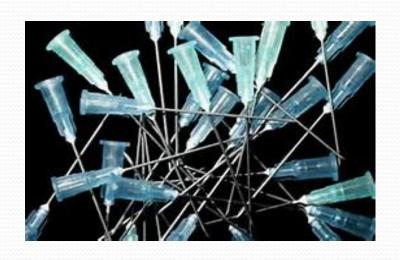
Needle and Sharps Safety and Injury Prevention





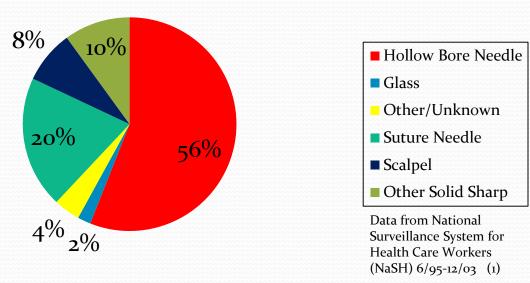
Introduction

- •Prevention of percutaneous injuries and other blood exposures is an important step in preventing the transmission of blood borne viruses to healthcare personnel(1).
- ■The CDC estimates that each year 385,000 needle sticks and other sharps-related injuries by hospital personnel; an average of 1,000 sharps injuries per day(1).
 - •This number does not include those health care personnel working in other settings (long-term care, home health, private medical offices).
 - •Further complicating this estimate is approximately 50% or more DO NOT report their occupational injury(2).
- •Harnett Health hospitals and clinics have seen a steady rise in the number of reported needle and sharps injuries over the past 5 months.
 - •Employee Health reports 8 exposures due to needle and/or sharps
 - •In 7 of the reports the source patient was known and labs drawn to verify the patients Hepatitis B & C and HIV status.



- •Injuries from needles and other sharp devices used in healthcare and laboratory settings are associated with the transmission of more than 20 pathogens(1).
 - •The most commonly transmitted include HIV and Hepatitis B & C
 - •Other transmittable diseases include:
 - •Herpes, Malaria, M. Tuberculosis, Ebola, Diphtheria among others.

Types of Devices Involved in Percutaneous Injuries





Who is at Risk

Data from the National Surveillance System for Heath Care Workers (NaSH) show the majority of injuries occur on inpatient medical units (Medical/Surgical, ICU/SCU, OB/GYN, Pediatrics), 39%(1).

- •Operating rooms and Procedural areas account for 34%
- ■Emergency room 8%
- ■Outpatient settings 8%
- •Waste/Laundry/Central Supply/Other 6%
- ■Lab area 5%

NaSH studies have shown Nursing sustain the highest number of reported percutaneous injuries at over 40%, with Physicians reporting almost 30%. The remaining 30% of reported injuries are divided between Lab personnel, Housekeeping, and other staff(1,2).





Costs of Needle Stick Treatment

Costs include the direct cost associated with the initial and follow up treatments range from \$71 to \$5000 depending on treatments provided(1).

Costs that are harder to quantify include:

- Emotional-Fear and anxiety
- Worrying about the consequences of an exposure
- Lost time from work including separation due to advanced illness
- ■Societal stigma of HIV or Hepatitis C seroconversion







How Injuries Occur

In a study of 10,000 reported needle stick injuries by NaSH:

- •41% occurred during the use of a sharp device or needle on a patient
 - •Manipulation of needle in pt, accessing IV lines, handling/pass of sharps
- •40% occurred <u>after</u> use and <u>before</u> disposal
 - •Recapping, activating safety feature, collision with co-worker/sharp
- •15% occurred <u>during</u> or <u>after</u> disposal
 - •During cleanup/disposal, improper disposal, transferring/processing specimens



Harnett Health



NO RECAPPING!



KEEP HANDS OUT OF SHARPS BOX!

Safety Features of Needles

In a study conducted by the CDC it was concluded that IV catheters that retracted or encased the needle after use reduced needle sticks by 83%. In the same study Phlebotomy injuries were reduced by 66% using the hinged needle shield(1).

Harnett Health utilizes BD(Becton, Dickinson and Company) needles. This brand of needle comes with built in safety features to minimize the risk of accidental needle sticks.

Examples of the BD brand needles and their safety features include:

- ■BD Insyte Autoguard IV catheter:
 - •Flared finger grips on sides of handle for better grasp and control
 - •One finger push button retraction of needle





■BD Eclipse Needles:

- •Hypodermic needles with pivoting shielding mechanism
- •One finger operation to close and lock safety feature
- •Audible 'click' when needle locked





■BD SafetyGlide Insulin and TB syringes:

- •One finger activation of safety feature
- •Audible 'click' when needle locked







■BD Eclipse Blood Collection Needle:

- •Blood collection needles with pivoting shielding mechanism
- •One finger operation to close and lock safety feature
- •Audible 'click' when needle locked





Vacuette SAFETY Blood Collection Set:

- •Pinching the hub and pulling back retracts needle into safety feature
- •Audible 'click' when needle locked







Lovenox Syringe:

- •Pre-filled medication syringe
- Pressing firmly on plunger activates
 Safety shield over needle





This is a small example of the types of needles/syringes in use throughout Harnett Health. These needles all have a built in safety device for **YOUR** protection. Disabling or disregarding this safety feature greatly increases your risk for a percutaneous injury and possible exposure to debilitating diseases.

If you are unfamiliar or unsure of the proper technique and use of any needle or sharp, it is YOUR RESPONSIBILITY to STOP and ASK for instruction.



Citations:

- 1. Usa. Department of Health and Human Services. Cdc. *Cdc.gov*. N.p., 25 Jan. 2008. Web
- 2. Usa. National Institute for Occupational Safety and Health. Http://www.hhs.gov/asl/testify/tooo622a.html. N.p., 27 May 2009. Web.
- 3. Wilburn, Susan Q., Rn. "Needlestick and Sharps Injury Prevention." *Needlestick and Sharps Injury Prevention*. Online Journal of Issues in Nursing, 30 Sept. 2004. Web. 02 Mar. 2016.



