



ECKERD COLLEGE

Safe Operating Procedures

(1/04)

Disposing of Biohazardous Materials

Biological Waste - Any solid waste that causes or has the capability of causing disease or infection and includes, but is not limited to, biohazardous waste, diseased or dead animals and other wastes capable of transmitting pathogens to humans or animals. The terms "biological waste" and "biohazardous waste" are used interchangeably throughout this policy.

All biohazardous solid wastes will be transported and disposed by a transport and disposal contractor licensed by the Florida Department of Environmental Protection for such services. Stericycle (phone #) has been contracted by Eckerd College to provide these services for the campus. The pickups are irregular for NAS so the company must be contacted specifically for NAS and arrangements made to have an added stop to our building.

Unpreserved carcasses should be double bagged, labeled with the PI/CI name, IACUC protocol number/course and date. Any special information concerning hazardous chemicals present in the carcasses should be noted. The label should be able to be read on the exterior of the container.

These remains should be frozen, accumulated and kept in the freezer compartment of the refrigerator located near the flammables cabinet in SHB 100. **Notify the Biology Stockroom Supervisor** as each addition is made to the freezer so that a log maybe kept of what is ready for pickup.

Preserved carcasses should be maintained in their preservative or holding fluid until pickup. These should be labeled with PI/CI name, IACUC protocol number/course and date. Any special information concerning hazardous chemicals present in the carcasses should be noted. The label should be able to be read from the exterior of the container. **Notify the Biology Stockroom Supervisor** where the carcasses are deposited and as each addition is made to the area so that a log maybe kept of what is ready for pickup.

Any questions regarding interpretation of this policy should be directed to members of the Health and Safety committee or the Safety Officer.

Records: the Campus Safety Officer, or designate, will maintain ALL records of biohazardous waste manifests (i.e., certificates of disposal, and invoices). These records will be maintained for a minimum of 3 years.

Additional work practices for infectious materials:

1. Hands should be washed after caring for infected persons, animals and/or material, after removing gloves or immediately after possible contact with body fluids.
2. Contaminated equipment shall be bagged, labeled, cleaned and disinfected (e.g., utensils and trays).
3. Use convenient location for puncture resistant container to dispose equipment such as needles, syringes, scalpel blades and other sharp items. Needles should not be recapped, purposefully bent, broken, removed from disposable syringes or otherwise manipulated by hand.
4. Spills (e.g., body fluids) must be cleaned immediately and area chemically disinfected.
5. The use of personal protective equipment such as gowns, gloves and eye covering should be worn when contamination of skin or clothing is likely or has occurred. Laboratory personnel shall wear gloves when handling red biohazardous waste bags.

Individuals who are injured by a "sharp" (medical instrument) outside of a health facility setting should be referred to the Student Health Clinic or Office of Human Resources for determination of their Tetanus immune status

Disinfectants

Chlorine: This halogen is a universal decontaminant active against all microorganisms, including bacterial spores. Chlorine combines with protein and rapidly decreases in concentration in its presence. Free, available chlorine is the active element. It is a strong oxidizing agent, corrosive to metals. Chlorine solutions will gradually lose strength so that fresh solutions must be prepared frequently. Sodium hypochlorite is usually used as a base for chlorine decontaminant. An excellent decontaminant can be prepared from household or laundry bleach. These bleaches usually contain 5.25% available chlorine or 52,500 p.p.m. If diluted 1 to 100, the solution will contain 525 p.p.m. of available chlorine, and if a nonionic detergent such as Naccanol is added in a concentration of about 0.7%, a very good decontaminant is created. These are recommended for certain disinfecting procedures, provided the available chlorine needed is considered. Low concentrations of available chlorine (50 to 500 p.p.m.) are active against vegetative bacteria and most viruses. For bacterial spores, concentrations of 2500 p.p.m chlorine are needed.

Household Bleach (low concentrations of chlorine) is available on the shelf in the back of the biological stockroom in ShB 100.

Formaldehyde-Alcohol: Solutions of 8% formalin in 70% alcohol are considered very good for disinfecting purposes because of their effectiveness against vegetative bacteria, spores and viruses. For many applications this is the disinfectant of choice. (NOTE: To be used only where absolutely necessary due to health hazard associated with formaldehyde.)

Alcohol: In concentrations of 70 to 95%, alcoholic solutions are good general-use disinfectants, but they exhibit no activity against bacterial spores. Ethanol is available in the flammables storage cabinet in SHB 100.

ADDITIONAL INFORMATION: Additional information may be obtained from the following sources:

Biosafety in the Laboratory: Prudent Practices for Handling and Disposal of Infectious Materials, National Academy Press, Washington, D.C. (1989).

Centers for Disease Control, Office of Biosafety, Atlanta, GA 30333. Phone: (404) 329-3883

National Institutes of Health, Division of Safety, Bethesda, MD 20892. (301) 496-1357

Guide for Infectious Waste Management, National Technical Information Service Publication, P.O. Box 199130, Springfield, VA 22161