

EAST CAROLINA UNIVERSITY

INFECTION CONTROL POLICY

Infectious Waste Management

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Approved By:

Biological Safety Officer,
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Infection Control Nurse

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Purpose

The purpose of this policy is to ensure infectious waste is managed in accordance with applicable local, state and federal regulations, including North Carolina Medical Waste Management rules (Appendix A-15A NCAC13B.1200 Medical Waste Management).

I. Designation of Infectious Waste

The following items should be considered “infectious waste” and/or “contaminated” and will always be discarded in red plastic trash bags (6 mil thickness) or, if sharps, into designated sharps container, both meeting Department of Transportation (DOT) Shipping Requirements.

Blood and contaminated items that would release blood if compressed and items that are caked with dried blood and are capable of releasing this material during material handling.

Items strongly suspected (based on the patient’s health history or the patient’s other diagnoses) of containing blood (even if not visible); or strongly suspected of containing serous fluid. (For example: The stool of a patient with gastrointestinal bleeding may not contain visible blood, but would be strongly suspected of containing blood.)

Pus or items contaminated with pus. (Examples: infected wound drainage (pus) or purulent (pus containing) sputum from a patient with pneumonia.)

Saliva (and items contaminated with saliva) in dental procedures; or saliva (and items contaminated with saliva) which contains visible blood.

The following fluids and items contaminated with same:

- Pericardial fluid
- Peritoneal fluid
- Pleural fluid
- Synovial fluid
- Cerebrospinal fluid
- Serous fluid
- Semen
- Secretions from the female genitalia (including vagina, cervix, fallopian tubes, etc.)
- Urine
- Amniotic fluid

Items contaminated with suctioned/drained body fluids in amount greater than 20 mls. (Examples: J-tube, chest tubes, Penrose drains, urine, etc.) Incineration or sanitary sewage systems may be utilized provided the sewage treatment authority is notified, ensuring discharge requirements are met.

Microbiological waste including cultures and stocks of infectious agents and contaminated devices used to transfer, inoculate, or mix cultures.

Pathological waste including human tissues, organs, and body parts.

Animal carcasses, body parts, and bedding of animals that were intentionally exposed to pathogens.

Fetal remains (unrecognizable). Fetal remains will be disposed of by burial, cremation or incineration except that burial or cremation will be the only method of disposal of recognizable fetuses. (A recognizable fetus is a fetus that has developed beyond completion of the second trimester of gestation.)

II. Segregation of Infectious Waste

Infectious waste should be segregated from all other waste to protect the public health and the environment by assuring that this waste receives appropriate treatment before disposal.

Infectious waste should be segregated at the point of generation by the person generating the waste. All infectious waste should be placed in a red bag. Sharps must be placed in an appropriate puncture resistant, labeled sharps container that is as close to the point of use as possible.

III. Packaging of Infectious Waste

The packaging of infectious waste should be appropriate for the physical state of the waste and the treatment option.

General packaging requirements include:

- Liquid waste must be collected and stored in tightly sealed containers for disposal or else emptied by staff wearing proper personal protective equipment before containers are placed in the general waste stream.
- Semi-solid waste (i.e. waste with liquid or pathological waste) must be double bagged.
- Sharps (including needles) must be placed in designated sharps disposal units and disposed of when $\frac{3}{4}$ full.

IV. Waste Removal/Transport

Biohazard waste generated in patient care areas will be collected at least one time each day and as needed.

Biohazard waste generated by research labs is labeled and placed in a secure location which is accessible by authorized personnel for storage prior to collection.

Contaminated and non-contaminated waste must not be stored in the same container.

All waste should be transported in closed, properly labeled containers. Medical waste will not be compacted prior to treatment.

The biohazard waste transport carts and containers will be cleaned with an approved disinfectant at least weekly and more frequently if necessary.

V. Storage

The following general storage requirements shall be met for all storage areas:

- Waste will be stored in a manner that prevents leakage of the contents of the package.
- Waste will be stored in areas that are inaccessible to vertebrate pests.
- The integrity of the package shall be maintained at all times.
- All containers shall permit access only to authorized, trained personnel.
- All areas where infectious waste is stored will be labeled with the universal biohazard symbol.

VI. Awareness of special precautions for wastes generated during care of patients with rare diseases:

- When discarding items contaminated with blood and body fluids from patients suspected of having smallpox or viral hemorrhagic fever patients, use methods that minimize the production of aerosols.
- There are special recommendations for managing medical wastes when disposing waste from clinical areas providing care for Creutzfeldt-Jakob Disease (CJD) patients. If a suspect CJD patient is seen, contact the Infection Control Nurse.

VII. Special precautions for wastes generated from special research laboratories, which include:

- Cultures/stocks/or high-risk organisms will be autoclaved prior to placing designated storage areas.

VIII. Requirements for storage and operational requirements/regulated medical waste treatment facility:

- Regulated medical waste is treated and managed in accordance with 15A NCAC13B.0100-.0700
- Requirements for storage of regulated medical waste are followed in accordance with 15ANCAC13B.1206.
- Operational requirements for regulated medical waste treatment facilities are followed in accordance with 15ANCAC13B.1207.

IX. Contingency Plan

Cleaning Spills of Blood and Other Potentially Infectious Material

Use protective gloves and other personal protective equipment (PPE), gown, N95 mask, and protective eyewear) appropriate for the task.

A. To clean a small spill (<20ml):

1. Don gloves
2. Carefully remove visible blood or other potentially infectious material with paper towels or some other absorbent paper and dispose in biohazard waste container.
3. Mechanical means such as forceps should be used to pick up any

- contaminated sharps or broken glass and place in biohazard sharps containers.
4. Swab the area with a cloth or paper towel moderately wetted with a disinfectant (an EPA-registered sodium hypochlorite product). Allow disinfectant to stand according to the manufacturer's recommended contact time.
 5. Wipe with a clean paper towel or air dry.
 6. Dispose of gloves and all contaminated items in a biohazard waste container.
 7. Wash hands using soap and water.
- B. To clean large amounts of blood (>100ml) or more than can be absorbed by paper towels:
1. Secure the area to prevent employees or visitors from exposure.
 2. Report spill to supervisor. Utilize Biohazard spill kit. Contact housekeeping if assistance is needed.
 3. Don PPE (gloves, gown, mask and eye protection).
 4. Mechanical means such as forceps should be used to pick up any contaminated sharps or broken glass and place in biohazard sharps containers.
 5. Remove visible blood or other organic material. A fluid control solidifier may be sprinkled on the spill.
 6. Discard all cleaning materials in a biohazard waste container.
 7. Apply disinfectant (an EPA-registered sodium hypochlorite product) to the spill area, keeping the area wet per manufacturer's recommended contact time.
 8. Wipe clean or air dry.
 9. Remove personal protective equipment and place in the biohazard waste container, then store in designated area.
 10. Wash hands thoroughly using soap and water for 30 seconds with proper hand washing techniques.
- C. As a general guideline, spills larger than 100cc probably would be considered large. Those less than 10 to 20cc would be considered small. For others, the pattern of the spill would determine the approach to clean up. In the case of a large biohazardous spill, exit the area, close door (30-60 minutes allow aerosols to dissipate), display sign not to enter area and notify Office of Prospective Health/Biological Safety for assistance in clean up. This would be the case if an individual lacked training on PPE.

X. Regulated Medical Waste Disposal/Treatment

- ECU medical waste utilizes Stericycle to handle/treat medical waste generated at our facilities. All ECU medical waste is incinerated by waste hauler at their facility.
- The contract regulated medical waste transporter will follow all requirements outlined in 15ANCAC.1205.

XI. Enforcement

The enforcement of this policy with a lab or clinic is the responsibility of the principal investigator, clinical administrator or head nurse in the respective department.

XII. References

- North Carolina Register – North Carolina Department of Environment and Natural Resources Division of Waste Management Medical Waste Program Rules, 15ANCAC13B.1200, Medical Waste Management, 10/1/90, Amended Eff. April 1, 1993; January 4, 1993.
- OSHA: Occupational Exposure to Bloodborne Pathogens; Needle sticks and Other Sharps Injuries; Final Rule (29 CFR part 1910.1030) (Occupational Safety and Health Administrative) (December 8, 2008)
- Biological Safety Manual, ECU, 1/30/12.
- US DOT Hazardous Materials, 49 CFR, Part 172.704, For the Safe Packaging and Transportation of Regulated Medical Waste.