

Environmental Health and Safety 1 University Ave Lowell MA 01854 http://www.uml.edu/eem/ehs

## SOP BIO-002 FOR SHARPS USAGE AND DISPOSAL

#### SCOPE

This policy describes the disposal of **sharp waste** as part of the UMass Lowell Biohazardous Waste Program, in compliance with 105 Code of Massachusetts Regulation 480.200 (E) with the fundamental purpose to protect staff, faculty and students that could be at risk when handling any waste sharps.

## DEFINITIONS

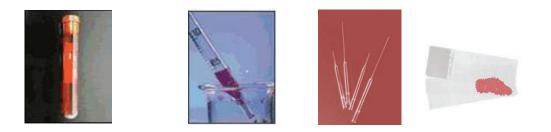
**Sharps** are any items having corners, edges, or projections capable of cutting or piercing the skin. The following items are considered sharps **WHETHER OR NOT CONTAMINATED** with biohazardous materials:

- Syringes, with or without needles (syringe components, suture needles, pen needles);
- Needles with attached tubing;
- Scalpels, razor blades, lancets.



The following items are considered sharps **ONLY WHEN CONTAMINATED** with biohazardous materials

- Empty blood vials
- Broken glassware
- Splintered plastic pipettes
- Glass Pasteur pipettes
- Glass slides and covers.



## IMPORTANT

- Use personal protective equipment (glasses gloves) when working with or disposal of sharps
- NEVER recap a needle before disposal;
- DO NOT pickup contaminate or broken glass with bare hands, use forceps or other mechanical device.

## SHARP CONTAINERS

Sharp containers are devices for the specific purpose of sharps disposal and in most cases are labeled with the biohazard sign. Immediate disposal of used needles into a sharps container is a required standard procedure.



**Sharps containers are for sharps ONLY.** The containers should be used until there are <sup>3</sup>/<sub>4</sub> full. Call EHS at 4-2618 for pick up for disposal or to request new supplies.



Disposal of non-sharp biohazard waste in sharps container adds significant costs to waste management. The following items **SHOULD NOT BE DISPOSED** in sharps containers:

- Gloves;
- Paper towels;
- Lab glassware;
- Plastic pipettes and pipette tips;
- Petri dishes or culture plates;
- Plastic vials and conical tubes.

## USAGE OF SHARPS AND NEEDLES

Syringes and hypodermic needles are dangerous instruments. The use of needles and syringes should be restricted to procedures for which there is no alternative.

Blunt cannulas should be used as alternatives to needles wherever possible (i.e., procedures such as oral or intranasal animal inoculations). Needles and syringes should never be used as a substitute for pipettes.

# PROCEDURES AND RECOMMENDATIONS WHEN WORKING WITH SHARPS AND BIOLOGICAL MATERIALS

Follow these recommendations when using syringes and needles with biohazardous or potentially infectious agents:

- 1. Before using any sharp, be sure to have a convenient size sharp container;
- 2. Minimize the use of reusable syringes and needles;
- 3. Use disposable needle locking syringe units whenever possible;
- 4. Work in a biosafety cabinet whenever possible;
- 5. Wear appropriate PPE: gloves, safety glasses;
- 6. Fill the syringe carefully to minimize air bubbles;
- 7. Expel air, liquid and bubbles from the syringe vertically into a cotton moistened with alcohol 70%;
- 8. Wrap the needle and stopper in cotton moistened with disinfectant when removing a needle from a rubber-stoppered bottle;

- 9. Use a separate pan of disinfectant for reusable syringes and needles;
- 10. If it is essential that a contaminated needle be recapped or removed from a syringe, the use of a mechanical device or the one handed scoop method (See Addendum) must be used;



- 11. The use of needle nipping devices is prohibited and the devices must be discarded as infectious waste;
- 12. Do not use a syringe to mix infectious fluid forcefully;
- 13. Do not contaminate the needle hub when filling the syringe in order to avoid transfer of infectious material to fingers;
- 14. Bending, recapping, clipping, or removal of needles from syringes is prohibited;
- 15. Do not place syringes in pans containing pipettes or other glassware in order to eliminate sorting them later;
- 16. Used disposable needles and syringes must be placed in appropriate sharps disposal containers and discarded as infectious waste;
- 17. Never overfill a sharps container.

For any questions on sharps disposal and/or biosafety issues, contact EHS at <u>biosafety@uml.edu</u> or Ext. 4-2618.

## ADDENDUM TO POLICY AND PROCEDURES FOR SHARPS USAGE AND DISPOSAL

## DISPOSAL OF CONTAMINATED SYRINGES

## POLICY

In compliance with the OSHA BBP Standard, this SOP applies to any worker who needs to pick up and or dispose potentially contaminated needles and syringes.

## **KIT CONTENTS**

- 1. Biohazard sharps tube
- 2. Pair of gloves
- 3. Tweezers/Forceps

## PROCEDURE

1. Open the bag and take out the contents.



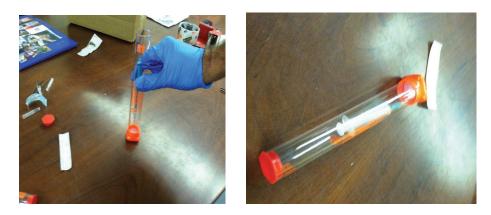
- 2. Put on the gloves.
- 3. Open the biohazard tube and place it near the syringe.
- 4. Using ONLY one hand, pick up the contaminated syringe with the tweezers. Needle should point down towards the bottom of the tube.



5. Place the syringe in the biohazard tube carefully.



- 6. Tap the tube for the needle to stay in place.
- 7. Cap the tube with both hands.



- 8. Place the biohazard tube and the tweezers back in the bag.
- 9. Remove the gloves in a sterile manner and discard them.
- 10. Reseal the bag and label it.

For additional information on sharp disposal, supplies and Biosafety issues, contact EHS at <u>biosafety@uml.edu</u> or Ext. 4-2618.