Bloodborne Pathogens Key Topic for 2014
Safer Needle Devices

In 2014, the Occupation Health & Safety (OH&S) Bloodborne Pathogens course focused on using safer needle devices. The information covers:

1. Reviewing how needlesticks impact areas at UAB
2. Examining new systems on the market for potential usage in your area
3. Understanding how more modern systems protect from needlesticks.

Statistical Evidence

And the truth is

Approximately 385,000 needlestick injuries occur each year in the United States alone.

75% of those are healthcare workers – nurses, doctors, and clinical lab workers.

Injuries are costly

Money is either lost or spent when a needlestick injury occurs. Why?

- Investigations cost both time and money.
- Sick time/time off means less work-time and productivity.
- Treatment of resulting illnesses and post-exposure care costs can be expensive.
- Fatalities may occur depending on the illness transferred due to the needle stick.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) alone usually does not adequately protect a person from needlesticks.

PPE provides a barrier to protect skin and mucous membranes from contact with blood and Other Potentially Infectious Materials (OPIM), but needles easily penetrate most personal protective equipment.
The Food and Drug Administration (FDA) suggests that a safety feature designed to protect employees should:

- Provide a barrier between the hands and the needle after use allowing or requiring the worker's hands to remain behind the needle at all times
- Be an integral part of the device and not an accessory
- Be in effect before disassembly and remain in effect after disposal to protect downstream workers
- Be easy to operate efficiently requiring little or no training to use
- Have safety mechanisms with a visual or audible cue to assure the user of activation that cannot be accidentally or intentionally disengaged or bypassed

Examples of Safer Needle Devices

1. **Self Re-sheathing Needles**
   
   Initially, the sleeve covers the barrel of the syringe with the needle exposed for use. After using the device, the user slides the sleeve forward over the needle where it locks in place and provides a guard around the used needle.

2. **Syringe with Retractable Needle**
   
   After using the needle, an extra push on the plunger retracts the needle into the syringe, removing the hazard of needle exposure.

3. **Blunt-tipped Blood Drawing Needles**
   
   After drawing blood, pushing on the collection tube moves the blunt tip needle forward through the needle and past the sharp needlepoint. Activate the blunt point tip of the needle before removing it from the vein or artery.
4. **Winged Steel Needles**

   After placement, rotate the third wing to a flat position, which blunts the needlepoint before removing it from the patient.

5. **Re-sheathing Disposable Scalpels**

   Single-use disposable scalpels have a shield that is advanced over the blade after use, containing and removing the hazard.

6. **“Add-on” Safety Feature**

   Hinged or sliding shields attached to phlebotomy needles, winged steel needles, and blood gas needles, act as an “add-on” safety features.

7. **Retracting Finger Prick Lancets**

   This single-use lancet retracts automatically after use containing and removing the hazard.