European Monitoring Centre for Drugs and Drug Addiction

Annual Expert Meeting

'Drug-related deaths and mortality among drug users' and

Drug-related infectious diseases

Day 2 –DRD/DRID joint meeting

Minutes

17 October 2013

EMCDDA – Lisbon

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Recipients: DRD experts and other participants to the 2013 DRD/DRID annual expert meeting; heads of national focal points.

- These minutes cover the second day (DRD and DRID joint) of the 2013 expert meeting. They follow the minutes of Day 1 ('DRD only') which are available from the link indicated below.
- They cover the following sessions:
  - **Mortality cohort studies among drug users (Joint Plenary)**
  - **Mortality related to infection: HIV, anthrax: service provision & guidelines (Joint Plenary)**
  - **Harm related to new psychoactive drugs and methamphetamine (Parallel workshop – DRD)**
  - **Prevention of overdose and infection (Joint Plenary DRD-DRID)**
- Presentations are available from the DRD restricted access area (for participants in the expert meeting and national focal points) http://projects.emcdda.europa.eu/alias.cfm/areaDRD

- The contact details of all speakers and participants are available from the above-mentioned link and persons interested in a particular presentation are invited to liaise directly with the speakers or with the EMCDDA for further information[1].

Appendices available from the DRD restricted access area

- Agenda, List of participants, A compilation of the DRD 2013 national abstracts available at the time of writing and papers and documents on the topics discussed, sent to the experts to prepare and to follow up after the meeting

[1] The EMCDDA public website will be updated and the MS Power point presentations given during the 2012 and 2013 DRD Expert Meetings will be available in 2014 on the public pages, for a wider public. This aims to increase both the visibility and the value of your work and the Drug-related Deaths Indicator Expert Network.

Summary (both days)

- The expert meeting took place on 16-18 October 2013 in the EMCDDA's premises. On the 16th, the DRD meeting included plenaries and workshops. On the 17, the DRD and DRID meetings were combined for plenary sessions. On the 18, the HIV risk assessment was discussed
- These are the minutes of the 1st day, i.e. ''DRD only' day and of the 2nd day (joint sessions DRD/DRID and prevention of DRD).

- The main aims of the expert meeting were to share and discuss the analysis of the recent European data and of the new developments. It aimed to discuss current activities and steps forward, to encourage cross-indicator analysis and to get input and suggestions from the national experts on some projects of the 2014 EMCDDA Work Programme.

- The meeting aimed as well to discuss the state of progress of the indicator 'Drug-related deaths and mortality among drug users', and to discuss specific national data and projects.

- The meeting on 16 October focused on the following areas presented and discussed in plenary sessions:
  - Recent European DRD data (based on preliminary analyses of data just reported by the Member states in 2013) – new developments and concerns)
  - Overall and cause-specific mortality among drug users based on longitudinal cohort studies of nine countries pooled for joint analyses
  - A detailed presentation of the DRD situation in Ireland, Norway and Austria presented by national experts
  - Issue of toxico-vigilance and enhanced monitoring of deaths related to new drugs

- The experts commented and contributed with their data and analyses to four workshops on[2]:
  - Mortality cohort studies[3]: with a focus on the pooled studies and among amphetamine users
  - Medicine-related deaths, with a focus on increasing tramadol and fentanyls-related deaths
  - Enhanced monitoring of acute emergencies based on national reports with focus on cannabis/cannabinoids
  - Underestimation and cross-validation of drug-induced deaths data

- The meeting on 17 October focused on the following topics, presented and discussed with the mixed group of DRD and DRID national experts:
  - Mortality cohort studies among drug users (insight into all causes of death, beyond overdoses) Mortality related to infection – HIV, anthrax: service provision and guidelines
  - Hepatitis C infection in PWID
  - Harm related to new psychoactive drugs and methamphetamine
  - Prevention of overdose and infection: discussing various prevention strategies and attempts in various countries, including implementation of naloxone programmes

[2] See next pages the objectives, main findings, conclusions and the links to the presentations

[3] See the 2012 cohort guidelines available from http://www.emcdda.europa.eu/themes/key-indicators/drd, under the 'Key Documents' section

Next steps and main action points[4]

- Usefulness of data from Hospital emergency rooms to monitor drug-related harm **Action**: interested experts and EMCDDA
  - Following the workshop on cannabis-related emergencies, a more in-depth analysis of the 2013 national reports (when received) will be conducted and some findings may be integrated into the 2013 European Drug Report (EDR).
  - A more in-depth review could be conducted (EMCDDA work Programme 2014), as was done for cocaine-related emergencies.
  - An EMCDDA strategy paper on options for monitoring drug-related emergencies is in preparation.
  - Euro-DEN EU-funded project (on acute toxicity of recreational and NPS) on-going in 2014, in liaison with EMCDDA for synergy and exchange of information.

- Multisite analyses of Mortality cohort studies **Action**: EMCDDA and contributing experts:
  - Interested national experts to provide, where national regulation allows, and if not done yet, their datasets following the format of the 2012 EMCDDA cohort guidelines[5] to append them to the pooled EMCDDA dataset (>31000 patients so far, from nine countries).
  - A draft EMCDDA Thematic paper will be circulated in November to participating experts for comments.
  - Draft papers for submission to peer-reviewed journals to be finalised by lead EMCDDA and national authors.
  - Interested participating experts are again invited to suggest additional research questions (so far, age, inequalities, causes of deaths).

- Medicine-related deaths **Action**: EMCDDA to further elaborate a conceptual framework for enhancement of the monitoring of misuse of medicine and to further review the strengths and limitations of the DRD indicator (among others) for collecting medicine-related data. Interested national experts to be consulted.

- New psychoactive substances (NPS)-related deaths **Action**: EMCDDA to integrate comments received on the draft tool for enhanced data collection of the fatal cases. EMCDDA to further elaborate how this might be integrated in/connected with the overhauled European Database on New Drugs (EDND), and to which extent it might help in any future data collection for joint reports.

- Next meeting: ~October 2014, likely back to back with the DRID or other expert meeting again but exact dates and format to be confirmed.

[4] For 'DRID only', see the minutes of the DRID meeting on the DRID restricted access area

[5] As requested in the EMCDDA cohort guidelines, all individual case data sent to the EMCDDA should be fully anonymised (i.e. only a study ID number should be used and all identifiers, direct or indirect, should be deleted in the dataset shared with EMCDDA). All participating experts are requested to fully comply with their national regulations, in particular to ensure the complete respect of data confidentiality and data protection for the persons enrolled in the cohort studies or linkage studies.

Mortality cohort studies among drug users (Joint Plenary)

Chair: Marica Ferri and Viktor Mravcik

Tim Millar (TM), United Kingdom
Mortality cohort study NIQUAD

[Pre-publication: presentation not for further circulation or dissemination] Excess mortality has long been observed among users of opiates, crack cocaine and those who inject drugs, but few cohorts have sufficient power to detect cause and subgroup specific mortality. NIQUAD is a major cohort study in the UK, using five different sources of data on drug users (more than 800 000 persons) and linking them with mortality registries to identify all deaths occurring between April 2005 and March 2009 (as registered by Sept. 2011). It is the largest cohort is of opiate and/or crack cocaine users to date. The study presented observed excess mortality across many avoidable causes, in particular overdoses, liver disease, suicide and homicide. It also demonstrated that an increased risk for many causes of death persists, and for some causes widens with increasing age. This is a first demonstration of a clear, highly significant, age-related increase in users' drug related poisoning (DRP) rate beyond 45 years of age. Women had a lesser DRP risk than men at younger age; with increasing age this difference is not sustained when taking account of behavioural risks. The study highlighted the importance of managing the complex health needs of older opiate users to reduce their mortality risk and health inequalities.

Follow-up discussion: The data will be made public soon. **Lyons** questioned why alcohol related poisonings are excluded from the drug related deaths category considering especially those older problem drug users who have also or mainly alcohol related problems. *TM* responded that it is included as a risk factor but not in the death category.

Anne-Claire Brisacier, France (ACB)
French study: preliminary findings of the 2013 record linkage

AVB presented the results from a mortality cohort study among drug users in France. The settings of enrolment were treatment centres and harm reduction / low-threshold centres. The inclusion criteria were to be born in France or born abroad but covered by social security, and have used substance other than cannabis in the last 30 days or used BZD excluding therapeutic use in the last 30 days or used substitution substance prescribed or not by a physician in the last 30 days. A comprehensive questionnaire was filled at enrolment, prospectively, and included social and demographic items, use of substances and health items. Enrolment and data linkage with mortality registries: 1,134 individuals were included between 09/2009 and12/2011; 970 vital status could be checked (86 %) through linkage : three quarters of the cohort (77%) were males; 37 deaths were identified (the first linkage exercise was completed in 07/2013 and a second one will be carried out in 12/2015); the causes of death was retrieved for 8 individuals only. Preliminary results on the total of 970 persons were shown (person years of follow-up=2949). Crude mortality rate (per 1000 PYs)=12.55 overall, 16.7 in females and 11.35 in males. Standardized mortality ratio= 6.72 overall (P<0.001, 4.73 - 9.26), 20.8 in females and 5.2 in males. Some of the study difficulties were the overall difficulty with inclusion (due to the non-anonymous data collection), the relatively high cost (10 € were paid to the centres per individual included = 11 500 € plus cost for logistical and data entry = 6000 €). One limitation is the lack of data on the substances consumed at the time of death (as data on drug use are collected at enrolment and drug use might have changed over time). Next steps: include multivariate models for the analysis of cohort studies (as many risk and protective factors are collected at enrolment; repeat in 12/2015 the data linkage with the national general mortality register (second point to find the vital status and cause of death).

Follow-up discussion: **Wiessing** noted that injecting drug use as a risk factor for death is missing in the data presented (given that there is large heterogeneity in Europe) and asked whether there is any plan for specific analyses in this area, as injecting drug use is linked with mortality. *ACB* responded that this could be one of the issues to be further explored in the future multivariate analyses.

Isabelle Giraudon (IG), EMCDDA

Overview and main findings of the pooled EU cohorts
The present pooled study was conducted together with the EMCDDA and the NFPs and national experts on mortality. It is the 2nd European coordinated study on mortality among drug users, building on the experience of the COSMO study. The rationale of this new exercise is that many studies have been carried out in Europe, in many countries, but that most of them are not published, and their results are not available for a wider international audience. The other purpose of the exercise was to increase the statistical power of the analysis, in particular with regard to the causes of death, and to involve more Eastern-Europe countries, which were underrepresented in COSMO. The objectives of the pooled studies are to describe: the overall and cause specific mortality, gender and age differences, trends, and social inequalities and mortality. Cohorts of opiate users entering treatment in 9 countries/sites were included: Spain (Barcelona), Netherlands (Amsterdam), Slovenia, Croatia (Zagreb), Romania (Bucharest), Norway (Oslo), Malta, Poland. A similar methodology was used for all, following the EMCDDA protocol http://www.emcdda.europa.eu/scientific-studies/2012/mortallity-cohorts: common core dataset, data linking (Population register, Mortality Register), baseline measure at intake and standardized mortality ratio with European population. 31000 persons were enrolled (all cohorts were dynamic), representing more than 200000 person-years (PY) of follow-up. There were 2885 deaths, 2043 of which with known cause. The CMR was 14.2/1000 PY ranging from 3.5 to 22 between countries. The SMR was 8.8 ranging from 3.5 to 18.8 between countries. Causes of death, where known were mainly overdose (34.9%), HIV-AIDS (14.4%), circulatory diseases (9.2%), hepatic disease (viral 2.3% or unspecified 4%), traumatic causes (9.6%), respiratory diseases (5.4%), suicide (5.2%) and neoplasm (4.9%). The findings confirm the current high mortality of opioid addicts in Europe and a considerable excess risk of death compared to the European population. Too many years of life are lost, with most causes being preventable (external causes). The share due to overdose might be underestimated in some countries (e.g. coded as diseases of the circulatory system).

Marcis Trapencieris (MT), Latvia
Pooled EU cohorts – implications of age differences in mortality

MT presented a preliminary analysis of age differences in mortality in the above described pooled EU cohort. Background: in the 9 pooled studies, the year of entry, length of follow-up, year of birth, and age at entry vary from country to country. The oldest drug users were in the NL, NO, and SP and the youngest in RO, MT and LV. Overall, mortality rates are considerably higher among opioid users as compared to the general population but this varies by country and cohort. Four of the younger cohorts (HR, MT, RO, SI) had significantly lower mortality rates (CMR or SMR); two of the younger cohorts (LV, PL) had as high mortality rates as three oldest cohorts. The number of deaths in some cohorts was relatively small. Other limitations include: the patients are not necessarily enrolled in their first treatment and few countries have this information available, few countries have data on the 'current drug-use status' (it is not sure whether or not people are still active drug users) and current treatment status. Health status at entry is not known in most participating cohorts. Further plans: explore the use of ACP (age-period cohort) analysis further in the pooled EU cohort.

Follow-up discussion: **Giraudon** acknowledged the difficulties with this kind of pooled analysis and the observed heterogeneity in the results; also proposed that together with the participating national experts, a methodological paper is published encapsulating this experience. **Mravcik**, commented that it is a very interesting study especially when trying to explain differences between countries; noticed possible differences in service provision, OST in particular and in the characteristics (e.g., injecting) of the drug users between the countries; these can be included in the discussion rather than as correlates. He noted as well that there was a constant risk of deaths over time, whereas a decrease could have been expected as some patients may stop using drugs. This might be due to the continuous enrolment of new patients as all cohorts are dynamic. Finally the possibility was discussed to use national populations as reference populations to compute the SMRs.

Mortality related to infection: HIV, anthrax: service provision & guidelines (Joint Plenary)

***Chair**: Maria J Bravo & Vivian Hope*

Isabelle Giraudon (IG), EMCDDA
Estimation of HIV mortality related to IDU

HIV/AIDS is one of the common causes of deaths reported in cohorts and the reduction of HIV-mortality is achievable in EU. This is why reducing mortality should be among the key priorities of HIV/AIDS policies. Mortality is an indicator of HAART coverage and access to HAART should be equitable for all groups. Study questions: how many HIV-AIDS deaths in Europe are accounted for by IDUs and what are the trends? Methods: EUROSTAT and HIV/AIDS surveillance database (ECDC) over time were the two European level sources used in the analysis (as is the case for the EMCDDA Statistical bulletin). Results: the 2010 standardised HIV/AIDS death rate per 100,000 inhabitants (Eurostat HIV-AIDS; ICD 10 B20-B24) where the highest in Portugal, France, Spain and Italy (West) and Estonia and Latvia (East). Trends in Italy and Spain clearly decreased after 1996 (because of HAART treatment) and decreased in Portugal but with several years of delay. In Estonia and Latvia there is an increase since 2003. The estimated proportion accounted for by IDUs varies from country to country. Based on surveillance data (ECDC data on deaths among AIDS patients with known risk group), the IDU risk group accounts from 64% (Spain) to less than 5% (HU, CY, the NL, MT, GR) of the reported AIDS patients. The estimated heaviest burden in numbers of HIV deaths related to IDUs were in Spain, Italy, Portugal, France, Poland, Germany, Latvia and Estonia; Most of the estimated deaths related to IDUs 1413/1663 (2010) of the estimated deaths are in Spain, Italy, Portugal and France (85%). IG went on discussing the increasing discrepancy between mortality statistics (Eurostat, based on death certificates in national mortality registries) and surveillance data (deaths among reported AIDS cases). Possible reasons (beyond reporting delays) include increasing non-AIDS mortality among PLHIV, possible underreporting of AIDS cases and deaths, differences between countries coding of the cause of death for the general mortality register, and likely different combinations of these factors in different countries. There is a need for surveillance of deaths among all HIV cases (not only AIDS cases), inclusion of information on cause of death in surveillance, assess underreporting of death among AIDS cases in national surveillance, compare coding practices and the development of national level linkage studies between mortality statistics and AIDS surveillance. This is particularly important in the current context of increased concern with HIV in some Baltic and south-east European countries.

Follow-up discussion: **Corkery** commented on the fact that within the UK, about 8% of HIV/AIDS deaths were attributed to IDUs in England in 2012, but about 46% in Scotland. Thus, regional characteristics and (to a certain extent may be) coding practices should be taken into account.

Anda Karnite and Marcis Trapencieris, Latvia
Mortality trends in PLHIV in Latvia and insight from cohort studies

Anda Karnite

Background: thanks to treatments, mortality decreased among PLHIV, and the causes of death tend to become similar to the causes existing in the general population (in EU and the USA). Objective of the study: to explore whether the mortality trends among PLHIV in Latvia are similar to the situation in the EU, and identify factors associated with higher death rates (socio-demographic, risk, and clinical or health care factors). Methods and sources: HIV cases register and mortality databases. The data sources and the population involve 4888 PLHIV and 31,192.6 py of follow-up since 1987. Analysis included indirect standardization (standard – age specific mortality rates of the general population), time trends-log transformation and linear regression, survival analysis - Cox regression, and cause-specific MRR - Poisson regression. Results: There was a peak in 2001 with around 650 newly diagnosed HIV in PWID (more than half, were known (for ~ half of the cases), in 2010). There is a high and increasing proportion of late diagnoses among PWID and poor treatment coverage. 30% of HIV positive PWID have not received care, 46% no ART, and only 6% received ART with no interruption. The crude mortality rate among PLHIV / PWID, in the period 2001-2010, increased annually (8.4%). The underlying cause of death is HIV for half (48%) of the PLHIV / PWID, and external causes (mainly overdose or suicide) for a quarter (26%). HIV specific proportional mortality increases (63% of the deaths in 2010). PLHIV who became HIV infected via drug injection have a two times higher death hazard (vs. MSM), two times higher HIV specific mortality and six times higher mortality from external causes of death. Limitations were discussed (underestimation of the PLHIV (half could be missed), underestimation of late diagnosis, unspecific definition of interruption

of treatment, and ART duration, combination of treatments not taken into account). Conclusions were that mortality rates among PLHIV / PWID in Latvia increase annually and HIV has been established as the underlying cause of death for half of the PLHIV / PWID; the HIV specific proportional mortality increases annually.

Marcis Trapencieris

The objective was to provide a complementary approach and describe HIV-related mortality among treated drug users in Latvia. Sources were a cohort of treated amphetamine users and a cohort of opioid users (described earlier as component of the EU pooled study). Automatic record linkage was carried out of PREDA (treatment database) and the mortality register. Results: 1) 1709 amphetamine users entered in treatment from 2000 to 2012, representing 8055 PY of observation; 61 died (including 51 males). The median age was 29. The CMR was 7.6/1000 PY and the SMR 4.3. 15 out of 61 died of HIV, with a median age of 34 years. 2) 3599 opioid using clients entered treatment from 2000 to 2011 representing 25775 PY of follow-up and of whom 417 died. The CMR was 16.2 (17.2 for males and 12.4 for females); 68 of 417 (16%) died of HIV and the proportion is increasing (40% in the last years). The mean age at death was 31 years.

Martin Busch (MB), Austria

Ten year trends in HIV and service provision in Europe

MB presented results from a report on the state of play of the 2003 Council Recommendation (CR) on prevention and reduction of health related harms associated with drug dependence. He summed up the key components of the CR (prevention of drug dependence and reduction of related risks, and development/implementing comprehensive strategies; reduction of incidence of drug-related health damage (e.g. including HIV and drug-related deaths; develop a range of different services and facilities, aiming at risk reduction). He listed the different purposes of the project: describe developments in epidemiology (in particular based on the EMCDDA Key Indicators DRID and DRD), availability of harm reduction measures, carry out a statistical analysis of changes in the epidemiological situation and the supply of harm reduction, collate existing evidence in effectiveness of harm reduction interventions based on literature review; produce conclusions and recommendations. He presented briefly the findings from the 3rd Work Package on which his team worked: country profiles (based on EMCDDA data mainly, Statistical Bulletin, Best Practice Portal, country overviews, survey among the Reitox network); stakeholder consultation and statistical analysis (using trends in DRD numbers, HIV diagnosis in PWID, OST and NSP from 2003-04 to 2009-10 or 2011). MB highlighted that some harm reduction measures (drug consumption rooms (5 countries), peer naloxone programs (8), heroin assisted treatment (6), NPS in prison (5) in particular) are poorly available in the EU. Conclusions and Recommendations included: need for political strengthening of harm reduction; increase of the availability and coverage of NSP and OST through specialised programmes; introduction of harm reduction interventions in prison (where non available); naloxone “take-home” programmes; use of emergency services; drug consumption rooms; counselling, outreach and peer involvement; access to HCV treatment; HBV vaccination; housing; integration of services; and research. Three priorities were identified: a) reduction of drug-induced deaths; b) improvement of harm reduction coverage in prison settings; and c) reduction of harm caused by drug-related infections.

Follow-up discussion: Some updates were reported from Germany (Although Germany has NSP in prisons ‘available’, NSP is provided in only one prison among about 240 prisons in Germany, this is significantly less than in former times due to a political reaction) and the UK (naloxone is available now also in Northern Ireland).

Cornelius Bartels, ECDC (CB)

ECDC/EMCDDA Joint anthrax prevention guidance for PWID

CB provided an overview on the characteristics and the history of anthrax. Then he focused on injection anthrax and referred to the outbreak among heroin users following the injection of heroin contaminated with B. anthracis spores; it became a new clinical entity in 2009. As main symptoms one expects to see serious soft tissue infection (SSTI), coupled with extensive oedema, developing at the injection site several days after heroin injection; in some cases there are signs of systemic

infection, including signs of fever, raised white cell count, cardiovascular compromise, blood coagulation disorder and multi-organ dysfunction syndrome. The outbreak has re-emerged in 2012, continuing in 2013, involving likely all single cases, not linked with each other. All cases are associated with heroin use/injection - heroin is the likely contaminated agent. CB presented recent results from genotyping and also possible geographical routes of trafficking contaminated heroin from Asia to central and Western Europe. A rapid response was requested by the Commission and ECDC and EMCDDA worked to produce a joint evidence based guidance. The process focused on primary and secondary prevention, systematic review of existing literature and grading of documents. An expert panel for formulation of recommendations was also consulted. Interventions targeted behavioural changes (e.g., adherence to OST and adherence to heroin assisted treatment, adherence to NSP, modifications in the preparation of heroin, alternative routes of administration) as well as prophylactic approaches (e.g., vaccination, antibiotics). The role of the expert panel was deemed crucial in the process (its rich composition in expertise was presented). Recommendations in the area of public health action & identification were: a) Appropriately-dosed opiate substitution treatment (OST), including a wide-range of OST options, should be provided to reduce or eliminate illicit heroin use in a context of anthrax outbreak among drug users or suspected circulation of drugs contaminated with anthrax. In countries where heroin-assisted treatment is legally possible, it should be seen as an intervention among an extended range of OST options for the prevention of anthrax in people who use heroin; and b) as early as possible diagnosis and referral of the case is essential to prevent further harm and death. Therefore, a wide range of professionals in contact with PWUH, but also PWUH themselves and peers should be made familiar with possible symptoms of infection with B. anthracis. These include localised soft tissue oedema near to the injection site and generalised symptoms like systemic illness, gastrointestinal, respiratory or CNS-disorders. All symptoms may appear separately or in combination with each other. Other key recommendations focused on risk communication. CM concluded that the anthrax outbreak is most likely on-going at least since 2000; contamination occurs most likely repeatedly in single production site(s) depending on environmental factors; early diagnosis and early treatment are crucial; there is an important role of aggressive surgical debridement; integration of clinics, public health, harm reduction and drug control for effective management are crucial; there is a potential for use of monoclonal antibodies; a positive heroin sample is still the missing link to identify and eventually control the source.
Follow-up discussion: (*A/N. The discussion following this presentation has been extensive. Work on this guidance is ongoing and likely to be finalised in 2014. Only some points are reproduced below*) **Blystad** asked about the role of vaccines. *CB* reported that the panel considered this matter but did not include it among its recommendations for, among other things, it was not clear how this would work with heroin users (health status). **Wiessing** acknowledged the important initiative of the ECDC on this project. More research is needed for getting more evidence. Discussion followed over the process of forming the recommendations on the basis on existing evidence. **Strang**: Some commented that some of the recommendations are not pragmatic (e.g., HAT is very costly) while others (e.g., OST) are inadequate. **Wiessing**: acknowledged the complications of HAT but also noted that the aim of prevention was to reduce all illicit heroin use and not so much to change of the route of administration as anthrax infection is not specifically related to injecting. A short discussion about heroin profiling followed.

Harm related to new psychoactive drugs and methamphetamine (Parallel workshop – DRD)

Chairs: Isabelle Giraudon and Gergely Horvath

David Wood, UK

Establishing the acute harm associated with the use of NPS: what is available, deficiencies in current datasets, potential for poison centre data, Euro-DEN data collection

Background: recreational drugs and NPS use are common; systematic data is available on prevalence of use, drug seizures, use of treatment agencies (TDI), drug-related fatalities. But, there is no systematic data collection on acute recreational drug toxicity. There is a need for data triangulation on NPS toxicity. The sources of information are in vitro pharmacological studies, animal studies, users' reports and subpopulation surveys, case reports (series), pre hospital emergency data, emergency department presentations, poison information services, data collection through specialist sentinel surveys. Scope, strengths and limitations of all of these are presented and discussed. The conclusions were that there is no pan European data collection systems on the acute harms related to novel psychoactive substances; data triangulation from multiple sources allows patterns of acute toxicity to be determined; poison centres and information services can provide useful information (there is some potential to link international centres to provide more robust data); Euro-DEN project is a novel pan-European coordinated approach to collecting Emergency department data.

John Corkery, UK

Trends in recreational drug-related deaths including new psychoactive substances

General trends in np-SAD deaths, related to 'traditional' and to NPS drugs were described. UK legislative changes are summarised (e.g MDPV controlled in April 2010; Methoxetamine Temporary Class Drug Order in April 2012 and controlled Class B in April 2013; 25I-NBOMe Temporary Class Drug Order in June 2013). The sources, design, cases definition used by np-SAD were presented. In 2012, there were about 1700 deaths reported, of which about 500 were related to heroin morphine, 150 to cocaine and 50 to amphetamines, prices, and 35 to ecstasy type drugs. For each drug, the context of purity, seizures, convictions, persons in treatment are discussed. The conclusions of the presentation were that there was a fall in price, use and purity of some 'traditional' stimulants - cocaine, amphetamines, and ecstasy type drugs accompanied by fall in deaths. There was appearance of new stimulants in the mid-2000, GHB, Ketamine and slow emergence of piperazines, and then methcathinones especially mephedrone. Both of these had associated deaths. New drugs can also cause deaths in their own right. Important to note that in many cases polydrug use is the typical scenario for these deaths. Effect of control legislation on deaths is clear for GHB/GBL where the control of both these substances was followed by initial fall. For mephedrone there was a sharp fall but then levelling off. The picture is not so clear between ketamine and methoxetamine. Finally, control appear to create displacement

Jane Mounteney, EMCDDA

2013 trendspotter meeting on methamphetamines: main findings, main concerns

The 'trend spotter concept' includes in depth information gathering, on subject of concern and uncertainty, one off and ad hoc with rapid reporting. It is a multi-source, multi-methods, multi-disciplinary triangulation: literature review, routine data collection, electronic survey, meeting with experts' presentations, focus groups and analysis. Harms, traffic, seisures, production, populations of users, responses were covered. The cmine in Europe is onclusions were that there were multiple different situations in Europe, and that there were many information gaps. Methamphetamine in Europe is not a mass phenomenon (but even a low prevalence can cause harm); the situation is stable in countries with history of methamphetamineor which already had a marked amphetamine

problem; there are new IV trends amongst small MSM groups in large cities (requiring close monitoring); in some countries like Latvia and Germany, the use of methamphetamine is increasing. In others like Greece, Cyprus, Turkey, methamphetamine (smoking) is an emerging threat).

Prevention of overdose and infection (Joint Plenary DRD-DRID)

Chair: Dagmar Hedrich & Teodora Groshkova

Paul Dargan (PD), United Kingdom

Improvement in the recognition and assessment of acute drug toxicity in the pre-hospital environment

The clinical classification of drugs are: Stimulants (e.g., amphetamines, MDMA, cocaine and NPS such as piperazines, cathinones, synthetic cocaine, pipradrols, indanes, benzofurans); Depressants (heroin, opioids, benzodiazepines, GHB and NPS such as GBL, 1,4-BD, novel opioids and metabolites); and Hallucinogens (e.g., LSD, Psilocybin, Ketamine and NPS such as glaucine, ketamine analogues, tryptamines, synthetic cannabinoids, salvia). Clinicians are familiar with the patterns of toxicity associated with classical drugs and become increasingly more familiar with the NPS. NPS have additional characteristics in their toxicity. The presentation focused on pre-hospital environment and what can be done to improve the management of the cases and in particular the identification of those at risk and the adequate referral to A&E and ambulance. The backdrop are large festivals; night clubs; recreational settings and the recreational drug toxicity and in particular the presentations in first aid facilities. In pre-hospital acute drug toxicity has different patterns compared to hospital cases and different drugs are in cause (e.g. more GHB and ketamine, than cocaine and XTC, contrary to hospital cases). Pre-hospital cases may just need reassurance in a calm environment but there is a potential for severe toxicity and life-threatening clinical features as well (e.g. coma with aspiration, sympathomimetic toxicity). These cases should be fast-tracked to hospital. Delayed transit of patients to hospital can be critical. Hence, an initiative towards the early identification and simple clinical assessment of those at risk in a London pre-hospital environment started in 2006. This included guidelines on responding, equipment, training etc. These guidelines were adapted to a European context accounting for the different models of pre-hospital care across Europe (EMCDDA funded project in 2011). An Internet-based review was done of the UK guidelines (guideline components and facilities needed for initial assessment and care). 17 countries responded to the survey and there was an overall acceptance of the guidelines. The next step (through one workstream of the Euro-DEN project, funded by the EC DPIP project 2013-2015)[6] is to provide training and guidelines to staff in recreational settings to respond to drug-related incidents. The objective is to develop and finalise an interactive training package and updated guidelines for pre-hospital assessment, recognition of drug-toxicity and referral. A feasibility study will be conducted in London, Mallorca, Oslo and Brno.
Follow-up discussion: **Georgiadis** asked whether alcohol was considered when developing the guidelines. The response was that these guidelines were focused on drugs but they could be considered to be appropriate also for alcohol in pre-hospital environments. **Another** question was about a possible 24-hour telephone line with specialist advice. The response was that this kind of service may be anyway available in many places in Europe (poison centres).

John Strang (JS), United Kingdom

Pre-provision of naloxone to prevent heroin overdose deaths: evidence, myths and UK experience

JS noted several reasons why take-home naloxone is an important intervention to consider: first, overdose is the major cause of death among drug users–mainly opiates; second, most heroin overdoses are witnessed (often by family members in home contexts) and therefore invite for active reaction by bystanders; except that often this reaction is often wrong. In all, overdoses are common

[6] See presentation given by David Wood on day 2, and minutes of the DRD sessions of the joint expert meeting.

hazards in this population and in addition they are frequently witnessed: this is where there is room for intervention that can make a difference. Naloxone is critical in settings and times of high risk. There are: Post-detox and post-rehabilitation phases, during methadone early treatment, and upon prison release (high excess drug-related mortality ratio). The value of naloxone interventions was supported and possible concerns (e.g., encouraging risk taking) acknowledged.
Follow-up discussion: **Mendão** *called for gathering all necessary evidence; in order to achieve this, any possible (ethical, bureaucratic, legal) barriers for carrying out scientific research on the effectiveness of use of naloxone in community settings, incuding trials around Europe. JS commented that that there should not be any controversy on this issue, except perhaps when we don't know who the recipient is..* **Wiessing**: liked the idea of the clinical trial and but wondered whether it could be ethically possible to set up a clinical trial if the comparison is going to be with not providing naloxone. *JS* thought that there is a need for well-designed trials in this area. **Another** concern is the restrictions for use (safety) JS doesn't know the national regulations but everywhere the context of use for naloxone is the reversal of overdose, except that it allows someone other than the drug user to do it. **Trapencieris** believes that naloxone interventions are important for countries that report high numbers of overdoses. He wondered however whether, considering precarious living conditions of many drug users they would have the medication readily at hand when required. JS responded that current tests address only whether naloxone peer distribution is effective: deaths among those exposed to the intervention compared to those not exposed.

Fabio Patruno, Italy
Prevention of overdose and infection. Experience from Villa Maraini Foundation/Italian Red Cross/International Federation Red Cross Red Crescent (IFRC)

Already in 1980, a Red Cross (RC) expert meeting on drugs held in Strasbourg recommended to include the antagonist medicine naloxone in RC first aid kits. This should be done after emergency professionals and RC volunteers have been formally trained on how to use this product. The medication does not present any risk and possibly saves the live of those who suffer an opioid overdose. Villa Mariani, a facility in Rome, managed by the Red Cross offers a wide range of services suited to individual needs and capacities. The services are defined as 'very low theshold' and include street units, emergency units and prison projects. Over the course of the past 20 years, more than one . million contacts with POUs took place, and 13000 naloxone vials were given out.Of11000 interventions for emergencies including overdoses, 9000 led to referals to drop in centres. In 2012 alone, over 600 OST patientsare followed up in the RC outpatient clinic per month.Furthermore, the RC conducts harm reduction trainings in many countries, including in Belarus, Cambodia, Kazakhstan, Ukraine and Latvia.

Charlotte Klein, Austria
Report on the EU consultant project: "Current current state of play of the 2003 Council Recommendation on the prevention and reduction of health-related harm: focus on evidence on the prevention DRD

The Council Recommendation of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence was briefly presented and the scope of the Follow-up project, which involved the documentation of trends and developments in harm reduction responses in Europe since 2003, was described. . As part of the analytical work, a review of the DRID and DRD situation as carried out. Overall, incidence of HIV infection among injecting drug users has been decreasing over years in many countries, a change that coincided with a broader availability of treatment and harm reduction responses. However, similar improvements were not yet evidenced with regard to drug-induced deaths. Countries were grouped according to their trend in the number of reported drug-induced deaths into those where an increase and those where a decrease was noted from the 2003/04 to 2009/10. These changes were analysed against the current estimated coverage in various harm reduction measures. The greatest reductions between the two periods, in the numbers of reported deaths were observed in countries with high coverage of harm reduction measures. Literature supports these results. The available evidence was discussed for some of the measures, including OST, supervised drug consumption rooms and, peer naloxone provision in particular. A special emphasis was given to measures targeting prisoners and ex-prisoners. It was noted that pre-release councelling and through care are essential to reduce DRD but are hardly

available in European countries. Prison release without adequate throughcare is one of the main risk factors for drug-induced deaths. Consultants recommended that measures targeting reduction of DRD should become a priority if the Council Recommendation were to be renewed. Proposed measures included: improving the coverage of interventions, providing low threshold access to OST, improved provision of OST to avoid interruptions, especially upon prison release and to avoid waiting lists; comprehensive health insurance covering OST; as well as measures to facilitate the use of emergency services in cases of overdose; peer involvement and family support, including through naloxone distribution programmes.

End of the regular DRID – DRD meetings, closure