



Co-funded by the Prevention of and Fight against Crime Programme of the European Union JUST/2013/ISEC/DRUGS/AG/6426

# I-SEE project

#### for strenghtening information exchange between Italy and South East Europe neightbouring countries on New Psychoactive Substances

#### **Project coordinator: Elisabetta Bertol**

Coordinator



Beneficiary partners









Department of Health Science





# MAIN OBJECTIVES

- To strengthen information exchange between Italy and South East Europe neighbouring countries on NPS
- To support the development and consolidation of national EWS networks
- To create a joint mechanism for information and good practice exchange and mutual learning
- To increase information flow towards Law Enforcement and health personnel to strengthen early identification and interception of NPS supply and demand





## PARTNERS & WORKSTREAMS

WS	Description		Partner	
0	Management and coordination		UNIVERSITÀ DEGLI STUDI FIRENZE	
1	Building up network with Law Enforcement, NGOs and health sector	•	NIJZ National Institute of Public Health	Ministrstvo za notranje zadeve Policija National Forensic Laboratory and Criminal Police Directorate
2	Building up clinical network		UNIVERSITY OF SPLIT SCHOOL OF MEDICINE	
3	Developing tools for strengthening NPS information exchange and identification		UNIVERSITÀ Degli studi FIRENZE	
4	Evaluation of the project and dissemination and communication of results		UNIVERSITÀ Degli studi FIRENZE	





# WS0: ACTIVITIES PERFORMED

- Participation to the kick off meeting organized by the European Commission (*Brussels, 10<sup>th</sup> February 2015*)
- Organization of 2 technical meetings with partners to organize project activities (webconference February 20<sup>th</sup> 2015 and Ljubljana January 25<sup>th</sup> 2016)





- Draft and subscription of a Partnership Agreement among partners to rule partners' relationships and mutual obligations
- Reporting to the EC (financial and activity report)
- Management of project funding





## WS 0: ORGANIZATION OF STUDY VISIT TO ITALY

- 14<sup>th</sup>-18<sup>th</sup> December 2015
- Visited institutions:
  - University of Florence, Forensic Toxicology Unit (Florence)
  - University of Florence, Medical Toxicology Unit (Florence)
  - Poison Control Center (Pavia)
  - S. Matteo Hospital lab (Pavia)
  - Carabinieri Research Investigation
    Unit (Rome)
  - Central Directorate for Antidrug Services (Rome)









# WS 3: PURCHASE AND DISTRIBUTION OF REFERENCE MATERIAL (RF)

- The University of Florence acquired and distributed to partners more than 50 reference materials (certified analytical standard)
- From partners, acquisition of:
  - authorization to import scheduled substances, signed by national Ministry of Health
  - possession and use license for scheduled substances







## CONSEQUENCES OF RF DISTRIBUTION

- increasing the analytical capacity of laboratories
- reducing the time to identify NPS in analyzed samples
- providing faster responses to Law Enforcement, with respect to seized product composition (IT and SLO)
- providing information to health personnel for a right diagnosis in intoxication cases by NPS (IT and CRO)







#### WS 4: MONITORING AND EVALUATION

 Drafting of an evaluation plan regarding activities performed and partners satisfaction



### WS 4: COMMUNICATION AND DISSEMINATION

- Writing a dissemination and communication plan
- Organizing 3 press conferences:
- 1<sup>st</sup> in Split (April 1<sup>st</sup> 2015)
- 2<sup>nd</sup> in Ljubljana (February 22<sup>nd</sup> 2016)
- **3<sup>rd</sup> in Florence** (December 16<sup>th</sup> 2016)















## NPS DETECTION ACTIVITY OF FORENSIC TOXICOLOGY UNIT

Seized material (about 600 <u>seizures</u>) was positive for traditional drugs (cocaine, cannabis, amphetamines and amphetamin-like, heroin, pharmaceutical drugs...)

NPS detected:

- 3-MMC
- Penthedrone
- Penthedrone + 3-MMC
- 4-FA
- Methoxethamine
- AB-FUBINACA (2016)
- **5-MAPB** (2016)







## NPS DETECTION ACTIVITY OF FORENSIC TOXICOLOGY UNIT

In vivo (biological samples):

- JWH-073
- MDPV
- AM-694
- Mephedrone
- 3-MMC + 4-MEC (2016)
- AB-FUBINACA (2016)





## NPS DETECTION ACTIVITY OF FORENSIC TOXICOLOGY UNIT in 2016

AB-FUBINACA

#### • 3-MMC + 4-MEC



Detected and quantified in urine and blood samples of intoxication cases





## NEW UNKNOWN COMPOUNDS...



• Further analysis (<sup>1</sup>H-NMR, <sup>13</sup>C-NMR, HRMS) will soon be performed...

### NEW UNKNOWN COMPOUNDS...

Hypothesis

- 1. Interrupted synthesis → found out by Law Enforcement in illegal lab?
- 2. Uncompleted synthesis → chemical reaction not completed?





#### CONCLUSIONS

#### Analytical activities promoted by this project allowed to detect the previously described substances, both in seized materials and in biological samples.

#### But,

the still low number of documented NPS cases in biological fluids is **only due to**:

- lack of routine analytical protocols to search these substances
- difficulties encountered by laws enforcement in identifying and seizing them

and not because they are not present among the population