ORS Guidance on Sharps Disposal

What is a “sharp”?  
The Illinois Environmental Protection Agency (IEPA) has specifically defined what type of waste must be discarded as Infectious Medical Waste (or as we describe it biowaste). They include “sharps” as part of this definition. This means that anything that the IEPA considers a “sharp” MUST be disposed of as biowaste.

Sharps are broken down into two categories: USED and UNUSED. Regardless of whether the sharps are used or unused, they are still considered biowaste according to the IEPA. The following is a list of items that the IEPA considers “sharps”:

- **Used Sharps** – includes, but is not limited to,
  - Hypodermic, intravenous or other medical needles (Fig. 1)
  - Hypodermic or intravenous syringes (Fig. 1)
  - Pasteur pipettes
  - Scalpel blades
  - Blood vials
  - Other types of broken or unbroken glass (including slides and cover slips) in contact with infectious agents. (contact ORS if you think you may have waste in this category)

  **Note:** Northwestern University Policy also requires that plastic pipette tips and serological pipets also be disposed of as biowaste. These items should be discarded in a solid container (it need not be a sharps container)

- **Unused Sharps** – includes, but is not limited to,
  - Hypodermic, intravenous or other needles
  - Hypodermic or intravenous syringes
  - Scalpel blades

**Figure 1. Types of needles and syringes used in research**
(A) Intravenous needles (B) Hypodermic needles (C) Intravenous and hypodermic syringes

**How do I dispose of my sharps?**  
NONE of the above items can be disposed of in the regular trash. ALL of these items MUST be disposed in a RED or CLEAR sharps container that has the universal biohazard symbol on it (Fig. 2) regardless of what material was used in them. Even if the needles and/or syringes only contained water or PBS, they are still considered used sharps and therefore must be disposed as biowaste.

**Figure 2. Sharps Containers**
(A) Clear puncture resistant sharps container with the universal biohazard symbol displayed. (B) Red biohazard container with the universal biohazard symbol displayed.
Should I recap my needles before I dispose of them in the sharps container?
NO. Do not recap needles prior to disposal. They must be thrown into the sharps container UNCAPPED (Fig. 3) and the cap must be placed into the sharps container also.

Figure 3. Proper needle disposal.
Needles must never be recapped before placing them in the sharps container.

Are there any exceptions?
Yes. Sharps that are contaminated with EPA classified hazardous materials are an exception. Sharps that are contaminated with hazardous material MUST be disposed of in a GREEN sharps container WITHOUT a biohazard symbol (Fig. 4). These sharps must never be disposed in a RED container even if the container does not display the biohazard symbol.

Figure 4. Green sharps container with no universal biohazard symbol.
This container must only be used for disposal of sharps contaminated with EPA classified hazardous substances.

Another exception is sharps that meet the IEPA conditions for exemption from the definition of potentially infectious medical waste. Only ORS personnel can determine if your sharps meet these criteria. Contact ORS for additional information if you think you may have sharps that are exempt.

Who do I contact for more information?
For additional information regarding the Potentially Infectious Medical Waste Regulations, visit the Illinois EPA website. For more information about the General Provisions of the Potentially Infectious Medical Waste Regulations, see this document. If you would like help with sharps disposal issues, including choosing the appropriate sharps container and proper disposal procedures, contact Andrea Hall in the Office for Research Safety at 847-491-5581 or ahall@northwestern.edu.