

MOST COMMON SHARPS INJURIES

Injuries from sharps including items such as needles, scalpels, lancets, razor blades, etc. can occur during every stage of their use from assembly to disposal.

The incidents listed below have occurred at Yale and are some of the more common injuries sustained from improper use or disposal of sharps. The corrective measures offer safety precautions as to how to avoid some of these common injuries.

As a general rule of safety, you should eliminate sharps from cell culture or lab experiments with biohazards and reserve the use of sharps for animal experiments only.

Cuts or punctures from sharps provide a direct avenue for the transmission of hazardous or infectious fluids.

Cut or slice to your hand by sharps blades, microtome, cryostat or with a regular razor

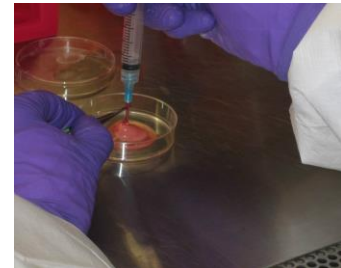
- Wear surgical grade cut-resistant gloves, which will prevent slices and cuts (not needlesticks) when working with sharp blades such as scalpels, cryostat or microtome. A single glove of your non-dominant hand can be used or one on each hand may be needed based on the risks associated with your work.
- Use tweezers, forceps or other engineering controls when changing or manipulating blades.

Cut by a razor used as a cutting tool in the lab

- Use a safety blade or safety razor for this purpose. A safety blade or razor has a handle to protect your hands from accidentally contacting the blade side of the razor.

Cut, sliced or stuck when moving a sharp toward your non-dominant hand

- Always keep your hands out of the path of the sharp.
- Use an engineering control, such as forceps or tweezers with your non-dominant hand to move the sample or animal away from the point of contact with the sharp.



Stuck while recapping needles

- Avoid recapping needles as this is not a proper safety procedure.
- Keep the needle box or sharps container in the immediate vicinity of use.
- Discard the needle and syringe as an intact unit in the needle box or sharps containers immediately after use.
- If you must remove the needle from the syringe, contact Environmental Health and Safety at 203-785-3550 for a safety protocol. Use an engineering control such as forceps, tweezers or a Kelly clamp to remove a needle from the syringe. Use Luer-Lok needles and syringes, which permit ease of removal.



Cut or slice while removing scalpel blades by hand

- Use disposable, one-piece scalpels.
- If you must remove a scalpel blade, use an engineering control such as a Kelly clamp, tweezers or forceps.

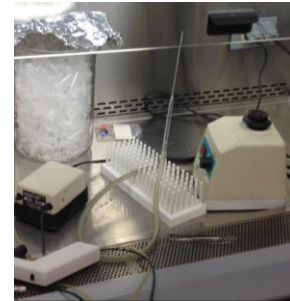
Stuck while working with animals

- Use mechanical or chemical restraint to minimize animal movement while performing the procedure.
- Ensure that personnel performing the procedure are well trained in the use of animals and sharps prior to work with animals and biohazards.
- Contact YARC/IACUC for hands-on training classes on handling animals.



Stuck with a Glass Pasteur

- Think of a Glass Pasteur as the equivalent to a needle.
- Use alternatives to Glass Pasteurs when working with biohazards or remove the cotton plug from a 1 millimeter pipette.
- Use plastic aspirating pipettes available in the Yale stockrooms (individually wrapped/sterile) or other plastic serological pipettes.
- Pipette tip extenders with gel loading or longer pipette tips can also be used for aspiration of media from flasks in place of Glass Pasteur pipettes.



Stuck by a needle protruding from a sharps container

- Empty the needle box or sharps container when it is two-thirds to three-quarters full.
- Use tongs, forceps or tweezers to safely transfer any items from an overflowing needle box or sharps container into a separate container that is not yet full.



Stuck during two-person animal inoculation

- It is not advisable to use two people for this procedure.
- Use a mechanical or chemical restraint to restrain the animal. You will not feel the animal move/flinch in time to prevent an accident if holding with your hand.

Stuck due to use of sharp-ended needle as a pipetting device in cell culture

- Always use pipettes in the cell culture laboratory. Never use needles.
- If a needle and syringe must be used due to the thin gauge required for unclumping cells, use a blunt end needle, not a beveled needle.
- Perform this procedure inside a biosafety cabinet as repeatedly mixing biohazardous cells will generate aerosols.

Stuck while trying to bend/shape needle for use

- Bending or shaping a needle by hand always presents a risk.
- Use an engineering control such as a clamp when bending or shaping a needle.

Placing a sharp in an unapproved biological waste container

- Only place sharps such as needles in an approved biological waste container.
- Contact your Safety Advisor if you need assistance locating an approved biological waste container.