

Microbiology Laboratory Safety Training

Adapted from the Biosafety in Microbiological and Biomedical Laboratories (BMBL) 5th edition from the Centers for Disease Control and Prevention

The Microbiology laboratories at Lewis-Clark State College, as used for teaching and research, contain microorganisms and the associated instrumentation and safety measures for Biosafety Level 2. All organisms used should be treated as potential pathogens; therefore the following guidelines are required at all times. Upon reviewing the listed items below, all those that have access to the Microbiology laboratory must submit a signed copy in agreement to practice proper laboratory safety.

1. Access to the Microbiology laboratory is controlled and enforced by the laboratory supervisor, stockroom manager, and/or biosafety officer. Biohazard signs are posted at the entrance of the laboratory including the names and contact information of the responsible personnel.
2. All persons must wash their hands prior to and after working in the laboratory. Hands must be washed prior to exiting the laboratory to a common-use space (e.g. hallway).
3. Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption is not permitted in laboratory areas.
4. Mouth pipetting is prohibited; mechanical pipetting devices must be used.
5. Hand-to-face contact should be avoided while in the laboratory.
6. Sharps and broken glassware must be disposed of in the proper manner as instructed by the laboratory supervisor. Broken glassware should never be handled directly; rather the use of a brush and dustpan or forceps is required.
7. Eye protection must be worn at all times and procedures should minimize the creation of splashes and/or aerosols.
8. Decontaminate work surfaces prior to and after working in the laboratory.
9. All used materials must be decontaminated prior to disposal. Areas within the laboratory will be available for items to be collected prior to autoclaving.
10. Gloves must be worn to protect hands from exposure to hazardous materials. Gloves should be changed when contaminated or glove integrity is compromised. Gloves should be removed using proper technique to avoid contamination of the user.
11. All spills should be cleaned immediately using proper decontamination protocols. The laboratory supervisor must be informed of all spills or accidents and documentation, when appropriate, must be completed.
12. Eyewash and shower stations must be available in the laboratory.
13. All non-essential items must stay clear of the work space.

14. Test tubes must always be stored in test tube racks.
15. Media, cultures, and laboratory equipment is not allowed to be removed from the laboratory space.
16. Be careful of loose clothing and long hair around Bunsen burners. Do not reach across bench spaces where Bunsen burners could be lit. Be aware of long sleeves on clothing.
17. Procedures that involve work with potentially infectious agents, as determined by the laboratory supervisor, and may create aerosols or splash hazards should be conducted in a biological safety cabinet.
18. Gas jets and water faucets must be turned off completely prior to leaving the laboratory.
19. The laboratory supervisor must ensure that workers demonstrate proficiency in standard microbiological practices prior to working with BSL-2 agents.
20. In the case of special microbiological practices (e.g. use of syringes; procedures that have a high potential for generating aerosols; use of instrumentation such as pH meters, spectrophotometer, plate reader), additional training is required.
21. Persons that are immunocompromised must inform the laboratory supervisor prior to working in the laboratory. Under some circumstances, a personal physician may need to be informed of the organisms and procedures occurring in the laboratory in order to assess the risk to the worker.

I, the undersigned, have read and agree to observe and abide by the above requirements and regulations. I understand that the responsible laboratory personnel make all possible reasonable effort to ensure laboratory safety; however I agree that I am responsible for following directions and safe laboratory practices.

Name

Date

Signature