

# **LABORATORY INDUCTION FOR CLEANERS**

# Laboratories

---

C002 Earth Science,

C021 Exercise & Sports Science

C024 Stokes

S003 Bio Sciences – 1<sup>st</sup> Year

S006 Psychology

W002B Animal House C

W023 Agronomy

W031 Rural Science Annexe - East

W048 Meat Science

C013 Pat O'Shane Building

C023 Riggs

S002 Botany

S005 Psychology – Howie Wing

W001A Main Office & Laboratory

W021 Natural Resources

W031 Rural Science Annexe – West

W034 McClymont

W077 Agricultural Education

- WET' lab is a term used for chemical and biological laboratories
- They contain a range of hazards, some are very low, but some hazards can be life-threatening.
- Hazards include:
  - Chemicals
  - Biological, and infectious (can include animals)
  - Radioactive
  - Electrical
  - Low Oxygen rooms
- Most labs will be safe for you to work in, providing you are careful!

## Example 1 'Wet' Lab

---



Hazards may be:

Chemical

Electrical

Biological  
or Infectious

## Fume Cabinets



Under **No circumstances** are Cleaners to clean fume cabinets.































## Do NOT Enter & Restricted Access

- **Where there is a high risk of illness or injury**, the rooms will be signed as “Do not enter” rooms. Only researchers or ‘authorised’ persons may enter these rooms cleaners, contractors and trades are **not** permitted.



# HAZARD AND WARNING SIGNS

# Door Signs

Hazards present in this Laboratory (delete or add as required)			
	Class 1 Explosives		
	Class 2.1 Flammable gases		
	Class 2.2 Non-flammable, non-toxic gases		
	Class 2.3 Toxic gases		
	Class 3 Flammable liquid		
	Class 4 Flammable solids		
	Class 5 Oxidising substances		
	Class 6 Toxic and infectious eg. Biohazard, toxins		
	Class 7 Radioactive substances		
	Class 8 Corrosive substances		
	Class 9 Miscellaneous goods		
	Cytotoxic substances		
		Animals	
		High voltage danger	
		Lasers	
		Mechanical equipment	
			
Conditions of entry into this laboratory include: (delete or add as required)			
	Eye protection		Foot protection/Closed shoes
	Hearing protection		Laboratory coat
	Gloves		Respiratory protection
	Radiation dosimeters		No food or drink
	Authorised access		



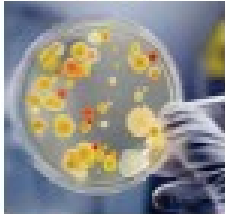




There should be a sign on each laboratory entry door outlining:

- Possible hazards inside the lab
- Conditions of entry

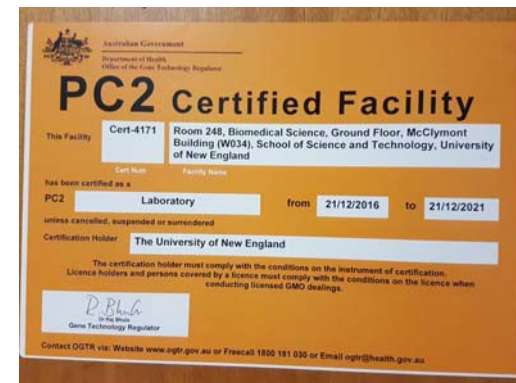
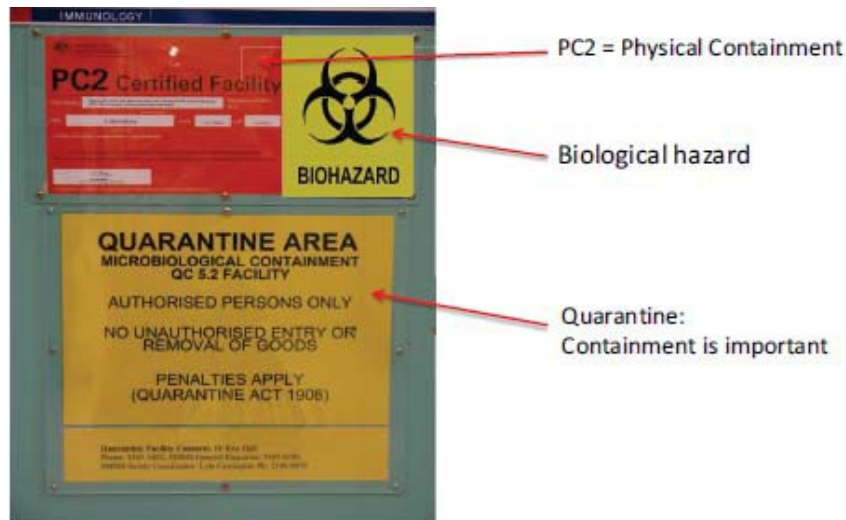
Not all laboratories will have the same hazards



# Warning Signs and Dangers

Hazard Sign	Hazard Type	Source	Injury
 	<ul style="list-style-type: none"> <li>• Biological</li> <li>• Diseases</li> </ul>	<ul style="list-style-type: none"> <li>• Cultures</li> </ul>   	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Sickness</li> </ul>  

# The signs on the door will indicate what special hazards are in the lab



PC2 Labs are in the buildings W034 McClymont and W077 Agricultural Education.

## **Biological Hazards – Groups**

---

**Quarantine** (biologicals not normally found in Australia)

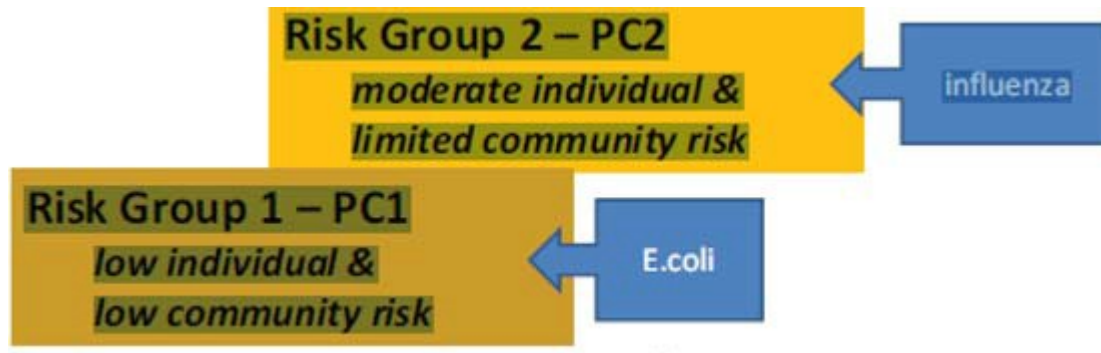
**Genetically Modified** (not naturally found in the environment)

**Infectious microorganisms** (may or may not be found in our environment, but pose a health and safety risk humans and/or animals and/or plants)







# Risk

---




## Risk Group Categories












# Warning Signs and Dangers

Hazard Sign	Hazard Type	Source	Injury
	<ul style="list-style-type: none"> <li>• Radioactive</li> <li>• Radiation</li> </ul>	<ul style="list-style-type: none"> <li>• Some equipment</li> </ul> 	<ul style="list-style-type: none"> <li>• Burns</li> </ul> 
	<ul style="list-style-type: none"> <li>• Laser beams</li> </ul>	<ul style="list-style-type: none"> <li>• Some equipment</li> </ul> 	<ul style="list-style-type: none"> <li>• Burns</li> <li>• Blindness</li> </ul> 






## Warning Signs and Dangers

Hazard Sign	Hazard Type	Source	Injury
	<ul style="list-style-type: none"> <li>Slippery floor</li> </ul>	<ul style="list-style-type: none"> <li>Wet floor, spills, mopping floors</li> </ul>	<ul style="list-style-type: none"> <li>Falling – bumps, sprain, breaks</li> </ul>
	<ul style="list-style-type: none"> <li>Trip hazard</li> </ul>	<ul style="list-style-type: none"> <li>Dry spills on floors, uneven floor</li> </ul>	

# Warning Signs and Dangers

Warning Label	Hazard Type	Source	Injury
	<ul style="list-style-type: none"> <li>• Toxic chemical</li> </ul>		<ul style="list-style-type: none"> <li>• Poisoning</li> </ul> 
	<ul style="list-style-type: none"> <li>• Corrosive chemical</li> </ul>		<ul style="list-style-type: none"> <li>• Chemical Burns</li> </ul> 
	<ul style="list-style-type: none"> <li>• Flammable liquid</li> </ul>		<ul style="list-style-type: none"> <li>• Burns</li> </ul> 

# Warning Signs and Dangers

Danger Sign	Hazard Type	Source	Injury	80-Freezer rooms
 	<ul style="list-style-type: none"> <li>No or low oxygen</li> <li>Never enter a room with a DANGER sign</li> </ul> 	<ul style="list-style-type: none"> <li>Chemicals e.g. liquid nitrogen, carbon dioxide</li> <li>Exhaust from equipment</li> <li>Lack of ventilation/airflow</li> </ul> 	<ul style="list-style-type: none"> <li>Pass-out/ unconscious then death</li> </ul> 	<p>W34 McClymont &amp; W77 Agricultural Building.</p> <ul style="list-style-type: none"> <li>The alarm is sounding in the freezer. Under <b><u>NO circumstances</u></b> are you to enter.</li> <li>Course of action is to contact UNE security.</li> </ul>



# Warning Signs and Dangers

<u>DO NOT</u> Signs	Meaning	Risk	Example
	<ul style="list-style-type: none"> <li>No smoking</li> </ul>	<ul style="list-style-type: none"> <li>Explosion or fire</li> <li>May interact with chemicals or fumes</li> </ul>	
	<ul style="list-style-type: none"> <li>No flames</li> </ul>		
	<ul style="list-style-type: none"> <li>No eating or drinking</li> </ul>	<ul style="list-style-type: none"> <li>Food may get contaminated and make you sick</li> </ul>	

# **SAFE WORK PROCEDURES**

## PPE – Protect yourself




- Gloves



- Enclosed/ Covered shoes – must cover your whole foot



# PPE SIGNS


MUST DO Signs	Meaning	Risk
  	<ul style="list-style-type: none"> <li>• Must wear safety glasses</li> <li>• Must wear shoes that cover your whole foot</li> <li>• Must wear protective clothing, that is a labcoat, overalls or a uniform – not your streets clothes.</li> </ul>	<ul style="list-style-type: none"> <li>• By following these directions you should be protected from basic hazards</li> </ul>

## These shoes must NOT be worn in Laboratories



## Follow Procedures and you will stay safe



- No Eating
  - No Drinks
  - No Chewing Gum
  - Do Not Bring Food or Drink Inside Laboratory
  - Cover All Cuts & Scratches
  - Never Let Other People In The Laboratory – Especially Not Family & Friends
- 
- A close-up photograph of a person's hand being bandaged. A white adhesive bandage is being wrapped around the back of the hand, near the wrist. The hand is held palm up, and the bandage is being applied by another person's fingers.
- Wear Closed Shoes
  - Wear Gloves When Touching Surfaces
  - Do Not Touch Any Bottles or Containers – Except for Bins

# Careful Handling

---



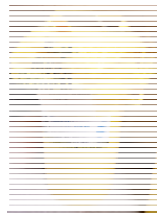
- Do not touch or handle any bottle or liquids in the laboratory
- Do not move any equipment except for chairs and bins
- Do not run inside the laboratory
- When mopping – watch where you are mopping!

## Minimum cleaning of Labs: Bins

Open spaces between and under benches, cabinets and equipment in the facility must be accessible for cleaning.

Rubbish bins:

- Empty general waste bins, replace liners.
- Do not touch any yellow Bio-hazard bins.





# Cleaning Lab Floors – Dry Mopping

## Dry mopping

- floors should be dry-mopped NOT swept with a broom
- mop needs dust retaining properties
- Handles must be plastic or metal, not wood



## Cleaning Labs Floors – Wet Mopping

Wet mopping

- Spot-clean dirty areas with a wet mop
- The mop head must be bagged and taken to the cleaning supervisor
- Remember mop handles must be plastic or metal, not wood



## Cleaning Lab Floors – Vacuuming

### Vacuum cleaning

- It is preferable not to vacuum labs.
- However if a vacuum is used, it must have a disposable bag and a HEPA filter fitted to the exhaust.



Sample

## Cleaning Labs - Fixtures and Fittings

- Fittings and door/window seals:
  - Should be wiped/dusted with a moist cloth. This includes light fittings within your reach, door sills, window sills and window ledges, skirting, and air-grills if they can be reached.
  - Remove any cobwebs that you find.
  - Report any insects to your supervisor.
- In some cases, additional cleaning may be required:
  - Annual polishing of floors, or as requested
  - Clean-up of non-hazardous spills (e.g. water leaks)
- **PC2 Labs**-Gloves and mop heads must be bagged and placed into the yellow bi-hazard bin provide.
  - Wash hands



# Colour Guidelines for Cleaning Labs & other areas

**Colour** coding helps reduce the risk of cross contamination, improves hygiene and reduces the risk of bacteria transfer between work areas. Mops, buckets, handles, brooms, brushes, cloths, wipes, etc.

Red		Toilets Washroom Utility Room
Blue		General Cleaning
Green		Kitchen, Catering Food Preparation Food Service
Yellow		Infectious Areas
White		Operating Theaters

# CONTAINMENT

---

CONTAINMENT while you work is important:



- Always keep doors shut.
- Do not prop doors open.
- When you have finished cleaning, check the doors are shut.
- Some doors have silent alarms to security.
- Remove your gloves and put the gloves in the clinical waste bin and wash your hands when you leave.
- Always wash your hands before you eat.

# Emergencies and Spills

## **Emergencies and Spills**

---

- If you notice any of the following inside the laboratory:
  - Smoke
  - Fire
  - Large water leaks or pools of liquid
  - Funny smells – e.g. gas or chemical smell

Exit the lab immediately and notify your supervisor immediately.

Your supervisor will notify Safety, Security & Information who will attend site & manage the situation.

- All Cleaners need to be aware of the University's evacuation procedures. These can be found on Safety Hub under heading Emergency Management.



# Emergency Services

Emergency **shut-down** buttons:

- Use if there is fire, electrocution or major spill
- It shuts down electricity and gas supplies
- If you accidentally hit this button call Safety, Security & Information on x 67732099 (non-emergency)



Emergency fire alarms:

- If there is a fire and the alarm has NOT gone off, break the glass of this box called a “manual call point” to activate. Breaking the glass activates an alarm for NSW Fire to attend.



- The alarms are located near emergency exits.
- If you activate one of these call points you must also call Safety, Security & Information on 6773 2099 to inform them of the emergency.

# Spills & Accidents When Working



## **SPILLS**

If you knock-over a bottle or container of liquid and it spills:

- Do not clean up the spill - it might contain chemicals or a biological culture
- Leave the room and warn your co-workers of the spill
- Notify your supervisor who will contact Safety, Security & Information
- AS YOU LEAVE - Wash hands and contaminated skin.
- Do NOT scrub your skin – Scrubbing may cause penetration of the spilt substance into the skin

## **Spills on clothing**

---

If a small spill occurs on your clothes but has NOT soaked through to your skin:

- Remove clothes quickly inside the facility
- Inform your supervisor immediately
- Put clothes in a bag, tape shut and leave in the lab for decontamination/disposal. DO NOT TAKE THEM HOME.
- You may need assistance so ask a work mate to help you.

# Spills on Your Skin or Eyes

For spills directly onto your skin or eyes

- Go immediately to an emergency station
- The longer the chemical is on your skin or in your eyes – the more damage it will do. So it is best to act immediately and rinse with clean water for as long as possible. See guide below.

Skin – Hands	Skin – body or face	Eyes
Rinse under tap - running water for 15 minutes	Use safety shower and drench skin and face – 15 minutes	Use eyewash Keep eyes open and flush eyes for 15 minutes
Notify your supervisor	Call for help when you can Remove clothing Notify your supervisor	Call for help when you can Remove clothing Notify your supervisor

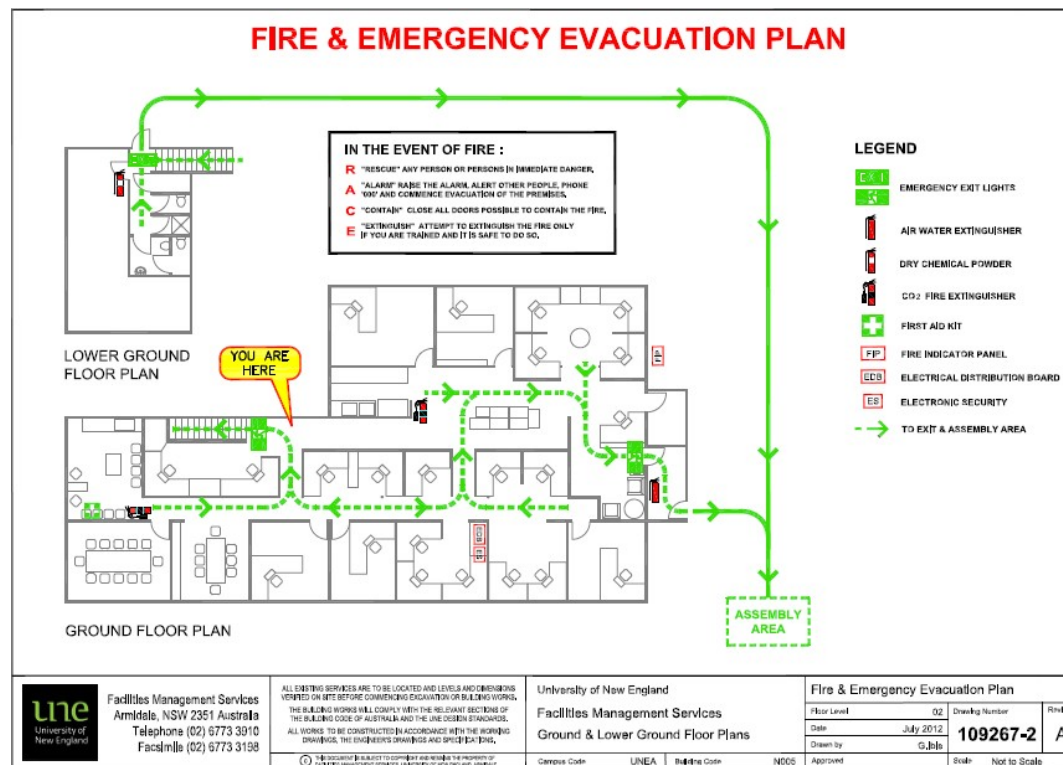
## Emergency / First Aid

- Safety Showers and Eye Wash Stations are located in every lab. Make yourself aware of their location.
- Please use them when required **for the full 15 minutes** – do not worry about excess water.



# Building Evacuation Diagram

Your Supervisor will show you, the closest FIRE EXIT from your work area.
   
 Red arrows lead to the fire exits.



# EVACUATION PROCEDURES

---

## Evacuation Alarms

There are two alarm sounds, when you hear either of them, you are to Evacuate.

- Warning Alarm and Flashing Amber light
  - **Evacuation alarm and Red Flashing light**
- 
- Evacuate the building via a fire escape stairwell immediately proceed to the designated assembly area and wait until permission is given to re-enter the building.
  - When working on different floors, be aware of the emergency equipment and exit routes from those floors.

## **REMEMBER**

---

- Any cuts on the skin should be covered with a band-aid or waterproof dressing before starting work (gloves may also be needed)
- Eating and drinking (includes storage of food or drink), smoking, handling contact lenses and applying cosmetics is not allowed in the laboratories.
- Do not handle chemicals or biological waste
- Close laboratory doors behind you
- Before you go on your break, wash your hands. Do not eat, smoke or drink unless you have washed your hands.
- **Before you go home wash your hands again.**