

Arthropod Containment Level 1 Inspection Report (01/2023)

**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"/> 5 yr Renewal
Lab Safety Officer:	College/Department Safety Officer:	Inspection Date:

<p>List of Agents that will be Used/Stored in facility (Check all applicable agent categories and list agents by category):</p> <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"/> Other: <input type="checkbox"/> Fungal:</p>	<p>Agents/toxins are a risk:</p> <p><input type="checkbox"/> Humans: <input type="checkbox"/> Animals: <input type="checkbox"/> Plants:</p>
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Arthropod Containment Level 1 (BSL-1): Suitable for work with uninfected arthropod vectors or those infected with anon-pathogen including: 1) arthropods that are already present in the local geographic region regardless of whether there is active vector-borne disease transmission in the locale, and 2) exotic arthropods that upon escape would be inviable or become only temporarily established in areas not having active vector-borne disease transmission.

ACL	AGENTS	PRACTICES	SAFETY EQUIPMENT	FACILITIES
1	Not known to consistently cause disease in immunocompetent adult humans.	Standard microbiological practices and ACL practices as indicated below.	<p>Primary Barriers: Species appropriate containers; other special containment equipment is not required, but may be used as determined by appropriate risk assessment.</p> <p>PPE: Lab coats, gloves, face, and respiratory protection as needed</p>	<ul style="list-style-type: none"> • Insectary separate from general traffic areas • Doors minimize escape and entrance of arthropods • Windows prevent escape of the smallest arthropods contained within

IBC Disposition:
 Approved for Work at: ACL-1
 Provisionally Approved for Work at: ACL-1

Comments:

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

Verbal Inspection		YES	NO	N/A	Comments
1.01	Laboratory/insectary doors are kept shut when experiments are in progress and are locked after hours.				
1.02	Personnel at risk of acquiring infections or for whom infections may have serious consequences are denied access to the lab.				
1.03	Lab personnel receive appropriate training on standard operating procedures, potential hazards associated with the work, the necessary precautions to prevent exposures, and exposure evaluation procedures.				
1.04	Lab personnel receive annual refresher training and/or additional training as necessary.				
1.05	Light colored protective laboratory clothing such as a lab coat or solid-front/wrap-around gown is worn when working in the insectary; protective clothing is either discarded appropriately in the lab or disinfected prior to laundering.				
1.06	Eye and face protection (e.g., goggles, mask, face shield, etc.) is used for anticipated splashes or sprays of infectious/recombinant materials.				
1.07	Persons who wear contact lenses in the laboratory also wear eye protection.				
1.08	Gloves are worn if hands are at risk of contact with infectious/recombinant materials or contaminated surfaces/equipment, and when handling host animals or blood for arthropod feeding.				
1.09	Personnel wash hands after handling infectious materials, handling animals, removing gloves, or before leaving the lab.				
1.10	PPE, including gloves, is changed/disposed of when contaminated, work w/ infectious/recombinant material is completed, or integrity is compromised.				
1.11	Disposable PPE, including gloves, is not reused and is disposed of as biohazardous waste.				
1.12	All PPE is removed and left in lab before leaving.				
1.13	No eating, drinking, smoking, handling contact lenses, applying cosmetics, or storing human food in the lab.				
1.14	Mechanical pipetting devices are used (<i>i.e.</i> , no mouth pipetting).				
1.15	Plastic ware is substituted for glassware whenever possible.				
1.16	Sharps handling policies and practices are in place.				
1.17	Broken glassware is only handled by mechanical means.				
1.18	Only needle-locking syringes or syringes w/ permanently affixed needles are used for injection/aspiration of infectious/recombinant materials.				
1.19	Needles are not bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated prior to disposal.				
1.20	Sharps containers are decontaminated (e.g., autoclaved or chemical treatment) prior to disposal or reprocessing.				
1.21	Lab maintains a needlestick injury log.				
1.22	Procedures minimize splashes/aerosols.				
1.23	Spills, accidents, and/or arthropod releases are immediately reported to the lab director.				

Verbal Inspection		YES	NO	N/A	Comments
1.24	Work surfaces including those in the BSC are decontaminated using an effective disinfectant at least daily, at completion of work, or after any spill/splash of infectious/recombinant material.				
1.25	Method for decontaminating lab waste (i.e., autoclave) is available in building.				
1.26	Materials decontaminated outside of the lab are transported in durable, leak-proof, closed containers (e.g., plastic bags transported in tray or pan with a leakproof bottom).				
1.27	Materials to be removed from the facility for decontamination are packed in accordance with applicable local, state, and federal regulations.				
1.28	Cultures/stocks/regulated wastes are decontaminated by approved method (e.g., autoclaving) before disposal.				
1.29	Insect/rodent control program is in effect.				
1.30	Accidental sources of arthropods from within the insectary are eliminated (e.g., soil and water are not left exposed).				
1.31	Cages and other culture containers are appropriately cleaned to prevent arthropod survival and escape; cages containing infectious materials are autoclaved before cleaning and/or disposal.				
1.32	Living arthropods are killed before disposal; infected arthropods are autoclaved before disposal.				
1.33	Arthropods fed on host animals are prevented from accidental transfer to host cages.				
1.34	Personnel take precautions to prevent transport or dissemination of arthropods on their persons or via the sewer.				
1.35	When handling/removing animals after exposure to arthropods, precautions are taken to prevent arthropod escape through screens, covers, and by flying.				
1.36	Host animals are inspected closely to ensure that arthropods are not concealed in fur, ears, etc.				
1.37	If blood is used as a food source, the blood is pathogen-free.				
1.38	All procedures are carefully designed and performed to prevent arthropod escape.				
1.39	Animals other than those needed for the study are not accessible to the arthropods.				
1.40	Escaped arthropods are killed and disposed of or recaptured and returned to their containers.				
Visual Inspection		YES	NO	N/A	Comments
2.1	Lab/insectary is located way from public areas and has lockable doors for access control.				
2.2	Signage is posted to indicate the presence of arthropod vectors; posted signage also includes supervisor's name and emergency contact information.				
2.3	Spill clean-up procedures are developed.				
2.4	Lab is designed to be easily cleaned (e.g., no carpets/rugs, spaces between cabinets/equipment/furniture are accessible, etc.).				
2.5	Bench tops are impervious to water and resistant to heat, organic solvents, acids, alkalis, and disinfectants.				
2.6	Lab furniture/equipment is suitable for intended use/loads.				
2.7	Lab has a sink for hand washing.				

Visual Inspection		YES	NO	N/A	Comments
2.8	BSC is not located near doors, windows that can be opened, or heavy traffic areas and is certified at least annually.				
2.9	The front grill of the BSC is not blocked or covered and cabinet is free of clutter.				
2.10	Sharps containers are labeled, conveniently located, and puncture resistant.				
2.11	Effective disinfectants are available for all agents and infectious/recombinant materials in use.				
2.12	Refrigerators/freezers containing infectious/recombinant materials are labeled with a biohazard sign.				
2.13	All equipment that may be contaminated with infectious/recombinant material is labeled with a biohazard sign.				
2.14	All receptacles used for infectious/recombinant waste are closed/covered when not in use or waste is autoclaved daily.				
2.15	Lab windows that open are fitted with fly screens.				
2.16	Eyewash station is readily available.				
2.17	There is not exposed soil, water, or insect diet in the insectary.				
2.18	Arthropods are identified with labels (e.g., species, strain/origin, date of collection, PI, etc.) firmly attached to the container (and cover if removable).				
2.19	Furniture and incubators containing arthropods are located in such a way that accidental contact and release is minimized.				
2.20	Equipment and supplies not required for operation of the insectary are not located in the insectary; supplies kept in the insectary are located in designated areas and not open shelves.				
2.21	Cages used to hold arthropods are non-breakable and screened with mesh of a size to prevent escape; openings for removal and introduction of arthropods are designed to prevent escape.				
2.22	Species appropriate traps are in place to catch escaped arthropods and records of exterior captures of escaped arthropods are maintained.				
2.23	An accidental release procedure (which includes contacts and immediate mitigating actions) is developed and posted.				
2.24	Interior walls, floor and ceiling are light-colored to aid in location of loose arthropods.				
2.25	Fixtures, pipes, and ducting are minimal and penetrations of walls, floors, and ceilings are sealed to reduce hiding places for loose arthropods.				

INSPECTION FINDINGS

Code M = Minor Deficiency Code S = Significant Deficiency

Checklist Number	Code	Deficiencies	Required Corrective Actions	Suspense