

Laboratory Biosafety Level 3 Inspection Report (11/2015)

**Oklahoma State University
Institutional Biosafety Committee
223 Scott Hall
Stillwater, OK 74078**

Lab Director:	Inspected By:	
Lab Location (Bldg/Rm Nos.):	Department:	Inspection Type: <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> 3 yr Renewal
Lab Safety Officer:	College/Department Safety Officer:	Inspection Date:

List of Agents that will be Used/Stored in Lab (Check all applicable agent categories and list agents by category): <input type="checkbox"/> Recombinant DNA: <input type="checkbox"/> Parasitic: <input type="checkbox"/> Bacterial: <input type="checkbox"/> Toxin: <input type="checkbox"/> Viral: <input type="checkbox"/> Prion: <input type="checkbox"/> Fungal: <input type="checkbox"/> Other:	Agents/toxins are a risk to: <input type="checkbox"/> Humans <input type="checkbox"/> Animals <input type="checkbox"/> Plants
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Biosafety Level 3 (BSL-3): Applicable to clinical, diagnostic, teaching, research, or production facilities where work is performed with indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalation route of exposure. Laboratory personnel receive specific training in handling of pathogenic and potentially lethal agents. All procedures involving the manipulation of infectious materials are conducted with BSCs or other physical containment devices. The BSL-3 laboratory has special engineering and design features.

BSL	AGENTS	PRACTICES	SAFETY EQUIPMENT	FACILITIES
3	Indigenous or exotic agents with the potential for aerosol transmission and those associated with serious or lethal consequences	BSL-2 practices plus: • Controlled access • Decontamination of all wastes before disposal • Enrollment in the Occupation Health & Safety Program (OHSP)	Primary Barriers: Class I or II BSC or other containment device used for all open agent manipulations PPE: Protective lab clothing, gloves, face, eye, and respiratory protection as required	BSL-2 plus: • Physical separation from access • Self-closing, double-door access • Exhaust air is not recirculated • Negative airflow into lab

IBC Disposition:
 Approved for Work at: BSL-3
 Provisionally Approved for Work at: BSL-3

Comments:

IBC Chair Signature:	Date:	Biological Safety Officer Signature:	Date:
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INSPECTION CHECKLIST

Verbal Inspection		YES	NO	N/A	Comments
1.1	Lab doors are locked at all times				
1.2	Lab access limited/restricted when work with cultures/specimens is in progress				
1.3	Select agent labs: access is restricted to SRA cleared personnel when lab is hot and when SATs are present; non-SRA cleared personnel are escorted				
1.4	Non lab personnel are escorted				
1.5	There are written policies on who can enter the lab and these requirements are enforced.				
1.6	Minors are never allowed in the lab				
1.7	Personnel and visitors are advised of potential hazards prior to entering and/or working in the lab				
1.8	Personnel and visitors are advised of conditions and medications that can compromise their immune system				
1.9	Individuals at risk of acquiring infections or for whom infections may have serious consequences are denied access to lab				
1.10	Personnel receive appropriate training on biosafety procedures and practices, standard operating procedures, potential hazards, precautions to prevent exposures, and exposure evaluation procedures				
1.11	Lab personnel are trained to open packages containing biohazards in a BSC				
1.12	Personnel are trained to contain, decontaminate, and clean spills				
1.13	Personnel have been provided with task specific training by the lab supervisor				
1.14	Lab personnel have demonstrated proficiency for all procedures they will perform in the BSL-3 lab				
1.15	All lab employees have attended chemical hygiene or hazard communication training				
1.16	Lab personnel receive annual refresher training and/or additional training as necessary				
1.17	Personnel are enrolled in the OHSP and have their serum banked at UHS				
1.18	Lab personnel have been offered appropriate immunizations for agents and materials handled or potentially present in laboratory (e.g., Hepatitis B vaccine, Anthrax vaccine, etc.)				
1.19	Protective laboratory clothing with a solid front such as a tie-back or wraparound gown or coveralls is worn				
1.20	Eye and face protection (e.g., goggles, mask, face shield, or other splatter guard) is used for anticipated splashes or sprays of biohazardous materials				
1.21	Persons who wear contact lenses in the laboratory also wear eye protection				
1.22	Eye and face protection is disposed of as biohazardous waste or decontaminated before reuse				
1.23	Personnel using respirators are enrolled in Respiratory Protection Program				
1.24	Gloves are worn to protect hands from exposure to hazardous materials				
1.25	Lab personnel wash hands after handling biohazardous materials, after removing gloves, and before leaving the lab				
1.26	Hand washing protocols are rigorously followed				

Verbal Inspection		YES	NO	N/A	Comments
1.27	PPE is changed when contaminated, when the integrity is compromised, and/or at the completion of work				
1.28	Disposable PPE, including gloves, is not reused and is disposed of as biohazardous waste				
1.29	PPE is decontaminated or removed prior to leaving the laboratory				
1.30	Protective clothing is either discarded appropriately or decontaminated and laundered on-site				
1.31	No eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food in lab				
1.32	Mechanical pipetting devices are used (i.e., no mouth pipetting)				
1.33	Sharps handling policies and practices in place				
1.34	Plasticware is substituted for glassware whenever possible				
1.35	Broken glassware is only handled by mechanical means				
1.36	Needle/syringe use is kept to absolute minimum.				
1.37	Only needle-locking syringes or syringes with permanently affixed needles are used for injection or aspiration of infectious materials				
1.38	Needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated prior to disposal				
1.39	Sharps containers are decontaminated (e.g., autoclaved) prior to disposal or reprocessing				
1.40	Lab maintains a needlestick injury log				
1.41	Procedures minimize splashes/aerosols				
1.42	Spills and accidents are immediately reported to the lab director and the BSO				
1.43	Spills of biohazardous material are decontaminated by trained personnel while wearing HEPA respirators				
1.44	The lab director has prepared an incident/emergency response plan				
1.45	Work surfaces including those in the BSC are decontaminated at the completion of work and after any spill or splash of viable material				
1.46	Lab equipment is decontaminated on routine basis and prior to sending it for repair/maintenance or packaging it for shipment				
1.47	The lab is decontaminated annually, following a biohazardous spill outside of primary containment, and when the space is decommissioned or downgraded to a lower biosafety level				
1.48	An autoclave is available in the facility				
1.49	Materials decontaminated outside of lab are transported in durable, leak-proof, closed containers				
1.50	Materials to be removed from the facility for decontamination are packed in accordance with applicable local, state, and federal regulations				
1.51	Cultures, stocks, and regulated wastes are decontaminated by an approved method (e.g., autoclaving) before disposal				
1.52	Autoclave test strips or biological indicators are used at least monthly to verify decontamination				
1.53	Autoclave records are maintained				
1.55	Select agent labs: Inventory records are kept for all agents and records are reconciled on a regular basis				

Verbal Inspection		YES	NO	N/A	Comments
1.56	Cultures, tissues, specimens, and infectious wastes are kept in covered, leak-proof containers during collection, handling, processing, storage, transport, and shipment.				
1.57	There are written procedures in place for offsite transportation of biohazards				
1.58	Animals and plants not associated with the work are not permitted in the laboratory				
1.59	An insect and rodent control program is in effect				
1.60	A Class II or III BSC or other primary containment device is used for all manipulations of infectious materials, necropsies of infected animals, and harvesting of tissues or fluids				
1.61	The lab HVAC system provides 100% make-up air, 100% ducted exhaust, and maintains the lab a negative relative air pressure (i.e., the HVAC system is designed to prevent the lab from becoming positively pressurized)				
1.62	Exhaust air is dispersed away from occupied areas and building air intakes or is HEPA filtered				
1.63	HVAC design allows for leak testing of each HEPA filter and assembly and filters are certified annually				
1.64	The lab is equipped with audible HVAC failure alarms (not required)				
1.65	A system is provided for electronic transfer of information				
1.66	Facilities are commissioned prior to operation and recertified annually				
Visual Inspection		YES	NO	N/A	Comments
2.1	Lab is located away from public areas				
2.2	Lab has lockable doors for access control				
2.3	Access to the laboratory is through two self-closing doors				
2.4	SAT labs: A log (manual or electronic) documenting the date/time of each person who enters the lab is maintained				
2.5	Biohazard signage including a biohazard symbol, the laboratory biosafety level, required immunizations, required PPE, required lab entry/exit procedures, and emergency contact information is posted at all lab entrances when infectious agents are present				
2.6	The lab is equipped with a visual device that allows personnel to verify that the lab pressure is negative before entry				
2.7	A lab-specific biosafety, biosecurity, and incident response plans/SOPs have been developed and are available in the lab				
2.8	MSDSs are available for all biohazards used in the lab				
2.9	Emergency contact information for the PI and the BSO is posted near the phone				
2.10	Training of personnel is adequately documented				
2.11	Spill clean-up procedures are developed and posted				
2.12	Emergency exit procedures are posted				
2.13	Lab has adequate lighting				
2.14	Lab is designed to be easily cleaned and decontaminated (e.g., no carpets or rugs, all surfaces are impervious to liquids and resistant to chemicals)				

2.15	Lab furniture and equipment is capable of supporting anticipated loads and uses				
2.16	No fabric upholstered/covered furniture or chairs				
2.17	Lab has a hands-free sink for hand washing				
2.18	BSC is tested and certified at least annually				
2.19	BSC is located away from possible airflow disruptions (e.g., room air supply and exhaust, doors, etc.)				
2.20	The front grill of the BSC is not blocked or covered and cabinet is free of clutter				
2.21	Vacuum lines are protected with liquid disinfectant traps or are HEPA filtered.				
2.22	Sharps containers are labeled, conveniently located, and puncture resistant				
2.23	Containers for non-disposable sharps are hard-walled and leak proof				
2.24	Effective disinfectants are available for all agents in use				
2.25	Refrigerators and freezers containing biohazards are labeled with a biohazard symbol				
2.26	All lab equipment that may be contaminated is labeled with a biohazard symbol				
2.27	All containers holding biohazardous materials are labeled with a biohazard symbol				
2.28	All biohazard waste receptacles are closed/covered when not in use or waste is autoclaved daily				
2.29	Biological and chemical spill kits are available				
2.30	All windows are sealed				
2.31	An eyewash station is readily available				

INSPECTION FINDINGS

Code M = Minor Deficiency Code S = Significant Deficiency

Checklist Number	Code	Deficiencies	Required Corrective Actions	Suspense