Sharps Handling

Why You Should Care

Have you ever stuck yourself with a needle, scalpel, or piece of broken glass? It can be a terrifying feeling if that sharp object was contaminated with something infectious, or worse, if you don’t know what it might be contaminated with. Sharps are defined as items capable of causing percutaneous wounds or breaks in the skin. Examples of sharps include: hypodermic needles; syringes; surgical needles; Pasteur pipettes; scalpels; capillary pipettes; razor blades; contaminated (with biohazardous materials) glass slides, cover slips, and broken glassware. Safe sharps handling can protect you and the personnel who collect your lab’s waste, if you follow a few simple rules.

Best Practices

- **Know the risks** – Are you using sharps while working with human materials, viral vectors, cancer cells, pathogens, recombinant/synthetic nucleic acids (r/sNA), or biological toxins? If the answer is yes, an accidental injury will have increased risk. Take time to be safe.
- **Full view** - Keep all sharps in full view at all times and if possible, use only one at a time.
- **Use a tube** - Rather than recapping the needle or leaving a scalpel exposed, place it in a clean conical tube if you need to set it down.
- **Within Arm’s Reach (W.A.R.)** - Dispose of sharps directly, without manipulation, in an approved sharps disposal container (i.e., do not bend, shear, break, recap, or use hands to remove needles from syringes or blades from scalpels). Maintain sharps disposal containers W.A.R. (including inside a biosafety cabinet).
- **Luer-Lock** – Use Luer-lock syringes and needles or units where the needle is integral to the syringe to prevent the needle from slipping off.
- **Safety Engineered Sharps** – This term means sharps that have built-in safety features like retractable needles or sheaths that cover the needle or scalpel when you’re done. Use them where you can.
- **Substitute** plasticware for glassware whenever possible.
- **Limit** the use of sharps to when no other alternatives are available.
- **Lock them up** – Stocks of both needles and syringes, even if stored separately, are required to be under lock and key when not in use.
- **Safe transport** – Use secondary containers to transport your sharps from Point A to Point B, particularly in public areas.

Things to Avoid

- **Do not recap** –Recapping needles is one of the easiest ways to receive a needlestick. However, if recapping must be done, there are safe recapping techniques. First receive permission from your PI and training from EHS Biosafety, or from CARE if animals are involved, and use one of the following two methods: 1) one handed scoop technique, or 2) forceps or tongs to place the cap on the needle.
- **Do not centralize your sharps bins** – Rather than keeping one large single sharps bin in the middle of the room, keep a smaller one at each station so you don’t have to walk around with the needle to dispose of it.
- **Do not use your hands** - Handle broken glass or other sharps with a secondary device such as forceps, crucible tongs, pieces of cardboard, or broom and dustpan.

Questions? Contact EHS!

www.ehs.cornell.edu  255-8200  askEHS@cornell.edu
Do not recap the needle using this technique.

This needle was disposed of incorrectly and resulted in the injury of a custodian who was handling the waste.

Where to get training and more information

- Follow the [EHS Lab Waste Guide](https://sp.ehs.cornell.edu/lab-research-safety/bios/Pages/Sharps.aspx) to determine disposal based on the sharps with which you work.
- View the [EHS Bloodborne Pathogen](https://sp.ehs.cornell.edu/lab-research-safety/bios/Pages/Sharps.aspx) site if you are working with any human materials, whether or not they involve sharps handling.
- Attend [Bloodborne Pathogen Training](https://sp.ehs.cornell.edu/lab-research-safety/bios/Pages/Sharps.aspx) if you are working with any human materials, whether or not they involve sharps handling. This is the law.
- View the [EHS Biosafety site](https://sp.ehs.cornell.edu/lab-research-safety/bios/Pages/Sharps.aspx) that contains the Needle & Syringe Log, Application for Certificate of Need, and specifics on storage and use requirements for syringes and needles as required by the New York State Department of Health (DOH) Certificate of Need regulations.

Visual Guide

Single-handed Scoop Method:

STEP 1
Place the cap on a flat surface, then remove your hand from the cap.

STEP 2
With one hand, hold the syringe and use the needle to ‘scoop up’ the cap.

STEP 3
When the cap covers the needle completely, use the other hand to secure the cap on the needle hub. Be careful to handle the cap at the bottom only.

RESERVE FOR Forcep RECAPPING METHOD