

OCCUPATIONAL HAZARDS OF DRUG LAW ENFORCEMENT: NEEDLESTICK INJURY AND ITS CORRELATES AMONG POLICE OFFICERS IN BALTIMORE, MARYLAND, US

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Overview

1. Policing people who inject drugs
2. Occupational safety training in Baltimore
3. Evaluation of NSI correlates
4. Implications & next steps

At-risk Groups, Policing, and Public Health

- People who inject drugs, sex workers, and other criminalized/marginalized groups at higher risk for health problems, including HIV, hepatitis, drug overdose, IPV
- Public health measures, especially harm reduction interventions like syringe exchange programs (SEPs) are effective and cost-effective
- Law enforcement targeting these populations shapes their risk environment
 - Whether or not linked to formal law

Harm Reduction, Law & Law Enforcement

- laws shape vulnerable groups' access to syringes, condoms, and public health prevention programs
- abuses perpetrated by police against vulnerable groups often go unaddressed (e.g. sexual violence, extortion, forced confessions)
- encounters with police (arrest, syringe or condom confiscation) associated with risk behavior and increased levels of infectious disease
- police interference with public health programs reduces their impact, fueling epidemics
- police can, do facilitate harm reduction, e.g. by providing security and referring clients to services



Photo by A. Cabrera

Police Perspective on Drug Law Enforcement



Photo by A. Cabrera

- Limited set of tools to address the root causes of drug misuse
- Cultural norms support negative attitudes toward harm reduction and other public health interventions
- Lack of clarity about policies governing harm reduction programs
- Competing priorities, including politics, economics and advocacy groups
- Poor police-community relations
- Fear of, frustration re. occupational risks from drug law enforcement increases stress, burnout, turnover

Occupational Health & Drug Law Enforcement

- Concern of HIV, HCV, other infection from needlestick injury (NSI)
- Growing problem due to new, resurgent epidemics of injection drug use and bloodborne disease in both rural and urban settings in the US
- NSI, syringe policies and programs not typically covered in general officer training
- Efforts to address concerns may improve retention, recruitment, reduce burnout, improve relations with the community
- Police education programs (PEPs) are potentially effective in mitigating these risks and harmonize public health with policing practices

Police Perspective on Drug Law Enforcement

Harm Reduction Journal



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Harm Reduction Journal



Contents lists available at SciVerse ScienceDirect

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Addiction

RESEARCH REPORT

doi:10.1111/j.1360-0443.2010.03149.x

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Police Training to Align Law Enforcement and HIV Prevention: Preliminary Evidence From the Field

Leo Beletsky, JD, MPH, Alpana Agrawal, PhD, Bruce Moreau, MA, Pratima Kumar, JD, MPH, Nomi Weiss-Laxer, MA, MPH, and Robert Heimer, PhD

Aligning Policing-Public Health

1. Law Reform
2. Changes in institutional policies/guidelines
3. Police training
4. Collaboration structures to bridge sectors
5. Changing incentives
6. Surveillance and monitoring

Drug Use and HIV in Baltimore

Drug Use

- ~17,000 Baltimore city residents used illicit drugs in the past month (half of whom used heroin)
- Estimated \$1 billion annual industry

HIV

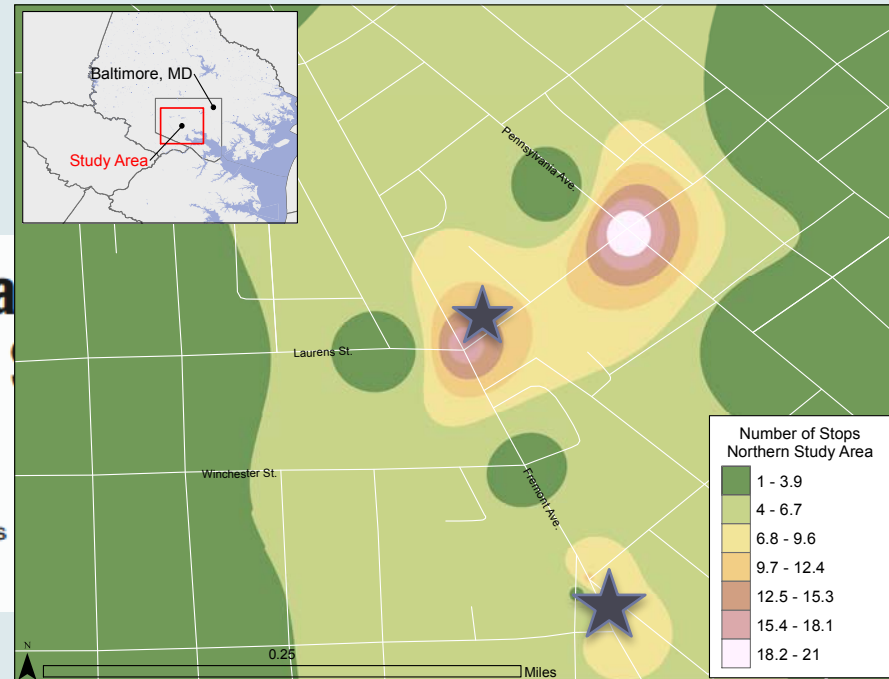
- 2014: 678 incident HIV cases
- 10th highest number of incident HIV infections among US metro areas (2014)

Baltimore Police and Syringe Exchange

- Maryland State Drug Paraphernalia Law protects SEP card carriers in Baltimore City
- SEP is run by a City agency allowing for collaboration
- BPD policy specifically protects SEPs and clients
- Syringe confiscation, other harassment reported by SEP clients; uninvited appearances
- Security concerns
- Harmonization needed

Police Encounters Among Needle Exchange Baltimore: Drug Law Enforcement as a Determinant of Health

Leo Beletsky, JD, MPH, Jess Cochrane, JD, MPH, Anne L. Sawyer, MPH, Chris Natanya Robinowitz, MPH, and Susan G. Sherman, PhD, MPH



Police Education Program (2010-2012)

Modeled on Previous Trainings

1. Infectious disease knowledge and prevention
2. Laws and policies
3. Public health programs and evidence

Trainer: Health Department Staffer

Audience: Police Officers and Cadets

Duration: 45 minutes – 1 hour

2 questionnaires with **13 pre/post test** questions

Methods

- Convenience sample of 771 Baltimore police officers and cadets received occupational safety training (PEP)
 - Legal, scientific, and logistical underpinnings of harm reduction services
 - Items assessed on 4-point Likert scale (strongly disagree → strongly agree)
 - Occupational risk (e.g. NSI history, using gloves if had access to them, confiscating syringes if not arresting someone)
 - Attitudes towards harm reduction services (e.g. access to clean syringes can increase police' s risk of occupational NSI)
 - Concerns about acquiring HIV or HCV through an NSI
- Statistical analysis
 - Descriptive statistics, logistic regression
 - McNemar' s test for pre/post evaluation

Baseline Demographics

Variable	N (%)
Male	631 (82.9)
Race	
White	362 (47.9)
African American	291 (38.5)
Latino & other	103 (13.6)
Age	
21- 30	374 (49.2)
31 – 40	223 (29.3)
>40	164 (21.6)
Years with BPD	
<2 years	241 (35.9)
2-10 years	235 (35.0)
>10 years	196 (29.2)

Baseline Occupational Health

Variable	N (%)
Ever experienced an NSI	60 (8.2)
Needlestick injuries are an important concern to me (agree/strongly agree)	757 (98.6)
I would use needle stick-resistant gloves in routine searches if I had access to them (agree/strongly agree)	729 (94.9)
If syringes are found during a search but the person is not arrested, I would confiscate them (agree/strongly agree)	560 (74.7)
Access to clean needles through pharmacies or needle exchange increases my chances get stuck with a used syringe (agree/strongly disagree)	325 (42.5)

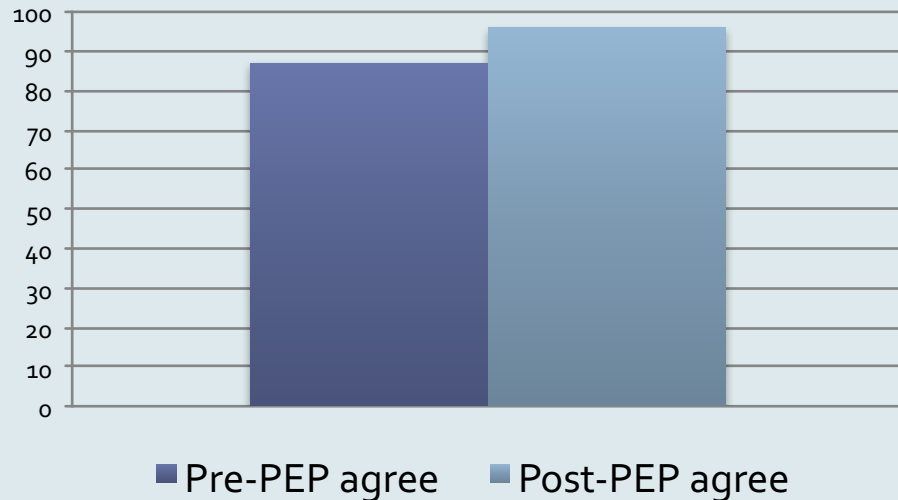
Correlates of NSI

	N [†] (%) ever experienced NSI	OR (95% CI)	aOR (95% CI) Model 1	aOR (95% CI) Model 2
Sex				
Female	10 (8.1)	1.00		
Male	49 (8.1)	1.00 (0.49 – 2.03)		
Race				
White	20 (5.8)	1.00	1.00	1.00
Black	26 (9.5)	1.71 (0.93 – 3.13)	1.29 (0.68 – 2.45)	1.31 (0.70 – 2.44)
Latino & other	13 (13.3)	2.50 (1.20 – 5.23) [*]	2.63 (1.15 – 5.99) [*]	2.47 (1.15 – 5.28) [*]
Age				
21-30	11 (3.0)	1.00		1.00
31 – 40	26 (12.1)	4.39 (2.12 – 9.08) ^{***}		4.19 (2.01 – 8.73) ^{***}
>40	22 (14.9)	5.57 (2.63 – 11.82) ^{***}		5.76 (2.68 – 12.39) ^{***}
Years on BPD				
<2 years	5 (2.1)	1.00	1.00	
2-10 years	21 (9.3)	4.78 (1.77 – 12.90) ^{**}	4.53 (1.66 – 12.37) ^{**}	
>10 years	29 (16.1)	8.91 (3.38 – 23.53) ^{***}	9.61 (3.57 – 25.82) ^{***}	

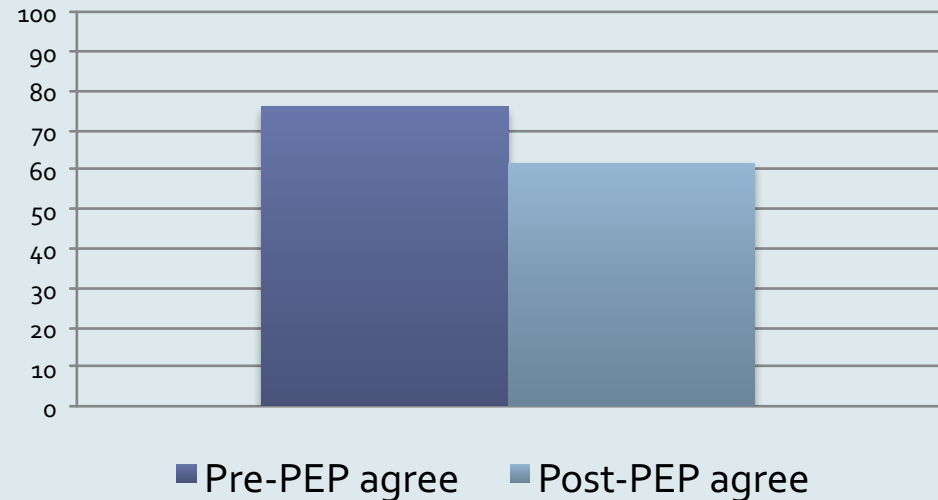
*p<0.05 **p<0.01 ***p<0.001

Evaluation: Intended Practices

I would refer a person who injects drugs to the needle exchange program

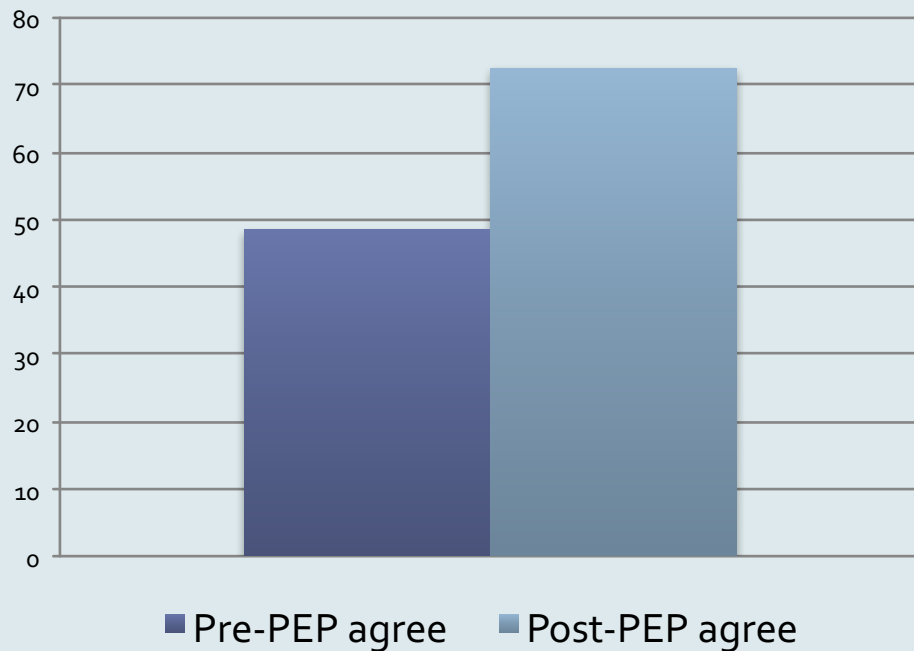


If syringes are found during a search but the person is not arrested, I would confiscate them

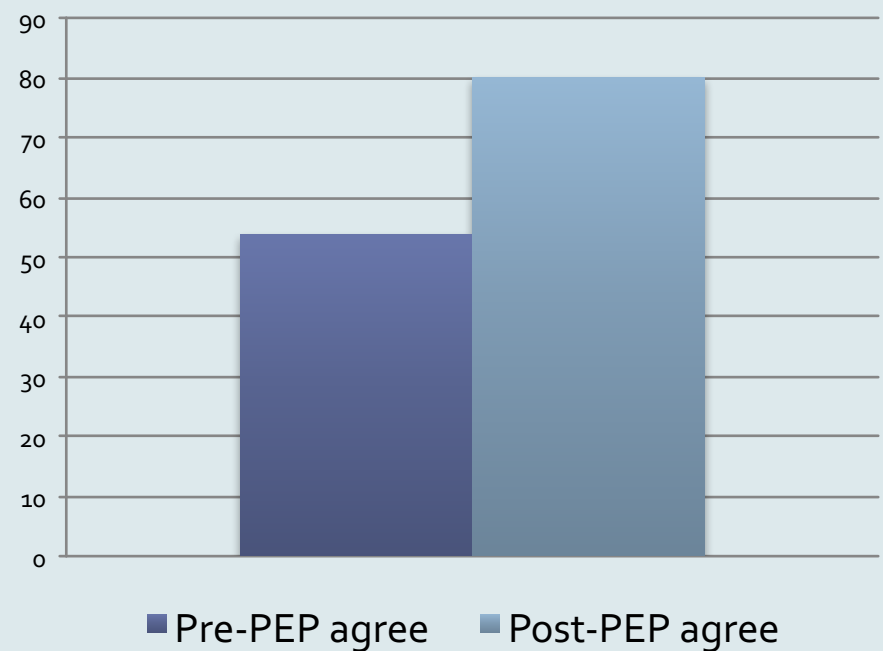


Evaluation: Harm Reduction Knowledge, Attitudes

It is legal for needle exchange clients to carry used syringes and other drug injection equipment



The needle exchange program helps people who use drugs get into drug treatment



Discussion

- NSI risk is an important, under-addressed concern among Baltimore police
- Over 8% ever experienced an NSI: elevated risk
 - Disparities in NSI risk by race (especially among young non-white officers)
- Impact on recruitment, retention, stress, job satisfaction
- No prior training on NSI, syringe access policies

Discussion

- PEP significantly shifted occupational safety knowledge, attitudes, intended practice
- PEP significantly shifted harm reduction knowledge, attitudes, intended practice
- Substantial proportions of trainees did not report shifts
- Unclear whether the PEP actually impacts behavior change
- Longitudinal study now underway to assess PEP impact overtime in Tijuana, Mexico

BMJ Open A police education programme to integrate occupational safety and HIV prevention: protocol for a modified stepped-wedge study design with parallel prospective cohorts to assess behavioural outcomes

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Recommendations

- ✓ Continue and institutionalize trainings and awareness-raising activities
 - Police trainings bundling information on occupational safety and public health efforts targeting IDUs
 - SEP client and staff information on the legal and practical aspects of harm reduction activities in Baltimore
 - Partner with other organizations working on related activities, including police oversight, criminal justice reforms, etc.

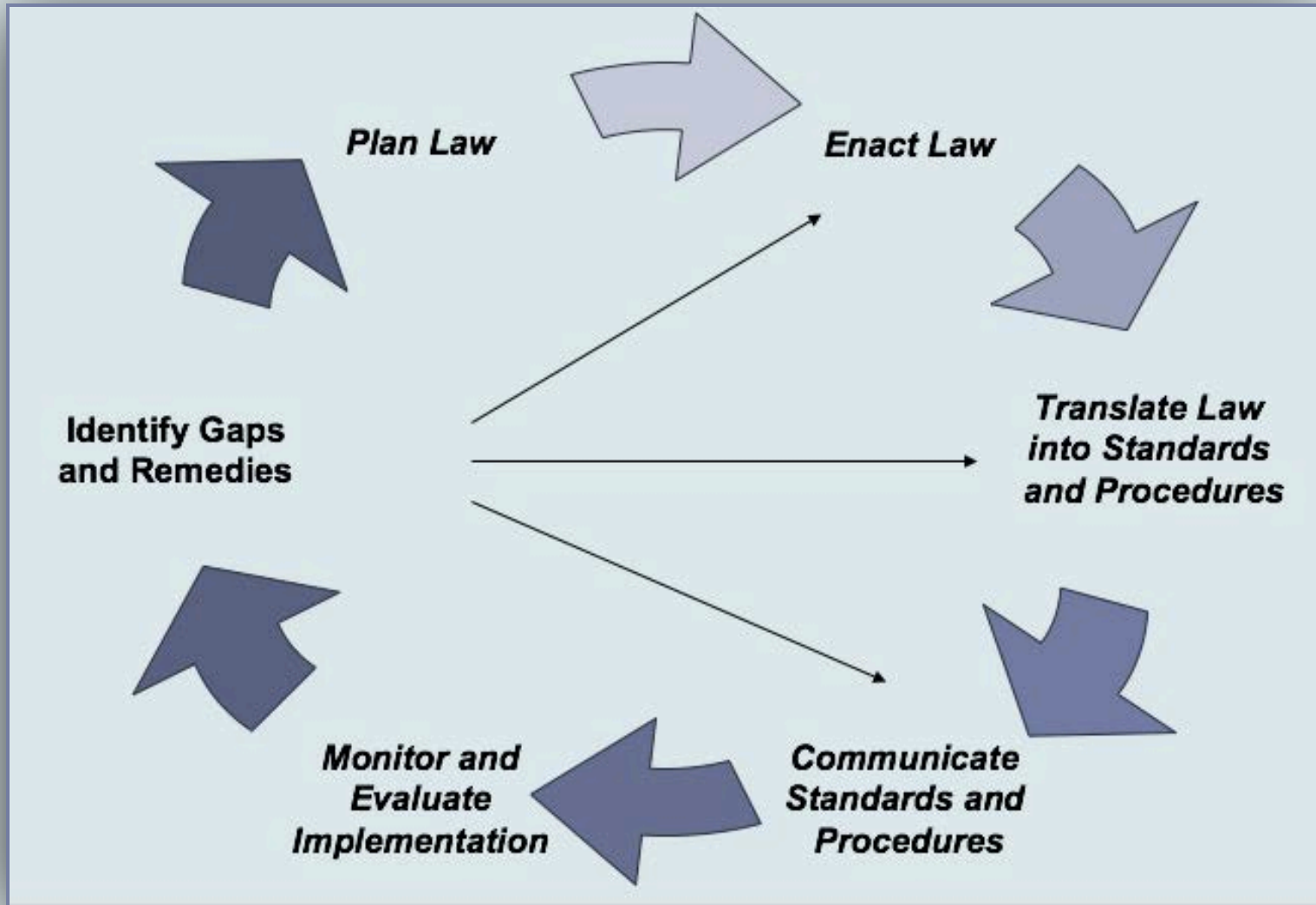
Recommendations

- ✓ Strengthen cross-agency communication on areas of mutual goals and interest, including
 - treatment entry and adherence
 - pre-arrest diversion (LEAD)
 - syringe disposal
 - occupational safety

Recommendations

- ✓ Build incentives and infrastructure for police-public health collaboration, including
 - rewards/certificates of appreciation
 - joint taskforces
 - changes in key performance indicators
 - global budgeting
 - fostering “champions of collaboration” through professional development, education, mentorship, and other resources

Recommendations



Study Limitations

- Convenience sample
- Cadets constitute the majority of the matched sample for police
- Police questionnaire forms were not always completed and in small number of cases pre-post trends were reversed
- Clients over-reported encounters
- Interruptions (staff, funding) didn't allow for a "snapshot" scenario

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Evaluation: Concerns & Perceived Risks

Variable	Post-PEP disagree	Post-PEP agree	p-value
Needle stick injuries are an important concern			
Pre-PEP disagree	2 (0.3)	7 (1.2)	0.0082
Pre-PEP agree	0 (0.0)	587 (98.8)	
I am concerned about getting HIV or other infectious diseases from drug users			
Pre-PEP disagree	13 (2.2)	11 (1.9)	1.000
Pre-PEP agree	11 (1.9)	549 (94.0)	
The risk of getting Hep C from needle stick is high			
Pre-PEP disagree	22 (3.7)	18 (3.1)	0.2858
Pre-PEP agree	25 (4.3)	523 (88.9)	
The risk of getting HIV from needle stick is high			
Pre-PEP disagree	51 (8.7)	15 (2.6)	<.0001
Pre-PEP agree	94 (16.1)	424 (72.6)	

Evaluation: Intended Practices

Survey item	Post-PEP disagree	Post-PEP agree	p-value
If syringes are found during a search but the person is not arrested, I would confiscate them			<.0001
Pre-PEP disagree	109 (19.3)	39 (6.9)	
Pre-PEP agree	105 (18.6)	313 (55.3)	
I would refer an injection drug user to SEP			<.0001
Pre-PEP disagree	9 (2.8)	32 (10.1)	
Pre-PEP agree	3 (1.0)	273 (89.5)	
I would use needle stick-resistant gloves in routine searches			0.0578
Pre-PEP disagree	21 (3.6)	8 (1.4)	
Pre-PEP agree	2 (0.3)	555 (94.7)	

Evaluation: Harm Reduction Knowledge, Attitudes

Variable	Post-PEP disagree	Post-PEP agree	p-value
It is legal for SEP clients to carry drug injection equipment			
Pre-PEP disagree	64 (20.1)	102 (32.0)	<.0001
Pre-PEP agree	25 (7.8)	128 (40.1)	
Access to clean needles through pharmacies or SEP promotes drug use			
Pre-PEP disagree	292 (49.6)	32 (5.4)	<.0001
Pre-PEP agree	96 (16.3)	169 (28.7)	
Access to clean needles increases the chance for me to get stuck with a used syringe			
Pre-PEP disagree	311 (53.2)	43 (7.4)	0.0019
Pre-PEP agree	77 (13.2)	154 (26.3)	
Access to clean needles through pharmacies or needle exchange reduces the spread of HIV and Hep C in the community			
Pre-PEP disagree	57 (9.8)	54 (9.3)	0.0011
Pre-PEP agree	25 (4.3)	445 (76.6)	
SEP helps drug users get into drug treatment			
Pre-PEP disagree	102 (17.9)	162 (28.4)	<.0001