

Appendix 12

Laboratory Requirements – Physical Containment Levels 1 and 2

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These Procedures are Applicable to Work Requiring PC1 or PC2 Containment Conditions:

1. *NO* eating, drinking or smoking in laboratories.
2. *NO* pipetting by mouth. *NO* licking labels.
3. *ALL* cuts and abrasions on hands *MUST* be covered with an occlusive (not perforated) dressing. Gloves *MUST* be worn where splashing of blood or other body fluids onto skin is likely and must be worn when cleaning and decontaminating equipment.
4. Laboratory coats or gowns *MUST* be worn at all times in laboratory areas. Coats and gowns used in laboratories *MUST NOT* be worn into recreation areas, e.g. staff rooms and tearooms, or into library or administration areas.
5. Hands *MUST* be washed at the end of each work period.
6. Clerical and manual recording activities carried out on work benches must be undertaken in areas separate from those where technical work with potentially infectious microorganisms is undertaken.
7. Work benches shall be decontaminated after use.
8. Laboratory waste shall be decontaminated before disposal (see decontamination procedures below).
9. Safety glasses, face shields and other protective equipment shall be worn where appropriate to protect eyes and face from splashes and other hazards.
10. Significant spills and accidents shall be reported immediately to the laboratory supervisor. A written record of the accident shall be prepared and provided to the Group Manager and Laboratory Manager.

The Following Procedures are Applicable to Work Requiring PC2 Containment Conditions:

11. Where significant quantities of infectious aerosols are likely to be produced, a Class II biological safety cabinet shall be used.
12. Where large volumes, or high concentrations of infectious material are to be centrifuged, a centrifuge fitted with sealed rotors or safety cups shall be used.
13. Laboratory doors shall normally be closed when work is in progress.
14. The use of syringes or needles shall be minimised where possible. After use, the needle and syringe shall be placed in a puncture resistant container for disposal by high temperature incineration. The needle should not be removed from the syringe or recapped before disposal.
15. When transporting any container of viable organisms between labs or to an autoclave elsewhere in the building, the container shall be transported within a second unbreakable and closed container, which can be readily decontaminated.

Standard Laboratory Procedures

1. **Personal Protective equipment (PPE):** PPE such as gloves, safety glasses and a laboratory coat must be worn whenever biological and/or chemical work is conducted in the laboratory. No sandals or open-toes shoes are allowed in the laboratory. Laboratory coats are kept on hooks near the Lab entrance.
2. **Decontamination of lab surfaces:** routinely clean laboratory bench areas before and after use with 70% alcohol.
3. **Waste disposal:** all waste must be disposed of in the appropriate manner. Biological waste must be autoclaved before disposal.
4. **Autoclave safety:** always wear heat resistant gloves, safety glasses and a laboratory coat when opening an autoclave. Be sure to allow the superheated steam to exit before attempting to remove the contents.
5. **Handwashing:** hands must be washed immediately or as soon as feasible after removing gloves or other personal protective clothing
6. **Proper labeling of equipment and work areas:** place a colour-coded label incorporating the universal biohazard label on work surfaces of any potentially contaminated equipment or work surface to warn others of biohazard contamination which may not be easily visible. This includes freezers, refrigerators and incubators.
7. **Clear labeling of solutions:** all bottles of solutions must be clearly labeled indication contents, date prepared and a pictogram denoting the primary hazard.
8. **Storage:** all potentially infectious materials to be stored must be clearly labeled with the universal biohazard symbol – this includes all uncleared biological products. Chemicals must be stored according to class so that incompatible chemicals are not stored together.
9. **Use of sharps:** minimize the use and exposure to sharps in the workplace. Keep sharp containers readily available in all locations where sharps may be generated.
10. **Aerosol generation:** any procedures that could potentially generate aerosols or other inhalation hazards must be performed in such a manner that will minimize airborne pathogen transmission and in a biosafety cabinet
11. **Spills:** all spills, whether biohazard or chemical, must be reported and treated with care. Spills should be handled according to the procedure in the Biohazard Manual or the Chemical Manual.
12. **Accidents/incidents:** All injuries, incidents and accidents must be reported using the appropriate form.
13. **Shipments:** All domestic and international shipments of biological and trackable chemicals must follow University procedure. Proper permits/licenses must be obtained before importing or exporting any biological material.

