Sharps injury incidence in US and Successful Reduction Strategies

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Learning Objectives

1. Identify US trends in blood exposure incidence
2. Present 2017 EXPO-S.T.O.P. results
3. Discuss 5 proven strategies to reduce sharps injuries
SI Trends since 2000

EPINet

SI Per 100 ADC

NSPA

CDC 2001 “Zero in 5 years”

37.9

22.2

-38%

“Occupied Beds” is poor workload Indicator

SI Trends since 2000


Sharps Injury Rates per FTE (best workload indicator)

Why are SI persisting?

EPINet -38% in 16 years!

EXPO-STOP -11% in 16 years!
Other EXPO-STOP Parameters

<table>
<thead>
<tr>
<th>EXPO-STOP SI Rates in hospitals</th>
<th>2011</th>
<th>2016</th>
<th>2017 Prelim</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI/100 FTE (All hospitals)</td>
<td>1.9</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Non-teaching</td>
<td></td>
<td></td>
<td>1.8</td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td>2.6</td>
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- Nurse SI Down;
- OR SI % UP;
Drs report less than Nurses, So **OR is the challenge**
Why have SI not decreased as expected?

- SI fallen off radar ("No data, No problem, No Action")
- Scarce resources in HCF (SI "low"– no "days off")
- “But HIV & HCV are treatable and HBV is excellent vaccine”
- SED effectiveness ("We comply with OSHA")
- Competency training (Always use SED, and correctly)
- **Competition with HAI**
- SED use?
“Use and activation of safety engineered sharps devices in a sample of 5 Florida healthcare facilities”

Grimmond T. J Assoc Occup Hlth Prof 2014;34(1):13-15
Results (1,987 Hollow-bore sharps)

• Only 45.6% were SED
• 21.6% of SED were not activated
• 42.5% of sharps were discarded “sharp”!

Compliant sharps containers will always be needed!
So, Currently in US...

- Exposures have decreased (slightly) since 2001
- But 250,000 HCW sustain SI annually – 700 every day!
- New BBP can emerge (e.g. Ebola, Zika)
- SI cause large emotional impact in many HCW

Renewed focus needed
5 Reduction Strategies in top 10 hospitals
(Incidence rates were 70% below U.S. average)

• Leadership Support
• Education & Training
• Communication
• Investigation
• Engagement

Good L & Grimmond T. Proven Strategies to Prevent Bloodborne Pathogen Exposure in EXPO-S.T.O.P. Hospitals. J Assoc Occ Hlth Prof 2017:36(1);1-5.
Leadership Support

• Strong commitment from the top
• Backing strategies with resources
• Firm commitment on policies/requirements
• Welcome frontline-staff as *partners* in safety
• Exclude non-SED. (Need apply in writing to Safety C’tee)
Education and Training

• Do not assume new staff know policies, rules, SED
• Must demonstrate competency with relevant SED
• Sign-off on “completion & understanding”: e.g. Exposure prevention policy, Work practices, Reporting procedures, unauthorised SED use
• Return for training if: SI, new SED, every 2 years
• Simulation lab; BBF; All staff/shifts; use vendors
Communication

• Make reduction goals data-driven; align w strategic goals so BE is seen and recognized as important
• Transparency of BE to ALL staff; Regular updates to decision-makers. “Safety Culture” permeates.
• Make reporting convenient; ph 24/7 (e.g. regional)
• Awareness campaigns; keep BE at forefront e.g. Monthly bulletins, cafeteria stands, praise the zeros
• Find “safety champ” in unit. e.g. surgeon in OR
• Use “safety scripts”- recite to patients
• Use door signs “Sharps Procedure in progress”
Investigation

• No blame No shame; encourage reporting of every BE.
• Drill down on every incident root-cause; don’t assume.
• Ask staff for their opinion when a trend/problem.
• Involve Unit Manager (+ senior leadership) + employee
• When investigating, confirm users:
  o had SED available
  o are correctly activating safety mechanism. Always. Immediately.
• Annually review safer SED availability (it’s OSHA law).
Engagement

• Hold frontline staff & managers responsible for safety

• When staff do well, get senior leadership to praise them
  “Employees who perceived strong senior leadership support for safety and who received high levels of safety-related feedback and training were half as likely to experience blood or body fluid exposure incidents.” Gershon et al 2000.

• Hold Safety Forums; open with a though-provoking:
  “If you arrived to work today and it was a safer environment, what would it look like?”

• Partner front-line staff as “Safety Advocates” or “Safety Champs” with Occ Health and management leaders in initiatives e.g. mthly breakfast meetings.

• Success & positivity - breeds respect for next initiative
ANA (+ 18 Assoc) 2017: 
Recommendations for Progress on Sharps Safety

1. Improving Sharps Safety in Surgical Settings
2. Understanding & Reducing Exposure Risks in Non-Hospital Settings
3. Involving Frontline HCW in Selection of Safety Devices
5. Enhancing Education & Training

Healthcare Associated Infection (HAI)

Definition...

“Healthcare-associated Infections are infections that patients acquire during the course of receiving treatment for other conditions within a healthcare setting.”¹

“...also includes occupational infections among staff of the facility.”²

Sharps injuries are “HAI” – need tap into HAI resources

Government pressure to reduce HAI

• 35 states mandate HAI be recorded

• 27 states require HAI be publically reported

HAI State Law Summary.
http://hospitalinfection.org/resources/state-infection-laws/state-law-summary

Why not an equal push for *staff* safety?

An 11% decrease in 16 years is NOT acceptable!

We’ve got the tools & strategies...

We must put SI back on radar...

We owe it to our colleagues.

*Thank You!*
Help us tackle the persistent issue of sharps injuries by sharing your #ITSNOTOK experience on LinkedIn, Instagram & Facebook!