



Chapter 4

Studies of the problematic drug use population

Methods and definitions

'Problem drug use' is defined for EMCDDA purposes as 'injecting drug use or long duration or regular use of opiates, cocaine and/or amphetamines'. This definition specifically includes regular or long-term use of prescribed opiates such as methadone but does not include their rare or irregular use or the use of ecstasy or cannabis. Existing estimates of problem drug use are often centred on opiate and poly-drug use, and so the definition is currently being reviewed to better take account of new phenomena such as potential problems with cannabis or cocaine use.

The methods used to produce prevalence estimates are based mainly on statistical models using drug use or related indicators and include:

- a simple multiplier method using police, treatment, mortality or HIV/HCV data;
- capture–recapture methods;
- extrapolation via multivariate indicator methods.

The EMCDDA has produced guidelines both for prevalence estimation at local and at national level. At local level the preferred method is a three-(or more)-sample capture-recapture study (though other methods can be used) and detailed guidelines have been produced: [Methodological guidelines to estimate the prevalence of problem drug use on the local level](#). At national level estimates are more difficult to obtain with capture-recapture methods due to spatial heterogeneity of data sets, data availability and quality problems. [Draft guidelines](#) have been developed, however, that are currently being updated on the basis of the experience of national experts. Given the methodological improvements over the last few years, it seems possible to distinguish between injecting drug users (estimates from mortality or HIV multipliers, these may be mainly current injectors) and the wider group of problem drug users, which includes both injectors and non-injectors. In addition to local and national prevalence estimation, several countries have

been able to explore incidence estimation (time trends in numbers of new cases rather than static estimates of all existing cases) and [draft guidelines](#) have been prepared based on two different methods for estimating incidence.

Available estimates are rapidly improving in number and quality, but there are still many problems to be solved that are being addressed in current research reports (see reference list below). There is not yet one method that can be applied in all the countries to give truly comparable results and even if a standard method such as capture-recapture can be used at local level, available datasets often differ so much that it would be difficult to compare results across countries. Comparability problems also stem from differences in the exact definition of the estimated target group, due to differences in drug use patterns between countries.

By 2003, all EU countries were able to produce national estimates of problem drug use using the agreed definition of problem drug use. Many of these estimates were based on results from more than one estimation method, thereby adding to their reliability. A project report with full methodological detail by country is available at <http://www.emcdda.eu.int/?nnodeid=1372>.

References to research reports

- Kraus L, Augustin R, Frischer M, Kümmler P, Uhl A, Wiessing L. Estimating prevalence of problem drug use at national level in countries of the European Union and Norway. *Addiction* 2003; 98: 471-85.
- Smit F, Toet J, van Oers H, Wiessing L. Estimating local and national problem drug use prevalence from demographics. *Addiction Research and Theory* 2003; 11: 401-413.
- Frischer M, Hickman M, Kraus L, Mariani M, Wiessing L. A comparison of different methods for estimating the prevalence of problematic drug misuse in Great Britain. *Addiction* 2001; 96: 1465-1476.

Overview of the data

Listed below are the tables in the bulletin, the supplementary downloadable tables and the associated graphics dealing with problem drug use, along with a brief overview. Please note that the associated graphics and the supplementary tables are available only on the statistical bulletin website (<http://stats05.emcdda.eu.int>).

Tables and graphics present summary information on the estimated numbers of problem drug users and injecting drug users, along with the corresponding prevalence rates in the adult population (aged 15 to 64). Estimates are made by a variety of methods in each country, and data are presented for the most recent years available. Estimates at the national or regional level are likely to show lower variability than local estimates.

Time trend analysis is restricted by the fact that few countries are able to provide regular estimates of PDU prevalence and even fewer can provide regular estimates of IDU prevalence. This suggests the need for strengthening surveillance capacity in this area. The full information on which the summaries are based can be found in the supplementary downloadable tables.

Summary points

- For estimates of PDU, the midpoints of the prevalence ranges all lie between 2 and 10 cases per 1000 of the adult population (aged 15 to 64).
- Prevalence appears to differ strongly between countries. In cases where different estimation methods have been used for the same country the results are largely consistent.
- Most new Member States have not yet been able to produce national estimates of problem drug use, but the few estimates that are available (Czech Republic, Slovenia, Poland) do not suggest higher prevalence rates than in the old Member States (Figure PDU-1).
- Few countries are able to provide national estimates for injecting drug use. Where available they are likely to relate mostly to recent injecting.
- All estimates of IDU are between 1 and 6 cases per 1000 of the population aged 15 to 64.
- Data available suggest important differences between countries in prevalence of IDU (Figure PDU-2).
- The proportion of current injectors among clients in drug treatment shows wide variation in levels and trends
- In some countries strong decreases have occurred during the 1990s, but this is not a general picture. Several countries show proportions injecting steadily maintained or somewhat decreasing in recent years. In several other countries, though, most heroin users entering treatment are injectors. This is observed both among all heroin users entering treatment as well as among the new clients entering treatment for the first time).
- Trends in the proportion of treated heroin users who are injectors must in most countries be seen in the context of declining numbers of heroin users entering treatment for the first time (Figure PDU-3. part (i), Figure PDU-3 part (ii)).
- Trends in problem drug use estimates suggest a general increase since the mid 1990s.
- However, in recent years trends seem to be more divergent, with some countries showing clear signs of a decline, whilst elsewhere estimates are rising or a more stable picture is reported (Figure PDU-4 part (i), Figure PDU-4 part (ii), Figure PDU-4 part (v), Figure PDU-5).
- Local or regional estimates suggest that prevalence of PDU can vary strongly between cities and regions. The reported pattern of estimates within a country can depend heavily on the availability of estimates and choice of geographic areas studied (Figure PDU-6, Figure PDU-7).

Data tables

	page
Table PDU-0. Prevalence of problem drug use at national and local level: bibliographic references	4.4
Table PDU-1. Prevalence of problem drug use at national level and range in local estimates, 1999 to 2003: summary table (rate per 1000 aged 15 to 64).	
<ul style="list-style-type: none"> • Table PDU-1 part (i). Prevalence of problem drug use at national level and range in local estimates, 1999 to 2003: summary table (rate per 1000 aged 15 to 64). Problem drug use 	4.8
<ul style="list-style-type: none"> • Table PDU-1 part (ii). Prevalence of problem drug use at national level and range in local estimates, 1999 to 2003: summary table (rate per 1000 aged 15 to 64). Injecting drug use 	4.10

Table PDU-0. Prevalence of problem drug use at national and local level: bibliographic references

Country	Ref.	Source
All countries	99	EMCDDA project (2003). National Prevalence Estimates of Problem Drug Use in the European Union, 1995-2000. CT.00.RTX.23, emcdda, Lisbon, coordinated by the Institut fur Therapieforschung, Munich (http://www.emcdda.eu.int/?nnodeid=1372)
Belgium	1	Walckiers D., Sartor F., Sasse A. (2001). Country Report: Belgium. National estimates of problem drug use prevalence IPH, 2001.
	2	Driesen G., De Maere W., Kinable H., Todts S. (1997). Risicogedrag bij injecterende druggebruikers in Vlaanderen. Rapport van het GIG-project.
	3	Ledoux Y, Preumont C, Bils L. Prevalence of opiate use in the French Community of Belgium. CCAD - Brussels, September 1999.
Czech Republic	1	Mravčík, V., Korčíšová, B., Lejčková, P., Miovska, L., Škrdlantová, E., Petroš, O., Radimecký, J., Sklenář, V., Gajdošíková, H., Vopravil, J. (2004). Výroční zpráva o stavu ve věcech drog v České republice v roce 2003 [Annual Report on Drug Situation 2003 – Czech Republic]. Praha: Úřad vlády ČR.
	2	National Focal Point (unpublished data)
	3	Mravčík, V., Zábranský, T., Korčíšová, B., Lejčková, P., Škrdlantová, E., Št'astná, L., Macek, V., Petroš, O., Gajdošíková, H., Miovska, M., Kalina, K., Vopravil, J. (2003). Výroční zpráva o stavu ve věcech v České republice v r. 2002 (Annual Report on Drug Situation 2002 – Czech Republic). Praha: Úřad vlády ČR. ISBN 80-86734-06-4
Denmark	1	Eva Hammerby, Nye Tal fra Sundhedsstyrelsen nr.16 2003
	2	Lene Haastруп: Estimates of the number of deaths among drug users and the number of drug users in Denmark, Nye tal fra Sundhedsstyrelsen, aargang 3, no 3, 1999
	3	Mortality and causes of death among drug users received in Treatment in 1996 in 'nye tal fra National Board of Health' 1999, number 3, year 3 pages 18
	4	National Focal Point (unpublished data)
	5	"Hvor mange stofmisbrugere er der i København", published by Forebyggelsesudvalget vedrørende stofmisbrug og Hiv-smitte, Københavns kommune, "Stadslaegen" July 1999.
Germany	1	Kraus L, Augustin R, Frischer M, Kümmler P, Uhl A, Wiessing L. Estimating prevalence of problem drug use at national level in countries of the European Union and Norway. Addiction 2003; 98: 471-85.
	2	Augustin, R. & Kraus, L. Changes in prevalence of problem opiate use in Germany between 1990 and 2000. European Addiction Research, in press
	3	Bundeskriminalamt OA 21(1996). Rauschgiftjahresbericht 1995 Bundesrepublik Deutschland.Wiesbaden: Bundeskriminalamt
	4	Bundeskriminalamt OA 21(2000). Rauschgiftjahresbericht 2000 Bundesrepublik Deutschland.Wiesbaden: Bundeskriminalamt
	5	Robert Koch Institut (Hrsg.) (2001). Aktuelle epidemiologische Daten (http://www.rki.de). Berlin: RKI.
	6	Kraus, L., Augustin, R., Simon, R. (2002). Country Report Germany. In: Simon, R., Kraus, L., Augustin, R., Wiessing, L., Hartnoll, R. Prevalence and Pattern of Problem Drug Use. Final Report project CT.RTX.23. Lisbon: EMCDDA.
	7	Strobl, M., Pelzel, K.-H., Bader, G., Zahn, H., Lange S.N. (2001). Jahresauswertung EBIS-A 2000 - Ambulante Suchtkrankenhilfe.
	8	Tauscher, M., Simon, R., Hüllinghorst, R., Bühringer, G., Helas, I., Schmidtobreck, B. (1996).Erweiterte Jahresstatistik 1995 der ambulanten Beratungs- und Behandlungsstellen für Suchtkranke in der Bundesrepublik Deutschland (Tabellenband). Hamm: EBIS-AG bei der DHS
	9	Kraus, Augustin & Orth 2004
	10	BKA 2004
	11	Kraus et al 2004
	12	National Focal Point (unpublished data)
	13	Kraus, L., Beloch, E., Quammou-Engel, M. & Müller-Kalthoff, Th. (in press). Verbesserung der therapeutischen Situation für Drogenkonsumenten in Augsburg unter besonderer Berücksichtigung von Maßnahmen zur Reduzierung der Zahl der Todesfälle.(Improving Health Care Conditions of Drug Addicts in Augsburg with Special Attention to Reducing the Number of DRD.) IFT - Bericht Bd. 119: München (Improving Health Care Conditions of Drug Addicts in Augsburg with Special Attention to Reducing the Number of DRD.) IFT - Bericht Bd. 119: München.
14	Zenker C., Greiser E. Eprobungsvorhaben zur Pravalenzschätzung des regionalen illegalen Drogenmißbrauchs und seiner Folgen. Bremen: Bremer Institut für Präventions-forschung und Sozialmedizin (BIPS), 1998.	
15	Kirschner W, Kunert M. Berlin: EFB, 1996.	
Greece	1	2004 National Report to the EMCDDA
	2	2003 National Report to the EMCDDA
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Spain	1	Domingo-Salvany A, Barrio G, Royuela L. Country report: Spain
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	3	National Focal Point (unpublished data)
	4	Domingo-Salvany A., Hartnoll R.L., Maguire A., Brugal T., Albertin P., Caylá J.A., Casabona J., Suelves J. M. 'Analytical considerations in the use of capture-recapture to estimate prevalence: Case studies of estimating opiate use in the metropolitan area of Barcelona'. Am J Epidemiol, 1998; 148: 732-40.

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Table PDU-0 – continued from previous page

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	7	Domingo-Salvany A, Hartnoll R, Maguire A, et al. American Journal of Epidemiology 1995; 141: 567-574.
France	1	Costes J.M., Country report : France in 'Prevalence and patterns of problem drug use for all European Union member states, Final report', EMCDDA
	2	National Focal Point (unpublished data)
	3	Chevallier, E. (2001) Estimations locales de la prévalence de l'usage d'opiacés et cocaïne en France: une étude multicentrique à Lens, Lille, Marseille, Nice et Toulouse, OFDT, Paris.
	4	Bello P. Y., Chené G. Methodological pilot study of local level of prevalence estimates. Lisbon: EMCDDA, December 1997.
	5	Bello P. Y., Chéne G. In: EMCDDA/Pompidou Group Scientific Monograph 1 (in press) Lisbon, 1997.
Ireland	1	Kelly A, Carvalho M, Teljeur C. A 3-Source Capture Recapture Study of the Prevalence of Opiate Use in Ireland 2000-2001. Key Findings Summary Tables. Dublin: National Advisory Committee on Drugs, 2003. Report available online at www.nacd.ie
	2	National Focal Point (unpublished data)
	3	C. M. Comiskey, Mathematics Department, National University of Ireland, Maynooth, Co. Kildare, Ireland.
Italy	1	Epidemiological Section of the Italian Observatory on Drugs and Drug Addiction, 2003. (unpublished data).
	2	Relazione Annuale al Parlamento sullo Stato delle Tossicodipendenze in Italia 2003. Ministero del Lavoro e delle Politiche Sociali. Roma, 2004. Epidemiological Section of the Italian Observatory on Drugs and Drug Addiction
	3	National Focal Point (unpublished data)
	4	Epidemiological Section of National Observatory on Drug and Drug Abuse.
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	6	Bello PY, Chéne G. In: EMCDDA/Pompidou Group Scientific Monograph 1 (in press) Lisbon, 1997.
	7	Perucci CA, Forastiere F, Rapiti E, et al. British Journal of Addiction 1992; 87:1637-1641.
	8	Relazione Annuale al Parlamento sullo Stato delle Tossicodipendenze in Italia - 2001 - Ministero del Lavoro e delle Politiche Sociali - Dipartimento per le Politiche Sociali e Previdenziali. Schizzi I., Piano L., Curzio O., Del Re F., Salvadori S. e Mariani F. Regione Liguria - Osservatorio Epidemiologico Regionale Tossicodipendenze. Rapporto 2002: Andamento del fenomeno tossicodipendenze.
	9	Relazione Annuale al Parlamento sullo Stato delle Tossicodipendenze in Italia - 2000 - Ministero del Lavoro e delle Politiche Sociali - Dipartimento per le Politiche Sociali e Previdenziali. Salvadori S., Potente R., Zuccaro P. e Mariani F. Stima di Prevalenza e di Incidenza dell'Uso e Abuso di Alcol e di Sostanze Illecite nella Regione Veneto - 2000.
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Latvia	1	Trapencieris M., Lace I. (2003) 'Survey of Drug Users', in 'Drug Abuse Prevalence in Latvia: Population Survey Report', Riga, 105-112.
	2	Trapencieris, M. Estimations on problem drug use in Latvia: project report, Riga, 2004
Luxembourg	1	Origer, A. (1998). Annual report on the state of the drugs problem in the Grand Duchy of Luxembourg. RELIS 2000. Ministry of Health. AST. NFP. Luxembourg
	2	Origer, A. (2001). Estimation de la prévalence nationale de l'usage problématique de drogues à risque élevé et d'acquisition illicite - Etude comparative multi-méthodes 1997-2000. Séries de recherche n°2. Point focal OEDT Luxembourg - CRP-Santé. Luxembourg.
	3	National Focal Point (unpublished data)
Hungary	1	Hungarian National Report 2004
Netherlands	1	Smit F, Toet J, van Oers H, Wiessing L. Estimating Local and National Problem Drug Use Prevalence from Demographics. Addiction Research and Theory 2003; 11: 401-413.
	2	Smit F, Van Laar M, Wiessing L. Prevalence of problem drug use in the Netherlands, 2001. (submitted)
	3	Smit F, Toet J (2001) National prevalence estimates of problematic drug use in the Netherlands, 1999.
	4	National Focal Point (unpublished data)
	5	Haagse harddruggebruikers en het bereik van de politie en verslavingszorg. Den Haag: Onderzoekcommissie MORE, December 1997.
	6	Couman AM, Neve RJM, Van de Mheen H. Het proces van marginalisering en verharding in de drugscene van Parkstad Limburg. Rotterdam:IVO, 2000.
	7	De Graaf I, Wildschut J, Van de Mheen D. Utrechtse druggebruikers: eenjachtig bestaan. Rotterdam: IVO, 2000.
	8	Bieleman, B., Biesma, S., Jetzes, M. (2003). Enschede van de straat. Aard en omvang dak- en thuislozen en zichtbare alcohol- en harddrugverslaafden in Enschede. Groningen-Rotterdam: Intraval.
	9	Personal communication with Marcel Buster, Municipal Health Service Amsterdam (GG&GD Amsterdam).

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Table PDU-0 – continued from previous page

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	11	Ten Den C, Bieleman B, de Bie E, Snippe J. Groningen: IntraVal, 1995.
	12	Struben HWA, Burger I, Hendriks VM. Omvangschatting van het totaal aantal (afhankelijke) Haagse harddruggebruikers in de periode 1993-98. Den Haag: Onderzoekcommissie monitoring en registratie (MORE).
	13	Biesma, S. Snippe, J., Oldersma, F., Bieleman, B. (2003). Inventarisatie harddrugverslaafden en dak- en thuislozen Leeuwarden, Noord en Zuidwest Friesland. Groningen-Rotterdam: IntraVal.
	14	Netherlands Focal Point, 1998. (Smit F, Toet J., van der Heijden P).
	15	Wiessing LG, Toet J, Houweling H, Koedijk PM, van den Akker R, Sprenger MJW. Prevalence and risk factors for HIV infection among drug users in Rotterdam. [In Dutch]. RIVM report nr. 213220001. Bilthoven, National Institute of Public Health and Environmental Protection (RIVM), 1995.
	16	Van Brussel G., et al. Amsterdam: Municipal Health Services & Bureau of Social Research and Statistics, 1996.
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	19	Burger, I., Struben, H. (2001). Haagse harddruggebruikers; Het bereik van politie en verslavingszorg in 1996-98 en veranderingen van 1993-95. Den Haag: Onderzoekcommissie monitoring en registratie (MORE).
Austria	20	Korf DJ, Reijneveld SA, Toet J. The International Journal of the Addictions 1994; 29: 1393-1417.
	1	National Focal Point (unpublished data)
	2	Uhl, A.; Seidler, D. (2000): Prevalence Estimate of Problematic Opiate Consumption in Austria. LBISucht, Vienna
	3	Busch 2003 (not yet available)
	4	Uhl and Busch 2002 (not yet available)
	5	ÖBIG 2003c (not yet available)
	6	Seidler D., Uhl A, in: Methodological pilot study of local level prevalence estimates. Lisbon: EMCDDA, December 1997.
	7	Vienna drug co-ordinators 1997.
Poland	1	National Focal Point (unpublished data)
Portugal	1	Negreiros, J. (2002): Estimativa da prevalência e padrões de consumo problemático de drogas em Portugal, CIPCDs/Faculdade de Psicologia e Ciências da Educação da Universidade do Porto, Porto
	2	National Focal Point (unpublished data)
	3	Freire S., Moreira M., in: Methodological pilot study of local prevalence estimates. Lisbon: EMCDDA, 1997.
	4	Godinho, J., Costa, H., Padre-Santo, D. (1998). Estimativa da prevalência de consumidores de heroína no Concelho de Setúbal.
Slovenia	1	National Focal Point (unpublished data)
	2	Pompidou Group Project on Treatment Demand: Tracking long-term trends
Finland	1	Partanen P., Hakkarainen P., Holmström P., Kinnunen A., Lammi R., Leinikki P., Partanen A., Seppälä T., Välikki J., Virtanen A.: Amfetamiinien ja opiaattien ongelmakäytön yleisyys Suomessa 2002. Yhteiskuntapolitiikka 3/2004.
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	3	Partanen P., Hakkarainen P., Holmström P., Kinnunen A., Lammi R., Leinikki P., Partanen A., Seppälä T., Simpura J., Virtanen A. Amfetamiinien ja opiaattien käytön yleisyys Suomessa 1999. Suom. Lääkärilehti 44/2001. (to be published)
	4	Partanen Päivi, Kinnunen Aarne, Leinikki Pauli, Nylander Olli, Seppälä Timo, Simpura Jussi, Virtanen Ari & Välikki Jouni: Selvitys amfetamiinin ja opiaattien käyttäjien määrästä pääkaupunkiseudulla ja koko maassa vuonna 1997. STAKES, Aiheita 19/1999
	5	Partanen P., Hakkarainen P., Holmström P., Kinnunen A., Lammi R., Leinikki P., Partanen A., Seppälä T., Simpura J. & Virtanen A. (2000): Amfetamiinien ja opiaattien käytön yleisyys Suomessa 1998. Yhteiskuntapolitiikka 65 (2000):6
	6	Partanen P. Report on the number of amphetamine and opiates users in the Greater Helsinki area in 1995. Helsinki: Stakes, Aiheita 40/1994.
Sweden	1	B. Olsson, C.A. Wahren, S. Byqvist, Det tunga narkotikamissbrukets omfattning i Sverige 1998, CAN, Stockholm 2001.
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	3	Social Services Research and Development Stockholm City, R & D Report 1996/12. Stockholm, 1996.
	4	Finne, E. Statistik över missbrukare, hemlösa och psykiskt störda i Stockholm år 2001. FoU-rapport. Socialtjänstförvaltningen, Forsknings- och utvecklingsenheten, Stockholm 2002.
	5	Finne, E. Statistik över missbrukare, hemlösa och psykiskt störda i stockholm år 1999. FoU -rapport.
	6	Finne, E. (1997) Socialtjänstens kontakter med missbrukare, psykiskt störda och hemlösa 1996. FoU-rapport 1997:15. Stockholm.
	7	Swedish Council for Information on Alcohol and other Drugs (CAN), UNO-92 (report 34), Stockholm, 1993./ Department of Social Welfare and Public Health, City Office, Malmö.
	8	'Finne, E. Statistik över missbrukare, hemlösa och psykiskt störda i stockholm år 2000. FoU -rapport.
	9	National Focal Point (unpublished data)
United Kingdom	1	Frischer M, Hickman M, Kraus L, Mariani M, Wiessing L. A comparison of different methods for estimating the prevalence of problematic drug misuse in Great Britain. Addiction 2001; 96: 1465-1476

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Table PDU-0 – continued from previous page

Country	Ref.	Source
	2	CDMR (University of Glasgow) & SCIEH ' Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland'.
	3	McElrath, K. (2002) Prevalence of Problem Drug Use in Northern Ireland. Belfast, Department of Health, Social Services and Public Safety.
	4	M Frischer, H Heatlie and M Hickman. Estimating the prevalence of problem and injecting drug use for drug action team areas in England: A feasibility study using the multiple indicator method. London: Home Office Drug and Alcohol Research Unit.
	5	National Focal Point (unpublished data)
	6	Frischer M. British Journal of Addiction 1992; 87: 235-243.
	7	Hay G, McKeganey N. Journal of Epidemiology & Community Health 1996; 50: 469-472.
	8	G Hay, N McKeganey, S Hutchinson (November 2001) Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland.
	9	Hickman, M, Higgins, V, Hope, V, Bellis, M. (2004) Estimating prevalence of problem drug use: multiple methods in Brighton, Liverpool and London. Home Office Online Report 36/04
	11	Bloor M, Wood F, Palmer S. Cardiff: University of Wales, 1997.
	12	Brugha, R.F., Swan, A V., Hayhurst, G.K., Fallon, M.P. (1998) 'A drug misuser prevalence study in a rural English district'. European Journal of Public Health, 8: 1101-1262.
	13	Hickman et al. Problem drug use prevalence in Inner London.
	14	Squires NF, Beeching NJ, Schlecht BJM, et al. Journal of Public Health Medicine 1995; 17: 103-109.
	15	Frischer M, Leyland A, Cormack R, et al. American Journal of Epidemiology 1993; 138: 170-181.
	16	DMRU (University of Manchester) & CDMR (University of Glasgow) The Dynamics of Drug Misuse: Assessing Changes in Prevalence. London, Home Office Drugs and Alcohol Research Unit
Norway	1	Bretteville-Jensen, A.L., personal communication, 2002.
	2	National Focal Point (unpublished data)

Table PDU-1 part (i). Prevalence of problem drug use at national level and range in local estimates, 1999 to 2003: summary table (rate per 1000 aged 15 to 64). Problem drug use

Country	Year	Method	Rate per 1000 (95% CI (1) or SI)	Numbers	Data sources/comments	Reference	Range in local estimates rate per 1000 (midpoints)	
							Lowest estimate (year/method/region)	Highest estimate (year/method/region)
Czech Republic	2003	TM	3.60 (3.46-3.89)	26500 (25000-28100)	Problem methamphetamine and opiate users. HCY national study - low-threshold facilities	1	13.3 (2002/TM/Prague)	13.3 (2002/TM/Prague)
Denmark	2001	CR	7.17 (6.67-7.67)*	25544 (23757-27331)	Nationally register of patients. National register of drug abusers undergoing treatment	1		
Germany	2003	TM	(2.00-3.20)	(109000-177000)	Treatment monitoring system: outpatient and inpatient	9, 10, 11	7.9 (2) (1999/CR/Greater Augsburg)	7.9 (2) (1999/CR/Greater Augsburg)
Germany	2003	PM	(2.70-3.40)	(144000-182000)	Police: Heroin users and drug related deaths	9, 10, 11		
Germany	2003	PM	(1.70-2.20)	(92000-123000)	Police: Heroin users and drug related deaths	9, 10, 11		
Greece	2003	CR	2.38 (2.07-2.76)*	17767 (15419-20563)	Treatment demands at other services	1	2.54 (2) (2002/CR/Greater Thessaloniki)	4.97 (2003/CR/Greater Athens)
Spain	2000	TM	5.31	144198	Problematic opiate users. Demographic multiplier method	99, 3		
Spain	2000	other	(6.72-7.89)	(182498-214152)	Treatment admissions data. Demographic multiplier method	99, 3		
France	1999	TM	4.72	180000		2	6.0 (2000/CR/Toulouse)	14.2 (1999/CR/Nice)
France	1999	PM	(3.88-4.79)	(147900-182600)		2		
France	1999	MI	4.67	178000		2		
France	1999	other	3.84	146400		2		
Ireland	2001	CR	5.60 (5.20-6.10)	14452 (13405-15819)	Demographic multiplier method	1	15.9 (2000/CR/Dublin City and county)	15.9 (2001/CR/Dublin City and county)
Italy	2003	TM	7.47 (7.22-7.72)*	285838 (276462-295464)	Problem opiate users. Methadone treatment clients; hospital; police	2	5.10 (2000/CR/Venice City)	10.8 (2000/CR/Genova City)
Italy	2003	MI	7.81 (7.55-8.07)*	298892 (289010-308977)	Ministry of Health data on IDUs attending public drug treatment services	2		
Italy	2003	CR	7.20 (6.98-7.44)*	275698 (267048-284590)	Ministry of Health data on IDUs attending public drug treatment services	2		
Latvia	na							
Luxembourg	2000	CR	(6.19-13.57)	(1801-3948)	Truncated Poisson model, combined results of Chao and Zelterman estimators	2, 99	2.6 (2002/MM/Riga)	9.1 (2003/(3)/Riga)
Luxembourg	2000	other	(7.33-10.05)	(2132-2924)	Truncated Poisson model, combined results of Chao and Zelterman estimators	2, 99		
Hungary	na						3.5 (2003/TM/Budapest)	3.5 (2003/TM/Budapest)
Netherlands	2001	TM	3.00 (2.38-3.62)	32418 (25718-39118)	Problem opiate and/or crack cocaine users. Police; Health Care Services for drug-related problems; Methadone Treatment	1, 2	4.9 (1999/CR/Parkstad Limburg)	9.5 (2001/CR/Amsterdam)

continued on next page

Table PDU-1 part (i) – continued from previous page

Country	Year	Method	Rate per 1000 (95% CI (1) or SI)	Numbers	Data sources/comments	Reference	Range in local estimates rate per 1000 (midpoints)	
							Lowest estimate (year/method/region)	Highest estimate (year/method/region)
Netherlands	2001	MI	2.94 (2.01-3.87)	31720 (21720-41819)	Problem opiate and/or crack cocaine users. Police; Health Care Services for drug-related problems; Methadone Treatment	1		
Netherlands	2001	other	3.07 (2.28-3.85)	33174 (24638-41603)	Problem opiate and/or crack cocaine users. Police; Health Care Services for drug-related problems; Methadone Treatment	1		
Austria	2002	CR	5.76 (5.38-6.14)	31466 (29397-33535)	Problem opiate users. Police, Substitution Treatment	5		
Poland	2002	other	1.94 (1.23-2.65)	52000 (33000-71000)	Problem drug users. Population survey of 2002. Residential Drug Treatment; Drug treatment: outpatient; HIV cases	1, 99		
Portugal	2000	TM	(6.03-7.03)	(41720-48673)	Ministry of Health data on clients attending public outpatient drug treatment services. Problem users of opiates, cocaine and amphetamines	1, 99	11.0 (2000/CR/Oeiras)	24 (2000/CR/Aveiro)
Portugal	2000	PM	(6.82-8.52)	(47184-58980)	Problem opiate, cocaine and amphetamine users. Police	1, 99		
Slovenia	2001	CR	5.30	7399	Problem drug users. Police, Drug treatment data	1	13 (2003/(4)/Ljubljana)	13 (2003/(4)/Ljubljana)
Finland	2002	CR	5.30 (4.60-6.10)*	18400 (16100-21100)	Register of infectious diseases (National Public Health Institute). Hospital Patient Discharge Register. Driving under the influence of drugs -register (National Public Health Institute and Ministry of Interior). Criminal Report File (Ministry of Interior and National Bureau of Investigation)	1	0.3 (2002/CR/East and North Finland)	7.05 (1999/CR/Greater Helsinki)
Sweden	2001	CR	4.80	27640	The Hospital Discharge Register.	2	3.5	4.3
United Kingdom	2001	CM	9.35 (8.99-9.79)	360811	Treatment, Police, Hospital	1, 2, 3, 4, 5	0.55 (2003/CR/Moray)	33.6 (2000/CR/Glasgow City)

Notes

(1) 95 % confidence interval (CI); intervals from sensitivity analysis (SI) are not marked with asterisk.

For further details on methods and data sources/comments see Table PDU-3 and Table PDU-4.

(2) Midpoints have been calculated in cases where no central estimate was provided to facilitate interpretation and comparisons; these are presented with an asterisk.

(3) Other method: two-source capture-recapture method.

(4) Other method: report delay adjustment.

Sources:

See Table PDU-0 (page 4.4).

Table PDU-1 part (ii). Prevalence of problem drug use at national level and range in local estimates, 1999 to 2003: summary table (rate per 1000 aged 15 to 64). Injecting drug use

Country	Year	Method	Rate per 1000 (95% CI (1) or SI)	Numbers	Data sources/comments	Reference	Range in local estimates rate per 1000 (midpoints)	
							Lowest estimate (year/method/region)	Highest estimate (year/method/region)
Germany	2000	MM	(2.27-3.03)	(126875-169167)	Police.	2, 4, 6, 99		
	2000	HM	(1.61-2.83)	(90000-158000)	Treatment monitoring system: outpatient	2, 5, 6, 99		
	2003	CR	1.29 (1.08-1.56)*	9626 (8044-11607)	Treatment demands at other services.	3	2.15 (2) (2003/CR/Greater Athens)	2.15 (2) (2003/CR/Greater Athens)
France	1999	HM	3.20	122000	Method not based on HIV but on use of syringes and substitution substance.	2	6.7 (1999/(3)/South Region)	8.1 (1999/(3)/Center Regions)
Italy								
Luxembourg	2000	HM	5.89	1715		2, 99		
Austria	2000	MM	(2.19-4.19)	(12000-23000)		1, 99		
Portugal	2000	MM	(2.30-4.60)	(15900-31800)	IDUs or regular/long time users of opiates, cocaine and/or amphetamines. Ministry of Justice/National Forensic Medicine Institute/data from the Special Register on drug-related deaths	1, 99		
UK	2000	HM	(4.28-6.35)	(29620-43966)	IDUs diagnosed with HIV/AIDS and registered in prisons, therapeutic communities, social services, drop-in centres and health centres	2, 3, 4, 5	0.07 (2003/CR/Dundee)	13.7 (2001/CR/Brighton)
Norway	2002	MM	(3.71-5.10)	(11000-15000)		1		

Notes

(1) 95 % confidence interval (CI); intervals from sensitivity analysis (SI) are not marked with asterisk.

See Table PDU-0 (page 4.4) for details on bibliographic references.

For further details on methods and data sources/comments see Table PDU-3 and Table PDU-4.

(2) Midpoints have been calculated in cases where no central estimate was provided to facilitate interpretation and comparisons; these are presented with an asterisk.

(3) Mortality multiplier, multivariate indicator and treatment multiplier.

List of supplementary material

The figures and supplementary tables listed here are available on the statistical bulletin website (<http://stats05.emcdda.eu.int>).

Figures

Figure PDU-1. Estimates of the prevalence of problem drug use, 1999-2003 (rate per 1000 population aged 15 to 64)

Figure PDU-2. Estimated rate of injecting drug use 1999-2003 (rate per 1000 aged 15 to 64)

Figure PDU-3. Trends in injecting drug use: percentage injecting among all heroin clients in treatment

- **Figure PDU-3 part (i).** Trends in injecting drug use: percentage injecting among all heroin clients in treatment. Percentage IDU among all heroin clients entering treatment
- **Figure PDU-3 part (ii).** Trends in injecting drug use: percentage injecting among all heroin clients in treatment. Percentage IDU among heroin clients entering treatment for the first time

Figure PDU-4. Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country

- **Figure PDU-4 part (i).** Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country: average of all estimation methods
- **Figure PDU-4 part (ii).** Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country: estimated by multiplier method from treatment data
- **Figure PDU-4 part (iii).** Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country: estimated by multiplier method from police data
- **Figure PDU-4 part (iv).** Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country: estimated by capture recapture method
- **Figure PDU-4 part (v).** Estimated prevalence of and trends in problem drug use at the national level (rate per 1000 population aged 15 to 64). Trends per country: extrapolation by multivariate indicator method

Figure PDU-5. Estimated prevalence of and trends in injecting drug use at the national level (rate per 1000 population aged 15 to 64)

Figure PDU-6. National and local estimates of the prevalence of problem drug use, 1999-2003 (rate per 1000 population aged 15 to 64)

Figure PDU-7. National and local estimates of the prevalence of injecting drug use, 1999-2003 (rate per 1000 population aged 15 to 64)

Tables

Table PDU-2. Prevalence of problem drug use at national level: trends

- **Table PDU-2 part (i).** Trends in rates
- **Table PDU-2 part (ii).** Trends in numbers

Table PDU-3. Prevalence of problem drug use at national level: full database

Table PDU-4. Prevalence of problem drug use at local level: full database