

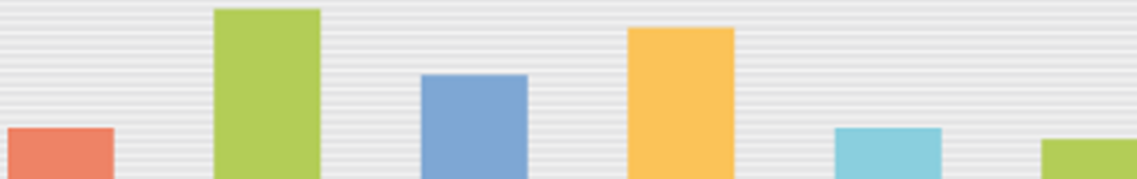


European Monitoring Centre  
for Drugs and Drug Addiction

Lisbon, 20 September 2017

# New psychoactive substances coding – how to adapt to a changing context?

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TDI/Treatment expert meeting



# EU Early Warning System on NPS

Europol & EMA

**Operative since 1997**

police  
customs medicine regulators  
public health treatment providers  
chemists **30** pathologists

**national early warning systems**

toxicologists policy makers  
poison centres  
researchers

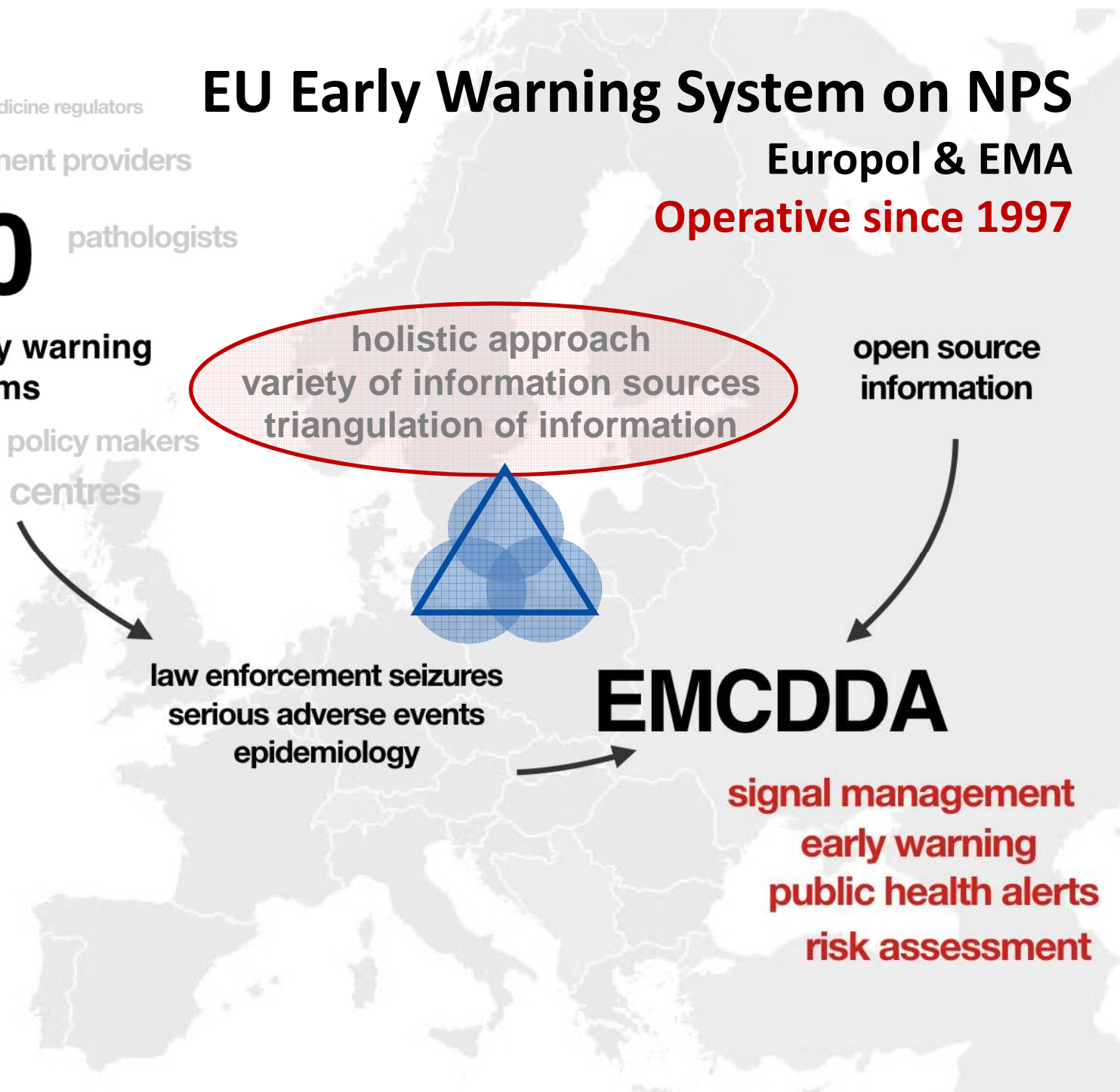
holistic approach  
variety of information sources  
triangulation of information

open source information

law enforcement seizures  
serious adverse events  
epidemiology

## EMCDDA

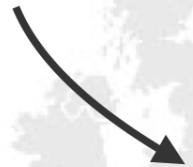
signal management  
early warning  
public health alerts  
risk assessment



police  
customs medicine regulators  
public health treatment providers  
chemists **30** pathologists

**national early warning systems**

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police/customs seizures  
serious adverse events  
epidemiology

**20** years of monitoring NPS  
**+620** NPS monitored  
**~150** public health alerts  
**23** risk assessments

in the last **3** years / since **2014**

**~300** NPS newly detected  
**+ 50** public health alerts  
**10** risk assessments

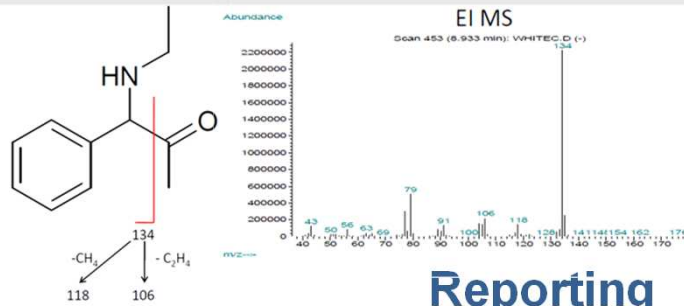
**EMCDDA**

signal management  
risk communication  
early warning  
risk assessment

**2015** seizures

~ **80,000** seizures (+ 2-fold increase as compared to 2014)  
~ **5** tonnes seized (+ 2-fold increase as compared to 2013)

# Multi-source information, data triangulation

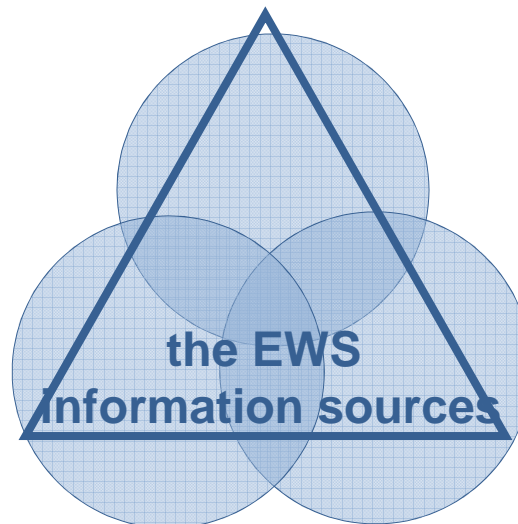


## Reporting

forensic analysis & toxicology  
law enforcement  
drug checking & surveys  
health & care

Seizures  
Collected samples  
Biological samples

Serious adverse events



## Targeted research

test purchase,  
wastewater analysis,  
computational modelling,  
pharmacotoxicological profiling

## Open source information

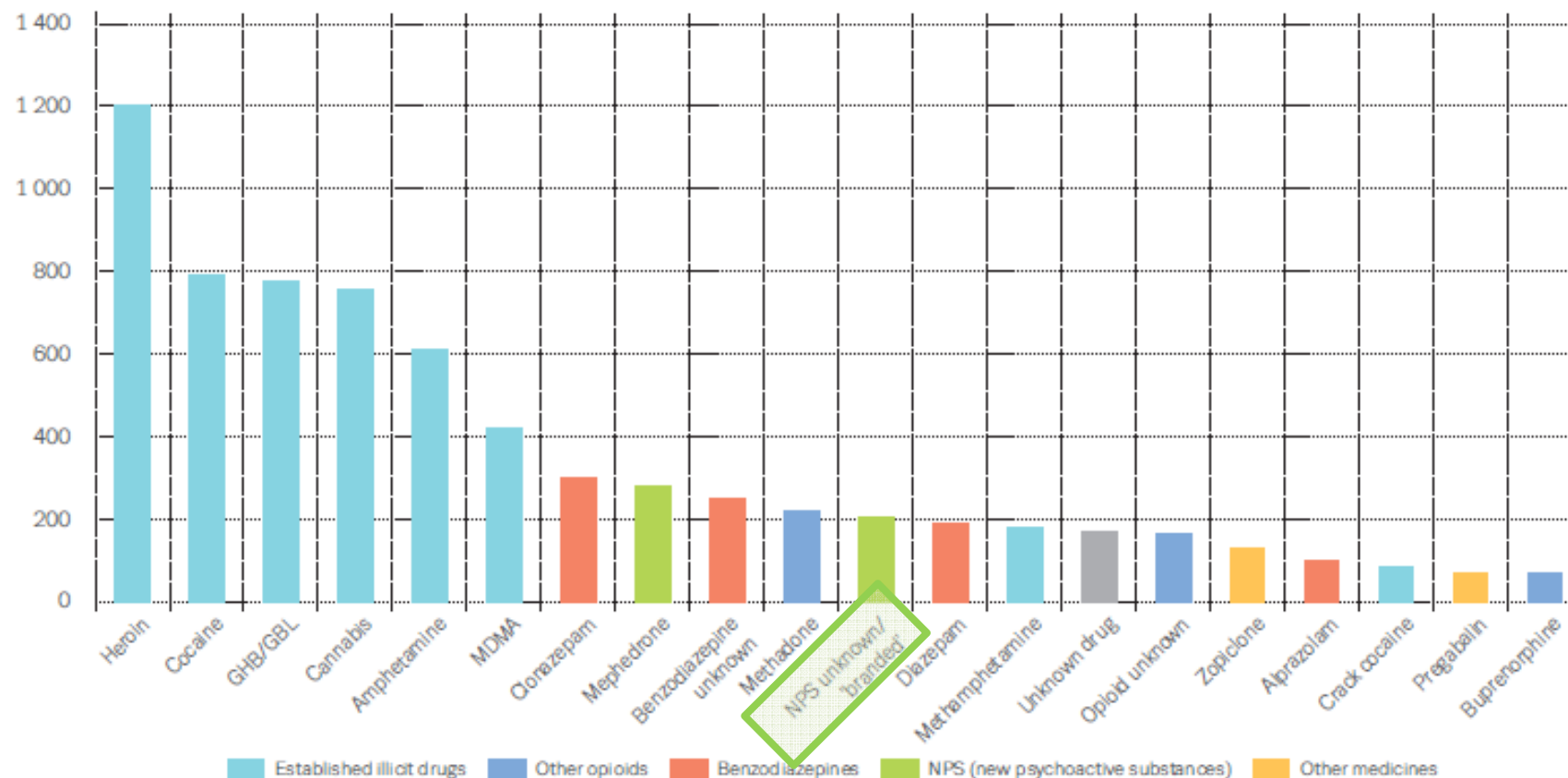
Internet, media, users,  
scientific/grey literature



# Top 20 drugs recorded in emergency presentations

Top 20 drugs recorded in emergency presentations in sentinel hospitals in 2015

Drug identifications

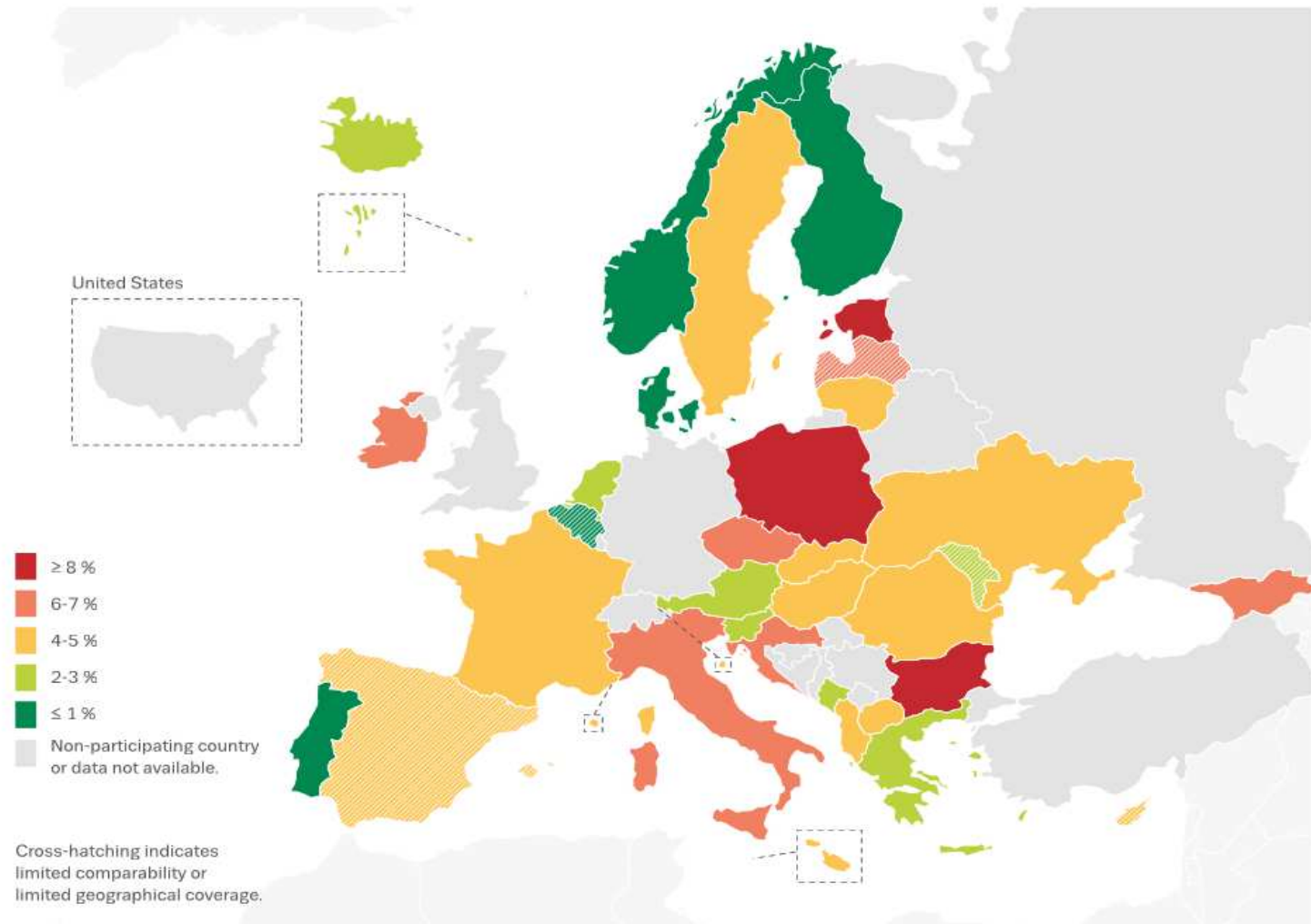


NB: Results of 5 054 emergency presentations in 15 sentinel sites in 9 European countries.  
Source: European Drugs Emergencies Network (Euro-DEN plus).



# Prevalence data – ESPAD 2015

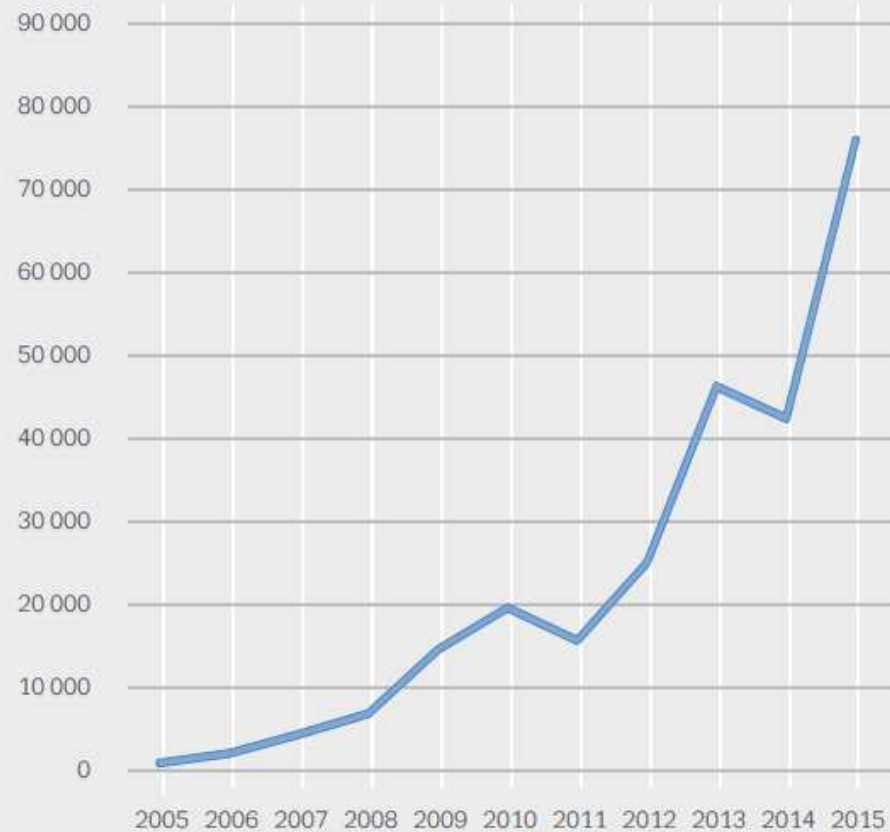
Figure 17a. Lifetime use of new psychoactive substances (NPS). 2015. Percentages. (Table 39)



# Seizures of new psychoactive substances

Number of seizures of new psychoactive substances reported to the EU Early Warning System: trends and distribution by category in 2015

Number of seizure cases



Cathinones

**33 %**

Cannabinoids

**29 %**

Benzodiazepines

**11 %**

Phenethylamines

**6 %**

Piperazines

**6 %**

Others

**5 %**

Arylalkyl-  
amines  
**4 %**

Arylcyclohexyl-  
amines  
**2 %**

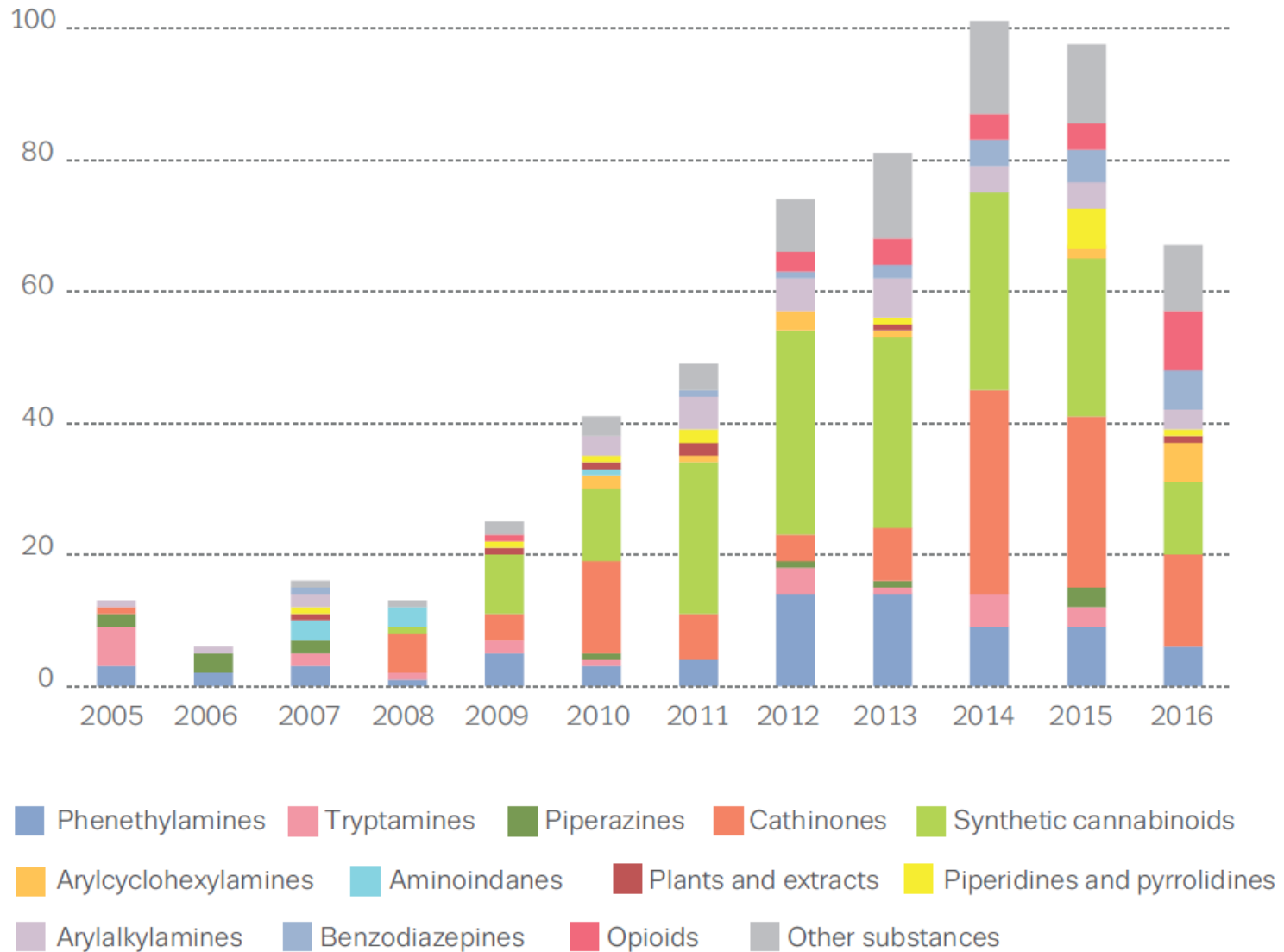
Tryptamines **1 %**

Piperidines and  
pyrrolidines **1 %**

Opioids **1 %**



# First detections of NPS





# How we define a new psychoactive substance?

## Council Decision 2005/387/JHA

*‘a new narcotic or psychotropic drug that is not controlled by the United Nations drug conventions, but which may pose a public health threat comparable to that posed by substances listed in these conventions’*

But what about NPS which have been recently controlled internationally?

### **Cathinones**

Mephedrone

MDPV

Methylone (BK-MDMA)

Alpha-PVP

4-Methylethcathinone (4-MEC)

Ethylone

Pentedrone

### **Opioids**

AH-7921

MT-45

Acetylfentanyl

U-47700

Butyrfentanyl

### **Synthetic Cannabinoids**

JWH-018

AM-2201

MDMB-CHMICA

5F-APINACA (5F-AKB48)

XLR-11



# Classification of NPS for the purposes of EW monitoring

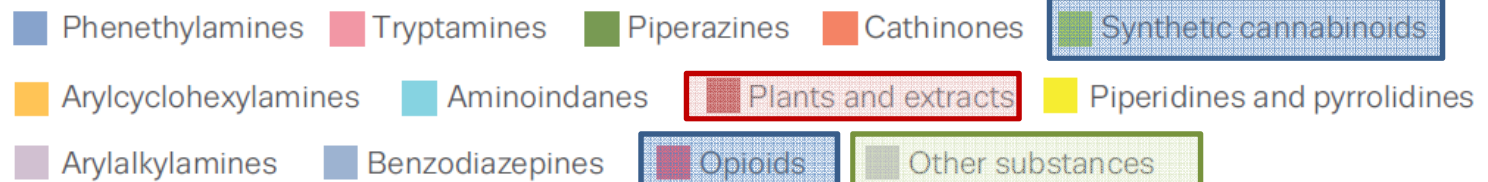
- Chemical family

■ Phenethylamines ■ Tryptamines ■ Piperazines ■ Cathinones ■ Synthetic cannabinoids  
■ Arylcyclohexylamines ■ Aminoindanes ■ Plants and extracts ■ Piperidines and pyrrolidines  
■ Arylalkylamines ■ Benzodiazepines ■ Opioids ■ Other substances



# Classification of NPS for the purposes of EW monitoring

- Chemical family
- Mode of action
- Origin
- Other



## Primary drug

The primary drug is defined as the drug that causes the client the most problems at the start of treatment. This is usually based on the request made by the clients and (or) on the diagnosis made by a therapist, commonly using international standard instruments (e.g. ICD-10; DSM-IV (5), ASI) or clinical assessment. This item is of central importance and it should be collected for every client.

## Purpose

To identify the clients' primary drug problem, assessing their profile and trends over time in drug use patterns. This variable allows information to be kept on the most relevant problems for the drug users from an epidemiological point of view.

## Inclusion criteria

### Methodological considerations

The decision on the choice of a primary drug should be based on the diagnosis of the professional plus the request of the client.

The criteria to select the primary drug have not changed and are consistent with the criteria for data reporting included in the TDI protocol 2.0. A new variable on polydrug use is now added to provide complementary information, but not as a replacement.

If the exact drug is not known (e.g. amphetamines or MDMA and derivatives), the generic category (e.g. Stimulants other than cocaine) should be recorded.

The category 'Not known' should be used exceptionally.

- Tobacco
- All psychoactive medicines and drugs used exclusively for medical treatment under a medical prescription and according to medical practice.

## Methodological specifications

‘Primary drug’ is the drug that causes the most problems for the client, as defined according to the client’s request and (or) the professional’s assessment.

This item should always be filled in, regardless of whether a client is subsequently considered to have a polydrug use problem (that will be additional information).

Some new drugs are included in the Protocol. They are substances that have appeared in recent years in the drug market, and for which a non-trivial number of people has entered treatment for problems associated with their use. The classification does not follow a scientific classification of the substances according to their chemical principles or psychoactive effects (e.g. cocaine and other stimulants are separated), route of administration, or other scientific categorisations. Rather, a pragmatic classification is adopted, in order to help professionals working at drug treatment centres to record the data.

The substances included are only those which create problems to the client according to the client’s request and the professional’s assessment.

The grouping of drugs is not only done on the basis of pharmaceutical criteria but also considering the actual experience of drug professionals.

Other opioids include all the opioids not included in the previous categories (e.g. Polish heroin). The insertion of fentanyl among primary drugs includes both the substance produced in the illicit market and the medicinal product used outside the medical practice.

Any specification on the primary substance should be included in the methodological comments.

# The challenge of **new fentanils**

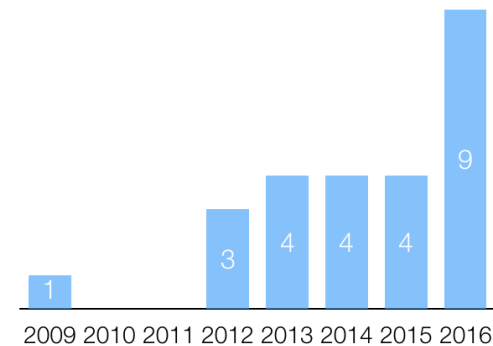
## 2017 – detailed investigations on

1. Acryloylfentanyl
2. Furanylfentanyl
3. AB-CHMINACA
4. 5F-MDMB-PINACA
5. ADB-CHMINACA
6. CUMYL-4CN-BINACA
7. 4-Fluoroisobutyrylfentanyl
8. Tetrahydrofuranylfentanyl
9. Carfentanil

## 2014/2015

1. AH-7921
2. MT-45
3. Acetylfentanyl

Internationally controlled



Substances which will be reviewed at the 39th ECDD (6–10 November 2017)

**12. Primary drug (7)**

1. Opioids (total)
  - 11 heroin
  - 12 methadone misused
  - 13 buprenorphine misused
  - 14 fentanyl illicit/misused
  - 15 other opioids (please specify)
2. Cocaine (total)
  - 21 powder cocaine (HCl)
  - 22 crack cocaine
  - 23 others (please specify)
3. Stimulants other than cocaine (total)
  - 31 amphetamines
  - 32 methamphetamines
  - 33 MDMA and derivatives
  - 34 synthetic cathinones
  - 35 other stimulants (please specify)
4. Hypnotics and sedatives (total)
  - 41 barbiturates misused
  - 42 benzodiazepines misused
  - 43 GHB/GBL
  - 44 other hypnotics and sedatives misused (please specify)
5. Hallucinogens (total)
  - 51 LSD
  - 52 ketamine
  - 53 other hallucinogens (please specify)
6. Volatile inhalants
7. Cannabis (total)
8. Other substances (total) (please specify which substance)
99. Not known.

(7) Note that several substances in the list can be produced illicitly (e.g. fentanyl or some amphetamines) or diverted from legitimate sources. For the purpose of this protocol, both sources are included.

**Number of clients entering treatment for NPS as PRIMARY drug**

	Fentanyl illicit/misused	Synthetic catyhinones	GHB/GBL	Ketamine	Total clients all drugs
Austria	0	2	2	1	4400
Belgium	16	14	364	34	25588
Bulgaria	0	0	0	0	2131
Croatia	1	0	0	0	7537
Cyprus			2		798
Czech Republic		0			10108
Denmark					6275
Estonia	202				282
Finland	2	11	3	0	656
France	62	27	26	21	62213
Germany					87256
Greece	0	0	0	0	4087
Hungary	0	0	0	0	4308
Ireland	2	31	10	4	9489
Italy			4	13	47213
Latvia	0	3	0	0	751
Lithuania	0	0	0	0	2549
Luxembourg					290
Malta					1829
Netherlands	1	0	427	16	10987
Norway					5908
Poland	15	536	24	5	9013
Portugal					3389
Romania	0	2	0	3	3240
Slovakia	30				2720
Slovenia	0	0	0	0	316
Spain	28	1	6	49	48926
Sweden	4	5	5		37988
Turkey	1		2		10884
Uk	17	1441	155	232	124234
<b>Total</b>	<b>381</b>	<b>2073</b>	<b>1030</b>	<b>378</b>	<b>535365</b>
<b>% of clients</b>	<b>0.07</b>	<b>0.39</b>	<b>0.19</b>	<b>0.07</b>	<b>0.72</b>





**Number of  
clients  
entering  
treatment  
for NPS as**

**SECONDARY**

**drug**

Country	Fentanyl	Synthetic cathinones	GHB/GBL	Ketamine	Clients with known primary drug
Austria	0	2	2	1	3640
Belgium	8	7	182	17	11698
Bulgaria	0	0	0	0	1804
Croatia	1	0	0	0	7537
Cyprus			2		797
Czech Republic		0			10090
Denmark					4705
Estonia	202				282
Finland	2	11	3	0	656
France	62	27	26	21	49041
Germany					87256
Greece	0	0	0	0	4061
Hungary	0	0	0	0	4308
Ireland	2	31	10	4	9489
Italy			4	13	47213
Latvia	0	3	0	0	751
Lithuania	0	0	0	0	2549
Luxembourg					290
Malta					1771
Netherlands	1	0	427	16	10987
Norway					5908
Poland	15	536	24	5	9013
Portugal					2756
Romania	0	2	0	3	3240
Slovakia	30				2503
Slovenia	0	0	0	0	316
Spain	28	1	6	49	48926
Sweden	4	5	5		37742
Turkey	1		2		10884
Uk	17	1441	155	232	120294
<b>Total sec.drugs</b>	<b>373</b>	<b>2066</b>	<b>848</b>	<b>361</b>	<b>500507</b>
<b>% secondary drug</b>	<b>0.07</b>	<b>0.41</b>	<b>0.17</b>	<b>0.07</b>	



# Issues and proposals

- Current NPS (or old NPS) coding in TDI:
  - Synthetic cathinones → Stimulants other than cocaine
  - GHB/GBL → Hypnotics and Sedatives
  - Fentanyl illicit/misused → Opioids
  - *Synthetic cannabinoids* → *Others, Cannabis, Stimulants, ???*
  - *Others* → *Others, ???*
- Proposal for new coding:
  - Fentanils ~~illicit/misused~~ → Opioids, to specify which fentanil
  - Synthetic cannabinoids → Add subcategory under Cannabis
  - Others → Others, to specify which substance



# Process

- Include an amendment to the TDI Protocol  
(note in the primary and secondary drug coding)
- Modify FONTE Template: add subcategory + change fentanyl illicit misuse to fentanils, specify
- Introduce new coding in data reporting 2018  
OR
- Conduct pilot data collection in interested countries and introduce new coding in data reporting in 2019

