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| **Principal Investigator Biosafety Laboratory Competency Checklist**  |
| **Employee Name:** | **Date:** |
| **Employee Title:** | **Supervisor:** |
| **SECTION I. POTENTIAL HAZARDS** |
| **Biological Materials** |
|  | Yes | No | N/A |
| 1. Ensure personnel's knowledge of biohazardous materials
 |[ ] [ ] [ ]
| 1. Manage biohazardous materials
 |[ ] [ ] [ ]
| 1. Establish hazard controls for biologic materials used in laboratory procedures
 |[ ] [ ] [ ]
| 1. Assess procedures for hazardous components
 |[ ] [ ] [ ]
| Comments: |
| **Research Animals** |
|  | Yes | No | N/A |
| 1. Assess the inherent hazards associated with research animals
 |[ ] [ ] [ ]
| 1. Assess possible route of exposures to personnel in relation to the animal procedures used
 |[ ] [ ] [ ]
| 1. Develop control measures and work practices to mitigate risks associated with research animals
 |[ ] [ ] [ ]
| Comments: |
| **Chemical Materials** |
|  | Yes | No | N/A |
| 1. Establish chemical inventory
 |[ ] [ ] [ ]
| 1. Assess personnel's knowledge of hazards associated with chemicals used in laboratory procedures
 |[ ] [ ] [ ]
| 1. Establish control measures and work practices to be used when working with chemicals
 |[ ] [ ] [ ]
| Comments: |
| **Radiologic Materials** |
|  | Yes | No | N/A |
| 1. Establish inventory of radiologic materials used in the laboratory
 |[ ] [ ] [ ]
| 1. Assess hazards associated with use of radiologic materials (collaborate with radiation safety personnel, as needed)
 |[ ] [ ] [ ]
| 1. Establish control measure and work practices to be used when working with radiologic materials (collaborate with radiation safety personnel, as needed)
 |[ ] [ ] [ ]
| 1. Evaluate monitoring devices for suitability in detecting radioisotopes to be used (collaborate with radiation safety personnel, as needed)
 |[ ] [ ] [ ]
| Comments: |
| **Physical Environment** |
|  | Yes | No | N/A |
| 1. Ensure identification of physical hazards present in the laboratory
 |[ ] [ ] [ ]
| 1. Establish control measures and work practices to be used when working with physically hazardous materials (collaborate with safety professionals, as needed)
 |[ ] [ ] [ ]
| Comments: |
| **SECTION II. HAZARD CONTROLS** |
| **Personal Protective Equipment (PPE) (Primary Barriers)** |
|  | Yes | No | N/A |
| 1. Determine PPE required for general laboratory entry
 |[ ] [ ] [ ]
| 1. Determine procedures (with institutional professionals) for use of specific PPE
 |[ ] [ ] [ ]
| 1. Develop a respiratory protection program to include fit testing for all staff using respiratory protection devices
 |[ ] [ ] [ ]
| 1. Ensure personnel's compliance with correct use of PPE
 |[ ] [ ] [ ]
| 1. Establish assessment procedures to maintain integrity and functionality of all PPE in use
 |[ ] [ ] [ ]
| 1. Develop procedures for appropriate reporting and response to compromised PPE
 |[ ] [ ] [ ]
| Comments: |
| **Engineering Controls --- Equipment (Primary Barriers)** |
|  | Yes | No | N/A |
| 1. Determine correct equipment to use with engineering controls in order to contain hazardous materials worked with in the laboratory
 |[ ] [ ] [ ]
| 1. Ensure proper functioning of laboratory equipment with engineering controls
 |[ ] [ ] [ ]
| 1. Ensure timely remediation of improperly functioning engineering controls on laboratory equipment
 |[ ] [ ] [ ]
| 1. Establish appropriate work practices for all staff working with laboratory equipment with engineering controls for safety
 |[ ] [ ] [ ]
| 1. Collaborate with institutional safety professionals to establish procedures to ensure hazard awareness notification, training, and lock-out procedures for primary engineering control maintenance staff or contractors
 |[ ] [ ] [ ]
| Comments: |
| **Engineering Controls --- Facility (Secondary Barriers) BSL-2 & BSL-3** |
|  | Yes | No | N/A |
| 1. Ensure that laboratory personnel have appropriate knowledge about facility engineering controls designed to prevent exposure or release of hazardous materials from the laboratory
 |[ ] [ ] [ ]
| 1. Develop response procedures to address any compromise in facility engineering controls
 |[ ] [ ] [ ]
| 1. Ensure correct reporting procedures are followed by all laboratory personnel when facility engineering controls are compromised
 |[ ] [ ] [ ]
| 1. Ensure continuous maintenance and required recertification of facility and facility engineering control systems
 |[ ] [ ] [ ]
| 1. Collaborate with institutional safety and facility professionals to develop the laboratory's controlled access system
 |[ ] [ ] [ ]
| 1. Ensure adherence to facility security rules
 |[ ] [ ] [ ]
| 1. Advise personnel on facility design differences between BSL-2 and BSL-3 laboratories
 |[ ] [ ] [ ]
| 1. Collaborate with institutional safety and maintenance professionals to determine appropriate procedures for cleaning of laboratory containment areas
 |[ ] [ ] [ ]
| Comments: |
| **Decontamination and Laboratory Waste Management** |
|  | Yes | No | N/A |
| 1. Establish facility waste segregation procedures for biologic, chemical, and radiologic materials in compliance with all required regulations and policies
 |[ ] [ ] [ ]
| 1. Establish facility waste management procedures for biologic materials
 |[ ] [ ] [ ]
| 1. Establish methods of disinfection, decontamination, and sterilization
 |[ ] [ ] [ ]
| 1. Establish regulatory compliant procedures for hazardous chemical waste collection and disposal
 |[ ] [ ] [ ]
| 1. Collaborate with radiation safety professionals to acquire required licensing and establish procedures for radioactive waste collection and disposal
 |[ ] [ ] [ ]
| 1. Establish procedures for safely removing equipment and instruments from the laboratory
 |[ ] [ ] [ ]
| Comments: |
| **SECTION III. ADMINISTRATIVE CONTROLS** |
| **Hazard Communication and Signage** |
|  | Yes | No | N/A |
| 1. Determine required safety signs, labels, and posted information
 |[ ] [ ] [ ]
| 1. Ensure the implementation of labeling of samples, containers, and cultures is compliant with appropriate regulatory requirements
 |[ ] [ ] [ ]
| 1. Develop procedures to communicate sample-specific hazard information according to SOPs
 |[ ] [ ] [ ]
| 1. Ensure personnel's knowledge of communication processes for applicable regulatory requirements
 |[ ] [ ] [ ]
| 1. Ensure personnel's knowledge of signals and alarms
 |[ ] [ ] [ ]
| Comments: |
| **Guideline and Regulation Compliance** |
|  | Yes | No | N/A |
| 1. Ensure personnel have knowledge of current regulatory requirements and applicable guidelines
 |[ ] [ ] [ ]
| 1. Develop and maintain laboratory manuals and plans to comply with current regulatory requirements and applicable guidelines
 |[ ] [ ] [ ]
| 1. Ensure compliance with applicable institutional committee requirements
 |[ ] [ ] [ ]
| 1. Advise regarding regulatory communications requirements
 |[ ] [ ] [ ]
| Comments: |
| **Safety Program Management** |
|  | Yes | No | N/A |
| 1. Collaborate in the development of the institution's safety and occupational health programs
 |[ ] [ ] [ ]
| 1. Develop site-specific safety training program
 |[ ] [ ] [ ]
| 1. Develop procedures for routine monitoring of equipment and facilities
 |[ ] [ ] [ ]
| 1. Resolve investigation of deviations from normal operations and procedures
 |[ ] [ ] [ ]
| 1. Develop quality assurance program
 |[ ] [ ] [ ]
| 1. Develop records management system
 |[ ] [ ] [ ]
| Comments: |
| **Occupational Health --- Medical Surveillance** |
|  | Yes | No | N/A |
| 1. Collaborate in the development of the medical surveillance plan
 |[ ] [ ] [ ]
| 1. Ensure personnel's knowledge of the benefits for monitoring personal health status changes
 |[ ] [ ] [ ]
| 1. Collaborate in the development of incident exposure reporting procedures
 |[ ] [ ] [ ]
| 1. Ensure personnel's knowledge of signs and symptoms after exposure to hazardous materials
 |[ ] [ ] [ ]
| Comments: |
| **Risk Management** |
|  | Yes | No | N/A |
| 1. Ensure personnel have knowledge of the differences in work practices between biosafety levels
 |[ ] [ ] [ ]
| 1. Ensure that potential hazards associated with laboratory materials and procedures are identified
 |[ ] [ ] [ ]
| 1. Ensure risk assessment is performed in accordance with institutional policy
 |[ ] [ ] [ ]
| 1. Ensure that control measures identified in the risk assessment are implemented, including communication
 |[ ] [ ] [ ]
| 1. Determine if controls have reduced the risk to an acceptable level
 |[ ] [ ] [ ]
| Comments: |
| **SECTION IV. EMERGENCY PREPAREDNESS AND RESPONSE** |
| **Emergencies and Incident Response** |
|  | Yes | No | N/A |
| 1. Ensure personnel's ability to recognize emergencies and other incidents that should be reported
 |[ ] [ ] [ ]
| 1. Collaborate with appropriate persons and agencies to develop plans and policies for reporting emergencies and other incidents
 |[ ] [ ] [ ]
| 1. Develop procedures to respond to emergencies and other incidents according to institutional plans and policies
 |[ ] [ ] [ ]
| Comments: |
| **Exposure Prevention and Hazard Mitigation** |
|  | Yes | No | N/A |
| 1. Develop laboratory's incident follow-up process to include the following: review of incident report, initiation of investigation process, conducting of root-cause analysis, development of an action plan to mitigate root causes, and reporting after taking action
 |[ ] [ ] [ ]
| 1. Assess effectiveness of response to incident
 |[ ] [ ] [ ]
| Comments: |
| **Emergency Response Exercises and Drills** |
|  | Yes | No | N/A |
| 1. Develop required emergency response training
 |[ ] [ ] [ ]
| 1. Collaborate in the development of drills and exercises for laboratory personnel
 |[ ] [ ] [ ]
| Comments: |