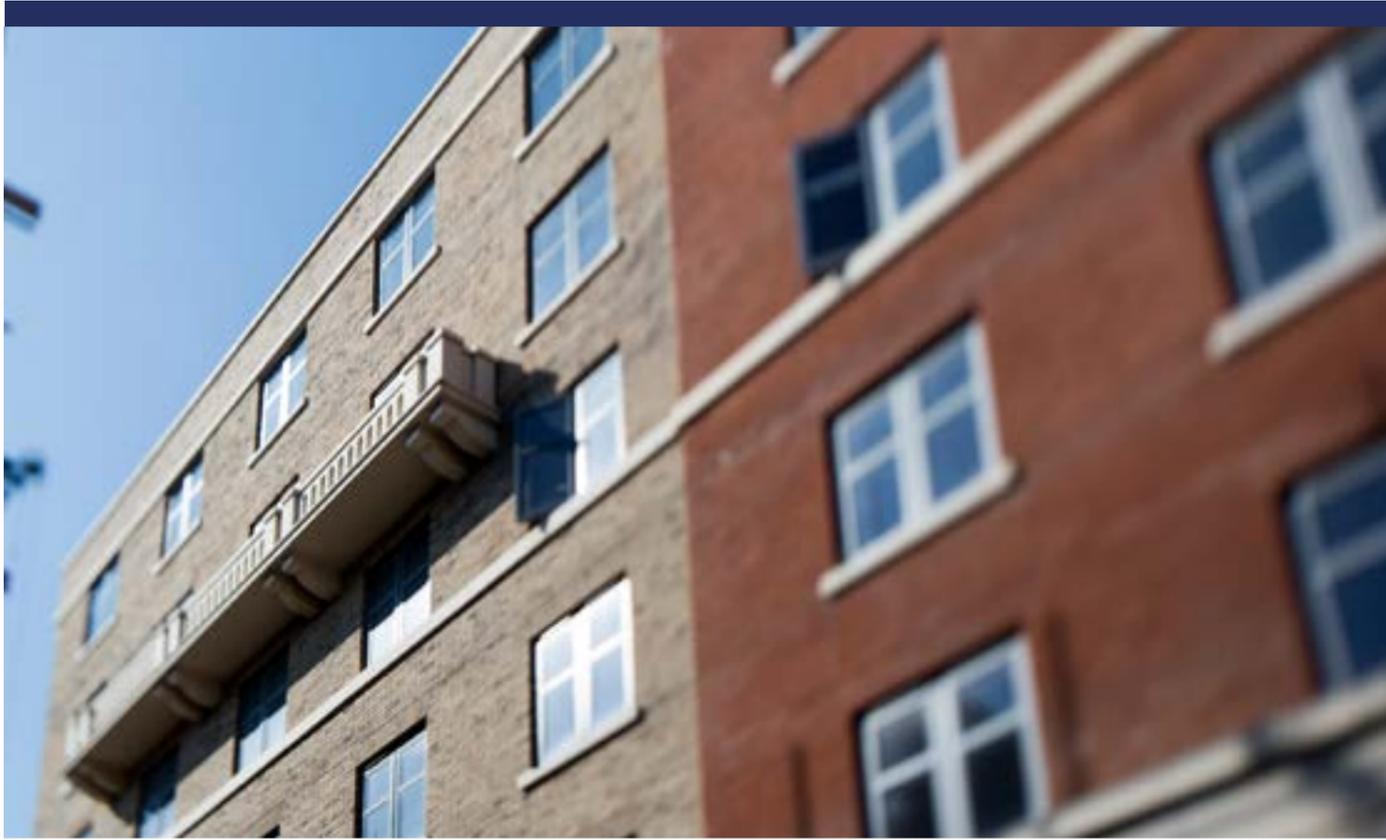
If you need to clarify whether a certain type of work that you do is construction, or arrange CDM training, contact your Health & Safety Lead or Health & Safety Team.

Health & Safety Team:
Call: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk

Whatever your role in construction you must:

- sensibly plan the work so the risks involved are managed from start to finish;
- ensure that people procured to carry out work have the knowledge, skill and experience to do so;
- have the right people for the right job at the right time;
- cooperate and coordinate your work with others;
- have the right information about the risks and how they are being managed;
- communicate this information effectively to those who need to know;
- consult and engage with workers about the risks and how they are being managed.

 If you require further advice and support in relation to any construction work contact the Estates and Facilities Management helpdesk: 01792 (29)5240



CONTRACTORS

Anyone who intends to plan and organise works to be carried out by contractors on campus must contact E&FM at the earliest opportunity (i.e. design stage), to obtain any relevant pre-construction health and safety information in order to comply with their duties under the CDM Regulations 2015.

 Telephone: 01792 (29)5240

This will enable all the relevant health and safety information, such as the location of any known asbestos containing materials/permit procedures, etc to be provided to the contractors, ensuring the safe and successful completion of works.

Buildings on Singleton Campus were constructed when asbestos was in frequent use. However, the University has a robust asbestos management plan to minimise the risks. For more information, including details of emergency procedures, contact the University Fire and Premises Manager.

 Telephone: 01792 (29)5240

Please refer to the E&FM Services Code of Safety Practice for Contractors guide for further information. All contractors on site must adhere to the University health and safety standards, procedures and environmental procedures.

SAFETY AROUND CONTRACTORS

The University is currently undergoing refurbishment and further development. To ensure your safety at all times:

- Do not access restricted areas.
- Adhere to contractor signage at all times.
- Stick to the designated footpaths and diversion paths.
- Report anything you consider to be unsafe to your manager, supervisor or H&S Lead.

 All environmental procedures are accessible from:
www.swansea.ac.uk/sustainability/



Section 2: Hazard Specific



LABORATORY SAFETY

The following is a general guide to health & safety within the Laboratory.

When working in laboratories you must always follow the rules of the laboratory and use/follow the controls in place.

- Observe safety signs outside of the laboratory and adhere to any Instructions provided.

- **Wear the personal protective equipment specified, for example a laboratory coat and safety glasses.**

In labs where harmful substances are used, you should also wear clothing that covers your legs within the laboratory at all times. **Do not** wear open toe footwear such as sandals or flip flops in the lab as they will not provide any protection in the event of a dropped item (such as glassware, or sharps) or a spillage of a hazardous substance.

- **Follow good laboratory hygiene practices** – do not take any food or drink into laboratories., do not mouth pipette or put any other objects (pens etc.) into your mouth and remove your gloves when handling phones, door handles etc. In the case of computer equipment within the lab either gloves are allowed (in which case always wear gloves) or they are not.

In a laboratory you need to **be more aware of your surroundings** (alarms going off or instructions from others), because of this the use of personal headphones is discouraged, and at most, is limited to one ear only.

- The laboratory should be kept in a clean and tidy condition. Chemicals should be returned to their appropriate storage Area/cupboard or cabinet when not in use. Trailing cables or other trip hazards should be tidied away and items stored carefully so they do not protrude into walkways.

- **Lab workers** should ensure that all experiments which involve hazards have a suitable risk assessment in place before hand, and that safe working practices are followed, including the wearing of additional personal protective equipment such as specific gloves or hearing protection.

- If you are unsure how to work with a specific substance or piece of equipment please ask your line manager or supervisor, member of technical staff or another senior lab worker.

- A notice should be attached to all equipment to be left on overnight, indicating how it may safely be switched off in an emergency.

- Identify your nearest emergency exit, fire-fighting equipment, first aid kit, safety shower, eye wash station and spill kit.

- Remove contaminated coats and gloves before leaving the laboratory and wash your hands thoroughly.

GLASSWARE AND SHARPS

A number of accidents occur in labs each year caused by broken glass or sharps. Not only can sharps cause significant physical injury and pain, but cuts can also introduce hazardous substances (chemicals or biological agents) into the body. Some basic rules for avoiding such incidents include:

GLASSWARE

- Consider whether plastic or shatter -proof glass can be used or your experiment. Never use damaged glassware; check for damage first.
- Store glassware in a safe location - do not store glassware above shoulder height, store heavy items at bench height and store tall vessels at the back of shelves with the smaller ones in front.
- Sweep up broken glass or pick up with forceps and dispose of it in a glass bin.

NEEDLES AND OTHER SHARPS

If you are using a needle, consider whether an alternative device such as a pipette, or a blunt needle could be used e.g. for disrupting cell cultures or loading gels or whether a "safer" designed needle might be appropriate. Never re-sheath needles – dispose of them directly using a dedicated 'sharps' bin located next to your activity. If using scalpels – could disposable scalpels or a safe-blade change device be used?

Never leave sharps such as scalpel blades or un-sheathed needles sitting on benches or in drawers, store in a labelled rigid plastic container.

Always treat any 'sharps' injury as serious – seek the help of a first aider and in the case of used sharps, seek medical assistance.

Guidance on the disposal of sharps and broken glassware (sharps) can be found on the Waste and Recycling webpage.



CHEMICAL SAFETY

Chemicals are routinely used throughout laboratories and workshops as well as in cleaning and catering environments. Many of these chemicals could pose a significant risk to health (e.g. toxic, carcinogens etc.), as well as to safety (fire and explosion, corrosives) and some also pose a risk to the environment.

Before purchasing, you should always consider whether a less hazardous chemical can be used (this is particularly important if you are using toxic chemicals or those which could cause cancer or respiratory sensitization). Also consider whether the chemical can be purchased in a safer form (e.g. purchasing tablets or granules instead of fine powders that can be easily inhaled, or purchasing ready made or dilute solutions). Only order the amount you need, buying in bulk may save money in the short term but does not include the increased costs of waste disposal and increased risk in the event of an emergency.

Safety Data Sheets are available from chemical suppliers. These provide a useful source of information on the hazard that chemical presents, how to store and use, and actions to follow in the event of an emergency. This information will help you to carry out a chemical risk assessment before you start using the chemical, however remember that some work processes may also generate hazardous substances (e.g. welding, sanding, chemical reactions which also need to be included in risk assessments).

When working out how to reduce the risk from the chemical you need to consider the chemical's physical properties and how it can enter the body (usually by inhalation, skin contact or ingestion), as well as the severity of the potential harm. As with other hazards the greater the potential harm the more steps we need to put in place to prevent that harm occurring. Within the workplace you should always try to minimise the escape and spread of chemicals, prioritising collective protection (e.g. use of local exhaust ventilation systems such as fume cupboards or glove boxes) over individual protection (e.g. respirators/ dust masks).

Personal protective equipment (PPE) should be considered with other control measures, where adequate control of exposure cannot be achieved by other means and may include safety glasses or goggles, gloves resistant to the chemicals you are handling and lab coats. If you are required to wear respiratory protective equipment this must be selected carefully and users must receive specific training in use and undergo "face fit testing".

In certain circumstances, users of some chemicals may require health surveillance (e.g. if they routinely work with chemicals that cause asthma).

LABELLING

All containers of chemicals must be labelled with the correct name, indicate clearly the hazard classification associated with the chemical, and, where applicable its Quartzzy reference number. All mixed chemicals are to be correctly labelled with the date it was created, name of chemical, and who is responsible for the chemical.



For further advice about Chemical Safety, contact your Health and Safety Lead or email healthandsafety@swansea.ac.uk

CHEMICAL INVENTORY

All hazardous chemicals at the University should be logged on a chemical inventory system. Chemical inventories allow Colleges to have an oversight of the chemicals in their laboratories, promote the sharing of chemicals and are particularly important in the event of an incident where emergency services require disclosure of chemicals in a specific area.

Inventory systems are only as good as the data in them, so data entered needs to be accurate and reviewed regularly.

The primary inventory used by the University is Quartzzy, an online system available via www.quartzzy.com/

Please contact your local Environment Officer or sustainability@swansea.ac.uk for access to the relevant University's "chemical groups" e.g. Singleton Campus Chemicals or Bay Campus Chemicals. Access will only be granted to postgraduate students and staff with @swansea.ac.uk email addresses.

Training on Quartzzy is available; please check ABW for more information or speak to your local environmental co-ordinator or Environment Officer.

In areas that are not using Quartzzy, please speak to local technical staff or the Environment Officer to understand the alternate process.

CHEMICAL & HAZARDOUS WASTE DISPOSAL

The University produces a wide variety of hazardous and chemical waste, all of which must be disposed of in accordance to regulatory requirements. There are specific arrangements in place for the disposal of chemical waste at the Singleton and Bay Campuses, with both sites' Chemical waste stores opening frequently throughout the month.

Singleton Campus; Grove chemical waste store

- First Monday of the month 9.30-10.00am
- Third Monday of the month 2.00-2.30pm

Bay Campus; Chemical waste Store, Engineering service yard

- On request with approval via estates-waste@swansea.ac.uk only

Guidance on the chemical waste disposal process and the categorisation of chemical waste, developed in line with the Hazardous Waste Regulations 2015, NRW and HSE Regulatory guidance can be found on the Waste and Recycling pages along with the chemical waste disposal forms and labels.

Any unwanted and useable (not expired) chemicals can be redistributed to another laboratory in your College/School as required through Quartzzy. Simply click on 'Edit' and check the last box on the page called 'Waste': Free to a good home

Please contact estates-waste@swansea.ac.uk to discuss your chemical and hazardous waste disposal requirements.

Waste chemicals should only be disposed of via the University chemical waste stores. It is an offence to dispose of hazardous waste and chemical waste through any other means.



BIOLOGICAL HAZARDS AND GENETICALLY MODIFIED ORGANISMS

Biological hazards can be a risk to the health of our staff, students and the wider public, but also to animals and plants in the environment. Where work involves genetically modified organisms (GMOs) these risks may be heightened as modifications may result in increased ability to cause or spread disease or resistance to treatment.

There are a number of Health & Safety, environmental and security regulations which govern the use of biohazards and GMOs in the UK – these include specific requirements for carrying out risk assessments, notifying and in some cases getting approval from government agencies to hold or use specific agents and specific standards for the laboratories used.

In order to oversee this, the University has set up a Biological & GMO Sub-Committee as well as appointment of a University Biological & GM Safety Advisor and College Biological & GM Safety Officers.

The University HSA policy arrangements outlines the systems in place for the University to manage Biological (HSA26) and GM (HSA27) risks. All risk assessments involving the storage and use of genetically modified organisms and for hazard group 2 or above human and/or animal pathogens must be approved by the Biological & GMO Sub-Committee prior to work commencing. Approval for Animal Pathogens and Human pathogens may require licences from the Health and Safety Executive.

Risk assessments should consider the host range of the biohazard, routes of infection and transmission and the combination of measures required to control this risk, this may include a need for vaccination of staff and postgraduate students against the agent, inactivation of waste and emergency spillage or first aid procedures.

If you have any queries or would like additional advice on biological and GM work contact your College Biological and GM Safety Officer(s) in the first instance.

CLINICAL & HEALTHCARE WASTE DISPOSAL

The University produces a range of hazardous and non-hazardous, controlled clinical healthcare wastes, all of which must be disposed of in accordance to regulatory requirements. Specific Waste Management Guidance Notes have been developed to ensure all healthcare and clinical wastes are segregated appropriately for disposal. This is to avoid infection and to ensure correct disposal in line with the standard colour coded system for bins & bags.

Waste guidance on the appropriate storage and disposal of a range of clinical healthcare wastes can be found on the Waste and Recycling webpages.

The mixing of clinical and healthcare waste with other waste streams is legally prohibited therefore financial penalties may be incurred.

Please contact estates-waste@swansea.ac.uk to discuss your clinical healthcare disposal requirements.



COMPRESSED GASES

A risk assessment should be in place for each gas system in use, the assessment should consider the nature of the gas (e.g. inert, flammable, toxic, corrosive) and the quantity of gas in the cylinder to determine the risk to the users and people in the wider vicinity, the type of installation required, location of the cylinders, the need for protective devices such as gas detection and alarms, cut off valves, flash back arrestors, ventilation, separation distances, storage and restraining requirements and emergency plans.

More information regarding risk assessment and gas installations can be found in the Health & Safety policy arrangements Compressed Gases, or for additional information please contact your Health & Safety Lead/coordinator or Health & Safety Team. Additional consideration may be required for refrigerant or ozone depleting gases.

MAINTENANCE AND TESTING

Both fixed manifold and temporary installation require periodic maintenance and testing. For fixed manifold systems, this will be specified in the written scheme of examination. For temporary systems, documented checks must be regularly carried out, and gas regulators changed in line British standards (usually every 5 years).

TRAINING

Only staff and postgraduate students that have completed the online e-learning module, and received local training in handling cylinders and fitting regulators are authorised to use, change over or move compressed gas cylinders: For more information regarding training contact your H&S Lead/Coordinator.

All users changing gas cylinders and regulators should follow a Standard Operating Procedures, a model SOP is available in the University H&S policy arrangements.

NEW GAS INSTALLATIONS

All new gas installations must be in accordance with the policy arrangements. Any persons installing a new gas installation must be appropriately trained and competent. As fixed manifold systems will usually involve disturbance of the building fabric (e.g. drilling through walls) or integration with other services (local exhaust ventilation, BMS or fire alarms), commissioning as well as generating a written scheme of examination, all new systems should be installed in consultation with E&FM.

If you require further clarification contact Estates & Facilities Management on: 01792 (29)5240

SUMMARY OF INSTALLATION PRINCIPLES

Flammables

- Piped in from outside (preferred)
- Fixed installation
- 30 Minute (minimum) fire rated gas cabinet
- Piped to point of use from cabinet
- Written scheme of examination required



Toxics

- Fixed installation only (no temporary installation)
- 30 Minute (minimum) vented fire rated gas cabinet
- Piped to point of use from cabinet
- Written scheme of examination required



Inerts

- Temporary installation only in accordance with arrangements
- Confined space risk assessment to determine potential for oxygen depletion*
- Connected to primary gas system, restrained by suitable wall mounted gas cylinder bracket located at a suitable height for the size of the gas cylinder and piped to point of use.
- Written scheme of examination required



To find out if your inert gas supply has the potential to deplete the oxygen in the room to less than 19.5% (which will then require an oxygen monitor) use the oxygen depletion calculator.



LASER SAFETY

Lasers emit radiation as narrow concentrated beams of light, not necessarily visible to the human eye and have many uses in teaching and research. Lasers are grouped into eight classes according to the ability of the beam to cause harm, the higher the number, the greater the potential harm. The class of each laser should be clearly marked on the device by the supplier. Lasers that have been imported may have been classified using a different system, if this is the case, please contact your College Laser Protection Supervisor (LPS).

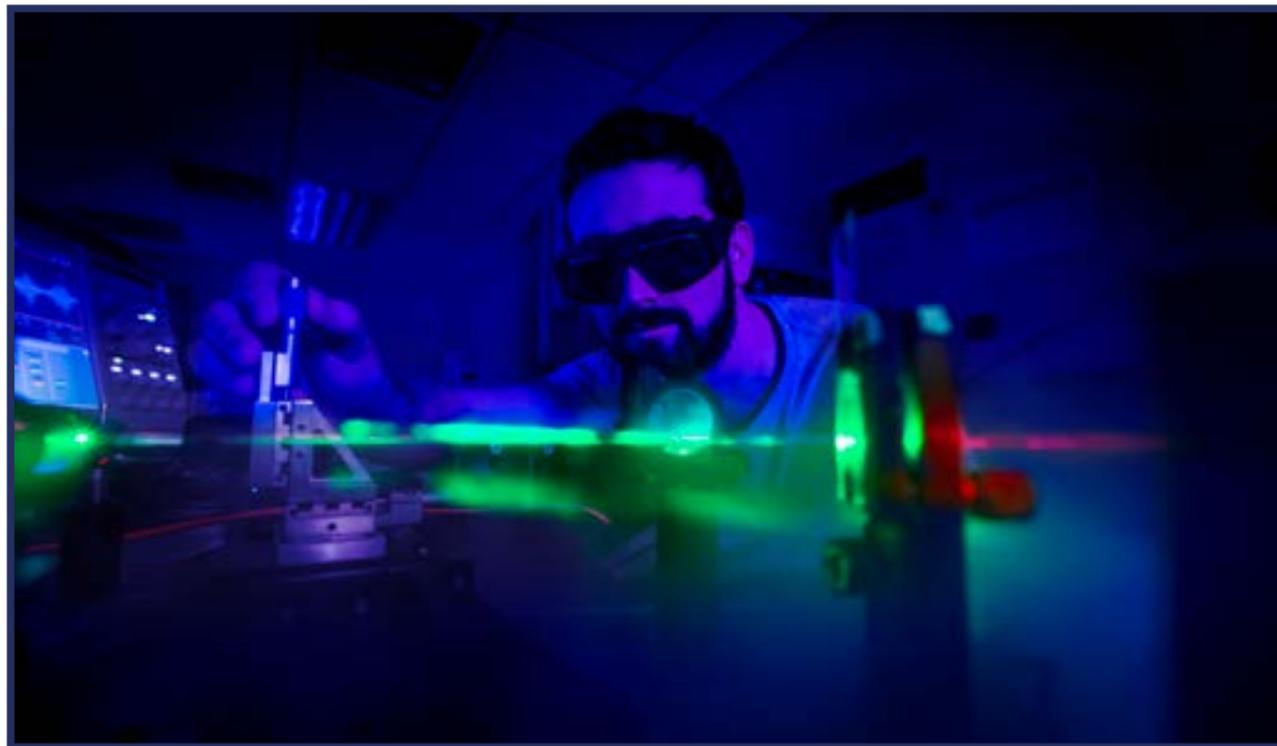
When assessing the risk from lasers you should consider their ability to damage eyesight, burn skin and cause fires as well as non-optical hazards such as risk of electric shock, use of hazardous chemicals, cryogenic liquids and flying debris / toxic fumes from targets etc.

Lower risk lasers (classes 1, 1M, 1C, 2, 2M and 3R) can be used by staff and students providing they have been trained in the safe use of the equipment and have completed a risk assessment. General controls include not staring at, or directecting the beam at other people and not modifying or refocusing beams with magnifying optics.

Equipment that has an embedded class 3B or 4 laser, but the laser beam is inaccessible to users would be considered to fall into Class 1 during normal use. .

Because of the potential to cause harm, additional procedures are in place for staff and students wishing to use Class 3B and 4 lasers. Risk assessments for these equipment must be reviewed by the College LPS and the University Laser Safety Officer before the laser is first used and users should complete the laser training module and register as a radiation user. Please refer to the Health & Safety Policy Arrangements, Laser Safety (HSA21) for further information. Risk assessment should be reviewed if there is a change of the laser set up or use.

If you have any queries or would like additional advice on laser safety procedures contact your College Laser Protection Supervisor, Health & Safety Lead/Coordinator or Health & Safety Team.



IONISING RADIATION

Activities involving ionising radiation may include the use of analytical or diagnostic X-ray equipment or use of radioactive material including certain rocks. Not only does ionising radiation present a risk to the health of our staff and students but radioactive material also poses a risk to the environment. As such there are strict systems in place to manage these risks.

Before any work with radiation is undertaken and before any radioactive sources are bought into our facilities a risk assessment must be completed and agreed with the College Radiation Protection Supervisor and University Radiation Protection Officer, who will check that the project complies with environmental permits and Health & Safety requirements.

Staff and students working with ionising radiation must receive appropriate training. For low risk sealed sources and contained X-ray equipment this will be training to local procedures whilst workers with higher risk sources and equipment are required to attend formal radiation training sessions.

The Ionising Radiation policy arrangements and associated guidance provide more detailed information on management of radiation risks.

ELECTROMAGNETIC FIELDS

Electromagnetic fields (EMFs) arise whenever electrical energy is used. So for example, EMFs may arise from work processes such as radiofrequency heating and drying and in the world at large from radio, TV and Telecoms broadcasting masts and security detection devices. Exposure to high levels of EMFs can give rise to acute effects.

The effects that can occur depend on the frequency of the radiation. At low frequencies the effects will be on the central nervous system of the body whilst at high frequencies, heating effects can occur leading to a rise in body temperature.

In reality, these effects are extremely rare and will not occur in most day-to-day work situations. EMF must be considered for 'people at risk' who may include those with active implants such as pace makers, or with passive implants including artificial joints, pins or stents.

For further information about Electromagnetic Fields, contact the Scientific Safety team: healthandsafety@swansea.ac.uk



NOISE AT WORK

Noise is part of everyday life, but too much noise can cause permanent and disabling hearing damage. This can be hearing loss that gets worse over time, damage caused by sudden, extremely loud noises, or tinnitus (permanent ringing in the ears).

AM I AT RISK?

You may be at risk if you answer 'yes' to any of these questions about the noise levels where you work. Please note that answering yes is indicative only and further checks and measurements will need to be taken to establish noise levels and any controls required.

- Is the noise intrusive - like a busy street, a vacuum cleaner or a crowded restaurant - for most of the working day?
- Do you have to raise your voice to have a normal conversation when about 2m apart for at least part of the day?
- Do you use noisy powered tools or machinery for over half an hour a day?
- Are there noises because of impacts (e.g. hammering, drop forging, pneumatic impact tools, etc.), explosive sources such as cartridge-operated tools or detonators, or guns?
- Do you have muffled hearing at the end of the day, even if it is better by the next morning?

If you answer yes to any of the questions above, speak to your line manager and your Health & Safety Lead who will contact the Scientific Safety Team for further advice.

Email: healthandsafety@swansea.ac.uk

CONTROLLING & REDUCING THE RISK

The Scientific Safety Team will work with you to provide advice and support to complete a risk assessment to determine the levels of noise and duration of exposure. Following this an action plan will be put together to reduce and control the risk from noise exposure.

If you have any queries or would like additional advice on noise exposure limits contact Health and Safety:

Call: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk

HOW DO I PROTECT MYSELF?

Buy tools with low noise. Report any problems with noise-control devices or your hearing protection straight away. Let your line manager and College/ PSU Health & Safety Lead/ Coordinator know about any issues or concerns. Co-operate. Make sure you use properly any noise-control devices (eg noise enclosures), and follow any working methods that are put in place. Attend your appointments for hearing checks with Occupational Health.

Wear any hearing protection you are given: Wear it properly (you will be trained how to do this), and make sure you wear it all the time when you are doing noisy work, and when you are in hearing protection zones. Taking it off even for a short while reduces the overall protection you get, meaning your hearing could still be damaged.

Look after your hearing protection. Make sure you understand what you need to do to maintain your hearing protection.

HEALTH SURVEILLANCE

If you are exposed to specific levels of noise you may need to have a hearing test at a set frequency. The hearing tests are organised by Occupational Health. This will be discussed with you in more detail by your line manager and Occupational Health team.

Contact Occupational Health:

Telephone: 01792 (29)5538
Email: occupational-health@swansea.ac.uk

OTOTOXINS

Exposure to noise in the workplace is a well-established risk to hearing and can result in noise induced hearing loss.

A less well known cause of hearing loss is as a result of exposure to ototoxic substances. Ototoxins may harm hearing or compound the damage noise causes. These include: toluene, styrene, xylene, lead, trichloroethylene, mercury, carbon monoxide, carbon disulphide, tin, germanium and cyanides. As the list shows, ototoxicity is not limited to solvents. Some medications have also been identified as ototoxic, including some anti-cancer, anti-inflammatory, anti-thrombotic, antimalarial and antirheumatic drugs, loop diuretics and antibiotics.

For further advice and information email:
healthandsafety@swansea.ac.uk

VIBRATION AT WORK

Hand-arm vibration (HAV) is vibration transmitted from work processes into workers' hands and arms. It can be caused by using equipment that vibrates including:

- Hand-held power tools.
- Hand-guided equipment e.g. lawnmowers or
- By holding materials being processed by machines, such as pedestal grinders.

Other sources of vibrating equipment in the University that could include:

- Laboratory equipment which vibrates/ shakes and causes vibrations in work benches
- Extensive use of trolleys over rough terrain/ cobbled areas

Regular and frequent exposure to hand-arm vibration can lead to permanent health effects. This is most likely when contact with a vibrating tool or work process is a regular part of your job.

Occasional exposure is unlikely to cause ill health.

Hand-arm vibration can cause a range of conditions collectively known as hand-arm vibration syndrome (HAVS), as well as specific diseases such as carpal tunnel syndrome.

HAVS is preventable, but once the damage is done it is permanent. Damage from HAVS can include the inability to do fine work and cold can trigger painful finger blanching attacks.

AM I AT RISK?

You may be at risk if you regularly use the following equipment regularly.

- Chainsaws;
- Cut-off saws (for stone etc);
- Hammer drills;
- Hand-held grinders;
- Impact wrenches
- Jigsaws
- Pedestal grinders
- Polishers

- Power hammers and chisels
- Powered lawn mowers
- Powered sanders
- Strimmers/brush cutters

If you answered yes to any of the questions, or are concerned about other vibrating equipment you use speak to your manager who can contact your Health and Safety Lead/ Coordinator for advice.

There may be certain health conditions that make you more vulnerable to developing symptoms.

CONTROLLING & REDUCING THE RISK

The Scientific Safety Team can work with you to provide advice and support on vibration and advise on a risk assessment and an action plan.

Telephone: 01792 (29)5240
Email: healthandsafety@swansea.ac.uk

HEALTH SURVEILLANCE

If you are exposed to specific levels of vibration or have a pre-existing condition that could be affected by vibration, you may need to be part of a Health Surveillance programme which is led by Occupational Health. This will be discussed with you in more detail by your line manager and Occupational Health team.

Section 3: Useful Contacts



USEFUL CONTACTS

Health & Safety: 01792 (29)5240 or healthandsafety@swansea.ac.uk

Contact Health and Safety: www.swansea.ac.uk/healthsafety/contactus/

Sustainability: 01792 (29)5245/ 01792 (29)2589 or sustainability@swansea.ac.uk

Contact Sustainability: www.swansea.ac.uk/sustainability/contactus/

Waste Queries: estates-waste@swansea.ac.uk

Security:

Singleton: 01792 (60)4271

Bay: 01792 (60)6010

or security@swansea.ac.uk

Helpdesk: 01792 (29)5240 or wsheldesk@swansea.ac.uk

Occupational Health: 01792 (29)5538 or occupational-health@swansea.ac.uk

Staff Counselling: 01792 644668

Postgraduate Student Health Centre: 01792 295321

Operator: 0

USEFUL WEBSITES

E & FM: www.swansea.ac.uk/estates-and-facilities-management/

Health & Safety: www.swansea.ac.uk/healthandsafety

Sustainability: www.swansea.ac.uk/sustainability

Sustainable Travel: www.swansea.ac.uk/estates-and-facilities-management/ourservices/traveloptions

Security: www.swansea.ac.uk/estates-and-facilities-management/ourservices/security/

HSE: www.hse.gov.uk



Section 4: College/PSU Contacts



COLLEGE/PSU CONTACTS

