

# **Harm reduction and Opioid Substitution Treatment (OST) in Prisons: What is clear, what are the barriers, what is New?**

HA-REACT WP 6 – Seminar1, 7-9 March 2017 Warrszawa(Poland



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# The Nelson Mandela Rules:

## Rule 24

1. The provision of health care for prisoners is a State responsibility.

Prisoners should enjoy the same standards of health care that are available in the community, and should have access to necessary health-care services free of charge without discrimination on the grounds of their legal status.

# The Nelson Mandela Rules:

2. Health-care services should be organized in close relationship to the general public health administration and in a way that ensures continuity of treatment and care, including for HIV, tuberculosis and other infectious diseases, as well as for drug dependence.

# 1. Epidemiology

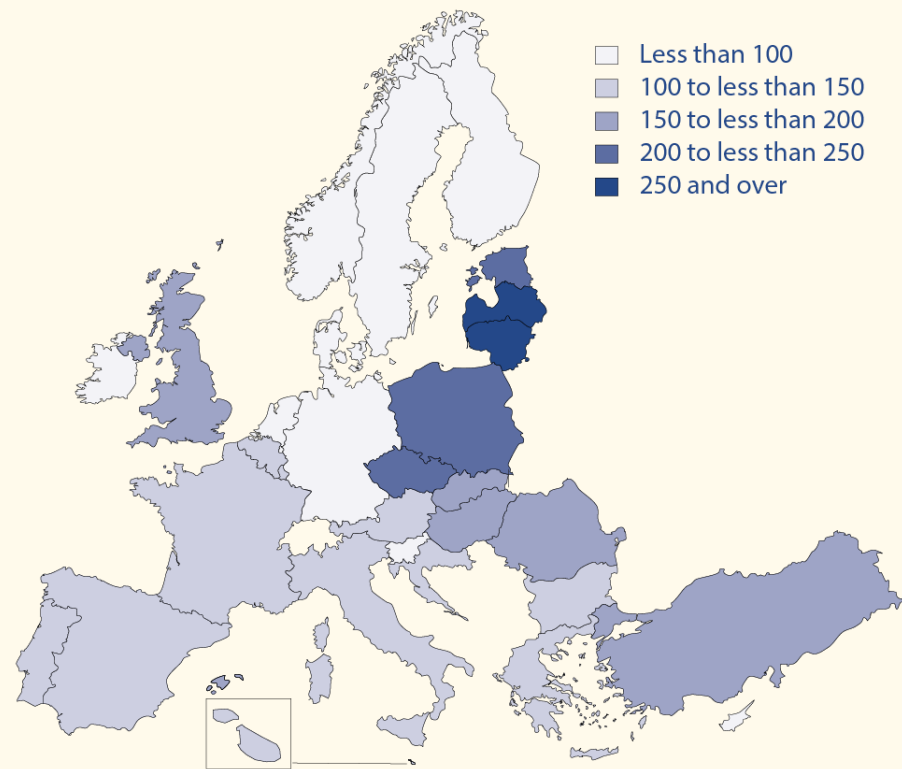
# Global Prison Population

- 10.35 million prisoners (cross cutting )
- annually higher due to turnover
- 1/3 in pre-trial detention
- global incarceration rate has risen by 6% over the past 15 years
- 113 countries noted as having a prison occupancy of more than 100%, including 22 with an occupancy above 200%

# Prison Population in Europe<sup>1</sup>

## ~ 770.000<sup>2</sup>

- ~2000 prisons in EU-30
- Prison Population Rate\*100000:
- EU: 130; Russia: 475; US: 698
- 4 % women (~ 32 000)
- 17 countries with overcrowding
- 16 % average foreigners
- 1 / 4 prisoners no final sentence
- DU mainly short sentences
- High recidivism
- Vulnerable and marginalised



<sup>1</sup> Sources: SPACE 2014 – Council of Europe

- Europe: 28 EU countries, Norway and Turkey;
- International Centre for Prison Studies

<sup>2</sup> 1<sup>st</sup> September 2013 – data collection Linda Montenari et al. EMCDDA

# Drug Users in European Prisons<sup>1</sup>

- ~ One million prisoners per year in Europe
- 15-25% sentenced for drug related offences<sup>2</sup>
- US: 25-50% drug dependent on admission<sup>3</sup>
- Europe: ~ 1 in 6 prisoners problem drug users<sup>4</sup>
- 10–42% report regular drug use in prison
- 1–15% have injected drugs while in prison
- 3–26% first used drugs while incarcerated
- Up to 21% of injectors initiated injecting in prison<sup>4</sup>
- 90% relapse to heroin after release<sup>5</sup>

<sup>1</sup> Stöver & Michels (2010): Drug use and opioid substitution treatment for prisoners. In: Harm Reduction Journal 2010, 7:17; <sup>2</sup> Source: Council of Europe-SPACE I, Table 7; <sup>3</sup> Fazel et al. (2006); <sup>4</sup> Hedrich et al. (2012); <sup>4</sup> Stöver & Kastelic 2014, <sup>5</sup>Stöver 2016

# The case of Germany: „Druck-Studie“ Robert-Koch-Institute/Germany: Imprisonment<sup>1</sup> n=2,077

**81%** [79.1-82.5] have been incarcerated\*

average duration in prisons: 5 years, median 3,5 J; (1M – 30 J)

on the average 5,6x imprisoned

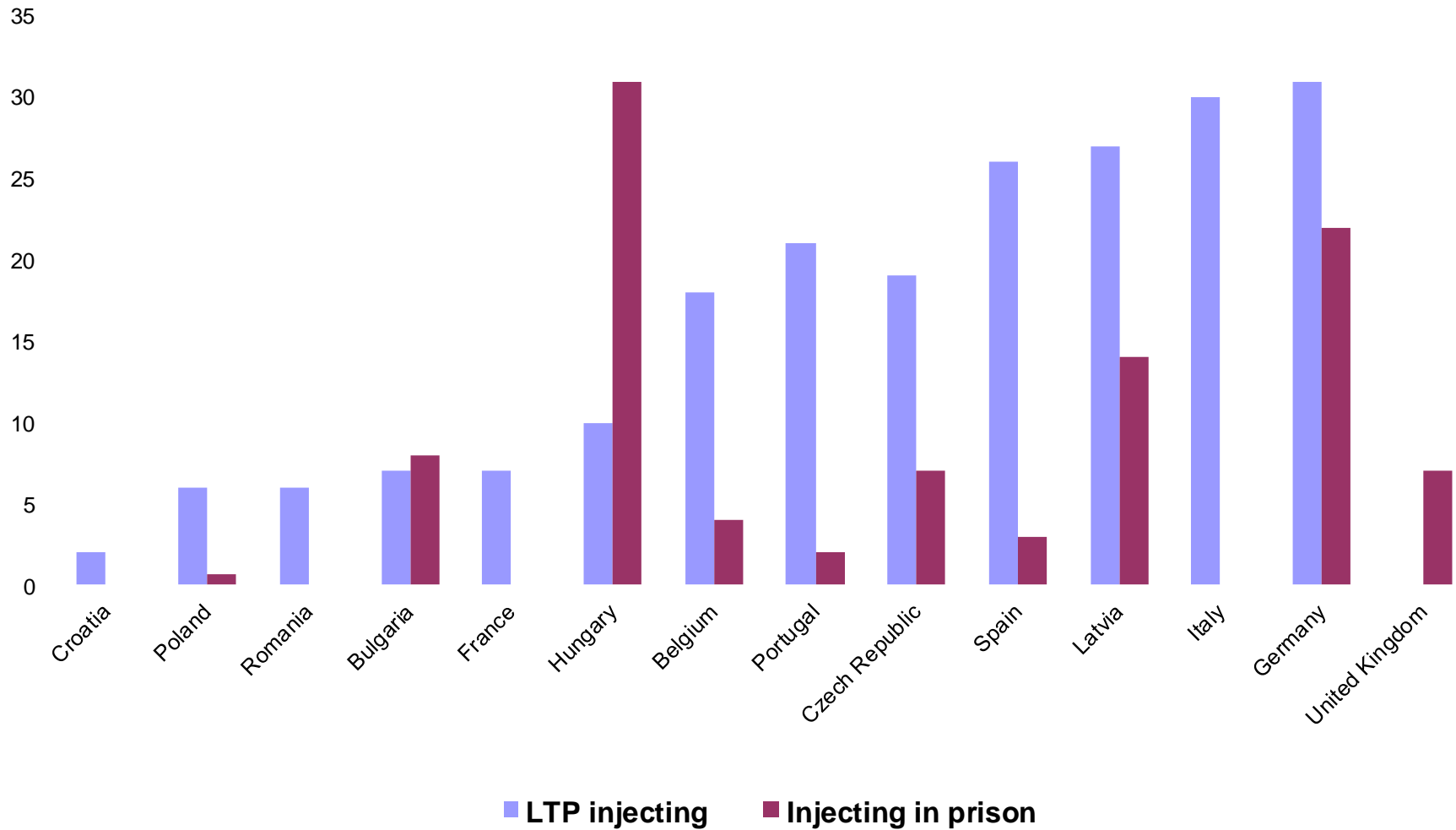
**30%** [27.3-31.7] of those ever incarcerated injected while in prison

**11%** [8.2-13.8] of those ever incarcerated and injected while in prison started their intravenous drug use in prisons

1 Zimmermann, R. et al. (2014): Ausgewählte Ergebnisse der DRUCK-Studie für die Praxis. 6. Fachtag Hepatitis C und Drogengebrauch Berlin, 23.10.2014



# Drug injecting among prisoners (before and within prisons)



Source: Statistical bulletin 2013

BG: heroin; LV: amphetamines; UK: females

Different years ; data: Lisa Montenari, EMCDDA

# People Who Inject Drugs and Infectious Diseases in prisons<sup>1</sup>

- Unprotected sex,
- multiple sexual partners,
- low and inconsistent condom use,
- intravenous drug use incorporating the
- sharing of syringes, needles and drug use paraphernalia,
- tattooing and body piercing

are among the principal drivers of the global HIV epidemic<sup>4</sup>.

<sup>1</sup> Jürgens R, Ball A, Verster A. Interventions to reduce HIV transmission related to injecting drug use in prison. *Lancet Infectious Diseases*. 2009;9(1):57–66.

# People Who Inject Drugs and Infectious Diseases in prisons<sup>1</sup>

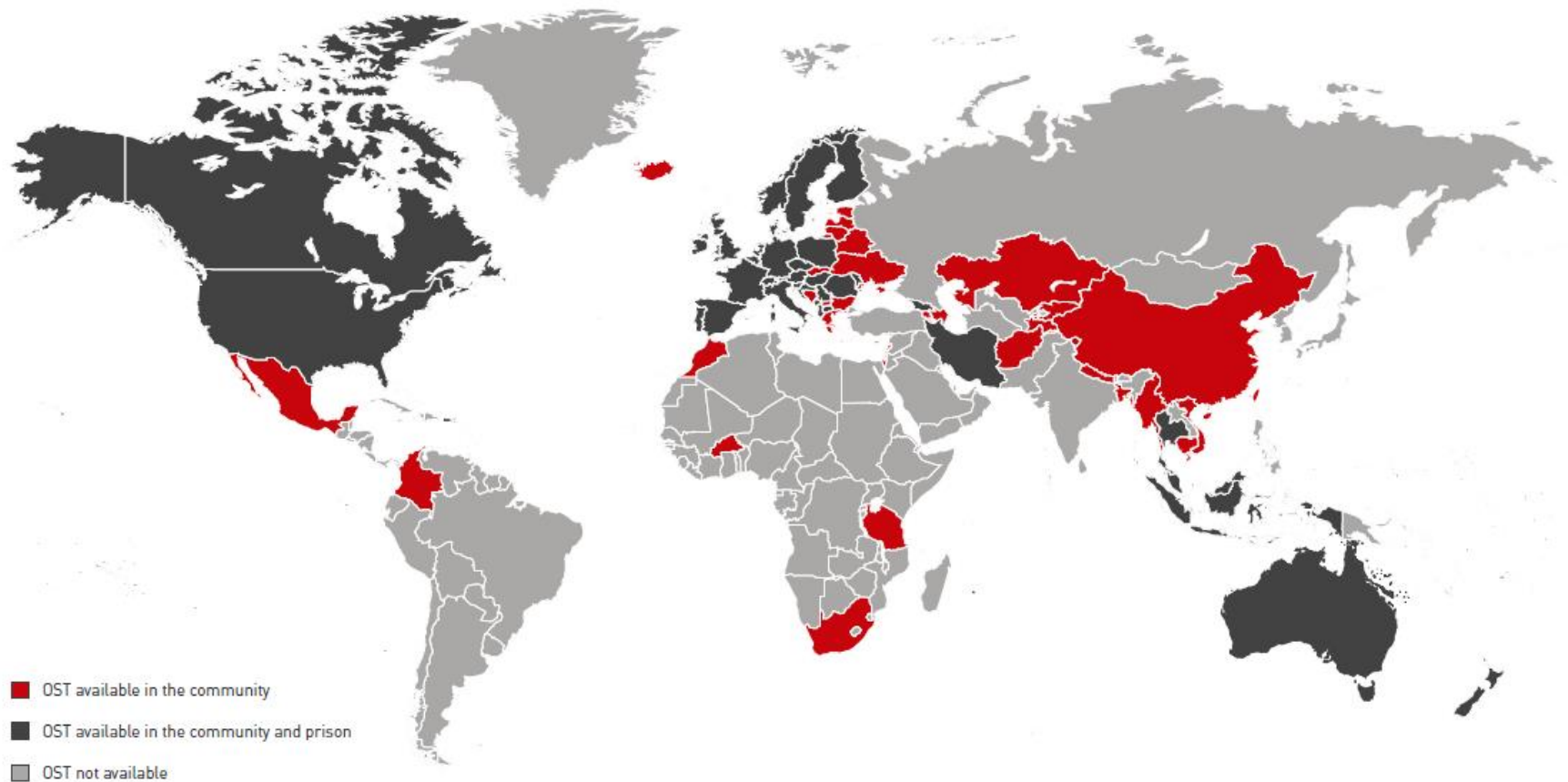
- HIV, STI, hepatitis B&C and TB prevalence **2 - 15 times higher**
- TB incidence rates **23 times higher**



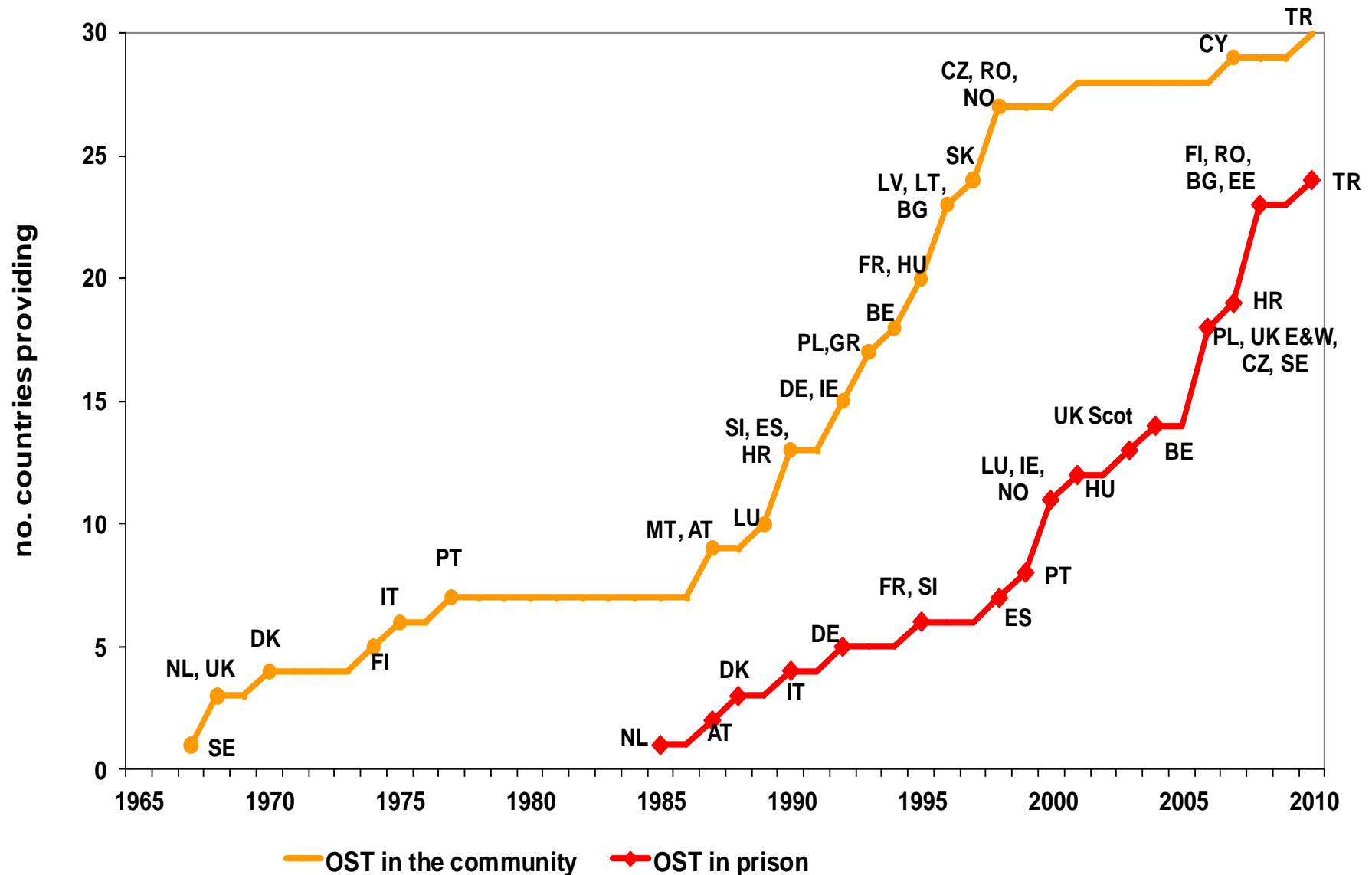
# HIV-Prevention – The Comprehensive Package: 15 Key Interventions (UNODC/ILO 2012)

1. Information, education and communication
2. HIV testing and counselling
3. Treatment, care and support
4. Prevention, diagnosis and treatment of tuberculosis
5. Prevention of mother-to-child transmission of HIV
- 6. Condom programmes**
7. Prevention and treatment of sexually transmitted infections
8. Prevention of sexual violence
- 9. Drug dependence treatment => Opioid Substitution Treatment**
- 10. Needle and syringe programmes**
- 11. Vaccination, diagnosis and treatment of viral hepatitis**
12. Post-exposure prophylaxis
13. Prevention of transmission through medical or dental services
- 14. Prevention of transmission through tattooing, piercing and other forms of skin penetration**
15. Protecting staff from occupational hazards

# OST in Community & Prison worldwide<sup>1</sup>



# Time gaps in the official introduction of OST in prisons: ~7-8y (Source: EMCDDA; D. Hedrich et al. 2012,)



# Systematic OST review of prison<sup>1</sup>

- Review of 21 studies (incl. 6 RCTs) shows that OST is effective among the prison population:
    - ++ reduced heroin use, injecting and syringe-sharing in prison, if doses adequate;
    - ++ increases in treatment entry and retention after release;
    - ++ post-release reductions in heroin use;
    - + pre-release OST reduces post-release deaths;
    - +/- evidence regarding crime and re-incarceration equivocal;
    - ? lack of studies addressing effects on incidence HIV/HCV;
- Disruption of continuity of treatment, especially due to brief periods of imprisonment, associated with very significant increases in HCV incidence.**

Andrej Kastelic, Jörg Pont, Heino Stöver

# Opioid Substitution Treatment in Custodial Settings

## A Practical Guide



world health organisation



UNITED NATIONS  
Office on Drugs and Crime

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**Adopted to the national situation and  
translated into several languages**



# 30y OST in European prisons<sup>1</sup>

Where have we got from here?

- Coverage low
- Detoxification models heterogenous
- Maintenance varies
- OST as relapse prevention only in few countries
- OST provision in prisons varies
  - from country to country,
  - from region to region,
  - from prison to prison,
  - from doctor to doctor within the same prison

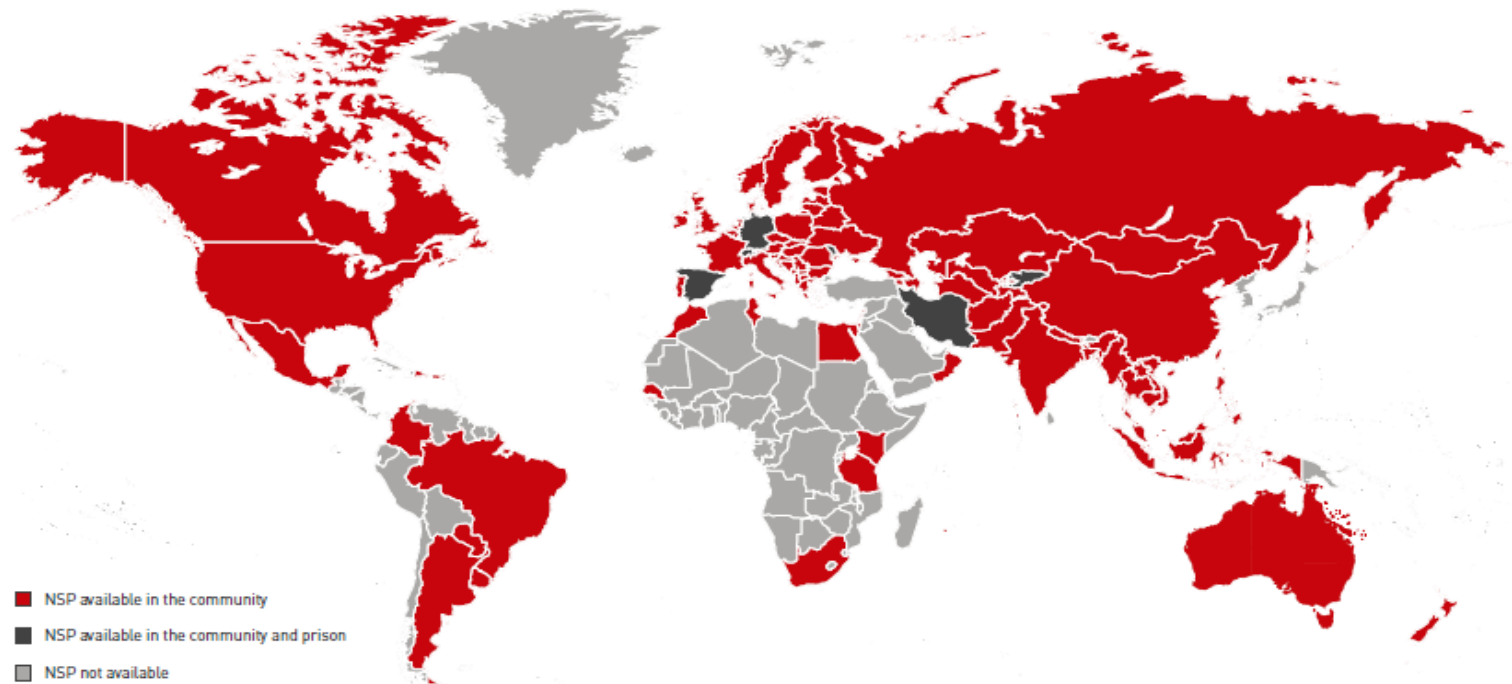
# European Court of Human Rights in the case of Wenner vs. Germany

- manifest and long term dependence to opioids
- denial of opioid substitution treatment (OST) in Bavarian/German prison
- The Court found that the physical and mental strain that Mr Wenner suffered as a result of his untreated or inadequately treated health condition could, in principle, amount to inhuman or degrading treatment.
- the failure to adequately assess Mr. Wenner's treatment needs involved a violation of the prohibition of inhuman or degrading treatment
- **Law more powerful than science!**

# Prison-Based Needle Exchange Programmes



# NSP in Community & Prison worldwide<sup>1</sup>



# Evaluations of PNSPs<sup>1</sup>

- Scientific evaluations conducted in 11 prisons with syringe distribution programmes
- The provision of syringes did not lead to an increase in drug consumption or an increase in injecting
- Syringes were not used as weapons, and safe disposal of used needles was not a problem
- Syringe sharing disappeared almost completely
- In prisons where blood testing was performed, no new cases of HIV or Hepatitis infection were found

<sup>1</sup> Stöver, H. & Nelles, J.: Ten years of experience with needle and syringe exchange programmes in European Prisons. In: *International Journal of Drug Policy* Dec./2003, volume 14, Issues 5-6), pp 437-444

# **Prison-based needle and syringe programs – UNODC Handbook**

**In 60 prisons worldwide – in 9 countries**



# 20y of Prison-Needle Exchange –

## Where have we got from here?

- **Quantity**
  - Only little increase in the Number of PNSP
  - Numbers of clients decreasing
  - Coverage poor and patchy
  - Independent from responsibility of prison health care
- **Quality**
  - Confidentiality the key problem
  - Access often arbitrary
  - Perception of drug use important
  - Continuous work on the programme needed
  - HIV/AIDS no longer the driver



## Drug treatment, harm reduction, overdose prevention in custodial settings

Data, knowledge and e-learning hub

### CURRENT E-LEARNING COURSES



Opioid Substitution Treatment  
OST Course updated 2014



Harm reduction in prison  
HR in prison Course updated 2014



Starting and managing needle and  
syringe programmes in prison  
PNSP Course updated 2016



Condom Distribution Program in  
Prison  
CDP Course updated 2016

THE  
GLOBE  
AND  
MAIL

When Ottawa recently announced a multipronged strategy to fight the deadly fentanyl crisis – a strategy that includes supervised drug consumption sites – Health Minister Jane Philpott boasted of "our renewed, evidence-based approach to Canada's drug strategy." [theglobeandmail.com](http://theglobeandmail.com)



### Useful Acronyms

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
BBV	Blood-borne virus
CPT	Centre for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment
DSM	Diagnostic and Statistical Manual of Mental Disorders
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
UD-4	Universal Declaration of Human Rights



# **Reduction of post-release mortality**

# Factors contributing to increased risk of acute death upon release in people with opioid use disorder (OUD)

- Physiological: desensitisation to opiates
  - Fatal OD if pre-incarceration dose is consumed at liberty
- Behavioural:
  - Acute injection (increases drug bioavailability and respiratory effects )
  - Concurrent with alcohol and benzodiazepine (tranquilliser) (exacerbates suppression of respiratory drive)
  - Concurrent with cocaine (induction of cardiovascular arrhythmias)

# Drug Related Death after Release

- Excess mortality risk in the first weeks after release
- European studies on excess mortality risks:
  - England/Wales (first week): X 29 (M) X 69 (F)
  - Denmark (first two weeks): X 62 (M/F).
  - France (first year): X 24 (M 15-34); X 274 (M 35-54)
  - Ireland: comp. Drug Related Deaths prison/no prison:
    - 28% of DRD had left prison since one week
    - 18 % of DRD had left prison since one month

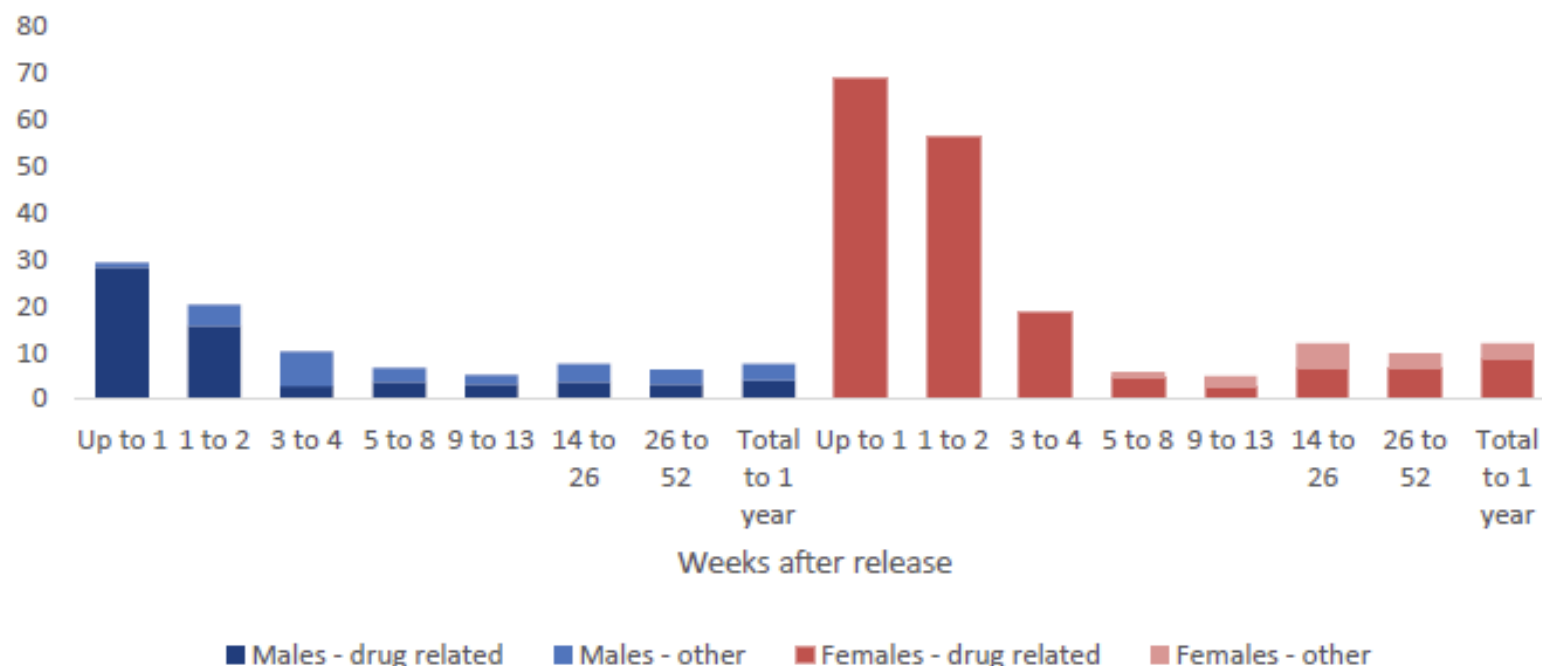


# Acute risk of drug-related death among newly released prisoners in England and Wales

Michael Farrell & John Marsden *Addiction*, 103, 251–255

National Addiction Centre, Division of Psychological Medicine and Psychiatry, Institute of Psychiatry, King's College London, UK

## Excess mortality rates for released prisoners - drug related deaths & other causes



# Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England

**John Marsden<sup>1</sup> , Garry Stillwell<sup>1</sup>, Hayley Jones<sup>2</sup>, Alisha Cooper<sup>3</sup>, Brian Eastwood<sup>3</sup>, Michael Farrell<sup>4</sup>, Tim Lowden<sup>3</sup>, Nino Maddalena<sup>3</sup>, Chris Metcalfe<sup>2</sup>, Jenny Shaw<sup>5</sup> & Matthew Hickman<sup>2</sup>**

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Health & Wellbeing Journal Club - 03/03/2017

Maciej Czachorowski

Epi-scientist

PHE National Health & Justice Team

# Study participants

- 15,141 prison releases (12,260 people opiate dependent 'OUD')
  - 82.1% entered the study once; remainder re-entered 2 to 7 times due to re-incarceration
- *OST exposed*: 8,645 releases (57.1%)
  - 7,614 (88.1%) methadone (40 mg / day)
  - 1,031 (11.9%) buprenorphine (8 mg / day)
- *OST unexposed*: 6,496 releases (42.9%)
  - 2,369 people (36.5%) lower daily dose medication
  - 2,110 (32.5%) withdrawn from OST in prison
  - 2,017 (31.0%) diagnosed with current OUD but with no record of OST.

# Conclusions

- Prison-based OST (with oral methadone or oral buprenorphine) is a highly effective means of **reducing the risk of death** (75% reduction) among people in the first 4 weeks after release from prison.
- The protective effect observed for OST in this study was independent of behavioural confounders or admission to community treatment.

**Take Home Naloxone (THN) for  
opioid overdose prevention in  
people who use drugs on  
release**



# THN: Example of Scotland

- Peer trainers/educators are used with success in Scotland to conduct **training on naloxone**
- **Giving out the kit** right in advance of release
- Several pilots worldwide
- Mortality rate reduced<sup>1</sup>

<sup>1</sup>Bird, S.; McAuley, A.; Perry, S.; Hunter, C. (2016): Effectiveness of Scotland's National Naloxone Programme for reducing opioid-related deaths: a before (2006–10) versus after (2011–13) comparison. In: Addiction, Volume 111, Issue 5 May 2016; pp. 883–891

# **Sexual Risks and Condom Programs**

# Condoms: from Maputo (Mozambique) to Munich (Germany) to Maseru (Lesotho)

- **Maputo/Mozambique:** ca. 24% of prisoners HIV+ - no condoms: „...might increase sexual activity ...“
- **Munich/Germany:** HIV-prevalence among prisoners 1,5% of men, that is 30-times higher than in the general population
- condoms available only via application – medical service
- 2005-2007 provision of 43 condoms to 13,000 prisoners
- Official legitimation: „prisoners are informed to behave responsibly right in the beginning“<sup>1</sup>
- Lesotho prison service has installed „condotainer“

<sup>1</sup>Bayerische Staatszeitung vom 29.08.2014

### 3. Conclusions



# Conclusions: from harm production to harm reduction

- Drug using/dependent prisoners are discriminated in a double sense: (i) incarcerated for coping symptoms of their drug dependence and (ii) not benefitting from the progresses in drug treatment/harm reduction, which have been achieved in the community.
- Putting drug users into prisons in high numbers (approx. 30%), means putting them at high risk of relapses, violence, sexual exploitation, debts, risks of infectious diseases.

# Future developments

- More attention on the particular situation of drug users in prisons is needed
- Abstinence-oriented treatment can only be one element of a comprehensive drug treatment service – it needs to be supplemented by harm reduction measures
- Integration of drug using prisoners: „Nothing about us without us“
- Utilizing international standards for changes in treatment (e.g. **the Nelson Mandela Rules**, CPT)

# Conclusions: from harm production to harm reduction

- A shift in the responsibility of healthcare from Justice to the ministry in charge of healthcare generally – like WHO, UNODC and many other international player are recommending – would probably lead to more and efficient healthcare, closely connected to community services.
- Alternatives to imprisonment would be an effective treatment to avoid health risks and health and social inequality.