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## GENERAL BSL1 and BSL2 LABORATORY HOUSEKEEPING

This Standard Operating Procedure (SOP) describes the use of disinfectants for routine decontamination of laboratory surfaces in the BSL1 and BSL2 laboratories. This ensures that the housekeeping process is uniform and consistent.

This SOP applies to all laboratory technicians, coordinators, students, and volunteers that work in the BSL1 and BSL2 laboratory. Laboratory workers are directly responsible for the cleanliness of their own workspaces, and jointly responsible for common areas of the laboratory

This SOP contains the following:

- 1.0 Reagents and Solutions
- 2.0 General Laboratory Housekeeping
- 3.0 Cleaning Procedures for the BSL1 Laboratory
- 4.0 Non-Routine Disinfection

### 1.0 Reagents and Solutions

#### 1.1 Alcohols

1.1.1 Ethanol (denatured ethanol, methylated spirits) or isopropanol are used at a dilution of 70%. Alcohols are volatile and flammable and must not be used near open flames. Working solutions should be stored in closed containers to avoid evaporation. Bottles with alcohol-containing solutions must be clearly labeled to avoid autoclaving. Alcohols can be used on skin, work surfaces of laboratory benches and biosafety cabinets, and to soak small pieces of surgical instruments. A major advantage of aqueous solutions of alcohols is that they do not leave any residue on treated items.

#### 1.1.2 To prepare 70% alcohol:

- Add 100mL of 95% ethanol to 39.1mL of distilled water
- Add 100mL of 90% ethanol to 31.0mL of distilled water
- Add 100mL of 85% ethanol to 23.1mL of distilled water
- Add 100mL of 80% ethanol to 15.3.1mL of distilled water
- Add 100mL of 75% ethanol to 7.64mL of distilled water

## 2.0 General Laboratory Housekeeping

Good housekeeping must be practiced at all times. The following is the list of suggestions enabling the laboratory to become a neat and pleasant place to work for all laboratory personnel. Remember, you are not the only one using the room and associated equipment. You would like to find it clean, so leave it tidy for the next person.

- 2.1 The laboratory must be kept neat and orderly at all times.
- 2.2 Keep the work area free from unnecessary apparatus, paper, chemicals, and waste.
- 2.3 All spills must be cleaned up before continuing work or other tasks.
- 2.4 All paths to exits must be kept clear and unobstructed.
- 2.5 All paths to emergency shower and eyewash areas must remain unobstructed.
- 2.6 Label clearly all chemical containers for easy identification by all.
- 2.7 Rinse broken glassware before disposal into the "Glass Waste" container.
- 2.8 Safely transfer biohazardous waste into the proper waste container.
- 2.9 Transfer waste paper, gloves packing material and wood into the regular waste container.
- 2.10 Clean all your equipment and put it away before leaving.
- 2.11 Clean your work area completely before leaving.
- 2.12 Return all unused chemicals to their proper storage places or on the laboratory cart.

## 3.0 Cleaning Procedures for the BSL1 and BSL2 Laboratory

All work areas and materials that come or may come into contact with biological agents should be disinfected both before and after each use. This provides protection for personnel, the community, the environment and your experiments. This procedure should also be followed for spills involving recombinant DNA (rDNA).

- 3.1 Apply disinfectant to work area. If visible or gross contamination is present, apply enough disinfectant to saturate the contamination.
- 3.2 Let stand for minimum of 1 minute contact time.
- 3.3 Wipe thoroughly and place absorbent material in the waste container.

## 4.0 Non-routine Disinfection

- 4.1 For disinfection or decontamination outside of normal operations, such as cleaning a large piece of laboratory equipment prior to disposal, contact the Biological Safety Officer for assistance.