Sharps injury incidence in US and Successful Reduction Strategies

Terry Grimmond, FASM, BAgrSc, GrDpAdEd
Director, Grimmond & Assoc. Microbiology Consultancy
terry@terrygrimmond.com

US Seminars- April 26 -28th, 2018

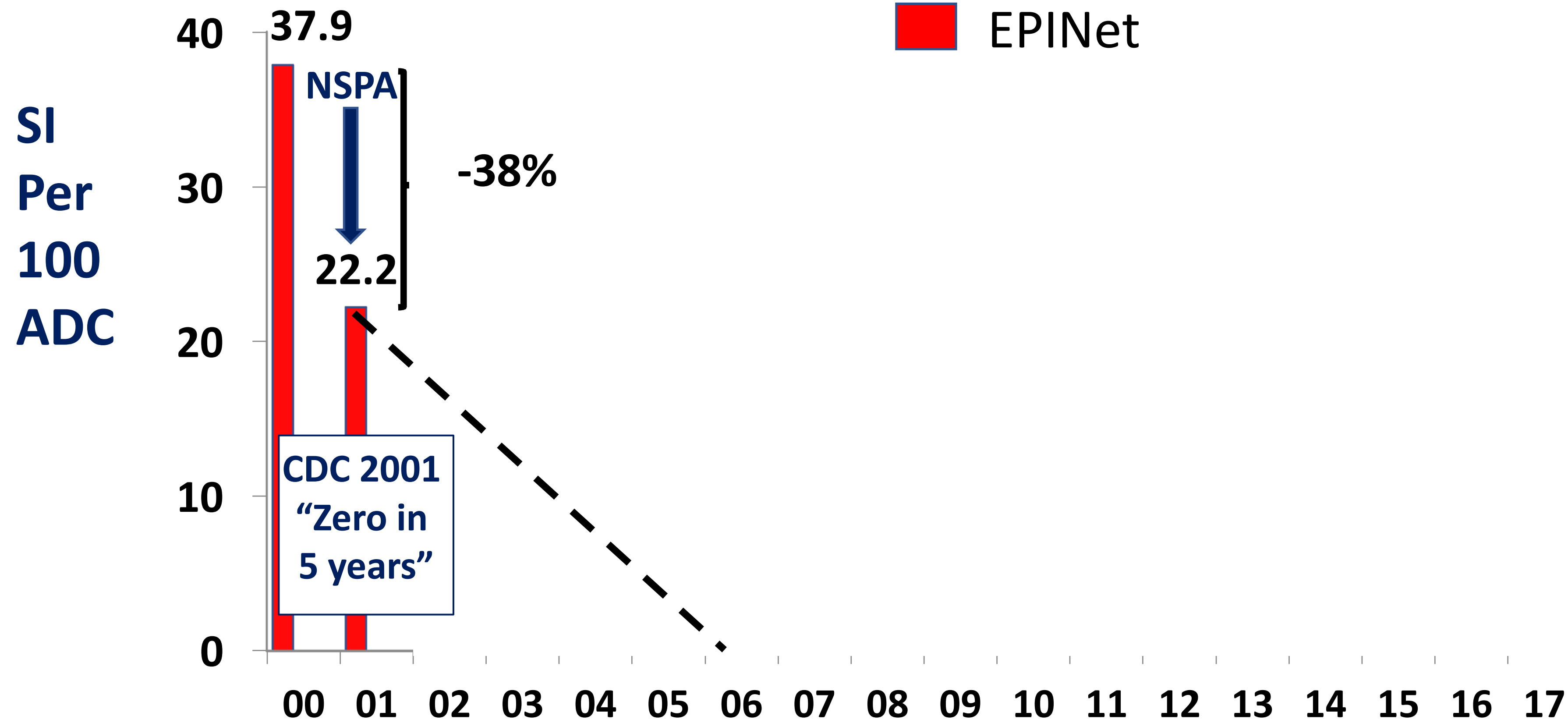
Learning Objectives

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

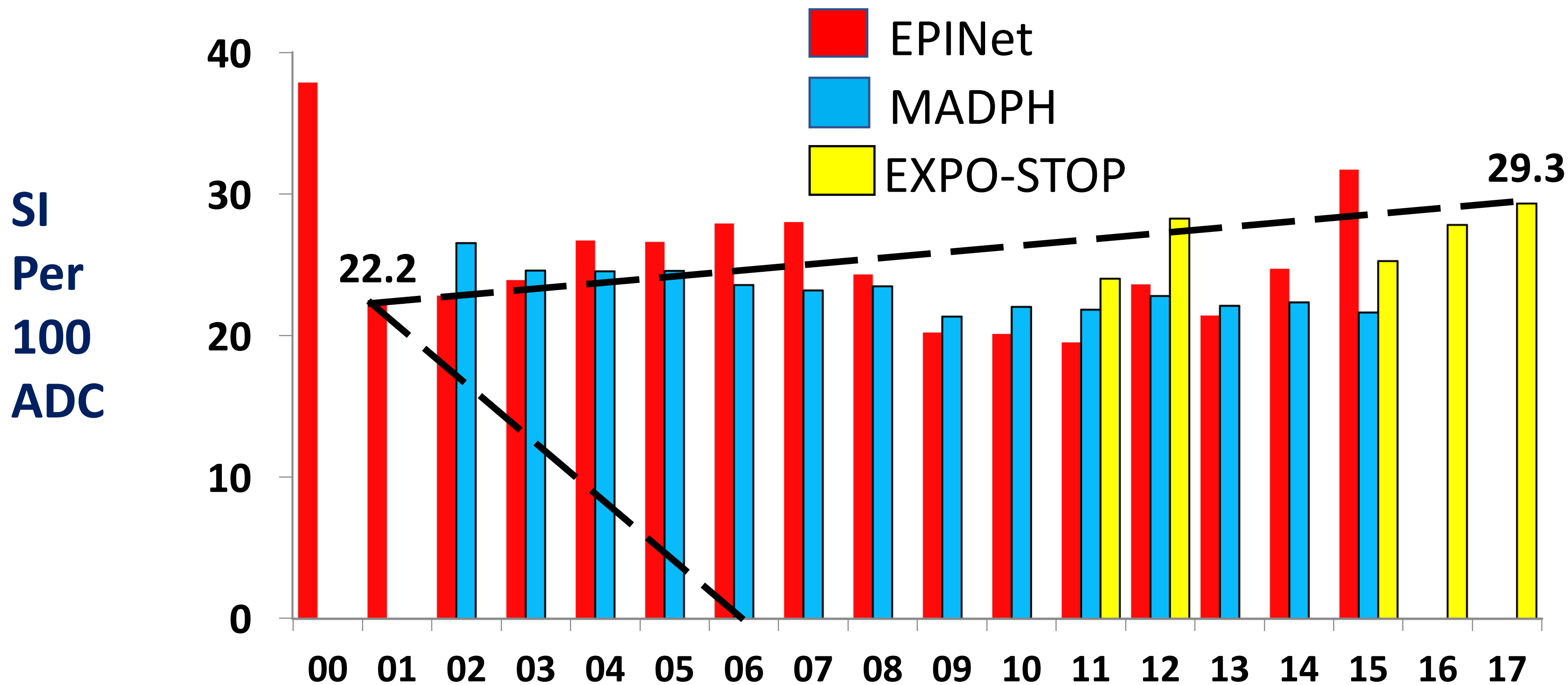
SI Trends since 2000



IT'S NOT OK

SI Trends since 2000

"Occupied Beds" is poor workload Indicator



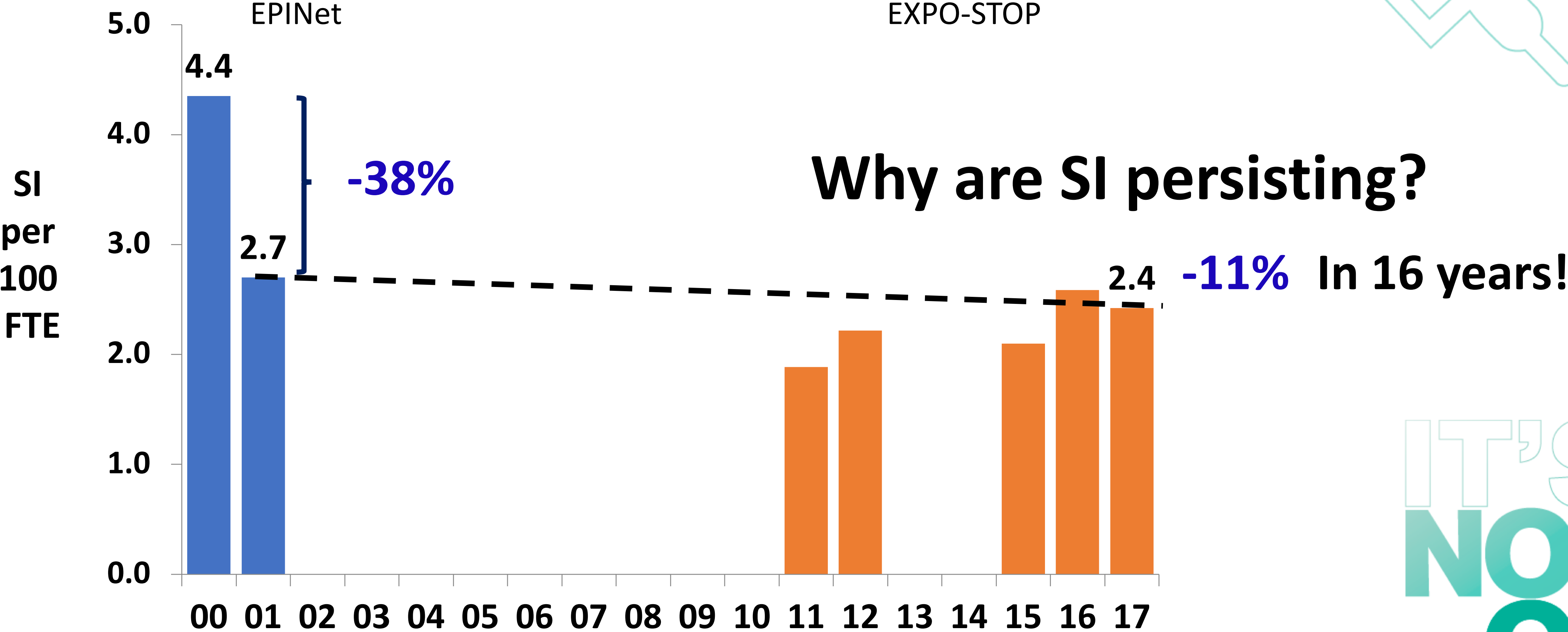
Massachusetts Department of Public Health. Sharps Injuries among Hospitals Workers in Massachusetts. 2002 to 2015. http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/ohsp/sharps/data-and-statistics.html

Grimmond T & Good L. Exposure Survey of Trends in Occupational Practice (EXPO-S.T.O.P.) 2015. Am J Infect Control 2017; 45(11): 1218–23

IT'S NOT OK

Taking a stand against Sharps Injuries.

Sharps Injury Rates per FTE (best workload indicator)



IT'S NOT OK

Taking a stand against Sharps Injuries.

Other EXPO-STOP Parameters

EXPO-STOP SI Rates in hospitals	2011	2016	2017 Prelim
SI/100 FTE (All hospitals)	1.9	2.6	2.4
Non-teaching			1.8
Teaching			2.6

- Nurse SI Down;
- OR SI % UP;

Drs report less than Nurses, So **OR is the challenge**

IT'S NOT OK

Taking a stand against Sharps Injuries.

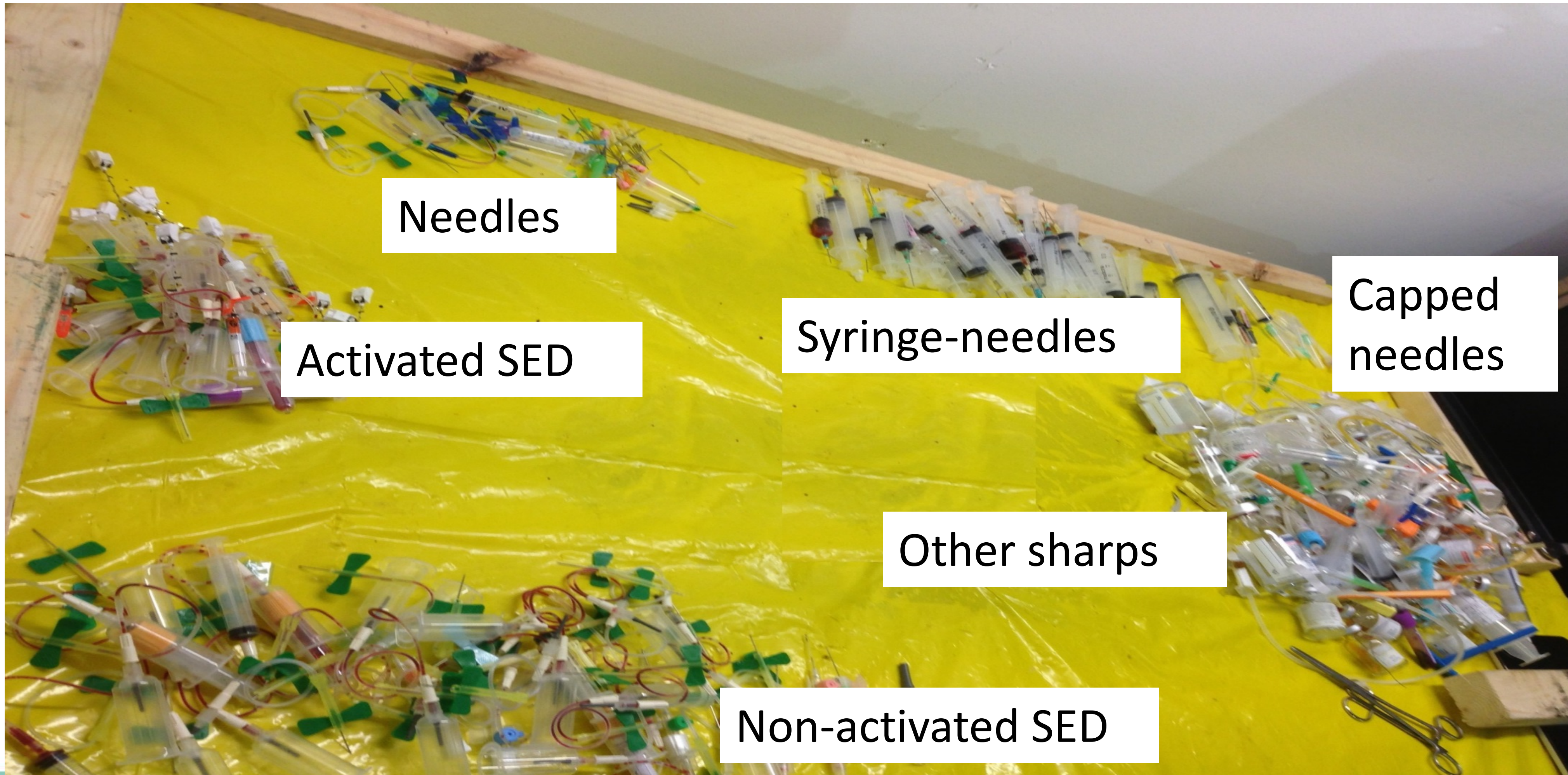
Why have SI not decreased as expected?

- 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?**

Taking a stand against Sharps Injuries.

"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



IT'S NOT OK

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)

Taking a stand against Sharps Injuries.

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 <u>seen</u> and <u>recognized</u> 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 <u>every</u> BE.
- Drill down on <u>every</u> 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 :
  - had SED available
  - are correctly activating safety mechanism. Always. Immediately.
- Annually review safer SED availability (it’s OSHA law).

Taking a stand against Sharps Injuries.

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
4. Addressing Gaps in Safety Devices: Need for Continued Innovation
5. Enhancing Education & Training

http://www.nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/SafeNeedles/SharpsSafety

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]

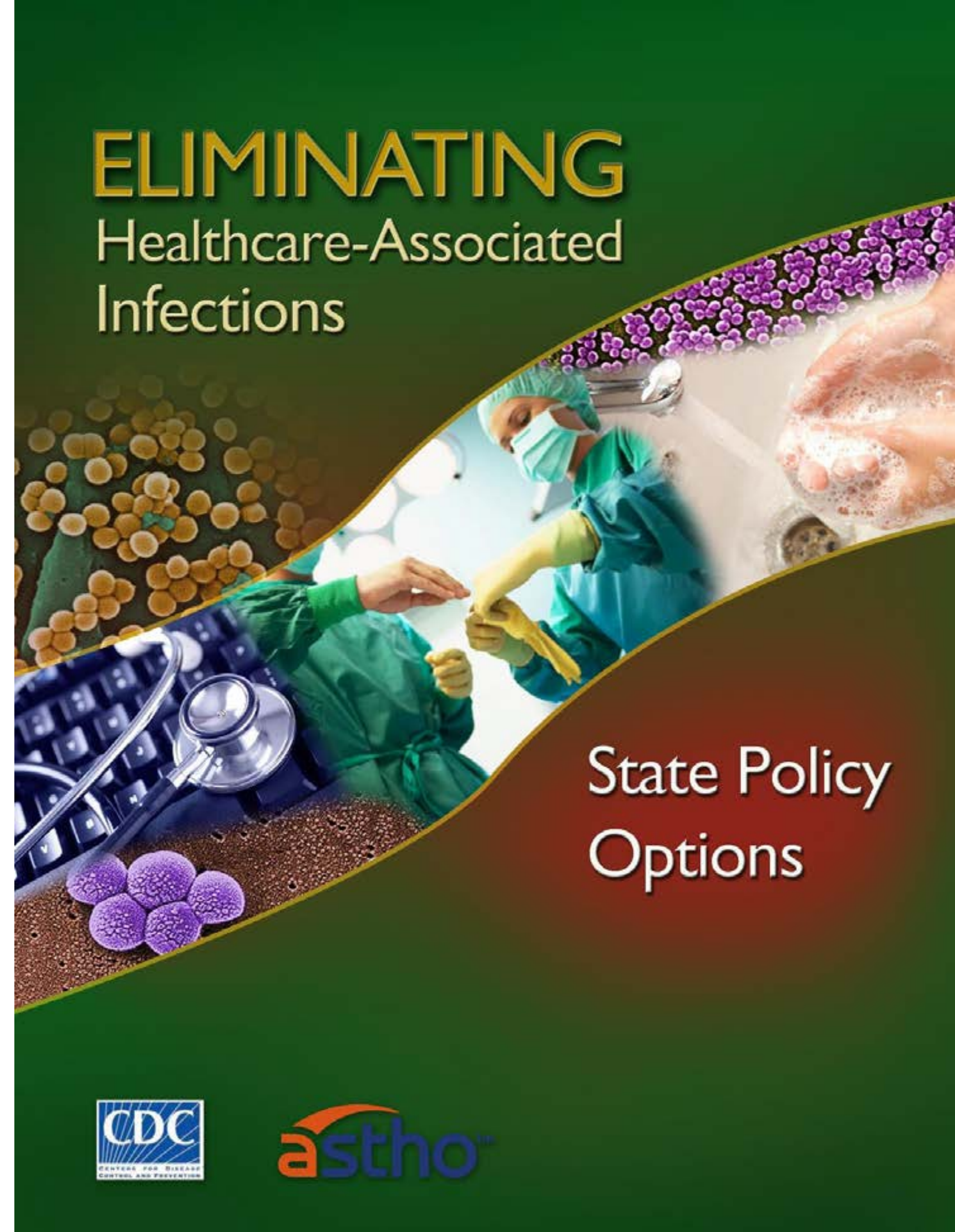
Sharps injuries *<u>are</u>* "HAI" – need tap into HAI resources

1. CDC HAI Glossary. http://www.cdc.gov/hai/hhs-hai toolkit/hai/glossary.html?mobile=nocontent#H
2. WHO. Clean Care is Safer Care. Report on the Burden of Endemic Health Care-Associated Infection Worldwide. WHO 2011 http://www.who.int/gpsc/country_work/gpsc_ccisc_fact_sheet_en.pdf.

Government pressure to reduce HAI

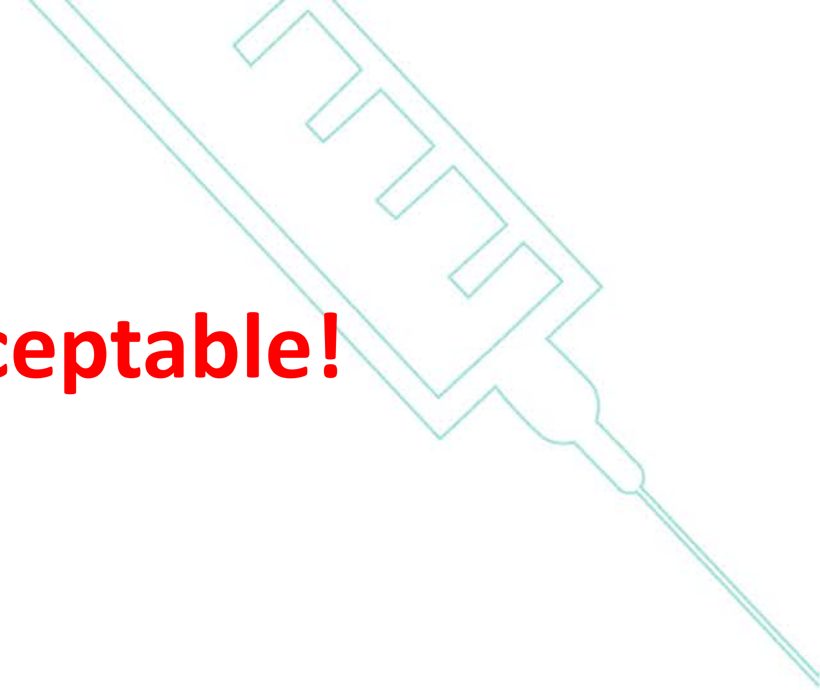
- 35 states mandate HAI be recorded
- 27 states require HAI be publically reported

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



https://www.cdc.gov/hai/pdfs/toolkits/toolkit-HAI-POLICY-FINAL_01-2012.pdf.

IT'S NOT OK



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!

IT'S NOT OK

Taking a stand against Sharps Injuries.

#ITS'S NOT OK

TAKE A STAND.
SHARE YOUR EXPERIENCE.

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