Addiction
SSA SOCIETY FOR THE STUDY OF ADDICTION
REVIEW
doi:10.1111/add.13056

# The drug situation in Europe: an overview of data available on illicit drugs and new psychoactive substances from European monitoring in 2015

**Jane Mounteney, Paul Griffiths, Roumen Sedefov, Andre Noor, Julián Vicente & Roland Simon**

European Monitoring Centre for Drugs and Drug Addiction, Lisbon, Portugal

## ABSTRACT

**Aim** A central task for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is to produce an annual report of the latest data available on drug demand and drug supply in Europe. This paper is intended to facilitate a better understanding of, and easier access to, the main quantitative European level data sets available in 2015. **Methods** The European reporting system formally covers all 28 European Union (EU) Member States, Norway and Turkey and incorporates multiple indicators alongside an early warning system (EWS) on uncontrolled new psychoactive substances (NPS). While epidemiological information is based largely on registries, surveys and other routine data reported annually, the EWS collects case-based data on an ongoing basis. The 2015 reporting exercise is centred primarily on a set of standardized reporting tools. **Results** The most recent data provided by European countries are presented, including data on drug use, drug-related morbidity and mortality, treatment demand, drug markets and new psychoactive substances, with data tables provided and methodological information. A number of key results are highlighted for illustrative purposes. Drug prevalence estimates from national surveys since 2012 (last year prevalence of use among the 15–34 age band) range from 0.4% in Turkey to 22.1% in France for cannabis, from 0.2% in Greece and Romania to 4.2% in the United Kingdom for cocaine, from 0.1% in Italy and Turkey to 3% in the Czech Republic and the United Kingdom for ecstasy, and from 0.1% or less in Romania, Italy and Portugal to 2.5% in Estonia for amphetamine. Declining trends in new HIV detections among people who inject drugs are illustrated, in addition to presentation of a breakdown of NPS reported to the EU early warning system, which have risen exponentially from fewer than 20 a year between 2005 and 2008, to 101 reported in 2014. **Conclusions** Structured information is now available on patterns and trends in drug consumption in Europe, which permits triangulation of data from different sources and consideration of methodological limitations. Opioid drugs continue to place a burden on the drug treatment system, although both new heroin entrants and injecting show declines. More than 450 new psychoactive substances are now monitored by the European early warning system with 31 new synthetic cathinones and 30 new synthetic cannabinoid receptor agonists notified in 2014.

**Keywords** Europe, HIV diagnoses, illicit drugs, monitoring, new psychoactive substances, prevalence, risk assessment.

*Correspondence to:* Jane Mounteney, European Monitoring Centre for Drugs and Drug Addiction, Lisbon, Portugal. E-mail: Jane.mounteney@emcdda.europa.eu
Submitted 19 April 2015; initial review completed 29 May 2015; final version accepted 11 June 2015

## INTRODUCTION

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) was established to provide a technical reference point for collating and disseminating information on the European drug situation. Details on the role and activities of the agency can be found in Griffiths *et al.* [1]. A central task for the agency is to produce an annual report of the latest data available on drug use in Europe. This reporting exercise is primarily based on a set of standardized reporting tools, which have been refined during the 20 years in which the system has been operational. Here an overview of the information available in 2015, together with links to data tables and methodological details, is provided. Some illustrative results from the most recent reporting exercise are also included (Tables 1 and 2, Fig. 1 and 2). It is not, however, the purpose of this paper to provide an analysis of the European drug situation, which can be found in the EMCDDA *European Drug Report: Trends and Developments* [2].

**Table 1** Subset of national data available in the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2015 data collection.

*Opioids*

| | | *Treatment demand indicator, primary drug* | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | *Opioids clients as % of treatment demands* | | | *% opioids clients injecting (main route of administration)* | | | |
| *Country* | *Problem opioid use estimate Cases per 1000* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* | *Clients in substitution treatment Count* |
| Belgium | – | 30.8 (2816) | 13 (416) | 39 (2024) | 20.1 (547) | 14.1 (57) | 21.5 (420) | 17 482 |
| Bulgaria | – | 88.8 (1744) | 79.3 (211) | 95.2 (954) | 73.8 (876) | 68.8 (141) | 74.4 (585) | 3563 |
| Czech Republic | 1.5–1.5 | 17.2 (1681) | 7.8 (362) | 25.6 (1319) | 89.4 (1493) | 86.9 (312) | 90.1 (1 181) | 3500 |
| Denmark | – | 17.5 (663) | 7.1 (102) | 26.3 (502) | 33.9 (193) | 23 (20) | – | 7600 |
| Germany | 2.8–3.4 | 37.1 (29 891) | 13.7 (3217) | – | – | – | – | 77 300 |
| Estonia | – | 92.9 (403) | 81 (102) | 98.6 (284) | 84.8 (339) | 90.2 (92) | 83 (235) | 1166 |
| Ireland | – | 51.3 (4451) | 29.7 (1032) | 66.8 (3291) | 41.3 (1762) | 33.7 (344) | 43.6 (1362) | 9640 |
| Greece | 2.0–2.6 | 69.3 (3367) | 54.9 (1145) | 80 (2194) | 36.8 (1227) | 32.8 (372) | 39.1 (850) | 9973 |
| Spain | 1.7–2.6 | 26.8 (13 333) | 11.4 (2866) | 43.7 (10 050) | 17.8 (2195) | 11 (295) | 19.6 (1859) | 69 111 |
| France | – | 43.1 (15 641) | 27.1 (2690) | 53.5 (11 275) | 14.2 (1836) | 6.8 (172) | – | 163 000 |
| Croatia | 3.2–4.0 | 80.4 (6315) | 24 (270) | 90 (5992) | 73.7 (4581) | 42.6 (104) | 75.1 (4446) | 6357 |
| Italy | 3.8–4.9 | 54.7 (18 072) | 37.2 (4782) | 65.7 (13 290) | 57 (9678) | 44.4 (1906) | 61.3 (7772) | 94 376 |
| Cyprus | 1.2–2.1 | 26.5 (270) | 7.7 (37) | 43.8 (232) | 48.1 (126) | 40 (14) | 49.3 (112) | 180 |
| Latvia | 4.1–9.7 | 52.1 (783) | 19.7 (104) | 69.6 (679) | 63.7 (495) | 84.6 (88) | 60.5 (407) | 328 |
| Lithuania | 2.3–2.4 | 86.8 (1918) | 62.8 (214) | 91.9 (1 671) | – | 100 (140) | – | 592 |
| Luxembourg | 5.0–7.6 | 50.2 (145) | 42.1 (8) | 49.8 (116) | 48.2 (68) | 28.6 (2) | 47 (54) | 1254 |
| Hungary | 0.4–0.5 | 5.9 (236) | 2.1 (54) | 13.6 (160) | 70.1 (157) | 60.4 (32) | 71.8 (112) | 786 |
| Malta | 6.5–7.7 | 74.8 (1352) | 33.7 (67) | 79.9 (1285) | 61.8 (816) | 54.2 (32) | 62.2 (784) | 1078 |
| Netherlands | 1.1–1.5 | 10.2 (1195) | 5.1 (343) | 17 (852) | 4.6 (51) | 5.4 (16) | 4.3 (35) | 8185 |
| Austria | 4.9–5.1 | 52 (1537) | 29.5 (361) | 67.9 (1176) | 43.4 (536) | 31.1 (100) | 47.8 (436) | 16 989 |
| Poland | 0.4–0.7 | 26.4 (724) | 8.2 (91) | 39.3 (621) | 58 (391) | 43.4 (36) | 60.3 (349) | 1725 |
| Portugal | – | 54.3 (1634) | 27.3 (380) | 77.6 (1254) | 15.9 (238) | 11.2 (38) | 17.3 (200) | 24 027 |
| Romania | – | 48.8 (802) | 33.6 (240) | 63.3 (543) | 84.5 (622) | 84.8 (189) | 84.8 (420) | 387 |
| Slovenia | 4.3–5.8 | 81.5 (234) | 60.6 (57) | 91.7 (176) | 48.7 (113) | 36.8 (21) | 52.3 (91) | 4065 |
| Slovakia | 1.0–2.5 | 24.7 (558) | 16 (185) | 34.1 (363) | 66.8 (367) | 48.4 (89) | 76.4 (272) | 408 |
| Finland | 3.8–4.5 | 64.2 (706) | 40.4 (65) | 69.2 (619) | 81.6 (567) | 73 (46) | 82.5 (504) | 2439 |
| Sweden | – | 27.3 (7760) | 17.2 (2211) | 35.7 (5549) | 59.6 (140) | 33.3 (11) | 63.9 (129) | 3425 |
| United Kingdom | 7.9–8.4 | 50.3 (49 871) | 19.7 (6813) | 66.6 (42 636) | 34.5 (16 871) | 22.5 (1484) | 36.3 (15 191) | 172 513 |
| Turkey | 0.2–0.5 | 76.3 (5542) | 68 (2540) | 85.1 (3002) | 39.7 (2201) | 29.3 (745) | 48.5 (1456) | 28 656 |
| Norway | 1.9–3.1 | 26.9 (2 266) | – | – | – | – | – | 7055 |
| European Union | – | 41 (168 102) | 18.7 (28 425) | 57.1 (109 107) | 38.2 (46 285) | 28.4 (6153) | 43.3 (37 806) | 701 449 |
| EU, Turkey and Norway | – | 41.3 (175 910) | 19.9 (30 965) | 57.6 (112 109) | 38.3 (48 486) | 28.5 (6898) | 43.5 (39 262) | 737 160 |

Year and method of estimate for problem opioid use vary between countries. The treatment demand indicator monitors entrants into treatment within a given year.

***(Continues)***

The European drug information system is explicitly multi-method and multi-source. While much has been conducted to improve data quality and comparability, the methodological and practical difficulties of monitoring drug use, and in generating cross-national comparisons, are considerable and well known [3]. The European system attempts to overcome these difficulties, as far as it is possible, through the incorporation of a wide range of information sources, triangulating data, utilizing feedback from national experts and by including methodological and contextual information. None the less, caution is required in the interpretation of data and in particular when single measures between countries are compared. As some important information domains for policy purposes are not

 

**Table 1** (Continued)

*Cocaine*

| | *Prevalence estimates* | | | *Treatment demand indicator, primary drug* | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *General population* | | *School population* | *Cocaine clients as % of treatment demands* | | | *% cocaine clients injecting (main route of administration)* | | |
| *Country* | *Life-time, adults (15–64) %* | *Last 12 month, young adults (15–34) %* | *Life-time, students (15–16) %* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* |
| Belgium | – | 2.0 | 2 | 15.6 (1430) | 15.2 (488) | 15.9 (825) | 6 (83) | 1.3 (6) | 7.1 (57) |
| Bulgaria | 0.9 | 0.3 | 4 | 0 (0) | 2.6 (7) | 0.3 (3) | 0 (0) | 0 (0) | 0 (0) |
| Czech Republic | 0.4 | 0.3 | 1 | 0.2 (19) | 0.3 (12) | 0.1 (7) | 11.1 (2) | 16.7 (2) | 0 (0) |
| Denmark | 5.2 | 2.4 | 2 | 5.1 (193) | 5.8 (84) | 5.2 (99) | 10.1 (17) | 0 (0) | – |
| Germany | 3.4 | 1.6 | 3 | 5.9 (4788) | 5.6 (1322) | – | – | – | – |
| Estonia | – | 1.3 | 2 | 0 (0) | 0 (0) | 0 (0) | – | – | – |
| Ireland | 6.8 | 2.8 | 3 | 7.8 (680) | 9.2 (320) | 6.6 (324) | 1.7 (11) | 0.3 (1) | 2.9 (9) |
| Greece | 0.7 | 0.2 | 1 | 5.1 (250) | 5.9 (122) | 4.6 (127) | 19.8 (49) | 12.4 (15) | 27 (34) |
| Spain | 10.3 | 3.3 | 3 | 39.2 (19 497) | 40.2 (10 142) | 38.5 (8855) | 2 (365) | 1 (95) | 3 (260) |
| France | 5.4 | 2.3 | 4 | 6.4 (2311) | 4.1 (411) | 7.5 (1573) | 9.9 (192) | 4.1 (16) | – |
| Croatia | 2.3 | 0.9 | 2 | 1.5 (119) | 2.6 (29) | 1.3 (84) | 0.9 (1) | 0 (0) | 1.2 (1) |
| Italy | 4.2 | 1.3 | 1 | 25.8 (8529) | 31.4 (4037) | 22.2 (4492) | 3.5 (289) | 2.9 (114) | 4 (175) |
| Cyprus | 1.3 | 0.6 | 4 | 12.2 (124) | 9.3 (45) | 14.7 (78) | 5.8 (7) | 0 (0) | 9.3 (7) |
| Latvia | 1.5 | 0.3 | 4 | 0.3 (5) | 0.8 (4) | 0.1 (1) | 0 (0) | 0 (0) | 0 (0) |
| Lithuania | 0.9 | 0.3 | 2 | 0.6 (14) | 1.8 (6) | 0.3 (5) | – | – | – |
| Luxembourg | – | – | – | 17.3 (50) | 10.5 (2) | 18 (42) | 39.1 (18) | – | 39 (16) |
| Hungary | 0.9 | 0.4 | 2 | 2 (81) | 2.4 (60) | 1.4 (17) | 8.9 (7) | 8.3 (5) | 5.9 (1) |
| Malta | 0.5 | – | 4 | 14.4 (260) | 32.2 (64) | 12.2 (196) | 25.6 (65) | 11.3 (7) | 30.2 (58) |
| Netherlands | 5.2 | 2.4 | 2 | 26.5 (3113) | 22.2 (1494) | 32.3 (1619) | 0.3 (8) | 0.3 (4) | 0.3 (4) |
| Austria | 2.2 | 1.2 | – | 10.2 (301) | 11.8 (145) | 9 (156) | 7.6 (18) | 2.7 (3) | 12.2 (15) |
| Poland | 0.9 | 0.3 | 3 | 2.4 (67) | 1.9 (21) | 2.8 (44) | 6.3 (4) | 4.8 (1) | 7.3 (3) |
| Portugal | 1.2 | 0.4 | 4 | 12.9 (388) | 17.2 (239) | 9.2 (149) | 4.1 (14) | 1.9 (4) | 7.7 (10) |
| Romania | 0.3 | 0.2 | 2 | 0.7 (11) | 1.3 (9) | 0.2 (2) | – | – | – |
| Slovenia | 2.1 | 1.2 | 3 | 3.5 (10) | 6.4 (6) | 2.1 (4) | 30 (3) | 16.7 (1) | 50 (2) |
| Slovakia | 0.6 | 0.4 | 1 | 0.6 (13) | 0.4 (5) | 0.8 (8) | 8.3 (1) | 0 (0) | 14.3 (1) |
| Finland | 1.7 | 0.6 | 1 | 0.1 (1) | 0 (0) | 0 (0) | 100 (1) | – | – |
| Sweden | – | 1.2 | 1 | 0.8 (236) | 1.2 (151) | 0.5 (85) | 6.3 (2) | 0 (0) | 18.2 (2) |
| United Kingdom | 9.5 | 4.2 | 2 | 12.9 (12 756) | 17.1 (5888) | 10.7 (6851) | 1.7 (204) | 0.5 (29) | 2.6 (175) |
| Turkey | – | – | – | 1.1 (81) | 1.1 (41) | 1.1 (40) | 0 (0) | 0 (0) | 0 (0) |
| Norway | 4.2 | 2.2 | 1 | 0.9 (79) | – | – | – | – | – |
| European Union | 4.6 | 1.9 | – | 13.5 (55 246) | 16.5 (25 113) | 13.4 (25 646) | 2.8 (1361) | 1.3 (303) | 3.6 (830) |
| EU, Turkey and Norway | – | – | – | 13 (55 406) | 16.2 (25 154) | 13.2 (25 686) | 2.8 (1361) | 1.3 (303) | 3.6 (830) |

Prevalence estimates for the general population are derived from representative national surveys. The year and method of survey varies by country. Prevalence estimates for the school population are taken from national school surveys or the ESPAD project.

***(Continues)***

covered by quantitative reporting instruments, expert opinions are utilized in the annual reporting exercise, while noting the limitations and difficulties of this approach. The focus of this paper is, however, on the most recent drug-related quantitative data sets provided by European countries.

The reporting system formally covers all 28 European Union (EU) Member States, Norway and Turkey, and incorporates multiple indicators alongside an early warning system (EWS) on uncontrolled new psychoactive substances (NPS) [4]. While epidemiological information is based largely on registries, surveys and other routine data and is reported annually, the EWS collects case-based data on an ongoing basis. Data availability and coverage vary by country and not all data reported comply with the formal EU reporting standards. These issues are reviewed

 

**Table 1** (Continued)

*Amphetamines*

| | *Prevalence estimates* | | | *Treatment demand indicator, primary drug* | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *General population* | | *School population* | *Amphetamines clients as % of treatment demands* | | | *% amphetamines clients injecting (main route of administration)* | | |
| *Country* | *Life-time, adults (15–64) %* | *Last 12 month, young adults (15–34) %* | *Life-time, students (15–16) %* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* |
| Belgium | – | – | 2 | 10.1 (925) | 9.1 (292) | 11 (574) | 13.3 (118) | 5.3 (15) | 17.7 (97) |
| Bulgaria | 1.2 | 1.3 | 5 | 4.7 (93) | 10.9 (29) | 1.8 (18) | 0 (0) | 0 (0) | 0 (0) |
| Czech Republic | 1.1 | 0.7 | 2 | 70.3 (6865) | 74.2 (3431) | 66.7 (3434) | 78.6 (5365) | 72.6 (2473) | 84.5 (2892) |
| Denmark | 6.6 | 1.4 | 2 | 9.5 (358) | 10.3 (149) | 8.9 (170) | 3.1 (9) | 0 (0) | – |
| Germany | 3.1 | 1.8 | 4 | 14.9 (12 026) | 18.7 (4365) | – | – | – | – |
| Estonia | – | 2.5 | 3 | 3 (13) | 5.6 (7) | 1.4 (4) | 76.9 (10) | 57.1 (4) | 100 (4) |
| Ireland | 4.5 | 0.8 | 2 | 0.6 (52) | 0.9 (32) | 0.4 (18) | 5.9 (3) | 9.7 (3) | 0 (0) |
| Greece | 0.1 | 0.1 | 2 | 0.2 (12) | 0.3 (7) | 0.2 (5) | 0 (0) | 0 (0) | 0 (0) |
| Spain | 3.8 | 1.2 | 2 | 1 (512) | 1.2 (307) | 0.8 (186) | 0.6 (3) | 0.7 (2) | 0.6 (1) |
| France | 2.2 | 0.7 | 4 | 0.3 (98) | 0.2 (22) | 0.3 (60) | 22.5 (18) | 15.8 (3) | – |
| Croatia | 2.6 | 1.6 | 1 | 0.9 (69) | 2 (22) | 0.7 (46) | 0 (0) | 0 (0) | 0 (0) |
| Italy | 1.8 | 0.1 | 1 | 0.2 (51) | 0.3 (37) | 0.1 (14) | 2 (1) | 2.9 (1) | 0 (0) |
| Cyprus | 0.7 | 0.4 | 4 | 2.6 (26) | 1.7 (8) | 3.4 (18) | 7.7 (2) | 0 (0) | 11.1 (2) |
| Latvia | 2.2 | 0.6 | 4 | 15.1 (227) | 21 (111) | 11.9 (116) | 68.2 (152) | 64.2 (70) | 71.9 (82) |
| Lithuania | 1.2 | 0.5 | 3 | 3.4 (76) | 10 (34) | 1.9 (34) | – | – | – |
| Luxembourg | – | – | – | 0 (0) | 0 (0) | 0 (0) | – | – | – |
| Hungary | 1.8 | 1.2 | 6 | 11.6 (461) | 11.6 (297) | 11 (130) | 15.3 (68) | 11.3 (33) | 24.2 (30) |
| Malta | 0.3 | – | 3 | 0.2 (4) | 0 (0) | 0.2 (4) | 25 (1) | – | 25 (1) |
| Netherlands | 3.1 | – | 1 | 6.5 (760) | 6.6 (445) | 6.3 (315) | 0.6 (4) | 0.5 (2) | 0.7 (2) |
| Austria | 2.5 | 0.9 | – | 3.4 (102) | 4.7 (58) | 2.5 (44) | 1.2 (1) | 2 (1) | 0 (0) |
| Poland | 2.9 | 1.4 | 4 | 25.9 (711) | 25.8 (287) | 26.5 (419) | 10.8 (76) | 3.9 (11) | 15.7 (65) |
| Portugal | 0.5 | 0.1 | 3 | 0.1 (2) | 0.1 (1) | 0.1 (1) | 0 (0) | 0 (0) | – |
| Romania | 0.1 | 0.0 | 2 | 0.5 (8) | 1 (7) | 0 (0) | – | – | – |
| Slovenia | 0.9 | 0.8 | 2 | 0.7 (2) | 1.1 (1) | 0.5 (1) | – | – | – |
| Slovakia | 0.5 | 0.3 | 1 | 43.2 (978) | 46.4 (535) | 39.9 (425) | 31.8 (300) | 27.1 (142) | 38 (154) |
| Finland | 2.3 | 1.6 | – | 11 (121) | 11.8 (19) | 10.8 (97) | 76.7 (89) | 52.6 (10) | 81.9 (77) |
| Sweden | – | 1.3 | 0 | 0.4 (112) | 0 (6) | 0.7 (105) | 78.3 (83) | 80 (4) | 78 (78) |
| United Kingdom | 11.1 | 1.5 | 1 | 2.7 (2725) | 3.1 (1058) | 2.6 (1656) | 24 (607) | 13 (125) | 31.1 (482) |
| Turkey | 0.1 | 0.1 | 2 | 0 (0) | 0 (0) | 0 (0) | – | – | – |
| Norway | 3.7 | 1.1 | 1 | 13.1 (1 104) | – | – | – | – | – |
| European Union | 3.5 | 1.0 | – | 6.7 (27 389) | 7.6 (11 567) | 4.1 (7894) | 47 (6910) | 41.9 (2899) | 53.6 (3967) |
| EU, Turkey and Norway | – | – | – | 6.7 (28 493) | 7.4 (11 567) | 4.1 (7894) | 47 (6910) | 41.9 (2899) | 53.6 (3967) |

***(Continues)***

regularly and detailed within the reporting exercise. There is variation in reporting capacity between countries, and the role of the agency is to work at the European level, which necessarily incorporates a range of national circumstances and provision. Numerical data collected in the annual reporting exercise are published in the EMCDDA *Statistical Bulletin*, which is updated annually and includes detailed methodological information [5]. The handling of numerical and statistical information is governed by a formal statistical code of practice [6]. Much of the data and analyses are provided through a network of focal points (Reitox), which coordinate national expert networks responsible for submitting and checking data [7].

## DATA ON DRUG USE

In addition to examining studies published in the scientific or grey literature, two approaches are used to provide data to comment directly on drug use in Europe (prevalence). The first of these is based on surveys of the general and

 

**Table 1** (Continued)

*Ecstasy*

| | *Prevalence estimates* | | | *Treatment demand indicator, primary drug* | | |
|---|---|---|---|---|---|---|
| | *General population* | | *School population* | *Ecstasy clients as % of treatment demands* | | |
| *Country* | *Life-time, adult (15–64) %* | *Last 12 month, young adult (15–34) %* | *Life-time, students (15–16) %* | *All entrants % (count)* | *First-time entrants* | *Previously treated entrants % (count)* |
| Belgium | – | – | 2 | 0.5 (43) | 0.7 (23) | 0.4 (19) |
| Bulgaria | 2.0 | 2.9 | 4 | 0.1 (1) | 0 (0) | 0.1 (1) |
| Czech Republic | 5.1 | 3.0 | 3 | 0.1 (8) | 0.1 (4) | 0.1 (4) |
| Denmark | 2.3 | 0.7 | 1 | 0.3 (13) | 0.5 (7) | 0.3 (5) |
| Germany | 2.7 | 0.9 | 2 | – | – | – |
| Estonia | – | 2.3 | 3 | 0 (0) | 0 (0) | 0 (0) |
| Ireland | 6.9 | 0.9 | 2 | 0.5 (43) | 0.8 (27) | 0.3 (16) |
| Greece | 0.4 | 0.4 | 2 | 0.2 (8) | 0.2 (5) | 0.1 (3) |
| Spain | 4.3 | 1.5 | 2 | 0.3 (134) | 0.4 (103) | 0.1 (29) |
| France | 4.2 | 2.3 | 3 | 0.5 (186) | 0.2 (22) | 0.6 (122) |
| Croatia | 2.5 | 0.5 | 2 | 0.3 (27) | 0.6 (7) | 0.3 (19) |
| Italy | 1.8 | 0.1 | 1 | 0.2 (55) | 0.2 (23) | 0.2 (32) |
| Cyprus | 0.9 | 0.3 | 3 | 0.1 (1) | 0 (0) | 0.2 (1) |
| Latvia | 2.7 | 0.8 | 4 | 0.2 (3) | 0.4 (2) | 0.1 (1) |
| Lithuania | 1.3 | 0.3 | 2 | 0 (1) | 0 (0) | 0.1 (1) |
| Luxembourg | – | – | – | 0.3 (1) | 0 (0) | 0.4 (1) |
| Hungary | 2.4 | 1.0 | 4 | 1.7 (69) | 1.7 (43) | 2 (23) |
| Malta | 0.7 | – | 3 | 1.2 (22) | 3.5 (7) | 0.9 (15) |
| Netherlands | 6.2 | 3.1 | 4 | 0.6 (67) | 0.8 (55) | 0.2 (12) |
| Austria | 2.3 | 1.0 | – | 0.8 (23) | 1.1 (13) | 0.6 (10) |
| Poland | 1.1 | 0.3 | 2 | 0.2 (6) | 0.1 (1) | 0.3 (5) |
| Portugal | 1.3 | 0.6 | 3 | 0.2 (5) | 0.4 (5) | 0 (0) |
| Romania | 0.7 | 0.4 | 2 | 0.1 (1) | 0.1 (1) | 0 (0) |
| Slovenia | 2.1 | 0.8 | 2 | 0 (0) | 0 (0) | 0 (0) |
| Slovakia | 1.9 | 0.9 | 0 | 0.1 (2) | 0.1 (1) | 0.1 (1) |
| Finland | 1.8 | 1.1 | 2 | 0.3 (3) | 0.6 (1) | 0.2 (2) |
| Sweden | – | 1.0 | 1 | 0 (3) | 0 (1) | 0 (1) |
| United Kingdom | 9.3 | 3.0 | 2 | 0.3 (325) | 0.7 (232) | 0.1 (92) |
| Turkey | 0.1 | 0.1 | 2 | 0.8 (55) | 1.1 (41) | 0.4 (14) |
| Norway | 2.3 | 1.0 | 1 | 0 (0) | – | – |
| European Union | 3.6 | 1.4 | – | 0.3 (1050) | 0.4 (583) | 0.2 (415) |
| EU, Turkey and Norway | – | – | – | 0.3 (1105) | 0.4 (624) | 0.2 (429) |

***(Continues)***

school populations, with priority given to those carried out at national level. In surveys of both the general population and school students across European countries, a relatively high degree of standardization has been achieved and representative probabilistic samples are utilized. Surveys are generally regarded as a poor tool for reporting on low prevalence and highly stigmatized behaviours such as heroin use or injection [3]. To address this, prevalence estimates based on statistical models are also collected. Common approaches include: simple multiplier methods; capture–recapture methods; and extrapolation via multivariate indicator methods [8].

Twenty-eight countries have reported a national population survey since 2004, with 16 new surveys becoming available since 2012. Prevalence estimates are based on standard periods of time, with priority given to last 12 months prevalence, although life-time and last 30-day estimates are also available. Estimates are available for three age bands (15–64, 15–34 and 15–24 years).

The surveys reported are subject to the range of sampling and non-sampling errors common to the method [9,10]. In addition, despite considerable improvement in comparability over time, including the general adoption of questions from a model questionnaire, differences still

 

**Table 1** (Continued)

*Cannabis*

| | *Prevalence estimates* | | | *Treatment demand indicator, primary drug* | | |
|---|---|---|---|---|---|---|
| | *General population* | | *School population* | *Cannabis clients as % of treatment demands* | | |
| *Country* | *Life-time, adults (15–64) %* | *Last 12 months, young adults (15–34) %* | *Life-time, students (15–16) %* | *All entrants % (count)* | *First-time entrants % (count)* | *Previously treated entrants % (count)* |
| Belgium | 14.3 | 11.2 | 21 | 33.6 (3077) | 54.3 (1744) | 23.1 (1201) |
| Bulgaria | 7.5 | 8.3 | 22 | 3.9 (77) | 4.5 (12) | 1.8 (18) |
| Czech Republic | 22.8 | 21.6 | 42 | 11 (1077) | 16.5 (763) | 6.1 (314) |
| Denmark | 35.6 | 17.6 | 18 | 63.4 (2397) | 72.6 (1048) | 55.5 (1061) |
| Germany | 23.1 | 11.1 | 19 | 36.3 (29 252) | 56.1 (13 138) | – |
| Estonia | – | 13.6 | 24 | 3.7 (16) | 12.7 (16) | 0 (0) |
| Ireland | 25.3 | 10.3 | 18 | 28.9 (2511) | 47 (1631) | 16 (790) |
| Greece | 8.9 | 3.2 | 8 | 21.5 (1045) | 35.4 (737) | 11 (302) |
| Spain | 30.4 | 17.0 | 28 | 29.9 (14 869) | 43.6 (10 982) | 14.8 (3402) |
| France | 40.9 | 22.1 | 39 | 44.1 (16 020) | 62.5 (6 206) | 32.3 (6804) |
| Croatia | 15.6 | 10.5 | 18 | 13.3 (1047) | 58.4 (658) | 5.7 (381) |
| Italy | 21.7 | 8.0 | 16 | 17.4 (5766) | 28 (3 593) | 10.7 (2173) |
| Cyprus | 9.9 | 4.2 | 7 | 56.8 (579) | 80.5 (388) | 35.3 (187) |
| Latvia | 12.5 | 7.3 | 24 | 27.3 (411) | 51.4 (272) | 14.3 (139) |
| Lithuania | 10.5 | 5.1 | 20 | 2.9 (65) | 11.7 (40) | 1.3 (23) |
| Luxembourg | – | – | – | 31.1 (90) | 47.4 (9) | 30.5 (71) |
| Hungary | 8.5 | 5.7 | 19 | 61 (2429) | 70 (1787) | 43.4 (511) |
| Malta | 4.3 | – | 10 | 7.9 (142) | 25.1 (50) | 5.7 (92) |
| Netherlands | 25.7 | 13.7 | 27 | 47.8 (5613) | 56.7 (3826) | 35.7 (1787) |
| Austria | 14.2 | 6.6 | 14 | 30 (887) | 50.6 (620) | 15.4 (267) |
| Poland | 12.2 | 8.1 | 23 | 33.4 (914) | 51.6 (575) | 20.3 (321) |
| Portugal | 9.4 | 5.1 | 16 | 26.8 (806) | 48.4 (674) | 8.2 (132) |
| Romania | 1.6 | 0.6 | 7 | 17 (279) | 27.3 (195) | 7.9 (68) |
| Slovenia | 15.8 | 10.3 | 23 | 12.5 (36) | 31.9 (30) | 3.1 (6) |
| Slovakia | 10.5 | 7.3 | 16 | 24.6 (557) | 32 (369) | 16.6 (177) |
| Finland | 18.3 | 11.2 | 12 | 14.6 (161) | 34.2 (55) | 10.8 (97) |
| Sweden | – | 7.1 | 5 | 13.2 (3763) | 22.4 (2881) | 5.7 (882) |
| United Kingdom | 29.9 | 11.2 | 22 | 26.8 (26 618) | 48.6 (16 775) | 15.3 (9771) |
| Turkey | 0.7 | 0.4 | 4 | 12.7 (920) | 17.5 (653) | 7.6 (267) |
| Norway | 23.3 | 12.0 | 5 | 20.3 (1705) | – | – |
| European Union | 23.3 | 11.7 | – | 29.4 (120 504) | 45.5 (69 074) | 16.2 (30 977) |
| EU, Turkey and Norway | – | – | – | 28.9 (123 129) | 44.8 (69 727) | 16.1 (31 244) |

***(Continues)***

exist in the methodology used by countries, reporting intervals vary and cultural and contextual factors may result in differences in response and non-response bias [10].

Survey data and accompanying methodological information are available for all countries (http://www.emcdda.europa.eu/data/stats2015). In the 16 new surveys reported since 2012, last-year cannabis prevalence rates for the 15–34 age group ranged from 0.4% in Turkey to 22.1% in France. Of the 15 surveys reporting on last-year use of illicit stimulants among the 15–34 age group, prevalence rates for cocaine ranged from 0.2% in Greece and Romania to 4.2% in the United Kingdom; rates for amphetamine ranged from 0.1% or less in Romania, Italy and Portugal to 2.5% in Estonia; and rates for ecstasy ranged from 0.1% in Italy and Turkey to 3% in the Czech Republic and the United Kingdom.

With respect to school survey data, in addition to national stand-alone surveys, two coordinated reporting exercises are important. Data on cannabis use and other health variables are available from the Health Behaviour in School-aged Children (HBSC) survey instrument [11] and data on use of a wider range of substance-related variables are available through the European School Survey Project on Alcohol and Other Drugs (ESPAD) exercise [12], which now provides a time–series dating back to 1995, with the next report becoming available in 2016.

 

**Table 1** (Continued)

*Other indicators*

| Country | Drug-induced deaths (aged 15–64) Cases per million population (count) | HIV diagnoses attributed to injecting drug users (ECDC) Cases per million population (count) | Injecting drug use estimate Cases per 1000 population | Syringes distributed through specialised programmes Count |
|---|---|---|---|---|
| Belgium | 10.5 (77) | 1.5 (17) | 2.5–4.8 | 907 504 |
| Bulgaria | 4.3 (21) | 4.5 (33) | – | 431 568 |
| Czech Republic | 5.1 (37) | 0.6 (6) | 5.9–6.0 | 6 181 134 |
| Denmark | 60 (218) | 2.3 (13) | – | – |
| Germany | 17.6 (956) | 1.2 (100) | – | – |
| Estonia | 126.8 (111) | 54.5 (72) | 4.3–10.8 | 2 183 933 |
| Ireland | 58.5 (177) | 3.9 (18) | – | 360 041 |
| Greece | – | 22.4 (248) | 0.6–0.9 | 429 517 |
| Spain | 12.2 (383) | 3.1 (145) | 0.3–0.4 | 2 684 251 |
| France | 6.8 (283) | 1 (67) | – | – |
| Croatia | 16.8 (48) | 0 (0) | 0.3–0.6 | 273 972 |
| Italy | 8.9 (343) | 2.7 (162) | – | – |
| Cyprus | 4.9 (3) | 0 (0) | 0.2–0.5 | 0 |
| Latvia | 8.1 (11) | 38 (77) | 7.3–11.7 | 341 421 |
| Lithuania | 27.1 (54) | 20.9 (62) | – | 168 943 |
| Luxembourg | 29.7 (11) | 9.3 (5) | 4.5–6.9 | 191 983 |
| Hungary | 4.6 (31) | 0.1 (1) | 0.8 | 435 817 |
| Malta | 10.4 (3) | 7.1 (3) | – | 357 691 |
| Netherlands | 10.2 (113) | 0.3 (5) | 0.2–0.2 | – |
| Austria | 24.2 (138) | 2.5 (21) | – | 4 762 999 |
| Poland | 7.6 (207) | 1 (39) | – | – |
| Portugal | 3.0 (21) | 7.4 (78) | – | 950 652 |
| Romania | 2.2 (30) | 7.4 (149) | – | 2 051 770 |
| Slovenia | 19.9 (28) | 1 (2) | – | 513 272 |
| Slovakia | 6.5 (25) | 0 (0) | – | 321 339 |
| Finland | 54.3 (191) | 0.6 (3) | 4.1–6.7 | 3 834 262 |
| Sweden | 69.7 (426) | 0.8 (8) | – | 229 362 |
| United Kingdom | 44.6 (1 858) | 1.8 (112) | 2.9–3.2 | 9 457 256[a] |
| Turkey | 4.4 (224) | 0.1 (4) | – | – |
| Norway | 69.6 (232) | 1.6 (8) | 2.2–3.0 | 3 011 000 |
| European Union | 17.3 (5804) | 2.9 (1446) | – | – |
| EU, Turkey and Norway | 16 (6260) | 2.5 (1458) | – | – |

Injecting drug use estimates are derived by indirect methods, with year of estimate varying between countries. [a]Data refer to Scotland and Wales (2013) and Northern Ireland (2012).

***(Continues)***

In the results from the last ESPAD survey (2011), one in four 15–16-year-old school students reported ever using an illicit drug, mainly cannabis, but with considerable intercountry variation [13].

Complementing the survey data, estimates of drug use from statistical modelling can be found at http://www.emcdda.europa.eu/activities/hrdu, accompanied by overviews of the different approaches used. Although there has been an increase in the number of estimates available, there is no single method that is applied in all countries. Even where a standard methodological approach, such as capture–recapture, is used the sources of data on which the estimate are based often differ and it remains difficult to compare results across countries. The data set is most complete for estimates of opioid use, although some countries also report other estimates, including drug injection. Since 2012, 13 countries have produced estimates of high-risk opioid use and nine countries have produced estimates of injecting drug use. Prevalence estimates of high-risk opioid use produced since 2012 range from 1.26 cases per 1000 population in the Netherlands to 6.97 cases per 1000 population in Malta (aged 15–64). Estimates of injecting drug use produced since 2012 range from 0.29 cases per 1000 population in Cyprus to 9.2 cases per 1000 population in Latvia (aged 15–64).

 

**Table 1** (Continued)

*Seizures*

| *Country* | *Heroin* | | *Cocaine* | | *Amphetamines* | | *Ecstasy* | |
|---|---|---|---|---|---|---|---|---|
| | *Quantity seized kg* | *Number of seizures Count* | *Quantity seized kg* | *Number of seizures Count* | *Quantity seized kg* | *Number of seizures Count* | *Quantity seized Tablets (kg)* | *Number of seizures Count* |
| Belgium | 1182 | 2431 | 6486 | 3653 | 216 | 3085 | 37 152 (–) | 1338 |
| Bulgaria | 157 | 32 | 20 | – | 193 | 8 | 4169 (29) | – |
| Czech Republic | 5 | 38 | 36 | 106 | 70 | 495 | 5061 (0.04) | 114 |
| Denmark | 14 | 461 | 681 | 2286 | 341 | 2167 | 7706 (–) | 590 |
| Germany | 270 | 3065 | 1315 | 3622 | 1339 | 12 801 | 480 839 (–) | 2233 |
| Estonia | 0 | 2 | 2 | 47 | 28 | 290 | 3341 (0.2) | 92 |
| Ireland | 61 | 690 | 66 | 366 | 23 | 114 | 465 083 (–) | 464 |
| Greece | 235 | 2158 | 706 | 437 | 16 | 81 | 34 579 (0.4) | 47 |
| Spain | 291 | 6502 | 26 701 | 38 033 | 497 | 3471 | 154 732 (–) | 2301 |
| France | 570 | – | 5612 | – | 501 | – | 414 800 (–) | – |
| Croatia | 10 | 167 | 9 | 171 | 13 | 414 | 0 (0.9) | 170 |
| Italy | 882 | 2560 | 4966 | 6031 | 103 | 128 | 4713 (17) | 136 |
| Cyprus | 0.7 | 16 | 3 | 105 | 1 | 38 | 504 (0.1) | 14 |
| Latvia | 0.7 | 288 | 1 | 34 | 46 | 744 | 60 (0.003) | 18 |
| Lithuania | 13 | 100 | 3 | 12 | 71 | 97 | 54 (0.5) | 13 |
| Luxembourg | 4 | 127 | 1 | 103 | 5 | 6 | 13 (–) | 3 |
| Hungary | 6 | 32 | 8 | 117 | 75 | 586 | 17 664 (2) | 181 |
| Malta | 1 | 51 | 4 | 115 | 0 | 3 | 30 375 (–) | 45 |
| Netherlands[a] | 750 | – | 10 000 | – | 681 | – | – | – |
| Austria | 80 | 346 | 25 | 992 | 29 | 859 | 5768 (–) | 119 |
| Poland | 49 | – | 21 | – | 685 | – | 45 997 (–) | – |
| Portugal | 55 | 792 | 2440 | 1108 | 5 | 48 | 2160 (1) | 80 |
| Romania | 112 | 273 | 53 | 75 | 0 | 42 | 27 506 (0.04) | 142 |
| Slovenia | 7 | 339 | 3 | 196 | 16 | 273 | 922 (0.9) | 53 |
| Slovakia | 0.2 | 73 | 1 | 23 | 4 | 634 | 47 (–) | 17 |
| Finland | 0.2 | 113 | 5 | 205 | 91 | 3 149 | 121 600 (–) | 795 |
| Sweden | 6 | 485 | 81 | 1452 | 677 | 4 541 | 26 919 (16) | 743 |
| United Kingdom[a] | 831 | 10 648 | 3324 | 18 569 | 1491 | 6515 | 1 173 100 (–) | 3716 |
| Turkey | 13 480 | 6096 | 450 | 863 | 1242 | 132 | 4 441 217 (–) | 4274 |
| Norway | 55 | 1192 | 188 | 1086 | 514 | 7229 | 7298 (3) | 411 |
| European Union | 5593 | 31 789 | 62 573 | 77 858 | 7217 | 40 589 | 3 064 864 (68) | 13 424 |
| EU, Turkey and Norway | 19 128 | 39 077 | 63 211 | 79 807 | 8973 | 47 950 | 7 513 379 (71) | 18 109 |

Amphetamines includes amphetamine and methamphetamine. [a]Seizures data refer to 2012.

***(Continues)***

## TREATMENT DATA

Historically, the European approach has been to use data on those entering treatment as a proxy indicator for the characteristics of those experiencing drug problems in the population. When combined with other information, these data also provide a window on the European treatment system.

Within these data, a distinction is made between those entering drug treatment for the first time and those returning to treatment, with estimates provided for first treatment entrants and all treatment entrants (both repeat and new entries). All countries provide data on treatment demand using an established European protocol, although coverage varies both by country and by treatment type. The data set is most complete for specialized drug treatment services. These limitations are generally well understood, and supporting contextual and methodological information to facilitate interpretation can be found on the EMCDDA website (http://www.emcdda.europa.eu/activities/tdi).

In 2013, there were reports of 461 000 Europeans entering treatment for a drug-related problem, of whom 174 000 entered treatment for the first time in their lives. Data on these treatment entrants can be found at http://

 

**Table 1** (Continued)

*Seizures (continued)*

| Country | *Cannabis resin* | | *Herbal cannabis* | | *Cannabis plants* | |
|---|---|---|---|---|---|---|
| | *Quantity seized kg* | *Number of seizures Count* | *Quantity seized kg* | *Number of seizures Count* | *Quantity seized Plants (kg)* | *Number of seizures Count* |
| Belgium | 4275 | 5529 | 14 882 | 23 900 | 396 758 (–) | 1212 |
| Bulgaria | 5 | 9 | 579 | 69 | 18 126 (24) | 11 |
| Czech Republic | 1 | 28 | 735 | 875 | 73 639 (–) | 361 |
| Denmark | 3292 | 11 030 | 394 | 1896 | – (5634) | 645 |
| Germany | 1770 | 5638 | 4827 | 28 875 | 107 766 (–) | 2026 |
| Estonia | 109 | 24 | 51 | 524 | – (16) | 42 |
| Ireland | 677 | 367 | 1102 | 1770 | 6309 (–) | 427 |
| Greece | 8 | 143 | 20 942 | 6743 | 23 008 (0) | 599 |
| Spain | 319 257 | 180 342 | 16 298 | 172 341 | 176 879 (–) | 2305 |
| France | 70 918 | – | 4758 | – | 141 374 (–) | – |
| Croatia | 5 | 359 | 1047 | 4171 | 3 957 (–) | 213 |
| Italy | 36 347 | 5261 | 28 821 | 5701 | 894 862 (–) | 1227 |
| Cyprus | 1 | 16 | 99 | 849 | 403 (–) | 62 |
| Latvia | 106 | 28 | 29 | 412 | – (344) | 31 |
| Lithuania | 1 088 | 11 | 124 | 199 | – (–) | – |
| Luxembourg | 8 | 81 | 11 | 832 | 8 (–) | 6 |
| Hungary | 5 | 103 | 863 | 2040 | 5307 (–) | 196 |
| Malta | 1 | 71 | 10 | 85 | 27 (–) | 3 |
| Netherlands[a] | 2200 | – | 12 600 | – | 1 218 000 (–) | – |
| Austria | 130 | 1512 | 1432 | 8270 | – (196) | 327 |
| Poland | 208 | – | 1243 | – | 69 285 (–) | – |
| Portugal | 8681 | 3087 | 96 | 559 | 8462 (–) | 354 |
| Romania | 25 | 284 | 165 | 1799 | 8835 (110) | 79 |
| Slovenia | 0.5 | 73 | 810 | 3 673 | 9515 (–) | 212 |
| Slovakia | 0.0 | 21 | 81 | 1307 | 1039 (–) | 32 |
| Finland | 122 | 1467 | 285 | 6167 | 23 000 (63) | 3409 |
| Sweden | 1 160 | 6 937 | 928 | 9221 | – (–) | – |
| United Kingdom[a] | 13 432 | 17 360 | 13 243 | 148 746 | 555 625 (–) | 15 846 |
| Turkey | 94 279 | 5331 | 180 101 | 60 742 | – (–) | 3706 |
| Norway | 2283 | 11 875 | 491 | 5444 | – (159) | 386 |
| European Union | 463 832 | 239 781 | 126 455 | 431 024 | 3 742 184 (6 387) | 29 625 |
| EU, Turkey and Norway | 560 394 | 256 987 | 307 047 | 497 210 | 3 742 184 (6 546) | 33 717 |

[a]Seizures data refer to 2012, apart from the number of cannabis plants seized in the Netherlands, which refers to 2013.

www.emcdda.europa.eu/data/stats2015, along with methodological notes and information on coverage. The most recent analysis of treatment data highlights the burden that opioid drugs continue to place on the drug treatment system, although both heroin entrants and injecting have declined in importance. In 2013, opioids—mainly heroin—were reported as a 'primary drug' by only 20% of those entering treatment for the first time, with new-to-treatment heroin clients more than halving in number since 2007.

Data are also available from all countries on opiate substitution treatment, with the introduction of national registers in a growing number of countries improving data quality in this area. An estimated 737 000 opioid users received substitution treatment in 2013, with more than two-thirds (69%) of substitution clients receiving methadone. Information on national drug treatment systems can be found at http://www.emcdda.europa.eu/responses/treatment-overviews. For a limited number of countries, data are also available on the number of syringes distributed annually by specialist programmes (see Appendix 2).

## DATA ON DRUG-RELATED MORBIDITY AND MORTALITY

With regard to drug-related morbidity and mortality, there are two main areas in which significant amounts of

 

**Table 2** Subset of European-level estimates available in the EMCDDA 2015 reporting exercise.

*Last year prevalence in the EU, Norway and Turkey (%) of age group 15–34*

| *Drug group* | *No. of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| Cannabis | 28 | 2004–2013 | 0.4 | 6.375 | 9.3 | 11.4 | 22.1 |
| Cocaine | 27 | 2004–2013 | 0.2 | 0.35 | 1.2 | 2.1 | 4.2 |
| Amphetamines | 26 | 2004–2013 | 0 | 0.425 | 0.85 | 1.375 | 2.5 |
| Ecstasy | 27 | 2004–2013 | 0.1 | 0.45 | 0.9 | 1.3 | 3.1 |

*Estimates of the prevalence of problem drug use in the EU, Norway and Turkey. Rate per 1000 population. Injecting drug users (IDU) and high-risk opioid users (HROU)*

| *Population* | *No of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| IDU | 14 | 2004–2013 | 0.22 | 0.5125 | 2.76 | 5.41 | 9.22 |
| HROU | 21 | 2007–2013 | 0.48 | 1.49 | 2.36 | 4.91 | 8.06 |

*Drug-related deaths in the EU, Norway and Turkey. Rate per 1 000 000 population aged 15–64*

| | *No of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| | 29 | 2010–2013 | 2 | 7 | 11 | 30 | 127 |

*HIV notifications attributed to injecting drug use in the EU, Norway and Turkey. Rate per 1 000 000 population. Source ECDC*

| | *No of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| | 30 | 2013 | 0 | 1 | 2 | 6 | 55 |

*Entrants into specialized treatment centres in the EU, Norway and Turkey, by drug. Rate per 100 000 population (15–64)*

| *Drug* | *No. of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| Opioids | 30 | 2011–13 | 2.7 | 18.7 | 38.8 | 57.2 | 469.8 |
| Cocaine | 30 | 2011–13 | 0.0 | 0.4 | 4.0 | 19.6 | 90.4 |
| Amphetamines | 30 | 2011–13 | 0.0 | 1.5 | 2.5 | 7.6 | 95.5 |
| Cannabis | 30 | 2011–13 | 1.6 | 6.4 | 27.3 | 50.3 | 95.0 |
| Other substances | 30 | 2011–13 | 0.2 | 1.8 | 4.1 | 9.7 | 98.9 |
| Not known/missing substances | 30 | 2011–13 | 0.0 | 0.0 | 0.4 | 6.4 | 64.3 |
| Total number of reported entrants | 30 | 2011–13 | 10.1 | 59.1 | 112.0 | 158.0 | 637.3 |

*Number of seizures in the EU, Norway and Turkey. Rate per 100 000 population (15–64)*

| | *No. of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| Cannabis resin | 27 | 2013 | 0.2 | 2 | 12 | 42 | 575 |
| Herbal cannabis | 27 | 2013 | 1 | 30 | 60 | 158 | 549 |
| Cannabis plants | 27 | 2013 | 0.2 | 3 | 6 | 12 | 97 |
| Heroin | 27 | 2013 | 0.2 | 3 | 8 | 22 | 36 |
| Cocaine | 27 | 2013 | 1 | 2 | 12 | 26 | 121 |
| Amphetamine | 27 | 2013 | 0.03 | 0.5 | 6 | 17 | 92 |
| Methamphetamine | 27 | 2013 | 0.01 | 1 | 2 | 6 | 128 |
| Ecstasy | 27 | 2013 | 0.4 | 1 | 4 | 12 | 23 |
| LSD | 27 | 2013 | 0.01 | 0.2 | 0.3 | 1 | 8 |

*Quantity seized in the EU, Norway and Turkey. Rate per 100 000 population (15–64)*

| | *No. of countries* | *Year of data* | *Min* | *25th percentile* | *Median* | *75th percentile* | *Max* |
|---|---|---|---|---|---|---|---|
| Cannabis resin (kg) | 30 | 2013 | 0.001 | 0.2 | 6 | 58 | 1018 |
| Herbal cannabis (kg) | 30 | 2013 | 1 | 6 | 12 | 36 | 358 |

***(Continues)***

 

**Table 2** (Continued)

*Quantity seized in the EU, Norway and Turkey. Rate per 100 000 population (15–64)*

| | No. of countries | Year of data | Min | 25th percentile | Median | 75th percentile | Max |
|---|---|---|---|---|---|---|---|
| Cannabis plants (no. of plants) | 30 | 2013 | 2 | 89 | 287 | 670 | 10 995 |
| Heroin (kg) | 30 | 2013 | 0.0001 | 0.1 | 1 | 2 | 27 |
| Cocaine (kg) | 30 | 2013 | 0.04 | 0.2 | 1 | 9 | 90 |
| Amphetamine (kg) | 30 | 2013 | 0.0002 | 0.1 | 1 | 2 | 10 |
| Methamphetamine (kg) | 30 | 2013 | 0.0001 | 0.05 | 0.1 | 0.5 | 6 |
| Ecstasy (tablets) | 30 | 2013 | 1 | 70 | 222 | 886 | 22 047 |
| LSD (units) | 30 | 2013 | 0.01 | 2 | 5 | 40 | 176 |

*Potency in the EU (% THC)/purity (% pure substance)/mg of ecstasy*

| | No. of countries | Year of data | Samples analysed | Min | 25th percentile | Median | 75th percentile | Max |
|---|---|---|---|---|---|---|---|---|
| Cannabis resin (% THC) | 26 | 2013 | 7246 | 3 | 10 | 12 | 15 | 22 |
| Herbal cannabis (% THC) | 26 | 2013 | 19 277 | 2 | 7 | 9 | 10 | 13 |
| Heroin (%) | 26 | 2013 | 3245 | 6 | 13 | 17 | 23 | 42 |
| Cocaine (%) | 26 | 2013 | 9190 | 20 | 33 | 40 | 50 | 75 |
| Amphetamine (%) | 26 | 2013 | 12 248 | 5 | 9 | 14 | 19 | 47 |
| Methamphetamine (%) | 26 | 2013 | 2431 | 7 | 31 | 37 | 66 | 89 |
| Ecstasy (mg/tablet) | 26 | 2013 | 188 632 | 34 | 77 | 84 | 98 | 144 |

*Retail price of drugs in the EU (euros per gram or euros per tablet for ecstasy)*

| | No. of countries | Year of data | Min | 25th percentile | Median | 75th percentile | Max |
|---|---|---|---|---|---|---|---|
| Cannabis resin | 27 | 2013 | 3 | 8 | 10 | 13 | 21 |
| Herbal cannabis | 27 | 2013 | 5 | 8 | 9 | 11 | 25 |
| Heroin | 27 | 2013 | 25 | 33 | 38 | 58 | 158 |
| Cocaine | 27 | 2013 | 47 | 52 | 57 | 70 | 103 |
| Amphetamine | 27 | 2013 | 8 | 10 | 11 | 19 | 63 |
| Methamphetamine | 27 | 2013 | 10 | 13 | 15 | 42 | 80 |
| Ecstasy | 27 | 2013 | 3 | 5 | 7 | 10 | 24 |

quantitative data are available at the European level. The first area is infectious diseases associated with drug use, where the data available refer principally—but not only—to cases of drug-related human immunodeficiency virus (HIV) and hepatitis C virus (HCV) infections. Drug-related mortality is the second area; here the data refer principally—but not only—to unintentional drug overdose deaths. In both these domains considerable contextual and supplementary information is available that, for reasons of brevity, is not described here (http://www.emcdda.europa.eu/activities/drd and http://www.emcdda.europa.eu/activities/drid).

Drug use, principally through injecting, continues to play an important role in the transmission of blood-borne infections in Europe. Two main data sources are available on this topic. National notification data from annual HIV case reports, where route of transmission is known, are compiled by the European Centre on Disease Prevention and Control (ECDC) [14] and WHO–Europe [15]. In addition, studies and ongoing surveillance exercises conducted among people who inject drugs (PWID), who are tested for HIV and/or hepatitis B and C, are reported annually (prevalence of antibodies, or other specific markers in the case of hepatitis B). In 2013, 30 countries reported on new diagnoses of HIV among samples of PWID. Since 2012, 10 countries have provided data from new national studies on hepatitis C antibody prevalence among PWID. For methodological reasons, principally under-reporting, national notification data on hepatitis C are not currently regarded as sufficiently reliable to be included in the reporting exercise. Interpreting study data in this area is complicated by the challenges of sampling. None the less, the data have proved useful in providing a broad overview of the situation, including regional variation in levels and trends, and by drawing attention to important developments, for example, the recent HIV outbreaks among PWID experienced by Greece and Romania [16] (see Fig. 1).

Among all HIV cases notified in Europe where the route of transmission is known, the percentage attributable to

 

injecting drug use has remained below 8% for the last decade. Provisional figures for the number of new HIV diagnoses in Europe in 2013 show 1458 newly reported cases, compared with 1974 in 2012. In 2013, population-based rates of newly reported HIV diagnoses attributed to injecting drug use ranged from 0 in Cyprus, Croatia and Slovakia to 54.5 per million population in Estonia. In countries such as Spain and Portugal that have experienced high rates of infection in the past, rates of newly reported HIV diagnoses continue to decline. Hepatitis C antibody levels among national samples of PWID in 2012–13 ranged from 13.8% in Malta to 84.3% in Portugal.

Drug use is one of the major causes of avoidable mortality among young people in Europe, both directly through overdose and indirectly through drug-related diseases, accidents, violence and suicide. All countries report on drug-induced deaths (overdoses and poisonings attributed directly to use of drugs). Data are derived from general mortality registries with an operative criteria based on selected codes from the WHO ICD-10, and special registries where the operative criteria consist of the classes of deaths that should be extracted. Additional notes and methodological information are available at http://www.emcdda.europa.eu/activities/drd. Interpreting overdose data is complicated by a range of factors, including systematic under-reporting in some countries and process-induced delays in reporting. In 2013, 5804 drug-induced deaths were reported in Europe among adults aged 15–64, although this figure includes some interpolated data points where reporting delays occurred. National estimates of drug-induced mortality rates vary considerably, from 2.2 per million population in Romania to 70 per million in Norway and Sweden, and 127 per million in Estonia.

## DETECTIONS OF NEW PSYCHOACTIVE SUBSTANCES

The EWS on NPS operates under a specific legal basis (Council Decision 2005/387/JHA) and is intended to provide the capacity to identify and respond to uncontrolled new substances that may pose a similar risk to public health as drugs controlled under the international conventions[1] (a description of the mechanism can be found at http://www.emcdda.europa.eu/activities/action-on-new-drugs). When substances are judged to meet certain criteria, a formal risk assessment exercise is conducted under the auspices of the EMCDDA scientific committee [17]. The results of this inform a political decision-making process that can result in the control of a substance across the EU. Since 2008, this area has witnessed considerable growth and is the subject of both policy and public attention. It should be noted that the EWS collects case-based data and that while epidemiological data on the use of these substances are emerging, they are currently weak. A total of 101 new substances were reported to the EU EWS in 2014 (Fig. 2). This brings the number of substances being monitored by the system to more than 450. In 2014, synthetic cathinones[2] (31 substances) and synthetic cannabinoid receptor agonists[3] (30 substances) were the two substance categories with the highest number of notifications. It is of note that the availability of synthetic cannabinoids was only first reported to the EWS in 2008 [18].

In 2014, six new psychoactive substances were formally risk-assessed, and each of these substances had been associated with reports of drug-related harm, including hospitalizations and deaths. These were: 25I-NBOMe, a substituted phenethylamine with hallucinogenic effects; AH-7921, a synthetic opioid with properties similar to morphine; MDPV, a synthetic cathinone derivative closely related to pyrovalerone; methoxetamine an arylcyclohexylamine closely related to ketamine; 4′-DMAR, a psychostimulant structurally related to the controlled drugs 4-methylaminorex and aminorex; and MT-45, a synthetic opioid with analgesic potency similar to morphine. In October 2014, 25I-NBOMe, AH-7921, MDPV and methoxetamine were subjected to control measures throughout Europe.[4]

At the time of writing, a decision is still pending on 4′-DMAR and MT-45. Detailed risk assessment reports, which include analysis and toxicological data, are available for all these substances [4].

## MARKET DATA

In addition to information on use and harms, at the European level, quantitative data from law enforcement, criminal justice and forensic science sources are also available. The most comprehensive data sets are in the areas of: number and volume of drug seizures, with more than 1 million

[1]'A new narcotic or psychotropic drug, in pure form or in preparation, 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'.

[2]Synthetic cathinones are related to the parent compound cathinone, one of the psychoactive principals in khat (*Catha edulis)*. Ring-substituted cathinone derivatives, e.g. mephedrone, are claimed to have effects similar to those of cocaine, amphetamine or MDMA (ecstasy). For more details see http://www.emcdda.europa.eu/publications/drug-profiles/synthetic-cathinones

[3]Synthetic cannabinoid receptor agonists act upon the cannabinoid receptors in the body, mimicking to varying degrees the effects of Δ9-THC, the main active chemical found in cannabis. For more details see http://www.emcdda.europa.eu/publications/drug-profiles/synthetic-cannabinoids

[4]Council Implementing Decision of 25 September 2014 on subjecting 4-iodo-2,5-dimethoxy-N-(2-methoxybenzyl)phenethylamine (25I-NBOMe), 3,4-dichloro-N-[[1-(dimethylamino)cyclohexyl]methyl]benzamide (AH-7921), 3,4-methylenedioxypyrovalerone (MDPV) and 2-(3-methoxyphenyl)-2-(ethylamino)cyclohexanone (methoxetamine) to control measures, L 287/22, 1.10.2014.

 

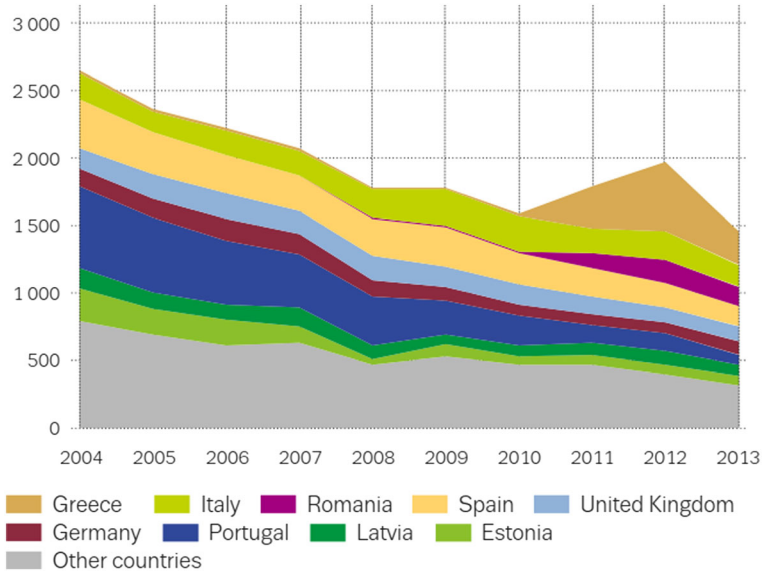


**Figure 1** Newly diagnosed HIV cases related to injecting drug use: trends in number of cases. Source: European Centre for Disease Prevention and Control

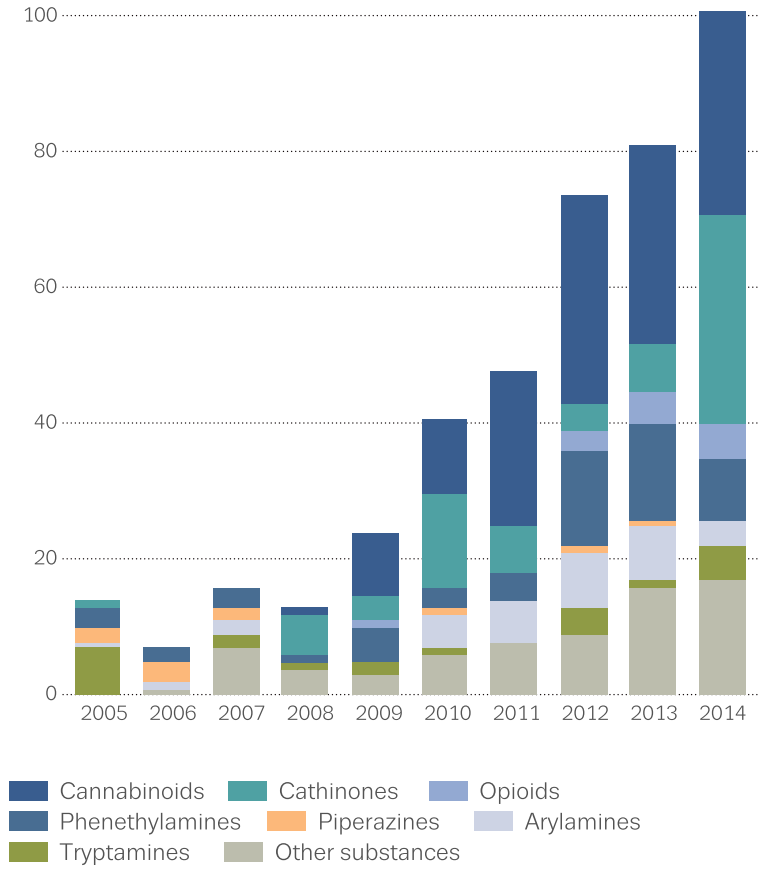


**Figure 2** Number and categories of new psychoactive substances notified to the EU Early Warning System

seizures reported annually; the price and purity or potency of retail level drugs; and the number of drug-related offences. The interpretation of these data is complicated by many factors, which include national policies and policing priorities and data quality issues. Currently, improving the quality of data in this area is regarded at the European level

as a developmental priority [19]. Summary and national tables can be found in Appendix 2 and at http://www.emcdda.europa.eu/data/stats2015.

## NATIONAL AND CUMULATIVE EUROPEAN ESTIMATES

In Table 1, national data is provided which allows countries to be compared across a subset of top-level drug related demand and supply areas. A link is provided to methodological and other information important for interpretation.

In addition to the provision of disaggregated data, the EMCDDA is required to provide European summary estimates and a subset of these can be found in Table 2. This task is as important from a policy perspective as it is challenging from a methodological one. Summary estimates can provide an overall characterization of the available data for monitoring both supply and demand, and the opportunity, at an aggregated level, to differentiate by substance. They are also useful for global level comparisons. The interpretation of these estimates must, however, be informed by an understanding of the methodological difficulties inherent in their construction. These include not only comparability issues as already discussed, but also the problem for some measures of missing data and that estimates may be based on data that is not collected contemporaneously. This is particularly the case for surveys which are not usually conducted on an annual basis, and therefore reporting years will necessarily vary.

## THE EUROPEAN DATA IN AN INTERNATIONAL CONTEXT

The European system for data collection was established to create a knowledge base on drugs information for the EU countries. The approach, however, is clearly influenced by historical, national and international developments [20]. The European data therefore contain many of the elements found in other national and international reporting systems. A review of global addiction data sources with comments on their relative strengths and weakness is provided by Gowing *et al.* [21]. It is worth noting, in particular, that the reporting mechanism supporting the United Nations (UN) drug conventions (Annual Report Questionnaire) covers the main information domains for both demand and supply data included in the European data set. Other regional monitoring systems and national data sets exist which are, to a greater or lesser extent, comparable with the EU model; see Griffiths & Mounteney [20] for a discussion. The United States and Australia stand out as countries in which developed and relatively comprehensive monitoring capacity exists.

With respect to monitoring the emergence of NPS, by international standards the European system was an early development in this area and has, to some extent, become a model for other data collection mechanisms. At the international level this work is now encompassed in the Global Smart Programme (globalsmart@unodc.org), and in the United States, the National Institutes on Drug Abuse (NIDA) has recently replaced its long-standing Community Epidemiology Work Group (CEWG) with a new National Drug Early Warning System (NDEWS), which is intended to enhance monitoring and reporting capacity in this area (http://www.drugabuse.gov/drugs-abuse/emerging-trends).

## CONCLUSION

During the last 20 years the EU has invested in establishing drug monitoring capacity, with the aspiration of enabling the drug situation to be better understood and comparisons to be made between countries. This paper is intended to facilitate a better understanding of, and easier access to, the main quantitative European-level data sets available in 2015. The methodological issues and data limitations that must necessarily inform any analysis in this area are acknowledged here but not explored in detail. We would argue that with sensitivity to these issues the data available do permit an informed understanding of the European drug situation and provide insight into regional and country differences. The EU reporting system is, however, a child of its time. The system was established at a time when a main policy driver was the need to respond to the diffusion of injecting heroin use and related public health problems. The current EU drug situation is more complex, with stimulants and synthetic substances playing a greater part. It is likely, therefore, that the development of new data sources as well as the exploitation of big data and use of data mining techniques will be required. In 2015 some limited information are available, for example, on acute drug-related emergencies. This data source has much potential to help to enhance understanding of drug-related morbidity [22]. In addition, multi-country wastewater analysis studies [23] and exploratory internet monitoring approaches are increasing insight into drug consumption and drug market trends. Novel information sources such as these remain developmental, but are likely to become more important in the future.

Finally, an obvious advantage of the EU approach is that countries have been working over the last two decades to harmonize their approach to data collection. More broadly, we note that the number of international bodies collecting information on aspects of drug use has prompted calls for more system wide coherence. We would therefore concur with the conclusions of Gowing *et al.* [21] that there is an 'urgent need to review the quality of data on which global estimates are made and coordinate efforts to arrive at a more consistent approach' (p. 918). We would argue that the European experience highlights not only the challenges

 

that this entails but also the considerable potential over the longer term to provide a more robust understanding of an increasingly global, dynamic and complex drug situation.

### Declaration of interests

None.

### Acknowledgements

This paper summarizes those data made available through the EMCDDA 2015 reporting exercise. The authors would like to acknowledge that this information set is only possible due to the work of many contributors. Importantly among these, we would note the invaluable contributions made by the Reitox network of National Focal Points and the associated technical expert working groups, input from other EU agencies, particularly the European Centre for Disease Control and Europol, the ESPAD and SCORE collaborations, the European Commission and staff of the EMCDDA.

### References

1. Griffiths P., Mounteney J., Lopez D., Zobel F., Götz W. Addiction research centres and the nurturing of creativity. Monitoring the European drug situation: the ongoing challenge for the European monitoring Centre for Drugs and Drug Addiction. *Addiction* 2012; **107**: 254–8.
2. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *European Drug Report 2015: Trends and Developments*. Luxembourg: Publications Office of the European Union, 2015. Available at: http://www.emcdda.europa.eu/edr2015/ (accessed 15th April 2015).
3. Sloboda Z. Defining and measuring drug abusing behaviors. In: Sloboda Z., editor. *Epidemiology of Drug Abuse*. New York: Springer Science; 2005.
4. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Action on New Drugs*. European Monitoring Centre for Drugs and Drug Addiction. Available at: http://www.emcdda.europa.eu/activities/action-on-new-drugs/ (accessed 15th April 2015).
5. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Statistical Bulletin*. European Monitoring Centre for Drugs and Drug Addiction. Available at: http://www.emcdda.europa.eu/data/stats2015/ (accessed 15th April 2015).
6. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Internal Statistics Code of Practice*. European Monitoring Centre for Drugs and Drug Addiction. Available at: http://www.emcdda.europa.eu/publications/manuals/statistics-code-of-practice/ (accessed 15th April 2015).
7. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Reitox Network*. European Monitoring Centre for Drugs and Drug Addiction. Available at: http://www.emcdda.europa.eu/about/partners/reitox-network/ (accessed 15th April 2015).
8. Hickman M., Taylor C. Indirect methods to estimate prevalence in epidemiology of drug abuse. In: Sloboda Z., editor. *Epidemiology of Drug Abuse*. New York: Springer Science; 2005.
9. Groves R. M. *Survey Errors and Survey Costs*. 2004. Hoboken, NJ: John Wiley and Sons.
10. Midanik K., Drescher-Burke K. Surveys and questionnaire design. In: Miller P. G., editor. *Addiction Research Methods*. Chichester: Wiley-Blackwell; 2010.
11. Health Behaviour in School-aged Children (HBSC). University of St Andrews, UK: International Coordinating Centre, Child and Adolescent Health Research Unit (CAHRU) School of Medicine. Available at: http://www.hbsc.org/ (accessed 16th April 2015).
12. European School Survey Project on Alcohol and Other Drugs. Available at: http://www.espad.org/ (accessed 16th April 2015).
13. Hibell B., Guttormsson U., Ahlstrom S., Balakireva O., Bjarnason T., Kokkevi A., *et al. The 2011 ESPAD Report: Substance Use Among Students in 36 European Countries*. Stockholm: The Swedish Council for Information on Alcohol and Other Drugs (CAN); European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); Council of Europe; 2012.
14. European Monitoring Centre for Drugs and Drug Addiction/European Centre for Disease Prevention and Control (EMCDDA/ECDC) Annual HIV/AIDS surveillance reports. Available at: http://ecdc.europa.eu/en/publications/surveillance_reports/HIV_STI_and_blood_borne_viruses/Pages/annual-hiv-aids-surveillance-reports.aspx/ (accessed 14th April 2015).
15. World Health Organization (WHO)–Europe HIV/AIDS Data and Statistics. Available at: http://www.euro.who.int/en/health-topics/communicable-diseases/hivaids/data-and-statistics/ (accessed 14th April 2015).
16. European Centre for Disease Prevention and Control (EMCDDA/ECDC). *HIV in injecting drug users in the EU/EEA, following a reported increase of cases in Greece and Romania*. Luxembourg: Publications Office of the European Union, 2011. 2015. Available at: http://www.emcdda.europa.eu/publications/joint-publications/hiv-in-injecting-drug-users-2011/ (accessed 15th April 2015)
17. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Risk assessment of new psychoactive substances—operating guidelines*. Luxembourg: Publications Office of the European Union, 2015. Available at: http://www.emcdda.europa.eu/html.cfm/index100978EN.html. (accessed 15th April 2015)
18. Griffiths P., Sedefov R., Gallegos A., Lopez D. How globalization and market innovation challenge how we think about and respond to drug use: 'Spice' a case study. *Addiction* 2010; **105**: 951–3.
19. Council conclusions on improving the monitoring of drug supply in the European Union. Council of Europe, 2013. Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/139606.pdf/ (accessed 15th April 2015)
20. Griffiths P., Mounteney J. Drug trend monitoring. In: Miller P. G., Strang J., Miller P. M., editors. *Addiction Research Methods*. Chichester: Wiley-Blackwell; 2010.
21. Gowing L., Ali R., Allsop S., Marsden J., Turf E., West R. *et al.* Global statistics on addictive behaviours: 2014 status report. *Addiction* 2015; **110**: 904–19.
22. Dines A., Wood D., Galicia M., Yates C., Heyerdahl F., Hovda K. *et al.* Presentations to the emergency department following cannabis use: a multi-centre case series from ten European countries. Euro-DEN Research Group. *J Med Toxicol* 5 February 2015 [Epub ahead of print].
23. Ort C., van Nuijs A., Berset J.-D., Bijlsma L., Castiglioni S., Covaci A. *et al.* Spatial differences and temporal changes in illicit drug use in Europe quantified by wastewater analysis. *Addiction* 2014; **109**: 1338–52.

 