

OBJECTIVE

To detail the minimum safety standards and behaviour required of for all RMIT staff, students, researchers and third parties who occupy laboratory, workshop or studio environments during their work, research or study, in order to reduce the risk of injury or illness.

BACKGROUND

SCOPE

This process applies to all RMIT colleges, portfolios and activities globally.

NOTE – Referenced legislation applies to Australian jurisdictions only. RMIT campuses in other jurisdiction must refer to local applicable legislation, where available.

WHAT MUST GO RIGHT?

The 'What must go right?' principles applicable to this process are:

- RMIT staff, students, researchers and third parties understand and comply with lab/workshop/studio HSW requirements.
- Laboratory, workshop or studio-based hazards are risk-assessed, and controls are in place to prevent incidents.

PROCEDURE

1. Implementation

Before undertaking an activity, process or using laboratory/workshop/studio equipment the user must:

- Gain approval from the relevant Operational Leader
- Receive the appropriate induction / training required, including any relevant contingency arrangements i.e. the use of any essential safety equipment including spill kits, emergency eyewash / shower, first aid kits, and who to contact in an emergency (e.g. Security, Emergency Services)
- Review or develop any existing Risk Assessments and Safe Operating Procedures (SOP), or if not already held, completing an Activity or Equipment risk assessment or developing a SOP
- Implement the control measures identified in the risk assessments/Safe Operating Procedure.

Working with Hazardous Chemicals

The requirements for laboratories/workshops/studios when working with hazardous chemicals are defined in Australian standards for laboratory design and construction (**AS/NZS 2982**) and Safety in laboratories set (**AS/NZS 2243**). The laboratory/workshop/studio must display signage at the entrance(s), stating the requirements for access (e.g. induction and mandatory PPE requirements) and those workers/students/researchers/third parties who are authorised to enter.

Examples of areas requiring regulatory or hazard signage are animal facilities, quarantine areas, biological containment areas, chemical storage, confined spaces, cryogenic areas, high noise areas, high voltage rooms, incineration rooms, plant rooms, radiation areas (ionising and non-ionising), roofs & roof access points, service tunnels. All RMIT work, research or learning environments meeting these requirements must have appropriate signage installed. Please consult the relevant standards and with your Senior Advisor, Health & Safety for information.

Safety Equipment

Emergency showers and eyewash stations must be available at a distance of no more than 10 seconds travel time from any position in a laboratory/workshop/studio where hazardous substances are stored. They must be tagged to demonstrate they have been serviced within the last 12 months. Additionally, they must be activated weekly for a period long enough to verify operation and ensure that flushing fluid is available. These tests must be documented, to demonstrate continued testing. Where combination Eyewash / Safety Shower Units (i.e. the eyewash and safety shower are interconnected on the same support frame and therefore use the same water source) are present, it is acceptable for the eyewash unit to be activated weekly and the safety shower monthly, provided a documented Risk assessment has been completed.

Hand washing facility must be available in laboratories/workshops/studios where hazardous materials are to be used. Hand basins should be located near exits to facilitate washing of hands upon completion of work and leaving the laboratory, workshop or studio.

Fume cupboards or local exhaust ventilation must be used when working with volatile substances unless the risk assessment indicates it is not necessary. Fume cupboards must have a label affixed to the front of the hood to indicate that they have been tested within the last 12 months.

Suitable lock-out/tag-out (LOTO) equipment must be made available in laboratories, workshops and studios. Process **HR – HSW-PR52 – Lock-out/Tag out** details the requirements for such equipment and the steps to complete in order to identify what LOTO equipment will be required and their use.

Risk assessments must be used to determine any additional controls, e.g. emergency spill equipment, glove boxes, mobile extraction units, personal protective equipment, that need to be installed, made available and/or used in the laboratory/workshop/studio.

Safety notice board

Schools should consider the use of Safety Notice boards to prominently display applicable emergency procedures, emergency contact details and other relevant safety information (**HR – HSW-PR07-WI02 – HSW Noticeboards**)

Safety Inspections

Laboratories, workshops and studios are considered to be high risk areas. Periodic inspections must be undertaken to ensure that laboratories / workshops / studios and the equipment, materials and safety measures associated with their use remain in good, serviceable condition. Inspection periods and their focus is detailed in **HR – HSW-PR12 – Workplace Inspections**.

Suitable Clothing and Equipment

The following clothing and footwear are required in the laboratory, workshop or studio:

- Sturdy closed-in, flat footwear (i.e. boots, runners, closed shoes). No open, high-heeled footwear (e.g. sandals, thongs etc.)
- Clothing, which cannot be entangled in plant/equipment or pose any other foreseeable hazard. Avoid any unsecured loose clothing or items, which may become entangled or pose a hazard such as jewellery, lanyards and ties
- Appropriate clothing to cover the skin when working with hazardous chemicals
- Personal Protective Equipment (PPE) in accordance with any Safe Operating Procedure, Risk Assessment, Safety Data Sheet and the laboratory/workshop rules as covered in induction and/or is signposted. Please refer to the **HR - HSW-PR38 - Personal Protective Equipment** process

- Hair must be tied back so that it cannot become entangled or fall into equipment, flames or hazardous substances e.g. hazardous chemicals, biological or radioactive material.

Housekeeping and Hygiene

If working in or visiting any laboratories/workshops/studios, please keep in mind that general housekeeping and hygiene practices are necessary, including:

- Keep aisle and exits free from obstructions and floors tidy and dry
- Clean up any spillages immediately, in accordance with any Safe Operating Procedures (for example, cleaning up spilled chemicals)
- Keep benches clean and free from contaminants, sharps and apparatus that are not being used
- Keep the interior of fume cupboards clean and nearby areas clear to minimise air turbulence
- Keep access to all emergency equipment e.g. fire extinguishers, first aid kits, chemical spill kits, emergency showers and eye washes free from obstruction
- Cover any open skin wound(s)
- Remove gloves before touching door handles, light switches or any other communal items i.e. phones
- Clean work areas and equipment thoroughly after use
- Wash your hands after completion of all work and on leaving the laboratory or workshop
- Never eat, drink or apply cosmetics, except where they are part of the research/teaching being undertaken
- Never store food and/or drink in laboratories/workshops/studios unless it is for use in research/teaching. Where this is the case, then it must be specifically labelled as such.
- Use waste disposal streams appropriate to the type of waste being generated

General Safety Requirements

The following rules are to be implemented in all laboratories/workshops/studios:

- Access to laboratories/workshops/studios must be restricted to authorised personnel; doors must be locked if leaving the area unattended
- Personal effects should be stored away from laboratory/workshop/studio work areas
- Do not dispose of hazardous materials down the drain or in general waste, all waste must be disposed of in accordance with Safety Data Sheets (SDS), RMIT requirements or specific College or school laboratory procedures
- Do not pipette by mouth, sniff or taste chemicals
- Do not exceed fume cupboard limits of liquids or restrictions on the type of hazardous materials used
- Do not clutter the fume cupboard with non-essential equipment and chemical containers (as this decreases the effectiveness of the fume cupboards operations)
- Turn off all equipment not in use (where appropriate) and extinguish any open flames when not required for the work being undertaken.
- If an experiment is required to be left running overnight, it must be approved and labelled (name and out-of-hours contact number, including name and out-of-hours contact number for emergency purposes).
- When using fume cupboards, refer to **HR - HSW-PR33-WI01 - Fume Cupboards**
- Write-up areas must be separated from work areas where hazardous materials are used, or dangerous activities are carried out within the laboratory/workshop/studio.
- Report all potential hazards and incidents (refer next section)

Reporting

All incidents, including near misses, must be reported in P.R.I.M.E., or equivalent, as detailed in **HR - HSW-PR10 – Incident Management and Investigation**.

2. Responsibilities

Senior Leaders

- Ensure there are resources available to implement this process in their area of control
- Review performance indicators on a regular basis.

Operational Leaders

- Ensure the implementation of this process in the area of their control
- Ensure the periodic testing of plant and/or equipment, as required, in their area of control

Staff, researchers, students or third parties

- Follow this process and all reasonable instructions relating to laboratory, workshop and studio safety
- Follow the direction of RMIT in relation to laboratory/workshop/studio requirements
- Report any health effects and any other hazards that they identify in their work or learning environment

HSW Team

- Provide advice on laboratory, workshop and/or studio safety where required.
- Regularly review this process in consultation with relevant staff
- Develop and report on KPIs relevant to this process
- Monitor compliance with this process and report on outcomes

3. Definitions

Defines any key terms and acronyms relating to the process where they apply

Term / acronym	Definition
Fume Cupboard / Fume hood	A ventilated enclosure in a chemistry laboratory, in which harmful volatile chemicals can be used or kept
HSW	Health, Safety and Wellbeing
KPI	Key Performance Indicator - a measurable value that demonstrates how effectively we are achieving key objectives
Operational Leaders	Any staff member of RMIT who: <ul style="list-style-type: none"> • Plans, organises or supervises the activities of other staff, students, contractors, volunteers, visitors and clients on behalf of RMIT; or • Designs or organises the design, maintenance or refurbishment of facilities on behalf of RMIT
PPE	Personal Protective Equipment - equipment worn by students, staff, contractors or visitors to reduce risk from hazards.
Senior Leaders	Heads of School, Deans, Senior Managers

Term / acronym	Definition
SOP	Safe Operating Procedure or Standard Operating Procedure; sometimes also called a SWP (Safe Work Procedure) - a step by step description of a process when deviation may cause a loss.
SDS	Safety Data Sheet (previously MSDS or Material Safety Data Sheet) - a document that provides information on the properties of hazardous chemicals and how they affect health and safety in the workplace.

4. Supporting Documents

- HR - HSW-PR04 - HSW Records Management
- HR - HSW-PR32 - Hazardous Chemicals
- HR - HSW-PR33-WI02 - Fume Cupboards
- HR – HSW-PR12 – Workplace Inspections
- HR - HSW-PR10 – Incident Management and Investigation.
- HR – HSW-PR07-WI02 – HSW Noticeboards
- HR - HSW-PR38 - Personal Protective Equipment
- HR – HSW-PR52 – Lock-out/Tag out
- Occupational Health and Safety Act 2004 (VIC)
- Occupational Health and Safety Regulations 2017 (VIC)
- AS/NZS 2243 - Safety in laboratories - Set
- AS/NZS 2982 - Laboratory design and construction -
- AS 4125.1 - Sound laboratory practice in food and water microbiology laboratories – Premises, safety, sample management, regulatory compliance and records management -
- AS 4775 - Emergency eyewash and shower equipment -

