

**Office of Regulatory Research Compliance (ORRC)**

**Howard University Laboratory Biosafety Level 2 Checklist**

Biosafety Level 2 laboratory is suitable for work that involves agents that pose moderate hazards to personnel and the environment. The checklist is based on *Biosafety in Microbiological and Biomedical Laboratories, 5th edition, 2007* and *NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines), Appendix G, September 2009*. Check each statement that are complied and make explanation and comment that are unchecked. This list can be used for self-assessment and is a part of review completed by the Institutional Biosafety Committee.

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| **P.I. Name** |  | **Department** |  |
| **Phone** |  | **Email Address** |  |
| **Lab Location** | |  | |
| **Phone** | |  | |
| **Biological Agents Used/Stored** | |  | |

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| **Biosafety Level 2** | | |
| **Section 1. Standard Microbiological Practices** | | |
|  | 1 | 1. Access to the laboratory is limited or restricted at the discretion of the P.I. when experiments are in progress. |
|  | 2 | Work surfaces are decontaminated at least once a day and after any spill of infectious or hazardous agents. |
|  | 3 | 1. All contaminated liquid or solid wastes are placed in biohazardous bags, autoclaved or decontaminated with suitable disinfectant before disposal. |
|  | 4 | Contaminated materials that are to be decontaminated are placed in a durable leak-proof container that is closed before being removed from the laboratory. |
|  | 5 | No mouth pipetting is permitted; mechanical pipetting devices are used. |
|  | 6 | 1. No eating, drinking, smoking, handling contact lenses, and applying cosmetics are permitted in the work area. Food may be stored outside the laboratory in cabinets/refrigerators designated and used for this purpose only. |
|  | 7 | Wash hands after handling cultures of infectious or other hazardous agents and before leaving the laboratory. |
|  | 8 | All procedures are carefully performed to minimize splashes and creation of aerosols. |
|  | 9 | Policies for safe use of needles, sharps and broken glassware are established and implemented. |

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| **Section 2. Special Practices** | | |
|  | 1 | A laboratory biosafety manual including standard operation procedures has been developed, adopted as the policy, and is readily available and accessible**. \*\*Revision Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | 2 | All laboratory personnel are advised of potential hazards and meet specific entry/exit requirements. |
|  | 3 | All laboratory personnel have received appropriate safety training and its annual updates. |
|  | 4 | All laboratory personnel are familiar with the emergency or disaster recovery plan. |
|  | 5 | A sign incorporating the universal biohazard symbol is posted at the entrance to the laboratory. Posted information must include: the laboratory’s biosafety level, the supervisor’s name, telephone number, the infectious or other biohazardous agents and special requirement for entering and exiting the laboratory. |
|  | 6 | A biohazard sign is placed on equipment, such as incubator or freezer, where biohazardous materials are used and stored. |
|  | 7 | Stock cultures of infectious or biohazardous agents are secured against unauthorized access. |
|  | 8 | Laboratory equipment is decontaminated with an appropriate disinfectant after work with infectious agents, and especially after spill or splashes. Contaminated equipment is decontaminated before removal from laboratory. |
|  | 9 | When appropriate, depending on the agents handled, baseline serum samples for laboratory and other at-risk personnel are collected and stored. Additional serum specimen may be collected periodically. |
|  | 10 | Animals not involved in the work are not permitted in the laboratory. |
| **Section 3. Containment, Personal Protective Equipment (Primary Barrier)** | | |
|  | 1 | Biological safety cabinets, preferably Class II, or other physical containments are tested and certified within the last year. **\*\*The certification expiration date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  | 2 | Biological safety cabinets are not located near doors, windows that can be opened, heavily traveled area, and any obstacle that may disrupt cabinet’s lamina flow. |
|  | 3 | Biological safety cabinets are used whenever procedures with potential for creating infectious aerosols or splashes are conducted, such as centrifugation, sonication, vigorous shaking, opening container of infectious agents, intranasal inoculation of animals, etc. Infectious agents can be centrifuged in open laboratory if the rotor heads, or centrifuge tubes are sealed. These tubes are packaged and opened in the biological safety cabinet. |
|  | 4 | Personal protective equipment (e.g., laboratory coats, gown, goggles, mask, etc.) are provided that are appropriate for the risk of exposure to infectious or hazardous agents. |
|  | 5 | Protective clothing are worn while in the laboratory and removed when enter the non-laboratory areas (e.g., cafeteria, library, administrative offices). |
|  | 6 | Wear gloves when skin contact is unavoidable with infectious or other hazardous agents. Gloves should not be worn outside the laboratory. |
|  | 7 | Eye and face protection (goggles, mask, face shield or other splatter guard) is used for anticipated splashes or sprays of infectious or other hazardous agents when they must be handled outside the biosafety cabinet. |

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| **Section 4. Laboratory Facilities (Secondary Barrier)** | | |
|  | 1 | 1. Laboratory doors are self-closing and have locks. |
|  | 2 | 1. The laboratory is designed so that it can be easily cleaned and decontaminated; no carpet or rugs. |
|  | 3 | 1. Spaces between benches, cabinets and equipment are accessible for cleaning. |
|  | 4 | 1. No fabric upholstered/covered furniture or chairs are permitted. |
|  | 5 | 1. Bench tops are impervious to water and resistant to acids, chemicals, organic solvents, and moderate heat. |
|  | 6 | Laboratory furniture is sturdy and capable of supporting anticipated loads. |
|  | 7 | Washing sink and eye wash station are readily available and accessible. |
|  | 8 | Laboratory windows that open to outside are fitted with fly screens. |
|  | 9 | Insect and rodent control programs are in effect. |
|  | 10 | Vacuum lines are protected with liquid disinfectant traps, HEPA filters or equivalent. |
|  | 11 | An autoclave for decontaminating laboratory wastes is available. |

**\*\*Review Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Please provide explanation or comment if the statement (identify by number) is unchecked .Add pages, if needed.

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**\*\* Please note: Mandatory Information. Without this information the application will not be considered for further action.**

1. The expiration date for the Biosafety Cabinet must be indicated in the form.
2. The PI must specify the review and revision date (s) for the laboratory SOP-manual.
3. All signage should be posted at appropriate locations with current dates corresponding the dates in the manual.

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