

COLLEGE OF HUMAN SCIENCES

Staff & Student Health & Safety Handbook

a general health and safety
guide for staff and students

INDEX

KEY CONTACTS AND LINKS	3
INTRODUCTION	4
The College	4
Useful University Health, Safety & Environment Resources	4
Useful Health and Safety Contacts	4
EMERGENCY ARRANGEMENTS	5
First Aid	5
Fire Prevention	5
Smoking	5
Fire – General Arrangements	5
Emergency Fire Action Procedures for Disabled Persons	6
Fire Evacuation Procedure	7
DAY TO DAY	8
Induction	8
Training, Information and Instruction	8
Risk Assessments	8
Accident / Incident Reporting Procedure	8
Buildings	9
Electricity / Portable Electrical Appliances	9
Computers / Display Screen Equipment (DSE) - Staff	9
Events	9
Food Safety	10
Travelling Abroad on University Related Business	10
Use of Vehicles, Minibuses and Driving Safely	10
Out of Hours / Lone Working	10
Disabled Persons	11
New and Expectant Mothers	11
General Health and Well-being	11
Visitors	11
Young Workers / Work Experience	11
Personal Protective Equipment (PPE)	11

HIGHER RISK ACTIVITIES	12
Manual Handling	12
Machinery and Equipment - General	12
Cilgwyn Design & Technology Workshop	12
Lifting Equipment and Lifting Accessories	12
Noise and Vibration	12
Fieldwork	12
Student Placements	13
Drones / Small Unmanned Aircraft	13
Restricted Areas	13
Gas – Laboratories	14
Compressed Gas Cylinders	14
Autoclaves / Steam Sterilisers	14
Centrifuges	14
Fume Cupboards	14
Biological Safety Cabinets	14
Statutory Examinations - Pressure Systems / Lifting Equipment	15
Hazardous Substances / Use of Chemicals	15
Biohazards and Genetically Modified Organisms (GMO)	16
Human Tissue	16
Ionising Radiation (open sources, X-rays)	16
Electromagnetic Fields (EMF)	17
Ultraviolet Light (UV)	17
Lasers	17

KEY CONTACTS AND LINKS

All telephones have a direct dialling facility for the Emergency Services. Inform the University's main Security Hub if you require the Emergency Services or have called them direct.

Fire, Ambulance or Police (internal phone) **333 (or 9-999)**

NOTE: If no internal phone add '01248 38' before the following 4 digit numbers:

Security Lodge (Main Hub)	2795
Health & Safety Lead (Deputy College Manager)	3136
Chief Technicians	specific to School
School Administration Team Leaders	specific to School
Senior School Clerical Officers	specific to School
Human Tissue (Designated Individual)	8069
Human Tissue (Persons Designated)	specific to School
The Health and Safety Office	3847 / 3854 / 2779
Property & Campus Services (PACS)	2783 / 2775
Travel Insurance Queries (Finance Office)	2199
Student Services	2024

- [College of Human Sciences \(CoHS\) Website](#)
- [University Health & Safety Office \(HSO\) Website](#)
- [Student Services Website](#)
- [Finance Office Website](#)
- [Property and Campus Services \(PACS\) Website](#)

THE COLLEGE

The College of Human Sciences (CoHS) consists of the following Schools.

- [Psychology](#)
- [Education & Human Development](#)
- [Health Sciences](#)
- [Medical Sciences](#)
- [Sport, Health & Exercise Sciences](#)

The College brings together a number of related disciplines, offering a range of courses and research opportunities which includes vocational training to gain hands on experience. This Handbook contains general health and safety information and some guidance if performing higher risk activities whilst working or studying with the College.

The most important advice is if you have doubts about your health and safety, stop and seek help.

USEFUL UNIVERSITY HEALTH, SAFETY & ENVIRONMENT RESOURCES

As this Handbook only provides a general overview of the College's health, safety and environmental management arrangements, it is important that you also familiarize yourself with the following key documents and resources:

- CoHS Health, Safety and Environmental Policy.
- CoHS 'Team' Resources (staff only).
- Bangor University [Staff / Student Health and Safety Handbook](#) offers day to day health and safety information whilst at the University.
- The University's [Health and Safety Office \(HSO\) Website](#) provides an array of information and guidance. The Website also includes Forms, Policies and procedures and a number of template documents to help you.
- [Environmental Management](#) details the University's work to protect the environment.

NOTE: Placement Providers must brief staff and students on Placement with them in their local health and safety arrangements.

USEFUL HEALTH AND SAFETY CONTACTS

The Deputy College Manager is the CoHS H&S Coordinator and is accountable to the College Manager for overseeing general health, safety and environmental (HS&E) arrangements across the College.

On a day to day basis, School based staff support the H&S Coordinator. This group is referred to as the College H&S Task Group and consists of Technicians, School Administration Team Leaders and Senior School Clerical Officers. Other staff may also provide help when required.

The University's central Health and Safety Office (HSO) also offers advice and support.

Contact numbers are available on page 3.

GENERAL EMERGENCY INFORMATION

FIRST AID

First Aid provisions are available in most University buildings with details displayed on First Aid Posters. These include a First Aid Box and in most cases a trained First Aider on-site. Others may receive First Aid Training dependent on their activities, for example, an Academic supervising student fieldwork.

Call Security on **2795 / 333** if local First Aid is not available or the Emergency Services are required whilst on University premises.



FIRE PREVENTION

A few simple measures can significantly reduce fire risk. Good housekeeping, storing materials appropriately, keeping fire doors closed and switching off electrical equipment (eg heaters) when not in use all help. Never leave or store combustible materials on emergency exit routes or block access to fire alarm call points, refuge points or fire-fighting equipment.

Risk Assessments must consider fire risks associated with an activity to ensure suitable arrangements are in place, with those affected informed so they know what to do if something does go wrong.

Please report any concerns to your local School safety contact immediately.

SMOKING

Smoking is not permitted within any building, within 5metres of any University building or in any vehicle owned, hired or leased by the University. This includes e-cigarettes.

FIRE - GENERAL ARRANGEMENTS

It is essential you understand the emergency procedures and any special hazards for each building you occupy or routinely visit. This should be covered during your H&S Induction and includes fire exits, fire escape routes and what to do if the fire alarm sounds.

Information, including a building's Assembly Point can also be found on the Fire Action Notices displayed in each building.



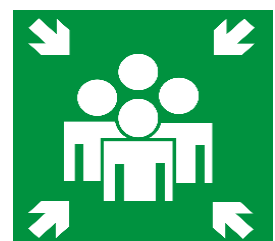
Call Point



Fire Action Notices



Fire Exit Signs



Assembly Points usually have this symbol

Please inform your Line Manager, Personal Tutor or local School safety contact if you are unsure.

FIRE ALARM TESTS AND FIRE EVACUATION DRILLS

Fire alarm tests are undertaken in occupied buildings. You will be informed, if needed when this will occur. In addition, the College arranges at least one Fire Evacuation Drill per Semester for each building under its control. With the exception of the fire alarm test **always evacuate if the fire alarm sounds**.

EMERGENCY FIRE ACTION PROCEDURES FOR DISABLED PERSONS

During an emergency, some people may require specific arrangements so they can evacuate safely.

Never use a lift if the fire alarm is sounding

Please tell your Line Manager or Personal Tutor if you have an impairment that could affect you in an evacuation so arrangements can be made.

General advice is available on the [HSO Website](#). This includes the [‘Getting Around Bangor’](#) document which contains information on Refuge Points for use if you cannot evacuate via the stairs.

Sometimes a Personal Emergency Egress Plan (PEEP) is needed. The H&S Coordinator arranges this for staff with the Health & Safety Office. Disability Services oversees this process for students.

Staff are expected to inform their visitors of arrangements as necessary. An [Information Sheet](#) is available on the HSO Website to give to visitors unable to evacuate via the stairs.



REFUGE POINTS

Refuge Point systems (see below for types and signage) are designated areas that offer protection from smoke and fire. They are for use by those who cannot evacuate a building via the stairs.

Most systems are fitted with an intercom or phone system that links to the University’s Security Team so you can talk with them. Clear user instructions are displayed at each Refuge Point. Their locations in each building are also available in the [‘Getting Around Bangor’](#) document as detailed above.



FIRE EVACUATION PROCEDURE

If you discover a fire:

- **Immediately** raise the alarm by activating a manual Call Point
- **Contact** University Security (**ext 333 / 2795** on internal phone or **01248 38 2795**)
- **If safe**, turn off equipment and close doors
- **Leave** by the nearest, safest exit and go to the Assembly Point

On hearing the fire alarm:



DO

- Stop work immediately
- If safe to do so, turn off equipment, close open doors
- Go directly to the designated Assembly Point
- Report missing colleagues or those who have chosen to go to a Refuge Point to Security staff or Emergency Services
- Only return to the building when instructed by Security staff or Emergency Services



DO NOT

- Use lifts
- Take personal belongings, carry hot drinks etc
- Stand too close to the building or obstruct emergency routes
- Leave the Assembly Point
- Re-enter the building (even if the fire alarm has stopped sounding) without Security staff or Emergency Services permission

If you smell gas or suspect a gas leak:

- Turn off all gas appliances. Extinguish naked flames, high heat sources and cigarettes
- **DO NOT** turn electric switches ON or OFF
- **If safe**, open external windows and doors but close doors leading onto stairs
- If gas smell is very strong or in the whole building evacuate the entire building
- Inform Security on **333** (internal phone) or **01248 382795**. If unavailable, call **WALES & WEST UTILITIES** on **0800 111 999**
- If gas smell is outside a building call Property and Campus Services (PACS) on **2775** or **01248 38 2775** or University Security on **01248 38 2795**

INDUCTION

- **Staff:** New staff must attend a University Induction that includes basic health and safety information¹. The relevant School must then provide a local H&S Induction that covers pertinent health and safety information, including emergency arrangements.
- **Students:** All registered students will receive a specific Cohort Induction. Other courses may also include H&S Modules. In addition, Placement Providers are required to treat students as employees whilst on Placement, this includes providing a H&S Induction relevant to the working environment and work activity to be undertaken.

TRAINING, INFORMATION AND INSTRUCTION

Health and safety training is essential to achieve competence and pass on key information regarding health and safety risks and associated controls and safe working practices.

You may need to attend additional training due to the nature of your role or studies. If staff identify training needs, they should contact their Line Manager or H&S Coordinator; students should speak with their Personal Tutor or Placement Provider. In addition, Line Managers should give staff the opportunity to discuss training at their annual Performance Development Review.

Note: Records should be kept of all formal Inductions and Training.

RISK ASSESSMENTS

A Risk Assessment is simply a careful examination of what, in your work / study, could cause harm (to persons, the environment or other assets), so you can decide if you are doing enough to control associated risks or if you can do more to prevent harm from occurring.

The College HS&E Policy details who is responsible for Risk Assessments. Never undertake any activity involving significant hazards until **an assessment of the risks and a written [Risk Assessment](#)** is in place. The Risk Assessment should be reviewed regularly (ie periodically and in the event of change, complaint, incident etc) to ensure suitable.

Communicate Risk Assessments to all those affected by the hazards, ensuring the risks and necessary controls to manage these are understood with any amended Risk Assessment **re-communicated**. As part of a document review, it is essential old versions are removed from use but kept on record. Advice on Risk Assessments, including Templates for a range of activities are available on the [HSO Website](#).

ACCIDENT / INCIDENT REPORTING PROCEDURE

Report all accidents and incidents, including near misses so they can be investigated to ensure lessons are learned and to prevent a recurrence. If you are involved in, or witness an incident:

- Obtain an Accident & Incident Report Form from the [HSO Website](#). Complete the Form whilst details are clear and witnesses are available.
- Return the completed Form (within 7 days of the event) to your local School safety contact who will forward a copy to the H&S Coordinator and the Health & Safety Office.

Report death, major injury, disease, dangerous occurrences immediately to Health & Safety on 3847.

¹ New on-line Staff H&S Induction to be rolled out in 2019

BUILDINGS

Never disturb any building structure (even banging a nail in the wall), any building service or interfere with anything which has this red and black label affixed which indicates the presence of asbestos.

Report building concerns or work requiring disturbance of the infrastructure to your School safety contact or in their absence direct to [Property and Campus Services 2775 / 2783](#). Contact Security **2795** if urgent issues arise outside of normal working hours.



ELECTRICITY / PORTABLE ELECTRICAL APPLIANCES

Property and Campus Services (PACS) maintain the fixed electrical system (ie up to the socket). The College has established the following to ensure the safe use of electrical items beyond the socket.

- **Equipment and Supplies:**
 - Portable electrical appliances are inspected and tested (PAT Tested) to a suitable Schedule and a label fixed to the item to show it is tested.
- **General Electrical Safety: All Staff, Students and Visitors:**
 - 'Brought in' electrical items must be PAT Tested before use on University premises.
 - **Visual checks are essential.** [Check](#) portable electrical equipment regularly.
 - Never overload sockets. Fully unwind coiled extension leads but be mindful of leads creating trip hazards.
 - Keep combustibles clear of electric heaters and switch heaters off if left unattended.
 - Do not use an item if you are concerned about its safety - report it immediately.

Report concerns with the 'fixed' electrical system to PACS **2783** or out of hours Security **2795 / 333**.

COMPUTERS / DISPLAY SCREEN EQUIPMENT (DSE) - STAFF

The College considers all staff to be 'DSE Users' (as defined by the Safe Use of Computers (DSE) Policy). All staff must complete the on-line DSE Training and Self-Assessment on starting and then every 5 years unless changes occur eg new office, health concerns. Once completed the on-line DSE Self-Assessment automatically forwards to the relevant School DSE Assessor for review and if needed action.

The University reimburses the cost of [eye tests](#) for staff working with DSE and a set amount towards the cost of [glasses](#) if needed to work safely with DSE.

A range of information on DSE (useful for staff and students) is available on the [HSO Website](#).

EVENTS

If planning an event you must nominate someone to act as the 'Event Lead' to ensure all necessary health and safety measures are in place. This includes informing the Head of Schools Office, arranging supervision for the event (*note: specific ratios may be required for events children are invited*) and reviewing / updating the general [Events Risk Assessment](#) to ensure pertinent to the event activities, the location and the attendees profile (eg age, numbers, specific needs).

If using a 3rd Party Supplier, checks must be carried out to confirm suitability (eg Public Liability Insurance, Risk Assessment, Disclosure & Barring Service (DBS) Checks).

FOOD SAFETY

Catering for events etc should be arranged through University Catering. Please inform the local School safety contact if you are planning 'cakes sales' or similar type events. General Food Safety guidance can then be provided and which must be followed.

TRAVELLING ABROAD ON UNIVERSITY RELATED BUSINESS

The University provides free Travel Insurance (available on-line via the [Finance Website](#)) which staff and students must submit if travelling overseas on University business.

As per the University's [Overseas Travel Policy](#) a Risk Assessment is required if travelling overseas. If travel is to a low risk country for a low risk activity (eg a conference in Europe), completing the University's on-line Travel Insurance is usually sufficient.

For higher risk travel, a specific Risk Assessment is required. Senior University staff must also specifically authorise travel to areas that the Foreign & Commonwealth Office (FCO) advises against all travel to unless on essential business **OR** advises against all travel to. If wishing to travel to these areas a formal application must be submitted to the H&S Coordinator with all the required documentation **at least 4 weeks before date of travel.**

USE OF VEHICLES, MINIBUSES AND DRIVING SAFELY

The University must ensure the safety of drivers and passengers driving on University business. The following summarises key points from the [Driver & Vehicle Safety Policy](#) and [Minibus Safety Policy](#):

- **Vehicles:** College owned, hired or leased must be road worthy, road legal and fit for purpose. In addition, vehicles must be subject to a weekly, recorded safety check.
- **The Driver:** Anyone driving a College owned, leased or hire vehicle must present, each year, a current summary of their driving licence to the College's Finance Hub (available from DVLA Website - www.gov.uk/view-driving-licence). The Licence Summary is checked to make sure the Driving Licence Categories cover the driver for the vehicles driven. Drivers must also sign a Driver Authorisation Form.
- **Claiming Business Mileage:** Any person using their own vehicle for University business and claiming business mileage must have 'business use' on their vehicle insurance.
- **Minibuses:** Specific requirements apply to those driving minibuses on University business, for example, age restrictions (differ to Students' Union age limits), MIDAS Training, displaying a Section 19 Bus Permit in each minibus driven.

OUT OF HOURS / LONE WORKING

Working outside of normal hours (i.e. 8am – 6pm, Monday to Friday) is discouraged. Although office work is generally low risk, simple precautions can be taken, for example, phone access, informing Security (ext 2795) if working at unusual hours; essential if they alarm a building at set times.

Occasionally lone activities, such as home visits, are undertaken away from the University. This will require a specific Risk Assessment to ensure suitable controls are in place to manage any risk. For example, identifying contacts who can provide support in an emergency, call back and escalation procedures, completing the activity in daylight hours. See the [HSO Website](#) for guidance.

DISABLED PERSONS (see Emergency Arrangements regarding PEEPs)

Staff should inform their Line Manager if they require adjustments to assist them whilst at work. Students should contact [Disability Services](#), who will then liaise with the College and others to support the student - most Schools also have a dedicated Student Disability Tutor.

NEW AND EXPECTANT MOTHERS

New and expectant mothers (staff and students) are encouraged to inform their Line Manager, Personal Tutor or the H&S Coordinator. This to ensure a Risk Assessment is prepared with appropriate provisions made to support the mother and unborn child. Human Resources will advise [staff](#) regarding maternity pay / leave, paternity etc. Student Services will advise [students](#) in relation to their studies.

GENERAL HEALTH AND WELL-BEING

Staff should inform their Line Manager if concerned work is affecting their health or due to individual circumstances, such as illness, which requires adjustments to support them. If staff cannot talk to their Line Manager, they should contact the Occupational Health Practitioner or Human Resources.

Students with similar concerns related to their studies should, in the first instance inform their Personal Tutor. Student Services can also offer advice and support.

VISITORS

Visitors must be protected against risks to their health and safety the same as staff and students. Visiting Academics and study / work placements hosted by the College must be authorised by the Head of School and must follow University and College HS&E procedures. The person inviting the Visiting Academic / person is considered responsible for the visitor and must ensure suitable arrangements are in place. For example, H&S Induction, supervision, instruction and training.

YOUNG WORKERS / WORK EXPERIENCE

Specific University policies exist to ensure the safety of any child (below 16 years) or young persons (between 16 and 18 years) undertaking placements at the University.

Before staff agree any work placement, they must seek approval of the Head of School. On approval, staff must inform Human Resources (HR) and the Head of School, with the relevant HR [Forms](#) completed and returned to HR **at least 8 weeks before** the placement starts.

A specific Risk Assessment must be prepared by staff overseeing the Placement to ensure suitable arrangements are in place eg H&S Induction, Supervision. A copy of the Risk Assessment must also be given to the person concerned and the Head of School Office.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Occasionally you may need to wear PPE for an activity and which your School will generally provide. Students should also receive PPE from any Placement Provider if required for an activity. If PPE is advised you must follow all training, instruction and signage regarding its use.

However, be mindful that PPE is personal. One size does not fit all so make sure the PPE is a correct fit and inform someone (eg Tutor, Placement Provider, Line Manager) immediately if the PPE is unsuitable or you are unsure in its use.

MANUAL HANDLING

Sometimes you may need to carry out handling tasks, for example lifting patients whilst on Placement, carrying kit on an expedition. Simple tips to look after yourself are:

- Ask for instruction on how to safely carry out a task.
- Avoid handling large / heavy objects – if possible split loads.
- Plan the task with the help of others, making sure you all understand the plan! If available, use mechanical aids such as ‘sack’ trucks, hoists.
- Inform someone of concerns which could affect you when carrying out handling tasks.

MACHINERY AND EQUIPMENT - GENERAL

Some Schools operate specialist items. **Never** use such items until **trained / instructed** in their use.

CILGWYN DESIGN & TECHNOLOGY (D&T) WORKSHOP - MACHINERY AND EQUIPMENT

A machine specific Competence Record must be completed before a student can access any machines without one to one supervision. Types of equipment operated in the Workshop includes a laser cutter, band saw, pillar drill, paint booth etc.

Only authorised, competent Workshop staff may operate **Restricted Equipment** (eg hand held circular saw, circular saw and grinders) without one to one supervision. Students undertaking work on **Restricted Equipment** must always be supervised by authorised staff; notwithstanding this, students must also attain a Specific Competence Record for each restricted item.

LIFTING EQUIPMENT AND LIFTING ACCESSORIES (see Statutory Examinations)

Lifting equipment such as hoists and automated beds may be used. Please ensure you are **trained** in their correct use. This to not only look after yourself but also your patient.

NOISE & VIBRATION

Every effort is made to purchase equipment with the lowest noise and vibration levels. Exposure can also be controlled by limiting the time spent operating a machine or task rotation. If this is not sufficient, suitable personal protective equipment (eg ear defenders) must be provided. Sometimes Mandatory Hearing Protection Zones, where you must wear PPE will be set up. Do not enter these areas if you do not have the correct PPE or know how to use it.



FIELDWORK

Fieldwork must be undertaken in accordance with the University's [Fieldwork Policy](#) which includes health and safety and other considerations such as costing required training in Research Proposals. Anyone undertaking fieldwork must ensure a Risk Assessment has been prepared and suitable arrangements put in place. Participants must be provided with, and understand the content of the Risk Assessment and any arrangements, especially those they are responsible for themselves (eg wearing walking boots on a fieldtrip, costs) in a timely manner.

A Trip Registration Form should also be completed for fieldwork away from the University with a copy held locally in the School and with Security staff for the duration of the session.

STUDENT PLACEMENTS

The College adheres to the University's [Procedure for Placement Learning](#) and the health and safety procedures listed therein. Additional arrangements then apply for overseas placements.

A member of University staff (eg Link Lecturer) and a Placement Contact must be identified for all Placements. Placement Providers should treat students as one of their employees whilst on placement with them. This includes being provided with a H&S Induction, Risk Assessment, PPE etc.

DRONES / SMALL UNMANNED AIRCRAFT

Never operate drones on University business (includes appointing a 3rd Party to provide the service) or overfly University premises without prior [written permission](#) from the Health and Safety Office.

RESTRICTED AREAS

There are a number of restricted areas, which because of the work in them requires a specific Induction / Training or permission before you may enter. The table below summarises the main areas.

Areas	Location	Specific Authorisation Required	Specific Induction Required
CELL Biology Lab	Padarn, Rm 003.1	Yes	Yes
Design and Technology & Product Design Workshop	Cilgwyn, Normal Site	Yes	Yes
Cardiovascular Lab	Padarn, Rm 014	Yes	Yes
Biochemistry Lab 1	Padarn, Rm 006	Yes	Yes
Biochemistry Lab 2	Padarn, Rm 003	Yes	Yes
DEXA Ionising Radiation Lab	George, Rm 203	Yes	Yes
Lab 201, Hypoxic Chamber Lab	George, Rm 201	Yes	Yes
Lab 202, Environmental Chamber Lab	George, Rm 202	Yes	Yes
MRI Scanner	Brigantia, Rm 007	Yes	Yes
Anatomy Lab	Brigantia, Rm 424	Yes	Yes
Diagnostic X-Ray Unit	Cambrian 1, Wrexham	Yes	Yes
Cancer Research Lab	Brambell, D2 & D7	Yes	Yes
Radiation Lab	Brambell, Rm 529	Yes	Yes

GAS – LABORATORIES

Gas points may still be found in some laboratories. Any person using gas powered equipment should receive instruction in how to do so safely. Gas taps must be turned off whenever a laboratory is left unattended. Although individuals are responsible for turning off burners they have been using, the last person leaving a laboratory at night should double check to make sure all gas taps are turned off.

COMPRESSED GAS CYLINDERS (see Statutory Examinations)

Please **inform** a Technician before purchasing / setting up / using / moving any compressed gas cylinder, gas line or regulator. This will ensure suitable suppliers are used and the cylinders are moved using the correct type of trolley and are set up so they have the correct regulator affixed. Cylinders must also be secured (eg strapped, chained) to prevent them toppling.

Once set up, Technicians will instruct any person using the system on its safe use. Technicians must also be informed of concerns, including empty cylinders to arrange removal / replacement.

AUTOCLAVES / STEAM STERILISERS (see Statutory Examinations)

Autoclaves / sterilisers use high pressure steam to kill bacterium etc. If operated incorrectly they can place the operator at risk and others coming into contact with materials which may have an incomplete 'kill' of hazardous micro-organisms. Additional requirements apply for large floor mounted [autoclaves](#) (eg Authorised Users, heat resistant gloves, User Log Book). **Never operate until training is given.**

CENTRIFUGES

Small benchtop machines capable of spinning small eppendorf tubes are relatively robust and can be covered in a general Lab Induction. Larger benchtop machines and especially floor standing hi-speed and ultra centrifuges pose a much greater risk. **Specific training** and registration to become an authorised user is needed before any person can operate [large centrifuges](#).

FUME CUPBOARDS

A fume hood is a ventilated enclosure which contains gases, vapours and fumes. An exhaust fan situated on the top of the building pulls air and airborne contaminants through connected ductwork and exhausts them to atmosphere. When used properly, fume hoods protect against fumes and vapours, for example from solvents.

BIOLOGICAL SAFETY CABINETS

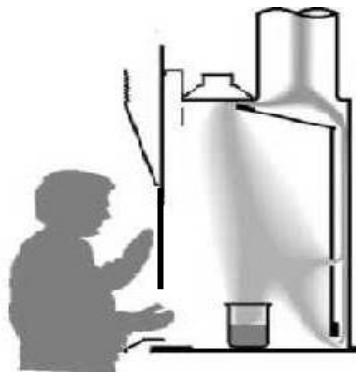
Class II Safety Cabinets contain infectious materials by drawing air through the open front of the cabinet and then drawing downwards through grills in the base of the cabinet, the air passes up the back of the cabinet and is then HEPA filtered. The cabinets protect the operator and the sample. They are particularly useful for handling cell cultures.

Hits and Tips on Working with Fume Cupboards / Safety Cabinets:

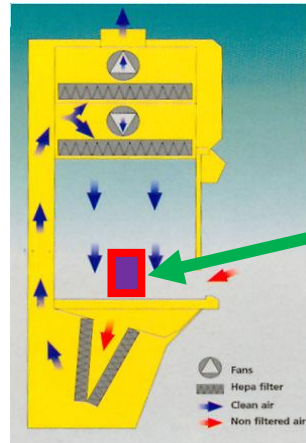
- Before use check it is working and that it is inside of 'Test Date' (the label on the front).
- Hold a tissue in front of the sash; it should be sucked inwards, although **do not allow** the tissue to be sucked in as it could cause damage.

HIGHER RISK / COMPLEX ACTIVITIES

- No matter how awkward, work with the sash as low as possible with the material positioned as far to the back as possible.
- Do not disrupt the airflow eg draughts, too many items inside, careless work practices.



Good Placement
of Materials – Fume Cupboard



Good Placement
of Materials –
Biological Safety
Cabinet

STATUTORY EXAMINATIONS (Pressure Systems & Lifting Equipment)

Any pressure system that falls under the remit of the Pressure Systems Safety Regulations (PSSR) or lifting equipment / accessories that fall under the remit of the Lifting Operations & Lifting Equipment Regulations (LOLER) require robust controls to be put in place.

This not only includes training in use and inspections and maintenance but also Statutory Examinations by a Competent Person. Examinations are **in addition** to inspections and maintenance and are performed by the University Insurer's Competent Engineer. Examinations can be arranged via the University Insurance Officer. Please inform the Insurance Officer of **ALL** relevant items (including when no longer in use).

HAZARDOUS SUBSTANCES / USE OF CHEMICALS

As part of your work / study you may have to work with chemicals (eg laboratories, Workshop).



To control risks:

- Read the instructions / hazard labels on containers. Follow the directions for use.
- Personal protective equipment (PPE) will be discussed during the local H&S Induction / Pre-activity Briefing. Use suitable PPE for the material and you (ie glove, lab coat, size).
- A Risk / COSHH Assessment must be in place, appropriate for the substances used (including concentration, mixtures, form) and how they are to be used.

- Use fumehoods when directed by the COSHH Assessment.
- Store chemicals and waste chemicals correctly eg segregated, banded.
- Dispose of waste chemicals as per the COSHH Assessment.
- If unable to dispose of waste chemicals safely in-house arrange via the Chemical Waste Collections set up by the Health & Safety Office.

BIOHAZARDS AND GENETICALLY MODIFIED ORGANISMS (GMOs)

The COSHH Regulations cover all micro-organisms which are hazardous to human health. As such, a specific [Biological Agents Risk Assessment](#) is required before working with hazardous microbes.

The University's Biological Safety Officer (BSO) must be informed of and **Approve** any work with micro-organisms in ADCP Hazard Group 2 (and above) and work involving the use or creation of GMOs **before** work. Once approved work is restricted to designated laboratories with specific arrangements, including **training** required.



Be mindful of the potential for exposure to biohazards during fieldwork or if working in a clinical setting. A Risk Assessment should be prepared for such activities with hazards and controls communicated to all those affected.

HUMAN TISSUE

The storage and use of human tissue is governed by the [Human Tissue Act 2004](#) which is defined as any sample derived from a human body that contains even a single cell. In addition, at the University:



- All human tissue stored, used or disposed of within the [University](#) must be recorded in the Anatomy Database.
- No specimens may be removed from the Anatomy Laboratory without **prior Written Consent**.
- All activity concerning human tissue must be **authorised** by the University's Designated Individual for the Human Tissue Authority or the appropriate Persons Designated within the School who has delegated responsibility.

IONISING RADIATION

Work with ionising radiation falls under the remit of the Ionising Radiation Regulations.

- **X-RAYS:** SSHES operates a DEXA Scanner and Radiography (Wrexham) a diagnostic X-ray unit, both managed by a local Radiation Protection Supervisor (RPS). Operators must receive formal training by the local RPS which includes Risk Assessments, Local Rules, ethical approval / informed consent procedures (where applicable) and dosimetry requirements. **Never operate X-ray equipment until training is given by the RPS.**



- **OPEN SOURCES OF IONISING RADIATION:** All persons working with open sources (Radiation Workers) must be **Registered** and all projects involving open sources **Approved** by the University Radiation Protection Officer (RPO) or University Radiation Protection Advisor (RPA).

Workers **must** receive **formal training** from the RPO and RPS before working with radioactive material. Work must be undertaken in a designated area and specific Local Rules and procedures, including dosimetry arrangements established as per RPA advice. Local Radiation Protection Supervisors (RPS) oversee day to day arrangements in these areas.

ELECTROMAGNETIC FIELDS (EMF)

An MRI Scanner and Transcranial Magnetic Stimulation (TMS) equipment that produces higher levels of [EMF](#) than that encountered in the environment is used by the College. Specific controls are in place to manage risks. For example, access restrictions and Risk Assessments. Signs are also displayed to warn of risks, especially to 'Persons at Particular Risk' (PPR). **Never operate equipment until trained.** If a 'PPR' **NEVER WORK** with such items until you have sought the advice of the staff member responsible for the equipment.



ULTRAVIOLET LIGHT (UV)

UV equipment is identifiable by this symbol. Users should **receive instruction** in its use with PPE provided if needed (eg UV resistant glasses / shield). In addition, regular checks should be carried out of any safety devices such as safety interlocks to confirm operation and to prevent accidental exposure.



LASERS

Class 3R, 3B, 4 lasers and Class 1 and 2 lasers with a power output 5 mW and above must be notified to the University Laser Safety Officer who will confirm suitability of arrangements. For example, training, Risk Assessment, Local Rules, Safe Operating Procedures and Registration of Laser Workers (Class 3R and above). Technicians will periodically check safety interlocks and arrange maintenance. **Never use lasers until trained.**

