

Lab Survey

Do you use any pathogenic organism or biological toxins?

Do you know the risk group of the agent?

Are you using recombinant DNA?

What biological hazards are present in your operation?

Do you have documented formal training for all you staff?

Do you have written SOPs?

Engineering controls and /or PPE?

History of LAI with this process?

Unique process?

Large volumes?

Restricted access?

Waste removal?

Steps to Risk Assessment

1. ID agent based on wild type
 - Endemic nature
 - Stability
 - Host range
 - Mode of transmission
 - Prevention
 - Infectious dose
 - Severity of disease
 - Treatment
2. Make an initial BSL judgement
3. Assess laboratory operations and procedures
 - Concentration of agent
 - Volume of agent
 - Aerosol generating procedures

- Use of sharps
- Animal research
- Non-routine processes
- 4. Final BSL determination
 - Any additional precautions
 - Validate additional precautions
- 5. Assess Lab and Personnel
 - Experience and training of PI
 - Experience and training of staff
 - Experience and training of students
 - Training documentation
 - Standard operating procedures
 - Equipment certification/maintenance
- 6. File Experimental approval with the IBC and review annually or with significant changes

Containment

1. Lab Practices and Techniques
2. Engineering controls, BSCs, safety cups, primary barriers
3. Personal Protective Equipment (PPE)
4. Secondary barriers (lab design, flow patterns, filtration, Autoclave, decon, hand washing, etc)

Animals

Level 1 Risk group 1 No involvement. Occupational health and IACUC

ABSL 2

Review from IACUC and IBC

Specific lab safety manual with SOPs

Medical surveillance

Waste disposal including bedding if pathogen is shed