Coláiste na Tríonóide, Baile Átha Cliath
Trinity College Dublin
Ollscoil Átha Cliath | The University of Dublin

School of Natural Sciences

Trinity College Dublin

October 2025

School Safety Statement

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1.0 Introduction

This document has been prepared in line with Sections 19 and 20 of the Safety, Health and Welfare at Work Act, 2005 and applies to all employees, students, contractors and visitors to the School of Natural Sciences.

This School Safety Statement supplements the University Safety Framework and University Policies which are accessible on the Trinity College Dublin's website

This Safety Statement is available online for all employees and other interested parties. It is the duty of all staff and students to familiarise themselves with this statement.

Risk assessments forms are available online and on the School Sharepoint pages. Specialised protocols for laboratories and procedures and for specific equipment are held locally. All other legally required documents are held with area safety officers and/or principal investigators (PIs).
The Safety Statement will be updated at least annually or as amendments are required.

Trinity College Occupational Health and Safety Policy

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

OCCUPATIONAL HEALTH AND SAFETY POLICY

We of **Trinity College Dublin, the University of Dublin** ("Trinity") value, above all else, the safety and health of our undergraduate and postgraduate students, staff, visitors, contractors and all others affected by our activities and we are committed to working in accordance with the provisions of the Safety, Health and Welfare at Work Act 2005 ("the Act") and associated legislation in order to provide a safe and healthy educational, recreational and residential environment for all. To comply with Section 20 of the Act, we have prepared a Framework (Parent) Safety Statement which sets out the safety management programme in place at Trinity and specifies how safety, health and welfare is secured.

The framework Safety Statement and local Safety Statements for each functional Unit, School or Area are maintained and updated. In addition, each school/unit and research institute has developed and maintained local COVID 19 response plans in line with the Implementation Guidelines for Public Health Measures in Higher Education Institutions to supplement and support the Safety Statements. Trinity is committed to fulfilling our statutory obligations to manage and co-ordinate workplace safety, health and welfare, and to ensure that, so as far as is reasonably practicable, work activities are managed to safeguard the safety, health and welfare of our staff, students, visitors, contractors and others. We will achieve this by carrying out local risk assessments and bringing them to the attention of all staff and students at least annually. Within the risk assessments, protective and preventative measures have been identified, which will be implemented and maintained.

We will provide a safe place of work, including welfare facilities, which are adequately designed, maintained and have a safe means of access and egress. The University buildings and rooms will be adapted to facilitate physical distancing and all recommendations from the COVID 19 Senior Management Group will be fully implemented. Trinity will also provide safe plant and equipment and ensure that safe systems of work are in place.

We will ensure, as far as is reasonably practicable, that any improper conduct likely to put staff, students, visitors or contractors safety and health at risk, is prevented. All staff and students will be provided with the appropriate information, instruction, training and supervision as required to stay safe and healthy. We will, as far as is reasonably practicable, prevent risks to health from articles or substances such as chemicals, nanotechnology, and radiological and biological agents.

Where hazards cannot be eliminated, adequate arrangements in accordance with the General Principles of Prevention, including where required the provision of suitable protective clothing and equipment, will be put in place to reduce the risk of injury. Trinity have plans and procedures to be followed in the event of an emergency or serious or imminent danger.

The College has competent personnel to advise and assist in securing the safety, health and welfare of staff, students, visitors and contractors. A COVID 19 Senior Management group, chaired by the Provost, has been convened to implement and advise on the University's Covid 19 Response Plan. The safety message is communicated to the college community through the College website, the University Safety Committee and its sub committees, local safety officers and safety representatives.

Our policy is subject to annual review and we appreciate any feedback in relation to this policy that allows us to continually improve our health and safety standards.

Signed: Linda Doyle _____ *Date:* _____

Dr Linda Doyle, President & Provost, Trinity College Dublin, the University of Dublin

1.1 Statement of the Head of School

The School of Natural Sciences hereby known as the School, as part of Dublin University, ensures as far as reasonably practicable that the health, safety and welfare policies operating within the school are compliant with European and national legislation. The School's policy is in keeping with the terms of the Safety, Health and Welfare at Work Act, 2005. The School's objectives are to achieve an accident-free and healthy workplace.

It is the duty of all personnel to ensure their own safety and that of others they come into contact with and to report any situation, which may pose a threat to themselves or others. Overall responsibility for health, safety and welfare lies with the Head of School. The University and the School provide a safe system of work that is planned, organised, performed and maintained so as to be as safe as reasonably practicable. All due care is taken to ensure that nobody is endangered by the activities of the School.

Resources will be made available for health, safety and welfare matters. All relevant up to-date training, information, instruction and supervision will be provided allowing staff and students to undertake their tasks in a safe manner and to achieve the stated objectives. If a staff or student feels unsure about any task, they should seek guidance from their superiors as the safety management programme depends on continuous communication to succeed.
All accidents or incidents must be reported to the Safety Officer in the School and the College Safety Office and these must be documented (Appendix 3) in order for meaningful controls to be implemented.

The Safety Statement will be available to all staff and where applicable to all relevant others.

The school will provide where reasonably practicable:

- A safe working environment with safe equipment and without any risk to safety or health;
- Safe working practices;
- An ongoing maintenance programme for equipment;
- Necessary welfare facilities;

- A safe means of access and egress to the workplace (unsafe surfaces, gates, fences);
- A written Risk Assessment with a means of identifying, assessing and managing risks, taking account of the general principles of prevention;
- Every means to conform to current legislation;
- Safe conditions for storage, transport and handling of substances;
- Promotion of Health, Safety and Welfare policies;
- Relevant up to-date training, instruction, supervision and information;
- A means of consultation with employees and their representatives;
- A competent person to advise on Safety, Health and Welfare issues;
- A means of reporting accidents and incidents to the Health and Safety Authority;
- A means of reviewing and monitoring the effective functioning of the management system and safety statement;
- Emergency plans and procedures;
- The necessary attributes to create a safety culture in the workplace;
- Adequate numbers of trained first aid people;
- Access to a copy of the Safety Statement for consultation by staff.

The means of achieving these objectives are outlined in the safety statement and the School is committed to achieving these. The School is also committed to carrying out its work in a manner, which prevents improper behaviour such as bullying, harassment and behaviour likely to lead to stress.

The Safety Statement and Risk Assessment(s) are live documents, which will be updated on a regular basis. Suggestions on improvements should be directed to the Safety Officers at NatSciHandS@tcd.ie

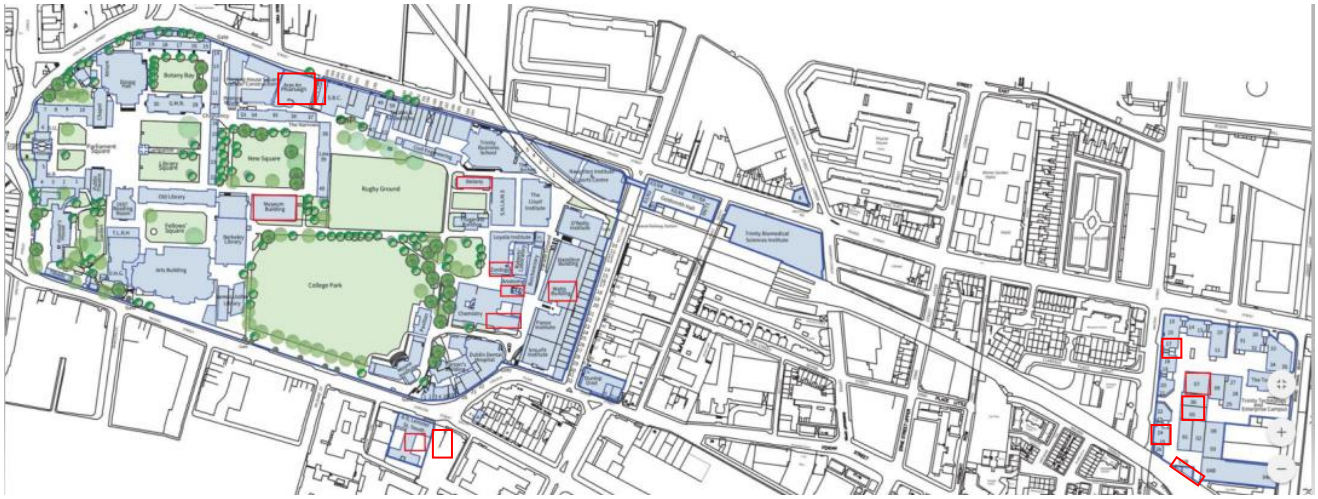
Head of School Date: October 2025

2.0 Description of the Workplace

The School of Natural Sciences occupies several buildings throughout the campus, namely:

The Museum Building, Botany Building, Zoology, Chemistry, Anatomy and Watt's buildings, Park Lane and Áras and Phiarsaigh. Off the main campus, the School has facilities at Sth Leinster Street, Claire Street, The Trinity East campus on Pearse Street, Dublin 2 and at Trinity Botanic Gardens in Dartry, Dublin 6.

These buildings consist of laboratories, offices, lecture and seminar rooms, libraries, museums, the herbarium and gardens.



The campus and adjacent School Buildings outlined in red above

School locations	**User**
Botany Building	Botany
Clare Street	Botany Climate +
Watts Building	Botany
old Anatomy Building	Botany Centre for Environment
Chemistry Extension (Tilda)	Botany Zoology
Áras an Phiarsaigh	School
Unit 5 TTEC	Zoology
Unit 6 TTEC	Botany Geology
Unit 7 TTEC	Geology
Unit 17 TTEC	Zoology
Unit 24 TTEC Geology Museum	Geology
Units 36a and b TTEC	Geology School
Botanic Gardens in Dartry	Botany

Zoology Building	Zoology
Museum Building	Geography
	Geology
Park Lane 205 Pearse Street	Zoology
South Leinster Street	Botany
	Zoology
	Climate +
Standalone area	
Glasshouses under arches	Botany

3.0 Work Activities

The School of Natural Sciences' primary activities include research and teaching; collaborating with the academic community and partnerships with industry, government, and other agencies.

4.0 Safety Responsibilities in School.

All staff are responsible for their own safety and that of others affected by activities within the school.

Primary responsibility resides with PIs whose signature is required on all risk assessments relating to their activities.

4.1 Head of School

The Head of School, Dr Matthew Saunders, has ultimate oversight of health, safety and welfare policies of the School. In his absence he will appoint an Acting Head of School. The Head of School must adhere to legislation in this area and specifically to the Safety, Health and Welfare at Work Act, 2005.

This includes:

- Ensuring all safe working practices are enforced and a safety culture exists in the School;
- Signing off on all health and safety policies and issues;
- Ensuring funding and facilities are available for Safety, Health and Welfare issues;
- Cooperating with any directives issued pertaining to Health & Safety and providing support to the Safety Officer, Safety Committee and others involved in carrying out Health & Safety policies in the School;
- A duty to assign responsibilities and to ensure they are understood;
- A duty to ensure that each School member is responsible and accountable for their actions on safety, health and welfare matters;

- Ensuring that all staff members are aware of the disciplinary procedures that exist should policies be willfully breached or neglected.

4.2 The School Safety Officer (SSO)

The School Safety Officer, Alison Boyce, has responsibility for the day to day running of all health, safety and welfare policies in the School and will dispense advice to management and staff on safety, health and welfare matters. Her role is clearly defined and she reports to Head of School and also represents the School on the Faculty Safety Committee where broader health, safety and welfare issues are debated. The Area Safety Officers assist the School Safety Officer in implementing all health, safety and welfare policies in their respective administrative areas and locations.

The School Safety Officer's duties include:

- Familiarity with the University Safety Statement and liaising with the College Safety Officers
- Liaising with other agencies to improve health, safety and welfare in the School
- Reviewing policies at regular intervals
- Upgrading, monitoring, and reviewing the Safety Statement, Risk Assessments in conjunction with the Head of School and Area Safety Officers
- Ensuring monitoring controls are adequate for risks while specific precautions are taken
- Ensuring equipment maintenance programmes are in place
- Arranging training, instruction, supervision and relevant information in health and safety matters
- Ensuring that suitable Personal Protection Equipment (PPE) is supplied and that adequate training is given for its use;
- Maintaining all health, safety and welfare records
- Maintaining accident and incident records and carrying out inspections and accident investigations
- Enforcing good housekeeping practice
- Attending the School Safety Committee where information from relevant committees and area SOs is shared.
- Attending Faculty of STEM Safety Committee meetings and reporting to the school committee on health, safety and welfare issues

- Liaising with safety representatives and union representatives
- Engaging in discussion with Estates and Facilities and Fire Officer in ensuring the School is legally compliant and a safe place of work
- Identifying and eliminating bad work practices
- Advising management and staff on safety, health and welfare issues
- Ensuring the Safety Statement and Risk Assessments are available to all staff.
- Updating the School Risk Register annually in conjunction with the Head of School

4.3 The Discipline and Area Safety Officers (Area SO)

The responsibilities of the Discipline and Area Safety Officers are to assist the SSO in implementing the safety policies of the School and to oversee all health and safety matters in their respective disciplines and areas.

List of Discipline and Area Safety Officers:

Botany	Marcus Collier (HoD)
Centre for the Environment	Mark Kavanagh
Geography and Geology (Museum Building)	Mary O'Shea
Geology (TTEC)	Cora Anne McKenna
Zoology	Alison Boyce, Sinéad Kelly
Áras an Phiarsaigh	George Oatridge

Their duties include (full list of duties is available at section 4.5 University Framework Document)**:**

- Acting for the School Safety Officer in their absence
- Advising the School Safety Officer on relevant training for staff under their control
- Ensuring accident/ incident forms are completed (Appendix 3)
- Liaising with the Fire Warden to ensure all areas under their control are adequately covered in case of fire
- Carrying out regular inspections of their buildings, equipment and work procedures and reporting breaches in safety, health and welfare to the School Safety Officer and overseeing all maintenance issues
- Ensuring visitors to the discipline and/or area and contractors are aware of safety policies
- Ensuring all staff under their guidance

are aware of safety and emergency policies and procedures
- Employing good housekeeping practices and checking offices using Appendix 6 on yearly basis or when occupants change
- Liaising with the School Safety Officer and coordinating the activities of technical staff.

4.4 Duties of Technical Officer and PI in Charge of Laboratory

The Technical Officer takes direction from the Chief Technical Officer (CTO) and where applicable from the area SO. PIs are responsible to overseeing risk assessments and adhering to school and university policies.

The Technical Officer's duties are:

- Overseeing that safe working practices are carried out daily, in the laboratory and good housekeeping practices are adhered to
- Reporting any deficiencies to the Chief Technical Officer
- Liaising with the Area Safety Officer to ensure all users have a good knowledge of procedures and safety
- Advising CTO of procurement needs and reporting faulty equipment
- Reporting usage of first aid materials and replenishing them from stocks
- Ensuring emergency procedures are enforced where applicable
- Ensuring laboratory area vacated during fire drills and in a fire situation
- Ensuring that visitors to the laboratory are not endangered or a source of danger.

4.5 The Discipline/Area Fire Warden and Evacuation Marshals

The Fire Warden ensures the School is compliant with the Fire Services Act 1981 and the Building Controls (Amendment) Regulations 2014. They report to the DSO on fire related issues.

The Fire Wardens weekly responsibilities are:

- Carrying out checks on escape routes to ensure they are clear
- Ensuring combustible material is not stored unnecessarily
- Ensuring all break-glass units and fire extinguishers are intact
- Assisting in evacuation of the building during fire drills, and emergencies

- Ensure that staff, students or visitors with disabilities are assisted as per the local fire evacuation plan.
- Undergoing basic fire training and ensuring all laboratory users undergo such a course and keeping records of attendees at courses
- Reporting any breaches of the fire code or faulty equipment
- Liaising with College Fire Officer in updating fire equipment as necessary
- Ensuring that the Fire Services Act 1981 and the Building Controls (Amendment) Regulations 2014 are adhered to.

Evacuation Marshal responsibilities:
The Evacuation Marshall is a senior person in an area when the fire alarm sounds – i.e. a lecturer in a theatre with students, a senior manager in an open plan office, a post doc in a laboratory with PhD students, a PI in an office off their lab, in the absence of a fire warden. Evacuation Marshals will be briefed on their role and responsibilities upon notification.
Fire Marshal Policy

They require no formal training beyond awareness of emergency procedures.

- Ensure that all persons in their designated vicinity or room are safely evacuated during an emergency, in the event that Fire wardens are not available during an evacuation
- Non-Intervention: Evacuation Marshals are not expected to confront fire hazards or manage firefighting equipment or place themselves at any risk during an emergency. Evacuation Marshals shall only direct persons in their area to a safe means of escape
- Not need to perform fire safety audits or be responsible for any regular fire safety checks
- Not require additional fire safety training but must be aware of basic evacuation procedures exit routes refuge areas and assembly points and inform all persons of same
- Need to report to the Fire Warden or other relevant emergency personnel if individuals are unable or unwilling to evacuate. They are

not to place themselves at risk should a person refuse to leave during an emergency.

- Participate in emergency drills as required and when in attendance in college to familiarise themselves with evacuation procedures and routes.

4.6 Specialist College Officers

These are consulted when deemed necessary by any member of staff.

List of College Specialist Areas.

Hazardous Chemicals

Biohazards

Bio-Safety and Genetic Manipulation

Laser Safety

Radiological Protection

Fire Safety

Cryogenics

Details of specialist officers are available from College Safety Office https://www.tcd.ie/safetyoffice/

4.7 General Staff

Under sections 13 and 14 of the Safety, Health and Welfare at Work Act, 2005 employees are required to:

- Take reasonable care for their own safety and that of others
- Co-operate with the College / School on relevant safety, health and welfare issues and policies
- Attend training and instruction where provided
- Ensure they are not under the influence of an intoxicant to the extent that it might endanger themselves or others
- Submit to reasonable appropriate tests for intoxicants if requested by the College
- Desist from engaging in improper conduct or behaviour that might endanger themselves or others
- Co-operate with College/School to enable them to be legally compliant.

- Ensure that they know the correct method to use any article or substance for protection of safety, health and welfare at work in the School
- Report any breaches of health & safety regulations, any work practice, any equipment, system of work, article or substance that might endanger the workforce to the Health & Safety Officer
- Not misrepresent themselves to the employers on entering a contract.

All staff must take care not to:

- Misuse or damage anything provided for safety, health and welfare.
- Place at risk the safety, health and welfare of persons in connection with work activities.

4.8 Contractors

Contractors working in the School on maintenance and specialist installations will be required to liaise with Estates and Facilities in the first instance, the Chief Technical Officer. They must observe the following conditions by:

- Having appropriate insurance cover
- Providing their own safety and emergency equipment and PPE
- Completing the appropriate 'Permit to Work' form provided and follow the terms laid out therein
- Supplying a copy of their Safety Statement
- Avoiding putting anyone at risk through his or her actions
- Reporting accidents and incidents to CTO or DSO
- Marking off any areas they are working in with relevant signage
- Following any directions given by the Area or Discipline Safety Officer.

The School will honour its obligations to any contractor under Section 8 of Safety, Health and Welfare at Work Act, 2005 to provide a safe workplace and safe equipment.

5.0 Consultation

The School of Natural Sciences has responsibilities under Section 26 of The Safety, Health and Welfare at Work Act, 2005. The School is aware that communication is essential at all levels of the workforce to ensure an effective safety management system is operated. The Safety Representative attends Faculty Safety Committee meetings and reports on areas of concern.

5.1 Safety Representative for School

Under Section 25 of the Safety, Health and Welfare Act, 2005 a Safety Representative is selected from the Faculty who undertakes the job with no loss of remuneration in order to fulfill the task.

Their position requires:

- Making representation to College on safety and health matters
- Inspecting the workplace once due notice has been given to College
- Investigating accidents and incidents
- Investigating complaints by staff to the School or College
- Accompanying a Health and Safety Authority Inspector on a tour of inspection or during an accident investigation, if requested
- Making oral representations to Health and Safety Authority Inspector on safety, health and welfare issues
- Liaising with other Safety Representatives in College

5.2 Faculty of STEM Safety Committee

The Faculty Safety Committee consists of school safety officers, faculty safety representative, Dean of STEM and their administrator, college safety officer or their representative. The Dean attends the University Safety Committee. The Faculty Safety Committee meet a minimum three times a year and as appropriate. They review day-to-day safety issues in various areas, report from school sub-committees, apply for risk reduction funds, update the risk register. Minutes are taken by school safety officer and report given at Executive and School Safety committees. Safety Committees provide for a for two-way communication between management and staff and oversees the effectiveness of the safety system.

The Faculty Safety Committee draw up health forms to be filled in by all students prior to using laboratories or going on fieldwork. (Appendix 7)

5.3 Communication

The School of Natural Sciences will communicate safety information and updates through the School Office, Sharepoint and NatSciHandS@tcd.ie, thus ensuring all are aware and familiar with the safety policy. The School communicates in different manners, via e-mails when sending directives, via supervisors orally, in policy statements and in printed and online form in the case of induction and information.

6.0 Training and Instruction

It is essential that every member of staff is given the safety training and information they require to carry out their jobs effectively and the School of Natural Sciences strives to provide this training and information. All staff will be trained in safe working practices and have protocols explained prior to undertaking any new tasks. Training will be given as often as required and will be monitored and evaluated by the SSO and area SO. Records will be kept on the iprotectU online system or on local systems as appropriate. https://**iprotectu.tcd.ie**/

6.1 Training and instruction provided

Trinity staff have access to the new training system, iProtectU. All Staff members must complete three mandatory training modules and the subsequent questions. Introduction to Fire Safety and Evacuation, Manual Handling and Display Screen Equipment DSE. All managers should also complete the Legal Briefing for managers.

- First aid courses to selected individuals who are given time off to attend in-house courses. Those likely to lead field-trips are required to attend the Remote Emergency Care course (REC) to have a better understanding of outdoor emergency procedures. The REC is run once per year on campus at the end of August.
- An induction course for all new laboratory users.
- Hazardous chemical training for all laboratory users. Including specific HF handling courses.

- Instruction courses for the use of all equipment and PPE in the School.
- Specialist training in supervisory skills for CTO and specialist Safety Officer courses run by College for all Safety Officers and staff.
- VDU Assessment Courses for Safety Officers and all staff who wish to attend to enable them to assess staff in their schools.
- Grievance procedure courses for CTOs to enable them to deal with disciplinary procedures.

Details of courses are kept by the area SO, PI and on iProtecU; reminders are sent when appropriate by College Safety Office. Any new training needs will be assessed and where practicable, courses will be offered.

6.2 Drones

Drones themselves are not inherantly hazardous but they do pose a reputational and financial threat if GDPR is infringed or where a flying incident occurs. Therefore, training, certification and insurance is legally required before operating a drone; a risk assessment must be completed. Large drone use is strictly controlled and access may take a significant period of time to organise. Contact your area SO in advance for more information.

7.0 Fire

7.1 Action in the event of fire

In the event of discovering a fire, activate the fire alarm by smashing a break glass unit. Note where the nearest one is to your work area. If you have attended the fire extinguisher course and it is safe to do so, attempt to extinguish the fire using the fire extinguishers/ blankets provided. If this fails abandon the attempt and leave the building.

7.2 When the fire alarm sounds

Stop whatever work you are engaged in and leave the building by one of the exits. Proceed to the appropriate assembly point for your area.

Those in charge or rooms no matter their size or activity (laboratories, lectures, offices) are responsible for work stopping and all occupants directed to evacuate the building.

7.3 Fire fighting equipment

Regular inspections are carried out by contractors on all fire fighting equipment as part of a contract with Estates and Facilities. Any person who uses a fire extinguisher must report it to the Chief Technical Officer to facilitate replacement.

When a fire extinguisher has been used, an accident / incident report form must be completed (Appendix 3)

Please note it is a criminal offence to use fire fighting equipment in an unauthorised manner.

7.4 Liaison with Fire Services

In order to facilitate the fire services a list of all chemicals used and stored in the laboratory must be kept on the back of the main door. The School uses the Labcup® online chemical inventory system. Access to this programme can be provided to emergency services. Labcup files will show the emergency services chemicals within the lab/building and their associated safety data sheets.

7.5 Fire Drills

Fire drills are carried out without prior warning by the College Fire Officer and security staff. The drills will be carried out when occupancy of the building is deemed to be high. They are assisted by the Area Fire Wardens and Evacuation Marshals in ensuring the building is vacated. Always treat a fire drill as a real emergency. Take the same precautions and assemble at your allocated assembly point. Never assume it is a fire drill and stay in your room.

7.6 Fire Doors

Under no circumstances should fire doors be wedged or left open. The curtailment of fire spread is dependent on fire doors being kept shut.

7.7 Fire Warden and Evacuation Marshal List

The Fire Warden and Evacuation Marshals for School locations;

School locations	User	Warden/Marshal
Botany Building	Botany	Trevor Hodkinson
Clare Street	Botany	TBA

	Climate +	TBA
Watts Building	Botany	Recently vacated
Old Anatomy Building	Botany	Patricia Coughlan
	Centre for Environment	Mark Kavanagh
Chemistry Extension (Tilda)	Botany	Patricia Coughlan
	Zoology	TBA
Áras an Phiarsaigh	School	George Oatridge
Unit 5 TTEC	Zoology	Alison Boyce, Sinéad Kelly
Unit 6 TTEC	Botany	TBA
	Geology	Carmela Alen Tupaz
Unit 7 TTEC	Geology	Cora McKenna
Unit 17 TTEC	Zoology	Alison Boyce, Sinéad Kelly
Unit 24 TTEC	Geology	TBA
Geology Museum		
Units 36a and b TTEC	Geology	Users
	School	Users
Botanic Gardens in Dartry	Botany	TBA
Zoology Building	Zoology	Alison Boyce, Sinéad Kelly
Museum Building	Geography	Sarah Carty, Maura
	Geology	Morgan, Elaine Treacy
Park Lane 205 Pearse Street	Zoology	Grace Aspell
South Leinster Street	Zoology	Users
Glasshouses	Botany	Users

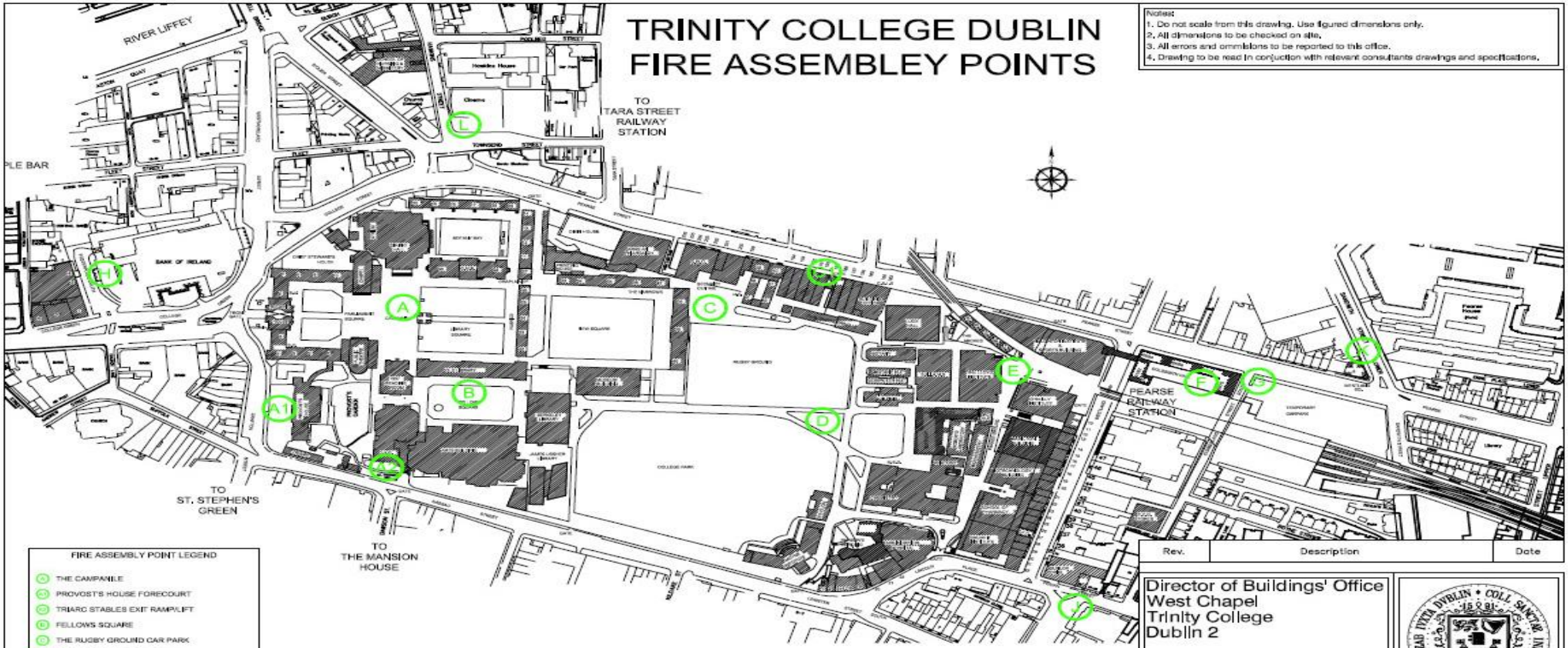
Any possible problems should be reported to the relevant Fire Warden.

7.8 Bomb Threats/Arson

Bomb threats require two actions; imediate evacuation or searches. Campus security will advise occupants on which procedure to follow. Where reactive chemicals have become unstable, the Safety Office will determine if removal or controlled detonation is warranted.

If you notice anything unusual please contact a technical/safety officer, your fire warden, person in charge or security 01 896 1317.

TRINITY COLLEGE DUBLIN
FIRE ASSEMBLEY POINTS



Notes:
1. Do not scale from this drawing. Use figured dimensions only.
2. All dimensions to be checked on site.
3. All errors and ommisions to be reported to this office.
4. Drawing to be read in conjuction with relevant consultants drawings and specifications.

FIRE ASSEMBLY POINT LEGEND

- A THE CAMPANILE
- A1 PROVOST'S HOUSE FORECOURT
- B TRIARC STABLES EXIT RAMP/LIFT
- C FELLOWS SQUARE
- D THE RUGBY GROUND CAR PARK
- E PEARSE STREET (EXIT GATE)
- F THE FLAT IRON
- G BETWEEN LLOYD/O'REILLY INSTITUTES/ARCHES
- H GOLDSMITH HALL COURTYARD
- K STH. CUMBERLAND STREET CORNER
- L FOSTER PLACE/B.O.I. PORTICO
- M DAVENPORT HOTEL
- N WESTLAND SQUARE (REAR CARPARK)
- O SCREEN CINEMA FORECOURT

CAD Ref: Z:\505\Current College Map\Fire Observations
External Refs: PMcD/KF 13.02.08

Rev.	Description	Date

Director of Buildings' Office
West Chapel
Trinity College
Dublin 2

Phone: (+353) 01 896 2262
Fax: (+353) 01 679 3799
Web: http://www.tcd.ie/buildings
Email: drawings@tcd.ie

Project: Fire Observations 2008	Drawn By: PMcD	Date: 04.03.08
	Issue: Information	Revision:
Title: Trinity College Dublin Main Campus Fire Observations Fire Assembley Points	Scale: Not to Scale	
	Drawing No.: 505-FO-004	
Client/Department: Trinity College Dublin	Building Atlas Number: 505	

8.0 First Aid

8.1 Action in the event of an emergency

First aid should never replace professional medical treatment. In the case of minor injuries e.g. burns, minor cuts and abrasions, assistance may be sought from one of the qualified First Aiders in the School. Refer to emergency numbers which are posted in common areas. Once treatment has been administered if there is any doubt, refer the patient to the College Health Centre for attention (phone extension 01 896 1591 or 01 896 1556) Printing House Square, College. A list of First Aiders should be displayed on first aid cabinets in each discipline and area.

8.2 First Aid Cabinets

First Aid cabinets are maintained in all laboratories and common areas. The names and telephone numbers of qualified First Aiders in the area along with the College Health Centre should be displayed on all cabinets.

These cabinets should be upgraded at least twice per year or more often if required by the (Chief) Technical Officer or Safety Officer in the Discipline or area. Contents should be checked with missing or outdated items being replaced. In some cases such as the inclusion of Calcium Gluconate Gel in Palynology laboratories, separate arrangements have to be made to secure this from alternative sources. This has a short life span and will be replaced more frequently.

The disciplines/areas may carry a stock of commonly used first aid materials which can replace items as required.

Disciplines also carry field first aid kits which are replenished prior to fieldtrips.

A comprehensive list of recommended contents of first-aid boxes and kits can be found in Table 1 at:

http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Guidelines_on_First_Aid_at_Places_of_Work_2008.pdf

8.2a Field First Aid Kits

First aid kits for field work and field courses are available from and maintained by technical teams. School vehicles are also fitted with a kit. Drivers must make themselves aware of its location before each journey. In some cases, research groups will hold and maintain their own kit.

8.3 First Aid Training

It is the School's policy to encourage staff and postgraduates to participate in first aid courses which are arranged by College Safety Office. First aid responders must be agreed by head of unit. In addition - as many functions of the School are carried out in the field – the College Safety Office provides a special Remote Emergency Course (REC) for all those leading fieldtrips; all fieldcourse staff are encourged to attend REC training. This course is geared for conditions in the open air and recreates possible emergency scenarios. It is run once per year in August.

https://www.tcd.ie/safetyoffice/safety-training/first-aid-training.php

A list of staff trained in occupational first aid, within each location, who hold current certification should be displayed on the front of all first aid cabinets in that area.

9.0 Electrical Safety

Due to the numerous electrical appliances and electrical fixtures and their proximity to water, electricity is a major hazard. New users of laboratories are given appropriate training to ensure safe working practices.

The following rules apply to all mains powered electrical equipment in the School:

- Alteration or maintenance to any of the electrical services can only be carried out by College Estates and Facilities or an appropriately certified contractor
- The CTO must apply by e-mail for work and a works number is issued
- Installation of any equipment must be undertaken by College Estates and Facilities' electricians, or under their supervision by qualified engineers or suppliers
- Repair and servicing by contractors must be done under the guidance of the Chief Technical Officer or project manager and only once a 'Permit to Work Form' has been issued
- All electric equipment must be examined for problems on a regular basis by the technical officer in charge of that area

- All faulty equipment must be reported to the Chief Technical Officer and the equipment decommissioned until work to repair it has been completed
- Any equipment generating high voltage must have appropriate signage
- No cables should be left trailing on the ground
- In the case of a faulty circuit the Chief Technical Officer should report it to College Estates and Facilities for immediate repair
- Where possible extension cables should be avoided but if necessary they should be regularly checked by the technical officer in charge, never left on the ground and fully unwound before use
- Where electrical equipment is left unattended as part of an experiment it must be failsafe with shutdown possible via mains isolation switch
- Regular updates on assessments of electrical equipment must be made by all staff and researchers
- Electrical plant rooms in buildings and electrical panels must be kept free from obstructions at all times to enable maintenance staff to gain access.

10.0 Chemical Safety

https://www.tcd.ie/safetyoffice/lab-safety/

The use of dangerous chemicals is strictly controlled by legislation. (Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and Safety, Health and Welfare at Work Act 2005). These apply to chemicals with the signal words 'Danger' or 'Warning'. The legislation requires:

- That controls are in place following a risk assessment and that they are maintained
- That information, training and supervision is provided for those using chemicals
- That health surveillance schemes (short/long term exposure) are implemented where required and monitored on a regular basis

10.1 School Rules on Chemical Safety

- A written Risk Assessment must accompany all chemicals and a SDS must be available. Chemicals are categorised as harmful or dangerous. Further hazard characteristics are listed as: flammable, oxidizing (explosive), compressed gas, irritant, harmful, mutagenic, corrosive, toxic, environmental consequences; all of which must be explicitly noted and reflected in the risk assessment.
- All chemicals to be used in School areas must be procured through the Chief Technical Officer or his/her appointee
- Hazardous Chemical Safety training must be undertaken by anyone prior to using chemicals in laboratories. Users must attend a local induction in the first instance and college safety training when available.
- All new users are given an induction course where they must read policies and procedures and sign off to say they have done so
- All users should be aware of the SDS information on the chemicals they are using. These should be available in the laboratory areas or on Labcup® or both.
- Every chemical and area where chemicals are used is assigned to a responsible person e.g. PI, TO or DSO. This person must update Labcup® as appropriate.
- Access to Labcup® must be given to laboratory users
- All chemicals, in a laboratory, must be included on the inventory list on Labcup® and at the back of the main door or both as a precaution in the event of fire
- Staff and researchers must use all hazardous chemicals in the fume-cupboard and wear the personal protection equipment provided
- Chemicals must be stored in their correct locations: chemical storage cabinets, under water or refrigerated
- No chemicals should be handled without the user having the correct personal protection equipment, and without the user having been trained in its use
- Spill kits and respirators are available for use in emergencies
- Disposal of spent chemicals and mixes, cytotoxic, biological and sharps containers should only be via the College Hazard Materials Disposal Facility

- All chemical users should familiarise themselves with the location of emergency exits, safety shower, first aid cabinet and eye wash stations

College has a stipulation whereby all laboratory users must complete forms as per their Faculty's Health forms.

11.0 Biological Hazards

https://www.tcd.ie/safetyoffice/lab-safety/

Procedures involving Biological Hazards may pose special safety problems in addition to those encountered in other laboratories and field sites e.g. allergens, contagions, exposure to live animals, genetically modified organisms. Consequently, the conditions for handling biological materials and the supervision required for unskilled workers are more rigorous. All such procedures (as defined in the College Biological Agents' Policy) must adhere to the conditions contained therein.

Special care is required when working with or encountering biological hazards and particularly if working alone or outside normal working hours. In addition to standard risk assessment procedures, specific policy protocols on biological hazards may exist.

If so, these policies and associated procedures will form part of the risk assessment and must be consulted prior to commencement of work.

Your DSO or technical officer will contact Dr Mary McDonnell, Safety Officer (Biological Hazards) on your behalf should additional information be required, see below.

Any individual proposing to undertake work (research or teaching) involving potential exposure to a biologically hazardous material, must comply with the College Biological Agents Policy , and the provisions of all relevant legislation, in particular the **Safety Health and Welfare at Work (Biological Agents) Regulations 2013 (S.I. No. 572 of 2013)** which classifies Biological Agents into four risk groups classified as to whether:

1. The agent is pathogenic to humans or the environment
2. The agent is hazardous to employees
3. The agent is transmissible to the community
4. There is effective treatment or prophylaxis available

These risk groups set down the minimum requirements for worker protection from the health risks associated with biological agents in the workplace.

The Health Safety and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007) states in Part 6 that certain biological agents have potential to effect certain risk groups and there is a legal obligation on employers to assess exposure to children, young persons, pregnant, post-natal and breast feeding employees to biological agents.

Biologically hazardous materials include micro-organisms natural or genetically modified, cell cultures, human endoparasites, human or animal tissues, fluids, preparations and derivatives, which may be able to cause any infection, allergy, or toxicity. Some biohazards have the potential to cause cancer and/or foetal damage.

It is the responsibility of each user of biologically hazardous material in College to ensure that they comply with the provisions of the College Biological Agents Policy. It is the duty of the employer to ensure that effective vaccines are made available, when necessary, to those dealing with biological hazards and to inform the employees of the benefits and drawbacks of such vaccines. The employer also has a duty to provide health surveillance for such employees.

Before undertaking any work with biological agents (as defined in the policy), the prior approval of the College Biological Safety Officer is required, as there is a legal requirement on College to notify the HSA and EPA when working with certain groups of biological hazards. Training in use of required PPE should be given at local level as well as an induction course on the risks involved in materials to be handled, the precautions to be taken, the hygiene requirements, steps to be taken in case of accidents, safe disposal of materials and any other relevant information that might be related to exposure to biological agents. The employer must inform workers and their representatives of any accidents as soon as possible to avoid further problems.

12.0 Radiation Safety

https://www.tcd.ie/safetyoffice/lab-safety/radiological-safety/

The Environmental Protection Agency of Ireland http://www.epa.ie/radiation/ is the national organisation with regulatory, monitoring and advisory responsibilities in matters pertaining to ionising radiation. In particular the agency concerns itself with hazards to health associated with ionising radiation and with radioactive contamination in the environment.

Trinity College holds a licence to work with radioactive materials (RAM) and irradiating apparatus granted by the EPA who have strict rules concerning the use of ionising radiation for research. These rules, based in "The Radiological Protection Act, 1991 to 2014 (Ionising Radiation)" are supplemented with the Local Rules of College. All radiation users in the University should be familiar with the provisions of the Radiological Protection Act, 1991(Ionising Radiation) Regulations 2019, S. I. No. 30 of 2019 or commonly referred to as **IRR19**.

Compliance with College licence conditions is a legal requirement, and any breach of licence conditions may lead to a suspension or removal of the College licence. Any radiation worker who does not comply with College licence conditions or with the College local rules is subject to disciplinary action, which may include suspension of work with ionising radiation.

The location and specifics of radiation equipment and sources are available from NatSciHandS@tcd.ie

12.1 Radiation Safety Equipment

The Earth Surface Research Laboratory holds a RadEye radiation monitor which is used to check potential radiation from its cabinet and portable x-ray machines.

12.2 Working with Ionising Radiation

Any worker in the Discipline of Geology who wishes to use the x-ray equipment must first:

1. Meet with the Departmental Radiation Protection Supervisor (DRPS) to discuss their research
2. Complete a Permit to Work form (**Form No: Rad 3 – Permit to Work – X-Ray Equipment**)
3. Attend the Radiation Safety training as part of the Lab Safety Symposium which is run in May each year. Online training via Blackboard is also available as interim training as a minimum requirement where it is absolutely necessary to commence ionizing radiation work before the Lab Safety Symposium
4. Be familiar with the College Radiation Emergency Procedures and Local Rules
5. Undergo specific machine training with the DRPS or suitably trained and competent person who is the main user of the instrument

12.3 X-ray Training

In addition to the College Radiation Safety workshop, the DRPS or trained and competent person trains users on an individual basis by arrangement. The training covers the following areas:

1. Booking and security access to the x-ray equipment
2. Sample preparation
3. Operation of the x-ray equipment including peripherals (e.g. chiller, gas, vacuum pumps)
4. Emergency procedures

Once the training is complete the DRPS or trained and competent person fully supervises the user until they are competent with the equipment, then is on hand to deal with questions and technical problems.

12.4 Laser Training

The Safety, Health and Welfare at Work (General Application) (Amendment) Regulations – Part 9 Control of Artificial Optical Radiation at Work, details the minimum Health and Safety requirements regarding the exposure of workers to risks arising from artificial optical radiation. It includes legislation on Exposure limits, Risk Assessments, Controls and Training and the use of Lasers is covered by this legislation.

The School has many Class Four lasers and their use must adhere to the University Laser Policy and accompanying training. Anyone who uses or is in the vicinity of lasers no matter the class must attend training which is online first then in person.
https://www.tcd.ie/physics/research/facilities/oal/laser-safety/

13.0 Compressed Gases

Compressed gases pose hazards both physical and chemical to persons and buildings. Their stored energy potential and release of their contents must be risk assessed, and strict controls applied. Their use is prohibited until training, permits, signage, engineering controls and emergency contacts are all in place.
Detailed mitigations must be made before any use or installation. In the first instance you must discuss with your DSO or CTO.

Any area or worker that wishes to install or use gases must adhere to the following:

- Risk assessment must first be completed
- Users must be fully trained
- Infrastructural assessments must take place to determine how gases will reach the users. Preferred suppliers can assist
- Storage and movement of cylinders will be considered
- Gas alarms must be installed to monitor gas and/or oxygen levels.
- Gas alarm locations and emergency contact details must be supplied to Estates and Facilities
- Regulators must be changed every five years
- Appropriate signage on laboratory doors

Protocol For Gas Alarms & Oxygen Depletion Alarms is available from E&F or SSO

14.0 Waste Disposal

Housekeeping, laboratory and field work must have systems of waste disposal. In the case of the latter two, disposal of waste products must be considered as part of risk assessment and are legally controlled. Waste can

be hazardous to human/ animal health and to the environment. In most circumstances those who generate waste are responsible for its correct disposal. Waste can have financial implications on the cost of a project. Consider end product chemicals and mixes/fumes/aerosols, biological waste, return of empty gas cylinders, leave no trace on field work. Technical staff are trained in waste disposal techniques and should be consulted during project design and costing, and before risk assessment.

15.0 Machine/ Equipment Safety

Machine and equipment safety (including vehicles, sharps, lasers) is controlled by training, maintenance and physical barriers to moving/ electrical parts (guards, gauges).

Machinery can itself be hazardous or become hazardous after contact with other materials, through wear and tear or improper use. Equipment is most often classed as physically hazardous (noise, vibration, physical injury, heat, cold, dust, radiation, electric shock). Chemical/ biological hazards may also occur.

No individual can use a machine, equipment or power tool without recorded training and risk assessment. Maintenance schedules are set by owner, technical officer, use or legislation.

16.0 Legislation

The following legislation is relevant to the work undertaken in the School of Natural Sciences and applies to all staff, researchers, maintenance, and contract staff.

Sensitive Risk Groups

It is policy to discourage pregnant employees from using the laboratory facilities as many of the chemicals handled can present a danger to the unborn. Any chemicals, labelled as H340 (May cause genetic defects), H341 (Suspected of causing genetic defects), H350 (May cause cancer), H351 (Suspected of causing cancer), H360 (May damage fertility or the unborn child), H361 (Suspected of damaging fertility or the unborn child), H362 (May cause harm to breast-fed children), H371 (May cause damage to organs), H372 (causes damages to organs through prolonged or repeated exposure) and H373 (May cause damage to organs through prolonged or

repeated exposure) should be avoided by pregnant employees. H340, H341, H350, H360 and H371 should only be handled in fume-cupboards while using relevant personal protection equipment.
Medical intervention may be necessary to identify certain hazards to the pregnant employee and this will be undertaken where necessary. For obvious reasons manual handling must be avoided by pregnant staff and directly after giving birth. Ergonomics must also be assessed, and breast-feeding staff should be aware of the possibility of chemical exposure transferring to breast milk in certain circumstances.

General Safety Legislation

The Safety, Health and Welfare at Work (General Application) Regulations 2007 details many requirements for the areas covered in the Risk Assessment such as the workplace itself, the use of work equipment, the provision of PPE, manual handling , electricity, first aid and notification of accidents and dangerous occurences while the 2007 Safety, Health and Welfare at Work (General Application Amendments) Regulations further look at work equipment, preventative and protective measures and fire fighting measures.

The Safety, Health & Welfare at Work (Chemical Agents) Regulations 2001, Chemicals Act 2008 (No. 13 of 2008) and Chemicals (Amendment) Act 2010 (No 32 of 2010) – Code of Practice 2011, Chemical Act 2008 also deals with training, health surveillance and assessing hazardous chemicals. The Safety, Health & Welfare at Work (Carcinogens) Regulations 2001 also looks at the risks of exposure to carcinogens and the need to keep records.
Much of our recent legislation in safety, health and welfare in the workplace has referred to risks, but the 2005 Safety, Health and Welfare at Work Act has laid down that every employer must identify hazards and assess risks in the workplace (Section 19). The employer has a statutory obligation to produce a written Risk Assessment and importantly must implement any improvements following from the Risk Assessment. The Risk Assessment must be reviewed if there are any significant changes, or it is believed to be no longer valid. It must take account of the work being carried out at the workplace and have regard for the relevant legislation. The employer now has a duty to ensure that the work and workplace are as far as is

reasonably practicable not exposed to risks. The Risk Assessment is in essence a work in progress and should be viewed in that light.

Relevant legislation includes:

- Safety, Health and Welfare at Work Act, 2005 (S.I. No. 10 of 2005)
- Safety, Health and Welfare at Work (General Application) Regulations, 2007 (S.I. No. 299 of 2007) and Amended (General Application) Regulations, 2007 (S.I. No.732 of 2007)
- Fire Services Acts, 1981 (S.I. No. 30 of 1981) and Amendment 2003 (S.I. No. 15 of 2003)
- Building Control Regulations, 1997 (S.I. No. 496 of 1997) and Amendment 2014 (S.I. No. 9 of 2014)
- Safety, Health and Welfare at Work (Diving) Regulations 2018 (S.I. No. 254 of 2018)
- Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2010 (Control of Artificial Optical Radiation at Work). (S.I. No. 176 of 2010)

Chemical

- Chemicals Act 2008 (No. 13 of 2008) and Chemicals (Amendment) Act 2010 (No 32 of 2010)
- 2011 COP for Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (S.I. No. 619 of 2001)
- Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (S.I. No. 619 of 2001)
- Safety, Health and Welfare at Work (Carcinogens) Regulations, 2001 (S.I. No. 78 of 2001)

Biological

- Safety, Health and Welfare at Work (Biological Agents) Regulations 2013 (S.I. No. 572 Of 2013)

Radiological

- Legislation governing the use of ionising radiation is derived from European Directives which in turn are based on the recommendations of the International Commission on Radiological Protection (ICRP)

- and Directive 84/467/Euratom in Europe

Welfare

- Code of Practice for Employers and Employees on the Prevention and Resolution of Workplace Bullying 2007

Relevant Guides Include:

- HSA Guide to Respiratory Protective Equipment 2010
- HSA Guide to Safety Signs at Work 2010

Regulatory Impact Analysis (RIA)

The Safety, Health and Welfare at Work (Diving) Regulations 2018 and 2019

The Safety, Health and Welfare at Work (Mines) Regulations, SI 133 of 2018

More information can be obtained from: www.HSA.ie

With the College Safety Office providing specific College policies at: https://www.tcd.ie/safetyoffice/

17.0 General Safety Policy

17.1 Insurance

Staff and Students of Trinity College Dublin on authorised College business on and off campus, are covered by the College's Liability Insurance. This provides cover for any liability that College incurs as a result of negligence on the College's part. It is not a no-fault compensation fund nor does it cover medical/repatriation as a result of illness or accident that is not the College's fault. If a staff member of student is injured during the course of their work and they felt this was due to negligence on the part of the College, they would need to make a claim to the College which would be assessed and a decision taken on the veracity of that claim taking all factors into account. The cover is not restricted to Trinity College Dublin campus only, subject otherwise to the usual terms, conditions and exceptions. This policy applies to laboratory work, fieldwork and placements with external bodies.

Note: You must send your completed risk assessment to the School, Area or Discipline Safety Officer to review. They will then request an Indemnity cover letter for work off campus from college insurance.

Trinity College Travel Insurance Policy

(Information and Travel forms available from TCD Insurance).

Insurance Sharepoint Link

Background

Trinity College Dublin has a business (staff) travel Insurance Scheme with AIG.

Persons Insured

Any person (excluding students other than Postgraduates) over the age of 17 authorised by the College to travel on College business (including incidental holiday travel if in the same country as business destination). Excluding persons on long-term secondment. This insurance does not cover Undergraduate Students working on course related work. It is recommended that Undergraduate Students travelling abroad for placements, fieldtrips or course related fieldwork ensure they are covered by a separate travel insurance policy as the College's Liability Policy does not cover all eventualities.

Maximum duration of any one trip no longer than six months

Journeys Covered

Any journey on the business of the College with destinations outside the Republic of Ireland and Northern Ireland and destinations within the Republic of Ireland and Northern Ireland provided such journey requires one or more aircraft flights or obtaining overnight accommodation away from normal place of residence.

No journey will be covered which involves travel to any area where war hostilities or widespread disturbances are or have been in progress or are reported as being imminent. In 2025, countries with a high degree of caution or do not travel status may not be covered. Destination specific advice is available at https://www.ireland.ie/en/dfa/overseas-travel/

N.B. No Cancellation, Curtailment or Change of Itinerary cover applies in respect of the volcanic ash cloud.

Cover Requirement

Travel insurance cover is provided to all staff and postgraduate students when they travel on University business. It is a requirement of the policy that the travel insurance registration form is completed and authorised before each and every journey is undertaken. Please see the Insurance Sharepoint link for registration details.
We would ask that it is done at least 21 days prior to proposed travel and ideally before the travel arrangements have been made**.**

Cover is only operative provided the journey is authorised by your Head of School/Administrative Area.

Claims

A claim under the policy should be notified immediately to insurance@tcd.ie or to the Estates and Facilities Department, West Chapel, College. In the event of property loss, the local police should be notified and a statement obtained from them that the matter is noted and will be investigated. Luggage loss, in the custody of an airline, must be reported to the airline and a report obtained from them. All reports, medical certificates, receipts and proof of travel must be retained to support any claim.

Lifeline Plus Assist Emergency Medical Assistance
Tel: +44 (0)1273 747 625

First Assist operates 24 hours a day 365 days year. As well as medical assistance the First Assist Travellers Helpline will provide the following assistance:
Advice on replacement of lost or stolen tickets, passport or travel documents Assistance in liaison with carrier on location of lost luggage items Emergency message relay to family or business associate where normal channels fail Referral to Embassy or Consulate where legal consultation is needed.

Multi-lingual assistance coordinators speaking more than 15 languages
A network of doctors and nurses throughout the world.
N.B. the services of the First Assist Traveller Helpline are to provide

advice and assistance only - there is no insurance cover in connection with these services.

17.2 Access to the School

The standard working hours are from 08:00 to 18:00 Monday to Friday. Although access to the buildings is often freely available during these hours, access to the laboratories is always limited to authorised staff, researchers, technical staff, approved contractors, cleaners, maintenance staff and authorised visitors.

There are occasions when staff will want to enter their office/ laboratories after hours. Once they enter after standard hours, they must sign in and out in the book provided. This is a backup for insurance purposes and in case of emergencies. Should a member of staff or researcher wish to work in a building outside normal working hours they must complete a Risk Assessment form; **Permission and Risk Assessment Form for Lone Working (page 52 and 113).**

It is vital that cleaning staff, maintenance staff and contractors are made aware of hazards in these areas and contractors must complete a "Permit to Work" when required. This form can be obtained from Estates and Facilites and/or the Chief Technical Officer in the discipline who is in charge of the building / laboratory.

17.3 Visitors

Visitors to the laboratory must sign in with the Technical Officer in charge of the laboratory who will make them aware of the applicable safety rules. Ultimately it is the responsibility of the staff member bringing in visitors to ensure they understand what has been explained to them. No visitor will be left unattended in the laboratory at any time.

17.4 Lone Working

University Lone Working Policy

https://www.tcd.ie/safetyoffice/assets/pdf/Trinity-College-Lone-Working-Policy.Rev.1.0.Board-Approved.pdf

Trinity College Dublin, the University of Dublin has a duty to all staff and students that may have cause to be working alone, under the Safety Regulations, which state that:

Without prejudice to the generality of section 19 of the Act, an employer shall, in identifying hazards and assessing risks under that section, take account of particular risks, if any, affecting employees working alone at the place of work or working in isolation at remote locations;

to ensure they have a safe and healthy working environment. It is the policy of the University to comply with this legislation and any guidance made under this legislation and to conform, as far as is reasonably practicable, to best practice.

Trinity College Dublin further recognises that some staff and students are required to work alone while others choose to do so. In order to comply with the University Lone Working Policy appropriate measures must be put in place to provide safe systems of work and a safe environment for those who work alone, by the School, Unit or Discipline.

This policy on Lone Working will apply to all staff, visiting academics, students engaged in university work and contractors employed by the University while working in the University's buildings, facilities and vehicles, to all staff and students working in buildings and facilities provided by other organisations and to those working in the community, on site visits and field trips. It equally applies to staff and students who are working abroad on College business or who are on work-based learning placements/internships that are part of their course in the University.

The College acknowledges that the risk will vary depending on the nature of the work that is being carried out whilst working alone. General office-based activities or 'paperwork' type activities are generally classified as being low to medium risk and are acceptable under normal conditions and can be covered through the local area safety statement.
The majority of laboratory work, maintenance works, workshop activities, fieldwork in remote areas, handling of hazardous (biological, chemical, radioactive) agents, etc. are likely to be medium to high-risk activities and

must not be undertaken without completion of a Lone Worker Risk Assessment. The college also acknowledges that there are also some activities that must not be carried out alone, and that some activities (low risk fieldwork or research) may also fall into a lower risk category too.

Heads of Units/Schools or Discipline and other responsible persons must ensure that this policy and associated guidance is fully complied with. A Unit may introduce local rules and policies that impose other arrangements relating to lone working provided that the minimum requirements of this policy are met.

All staff and students who carry out lone working must take care of their own safety and comply with all other university policies, local rules and procedures. Failure to comply with the policy will be considered a disciplinary issue and may result in any privilege to lone working being withdrawn.

This policy will be reviewed on an annual basis to ensure its adequacy and to assess its performance.

Approved by the Board of College on 24/06/2020 Trinity College Lone Working Policy 1.0

Guidance to the University Lone Working Policy
17.4.1 INTRODUCTION

The principal purpose of this Policy is to ensure a safe and healthy working environment for all lone workers (staff and students) in Trinity College, Dublin by developing a continuum of responses that ensure an environment where staff, students and visitors are safe.

Under the Safety, Health and Welfare at Work (General Application) Regulations, 2007, Regulation 2(3) states that:

2 (3) Without prejudice to the generality of section 19 of the Act, an employer shall, in identifying hazards and assessing risks under that

section, take account of particular risks, if any, affecting employees working alone at the place of work or working in isolation at remote locations.

In addition, the Policy requires the University to reduce, so far as is reasonably practicable, all reasonably foreseeable risks associated with Lone Working and to detail arrangements to achieve this reduction in line with legislative requirements. The main hazards that are generally associated with lone working are exposure to violence and poor access to emergency assistance.

In the University context there are many examples of lone working both during normal working hours and outside of normal hours. These might include

- Persons working alone within a laboratory or workshop;
- Persons working alone in a remote office, reception or classroom;
- Staff carrying out fieldwork alone
- Unaccompanied home visitors
- Cleaners
- Manual staff such as Electricians, Plant Operators and Drivers;
- Security staff.

17.4.2 SCOPE

The Policy on Lone Working will apply to all staff, visiting academics, students engaged in university work and contractors employed by the University while working in the University's buildings, facilities and vehicles, to all staff and students working in buildings and facilities provided by other organisations and to those working in the community, on site visits and field trips. It equally applies to staff and students who are working abroad on College business or who are on work-based learning placements/internships that are part of their course in the University.

17.4.3 DEFINITIONS

- Lone Workers are those who work by themselves without close or direct supervision or without direct or close contact with a colleague. In

reality this means working in an environment in which, if rendered incapacitated or unconscious, a person cannot reasonably expect to be found within 15 minutes. The main hazard in lone working is that in the event of an accident that incapacitates them, a person will not be able to contact or summon help.

- It **does not** include the chance or occasional occurrence of being on one's own at work. For example, in every workplace there is somebody who arrives first and somebody who leaves last, or an individual may need to go to an unoccupied storeroom etc.
- An individual who has either visual or audible communication with another employee **is not** considered as working alone.

Trinity College Lone Working Policy 1.0

- Lone working is not restricted to out-of-hours working but can occur at any time especially during fieldwork (i.e. study that consists of practical activities that are done away from your school or place of work)

17.4.4 PROCEDURES

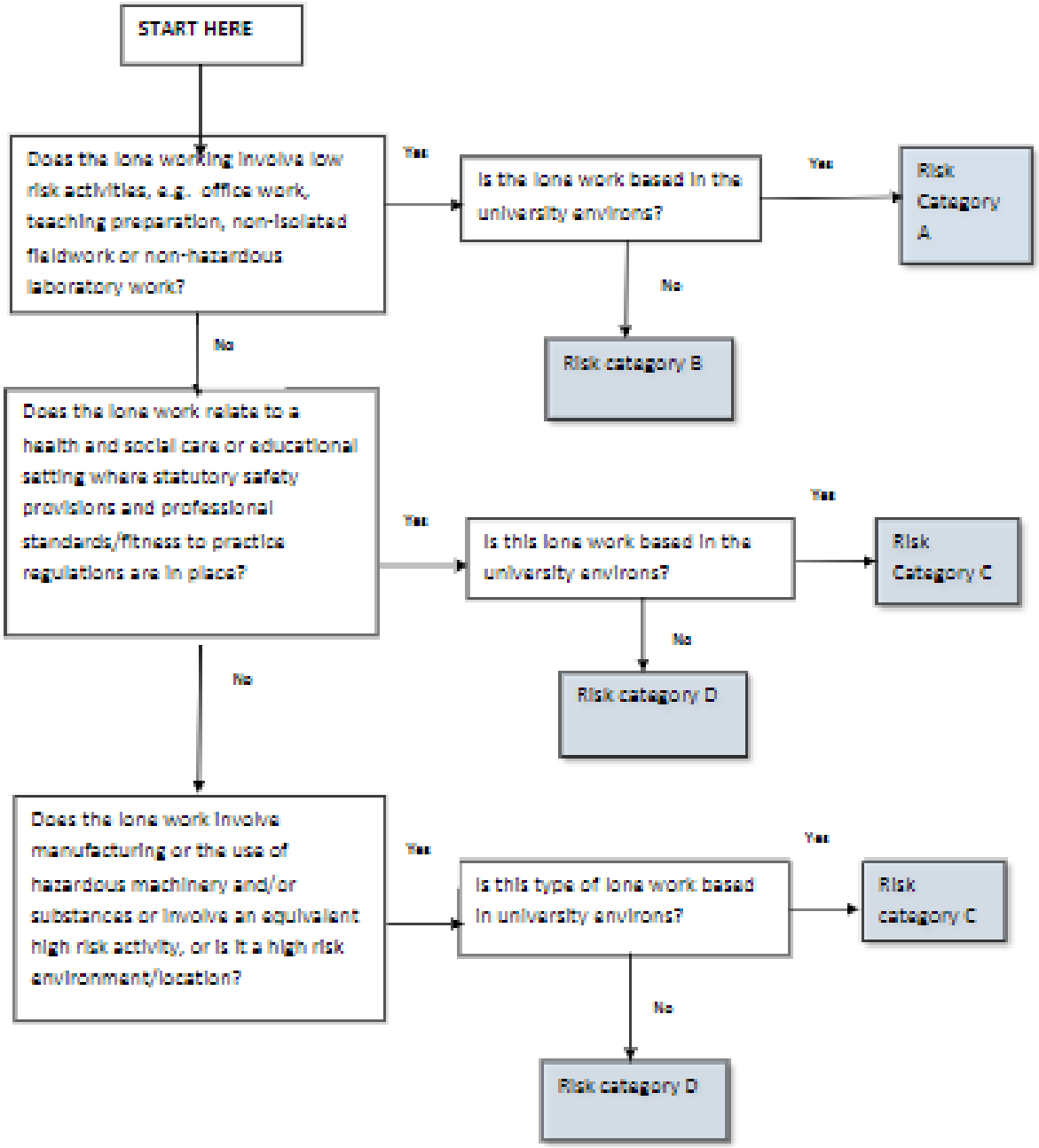
- The overall Policy is to keep to a minimum the number of lone workers within college. Where lone working occurs, it is the responsibility of the Head of School/Unit/Discipline to ensure that staff and students comply with this policy and risk assessments are carried out for particular tasks and activities
- The assessment may be documented as part of a project risk assessment, as school local rules or documented in the local safety statement.
- The Lone Working Risk Categorisation Chart (Appendix A) can be used to help identify the level of risk and ensure appropriate control measures put in place. This document provides guidance for such categorisation. Where Category B or D is selected i.e. in the case of isolated fieldwork or remote-working, additional location related assessments, i.e. travel assessments or teleworking assessments must be also completed.
- A checklist to assist in the identification of potential hazards is available in Appendix B.
- A Unit may introduce local rules and policies that impose other arrangements relating to lone working provided that the minimum requirements of this policy are met.

- All staff and those students identified as Lone Workers should familiarize themselves with the contents of this Policy and the associated procedures.
- Employees have a duty of care to themselves and to others in relation to Health and Safety and must comply with any processes/control measures that have been provided by their school/unit/discipline for their safety. Questions should be directed to their relevant supervisors.
- Each Head of School/Head of Area must ensure that there are procedures in place for lone working (including out-of-hours access) and the associated supplementary documents such as risk assessments.
- It is recommended that undergraduate students should never be engaged in lone working, i.e. are not permitted out-of-hours access to buildings other than designated 24-hr facilities or with direct supervision.
- The risk assessments should include general risks associated with the building (such as reduced heating, unlit corridors etc.) or the environment in which it is carried out in (e.g. in the community) and specific risks associated with the task.
- Lone working in the field or in the community is permitted only if the risk assessment shows that the risk is low and all that controls indicated by the risk assessment are implemented.
- Every lone working procedure or assessment must include a clear designation of responsibilities for enforcing the procedure, and any training requirements
- Types of hazards that may be of a concern to lone working are detailed in Appendix C, and examples of possible control measures are available in Appendix D.
- Appendix E details examples of the lone working assessment process.

Any queries on this policy and its guidance notes can be sent to safetyoffice@tcd.ie

APPENDIX 1

LONE WORKING RISK CATEGORISATION CHART



Risk Categories Risk Category A Low risk activities e.g. office work, teaching preparation, or non-hazardous laboratory work, carried out on campus	Low Risk, can be included in Safety Statement, with additional control measures mentioned in Appendix D
Risk Category B Lower risk activities e.g. non-isolated fieldwork, office-based work, carried out off campus either in Ireland or abroad	Low-Medium depending on location of work, may require additional location related assessments; travel assessment; teleworking assessment

Risk Category C Lab-based or research type activities which depending on the risks associated with the work may require detailed assessments and procedures put in place	Medium-High, detailed procedures, assessments and control measures required
Risk Category D As Risk Category C but due to a different location (i.e. unavailbility of Campus Emergency Procedures)	Medium-High, detailed procedures, assessments and control measures required, depending on location of work, may require additional location related assessments; travel assessment; teleworking assessment

APPENDIX B. AN EXAMPLE OF A LONE WORKING HAZARD ASSESSMENT CHECKLIST
To assist in completing the risk assessment

Hazard	Y/N	Controls/further action
The Nature of the Work		
Is it appropriate for the worker to be alone whilst carrying out particular work activities (e.g. a buddy should be on hand when working with most hazardous materials)		
Is there adequate information and instruction for the worker to be able to work alone safely?		
Are there hazards associated with the machinery, tools and equipment that may be used?		
high risk activity (e.g. work at heights, with electricity, with hazardous substances or work with hazardous equipment, such as chainsaws or lathes)		
Is fatigue likely to increase risk (e.g. with long hours driving a vehicle or operating machinery)?		
Is there risk of attack by an animal? (dogs during home visits)		
Is the worker likely to be exposed to extremes of temperature?		
Is the lone worker more at risk due to their gender, age or inexperience?		
The Location of the work		
If the worker is working inside a locked building, will emergency services be able to gain access if the worker is unable to let them in		
If the worker is working inside a building, is there a system for emergency services to locate them (e.g. sign-in book) if the worker is unable to communicate with them directly		
Is lighting at entrances and exits to buildings and parking areas adequate?		

Are security measures adequate, including alarm maintenance and testing scheduling, video or patrols?		
Is the work in a remote location?		
Is the work in a location which increases the risk of violence to workers (e.g. from people affected by drugs or alcohol or in a location with a high incidence of crime)?		
Does the form of transport increase the risk (e.g. public transport in a remote or dangerous area)		
Are there risks associated with the environment in which the work is carried out (e.g. water bodies, remote locations, poor phone coverage, attack by people?)		
First Aid and Emergencies		
Is first aid equipment available for immediate treatment		
Are there means of raising an alarm in the event of an emergency		
Are there arrangements for a response to an emergency		
Communications		
Does the worker have access to a communications system (e.g. mobile or satellite phones, alarm systems)?		
Will the emergency communication or alarm system work properly in all situations		
Are there procedures for regular contact with the worker who works alone?		
Are there end-of-shift procedures for checking in with the worker		
Are workers authorised to contact emergency services directly?		
Is voice communication essential for the safety of the worker		
Training and Information		
Has the worker had training to prepare them for working alone and, where applicable, in remote locations		
Does the worker speak English (or the local language if abroad) or is there anything that would interfere with his or her ability to communicate with someone in an emergency?		
Are there procedures to ensure knowledge of workers' whereabouts (e.g. clients' addresses, expected arrival and return times)?		
Are there procedures for incident reporting so that all workers are aware of local risks (e.g. clients' history of violence)?		
Other Hazards		

APPENDIX C: POTENTIAL HAZARDS AND ISSUES ASSOCIATED WITH LONE WORKING

From:
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Guidance_on_Lone_Working_in_the_Healthcare_Sector.pdf

The hazards facing "Lone Workers" are the same as for other workers; however they may face increased or additional risk from:

•Lack of Supervision / Training
•Working in remote areas
•Sudden Illness / emergencies. Lack of emergency procedures.
•Risks related to transport / driving
•Effects of social isolation
•Communication
•Work Equipment
•Violence and abuse (from members of the public and others)
•Theft / Intruders
•Fire

What issues should the employer address when planning safe working arrangements for lone workers?
When establishing safe working arrangements for lone workers, employers need to know the law and standards that may apply to their specific work activity. They must then assess if the requirements of that work activity can be met by people working alone. Issues that need to be addressed when planning such safe working arrangements are:

1. *Can the risks of the job be adequately controlled by one person?*

Lone workers should not be at more risk than other employees. This may require extra risk control measures. Precautions should take account of normal work and foreseeable emergencies, e.g. fire, equipment failure, illness and accidents. Employers should identify situations where people work alone and ask questions such as:

•Does the workplace present a special risk to the lone worker?

•Is there a safe way in and a way out for one person? Can any temporary access equipment that is necessary, such as portable ladders or trestles, be safely handled by one person?
•Can all the plant, substances and goods involved in the work be safely handled by one person? Consider whether the work involves lifting objects too large for one person or whether more than one person is needed to operate essential controls for the safe running of equipment
•Is there a risk of violence?
•Are women especially at risk if they work alone?
•Are young workers especially at risk if they work alone?

2. Is the person medically fit and suitable to work alone?
Check that lone workers have no medical conditions which may make them unsuitable for working alone. Seek medical advice if necessary. Consider both routine work and foreseeable emergencies, which may impose additional physical and mental burdens on the individual.

3. What training is required to ensure competency in safety matters?
Training is particularly important where there is limited supervision to control, guide and help in situations of uncertainty. Training may be critical to avoid panic reactions in unusual situations. Lone workers need to be sufficiently experienced and to understand the risks and precautions fully. Employers should set the limits to what can and cannot be done while working alone. They should ensure employees are competent to deal with circumstances that are new, unusual or beyond the scope of training, e.g. when to stop work and seek advice from a supervisor and how to handle aggression.

1. *How will the person be supervised?*
Although lone workers cannot be subject to constant supervision, it is still an employer's duty to ensure their safety and health at work. Supervision can help to ensure that employees understand the risks associated with their work and that the necessary safety precautions are carried out. Supervisors can also provide guidance in situations of uncertainty. Supervision of safety and health can often be carried out when checking the progress and quality of the work; it may take the form of periodic site

visits combined with discussions in which health and safety issues are raised.

The extent of supervision required depends on the risks involved and the ability of the lone worker to identify and handle safety and health issues. Employees new to a job, undergoing training, doing a job which presents special risks, or dealing with new situations may need to be accompanied at first. The level of supervision required is a management decision, which should be based on the findings of risk assessment, i.e. the higher the risk, the greater the level of supervision required. It should not be left to individuals to decide whether they require assistance

APPENDIX D: CONTROL MEASURES

WHAT CONTROL MEASURES COULD BE IMPLEMENTED TO MINIMISE THE RISK TO LONE WORKERS?

The risk assessment should prescribe control measures to be implemented in order to eliminate/minimize the identified risks. Such control measures may include:

- communication is very important: mobile phone, telephone or radio
- controlled periodic checks
- Automatic warning devices, e.g. panic alarms, no movement alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.
- Instruction and training in proper procedures, e.g. code words for potentially violent situations when combined with mobile phone communication.
- use of Personal Protective Equipment (PPE)
- health surveillance
- first-aid kits and training
- implementing Standard Operating Procedures (SOP's)
- locking and securing place of work
- implementing correct incident reporting procedures
- provision of counselling
- buddy system
- Location/locating systems, i.e. monitored system by App or Specific device
- Specify emergency procedures

The chart below details the relationship between the categories (Appendix A) and control measures (Appendix 4) and guides one to the type of control measures that may be required or considered.

Control Measures†	**Category A**	**Category B**	**Category C**	**Category D**
Means of communication: mobile phone, telephone, radio	P	P	P	P
Controlled Periodic Checks			P	P
Automatic warning devices*, e.g., panic alarms, man-down alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.	P	P	P	P
Use of Personal Protective Equipment (PPE)			P	P
Health Surveillance			P	P
First Aid Kits and First Aid Training			P	P
Implementing Standard Operating Procedures (SOP's)			P	P
Locking and securing place of work			P	P
Instruction, Information and Training	P	P	P	P
Prohibition of Lone working?			P	P
Additional assessments based on location		P		P

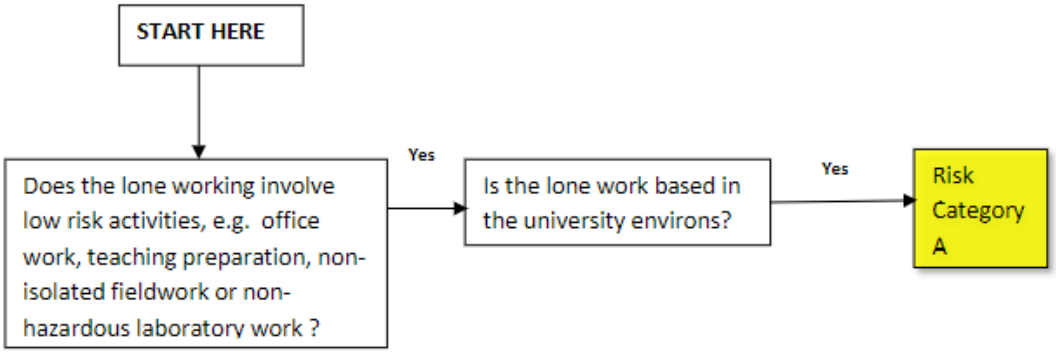
† This would not be exhaustive and dependent on the work, individual, location

* Monitored system by App or Specific device

APPENDIX E. EXAMPLES OF THE LONE WORKING ASSESSMENT PROCESS

N.B. Examples are simply illustrative, and are not designed to be exhaustive nor to suggest that superficially similar cases need the same control measures. These are dependent on the specific work, individual, and location involved.

CATEGORY A



Risk Category A Low risk activities e.g. office work, teaching preparation, or non-hazardous laboratory work, carried out on campus	Low Risk, can be included in Safety Statement, with additional control measures mentioned in Appendix 4

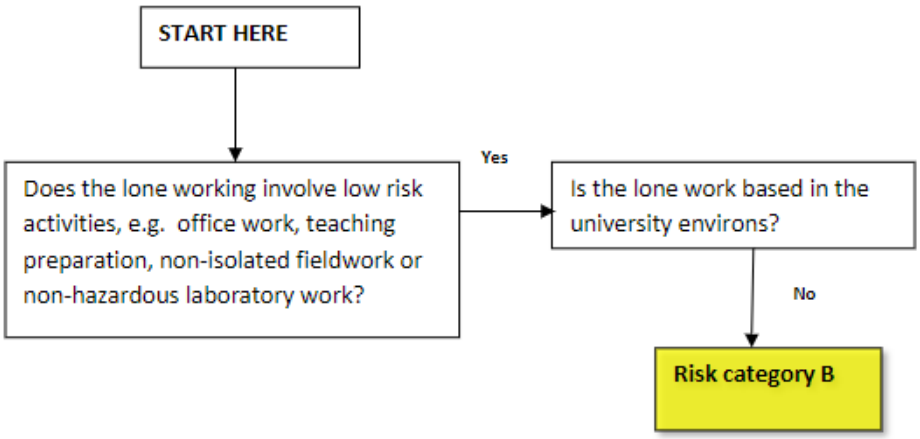
Specifically, Category A would be assigned to those working in an office environment, possibly at weekends when less people are around. The protection of lone workers can be described in the local safety statement which may include the requirements:

1.To have a means of communication, i.e. a mobile phone or telephone to advise someone where they will be or to raise the alarm;

2.To use the Safezone App to check in when you arrive and check out when you leave. If necessary, you can use the alert buttons to raise an alert too; and

3.To provide instruction and Information on the process, how to use the App and how to raise an alarm in an emergency.

CATEGORY B



Risk Category B Lower risk activities e.g. non-isolated fieldwork, office-based work, carried out off campus either in Ireland or abroad	Low-Medium depending on location of work, may require additional location related assessments; travel assessment; teleworking assessment

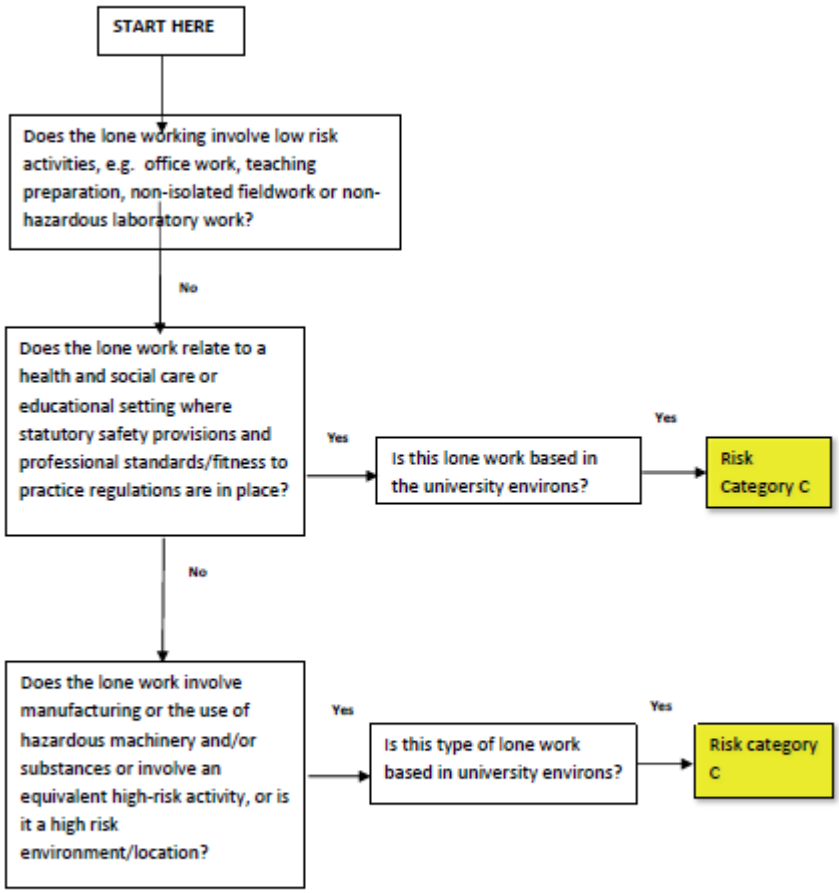
As for Category A, the same will apply but by virtue of the change in location, additional assessments in relation to your new location or travel will also be required and these may be used to include the information on working alone. In this case, these assessments can include the information specifically on protection while lone working, i.e.:

1.To have a means of communication, i.e. a mobile phone or telephone to advise someone where they will be or to raise the alarm;

2.To use the Safezone App to check in when you arrive and check out when you leave. If necessary, you can use the alert buttons to raise an alert too.

3.Provision of information on the process, how to use the App and how to raise an alarm in an emergency.

CATEGORY C



Risk Category C (Lab-based or research type activities which depending on the risks associated with the work may require detailed assessments and procedures put in place)	Medium-High, detailed procedures, assessments and control measures required

The risk assessment should prescribe control measures to be implemented in order to eliminate/minimise the identified risks. For this category the lone working checklist should be completed.

Such control measures may include:

•communication is very important: mobile phone, telephone or radio controlled periodic checks

•Automatic warning devices, e.g. panic alarms, no movement alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.

•first-aid kits and training

•implementing Standard Operating Procedures (SOP's)

•locking and securing place of work

•implementing correct incident reporting procedures

•provision of counselling

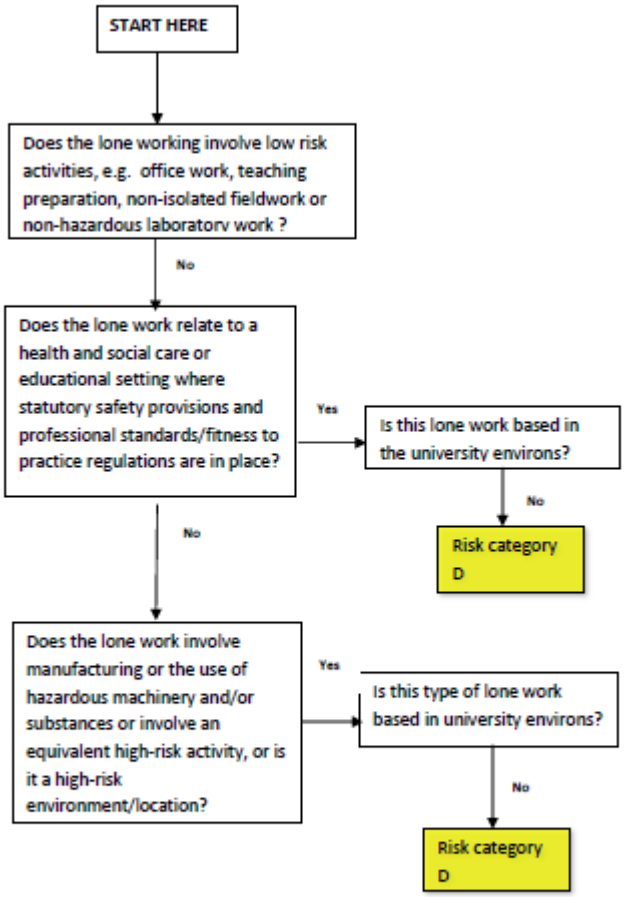
•Location/locating systems, i.e. monitored system by App or Specific device

•Specific emergency procedures

Specifically, Category C suggests the following control measures are considered. These would not be exhaustive and dependent on the work, and the individual:

1.Means of communication: mobile phone, telephone, radio
2.Controlled Periodic Checks
3.Automatic warning devices*, e.g. Safezone App, panic alarms, man-down alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.
4.Use of Personal Protective Equipment (PPE)
5.Health Surveillance
6.First Aid Kits and First Aid Training
7.Implementing Standard Operating Procedures (SOP's)
8.Locking and securing place of work
9.Instruction, Information and Training
10.Prohibition of Lone working

CATEGORY D



Risk Category D (as Risk Category C but due to a different location (i.e. unavailbility of Campus Emergency Procedures)	Medium-High, detailed procedures, assessments and control measures required, depending on location of work, may require additional location related assessments; travel assessment; teleworking assessment

The risk assessment should prescribe control measures to be implemented in order to eliminate/minimise the identified risks. For this category the lone working checklist should be completed.

Such control measures may include:

•communication is very important: mobile phone, telephone or radio

•controlled periodic checks

•Automatic warning devices, e.g. panic alarms, no movement alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.

•first-aid kits and training

•implementing Standard Operating Procedures (SOP's)

•locking and securing place of work

•implementing correct incident reporting procedures

•provision of counselling

•Location/locating systems, i.e. monitored system by App or Specific device
•Specific emergency procedures

Specifically, Category D suggests the following control measures are considered. These would not be exhaustive and dependent on the work, individual, and location:

1.Means of communication: mobile phone, telephone, radio
2.Controlled Periodic Checks
3.Automatic warning devices*, e.g. Safezone App, panic alarms, man-down alarms, automatic distress message systems, i.e. pre-recorded message sent if not actively cancelled by operative, etc.
4.Use of Personal Protective Equipment (PPE)
5.Health Surveillance
6.First Aid Kits and First Aid Training
7.Implementing Standard Operating Procedures (SOP's)
8.Locking and securing place of work
9.Instruction, Information and Training
10.Prohibition of Lone working

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Approval Form for Lone Working

The following form is to be completed by Academic Supervisors, PIs or Heads of Discipline for each person requiring lone working or out of hours working facilities. The category of risk will determine the signatory; category D activities will require HoD signature and additional Safety Officer check.

For Staff and Postgraduate Students this form should accompany a Risk Assessment Form as required by law.
Undergraduates are not permitted to work alone under any circumstances.

All those working alone should the sign in/out book provided in their area if available. Safezone is a prerequisite of lone working in college locations.

Approval Form for Lone Working

Lone Worker Name & Mobile Number	
Date/Time when access is requested	
Category. (Staff, Postgraduate, etc.)	Staff ☐ Postgraduate ☐
Contact details of companion (if required)	

Assessed Activity	
Does the task involve:	Dangerous Chemicals? Y/N Exposed moving machinery? Y/N 3-phase equipment/high energy sources? Y/N Biological Hazards? Y/N Work in enclosed spaces or from height? Y/N Risk of violence? Y/N Danger from radioactive substances & Ionizing sources? Y/N Working off campus Y/N If you answer yes to of these questions, your work is high hazard and should not be performed by a lone worker
Have you read the Lone Working Policy and assessed your work category	Y/N

Activities (full details on Risk Assessment)	Assessed Risk Category A, B, C or D
Known hazards associated with the work to be undertaken	
Controls to reduce risks	
Has a companion been deemed necessary	Y/N
Possible risks outstanding with controls in place	e.g. security, connectivity, power outages
Training Received (detail)	
Contact procedures and schedule	
Emergency Action	
Emergency contact phone numbers	Next of kin, emergency services, college security, supervisor

Do you agree to have the Safezone app installed and running when lone working on campus? Note: this is a prerequisite control		Y/N
Signature of Supervisor		Date:
Signature of Worker		Date:
Completed Risk Assessment Attached		Y/N
Signature of Head of Discipline For category D work only Safety Officer check	 Y/N	Date:

17.5 Working in and around water

When working in or around water specific precautions must be taken. Casualties are often experienced field workers, but the volatile nature of water and its environments can create unforeseen problems.

1. Before any trip on or near water, workers must undertake a risk assessment to establish the associated risks. No work should be undertaken if there is any risk to your safety or that of others. If a watercraft is being used, discuss the planned activity with the skipper and always be aware that drowning can occur in relatively shallow water.

2. Be familiar with the area and check water levels and tidal effects before any trip. Water clarity, floating debris and eddies should be taken into account.

3. Check the weather forecast and don't take any chances. Be aware that adverse weather conditions can impede your ability to assess tidal conditions. Wind is highly significant as it affects the condition of water and the buoyancy of floating items and can also contribute to hypothermia.

4. Choose a safe access to the site with no erosion of riverbanks.

5. Wear appropriate high visibility protective clothing depending on task and time of year, the weather and the sea conditions. Always wear suitable life jackets on or near water and try to stay warm and dry. Always wear appropriate footwear and headgear if necessary.
Do not wear chest or hip waders in flowing water which can prevent you from up-righting yourself. Keep to thigh waders or wellington boots. When wearing waders be aware of water height and avoid wading above the top of waders.

6. Never work alone near or on water and always employ a "Buddy System".

7. Unless required for work, never wade into swift water and never

work in flooded streams, weirs or caves. Tides, currents, temperature, underwater obstructions and depth of mud are all potential hazards that must be assessed prior to any work being undertaken.

8. Be familiar with rescue techniques and carry a first aid kit as well as throw bags when near rivers.

9. Be aware of the dangers associated with sinkholes, slippery surfaces silt and treacherous areas when working within streams.

10. Be aware of contaminants in water often caused by floodwaters, which can possibly carry hepatitis, gastroenteritis or Weil's disease. There is always a risk of infection in these circumstances and all precautions should be taken to minimize these risks.

10. If working from riverbanks or on a bridge be aware of passing traffic and pedestrians. Always maintain safe hand and foot holds while checking if the structure or bank can hold the weight to be used on it.

11. Watch for animals and never cross private property without first seeking permission.

12. If using a watercraft be aware of safety and condition, only leave a boat in conditions where it is safe to do so. Ensure there are a set of oars, anchor, neatly coiled rope, safety line and bailer on-board.

15. Ask if staff require specific training before any tasks are undertaken on or near water.

16. Check all equipment is functioning and its suitability for use.

17. Check if there is a way of seeking assistance if it is required in an emergency.

18. A safe means of communication with fellow workers is essential.

19. An ability to swim at least 50m, fully clothed, when on or near water

is advisable.

20. Never permit smoking on boats or near fuel tanks and carry fuel in appropriate containers.

21. No equipment needing a power supply or having internal voltage greater than 50 volts AC or DC should be used on small boats.

22. A boat float plan should be lodged with a responsible person on shore before operating a small boat. It should include planned departure and return times, site of operation, P.I. on board, name of those on board, communication and safety equipment on board.

**** If work or research requires sub aqua diving, the person(s) involved should be fully trained and certified with an appropriate body and should only undertake the work when permission has been granted, by Head of Discipline and Safety Officer and then only after stringent checks have been undertaken. A diving policy for the School has been developed and is available at https://naturalscience.tcd.ie/healthsafety/***

When using a hire boat ensure:

- The skipper has formal qualifications.
- The vessel is licensed to carry passengers if required.
- There is Public Liability Insurance.
- The vessel is well maintained and seaworthy including appropriate navigational lights and distress flares.
- Sufficient fuel is on-board for the journey.
- Everyone is wearing suitable life jackets.
- Radio and communications equipment is on-board.
- There are fire extinguishers on-board.
- The emergency procedures are explained to all.

When using a small boat:

- Assess weather and sea conditions including tidal and bottom conditions.
- Inspect the boat and equipment before the trip.
- Inform passengers of emergency procedures and any additional hazards.
- Inform passengers of the location of emergency equipment.
- Always file a float plan with a responsible person on land and check in on return.
- Always carry floatation devices, fire extinguisher and distress signal.
- The following are essential; Anchor and sufficient chain, bailer, oars, first aid kit,
- Communication device, extra fuel, water, tool kit, sun protection, light, GPS.
- If the boat is to be used for diving special CoPs for scuba activities should be consulted.
- When operating RIBs as boats, occupants should wear a PFD/lifejacket in addition to their wet/dry suit. The weight of persons and equipment on board must not jeopardize safety. The operator of the RIB must wear an engine kill cord when under way.

Small Boat Safety Checklist

Prelaunch checks

- Local bye laws/restriction ☐
- Weather forecast/tides ☐
- Knowledge of work area ☐
- Boat/engine check ☐
- 3rd party insurance ☐

Boat equipment

- Anchor and sufficient line and buoy ☐
- Mooring lines and spare rope ☐
- Shot Line ☐
- Bailer/bucket ☐
- Basic tool kit/ engine spares ☐

Navigation/Safety

- Float Plan/ person ashore briefed ☐
- Briefing of crew ☐
- Compass ☐
- GPS/Sounder ☐
- Communication Device ☐
- Personal Buoyancy aids ☐
- Lights ☐

Engine & Fuel

- Full fuel tank ☐
- Spare fuel mixture / funnel ☐
- Set of oars ☐
- Engine kill cord/ spare ☐

Emergency equipment

- Means of signaling distress ☐
- Fire extinguisher ☐
- First aid kit ☐

Personal requirements

Approved floatation devices	☐
Suitable clothing, non-slip shoes & glasses	☐
Knowledge of safety requirements	☐
No drugs, alcohol or smoking on board	☐
No overloading	☐
Competent trained skipper/crew	☐

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Float Plan

Departure date: **Time:** **Return date:** **Time:**

Departing From: **Returning To:**

Site Coordinates: **Latest return time:**

Other travel notes:

Weather Forecast:

Source:

Tides: **Skies:**

Winds:

Current weather advice:

People on board

Name	Age	Gender	Phone Contact

17.6 Reporting Accidents and Incidents

All accidents, incidents and near misses or dangerous incidences must be reported immediately to the Chief Technical Officer, Area or Discipline Safety Officer and an accident/incident form completed (Appendix 3). An online record of the incident must go to the Safety Office. https://iprotectu.tcd.ie/report/combined

When completed a copy of the form should be forwarded to the Area/Discipline Safety Officer (for information and to allow reporting to School and Faculty Safety Committee and follow up action), and if deemed necessary to Tony Dowling, Head of Insurance.

17.7 Equipment and Personal Protection Equipment (PPE)

The School shall endeavour to see that all equipment is safe and suitable for use. All training and information to use equipment will be provided. All equipment will be maintained adequately. All workers will be provided with adequate engineering controls and PPE to enable them to avoid any hazards. The school will be compliant with legislation as in The Safety, Health and Welfare at Work (General Application) Regulations 2007. All PPE will be assessed, training provided and will be fitted to the person and replaced as necessary. Employees are legally bound to use the PPE correctly. A new standard for laboratory coats demands a Howie style coat only with a Teflon (flame retardent) coating. These are available from the Student's Union Shop in College.

All staff and students purchasing coats for laboratory work must use these coats only.

17.8 Display Equipment (DSE)

The School will comply with Safety, Health and Welfare at Work (General Application 2007). The aim of the legislation is to reduce risks for those undertaking frequent VDU work. Assesments of all staff workstations will be conducted as required and the risks to users will be reduced as far as reasonably practicable. This includes asessment of ergonomics, VDU, working environment and software used. Eyesight tests are available through the College OHS and reimbursement is available for lenses. All users will be given training on the best situation for their needs and

encouraged to take regular breaks from the screen. See (Appendix 6) for VDU assessment forms.

Those who partake in blended working must self-assess their working environment at https://iprotectu.tcd.ie/common/dse

17.9 Unattended Equipment

No equipment should be left running unattended without consultation with the CTO and the relevant supervisor. A risk assessment should be undertaken to ensure the safety of the equipment and the area taking into account the possibility of loss of services such as water, electricity, gas etc. If it is necessary to leave equipment in operation , please display a note alongside the equipment in question indicating when the equipment should be operable and a contact number for the operator. Also a fail to safe system must be in place e.g. thermocouple cut out.

17.10 Audits /Inspections

- Inspections in the School are carried out by the CTO or DSO at regular intervals or by someone designated by him/her.
- Technicial Officers regularly check their areas and advise the CTO on any corrective actions that are necessary.
- All staff are encouraged to report any defects in equipment or procedures to the CTO and (s)he is responsible for rectifying any problems.
- Where new safety equipment is necessary, details should be sent to the CTO or DSO who can apply for funding from various sources, faculty, College etc.
- The Fire Warden regularly checks the equipment, signage and emergency lighting in the school and reports faults to Estates and Facilitites for repairs.

17.11 Manual Handling

Under the Safety, Health and Welfare (General Applications) Regulations 2007 the School is obliged to avoid negative manual handling. The Risk Assessment of any manual handling task must identify what controls are to be used to reduce the risk. Using a trolley as opposed to manual lifting is advisable and lifting light loads as opposed to heavier loads is advisable. Training is provided by College for appropriate staff.

The use of mechanical lifting devices is protected by administraive controls, training and procedures.

17.12 Slips, Trips and Falls

These are generally caused by wet floors, uneven surfaces, stairs, broken tiles or trailing cables. Where possible these hazards have been minimised by use of non-slip flooring. However any spills should be cleaned immediately and a sign put up to show wet surface. Tripping is a hazard in many areas and trailing cables and clutter should be removed from general areas. Good housekeeping practices can resolve this. It is prohibited to block fire exits at any time and for any reason.

17.13 Monitoring and Review

- The Safety Statement will be reviewed annually by the SSO, CTO and HoS and Safety Representative. Revisions will be made if new personnel, equipment or regulations have arrived during the preceeding year. The revisions are the responsibility of the SSO.
- Monitoring of the workpractices is conducted regularly by the DSO.
- After any accidents or incidents a review of safety procedures is conducted by the DSO and CTO.
- Training and PPE needs are constantly reviewed and monitored.
- Annual assessments and monitoring of staff use of VDUs is carried out by the DSO or those trained in VDU assessment.

18.0 Human Relationships

18.1 Stress

The School of Natural Sciences is aware of the obligations placed on employers in the Safety, Health and Welfare at Work Act, 2005 in order to safeguard against all risks to safety and health of employees and this includes stress.

The causes of stress:

- Ill defined work roles;
- Bad communications between management and staff;
- Excessive work loads;
- Lack of managerial support;
- Repetitive work;
- Poor work organisation;
- Threat of violence in the workplace.
- Inappropriate behaviour (as defined in the College Dignity & Respect Policy)

The risk assessment should highlight these hazards. Monitoring and health surveillance should act as a control. The Employee Assistance Programme (EAP), Occupational Health Service (OHS) and a means of reporting areas of stress are offered by the College and should benefit those in a stressful situation.

18.2 Bullying

Bullying is a form of repeated aggression by one or more against another person or persons. It can be physical, verbal or psychological in its nature. This can result in increased stress and/or anxiety for those being bullied and can result in accidents or health problems. Following College guidelines, the School has adopted the following policy;

- Bullying in any form is not acceptable and will lead to disciplinary actions being taken against the perpetrators;
- If bullying is a problem in specific areas, action will be taken to correct the situation;
- All victims of bullying will be encouraged to take advantage of the facilities offered by College and to seek advice from the College Emploee Relations personnel.

- All those causing bullying will be offered training to correct their attitudes;
- All staff will be made aware of the School's/College's Bullying Policy;
- See Human Resources website for contact people and more information.

https://www.tcd.ie/hr/staff-wellbeing/index.php

18.3 Violence at Work

It is the School's policy to protect staff as far as is reasonably practicable, from any violence in the workplace. The School is compliant with Section 6 of the Safety, Health and Welfare at Work Act, 2005 and strives to provide a safe place of work. Staff should be aware of their duty of care under Section 9 of the Act. College will endeavour to offer support to victim and attacker. It is worth noting that bullying is a form of violence. A risk assessment will be carried out on any areas where violence is likely e.g. lone fieldwork.

18.4 Occupational Health Service (OHS)

An OHS is primarily a preventative service available to staff in College. The aim of the service is to ensure as far as is resonably practicable, that employees suffer no adverse health effects through work practices. This is available to all staff and information can be found on the TCD Health Centre web page. Occupational advice is provided by Consultants in Occupational Health, Drs. Gueret, Holland and Ryan in Baggot Street.

Referrals are normally made through the Health Centre or Human Resources Office.

https://www.tcd.ie/hr/employee-relations/

https://www.tcd.ie/collegehealth/service/staff-clinics.php

18.5 Employee Assistance Programme

This service offers personal support, guidance in work-life balance and health and wellbeing. This voluntary resource is available to staff and their immediate families. This is a 24 hour 365 day per year service. Information is available from TCD Health Centre web site.

The service is offered by Inspire Workplaces and information is accesible via web, phone or in person.

https://www.tcd.ie/hr/staff-wellbeing/employee-assistance.php.

This counselling service is fully funded by College and total confidentiality is guaranteed. Five sessions are available to members of staff and their immediate family members experiencing problems.

College also offer a disability service and other services for students and staff. Information can be obtained from Human Resources website.

http://www.tcd.ie/hr/az/

18.6 Pregnant Employees

The school of natural science adheres to the provision of the Safety, Health at Work (General Application) Regulation 2007: Protection of Pregnant, Post Natal and Breastfeeding Employee. Pregnant Employee Assessments are carried out as required.

Because there are some hazards in the workplace which may affect either the health of the woman or her developing child an employer has specific responsibilities as set out in Chapter 2 of Part 6 of the Safety, Health and Welfare at Work (General Application Regulations) 2007. In addition, Regulation 24 (Chapter 1 of Part 2 relating to the workplace) of the 2007 Regulations requires an employer to ensure that pregnant, post-natal and breastfeeding employees are able to lie down to rest in appropriate conditions.

These Regulations apply to employees that are pregnant, a post-natal employee (*gave birth not more than 14 weeks preceding a material date)* or are breast-feeding (within the first 26 weeks after birth). On receiving notification that an employee is pregnant, the School must assess the specific risks to that employee and take action to ensure that she is not exposed to anything in the workplace that will damage either her safety or health or that of her developing child. If the risk assessment identifies possible exposure to these specified risks, the School must ensure that these employees do not carry out duties which would result in such exposure. If it is not practicable to ensure the safety or health of the employee or unborn child through protective or preventative measures, then Trinity College Dublin must adjust temporarily the working conditions or the working hours (or both) of the employee concerned. If this doesn't remove the risk then provide suitable alternative work. If that isn't possible,

Trinity College Dublin should assist the employee in receiving health and safety leave under the Maternity Protection Act.

The University's Pregnant Employee Risk Assessment Form is provided with the Parent Safety Statement. The Safety Office may also be contacted for guidance and advice.

Employees who are pregnant or suspect they may be pregnant must inform their direct line manager or nominated deputy or the school safety office as soon as is possible to allow them to complete the pregnant assessment.

The laboratory facility has many of the chemicals that may present a danger to the unborn. Chemicals labelled H360 (May damage fertility or the unborn child) and H361 (Suspected of damaging fertility or the unborn child) should be avoided by pregnant employees. Medical intervention may be necessary to identify certain hazards to the pregnant employee and this will be undertaken where necessary.

Manual handling must be avoided by pregnant staff and postpartum. Ergonomics must be assessed, and breast-feeding staff should be aware of the possibility of chemical exposure transferring to breast milk in certain circumstances.

18.7 Welfare Facilities

Toilet, washbasins and where applicable, a shower room are provided for employees use. Employees are encouraged to maintain high hygiene standards in these rooms. They are cleaned daily by College staff and in some cases are out-scourced. Canteen facilities are available to staff.

18.8 Disciplinary Action

A policy exists within the School in line with College's policy on discipline. This has been drawn up between College and the various Trade Unions involved. Details are available https://www.tcd.ie/hr/az/ It is the School's policy to try and resolve any issues informally before proceeding to any formal disciplinary action.

18.9 Child Protection Policy

The aim of the School of Natural Sciences at Trinity College Dublin is to provide the best possible care for children under its care and supervision to that end it has adopted a Child Protection Policy, which is designed to promote best practice in child protection. It follows the Child Protection Policy as prescribed by College.

Here we define 'Child' as any person under 18 years of age other than a person under 18 years of age who has been married.

It refers to children who work with academic, support or voluntary staff including those attending summer courses, Open Days, Transition Year placements and children visiting the School for other reasons.

We must remember that the child's welfare should always be of paramount importance.

We must adopt and apply safe management policies and practices with regards to child protection. Premises being used where children are must comply with prescribed health and safety standards. Insurance cover must be adequate.

All College staff working frequently with children should be trained appropriately in child protection procedures.

We must adhere to a code of behaviour when working with children.

Please Note: Staff who currently have unsupervised access to children and/or vulnerable adults during employment/engagement will be required to undergo Garda Vetting.
Further information and relevant forms are available from:
https://www.tcd.ie/hr/resourcing/garda-vetting/

Guidelines for visitors and children attending field courses:

All activities and participants on field courses must be risk assessed as a legal requirement. The School must be made aware of all those attending under supervision or as guests.

Guests attending a field course must be familiar with, and complete, all documents relating to the course.

Within Ireland, staff and students of Trinity College Dublin on authorized College business, are covered by the College's Liability Insurance. For overseas trips staff and postgraduates are covered under the travel insurance policy. All others must ensure that they are covered by a separate insurance policy.

Supervision of people undertaking activities must be adequate. All groups must have a leader whose authority and responsibilities are clear to everyone. Where a leader brings a child under 17 this may impede their ability to supervise and fulfil their duty of care to students. Therefore, children attending field courses is actively discouraged. Any field trip leader wishing to bring an individual under 17 must contact the College Safety Office for approval and have all adults on the course Garda vetted. This is in line with the College's child protection policy. https://www.tcd.ie/about/policies/university-policies/child-protection-policy/

in particular Appendix F, section 4.

CODE OF BEHAVIOUR FOR SCHOOL PERSONNEL AND VOLUNTEERS

School employees and volunteers in contact with children should:

- Be familiar with the College's policies on child protection.
- Treat all children fairly and as individuals.
- Do not single out any particular child for unfair criticism, favouritism, ridicule or unwelcome focus of attention.
- Set an example of appropriate behaviour (use of language, appropriate dress, etc).
- Avoid using sarcasm, discrimination, negative criticism and labelling.
- Avoid using language or behaviour of a sexual suggestive or inappropriate nature in front of children.

- Do not allow or engage in suggestive remarks, gestures or touching of a kind which could be misunderstood.
- Provide encouragement, support and praise (regardless of ability).
- Respect each child's boundaries, personal space and privacy and explain to them what they can do if they feel there is a problem.
- Physical contact should be open (never secretive or hidden), occur for a good reason and should be initiated by the young person.
- Children must be supervised in all activities and should normally not be left unattended. Staff should always know where they are and what equipment they are using.
- Avoid being alone with a child where practicable. If necessary, consider leaving the door ajar or informing another adult that you will be alone in a room with the individual in question.
- Be visible to others when working with children whenever possible.
- Be sensitive to the possibility of becoming over involved or spending too much time with any one young person.
- Do not exchange personal details with children unless this is required by the activity.
- Do not provide children with alcohol, drugs or cigarettes.
- Do not under any circumstances try to deal with any problems alone. Never promise to keep a secret in relation to child protection concerns.

If a staff member or volunteer is accused of inappropriate behaviour by or with children they should be reported to the relevant authority while at the same time being treated with dignity and respect. Discretion is called for here to maintain the good name of the person involved in case of false accusations.

19.0 Risk Assessment Methodology

19.1 Description of Risk Assessment

Before describing the methodology the following should be defined;

A Hazard: is something that has potential to cause injury or damage (harm).

A Risk: is the likelihood of someone being injured by a hazard and the severity of the injury. It is impossible to address risks that are unforeseeable but all other risks that we would reasonably be expected to know should be adressed.

19.2 Aims of the Risk Assessment

The aim of this Risk Assessment is to create a safer workplace by removing hazards if possible and reducing the risk level through control measures. This is in keeping with Section 19 of Safety, Health and Welfare at Work Act, 2005. The Risk Assessment will identify the hazards by looking at all aspects of the work, looking at accident records, viewing existing procedures, and looking for the risks that may affect visitors to the School or third parties interacting with university work off campus. It is intended to look at the number of people involved in the work, and whether current controls can be improved thus reducing risks to a minimum.

Once this Risk Assessment is completed in each area, it will be communicated to employees, safety representatives and visitors to the area. It is the responsibility of the Area/Discipline Safety Officer to ensure recommended controls are implemented within the time set out in the controls. The Risk Assessment is a live document and as such will be reviewed annually or when any aspect of it changes and all necessary amendments made to it.

19.3 Risk Assessment

The risk assessment process is continuous. It entails identification of hazards in all areas and activities, the people at risk from these hazards and the controls (to be put) in place. It records the likelihood and severity associated with hazards and produces a risk factor for exposure. This risk is used when devising controls, nominated staff to implement these and decisions on implementation dates. Risk assessments must be updated at

least annually or when changes to the process, persons or hazards occur. If any incident or accident takes place the risk assessment must be updated to reflect the improvements necessary and applied.

Risk Assessments for VDU, field work, incidental activities are carried out as required.

19.4 Hazard Identification

Chemical hazards will examine and identify storage conditions, whether the chemicals are irritants, are corrosive, harmful, *etc. S*tudy the relevant SDS sheets and look at any other information available from manufacturers or from industry standards and codes of practice.

Electrical safety will examine cabling, whether correct standards have been adhered to and whether lighting is adequate.

Equipment/Machine safety will look at placement of equipment in laboratories, its ease of use and whether it is in a safe condition.

Facilities will view our current facilities and establish if they are best located and adequate for our requirements and if heating and ventilation are adequate.

Fire safety will look at the current policy in the organisation and see if it fits all the criteria required for this laboratory. A review the fire-escapes and safety emergency lighting in the area will be incorporated in the Risk Assessment.

General ergonomics of work areas will try and assess how well the area and facilities work for those using it and see if improvements can be made.

Interpersonal will assess the risks posed by working with or around other persons.

Location will assess field working areas, entrances, exits and inherent dangers e.g. security, weather.

Lone-working will assess this under College's Lone Working policy

Manual handling issues will identify what needs to be handled, and see if we can reduce same and if adequate training is being given.

Noise The intention is to view, listen and evaluate.

PPE requirements will look at our current usage and training and see if changes need to be implemented.

Solvents & storage will review the solvents we use, look at SDS sheets and check if storage facilities are adequate, and safe.

Training will look at the current training and see if alternative training is more appropriate.

Hazards requiring **permit-to-work systems** will look at our obligations here and view what procedures are needed.

VDU displays. A VDU assesment on all VDU operators will be carried out.

19.5 Matrix

As each risk will have to be evaluated independently. The following Risk Assessment matrix should be used to arrive at the assessment.

Likelihood to be graded as

1. Rare
2. Unlikely
3. Possible
4. Likely
5. Almost Certain

Severity to be graded as:

1. Negligible
2. Minor
3. Moderate
4. Major
5. Catastrophic

Yeilding the Risk to be graded as:

1. Low
2. Moderate
3. High
4. Extreme/STOP

		Likelihood				
		1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost Certain
Consequences	5 Catastrophic	5 Moderate	10 High	15 Extreme	20 Extreme	25 Extreme
	4 Major	4 Moderate	8 High	12 High	16 Extreme	20 Extreme
	3 Moderate	3 Low	6 Moderate	9 High	12 High	15 Extreme
	2 Minor	2 Low	4 Moderate	6 Moderate	8 High	10 High
	1 Negligible	1 Low	2 Low	3 Low	4 Moderate	5 Moderate

A hierarchy of control will also be utilised;

Hierarchy of Controls

The following hierarchy of controls will be used when deciding on the controls.

Elimination

The first step is to see if the hazard can be eliminated completely. An example would be to have a policy of sending waste chemicals to the College Hazardous Waste Disposal Facility thus eliminating the need for neutralisation of spent chemicals in the laboratory.

Substitution

If a substance cannot be eliminated it may be possible to substitute it as in the case of Hydrofluoric Acid where alternative less hazardous chemicals can be used in certain circumstances.

Engineering Solutions

If neither elimination nor substitution is possible introduce engineering controls where isolation of a process for example may be a safeguard as in the case of handling chemicals in the fume cupboard.

Administrative Solutions

These are used in cases such where written procedures, extra supervision and extra training are of benefit to reduce risks.

Personal Protective Equipment

These should be considered as a last resort. Where other controls fail it may be necessary to include these. This is the case where acids are handled in

the laboratory and failing to use the personal protection equipment provided would be negligent.

Risk Assessment Forms and guidance documents are available on the School SharePoint page. School of Natural Sciences Health and Safety (requirements and supports within the School)

There are three categories of risk assessment: laboratory, fieldwork (solo and small groups), fieldwork (large groups, fieldcourses).

Assessments are held on OneDrive where they are available for consultation. For ongoing activities, they must be updated at least on an annual basis and whenever changes occur.

20.0 Fieldwork Safety

By its nature, much of the teaching and research work carried out in the School of Natural Sciences is field based. This brings with it specific risks which need to be addressed separately from other risks. A comprehensive Fieldwork manual is provided at:

https://www.tcd.ie/naturalscience/health-and-safety/

In order to facilitate a quick response from those leading fieldtrips or fieldwork a short tick box risk assessment system has been devised. It must be read and understood by those undertaking fieldwork. See Appendix 1.

20.1 Fieldwork Risk Assessment

Fieldwork should never involve a significant risk to your safety or the safety of others. You should always seek to identify any significant risks that might be associated with your planned activities before considering: first, how these risks might be eliminated; second, if the risks cannot be eliminated completely, the precautions that can be taken to ensure an acceptable level of safety.

All fieldworkers are required to read the Fieldwork Safety Manual before undertaking any trips. https://www.tcd.ie/naturalscience/health-and-safety/

Assessments of risk should be practicable rather than elaborate and minutely detailed. When identifying and evaluating risks and appropriate precautions, you should base your assessment on what a well-informed person would consider reasonable.

What hazards or risks are associated with the activities you intend to undertake?

Almost all activities involve some degree of risk. One should consider particularly those risks that:

- Are specific to the planned activity;
  e.g. are associated with working in and around rivers
- Can be reasonably foreseen; daylight hours, tidal times
- Are likely to have serious consequences; *e.g.* result in injury
- May be accentuated by any disabilities, illnesses *etc.* that you might have at the time of fieldwork.
- Fieldworkers that may be more at risk due to gender, age, culture, etc.

Thought should be given to the possible ethical implications of your fieldwork. Sometimes research can have serious consequences for the groups, individuals or environments being studied.
What hazards or risks are associated with the location(s) where you will be working and the time at which you are carrying out fieldwork?

- Some activities may be effectively risk free in some locations but potentially dangerous in others.
- Similarly, some activities may involve an unacceptable degree of risk simply because they are taking place in remote and isolated locations.
- Some risks vary according to the time of the fieldwork. For example, working at night often involves a higher risk than the same work carried out during the day.

Therefore, what precautions will be taken to mitigate risk?

- Can the risk be eliminated?

- If the risk cannot be eliminated, can you ensure an acceptable level of safety?

If neither of the above conditions is met, one should not undertake the activity concerned.

Appendices

Appendix 1

Field trip (one day) /Field Course (several days) Risk Assessment
The following checklists are the preliminary step when assessing the feasibility of a field trip or field course.

These visits to the field often include large numbers of students and staff, may require overnight accommodation and overseas travel. Choose the checklists appropriate to your trip.

Once the checklists have been completed, proceed to the Fieldwork Risk Assessment Large Groups (Fieldcourses) on SharePoint.
It is best to consult with the CTO, Safety Officer or technical officers before developing new courses as equipment and preparation may be required.

LISTS TO BE COMPLETED BY FIELDTRIP LEADER

PRIOR TO ANY FIELD TRIP OR FIELD COURSE

CHECKLISTS

Use the following checklists before you attempt to complete the Risk Assessment proper. Please keep a copy of these checklists and send the completed risk assessment to NatSciHandS@tcd.ie once passed it will be sent to HoD or HoS for approval.

CHECKLIST 1 (FEASIBILITY OF FIELDTRIP:)

ACCESS Travel Arrangements. Ensure everyone knows details and book well in advance. ☐

Permission to work on site. Ensure prior permission for access to private property has been obtained. ☐

Provision for disabled. Provide requirements where necessary. ☐

Availability of assistance. Get emergency phone numbers for locality in advance of any field-work. ☐

Accommodation. Ensure all accommodation is satisfactory and safe. ☐

Insurance. Get travel insurance where needed. ☐

FITNESS Pre-expedition training should be undertaken where necessary. ☐

TRAINING Ensure some or all participants on any field-trip are adequately trained in particular areas as required.

Navigation ☐

First aid ☐

Languages ☐

Interpersonal skills ☐

Hygiene / health education ☐

Specific skills *e.g.* diving, caving, etc. ☐

HEALTH Health questionnaire must be filled in by students prior to field trips ☐

Medical / dental check-up where necessary. ☐

Vaccinations when applicable to area or work. ☐

First aid kits should be taken on all field work and are available from DSO

STAFFING Staff / student ratio should not exceed a ratio of 1:10

Competence of leaders. Leaders should be safety trained.

Appointment of deputies. Here only suitable and competent people must be appointed leaders/ deputies.

CHECKLIST 2 RISKS INHERENT IN SITE

PHYSICAL HAZARDS Leaders should make participants aware of the following possible hazards. All precautions including weather forecasts should be taken into account.

Extreme weather	
Mountains and cliffs	
Caves, mines and quarries	
Beaches and seashore	
Sea, lakes and rivers	
Forests	
Roadside	
Urban areas	

BIOLOGICAL HAZARDS Leaders should make participants aware of potential hazards in this area.

Animals	
Plants	
Pathogenic microorganisms	

CHEMICAL HAZARDS Leaders should make participants aware of potential hazards in this area.

Agrochemical and pesticides	
Dusts	
Chemicals on site	

MAN MADE HAZARDS Leaders should make participants aware of potential hazards in this area.

Machinery and vehicles	
Power lines and pipes	
Electrical equipment	
Insecure buildings	
Slurry and silage pits	
Attack on the person or property	

ENVIRONMENTAL HAZARDS Leaders should make participants aware of potential hazards in this area.

Pollution	
Disturbance of Eco-system	

Waste minimization

HEALTH HAZARDS Where applicable any of these hazards relevant to the particular field-work should be brought to the attention of the participants.

Dehydration
Insect Bites (Mosquito)
Animal Bites
Sunburn
Allergies to local factors
Lyme's / Weil's diseases
Food-poisoning
Excess alcohol
Misuse of listed substances
Impure water

ACCOMMODATION Every participant should treat the accommodation with respect and take other people into consideration. Participants should be made aware of potential hazards in the accommodation as per list below.

Stairs
Balconies
Misuse of Lifts
Correct use of swimming pools

SOCIAL / RECREATIONAL Participants must be made aware that there are HAZARDS associated with social and recreational pursuits.

Swimming
Alcohol Excess
Illegal Substance Abuse
Stay within capabilities

CHECKLIST 3 RISKS INHERENT IN WORK

TRAINING Ensure some or all participants on any field-trip are adequately trained in particular areas as required.

Navigation, map-reading and compass work	
Survival / rescue	
First aid	
Specialist training *e.g.*	
Conduct on boats	
Advanced driving	
Diving	
Caving (confined spaces)	
Rock climbing	
Hill walking	
Ladders and scaffolding	

PERSONAL The following should be brought to the attention of the participants.

Risk of attack	
Communication as routine	
Communication in emergency	
General Road Safety	

CHECKLIST 4 ORGANISATION OF FIELDWORK

To avoid risks take note of the following

PRE-PLANNING

Travel documents

Note of next of kin and GP

Note of particular medical problems

Appropriate authorities informed

CATERING

Provision of food

Hygiene

Portable and potable water supply

Food preparation and storage

Fuel for cooking

THE GROUP

Leader (experience / competence)

Chain of command

Staff / student ratio

Interpersonal relationships

Max. / Min. size of group

Responsibilities for aspects of work

Accommodation

THE INDIVIDUAL

Avoid lone worker situations

Adequate and suitable clothing

Individually trained and fit

Physical handicaps

EQUIPMENT

Fit for purpose

Used properly

Well maintained

Repairable on site

CHECKLIST 5 CONDUCT OF FIELDWORK

CONDITIONS (LOCAL)

Weather forecast
Local knowledge
Farming practices
Itinerary and return times

TRANSPORT

Appropriately licensed drivers/vehicle
Correctly maintained
Correctly loaded
Appropriate spares
Seat belts
Fuel

THE GROUP

Roll call
Correctly equipped
Not overloaded
First aid kit
Survival aids
Group size and supervision

WORKING PRACTICES

Avoid lone worker
Communications
"Buddy" system or lookouts
Safe working systems
Permit to work
Worker trained and fit
Time to be spent working

EMERGENCIES All participants should be made aware of procedures in an emergency including taking note of the following.

Communications

Protection of remaining group	□
Chain of command	□
Trained personnel	□
Evacuation	□
Recovery of casualties	□

Appendix 2
Sample Risk Assessment Forms
for
Chemicals & Equipment

The Area/Discipline Safety Officer or Technical Officer in charge of the Laboratory must update this form for any new procedure or system of work carried out or any new chemical or equipment introduced to the laboratory. A hardcopy of the completed document should be kept in the laboratory for consultation.

Name of Principal Investigator	Date	Review Date

Equipment or CAS No.

Risks

Existing Controls

Statutory Controls

Persons Exposed

Occupational Exposure Limits

Risk Assessment	Severity	Likelihood	Risk Factor

Training/Information

Consultation

Documentation

New Controls/ Implementation

Emergency Actions

Risk Assessment Result:	Severity	Likelihood	New Risk Factor

Signature of Assessor:

Appendix 3

Accident Report Form (paper)

Safety Officer or staff must also report to iProtectU

ACCIDENT/INCIDENT REPORT FORM

This form must be completed by the School/Department Head, Chief Technician, School/Unit Safety Officer or Supervisor/Manager as soon as possible after any incident has occurred/reported. This is a requirement under the College's Employer & Public Liability policies. In the case of personal injuries, the original form should be retained by the Department, and copies emailed to **insurance@tcd.ie.**

Name: …….. **Staff** ☐ **Student** ☐
Other ☐ **Visitor** ☐

Department:
……..……
……..

Job Title: …… **Hours of Work:**
……..……

Date & Time of Alleged Accident:
……

Place/Building Name:
……
……

Grade of Accident: **Minor** ☐ **Moderate** ☐ **Severe** ☐

Brief Particulars:

……

……

……

(Continue overleaf if necessary)

Nature of Injury:
……
…….

(If to limb or eye, state whether left or right)
…….

What action was taken to treat or minimize injury or damage?

……..……....
……

Did the injured party require an ambulance or lose consciousness?

……
……

Please state the names & addresses of any witnesses:

(1)
……
.....

(2)
……
.....

Are you satisfied that an accident occurred at the time, date and place stated? Yes ☐ No ☐ N/A ☐

Was the person authorized to be in that place at that time for the purpose of his/her work? Yes ☐ No ☐ N/A ☐

What was the person doing at the time of the accident?

……

……

……

……

Was this something authorized or permitted to be done for the purpose of his/her work? Yes ☐ No ☐ N/A ☐

Was time taken off work as a result of this accident/incident?
……

- **If so, how many days?**
  ……
  ……

To whom was the accident reported?
……

When was it first reported?

…….

Signed: …….. **Date:** ……

*Minor = Onsite treatment; Moderate = First aid and referred for medical attention; Severe = ambulance called.

Print Name: …… Ext No: ……

APPENDIX 4

Forms for Contractors

https://www.tcd.ie/safetyoffice/assets/pdf/Management_of_Contractors_HSE_guidance.pdf

Permit to cover Fire alarm detector heads
(For any work such as sanding/dust/moisture *etc.* that requires the covering of detectors heads)

Date permit required:
(AEC to uncover heads overnight or whenever area is unmanned and cover again the next day before giving contractor approval to proceed)

AEC responsible for area: ……

Work Location: …….

Building:……

Floor / room number:……

Contractors name and Company:……

……

Brief description of work, which requires covering of detectors:
……
……
……
……
Location or address number of relevant detectors:
(To be completed by AEC for reference)
……
……
……
Detectors must not be covered without first notifying Estates and Facilities and the College Safety Department.

The contractor is to notify the AEC if the area concerned is to be left without protection for a prolonged period of time such as lunch breaks etc. and a fire watch shall be provided or heads uncovered.

Heads must be re-instated at the end of work each day unless pre-approved in advance with Estates and Facilities and the College Safety Department.

College Fire/Safety Officer AEC (Name)

_____ _____

Date:_____ Date: _____

Internal Memorandum

To:	Person in charge (Company name)
From:	College Fire / Safety Officer
Re:	Hot Work Permit: Location: Building / floor/ room number etc.

The following conditions will apply to all hot work and grinding operations in the above location to be carried out on (fill in date(s) here) by Company name.

Work description: Write brief description here

1- **AEC (name)** to be informed of work taking place and affected area**.**
2- 1No. Powder Extinguisher.
3- 1No. Water Extinguisher.
4- 1No. Fire Blanket.
5- 2No. operatives on site at all times.
6- 2No. operatives on site one hour after last hot work
7- No smoking on site.
8- Gas bottles/canisters/ cylinders, if applicable to be stored overnight in open air
9- All gas welding equipment to be complete with relevant features *e.g.* flame arrestors.
10- All combustible materials to be removed from area prior to welding as far as possible,
e.g. the removal of all combustible items on work tops and in storage presses, fume cupboards etc.
11- All personal protective equipment to be worn as appropriate.
12- Operatives to know location of all relevant fire alarm call points.
13- Operatives to raise fire alarm on discovering fire, and notify front gate on **Extn.** (01 896)**1999**.
14- No petrol driven generators to be used.
15- All accidents and dangerous occurrences to be reported to the **University Safety Officer**.
16- Any oxygen cylinders to be checked prior to the operation to check they have not leaked and the atmosphere enriched as a result.

17- All air intakes in the vicinity of the hot work to be closed down for the duration.

18- **Smoke detectors to be turned off prior to welding and turned on after the last weld. Contractor must not cover heads.**

19- All duct runs areas are to be cleared of any combustible materials prior to hot work.

20- All fire dampers are to be lowered to closed during the hot work and opened after the last weld.

21- Heat-proof materials to be used to shield wooden/combustible areas from heat sources.

22- **AEC (name)** to supervise the hot work and sign the permit allowing the work to go ahead in accordance with the conditions.

23- Area where welding taking place to be adequately screened off from public areas.

24- Fire escape door in this area to be openable at all times while welding is being undertaken, and this door to be readily accessible for use while work is undertaken in this area.

New permit to be issued before work commences in any new location or if any significant changes in practice operation or content of location.

Karl Flynn AEC (Name)

_____ _____

College Fire / Safety Officer

Date: _____ Date: _____

One signed copy retain by Fire / Safety Officer, One signed copy to AEC, One signed copy to Contractor.

Appendix 5

Office Safety Checklist

Office Safety Checklist to be undertaken by Area/Discipline Safety Officer on a regular basis and records to be kept.

ELECTRICAL SAFETY

Are all fittings in good condition & free from damage. □

Are electrical repairs carried out by trained personnel only? □

Are there multi-point adapters in use? □

FIRE SAFETY

Are Fire Wardens appointed for each building. □

Have Fire Wardens undergone training in respect of their duties. □

Are fire exits & escape routes accessible and unimpeded. □

Is a fire drill conducted regularly? At least twice a year? □

Do all personnel know where fire extinguishers are located? □

Do all staff know the alternative escape routes in the event of fire? □

Are the escape routes clearly marked? □

Are all flammable materials stored securely in appropriate cabinets? □

EMERGENCY PREPAREDNESS

Is a member of staff trained in occupational First Aid? □

Are the First Aid boxes located in visible positions? □

Are all staff aware of what to do in the event of an emergency? □

Is the Security Response Number prominently displayed
for staff working out of hours? □

VDU ERGONOMICS

Are VDU assessments carried out regularly? Appendix 6. □

Are actions implemented on these assessments? □

Are all chairs in use at VDU stations fully adjustable? □

Do staff take regular breaks from display screen work? □

Is there adequate space around the desk to move easily? □

Are windows fitted with blinds to eliminate glare? □

Is the temperature in the office adequate? □

MANUAL HANDLING

Are staff who lift / push / pull loads trained in manual handling techniques? □

Are trolleys / other manual handling aids available to transport loads? □

Are heavy items stored at an appropriate height for ease of manual handling? □

GENERAL HOUSEKEEPING

Is the overall condition of room/area tidy, safe and clean? □

Are floor coverings damaged or worn so as to be a tripping hazard? □

Are passageways, especially emergency exits, kept free of obstruction? □

Are there trailing cables, which are likely to be a tripping hazard? □

Are filing cabinets secure and interlocked (only 1 drawer opens at a time)? □

Are sufficient bins provided for rubbish, and are they frequently emptied? □

Are boilers securely fixed to avoid risk of scalds? □

Note 1: Readily resolved Issues should be rectified during the inspection process

Note 2: Time frame for rectification of other issues must be agreed by management and Area/Discipline Safety Officers.

DSO Signatures: (1) _____

Date of Inspection: _____

Appendix 6

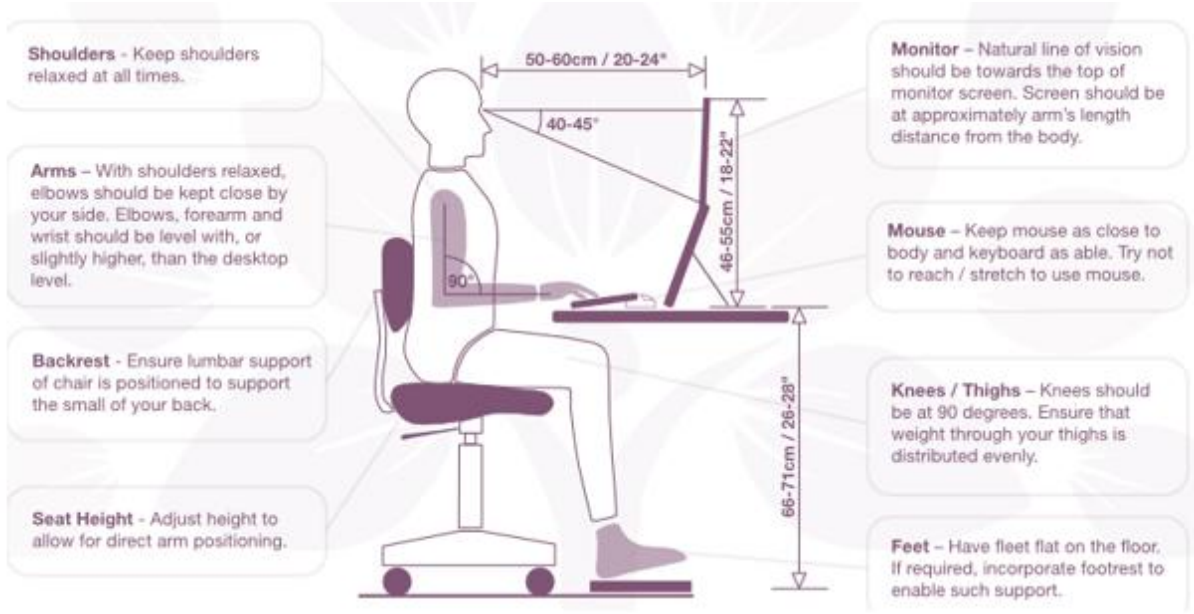
Display Screen Equipment Assessments can also be completed on iProtectU

Display Screen Equipment Risk Assessment Checklist

https://iprotectu.tcd.ie/common/dse

Under the Safety Health and Welfare at Work Act (General Application) Regulations, 2007, all hazards associated with the use of display screen equipment (VDUs) must be identified, and any risk to the health and /or safety of the user must be assessed.

To ensure compliance with this legislation, the following checklist must be completed for all VDU workstations in your department / school.



1.	**Display Screen**	Yes / No
(a)	Are the Display Characters easy to read?	
(b)	Are the Display Characters of adequate size?	
(c)	Is the image stable and free from flickering?	
(d)	Are there controls for brightness and contrast?	
(e)	Can the screen be tilted and swiveled easily?	
(f)	Is it possible / necessary to adjust the height of the screen?	
(g)	Is the screen free from uncomfortable glare and reflection?	
(h)	Is the screen separate from the keyboard?	

(For laptops in prolonged use a separate keyboard / monitor / docking station is required)

2.	**Keyboard**	Yes / No
(a)	Is there enough space in front of the keyboard for one to rest the wrists and arms?	
(b)	Is the layout of the keyboard easy to use?	
(c)	Are the keyboard symbols easy to read?	
(d)	Is the keyboard non-reflective?	
(e)	Is the keyboard detachable?	

3.	**Work Desk**	Yes / No
(a)	Does the surface have low reflection?	

(b) Is it large enough for all equipment?
(c) If a document holder is provided, is it stable, adjustable, and at the same level as the display screen?
(d) Is work positioned to lessen head /eye movements.
(e) Is there enough space for employees to find a comfortable position?
(f) Are any electrical cables / equipment in good condition?
(g) Are cables tidy and prevented from trailing?
(h) Is adequate storage space for documentation etc. provided in/on the desk

4. **Work Chair** Yes / No

(a) Is the work chair stable?
(b) Does the chair allow operator easy freedom of movement?
(c) Is the seat height of the chair adjustable?
(e) Can the angle of tilt of the backrest be locked into a suitable position?
(f) Is the operator aware of how to adjust the chair properly in order to find the best sitting posture?
(g) Can the employee place both feet flat on the floor? If not - Is there a stable footrest available for use?

5. Work Environment Yes / No

(a) Is there enough space for the employee to change position and vary movement?
(b) Is lighting adequate for the task with no extremely Light or dark areas?
(c) Can the workstation be adjusted to avoid glare and reflections?
(d) Do windows have adjustable blinds or other suitable adjustable coverings?
(e) Is the VDU positioned so that neither the screen nor the operator are facing a window?
(f) Is the working area free from excessive noise from equipment?
(g) Is the room temperature comfortable?
(h) Is the humidity level comfortable?
(i) Is the ventilation adequate?

6. Operator / Computer Interface Yes / No

Does the operator find the software easy to use and non-stressful?

7. General Yes /No

(a) Has an eye and eyesight test been made available to the employee?
(b) Has the employee had an eye and eyesight test in connection with the use of VDU's?
(c) Has a system of permitted breaks been set up?
(d) Is the employee free from fatigue or stress?

(e) Is the employee free from aches, pains, pins and needles etc. in the neck, back, shoulders or upper arms?
(f) Is the employee free from restricted joint movement?
(g) Is the employee free from problems with vision *e.g.,* headaches, sore eyes, problems with focusing etc.?

Overall Assessment

What, if any remedial action is required?

_____

_____

_____

_____

_____

Please notify the responsible person for implementation, *e.g.* Head of Discipline / School, Estates and Facilities, College Health Service etc.

Assessor's Signature: VDU Operator's signature:

_____ _____

Date of Assessment: Department:

_____ _____

Location:

A copy of this completed Risk Assessment Checklist should be kept with the relevant Departmental / School Safety Statement.

Appendix 7

Health Declaration Form

School of Natural Sciences
Health Questionnaire for Lab and/or Field Work

Instructions:

If you answer 'no' to all questions in Part A of this form, please send it to your Safety Officer or field course leader. You will not need to complete Part B.

If you answer 'yes' to <u>any</u> questions in Part A, please give details in the box below and take this form along with Part B to the Student Health Service or your GP. The doctor will detail any specific control measures (e.g. medications) or accommodations (e.g. ramp access) you may require.
When the doctor has completed Part B please bring it to your Safety Officer or Course Director. <u>Do not return Part A to your Safety Officer</u>, this is now confidential.

Fieldwork notes: In the case of overnight field work courses please let your course leader know in advance if you have any dietary requirements. When working near soil or animals it is advisable that you have had a tetanus vaccination/booster within the last ten years.

Part A - Questionnaire

Name: ..... Student No: .....
CAPITAL LETTERS

Address: .....
Address at which you reside while attending College (e.g. Home, rented, etc.)

Date of Birth: ..... Male/Female: .....

Home Tel No: ..... Mobile No: .....

Do you have any of the following medical conditions, or other ongoing issues, which might impact functionally your ability to safely undertake **laboratory or field work**?

MEDICAL CONDITION IMPACTING:	YES/NO
Attention/concentration/memory	
Balance/dexterity/mobility/speed	
Behaviour /perception	
Communication/hearing/speech/vision	
Energy Levels /stamina/strength	
Other (specify)	

If you have answered **YES** to any of the above, please give details, as well as details of any past and present treatment, below.

*If you answered yes to any questions above please take this form, together with **Part A**, to your GP or the College Health Centre.*

School of Natural Sciences
Health Questionnaire for Lab and/or Field Work

Part B (i)

(To be completed by the student before submission to their GP or the College Health Centre)

Name: ..... Student No: .....
BLOCK CAPITALS

Address: .....
Address at which you reside while attending College (e.g. Home, Rented, etc.)

Date of Birth: ..... Male/Female: .....

Home Tel No: ..... Mobile No: .....

Course for which you are registered: .....
(e.g. Earth Sciences, Botany etc.)

Part B (ii)

(To be completed by the GP or the College Health Centre)

*Having reviewed the **Health Questionnaire** (Part A), submitted by the student, I can confirm:*

The student, named above, should be able to undertake all laboratory and fi	**YES**	*(tick)*	**NO**	*(tick)*
Any specific control measures or accommodations necessary are outlined below:				

Signed: ..... Date: .....
GP/College Health Centre

***Part B** of this form **ONLY** should be returned to the Area/Discipline Safety Officer or Course Director*

Appendix 8

Lone Working Approval Form

Also available on page 55

School of Natural Sciences Trinity College Dublin

Approval Form for Lone Working

The following form is to be completed by Academic Supervisors, PIs or Heads of Discipline for each person requiring lone working or out of hours working facilities. The category of risk will determine the signatory; category D activities will require HoD signature and additional Safety Officer check.

For Staff and Postgraduate Students this form should accompany a Risk Assessment Form as required by law.
Undergraduates are not permitted to work alone under any circumstances.

All those working alone should the sign in/out book provided in their area if available. Safezone is a prerequisite of lone working in college locations.

Approval Form for Lone Working

Lone Worker Name & Mobile Number	
Date/Time when access is requested	
Category. (Staff, Postgraduate, etc.)	Staff ☐ Postgraduate ☐
Contact details of companion (if required)	

Assessed Activities	
Does the task involve:	Dangerous Chemicals? Y/N Exposed moving machinery? Y/N 3-phase equipment/high energy sources? Y/N Biological Hazards? Y/N Work in enclosed spaces or from height? Y/N

	Risk of violence? Y/N Danger from radioactive substances & Ionizing sources? Y/N Working off campus Y/N If you answer yes to of these questions, your work is high hazard and should not be performed by a lone worker
Have you read the Lone Working Policy and assessed your work category	Y/N
Activities (full details on Risk Assessment)	Assessed Risk Category A, B, C or D
Known hazards associated with the work to be undertaken	
Controls to reduce risks	
Has a companion been deemed necessary	Y/N
Possible risks outstanding with controls in place	e.g. security, connectivity, power outages
Training Received (detail)	
Contact procedures and schedule	

Emergency Action	
Emergency contact phone numbers	Next of kin, emergency services, college security, supervisor

Do you agree to have the Safezone app installed and running when lone working on campus? Note: this is a prerequisite control		Y/N
Signature of Supervisor		Date:
Signature of Worker		Date:
Completed Risk Assessment Attached		Y/N
Signature of Head of Discipline For category D work only Safety Officer check	 Y/N	Date: