



Self-Inspection 2020

Biosafety Containment Level 1 Requirements

To be verified at an Inspection by Biohazard Committee Members

Containment requirements of Queen's University policies, in accordance with recommendations of the "Canadian Biosafety Standard", 2nd Edition, 2015, published by the Public Health Agency of Canada (PHAC).

This checklist is to be filled out by the Principal Investigator, or designate, as a self-audit prior to a biohazard lab inspection.

- Answer each question prior to the inspection by ticking N/A, Yes or No, and present the completed form to the inspectors when they arrive.
- Fill this form out for your main CL1 lab and begin the inspection there. A short version of the form is available for your other labs.
- The person who filled out the form is to be present at the inspection to discuss answers on the form with the inspectors.
- Other lab members are welcome to attend the inspection.
- Training records are to be available in one of your laboratories for review by the inspectors. They may be stored elsewhere at other times.

Investigator: _____ Secondary Biohazard Contact: _____ Person completing self-audit: _____

Building & Room # _____ Biohazard Containment Level _____

Biohazard Committee Inspection Team: _____

Signatures: _____ Inspection Date: _____

Comments for the attention of the lab and/or the University Biosafety Officer: _____

Abbreviations: N/A, not applicable, Yes, compliance; No, compliance lacking; VI, Inspectors Verified at Inspection; CBS requirement number from Canadian Biosafety Standard, 2nd Edition.

Item #	Item	Compliance			
		N/A	Yes	No	VI
1. Biohazardous Material Information					
1.1	What are the biohazardous materials used in this lab? General types of material (as listed on biohazard sign) : _____ _____				
1.2	Is an inventory of biological agents handled or stored in the containment zone, maintained and kept up to date? Note: the inventory must contain a list of all agents and materials, their risk group, source and the rooms or locations in which they are used or stored. Quantities are not required. Inventory must be kept up to date in biohazard permit in TRAQ/Romeo.				



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2. Signage					
2.1	Biosafety warning sign posted on laboratory door indicates containment level.				
2.2	Sign has <u>current</u> contact information for the supervisor and other responsible person (usually the secondary biohazard contact).				
2.3	Sign lists types of biohazardous material (eg. RG1 bacteria (cloning strains only), RG1 bacteria (opportunistic infection risk), RG1 viruses (host range insects)).				
Comment re signage:					
3. General Lab Facilities and Procedures					
3.1	Access to the laboratory is at the discretion of the laboratory director (children should not be present in laboratory areas).				
3.2	Trainees and visitors must be accompanied by a trained staff member.				
3.3	Door to the laboratory kept closed.				
3.4	Lab kept clean and tidy. No cardboard boxes on the floor.				
3.5	Visual inspections of the containment zone to be conducted in order to identify faults and/or deterioration; when found, corrective actions to be taken. Lab benches, floor, equipment, etc. are in good condition, with surfaces and caulking intact, so that they can be readily decontaminated.				
3.6	All spills, accidents and overt or potential exposures must be reported promptly in writing to the Departmental Safety who is: _____				
3.7	<ul style="list-style-type: none"> • Emergency Plan posted in the laboratory is <u>current</u> (updated and reposted annually at the time of annual retraining) • familiar to all personnel • includes site specific information on spill clean-up, fire, and where applicable, BSC failure, animal escape, etc. 				
3.8	Eyewash <u>in accordance with containment zone activities</u> (or, depending on the hazard, eyewash in hall within 10 seconds access and no more than one door); access not obstructed; tested weekly and card initialled.				
3.9	Safety shower <u>in accordance with containment zone activities</u> within 10 seconds access time and through no more than one door.				
3.10	Sink identified for hand washing has soap and paper towels; if lab has more than one sink and if feasible then dedicate sink near lab exit for hand washing only; if hand washing sink is <u>not</u> near the exit then a sign must be posted near the exit to remind personnel to wash their hands.				
3.11	Personnel are to wash hands after completing tasks that involve the handling of infectious material or toxins and before undertaking other tasks in the containment zone. Hands washed after removal of gloves, after handling potentially biohazardous material, immediately before leaving the laboratory.				
3.12	Eating, drinking, smoking, storing food or utensils, applying cosmetics and inserting or removing contact lenses is not permitted.				



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3.13	Paperwork and computers kept separate from biohazardous materials work areas. If the “desk” is on a bench beside where work with biohazards is done, without a change in the height to separate the desk area, then there is a line of tape on the bench to indicate the clean area.				
3.14	Long hair tied back so as not to contact hands, specimens, containers or equipment.				
3.15	All pipetting using automatic pipets (No oral pipetting).				
3.16	Creation of aerosols and their effects minimized – indicate method for different procedures in use (e.g. during pipetting, vortexing, centrifuging, for sonicating).				
3.19	Vacuum aspiration equipment is protected with a HEPA filter as per SOP-Biosafety-01 (available in Botterell biobar).				
3.20	Biohazard bags are supported in <u>solid</u> containers that have a biohazard symbol.				
3.21	Use of needles, syringes, and other sharp objects is strictly limited and avoided when suitable alternatives are available.				
3.22	Bending, shearing, re-capping, or removing needles from syringes is avoided, and, when necessary, performed only as specified in written SOPs.				
Comment re lab facilities and procedures:					
4. Biological Safety Cabinet (BSC)					
4.1	Aware of SOP-Biosafety-03 Biological Safety Cabinets.				
4.2	Intake and rear grilles are clear of obstructions. BSC is not overcrowded and only equipment and supplies needed immediately for the work being done are in the BSC.				
4.3	Work surfaces and under front grill are clean and free of visible biological residue.				
4.4	Bunsen burners and/or open flames are not used in biological safety cabinets. Open flames are not permitted inside BSCs; consider an alternative, such as an electrical bacticinerator.				
4.8	If the risk group 1 material is known to be an opportunistic pathogen and if the BSC is not in an area that makes informing all those accessing the area feasible (e.g. in a corridor), then BSCs to be certified upon initial installation, every few years, and after repairs, modification, or relocation that might dislodge the HEPA filter. Date of the last BSC certification: _____				
Comment re BSC:					
5. Personal Protective Equipment					
5.1	Fastened lab coat worn.				
5.2	Lab coat stored separately from street clothing and not on top of each other on hooks.				
5.3	Lab coat removed prior to entering non-laboratory areas.				
5.4	How and where are lab coats laundered?				



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5.5	Closed toe and heel footwear worn by all personnel. Type of footwear worn to be selected to prevent injuries and incidents, in accordance with containment zone function.				
5.6	Suitable eye and face protection when required (check availability of goggles &/or face shield).				
5.7	Contact lenses worn only when other corrective eyewear is not suitable and if worn then other eye protection is worn when there is a splash risk.				
5.8	Gloves worn for work with infectious agents, toxins, blood and other potentially biohazardous material.				
5.9	Open wounds, cuts, and breaks in the skin should be covered with a waterproof dressing.				
5.10	Glove material not permeated by substances used in conjunction with biohazards (e.g. chemical hazards, cancer chemotherapeutics).				
5.11	Gloves to be removed prior to leaving laboratory (or “one glove method” if carrying hazardous materials).				
5.12	If N95 respirators are required, all users have been fit tested through EH&S every 2 years.				
Comment re PPE:					
6. Storage, Decontamination and Disposal					
6.1	Gross contamination to be removed prior to decontamination of surfaces and equipment, and disposed of accordingly. i.e. clean to remove most of the organic matter so that chemical decontamination is effective.				
6.2	Decontamination to be performed with a disinfectant effective against the pathogen(s) in use, or a neutralizing chemical effective against the toxin(s) in use, at a frequency to minimize the potential of exposure to infectious material or toxins.				
6.3	Equipment, supplies, wastes, etc. are disinfected prior to removal from the laboratory or if waste is being removed for decontamination or disposal through EH&S, then double contained and surface decontaminated.				
6.4	All biohazardous material decontaminated prior to disposal (or disposed as hazardous waste through EH&S). Contaminated aqueous liquids to be decontaminated prior to release to sanitary sewers. – indicate method(s): _____				
6.5	If autoclaves are used for decontamination, lab is aware of SOP-Biosafety-09 Autoclaves – Biohazardous Waste Treatment and biological indicators (<i>Bacillus stearothermophilus</i> spores) are used weekly to monitor efficacy in a representative waste load.				
6.6	Name of person responsible for biological indicator testing: _____				
6.7	Biohazard labels, if present, are defaced after autoclave decontamination and prior to disposal. (do not use red biohazard bags with a printed biohazard label for waste that will be autoclaved and discarded in the municipal waste)				
6.8	Biohazardous material contaminated with chemical hazards or radioisotopes is disposed through EH&S. Human and animal tissues are disposed through EH&S for incineration.				



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6.9	Bench coat (paper backed with plastic) may be used to contain hazardous material. If used it is changed regularly & not taped to benches.				
6.10	Contaminated sharps are placed in an approved labelled puncture-proof disposable container for decontamination.				
Comment re storage, decontamination & disposal:					
7. Training					
7.1	Lab biosafety information is available including Queen's Biosafety Policies and Manual 2017 (check – there should be either a link on computer or a hardcopy; confirm that lab members know how to find their biohazard permit and SOPs either in the lab or in TRAQ/Romeo).				
7.2	All staff/students have received the appropriate training; check that training record was signed by the trainee and the supervisor (or designate). <ul style="list-style-type: none"> • Training records should be organized with those for each individual together. • Training records for those still working in the lab should be in a group. • Records for those who have left the lab should be grouped separately and retained for 5 years. 				
7.3	Lab is aware that everyone listed on a biohazard permit is to complete the appropriate Queen's EH&S Biosafety Training quiz (level 1 or level 2).				
7.4	Refresher training on emergency response procedures is provided annually and documented in the lab.				
Comment re training:					
8. Medical Surveillance					
8.1	<ul style="list-style-type: none"> • Lab is aware that in an Emergency they should go to KGH Emergency; • that Walsh and Associates is the Occupational Health Services provider for Queen's (no longer KGH OHS); • Walsh and Associates will provide appropriate follow-up care after an incident • Walsh and Associates will provide any medical surveillance for the lab as specified in the biohazard permit e.g. immunizations, titre checks, etc. 				
8.2	Immunizations required for work in the lab?				
8.3	Any specific immune-surveillance or incident response info required and posted?				
Comment re medical surveillance:					