

University College Dublin



School Of Biosystems and Food Engineering

Safety Statement

*Rev 2. Issued November 2022
University College Dublin
Safety, Insurance, Operational Risk and Compliance (SIRC)
Office*

This document must be read in conjunction with the [University Parent Safety Statement](#)

UCD School of Biosystems and Food Engineering
Safety Statement

Contents

1.0 Introduction	3
2.0 School Description	Error! Bookmark not defined.
3.0 Management of Health and Safety within the School.....	4
4.0 Key Contact Details	5
5.0 Employee Safety Representation.....	6
6.0 Emergency Response Plans.....	7
6.1 Fire	7
6.2 Gas Leak	9
6.3 Loss / Spillage of a Chemical Agent	9
6.4 Loss / Spillage of A Biological Agent	10
6.5 Chemical Agent Exposure	11
6.6 Biological Agent Exposure.....	12
6.7 Personal Injury	13
6.8 Campus Emergency.....	13
6.9 Contacting the Emergency Services.....	14
7.0 Location of Emergency Equipment.....	15
8.0 Risk Assessments	17
8.1 Risk Assessment Methodology	17
8.2 UCD School of Biosystems and Food Engineering Register of Risks.....	19
Appendix 1	27
Lone Working Risk Assessment Template	27

Revision History

- Revision 0: Issued November 2017.
- Revision 1: Issued April 2022.
- Revision 2: Issued November 2022.

UCD School of Biosystems and Food Engineering Safety Statement

1.0 Introduction

This document is designed to fulfil the requirements of Section 20 of the *Safety, Health and Welfare at Work Act (No. 10 of 2005)* which requires all employers to prepare a *Safety Statement*.

This document applies to the operations of the *School Of Biosystems and Food Engineering* as located within the Agriculture and Food Science in the Belfield Campus. This document does not apply to the operations of staff from the School who may hold employment in other third party institutions. When working in another institution the local safety requirements should be adhered to.

This document when read in conjunction with the *University Parent Safety Statement* and relevant risk assessments outlines how the health and safety of staff, students and visitors to the school will be safeguarded.

This document will be subjected to review on a regular basis and also when changes in work practices necessitate it.

All persons are strongly encouraged to develop local area safety plans and procedures to complement the contents of this document where they deem it necessary or useful to do so. In particular researchers are required where necessary to complete their own risk assessments to complement the ones prepared as part of this document (Section 8.0).

2.0 School Description

Located on the main UCD Belfield Campus, *School of Biosystems and Food Engineering*, educate engineers, scientists and technologists in the specific and technological aspect of food manufacturing and processing as well as application of engineering principles to the production, manufacture and processing of biological materials. School engaged both in education of students and the carrying out of cutting edge research.

The School facilities are mainly located at the top floor of the UCD Agriculture and Food Science Centre. Additional laboratories are located over two floors in the Agriculture and Food Science Centre. In addition, one laboratory is located on the ground floor in Science South building.

UCD School of Biosystems and Food Engineering Safety Statement

3.0 Management of Health and Safety within the School

University College Dublin is committed to providing a safe place of work for all of its employees and to providing a safe environment for students in which to carry out their studies and associated activities. The University is also committed to ensuring that, in so far as is reasonably practicable, its actions and activities do not have a negative impact on the safety of any third parties.

The Head of School is responsible for ensuring or making arrangements to ensure that the activities undertaken within the school are carried out in a safe manner without undue risk to the health and safety of University employees, students or any third parties.

All employees have a duty to cooperate with the University in all matters of health and safety at work and not to endanger the safety of themselves, their co-workers or any other parties through any act or omission that they may undertake. This cooperation is essential to the effective management of safety within the University. In accordance with safety legislation the University expects all employees to take responsibility for their own safety whilst at work and to perform their duties in a safe manner and in accordance with all relevant safe working procedures.

The University encourages employees to become actively involved in safety matters and welcomes all suggestions or comments regarding safety which can be made to the local Safety Committee, where they can be dealt with most efficiently.

Refer to the [University Parent Safety Statement](#) for further details.

UCD School of Biosystems and Food Engineering
Safety Statement

4.0 Key Contact Details

<u>Title</u>	<u>Name</u>	<u>Contact Details</u>
Head of School	Prof. Paula Bourke	(716) 7495
University SIRC Manager	Dr. Peter Coulahan	(716) 8768 / 8771
Employee Safety Representative	Assoc. Prof. Enda Cummins	(716) 7476
Fire Alarm Maintenance Company	Contact UCD SIRC Office	(716) 8768 / 8771
Fire Extinguisher Maintenance Company	Contact UCD SIRC Office	(716) 8768 / 8771
Student Health Centre		(716) 3133
UCD Chaplaincy		(716) 8372
UCD 24 HR Emergency Line		(716) 7999
Campus Duty Manager		(716) 7666
Campus Services		(716) 7000

School of Biosystems and Food Engineering First Aiders

<u>Name</u>	<u>Location</u>	<u>Contact details</u>
Dr. Anna Lesniak-Podsiadlo	room 3.09	ext. 7316

Emergency First Aid treatment and equipment is available from the 24 hour Emergency line (01) 716 7999

There is an AED located at the main hub of the Agriculture Building. First aiders have been trained in its use.

UCD School of Biosystems and Food Engineering Safety Statement

5.0 Employee Safety Representation

University College Dublin is committed to involving and consulting employees in the management of health and safety within the University. To this end the University encourages active participation by employees as Safety Representatives or in a Safety Committee System. The functions of Safety Representatives are to act as a medium for employees within a College / School to raise safety concerns and for the *University SIRC Office* and College / School Management to impart information on health and safety matters.

Representation on a committee should be drawn from a broad spectrum of areas within the school. All persons sitting on the committee are classed by the University as Employee Safety Representatives as outlined in Part 4 of the 2005 Safety, Health and Welfare at Work Act.

Employees have a right under this legislation at any time to elect from their number such *Employee Safety Representatives*.

Any persons wishing to act as *Employee Safety Representatives* should contact their Head of School in the first instance.

School of Biosystems and Food Engineering Safety Representative

<u>Name</u>	<u>Contact Details</u>
Assoc. Prof. Enda Cummins	(716) 7476

For further information on local area Safety Representatives please contact the [UCD SIRC Office](#).

UCD School of Biosystems and Food Engineering

Safety Statement

6.0 Emergency Response Plans

Introduction

The purpose of these emergency response plans is to detail the steps and responses that must be taken in the event of an emergency within the School. Where deemed necessary, individual units within the school may further develop these plans to take account of the individual circumstances in their areas.

The following are deemed as emergencies within the School:

1. Fire
2. Gas Leak
3. Loss / Spillage Of A Chemical Agent
4. Loss / Spillage Of A Biological Agent
5. Chemical Agent Exposure
6. Biological Agent Exposure
7. Personal Injury
8. Major Campus Emergency

6.1 Fire

If you hear the fire alarm:

1. Do not panic but prepare to leave the building
2. The alarm will sound continuously; leave the building immediately in an orderly fashion by following the green man running signs to the nearest exit. Please note that this may not be the same way that you entered the building.



3. Classes in session must be dismissed and students directed to leave.
4. Persons in laboratories and treatment rooms should make the area safe before leaving by turning off equipment where possible and securing hazardous containers.
5. Do not use the lifts.
6. Do not go back to your working area for any reason.
7. If for any reason you are unable to leave the building make your way to a protected stairwell or a room with an external window and shut the door. If possible inform the

UCD School of Biosystems and Food Engineering Safety Statement

emergency line (**ext. 7999**) or a colleague of your location and the reason why you cannot safely exit the building.

8. If safe to do so nominated *Fire Marshals* should inspect their designated areas.
9. Proceed to your designated emergency assembly following your departure from the building. The assembly areas for the Biosystems and Food Engineering is:

In Front of Church/Agriculture Building or Car Park Behind Church

10. Report any knowledge you may have of missing or injured persons to *Services Personnel*
11. Return to the building only after the *Chief Fire Marshal / Services Personnel* give the all clear signal.

If you observe a fire:

1. Activate the fire alarm by breaking one off the red wall mounted break glass units.
2. If it is safe to do so and you have been trained to do so the fire may be tackled using a suitable fire extinguisher, but only if this does not place any person at risk of injury.
3. If you decide to fight a fire ensure that you have a safe and clear means of escape from the fire at all times.
4. In the case of chemical fires be aware that many chemicals give off poisonous fumes under fire conditions. Only fight chemical fires if you are certain that it is safe to do so and that the products of combustion can be avoided.
5. In the event that you cannot fight the fire or the fire begins to get out of control evacuate the area immediately.

Fire Extinguisher Types

Aqueous Film Forming Foam

- Red cylinder with a cream coloured label.
- Suitable for fighting paper, wood, fabric, etc fires.
- Not suitable for use on electrical fires.
- Suitable for use on most chemical fires.

Carbon Dioxide

- Red cylinder with a black label and a black discharge horn.
- Suitable for fighting electrical fires.
- Not suitable for paper or fabric fires as the gas is discharged under pressure and can blow embers around.

UCD School of Biosystems and Food Engineering
Safety Statement

- Not suitable for use in a confined space due to the asphyxiant nature of the carbon dioxide.
- Discharge horn can get very cold during use.

Dry Powder

- Red cylinder with a blue label.
- Suitable for all types of fires including electrical and chemical.
- Can be very messy and can damage electronic equipment.

To Use A Fire Extinguisher:

- Remove from wall bracket if necessary.
- Break the seal and remove the pin.
- Squeeze handle to test the extinguisher.
- For carbon dioxide extinguishers manually turn discharge horn into position before testing. Once used do not touch the discharge horn again as it gets very cold.
- Fight fire by aiming extinguisher at the base of the fire.

6.2 Gas Leak

- In the event that a natural or laboratory gas leak is suspected in the Biosystems and Food Engineering then the 24hr Emergency Line (ext. **7999**) must be contacted.
- The area should be evacuated.
- Only authorised personnel may interfere with gas safety systems.

6.3 Loss / Spillage of a Chemical Agent

In the case of a spill or leak of a chemical agent the following procedure should be followed:

- In the event that a chemical is spilled or is discovered to have leaked then all persons should be verbally requested to leave the affected area immediately.
- Where possible windows should be opened but all doors shut be kept closed.
- If the spilled material is flammable all possible sources of ignition, including electrical appliances should be turned off if safe to do so.
- The SDS for the chemical concerned should be consulted before dealing with the spillage and the information contained therein utilised to ensure a safe clean-up response.

UCD School of Biosystems and Food Engineering
Safety Statement

- For large spills (>10 L / kg) the University SIRC Office should be informed by dialling 8768 / 8771 or 7999 on an internal telephone.
- In the event that the spillage is deemed safe to deal with a spill kit should be obtained.
- Suitable personal protective equipment should be donned by the persons dealing with the spillage. At the very least safety glasses, gloves and a lab coat should be worn. All spills must be attended by at least two persons.
- The source of the leak should be ascertained and if possible and safe to do so closed or sealed. Any damaged containers should be removed and repackaged if possible.
- In the event of liquid spills adsorbent pads or vermiculite should be spread over the spilled material until it is covered. If necessary absorbent booms should be used to prevent the spillage spreading further.
- Using a dust pan and brush or similar the spilled material along with the absorbent material should be collected and placed into the bag / container contained within the spill kit.
- In the event of the spillage of a solid material the material should be collected using a dust pan and brush and placed into the bag / container contained within the spill kit.
- All wastes and all contaminated items generated by spillages must be disposed of in a suitable manner.
- When dealing with spillages the inhalation of large amounts of vapour or air borne contaminants should be avoided. In the event that a large amount of material is spilled then specialist assistance may be required. Respiratory protection may be required when dealing with large spillages. Persons must note that non air fed respiratory protection is not a substitute for decreased ambient oxygen levels.
- Some chemicals require specialist responses, e.g. elemental mercury, cyanides, strong acids, etc. Reference should be made to a materials' SDS before it is used in the laboratory for the first time and if required any recommended specialist spill response equipment should be sourced and held in a suitable location.

6.4 Loss / Spillage of A Biological Agent

For spillages where aerosols are not likely to be produced persons should do the necessary PPE (gloves and a lab coat at a minimum) and treat the affected area with an appropriate dry disinfectant or cover with tissue paper and apply a liquid disinfectant. The treated area should be allowed to remain long enough for the disinfectant to take effect before being cleaned and the waste material being disposed of accordingly. As a rule, *Virkon* and *Presept* should be used

UCD School of Biosystems and Food Engineering

Safety Statement

for the treatment of spillages of biological agents. If a different disinfectant is required, then this should be indicated in any relevant risk assessment.

Where a spillage may give rise to aerosols, e.g. during the rupture of a sample tube in a centrifuge, the area must be evacuated, and the droplets allowed time to settle. Persons then wearing appropriate PPE (gloves, lab coat and barrier face mask) may enter the affected area treat the spillage. In some cases, extensive decontamination of the working area may be required. If deemed necessary testing for the presence of the biological agent can be done following the completion of the disinfectant procedure. Respiratory protection may be required when dealing with spillages that have generated aerosols.

6.5 Chemical Agent Exposure

Some agents require specialist first aid responses, e.g. hydrofluoric acid, cyanides, etc. Reference should be made to a material's SDS before it is used for the first time and if required any specialist first aid equipment should be sourced and held in a suitable location and any unusual first aid responses should be noted.

The following are general guidelines for treating exposures to chemical agents.

Inhalation

- Following exposure to an airborne chemical; affected persons should be removed from the source of exposure to fresh air.
- At no time should persons place themselves at risk when trying to remove affected persons from the source exposure.
- If breathing stops then artificial respiration should be administered – note this may not be possible if corrosive or toxic materials are on the lips or in the mouth.
- If available, oxygen may also be administered.
- Any exposure which results in vomiting or unconsciousness must be referred to a medical practitioner.

Skin Contact

- Remove any contaminated clothing and wash (not scrub) the skin with soapy water.
- If required utilise an emergency shower if one is available.
- If the skin blisters or becomes reddened then seek medical advice.

UCD School of Biosystems and Food Engineering Safety Statement

Eye Contact

- Wash out eyes with copious amounts of fresh water and seek medical advice.

Ingestion

- Refer to the specific SDS. Always seek medical advice.

For further information contact the [Poisons Information Centre](#). Telephone +353 (01) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week).

If seeking medical advice after a chemical exposure, ensure that the patient has in their possession a copy of the relevant SDS.

6.6 Biological Agent Exposure

Any person who suspects that they may have been exposed to a biological agent must contact the SIRC Office (ext. 8768 / 8771) immediately. Medical assistance / advice must be sought as soon as is possible.

For needle stick / sharps type injuries:

1. Cuts caused by sharps should be treated immediately. No attempt should be made to remove broken glass from wounds. Needle stick injuries from contaminated needles should be encouraged to bleed. Wash well under running water and cover with a dry dressing. An attempt should be made to identify any chemical or biological hazard in the needle that may have been injected.
2. Apart from very minor injuries, a First Aider should be called.
3. In the event of sustaining an accident resulting in a wound:
 - Immediately wash the wound liberally with soap and water but without scrubbing
 - Do not attempt to remove any glass by hand
 - Gently encourage free bleeding of puncture wounds but do not suck the wound
 - Dry the area and apply a waterproof dressing
 - Seek medical advice if the sharp concerned was contaminated with any hazardous materials

UCD School of Biosystems and Food Engineering

Safety Statement

There is no evidence available to show that using antiseptics or squeezing a wound will reduce the risk of transmission of a blood borne pathogen. Using a caustic agent such as bleach to wash a wound is not recommended.

6.7 Personal Injury

In the event that a person suffers an injury that requires first aid treatment then:

- Treat the injury using first aid equipment. First aid equipment can be sourced from the 24hr Emergency Line (7999). There are several first aid boxes available within the School of Biosystems and Food Engineering, mainly located in laboratories; rooms 3.08, 3.19, 3.36.
- If necessary contact a trained first aider from within the School (section 4.0).
- If the emergency services are required then the 24hr Emergency Line should be contacted (7999) and the request made.

6.8 Campus Emergency

In the event that notification of a major campus incident is received then all staff and students should adhere to the *Shelter-Shut-Listen* model of response.

- In the event that a critical incident is notified then staff and students should **shelter** in a building, preferably in a secure area with access to a telephone and the UCD computer network. Lecturers should direct the students to remain indoors and should seek further information on their behalf via the UCD website, local Services Centre or the emergency line (7999).
- Staff should remain **shut** in their location until they are advised that the incident is over or until they are requested to leave the area.
- In the event that staff are required to evacuate an area the building fire alarm will be used to inform all building occupiers and further instructions will be given upon building evacuation.
- Unless instructed to do otherwise staff should remain indoors and **listen** for further instructions.
- Further instructions may be issued via voicemails; website; e-mail; campus siren, etc.

UCD School of Biosystems and Food Engineering Safety Statement

6.9 Contacting the Emergency Services

In all instances contacting the Emergency Services must be done via the 24hr Emergency Line (**7999**). Services personnel will then contact the Emergency Services and ensure that they are met upon their arrival on campus and are escorted to the correct location of any incident.

Any fire, hazardous agent spillage, exposure to a chemical agent, personal injury, etc. or near miss must be notified to the University SIRC Office using an official accident report form. Such forms can be obtained from the University SIRC Office. Contact sirc@ucd.ie or ext. 8768 / 8771

UCD School of Biosystems and Food Engineering Safety Statement

7.0 Location of Emergency Equipment

Fire Extinguishers

- Fire extinguishers are located throughout all buildings and are readily available in all locations.

First Aid Boxes

- First aid boxes are located in rooms: **3.04, 3.08, 3.19, 3.36.**
- First aid equipment is also available via the **24hr emergency line – 7999.**

Safety Shower

- Safety shower is located in room **3.01**

Automatic External Defibrillators (AED's)

<http://www.ucd.ie/sirc/healthandsafety/automatedexternaldefibrillatorsaeds/>

AED's are located in the following locations around the University:

- **Agriculture & Food Science Entrance Lobby (ground floor, Main Entrance)**
- Arts Annexe – Geary Institute Entrance Lobby
- Belfield Office Park – Blocks 9/10 Entrance Lobby (Nexus UCD)
- Campus Services Mobile Jeeps
- Conway Institute Undergraduate Area
- Engineering First Floor
- Health Sciences Entrance Lobby
- James Joyce Library Admissions Desk
- Lyons Estate
- Main Restaurant Entrance Lobby
- Newman Building Main Entrance Lobby
- Newstead Entrance Lobby
- Nova UCD
- National Virus Reference Lab (NVRL) Reception
- O'Reilly Hall
- Quinn S.O. Business Reception Desk
- Richview Architecture Building – Main Entrance Lobby
- Roebuck Castle Programme Office

UCD School of Biosystems and Food Engineering
Safety Statement

- Rosemount Environmental Research Station
- Science East Ground Floor Entrance Lobby
- Science North Ground Floor Entrance Lobby
- Science South Entrance Lobby
- Science West First Floor Entrance Lobby
- Smurfit S.O. Business Services Desk, Blackrock
- Smurfit S.O. Business Library Corridor
- Sports Centre Reception
- Sports Centre Rear Exit
- Student Health Centre
- Sutherland School of Law Reception
- Tierney Building – Main Entrance Lobby
- UCD Bowl
- Veterinary Hospital
- Veterinary Science Entrance Lobby

For training in the use of defibrillators please contact aed@ucd.ie

UCD School of Biosystems and Food Engineering Safety Statement

8.0 Risk Assessments

8.1 Risk Assessment Methodology

It is the aim of *University College Dublin* to identify hazards in the workplace and to control the risks from those hazards in so far as is reasonably practicable. ‘Hazard’ is defined as the potential to cause harm, while ‘risk’ is defined as the potential of the hazard to cause harm under the actual circumstances of use. The assessment of risk from the hazards identified is based on the linkage of the probability of occurrence with the severity of injury or material loss (the hazard effect) resultant from that occurrence.

Probability is determined based on an assessment on how likely it is that an adverse event related to the hazard concerned will occur. Probabilities are graded as:

- *Unlikely*: the adverse event being considered will occur only rarely.
- *Likely*: the adverse event being considered will occur on a frequent basis
- *Very Likely*: the adverse event being considered is almost certain to occur

Severity is based on the degree of personal injury or damage to property likely to occur in the event that the adverse event occurs. Severity of outcome is graded as:

- *Slightly Harmful*: e.g. superficial injuries; minor cuts and bruises; nuisance and irritation; temporary discomfort; minor infection; minor material damage.
- *Harmful*: e.g. lacerations; burns; concussion; sprains; minor fractures; dermatitis (temporary); asthma (temporary); long term discomfort; infection requiring medical treatment; significant material damage.
- *Very Harmful*: e.g. fatality; amputation; major fracture; severe poisoning; cancer; life shortening condition / disease; deafness; head injuries; eye injuries; substantial material damage.

The risk assessment matrix below is used to calculate the risk posed by any hazard by linking the probability of an adverse occurrence with the severity of injury or material loss (the hazard effect) resultant from that occurrence.

UCD School of Biosystems and Food Engineering
Safety Statement

Table 1. Risk Assessment Matrix

Probability of Negative Event	Severity of Outcome Of Negative Event		
	Slightly Harmful	Harmful	Very Harmful
Unlikely	<i>trivial risk</i>	<i>acceptable risk</i>	<i>moderate risk</i>
Likely	<i>acceptable risk</i>	<i>moderate risk</i>	<i>substantial risk</i>
Very Likely	<i>moderate risk</i>	<i>substantial risk</i>	<i>intolerable risk</i>

- *Trivial Risk:* No further action required.
- *Acceptable Risk:* No additional risk control / reduction measures required
- *Moderate Risk:* Further risk control / reduction measures should be considered and implemented were possible. Hazards graded as *Moderate Risk* must be closely managed.
- *Substantial Risk:* Further risk control / reduction measures must be identified. If the risk cannot be reduced further then the hazard must be strictly managed, and the frequency and duration of the hazard must be reduced to as low a level as practicable along with the number of persons exposed to the hazard.
- *Intolerable Risk:* All work involving this hazard is prohibited.

The aim of any risk control / reduction measures identified and implemented are to reduce the residual risk from the hazard to as low a level as is reasonably practicable.

Where practicable *University College Dublin* commits itself to the elimination of hazards. Where the risk from a hazard cannot be eliminated at source then the University will supply a range of suitable personal protective equipment in order to protect employees where necessary.

Risk assessments will be reviewed regularly and when changes in work practises arise within the University or when new activities are introduced. All staff and postgraduate students must be familiar with the contents of the risk assessments that are relevant to their work. Training and further information on workplace safety and risk assessment is available from the [University SIRC Office](#).

Staff and postgraduates working within *UCD School of Biosystems and Food Engineering* must review all relevant available risk assessments (see register of risks below) prior to initiating work or undertaking new tasks to establish whether or not these documents identify and manage the hazards associated with their work adequately. In the event that

UCD School of Biosystems and Food Engineering Safety Statement

existing risk assessments do not adequately manage the hazards associated with their work employees and postgraduates should complete their own risk assessments (see <https://intranet.ucd.ie/sirc/riskassessmenttemplates/index.html> for risk assessment templates); inform their local Safety Committee or inform the [*University SIRC Office*](#).

Persons required to complete risk assessments for chemical, biological or fieldwork hazards are strongly encouraged to consult the [*University College Dublin Biosafety Manual*](#) and the [*Chemical Safety Manual*](#) for more detailed safety information.

8.2 UCD School of Biosystems and Food Engineering Register of Risks

The following risk assessments are deemed to be relevant to the operations of the *School of Biosystems and Food Engineering*. The most current versions of these risk assessments are available at <http://www.ucd.ie/sirc/healthandsafety/riskassessments/>. Persons working within the school must make themselves familiar with the contents of all risk assessments which are relevant to their assigned duties and work in accordance with the provisions contained therein.

UCD School of Biosystems and Food Engineering
Safety Statement

Table 2: *UCD School of Biosystems and Food Engineering Register of Risks*

General Risk Assessments			
<i>These risk assessments may apply to all persons working within the school</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDA1	<u>Manual Handling (General)</u>	Acceptable Risk	
UCDA2	<u>Access and Egress</u>	Acceptable Risk	
UCDA3	<u>Bullying and Harassment</u>	Moderate Risk	
UCDA4	<u>Workplace Housekeeping</u>	Acceptable Risk	
UCDA5	<u>Pregnant Employees (General)</u>	n/a	Contact <u>UCD SIRC Office</u> to arrange Risk Assessment
UCDA6	<u>Home Working</u>	Trivial Risk	
UCDA7	<u>Presence On A Third Party Site (General)</u>	Moderate Risk	
UCDA8	<u>Kitchen / Tea Making Areas</u>	Trivial Risk	
UCDA9	<u>Driving / Use Of Vehicles</u>	Substantial Risk	
UCDA10	<u>Foreign Travel</u>	Acceptable Risk	
UCDA11	<u>Lone Working (General)</u>	n/a	Risk rating to be decided on an individual basis
UCDA12	<u>Workplace Stress</u>	Moderate Risk	
UCDA13	<u>Use Of Passenger / Goods Lifts</u>	Trivial Risk	
UCDA14	<u>Noise (General)</u>	Acceptable Risk	
UCDA15	<u>Use Of Personal Protective Equipment (General)</u>	Trivial Risk	
UCDA16	<u>Travel Within Ireland</u>	Acceptable Risk	
UCDA17	<u>Violence And Aggression(General)</u>	Acceptable Risk	
UCDA18	<u>Fire (General)</u>	Moderate Risk	
UCDA19	<u>Electricity (General)</u>	Moderate Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

Office Risk Assessments			
<i>These risk assessments may apply to persons working within an office environment within the school</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDB1	<u>Office Safety (General)</u>	Acceptable Risk	
UCDB2	<u>Use Of Display Screen Equipment</u>	Acceptable Risk	Contact SIRC Office to arrange individual assessment
UCDB3	<u>Electricity In The Office</u>	Acceptable Risk	
UCDB4	<u>Fire In The Office</u>	Acceptable Risk	
UCDB5	<u>Manual Handling In The Office</u>	Acceptable Risk	

Chemical Agents Risk Assessments			
<i>These risk assessments may apply to persons working with chemical agents within the school</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDC1	<u>Handling And Use Of Chemical Agents (General)</u>	Moderate Risk	For general guidance purposes only. Reference should be made to the more specific risk assessments for chemical agents. In the event that no risk assessment is available for a chemical agent then the user must arrange for one to be completed prior to using the agent for the first time.
UCDC2	<u>Storage Of Chemical Agents (General)</u>	Moderate Risk	The large scale storage of chemical agents (i.e. 00's of L / kg may require the completion of a more specific risk assessment).
UCDC3	<u>Handling And Use Of Flammable Liquids /</u>	Acceptable Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

	<u>Organic Solvents (General)</u>		
UCDC4	<u>Cryogenic Liquids (General)</u>	Acceptable Risk	
UCDC5	<u>Use Of Compressed Gases (General)</u>	Acceptable Risk	
UCDC6	<u>Use and Handling Of Corrosive Chemicals (General)</u>	Acceptable Risk	
UCDC7	<u>Use and Handing Of Hydrofluoric Acid (General)</u>	Moderate Risk	
UCDC8	<u>Use and Handling Of Cyanide Compounds (General)</u>	Moderate Risk	
UCDC9	<u>Use and Handling Of Mercury And Mercuric Compounds (General)</u>	Acceptable Risk	
UCDC10	<u>Use and Handling Of Organic Peroxide Compounds (General)</u>	Acceptable Risk	
UCDC11	<u>Use and Handling Of Potentially Explosive Materials (General)</u>	Acceptable Risk	
UCDC12	<u>Use and Handling Of Laboratory Diagnostic Kits (General)</u>	Acceptable Risk	
UCDC13	<u>Use and Handling Of Carcinogens and Mutagens (General)</u>	Moderate Risk	For general guidance purposes only. A specific risk assessments for every carcinogen and mutagen in use must be completed prior to using the agent for the first time.
UCDC14	<u>Use and Handling Of Teratogens And Reproductive Toxins (General)</u>	Acceptable Risk	
UCDC15	<u>Use and Handling Of Irritants, Harmful Agents and Sensitisers (General)</u>	Acceptable Risk	
UCDC16	<u>Use and Handling Of Toxic Agents (General)</u>	Acceptable Risk	
UCDC17	<u>Use and Handling Of Dry Ice (General)</u>	Acceptable Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

Biological Agents Risk Assessments

These risk assessments may apply to persons working with biological agents within the school

Risk Assessment Number	Title	Residual Risk Rating	Comment
UCDD1	<u>Handling and Use Of Class 1 Biological Agents</u>	Trivial Risk	
UCDD2	<u>Handling and Use Of Class 2 Biological Agents</u>	Acceptable Risk	
UCDD3	<u>Use and Propagation Of Cell Lines (General)</u>	Acceptable Risk	
UCDD4	<u>Handling and Use Of Biological Material Of Human / Animal Origin</u>	Acceptable Risk	
UCDD5	<u>Diagnostic Laboratories (General)</u>	Acceptable Risk	
UCDD6	<u>Handling and Use Of Class 3 Biological Agents</u>	Acceptable Risk	
UCDD7	<u>Centrifugation Of Biological Samples (General)</u>	Acceptable Risk	
UCDD8	<u>Dealing With Biological Agent Spillages</u>	Acceptable Risk	

Laboratory Risk Assessments

These risk assessments may apply to persons engaged in laboratory work within the school

Risk Assessment Number	Title	Residual Risk Rating	Comment
UCDE1	<u>Use of Centrifuges (General)</u>	Acceptable Risk	
UCDE2	<u>Use Of Autoclaves (General)</u>	Acceptable Risk	
UCDE3	<u>Use Of Bunsen / Gas Burners (General)</u>	Acceptable Risk	
UCDE4	<u>Cold Rooms / Walk In Freezers (General)</u>	Acceptable Risk	
UCDE5	<u>Use Of Fridges / Freezers (General)</u>	Trivial Risk	
UCDE6	<u>Use of Laboratory Glassware (General)</u>	Acceptable Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

UCDE7	<u>Use Of Laboratory Ovens (General)</u>	Acceptable Risk	
UCDE8	<u>Use Of Microwave Ovens (General)</u>	Acceptable Risk	
UCDE9	<u>Use Of Sharps (General)</u>	Acceptable Risk	
UCDE10	<u>Use Of Homogenisers (General)</u>	Acceptable Risk	
UCDE11	<u>Use Of Hot Plates / Stirrers (General)</u>	Acceptable Risk	
UCDE12	<u>Use Of pH Meters (General)</u>	Trivial Risk	
UCDE13	<u>User Of Rotary Evaporators (General)</u>	Acceptable Risk	
UCDE14	<u>Use Of UV Light Sources</u>	Acceptable Risk	
UCDE15	<u>Gel Electrophoresis - Non Chemical Risks (General)</u>	Acceptable Risk	
UCDE16	<u>Use Of Laboratory Personal Protective Equipment</u>	Trivial Risk	
UCDE17	<u>Use Of Microtomes (General)</u>	Acceptable Risk	
UCDE18	<u>Use Of Laboratory Pumps (General)</u>	Acceptable Risk	
UCDE19	<u>Electrical Safety In The Lab</u>	Moderate Risk	
UCDE20	<u>Fire Safety In The Lab</u>	Moderate Risk	
UCDE21	<u>Manual Handling In The Lab</u>	Acceptable Risk	
UCDE22	<u>Laboratory Waste Disposal</u>	Acceptable Risk	
UCDE23	<u>Laboratory Personal Hygiene</u>	Acceptable Risk	
UCDE24	<u>Use Of Water / Oil Baths (General)</u>	Acceptable Risk	
UCDE25	<u>Use Of Hot Air Guns (General)</u>	Acceptable Risk	
UCDE26	<u>Use Of Wax Baths (General)</u>	Acceptable Risk	
UCDE27	<u>Use Of Ice Makers (General)</u>	Trivial Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

UCDE28	Dissection (General)	Acceptable Risk	
UCDE29	Use Of Hand Sanitizers / Soaps (General)	Acceptable Risk	
UCDE30	Handling And Use Of Disinfectants (General)	Acceptable Risk	
UCDE31	Use of Lasers (General)	Acceptable Risk	
UCDE32	Use Of Laboratory Analytical Equipment (General)	Acceptable Risk	

Radiation Safety Risk Assessments			
<i>These risk assessments may apply to persons working with radioactive materials within the School.</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDG1	Handling And Use Of Radioisotopes (General)	Moderate Risk	
UCDG2	Use Of X Ray Equipment (General)	Moderate Risk	

Fieldwork Risk Assessments			
<i>These risk assessments may apply to persons engaged in fieldwork.</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDH1	Fieldwork (General)	Moderate Risk	
UCDH3	Home Visits / Face To Face Interviews	Acceptable Risk	

Workshop Safety Risk Assessments			
<i>These risk assessments may apply to persons working in a workshop</i>			
Risk Assessment Number	Title	Risk Rating	Comment
UCDK3	Use Of Lasers (General) Risk Assessment	Acceptable Risk	
UCDK7	Use Of Bench Furnaces (General) Risk Assessment	Acceptable Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

UCDK13	<u>Use Of Compressed Air (General) Risk Assessment</u>	Acceptable Risk	Refer to UCD Risk Assessment <i>UCDK11 Use Of Compressors (General)</i> if necessary.
UCDK14	<u>Use Of Hand Held Portable Electrical Tools (General) Risk Assessment</u>	Acceptable Risk	The provisions laid down in <i>UCDA19 Electricity (General) Risk Assessment</i> and <i>UCDA14 Noise (General) Risk Assessment</i> should be adhered to where relevant.
UCDK15	<u>Use Of Hand Held Tools (General) Risk Assessment</u>	Acceptable Risk	

UCD School of Biosystems and Food Engineering
Safety Statement

Appendix 1

Lone Working Risk Assessment Template

UCD School of Biosystems and Food Engineering
Safety Statement

1. General Information

Name of Person(s) carrying out risk assessment and their position	
Principal Investigator / Supervisor <i>(Person responsible for ensuring safety)</i>	
Name and position of proposed lone worker	
Date of assessment	
Dates of proposed lone working	

2. Initial Assessment

If the any of the following tasks are involved in the task being carried out, then lone working / out of hours working is **prohibited**.

Does the task involve:	Select as appropriate		
	Yes	No	N/A
a. The use of exposed high energy moving equipment			
b. Working at a height			
c. High energy sources			
d. The use of high energy lasers			
e. The use of high risk chemical agents			
f. The use of high risk biological agent			
g. The use of high risk radioactive substances			
h. A significant risk of violence			

3. Provide a detailed description of the activity in question, the location where the activity takes place and the reason lone working has to be undertaken.

Location of Activity:
Description of Activity:
Justify the need for lone working:

4. Hazard Identification and Risk Assessment

To complete the Risk Assessment Form below:

- Identify the hazards specific to the lone working activity and attach to this document the associated risk assessment for the work being completed
- Evaluate the associated risks

UCD School of Biosystems and Food Engineering Safety Statement

- List control measures to reduce the risk - procedures, equipment, training etc.
- Establish the residual risk rating after the implementation of controls

Generic risk assessments for different categories are available on [SIRC Office Website](#).

Alternatively use an available risk assessment template for the work:

- [Chemical agents risk assessment template](#)
- [Biological agents risk assessment template](#)
- [Fieldwork risk assessment template](#)
- [Workshop / Equipment risk assessment template](#)

Risk Rating = Likelihood of risk occurring x Severity of outcome

		Severity		
Likelihood		Low	Medium	High
	Low	Trivial	Acceptable	Moderate
	Medium	Acceptable	Moderate	Substantial
	High	Moderate	Substantial	Intolerable

Assessment of Likelihood and Severity

	Severity of Outcome	Likelihood of Exposure
Low	Slightly Harmful	Unlikely
Medium	Harmful	Likely
High	Very Harmful	Very Likely

1. **Trivial Risk:** No further action needed
2. **Acceptable Risk:** No additional risk control measures required
3. **Moderate Risk:** Implement further risk control measures if possible
4. **Substantial Risk:** Further control measures must be implemented. If this is not possible then work must be strictly managed to ensure safety.
5. **Intolerable:** Work must be prohibited until further control measures are implemented.

UCD School of Biosystems and Food Engineering
Safety Statement

Hazard	Risk(s)	Control Measure(s)
WORKPLACE: Identify any hazard specific to the workplace / environment, which may create particular risks for lone workers	<i>Attach specific risk assessment</i>	
Residual Risk Rating:		
PROCESS: Identify any hazards specific to the work process, which may create particular risks for lone workers	<i>Attach specific risk assessment</i>	
Residual Risk Rating:		
EQUIPMENT: Identify any hazards specific to the work equipment, which may create particular risks for lone workers	<i>Attach specific risk assessment</i>	
Residual Risk Rating:		
VIOLENCE: Identify the potential risk of violence		
Residual Risk Rating:		
INDIVIDUAL: Identify any hazards specific to the individual, which may create particular risks for lone workers e.g. medical conditions, inexperience, etc.		
Residual Risk Rating:		
WORK PATTERN: Consider how the lone worker's work pattern integrates with those of others workers, in terms of both time and geography		
Residual Risk Rating:		
OTHER: Please specify		
Residual Risk Rating:		

UCD School of Biosystems and Food Engineering
Safety Statement

6. Risk Rating

Is the risk rating acceptable: Yes No

If any aspect of the work is considered high risk, it is not suitable for lone working.

If yes, sign and date below and ensure all risk control measures have been implemented.

If no identify further control measures and reassess risk. If the risk cannot be reduced to an acceptable level then the process cannot be carried out.

Signed:

Position:

Date:

Lone Worker

Signed:

Position:

Date:

Assessor

Signed:

Position:

Date:

Academic Supervisor / Manager

This document must be signed by the lone worker, the assessor and the academic supervisor / manager (person responsible for ensuring safety).

By Signing the lone worker agrees to abide by the control measures outlined.

The assessment should be reviewed at regular intervals to ensure that it remains up to date.