



European Monitoring Centre  
for Drugs and Drug Addiction

# HIV, HCV, TB, fatal overdose and intervention coverage in injecting drug users in Europe – a brief overview

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EMCDDA, 12 November 2009

# EATG requested overview for IDUs of Epidemiology and Intervention coverage of:

- HIV
- HCV
- TB
- Overdose deaths
- IDU prevalence
- OST coverage
- NSP coverage
- ART coverage
- Hepatitis C treatment access
- Rate of successful TB treatment

OST: opioid substitution treatment; NSP: needle and syringe programmes



# Questions

- Epidemiology
- Intervention coverage



# IDU prevalence



## Estimates of IDU prevalence (Mathers et al., Lancet 2008)

Western Europe\* 1.0 million (0.8 – 1.3)  
rate in ages 15-65 ~0.4%

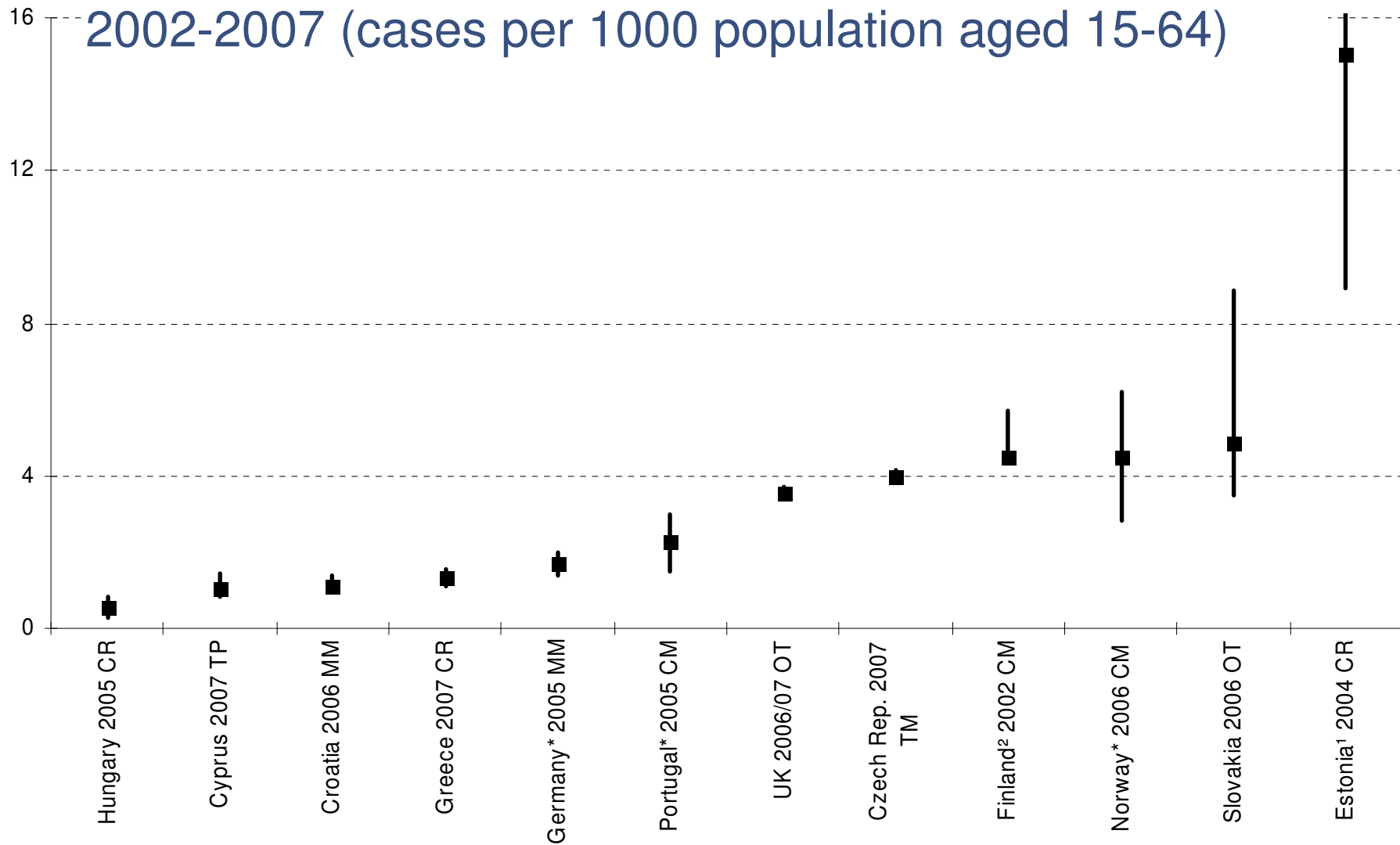
Eastern Europe\*\* 3.5 million (2.5 – 4.5)  
rate in ages 15-65 ~1.5%

\*Albania, Andorra, Austria, Belgium, Denmark, Finland, Macedonia, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Montenegro, Netherlands, Norway, Portugal, San, Serbia, Slovenia, Spain, Sweden, Switzerland, UK

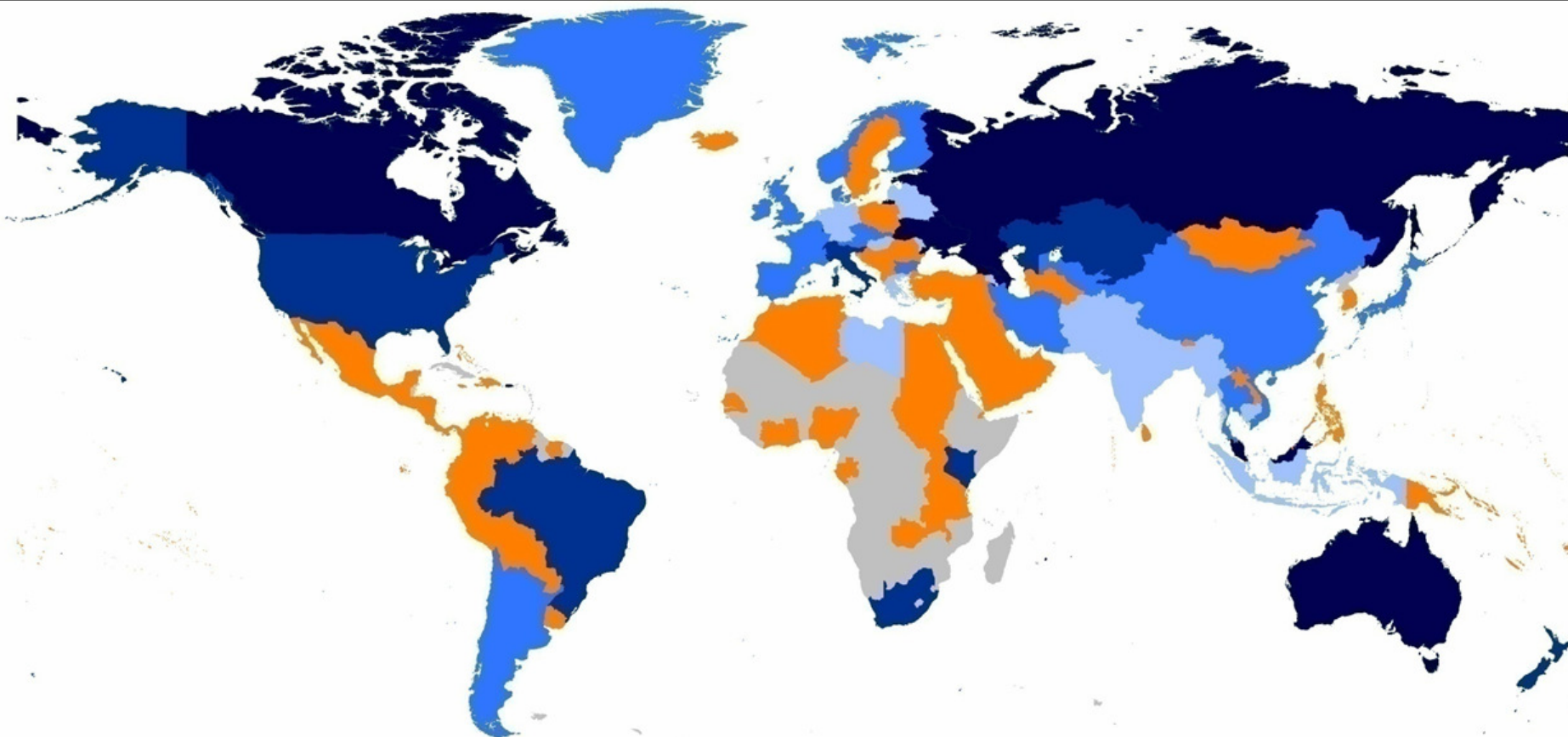
\*\*Armenia, Azerbaijan, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Ukraine








# Estimates of the prevalence of injecting drug use in EU, 2002-2007 (cases per 1000 population aged 15-64)



# Injecting drug use



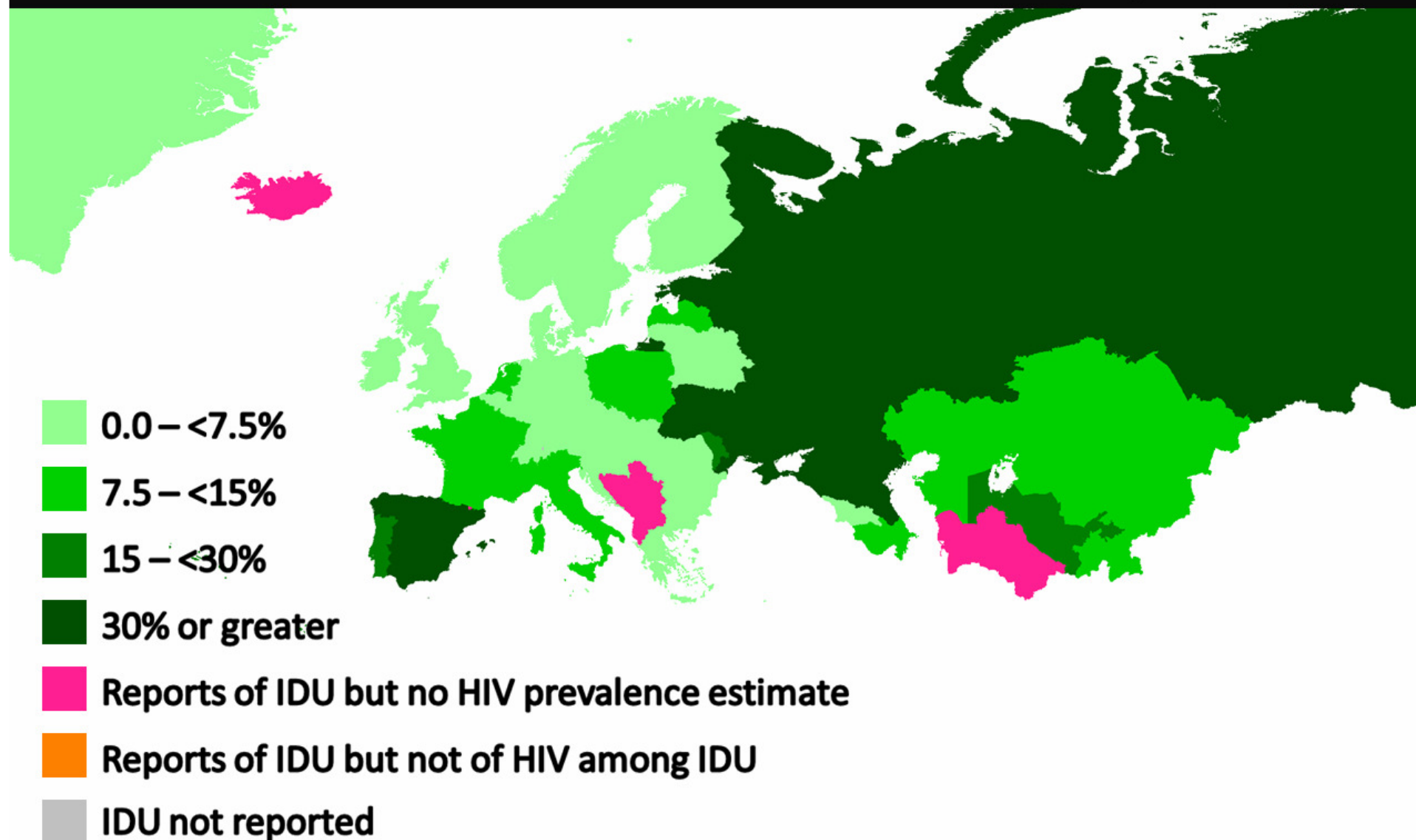
Prevalence of IDU (%)	0.00 - <0.25	(18 countries)	
	0.25 - <0.50	(22 countries)	
	0.50 - <1.00	(11 countries)	
	>1.00	(10 countries)	
	Reports of IDU but no estimate in 87 countries		

# HIV in IDUs

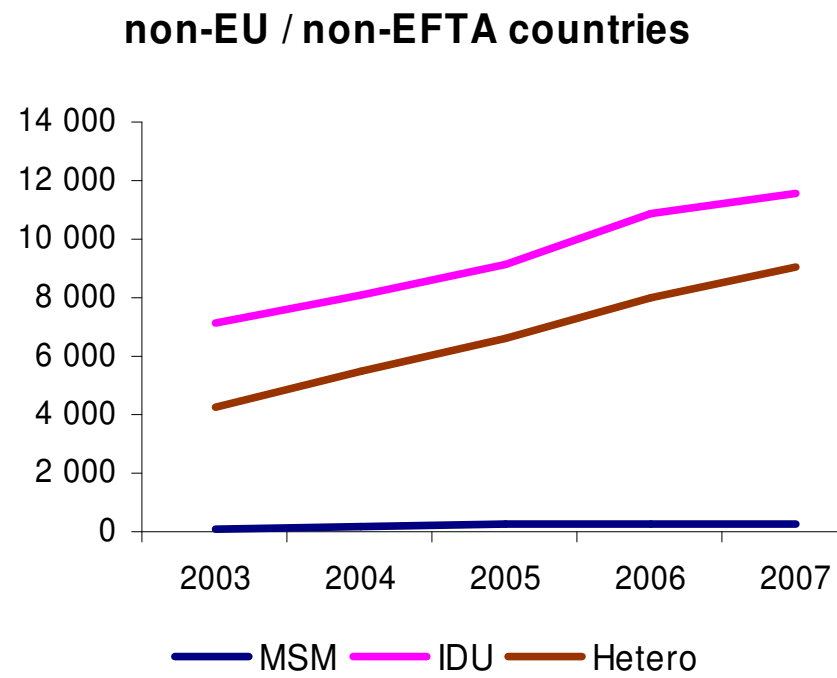
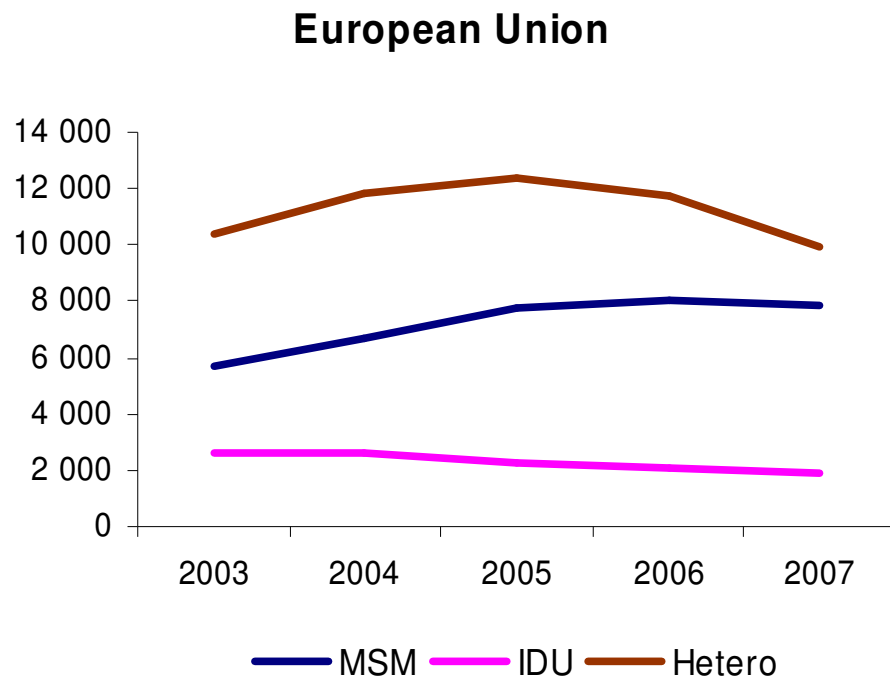


# HIV among people who inject drugs

## Central Asia, Eastern & Western Europe



# HIV infections newly diagnosed in the WHO European region: main 3 risk categories by year of notification (2003-2007)

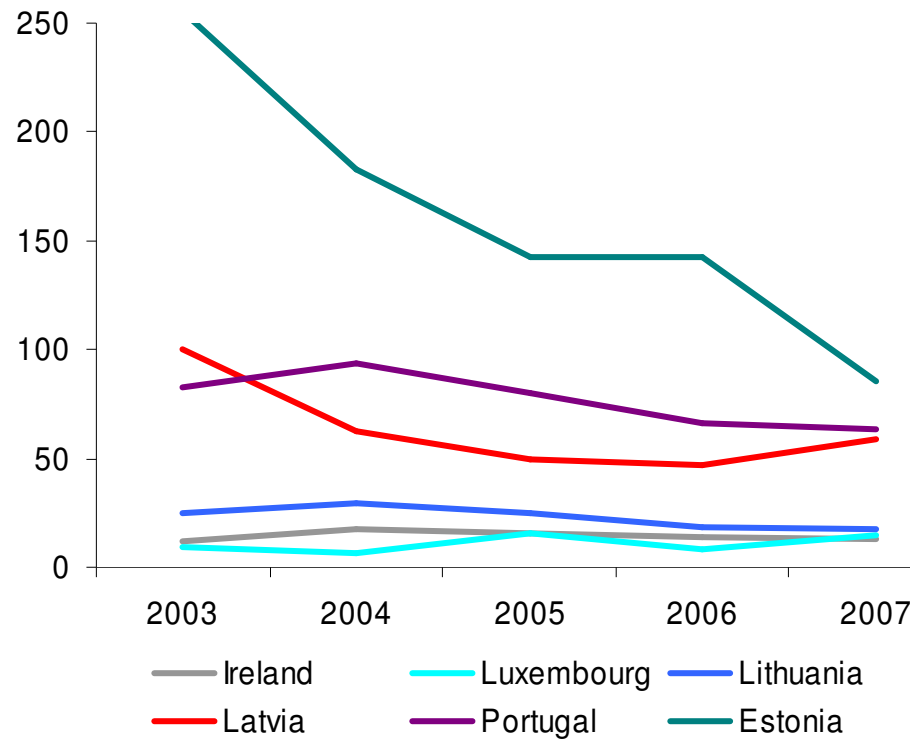


Source: ECDC/WHO 2008

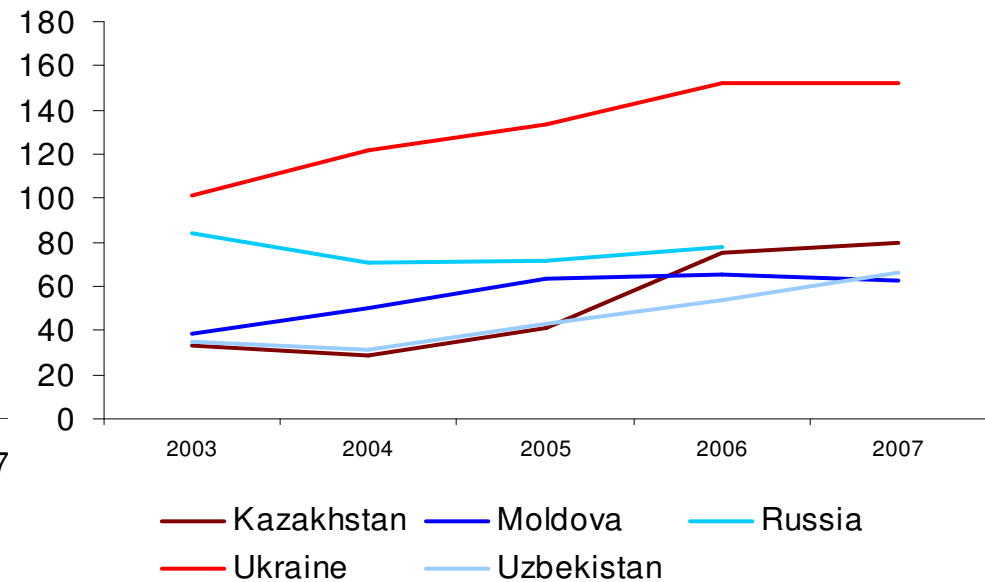


# HIV cases newly diagnosed in IDUs per million population, European Union 2003-2007

**EU: Countries with over 10 cases / M in 2006-2007**



**East: Countries with over 50 cases / M in 2006-2007**

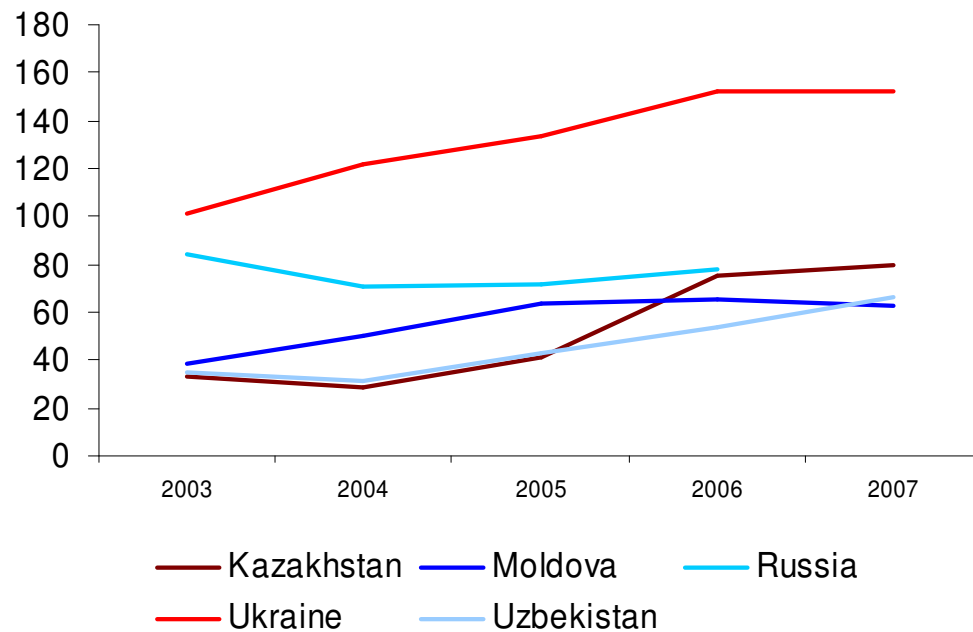


Source: ECDC/WHO 2008; Wiessing et al Eurosurveillance 2008

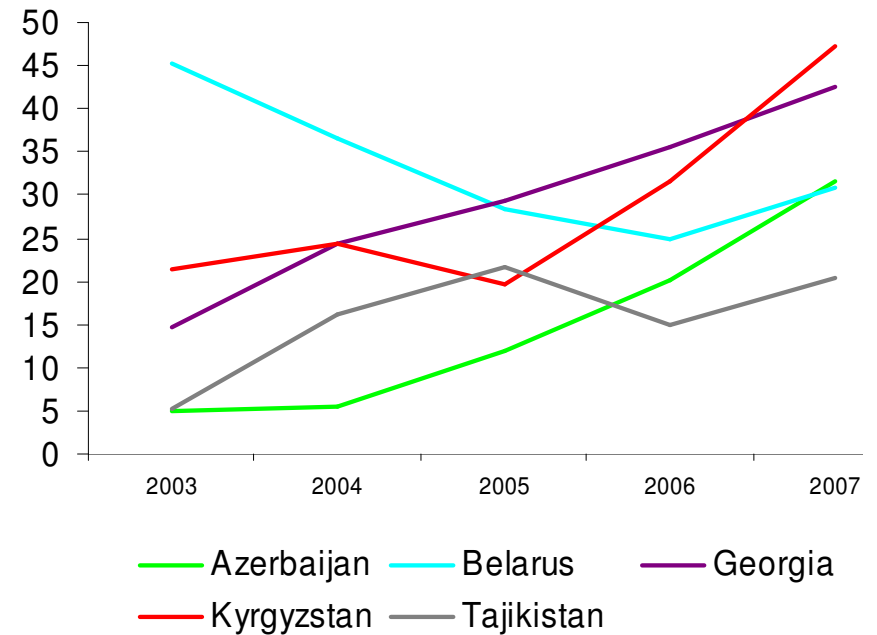


# HIV cases newly diagnosed in IDUs per million population, Eastern countries of the WHO European region 2003-2007

**East: Countries with over 50 cases / M in 2006-2007**



**East: Countries with 10 to 50 cases / M in 2006-2007**



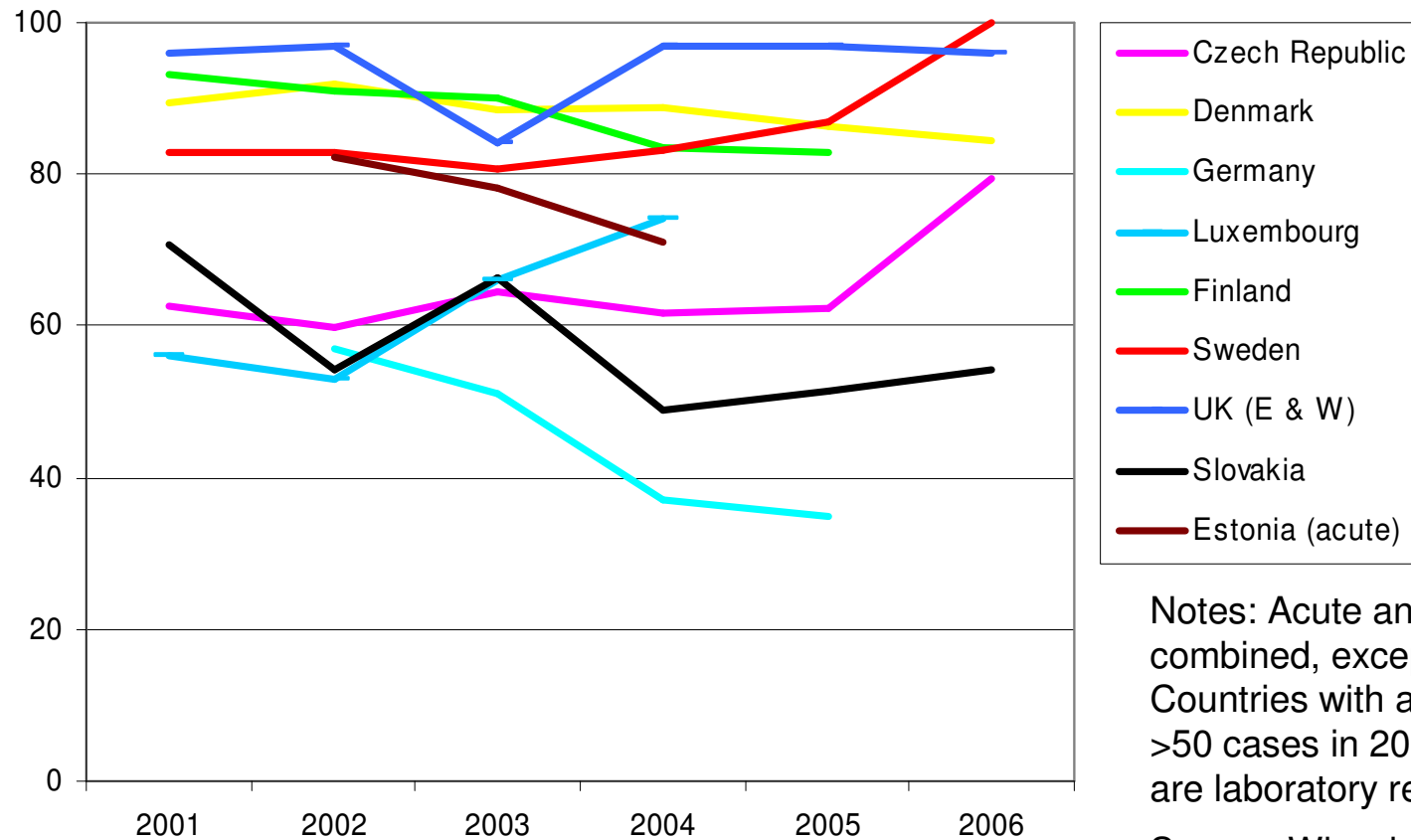
Source: ECDC/WHO 2008; Wiessing et al Eurosurveillance 2008



# Hepatitis C in IDUs



# Percent IDUs among notified cases of hepatitis C where risk factors are known, 2001-2006

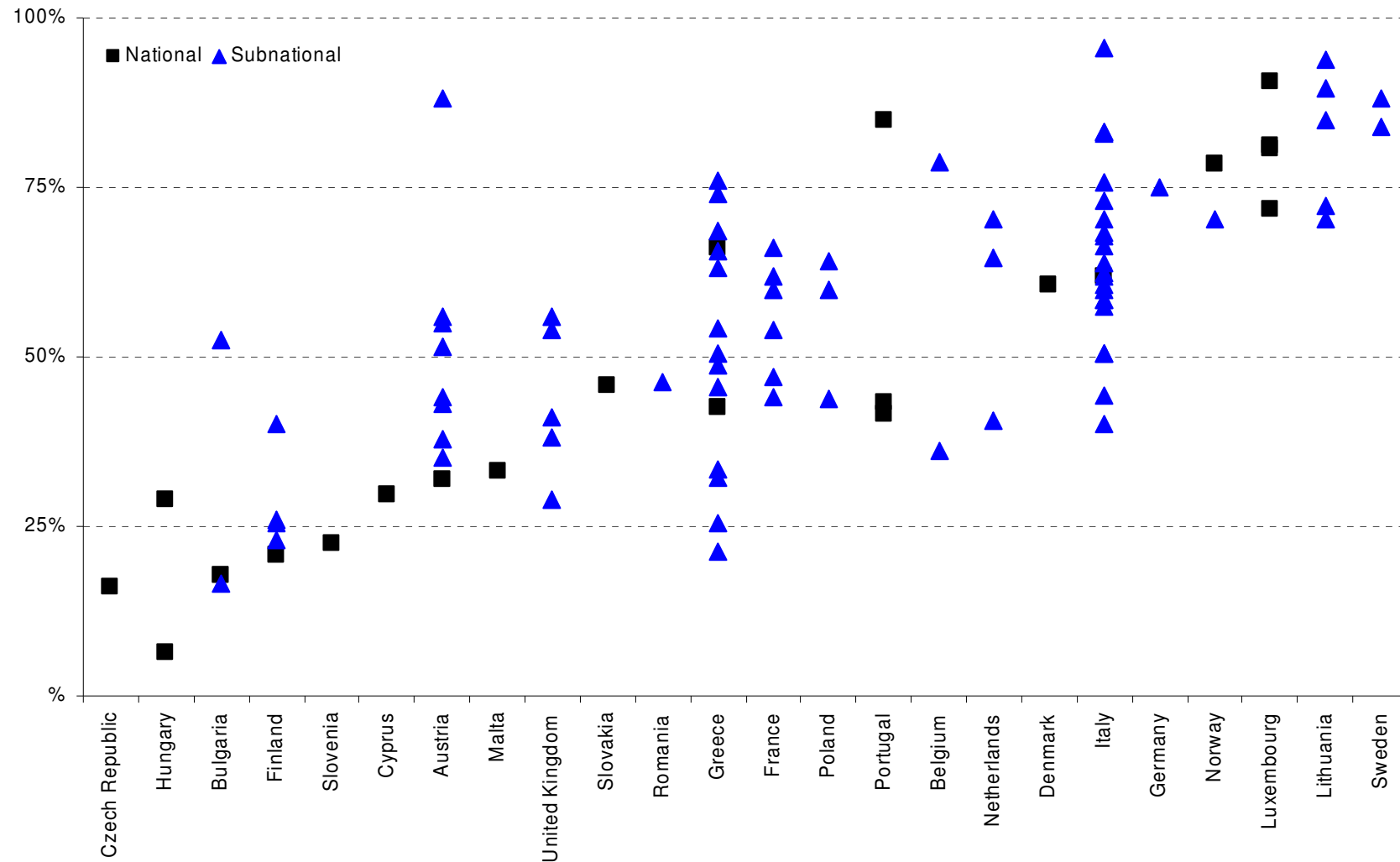


Notes: Acute and chronic cases combined, except for Estonia. Countries with a time series and >50 cases in 2004-2006. UK data are laboratory reports.

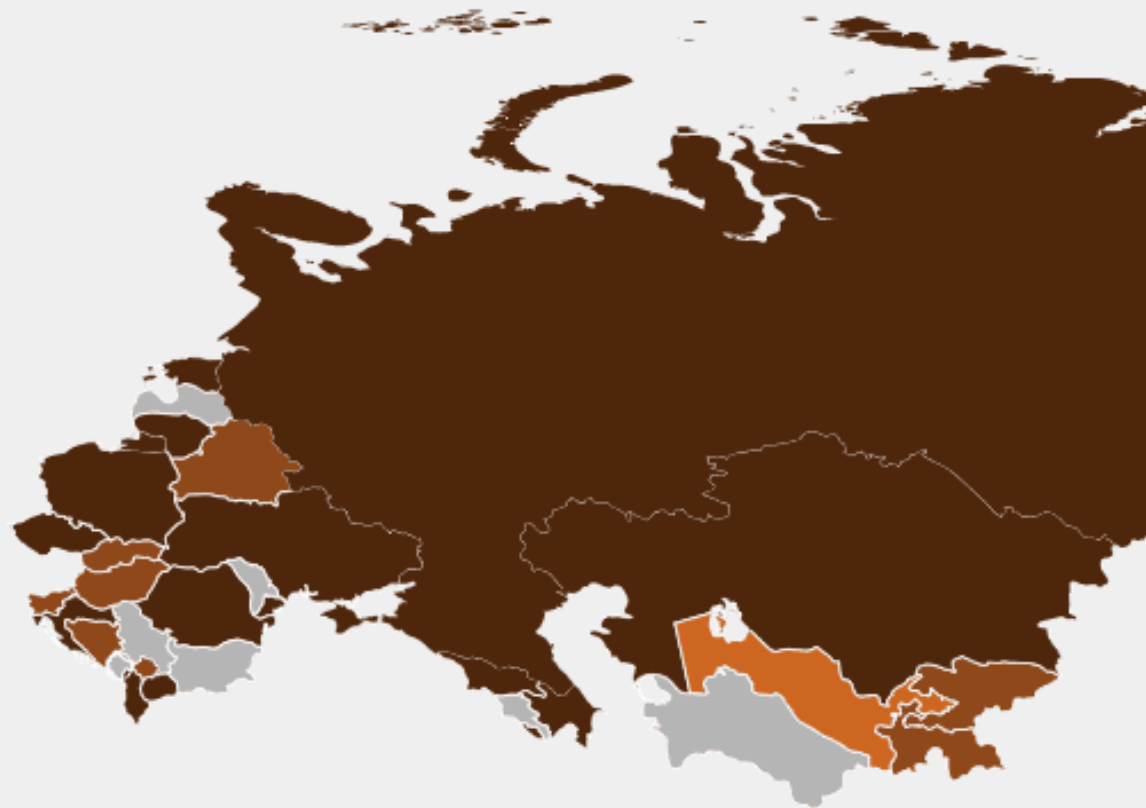
Source: Wiessing et al. Eurosurveillance, 2008.



# HCV antibody prevalence among injecting drug users – studies with national and subnational coverage 2005-2006



## HCV PREVALENCE RATES AMONG PEOPLE WHO INJECT DRUGS



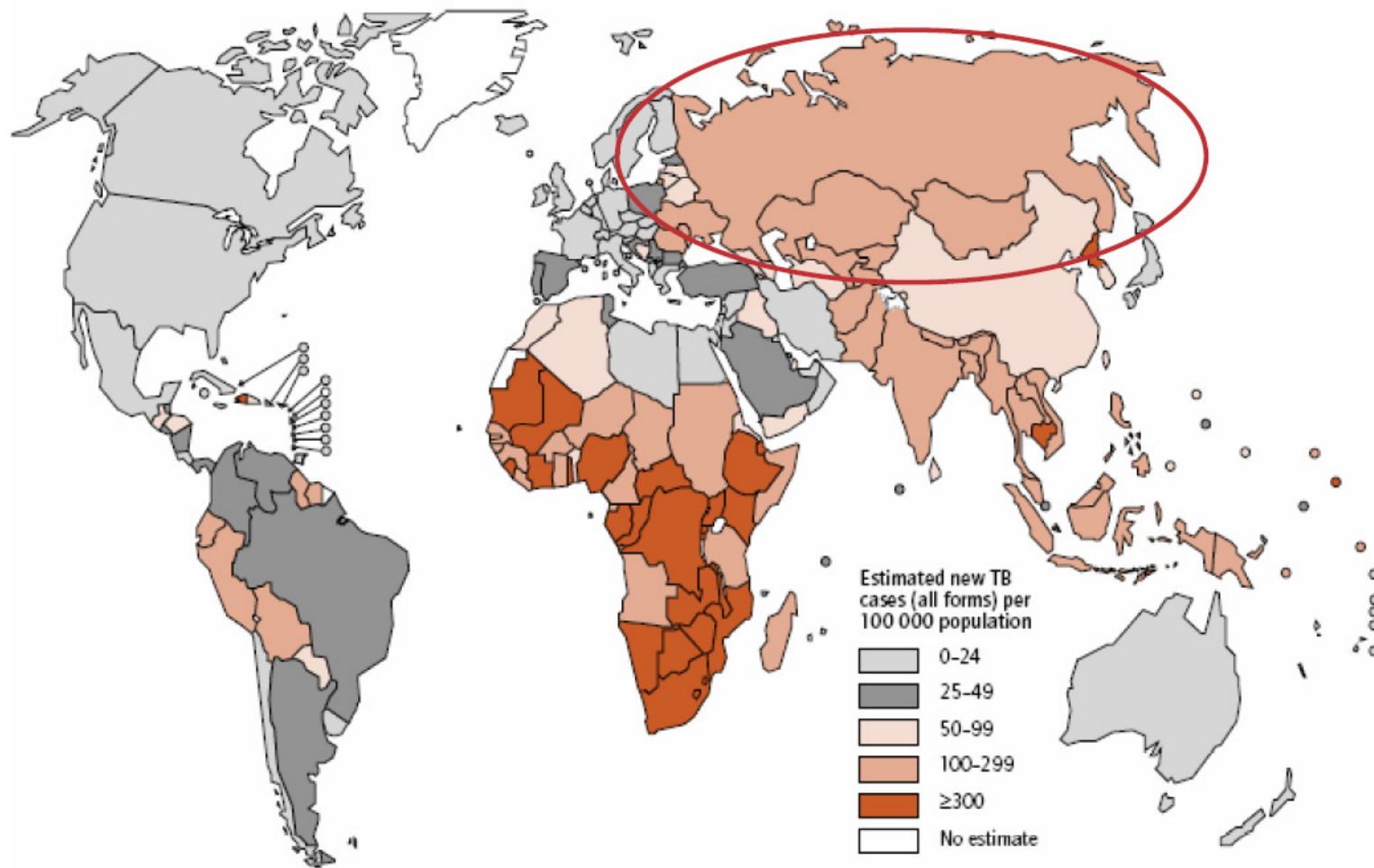
Sources:  
IHRA / EHRN

# Tuberculosis

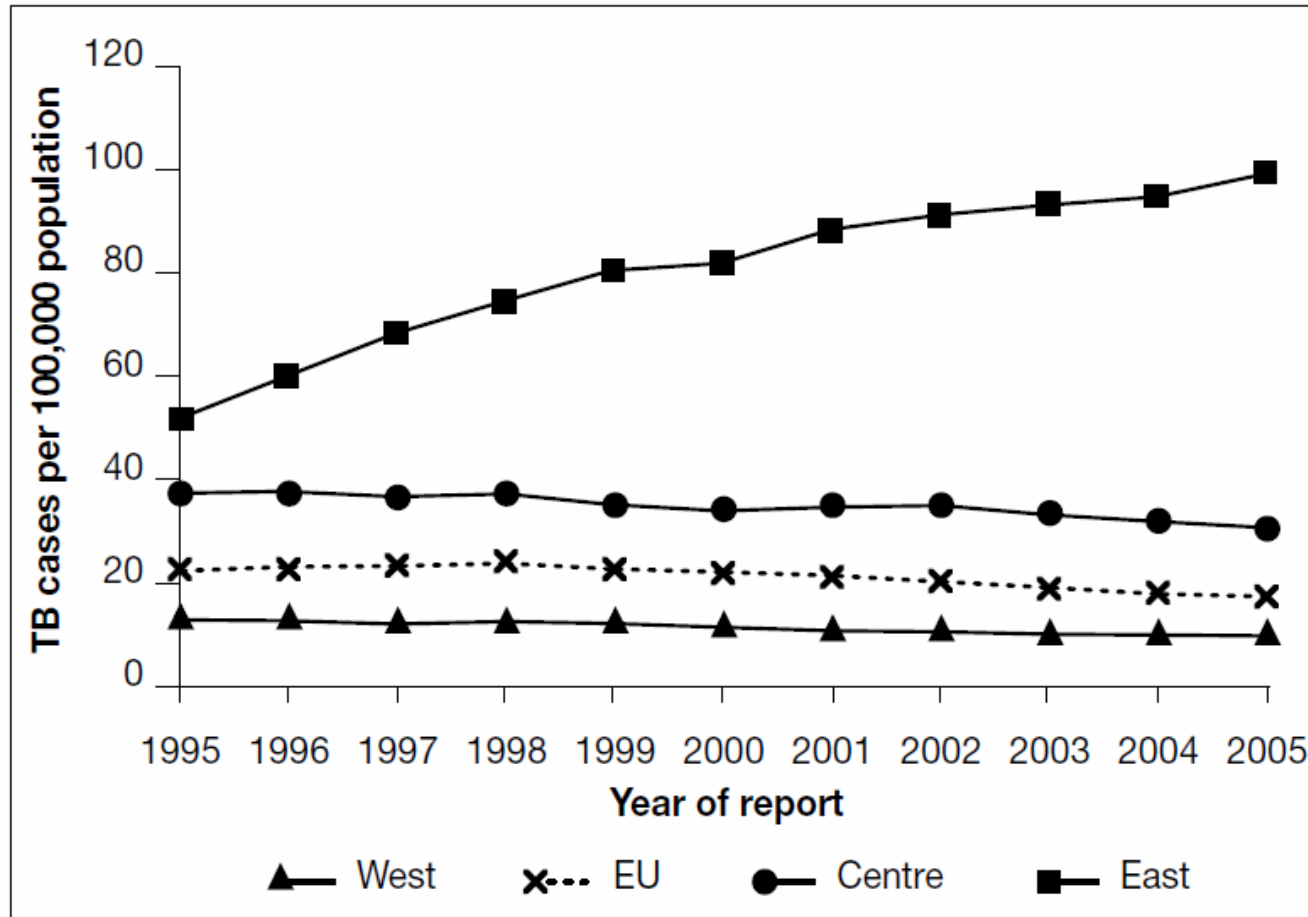


# Estimated TB incidence rates, 2007

## WHO TB report 2009



**Figure 4.1: Trends in the rates of TB cases in the WHO European Region, 1995-2005**

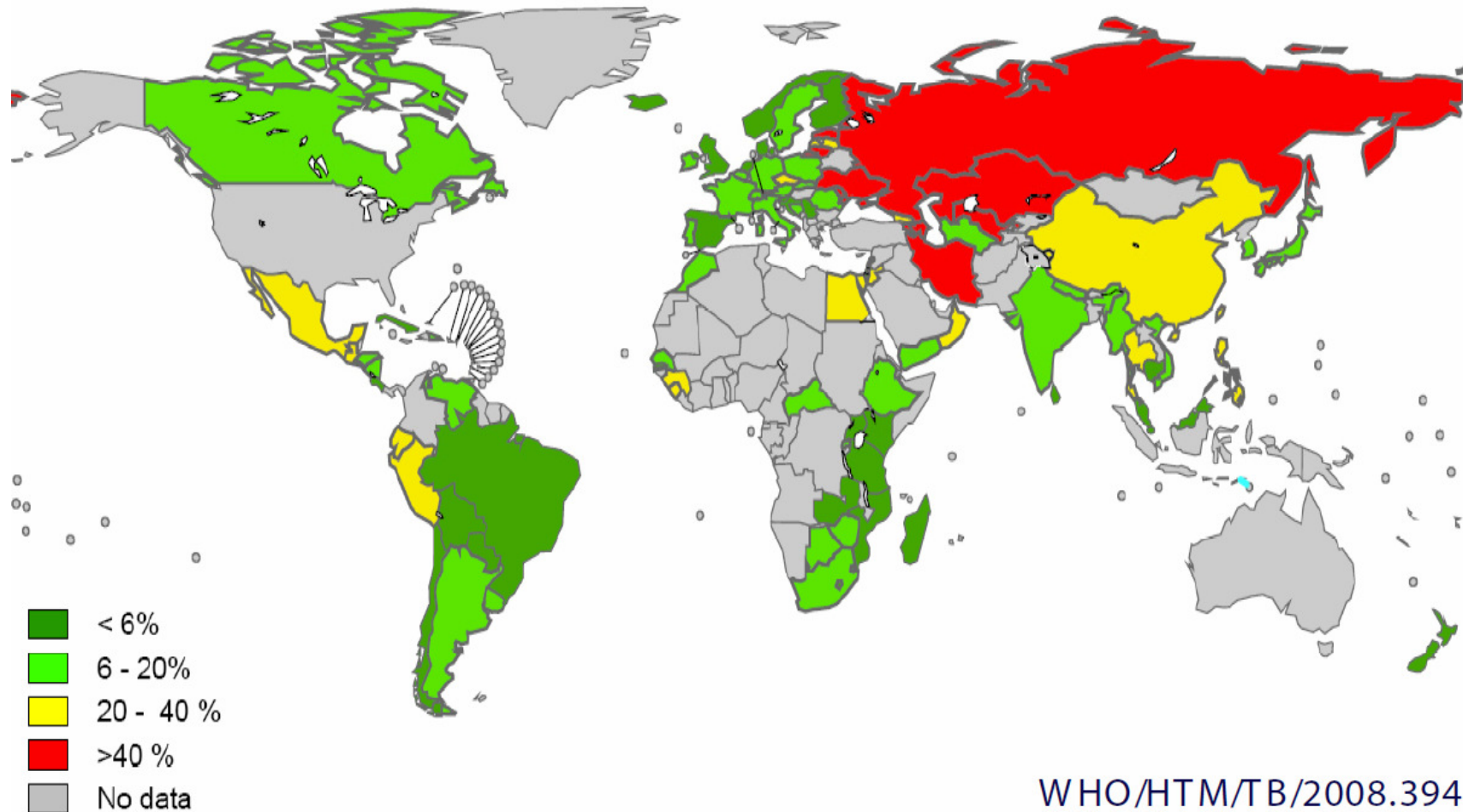


Countries excluded: Andorra, Bosnia & Herzegovina, Georgia, Monaco, San Marino.

Source: EuroHIV 2006

# MDR-TB among previously treated TB cases, 1994-2007

\* Sub-national coverage in India, China, Russia, Indonesia.



## Characteristics of TB epidemic in Eastern Europe

- ~ 70% of all TB cases reported in Europe
  - >250.000 of TB cases occur every year
  - High prevalence of TB in prisons
- Compared to other regions of the world,
  - highest rate of treatment failure (7%) and 2nd-highest rate of death (6%) as treatment outcome
  - Highest rate of MDR-TB: 9 – 22%, where 1 of 10 MDR-TB cases is XDR-TB
- In Russia ~ 30 000 people die every year and another 30 000 are disabled as a result of TB disease



## IDU is associated with increases rates of TB

- TB disease rates (Reichman et al 1979; Rhodes et al)
  - higher among IDUs than in general population
- TB infection rates (Portu et al. 2002)
  - higher among IDUs than in general population
- TB in IDUs (Nissapatorn et al. 2004; Morozova et al. 2003)
  - more likely to be extrapulmonary
  - higher risk of MDR-TB

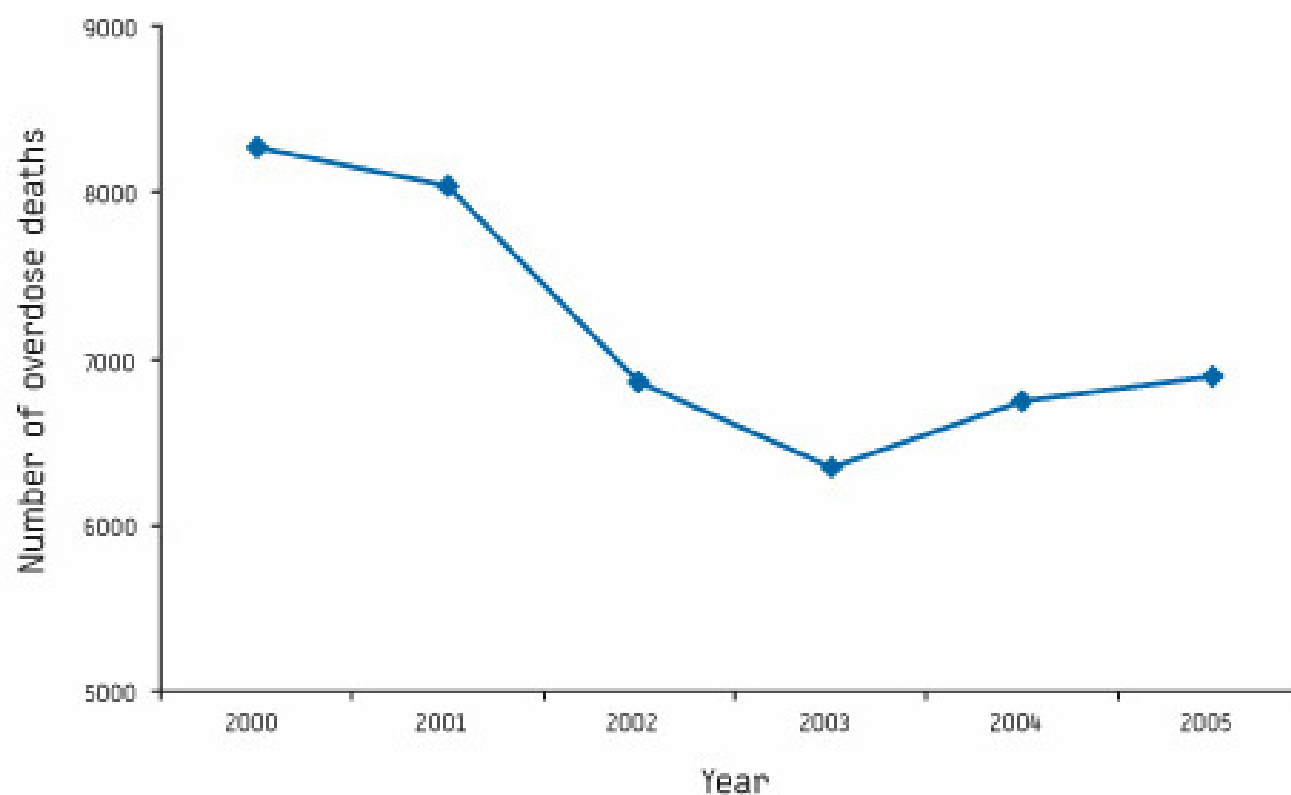


# Overdose death



## FIGURE

### Number of overdose deaths reported to the EMCDDA by 23 EU Member States and Norway, 2000-2005



Belgium, Cyprus, Denmark and Slovakia were not included in the analysis  
In Sweden and Ireland, data for 2005 were missing and 2004 figures have been imputed.

Vicente et al., Eurosurveillance 2009

## OD in Eastern Europe

- No reliable data are available
- Estimates using OD mortality rates from the literature of about 0.8 % per annum would imply some  $0.008 \times 3.5 \text{ million} = 28000$  deaths every year
- This might be an underestimate, for example in Russia 3 times more OD deaths (9354) are reported than the expected number using 0.8% (2844)

Source: Shona Shonning EHRN personal comm. 2009



# Intervention coverage in IDUs



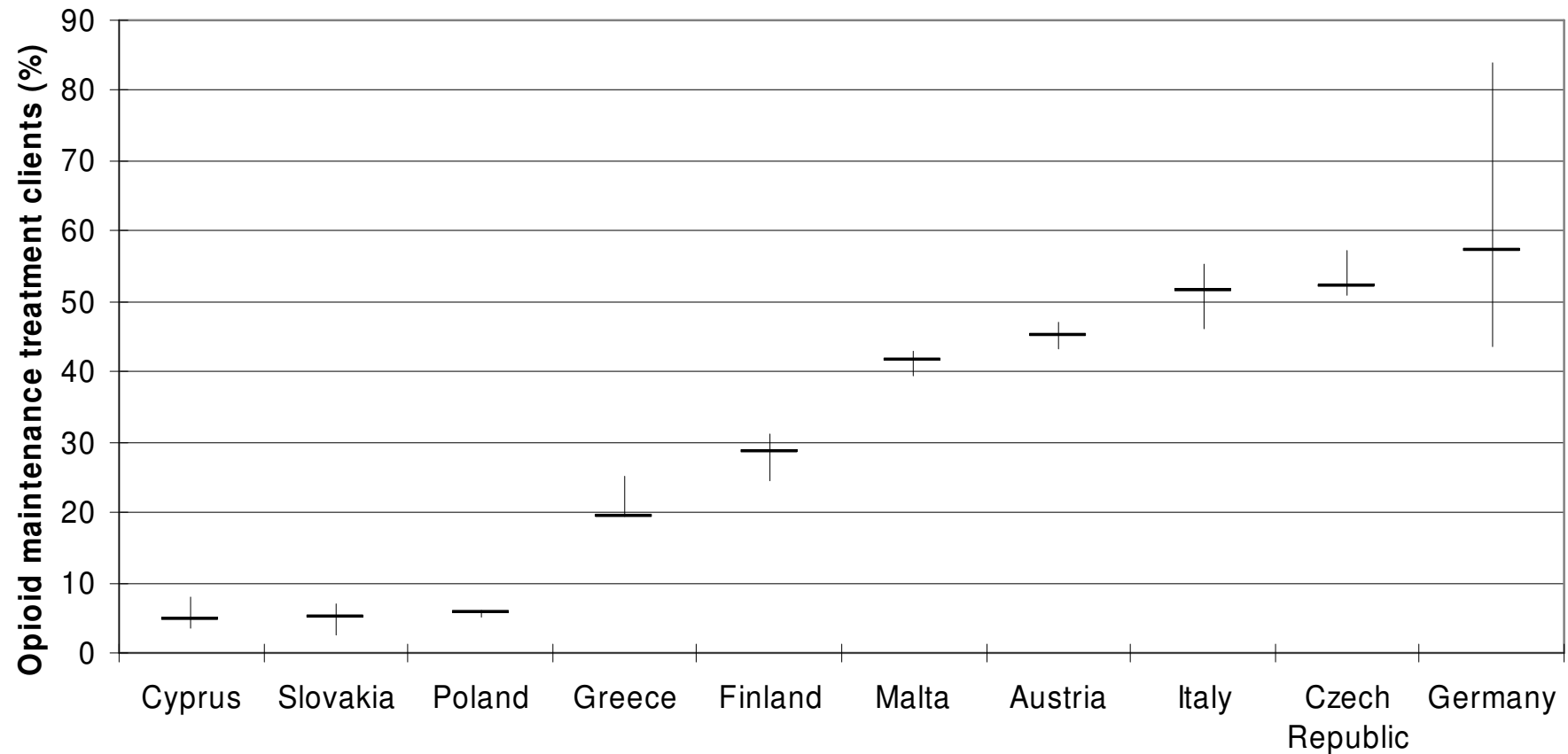
# Comprehensive package of interventions

(WHO, UNODC, UNAIDS technical guide to set targets... 2009)

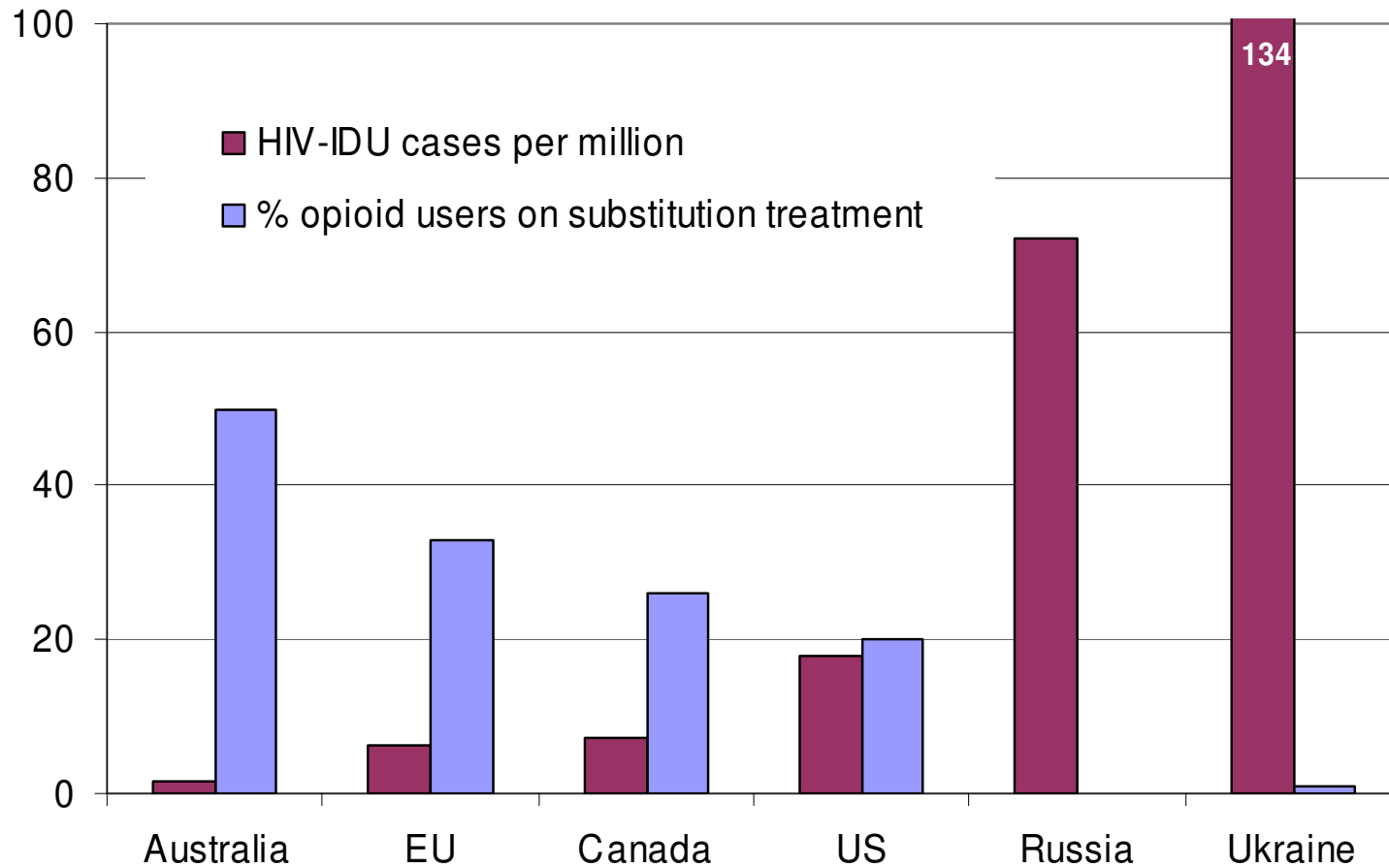
1. Needle and syringe programmes (NSPs)
2. Opioid substitution therapy (OST) and other drug dependence treatment
3. HIV testing and counselling (T&C)
4. Antiretroviral therapy (ART)
5. Prevention and treatment of sexually transmitted infections (STIs)
6. Condom programmes for IDUs and their sexual partners
7. Targeted information, education and communication (IEC) for IDUs and their sexual partners
8. Vaccination, diagnosis and treatment of viral hepatitis
9. Prevention, diagnosis and treatment of tuberculosis (TB)



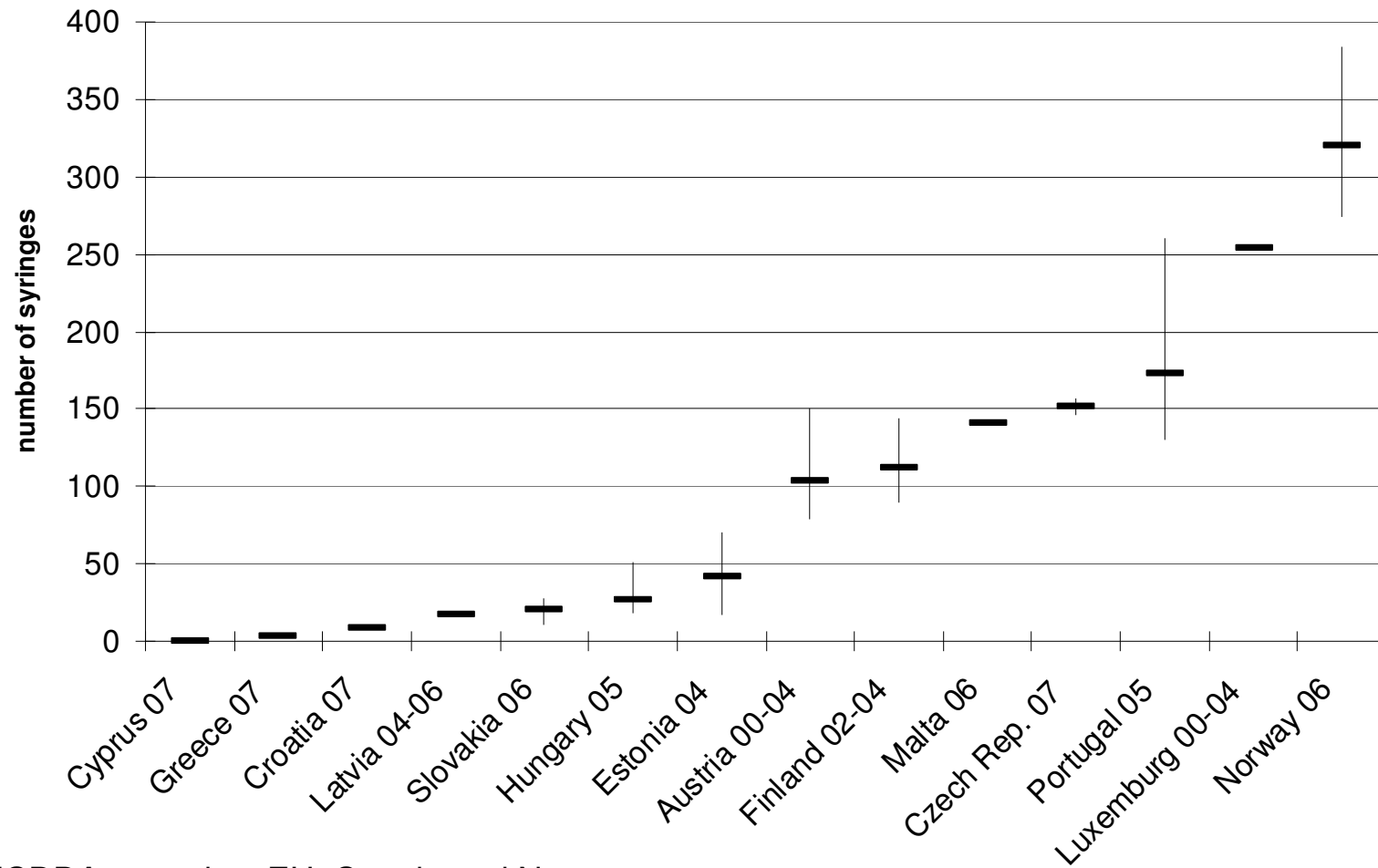
## Percent coverage of opioid substitution treatment (OST) among the estimated opioid using population, EU 2005-07



# Incidence of diagnosed HIV in IDUs per million population (2005) and % coverage of opioid substitution treatment (2000-2004) (Wiessing et al., Am J Public Health 2009)



## Syringes distributed through specialised programmes in the EU\*, per estimated IDU per year (2002-2007)



\*EMCDDA countries: EU, Croatia and Norway

# Reference Group to the United Nations on HIV and Drug Use – preliminary results 2009

- Data on NSP and ART coverage removed due to embargo

NOT FOR FURTHER DISSEMINATION – PLEASE REMOVE THIS SLIDE FROM ANY HANDOUTS



# UN reference group preliminary results 2009: Percent of HIV positive IDUs on ART

- Data on ART coverage removed due to embargo

UN Reference Group on HIV in Drug using populations 2009 (unpublished data) THIS SLIDE NOT FOR DISSEMINATION  
Note: weighted average for Western Europe includes data not shown from some large countries with high coverage (e.g. Spain)



# Conclusions

- The situation in Eastern Europe with regard to HIV, HCV, TB and fatal overdose among IDUs is likely very serious and still deteriorating, as far as the limited data allow drawing conclusions
- Key interventions such as opioid substitution treatment, needle and syringe programmes and antiretroviral treatment are mostly lacking for IDUs
- In Western Europe / the EU the epidemiological situation is much better, however there are still serious problems among IDUs (HCV, OD). Intervention coverage among IDUs is higher but variable and can likely be further improved



# Thank you

## Acknowledgments

EMCDDA national focal points and DRID experts

Catherine Cook, IHRA

Giedrius Likatavicius, ECDC

Magomed Nashkoev and UNAIDS

Bradley Mathers and the UN Reference Group Secretariat on HIV  
in drug using populations

Daria Podlekareva, Copenhagen HIV programme

Shona Shonning, EHRN

Annemarie Stengaard, WHO/Europe

