Needlesticks and Sharps



DID YOU KNOW?

According to the Centers for Disease Control and Prevention (CDC), about 385,000 sharps injuries occur annually to hospital employees.

Potential Hazard

Exposure to blood and other potentially infectious materials (OPIM) because of:

- Unsafe needle devices.
- Improper handling and disposal of needles and other sharps.

Possible Solutions

- Use safer needle devices and needleless devices to decrease needlestick or other sharps exposures. See Safer Needle Devices.
- Properly handle and dispose of needles and other sharps according to the Bloodborne Pathogens Standard.

OSHA estimates 5.6 million workers in the U.S. healthcare industry are at risk of occupational exposure to bloodborne pathogens via needlestick injuries and other sharps-related injuries.

Each year 384,000 needlestick injuries and other sharps-related injuries are sustained by hospital-based healthcare personnel. This equates to an average of around 1,000 sharps injuries occur per day in U.S. hospitals.

Including other non-acute healthcare facilities, it is estimated that 600,000 healthcare personnel incur a needlestick injury each year in the U.S.

40% of injuries occur after use and before disposal of sharp devices, 41% of injuries occur during the use of sharp devices on patients, and 15% of injuries occur during or after disposal (CDC unpublished data)

Direct and Indirect Costs of Needlestick Injuries

Approximately 1000 needlestick injuries occur per day in the United States, leading to $1 Billion in unnecessary costs for healthcare providers. This amounts to $3042 per victim. The costs are attributed to laboratory fees for testing exposed employees, labor associated with testing and counseling, and the costs of post-exposure follow-ups.

As the CDC’s Sharps Safety Workbook points out, other costs are more difficult to quantify: the emotional costs associated with fear and anxiety about possible consequences of an exposure, direct and indirect costs associated with drug toxicities and lost time from work, and the societal cost associated with an HIV or HCV seroconversion; including the possible losses of a workers’ services in patient care, the economic burden of medical care, and any associated litigation costs.

A report from the Centers for Disease Control and Prevention (CDC) in the United States lists the following percentages for injury rates from a study with data collected from 1995 to 2007:

Injuries involving hollow-bore needles:

- During or after disposal: 22%
    - In transit to disposal.
    - Improper disposal.
    - During disposal.
- After use, before disposal: 19%
    - Activation of safety feature.
    - Recap needle.
    - During clean
- During use: 52%
    - Access IV line.
    - Transfer/process specimens.
    - Pass/transfer equipment.
    - Collision with sharp or worker.
    - Insertion or removal of needle.

Injuries involving solid sharps:

- During or after disposal: 3%
    - In transit to disposal.
    - During disposal.
- After use, before disposal: 15%
    - Sharp left in unusual location.
    - During clean up.
- During use of the item: 70%
    - Processing specimen.
    - Collision with sharp or worker.
    - Manipulate sharp in patient.
    - Handle, pass, transfer equipment or specimen.
    - Suture needle handling.
    - Other

Equipment design, nature of the procedure, condition of work, staff experience, recapping, and disposal have all been mentioned as factors that influence these occurrences.