

Microbiology: Basic Lab Practices and Safety Rules

1. Before entering and while leaving the lab wash your hands with disinfectant properly.
2. Always wear lab coats in the lab and girls should tie their hair properly.
3. The allotted bench space should be cleaned with disinfectant solution before and after every laboratory session and ensure that throughout each laboratory period it is kept neat, clean, and uncluttered.
4. Mouth pipetting should be strictly avoided. Eatables are not allowed in the lab.
5. All the glass wear should be properly labelled and also sterilized.
6. Wear appropriate clothes and foot wear in the laboratory.
7. Report breakage of any glassware and individual accidents if any to the instructor.
8. Bunsen burner and water taps should be always turned off after their use.
9. Culture plates and used glassware should be discarded in the contaminated labelled container.
10. Disposable and plastic items should be discarded separately.
11. Never place used pipettes on the bench top.
12. Be careful while flame sterilizing with alcohol and see that there are no papers under you.
13. Use a fine top, water-resistant marker and masking sticky tape to label your cultures clearly.
14. Treat all cultures as pathogenic, any spillage of the culture should be informed to the instructor and the area should be cleaned using disinfectant with towel. Clean the spill area by disinfectant using fresh paper towels. The paper towels should be discarded in the suitable container and disinfect your hands carefully.
15. Petri plates should not be opened outside and all the reagent and solution bottles should be properly capped.
16. Cultures should never be removed from the laboratory without permission of instructor.

2 Microbiology Laboratory Essential Requirements

17. Culture tubes (broth and slants) must be in the straight pose in a stand or basket always for incubation or discarding.
18. Solid waste should be disposed in biohazard bag and autoclaved before throwing into trash.
19. Arrange all the materials required for the start of laboratory session, read the instructions carefully. Ask the instructor for clarification of any doubt during the exercise.
20. Inoculating loop or needle should be properly flamed before and after use. In case if there is any viscous material lying on the loop or needle dry then dry at the side of the blaze prior to placing it directly in the flame.
21. Update lab notebooks regularly and also illustrate when ever requested.
22. Instructor should always be informed about the cultures that are no longer useful. Labels and markings from the tubes should always be removed before disposing them; do not discard anything into the sink directly.
23. Switch on Laminar air flow at least five minutes before working and inoculations should always be done near burner.