Institutional Biosafety Committee: Biomedical Waste

This guidance is intended to insure compliance with the NIH/CDC, federal and state guidelines and restrictions of the University of South Alabama. This information describes the proper method for handling and disposing of biomedical waste produced from RESEARCH ACTIVITIES.

What is Considered Medical or Biomedical Waste?

Federal, State and local environmental laws consider medical waste to be certain laboratory and medical treatment apparatus:

1. **All sharps (contaminated and uncontaminated):**
   - Syringes with/without needles
   - Broken glass
   - Scalpels, razors and lancets
   - Glass pipettes
   - Specimen tubes, slides

2. **Human or animal blood, blood-products, body fluids and tissues**

3. **Cultures, infectious agents and associated biologicals:**
   - Used Petri plates containing culture agars
   - Specimens from bottles, medical, pathology and research laboratories
   - Discarded live and attenuated vaccines
   - Wastes from the production of biologicals
   - Culture flasks

4. **Other laboratory wastes including but not limited to:**
   - Surgical drapes and absorbents
   - Protective gloves, disposable lab coats, or masks
   - Specimen containers
   - All microorganisms constructed using rDNA

5. **All wastes that have been autoclaved.**

6. **Any medical equipment or disposables that have the appearance of medical wastes**

Further, all items in red biohazard bags are considered medical waste, even if the items are sterilized. Only red bags and collection containers meeting regulations shall be used for collection and disposal of biomedical waste. Chemicals and radioactive waste cannot be disposed of as biomedical waste.

Everyone who produces, handles, treats and/or disposes of biohazardous waste is responsible for the proper management of this waste stream. By assuming these responsibilities, regulatory compliance can be assured, and risks for exposure to employees and the community is greatly reduced.

**Sharps Waste:** Syringes, scalpels and razor blades, broken glass/plastic, pipettes, tips, etc. are required to be placed in red sharps containers and must be segregated at the point of use. Sharps containers **must:**
- Be disposed of or swapped when they are full.
- Have proper biohazardous labels outside of the containers.
- Be kept closed when not in use.

Segregation and Packaging of Waste:

Infectious/potentially infectious/rDNA:
- human pathogens  - animal pathogens  - plant pathogens
- recombinant DNA  - human/primate blood, blood products,  body fluids  - human/primate tissue
- any biological contaminated material (including unbroken plastic lab ware, gloves, etc.)

Refer to the Biological Waste and Sharps Disposal Flowchart.

Handling and Disposing of Biohazardous Wastes:

Biomedical waste must be separated at the point of origin by the generator. All research-generated infectious waste containing large volumes of human or animal pathogens must be sterilized on site by autoclaving prior to disposal using autoclavable bags with approved biohazard symbol and built-in indicator strip confirming proper autoclaving temperature has been reached. Alternatively, heat-sensitive autoclave tape or indicator strips can be placed across the biohazard symbol prior to autoclaving. Autoclaved bags are then placed in a red biohazard bag after autoclaving. (Double bags are recommended if leakage and/or outside contamination may occur).

Red bags should be capable of passing the ASTM 125 pound drop test for filled bags. All bagged medical waste must be closed by twisting and hand tying in a single knot. Biohazard bags must be placed into an approved biomedical waste container for transport from generation site to the biohazardous waste holding site. **All red bags must be labeled with the following information before disposal:** 1) name and room number of investigator's laboratory; 2) department; 3) phone number; and 4) date of disposal. Lids should be kept on the red containers at all times. Red Stericycle-issued waste containers are available at each facilities designated collection site.

For additional reference refer to the Biological Waste and Sharps Disposal Flowchart.

For questions regarding the disposal of biomedical waste, please call the Office of Research Compliance and Assurance at (251)341-4913

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