

# Animal Facility Biosafety Level 2 Inspection Report (5/2017)

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

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

<p><b>List of Agents that will be Used/Stored in Animal facility</b> (Check all applicable agent categories and list agents by category):</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Recombinant DNA:</td> <td><input type="checkbox"/> Parasitic:</td> </tr> <tr> <td><input type="checkbox"/> Bacterial:</td> <td><input type="checkbox"/> Toxin:</td> </tr> <tr> <td><input type="checkbox"/> Viral:</td> <td><input type="checkbox"/> Prion:</td> </tr> <tr> <td><input type="checkbox"/> Fungal:</td> <td><input type="checkbox"/> Other:</td> </tr> </table>	<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:	<p><b>Agents/toxins are a risk:</b></p> <p><input type="checkbox"/> Humans: <input type="checkbox"/> Animals: <input type="checkbox"/> Plants:</p>
<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:								

**Animal Biosafety Level 2 (ABSL-2):** Suitable for working with animals infected with pathogenic agents associated with human or animal disease that is primarily transmitted by ingestion and/or exposure of percutaneous/mucous membranes.

ABSL	AGENTS	PRACTICES	SAFETY EQUIPMENT	FACILITIES
2	Associated with human or animal disease. Hazard = percutaneous injury, ingestion, mucous membrane exposure.	ABSL-1 practice plus: ● Limited access ● Biohazard warning signs ● Sharps precautions ● Biosafety manual ● Decontamination of infectious wastes and cages prior to washing	ABSL-1 equipment plus primary barriers: containment equipment appropriate for animal species <b>PPE:</b> Lab coats, gloves, face and respiratory protection as needed	ABSL-1 facility plus: ● Autoclave available ● Hand washing sink available in the animal room ● Mechanical cage washer recommended ● Negative airflow into animal and procedure rooms recommended

**IBC Disposition:**  
 Approved for Work at: .....  ABSL-2  
 Provisionally Approved for Work at: .....  ABSL-2

**Comments:**

<b>IBC Chair Signature:</b>	<b>Date:</b>	<b>Biological Safety Officer Signature:</b>	<b>Date:</b>
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# INSPECTION CHECKLIST

Verbal Inspection		YES	NO	N/A	Comments
1.1	Facility access is limited or restricted to only those persons required for program or support purposes				
1.2	Animal room access is limited/restricted to the fewest number of individuals possible				
1.3	Doors to areas where biohazardous materials and/or animals are housed are kept closed and are never propped open.				
1.4	Animal room doors are locked when personnel are not present				
1.5	Personnel at risk of acquiring infections or for whom infections may have serious consequences are denied access to facility unless special procedures can eliminate the risk				
1.6	All personnel are advised of potential hazards prior to entering/working in facility; non project personnel are escorted				
1.7	Personnel have read and follow biosafety procedures/practices				
1.8	All employees have attended orientation training (to include chemical hygiene, how to read MSDS sheets, and animal husbandry and training records are maintained)				
1.9	Personnel are trained on the potential hazards, precautions to prevent exposures, & exposure evaluation procedures				
1.10	Personnel receive annual refresher training and/or additional training as necessary				
1.11	Personnel are enrolled in the Occupational Health and Safety Program				
1.12	Personnel are appropriately immunized against or tested for the agents being used (e.g., HBV vaccinations, Tb skin test)				
1.13	Protective clothing such as lab coats, solid-front/wrap-around gowns, scrub suits, or coveralls are worn in the facility/animal rooms and protective clothing is removed before exiting the facility				
1.14	Appropriate face/eye protection and respiratory protection is worn by all personnel entering animal rooms (contact lens users should also wear eye protection)				
1.15	Goggles or face shield used when performing procedures that pose a splash risk outside of a BSC				
1.16	Eye and face protection is disposed of as biohazardous waste or decontaminated before reuse.				
1.17	Personnel using respirators are enrolled in respiratory protection program				
1.18	Boots, shoe covers, or other protective footwear and disinfectant foot baths are available and used where indicated				
1.19	Gloves are worn if hands are at risk of contact with infectious materials, infected animals, or contaminated surfaces				
1.20	Gloves are aseptically removed and disposed of when overtly contaminated, work with infectious materials is completed, upon leaving animal rooms or integrity is compromised.				
1.21	Gloves are not worn outside animal/procedure rooms or when touching "clean" surfaces (e.g., telephones, keyboards, etc.)				
1.22	Gloves are not reused.				
1.23	Personnel wash hands after handling viable material, handling animals, removing gloves, and before leaving the animal facility				
1.24	Protective clothing is changed when overtly contaminated				
1.25	Protective clothing is either discarded appropriately in the facility or laundered on-site				
1.26	Soiled/used lab clothing is autoclaved for chemically disinfected before laundering				
1.27	PPE is removed in such a way that prohibits transfer of biohazardous materials.				
1.28	No eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food is restricted to designated areas and is prohibited in animal/procedure rooms				

Verbal Inspection		YES	NO	N/A	Comments
1.29	Mechanical pipetting devices are used ( <i>i.e.</i> , no mouth pipetting)				
1.30	Sharps handling policies/practices in place (e.g., for parenteral injections, blood samples, aspiration of fluids from animals/vials, etc.)				
1.31	Plastic ware is substituted for glassware whenever possible				
1.32	Broken glassware is only handled by mechanical means				
1.33	Needle/syringe use is kept to absolute minimum				
1.34	Only needle-locking syringes or syringes with permanently affixed needles are used for injection or aspiration of infectious materials				
1.35	Disposable needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated prior to disposal				
1.36	Sharps containers are decontaminated (e.g., autoclaved or appropriate chemical treatment) prior to disposal or reprocessing				
1.37	Procedures minimize splashes/aerosols				
1.38	Work surfaces including those in the BSC are decontaminated at completion of work or after any spill/splash of viable material				
1.39	Spills/accidents are immediately reported to the facility Director or PI; spills of concentrated biohazardous materials or volumes > 10mls are reported to the BSO				
1.40	If the spills and/or accidents result in overt exposure appropriate medical evaluation, surveillance, and treatment are provided				
1.41	Spills involving biohazardous material are contained, decontaminated, and cleaned up by trained personnel.				
1.42	Equipment is decontaminated on routine basis, after work with an infectious agent, after any spill, splash, or other contamination by infectious material, prior to sending it for repair/maintenance, or packaging it for shipment				
1.43	Method for decontaminating facility waste is available in building ( <i>i.e.</i> , autoclave, incinerator, <i>etc.</i> )				
1.44	Materials decontaminated outside of animal/procedure rooms are transported in durable, leak-proof, closed containers that are labeled with a biohazard symbol and the outer surfaces are disinfected prior to removal from animal/procedure rooms.				
1.45	Cages are autoclaved or thoroughly decontaminated before bedding is removed and before they are cleaned/washed				
1.46	Cages are washed manually or in a mechanical cage washer with a final rinse temperature of at least 180°F				
1.47	Animal wastes (e.g., animal tissues, carcasses, contaminated feed/bedding, etc.) are decontaminated by an approved method (e.g., autoclaving) before disposal (as dictated by risk assessment)				
1.48	Animal wastes (e.g., animal tissues, carcasses, contaminated feed/bedding, etc.) are kept in covered, leak-proof containers during collection, handling, processing, storage, transport or shipment				
1.49	Materials not related to the experiment (e.g., plants, animals, etc.) are not permitted in the facility				
1.50	Insect/rodent control program in effect				
1.51	There are written procedures in place for offsite transportation of any potentially infectious material				
1.52	The facility maintains an accident/injury log that contains details such as where and how the incident happened.				
1.53	Class II BSC or equivalent is used for procedures that have potential to create aerosols or splashes or for work w/high concentrations or large volumes of infectious agent				

<b>Verbal Inspection</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Comments</b>
<b>1.54</b>	Equipment, cages, and racks are handled in a manner that minimizes contamination of other areas. (i.e., placed in BSC or equivalent when possible during manipulations)				
<b>1.55</b>	Consideration is given to the use of restraint devices and practices that reduce the risk of exposure during animal manipulations (physical restraint devices, chemical restraint medications, etc.)				
<b>1.56</b>	If work is done with an animal containing recombinant DNA or recombinant DNA-derived organisms, a permanent record is maintained of the experimental use and disposal of each animal or group of animals				
<b>1.57</b>	All genetically engineered neonates are permanently marked within 72 hours after birth, if their size permits; if their size does not permit marking, their containers are marked				
<b>1.58</b>	Transgenic animals contain distinct and biochemically assayable DNA sequences that allow identification of transgenic animals from among non-transgenic animals.				
<b>1.59</b>	If work is done with an animal containing recombinant DNA or recombinant DNA-derived organisms, a double barrier is provided to separate male and female animals unless reproductive studies are part of the experiment or other measures are taken to avoid reproductive transmission				
<b>Visual Inspection</b>		<b>YES</b>	<b>NO</b>	<b>N/A</b>	<b>Comments</b>
<b>2.1</b>	Facilities are located away from public areas and access is limited by secure locked doors				
<b>2.2</b>	Biohazard signage is posted at all facility entrances when infectious agents are present				
<b>2.3</b>	Posted biohazard signage includes biosafety level, required immunizations, required PPE, required facility exit procedures, and the PI's emergency contact information				
<b>2.4</b>	Facility Director or PI has established standard biosafety policies, procedures, and protocols for emergency situations (SOPs)				
<b>2.5</b>	There are written procedures in place for offsite transportation of potentially infectious materials				
<b>2.6</b>	Doors to areas where biohazardous material and/or animals are housed open inward and are self-closing; doors to cubicles inside an animal room may open outward or slide				
<b>2.7</b>	Doors to areas where biohazardous materials and/or animals are housed are kept closed and are never propped open				
<b>2.8</b>	A biohazard spill procedure is developed and posted				
<b>2.9</b>	SDSs are available for all biohazards used in the facility				
<b>2.10</b>	Emergency contact information (including the Biosafety Officer's phone number) is posted in a conspicuous location				
<b>2.11</b>	Eyewash station is readily available				
<b>2.12</b>	Facility is designed to be easily cleaned (e.g., no carpets/rugs, spaces between cabinets/equipment/furniture are accessible, etc.)				
<b>2.13</b>	Cabinet and bench tops are impervious to water and resistant to heat, organic solvents, acids, alkalis, and disinfectants				
<b>2.14</b>	Facility furniture/equipment is suitable for intended use/loads.				
<b>2.15</b>	No fabric upholstered/covered furniture or chairs				
<b>2.16</b>	Interior walls, floors, and ceilings are water resistant				
<b>2.17</b>	Facility windows are resistant to breakage; windows that open are fitted with fly screens				
<b>2.18</b>	Facility has adequate lighting for all activities				
<b>2.19</b>	Internal light fixtures, air ducts, utility pipes, etc. are arranged to minimize horizontal surface areas, to facilitate cleaning and minimize the accumulation of debris or fomites				
<b>2.20</b>	Penetrations in floors, walls and ceiling surfaces are sealed, to include openings around ducts, doors and door frames, to facilitate pest control and proper cleaning				

Visual Inspection		YES	NO	N/A	Comments
2.21	There is a hand washing sink in each room housing infected animals; if the animal facility has segregated areas where infectious materials and/or animals are housed or manipulated, a sink must also be available for hand washing at the exit from each area				
2.22	Sink traps and floor drains are filled with water and/or appropriate disinfectant to prevent the migration of vermin and gases				
2.23	Floors are slip resistant, impervious to liquids, and resistant to chemicals				
2.24	BSCs are tested and certified at least annually				
2.25	BSCs are not located near doors or windows that can be opened				
2.26	The front grills of the BSCs are not blocked or covered and cabinets are free of clutter.				
2.27	If vacuum lines are in place, each service connection is fitted with liquid disinfectant traps and an in-line HEPA filter, placed as near as practicable to each use point or service cock				
2.28	Sharps containers are labeled, conveniently located, and puncture resistant				
2.29	Non-disposable sharps containers are hard-walled and leak proof				
2.30	The direction of airflow into the animal facility is inward; animal rooms maintain inward directional airflow compared to adjoining hallways				
2.31	A ducted exhaust air ventilation system is provided				
2.32	Exhaust air is discharged to the outside without being recirculated to other rooms				
2.33	Cage wash area is designed to accommodate the use of high pressure spray systems, humidity, strong chemical disinfectants and 180°F water temperatures, during the cage/equipment cleaning process				
2.34	If transgenic arthropods or transgenic microbes that are transmitted by arthropods are used, interior work areas are appropriately screened (52 mesh), all perimeter joints and openings are sealed and additional arthropod control mechanisms used to minimize arthropod entry and propagation (i.e., appropriate screening of access doors) is in place				

# INSPECTION FINDINGS

Code M = Minor Deficiency    Code S = Significant Deficiency

## Special Notes & Considerations


Checklist Number	Code	Deficiencies	Required Corrective Actions	Suspense