## Before filling in this risk assessment

As part of your University induction and regular training you should have taken a set of compulsory courses: https://www.stir.ac.uk/about/professional-services/estates-and-campus-services/safety-environment-and-continuity/safety/induction-courses/

The University has further information available on their health and safety pages: https://www.stir.ac.uk/about/professional-services/estates-and-campus-services/safety-environment-and-continuity/safety/

The sport science safety pages have more specific information: https://sportsciencesafety.stir.ac.uk/

## Local safety policy for Sport Science

The Faculty takes issues of health and safety and best practice for risk management very seriously. All research projects, including undergraduate dissertation research and postgraduate research should complete a risk assessment. All researchers should make themselves aware of the specific needs their research has for compliance with health and safety legislation. The division carries out Health and Safety inspections regularly to ensure a safe working environment. All staff, project students and visiting researchers should ensure that they have received up to date basic training in Health and Safety either through their supervisor or the laboratory manager. Staff are required to take a series of courses on arrival and at regular intervals. To undertake any applied research everyone must obtain a permit to work which you will be given as part of your laboratory induction and can be renewed on request.

## Who is responsible?

The operational responsibility for health and safety policy for Health Science and Sport lies with head of faculty Prof Jayne Donaldson. The Safety Officer, Dr Nidia Rodriguez Sanchez is responsible for coordination and communication of health and safety policy & procedures in the faculty. Academic staff are responsible for conducting risk assessments for all undergraduate and taught postgraduate activities both field and laboratory based. Academic supervisors and postgraduate students are responsible for conducting risk assessments for all research activities both field and laboratory based. Accident and incident reports should be directed the School Manager, Elizabeth Robertson. Radiation Protection Supervisors are; Gillian Dreczkowski and Chris Grigson. A list of first aid trained staff is provided on the door of each laboratory.

## Contacts

|  |  |  |
| --- | --- | --- |
| Emergency: Fire, First Aid, Ambulance | 7999 (internal phone) | 01786 46 7999 |
| Head of Faculty: Prof Jayne Donaldson | 7657 6281 | 01786 46 7657 6281 |
| Faculty Manager: Elizabeth Robertson | 7493 | 01786 46 7493 |
| Safety Adviser: Dr Nidia Rodriguez Sanchez | 6098 | 01786 46 6024 |
| Laboratory manager: Kerry Bartie: Cottrell room 4B137 | 6297 | 01786 46 6297 |
| Radiation protection supervisor: Chris Grigson: Pathfoot room C4 | 6469 | 01786 46 6469 |
| First Aiders: See signs on laboratory doors | 2222 (internal phone) | 01786 46 7999 |
| Defibrillator: See signs in all laboratories |  |  |
| Building Defects | 2444 | 01786 46 2444 |
| University Safety Adviser | 7079 | 01786 46 7079 |
| University Fire Officer | 6147 | 01786 46 6147 |

## Emergency procedures

When phoning in an emergency, be prepared to state the service you require, the extension from which you are calling, the location of the emergency, your name and any other relevant information.

**For serious accidents**
such as a bad injury, heart attack or hazardous chemical spill that could affect others
phone 999, then phone 2222 (01786 46 7999 on a mobile).

**For minor accidents**
such as a minor fall, sickness or small, contained chemical spill
phone 2222 (01786 46 7999 on a mobile).

More detail is available in The University emergency procedures which can be found here:

<https://www.stir.ac.uk/about/professional-services/estates-and-campus-services/safety-environment-security-and-continuity/safety>

The person responsible for the laboratory must be informed of all accidents and incidents so that they can be properly recorded and improvements made.

## Work and safety culture

We do not support a culture of blame in the laboratories. We expect things to occasionally go wrong and equipment will break. The staff are there to help you with your work. Please talk to them.

## Where to find information for the laboratory

By the door you will find an access control sign showing the person responsible for the laboratory and a QR code for the safety website, a list of local first aiders, the location of the nearest defibrillator and the laboratory risk assessment. Guidance, manufacturers manuals, risk assessments, policies and Standard operating procedures (SOPs) are available on the safety website. For machinery and more hazardous equipment documents are available in the holders adjacent to equipment. Your supervisor may provide additional SOPs. Pay attention to pre use equipment checks.

What to do next
This risk assessment form should be filled in with the guidance in the appendix then submitted to the faculty safety officer for approval in good time before work commences. Do not start work before the safety officer has approved the risk assessment and updated your induction record.

## Hazard categories

Ethical approval requires hazards to be ascribed to a category. Use the following categories when describing the hazards in the table on the next page. Mark each category clearly.

|  |  |
| --- | --- |
| **F1. Working in a dangerous area:** e.g. high crime area, area of civil/political unrest, psychiatric unit or prison. Check with the Foreign and Commonwealth Office Travel Website and with University Insurance Officer prior to travel overseas. Discuss risk assessment/control measures with the management of any institution involved or with local police/law enforcement.- Take into account the possibility of psychological injury (trauma/PTSD and stress) as well as physical injury. - Give contact details and measures to be taken in case of emergency. | YesNo |
| **F2.** **Working in an isolated geographical area:** An isolated geographical area can include city parks, urban brownfield site as well as a remote hillside or a valley. - Take into account physical isolation through distance, screening effect of shrubbery/woodland or lack of mobile phone signal, etc. rather than just distance from “civilisation”.- Give contact details and measures in case of emergency.  | YesNo |
| **F3. Lone working:** Lone working can include unaccompanied visits to research subjects in their own home, etc., as well as working alone in the field. Working alone in an office environment with access to a phone is not usually categorised as “lone working”.- Give contact details and measures in case of emergency | YesNo |
| **F4.** **Working with equipment:** Please detail the risks associated with this- Give the manufacturer and model-Take into account how the equipment and users are affected by the location | YesNo |
| **F5. Environmental hazards:** e.g. extremes of weather (temperature, wind speed, ice, etc.), rough terrain, animals, plants, earthquake, water quality, contaminated land, derelict/unstable buildings are examples of factors to be considered here. | YesNo |
| **F6. Chemical & biological hazards:** e.g. laboratory and other chemicals and mixtures (eg, oils, acids, chemical wastes (pre-existing or generated during the project), detergents, crop spraying or fumigation, diseases (of humans, animals or plants). - If this section is applicable, a full COSHH risk assessment will always be required. | YesNo |
| **F8.** **Emotional risks:** e.g. sensitive research. This can include many areas that can be emotional triggers – research with or regarding children, animals, conflict (war, terrorism, holocaust studies, etc.), and natural disasters are examples. - The predisposition of the individuals should always be taken into account as an individual’s emotional triggers depend very much upon that individual’s personal/family history. | YesNo |

## Risk assessment

|  |  |  |  |
| --- | --- | --- | --- |
| Faculty / Service Area: | Faculty of Health Sciences and Sport | Location: | Cottrell 2B148 |
| Description of work task / equipment /area being assessed:  |
| Exercise / Intervention laboratory |
| Head of division | Prof Jayne Donaldson | Safety officer | Dr Nidia Rodriguez Sanchez |
| Completed by: |  | Date: | 12th May 2015 |
| Reviewed by (Line Manager): |  | Date: |  |
| Date of next review: |  |
| Equipment used |  |
| Categories of people involved | Staff, UG, PG, Visitors |
| Duration of activity |  | Frequency of activity |  |
| Legal compliance to standards and regulations required | HASAWA, MHSWR, PUER, COSSH |
| Change log |  |
| **What are the hazards?** | **Hazard category** | **Who might be harmed and how?** | **What are you already doing to control the risks?** | **\*Risk rating** | **What additional controls (if any) are required to reduce the risks?** | **\*Risk rating** | **Action by who?** | **Action by when?** | **Date of completion** |
| **Powerjog treadmill** | F4 | Investigators participants1. Overexertion leads to adverse health effects
2. Slips, trips and falls cause cuts bruises and abrasion

Nip points cause crushing and cuts | 1. RA01, RA02
2. Instruction, SOP

Inspection of belt covers |  | Monthly inspection and annual maintenance |  | Competent person | Continual |  |

## COSHH Hazards

Anything in category F.6 (Chemical and biological hazards) should go here

\*Details under relevant heading in appendix

Manufacturers COSHH data sheets are required for all chemical hazards and should be attached

| **The Substance****What are the hazards and \*classification?** **\*Route of exposure** | **\*WEL****mg/m3** | **Who might be harmed and how?** | **What are you already doing to control the risks?** | **\*Risk rating** | **What additional controls (if any) are required to reduce the risks?** | **\*Risk rating** | **Action by who?** | **Action by when?** | **Date of completion** | **Health monitoring** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Miltons sterilising solution**IrritantSkinEyes |  | Investigators, StudentsSkin irritation, Eye irritation | Provide Eye goggles, washing up glovesInstruction on PPE during induction and in SOPInstruction – In case of contact with eyes rinse immediately with plenty of water for least 5 minutes.  In case of contact with skin, wash affected area thoroughly with water. | 2 |  |  |  |  |  | No |

## Append supplier safety data sheets for all substances here:

# Appendix

## Risk ratings

Risk ratings are a way of evaluating risk. A risk is defined as the likelihood that a hazard will cause harm combined with the severity of the harm. We can apply a value to a risk by using the following formula and matrix.

Risk = Likelihood x Severity



Risks can then be prioritised by their rating

1 Urgent Action - (Risk 15 - 25)

2 High Priority - (Risk 10 - 12)

3 Medium Priority - (Risk 5 - 9)

4 Low Priority - (Risk 2 - 4)

5 Very Low Priority - No Action Required (Risk 1)

This gives the leads to the residual risk: Low (Risk 1-4), Medium (Risk 5-9), or High (Risk 10 to 25). If the risks are acceptable (Low Risk) then you may feel able to proceed without further action. If the risk is Medium or High then you must do something to bring the risk to a "tolerable" level.

## Controls measures

Control measures are actions that reduce the risk to a tolerable level. Controls should be chosen to reduce the severity and or likelihood of a risk. Controls should be applied in an order of preference or Hierarchy of Controls:

1. Elimination – Remove the hazard
2. Substitution – Exchange the risk for something less likely or severe
3. Physical Controls – separation or isolation, prevent contact with the hazard
4. Administrative controls - safe operating procedures to ensure safe interaction with hazard
5. Information, instruction, training & supervision – warn people of the hazard and tell or show them how, or help them to deal with it.
6. Personal Protective Equipment – dress people to reduce severity of harm

## COSSH section

The Control of Substances Hazardous to Health Regulations 2002 require additional specific risk assessment for hazardous substances. Fill in the COSHH section for any of the substances identified under hazard category F.6 . Control is adequate when the risk of harm is ‘as low as is reasonably practicable'. This means you need to demonstrate that:

1. All control measures are in good working order.
2. Exposure is below the Workplace Exposure Limit, where one exists.
3. Exposure to substances that cause cancer, asthma or genetic damage is reduced to as low a level as possible.

“A brief guide to COSHH”: <https://www.hse.gov.uk/pubns/indg136.htm>

## Workplace exposure limits (WEL)

There is a maximum exposure to hazardous substances defined by law. These workplace exposure limits are given in the following document.

“EH40/2005 Workplace exposure limits”: <https://www.hse.gov.uk/pubns/priced/eh40.pdf>

## COSHH Hazard classifications

This information should be given on the exterior of the container and on the COSHH data sheet supplied with the hazardous substance.

* Very Toxic
* Toxic
* Corrosive
* Harmful
* Irritant
* Sensitiser
* Dust
* Teratogenic
* Carcinogen or suspected carcinogen
* Microorganism
* Possible long term effects

## COSHH Routes of exposure

Routes of exposure are the different ways hazardous substances interact with the body. There may be more than one route.

* Contact damage to skin or eyes
* Injection
* Absorption through skin
* Ingestion
* Inhalation

## COSHH Supplier Safety data sheets

Attach the supplier safety data sheet to the risk assessment for each substance covered.

## Safe operating procedures

The faculty provides safe operating procedures for many activities these can be found on the health and safety web pages and in the folders located near any equipment they apply to. The activity you are planning may require an additional procedure to be written as a control. Contact the safety officer for help with this as they may be able to identify similar activities the procedure should apply to. They will also be able to advise on a suitable format and wording.

## Pre operation equipment checks

Pre operation checks are detailed in operating procedures found on the health and safety web pages and in the folders located near any equipment they apply to. Fill in the form provided each time you use the machine. Report any issues you encounter in your check and leave a note on the machine. Do not be tempted to skip pre operation checks. Faulty machinery can cause injury.

## Resources, instruction, information, supervision and training

In addition to the resources mentioned elsewhere. Manufacturer user manuals are available from the health and safety webpages https://sportsciencesafety.stir.ac.uk and in the folders by the equipment. Training and supervision are arranged as part of the laboratory induction. Remember, you must not work in any laboratory without obtaining authorisation for the activities you wish to undertake as part of an induction. Inductions should be repeated on a regular basis as indicated on your induction record. If further instruction, training or supervision is required, please contact the person in charge of the laboratory.

## Faults and reporting

If you experience a fault or poor performance with a piece of equipment you should stop work. You should immediately inform the person responsible for the laboratory as listed on the sign on the door. This is important as monitoring is an important part of adequate maintenance.

## Where does this all come from?

As part of your University induction and regular training you should have taken a set of compulsory courses

<https://www.stir.ac.uk/about/professional-services/estates-and-campus-services/safety-environment-and-continuity/safety/induction-courses/>

The University has further information available on their health and safety pages <https://www.stir.ac.uk/about/professional-services/estates-and-campus-services/safety-environment-and-continuity/safety/>

The Sport Science health and safety pages are here <https://sportsciencesafety.stir.ac.uk>

Employers, employees and people who own buildings have a legal duty to their own safety and the safety of any others who may be affected by their activities. This mainly comes from the Health and Safety at Work act 1974 (HASAWA) and the Management of Health and Safety at Work Regulations 1999 (MHSWR). Substances used in the workplace must be used in accordance with The Control of Substances Hazardous to Health Regulations 2004 (COSHH). Work equipment must be suitable, safe and well maintained in accordance with The Provision of Work Equipment Regulations (PUWER). Further regulations apply to machinery. Machinery is a special category of work equipment which usually incorporates a motor. The legal requirements are summarised in guidance provided by the Health and Safety Executive. The guidance is much easier to read and can be found on the HSE web site.