

Office of Safety  
 University of North Dakota  
 3851, Campus Rd Stop 9031  
 Grand Forks, ND 58202-9031  
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# BSL-3 FACILITY INSPECTION FORM



DATE OF SURVEY:	CONDUCTED BY:	BUILDING:
ROOM NUMBER:	DEPARTMENT:	PRINCIPAL INVESTIGATOR:
E-MAIL ADDRESS:		
RESPONSIBLE PERSON (OTHER THEN PI):		
PHONE NUMBER:	E-MAIL ADDRESS:	

ITEM #	ITEM	YES	NO	CTI	N/A	COMMENTS CTI=CORRECTED AT TIME OF INSPECTION
<b>SECTION A: GENERAL LAB SAFETY</b>						
<b>1.0 SIGNAGE</b>						
1.1	The laboratory door(s) are posted with the current Office of Safety issued signage and display up-to-date emergency contact information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>2.0 DOCUMENTATION AND TRAINING</b>						
2.1	All personnel know how to access the Office of Safety website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.2	All personnel know how to access UND's <u>Bloodborne Pathogens Exposure Control Plan</u> on the Office of Safety website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.3	All personnel know how to access UND's <u>Institutional Biosafety Manual</u> on the Office of Safety website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.4	All personnel know how to access <u>University's Chemical Hygiene Plan</u> on the Office of Safety website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.5	An up-to-date <u>Chemical Inventory</u> is available inside each laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.6	Facility specific emergency plans are available and up-to-date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.7	All personnel have taken the <u>Laboratory Safety Training Course</u> within the past year and documentation is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.8	All personnel have attended <u>Radiation Safety Training</u> within the past 3 years ( <b>Radiation labs only</b> ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.9	All personnel who work with human blood, bodily fluids, tissues, cell lines, etc. have completed the <u>Bloodborne Pathogens Training</u> within the last year and documentation is available ( <b>This training is independent of Laboratory Safety Training</b> ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>3.0 SHIPPING TRAINING</b>						
3.1	If your lab ships biological/infectious agents or dry ice, has an individual from the lab taken <u>Compliance Training for Shipping Infectious and Biological Substances</u> with the past 2 years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2	If yes, please list the name of the trained person and the last training date below: <b>Name:</b> _____ <b>Date:</b> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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<b>4.0 CHEMICAL STORAGE</b>						
4.1	All chemicals are labeled with the full chemical name. <i>(Example: Ethyl alcohol - not ETOH).</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.2	Chemical containers are in good condition (i.e. completely intact and clean on the outside).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.3	Legacy / obsolete chemicals (inherited, unused for 10+ years, obvious container deterioration) are collected and given to Office of Safety for disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.4	Chemicals are stored by compatibility <i>(i.e. flammables and oxidizers are separated, acids and bases are separated, etc.).</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.5	Mineral acids are stored separately from organic acids.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.6	Perchloric acid is stored separately from all other materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.7	Chemicals are stored in appropriate locations <i>(i.e. flammables are in a flammables cabinet, corrosives are in a corrosives cabinet, etc.).</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.8	Corrosives are stored in a secondary container (Example: polypropylene bin).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.9	Shelves, cabinets, and counter tops are stable and not overloaded, and containers are placed on shelves in a safe manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10	Chemicals are not stored on the floor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11	Chemicals are stored in such a way as to prevent release to the environment (stored away from sink drains; containers are tightly capped).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>5.0 FLAMMABLE LIQUIDS STORAGE</b>						
5.1	Flammables are stored in an approved flammable liquids cabinet. (Contact Office of Safety with questions.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.2	Volatile liquids are stored in an explosion-proof refrigerator when required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.3	Aerosol cans are kept away from heat and ignition sources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>6.0 SPECIAL CHEMICAL HAZARDS</b>						
6.1	Acetyl cholinesterase inhibitors are stored securely and in compatibility groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.2	Pyrophoric compounds are stored by compatibility groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.3	Shock sensitive compounds are stored by compatibility groups. For those compounds that require underwater storage (reactive when dry), periodic inspections of the material are conducted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.4	Unstable materials, cryogenics, and water-reactive materials are handled properly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.5	Carcinogens, teratogens, mutagens are stored securely and in compatibility groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.6	Written procedures are in place for the use of acutely hazardous chemicals <i>(i.e. carcinogens, reproductive hazards, highly toxic substances, etc.).</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.7	Laboratory personnel know the peroxide-forming chemicals used in the lab.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.8	Containers of peroxide-forming chemicals are disposed of properly through Office of Safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.9	Peroxide-forming chemicals are labeled with the date received and the expiration date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>7.0 MERCURY</b>						
7.1	Alternatives to mercury are used, if possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.2	All mercury thermometers have been replaced with mercury-free thermometers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.3	Mercury containing devices still in use are intact and are not leaking. <i>Mercury leaks or spills are reported to Office of Safety immediately.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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7.4	Unused mercury containing devices (thermometers, thermostats, etc.) are disposed of through Office of Safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>8.0 DEA CONTROLLED SUBSTANCES</b>						
8.1	Federal <u>DEA License</u> is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.2	State of North Dakota Board of Pharmacy License is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.3	DEA-regulated items are secured in a locked container.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.4	Expired drugs are disposed of properly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.5	Lab has proper record keeping of stock, usage, and disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>9.0 COMPRESSED GASES</b>						
9.1	Cylinders secured.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.2	Away from heat.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.3	Flammable and oxidizing gases separated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.4	Away from exits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>10.0 FUME HOODS</b>						
10.1	Inspected within last year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.2	Undamaged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.3	Used Correctly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>11.0 BIOLOGICAL SAFETY CABINETS</b>						
11.1	All active BSCs have been certified within the last 12 months by a vendor approved by UND.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.2	The certification label is attached and initialed by a vendor approved by UND.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.3	Intake and rear grilles are clear of obstructions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.4	Bunsen burners and/or open flames are not used in biological safety cabinets. ( <i>Open flames are not permitted inside BSCs; consider an alternative, such as an electrical Bacti-Cinerator</i> ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.5	Work surfaces are clean and free of visible biological residue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.6	The sash alarm is not muted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>12.0 ELECTRICAL</b>						
12.1	Extension cord use is temporary.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.2	Proper grounding is used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.3	Cord and equipment in good condition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.4	No outlet overloading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.5	Outlets near water GFCI protected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.6	Electrical Panels Accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.7	Shock hazards have proper signage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>13.0 EMERGENCY EQUIPMENT</b>						
13.1	<b>FIRE EXTINGUISHER</b>					
	Correct type Fire Extinguisher present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Fire Extinguisher easily accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Fire Extinguisher tagged within the last year by Office of Safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13.2	<b>SAFETY SHOWERS</b>					
	Safety showers are unobstructed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Safety showers are tested monthly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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	Safety showers are functional and installed properly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13.3	<b>EYEWASHES</b>					
	Eyewashes are unobstructed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Eyewashes are tested monthly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Eyewashes are functional and installed properly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13.4	<b>SPILL KITS AND FIRST AID</b>					
	Spill kits and first aid are stocked appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Spill kits and first aid are readily accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Disinfectant available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Broom, dustpan, forceps available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Calcium gluconate available for HF.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>14.0 CHEMICAL WASTE</b>						
14.1	Office of Safety picks up all chemical waste from the facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.2	Chemicals are not put down the drain, in the regular trash, or in biomedical waste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.3	All chemical / chemical waste containers are closed except when in use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.4	Chemical wastes are compatible with their containers and are stored by compatibility ( <i>i.e. acid waste is not stored with alkaline waste</i> ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.5	Office of Safety picks up all empty P-listed chemical containers from the facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.6	Office of Safety picks up expired pharmaceutical wastes (excluding DEA controlled substances) from the facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>15.0 BIOLOGICAL WASTE</b>						
15.1	Biomedical waste containers are labeled with the Biohazard symbol and the word "Biohazard".					
15.2	An orange / red Biohazard bag is used to dispose of biohazardous waste.					
15.3	Biohazard waste containers are closed except when adding waste.					
15.4	Biohazards are not put down the drain or in regular trash.					
15.5	Biohazard waste is not mixed with chemical waste.					
15.6	Facility-specific SOPs for the treatment and removal of biohazard waste from the facility are available and adhered to.					
<b>16.0 SHARPS HANDLING AND WASTE</b>						
16.1	Sharps are disposed of in a sharps disposal container and the containers are no greater than ¾ full.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16.2	Sharps containers are tightly lidded to prevent the contents from spilling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16.3	Office of Safety picks up sharps waste for disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>17.0 RADIOACTIVE WASTE</b>						
17.1	Lab has current authorization for ordering, working with, and/or storing radioactive materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.2	If lab has received an annual letter indicating inactive status, the lab does not have any radioactive materials (RAM) or RAM waste in the lab.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.3	Radioisotopes in use are listed on authorization permit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.4	Personnel working with radioactive materials are identified on PI's authorization permit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.5	All personnel listed on the radiation safety permit are up-to-date on their Office of Safety required <u>Radiation Safety Training</u> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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17.6	Area Geiger meter surveys/wipe tests are performed during the work weeks that radioactive materials are used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.8	No unauthorized removal of radioactive material from a facility has occurred. All transport of radioactive materials between facilities is conducted by Office of Safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.9	<b><i>“Radioactive Material Laboratory”</i></b> signs are posted at the lab entrance and on the lab bench/areas/equipment where radioactive material is used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.10	Use and storage of radioactive materials takes place in the authorized area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.11	Shielding is present and appropriate for type of radiation. Shielding reduces dose rate to 2 mR/hr or less at 30 cm from source or surface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.12	All radioactive waste is stored in Office of Safety provided radioactive waste containers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.13	Radioactive material is secured against unauthorized access or removal. Methods include locking unattended laboratories, locking refrigerators or freezers in unrestricted areas or for shared refrigerators or freezers, securing in a lock box attached to the refrigerator or freezer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.14	Radioactive waste is segregated by isotope and waste type (Dry, Liquid, or Liquid Scintillation Vial).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.15	Radioactive waste containers are labeled with a provided Office of Safety Radioactive Waste Label complete with PI's name, and isotope.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.16	Radioactive waste is not disposed of via sewer without authorization and documentation. Sewer disposal is not in excess of authorized limits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.17	Personnel wear badges properly when handling radioactive material.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.18	Personnel radioactive exposure records are stored in the lab's Radiation Safety Binder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.19	Personal dosimetry badges and control badges are stored away from radioactive materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.20	Labels on shipping boxes used for receiving radioactive materials are defaced prior to disposal through housekeeping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>18.0 AUTOCLAVE USE</b>						
18.1	A facility specific SOP for autoclave validation is available and adhered to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18.2	Documentation of autoclave validation is maintained and made available upon request.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18.3	Autoclaves are validated at least monthly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SECTION B: BIOSAFETY (These questions are based on the Biosafety level 3 section of Biosafety in Microbiological and Biomedical Laboratories, 5<sup>th</sup> Edition.</b>						
1.1	<b>Biological Agents used in this laboratory for research.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2	<b><i>Access to the laboratory is limited or restricted</i></b> when experiments involving infectious organisms are in progress. Enforcement is the responsibility of the PI/Lab Supervisor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3	<b>Persons must wash their hands:</b> <b>a) After working with potentially hazardous materials including:</b> i. infectious organism's ii. Organisms with r/syn DNA/RNA iii. Animals. <b>b) Before leaving the lab.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.4	Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption must not be permitted in laboratory areas. Food must be stored outside the laboratory area in cabinets or refrigerators designated and used for this purpose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.5	Mouth pipetting is prohibited; mechanical pipetting devices must be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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1.6	<p>Policies for the safe handling of sharps, such as needles, scalpels, pipettes, and broken glassware must be developed and implemented. Whenever practical, laboratory supervisors should adopt improved engineering and work practice controls that reduce risk of sharps injuries. Precautions, including those listed below, must always be taken with sharp items. These include:</p> <p>a. Careful management of needles and other sharps are of primary importance. Needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal.</p> <p>b. Used disposable needles and syringes must be carefully placed in conveniently located puncture-resistant containers used for sharps disposal.</p> <p>c. Non-disposable sharps must be placed in a hard walled container for transport to a processing area for decontamination, preferably by autoclaving.</p> <p>d. Broken glassware must not be handled directly. Instead, it must be removed using a brush and dustpan, tongs, or forceps. Plastic ware should be substituted for glassware whenever possible.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.7	Decontaminate work surfaces after completion of work and after any spill or splash of potentially infectious material with appropriate disinfectant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.8	<p>Decontaminate all cultures, stocks, and other potentially infectious materials before disposal using an effective method. Depending on where the decontamination will be performed, the following methods should be used prior to transport:</p> <p>a. Materials to be decontaminated outside of the immediate laboratory must be placed in a durable, leak proof container and secured for transport.</p> <p>b. Materials to be removed from the facility for decontamination must be packed in accordance with applicable local, state, and federal regulations.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.9	A sign incorporating the <b><u>UNIVERSAL BIOHAZARD SYMBOL</u></b> must be posted at the entrance to the laboratory when infectious agents are present. Posted information must include: the laboratory's biosafety level, supervisor's name (or other responsible personnel), telephone number, and required procedures for entering and exiting the laboratory. Special precautions for organisms containing r/syn DNA/RNA are also included on door signs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	An effective integrated pest (insect and rodent) management program is required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.11	The laboratory supervisor must ensure that laboratory personnel receive appropriate training regarding their duties, the necessary precautions to prevent exposures, and exposure evaluation procedures. Personnel must receive annual updates or additional training when procedural or policy changes occur. Personal health status may impact an individual's susceptibility to infection, ability to receive immunizations or prophylactic interventions. Therefore, all laboratory personnel and particularly women of childbearing age should be provided with information regarding immune competence and conditions that may predispose them to infection. Individuals having these conditions should be encouraged to self-identify to the institution's healthcare provider for appropriate counseling and guidance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Laboratory personnel must be provided medical surveillance, as appropriate, and offered available immunizations for agents handled or potentially present in the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	A <b><u>laboratory-specific biosafety manual</u></b> must be prepared and adopted as policy. The biosafety manual must be available and accessible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	The laboratory supervisor must ensure that laboratory personnel demonstrate proficiency in standard and special microbiological practices before working with BSL-3 agents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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1.16	Potentially infectious materials must be placed in a durable, leak proof container during collection, handling, processing, storage, or transport within a facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Laboratory equipment should be routinely decontaminated, as well as, after spills, splashes, or other potential contamination. a. Spills involving infectious materials must be contained, decontaminated, and cleaned up by staff properly trained and equipped to work with infectious material. b. Equipment must be decontaminated before repair, maintenance, or removal from the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.18	Incidents that may result in exposure to infectious materials must be immediately evaluated and treated according to procedures described in the laboratory biosafety manual. All such incidents must be reported to the laboratory supervisor. Medical evaluation, surveillance, and treatment should be provided and appropriate records maintained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Animal and plants not associated with the work being performed must not be permitted in the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	All procedures involving the manipulation of infectious materials must be conducted within a BSC (preferably Class II or Class III), or other physical containment devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.21	Workers in the laboratory where protective laboratory clothing with a solid-front, such as tie-back or wrap-around gowns, scrub suits, or coveralls. Protective clothing is not worn outside of the laboratory. Reusable clothing is decontaminated before being laundered. Clothing is changed when contaminated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.22	Eye and face protection (goggles, mask, face shield or other splash guard) is used for anticipated splashes or sprays of infectious or other hazardous materials. Eye and face protection must be disposed of with other contaminated laboratory waste or decontaminated before reuse. Persons who wear contact lenses in laboratories must also wear eye protection.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.23	Gloves must be worn to protect hands from exposure to hazardous materials. Glove selection should be based on an appropriate risk assessment. Alternatives to latex gloves should be available. Gloves must not be worn outside the laboratory. In addition, BSL-3 laboratory workers: a. Changes gloves when contaminated, glove integrity is compromised, or when otherwise necessary. Wear two pairs of gloves when appropriate. b. Remove gloves and wash hands when work with hazardous materials has been completed and before leaving the laboratory. c. Do not wash or reuse disposable gloves. Dispose of used gloves with other contaminated laboratory waste. Hand washing protocols must be rigorously followed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.24	Eye, face, and respiratory protection must be used in rooms containing infected animals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.25	Laboratory doors must be self-closing and have locks in accordance with the institutional policies. The laboratory must be separated from areas that are open to unrestricted traffic flow within the building. Laboratory access is restricted. Access to the laboratory is through two self-closing doors. A clothing change room (anteroom) may be included in the passageway between the two self-closing doors.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.26	Laboratories must have a sink for hand washing. The sink must be hands-free or automatically operated. It should be located near the exit door. If the laboratory is segregated into different laboratories, a sink must also be available for hand washing in each zone. Additional sinks may be required as determined by the risk assessment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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1.27	<p>The laboratory must be designed so that it can be easily cleaned and decontaminated. Carpets and rugs are not permitted. Seams, floors, walls, and ceiling surfaces should be sealed. Spaces around doors and ventilation openings should be capable of being sealed to facilitate space decontamination.</p> <p>a. Floors must be slip resistant, impervious to liquids, and resistant to chemicals. Consideration should be given to the installation of seamless, sealed, resilient or poured floors with integral cove bases.</p> <p>b. Walls should be constructed to produce a sealed smooth finish that can be easily cleaned and decontaminated.</p> <p>c. Ceilings should be constructed, sealed, and finished in the same general manner as walls.</p> <p>Decontamination of the entire laboratory should be considered when there has been gross contamination of the space, significant changes in laboratory usage, for major renovations, or maintenance shut downs.</p> <p>Selection of the appropriate materials and methods used to decontaminate the laboratory must be based on the risk assessment.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.28	<p>Laboratory furniture must be capable of supporting anticipated loads and uses. Spaces between benches, cabinets, and equipment must be accessible for cleaning.</p> <p>a. Bench tops must be impervious to water and resistant to heat, organic solvents, acids, alkalis, and other chemicals.</p> <p>b. Chairs used in laboratory work must be covered with a non-porous material that can be easily cleaned and decontaminated with appropriate disinfectant.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.29	All windows in the laboratory must be sealed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.30	BSCs must be installed so that fluctuations of the room air supply and exhaust do not interfere with proper operations. BSCs should be located away from doors, heavily traveled laboratory areas, and other possible airflow disruptions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.31	Vacuum lines must be protected with HEPA filters, or their equivalent. Filters must be replaced as needed. Liquid disinfectant traps may be required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.32	An eyewash station must be readily available in the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.33	<p>A ducted air ventilation system is required. This system must provide sustained directional airflow by drawing air into the laboratory from “clean” areas toward “potentially contaminated” areas. The laboratory shall be designed such that under failure conditions the airflow will not be reversed.</p> <p>a. Laboratory personnel must be able to verify directional airflow. A visual monitoring device, which confirms directional airflow, must be provided at the laboratory entry. Audible alarms should be considered to notify personnel of air flow disruption.</p> <p>b. The laboratory exhaust air must not re-circulate to any other area of the building.</p> <p>c. The laboratory building exhaust air should be dispersed away from occupied areas and from building air intake locations or the exhaust air must be HEPA filtered.</p> <p>HEPA filter housings should have gas-tight isolation dampers, decontamination ports, and/or bag-in/bag-out (with appropriate decontamination procedures) capability. The HEPA filter housing should allow for leak testing of each filter and assembly. The filters and the housing should be certified at least annually.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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1.34	HEPA filtered exhaust air from a Class II BSC can be safely re-circulated into the laboratory environment if the cabinet is tested and certified at least annually and operated according to manufacturer's recommendations. BSCs can also be connected to the laboratory exhaust system by either a thimble (canopy) connection or directly exhausted to the outside through a hard connection. Provisions to assure proper safety cabinet performance and air system operation must be verified. BSCs should be certified at least annually to assure correct performance. Class III BSCs must be directly (hard) connected up through the second exhaust HEPA filter of the cabinet. Supply air must be provided in such a manner that prevents positive pressurization of the cabinet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.35	A method for decontaminating all laboratory wastes should be available in the facility, preferably within the laboratory (e.g., autoclave, chemical disinfection, or other validated decontamination method).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.36	Equipment that may produce infectious aerosols must be contained in primary barrier devices that exhaust air through HEPA filtration or other equivalent technology before being discharged into the laboratory. These HEPA filters should be tested and/or replaced at least annually.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.37	Facility design consideration should be given to means of decontaminating large pieces of equipment before removal from the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.38	Enhanced environmental and personal protection may be required by the agent summary statement, risk assessment, or applicable local, state, or federal regulations. These laboratory enhancements may include, for example, one or more of the following: an anteroom for clean storage of equipment and supplies with dress-in, shower-out capabilities; gas tight dampers to facilitate laboratory isolation; final HEPA filtration of the laboratory exhaust air; laboratory effluent decontamination; and advanced access control devices, such as biometrics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.39	The BSL-3 facility design, operational parameters, and procedures must be verified and documented prior to operation. Facilities must be re-verified and documented at least annually.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	