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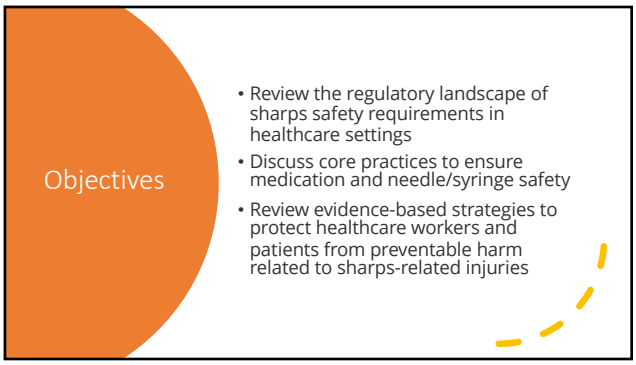

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Background Context

4

What are the True Risks with Sharps Injuries?

- CDC estimates ~385,000 sharps injuries annually among hospital-based healthcare personnel (>1,000 injuries/day)
  - Many more in other healthcare settings (e.g., emergency services, home care, nursing homes)
- Increased risk for bloodborne virus transmission
- Costly to personnel and healthcare system

Source: US Centers for Disease Control and Prevention

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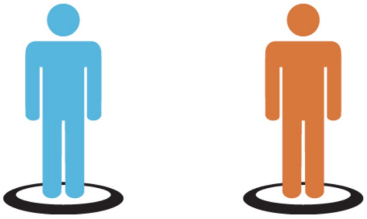

SOURCE
Infectious person, e.g. chronic, acute

HOST
Susceptible, non-immune person

Source: US Centers for Disease Control and Prevention

6

Risks of Seroconversion due to Sharps Injury
from a known positive source

• **Virus**	• **Risk (Range)**
• HBV	• 6-30%*
• HCV	• ~ 2%
• HIV	• 0.3%

(*Risk for HBV applies if not HB vaccinated
Source: US Centers for Disease Control and Prevention

7

What is the Risk of HIV Alone?

- Percutaneous 0.3%
- Mucous membrane 0.1%
- Non-intact skin <0.1%

Source: US Centers for Disease Control and Prevention

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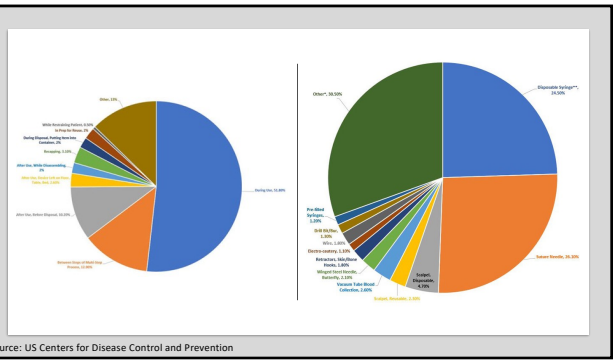

Source: US Centers for Disease Control and Prevention

9

Costs of Sharps Injuries

- Baseline and follow-up laboratory testing
- Treatment of exposed personnel
  - $71-~$5,000 depending on treatment provided
- Lost productivity
- Time to complete paperwork
- Loss of income / loss of career
- Emotional costs
- Societal costs

Source: O'Malley, et. al. Costs of Management of Occupational Exposure to Blood and Body Fluids. ICHE, July 2007, v 28, No. 7.

10

When do Sharps Injuries Occur?

- During use: 41%
- After use/before disposal: 40%
- During and after disposal: 15%
- Other: 4%

Source: US Centers for Disease Control and Prevention

11

Drug Diversion Plagues US Healthcare

U.S. Outbreaks Associated with Drug Diversion by Healthcare Providers, 1983-2018

Year	Cases	Outbreak
2018	12	HCV infections associated with an emergency department nurse at a hospital in Washington [Footnote 1]
2018	6	*Sphingomonas paucimobilis* bacteremia associated with a nurse at a cancer center in New York [Footnote 2]
2015	7	HCV infections associated with a nurse at a Utah hospital [Footnote 3]
2014	5	*Serratia marcescens* bacteremia associated with a nurse in a post-anesthesia care unit at a hospital in Wisconsin [Footnote 4]
2012	45	HCV infections associated with a radiology technician at hospitals in New Hampshire, Kansas and Maryland [Footnotes 9, 14, 15, 16]
2011	25	Gram-negative bacteremia associated with a nurse at a Minnesota hospital [Footnotes 9, 13]
2009	18	HCV infection associated with a surgical technician at a Colorado hospital [Footnotes 9, 12]

Source: https://www.cdc.gov/injectionsafety/drugdiversion/index.html

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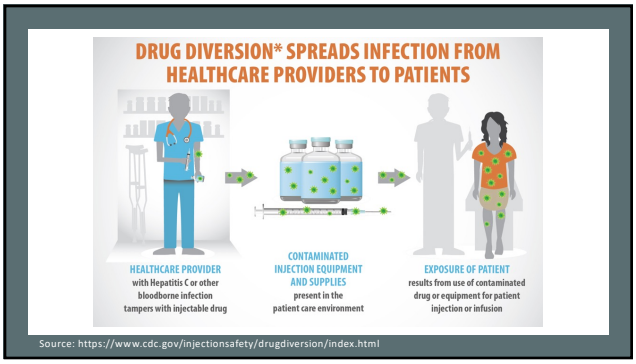

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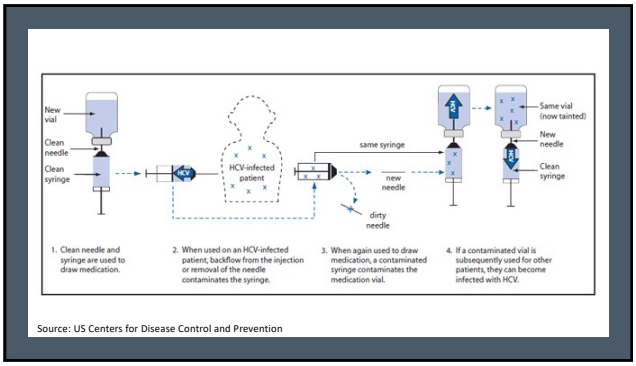

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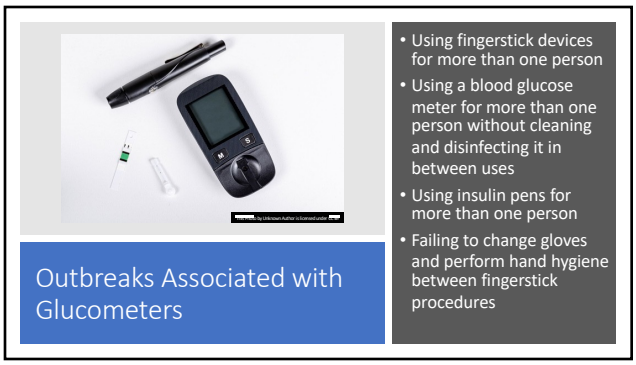

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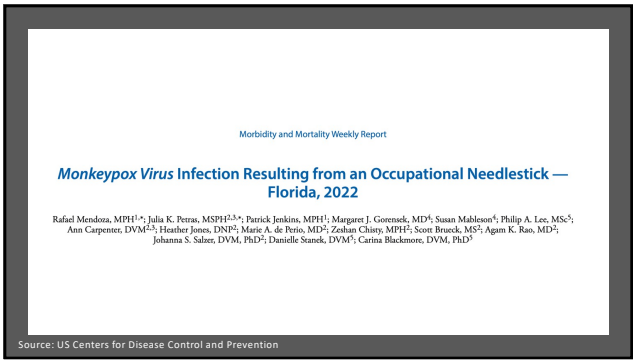

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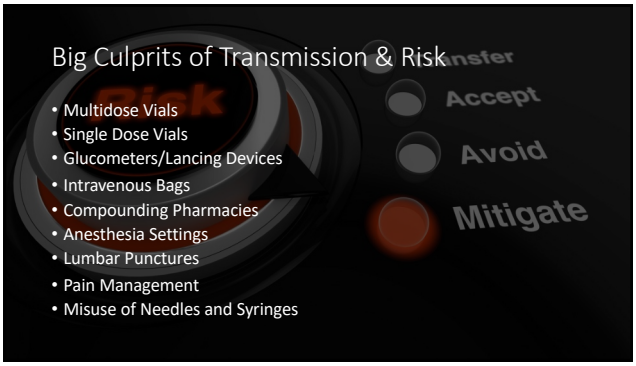

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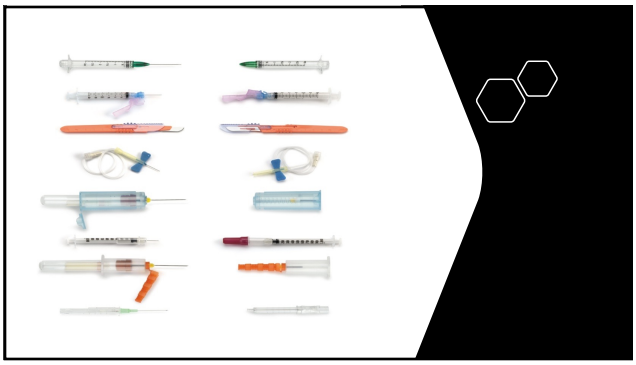

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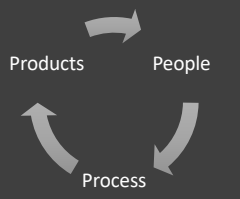
The 3 P's Approach



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Human Factors Engineering: Improved Designs Reduce Risks

- Hypodermic Needles
- Phlebotomy Needles
- IV Catheters
- Winged-Steel Needles
- IV Delivery Systems
- Lancets
- Scalpels
- Suture Needles
- Hemodialysis Needles

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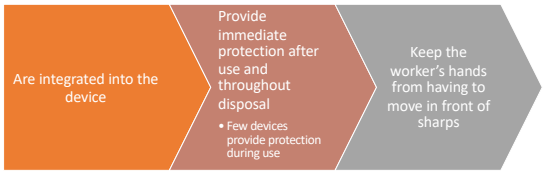
Better Designs Mitigate Risks



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People

- Do I have the right team members performing the role for which they are most qualified?
- How do I ensure the competency of my reprocessing personnel in reprocessing medical devices?
- Are my personnel able to meet the demands of our clinical practice with reprocessing?
- Do I have total confidence in my reprocessing process?

22

Process

- How is my reprocessing process validated and how often?
- How often does the device vendor validate our reprocessing capability?
- What other devices does our facility use that may contribute to reprocessing failures?
- How would I know if I have a reprocessing failure and how many patients would be impacted?

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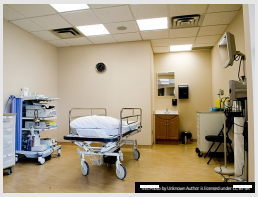

Products

- Do I want to continue to take the known risks associated with reprocessing a reusable medical device?
- How old is my fleet of reusable devices and how often are they inspected, serviced, and assessed by the actual OEM device manufacturer?
- What other third-party devices might be used through the medical device that could result in damage to the device and create a pathway for potential device contamination?

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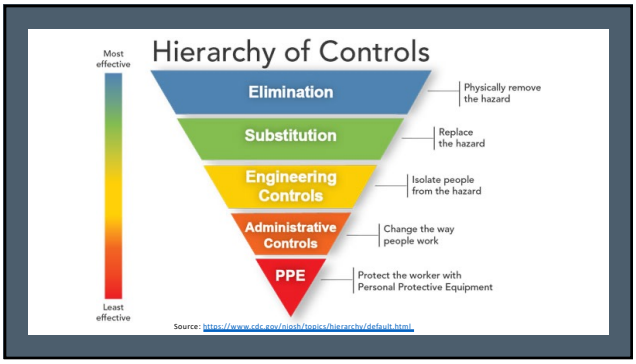

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Regulatory Requirements

OSHA Bloodborne Pathogens Act

Bloodborne Pathogens Training

OSHA Needlestick Prevention Act

26

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How do We Influence Safety?

- **Values**
- **Attitudes**
- **Perceptions**
- **Competencies and**
- **Patterns of behavior**

28

Wait, We have a Toolkit for That?

Source: US Centers for Disease Control and Prevention

29

Introduction to the Patient Notification Toolkit

Print

A Guide to Assist Health Departments & Healthcare Facilities with Conducting a Patient Notification Following Identification of an Infection Control Lapse or Disease Transmission

Patient Notification Toolkit

- **Introduction**
- Section 1: Developing Documents for a Patient Notification
- Section 2: Planning Media and Communication Strategies
- Writing for Media
- Spokesperson Preparation
- Media & Patient Notification Letters
- Conducting a Successful Press Conference or Media Opportunity
- Section 3: Establishing Communication Resources
- Example Q/A Resources
- Section 4: Best Practices in Conducting Patient Notifications
- Scope/Acknowledgement
- Additional Resources

To Access Toolkit: https://www.cdc.gov/injectionsafety/pntoolkit/index.html

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What Choice Does our Patient Expect?

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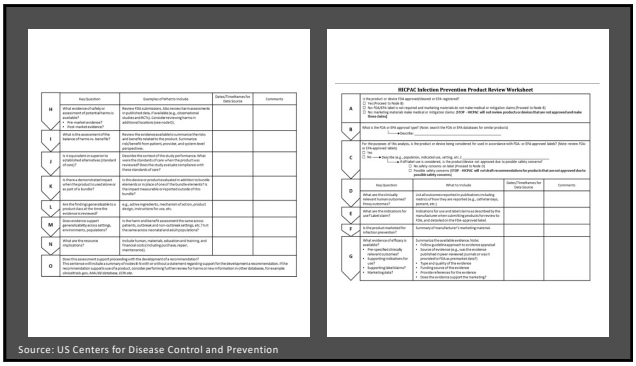

HICPAC Infection Prevention Product Review Worksheet

Source: US Centers for Disease Control and Prevention

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Prevent the Stick!

- Avoiding the use of needles where safe and effective alternatives are available
- Helping your employer select and evaluate devices with safety features that reduce the risk of needlestick injury
- Using devices with safety features provided by your employer
- Avoiding recapping needles
- Planning for safe handling and disposal of needles before using them
- Promptly disposing of used needles in conveniently placed and appropriate sharps disposal containers
- Reporting all needlestick and sharps-related injuries promptly to ensure that you receive appropriate follow-up care
- Telling your employer about any needlestick hazards you observe and promptly reporting any needlesticks and near-misses
- Participating in training related to infection prevention
- Getting a hepatitis B vaccination

Source: US Centers for Disease Control and Prevention

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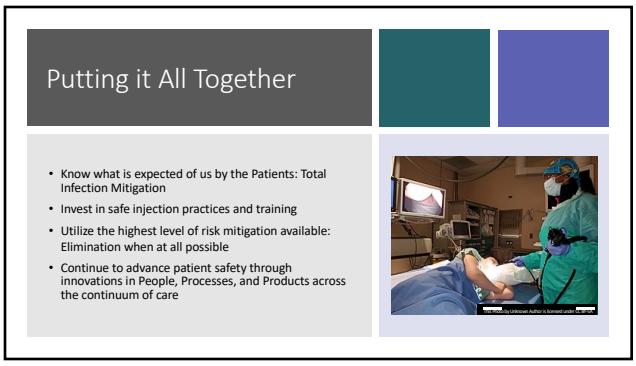

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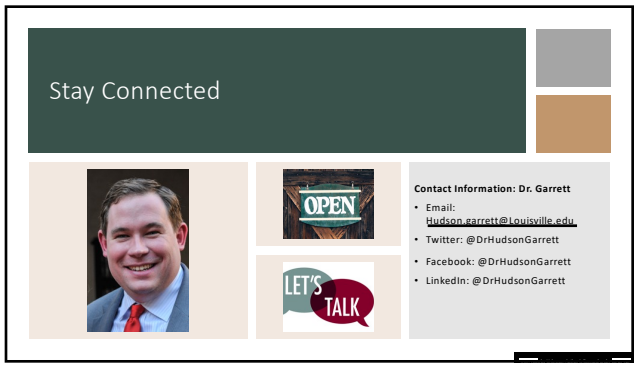

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