HIV and Hepatitis C Infection among Persons who Inject Drugs: Global Overview and Policy Implications

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UNODC 2014 and 2016 Scientific Consultations

- Systematic literature reviews
- Economic modeling
- Policy analyses

INTRODUCTION: SITUATION AMONG PWID

- Approximately 0.9 to 4.8 million PWID are HIV positive and >50% are hepatitis C (HCV) positive
- Increase in recent years in newly diagnosed cases of HIV among PWID; in 2011 there were 114,000 new cases reported, but 152,000 were reported in 2015
- Cases of HCV continue to increase among PWID
- HIV continues to spread among PWID in low and middle income countries through the multi-person use (“sharing”) of drug injection equipment

Examples of Very Rapid Spread of HIV among PWID, > 10%/year

- Bangkok, Thailand
- Edinburgh, Scotland
- Manipur, India
- New York City
- St. Petersburg, Russia
- Vancouver, Canada

FACTORS ASSOCIATED WITH RAPID PWID HIV/HCV TRANSMISSION

- Absence of knowledge among PWID that HIV/HCV is a local threat
- Limitations on PWID access to sterile injecting equipment
- High frequencies of drug injecting
- Large injection risk networks, with mechanisms for rapid change risk partner change. Such mechanisms include injecting in group settings, in "shooting galleries" and the use of "dealer's works"

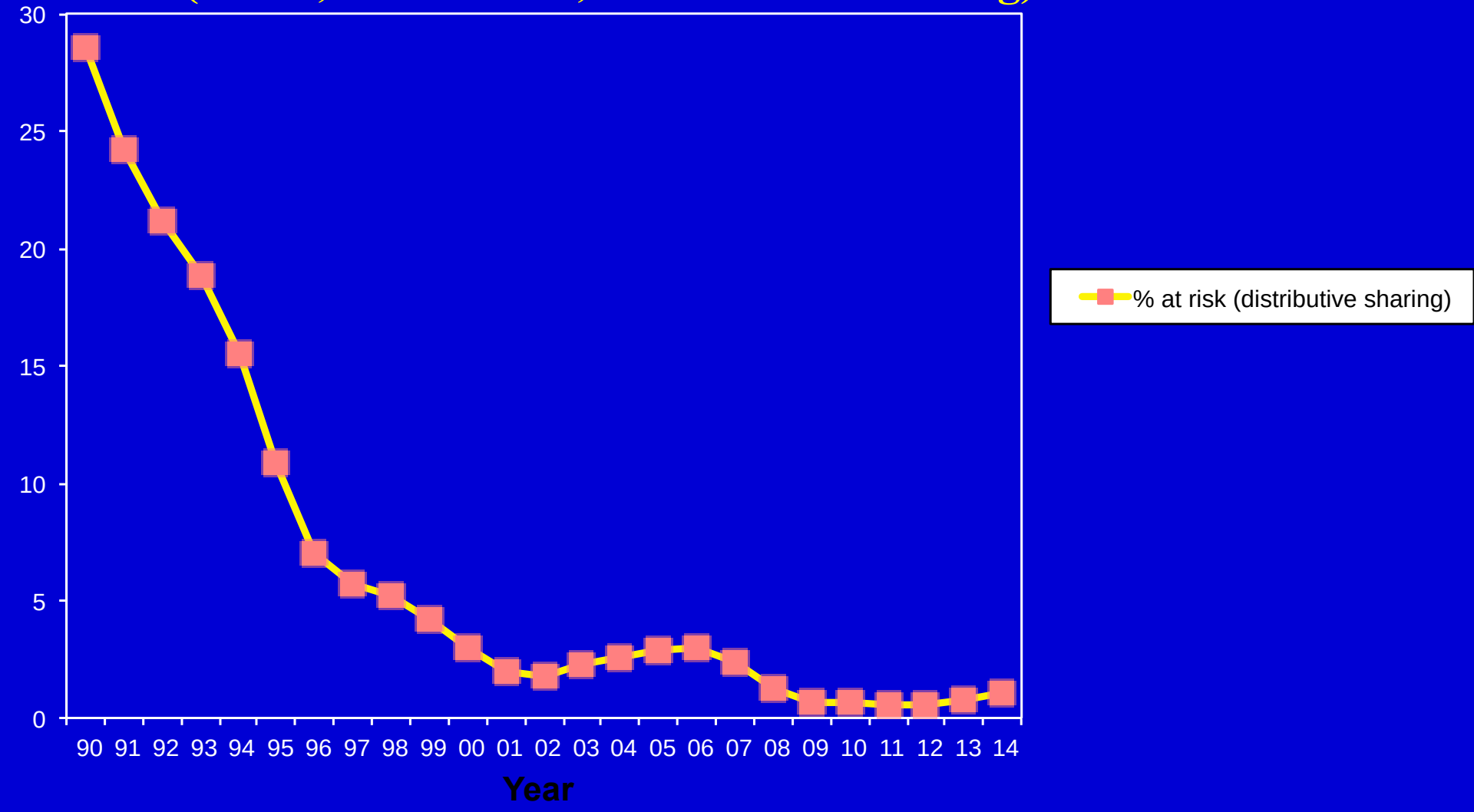
LOCATIONS WITH "ENDED" HIV EPIDEMICS AMONG PWID

- There are several countries that experienced HIV epidemics among PWID but that are now under control with low HIV incidence:
  - France
  - New York City (USA)
  - Scotland
  - Vancouver (Canada)
  - Italy
- Utilization of multiple interventions (needle exchange, opiate substitution, ART) to reduce new HIV infections

REDUCING TRANSMISSION POTENTIAL AMONG SEROPOSITIVE PWID

- Providing very good access to sterile injection equipment
- Developing social norms to not transmit
- Providing ART to reduce infectiousness
- Virtuous cycle

Percent of All PWID at Risk of Transmitting HIV (HIV+, not on ART, Distributive Sharing)



ENDING HIV EPIDEMICS: OPERATIONAL DEFINITION

- Operational definition for ending HIV epidemics:
  - Prevalence of untreated HIV infection is less than 5%
  - HIV Incidence is less than 0.5/100 person years

- **WHO/UNODC/UNAIDS Comprehensive Package:**

1. Needle & Syringe Programmes
2. Opioid Substitution Therapy
3. HIV testing & counselling
4. Antiretroviral therapy

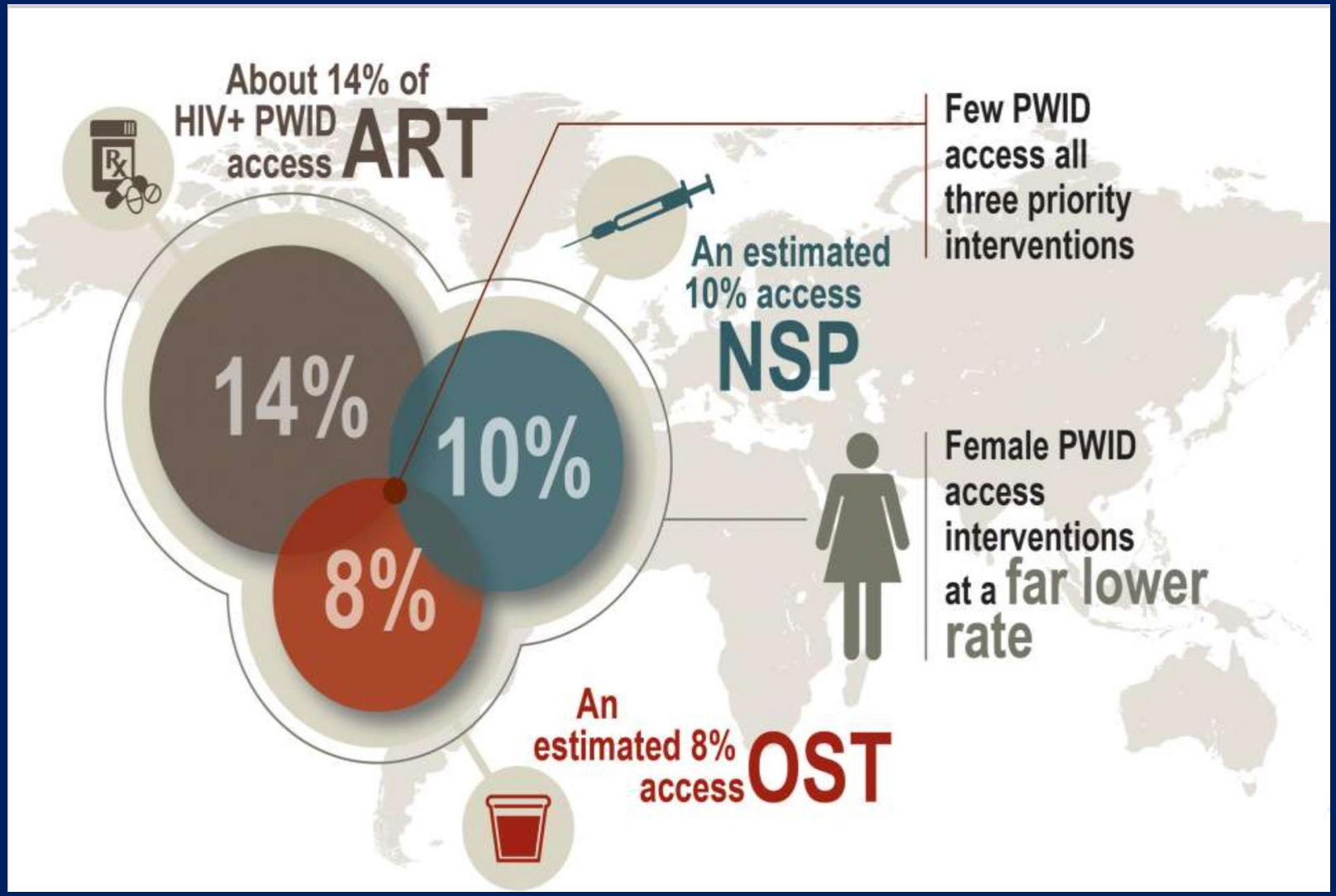
Beletsky et al, 2011

COST EFFECTIVENESS

- NSP: Highly cost effective for HIV prevention, linking PWID to other health services, e.g. substance use treatment, HIV testing

- MAT/OST: cost effective for HIV prevention in high incidence areas; highly cost effective in reducing crime, other health problems

COVERAGE OF COMBINED PREVENTION AND CARE FOR PWID



ALLOCATION EFFICIENCY

Make the best possible investment **decisions**

Generate demand for and **deliver** services to the best feasible standards:

for the right **people**
in the right **places**
at the right **time**
in the right **ways**

Achieve the best possible **health impact**

Plan early to ensure that proven approaches are **institutionalized** and **sustained**

Drug Policy Fuels HIV among PWID

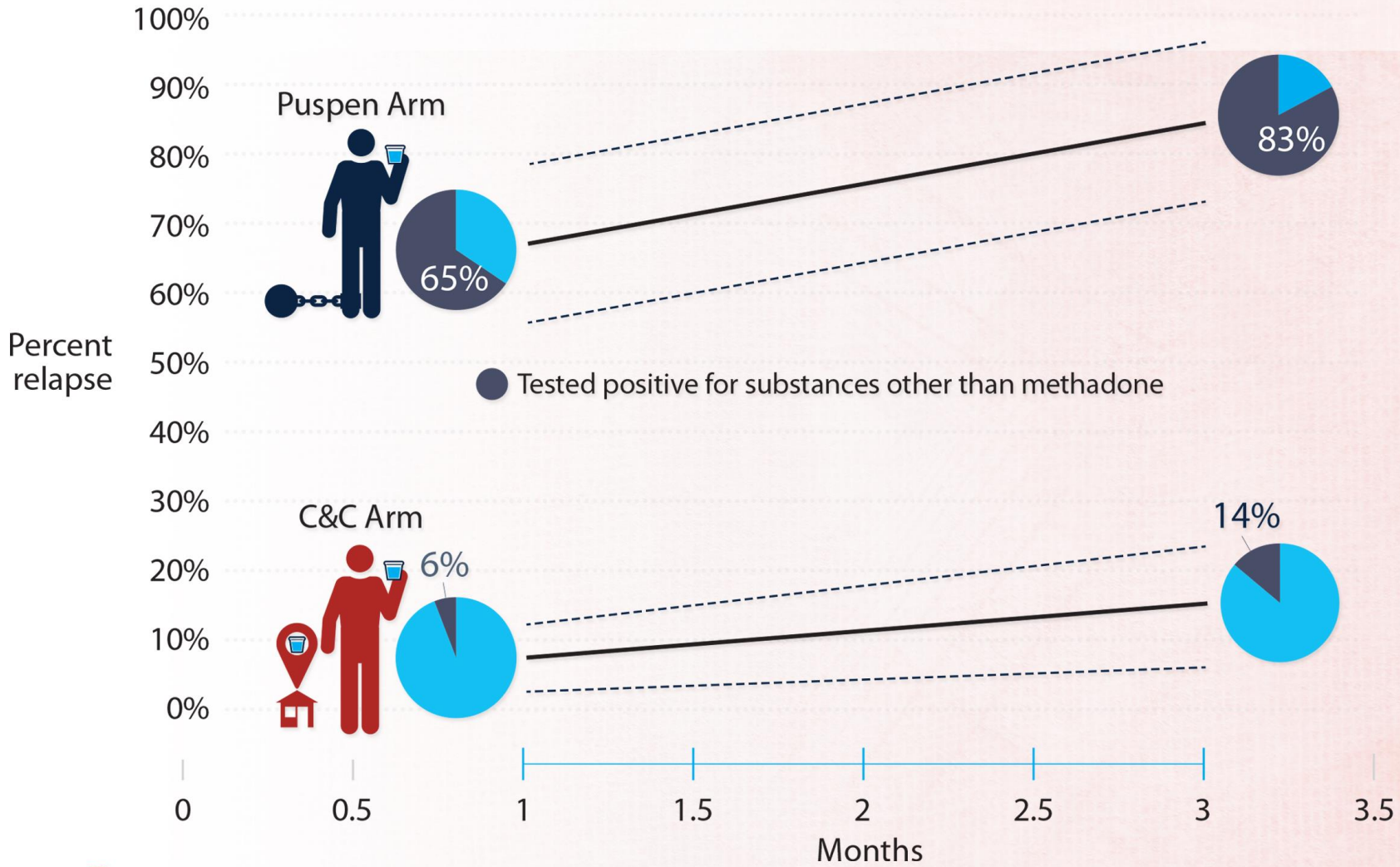
- Criminalization of syringe possession, distribution
- Criminalization of drug possession
- Over-regulation of harm reduction programmes (NSP, SIF, etc.)
- Over-regulation of medicines used in substance use and HIV treatment, incl. in prisons
- Drug user registration, other surveillance

Case Study: NSPs in the United States

- 32% weekly clientele harassment by police
- 21% weekly confiscation of legal equipment
- 10% weekly clientele arrest en route to NSP
- 20% monthly police visit/interference w program
- 17% programs report at least one client referral by police in the last year (3 programs report 6+ instances)
- 56% do not systematically document problems w/ police

Beletsky et al, 2011

What we know about **community OST** versus **compulsory detention**



Community OST is **6-fold more effective** and **12-fold more cost-effective** as detention

SPECIAL ISSUES

RECENT OUTBREAKS: HIV AND HCV

- In recent years there have been several locations that have experienced outbreaks of HIV and HCV among PWID including:
  - Scott County Indiana (2015)
  - Athens Greece (2011-2012)
  - Dublin Ireland (2014-2015)
  - Tel-Aviv Israel (2012-2013)
- Multiple factors have lead to outbreaks in these locations: Lack of Programs, Changes in Drugs

WOMEN PWID AND HIV RISK

- FWID often have higher rates of HIV than MWID. This is because of the dual risk from unsafe injection practices and unprotected sex
- FWID who sell sex are more likely to share injection equipment, have unprotected sex with their clients and their intimate partners, have high rates of STIs and to experience sexual and physical violence and incarceration
- Women are often reliant on their male partners and may be controlled by their intimate male partners for drugs, clients, condom use

STIMULANT DRUGS AND HIV TRANSMISSION

1. Different Stimulants: Cocaine, ATS,
2. Different Routes of Administration: Injecting, Smoking, Oral
3. Acute Drug Effects: Impaired Judgment, Continuation of the High
4. Chronic Drug Effects: Dependence, Need for Money

SPECIAL ISSUES FOR STIMULANTS

1. High frequencies of injection for cocaine: need for very large numbers of sterile needles and syringes

2. Expectations for increased sexual pleasure for crack cocaine and amphetamine type stimulants (vary by drug use cultures)

3. Disorganized lifestyle among very heavy cocaine and ATS users: runs and crashes

4. Lack of scalable effective treatments

HIV, Drug use and Prisons

- **High prevalence** of HIV, HBV, HCV, TB & mental health disorders
- Risk behaviours (IDU, Sexual)
- High HIV **incidence**
- **Poor access to HIV services**

- Unless HIV is controlled in the prison setting it may not be controlled in broader community of some countries

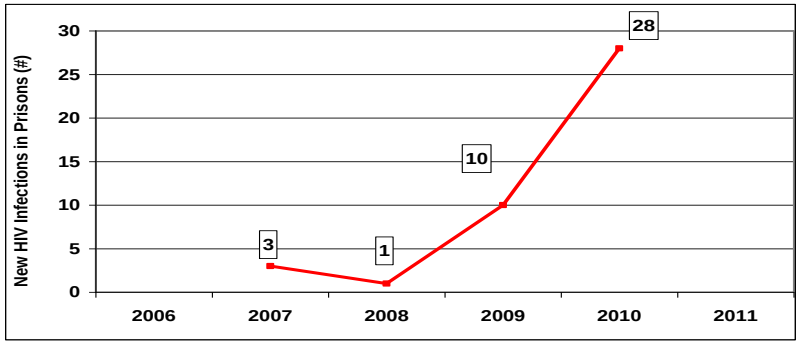
Harm reduction in prisons works

Increase of HIV in Lithuanian prisons in the absence of prevention services

Intervention	Availability
NSP	No
OST	No
HIV Testing	Yes
ARV Therapy	18%
Harm Reduction Education	5 pilot projects

Source: UNODC S. Rotberga, Tallinn, 2011

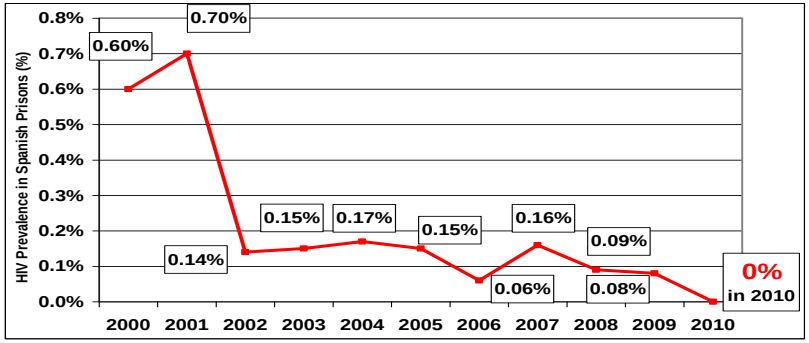
New HIV Infections in Lithuanian prisons



Decrease of HIV in Spanish prisons in the presence of prevention services

Intervention	Availability
NSP	Yes, 30 Prisons
OST	10.2% of inmates (6,429 in 2010)
HIV Testing	76.10%
ARV Therapy	64.6% (2,668 in 2010)
Peer Health Education	100%

New HIV Infections in Spanish prisons



Source: Enrique Acín García, M.D., Head of Public Health Department. General Secretariat of Penitentiary Institutions. Ministry of Interior. Spain.

FUTURE DIRECTIONS: TREATMENT/INTERVENTIONS

1. Improve implementation of harm reduction
2. Coordinated harm reduction with policies and practices
3. New interventions and new implementation plans for reducing initiation into injecting drug use
4. We need interventions to reduce the stigmatization of persons who use drugs