Annex B: Some other definitions of drug-deaths

B1. Other bodies may use other definitions for other purposes: this annex gives some examples. It then discusses how some deaths from certain other causes might be counted as well, to obtain a wider view of mortality arising from drug misuse.

'Drug poisoning' deaths
(Office for National Statistics [ONS] 'wide' definition)
and
'drug induced' deaths
(European Monitoring Centre for Drugs and Drug Addiction [EMCDDA] 'general mortality register' definition)

B2. First, there is a 'wide' definition which is used by the Office for National Statistics (ONS) to provide figures for 'drug poisoning' deaths. It covers the following cause of death categories (the relevant codes from the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision [ICD10], are given in brackets):

a) deaths where the underlying cause of death has been coded to the following sub-categories of 'mental and behavioural disorders due to psychoactive substance use':
- opioids (F11);
- cannabinoids (F12);
- sedatives or hypnotics (F13);
- cocaine (F14);
- other stimulants, including caffeine (F15);
- hallucinogens (F16);
- volatile solvents (F18); and
- multiple drug use and use of other psychoactive substances (F19).

b) deaths coded to the following categories:
- accidental poisoning by and exposure to drugs, medicaments and biological substances (X40 – X44);
- intentional self-poisoning by and exposure to drugs, medicaments and biological substances (X60 – X64);
- assault by drugs, medicaments and biological substances (X85); and
- poisoning by and exposure to drugs, medicaments and biological substances, undetermined intent (Y10 – Y14).

The main differences between this 'wide' definition and the one used to produce the statistics given in this publication (the 'baseline' definition for the UK Drugs Strategy) are:
- the first part also includes deaths coded to 'volatile substances' (F18); and
- the second part is not restricted to cases where a drug listed under the Misuse of Drugs Act (1971) was known to be present in the body at the time of death.

Therefore, the 'wide' definition's figures are markedly higher.

B3. Second, there is the 'drug induced deaths' definition used by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) for its 'general mortality register'. The rules for this definition refer to particular codes for the underlying causes and the types of substance involved, and (in some cases) specify the combinations that must occur for a death to be counted under this definition. It produces figures which are broadly similar to those of the standard (Drugs Strategy 'baseline') definition, but which cover deaths which

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involved the use of a different (albeit overlapping) range of drugs: so some deaths which are counted under the EMCDDA definition are not counted under the standard (Drugs Strategy 'baseline') definition, and vice versa. In the '… in 2015' edition, the EMCDDA figures for some of the years from 2000 to 2014 were revised slightly from those published previously, following advice, from Public Health England (which co-ordinated the provision of figures for the UK to the EMCDDA) that deaths satisfying some other criteria should be counted in the EMCDDA definition.

B4. Because National Records of Scotland (NRS) has details of all the deaths which were registered in Scotland, it can produce figures using the 'drug poisoning' (ONS 'wide') definition and the 'drug induced' (EMCDDA 'general mortality register') definition, as well as using the standard (Drugs Strategy 'baseline') definition. These are given in Table X. As the table and Figure X1 show, the numbers produced using the three definitions tend to rise and fall in broadly similar ways, and so all three definitions give similar impressions of the long-term trend, although they differ regarding the numbers of deaths in each year. Figures based on the 'drug poisoning' (ONS 'wide') definition have been provided for 1979 onwards, but numbers based on the other two definitions are only available for 1996 and later years. A separate note, 'Figures for drug-related deaths for Scotland for 1995 and earlier years' is available on the NRS website, explains why NRS cannot produce figures for drug-related deaths for 1995 and earlier years on the basis of the standard (Drugs Strategy 'baseline') definition, comments on the potential reliability of the numbers on the basis of the 'drug poisoning' (ONS 'wide') definition for 1979 to 1999, and explains why it is not possible to produce reliable figures for drug-related deaths on that basis for 1978 or earlier years.

B5. As explained above, the 'drug poisoning' (ONS 'wide') definition includes all deaths coded to accidental poisoning, and to intentional self-poisoning by drugs, medicaments and biological substances, whether or not a drug listed under the Misuse of Drugs Act was present in the body. Table Y shows the numbers of deaths (on this basis) in each year for the latest year, and over the previous ten years, for which a range of drugs (including anti-depressants, anti-psychotics, paracetamol or a compound, and tramadol) were reported, including recent years' rises in the numbers of deaths involving certain drugs (such as diclazepam, etizolam, gabapentin and pregabalin) which have only been controlled for a few years (and others which have yet to be controlled).

Examples of definitions which have been used by the Police

B6. The former Scottish Crime and Drug Enforcement Agency (SCDEA) used a different definition. In Autumn 2007, the then General Register Office for Scotland (GROS) compared some of the details of the drug-related deaths (in terms of the 'baseline' UK Drug Strategy definition) in 2006 that were held by GROS and the deaths that were recorded in an SCDEA database of drug-related deaths. The results may be summarised as follows:

- 321 deaths were counted by both GROS and SCDEA;
- 100 deaths were counted by GROS but not by SCDEA. These included:
  - 14 deaths occurring in December 2005 which were not registered until 2006;
  - 28 definite suicides;
  - 19 probable suicides (classified as 'events of undetermined intent');
  - 8 cases coded to 'accidental overdose'; and
  - 29 cases coded to 'drug abuse'.
- 53 cases were counted by SCDEA but not by GROS. These comprised:

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- 13 deaths occurring in December 2006 which were not registered until 2007 - most (if not all) of which will be included in the GROS figures for 2007;
- 21 deaths for which drugs (whether named or unspecified) were recorded in the GROS database - but either the drugs mentioned were not covered by the 'baseline' definition or the deaths were coded to causes other than drug abuse or drug overdose;
- 19 deaths which had no mention of drugs in the GROS database (13 were coded to 'unascertained' cause of death). Returns from Procurators Fiscal were still outstanding for several of these when the GROS database for 2006 was closed at the end of June 2007. SCDEA recorded the involvement of heroin or methadone in 15 deaths, so it is likely that some of them would have been counted in GROS's figures for drug-related deaths had all the relevant information been available before its database for 2006 closed.

B7. Because the numbers involved are smaller, and because there may be differences in the way in which cases are counted against geographical areas, there may be larger (in percentage terms) differences between NRS and other bodies in their figures for parts of Scotland. For example, in September 2010, the then Grampian Police investigated the difference between its figure of 43 and the then GROS's figure of 52 for the number of drug-deaths in the Grampian area in 2009. The Police's results may be summarised as follows:

- 39 deaths were counted by both the then GROS and the Police;
- 13 deaths were counted by the then GROS but not by the Police. These comprised of:
  - nine cases of suicide, or suspected suicide (the Police did not include suicides which involve drugs in their figures for 'drug-related' deaths);
  - two deaths which had been registered in 2009 but had actually occurred in 2008 (and so were not in the Police figures for 2009). As mentioned in Annex C, NRS counts events on the basis of the date of registration, since the date of occurrence may not be known;
  - the death of someone from Grampian who had been living elsewhere in Scotland for 3 months. As explained in the information about the geographical basis of the Vital Events statistics (available via the vital events general background information section of the NRS website), NRS normally counts someone who had been living at an address for less than a year on the basis of the previous address. The Grampian Police had not known about this death, so could not have counted it; and
  - a death from an overdose of prescribed medication. The Police had not counted this death as 'drug-related' because the controlled substances which caused the death had been obtained legitimately, being medication which had been prescribed to the deceased.
- 4 deaths were counted by the Police but not by NRS (formerly GROS). These comprised of:
  - two deaths which occurred in December 2009 but which had not been registered until 2010 (and so were not in the GROS figures for 2009);
  - a death caused by a medical condition upon which the consumption of controlled drugs had a bearing (GROS had counted this death as being due to the medical condition rather than as being drug-related); and

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- the death in Grampian of someone who had been living elsewhere. (GROS counted this in its statistics for the other part of Scotland, because NRS's figures are based on its understanding of the area of residence of the deceased, if that was within Scotland).

Grampian Police also looked at the statistics for individual local authority areas, and found further differences between its figures and those of the then GROS. These were due to different practices for counting deaths against geographical areas. For example, the Police figures for Aberdeen City included deaths, which had occurred in Aberdeen, of people who had lived in Aberdeenshire or Moray. GROS counted such cases on the basis of its understanding of the area of residence of the deceased.

Other bodies' definitions: discussion

B8. It follows that there will inevitably be differences between NRS's figures and those of other bodies, because different organisations may use different definitions, perhaps because their reasons for compiling their figures differ because they need to use them for different purposes. For example, the Police did not include suicides in their drug-related death figures because their need for such figures was to monitor the numbers of cases where people have died accidentally after taking controlled drugs, as they have a duty to investigate any potential criminal activity involved in the supply of controlled drugs to the deceased. The Police investigate suicides in a different way (for which it does not matter what method was used, such as legal or illegal drugs, hanging, or falling from a height), and therefore did not include suicides involving drugs in their drug-related death figures. In addition, NRS and other bodies may hold different information in some cases (for example when registering a young person's death, a parent may say that the person's usual place of residence was the family's home address, whereas the Police records may hold a different address). This may sometimes lead to differences in the direction of the year-to-year change shown by NRS's and another body's statistics (for example one set of data might suggest a slight rise, the other a slight fall). However, such differences between NRS's and other bodies' figures should not be a cause for concern, because they can be explained by the kinds of reasons given above. In addition, as mentioned in Annex D, the figures for any given part of Scotland may be subject to year-to-year fluctuations: using 5-year moving averages should provide a better indication of the level and any long-term trend than looking only at (say) the figure for the latest year and the change from the previous year.

B9. Other organisations may interpret the term 'drug-related deaths' in other ways. For example, drug-related deaths which were known to be suicides were excluded from the National Drug-Related Deaths Database (Scotland) Report 2009, which was prepared by the Information Services Division (ISD) of NHS National Services Scotland, which is now part of Public Health Scotland (PHS). That report is available (along with the corresponding reports for 2010 and later years) on the ISD (now PHS) website. However, that definition of drug-related deaths was changed to include confirmed suicides for the first time in the ISD database for 2012. ISD's database was established to collect detailed information, from a range of local data sources, on the nature and circumstances of people who had died a drug-related death - for example, including data on the person's social circumstances, medical and drug use history, and previous contact with health and criminal justice services. The ISD publication for 2009 included sections on Sociodemographics, Drug Use History, Medical and Psychiatric History and Adverse Life Events, the Death, Toxicology and Substance Prescribing, and Contact With Services. It also had an appendix on the reasons for differences between ISD's figures and those given here, which include some differences in coverage and definitions (such as the exclusion of confirmed suicides for the years before 2012) and the fact that ISD's local contacts did not provide data for some drug-related deaths.

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Deaths counted in the 'wide' definition but not in the NRS implementation of the 'baseline' definition; some other causes of death that may be associated with drug misuse; and the numbers of volatile substance abuse deaths

B10. Among the recommendations made by the National Forum on Drug-related Deaths in its annual report for 2009/10 was one which relates to this publication:

'In recognition of the expanding range of causes of drug related deaths, and in keeping with the aims of the Advisory Committee on Misuse of Drugs report on Drug Related Deaths (published in 2000) to include a wider view of mortality caused by drug misuse, the forum recommends:

- that GROS include a table within their annual drug related deaths report that reflects deaths from 'some causes which may be associated with present or past drug misuse';
- that in the coming year, this includes detail on deaths caused by Hepatitis C and HIV; and
- that the forum and GROS explore the possibility of including violence, trauma and road traffic accidents in future reports.'

As a result, Table Z was added to a previous edition of this publication.

B11. The top part of Table Z gives the numbers of deaths counted by the 'drug poisoning' (ONS 'wide') definition, with separate figures for:

- the basis used for the statistics in this publication (this is the Drug Strategy 'baseline' definition, as implemented by GROS/NRS);
- deaths which are within the 'baseline' definition but are excluded from the figures produced by GROS/NRS for reasons which are given in Section A3 of Annex A;
- all other deaths which are counted by the 'drug poisoning' (ONS 'wide') definition.

B12. The next part of Table Z gives some information which was requested by members of the National Forum, starting with the numbers of deaths from some causes which may be associated with present or past drug misuse. At present, this shows only the following two causes of death:

- Hepatitis C - the virus can be transmitted through sharing needles when injecting drugs. Health Protection Scotland (HPS), which is now part of Public Health Scotland (PHS), estimated that, in 2017-18, 57% of people who injected drugs were Hepatitis C antibody positive. From data on all the people who had been diagnosed as Hepatitis C antibody positive in Scotland by the end of 2017, HPS found that 91% of those with a known risk factor were people with a history of injecting drug use. In only a small proportion of cases was the infection known to have been transmitted in another way (such as through sexual contact, a tattoo or body piercing with equipment that had not been properly sterilised, a bite, blood spillage, blood transfusion, using medical equipment that was not adequately sterilised, or perinatal risk). Accordingly, most deaths caused by Hepatitis C occur in people with a history of injecting drug use.
- HIV - using a needle or syringe that has already been used by someone who is infected is one of the two main ways to become infected, the other being unprotected sexual intercourse with an infected person. Therefore, only a proportion of deaths caused by HIV will be due to drug misuse.

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B13. The final part of Table Z shows the number of volatile substance abuse deaths in Scotland. Two sets of figures are provided, the first of which has not been updated for many years. It used to be produced and published by the International Centre for Drug Policy (ICDP) at St George's, University of London. A few deaths per year could be counted as both 'drug-related' and 'volatile substance abuse' (for example if the cause was 'combined toxic effects of methadone and butane'). ICDP produced its figures for Scotland using information from NRS, the Crown Office and Procurator Fiscal Service, and other sources. More details of the figures that ICDP used to produce are given in its Volatile Substance Abuse Mortality Report, available via the news and publication section of the St George's website.

B14. The second set of statistics of volatile substance abuse deaths was produced by NRS, on the basis which was used for an ONS publication which had figures for the whole of Great Britain. Again, some deaths may be counted as both 'drug-related' and 'volatile substance abuse'. More information about these figures is given in material which is part of the Deaths section of the NRS website.

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