



European Monitoring Centre
for Drugs and Drug Addiction

Applied PDU estimations: POU and IDU as a denominator to analyse drug-related deaths prevalence

Isabelle Giraudon, Danica Thanki, João Matias, Julian Vicente, EMCDDA
Problem Drug Use Indicator (PDU) Annual Expert Meeting 2012
25-26 October 2012, Lisbon

Drug-related deaths and mortality of drug users

- One the 5 epidemiological indicators
- 2 components
- 1) Overdoses
 - Cases extracted from 'General' and 'Special' mortality registers (police, forensic services..)
- 2) Mortality among drug users
 - Cohort studies



Case definition

‘Deaths happening shortly after consumption of one or more illicit psychoactive drugs, and directly related to this consumption, although they often may happen in combination with other substances such as alcohol or psychoactive medicines’

DRD EMCDDA protocol

<http://www.emcdda.europa.eu/html.cfm/index107404EN.html>

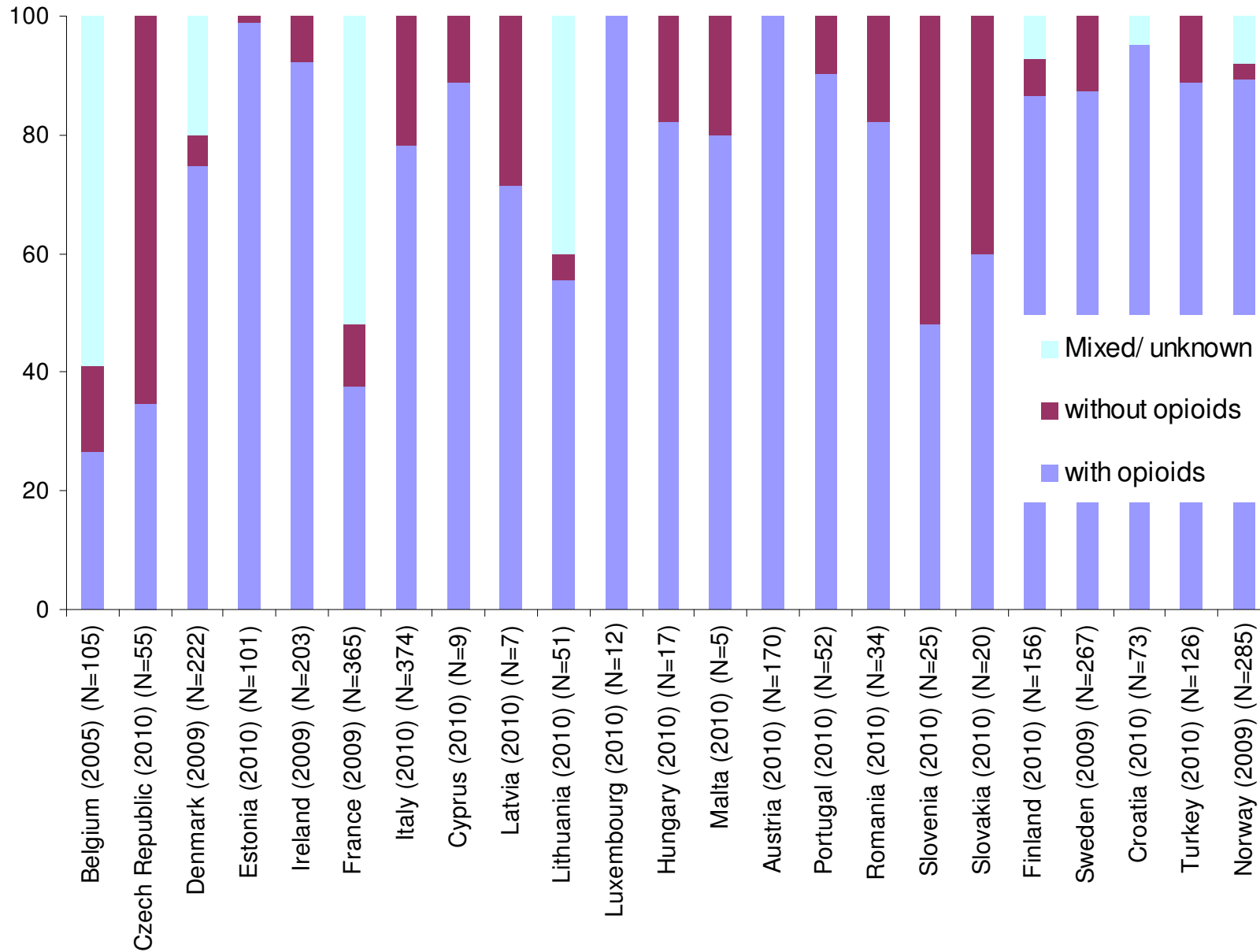


Overdoses reported

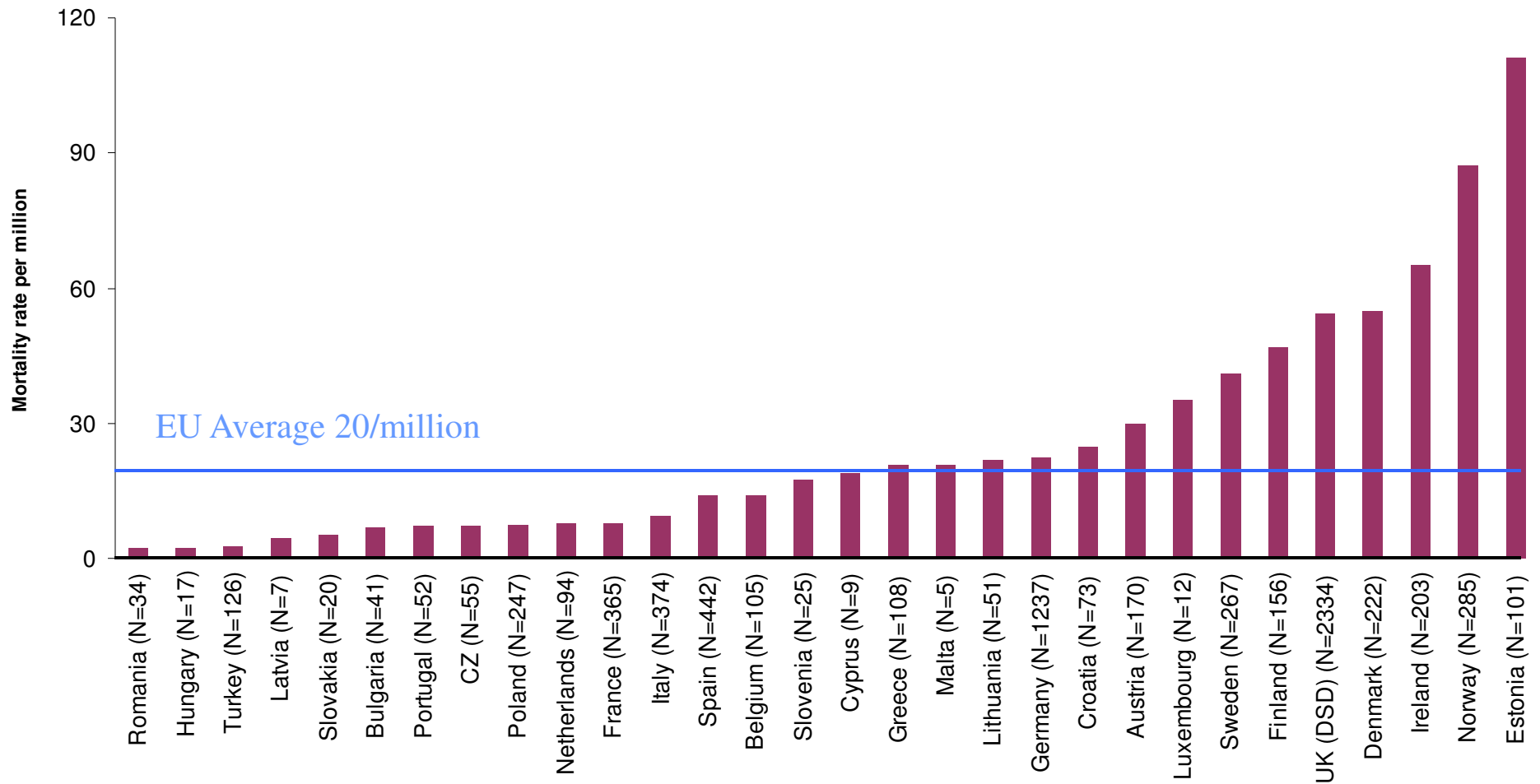
- ~ 7 000 fatal overdoses reported in 2010
 - ~80% males
 - Mean age ~38 years - increasing
 - Mainly opioids – heroin
 - Mainly ‘polydrug’ overdoses plus alcohol, benzo and other medicines, other illicit drugs



% of overdoses that show presence of opioids



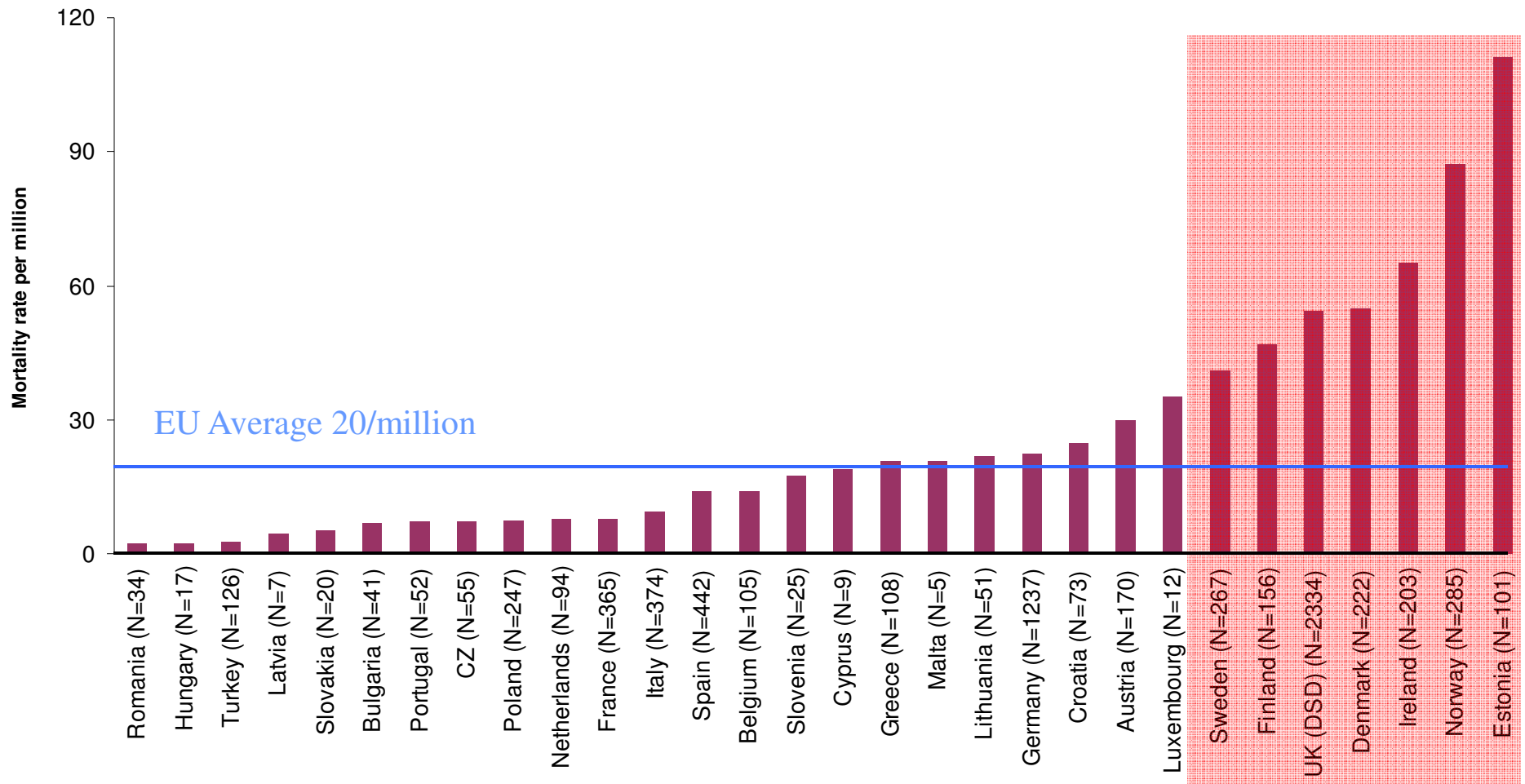
Mortality due to overdoses among all adults (15 to 64 years)



Source: most recent year reported. 2012 Statistical Bulletin



Mortality due to overdoses among all adults (15 to 64 years)



Source: most recent year reported. 2012 Statistical Bulletin

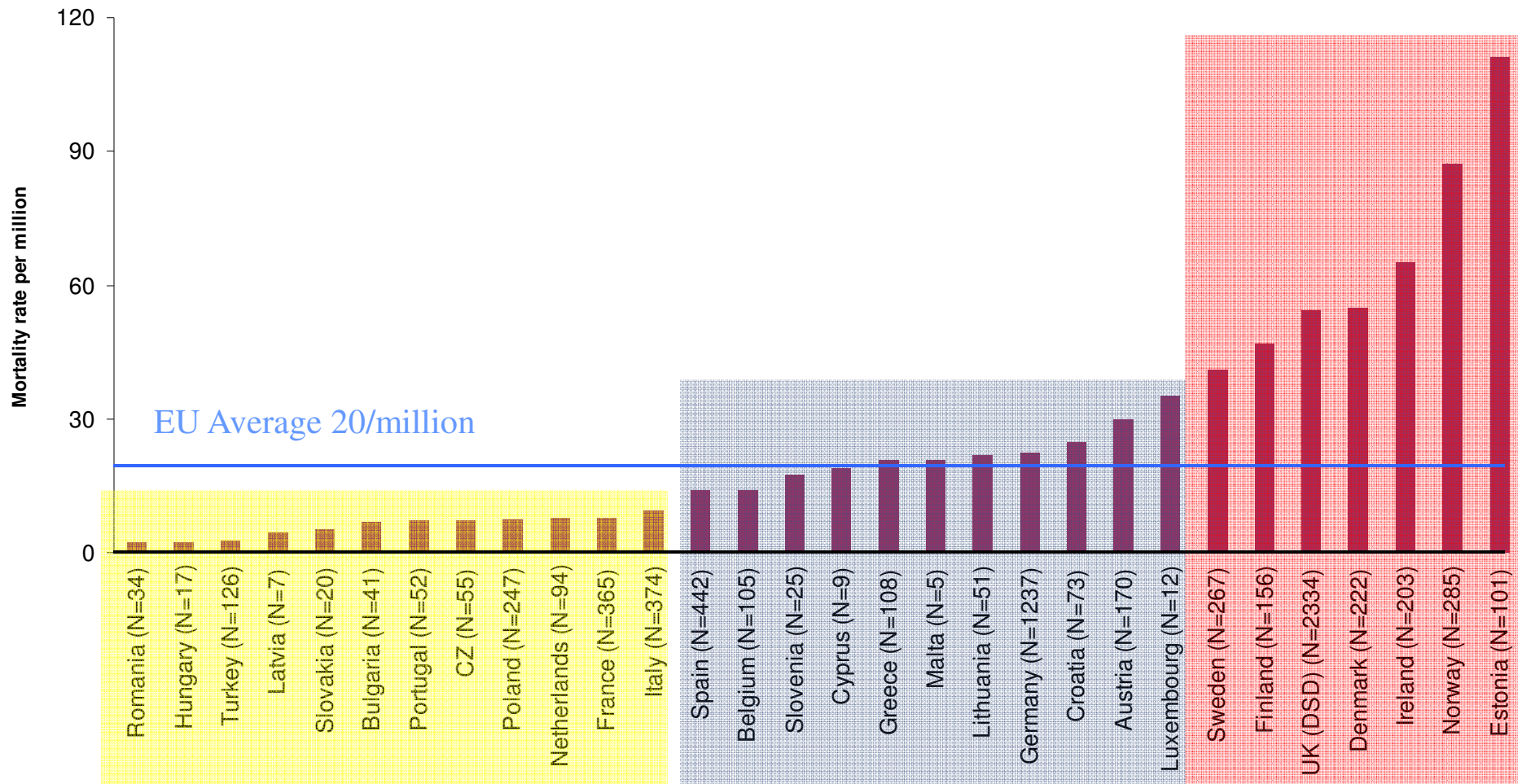


Rational and objectives

- OD-related population mortality rates vary++
- What about the prevalence of drug use?
- Objective: use other denominators to get a better insight on the level of risk among POUs and among injectors



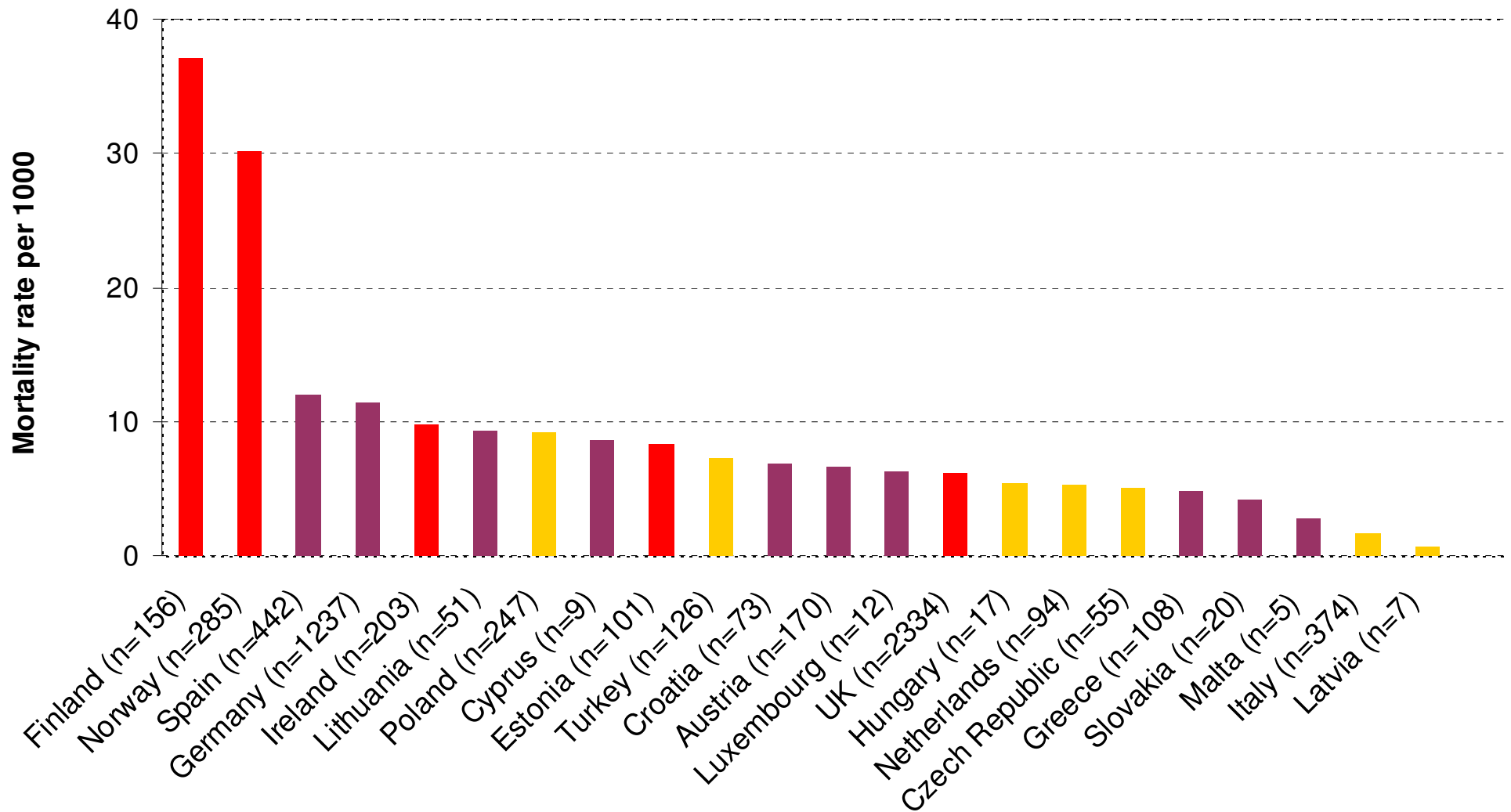
Mortality due to overdoses among all adults (15 to 64 years)



Source: most recent year reported. 2012 Statistical Bulletin

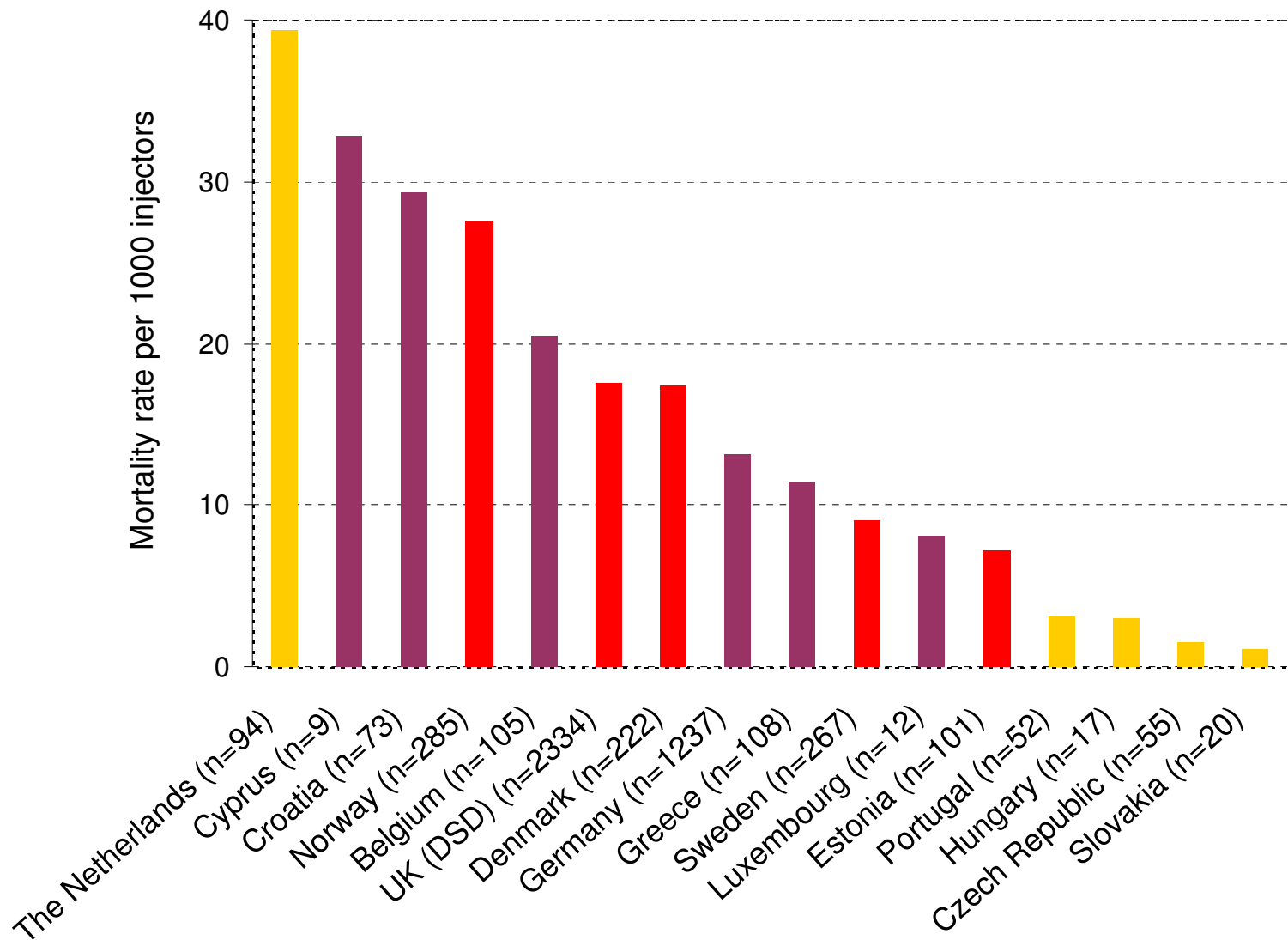


Mortality rates/1000 due to overdose among **POU**



Source: most recent year reported. 2012 Statistical Bulletin

Mortality rates/1000 due to overdose among **injecting drug users**

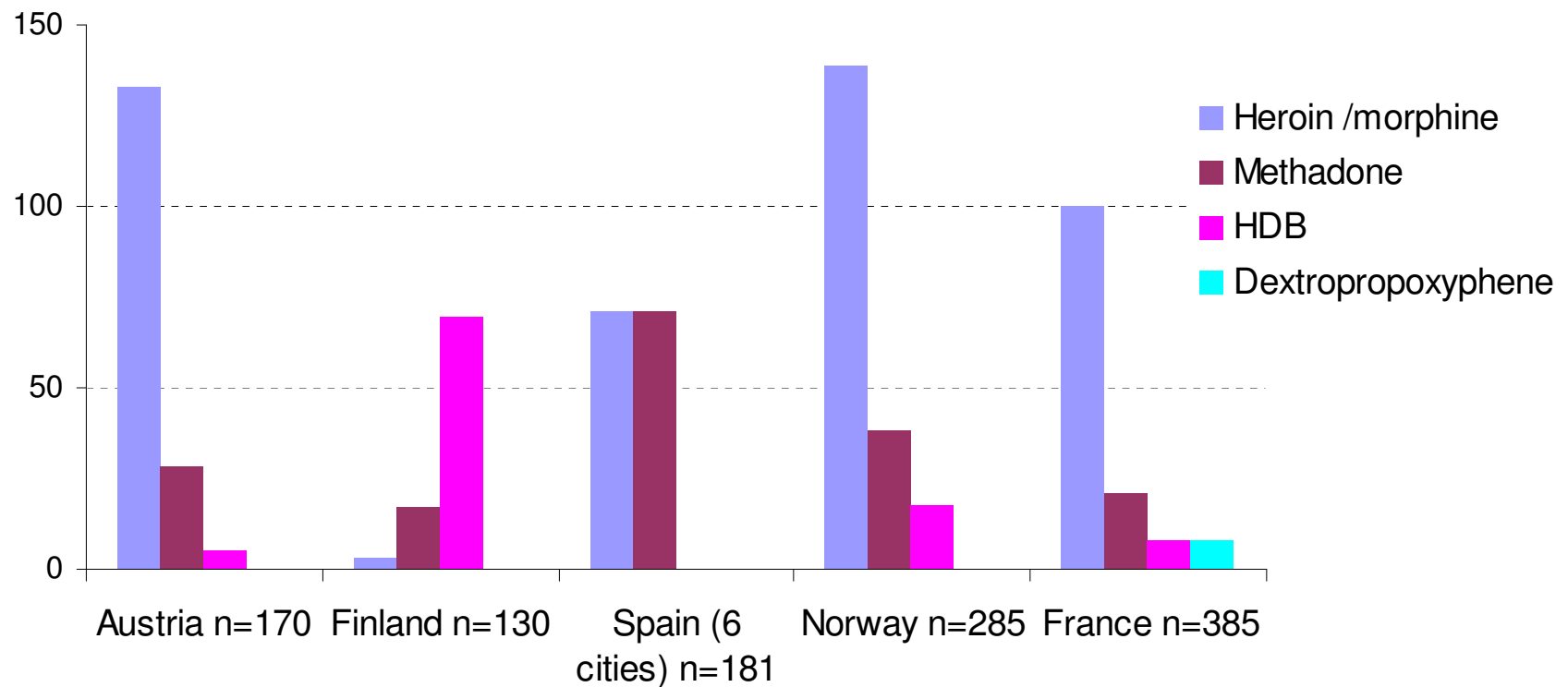


Discussion

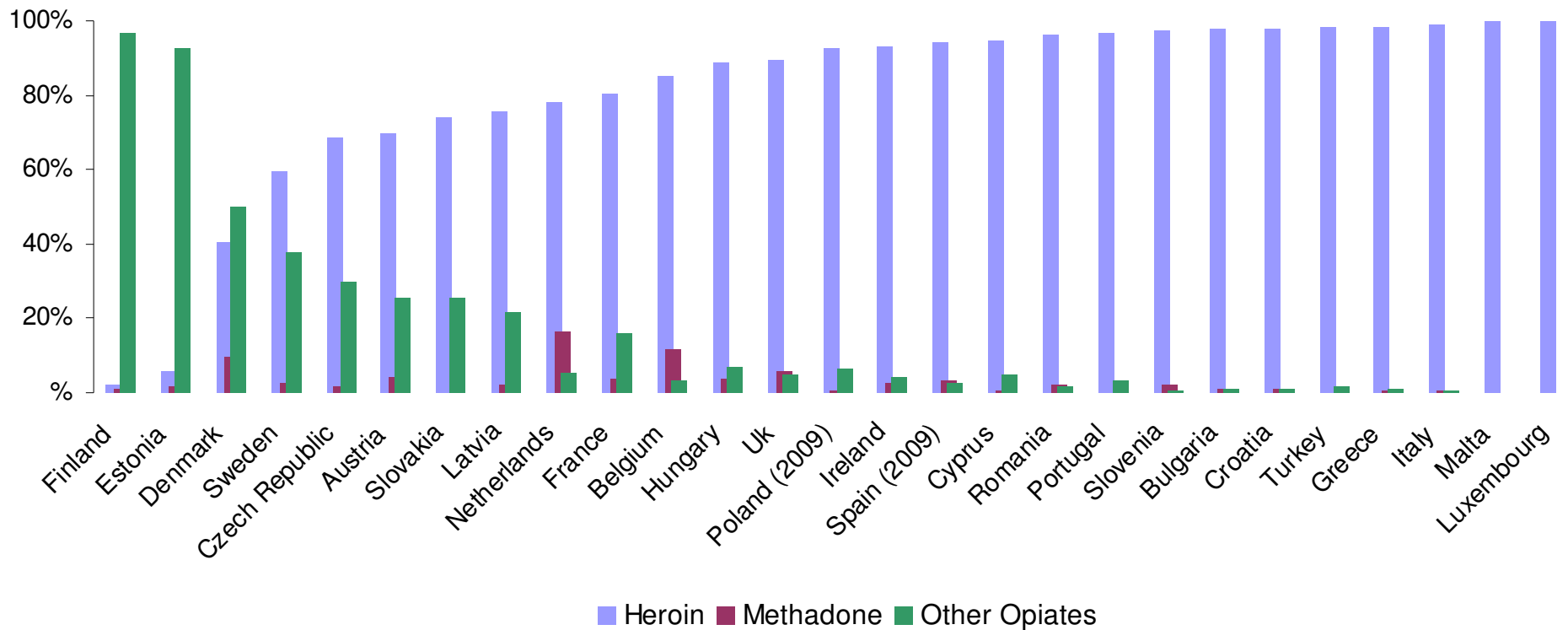
- Numerator. Type of overdose deaths: what substances are in cause?
- Denominator: type of substances misused
- Confidence intervals ?
- Uncertainties on both overdoses and PDU estimates
 - Case definitions, methods, data sources and target vary



Nature of the overdoses reported: various substances found in post mortem



All clients entering treatment for opioids, by type of opioid misused



Source: most recent year reported. 2012 Statistical Bulletin



Some conclusions

- POU and IDU prevalence should be important to consider when interpreting overdose mortality rates
- Some issues with quality and comparability of both the numerator and denominator(s)
- More country level analysis needed (case definition?)
 - e.g 'overdoses in injectors/all injectors' and 'overdoses in non injectors/all non injectors' in the NL
- Contextual information needed to understand mortality risk
 - e.g. the IDUs in the NL are old, vulnerable, marginalised; type of opioids used, contact with services, alcohol and other drugs used;
 - Triangulation with cohorts
- Work in progress



ICD codes

- Case definition translated into a selection of ICD codes (underlying cause of death)
 - Disorders F11-F12, F14-F16, and F19
 - Accidental poisoning X42*, X41**
 - Intentional poisoning X62*, X61**
 - Poisoning of undetermined intent Y12*, Y11**
- In combination with the T-codes: T40.0-9, **In combination with the T-code: T43.6.



- Thank you for your attention
- Thanks to Marcis Trapencieris for his comments on the draft presentation
- <http://www.emcdda.europa.eu/themes/key-indicators/drd>
- Isabelle.giraudon@emcdda.europa.eu
- Joao.matias@emcdda.europa.eu
- Julian.vicente@emcdda.europa.eu

