

News release

from the EU drugs agency in Lisbon

HOSPITAL EMERGENCIES AND ACUTE DRUG TOXICITY IN EUROPE

New EMCDDA report sheds light on drug-related hospital emergencies

(4.8.2016, LISBON) Data from hospital emergency departments show that every year in Europe thousands of individuals experience drug-related poisoning and other harms, requiring some kind of medical assistance. In a new report published today, the **EU drugs agency (EMCDDA)** provides the latest findings on hospital emergency cases resulting from drug use. It reveals that those affected are mainly young adults (20–39 years) and predominantly male and that heroin is still No 1 on the Top 20 list of drugs involved. It also signals a recent rise in cases linked to new psychoactive substances (NPS)(1).

The report is based on an analysis by the **European Drug Emergencies Network (Euro-DEN Plus)**, which monitors drug-related emergency presentations in 20 'sentinel' hospitals in 14 European countries (²). The report reveals that, in its first two-year data-collection period (October 2013 to September 2015), the network recorded 10 956 drug-related emergency presentations, including 49 deaths.

Over two-thirds (70.2%) of the presentations were recorded in five of the centres — situated in **Dublin**, **London** (2 centres), **Oslo** and **Paris** — over half of them (61%) occurring in **Oslo** and **London**. A similar number of presentations were reported in Year 1 (5 529) and Year 2 (5 427). Males dominated the presentations in all age groups (76%).

The **EMCDDA** adopts a multi-indicator approach to drug monitoring on the principle that no single measure can provide a full picture of the drug situation. It views hospital emergency data-collection as a useful addition to its monitoring toolkit.

EMCDDA Director Alexis Goosdeel says: 'Data from hospital emergency units can provide us with a unique insight into acute health harms related to drug use and can enrich our understanding of the drugs problem by broadening the scope of our monitoring. Emergency data can complement routine indicators of high-risk drug trends and related harms but also act as early-warning signals on new substances and patterns of use. Continued monitoring in these settings will help us assess the public health impact of acute drug toxicity in Europe, develop appropriate healthcare and prevention activities and provide crucial input to our risk assessments of new psychoactive substances'.

Most of the presentations recorded in the study reportedly involved one drug (62%) or two (26%). Two-thirds of the substances recorded (64%) involved established illicit drugs (e.g. heroin, cocaine, cannabis, amphetamine and MDMA) and one quarter (25%) over-the-counter or prescription medicines (e.g. benzodiazepines).

Top 20 drugs involved in hospital emergencies

The report presents the Top 20 most commonly reported drugs in the sentinel hospital emergencies over the two years (see Figure 7). Of these, 19 appeared in both years. Methedrone dropped from position 19 in Year 1 to 23 in Year 2, while the sedative zopiclone rose from 21 to 15.

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Over the two years, heroin was involved in nearly a quarter of presentations (24%), cocaine and cannabis both in 16%. Less commonly reported were new psychoactive substances (NPS) — often sold as 'legal highs' or research chemicals — representing 7% of drugs involved in hospital emergencies over the study period. But the report shows a rise in the proportion of NPS: from 6% of reported drugs in Year 1 to 8% in Year 2 (³). There was a significant geographic variation in NPS presentations, with a greater proportion reported in centres in **Germany, Ireland, Poland** and the **UK**.

The most common clinical features reported were agitation/aggression (26%). Other severe features included chest pains (7%) psychosis (6%), seizures (3%), hyperthermia (1.4%) and cardiorespiratory arrest (0.5%). Of the 49 deaths recorded, 84% were in males (median age: 29 years). The deaths involved mainly opioids (23 deaths) and or stimulants (15 deaths). NPS were involved in 9 deaths.

More cases in the summer months, at weekends and late at night

A number of time patterns emerge from the data, including clear seasonal variations. Over the two years, fewer than 800 presentations were recorded for the months of December, January and February, compared to over 1 000 per month for the months of June, July and August. More cases were recorded at the weekend than on weekdays, with 18% occurring on Saturdays compared with 12–13% during the week. Cases were most common in the evening and early hours of the morning rather than during core working time.

Almost half (45%) of the cases were discharged from hospital within four hours. A minority were admitted to hospital, with 5.7% requiring admission to a critical area and 4.2% to a psychiatric ward.

Cases of acute drug toxicity can constitute a significant burden and challenge to health services. The report states: 'Overall, 68% of presentations arrived at the emergency department by ambulance, indicating significant utilisation of pre-hospital emergency services'.

Notes

- (¹) EMCDDA Rapid communication Hospital emergency presentations and acute drug toxicity in Europe Update from the Euro-DEN Plus Research Group and the EMCDDA. Available at www.emcdda.europa.eu/publications/rapid-communications/2016/hospital-emergencies See also www.emcdda.europa.eu/activities/emergencies
- (²) The Euro-DEN network was set up in 2013 to improve knowledge at European level on acute drug toxicity relating to established illicit drugs and new psychoactive substances. It was funded by the European Commission from April 2013 to March 2015. After this, the network continued its work and renamed itself 'Euro-DEN Plus' as it grew from 16 to 20 centres. The EMCDDA has participated in the network's Steering Committee since the outset and facilitates synergies between projects. The 20 centres are located in Barcelona, Basel, Bratislava, Copenhagen (subsequently moved to Riskelde), Drogheda, Dublin, Gdansk, Imsida, London (2), Mallorca, Munich, Oslo (2), Paris, Pärnu, Prague, Tallinn, Yekaterinburg, York.
- (³) The EMCDDA published on 24 June its first report on health responses to NPS: www.emcdda.europa.eu/news/2016/7/nps-responses See also EMCDDA–Europol annual implementation report on NPS published on 8 July: www.emcdda.europa.eu/publications/implementation-reports/2015

Although this sentinel site survey is not representative of the overall European situation, in the absence of standard national reporting in this area, it does provide a useful window on trends and developments through regular reporting from a number of important locations.

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