

Building: \_\_\_\_\_ Room Number: \_\_\_\_\_ Date: \_\_\_\_\_

Area Supervisor: \_\_\_\_\_ Area Use: \_\_\_\_\_ Phone: \_\_\_\_\_

## General Biosafety

All labs using biological agents are required to comply with the General Biosafety aspects of this checklist.

### Hazard Assessment

- |   |                         |                  |     |
|---|-------------------------|------------------|-----|
| 1. Are biological agents used or stored in this lab?            | Yes                     | No               | N/A |
| 2. Is the inventory of biohazards up-to-date?                   | Yes                     | No               | N/A |
| 3. Are biohazards classified into appropriate biosafety levels? | Yes                     | No               | N/A |
| 4. Select agents used:  |                         |                  |     |
| Microorganisms  | Human blood/tissue/OPIM | Human cell lines |     |
| Other cell lines/tissue culture                                 | Animal tissues          | rDNA             |     |
| Other biological materials (specify): _____                     |                         |                  |     |
| 5. What is the biosafety level for this area?                   | Yes                     | No               | N/A |

### Laboratory Facility

- |  |     |    |     |
|--|-----|----|-----|
| 6. Does the lab contain a sink for hand washing? | Yes | No | N/A |
| a. Is soap available?                            | Yes | No | N/A |
| b. Are paper towels available?                   | Yes | No | N/A |
| 7. Are operable windows fitted with fly screens? | Yes | No | N/A |

### Training and Recordkeeping

- |   |     |    |     |
|---|-----|----|-----|
| 8. Has the department ensured general biosafety training for potentially exposed personnel?             | Yes | No | N/A |
| 9. Has the PI provided task-specific biosafety training?  | Yes | No | N/A |
| 10. Has all training been properly documented?  | Yes | No | N/A |
| 11. Is the UofM <i>Biological Safety Program</i> (biosafety manual) readily available and up-to-date?   | Yes | No | N/A |
| 12. Are lab personnel knowledgeable about biological hazards and risk reduction methods for their area? | Yes | No | N/A |

### Signage

- |   |     |    |     |
|---|-----|----|-----|
| 13. Are biohazard signs posted on lab entrances?  | Yes | No | N/A |
| 14. Is emergency contact information posted on lab entrances?   | Yes | No | N/A |
| 15. Is the Biohazard Work Area delineated with floor markings (if only a portion of the lab is used)? | Yes | No | N/A |
| 16. Are biohazard signs or labels on storage and use areas?   | Yes | No | N/A |
| 17. Is the biohazard symbol affixed to potentially contaminated equipment?                            | Yes | No | N/A |
| 18. Are refrigerators labeled "Not for Storage of Food for Human Consumption?"                        | Yes | No | N/A |

### Risk Reduction - Work Practices, PPE, and Engineering Controls

- |   |     |    |     |
|---|-----|----|-----|
| 19. Does staff wash hands after handling viable materials, after removing gloves, and before leaving Biohazard Work Area? | Yes | No | N/A |
| 20. Are eating, drinking, smoking, applying cosmetics, and handling contact lenses prohibited in the work area?           | Yes | No | N/A |
| 21. Is food and drink stored outside the Biohazard Work Area in a dedicated refrigerator?                                 | Yes | No | N/A |
| 22. Are procedures performed carefully to minimize splashes, sprays, and the creation of aerosols?                        | Yes | No | N/A |

23. Is the lab maintained in a clean and sanitary condition?	Yes	No	N/A
24. Are lab coats worn in the Biohazard Work Area?	Yes	No	N/A
25. Are lab coats free of visible contamination?	Yes	No	N/A
26. Are contaminated lab coats laundered on-site or by a suitable outside contractor - NOT taken home by lab personnel?	Yes	No	N/A
27. Are lab coats removed before leaving the lab area and entering non-lab areas (library, cafeteria, administrative offices, etc.)?	Yes	No	N/A
28. Are gloves worn when handling biological agents?	Yes	No	N/A
29. Are gloves removed prior to touching "clean" surfaces?	Yes	No	N/A
30. If splashes or sprays might occur, is protective eyewear available and used?	Yes	No	N/A
31. Is respiratory protection available for strictly <i>voluntary</i> use of filtering face pieces (dust masks)?	Yes	No	N/A
32. Has the UofM <i>Voluntary Use of Dust Masks</i> form been completed for all staff choosing to use dust masks?	Yes	No	N/A
33. Is the OSHA Respiratory Protection Standard implemented when respiratory protection exceeds voluntary use of dust masks (filtering face pieces)?	Yes	No	N/A
34. Are Biosafety Cabinets (BSCs) available?	Yes	No	N/A
a. Class I?	Yes	No	N/A
b. Class II?	Yes	No	N/A
35. Has the biosafety cabinet been certified within the past 12 months?	Yes	No	N/A
36. Are BSCs located away from doors, fume hoods, air supply vents, or other sources of airflow disruption?	Yes	No	N/A
37. Has smoke testing determined that sources of airflow disruption do not interfere with proper functioning of BSC?	Yes	No	N/A
38. Are only incidental amounts of chemicals used inside the BSC?	Yes	No	N/A
39. Are laminar flow hoods ("clean air benches") located in the lab?	Yes	No	N/A
40. Are the laminar flow hoods used only for non-hazardous agents?	Yes	No	N/A
41. Are mechanical pipetting devices used?	Yes	No	N/A
<b>Disinfection, Decontamination, and Waste</b>			
42. Are work surfaces decontaminated at least daily and immediately after spills?	Yes	No	N/A
43. Are decontaminants that are effective against agents in use?	Yes	No	N/A
List decontaminants used:			
44. Are written procedures in place for large and small spills or leaks?	Yes	No	N/A
45. Is a biohazard spill kit available and properly stocked?	Yes	No	N/A
46. Is an autoclave available?	Yes	No	N/A
47. Are biological indicators routinely used to verify the efficacy of the autoclave?	Yes	No	N/A
48. Are biohazardous waste disposal procedures in place and implemented?	Yes	No	N/A
49. Is biological waste placed into appropriately labeled or color-coded receptacles?	Yes	No	N/A
50. Is the waste container closed when not in use?	Yes	No	N/A
51. Are needles/sharps placed into appropriate containers that are labeled, leak-proof, and puncture resistant?	Yes	No	N/A
52. If materials are decontaminated outside of the laboratory, are they transported in durable, leak-proof containers?	Yes	No	N/A

## Biosafety Level 2

Laboratories using biosafety level 2 agents must also comply with the following provisions:

1. Does the lab have access to the CDC's <i>Biosafety in Microbiological and Biomedical Laboratories</i> ?	Yes	No	N/A
2. Is access to the lab limited or restricted when working with infectious agents? Describe method of access control:	Yes	No	N/A
3. Does entrance signage include biosafety level and any special requirements for entry (such as PPE, training, or vaccination requirements)?	Yes	No	N/A
4. Are medical evaluation and reporting procedures in place in the event of accidental exposure?	Yes	No	N/A
5. Can staff describe the procedures to follow in the event of an exposure?	Yes	No	N/A
6. Are only needle-locking syringes or disposable syringe-needle units used?	Yes	No	N/A
7. Do laboratory personnel follow safety protocols to ensure needles are not bent, broken, removed, or otherwise manipulated by hand before disposal?	Yes	No	N/A
8. If needles must be recapped, is a one-hand technique used?	Yes	No	N/A
9. Is a biosafety cabinet used for procedures that might produce infectious aerosols or splashes?	Yes	No	N/A
10. Is a biosafety cabinet used for large volumes or high concentrations of infectious agents?	Yes	No	N/A
11. If viable materials are centrifuged, are safety containment cups or sealed rotors with O-rings used?	Yes	No	N/A
12. Are safety containment cups or sealed rotors opened only within a BSC?	Yes	No	N/A
13. Is whole-face protection used for procedures that must be conducted outside the BSC?	Yes	No	N/A
14. Do sinks utilize hands-free controls (foot, knee, or automatically operated)?	Yes	No	N/A
15. Is an emergency shower/eyewash station readily available?	Yes	No	N/A
16. Are vacuum lines protected with a liquid disinfectant trap and HEPA filter?	Yes	No	N/A

## **Bloodborne Pathogens (human blood, unfixed tissues, body fluids, cell lines)**

Laboratories using any of the above substances must comply with the General Biosafety and Biosafety Level 2 sections, as well as the Bloodborne Pathogens section of this checklist.

1. Is a Departmental <i>Exposure Control Plan</i> available and up-to-date?	Yes	No	N/A
2. Does the lab have access to the OSHA <i>Bloodborne Pathogens Standard</i> (29CFR 1910.1030)?	Yes	No	N/A
3. Have personnel with potential exposure risk received Bloodborne Pathogens training?	Yes	No	N/A
4. Is refresher training provided annually?	Yes	No	N/A
5. Have personnel with potential exposure risk been offered the Hepatitis B vaccine?	Yes	No	N/A
6. Is the Vaccination Declination form on record for employees who have opted out of the HBV vaccination program?	Yes	No	N/A
7. Are Universal Precautions employed?	Yes	No	N/A
8. Does the lab maintain a needle stick/sharps injury log?	Yes	No	N/A

## **Recombinant DNA**

Laboratories using recombinant DNA molecules must comply with the General Biosafety and the rDNA sections of this checklist. The BSL-2 section must also be completed if any of the vectors or agents involved are biosafety 2 (or Risk Group 2) agents.

1. Does the lab have access to NIH's <i>Guidelines for Research Involving Recombinant DNA Molecules</i> ?	Yes	No	N/A
2. Is a <i>Registration for Recombinant DNA Research</i> form on file with EH&S?	Yes	No	N/A
3. Is the rDNA experiment NIH Category III-F (exempt)?	Yes	No	N/A
4. Is the agent replication deficient?	Yes	No	N/A