



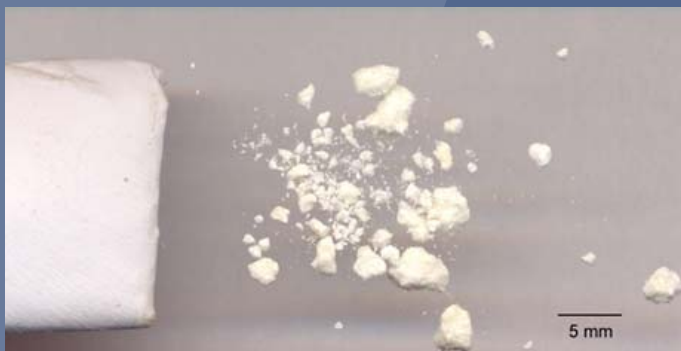
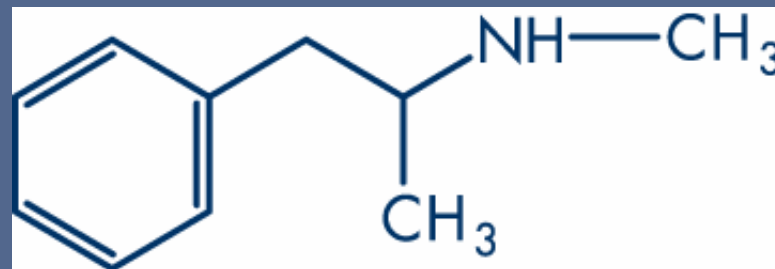
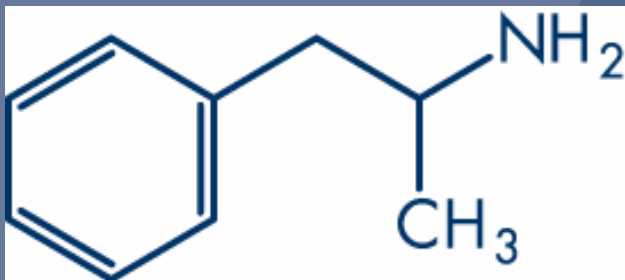
European Monitoring Centre
for Drugs and Drug Addiction

Overview: Methamphetamine & Amphetamine in the EU

Quite a lot of smoke but a very limited fire?

Paul Griffiths , Symposium: Meth-Amphetamines sharing the
experience, Prague, April 2009

Amphetamines



Amphetamine



Methamphetamine

Overview

- Say something about health issues and patterns of use
- Historical context
- Consider trends – with a particular focus on potential for greater diffusion of methamphetamine



Sources

- Presentation based on...
 - Quite a lot of smoke but very limited fire – the use of methamphetamine in Europe. Drug Alcohol Review (May 2008, 27, 236-242). Griffiths, P., Mravcik, V., Lopez, D., & Klempova, D.
 - Ongoing EMCDDA monitoring activities
 - Preparatory work for a new joint Europol – EMCDDA analysis



Key points

- Amphetamines remain important but sometimes overlooked element of EU drug situation
- Must be viewed in the context of the overall stimulant market
- Route of administration critically important



Types of Methamphetamine

- **Tablets:** (usually MA hydrochloride with caffeine) Yaba (Thai) Shabu (Philippines). RoA – oral, chasing (smoke) IV. In EU sometimes with ecstasy logos and ketamine, ephedrine & caffeine.
- **Powder:** Crystalline hydrochloride salt – ranging white to reddish brown. RoA: oral & IV but can be smoked
- **Crystal:** MA Hydrochloric powder that has been re-crystallised – looks like cracked ice or glass tends to be very pure and highly smoking efficient.



Public health impact: Methamphetamine V amphetamine

- Stronger CNS
- Need to consider
 - Route administration
 - Purity (varies considerably less than 5% to greater 80%)
 - Consumption patterns
 - Consumer profiles (PDU, sex workers, recreational, drivers)
 - Acidity of urine
- Injecting use probably broadly similar
- Snorting & oral – marginal increased risk possible
- Smoking – considerably more problematic



Health issues

- **Side effects**

- Loss appetite
- Insomnia
- Agitation
- Repetitive tasks
- Talkativeness, irritability, panic attacks
- Increased libido
- Dilated pupils

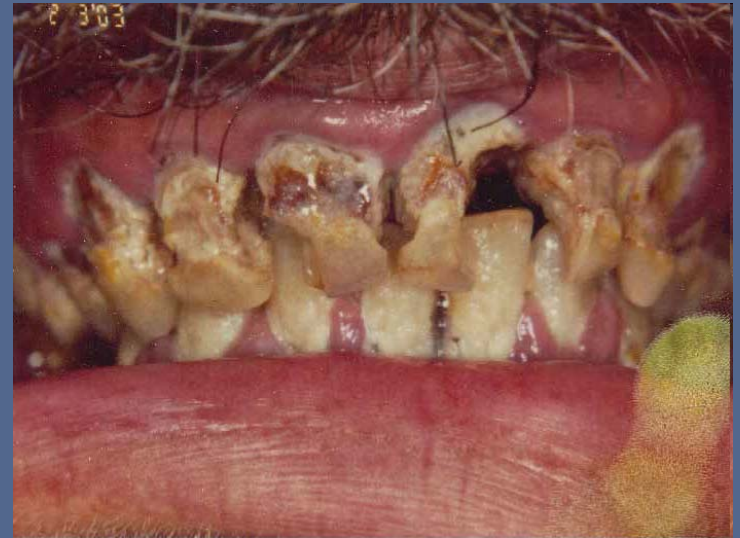
- **Chronic use**

- Dependence
- Weight loss
- Withdrawal & depression
- Amphetamine psychosis
- Erectile dysfunction
- Formincation
- Long term cognitive impairment
- Neurological damage
- Paranoia, delusions
- Cerebrovascula crisis
- Strokes
- Violence



Methamphetamine teeth

- Only relevant smoking
- Residue chemicals or reaction?
- Grinding?
- Sugary drinks?
- Bad hygiene & ill health?



Methamphetamine & HIV

- **Injectors at risk** (but in EU some evidence of lower levels of infection than opiate injectors – difficult interpret)
- **Associated with sexual risk behaviour**
 - High risk acts
 - Loss control, lower inhibitions
 - Sex of long duration (trauma associated with STD –HIV)
 - Possible sub cultural association with high risk behaviours (especially among MSM)



Historical context - MA

- First synthesised in 1919 by Japanese chemist A. Ogata (amphetamine 1887)
- Temmler pharmaceutical company in Berlin: “Pervitin” since 1938
- Distributed to Allied and Axis troops WWII
 - Some leakage into post war civilian population (Japan)
- 1940s-60s “Methedrine” (desoxoepedrine) by Burroughs and Wellcome used to treat a range of conditions
 - Narcolepsy, parkinsons, alcoholism, cocaine addiction, neurosis, depression, obesity...
 - 2.5% all prescriptions in UK 1961



History illicit use - Europe

- From 1950s ---1960s diverted amphetamine & methamphetamine pills, (mods rockers, bohemian groups London).
- London 1968 epidemic of intravenous use and MA related psychosis
- 1970s MA prescriptions controlled – diverted pharmaceuticals replaced with illicitly produced amphetamine sulphate
- 1980s MA virtually disappears (from view?)



Pervitin in the Czech Republic

- Illegal production began early 1970s
- VUAB factory major producer ephedrine 1971-2003
- Estimates PDU from late 1980s 25-30,000
- Originally producer consumer cooperatives
- Development drug market
- Mostly chronic users and injectors
- Today situation probably stable (?) (2.6 -3 cases per 1000)



Stimulants in EU

- Stimulant drugs — such as amphetamines, ecstasy and cocaine — 2nd most commonly consumed drug type in Europe today, after cannabis
- Cocaine use now greater but more geographically limited
- Data reveal a very mixed picture in terms of prevalence, trends and market developments
- To some extent can be viewed as competing substances — often used for instrumental purposes (facilitating socialising, staying up late, dancing & sex)



Europe: Contemporary patterns of use

- Injecting amphetamine use well established part drug in Nordic countries,
- Recreational and some chronic use of amphetamines many countries
- MA - Czech Republic and Slovak Republic
- Ice (crystalline methamphetamine) smoking appears very rare

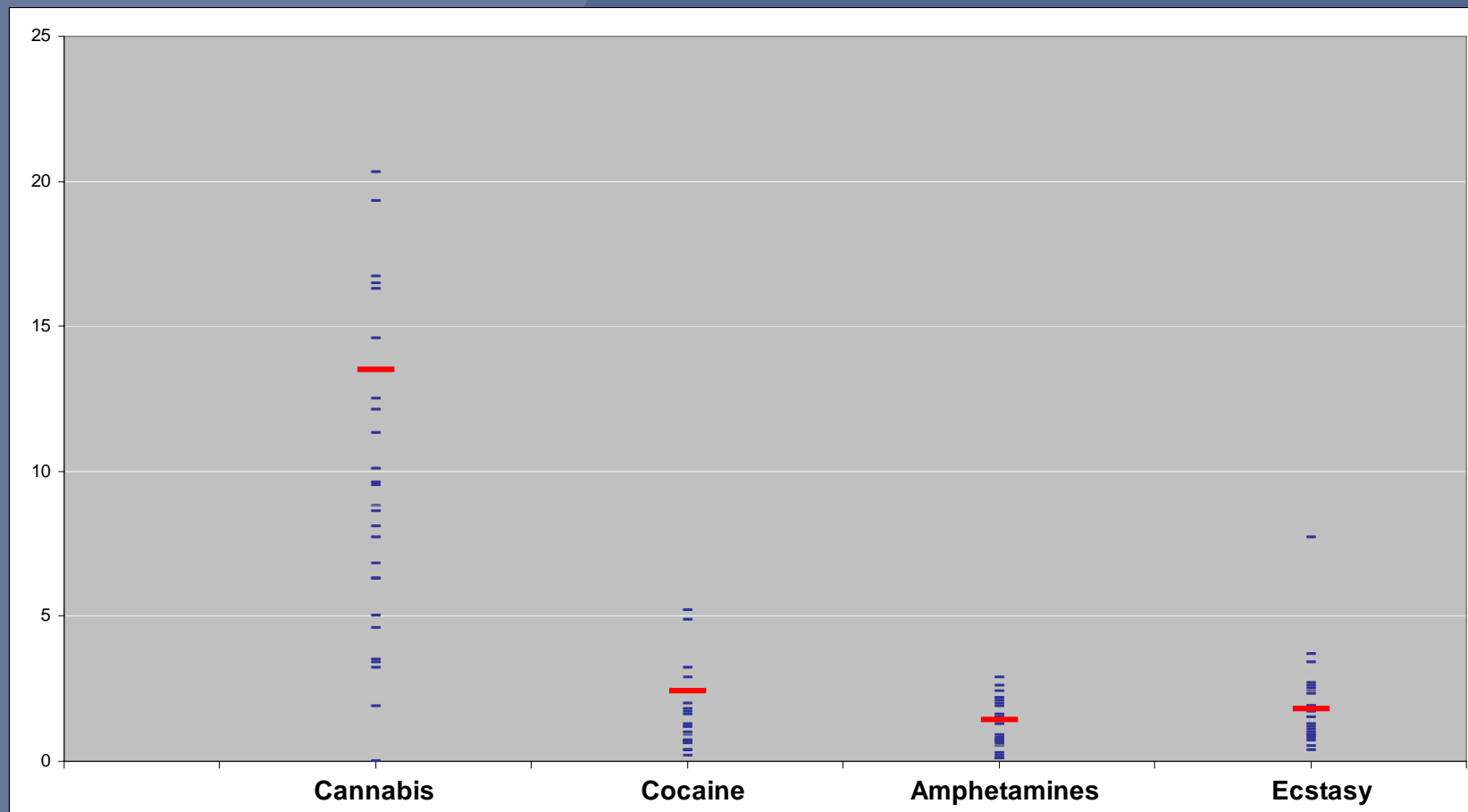


Amphetamines (adult prevalence 2007)

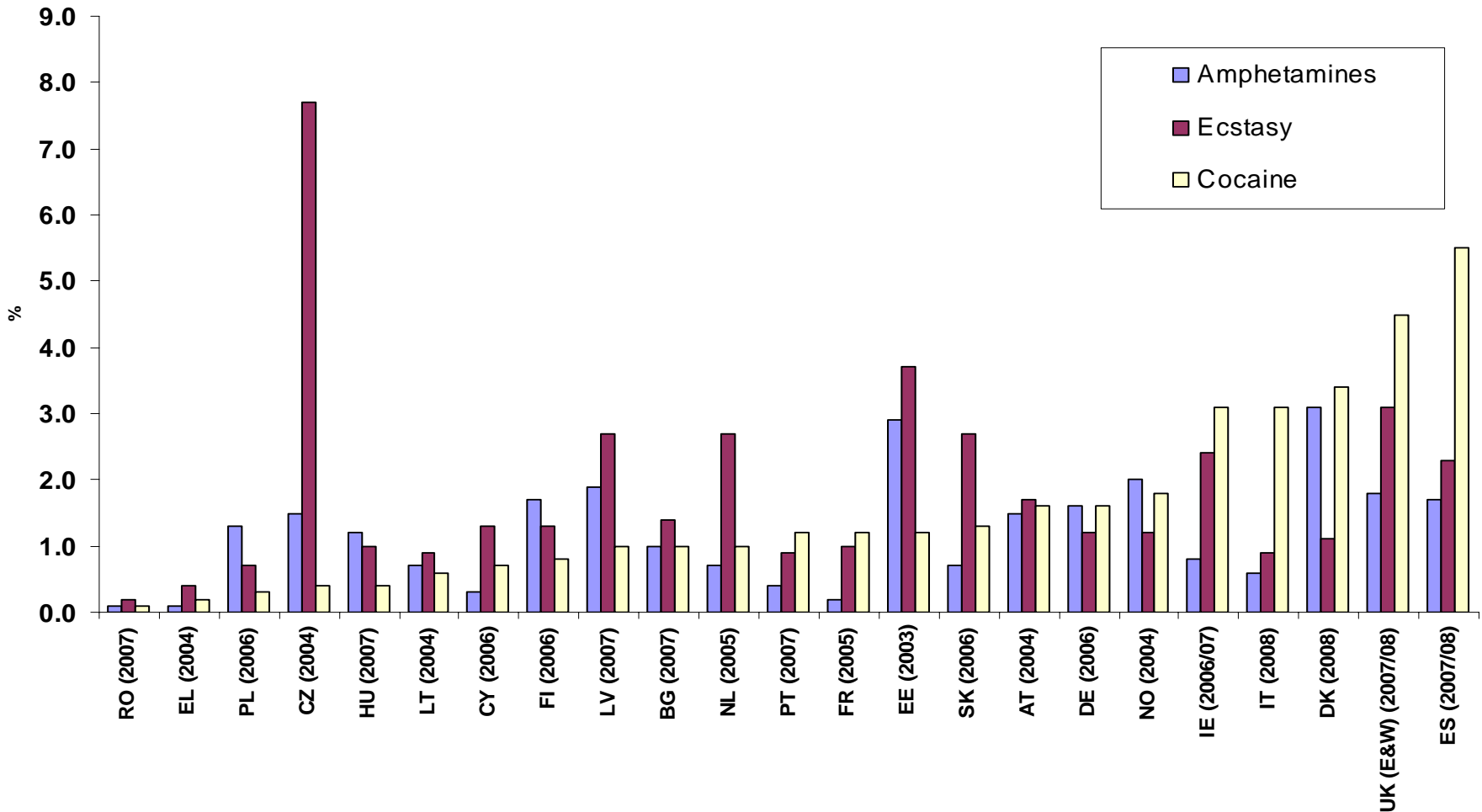
- Ever used 12 million
- EU Average LTP 3.5% (max -12%)
- Last year 2 million
- EU Average LYP 0.6% (max 1.3%)
- High prevalence countries – UK, Denmark, Spain, Norway Estonia
- Low prevalence countries – Romania Greece, Malta, Cyprus France



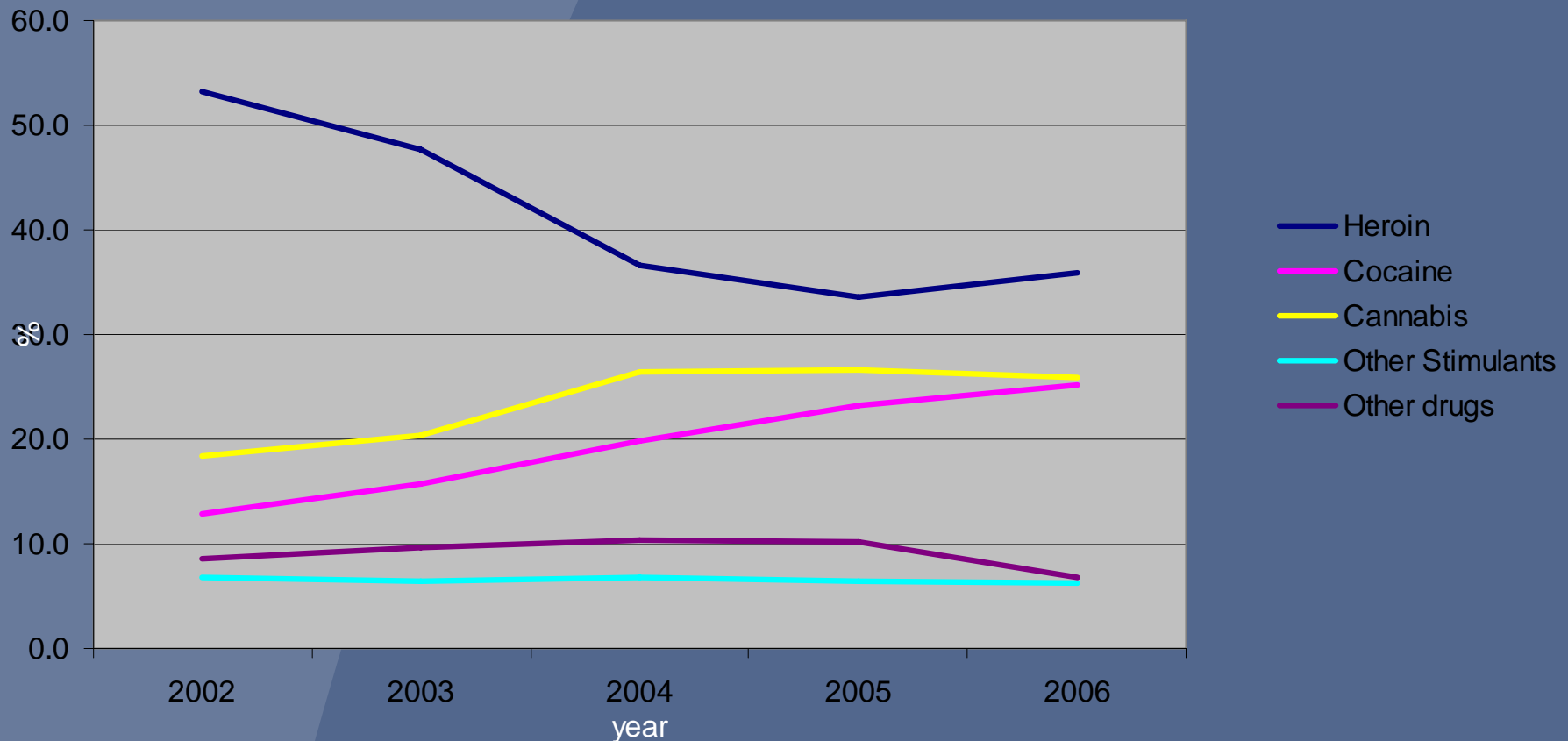
Overview of last year drug use prevalence for young adults (aged 15 to 34) in Europe



Last year prevalence of amphetamines, ecstasy and cocaine among young adults (aged 15 to 34)



Proportion of main drugs for clients asking for O.P. treatment (new treatment demands)



MA – Czech republic & Slovak republic.

- Czech Republic: General population (15-64) 2004
 - LTP. 2.5%, LMP 0.7% LMP 0.2%,
 - Estimated 17 500 – 22 500 problem MA users (2006);
 - most are injectors (80%)
 - 60% of those seeking treatment primarily MA problem
- Slovak Republic 2006:
 - 6 000-15 000 problem methamphetamine users
 - Since 2004: methamphetamine has become the most common primary drug among those demanding treatment (2006 first treatments 30%)



MA focused studies in special groups

- Slovakia 2005 survey in music festivals and the 'party scene' in (15-29)y: LTP 27%, LYP 19% and LMP 10%
- CZ 2003 survey among 'party goers': 41%, 25% and 14% (LTP, LYP and LMP, respectively); most sniffing
- UK: Mixmag annual survey 2000-2003: LTP 4% - 7%, LMP 0.4-1.6%
- UK: MSM between 2002 and 2005: 8.3% to 20.7% LYP year use in 3 groups. Mostly 1-2 occasions and no signs of increase



MA focused studies in special groups

Norway:

- Road traffic cases: increase in methamphetamine (2003: around 10%, 2006: around 20%)
- In prisoners: increasing number of methamphetamine cases (but remains at around 2%)

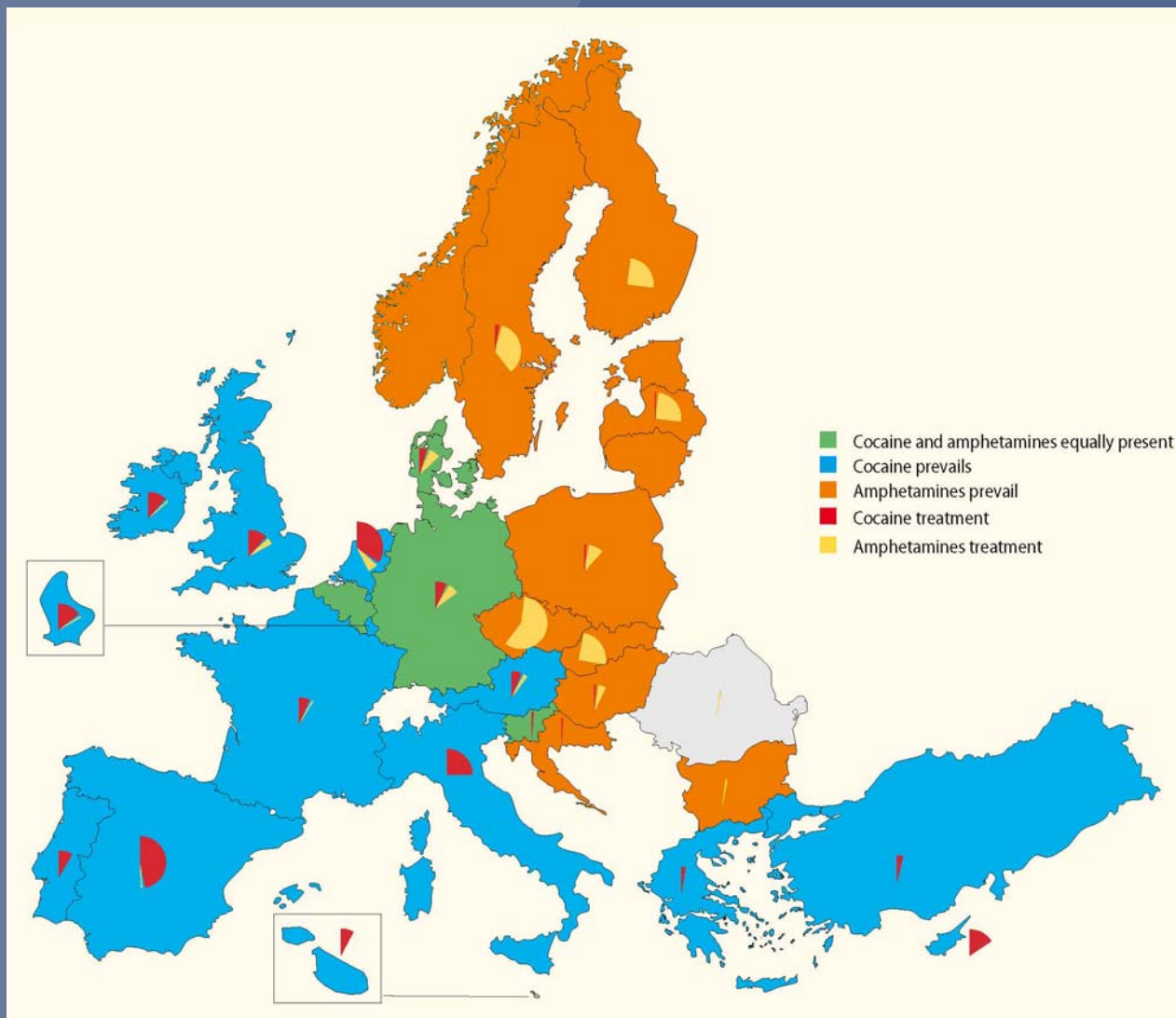


Europe's divided stimulant market

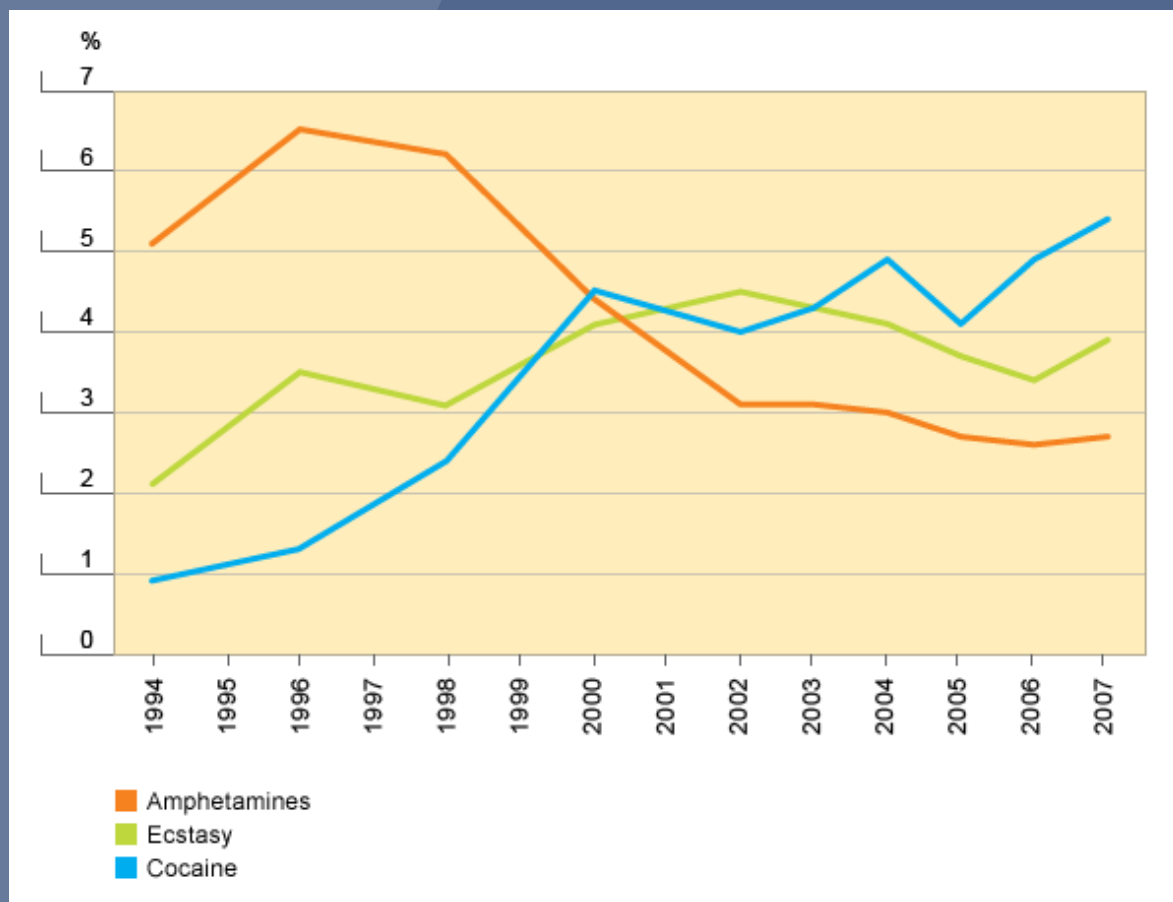
- Cocaine dominates the illicit stimulant market in the west and south of Europe, but elsewhere use and availability are low
- In most northern, central and eastern Member States, amphetamines are the prevailing stimulant
- Cocaine and amphetamines: 'competing products' on the European illicit drug market?
- A holistic approach to stimulants is needed (rather than focusing on individual substances)



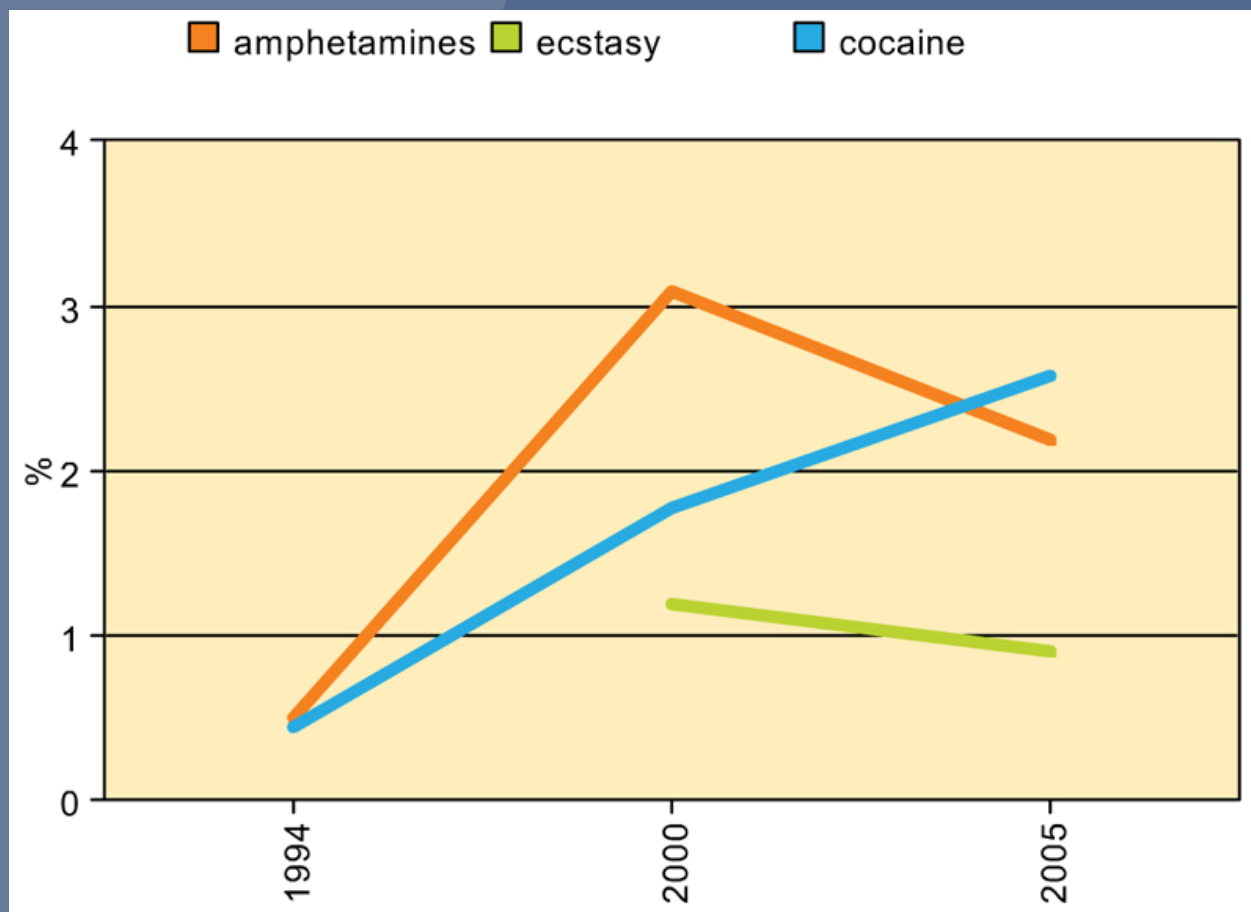
Chapter 4: The European stimulant market



Trends in last-year prevalence of amphetamines, ecstasy and cocaine among young adults (15–34 years) in the United Kingdom (E&W) (Figure GPS-23, i)



Trends in last-year prevalence of amphetamines, ecstasy and cocaine among young adults (15–34 years) in Denmark (Figure GPS-23, ii)



Methamphetamine diffusion

- Only sporadic reports from high risk groups-settings (recreational & chronic use)
- Do not appear to be getting worse
- Most Indicators not registering
- Consumer resistance
- Supplier resistance?
- Crowded market
- Large market stimulant drugs
- Media attention provokes interest
- Easy to produce
- Evidence of increased – seizures, spread production sites and innovation in market
- Leakage ...
- Population mixing



Conclusions

- Overall stable or in some countries declining trend in amphetamine use
- No strong evidence of significant methamphetamine diffusion outside areas historical high prevalence
- But...
 - Some evidence of creep into neighbouring countries
 - Worrying reports on production innovation
 - Considerable potential for increase in problems in the future



