

# PREVENTING CUTS AND PUNCTURES IN THE LABORATORY

Cuts and punctures are the leading injury type that occurs in the laboratory work environment at UNC. Injuries have occurred to laboratory researchers working with needles, scalpels, razor blades, microtomes, glass pipettes and broken glassware. These injuries are preventable with employee training, personal protective equipment and following proper disposal procedures.

## Gloves:

- Wear leather gloves when picking up broken glassware or working with glassware that has a high potential to break
- If a common procedure in your lab involves the potential for cuts and punctures, purchase cut resistant and/or puncture resistant gloves (e.g. [Turtleskin®](#) or [HexArmor®](#))



## Needles:

- Never recap a needle!
- Utilize puncture resistant gloves when working with high risk tasks and needles
- Do not store uncapped needles in a drawer, bench-top or fume hood
- Dispose of used needles in a proper sharps container

## Glassware:

- Dispose of all cracked and broken glassware immediately—do not save it because you think it is still usable
- Proper disposal involves placing broken glassware in a clearly marked, plastic bag lined cardboard box (do not overfill or have items sticking out)

## Razor Blades:

- Don't use a razor blade if a scalpel, X-ACTO knife or utility knife is suitable for the same task
- Whenever possible use a utility knife with a retractable blade
- If you must use razor blades use them in a protective holder
- Store and dispose of razor blades properly (loose blades on lab benches cause many injuries)
- Dispose of razor blades in a proper sharps container



## Scalpels:

- Whenever possible, use scalpels that have a retractable blade and locking mechanism
- Use a hands free scalpel blade removal product to change out blades
- Dispose of blades in a proper sharps container

## Microtomes:

- Handle blades very carefully when installing or removing.
- Never leave blades on countertops.
- When applying the brake, ensure that it is tight. Most accidents occur when the brake slips and the operator's hand is drawn into the blade.
- When leaving the microtome, ensure that the blade guard is in place.
- Use forceps to retrieve slices from the boat and to retrieve ribbons, thereby keeping your hands free from the moving parts of the microtome.
- A high-density polystyrene rod can be used to clean the blade, freeing your hands from potential contact.



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