

Minimum Biosafety Level 1 Laboratory Requirements for COMS-Approved Projects

Additional stipulations may be listed in your approval letter.

Work Practices

- Laboratory access is restricted at the discretion of the Principal Investigator (PI).
- Work may be performed on open bench tops using standard microbiological practices.
- Minimize use of sharps such as needles, scalpels, glass pipettes, and broken glassware. Use safe-sharp products whenever possible. Substitute plasticware for glassware whenever possible. If sharps cannot be eliminated, they must be disposed immediately after use into a solid sharps waste container. Needles must never be recapped or bent without approval from the Biosafety Officer (BSO).
- Minimize the creation of splashes and/or aerosols.
- Decontaminate work surfaces with appropriate disinfectant after completion of work and after any spill or splash of biological material. .
- Decontaminate all liquid cultures, stocks, and other biological materials using an effective method (e.g. 10% household bleach for 20 minutes).before disposal into the sink
- Dispose of solid biohazardous waste directly into biowaste containers.
- Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption is not permitted in laboratory areas.
- Researchers must wash hands with soap and water after handling research materials and before leaving the laboratory.
- It is the PI's responsibility to ensure that laboratory personnel receive appropriate training regarding their duties, the necessary precautions to prevent exposures, and exposure evaluation procedures. Personal health status may impact an individual's susceptibility to infection, ability to receive immunizations or prophylactic interventions. Therefore, all laboratory personnel and particularly persons of childbearing age should be provided with information regarding immune competence and conditions that may predispose them to infection. Individuals having these conditions should be encouraged to self-identify to institutional occupational health services for appropriate counseling and guidance.
- Chairs and other laboratory furniture must be covered in non-porous material that is easily cleaned and decontaminated. Carpets and rugs are not permitted in laboratories.

Personal Protective Equipment (PPE)

- Researcher must wear proper street clothing into the laboratory before donning PPE. This includes long pants or other garment that covers one's legs and shoes that cover the entire foot.¹

¹ Local institutional policies may supersede this requirement

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- Laboratory coats or gowns are recommended to prevent contamination of personal clothing.
- Protective eyewear must be worn when conducting procedures that have the potential to create splashes of microorganisms or other hazardous materials. Persons who wear contact lenses in laboratories should also wear eye protection.
- Disposable gloves must be worn. Change gloves when contaminated, glove integrity is compromised, or when otherwise necessary. Do not wash or reuse disposable gloves. Wash hands after removal of gloves.

References

NIH guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines).
<https://osp.od.nih.gov/biotechnology/nih-guidelines/>

Biosafety in Microbiological and Biomedical Laboratories, 5th ed.
<https://www.cdc.gov/biosafety/publications/bmbl5/index.htm>