



## BIOSAFETY SELF AUDIT

PRINCIPAL INVESTIGATOR/PERMIT HOLDER:

SELF AUDIT COMPLETED BY:

LABORATORY ROOM NUMBER: Building: Rm. #:

CONTAINMENT LEVEL: 1 2 RISK GROUP: 1 2

DATE OF AUDIT: \_\_\_\_\_

AUDIT TO BE COMPLETED BY (DATE):

		Y	N	N/A	Comment (if N/A comment)
<b>Access Control &amp; Hazard Awareness</b>					
1	Access to the laboratory is limited or restricted to authorized personnel only.				
2	Proper lab hazard signs are posted. Emergency contact information is provided.				
3	All persons have met specific entry requirements and have been advised of the potential hazards in the laboratory.				
4	Persons are informed that conditions such as pregnancy or compromised immune systems may increase risk.				
5	Individuals under the age of 16 are not permitted in the laboratory.				
6	Employees/students are thoroughly trained in good laboratory practices and techniques. All Lab personnel handling Biohazardous material have completed the T.U. Biosafety course or acceptable equivalent (with BSO approval). A list of personnel authorized to work with				

	Biohazardous material is posted in the lab and is up to date.				
7	Employees work practices are monitored to ensure safety and adherence to protocols.				
8	Appropriate protective equipment (as per protocols) is available to lab workers and visitors.				
9	Workers are trained in post exposure protocols.				
10	Chemical Safety Data Sheets and Pathogen Safety Data Sheets are available and up to date (PSDS are available through the Public Health Agency of Canada website).				
<b>Laboratory Design</b>					
11	The laboratory is designed to permit general cleaning and housekeeping and is clean, neat and organized.				
12	There is no evidence of cracked surfaces or need for general repair (leaking pipes, tiles lifted).				
13	Bench tops are impervious to liquids and resistant to alkali, acids, organic solvents and heat.				
14	The surfaces of walls, floors and ceilings are impervious to liquids and readily cleanable.				
15	Floors are slip resistant.				
16	Windows are closed and sealed (permanently or with a screen).				
17	All components of essential services requiring maintenance or replacement are located outside of the facility, (i.e. circuit breakers, gas shut off) or are easily accessible.				
18	Dedicated hand washing facility is located near each laboratory exit (hands-free preferred, but not required).				
19	Air flow is sufficient to exhaust vapours of flammable liquids and dangerous chemicals.				

20	Lab Coats are hung near the entry way and are separate from where street clothes are stored				
21	Appropriate storage areas are available for personnel items, back-packs away from biohazardous work areas.				
22	Alarmed equipment is identified and emergency contact information is affixed to the equipment.				
23	"Paper work areas" are located away from chemical or biohazard work areas.				
24	Food and drink for consumption are stored outside of laboratory.				
25	Emergency systems are in place: fire extinguisher, eyewash, and shower.				

<b>OPERATIONAL PROCEDURES</b>					
26	Long hair is tied back during laboratory work.				
27	Lab coats are worn, buttoned, with sleeves tucked into gloves when working with infectious material.				
28	Gloves are changed frequently when working with infectious material and before working with "clean" equipment and after possible contamination.				
29	Hands are washed after removing gloves, routinely throughout the day, after possible exposure and prior to leaving the lab.				
30	Received samples are inspected for damage, opened in the BSC, surfaces decontaminated and supporting documentation verified.				
31	All procedures with a high potential for creating aerosols or using high concentrations of an infectious agent are performed in a BSC.				
32	Before work in a BSC is initiated, start up procedures including surface decontamination, inward air flow and purging are completed.				
33	Appropriate BSC shut down procedure is in place and followed.				

34	Equipment inside a BSC is such that air flow is not impeded. Air grilles are not obstructed.				
35	All manipulations are performed at least 16 cm (6 inches) inside the sash of a BSC. Rapid movements are avoided.				
36	When rotating or moving equipment in a BSC, it is prohibited to perform any other manipulations in the cabinet.				
37	Mechanical pipetting devices are used. Mouth pipetting is never used and prohibited. All pipettes are "to deliver."				
38	Used pipettes are submerged horizontally in a suitable disinfecting solution, inside a BSC, or are disposed after use.				
39	Needles are not bent, sheared or recapped prior to disposal. Used needles are not reused. Needles are disposed of in a proper sharps container.				
40	When transferring infectious material from pipette to petri dish or bottle, the liquid is released as close as possible to the receptacle, or allowed to run down the wall, never a straight drop from a height.				
41	Sharp containers are never filled past the marked line.				
42	When possible, capped leak proof tubes and bottles are used when working with/or storing infectious agents. Where possible the use of glass is minimized (to reduce the risk of breakage).				
43	All infectious agents are transported in unbreakable, leak proof containers suitable for decontamination.				
44	Magnetic stir bars are added before liquid.				
45	Inoculating loops are cooled before they are inserted into a liquid culture. Micro incinerators or pre-sterilized loops are used.				

46	When withdrawing a needle from a stoppered bottle, the needle and bottle are wrapped with a disinfectant soaked absorbent. Air bubbles are expelled into such absorbent.				
47	Sonicating, mixing, grinding and blending utilize equipment with gasket lids and leak proof bearings. Vortexing is used instead of tipping to mix. Aerosols are allowed to settle prior to opening.				
48	Centrifuges are: properly serviced, maintained, interlocked and balanced. Regularly checked for stress, damage and decontaminated. Checks recorded.				
49	When working with cryogenic materials appropriate PPE is used: face shields, apron, insulated gloves? Samples are introduced slowly to prevent splatter, containers are not over-filled?				
50	Compressed gas cylinders are securely stored away from exits, leak tested and correct gauges used?				
51	Any work with Radioactive material as well as Biohazardous material requires a Radiation Work Permit as well as a Biosafety Work Permit. Is a Radiation Work Permit required?				
52	Animal work with Pathogenic material is approved by the Animal Care Committee as well as the Biosafety Officer. All individuals are trained to minimize exposure e.g. scrapes, bites, needle sticks and other unique hazards.				
53	Electrical hazards are identified and addressed. CSA approved, no frayed wires or use of electricity near sources of water.				
54	Appropriate waste containers are used and do not pose a tipping risk. Surfaces are decontaminated or double bagged to permit transfer for decontamination.				
55	Waste procedures are available and followed.				

56	Autoclave procedures are available. Bio-indicators are used for loads which contain any biohazardous material for decontamination. Autoclave use records are completed at time of use.				
57	All specimens of unknown status are autoclaved or sent for incineration.				
58	All equipment exposed to infectious materials is decontaminated prior to repair or servicing.				
59	Written protocols outlining decontamination of work surfaces, spills and wastes are available and followed.				
60	All spills and accidents which result in exposures to infectious materials are immediately reported, recorded and investigated.				

For the record, to ensure that lab personnel have been informed of the risks, Laboratory SOPs, and emergency procedures please have all of your lab personnel sign below indicating that the information above was explained:

Date Reviewed	Name of Personnel	Personnel Signature

**As Principal Investigator/Permit Holder I attest to having completed this inspection report and conducting the annual review with my research group.**

\_\_\_\_\_  
Principal Investigator/Permit Holder Signature

\_\_\_\_\_  
Date

**Once Completed, please save this form and send it by email to Cwilliams@trentu.ca.**