

Share User's experience on BSL-3 Working

AFRIMS's Experience: Policy Setting and Training for research

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Protecting Personnel and Environment from occupational exposure in laboratories

- Engineering
 - Primary containment
 - Secondary containment
- Administrative
 - Medical surveillance
 - Immunization
 - Management of staff (Policy, SOP compliance)
 - Training
- Workplace practices
- Personal protective equipment

Commissioning Criteria

- **Purpose:** to evaluate implementation and effectiveness of the facility's biosafety control-measures and compliance with AR 385-10 and DA Pam 385-69, to include simulation of selected etiologic and emergency response operations.
- Pre Commissioning Phase
- Commissioning Phase

Commissioning Criteria

1. **Biological Safety Program Management**
2. **Risk Assessment**
3. **Medical**
4. **Facility Design and Commissioning**
5. **Continuing Maintenance Process**
6. **SOPs**
7. **Laboratory Procedures**
8. **Personal Protective Equipment**
9. **Training and Information**
10. **Inspections and Audits**
11. **Transportation**
12. **Decontamination**
13. **Disposal**
14. **Accident and Incident Reporting**
15. **Emergency Planning and Response**

AFRIMS Safety and Occupation Health Policy

- **Occupational Health and Safety Program**
 - To identify health and safety concern, reduce the occurrence of occupational incidents, injuries, and illness, and promote employee health and well-being.
- **Biosafety Program**
 - To ensure that all activities involving biohazardous material are safely conducted.
 - To protect the public, employee, and environment from biohazard.
 - To assure a favorable climate for the conduct of scientific inquiry
 - To protect the interest of AFRIMS when conducting activities involving potential biohazardous materials.

Biosafety Program Component

- **Biosafety Manual:** Provide guidelines and policies for the management of hazardous and potentially hazardous biological materials.
- **Standard operating procedure:** Provide specific standard procedures for the management of hazardous and potentially hazardous biological materials.
- **Hazard analysis and risk assessment:** Provide a standard method for analyzing and mitigating risks prior to initiating laboratory procedures to ensure that laboratory activities are done with minimal risk.
- **Biosafety training Program:** Provide basic information on the safe procedures and practices for biological/biomedical research.
- **Protocol approval:** Provide guidelines and materials for protocol submission and approval procedure.

Training for BSL-3 Work

- **Once a year** all personnel working in the BSL-3 laboratory will be instructed by the Safety Office on the **special biological safety procedures** (BSL-3 mandatory SOPs) to be used. Attendance at this session is mandatory.
- **Prior to starting work** in the BSL-3 laboratory new laboratory personnel must read a copy of the **BSL-3 Manual** and the **current version of Biosafety in Microbiological and Biomedical Laboratories** regarding working in laboratory biosafety level 3 .
- It is the direct responsibility of the Principal Investigator or BSL-3 Laboratory Director to train laboratory and support personnel on **agent specific characteristics to include the natural and laboratory associated routes of infection, general characteristics of the agent and signs and symptoms of the disease** so that illness to an exposure can be easily recognized.

SOPs Training: Prior to work and annually

Standard Operating Procedures (SOPs)

Safety and Occupational

- Fire Prevention, Protection, Report and Investigation
- Hazard Communication Program
- Accident, Illness and Complaint Reporting, Records and Investigations
- Respiratory Protection Program
- Safety Risk Assessment
- Biosafety in Laboratory
- Chemical Safety
- Laboratory Waste Management
- Safety Equipments Usage
- Routine Prophylaxis and Screening
- Post-Exposure Prophylaxis and Intervention
- Bloodborne Pathogens Exposure Control plan

SOPs Training: Prior to work and annually

Standard Operating Procedures (SOPs)

BSL-3 SOPs

- Entry/Exit Procedures for BSL-3 Laboratory
- Procedure for Transfer of Equipment and Supplies Into and Out of the BSL-3 Laboratory
- Routine Cleaning and General Disinfection of BSL-3 Laboratory
- Waste Management for 3 BSL-3 Laboratory
- Use and Routine Maintenance for BSL-3 Laboratory Autoclave
- Use and Maintenance for BSL-3 Laboratory Centrifuge
- Temporary Storage and Removal of Non-BSAT Agents for BSL-3 Laboratory
- Personal Protective Equipment for BSL-3 Laboratory Selecting and Usage
- Personal Hygiene and Safe Laboratory Practices for BSL-3
- Biohazard Spill Response Plan for BSL-3 Laboratory
- Emergencies Response Plan for BSL-3 Laboratory (Fire, Biohazardous Spills, Personnel Injury, Critical Equipment Failure, Bomb Threat, Natural Disaster, Gas Leak)

Autoclave operation



Safety Equipment Use





PPE Donning and Doffing

Successful of Policy Implementation

- Share comment and cooperation by all concerned parties.

Commander

Biosafety committee

Safety personnel

Department chiefs

PIs

Laboratory personnel

Occupational health personnel

Biosurety Personnel

Medical maintenance personnel

Security personnel

References

- AFRIMS Policy Statement No. 07-04
Occupational Health and Safety Program
- AFRIMS Policy No. 08-05 AFRIMS Biosafety
Program
- AFRIMS BSL-3 Laboratory Manual Version 1

Thank you & Questions???