THE UNIVERSITY OF NEWCASTLE AUSTRALIA

LABORATORY SAFETY CHECKLIST

LABORATORY: **DATE:**
RESPONSIBLE OFFICER:
INSPECTION BY:

Boxes to be ticked as items completed or sighted. An "x" to indicate that the item needs attention or is deficient. N/A indicates the item does not apply to this laboratory.

1	HAZARD IDENTIFICATION	✓/x/NA	Comments
1.1	Are there current lists of all: (a) hazardous substances, (b) micro-organisms, (c) radioisotopes, used or stored in the laboratory?		
1.2	Are current copies available of: (a) permits for notifiable or prohibited carcinogens, (b) AQIS permits for imported biological (c) licences for staff handling radioactive material or operating irradiating apparatus, (d) exemptions for students handling radioactive material or operating irradiating apparatus?		
1.3	Is there appropriate signage: (a) Biological hazard symbol, and/or (b) OGTR PC2 sign, (c) Dangerous Goods diamonds, (d) Radiation trefoil, on entrances to the laboratory, including offices not part of the PC2 facility?		
1.4	Do storage units for micro-organisms or recombinant or manipulated DNA, including refrigerators and freezers inside and outside the designated lab, have a biological hazard symbol on them? Are names and contact numbers of users displayed on the units? Are they kept locked or is access to these restricted, if so how?		
1.5	Are all chemicals clearly labelled including all hazard information and appropriate risk statements? This particularly applies to chemicals that have been decanted and solutions that have been made up unless used within the course of the day.		
1.6	Are cultures clearly identified and dated?		
2	**RISK ASSESSMENT**	**✓/x/NA**	**Comments**
2.1	Are Material Safety Data Sheets available for: (a) all hazardous substances (b) micro-organisms used or stored in the laboratory?		
2.2	Is the containment level appropriate to the nature of pathogens being used and the type of operations being undertaken with them?		
2.3	Has the laboratory been appropriately classified as a medium or low-level radiation laboratory?		
2.4	Are there documented risk assessments for procedures undertaken in the laboratory?		
2.5	Has the relevant Technical Committee provided approval for the work undertaken?		
2.6	Are copies of all Safety Clearance Approvals in the Laboratory Safety Manual?		

3	RISK CONTROL - Engineering Controls	✓/x/NA	Comments
3.1	Is the laboratory isolated from general and administrative work areas with doors that can be closed when work is in progress?		
3.2	Are bench tops made of suitable materials: impervious to water, resistant to reagents, solvents, disinfectants, etc?		
3.3	Are walls, ceilings and floors smooth, easy to clean, impermeable to liquids, and resistant to commonly used reagents and disinfectants?		
3.4	Is the floor covering appropriate (e.g. seamless and extending up the walls)? Do floors have a non-slip finish?		
3.5	Are stools and chairs an appropriate height or height adjustable & covered with easily cleaned materials?		
3.6	Are facilities provided for keeping documents and writing reports separate to work benches to ensure they do not become contaminated?		
3.7	Are eye-wash stations provided?		
3.8	Are safety showers provided? If so, are they checked weekly, and is a record maintained in the Laboratory Manual?		
3.9	Are gas cylinders properly secured?		
3.10	Are solvents and flammable chemicals stored in approved flameproof cabinets? Is the compatibility of chemicals to be stored in close proximity checked?		
3.11	Are hand-washing facilities (with hot and cold water) provided in the laboratory, preferably near the exit? Do hand-washing facilities incorporate basin mixers (preferably foot or elbow operated)? Is antiseptic hand wash provided where necessary?		
3.12	Where the laboratory is mechanically ventilated, is directional airflow into the laboratory maintained by extraction of room air? Is air precluded from recirculating into non-PC2 areas?		
3.13	Are flyscreens fitted to opening windows?		
3.14	Is the certification of Biological Safety Cabinets, fume cupboards current?		
3.15	Is there a maintenance record for each fume cupboard and Biological Safety Cabinet?		
3.16	Are provisions made for decontaminating the Biological Safety Cabinets (with formaldehyde gas) and safely venting the gas to atmosphere?		
3.17	Are sealed rotors or safety cups used for centrifugation of large volumes or highly concentrated infectious organisms?		
3.18	Is bio-aerosol generation from vacuum pumps filtered?		
3.19	Is there an appropriate radiation monitoring instrument for the isotopes used in this room? If so is there a servicing and calibration log?		
3.20	Is there evidence that the facility is well maintained?		
3.21	Is there a maintenance log for laboratory equipment?		

4	RISK CONTROL - Administrative/Procedural Controls	✓/x/NA	Comments
	Work Procedures		
4.1	Are there standard procedures & safety instructions available for the tasks involving the use of: (a) hazardous substances (b) micro-organisms – has the Micro-organism Risk M/Ment form (PC2 Manual format) been completed and retained in the LSM? (c) radioisotopes?		
4.2	Are all laboratory personnel aware of all procedures and substances posing potential hazards and the mechanisms for minimising the hazards?		
4.3	Is there a Laboratory Safety Manual that includes information on: (a) chemical (b) biological (c) radiation safety, including spill treatment and waste disposal?		
4.4	Is there evidence that the following Laboratory Rules are observed at all times: • Enclosed footwear is worn • No smoking • No eating or drinking • No application of cosmetics • Long hair is tied back • No moistening labels by the tongue • No pipetting by mouth • No sniffing of bacterial plates • Hands must be washed before leaving		
4.5	Are doors kept closed when work is in progress?		
4.6	Is there a supply of clearly labelled disinfectant for decontamination?		
4.7	Are bench tops and equipment decontaminated after each task? Are bench covers used?		
4.8	Are Universal Precautions adopted when handling human body fluids? Are all clinical specimens treated as being infectious?		
4.9	Is a pest control program in place?		
	Emergency Procedures		
4.10	Are First Aid Kits readily available? Are there clear directions to the First Aid Kit and are First Aid Officers contact details and photos on display?		
4.11	Are fire extinguishers regularly checked and are they appropriate for the types of fires expected?		
4.12	Are emergency contact numbers displayed?		
4.13	Are practice evacuation drills conducted regularly? Date of last drill:		
4.14	Are emergency procedures in place for personnel working alone or after hours?		
4.15	Are spill kits provided and appropriate to procedures carried out in the laboratory? Are decontamination procedures recorded in the Laboratory Manual?		
4.16	Where an experiment is to be left unattended overnight or at weekends, are signs indicating the relevant person to be contacted in the event of a failure attached to the equipment?		
4.17	Is the Laboratory Manager informed immediately, and records kept of significant spills and accidents?		

4	RISK CONTROL - Administrative/Procedural controls	✓/x/NA	Comments
	Waste disposal		
4.18	Are disposal procedures in place and detailed in the Laboratory Manual for: (a) Chemical waste (b) Microbiological waste - both contaminated and non-contaminated items (c) Radioactive waste		
4.19	Are waste minimisation procedures in place and are appropriate waste separation protocols and disposal programs detailed in the Laboratory Manual?		
4.20	Is waste labelled appropriately?		
4.21	Is an autoclave available in a convenient location? Is there an autoclave log detailing use, sterilisation checks and maintenance records, including certification of the pressure vessel?		
4.22	Are infectious waste materials, including used gloves, decontaminated or autoclaved before disposal? (In certified PC2 laboratories all microbiological wastes must be autoclaved before disposal)		
4.23	Is the transfer of infectious materials between or outside laboratory (eg. to the autoclave) contained inside a second unbreakable closed container that can be easily decontaminated by autoclaving?		
4.24	Are re-usable items autoclaved or disinfected before washing and re-use?		
4.25	Are contaminated needles & syringes placed in special puncture-resistant containers for disposal (preferably by incineration)?		
4.26	What steps are taken to ensure that needles are not removed, bent or recapped unless this can be carried out with equipment that minimises the risk of needlestick injuries?		
4.27	Is there a log of disposal of radioactive waste? Is there a log of weekly amounts and dilutions consigned to sewer?		
	Induction & training		
4.28	Is access to the laboratory limited to specified personnel? Is a list of authorised staff maintained and retained in the LSM?		
4.29	Do lab personnel receive instruction & training, with regular updates, in procedures and methods of risk control? Is there a training register signed by staff member or student and supervisor?		
4.30	Are maintenance and service personnel and other visiting personnel advised by laboratory staff of the special hazards at the time of visit? Is there a register of inductions for all personnel who are required to be inducted?		

5	RISK CONTROL - Personnel Protective Equipment	✓/x/NA	Comments
5.1	Is equipment for handling hot or cold items readily available?		
5.2	Is Personal Protective Equipment supplied, properly stored and maintained, e.g. lab coats, face masks, goggles, gloves, disposable gloves? Are there procedures to ensure that PPE is worn?		
5.3	Are laboratory gowns worn, and removed before		

	leaving the laboratory? Are coat hooks provided inside the laboratory close to the door?		
5.4	Are appropriate immunisations provided to laboratory personnel (e.g. Hepatitis B for personnel handling human body fluids)?		
5.5	Is there a personal badge monitoring system in place? Are records of personal exposure maintained?		

6	**ANY ADDITIONAL COMMENTS**	***✓/x/NA***	**Comments**
6.1			
6.2			
6.3			
6.4			
6.5			
6.6			