



European Monitoring Centre
for Drugs and Drug Addiction

Trendspotting in Europe: taking a multidimensional view of emerging drug trends and threats

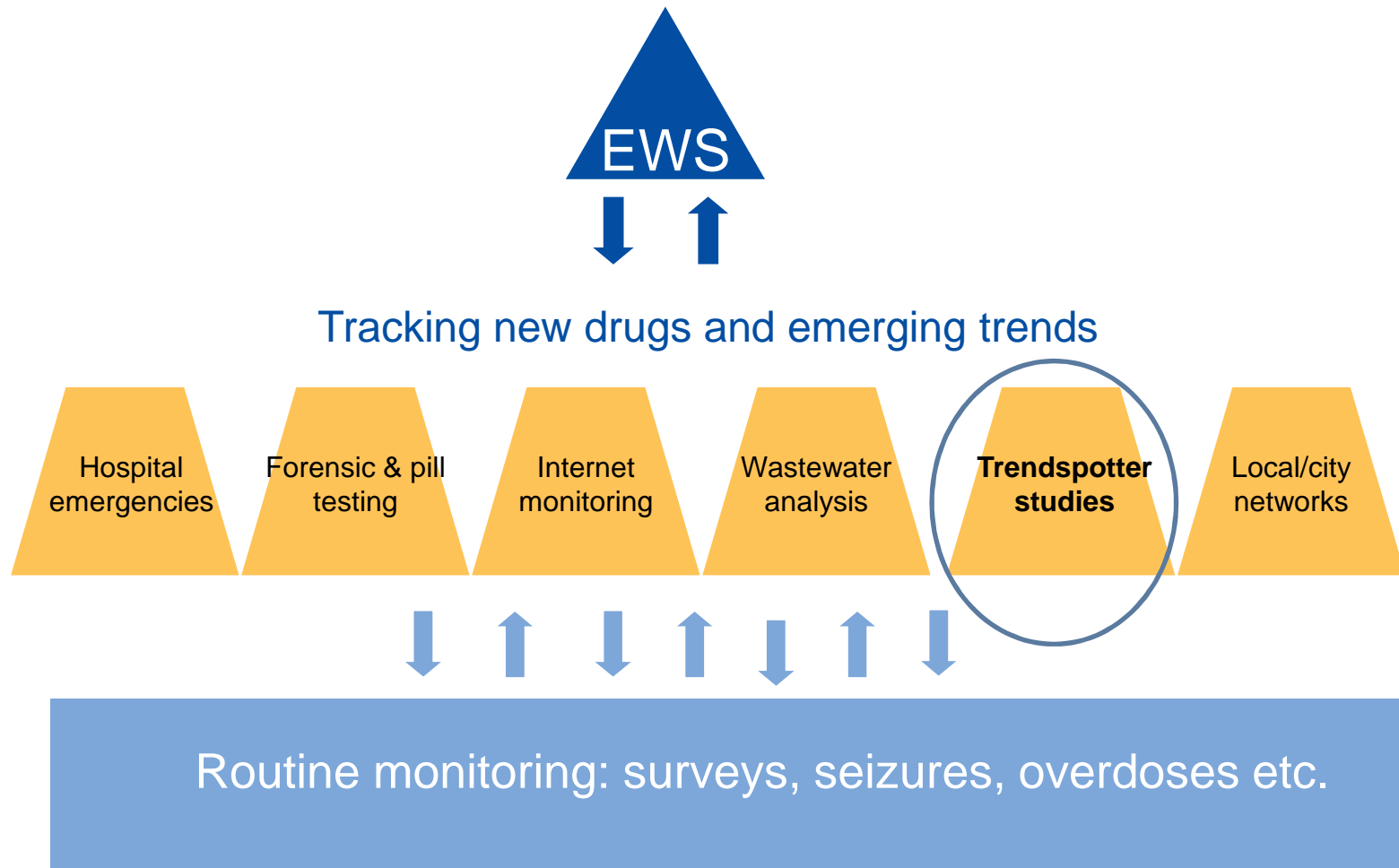
Jane Mounteney

EMCDDA

GPS meeting, June 2017

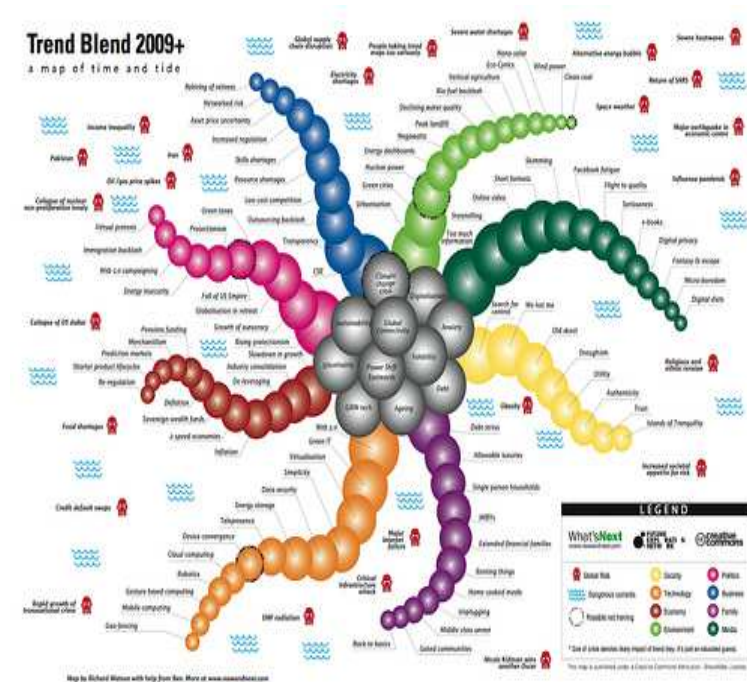


New tools in the monitoring toolkit



Trendspotter studies — concept

- In depth information gathering
- On subject of concern, uncertainty
- To fill gaps and complement
- More timely and rapid reporting

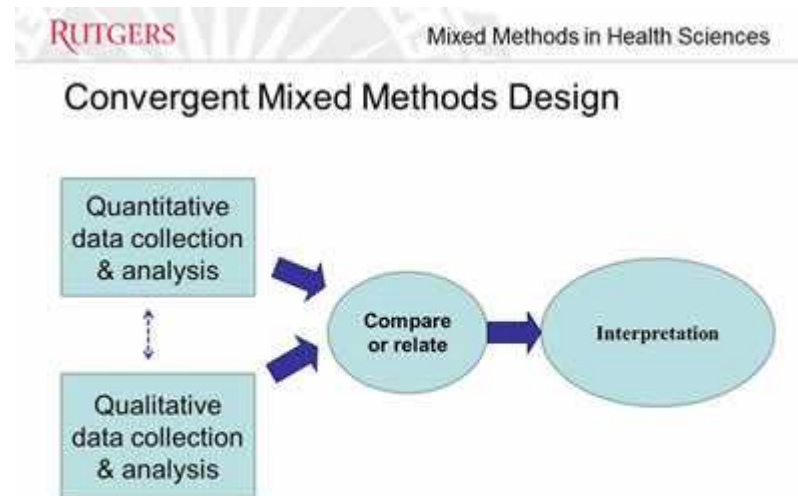


Trendspotter methodology

Draws on mixed methods approaches and rapid assessment methodologies

Multi-source, multi-method, triangulation:

- Literature review
- Data collection
- Electronic survey
- Expert presentations
- Focus groups
- Social media



Trendspotter study process

Phase 1

EMCDDA data collection,
literature review

Electronic survey
Network survey
Social media

Phase 2

Expert presentations
x15 &
EMCDDA

Focus/
discussion
groups

Report

ANALYSIS



Study analysis – trend confirmation

RECENT (2 years) CHANGES IN THE ECSTASY/MDMA MARKET - for EMCDDA data 4 years interval can be used												
Country	SUPPLY					USE			HARMS		TREATMENT	
	Availability	Seizures (Number)	Seizures (Amount)	Purity	Production	Online market	GPS	Special population	Wastewater analysis	Non-fatal intoxications (including emergency cases, eg. Euro-DEN data)	Number of deaths	Clients in specialized treatment
Belgium												
EMCDDA		4	4						4			5
expert				4			4	3		4		3
expert	5				5							
expert	5			5	5	5	4	4		5		4
Netherlands												
EMCDDA							1		5			2
expert	5			Don't know	5	5	4	3		5		3
expert	5			3	5		4	Don't know		3		4
expert	4			5		5	4	4		4	Don't know	
Spain												
EMCDDA		5	5				3		3			5
expert	3			5	5		3	3		Don't know	Don't know	
expert	4			4	5	5	4	4		4		2
NFP	5				3		3			4		3
France												
EMCDDA			5				5		2			5
expert	4			5	5	5	4	4		Don't know		4
NFP	5			5	3		5	Don't know		4		4
Portugal												
EMCDDA												3
expert	4			4		5	4	4		3		4
NFP	4			3	3							
United Kingdom												
EMCDDA							4		4			4
expert	5			5	5	3	4	4		4		4
Turkey												
EMCDDA												5
expert	5			3	5							5
Norway												
EMCDDA		1	5						5			
expert	5			5	5		Don't know	Don't know		Don't know	Don't know	
NFP	4			4								3
Croatia												
EMCDDA		5	4						5			5
NFP	4			4	3					Don't know		3
Austria												
EMCDDA		5	3									4
NFP	4			4			3	3		Don't know		3

- 2011: Heroin shortages in Europe
- 2012: Fentanyl outbreaks in Europe
- 2013: Methamphetamine availability, use and harms
- 2014: Internet and drug markets
- 2015: MDMA market changes
- 2016: NPS and high risk drug use







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MDMA market changes



Rationale:

Signs of increased availability, use, high purity & adulterated tablets, harms and deaths.

Study objective:

- Increase our understanding of recent changes in the MDMA/ecstasy market in Europe
- Levels and patterns of use; products and supply; harms and deaths.
- Identify implications for responses and monitoring.



MDMA experts

- Outreach/festival services
- Law enforcement/forensics
- Pill checking
- Wastewater monitoring
- Ethnographers
- City-level/local monitoring
- Emergency room data
- Drug-related deaths

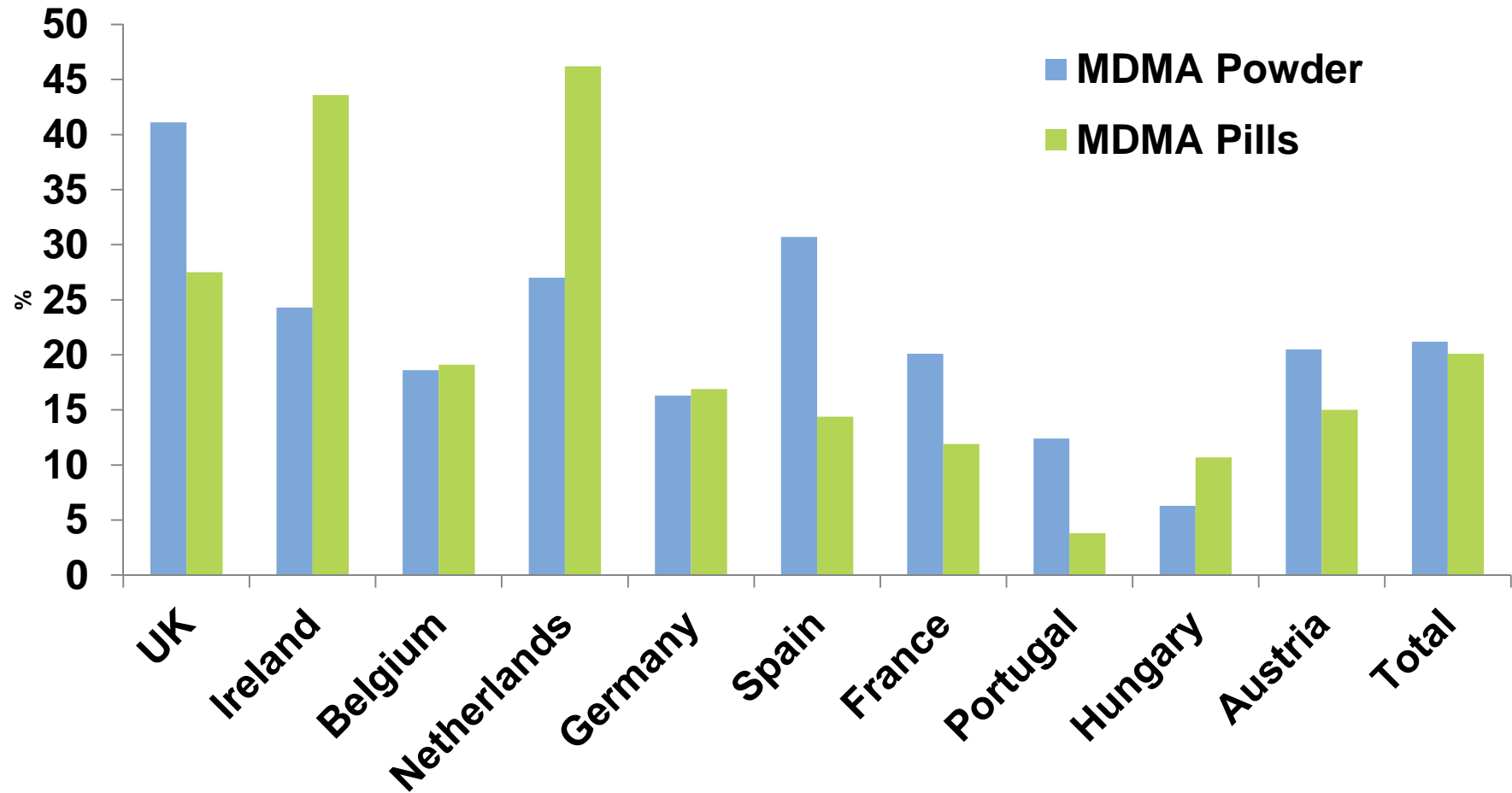


MDMA use: higher in targeted surveys

	% LYP	% GPS
Lithuania (nightlife visitors)	2.4	0.3
Slovakia (university students)	3.2	0.9
Frankfurt (MOSYD)	4	0.9 (Germany)
...		
Global Drugs Survey	36.6	-



Type of MDMA preparation varies



(GDS 2015)



MDMA – range of products

Tablets

contain binders/fillers, normally microcrystalline cellulose

Crystals

translucent white - brown; coarse structure - not adulterated

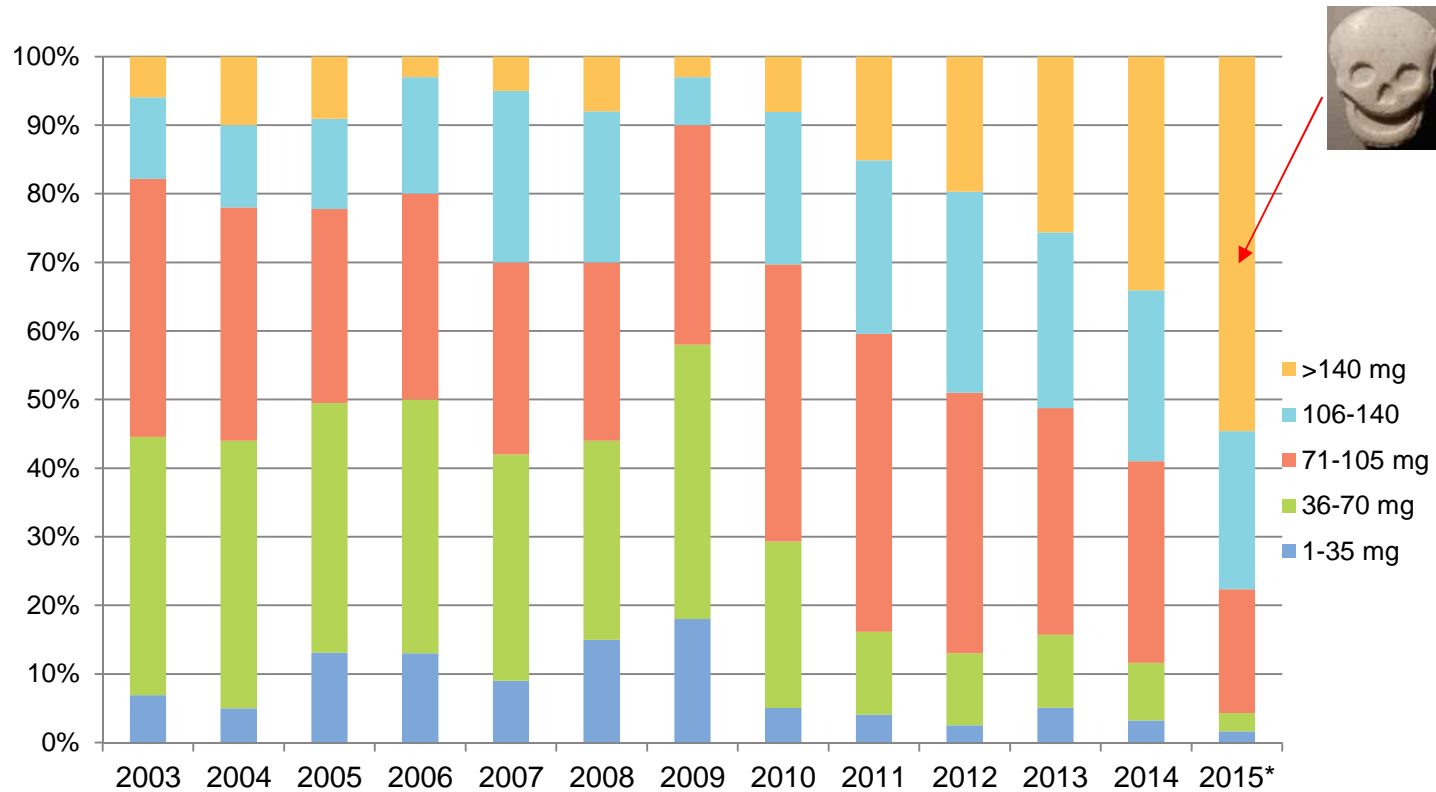
Powders

(finely crushed crystals) white with a “crystalline” shimmer; used orally by “dabbing” – may be adulterated

...capsules may contain crystals or powders



Increase in % MDMA content in pills (DIMS)



Alerts – both tablets with high MDMA content, and containing PMMA

22st July 2011



Drug Alert

PMMA

(ParaMethoxyMethylAmphetamine)

PMMA is a Class A drug which is known to be circulating in Scotland. It is a very toxic stimulant and has been found in tablets that may look like ecstasy and 'legal highs'.

Since last summer, PMMA has been responsible for 19 deaths on the European mainland.

From forensic analysis, we know that PMMA is present in pink tablets with a Rolex Crown logo and white tablets with a four-leaf clover logo. Some products claiming to be 'legal highs' have also been found to contain PMMA – see images. We know that PMMA has been identified in powder form too and it is possible that PMMA will be present in many other illicit products and tablets with other logos.

The stimulant effects of PMMA are not as potent as MDMA (ecstasy) so users may feel inclined to take more, thereby increasing the risk of a fatal overdose.

Users are strongly advised to avoid the products listed.

For information and advice about drugs and their risks visit:

www.knowthescore.info or ring KtS free on 0800 587 587 9

<p>Rolex tablets</p> <p>Courtesy of the Norwegian Focal Point</p>	
<p>Four-leaf clover tablets</p> <p>Courtesy of the Netherlands Forensic Institute</p>	
<p>'E=XTC'</p>	
<p>'Mind Candy'</p>	
<p>'Xtacy ULTRA'</p>	
<p>'Doves Red'</p>	<p>White tablets - No image</p>
<p>'Doves Red Ultra'</p>	<p>Grey tablets - No image</p>

Regional differences in purity

INCREASE- NL, BE, FR, UK

- 60-100 mg (2012/13) → 150-200 mg (2014/15)
 - 100 mg (2013) → 125 mg (2015)
 - 50-80 mg (90s) → 125 mg (now)
- ‘Super pills’ – 278 mg -341 mg

No change or decreases- LV, LT

Location specific?? Different sources of supply?



Source: saferparty.ch



Presentations with Acute MDMA Toxicity to 16 Euro-DEN Centres in 10 European Countries Oct 2013 - Dec 2014

Cathelijne Lyphout, David Wood, Alison Dines, Paul Dargan

Isabelle Giraudon presenting on Behalf of the Euro-DEN Plus Steering Group



Conclusions

- MDMA involved in ~ 8% of acute drug toxicity ED presentations to Euro-DEN Centres
 - Significant variation around Europe
- Typically male individuals in mid 20s
- Moderately severe toxicity with stimulant pattern
 - >30% agitation, 10% chest pain
- Most patients discharged from ED within 12 hours
 - 5% critical care
 - ~3% hyperthermia: poorer outcome

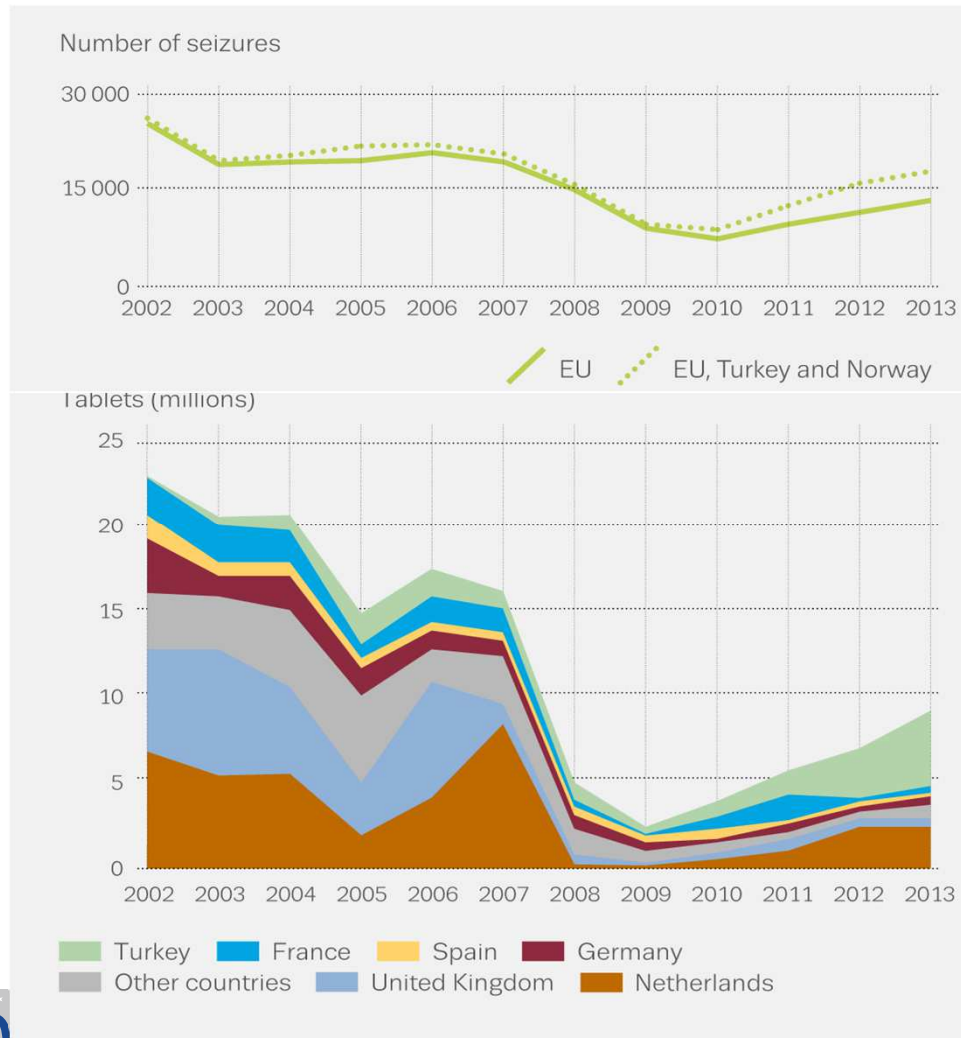


MDMA production trends

- Availability of new pre-precursors driving the trend
- Labs getting bigger and more professional
- OCGs operating precursor supply, production and MDMA smuggling
- Europe continues to be the main source of MDMA supply worldwide, production sites in NL and BE



MDMA market: evidence of recovery



MDMA purchases on dark net markets

The screenshot shows the AlphaBay Market website interface. The browser address bar displays the URL `pwoah7foa6au2pul.onion/search.php?frc=2`. The page header includes the AlphaBay Market logo, a user login status for 'skcygo' with a current balance of 0.0000 BTC, and a navigation menu with links for Home, Sales, Messages, Listings, Balance, Orders, Feedback, Forums, and Contact. A secondary menu shows currency exchange rates for USD, CAD, EUR, AUD, and GBP. On the left, a 'Browse Categories' sidebar lists various drug categories with their respective item counts. The main content area, titled 'Search Results [Save Search]', displays four search results for MDMA-related items, each with a thumbnail image, title, item number, views, bids, and quantity left. The first result is 'SAMPLE / 1 gram MDMA 84% pure crystals' (Item # 2873) with a buy price of USD 5.49. The second is '1 box (28 tabs) CRESCENT pharma uk diazepam/valium 10mg' (Item # 3112) with a buy price of USD 23.40. The third is '15 Oxycodone @ \$26 each = \$390' (Item # 4617) with a buy price of USD 390.00. The fourth is '[FREE SAMPLE] by Dr-Oetker' (Item # 13644) with a buy price of USD 0.00. The Windows taskbar at the bottom shows the system time as 9:50 AM on 6/23/2015.

Category	Count
Fraud	4425
Drugs & Chemicals	9131
Benzos	696
Cannabis & Hashish	2664
Dissociatives	187
Ecstasy	1087
Opioids	732
Prescription	878
Steroids	196
Stimulants	1652
Tobacco	73
Weight Loss	43
Other	321
Paraphernalia	107
Psychedelics	495
Guides & Tutorials	1846
Counterfeit Items	488

Item	Views	Bids	Quantity	Buy Price
SAMPLE / 1 gram MDMA 84% pure crystals (Item # 2873)	13855	Fixed price	33	USD 5.49 (0.00224 BTC)
1 box (28 tabs) CRESCENT pharma uk diazepam/valium 10mg (Item # 3112)	3238	Fixed price	Unlimited	USD 23.40 (0.0954 BTC)
15 Oxycodone @ \$26 each = \$390 (Item # 4617)	3832	Fixed price	4	USD 390.00 (1.5907 BTC)
[FREE SAMPLE] by Dr-Oetker (Item # 13644)	7408	Fixed price	Unlimited	USD 0.00 (0.0000 BTC)

One of the most commonly purchased drugs through darknet markets

MDMA sales on DNM

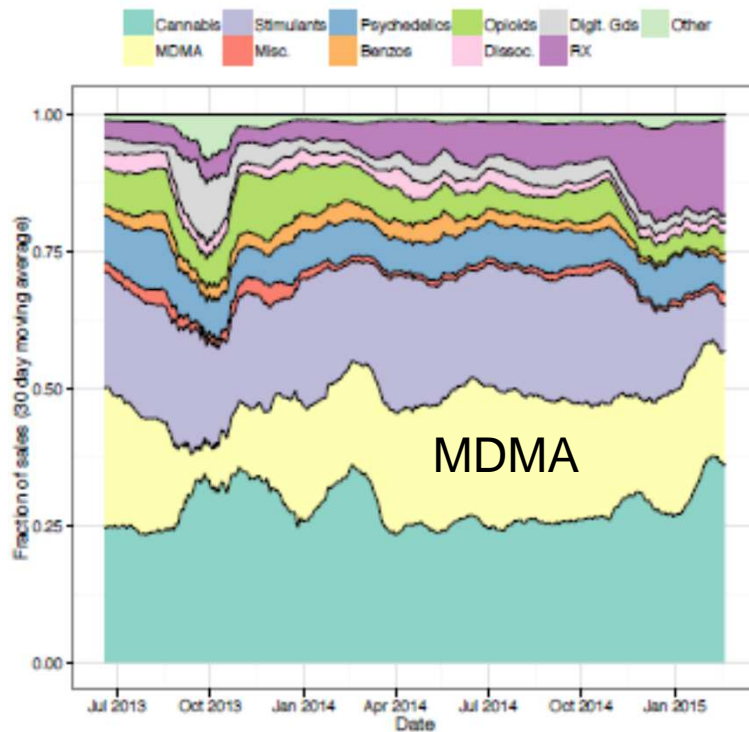


Figure 7: Fractions of sales per item category.

- MDMA represents approx 25% of market demand - 16 DNM (2013-15) (Soska and Christin, 2015)
- 45% of MDMA annual revenue on Silk Road generated by high-priced listings – suggesting transactions at the middle to wholesale level. (Aldridge and Decary-Hetu 2014)



MDMA market recovery and consolidation

- Increases in prevalence, novice users, higher MDMA content in products
- MDMA less linked to specific sub-cultures and settings – use becoming normalised in some populations
- 2014 may represent peak year for high purity pills (NL, UK)
- Picture is not uniform across Europe - some temporal ripple effects as late comer countries catch up



MDMA-related harms – implications

- Overall levels of serious acute harms appears to be low. However, with increased dose of MDMA in products, the relative risk of all users experiencing problems increases.
- Unstable purity/MDMA content is probably one of the greatest threats, with high variability of MDMA content in similar looking products.
- New generation of MDMA users may challenge our existing approaches to working with consumers and require a rethink in our nightlife interventions.



Next steps

- **Developing a handbook**
- **National pilots**
- **Online trendspotter network**



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EMCDDA Trendspotter Handbook

Report available at <http://www.emcdda.europa.eu>

