Sharps! Sharps! Everywhere are sharps!

The proper disposition of sharps is a question that we must constantly face. What is a sharp? Where do sharps go? If I use this or that and it is not contaminated, is it still a sharp? What about pipette tips, they can puncture? Before we go into all the various sharps and how they should be treated, it would be prudent to define just what sharps are.

Sharps are defined by the Alabama Department of Environmental Management (ADEM), the regulatory body in the state that addresses medical waste, as:

“any used or unused discarded article that may cause punctures or cuts and which has been or is intended for use in animal or human medical care, medical research, or in laboratories utilizing microorganisms. Such waste includes, but is not limited to, hypodermic needles, IV tubing with needles attached, scalpel blades, and syringes (with or without needles attached). Items listed above that have been removed from their original sterile containers are included in this definition. Glassware, blood vials, pipettes, and similar items are to be handled as if they are contaminated with blood or body fluids.”

The medical waste regulations in the state of Alabama specifically mention blood or body fluids. So what about contaminated items from the research labs? The state plan also addresses that issue! ADEM defines microbiological waste as:

“discarded cultures and stocks of human infectious agents and associated microbiologials; human and animal cell cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; waste from the production of biologicals; discarded live and attenuated vaccines; culture dishes and devices used to transfer, inoculate and mix cultures. Only those animal vaccines which are potentially infectious to humans (strain 19 Brucellosis vaccine, Feline Pneumonitis vaccine, contagious Eczema vaccine for Sheep, Newcastle Disease vaccine, Anthrax Spore vaccine, and Venezuelan Equine Encephalitis vaccine) shall be considered microbiological waste.”

Since this definition was created, other vaccines may fall into a category of regulated material. Contact UAB Occupational Health and Safety for additional details.

The obvious implication is that if the material is contaminated with microbiological waste and is also categorized as a sharp, it must be treated as a sharp and is therefore disposed of in an approved sharps container. So what is an “approved” sharps container? ADEM defines sharps containers as:

“…leak proof, rigid, puncture-resistant containers and sealed to prevent loss of contents under normal handling procedures. These containers shall be clearly labeled…” “…containers which have either a red background color or utilize red..."
lettering with contrasting background color and conspicuously labeled with either
the words “infectious” or “Medical Waste” or “Biohazardous” and/or contain the
International Biological Hazard Symbol.”

![Image] This is an example of an approved Sharps container. Many sizes are available to suit your generated volume needs.

In other words the sharps container MUST be designed for sharps as they are defined by ADEM!

*Sharps that have been used for radioactive materials or chemicals must not be placed in the regular medical waste stream. Radioactive material should be treated in accordance with the UAB Radiation Safety Procedures manual. Special Containers designed for mixed waste must be used for items contaminated with potential chemical hazards. Contact UAB Radiation Safety or UAB Chemical Safety for more details.*

Ok, so now you know what a sharp is and in what container it is to be disposed of, but what about recapping needles, sheering needles, or removing needles from syringes. The Occupational Safety and Health Administration (OSHA), a federal agency, has addressed this issue in the Bloodborne Pathogen Standard 29 CFR1910.1030, paragraph (d)(2)(vii)(A). This standard says in part:

“Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed, unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure.”

In addition, a compliance directive (CPL 2-2.69 at XIII.D.5) issued by OSHA states:

“…removing the needle from a used blood-drawing/phlebotomy device is rarely, if ever, required by a medical procedure. Because such devices involve the use of a double-ended needle, such removal clearly exposes employees to additional risk, as does the increased manipulation of a contaminated device.”

From these two citations we can clearly see that OSHA prohibits removing needles from syringes, sheering needles, recapping needles, or procedures that would otherwise place an individual at risk for a needle stick injury.

When working in the lab, we face many types and categories of hazards. By following a few simple rules we can not only reduce the incidence of injury to ourselves, but also make our labs a safer place to work for others we interact with. If you or someone you know has any questions regarding the proper use and disposition of sharps, the UAB Department of Occupational Health and Safety is here to help.