University College Dublin



School of Agriculture and Food Science Safety Statement

Rev 3. Issued September 2025

University College Dublin

Safety, Insurance, Operational Risk and Compliance (SIRC)

Office

This document must be read in conjunction with the <u>University Parent</u>
<u>Safety Statement</u>

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Revision History

- o Revision 0: Issued November 22
- o Revision 1: Issued May 23
- o Revision 2: Issued July 23
- Revision 3: Issued Oct 25: Contacts and positions information updated, Details of Rosemount added, sections about out of hour access, compressed gas, Liquid nitrogen, Fieldwork and waste management added.

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 Agriculture and Food Science* located within the Agriculture and Food Science Centre on 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 <u>University Parent Safety Statement</u> 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.

2.0 School Description

The mission of the <u>School of Agriculture and Food Science</u> is to develop and apply the science and scholarship of agriculture, food, environmental sciences and rural development for the benefit of society through excellence in education, research, innovation and continuing professional development.

UCD is the only university in Ireland with a dedicated School of Agriculture and Food Science. The School is the first destination of choice for students in Ireland interested in pursuing the careers in the agri-food sector,

The School has a staff of over 160 (academic, technical, administrative and research-funded) who teach, conduct research and provide service at many levels to the agriculture and food industry. Approximately 2,500 undergraduate and postgraduate students are registered to the School's teaching and research programmes.

The School has four Sections that reflect the School's teaching and research interests, spanning the complete food chain farm to fork: Animal and Crop Sciences, Environmental and Sustainable Resource Management, Agribusiness and Rural Development, and Food Science and Nutrition.

The School's home is the Agriculture and Food Science Centre on the Belfield campus but School staff and students also spend significant amounts of time at UCD's Lyons Farm. On the Belfield campus the School also has facilities in the UCD Veterinary Sciences Centre, the UCD Conway Institute of Biomolecular and Biomedical Research, the UCD Institute of Food and Health and the UCD Earth Sciences Institute.

Further details can be found on the School website: https://www.ucd.ie/agfood/

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.

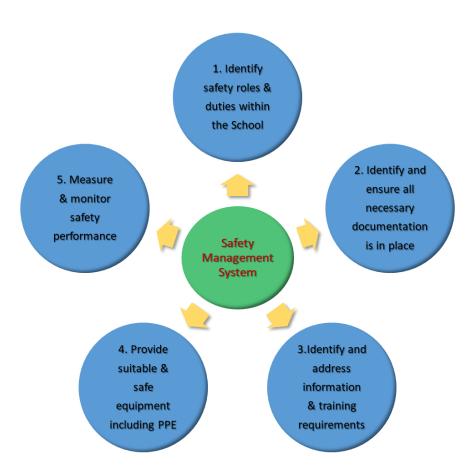
Refer to the <u>University Parent Safety Statement</u> for further details.

4.0 Safety Management System (SMS)

Introduction and Key Areas

The Safety Management System (SMS) in a School encompasses a comprehensive framework designed to ensure the safety and well-being of students, staff, and visitors within the School environment. It is a systematic approach that integrates policies, procedures, and practices aimed at identifying, assessing, and mitigating potential risks and hazards.

The diagram below identifies the main five Key areas forming the backbones of the SMS in place:



4.1 Identify safety roles and duties within the School

The University has identified specific safety roles within schools to ensure the effective implementation of its Safety Management System. These roles play a crucial part in maintaining a safe and secure environment for students, staff, and visitors. Chapter 5 of the statement document will provide comprehensive details about the specific duties and responsibilities associated with each safety role.

The diagram below illustrates the key safety-related roles that have been identified within the organization:

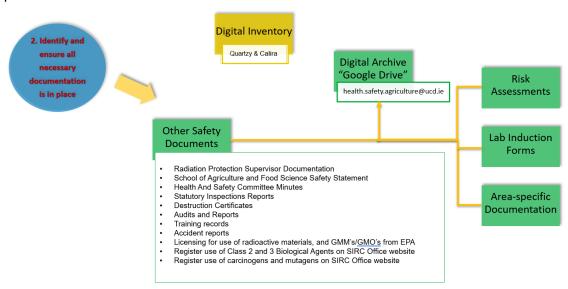


These roles have been established to ensure the effective implementation and management of our safety protocols. Each role carries specific responsibilities and duties, which will be outlined in detail in the following sections. It is crucial that individuals assigned to these roles fulfil their responsibilities diligently to uphold a safe and secure environment for all.

4.2 Identify and ensure all necessary documentation is in place

This aspect is crucial for establishing an organized and comprehensive archive system for safety documentation within the organization. This section aims to create a framework that ensures the availability and accessibility of all essential safety-related documents.

A schematic of the archive system is provided below, outlining the key components and processes involved:



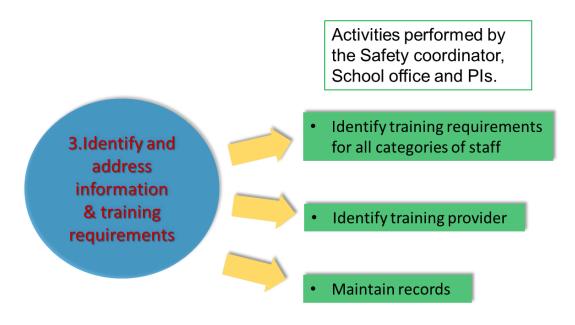
The archive system serves as a centralized repository for various safety documents, including policies, procedures, incident reports, risk assessments, emergency response plans, training materials, and regulatory compliance records, including PI self-assessment. The systematic organization and maintenance of these documents play a vital role in supporting effective safety management and facilitating timely access to critical information when needed.

Moreover, with some limited local exceptions, the School is transitioning towards the adoption of a digital system for managing the chemical inventory and equipment. This system will provide users with convenient access to safety documentation and Standard Operating Procedures (SOPs). The implementation of this digital system aims to enhance efficiency, accuracy, and accessibility in managing and retrieving important safety information.

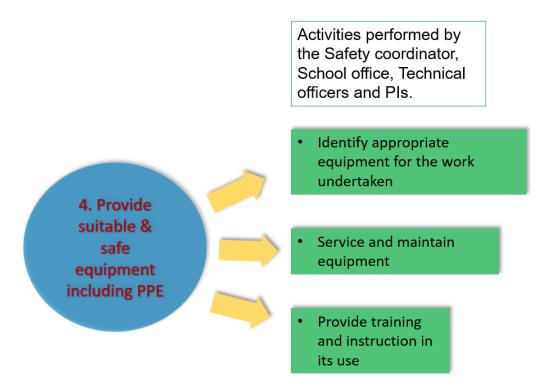
By utilizing the digital systems, such as "Quartzy" and "Calira" (formerly Clustermarket), users will be able to easily search and access safety documentation and SOPs related to chemicals and equipment. The system will also enable users to update and maintain accurate records of inventory, ensuring that all necessary safety information is up-to-date and readily available.

4.3 Identify and address information and training requirements

This paragraph outlines how the organization is committed to providing staff with access to essential information and appropriate training to fulfil their responsibilities in maintaining a safe and secure environment. The scheme below provides a summary of the main roles and duties associated with these specific tasks.



4.4 Provide suitable and safe equipment including PPE



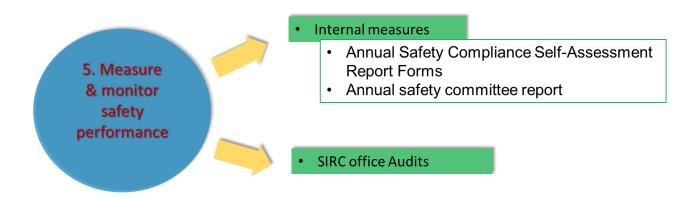
This paragraph emphasizes the organization's commitment to providing staff, students, and visitors with suitable and safe equipment, including Personal Protective Equipment (PPE). Furthermore, the School is committed to offering appropriate training on the use of PPE and the safe handling of equipment. In addition, proper equipment maintenance is ensured to adhere to safe operational practices, thereby maintaining a safe and secure environment. The scheme below provides a summary of the main roles and duties associated with these specific tasks.

By prioritizing the provision of suitable and safe equipment, the organization aims to protect the well-being of staff, students, and visitors. This includes ensuring that individuals have access to the necessary PPE to mitigate potential risks and hazards within the School environment.

4.4 Measure and monitor safety performances

This chapter outlines the methodologies and tools employed to measure various safety indicators, allowing for a comprehensive understanding of the organization's safety performance.

By implementing effective measurement and monitoring strategies, the organization can identify areas of strength and areas requiring improvement, enabling targeted interventions to enhance safety practices. This chapter delves into the key components involved in measuring safety performance and provides insights into monitoring mechanisms that ensure ongoing safety compliance and progress. The scheme below provides a summary of the main metrics associated with these specific tasks.



The scope is to implement systems and processes to collect accurate and reliable safety data. This involves establishing data collection methods, ensuring data integrity, and utilizing appropriate analytical tools to interpret the collected information effectively.

The Annual Safety Compliance Self-Assessment report forms, filled out by the School Principal Investigators (PIs), in conjunction with the data provided by the SIRC office and the online safety archive, play a crucial role in tracking the compliance and status of safety practices within the School. These assessment forms provide valuable information on the implementation of safety protocols, the identification of potential hazards, and the effectiveness of safety measures.

By analysing the self-assessment reports and consolidating the data from various sources, the Safety Committee and the Safety Coordinator can generate an annual safety report. This report serves as a comprehensive overview of the School's safety performance, highlighting areas of compliance as well as areas that require improvement. It provides a clear snapshot

of the School's safety practices and helps identify trends, patterns, and areas where additional resources or interventions may be necessary.

In addition to the internal assessment process, the School benefits from an external layer of control through the SIRC office external audit. This external audit provides an objective evaluation of the current safety procedures, practices, and compliance with applicable regulations. The audit offers valuable feedback and recommendations to ensure the effectiveness and continuous improvement of the safety management system. It helps identify potential gaps or areas for enhancement, providing guidance to maintain a robust and up-to-date safety framework.

By combining the internal self-assessment reports, data from the SIRC office, and the external audit, the School can maintain a comprehensive and proactive approach to safety management. These processes contribute to a continuous cycle of improvement, reinforcing a culture of safety and fostering an environment where the well-being of students, staff, and visitors remains a top priority.

5.0 School's Roles and responsibilities

5.1 Heads Of Schools / Managers Of Facilities / Heads Of Units

The above, or their nominees, are responsible for ensuring or making arrangements to ensure that the activities undertaken within their areas of responsibility are carried out in a safe manner without undue risk to the health and safety of university employees, students or any third parties.

The attention of such persons is drawn to Regulation 80(1) of the Safety, Health and Welfare At Work Act 2005 which states that 'Where an offence under any of the relevant statutory provisions has been committed by an undertaking and the doing of the acts that constituted the offence has been authorised, or consented to by, or is attributable to connivance or neglect on the part of, a person, being a director, manager or other similar officer of the undertaking, or a person who purports to act in any such capacity, that person as well as the undertaking shall be guilty of an offence and shall be liable to be proceeded against and punished as if he or she were guilty of the first-mentioned offence.' Consequently, there is a significant legal liability placed upon all managers or persons who act as managers to ensure that all operations under their control are carried out safely.

5.2 Employees

All employees are legally required to work in a safe manner and not to endanger their own health and safety or that of any of their co-workers.

5.3 Contractors

Contractors must adhere to all relevant University safety requirements and must carry out all of their works with due regard for and without undue risk to the safety of any persons.

5.4 Visitors

All visitors to the University are expected to behave in a safe manner, adhere to any local safety requirements and not to endanger the safety of themselves or any other persons through any act or omission that they may undertake.

5.5 SIRC Office

The SIRC Manager and the SIRC Office act as advisors and provide direction and guidance to the University and to individual staff members, Colleges, Schools, Facilities and Units on matters of health and safety.

5.6 Technical Officers

Technical officers champion best health and safety practices to ensure that safe practices and the use of protective equipment and clothing become part of the normal day-to-day routine. They report any risks that may jeopardise workplace safety to the designated supervisor and communicate the necessary actions required to mitigate, minimise, or manage those risks.

5.7 Fire Marshals

The primary responsibility of a fire marshal is to ensure the safety of people and property by preventing, investigating, and mitigating the risks associated with fires.

Fire marshals are responsible for identifying and reporting potential fire hazards and implementing measures to prevent fires from occurring.

They ensure that fire exits, fire doors, and escape routes in their areas are kept clear of all obstructions. They also supervise and provide guidance on fire safety practices during evacuation, and they report the status of their local area to the Duty Manager.

5.8 First Aiders

A first aider is a person trained in basic medical techniques and emergency response protocols to provide initial medical assistance and support to individuals who are injured, experiencing sudden illness, or facing a medical emergency.

The responsibilities of a first aider include:

Assessing the Situation: First aiders evaluate the scene of an emergency to ensure their own safety and to determine the nature and severity of injuries or illnesses. They prioritise their actions based on the urgency and need for immediate medical attention.

Administering First Aid: First aiders provide immediate medical care and treatments within the scope of their training. This may include assessing vital signs, controlling bleeding, immobilising fractures or sprains, performing CPR (cardiopulmonary resuscitation), applying bandages or dressings.

Calling for Professional Help: First aiders are responsible for promptly activating the emergency medical services (EMS) system by calling for professional medical help and contacting the local on-campus emergency service (01 716 7999) to facilitate the operations.

Providing Reassurance and Emotional Support: First aiders offer comfort, reassurance, and emotional support to the injured or ill person and their bystanders. They remain calm and compassionate, providing a sense of security during the emergency situation.

Documenting the Incident: First aiders may need to gather relevant information about the incident, such as the cause of the injury or the symptoms observed. This documentation can assist healthcare professionals in providing appropriate care.

Continuous Monitoring: First aiders keep a watchful eye on the individual's condition while waiting for professional medical help. They monitor vital signs, provide ongoing care, and update the responding medical professionals on any changes in the person's condition.

5.9 Principal Investigators (PIs)

Principal *Investigators* as persons who control and direct the activities of others in the workplace have statutory responsibility for ensuring the safety of their research groups and others.

They may delegate some activities to other members of the research group, such as the day-to-day duties of safety management, while they themselves retain legal responsibility.

The responsibilities of Principal Investigator include:

Ensuring Compliance with Health and Safety Regulations: The PI is responsible for understanding and ensuring compliance with all applicable health and safety regulations, standards, and guidelines within their specific field of work. This includes maintaining a safe working environment for themselves, their team members, and any participants involved in the research or project.

This includes the completion of the School's annual Safety Compliance Self-Assessment Report Form in relation to their role (Appendix 4) and adherence to the School's Laboratory Safety Induction Form (Appendix 3).

Risk Assessment and Hazard Identification: The PI is responsible for conducting thorough risk assessments and identifying potential hazards associated with the research or project. This involves analysing the tasks, equipment, chemicals, and materials involved, and determining appropriate control measures to mitigate risks and ensure the safety of personnel involved.

Developing and Implementing Safety Protocols: The PI is responsible for developing and implementing safety protocols and procedures specific to their research or project. This includes establishing guidelines for the safe handling of hazardous substances, proper use of equipment, emergency response procedures, and any necessary training requirements.

Training and Education: The PI is responsible for providing adequate health and safety training to all individuals involved in the research or project. This includes educating team members on potential hazards, safe work practices, and emergency protocols. They ensure that personnel are equipped with the knowledge and skills necessary to perform their tasks safely.

Monitoring and Inspections: The PI is responsible for regularly monitoring the research or project site to ensure compliance with health and safety protocols. This can involve conducting inspections, reviewing safety documentation, and addressing any identified deficiencies or non-compliance promptly.

Incident Investigation and Reporting: In the event of an incident or accident, the PI is responsible for initiating and leading the investigation to determine the cause, identifying any deficiencies in safety measures, and implementing corrective actions to prevent future occurrences. They may also be responsible for reporting incidents to relevant authorities or institutional bodies (SIRC and Health and Safety Committee), as required.

Continuous Improvement: The PI plays a crucial role in promoting a culture of continuous improvement in health and safety practices. This includes staying updated with the latest

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research, regulations, and best practices in the field of health and safety and implementing necessary changes to enhance the overall safety of the research or project.

5.10 Health and Safety Committee Chairperson

The role of the Health and Safety Committee Chairperson is to provide leadership and oversight to ensure effective functioning of the committee and the implementation of health and safety measures within the School of Agriculture and Food Science.

The responsibilities of the Health and Safety Committee Chairperson include:

Leadership and Direction: The Chairperson takes on a leadership role, guiding the activities of the Health and Safety Committee. They provide direction, establish goals, and set priorities to ensure that the committee's efforts align with the college's health and safety objectives.

Committee Management: The Chairperson is responsible for organising and coordinating committee meetings, including setting agendas, scheduling meetings, and ensuring that relevant stakeholders are involved. They facilitate discussions, encourage participation, and keep the committee focused on its objectives.

Policy Development and Implementation: The Chairperson leads the committee in developing health and safety policies and procedures specific to the college in alignment with the SIRC office directives. They work with committee members and other stakeholders to draft, review, and implement these policies effectively. The Chairperson also monitors policy compliance and oversees their dissemination throughout the School in synergy with the Head of School.

Reporting and Communication: The Chairperson is responsible for reporting the committee's activities, findings, and recommendations to School leadership and institutional bodies (SIRC). They effectively communicate health and safety initiatives, updates, and progress to the college community, fostering awareness and engagement.

Liaison and Collaboration: The Chairperson serves as the primary point of contact between the Health and Safety Committee, college administration, and other relevant stakeholders. They collaborate with different sections, faculty, staff, and students to promote a culture of health and safety across the college. The Chairperson may also engage external partners, such as regulatory agencies or industry experts, as needed.

Continuous Improvement: The Chairperson promotes a culture of continuous improvement within the committee and the college. They regularly evaluate the effectiveness of health and safety measures, identify areas for enhancement, and advocate for necessary resources or changes to improve health and safety practices. The Chairperson may also stay updated on emerging trends, regulations, and best practices to ensure the college remains current in its approach.

5.11 Safety Coordinator

The Safety Coordinator is to support and facilitate the operations of the committee, ensuring effective communication, coordination, and implementation of health and safety measures.

The responsibilities of the Safety Coordinator include:

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Committee Administration: The Safety Coordinator is responsible for the administrative functions of the Health and Safety Committee. This includes scheduling meetings, coordinating agendas, preparing meeting materials, and ensuring that accurate minutes and records are maintained. The Safety Coordinator may also handle communication and correspondence on behalf of the committee.

Documentation and Archive: The Safety Coordinator is responsible for maintaining comprehensive digital records related to the committee's activities, including meeting minutes, reports, policies, and incident data. They compile and organise relevant information to support reporting requirements, preparing regular or ad-hoc annual reports on the committee's progress, challenges, and recommendations.

Communication and Coordination: The Safety Coordinator serves as a central point of contact for committee members, college staff, and other stakeholders regarding health and safety matters. They facilitate effective communication within the committee, disseminating information, updates, and action items. The Coordinator also coordinates with relevant departments or individuals to ensure timely implementation of health and safety initiatives in synergy with the School office.

Policy and Procedure Support: The Safety Coordinator assists in the development, review, and dissemination of health and safety policies and procedures within the college. They collaborate with committee members, relevant stakeholders, and college administration to ensure policies align with regulatory requirements and best practices. The Coordinator may also assist in updating and distributing policies as needed.

5.12 Radiation Protection Supervisor

The Radiation Protection Supervisor (RPS) involves overseeing and ensuring compliance with radiation safety protocols and regulations.

The responsibilities of the Radiation Protection Supervisor include:

Maintain a knowledge and understanding of all current Regulations and Local Rules relevant to working with ionising radiation.

Advise the Head of School (through the School's Health and Safety meetings or otherwise) of current requirements, practices or required modifications related to the implementation of the relevant Ionising Radiation Regulations and Local Rules.

Supervise the arrangements set out in the Local Rules.

Maintain a knowledge and understanding of necessary precautions and emergency procedures, and act in accord with the emergency procedures if required.

5.13 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.

6.0 Key Contact Details

<u>Title</u>	<u>Name</u>	Contact Details
Head of School	Professor Frank Monahan	(01)716 2842
Chair of SAFS Safety Committee	Dr Stephen Kehoe	(01)716 1102
School Safety Co-ordinator	Dr Stephen Kehoe	(01)716 1102
Radiation Protection Officer	Vincenzo Del Grippo	(01)716 7075
University SIRC Manager	Ms. Sarah Carry	(01)716 8770
Fire Alarm Maintenance Company	Contact UCD SIRC Office	(01)716 8768
Fire Extinguisher Maintenance Company	Contact UCD SIRC Office	(01)716 8768
Student Health Centre		(01)716 3133
UCD Chaplaincy		(01)716 8372
UCD 24 HR Emergency Line		(01)716 7999
Campus Duty Manager		(01)716 7666
Campus Services		(01)716 7000

School of School of Agriculture and Food Science First Aiders

<u>Name</u>	<u>Location</u>	Contact details
Damien Dempsey	Agriculture & Food Sci. ROOM G10	EX 7361
Thomas Cummins	Agriculture & Food Sci. ROOM 2.50	EX 7744
Gillian McGrath	Agriculture & Food Sci. ROOM 2.47	EX 7209
Laura Gallego-Lorenzo	Agriculture & Food Sci. ROOM 2.46	EX 7210
Stephen Kehoe	Agriculture & Food Sci. ROOM 2.46	EX 1102
Sarah Keenan	Agriculture & Food Sci. ROOM 2.09	EX 7708
Eva Achata Gonzales	Agriculture & Food Sci. ROOM 3.08	EX 7316
Ronald Halim	Agriculture & Food Sci. ROOM 3.02D	EX 7490
Aoife Kavanagh	Science Centre South ROOM S2.04	EX 2846
Vincenzo Del Grippo	Science Centre South ROOM S2.17	EX 7075
Heleena Moni Bottu	Science Centre South ROOM S2.17	EX 2859
David Brogan	Rosemount Environment Research station EX 2401	

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

School of School of Agriculture and Food Science Fire Marshals

<u>Name</u>	Office Location	Area covered
Moya Ryan	Agriculture and Food Science Centre School Office G25	Ground floor
Jennifer McGowan	Agriculture and Food Science Centre Room G10	Ground floor
Sinead Myler	Agriculture and Food Science Centre Room 1.14	First floor
Kevin Daly	Agriculture and Food Science Centre Room 1.53	First floor
Simon Hodge	Agriculture and Food Science Centre Room 1.40	First floor
Joey Henchy	Agriculture and Food Science Centre Room 1.29	First floor
David Stead	Agriculture and Food Science Centre Room 1.26	First floor
Stephen Kehoe	Agriculture and Food Science Centre ROOM 2.46	Second floor
Chanemouga Arunachalam	Agriculture and Food Science Centre Room 2.03	Second floor
Thomas Cummins	Agriculture and Food Science Centre ROOM 2.50	Second floor
Sarah Keenan	Agriculture and Food Science Centre Room 2.07	Second floor

Eva Achata Gonzales	Agriculture and Food Science Centre Room 3.08 ROOM 3.08	Third floor
Annette Patchett	Agriculture and Food Science Centre Room 3.03a	Third floor

School of Agriculture and Food Science Safety Representatives

NAME	ADDRESS				E-MAIL
Stephen Kehoe	Environment Management	&	Sustainable	Resource	stephen.kehoe@ucd.ie
Vincenzo Del Grippo	Food Science 8	k Nut	rition		vincenzo.delgrippo@ucd.ie
	Administrator				<u></u>
Ajay Menon	Food Science 8	k Nut	rition		ajay.menon @ucd.ie
Joey Henchy	Environment Management	&	Sustainable	Resource	joey.henchy@ucd.ie
Laura Gallego-Lorenzo	Environment Management	&	Sustainable	Resource	laura.gallego-lorenzo@ucd.ie
Aisling Reilly	Environment Management	&	Sustainable	Resource	Aisling.reilly@ucd.ie
Sinéad Flannery	Agri-Business 8	k Rur	al Developmen	t	sinead.flannery@ucd.ie

Gillian McGrath	Environment Management	&	Sustainable	Resource	gillian.mcgrath@ucd.ie
Denise Cunningham	Animal & Crop S	Scier	ices		denise.cunnigham@ucd.ie
David Brogan	Environment Management	&	Sustainable	Resource	david.brogan@ucd.ie
Sarah Keenan	Environment Management	&	Sustainable	Resource	sarah.keenan@ucd.ie
Eva Achata Gonzales	School of Biosys	stem	s and Food Eng	gineering	eva.achatagonzales@ucd.ie
Frank Monahan	Head of School				frank.monahan@ucd.ie
Anna Lesniak- Podsiadlo	SIRC Office				anna.lesniak@ucd.ie

7.0 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

7.1 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 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 Agriculture and Food Science is:

In Front of Church 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

- o 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

- o Red cylinder with a black label and a black discharge horn.
- Suitable for fighting electrical fires.

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- Not suitable for paper or fabric fires as the gas is discharged under pressure and can blow embers around.
- Not suitable for use in a confined space due to the asphyxiant nature of the carbon dioxide.
- o Discharge horn can get very cold during use.

Dry Powder

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

To Use A Fire Extinguisher:

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

7.2 Natural Gas Leak

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

7.3 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.
- o 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.
- For large spills (>10 litres / kgs) the University SIRC Office should be informed by dialling
 8768 / 8771 or 7999 on an internal telephone.
- o 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 absorbent 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 dustpan 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 dustpan 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.

7.4 Loss / Spillage of A Biological Agent

For spillages where aerosols are not likely to be produced persons should don 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 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.

7.5 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

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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.
- o If available, oxygen may also be administered.
- Any exposure which results is vomiting or unconsciousness must be referred to a medical practitioner.

Skin Contact

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

Eye Contact

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

Ingestion

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

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For further information contact the <u>Poisons Information Centre</u>. 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.

7.6 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 possible.

For needle stick / sharps type injuries:

- 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:
 - o Immediately wash the wound liberally with soap and water but without scrubbing
 - Do not attempt to remove any glass by hand
 - o Gently encourage free bleeding of puncture wounds but do not suck the wound
 - o Dry the area and apply a waterproof dressing
 - Seek medical advice if the sharp concerned was contaminated with any hazardous materials

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.

7.7 Personal Injury

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

- o Treat the injury using first aid equipment.
- First aid boxes:

Ground Floor: G.10 Programme Office, School Office

First Floor: 101B, 1.14, 1.29

Second Floor: 2.03, 2.05, 2.07, 2.13, 2.20, 2.45, 2.49

Third Floor: 3.01

Food Science Annex: FSLG03, FS107, FS202

South Science: S2.58, S2.28, S2.36

Rosemount: Production Glasshouse, Containment Glasshouse, PEAC Facility, Preparation

laboratory

- o Defibrillator: located in Agriculture Building entrance lobby, by the stairs
- First aid assistance is available 24hours per day from the UCD Emergency Line on internal extension 7999 or 01 716 7999 from an external phone.
- If the emergency services are required, then the 24hr Emergency Line should be contacted (01 716 7999) and the request made.
- All personal injury or near miss incidents must be reported to the University SIRC Office and the School's Health and Safety committee, on an official accident report form which is available from the University SIRC Office.

7.8 Location of Emergency Equipment

Fire Extinguishers

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

First Aid Boxes

|--|

First Floor:	101B, 1.14, 1.29, 1.48,
Second Floor:	2.03, 2.05, 2.07, 2.13, 2.20, 2.45, 2.49,
Third Floor:	3.01
Food Science Annex:	FSLG03, FS101, FS202, FS207
South Science	S2.58, S2.28, S2.36

- There may be additional first aid boxes located locally nominated local first aiders can advise on the location of your nearest first aid box.
- o First aid equipment is also available via the 24hr emergency line ext. 7999/01-716 7999.

Automatic External Defibrillators (AED's)

Automatic External Defibrillators (AEDs) are located throughout the University's Belfield and Blackrock campuses. Refer to UCD SIRC Office website for current locations. For training in the use of defibrillators please contact sirc@ucd.ie.

One AED is located on the ground floor next to the main stair well in the Agriculture building. In Rosemount an AED is located on the wall just inside the main reception door. In Lyons Estate An AED can be found in the Farm Office.

7.9 Contacting the Emergency Services

In all instances contacting the Emergency Services must be done via Campus Services using the 24hr Emergency Line (internal extension 7999 or 01 716 7999 from an external phone). Campus 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.

7.10 Personal Emergency Egress Plans

Personal Emergency Egress Plans (*PEEPS*) are advisable for staff and students who suffer from a sensory, physical or medical impairment that may make evacuation of a building in an emergency more challenging. PEEPS are 'personal' plans and are tailored to an individual's needs and help address the challenges that the particular individual staff member or student may have to face in evacuating a university building in an emergency.

Staff who would like to discuss the preparation of a PEEP should contact the <u>SIRC Office</u>. Students who would like to discuss the preparation of a PEEP plan should contact the <u>University Access and Lifelong Leaning Office</u>.

7.11 Acute Student Situations

The SIRC Office has prepared a guidance document entitled <u>Dealing With Acute Student Situations and Other Emergencies</u> to provide staff members who work in public offices and have face to face interactions with students and members of the public with a set of guidelines for dealing with various types of emergency situations that may arise when dealing with same, e.g. disruptive or threatening behaviour; emotionally distressed students, student or staff injury.

In addition, the <u>UCD Student Mental Health and Wellbeing Policy</u> and further information and useful documents can be found through the website http://www.ucd.ie/students/support/

In all instances, contacting the Emergency Services must be done via *Campus Service* using 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.

7.12 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.
- o Further instructions may be issued via voicemails; website; e-mail; campus siren, etc.

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

7.13 Pandemic / Infectious Disease Outbreak

- Where applicable, UCD will put in place emergency response plans to respond to a pandemic / infectious disease outbreak. Response plans will be developed and updated in line with the prevailing public health advice, and with government and sectoral guidance as appropriate.
- The University will put in place all measures as appropriate and communicate plans and up to date information to all University personnel, as required.
- All university personnel will be responsible for adhering to public health advice and the provisions of the University's response plans.

8.0 Out of Hours Access

Out of hours access is considered to be 20:00-08:00 out of term and 22:00-08:00 in term Monday – Friday, all weekends and bank holidays. During this time only people with card access gain entry to the Agriculture and Food Science Annex. This also the case for Rosemount Environmental research Station. Undergraduate students are not allowed access during this time unless they are accompanied by a member of staff. No work which carries a high risk of personal injury may be carried out during out of hours periods. Out of hours working should be avoided where possible and must be subjected to a <u>lone working risk assessment</u> if applicable.

9.0 Fieldwork Safety

Fieldwork is an integral part of the School, and is used in teaching and research, both nationally and internationally. All fieldwork activities must be subjected to risk assessments prior to taking place. See section below for Risk Assessment templates used for Fieldwork.

10.0 Safety Induction Training

Safety induction training is required for all laboratory and field users throughout the School before they can start work. Induction training is provided by the Technical Officers within the School and signed by the Principal Investigator (PI). It is the responsibility of the PI to ensure their students are competent in safety before they enter laboratories or the field. Safety Induction forms are located on our website.

11.0 Waste Management

It is the responsibility of all students and researchers in the to dispose of hazardous and non-hazardous waste in a safe and responsible manner. Non-hazardous materials can be disposed of in the regular waste bins located across the School. All hazardous waste can be disposed according to their category in specialised containers.

12.0 Working with liquid Nitrogen

Liquid Nitrogen is used for a variety of research throughout the School. As such, all personnel should, at the very least be aware of the hazards associated with cryogenic liquids. All persons intending to use liquid nitrogen should consult the UCD guide to the Safe use of Liquid Nitrogen, available from the UCD SIRC website. It is also mandatory that all persons should attend SIRC's Cryogenic Safety Training and have a local hands on training. Safety goggles must always be worn when working with liquid nitrogen. Under no circumstances should people travel in a lift with any quantity of liquid nitrogen.

13.0 Handling of Compressed Gases

The use of compressed gases is becoming more commonplace in the School. Compression presents its own inherent risks aside from those associated with the chemical properties of the gases themselves. Users are expected to be aware of these risks and the proper procedures and safety protocol associated with their use. These should factor into the risk assessment for the process (see section 14.0). Please note that while the below points must always be kept in mind when using gas cylinders, they are not a substitute for gas safety training. It is recommended that anyone using compressed gases for the first time should seek training at the earliest opportunity, and carry out any work prior to that under the direct supervision of a trained member of their group.

- 1. Preparation, setup and clean-up.
- Minimise any potential spark/fire hazards.
- Check the valve to make sure it is operational and clean.
- Cylinder must be secured with a full-circumference clamp (2 if necessary, depending on cylinder height and clamp size) whether in use or in storage, and should be in full view of the user during operation if possible.
- Regardless of how inert a gas may be, never use it as a substitute for compressed air.
 Such practice is wasteful and potentially hazardous.

2. Storage

- Cylinders should be stored upright and well-secured in the designated gas storage areas. These areas should not be used for the storage of any other equipment.
- Group according to hazard category, making sure that incompatible gases are kept as far apart as possible. Empty cylinders should be segregated, and returned to the supplier as

soon as possible.

- Gas valves should be fully closed when not in use.
- Cryogens should be stored in a well-ventilated area away from drains, ducts and paths to low-lying areas.
- Liquefied petroleum gases should be stored in open air, out of direct sunlight and not within 3 m of any compressed gases.

3. Transport

- Cylinders must be treated with care. Never drop or subject them to impact. Damaged or faulty cylinders should be returned to the supplier ASAP and the problem reported. Never move or use a damaged cylinder. Never disguise or attempt to repair damage to a cylinder.
- Make sure to use the correct trolley for the size of the cylinder. Always check that it is fully secured with all valves closed before transport. Never roll a cylinder.
- Never transport a cylinder with a hose and regulator attached.
- Empty cylinders should be returned to the supplier with the valve in the closed position and the security cap in place.

4. General Safety

- Never use an unlabelled cylinder.
- Never interfere with a cylinder's appearance, identification or screw threads.
- Never dispose of cylinders for which you are not responsible.
- Check pressure regulators before use, and replace every 5 years. Do not attempt to repair or modify.
- Never tamper with the cylinder valve or remove the valve guard.
- Never use PTFE tape to line cylinder valves this contains oil that can react violently with compressed gases.

14.0 Risk Assessments

14.1 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) resulting from that occurrence.

Table 1. Risk Assessment Matrix

	Severity of Outcome of Negative Event			
Probability of Negative Event	Slightly Harmful	Harmful	Very Harmful	
Unlikely	trivial risk	acceptable risk	moderate risk	
Likely	acceptable risk	moderate risk	substantial risk	
Very Likely	moderate risk	substantial risk	intolerable risk	

- 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.

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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 Agriculture and Food Science 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 existing risk assessments do not adequately manage the hazards associated with their work employees and postgraduates should either complete their own risk assessments (templates available on UCD SIRC Office website); inform their local Safety Committee or inform the *University SIRC Office*.

<u>Templates</u> to assist in the completion of risk assessments have also been created by the SIRC Office. Assistance and advice in this regard can be obtained from the University SIRC Office. Contact <u>sirc@ucd.ie</u>.

Guidelines on completing risk assessments are available at www.ucd.ie/sirc.

An Office Safety Handbook which outlines the risk associated with working in an office environment is available for review by persons who work in said environment.

For those persons, who as part of their duties have to meet members of the public face to face or engage in 'home visits' or other fieldwork activities, reference should be made to the Home visits - Face to face Safety Guidelines and the Fieldwork Safety Manual in advance for guidelines, detailed safety information and when completing a Fieldwork Risk Assessment.

14.2 School Agriculture and Food Science Register of Risks

The following risk assessments are deemed to be relevant to the operations of Agriculture and Food Science School. The most current versions of these risk assessments are available on the UCD SIRC Office website.

Persons working within the Agriculture and Food Science 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.

Table 2. Agriculture and Food Science Safety

Register of Risk Assessments

General Risk Assessments

These risk assessments may apply to all persons working within the School

Risk Assessment Number	Title	Risk Rating	Comment
UCDA1	Manual Handling (General)	Acceptable Risk	
UCDA2	Access and Egress	Acceptable Risk	
UCDA3	Bullying and Harassment	Moderate Risk	
UCDA4	Workplace Housekeeping	Acceptable Risk	
UCDA5	Pregnant Employees (General)	n/a	Contact UCD SIRC Office to arrange Risk Assessment
UCDA6	Home Working	Trivial Risk	

UCDA7	Presence on a Third Party Site (General)	Moderate Risk	
UCDA8	Kitchen / Tea Making Areas	Trivial Risk	
UCDA9	Driving / Use of Vehicles	Substantial Risk	
UCDA10	<u>Foreign Travel</u>	Acceptable Risk	
UCDA11	Lone Working (General)	n/a	Risk rating to be decided on an individual basis
UCDA12	Workplace Stress	Moderate Risk	
UCDA13	Use of Passenger / Goods Lifts	Trivial Risk	
UCDA14	Noise (General)	Acceptable Risk	
UCDA15	Use of Personal Protective Equipment (General)	Trivial Risk	
UCDA16	Travel Within Ireland	Acceptable Risk	
UCDA17	Violence and Aggression (General)	Acceptable Risk	
UCDA18	Fire (General)	Moderate Risk	
UCDA19	Electricity (General)	Moderate Risk	

Office Risk Assessments

 $These\ risk\ assessments\ may\ apply\ to\ persons\ working\ within\ an\ office\ environment\ within\ the\ School$

Risk Assessment			
Number	Title	Risk Rating	Comment
UCDB1	Office Safety (General)	Acceptable Risk	
UCDB2	<u>Use of Display Screen</u> <u>Equipment</u>	Acceptable Risk	Contact SIRC Office to arrange individual assessment
UCDB3	Electricity in the Office	Acceptable Risk	
UCDB4	Fire in the Office	Acceptable Risk	
UCDB5	Manual Handling in the Office	Acceptable Risk	

Chemical Agents Risk Assessments

Risk Assessment Number	Title	Risk Rating	Comment
UCDC1	Handling and Use of Chemical Agents (General)	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	Storage of Chemical Agents (General)	Moderate Risk	The large-scale storage of chemical agents (i.e. 00's of litres / kgs may require the completion of a more specific risk assessment).
UCDC3	Handling and Use of Flammable Liquids / Organic Solvents (General)	Acceptable Risk	
UCDC4	Cryogenic Liquids (General)	Acceptable Risk	
UCDC5	Use of Compressed Gases (General)	Acceptable Risk	
UCDC6	Use and Handling of Corrosive Chemicals (General)	Acceptable Risk	
UCDC7	Use and Handing of Hydrofluoric Acid (General)	Moderate Risk	
UCDC8	Use and Handling of Cyanide Compounds (General)	Moderate Risk	
UCDC9	Use and Handling of Mercury and Mercuric Compounds (General)	Acceptable Risk	
UCDC10	Use and Handling of Organic Peroxide Compounds (General)	Acceptable Risk	

UCDC11	Use and Handling of Potentially Explosive Materials (General)	Acceptable Risk	
UCDC12	Use and Handling of Laboratory Diagnostic Kits (General)	Acceptable Risk	
Risk Assessment Number	Title	Risk Rating	Comment
UCDC13	Use and Handling of Carcinogens and Mutagens (General)	Moderate Risk	For general guidance purposes only. A specific risk assessment for every carcinogen and mutagen in use must be completed prior to using the agent for the first time.
UCDC14	Use and Handling of Teratogens and Reproductive Toxins (General)	Acceptable Risk	
UCDC15	Use and Handling of Irritants, Harmful Agents and Sensitisers (General)	Acceptable Risk	
UCDC16	Use and Handling of Toxic Agents (General)	Acceptable Risk	
UCDC17	Use and Handling of Dry Ice (General)	Acceptable Risk	

Biological Agents Risk Assessments

Risk Assessment Number	Title	Residual Risk Rating	Comment
UCDD1	Handling and Use of Class 1 Biological Agents	Trivial Risk	Biological against must be registered with SIRC
UCDD2	Handling and Use of Class 2 Biological Agents	Acceptable Risk	Biological against must be registered with SIRC
UCDD3	Use and Propagation of Cell Lines (General)	Acceptable Risk	
UCDD4	Handling and Use of Biological Material of Human / Animal Origin	Acceptable Risk	
UCDD5	<u>Diagnostic Laboratories</u> (General)	Acceptable Risk	
UCDD6	Handling and Use of Class 3 Biological Agents	Acceptable Risk	
UCDD7	Centrifugation of Biological Samples (General)	Acceptable Risk	
UCDD8	Dealing with Biological Agent Spillages	Acceptable Risk	
UCD09	Zoonoses (General) Risk Assessment	Acceptable Risk	
UCD10	Use and Propagation of Cancer Cell Lines (General) Risk Assessment	Acceptable Risk	

Laboratory Risk Assessments

Risk Assessment Number	Title	Residual Risk Rating	Comment
UCDE1	<u>Use of Centrifuges</u> (General)	Acceptable Risk	
UCDE2	Use of Autoclaves (General)	Acceptable Risk	
UCDE3	<u>Use of Bunsen / Gas</u> <u>Burners (General)</u>	Acceptable Risk	
UCDE4	Cold Rooms / Walk in Freezers (General)	Acceptable Risk	
UCDE5	Use of Fridges / Freezers (General)	Trivial Risk	
UCDE6	<u>Use of Laboratory</u> Glassware (G <u>eneral)</u>	Acceptable Risk	
UCDE7	Use of Laboratory Ovens (General)	Acceptable Risk	
UCDE8	Use of Microwave Ovens (General)	Acceptable Risk	
UCDE9	Use of Sharps (General)	Acceptable Risk	
UCDE10	Use of Homogenisers (General)	Acceptable Risk	

UCDE11	Use of Hot Plates / Stirrers (General)	Acceptable Risk	
UCDE12	Use of pH Meters (General)	Trivial Risk	
UCDE13	User of Rotary Evaporators (General)	Acceptable Risk	
UCDE14	Use of UV Light Sources	Acceptable Risk	
UCDE15	Gel Electrophoresis – Non- Chemical Risks (General)	Acceptable Risk	
UCDE16	Use of Laboratory Personal Protective Equipment	Trivial Risk	
UCDE17	<u>Use of Microtomes</u> (General)	Acceptable Risk	
UCDE18	Use of Laboratory Pumps (General)	Acceptable Risk	
UCDE19	Electrical Safety in the Lab	Moderate Risk	
UCDE20	Fire Safety in the Lab	Moderate Risk	
UCDE21	Manual Handling in the Lab	Acceptable Risk	
UCDE22	Laboratory Waste Disposal	Acceptable Risk	
UCDE23	<u>Laboratory Personal</u> <u>Hygiene</u>	Acceptable Risk	

UCDE24	Use of Water / Oil Baths (General)	Acceptable Risk	
UCDE25	Use of Hot Air Guns (General)	Acceptable Risk	
UCDE26	Use of Wax Baths (General)	Acceptable Risk	
UCDE27	Use of Ice Makers (General)	Trivial Risk	
UCDE28	<u>Dissection (General)</u>	Acceptable Risk	
UCDE29	<u>Use of Hand Sanitizers /</u> <u>Soaps (General)</u>	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	

Veterinary Sciences Risk Assessments

Risk Assessment Number	Title	Risk Rating	Comment
UCDF1	Use of Band Saws (General)	Acceptable Risk	
UCDF2	Use of Forklift	Acceptable Risk	

UCDF3	Use of Abrasive Wheels (General)	Acceptable Risk	
UCDF4	Zoonoses (General)	Acceptable Risk	
UCDF5	Animal Handling (General)	Acceptable Risk	
UCDF6	Inoculation of Animals (General)	Acceptable Risk	
UCDF7	Use of Anaesthetic Gases	Acceptable Risk	
UCDF8	Working in Nuclear Medicine	Moderate Risk	
UCDF9	Use of Rotating Chute	Acceptable Risk	
UCDF10	Animal Loading / Unloading Operations	Acceptable Risk	
UCDF11	<u>Use of Hoists</u>	Acceptable Risk	
UCDF12	Handling of Animal Bedding	Acceptable Risk	
UCDF13	Use of Treadmill	Acceptable Risk	
UCDF14	Lunging Ring	Acceptable Risk	
UCDF15	Oxygen Generator	Acceptable Risk	
UCDF16	Post Mortem Room	Acceptable Risk	
UCDF17	Use of Hand Tools	Acceptable Risk	5
UCDF18	Use and Handling of Hydraulic Oil	Trivial Risk	
UCDF19	Use of Power Washer	Acceptable Risk	

UCDF20	<u>Use of Ladders</u>	Acceptable Risk	
UCDF21	Use of Compactor / Bailer	Acceptable Risk	
UCDF22	Working in The Isolation Yard	Acceptable Risk	
UCDF23	Use of Milking Unit	Trivial Risk	
UCDF24	Use of Vehicle Trailers	Acceptable Risk	
UCDF25	Use of Pallet Truck	Acceptable Risk	
UCDF26	MRI UNIT	Acceptable Risk	
UCDF27	Yard Vehicle Safety	Acceptable Risk	
UCDF28	Dissection / Surgery	Acceptable Risk	
UCDF29	Animal Surgery (General)	Acceptable Risk	
UCDF30	Animal Allergy	Acceptable Risk	
UCDF31	<u>Use of Pharmaceutical</u> <u>Products (General)</u>	Acceptable Risk	
UCDF32	Violence and Aggression	Acceptable Risk	
UCDF33	Hydrotherapy Unit	Acceptable Risk	
UCDF34	Ethylene Oxide Autoclave	Moderate Risk	

Radiation Safety Risk Assessments

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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

	T	<u></u>	T
Risk Assessment Number	Title	Risk Rating	Comment
UCDH1	Fieldwork (General)	Acceptable Risk	For general guidance purposes only. Reference should be made to the <u>UCD Fieldwork Safety</u> <u>Guidelines.</u> In some cases an expedition specific risk assessment will be required.
UCDH2	<u>Leptospirosis (Fieldwork)</u>	Acceptable Risk	
UCDH3	Home Visits – Face to Face Interviews	Acceptable Risk	

Workshop Safety Risk Assessments

Risk Assessment Number	Title	Risk Rating	Comment
UCDK1	Use of Abrasive Wheels (General) Risk Assessment	Acceptable Risk	
UCDK2	Use of Band Saws (General) Risk Assessment	Acceptable Risk	
UCDK5	Use of Milling Machines (General) Risk Assessment	Acceptable Risk	
UCDK6	Use of Table Saws (General) Risk Assessment	Acceptable Risk	
UCDK7	Use of Bench Furnaces (General) Risk Assessment	Acceptable Risk	
UCDK10	Soldering (General) Risk Assessment	Acceptable Risk	
UCDK11	Use of Compressors (General) Risk Assessment	Acceptable Risk	
UCDK12	Use of Petrol - Diesel Fuel (General) Risk Assessment	Acceptable Risk	

UCDK13	Use of Compressed Air (General) Risk Assessment	Acceptable Risk	Refer to UCD Risk Assessment UCDK11 Use of Compressors (General) if necessary.
UCDK14	Use of Handheld Portable Electrical Tools (General) Risk Assessment	Acceptable Risk	The provisions laid down in UCDA19 Electricity (General) Risk Assessment and UCDA14 Noise (General) Risk Assessment should be adhered to where relevant.
UCDK15	Use of Handheld Tools (General) Risk Assessment	Acceptable Risk	
UCDK16	<u>Use of Pallet Trucks</u> (General) Risk Assessment	Acceptable Risk	
UCDK17	Use of Ladders (General) Risk Assessment	Acceptable Risk	
UCDK18	Use and Handling of Hydraulic Oil - Workshop Lubricants - Etc (General) Risk Assessment	Trivial Risk	
UCDK19	Dust (General) Risk Assessment	Acceptable Risk	
UCDK20	Vibration (General) Risk Assessment	Acceptable Risk	
UCDK21	General Plant and Equipment	Acceptable Risk	Where relevant the provisions contained within the following risk assessments must be adhered to:

			UCDA19 Electricity (General) UCDK19 Dust (General) UCDK20 Vibration (General)
UCDK22	Welding (General) Risk Assessment	Acceptable Risk	

Health Sciences and Allied Subjects Risk Assessments

Risk Assessment Number	Title	Risk Rating	Comment
UCDP1	Patient Handling (General)	Moderate Risk	
UCDP2	Infection Control During Teaching Activities (Non- Invasive)	Acceptable Risk	
UCDP3	Working with Cadavers and Associated Material (General)	Acceptable Risk	
UCDP5	Use of Volunteers for Teaching Purposes (General)	Acceptable Risk	
UCDP6	Pregnant Employees (Health Sciences)	n/a	Contact Safety Office to arrange assessment
UCDP7	Use of Mercury Containing Equipment	Acceptable Risk	
UCDP8	Use of UV Hand Inspection Light Boxes	Trivial Risk	
UCDP9	Use of AED's For Teaching Purposes (General)	Acceptable Risk	

UCDP10	Manipulation / Handling of Teaching Subjects	Acceptable Risk	
UCDP11	Use and Handling of Artificial Blood and Urine Risk Assessment	Moderate Risk	
UCDP12	<u>Use of Lancets Risk</u> <u>Assessment</u>	Moderate Risk	
UCDP13	Use of Compressors to Inflate Mannequins Risk Assessment	Moderate Risk	
UCDP14	Use of Pharmaceuticals for Teaching Purposes Risk Assessment	Moderate Risk	
UCDP15	Injection of Subjects for Teaching Purposes Risk Assessment	Moderate Risk	
UCDP16	Presence on A Third-Party Site-Institution Risk Assessment	Moderate Risk	

	<u>Chemical Enginee</u>	ering Risk Assessme	<u>ents</u>
Risk Assessment Number	Title	Risk Rating	Comment
UCDN1	Glass Pilot Plant Distillation Column Risk Assessment	Moderate Risk	
UCDN2	Use of Bioreactor (General) Risk Assessment	Moderate Risk	

15.0 Appendices

Appendix 1: UCD SIRC Office Guidance Documents and Templates

1. UCD Risk Assessment Templates

- Application for Registration of GM Animal Use
- Biological Agent Risk Assessment Template
- Chemical Agents Risk Assessment Template
- Fieldwork Risk Assessment Template
- Home Working Risk Assessment Template
- Lone Working Risk Assessment Template
- Machinery / Equipment Risk Assessment Template
- Manual Handling Risk Assessment Template
- Nanomaterial Risk Assessment Template

2. UCD Guidance Documents and Manuals

- Dealing with Acute Situations and Other Emergencies Health and Safety Guidelines
- <u>Fieldwork Safety Guidelines</u>
- Guide for School/ Units Hosting Researchers, Work Experience Students or Unpaid Volunteers
- Health and Safety Management A Guide for Managers
- Home Visits: Face-to-Face Interview Safety Guidelines
- Homeworking Safety Guidelines
- Office Safety Manual
- Travel Safety Guidelines

3. UCD Checklists

- Self-Audit Checklist
- <u>Lab Safety Checklists</u>
 - o <u>Biological Safety</u>
 - o **Chemical Safety**
 - o **Equipment Safety**
 - o <u>General</u>
 - o <u>Housekeeping</u>
 - o <u>Radiation</u>

4. Emergency Response Posters

- Biological Spill Response Poster
- <u>Chemical Spill Response Poster</u>
- Fire Evacuation Poster

Appendix 2:UCD School of Agriculture and Food Science Fire Evacuation Notice

AGRICULTURE & FOOD SCIENCE CENTRE FIRE SAFETY NOTICE

IF YOU HEAR THE FIRE ALARM

- 1. Do not panic, but prepare to leave the building.
- 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 workshops should make the area safe before leaving by turning off equipment where possible and securing hazardous containers.
- 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 emergency line (ext. 7999) or a colleague of your location and the reason you cannot safely exit the building.
- 8. Proceed to the nearest emergency assembly area to your point of departure from the building. The assembly areas for the Agriculture and Food Science Centre are:

In Front of Church

Car Park Behind Church

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

IF YOU OBSERVE A FIRE

- 1. Activate the fire alarm by breaking one of the red wall mounted break glass units located throughout the building and if possible inform the emergency line (ext. 7999).
- 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 and you have a safe and clear means of escape from the fire at all times.
- 3. In the event that you cannot fight the fire or the fire begins to get out of control evacuate the area immediately.

UCD School of Agriculture and Food Science

Safety Statement

Appendix 3: UCD School of Agriculture and Food Science Laboratory Safety Induction



Laboratory Safety Induction

UCD School of Agriculture & Food Science University College Dublin

Personal Data
Student/Staff Member Name:
Student/Personnel no.:
Laboratory/Work Area:
The School requires you to complete the following:
€ Discuss and plan your safety training needs. Consult the SIRC office and book as necessary: sirc@ucd.ie http://www.ucd.ie/sirc/healthsafety/trainingupcomingtraining/
€ Be aware of the need for Risk Assessment(s). If necessary, Risk Assessment(s) should be planned and produced. http://www.ucd.ie/sirc/healthsafety/riskassessments/
€ Be aware of existing Standard Operating Procedures for instruments and methodologies. If necessary, new SOPs should be planned and produced.
€ Understand the use and content of Safety Data Sheets. Where in place, the use of Quartzy should be included.
€ Be aware of the health and safety risks of Lone Working. If necessary, a Risk Assessment should be produced. http://www.ucd.ie/sirc/healthsafety/workplacesafety/loneworking/
€ Be aware of the procedures for the correct disposal of chemical and laboratory waste. http://www.ucd.ie/sirc/healthsafety/hazardouswaste/
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
€ Be aware of the procedures for Incident Reporting. http://www.ucd.ie/sirc/healthsafety/accidentreporting/
€ Plan an induction tour with your Technical Officer. The following Laboratory requirements and PPE will be identified during the tour: First Aid Kits, Dust Masks, Gloves, Safety Glasses, Respirators, Laboratory Coats, Eye Wash Station, Fume Cupboards, Hearing Protection
Declaration
I the undersigned declare that I understand, and will meet, the requirements above.
Student/Staff member:
Principal Investigator:Date:

Appendix 4: UCD School of Agriculture and Food Science Safety Compliance Self-Assessment Report Form

Online form for Safety Compliance Self-Assessment Report Form

	lame *
Safet	y Compliance Actions checklist:
date	re list the members of your research group for the period 01January 2023 to (postdoctoral scientists, research assistants, graduate research students)
Chem	nical Agents Risk Assessments *
	ical Agents Risk Assessments for all procedures involving chemicals used by the rch group have been completed and sent to health.safety.agriculture@ucd.ie .
	/es
1	No
	Not required
	Additional actions required
	Other: