



**LISBON  
ADDICTIONS  
2022**

● Insights into acute recreational drug and new psychoactive substance toxicity – an update from the Euro-DEN Plus Project

15:00 to 16:30 📍 Central square 2 (C2)

👤 Paul Dargan



# Insights into acute recreational drug and NPS toxicity: an update from the Euro-DEN Plus Project

Professor Paul Dargan

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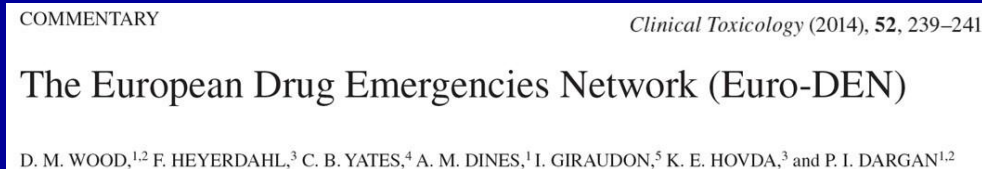
# Declaration of Interest

## Euro-DEN Research Funding

- 2013 – 2015:
  - Financial support from the European Commission DPIIP Programme
- 2016 – date:
  - Financial support from the EMCDDA

# Euro-DEN: The European Drug Emergencies Network

- Limited systematic data on acute drug toxicity
  - Acute drug toxicity is not an EMCDDA key indicator
  - Key public health gap in the understanding of the public health impact of drug use
- Euro-DEN: formed in 2013
  - *Sentinel* centre model: Emergency Departments (EDs) with clinical toxicology expertise
  - *Systematic* and *structured* data on acute drug / NPS toxicity presentations to European EDs



# Euro-DEN: The European Drug Emergencies Network

- Data collection on all ED presentations with acute recreational drug toxicity
  - Clinical features consistent with acute drug / NPS toxicity or acute toxicity related to prescription medicine misuse
- Euro-DEN minimum dataset (54 parameters) collected from clinical notes
  - Entered onto Excel spreadsheet and data returned to London for collation
  - In process of upgrading to REDCap
- Drug(s) involved: patient self-report with clinical interpretation
  - Drug screening data (~20% cases), only when undertaken as part of routine clinical care

COMMENTARY

*Clinical Toxicology* (2014), **52**, 239–241

## The European Drug Emergencies Network (Euro-DEN)

D. M. WOOD,<sup>1,2</sup> F. HEYERDAHL,<sup>3</sup> C. B. YATES,<sup>4</sup> A. M. DINES,<sup>1</sup> I. GIRAUDON,<sup>5</sup> K. E. HOVDA,<sup>3</sup> and P. I. DARGAN<sup>1,2</sup>



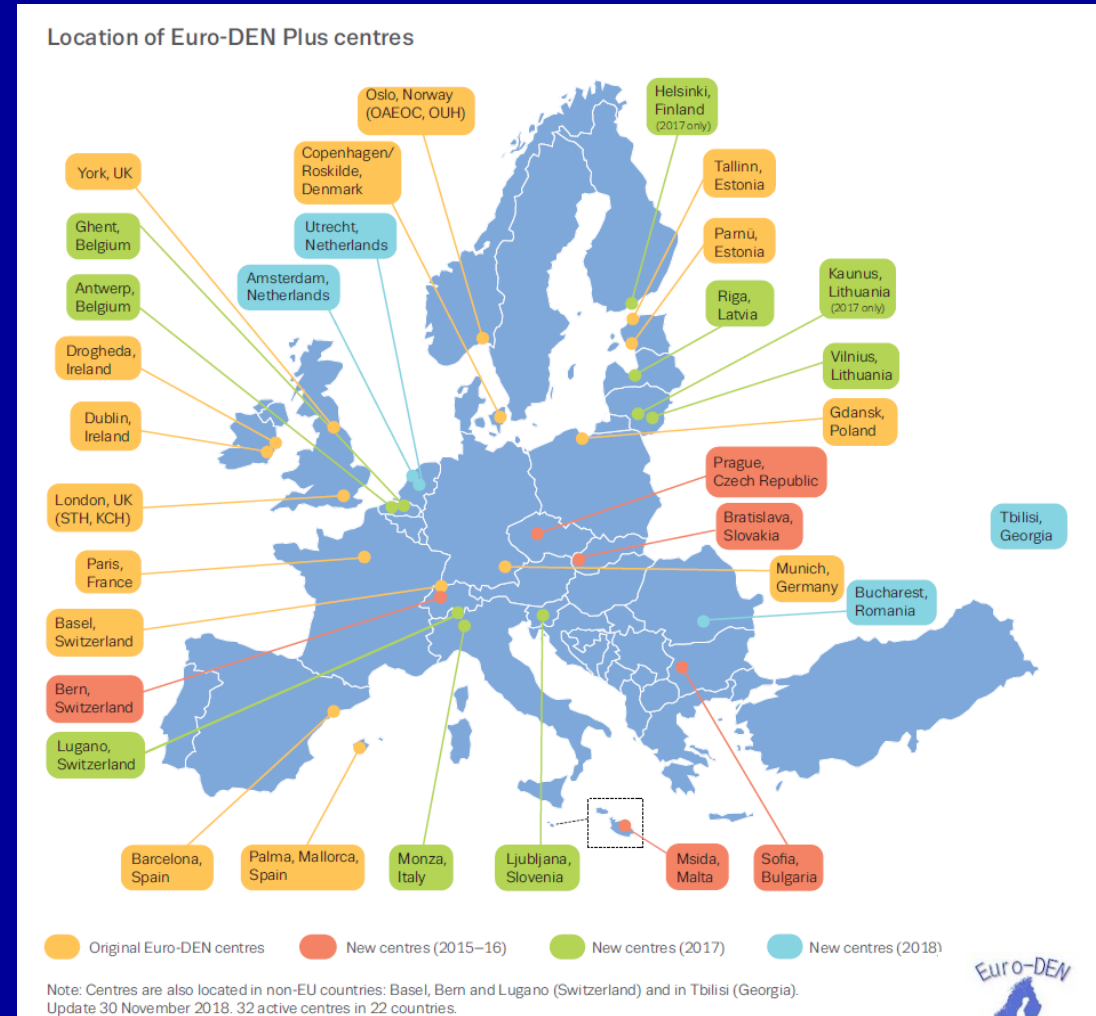
NHS

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NHS Foundation Trust

# Euro-DEN Plus

- Continued expansion of the network
  - 29 active sentinel centres, 24 countries
- Data on ~ 8,300 presentations per year, > 68,000 in total
- Pilot data collection in European Neighbourhood and Pre-Accession countries: EU4MD/IPA7 projects

**Drugs beyond EU borders:  
emerging trends and preparedness**



European Monitoring Centre  
for Drugs and Drug Addiction

Guy's and St Thomas'  
NHS Foundation Trust



Euro-DEN Plus: EU4MD and IPA7 – 2021 Pilot Project



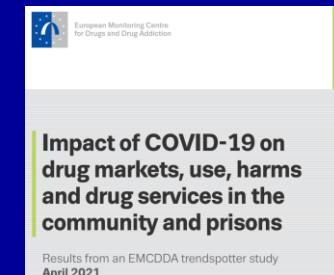
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# Euro-DEN Plus Outputs

- European Policy and Monitoring:
  - European Drug Report since 2015
  - EMCDDA outputs e.g. trendspotters, technical reports
  - EMCDDA website open access for key data
    - Interactive maps, 6 monthly data updates
    - Will be live in next few weeks
- Academic:
  - 23 peer-reviewed papers 2013 to date

A unique insight into acute health harms is provided by hospital emergency data

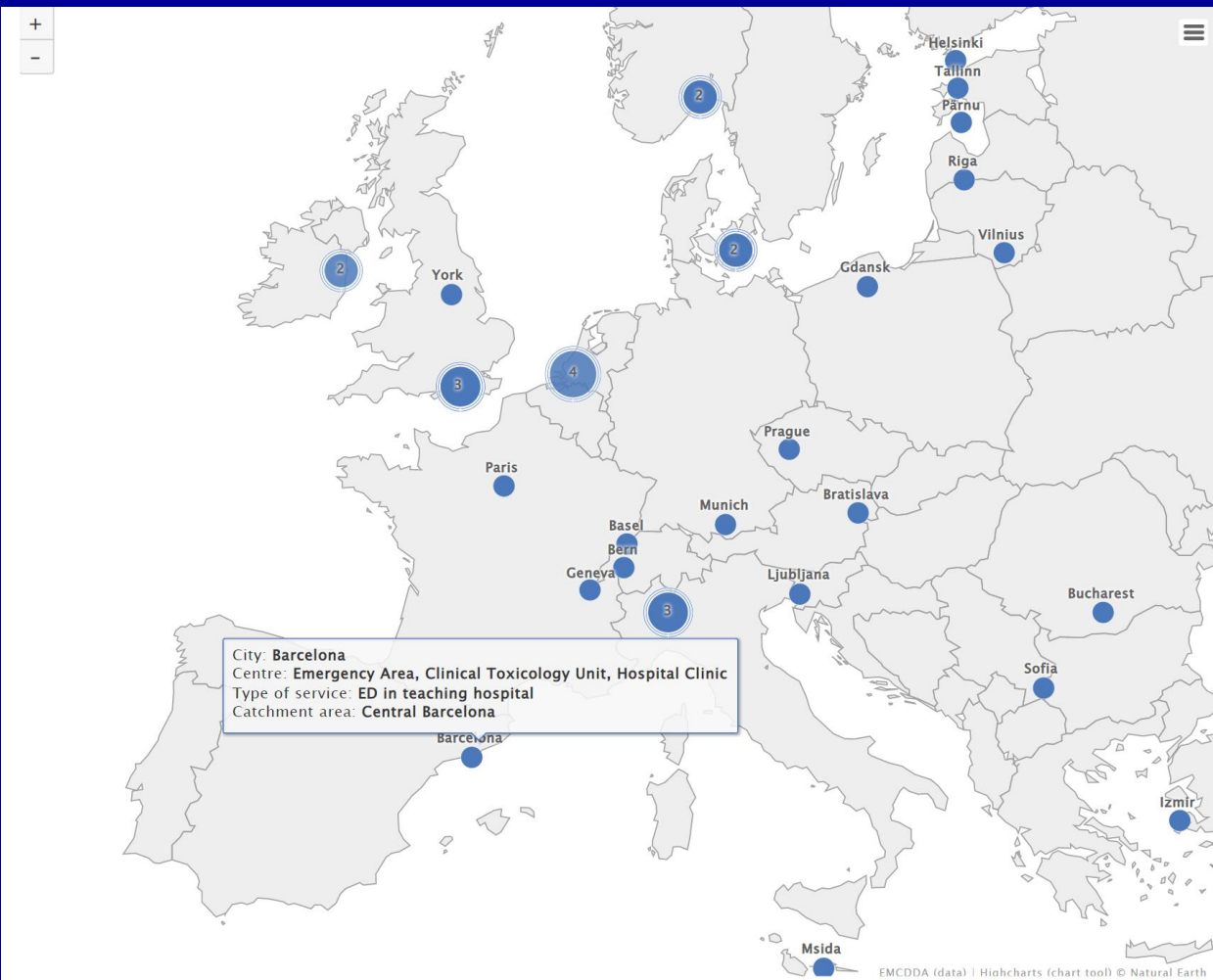
HOSPITAL  
EMERGENCIES



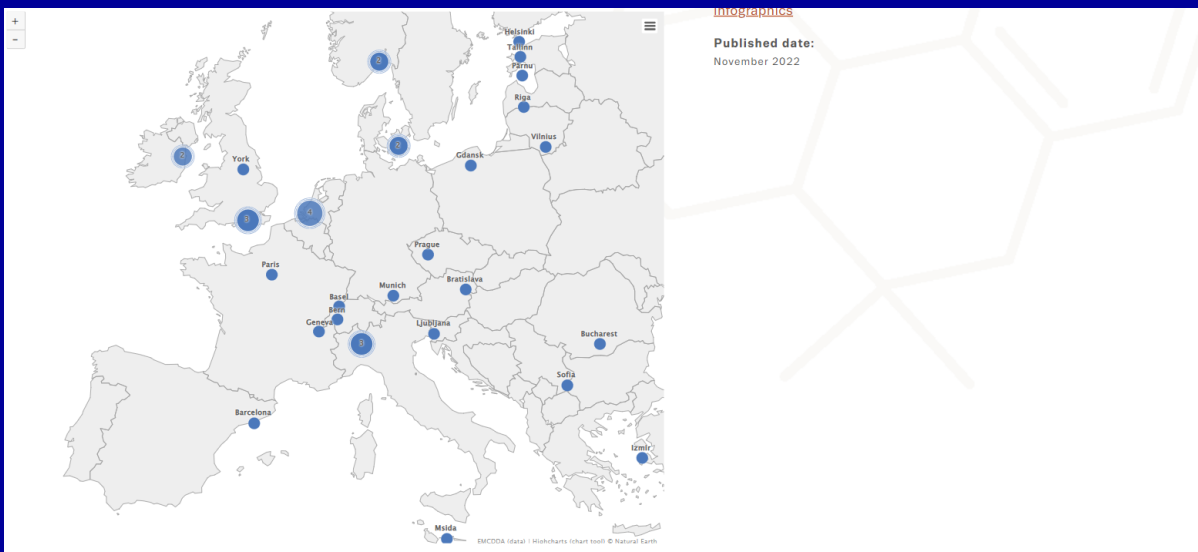


# Euro-DEN Plus: EMCDDA Website Interactive Maps

## Location and Information on Sentinel Centres



The source data for this graphic is available in the [source table](#) on this page.

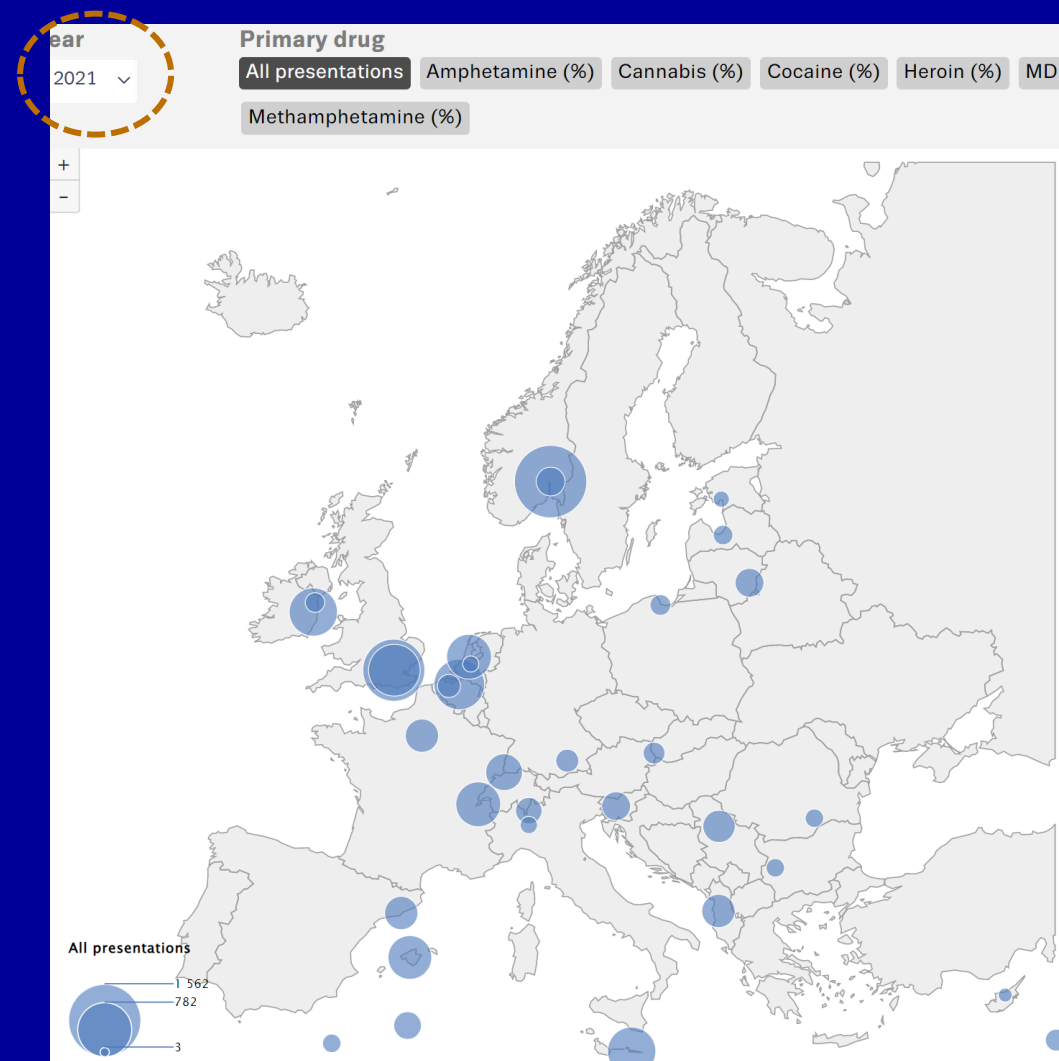
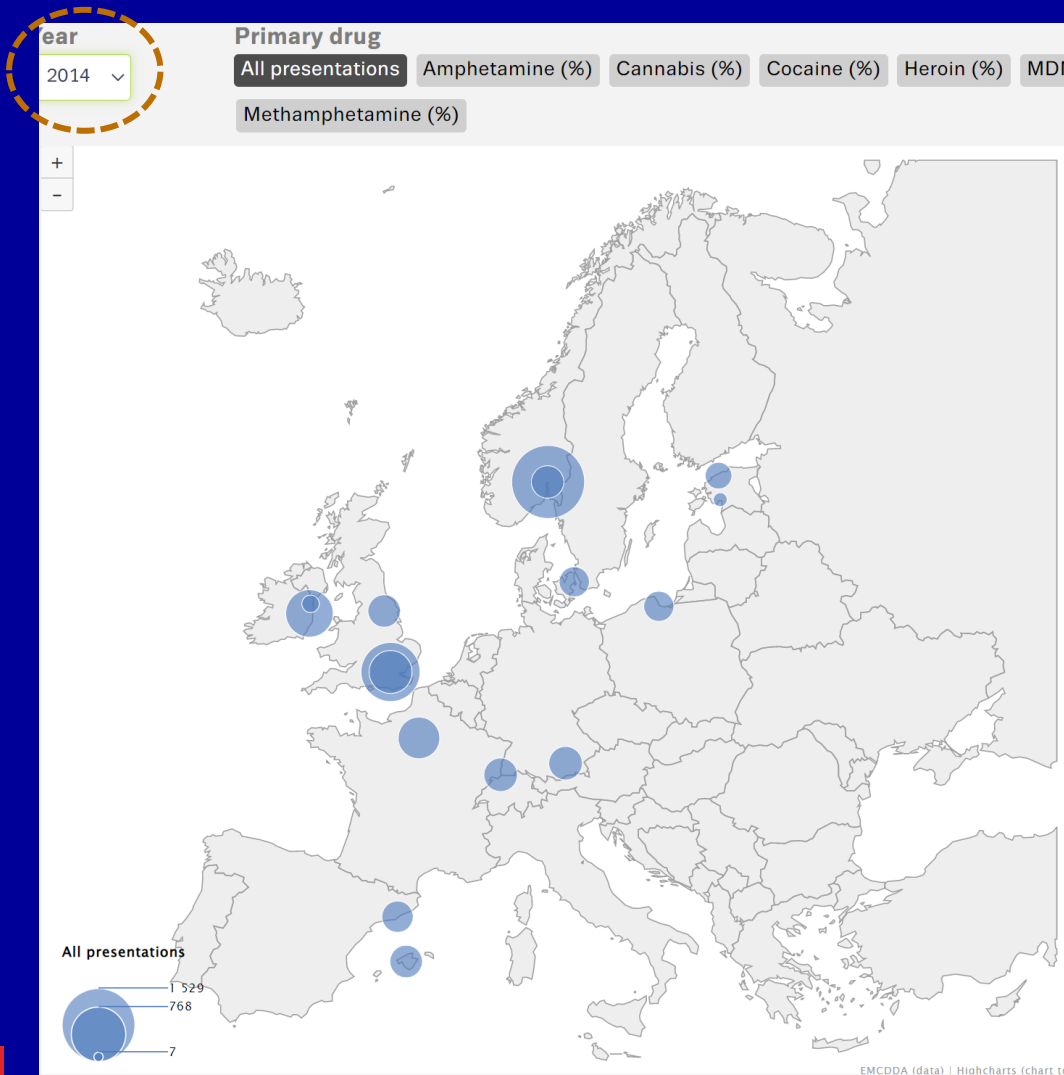


The source data for this graphic is available in the [source table](#) on this page.

Country	City	Coordinates	Centre	Type of service	Catchment area	Type of people using drugs	Number of beds	Estimates population served (n)	Emergency department and referral	Other comment
Belgium	Antwerp	51.2,4.4	ZNA Stuivenberg	ED in general hospital	Central and northern. Antwerp Metropolitan Area 40 km <sup>2</sup>	Urban ED. With both long-term drug users and recreational use	250	500000	Patients managed by ED. With referral to ICU, internal medicine or psychiatry as required.	Part of Ziekenhuis Network Antwerpen (ZNA), a 2500 bed hospital on 10 sites in Antwerp Metropolitan Area
Belgium	Ghent	51.1,3.7	Ghent University Hospital	ED in university hospital	City of Ghent	Located in city with very large student population (63 000	1000	200,000	All poisonings are treated by the emergency	No dedicated toxicology department.

# Euro-DEN Plus: EMCDDA Website Interactive Maps

Number of presentations and drugs involved

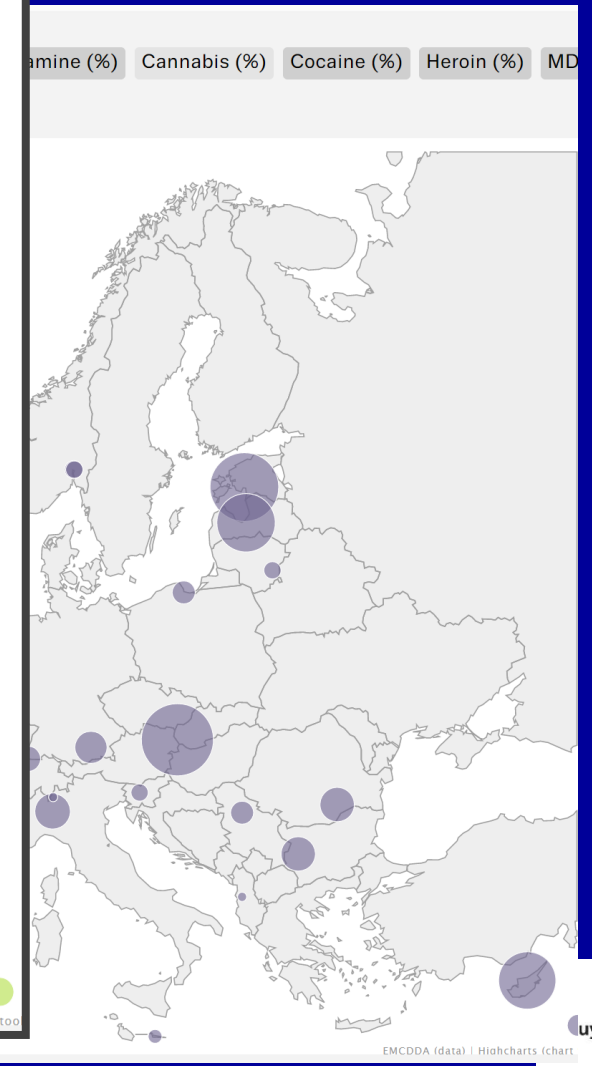
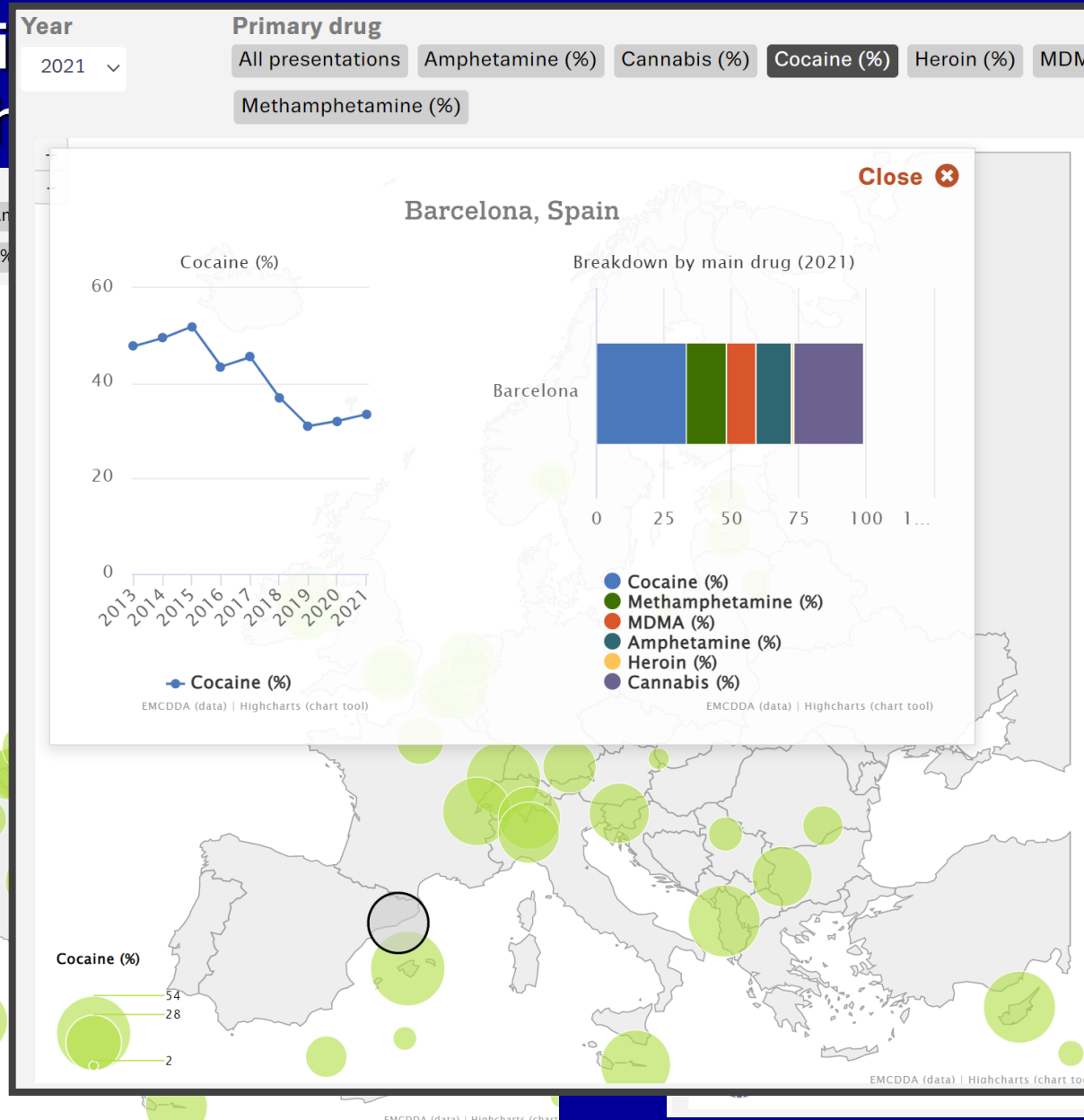
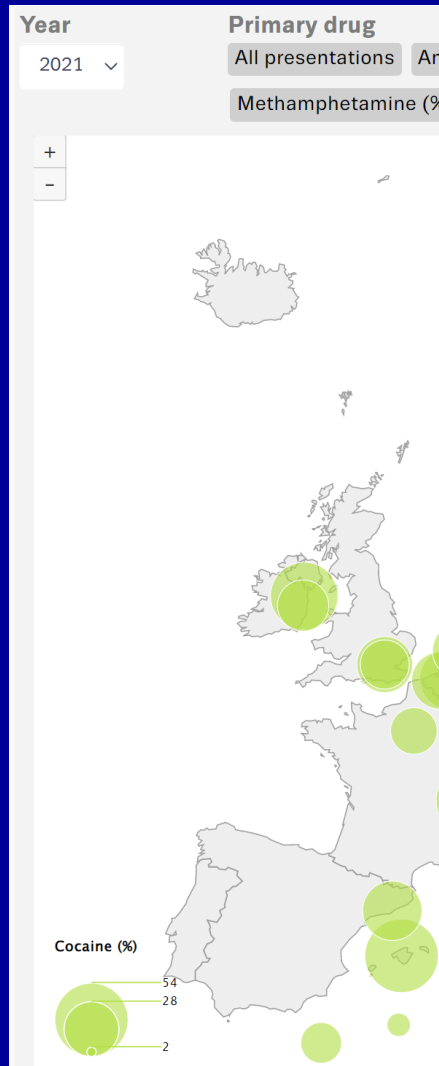


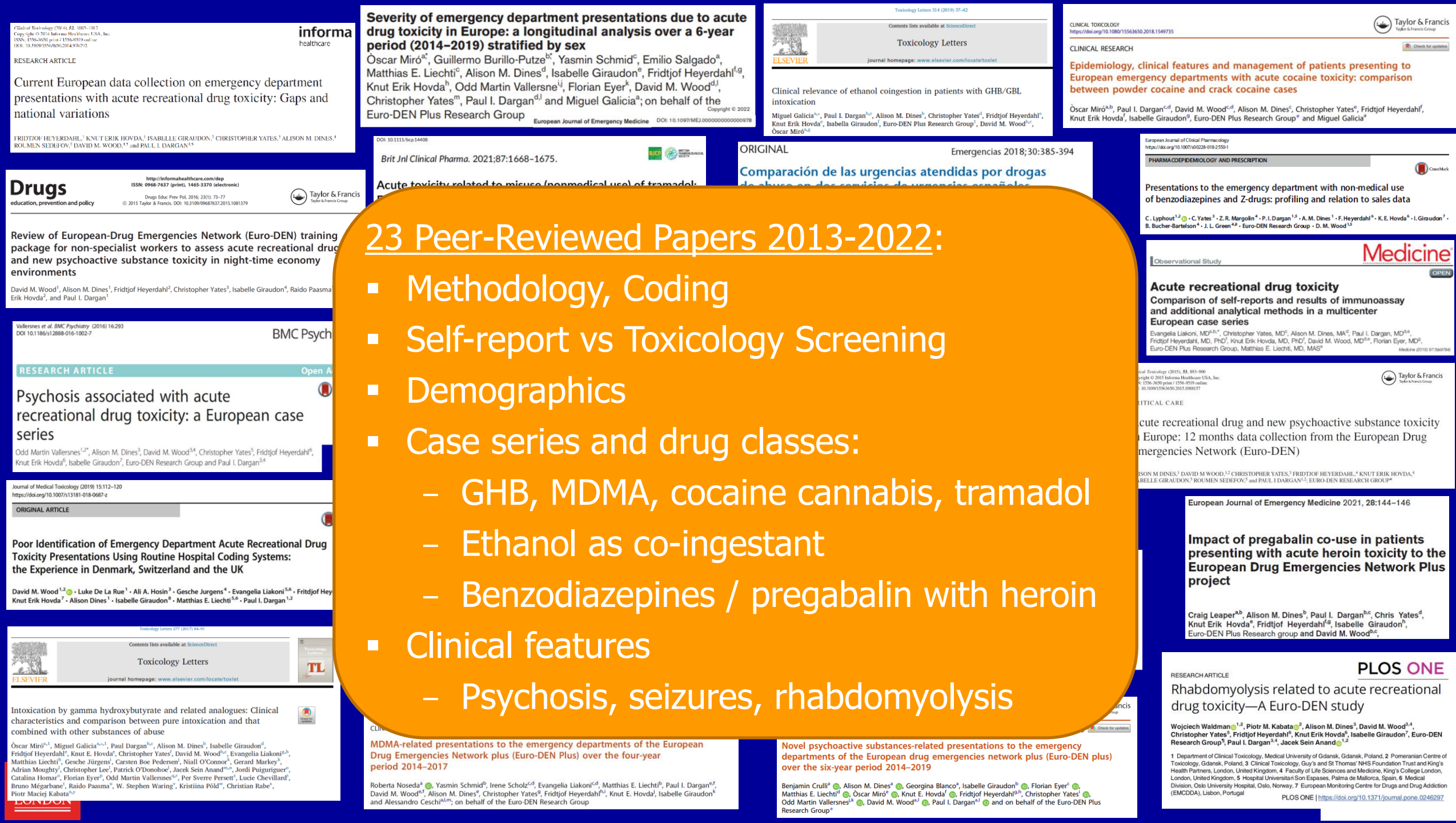


# Euro-DEN Plus: EMCDDA Website Interactive Maps

2021: proportion  
with

of presentations  
amphetamine





## 23 Peer-Reviewed Papers 2013-2022:

- Methodology, Coding
- Self-report vs Toxicology Screening
- Demographics
- Case series and drug classes:
  - GHB, MDMA, cocaine cannabis, tramadol
  - Ethanol as co-ingestant
  - Benzodiazepines / pregabalin with heroin
- Clinical features
  - Psychosis, seizures, rhabdomyolysis



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Oral presentation

**1. New Psychoactive Substance Presentations to the Euro-DEN Plus Network**

15:00 to 16:30    📍 Central square 2 (C2)    👤 Benjamin Crulli

Oral presentation

**2. The clinical impact of ethanol co-use in patients with acute drug toxicity involving the use of central nervous system depressant recreational drugs**

15:00 to 16:30    📍 Central square 2 (C2)    👤 Eva-Carina Heier

Oral presentation

**3. Variation in the drugs involved in acute drug toxicity presentations based on age and sex within the Euro-DEN Plus dataset**

15:00 to 16:30    📍 Central square 2 (C2)    👤 Òscar Miró

Oral presentation

**4. Deaths among acute drug toxicity presentations to the Euro-DEN Plus Network, 2014-2020**

15:00 to 16:30    📍 Central square 2 (C2)    👤 Isabelle Giraudon