



Occupational Exposure to Bloodborne Pathogens in Healthcare

Johns Hopkins Bloomberg School of Public Health



Presented by
The International Safety Center

Amber H Mitchell, DrPH, MPH, CPH
Elise Handelman, BSN, MEd, COHN-S

Johns Hopkins Bloomberg School of Public Health



Amber Hogan Mitchell
DrPH, MPH, CPH



President | Executive Director,
International Safety Center



Elise Handelman
BSN, MEd, COHN-S

Occupational and Environmental Health
Consultant

Modules

- Module I: Current BBP Prevalence & Incidents/Injuries
 - Changing trends and emerging bloodborne diseases, and patterns of incidents and prevalence of exposures in healthcare settings
- Module II: General OSHA Compliance
 - Key elements of the Bloodborne Pathogens Standard, including recording and reporting requirements
- Module III: Applied OSHA Compliance
 - OSHA inspection protocols, and occupational health professional responsibilities regarding privacy and compliance
- Module IV: Motivating Change
 - Strategies to overcome barriers to change at the organizational and personal level

Learning Objectives

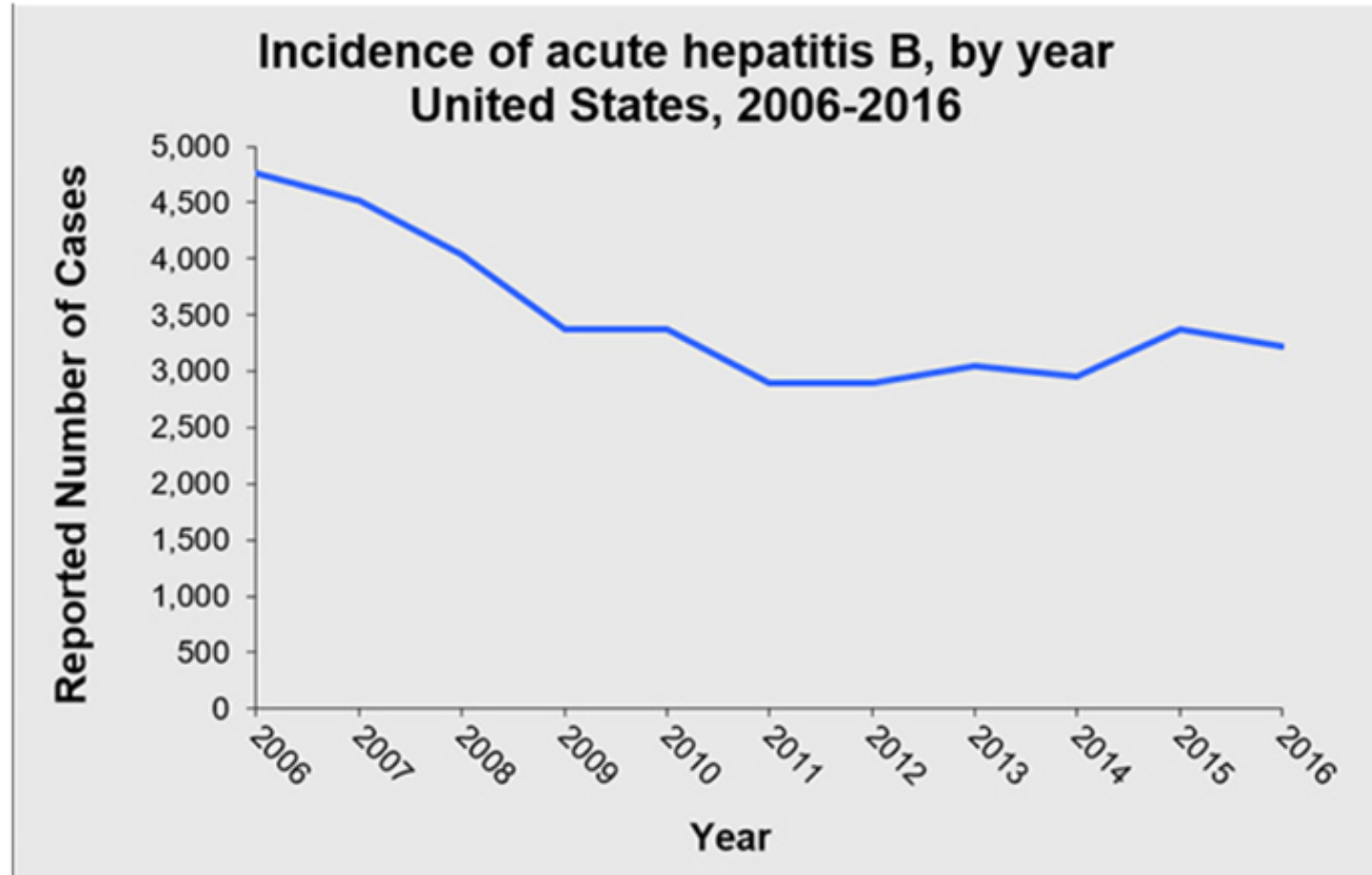
1. Explain why transmission of bloodborne pathogens is still a critical occupational health issue
2. Provide recent sharps injury and mucocutaneous exposure data
3. Review OSHA Bloodborne Pathogens Standard requirements
 - I. General Requirements
 - II. Applied Requirements, including Recordkeeping and Medical Records
4. Describe why sharps injury protection (SIP) devices and PPE are critical to preventing sharps injuries and BBP exposures
5. Provide a framework for implementing change and motivators of change
6. Provide useful resources for compliance

Modules

- Module I: Current BBP Prevalence & Incidents/Injuries
 - Changing trends and emerging bloodborne diseases, and patterns of incidents and prevalence of exposures in healthcare settings
- Module II: General OSHA Compliance
 - Key elements of the Bloodborne Pathogens Standard, including recording and reporting requirements
- Module III: Applied OSHA Compliance
 - OSHA inspection protocols, and occupational health professional responsibilities regarding privacy and compliance
- Module IV: Motivating Change
 - Strategies to overcome barriers to change at the organizational and personal level

Why is Occupational Exposure to Blood Still a Problem?

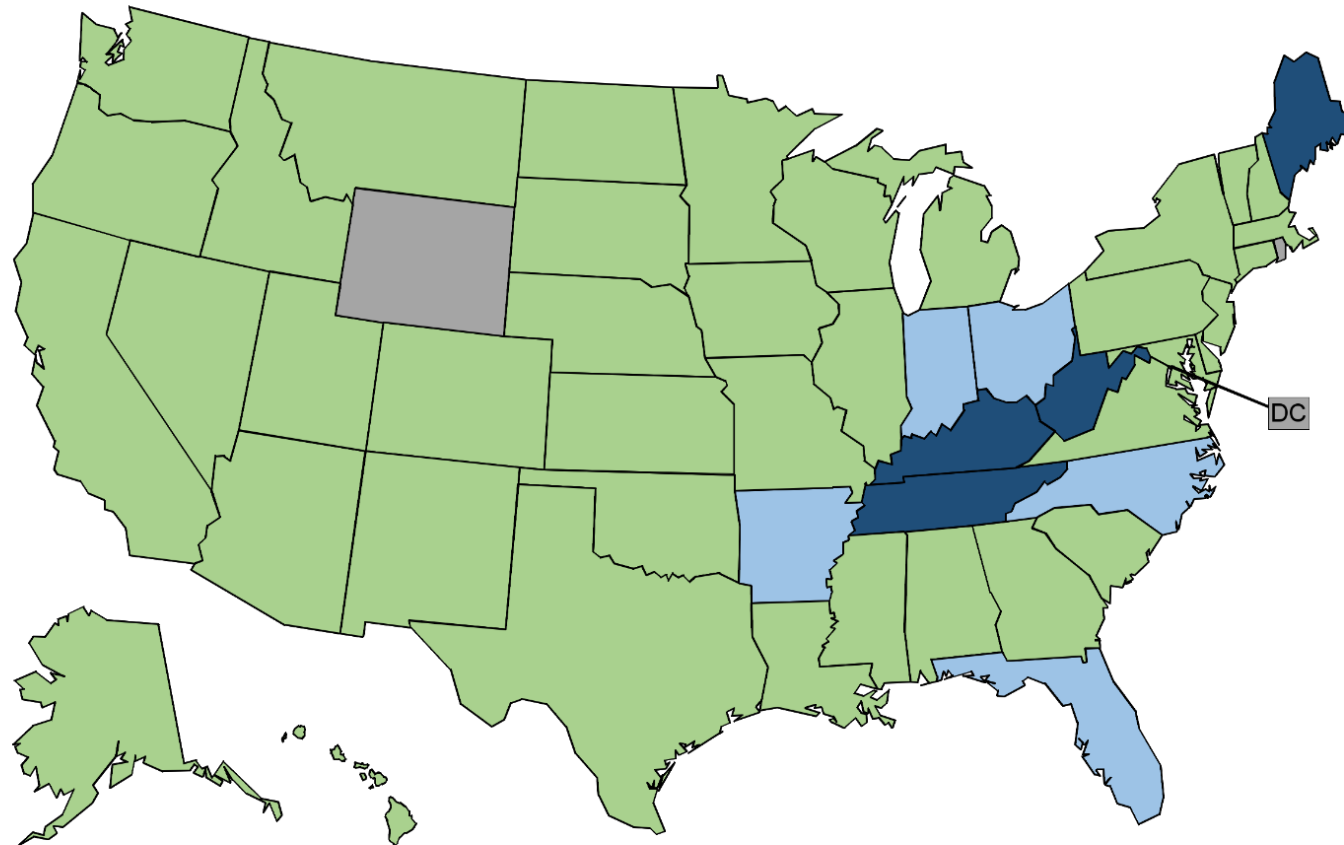
How have risks changed?



<https://www.cdc.gov/hepatitis/hbv/hbvfaq.htm>

Map 3.1 State Acute Hepatitis B Incidence Compared to Healthy People 2020 National Goal*
United States, 2016

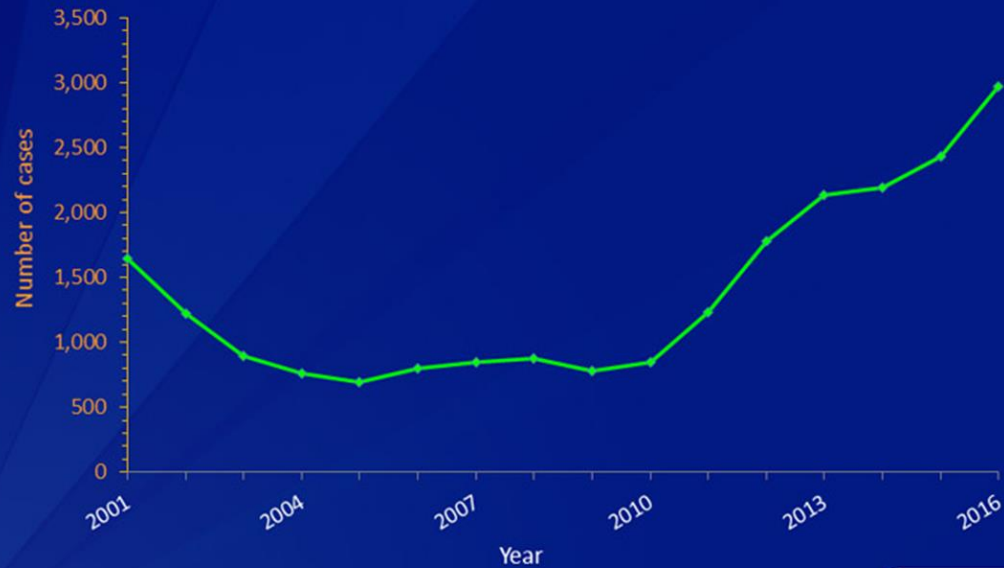
At or below national goal Above national goal
More than twice national goal Data unavailable



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

*National goal: 1.5 cases/100,000 population

Figure 4.1. Reported number of acute hepatitis C cases — United States, 2001–2016



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)



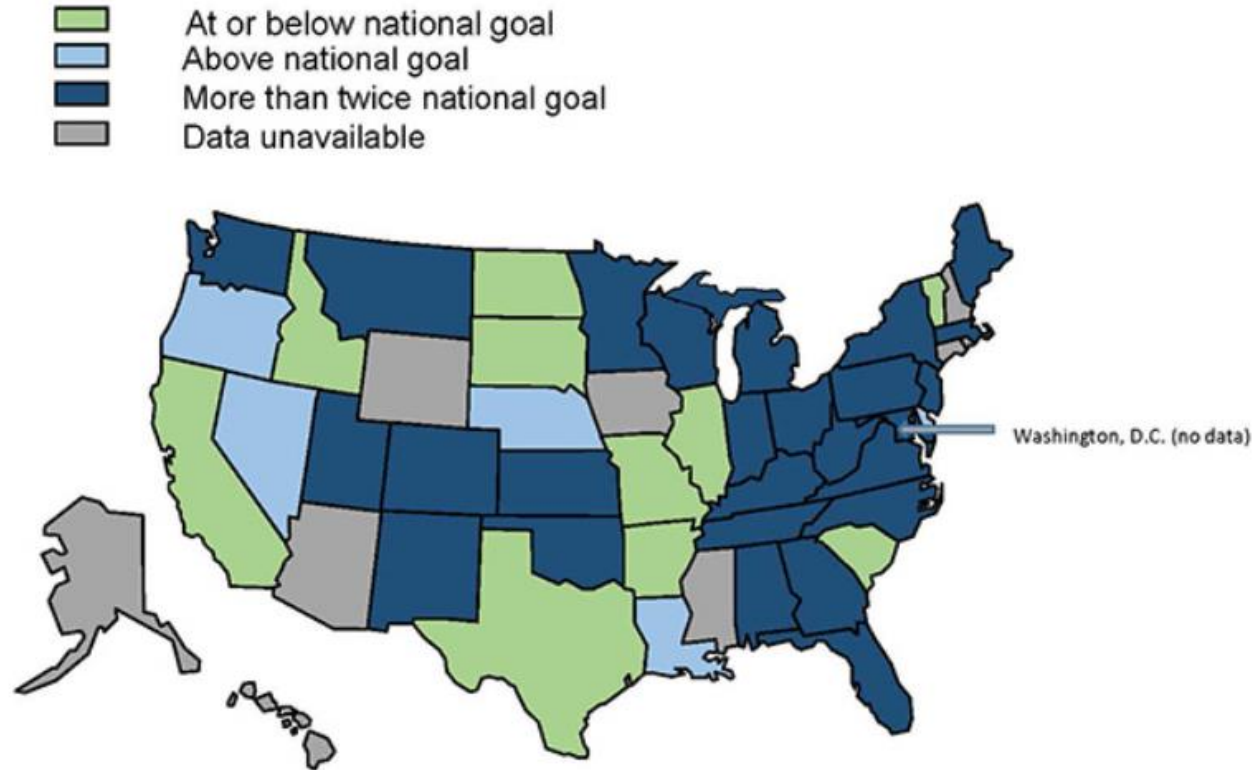
In the US, 3 in 4 people with hepatitis C were born from 1945–1965.



More Americans died from hepatitis C than from 60 other infectious diseases combined, including HIV and TB, with 'baby boomers' at greatest risk.

HCV Rates Compared to National Goals

Map 4.1. 2015 State Acute Hepatitis C Incidence Compared to Healthy People 2020 National Goal*



Source: CDC, National Notifiable Diseases Surveillance System (NNDSS)

*National goal: 0.25 cases/100,000 population

REF: <https://www.cdc.gov/hepatitis/statistics/2015surveillance/index.htm>

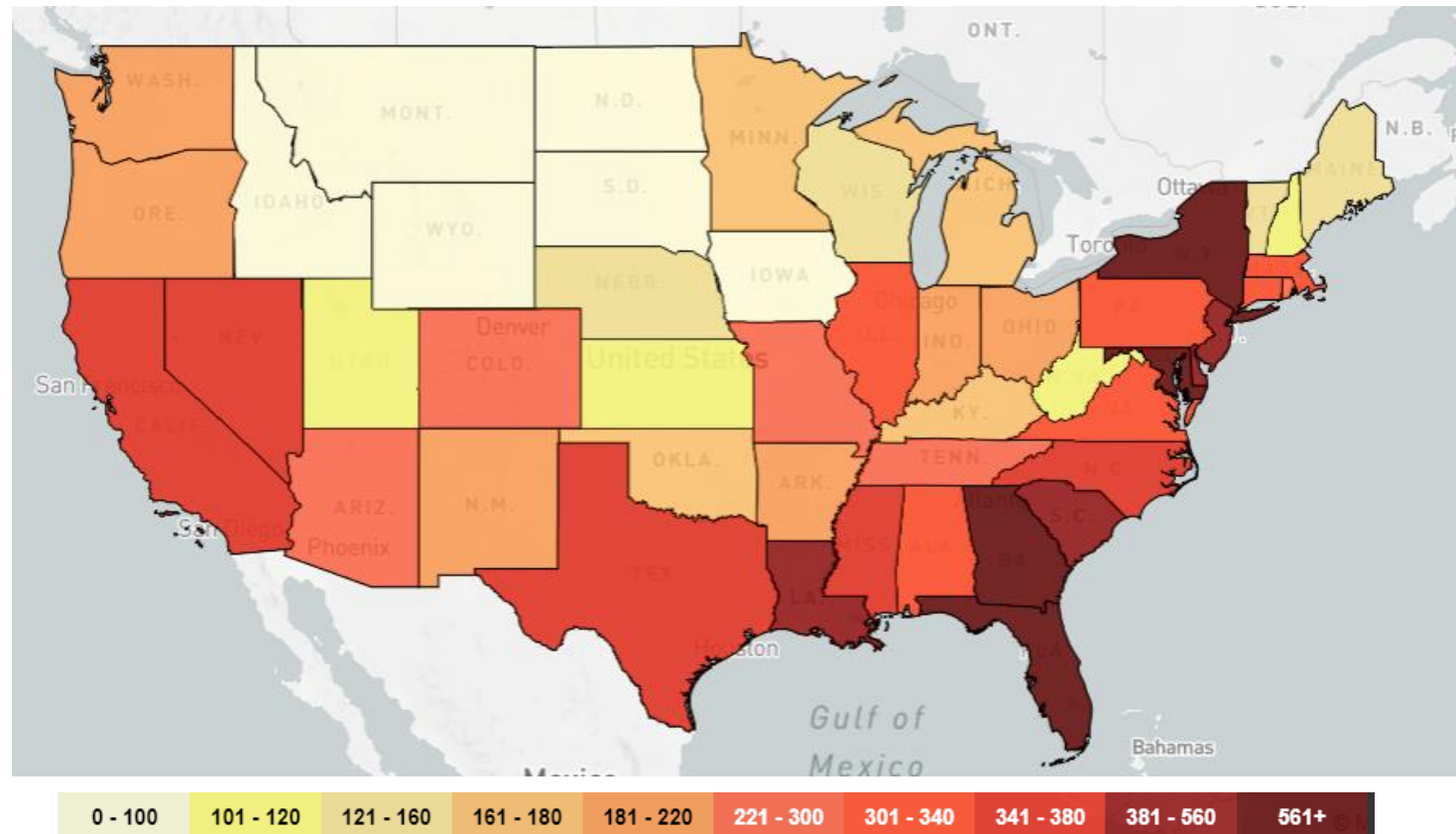
Human Immunodeficiency Virus (HIV)

Today, **1.1 MILLION PEOPLE**
in the US are living with HIV.



1 in 7 Don't know they are infected
and can pass the virus to others.

Rates of Persons Living with HIV; 2015



REF: <https://aidsvu.org/>

Risk of Co-Infection

- People with HIV infection are often affected by:
 - HBV and/or HCV, and
 - Co-infection with a multi-drug resistant organism
 - MRSA and TB
 - Increasing prevalence of diabetes



Additional Pathogens Transmitted Through **Blood** and Body Fluid Exposure

- *Brucellosis abortus*
 - *Corynebacterium diphtheriae*
 - Creutzfeldt-Jakob disease
 - *Cryptococcosis neoformans*
 - Dengue virus
 - **Ebola Virus**
 - Herpes
 - Malaria
- *Rickettsia rickettsii*
 - *Sporotrichum schenkii*
 - *Streptococcus pyogenes*
 - *Staphylococcus aureus*
 - Syphilis
 - *Toxoplasma gondii*
 - Tuberculosis
 - **Zika Virus**

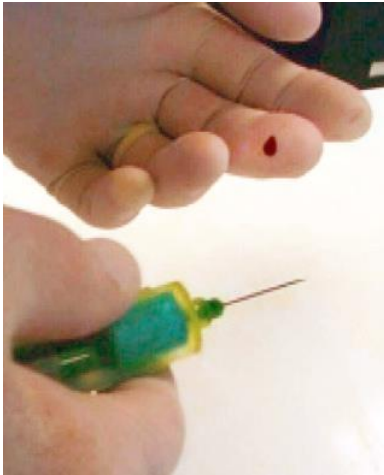
Preventing blood and body fluid exposure for
EVERY patient/sample during
EVERY procedure
EVERY time
is critical

Injury & Exposure Data

EPINet Summary Incident Reports:

Needlestick & Sharp Object Injuries

Injury & Exposure Data



**Most common:
Needlesticks**



**Cuts from contaminated
sharps**

(e.g., blades, scalpels,
broken glass, metal,
bone)



**Blood and body fluid
splash and splatters**

(e.g., eyes, nose, mouth,
or non-intact skin)

Needlestick & Sharp Object Injury Report

Last name: _____ First name: _____

Email address: _____

Injury ID: (for office use only) S _____ Facility ID: (for office use only) _____ Completed by: _____

1) Date of injury: 2) Time of injury:

3) Department where incident occurred: _____

4) Home/Employing department: _____

5) What is the job category of the injured worker? (check one box only)

- | | |
|--|--|
| <input type="checkbox"/> 1 Doctor (attending/staff); specify specialty _____ | <input type="checkbox"/> 10 Clinical laboratory worker |
| <input type="checkbox"/> 2 Doctor (intern/resident/fellow) specify specialty _____ | <input type="checkbox"/> 11 Technologist (non-lab) |
| <input type="checkbox"/> 3 Medical student | <input type="checkbox"/> 12 Dentist |
| <input type="checkbox"/> 4 Nurse: specify <input type="checkbox"/> 1 R.N. | <input type="checkbox"/> 13 Dental hygienist |
| <input type="checkbox"/> 5 Nursing student | <input type="checkbox"/> 14 Housekeeper |
| <input type="checkbox"/> 18 C.N.A./H.H.A. | <input type="checkbox"/> 19 Laundry worker |
| <input type="checkbox"/> 3 N.P. | <input type="checkbox"/> 20 Security |
| <input type="checkbox"/> 6 Respiratory therapist | <input type="checkbox"/> 16 Paramedic |
| <input type="checkbox"/> 4 C.R.N.A. | <input type="checkbox"/> 17 Other student |
| <input type="checkbox"/> 7 Surgery attendant | <input type="checkbox"/> 5 Midwife |
| <input type="checkbox"/> 8 Other attendant | <input type="checkbox"/> 15 Other, describe: _____ |
| <input type="checkbox"/> 9 Phlebotomist/Venipuncture/IV team | |

6) Where did the injury occur? (check one box only)

- | | |
|---|--|
| <input type="checkbox"/> 1 Patient room | <input type="checkbox"/> 9 Dialysis facility (hemodialysis and peritoneal dialysis) |
| <input type="checkbox"/> 2 Outside patient room (hallway, nurses station, etc.) | <input type="checkbox"/> 10 Procedure room (x-ray, EKG, etc) |
| <input type="checkbox"/> 3 Emergency department | <input type="checkbox"/> 11 Clinical laboratories |
| <input type="checkbox"/> 4 Intensive/Critical care unit: specify type: _____ | <input type="checkbox"/> 12 Autopsy/Pathology |
| <input type="checkbox"/> 5 Operating room/Recovery | <input type="checkbox"/> 13 Service/Utility (laundry, central supply, loading dock, etc) |
| <input type="checkbox"/> 6 Outpatient clinic/Office | <input type="checkbox"/> 16 Labor and delivery room |
| <input type="checkbox"/> 7 Blood bank | <input type="checkbox"/> 17 Home-care |
| <input type="checkbox"/> 8 Venipuncture center | <input type="checkbox"/> 14 Other, describe: _____ |

7) Was the source patient identifiable? (check one box only)

- 1 Yes 2 No 3 Unknown 4 Not applicable

8) Was the injured worker the original user of the sharp item? (check one box only)

- 1 Yes 2 No 3 Unknown 4 Not applicable

9) The sharp item was: (check one box only)

- 1 Contaminated (known exposure to patient or contaminated equipment) was there blood on the device?
 2 Uncontaminated (no known exposure to patient or contaminated equipment)
 3 Unknown

10) For what purpose was the sharp item originally used? (check one box only)

- 1 Unknown/Not applicable 16 To place an arterial /central line
 2 Injection, intra-muscular/subcutaneous, or other injection 9 To obtain a body fluid or tissue sample

EPINet™

FOR MICROSOFT® ACCESS
EXPOSURE PREVENTION
INFORMATION NETWORK

EPINet is a trademark of the University of Virginia. Windows is a registered trademark of Microsoft Corporation in the United States and other countries. Operates in Windows XP, Windows Vista, Windows 7, and Windows 8 Environment. © 2008 Selecta, Dickinson and Company. Access 2010 US

Blood and Body Fluid Exposure Report

Last name: _____ First name: _____

Email address: _____

Injury ID: (for office use only) S _____ Facility ID: (for office use only) _____ Completed by: _____

1) Date of exposure: 2) Time of exposure:

3) Department where incident occurred: _____

4) Home/Employing department: _____

5) What is the job category of the exposed worker? (check one box only)

- | | |
|--|--|
| <input type="checkbox"/> 1 Doctor (attending/staff); specify specialty _____ | <input type="checkbox"/> 10 Clinical laboratory worker |
| <input type="checkbox"/> 2 Doctor (intern/resident/fellow) specify specialty _____ | <input type="checkbox"/> 11 Technologist (non-lab) |
| <input type="checkbox"/> 3 Medical student | <input type="checkbox"/> 12 Dentist |
| <input type="checkbox"/> 4 Nurse: specify <input type="checkbox"/> 1 R.N. | <input type="checkbox"/> 13 Dental hygienist |
| <input type="checkbox"/> 5 Nursing student | <input type="checkbox"/> 14 Housekeeper |
| <input type="checkbox"/> 18 C.N.A./H.H.A. | <input type="checkbox"/> 19 Laundry worker |
| <input type="checkbox"/> 3 N.P. | <input type="checkbox"/> 20 Security |
| <input type="checkbox"/> 6 Respiratory therapist | <input type="checkbox"/> 16 Paramedic |
| <input type="checkbox"/> 7 Surgery attendant | <input type="checkbox"/> 17 Other student |
| <input type="checkbox"/> 8 Other attendant | <input type="checkbox"/> 15 Other, describe: _____ |
| <input type="checkbox"/> 9 Phlebotomist/Venipuncture/IV team | |

6) Where did the exposure occur? (check one box only)

- | | |
|---|--|
| <input type="checkbox"/> 1 Patient room | <input type="checkbox"/> 9 Dialysis facility (hemodialysis and peritoneal dialysis) |
| <input type="checkbox"/> 2 Outside patient room (hallway, nurses station, etc.) | <input type="checkbox"/> 10 Procedure room (x-ray, EKG, etc) |
| <input type="checkbox"/> 3 Emergency department | <input type="checkbox"/> 11 Clinical laboratories |
| <input type="checkbox"/> 4 Intensive/Critical care unit: specify type: _____ | <input type="checkbox"/> 12 Autopsy/Pathology |
| <input type="checkbox"/> 5 Operating room/Recovery | <input type="checkbox"/> 13 Service/Utility (laundry, central supply, loading dock, etc) |
| <input type="checkbox"/> 6 Outpatient clinic/Office | <input type="checkbox"/> 16 Labor and delivery room |
| <input type="checkbox"/> 7 Blood bank | <input type="checkbox"/> 17 Home-care |
| <input type="checkbox"/> 8 Venipuncture center | <input type="checkbox"/> 14 Other, describe: _____ |

7) Was the source patient identifiable? (check one box only)

- 1 Yes 2 No 3 Unknown 4 Not applicable

8) Which body fluids were involved in the exposure? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Blood or blood products | <input type="checkbox"/> Peritoneal fluid |
| <input type="checkbox"/> Vomit | <input type="checkbox"/> Pleural fluid |
| <input type="checkbox"/> Sputum | <input type="checkbox"/> Amniotic fluid |
| <input type="checkbox"/> Saliva | <input type="checkbox"/> Urine |
| <input type="checkbox"/> CSF | <input type="checkbox"/> Other, describe: _____ |

8a) Was the body fluid visibly contaminated with blood? Yes No Unknown

9) Was the exposed part? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Intact skin | <input type="checkbox"/> Nose (mucosa) |
| <input type="checkbox"/> Non-intact skin | <input type="checkbox"/> Mouth (mucosa) |
| <input type="checkbox"/> Eyes (conjunctiva) | <input type="checkbox"/> Other, describe: _____ |

10) Did the blood or body fluid? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Touch unprotected skin | <input type="checkbox"/> Soak through barrier garment or protective garment |
| <input type="checkbox"/> Touch skin between gap in protective garments | <input type="checkbox"/> Soak through clothing |

EPINet™

FOR MICROSOFT® ACCESS
EXPOSURE PREVENTION
INFORMATION NETWORK

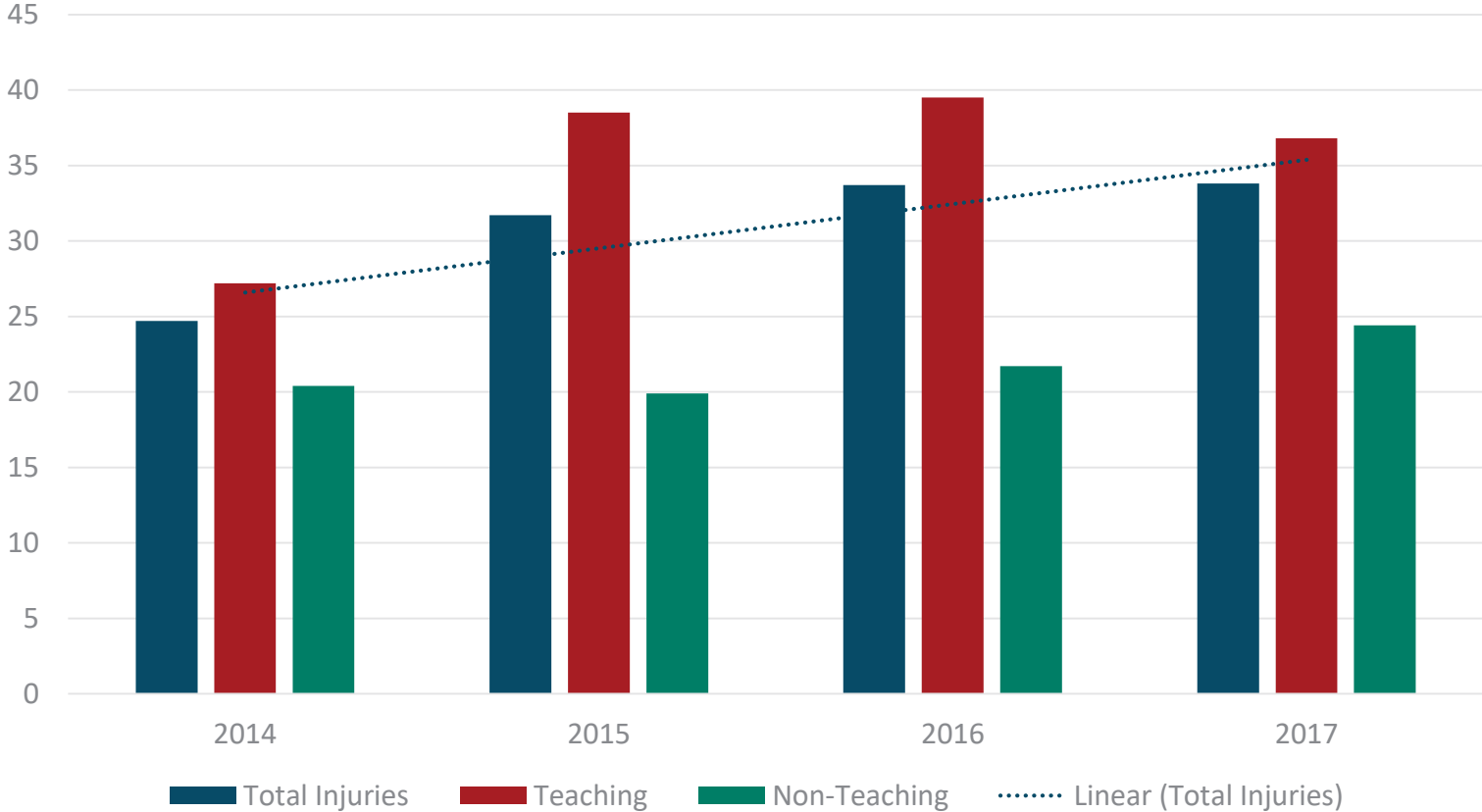
EPINet is a trademark of the University of Virginia. Windows is a registered trademark of Microsoft Corporation in the United States and other countries. Operates in Windows XP, Windows Vista, Windows 7, and Windows 8 Environment. © 2008 Selecta, Dickinson and Company. Access 2010 US

4/2014

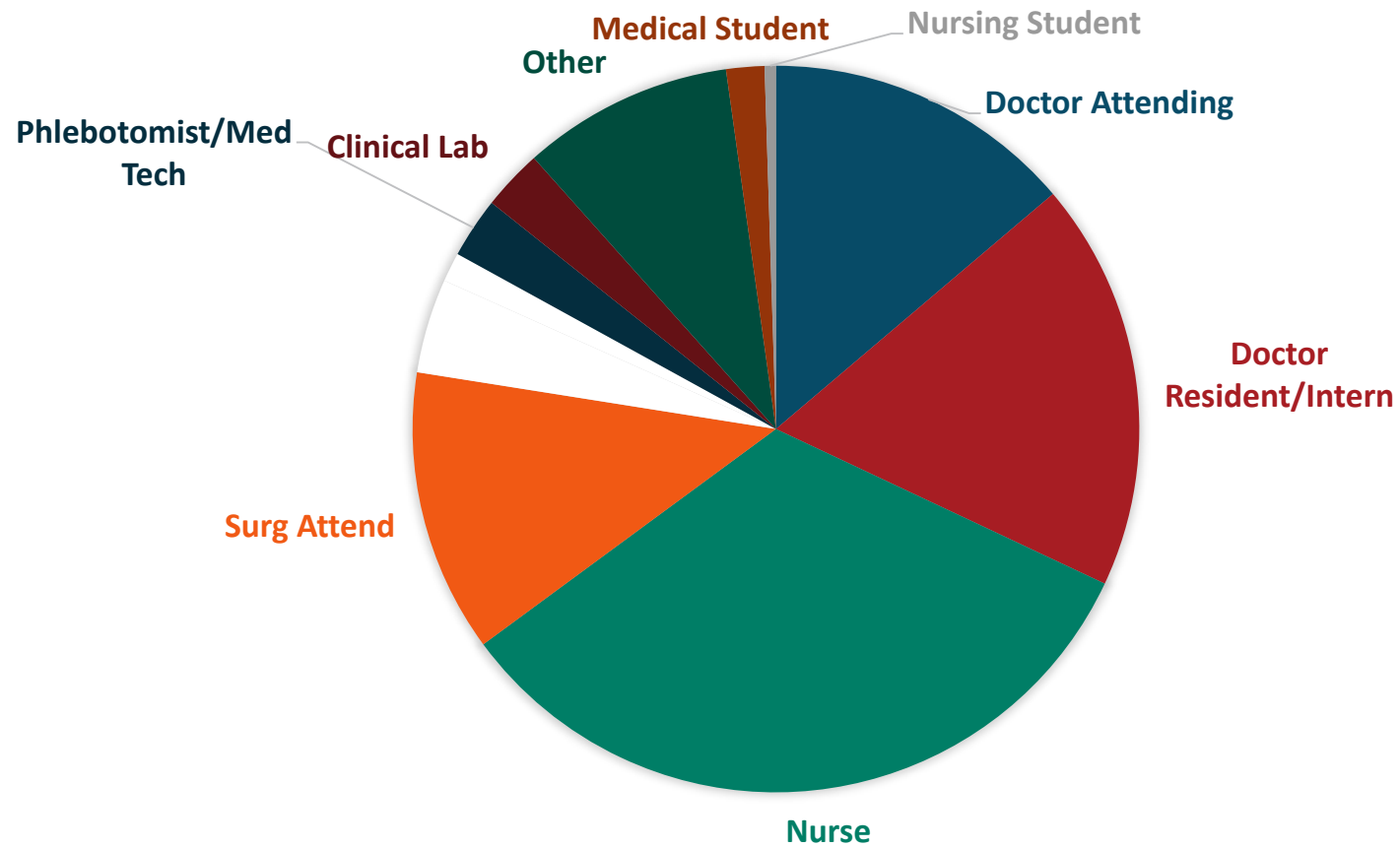
In use around the world since 1992.

FREE: <https://internationalsafetycenter.org/use-epinet/>

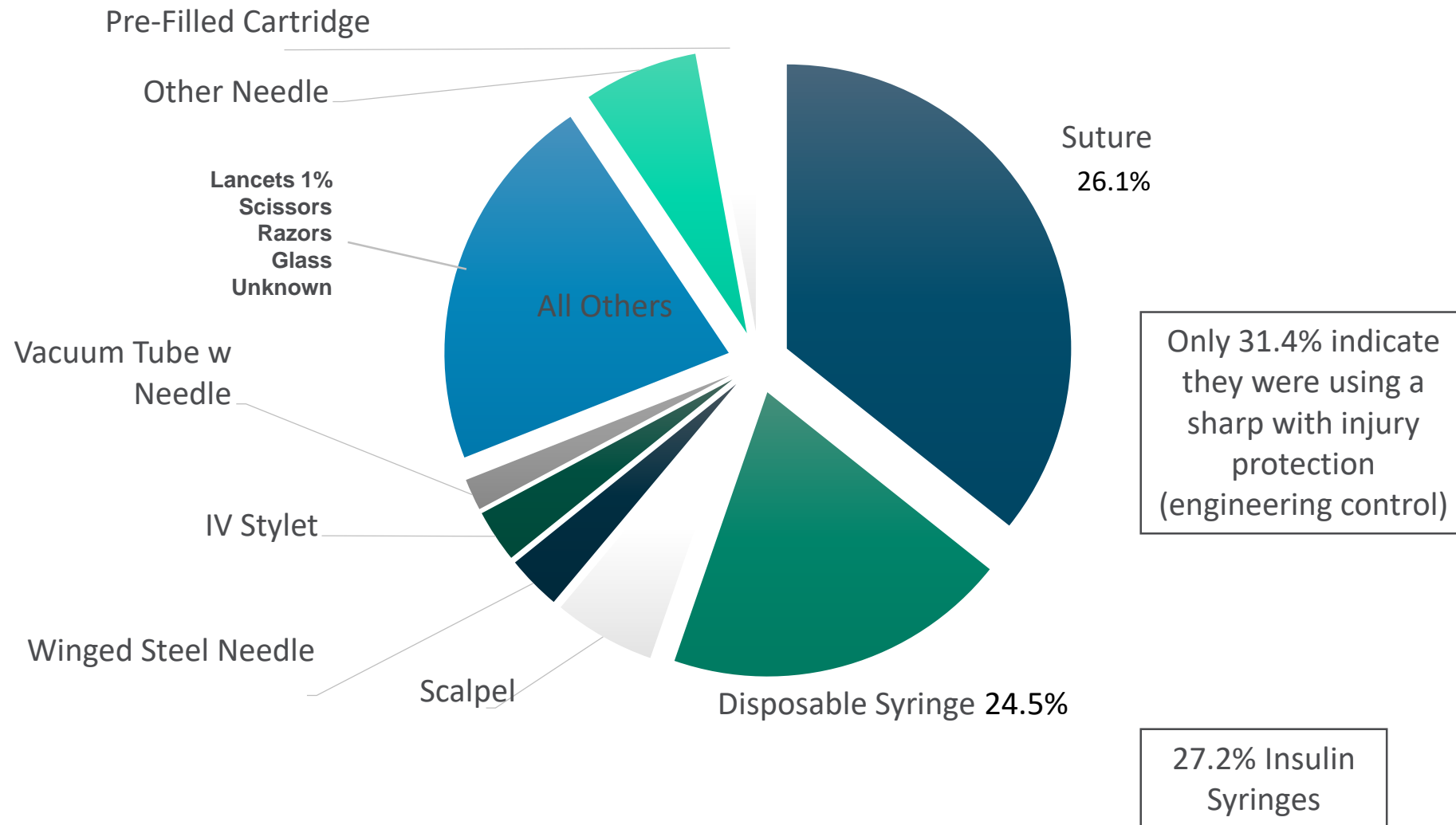
Summary of Needlesticks and Sharp Object Injuries (SOI) per 100 ADC; EPINet



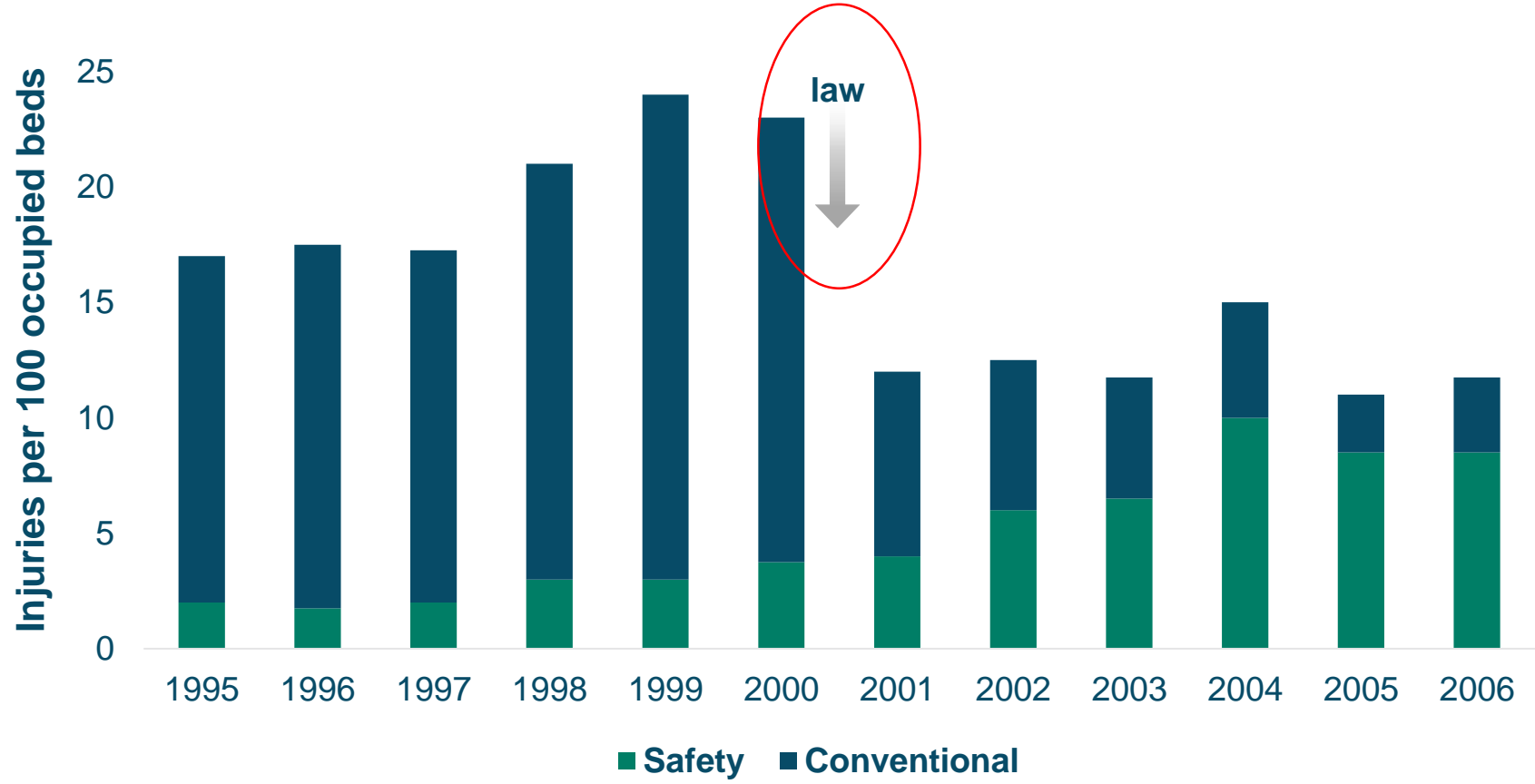
Sharp Object Injury & Needlestick Summary Data; N=31 US Health Systems, EPINet 2017



Sharp Object Injury & Needlestick Summary Data; N=31 US Health Systems, EPINet 2017



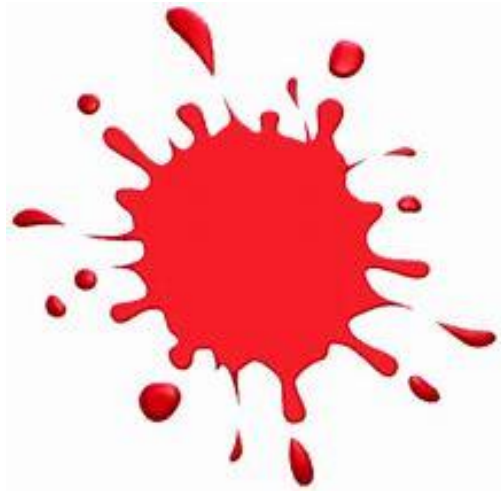
Injury Rates from Contaminated Hollow-bore Needles: Safety versus Conventional, U.S. EPINet 1995-2006; 87 Hospitals; Total Injuries = 24,440



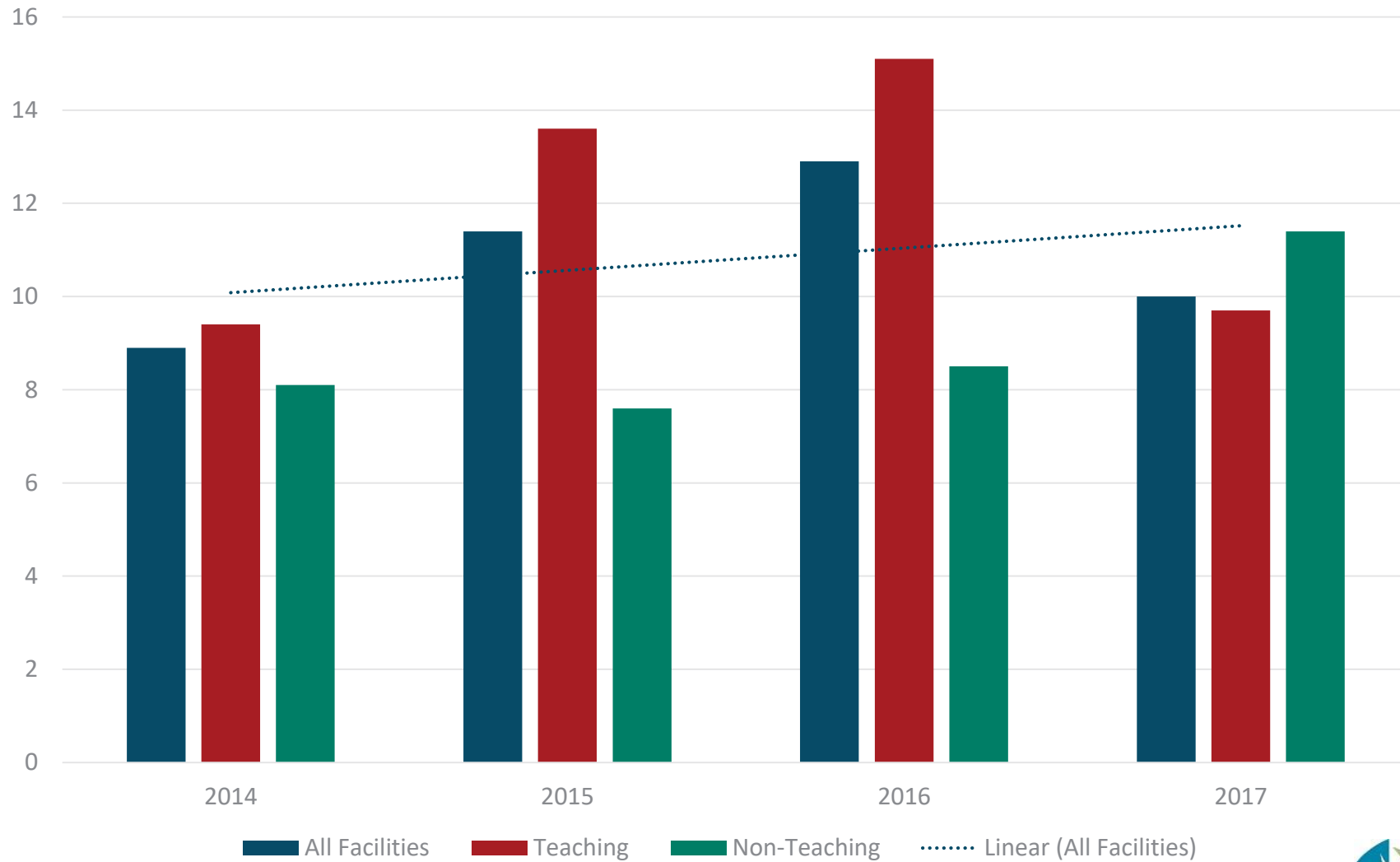
Examples



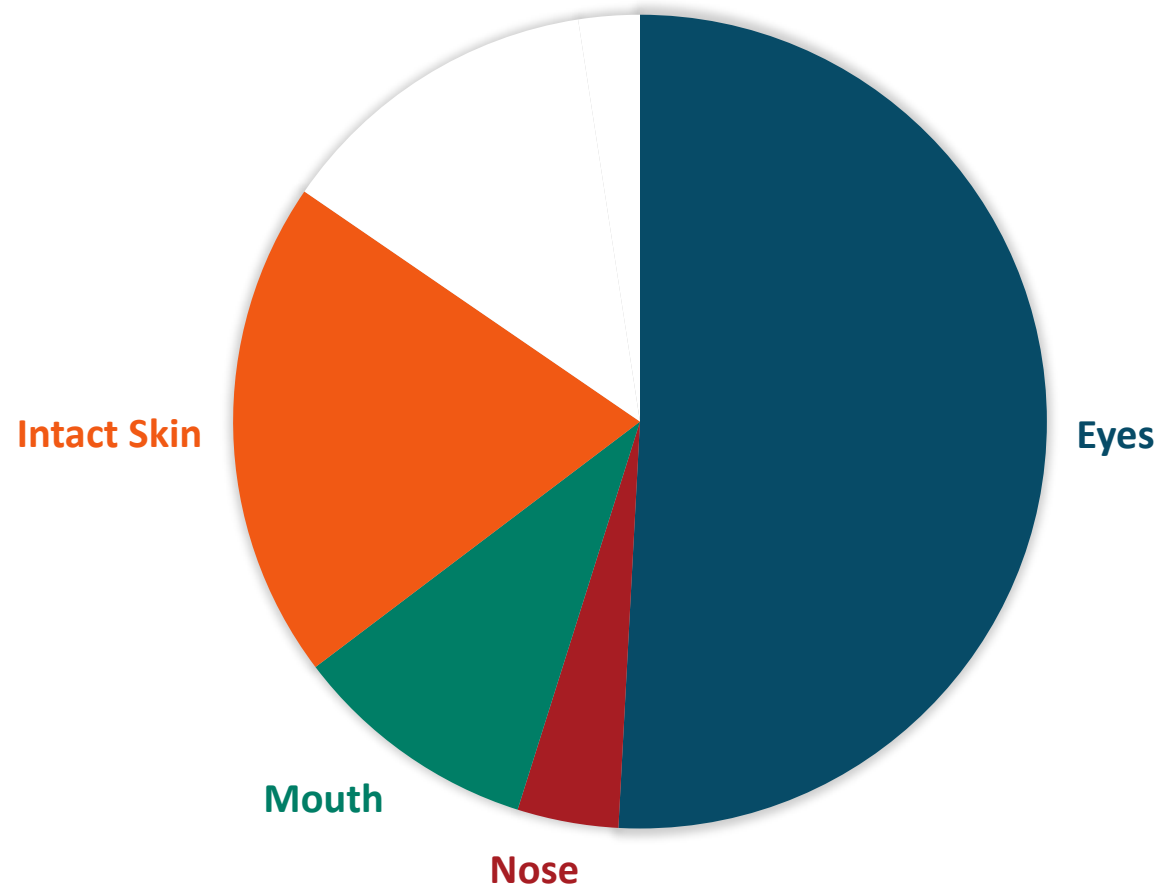
Blood & Body Fluid Exposure (BBFE) Incidents Non-Sharps



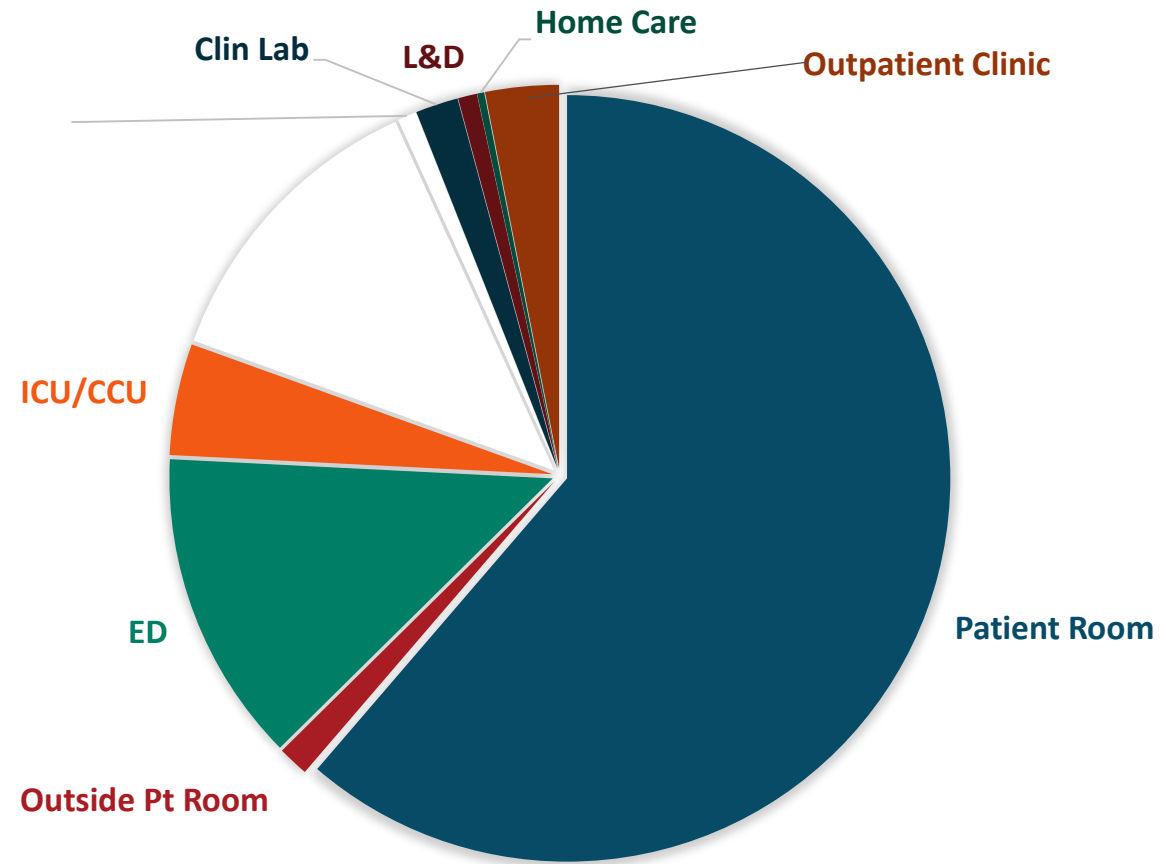
Blood & Body Fluid Exposure Incidents per 100 ADC; EPINet



Blood & Body Fluid Exposure Incident Summary Data; N=31 facilities, EPINet 2017



Blood & Body Fluid Exposure Incident Summary Data; N=31 Facilities, EPINet 2017,



Total PPE & Barrier Garment Worn; 2017

Which barrier garments were worn at the time of exposure?	% of Total Records
Single pair of gloves	28.3%
Double pair of gloves	2%
Protective Eyewear / Goggles	0.5%
Eyeglasses (not protective)	5.8%
Eyeglasses with sideshields	0.5%
Faceshield	2.0%
Surgical mask	2.5%
Surgical gown	3.0%
Plastic apron	0.5%
Labcoat / Scrub Jacket, cloth, (not protective)	0%
Respirator	0.0%
Other	1.8%

3.0%
Wearing appropriate
eye protection

To Summarize

- Global Prevalence of Bloodborne Disease Impacts Public and Occupational Health
- Sharps Injuries and Needlesticks are INCREASING
- Blood and Body Fluid Exposures are INCREASING
- PPE Use is Poor
- The majority of injuries and exposures are occurring in patient / exam rooms where healthcare personnel are not protected
 - Inaccessibility and/or non-use of sharps with injury protection and PPE

Resources



INTERNATIONAL SAFETY CENTER

SAFER WORKERS | BETTER HEALTHCARE™

[Home](#)

[About](#)

[Use EPINet](#)

[EPINet Reports](#)

[Resources](#)

[Contact](#)



PPE compliance is crucial.

We may not be doing enough to protect our healthcare workers. Our data, used in new studies on worker safety – including a study published by the Center's Dr. Mitchell – illustrates that PPE compliance rates are

Welcome to the International Safety Center.

We are committed to improving occupational safety in healthcare by minimizing exposure to blood and body fluids.

EPINet Sharp Object Injury and Blood and Body Fluid Exposure Reports by Year

The following data are intended to provide a picture of sharp object injury and blood and body fluid exposure patterns in healthcare settings for you to use as comparison data to measure progress in your facility.

These reports may not be duplicated in full without the express permission of the International Safety Center.

Sharp Object Injury Reports



[2017 Sharp object injury report](#)



[2016 Sharp object injury report](#)



[2015 Sharp object injury report](#)



[2014 Sharp object injury report](#)



[2013 Sharp object injury report](#)



[2012 Sharp object injury report](#)



[2011 Sharp object injury report](#)



[2010 Sharp object injury report](#)

Blood and Body Fluid Exposure Reports



[2017 Blood and body fluid exposure report](#)



[2016 Blood and body fluid exposure report](#)



[2015 Blood and body fluid exposure report](#)



[2014 Blood and body fluid exposure report](#)



[2013 Blood and body fluid exposure report](#)



[2012 Blood and body fluid exposure report](#)



[2011 Blood and body fluid exposure report](#)



[2010 Blood and body fluid exposure report](#)



Viral Hepatitis

Viral Hepatitis > Statistics & Surveillance



🏠 Statistics & Surveillance

Viral Hepatitis
Surveillance – United
States

2016 Surveillance	+
2015 Surveillance	+
2014 Surveillance	+
2013 Surveillance	+

Viral Hepatitis Surveillance – United States

[Viral Hepatitis Surveillance – United States, 2016](#)

[Viral Hepatitis Surveillance – United States, 2015](#)

[Viral Hepatitis Surveillance – United States, 2014](#)

[Viral Hepatitis Surveillance – United States, 2013](#)

[Viral Hepatitis Surveillance – United States, 2012](#)

[Viral Hepatitis Surveillance – United States, 2011](#)

[Viral Hepatitis Surveillance – United States, 2010](#)

[Viral Hepatitis Surveillance – United States, 2009](#)

[Surveillance Data for Acute Viral Hepatitis – United States, 2008](#)

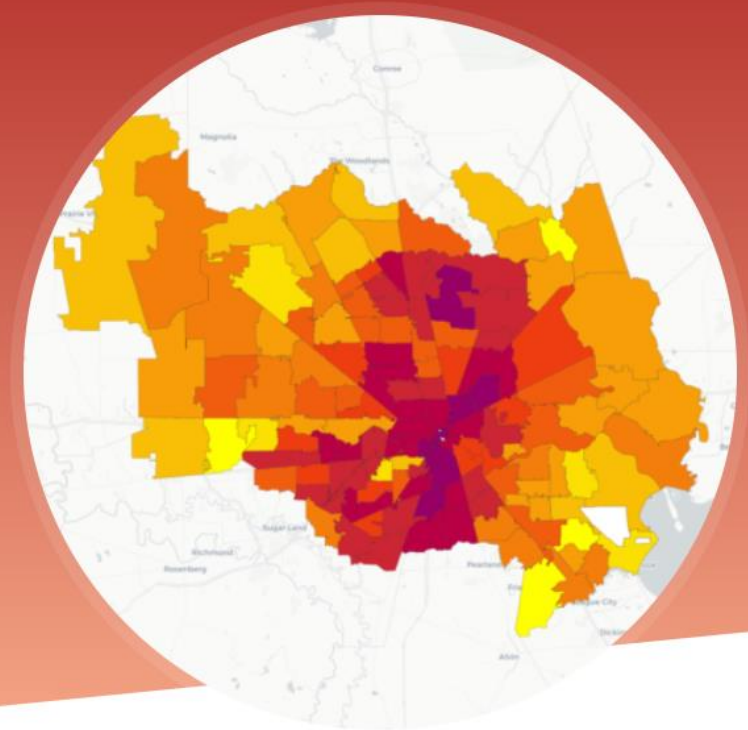
[Surveillance for Acute Viral Hepatitis – United States, 2007](#) [PDF – 32 pages]

Understanding HIV in Houston

AIDSVu is an interactive online mapping tool that visualizes the impact of the HIV epidemic on communities across the United States.

There are approximately 25,831 people living with diagnosed HIV in Houston

- [> Local Data for Houston](#)
- [> Find Services in Houston](#)
- [> View Houston Map](#)



Modules

- Module I: Current BBP Prevalence & Incidents/Injuries
 - Changing trends and emerging bloodborne diseases, and patterns of incidents and prevalence of exposures in healthcare settings
- Module II: General OSHA Compliance
 - Key elements of the Bloodborne Pathogens Standard, including recording and reporting requirements
- Module III: Applied OSHA Compliance
 - OSHA inspection protocols, and occupational health professional responsibilities regarding privacy and compliance
- Module IV: Motivating Change
 - Strategies to overcome barriers to change at the organizational and personal level

OSHA Bloodborne Pathogens Standard (BPS)

With Updates from The Needlestick Safety and Prevention Act



Bloodborne Pathogens

Requirements

- Exposure Control Plan
- Engineering & Work Practice Controls
 - Safety Engineered Device Use, Activation
 - Immediate Disposal
 - Frontline Employee Evaluation & Selection
 - PPE Availability and Use



Bloodborne Pathogens

Requirements

- Training
 - Prior to Initial Placement
 - Annually
 - New Procedures, Practices, Devices
- HBV Vaccine and Post-Exposure Procedures
- Recordkeeping and Sharps Injury Log

**APPENDIX D
MODEL EXPOSURE CONTROL PLAN**

The Model Exposure Control Plan is intended to serve employers as an example exposure control plan which is required by the Bloodborne Pathogens Standard. A central component of the requirements of the standard is the development of an exposure control plan (ECP).

The intent of this model is to provide small employers with an easy-to-use format for developing a written exposure control plan. Each employer will need to adjust or adapt the model for their specific use.

The information contained in this publication is not considered a substitute for the OSH Act or any provisions of OSHA standards. It provides general guidance on a particular standard-related topic but should not be considered a definitive interpretation for compliance with OSHA requirements. The reader should consult the OSHA standard in its entirety for specific compliance requirements.

POLICY

The (Facility Name) is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this endeavor, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The ECP is a key document to assist our firm in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- * Determination of employee exposure
- * Implementation of various methods of exposure control, including:
 - Universal precautions
 - Engineering and work practice controls
 - Personal protective equipment
 - Housekeeping
- * Hepatitis B vaccination
- * Post-exposure evaluation and follow-up
- * Communication of hazards to employees and training
- * Recordkeeping
- * Procedures for evaluating circumstances surrounding an exposure incident

The following is a list of job classifications in which **some** employees at our establishment have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals:

<u>JOB TITLE</u>	<u>DEPARTMENT/LOCATION</u>	<u>TASK/PROCEDURE</u>
<u>(Example: Housekeeper)</u>	<u>Environmental Services</u>	<u>Handling Regulated Waste</u>

Part-time, temporary, contract and per diem employees are covered by the standard. How the provisions of the standard will be met for these employees should be described in the ECP.

METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees will utilize universal precautions.

Exposure Control Plan

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees have an opportunity to review this plan at any time during their work shifts by contacting (Name of responsible person or department). If requested, we will provide an employee with a copy of the ECP free of charge and within 15 days of the request.

(Name of responsible person or department) is responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

Engineering Controls and Work Practices

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

- * (For example: non-glass capillary tubes, SESIPs, needleless systems)
- * _____
- * _____



- Personal Protective Equipment (PPE)
 - Gloves, Gowns, Face Masks, Eye Protection
- Employer must:
 - Provide appropriate PPE (latex-alternatives)
 - Ensure the use of PPE
 - Launder/Clean PPE
 - ... at no cost to the employee



- Housekeeping (Environmental Services)
 - Disinfection (FDA, EPA)
 - Contaminated work surfaces
- Laundry & Contaminated Linen



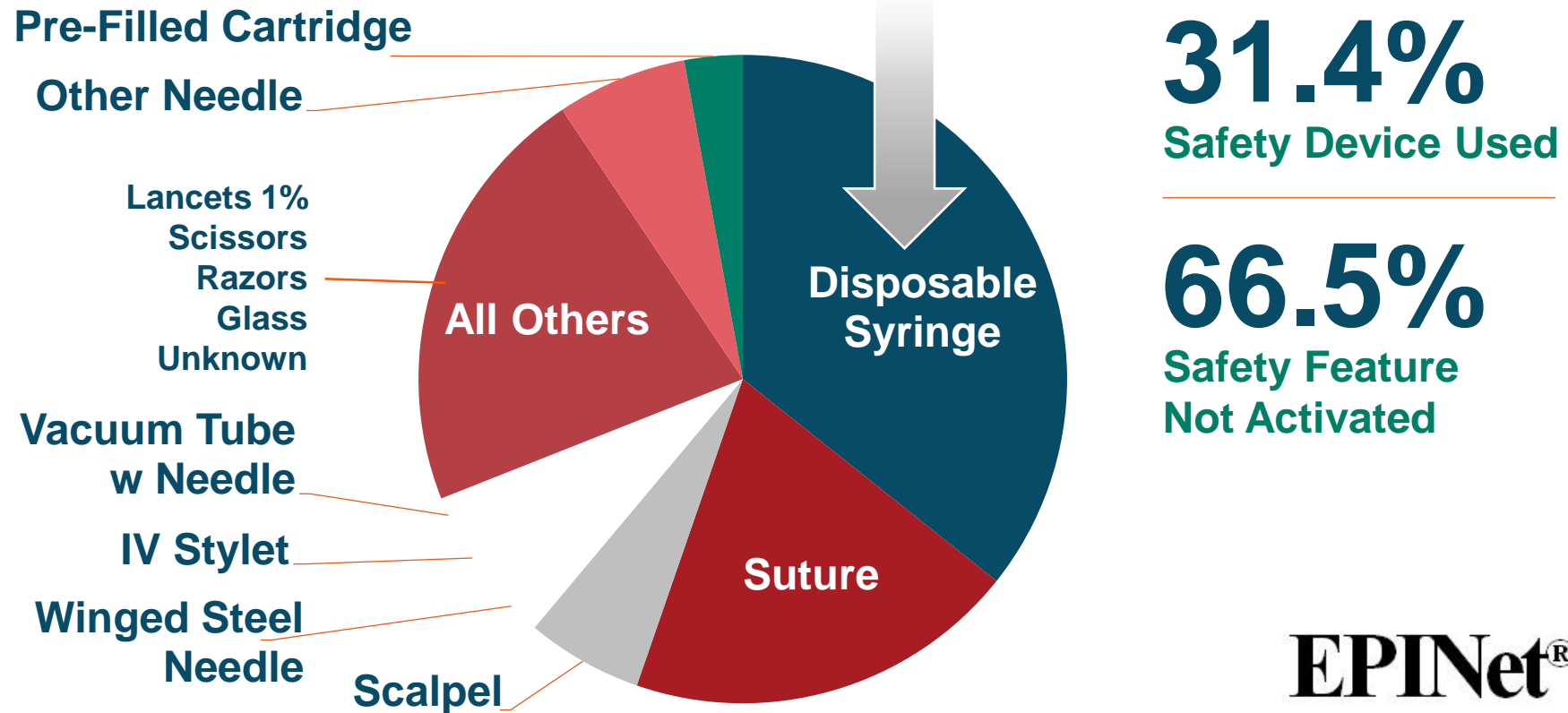
-
- Training
 - Regulated Medical Waste
 - Signage and Labels



Importance of Frontline Employees

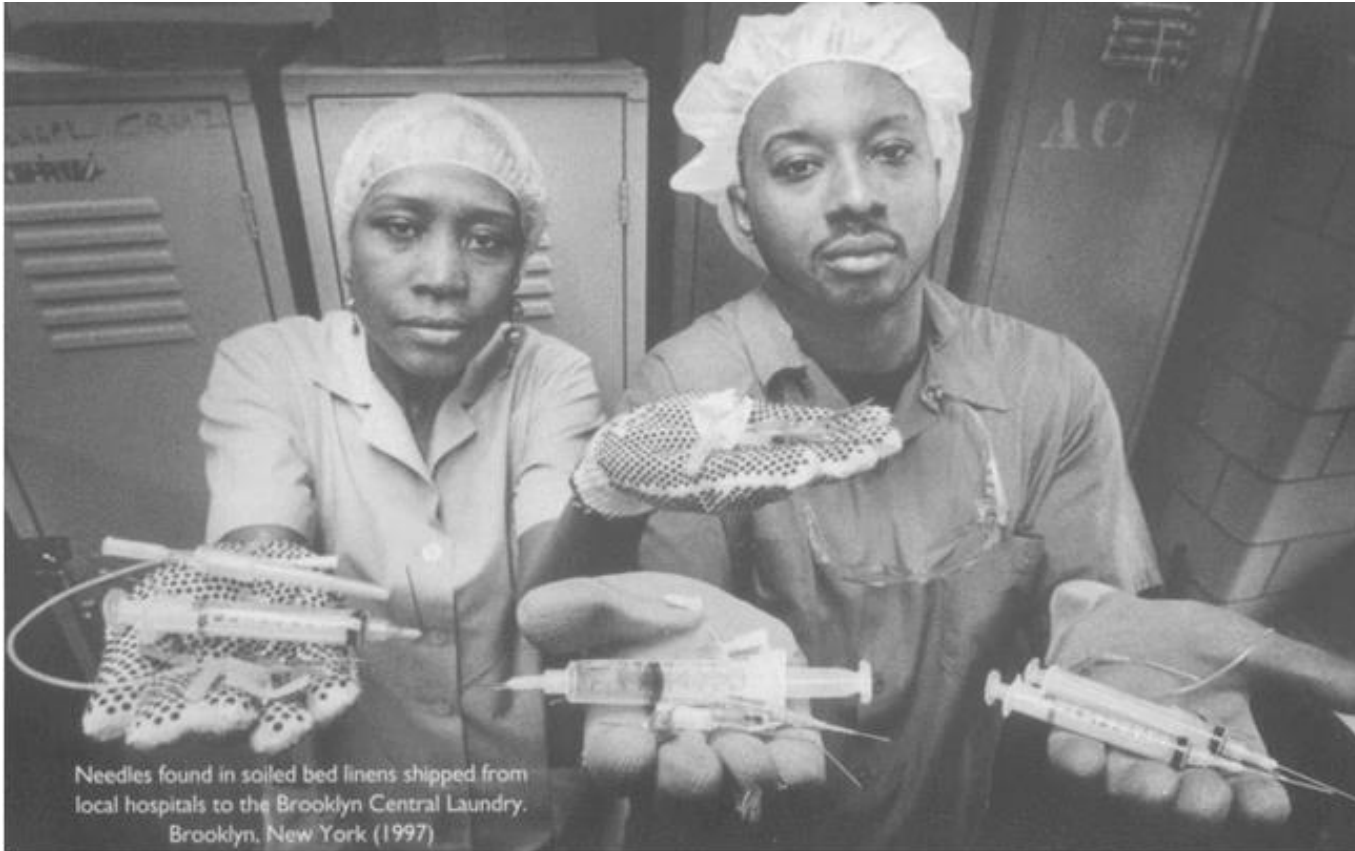
- Safety devices are evaluated and selected by non-managerial **frontline** employees
- Improve use of safety devices
- Improve activation of safety feature
- Decrease downstream, non-user injuries
- Create culture and climate of safety

Injuries and Devices Used



Exposure Prevention Information Network "EPINet" 2017 Data

Safety Extends through Use & Life Cycle of Device



THE QUIET SICKNESS
A PHOTOGRAPHIC CHRONICLE OF HAZARDOUS WORK IN AMERICA

7. Was the injured worker the original user of the sharp item?

1	Yes	65.1%
2	No	29.8%
3	Unknown	2.9%
4	N/A	2.2%

Total records: 1,210

OSHA Recordkeeping Requirements

What's New!

New Requirement for Electronic Submission

Final Rule Issued to Improve Tracking of Workplace Injuries and Illnesses



Provisions call for employers to electronically submit injury and illness data that they already record

About

[Read the Rule](#)

[Regulatory Text for Recordkeeping Standard - Part 1904 - \[Amended\]](#)

[Corrected Text](#)

NEW [Employee Involvement \(Employee's right to report injuries and illnesses free from retaliation\) \(1904.35\)](#)

[Fact Sheet](#)

[Frequently Asked Questions](#)

[Blog by Paul O'Neill](#)

Related Links

[Recordkeeping Webpage](#)

[Recordkeeping Forms](#)

[Examples of Rate-Based Incentive Programs Submitted to OSHA Regulatory Docket](#)

[Injury Tracking Application](#)

Final Rule to Improve Tracking of Workplace Injuries and Illnesses

“...public disclosure of the data will ‘nudge’ employers to reduce work-related injuries and illnesses in order to demonstrate.... safe and healthy work environments for their employees.”

Unique Requirements for Sharp Injury, Exposure Testing & Seroconversion

Under what circumstances should you NOT enter the employee's name on the OSHA Form 300?

You must consider the following types of injuries or illnesses to be privacy concern cases:

- ▼ an injury or illness to an intimate body part or to the reproductive system,
- ▼ an injury or illness resulting from a sexual assault,
- ▼ a mental illness,
- ▼ a case of HIV infection, hepatitis, or tuberculosis,
- ▼ a needlestick injury or cut from a sharp object that is contaminated with blood or other potentially infectious material (see 29 CFR Part 1904.8 for definition), and
- ▼ other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log.

You must not enter the employee's name on the OSHA 300 Log for these cases. Instead, enter "privacy case" in the space normally used for the employee's name. You must keep a separate, confidential list of the case numbers and employee names for the establishment's privacy concern cases so that you can update the cases and provide information to the government if asked to do so.

OSHA Recordkeeping 300, 300A Instructions Available:

<https://www.osha.gov/recordkeeping/new-osha300form1-1-04.pdf>

Privacy Information:

Access to Employee Exposure and Medical Records Standard

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=S_TANDARDS&p_id=10027




OSHA BPS Compliance Recap

- Exposure Control Plan
- Methods of Control
 - Engineering Controls
 - Work Practices
 - PPE
- Training
- HBV Vaccination
- Post-Exposure Protocols
- Recordkeeping

Resources

- **CDC Workbook: Sharps Injury Prevention**
https://www.cdc.gov/sharpssafety/pdf/sharpsworkbook_2008.pdf
- **NIOSH Stop Sticks Campaign**
<https://www.cdc.gov/niosh/stopsticks/default.html>
- **Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens & Needlestick Prevention**
https://www.osha.gov/SLTC/bloodbornepathogens/gen_guidance.html
- **OSHA Injury and Illness Recordkeeping and Reporting Requirements**
<https://www.osha.gov/recordkeeping>
- **TDICT (Training for Development of Innovative Control Technologies Project)** www.tdict.org


eTools Home : Hospital [Scope](#) | [Glossary](#) | [References](#) | [Site Map](#) | [Credits](#)



Hospital eTool

- Administration
- Central Supply
- Clinical Services ▶
- Dietary ▶
- Emergency
- Engineering
- Healthcare Wide ▶
- Hazards
- Heliport
- Housekeeping
- ICU
- Laboratory
- Laundry
- Pharmacy
- Surgical Suite ▶
- Expert Systems

Hospital eTool



The OSH Act of 1970 strives to "assure safe and healthful working conditions" for today's workers, and mandates that employers provide a safe work environment for employees. Hospitals and personal care facilities employ approximately 1.6 million workers at 21,000 work sites. There are many occupational health and safety hazards



Worker Safety in Hospitals

Caring for our Caregivers



[Worker Safety in Hospitals Home](#)

[Understanding the Problem](#)

[Safety & Health Management Systems](#)

[Safe Patient Handling](#)

[MSD Assessment](#)

[Management Support](#)

[Policy / Program Development](#)

[Facility & Patient Needs Assessment](#)

[Facilitating Change](#)

[Safe Patient Handling Equipment](#)

[Education & Training](#)

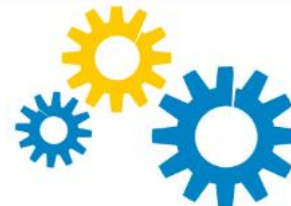
Did you know that a hospital is one of the most hazardous places to work? In 2011, U.S. hospitals recorded 253,700 work-related injuries and illnesses, a rate of 6.8 work-related injuries and illnesses for every 100 full-time employees. This is almost twice the rate for private industry as a whole.

OSHA created a suite of resources to help hospitals assess workplace safety needs, implement safety and health management systems, and enhance their safe patient handling programs. Preventing worker injuries not only helps workers—it also helps patients and will save resources for hospitals. [Download the overview](#) and explore the links below to learn more about the resources available.



Understanding the Problem

Hospitals are hazardous workplaces and face unique challenges that contribute to the risk of injury and illness.



Safety & Health Management Systems

A safety and health management system can help build a culture of safety, reduce injuries, and



Safe Patient Handling

Safe patient handling programs, policies, and equipment can help cost-effectively reduce the biggest cause of workplace



Preventing Workplace Violence

A comprehensive prevention program can help address the problem of workplace violence in healthcare facilities.



TOOLS OVERVIEW INFO & RESOURCES

Medical Device Evaluation Forms

Drive the adoption of safer medical devices and improve frontline healthcare worker safety with TDICT Medical Device Evaluation Forms.

Design Criteria and Evaluation Forms for Healthcare Facilities & Hospitals

SAFER INJECTION

This evaluation form is for users who prepare medications and provide skin injections with syringes or pens as part of their assigned duties.

[ONLINE & DOWNLOAD FORMS](#)

VASCULAR ACCESS DEVICES (VENOUS, ARTERIAL)

This evaluation form is for users of vascular access devices, including professionals and teams that perform vascular access, infusion therapy, and cardiovascular procedures using catheters.

[DOWNLOAD FORM](#)

NEEDLELESS I.V. CONNECTORS

This evaluation form is for any user who's responsible for administering medications, fluids, or other therapeutics through administration in a catheter.

[DOWNLOAD FORM](#)

BLOOD COLLECTION SYSTEMS

This evaluation form is for those responsible for drawing blood using syringes, vacuum tubes, lancets, or blood gas devices and/or equipment.

[DOWNLOAD FORM](#)

PROTECTIVE EYEWEAR

This evaluation form is for the assessment of any type of eyewear that qualifies as personal protective equipment, including goggles, eye shields, faceshields, side shields, and hoods.

[ONLINE & DOWNLOAD FORMS](#)

DISPOSABLE GLOVES

This evaluation form is for the assessment of any type of disposable protective glove, including latex, nitrile, or vinyl.

[DOWNLOAD FORM](#)

SHARPS CONTAINERS

This evaluation form is for assessment of puncture resistant and leakproof containers

<https://tdict.org/>

Simplifying the Selection Process



Sharps with Injury Prevention (SIP) Evaluation Form for Safer Injections

Date: _____ Department: _____ Occupation: _____

Product: _____ Number of Times Used: _____

General Considerations for Evaluation of Devices with Sharps Injury Prevention (SIP) Features. The following considerations must be met.

- Gloves will be used during procedures, so it is important to include that the device is appropriately used with gloved hands.
- Used/contaminated SIP device should not be recapped. Injury prevention features should be activated then safely disposed into an appropriate sharps container. Each SIP must provide a better alternative than to recap.
- The device will work effectively with all relevant syringe and needle sizes.
- If hazardous drugs are being administered (i.e., chemotherapy, anti-neoplastics) controls for protecting users from bloodborne pathogens and chemical hazards must be addressed.
- If using a disposable syringe to draw blood, please refer to the Blood Collection Evaluation Form.

Once these conditions have been met, the following design criteria will serve as parameters to inform the decision to introduce a new SIP device into use.

Please circle the most appropriate answer for each question. Not applicable (N/A) may be used if the question does not apply to this specific product

Percutaneous/Skin Injection:

During Use:		Scale (1) Agree.....(5)Disagree					
1	The injury prevention feature/mechanism is integral to the needle.	1	2	3	4	5	N/A
2	The sharp with injury prevention (SIP) does not require more time to use than a device without an injury prevention feature/mechanism.	1	2	3	4	5	N/A
3	The SIP feature/mechanism does not interfere with the view of aspirated fluid in the syringe.	1	2	3	4	5	N/A
4	The SIP feature/mechanism does not obstruct vision of the tip of the sharp before use.	1	2	3	4	5	N/A
5	This device minimizes splashes and splatters.	1	2	3	4	5	N/A
6	This device can be used without causing more patient discomfort than the current device.	1	2	3	4	5	N/A
After Use/Prior to Disposal:							



SAFER INJECTION

Evaluate sharps devices and help reduce sharps injuries for healthcare workers.

ONLINE & DOWNLOAD FORMS



SHARPS CONTAINERS

Evaluate sharps containers and ensure your sharps are disposed of safely.

ONLINE & DOWNLOAD FORMS



EYE PROTECTION

Evaluate protective eyewear and help reduce blood and body fluid exposures.

ONLINE & DOWNLOAD FORMS



EVALUATION FORM LIBRARY

View all TDICT online and downloadable evaluation forms.

VIEW ALL EVALUATION FORMS

<http://tdict.org/>

Modules

- Module I: Current BBP Prevalence & Incidents/Injuries
 - Changing trends and emerging bloodborne diseases, and patterns of incidents and prevalence of exposures in healthcare settings
- Module II: General OSHA Compliance
 - Key elements of the Bloodborne Pathogens Standard, including recording and reporting requirements
- Module III: Applied OSHA Compliance
 - OSHA inspection protocols, and occupational health professional responsibilities regarding privacy and compliance
- Module IV: Motivating Change
 - Strategies to overcome barriers to change at the organizational and personal level

OSHA Act

1970

A horizontal banner with a background of weathered wooden planks. On the right side, a yellow hard hat is partially visible. A dark teal rounded rectangle is overlaid on the left side of the banner, containing the text "Occupational Safety and Health Administration" in white.

Occupational Safety and Health
Administration

**OSHA requires
employers to ...**

- Furnish employment and a place of employment that are free from recognized hazards.
- Comply with OSHA standards.

OSHA is headed your

You get a call from the Executive Officer that there is an OSHA Compliance Officer on the premises. OSHA has received a complaint from a current employee regarding exposure to blood. The Compliance Officer plans to come to the occupational health clinic as part of their inspection.



What records are you responsible for providing to them?

OSHA Fines

Penalty amounts adjusted for inflation as of January 2019

Type of Violation	Penalty
<ul style="list-style-type: none">• Serious• Other-Than-Serious• Posting Requirements	\$13,260 per violation
Failure to Abate	\$13,260 per day beyond the abatement date
Willful or Repeated	\$132,598.00 per violation

OSHA Inspections



Enforcement Considerations during an OSHA inspection

- Inspections are always unannounced.
- The highest executive is notified.
- The specific “complaint” is explained.
- Complaints are always anonymous—strictly!!
- Access to the facility is required (warrant if needed).
- Access to certain records is required.
- Access to certain personal employee records is prohibited.



Suggested OSHA inspection protocols

- Be cooperative.
- Ask for specifics.
 - What is the complaint?
 - What records are they requesting?
- Consult legal as needed.
- Comply within 15 days.

What You Have to Gain



Provide a safer
workplace for your
employees



Protect your employer
from unfounded
citations/fines



Uphold your
professional, legal and
ethical standards

Rules of agency practice and procedure

Concerning OSHA access to employee medical records



OSHA is required to:

- Protect “personally identifiable information” about employees during an OSHA inspection.
- Use records solely to verify compliance with standards requiring surveillance.
- Request aggregate data if needed.
- View records on-site and not remove or copy records, UNLESS:
 - OSHA Medical Access Order.
 - Written consent from the employee.
 - Litigation situations.

Two OSHA Standards to Consult Regarding Medical Records



- Access to employee exposure and medical records (29 CFR 1910.1020)
- OSHA Access to employee medical records (29 CFR 1910.1013)
- [Recording and Reporting Occupational Injuries and Illnesses (29CFR 1904)]

Access to employee exposure and medical records

(1910.1020)

Employee (or their representative) have access to:

- Medical surveillance for a specific employee
- Exposure records – surveillance
- First Aid records
- OSHA recordkeeping forms (29 CFR 1904)
- 15 days to provide copies

Does NOT include (among others):

- Records prepared for litigation
- Personal medical records
- Records on voluntary employee assistance programs
(substance abuse, counseling, etc.)



Except as expressly provided, **nothing in this section is intended to affect existing legal and ethical obligations concerning the maintenance and confidentiality of employee medical information, the duty to disclose information to a patient/employee or any other aspect of the medical-care relationship, or affect existing legal obligations concerning the protection of trade secret information.**

Health Professional means a physician, **occupational health nurse**, industrial hygienist, toxicologist, or epidemiologist, providing medical or other occupational health services to exposed employees.

Rules of agency practice and procedure

Concerning OSHA access to employee medical records

OSHA Medical Access Orders:

- Designate a Medical Records Officers.
- Approve or deny the Principle OSHA Investigator's request for records.
- Secure the records:
 - Remove personal identifiers and provide a unique number for each employees' record.
 - No public access to the records.
- Can share records with NIOSH, DOJ (criminal investigations).



Summary



How to enhance your benefits during an inspection



Professional responsibilities during an OSHA inspection



OSHA Act (1970)

Summary:

Why Prevent Exposures to **Blood** ?



It Could Save Your Life!!!

(...Or That of Someone Around You)

Resources

- Access to employee exposure and medical records

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1020>

- OSHA Access to employee medical records

<https://www.osha.gov/SLTC/medicalaccessorder/index.html>

Modules

- Module I: Current BBP Prevalence & Incidents/Injuries
 - Changing trends and emerging bloodborne diseases, and patterns of incidents and prevalence of exposures in healthcare settings
- Module II: General OSHA Compliance
 - Key elements of the Bloodborne Pathogens Standard, including recording and reporting requirements
- Module III: Applied OSHA Compliance
 - OSHA inspection protocols, and occupational health professional responsibilities regarding privacy and compliance
- Module IV: Motivating Change
 - Strategies to overcome barriers to change at the organizational and personal level

Changing Course seems easy.....



...but you may feel you have entered a shark tank !



Motivators for **Change**

- Co\$t Analysis
- Simplifying the Selection
- Overcoming Resistance to **Change**

Motivators for **Change**

- Co\$t Analysis

Direct Financial Burden

Initial Treatment of Needlesticks:

\$800 - \$6,000 each¹

Initial cost of medications
for HCV can be

> \$25,000²

OSHA fines more than

\$13,260
per violation³

“Indirect” Associated Costs

- **Personal:** Emotional Toll, Anxiety, Fear, Loss of Wages/Shifts, Disability, Potential for Chronic Disease
- **Professional:** Staffing, Re-staffing, Limited Work Duty, Public Perception, Staff Recruitment/Retention
- **Societal:** Burden on Workers Compensation, Insurance, Public Health

OSHA says:

“Remember, selecting a safer device based solely on the lowest cost is not appropriate.

*Selection must be based on **employee feedback and device effectiveness.**”*

Motivators for **Change**

- Co\$t Analysis
- Simplifying the Selection

Confused about the selection process?





Dilemma for Doris

Your safety director notes that there have been repeated injuries with a particular type of phlebotomy device being used in your out-patient clinic. He wants you to recommend a change in products.

**You ask:
Where do I begin?**



Examples





Importance of Frontline Employees

- Safety devices are evaluated and selected by non-managerial **frontline** employees
- Improve use of safety devices
- Improve activation of safety feature
- Decrease downstream, non-user injuries
- Create culture and climate of safety

Simplifying the Selection **Process**

- Safety for the user/worker
- Ease of use
- Patient safety and comfort



Medical Device Evaluation Forms

Drive the adoption of safer medical devices and improve frontline healthcare worker safety with TDICT Medical Device Evaluation Forms.

Design Criteria and Evaluation Forms for Healthcare Facilities & Hospitals

SAFER INJECTION

This evaluation form is for users who prepare medications and provide skin injections with syringes or pens as part of their assigned duties.

[ONLINE & DOWNLOAD FORMS](#)

VASCULAR ACCESS DEVICES (VENOUS, ARTERIAL)

This evaluation form is for users of vascular access devices, including professionals and teams that perform vascular access, infusion therapy, and cardiovascular procedures using catheters.

[DOWNLOAD FORM](#)

NEEDLELESS I.V. CONNECTORS

This evaluation form is for any user who's responsible for administering medications, fluids, or other therapeutics through administration in a catheter.

[DOWNLOAD FORM](#)

BLOOD COLLECTION SYSTEMS

This evaluation form is for those responsible for drawing blood using syringes, vacuum tubes, lancets, or blood gas devices and/or equipment.

[DOWNLOAD FORM](#)

PROTECTIVE EYEWEAR

This evaluation form is for the assessment of any type of eyewear that qualifies as personal protective equipment, including goggles, eye shields, faceshields, side shields, and hoods.

[ONLINE & DOWNLOAD FORMS](#)

DISPOSABLE GLOVES

This evaluation form is for the assessment of any type of disposable protective glove, including latex, nitrile, or vinyl.

[DOWNLOAD FORM](#)

SHARPS CONTAINERS

This evaluation form is for assessment of puncture resistant and leakproof containers

Motivators for **Change**

- Co\$t Analysis
- Simplifying the Selection
- **Overcoming Resistance to Change**

Motivators for **Change**

Institutional

- The use of safety-engineered devices is required
- Economically sound decision
- Remain competitive in recruitment and retention
- Enhance marketability of the practice

Motivators for **Change**

Institutional

- The use of safety-engineered devices is required
- **Economically sound decision**
- Remain competitive in recruitment and retention
- Enhance marketability of the practice

Motivators for **Change**

Institutional

- The use of safety-engineered devices is required
- Economically sound decision
- **Remain competitive in recruitment and retention**
- Enhance marketability of the practice

Motivators for **Change**

Institutional

- The use of safety-engineered devices is required
- Economically sound decision
- Remain competitive in recruitment and retention
- **Enhance marketability of the practice**

Motivators for **Change**

Personal

- Enhanced Perception of Risk
- Provide Cues to Action
- Clarify the Perceived Benefit

Motivators for **Change**

Personal

- Enhanced Perception of Risk
- Provide Cues to Action
- Clarify the Perceived Benefit

Motivators for **Change**

Personal

- Enhanced Perception of Risk
- Provide Cues to Action
- Clarify the Perceived Benefit

Motivators for **Change**

Personal

- Enhanced Perception of Risk
- Provide Cues to Action
- Clarify the Perceived Benefit

Summary:

Why Prevent Exposures to **Blood** ?



It Could Save Your Life!!!
(...Or That of Someone Around You)

Resources on Motivating Change

Search “Motivation Change”

Overview of Primary Resources

All at NO COST!

- **CDC Workbook: Sharps Injury Prevention**
https://www.cdc.gov/sharpssafety/pdf/sharpsworkbook_2008.pdf
- **International Safety Center (EPINet data)**
<https://internationalsafetycenter.org/exposure-reports/>
- **Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens & Needlestick Prevention**
https://www.osha.gov/SLTC/bloodbornepathogens/gen_guidance.html
- **OSHA Injury and Illness Recordkeeping and Reporting Requirements** <https://www.osha.gov/recordkeeping>
- **TDICT (Training for Development of Innovative Control Technologies Project)** www.tdict.org