ISEF Guidelines for Biosafety Level 1  
Laboratory Facilities & Operations  

A Self-Assessment Safety Checklist

This form is intended to aid in assessing a laboratory as appropriate to do BSL 1 studies in locations such as water testing facilities, high schools or colleges teaching introductory microbiology classes. The following checklist is based on the Biosafety Level 1 section of “Laboratory Biosafety Manual”, 3rd edition, World Health Organization, 2004.

Facility Name ________________________________  
Room # __________

Address  _________________________________

_________________________________

- **Name of Laboratory Supervisor/Teacher** ________________________________
  
  - This person must be educated, trained and qualified to supervise microbiological projects and maintain the criteria below.
  
  - Qualifications: (List or attach additional sheet if necessary. Qualifications should include general training in microbiology or a related science)
    
    ______________________________________________________________
    ______________________________________________________________
    ______________________________________________________________
    ______________________________________________________________
    ______________________________________________________________
    ______________________________________________________________

  I attest that I have the qualifications listed above (or attached).

  I attest that there will be direct supervision of students when they are in the laboratory.

  Laboratory Supervisor/Teacher Signature___________________________________
  Date of signature __________________________

- **Name of Responsible Administrator** ________________________________

  I attest that this laboratory is a BSL 1 facility and complies with all procedures listed on this form and that the person named above is educated, trained and qualified to supervise microbiological projects and maintain the criterion below.

  Administrator Signature ________________________________________
  Title _________________________________________________________
  Date of Signature ____________________________________________
Check the appropriate box for each statement.

If you check any of the following boxes with “NO”, you must make appropriate modifications before you can classify the lab as a BSL 1 facility. The safety of students and faculty must be your primary concern.

### A. Laboratory Practices

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1. All personnel wash their hands after they handle viable materials and animals, after removing gloves, and before leaving the laboratory.

2. Eating, drinking, handling contact lenses, and applying cosmetics is forbidden in the laboratory.

3. Mouth pipetting is prohibited and only mechanical pipetting devices are used.

4. All procedures are performed to minimize the creation of splashes or aerosols.

5. Work surfaces are decontaminated with disinfectant when work is completed at the end of the day and after any spill of viable material.

6. All contaminated cultures, stocks, glassware, plastic ware and other biologically contaminated waste are autoclaved or decontaminated with a suitable disinfectant.

7. Culture fluids and other contaminated liquid wastes are autoclaved or decontaminated with a suitable disinfectant before disposal.

8. Materials to be decontaminated outside of the laboratory are placed in a durable, leak-proof container and closed for transport from the laboratory.

9. Insect and rodent control procedures are in effect.

### B. Personal Protective Equipment

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1. Protective laboratory coats/aprons are worn while in the laboratory and left in the laboratory after use. These coats are never taken from the laboratory without prior autoclaving or disinfection.

2. Suitable disposable gloves (e.g., latex, nitrile, vinyl) must be worn.

3. Goggles are available and used when required.

### C. Laboratory Facilities

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1. The laboratory has a sink for hand washing.

2. The laboratory is designed so that it can be easily cleaned and decontaminated. (Carpets and rugs are not appropriate)

3. Bench tops are impervious to water and resistant to moderate heat, acids, alkalis, organic solvents and chemicals used to decontaminate the work surface.

4. The laboratory furniture is sturdy with surrounding spaces accessible for cleaning.

5. If the laboratory has windows that are open, they are fitted with fly screens.

6. Sharps are discarded in a puncture-resistant sharps disposal container.

7. A fire extinguisher and first aid supplies are easily accessible within the laboratory.

8. An eyewash facility is easily accessible within the laboratory.