Sharps Injury Prevention Program-
“Make Sharps Safety-Priority ONE!”
Objectives

At the end of this presentation, the staff member will have a better understanding of:

1. Best practices for sharps safety.
2. Common risk factors for sharps injuries.
3. Best practices to prevent viral transmission to the healthcare worker.
4. Best practices for safe gloving techniques.
5. Best practices for handling of needles, knife blades and other sharps.
Background and Goals

- The CDC estimates 384,325 needle stick injuries per year in hospitals and 590,164 for all healthcare settings.

- Use of safety engineered devices and safe work practices are required under the **Needlestick Safety and Prevention Act of 2000** and the blood borne pathogens standard, enforced by the Occupational Safety and Health Administration (OSHA).

- Vanderbilt University Medical Center’s goal is to comply with OSHA’s requirement to eliminate or minimize employees’ exposure to blood borne pathogens.

*From CDC Releases National Needlestick Estimates. Fact Sheet: Percutaneous Injuries From Suture Needles. (2006, June), 83 KB PDF.*
Factors for Viral Transmission

The specific risk of viral transmission depends on a number of factors:

• Injuries with a hollow-bore needle.

• Deep penetration.

• Visible blood on the needle.

• Needle that was located in a deep artery or vein.

• Blood from terminally ill patients is known to increase the risk for HIV infection.
Risk Reduction Strategies for Gloving

Staff should always wear gloves when exposed to blood borne pathogens or any other contaminated items.

• Double gloving is required for all invasive procedures irrespective of the physical location of the patient, and where the proceduralist has direct access to the structures or organs involved.

• Examples of procedures where double gloving IS REQUIRED:
  ➢ Surgical procedures.
  ➢ Chest tube insertion.

• Monitor gloves periodically for punctures.
Sharps Injuries

Injuries from sharps occur most often when:

- Performing multistep procedures.
- Disassembling a device.
- Recapping.
- Withdrawing a needle from a rubber stopper.
- Putting item in a disposal container.
- An item is protruding from disposal container.
- Device is left on floor or other inappropriate place.

Risk Reduction Strategies for Sharps Safety

- Syringes **should not** be used for venous blood drawing. Needles (with a protective feature) should be used. This allows blood to be drawn directly into a blood culture tube, and helps prevent accidental sticks.

- For arterial blood draws, safety syringes that are specifically designed for performing arterial blood gases (ABGs) should be used. Almost half of injuries from ABG syringes (48%) occurred during use of the non safety device.

*From CDC Releases National Needlestick Estimates. Fact Sheet: Percutaneous Injuries From Suture Needles. (2006, June), 83 KB PDF.*
Risk Reduction Strategies for Sharps Safety

- Safety syringes, needles and scalpels are specifically designed to prevent recapping of any sharps device. Never remove or manipulate a safety device as this can lead to injury. Recapping is the 3rd most common needle stick injury and is a major TOSHA violation.

- Use of a local anesthetic can help minimize patient movement and thus reduce needlestick risk.

- Use sharps containers that have openings wide enough to accommodate items. Make sure to replace needle box when it is ¾ full to avoid overfill.

Establishing a Neutral Zone for a Sterile Procedure

- Establish a *neutral zone* when using sharps in a procedure. (*A neutral zone is an area on the sterile field where proceduralist places used sharps to minimize sharp injury.*)

- Provide a clear *transition zone* between clean items and contaminated items.

- Use the provided plastic dish/cup container for discarded sharps.