

# Health and Safety Procedure - Laboratory (Teaching) Safety

# **Section 1 - Key Information**

Policy Type and Approval Body	Administrative - Vice-Chancellor
Accountable Executive - Policy	Chief Operating Officer
Responsible Manager - Policy	Senior Manager, Health and Safety
Review Date	22 February 2026

## **Section 2 - Purpose**

(1) This Procedure documents how to comply with the <u>Health and Safety Policy</u> to address the hazards and risk associated with teaching activities that are undertaken in laboratory facilities. These directions are aligned to the Australian Standard AS2243.2.2021, Safety in Laboratories Part 1 – Planning and Operational Aspects. This procedure applies a risk management approach to plan and execute laboratory work, ensuring common standards and practices are applied.

## **Section 3 - Scope**

- (2) This Procedure applies to:
  - a. all teaching laboratories that are managed and operated by La Trobe University.

## **Section 4 - Key Decisions**

Key decisions	Role
Confirm the acceptance of residual risk for completed risk assessments	Head of Department and Discipline Leads

## **Section 5 - Policy Statement**

(3) This procedure forms part of the <u>Health and Safety Policy</u> suite which governs its application.

## **Section 6 - Procedures**

### Part A - Responsibilities

#### **Heads of Department and Discipline Leads**

- (4) Heads of Department and Discipline Leads are responsible for:
  - a. Providing oversight to ensure laboratory work is planned, risk assessed and is safely conducted;
  - b. Confirming the acceptance of residual risk for heightened risk activity;
  - c. Seeking assurance that there are adequate levels of supervision;
  - d. Seeking assurance that required inductions are completed for each discipline; and
  - e. Confirming that periodic laboratory inspections for hazard management and continuous improvement are completed.

#### **Academic Staff (Course and Subject Coordinators)**

- (5) Academic staff such as Course and Subject Coordinators are responsible for:
  - a. Ensuring laboratory work is planned, risk assessed and is safely conducted;
  - b. Accepting or querying the residual risk for heightened risk activity;
  - c. Ensuring adequate levels of supervision for all laboratory activities;
  - d. Ensuring that students have completed all required inductions before laboratory activity commences;
  - e. Leading or participating in periodic laboratory inspections for hazard management and continuous improvement.

#### **Teaching Educators**

- (6) Teaching Educators are responsible for:
  - a. Safely conducting laboratory work;
  - b. Ensuring operational risk controls are in place and working;
  - c. Ensuring students have completed the required inductions before commencing laboratory work;
  - d. Ensuring personal protective equipment (PPE) and general clothing requirements are strictly followed; and
  - e. Reporting all hazards and incidents.

#### **Facilities and Technical Services staff**

- (7) Facilities and Technical Services staff are responsible for:
  - a. Supporting the work plan, risk assessment and safe work execution;
  - b. Ensuring all risk controls are in place and operational;
  - c. Ensuring access to the sfety inductions for all participants; and
  - d. Leading periodic laboratory inspections for hazard management and continuous improvement.

#### **Students**

- (8) Students are responsible for:
  - a. Completing the mandatory safety induction before commencing laboratory activities;
  - b. Following the personal protective equipment (PPE) and general clothing requirements;
  - c. Following safe laboratory practices and processes;
  - d. Stopping the activity if there is immediate danger to health and safety; and
  - e. Reporting all hazards and incidents to teaching staff.

#### **Health and Safety Team**

- (9) The Health and Safety Team are responsible for:
  - a. Providing oversight and monitor this Procedure;
  - b. Advising on hazards and risk assessments as required;
  - c. Advising on risk control measures;
  - d. Supporting incident response, investigation, and sharing the lessons learnt across the organisation; and
  - e. Supporting periodic laboratory inspections for hazard management and continuous improvement.

#### Part B - General

(10) Laboratory work will vary widely, presenting differing levels of hazard and risk with consideration to the type of activity undertaken. The following groupings are indicative categories to assist aligning the level of risk assessment, personal protective equipment (PPE) requirements and supervision that is required.

#### **Low Risk Activity**

(11) Observational laboratory work or theoretical modelling that is carried out by students for the purpose of teaching and learning and is of low risk to Health and Safety. Examples include health monitoring, electronic circuitry and computer modelling. In these instances, the laboratories used are typically dry facilities.

#### **General Laboratory Activity**

(12) Practical activities that are typically associated with laboratories such as wet experimental work using chemical substances and biological materials or dry facilities where specialised equipment is used.

#### **Heightened Risk Activity**

(13) Activity which includes hazardous substances, biological models and complex equipment such as lasers that poses heightened risk due to the inherent risk or because of the combination that is being utilised. Risk assessments will identify activities which have heightened associated risk. In these instances, Physical Containment (PC) laboratories are frequently utilised as a control measure to address heightened risk.

#### Part C - Risk Assessment

- (14) Each discipline will undertake risk assessments to identify and address the differing types of laboratory work to ensure simple activities adhere to basic requirements whilst complex undertakings are deeply considered and carefully planned for.
- (15) The function of risk assessments is to raise awareness of the hazards and quantify the risk. This process enables a review of the controls in place relative to the risk and promotes the consideration of additional controls to improve hazard management. The residual risk rating will realistically reflect the remaining risk to ensure that the line of sight to the hazard/s is not lost nor diminished.
  - a. Risk assessments for all laboratory operations will be completed and periodically reviewed.
  - b. Risk assessments will be updated when new materials and/or methods are introduced and standard operating procedures modified as required.
  - c. Each completed risk assessment will include supervisor sign off. Where the inherent hazard risk is high, the departmental head or discipline lead will review and sign off on the risk assessment.
  - d. Risk assessment documentation will be kept and digitally archived by each discipline or area.

### **Part D - Safety Induction**

- (16) In addition to the general Health & Safety induction that all staff and students complete as part of the onboarding process, a laboratory safety induction will be completed for general laboratory work and include practical skills induction for specific equipment or techniques that will be utilised.
- (17) Each discipline will manage a range of inductions to capture the differing undergraduate and postgraduate requirements and commensurate with the level of risk.

### Part E - Personal Protective Equipment (PPE)

- (18) The selection of personal protective equipment (PPE) will be guided by the type of laboratory activity under consideration and the hazards and risks involved.
- (19) As a minimal requirement, all staff and students participating in wet laboratory activity must wear enclosed footwear and a laboratory coat or gown.
  - a. Personal clothing worn will be suitable for wet laboratory conditions and will provide adequate skin protection.
  - b. Laboratory coats or gowns will be fully fastened or tied and sleeves fully extended.
  - c. Activities that use mechanised equipment, heat sources, or naked flames must ensure that participants wearing any flowing garments, such as headscarves, are constructed from non-flammable material and must be tucked in.
  - d. Long hair must be tied back.
  - e. Eye protection must be worn where identifed through risk assessments and/or safety data sheets.
  - f. Additional PPE will be used as identified from either a risk assessment, safety data sheet or the laboratory protocol.

### **Part F - Laboratory Supervision**

- (20) All laboratory work undertaken for teaching purposes will be supervised by staff. The levels of supervision will be commensurate the risks as determined by the activity risk assessment.
- (21) There are occasional circumstances where participants may need to work alone or outside normal operational hours to complete laboratory activity. In these instances the consequential risk of some hazards may increase, as immediate assistance in the event of an incident is reduced.
- (22) Where the activity risk assessment identifies that the planned activity has moderate or heightened risk, then the activity will not proceed without the adequate supervision.

#### Part G - Immunisation and medical restriction

- (23) It is recommended that all staff and students undertaking wet laboratory work have current immunisation for tetanus. Immunisation can be obtained from General Practitioner (GP) clinics.
- (24) Where a participant discloses a disability (temporary included), or a medical restriction such as pregnancy, a risk assessment will be undertaken to identify laboratory activities which may impact the restriction. A plan will be developed with the assistance of the Health and Safety team. The plan may address the exclusion to tasks or activities where the levels of control cannot adequately manage the risk.

## **Section 7 - Definitions**

(25) For the purpose of this procedure:

- a. Disability: is any continuing condition that restricts everyday activities.
- b. Dry Laboratory: is a type of space where large experimental equipment is utilised with minimal use chemicals whilst the scientific models are inert.
- c. Hazard: is anything with the potential to cause harm. Potential hazards can be identified on the basis of previous experience or from the anticipation of problems that can be reasonably associated with the activity.
- d. Laboratories: are facilities that provide controlled environments in which scientific or technological research, experiments and measurement may be performed. Examples include chemical, anatomical, engineering and geomorphology laboratories and human movement, heath monitoring, and information systems laboratories.
- e. Risk control: is the allocation of resources or methods to eliminate or to minimise, as far as is reasonably practicable, the risk to safety or health from a hazard.
- f. Wet Laboratory: is a type if space where various types of chemicals and biological hazards are handled, so the room is designed, constructed and controlled to avoid spillage and contamination.

# **Section 8 - Authority and Associated Information**

(26) This Policy is made under the La Trobe University Act 2009.

(27) Associated information includes:

a. Health and Safety (intranet)

#### **Status and Details**

Status	Current
Effective Date	10th December 2019
Review Date	22nd February 2026
Approval Authority	Senior Executive Group
Approval Date	5th December 2019
Expiry Date	Not Applicable
Responsible Manager - Policy	Spomenka Krizmanic Senior Manager, Health and Safety 61 3 9479 2186
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