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| **Student Biosafety Laboratory Competency Checklist** | | | | |
| **Employee Name:** | **Date:** | | | |
| **Employee Title:** | **Supervisor:** | | | |
| **SECTION I. POTENTIAL HAZARDS** | | | | |
| **Biological Materials** | | | | |
|  | | Yes | No | N/A |
| 1. Describe the concept of biohazardous materials | |  |  |  |
| 1. Recognize potential hazards associated with biohazardous materials handled in the laboratory | |  |  |  |
| 1. Utilize control measures and work practices with biologic materials | |  |  |  |
| 1. Recognize hazards associated with various procedures | |  |  |  |
| Comments: | | | | |
| **Research Animals** | | | | |
|  | | Yes | No | N/A |
| 1. Describe inherent hazards associated with research animals | |  |  |  |
| 1. Describe possible route of exposures to personnel in relation to the animal procedures used | |  |  |  |
| 1. Describe control measures and work practices to mitigate the risks associated with research animals and report on effectiveness to supervisors | |  |  |  |
| Comments: | | | | |
| **Chemical Materials** | | | | |
|  | | Yes | No | N/A |
| 1. Identify chemicals used in the laboratory | |  |  |  |
| 1. Describe hazards associated with chemicals used in laboratory procedures | |  |  |  |
| 1. Recognize control measures and work practices to be used when working with chemicals | |  |  |  |
| Comments: | | | | |
| **Radiologic Materials** | | | | |
|  | | Yes | No | N/A |
| 1. Identify radiologic materials used in the laboratory | |  |  |  |
| 1. Describe hazards associated with use of radiologic materials | |  |  |  |
| 1. Recognize control measure and work practices to be used when working with radiologic materials | |  |  |  |
| 1. Describe monitoring devices (e.g., Geiger counters and dosimetry badges) | |  |  |  |
| Comments: | | | | |
| **Physical Environment** | | | | |
|  | | Yes | No | N/A |
| 1. Describe physical hazards in the laboratory | |  |  |  |
| 1. Describe control measures and work practices to be used when physical hazards are present | |  |  |  |
| Comments: | | | | |
| **SECTION II. HAZARD CONTROLS** | | | | |
| **Personal Protective Equipment (PPE) (Primary Barriers)** | | | | |
|  | | Yes | No | N/A |
| 1. List PPE required for general laboratory entry | |  |  |  |
| 1. Describe specific PPE to be used for each laboratory procedure | |  |  |  |
| 1. Describe respiratory protection program | |  |  |  |
| 1. Perform correct use of PPE | |  |  |  |
| 1. Assess integrity and functionality of all PPE in use | |  |  |  |
| 1. Describe appropriate reporting and response to compromised PPE | |  |  |  |
| Comments: | | | | |
| **Engineering Controls --- Equipment (Primary Barriers)** | | | | |
|  | | Yes | No | N/A |
| 1. Describe laboratory equipment used with engineering controls to contain hazardous materials | |  |  |  |
| 1. Describe proper functioning of laboratory equipment with engineering controls | |  |  |  |
| 1. Describe procedures to immediately report compromised, malfunctioning, or nonfunctioning engineering controls on laboratory equipment | |  |  |  |
| 1. Adhere to appropriate work practices when using laboratory equipment with engineering controls for safety | |  |  |  |
| Comments: | | | | |
| **Engineering Controls --- Facility (Secondary Barriers) BSL-2 & BSL-3** | | | | |
|  | | Yes | No | N/A |
| 1. List the laboratory facility engineering controls designed to prevent exposure or release of hazardous materials | |  |  |  |
| 1. Recognize when facility engineering controls are compromised or not functioning properly | |  |  |  |
| 1. Adhere to correct reporting procedures when facility engineering controls are compromised | |  |  |  |
| 1. Describe process for routine monitoring of facility and facility engineering control systems | |  |  |  |
| 1. Describe laboratory facility's controlled access system | |  |  |  |
| 1. Adhere to facility security rules | |  |  |  |
| 1. Describe facility design differences between BSL-2 and BSL-3 laboratories | |  |  |  |
| Comments: | | | | |
| **Decontamination and Laboratory Waste Management** | | | | |
|  | | Yes | No | N/A |
| 1. Describe laboratory waste segregation procedures for biologic, chemical, and radiologic materials | |  |  |  |
| 1. Describe laboratory waste procedures for biologic materials | |  |  |  |
| 1. Describe disinfection, decontamination, and sterilization methods | |  |  |  |
| 1. Describe procedures for hazardous chemical waste collection and disposal | |  |  |  |
| 1. Describe procedures for radioactive waste collection and disposal | |  |  |  |
| 1. Adhere to procedures for safely removing equipment and instruments from the laboratory | |  |  |  |
| Comments: | | | | |
| **SECTION III. ADMINISTRATIVE CONTROLS** | | | | |
| **Hazard Communication and Signage** | | | | |
|  | | Yes | No | N/A |
| 1. Explain safety signs, labels, and posted information | |  |  |  |
| 1. Describe labeling of samples, containers, and cultures according to appropriate regulatory requirements | |  |  |  |
| 1. Describe process to communicate sample-specific hazard information according to standard operating procedures (SOPs) | |  |  |  |
| 1. Describe communication processes for applicable regulatory requirements | |  |  |  |
| 1. Recognize signals and alarms | |  |  |  |
| Comments: | | | | |
| **Guideline and Regulation Compliance** | | | | |
|  | | Yes | No | N/A |
| 1. Describe current regulatory requirements and applicable guidelines that govern appropriate laboratory procedures | |  |  |  |
| 1. Follow laboratory manuals and plans | |  |  |  |
| 1. Describe applicable institutional committees | |  |  |  |
| 1. Adhere to security requirements | |  |  |  |
| Comments: | | | | |
| **Safety Program Management** | | | | |
|  | | Yes | No | N/A |
| 1. Comply with institution's safety and occupational health programs | |  |  |  |
| 1. Complete required safety training | |  |  |  |
| 1. Describe routine monitoring process of equipment and facilities | |  |  |  |
| 1. Recognize deviations from normal operations and procedures | |  |  |  |
| 1. Describe the quality assurance program | |  |  |  |
| 1. Describe records management system | |  |  |  |
| Comments: | | | | |
| **Occupational Health --- Medical Surveillance** | | | | |
|  | | Yes | No | N/A |
| 1. Describe the medical surveillance plan | |  |  |  |
| 1. Describe the benefits for monitoring personal health status changes | |  |  |  |
| 1. Describe incident exposure reporting procedures | |  |  |  |
| 1. Describe signs and symptoms in humans following exposure to hazardous materials | |  |  |  |
| Comments: | | | | |
| **Risk Management** | | | | |
|  | | Yes | No | N/A |
| 1. Describe the differences in work practices between biosafety levels | |  |  |  |
| 1. Recognize potential hazards associated with laboratory materials and procedures | |  |  |  |
| 1. Describe the risk assessment process on identified hazards | |  |  |  |
| 1. Describe control measures identified in the risk assessment, including communication | |  |  |  |
| 1. Recognize effectiveness and non-effectiveness of new control measures | |  |  |  |
| Comments: | | | | |
| **SECTION IV. EMERGENCY PREPAREDNESS AND RESPONSE** | | | | |
| **Emergencies and Incident Response** | | | | |
|  | | Yes | No | N/A |
| 1. Recognize emergencies and other incidents that should be reported | |  |  |  |
| 1. Describe reporting requirements for emergencies and other incidents according to institutional plans and policies | |  |  |  |
| 1. Describe assigned role in responding to emergencies and other incidents | |  |  |  |
| Comments: | | | | |
| **Exposure Prevention and Hazard Mitigation** | | | | |
|  | | Yes | No | N/A |
| 1. Describe laboratory's incident follow-up process | |  |  |  |
| Comments: | | | | |
| **Emergency Response Exercises and Drills** | | | | |
|  | | Yes | No | N/A |
| 1. Comply with personnel emergency response training requirements | |  |  |  |
| 1. Participate in drills and exercises for laboratory personnel | |  |  |  |
| Comments: | | | | |