 

Research Laboratory Safety Self-Inspection:

Biological Safety Checklists

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| --- | --- |
| Principal Investigator: | Department: |
| Lab Building: | Inspector Name: |
| Lab Rooms: | Inspection Date: |

**Instructions: Use the checklists below to conduct a biological safety self-inspection for the hazards in your laboratory. Click the arrow next to each heading to expand the relevant sections for your lab hazards.**

# Laboratory Biosafety Level 1 (BSL-1)

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Does the lab supervisor enforce the institutional policies that control safety in and access to the laboratory? |  |  |  |  |
| Has the lab supervisor ensured that lab personnel receive appropriate training? |  |  |  |  |
| Is the USC biosafety manual available and accessible in the lab? |  |  |  |  |
| Is a biohazard sign posted at the entrance to the lab when infectious agents are present? |  |  |  |  |
| Is long hair restrained? |  |  |  |  |
| Are gloves worn to protect hands from exposure to hazardous materials? |  |  |  |  |
| Are gloves removed and hands washed when work with hazardous materials has been completed and before leaving the lab? |  |  |  |  |
| Are gloves changed when contaminated, integrity has been compromised, or when otherwise necessary? |  |  |  |  |
| Are disposable gloves never reused, and are used gloves disposed with other contaminated lab waste? |  |  |  |  |
| Are gloves and other PPE removed in a manner that minimizes personal contamination and transfer of infectious materials outside of work areas? |  |  |  |  |
| Does the lab prohibit eating and drinking, and storing food in lab areas? |  |  |  |  |
| Is mouth pipetting prohibited? |  |  |  |  |
| Do persons wash their hands after working with potentially hazardous materials and before leaving the lab? |  |  |  |  |
| Does the lab carefully manage use of needles (e.g., not recapping needles)? |  |  |  |  |
| Are used, disposable sharps placed in a conveniently located puncture-resistant sharps container? |  |  |  |  |
| Are non-disposable sharps placed in a hard walled container? |  |  |  |  |
| Is a mechanical device (e.g. brush and dustpan) used for handling broken glassware? |  |  |  |  |
| Are all procedures performed to minimize the creation of splashes and/or aerosols? |  |  |  |  |
| Are work surfaces decontaminated with appropriate disinfectant? |  |  |  |  |
| Are all cultures, stocks, and other potentially infectious materials decontaminated before disposal using an effective method? |  |  |  |  |
| Are materials to be decontaminated outside of the lab placed in a properly labeled, durable, leak proof container and secured for transport? |  |  |  |  |
| Is an effective integrated pest management program established? |  |  |  |  |
| Are protective laboratory coats, gowns, or uniforms used to prevent contamination of personal clothing? |  |  |  |  |
| Is protective eyewear worn when conducting procedures that have the potential to create splashes of microorganisms? |  |  |  |  |
| Are animals and plants not associated with the work being performed prohibited from the lab? |  |  |  |  |
| Does the lab have doors for access control? |  |  |  |  |
| Do labs have a sink for hand washing? |  |  |  |  |
| Is an eyewash station readily available in the lab? |  |  |  |  |
| Is the lab designed so that it can be easily cleaned (e.g., no carpets or rugs in labs)? |  |  |  |  |
| Is lab furniture capable of supporting anticipated loads and uses? |  |  |  |  |
| Are bench tops impervious to water and resistant to heat and chemicals? |  |  |  |  |
| Are chairs used in lab work covered with a non-porous material that can be easily decontaminated with disinfectant? |  |  |  |  |
| Are lab windows that open to the exterior fitted with screens? |  |  |  |  |
| Is lighting adequate for all activities? |  |  |  |  |

# Laboratory Biosafety Level 2 (BSL-2)

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Does the lab supervisor enforce the institutional policies that control safety in and access to the lab? |  |  |  |  |
| Has the lab supervisor ensured that lab personnel receive appropriate training? |  |  |  |  |
| Does the lab supervisor ensure that lab personnel demonstrate proficiency in microbiological practices before working with BSL-2 agents? |  |  |  |  |
| Has research involving recombinant or synthetic nucleic acids, infectious agents, human-derived materials, or HHS/USDA select agents or toxins been approved by the IBC? |  |  |  |  |
| Is a lab-specific biosafety manual prepared and adopted as policy, and is the manual available and accessible? |  |  |  |  |
| Is a biohazard sign posted at the entrance to the lab when infectious agents are present? |  |  |  |  |
| Is long hair restrained? |  |  |  |  |
| Are gloves worn to protect hands from exposure to hazardous materials, and not worn outside the lab? |  |  |  |  |
| Are gloves removed before leaving the lab? |  |  |  |  |
| Are gloves changed when contaminated or when otherwise necessary, and are two pairs of gloves worn when appropriate? |  |  |  |  |
| Are disposable gloves never reused, and are used gloves disposed with other contaminated lab waste? |  |  |  |  |
| Do persons wash their hands after working with potentially hazardous materials and before leaving the lab? |  |  |  |  |
| Are lab coats designated for lab use worn while working with hazardous materials and removed before leaving for non-lab areas? |  |  |  |  |
| If respiratory protection is needed for work with hazardous materials, is relevant staff enrolled in the respiratory protection program? |  |  |  |  |
| Is eye and face protection used for manipulation or activities that may result in splashes or sprays of infectious or other hazardous materials? |  |  |  |  |
| Does the lab prohibit eating and drinking, and storing food in lab areas? |  |  |  |  |
| Is mouth pipetting prohibited? |  |  |  |  |
| Does the lab carefully manage use of needles (e.g., not recapping needles)? |  |  |  |  |
| Are disposable sharps placed in a conveniently located puncture-resistant sharps container? |  |  |  |  |
| Are non-disposable sharps placed in a hard walled container? |  |  |  |  |
| Is a mechanical device (e.g. tongs, forceps, brush and dustpan) used for handling broken glassware? |  |  |  |  |
| Are all procedures performed to minimize the creation of splashes and/or aerosols? |  |  |  |  |
| Are work surfaces decontaminated with appropriate disinfectant after completion of work and after spills? |  |  |  |  |
| Are potentially infectious materials placed, stored, and maintained in a durable, leak-resistant container before and during transport? |  |  |  |  |
| Are all potentially infectious materials decontaminated before disposal using an effective method? |  |  |  |  |
| Are materials to be decontaminated outside of the lab placed in a durable, leak proof container and secured for transport? |  |  |  |  |
| Is an effective integrated pest management program established? |  |  |  |  |
| Are animals and plants not associated with the work being performed prohibited from the lab? |  |  |  |  |
| Is access to the lab controlled when work is being conducted? |  |  |  |  |
| Are incidents that may result in exposure immediately evaluated and treated according to proper procedures, and reported to the lab supervisor? |  |  |  |  |
| Are BSC or other containment devices used whenever procedures creating aerosols or splashed are conducted? |  |  |  |  |
| Are BSCs or other containment devices used whenever high concentrations or large volumes of infectious agents are used? |  |  |  |  |
| Is lab equipment routinely decontaminated, as well as, after spills, splashes, or other potential contamination and repair, maintenance, or removal from the lab? |  |  |  |  |
| Do labs have a sink for hand washing? |  |  |  |  |
| Is an eyewash station readily available? |  |  |  |  |
| Is the lab designed so that it can be easily cleaned (e.g., no carpets or rugs in labs)? |  |  |  |  |
| Is lab furniture capable of supporting anticipated loads and uses? |  |  |  |  |
| Are bench tops impervious to water and resistant to heat and chemicals? |  |  |  |  |
| Are chairs used in lab work covered with a non-porous material that can be easily decontaminated with disinfectant? |  |  |  |  |
| Are lab windows that open to the exterior fitted with screens? |  |  |  |  |
| Is lighting adequate for all activities? |  |  |  |  |

# Human-Derived Materials (Blood or OPIM)

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Does the lab have access to the USC Bloodborne Pathogens Exposure Control Plan? |  |  |  |  |
| Has the Hepatitis B vaccination been made available to lab members with occupational exposure to bloodborne pathogens? |  |  |  |  |
| Have lab members with occupational exposure to bloodborne pathogens completed the USC bloodborne pathogens training? |  |  |  |  |
| Are contaminated sharps discarded in containers that are labeled, closable, puncture resistant, and leakproof? |  |  |  |  |
| Are containers for contaminated sharps replaced routinely and not overfilled? |  |  |  |  |

# Live Animals

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Does the lab carefully manage use of needles (e.g. not recapping needles)? |  |  |  |  |
| Are used needles and syringes placed in a conveniently located puncture-resistant sharps container? |  |  |  |  |
| Are non-disposable sharps placed in a hard walled container? |  |  |  |  |

# Shipping Biological Materials

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Have personnel shipping infectious substances or related materials completed required training on safe transport of these samples? |  |  |  |  |

# Biosafety Cabinets

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| --- | --- | --- | --- | --- |
| **Questions** | **Yes** | **No** | **N/A** | **Comments or Deficiencies**  **\* Indicate room where deficiency is identified** |
| Are vacuum lines protected with liquid disinfectant traps and in-line HEPA filters or their equivalent? |  |  |  |  |
| Are BSCs installed and operated so that possible airflow disruptions do not interfere with proper operations? |  |  |  |  |
| Are provisions to assure proper biosafety cabinet performance and air system operation verified (e.g., annual BSC certification)? |  |  |  |  |