

# FACT SHEET



## LAWS/STANDARDS

The Occupational Safety and Health Administration (OSHA) adopted the **Bloodborne Pathogens standard** in 1991, requiring **exposure control plans** and outlining safety and protection measures (**engineering controls**) to minimize or eliminate the risks of exposure to bloodborne pathogens through needlestick and other sharps injuries.

In 2000, the **Needlestick Safety and Prevention Act** amended the OSHA Bloodborne Pathogens Standard to define more specifically the types of engineering controls and needle devices required to increase safety; require review of new technology; require employers to maintain a sharps injury log; and require the input of frontline staff in the evaluation and selection of safer devices.

## WORKERS AT RISK, BY THE NUMBERS

OSHA estimates that **5.6 million workers in the health care industry and related occupations are at risk of occupational exposure to bloodborne pathogens**, including human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), and others.

**Each year, hospital-based health care workers sustain an estimated 384,000 percutaneous (skin-puncture) injuries** from needles and other sharp devices, or more than 1,000 injuries per day.

When accounting for both hospitals and other health care settings, such as private clinics, home care operations and long-term care facilities, studies have estimated that **between 600,000 and 800,000 needlestick and other percutaneous injuries occur annually** to health care workers.

## NEEDLESTICK INJURIES – WHO, WHERE, WHEN, HOW

Research shows that **nurses sustain the most needlestick injuries**.

Most needlestick injuries occur:

- In patient wards, operating room and recovery.
- During injections and suturing.
- With hollow-bore needles.

The **majority of needlestick injuries occur during the use of the device, and following use but prior to disposal**. Common causes of injuries attributable to improper work practices include:

- Passing sharps between health care workers.
- Transferring sharps to a different location.
- Recapping sharps.
- Decontamination or processing of used devices.

As many as **one-third of all sharps injuries occur during disposal** of the device.

About 30 percent of injuries occur to those who are **not the primary user** of the sharp device.

The CDC estimates that **between 62 percent and 88 percent of sharps injuries can be prevented** by using safer devices.

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A CDC analysis shows the **most prevalent causes of injuries** as a result of a needlestick incident were manipulating needle in patient (27%), improper disposal/disposal related (22%), cleanup (11%), handling/passing device during or after use (10%).

## THE RISKS

**Risks for transmission of virus** from exposure to bloodborne pathogen:

- hepatitis B virus (if unvaccinated): ..... 6 percent to 30 percent
- hepatitis C virus: ..... 1.8 percent
- human immunodeficiency virus (HIV): ..... 0.3 percent

## MINIMIZING RISKS

An employer's **exposure control plan** must include:

- Job classifications and tasks and procedures that involve occupational exposure to blood.
- Procedures for investigating an exposure incident.
- A schedule outlining how provisions of the Bloodborne Pathogens standard will be implemented.

**Engineering controls** as required under OSHA's Bloodborne Pathogens standard include:

- Sharps disposal containers.
- Self-sheathing needles.
- Medical devices engineered for increased safety.
- Needleless systems (such as IV delivery).

**FOR MORE INFORMATION, VISIT:**  
**WWW.NEEDLESTICK.ORG**

## SOURCES/RESOURCES:

*State of the Sector: Healthcare and Social Assistance.* National Occupational Research Agenda. CDC-NIOSH publication, 2009-139, Aug. 2009.

*NIOSH Alert: Preventing Needlestick Injuries in Healthcare Settings.* DHHS (NIOSH) Publication No. 2000-108, 1999.

<http://www.osha.gov/SLTC/bloodbornepathogens/index.html>.

Exposure Prevention Information Network: <http://www.healthsystem.virginia.edu/internet/epinet/epinetdatareports.cfm#subsets>.

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