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## Drug-related deaths in Scotland in 2010

Statistics of drug-related deaths in 2010 and earlier years, broken down by cause of death, selected drugs reported, age and sex. Includes three tables of figures for NHS Board areas, and three for Council areas

Published on 9 August 2011

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A National Statistics publication for Scotland

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## Main Points

The key points in this publication are:

- On the basis of the definition used for these statistics, there were 485 drug-related deaths registered in Scotland in 2010, 60 (11 per cent) fewer than in 2009. However, this was the third-highest number ever recorded, 30 (7 per cent) more than in 2007 and 193 (66 per cent) more than in 2000. The number of drug-related deaths has risen in six of the past ten years.
- Males accounted for 75 per cent of the drug-related deaths in 2010.
- In 2010, there were 161 drug-related deaths of people aged 25-34 (representing 33 per cent of all drug-related deaths) and 158 drug-related deaths of 35-44 year olds (also 33 per cent). In addition, 65 people aged under 25 died (13 per cent), as did 76 45-54 year olds (16 per cent) and 25 people aged 55 and over (5 per cent).
- The NHS Board areas which accounted for most of the 485 drug-related deaths in 2010 were:
  - Greater Glasgow & Clyde - 167 (34 per cent);
  - Lothian - 73 (15 per cent); and
  - Lanarkshire - 53 (11 per cent).
- Using the annual average for 2006-2010, to reduce the effect on the figures of year-to-year fluctuations.
  - For Scotland as a whole, the average of 496 drug-related deaths per year represented a death rate of 0.10 per 1,000 population.
  - Only one NHS Board area had a higher rate: Greater Glasgow & Clyde (0.15).
  - The next highest rate was for Tayside (0.10).
  - Two areas had rates of 0.09, and three had rates of 0.08.
- Comparing the annual average for 2006-2010 with that for 1996-2000:
  - the percentage increases in the number of drug-related deaths were about the same for males (90 per cent) and females (94 per cent);
  - the percentage increases for 35-44 year olds and people aged 45-54 were larger than for 25-34 year olds and people aged 55 and over, and there was a fall in the number of drug-related deaths of people aged under 25; and
  - the NHS Board areas with the largest increases in the numbers of drug-related deaths were Greater Glasgow & Clyde (up by 64), Lanarkshire (up by 27), Lothian (up by 26) and Ayrshire & Arran (up by 24).
- The standard basis for the figures for individual drugs for 2008 and subsequent years is 'drugs which were implicated in, or which potentially contributed to, the cause of death' of the 485 drug-related deaths in 2010:
  - heroin and/or morphine were implicated in, or potentially contributed to, the cause of 254 deaths (52 per cent of the total);
  - methadone was implicated in, or potentially contributed to, 174 deaths (36 per cent);
  - benzodiazepines (e.g. diazepam) were implicated in, or potentially contributed to, 122 deaths (25 per cent);

- cocaine, ecstasy and amphetamines were implicated in, or potentially contributed to, 33, 0 and 3 deaths respectively; and
  - alcohol was implicated in, or potentially contributed to, 127 deaths.
- In 2010, heroin/morphine, benzodiazepines and alcohol were implicated in, or potentially contributed to, markedly fewer deaths than in 2008 and 2009. However, for methadone and cocaine there were only slight differences in the numbers for those three years. Because of a change in the method used to collect information about the substances which were found in the body (section 2), 'individual drugs' figures for 2008 onwards cannot be produced on the same basis as those for earlier years.
  - Most drug-related deaths were of people who took more than one drug. There were relatively few deaths for which only one drug (and, perhaps, alcohol) was found present in the body, including 30 for which only heroin/morphine (and, perhaps, alcohol) was reported, and 20 for which only methadone (and, perhaps, alcohol) was mentioned. There were more deaths for which only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to, the cause (whether or not anything else was present), including 123 cases where that drug was heroin/morphine and 69 where it was methadone.

## 1. Introduction

- 1.1 This is the latest edition of an annual publication which provides statistics of drug-related deaths which were registered in Scotland over the period from 1996 to 2010. The figures were produced using a definition of 'drug-related deaths' which was introduced in 2001 for the 'baseline' figures for the UK Drugs Strategy. This definition was agreed by a working party set up following the publication, by the Advisory Council on the Misuse of Drugs, of a report on 'Reducing drug related deaths'. The Office for National Statistics has also prepared data on drug-related deaths in England and Wales using this definition. These statistics of drug-related deaths are used in the development of policy by the Scottish Government, to inform the discussions and recommendations of its National Forum on Drug-related Deaths, and by a number of other interested parties such as NHS Boards and local Alcohol and Drug Partnerships.
- 1.2 [Section 2](#) gives some background on the collection of information on drug-related deaths in Scotland. [Section 3](#) describes the figures for Scotland, [Section 4](#) covers the statistics for NHS Board areas and [Section 5](#) refers to the figures for Council areas and the potential problems that may affect the figures for these and smaller areas. [Annex A](#) sets out the definition of drug-related deaths used in this publication; [Annex B](#) refers to some other definitions of drug-related deaths, and gives figures for them and for deaths from some other causes that may be associated with present or past drug misuse; [Annex C](#) provides some References; and [Annex D](#) contains the questionnaire used to collect further information about drug-related deaths with effect from 2008. Then follow the tables and charts, which can be broadly grouped thus.
- Tables 1 to 7, Figure 1 - statistics for Scotland.
  - Table 8 - age-specific death rates for Scotland and NHS Board areas.
  - Tables HB1 to HB3 - statistics for NHS Board areas.
  - Tables C1 to C3 - statistics for Council areas.
  - Tables X, Y and Z, Figure 2 - statistics which are not on the standard basis.

In the tables, ".." indicates "not available" or "not applicable". There may be slight discrepancies between some of the figures in different tables for some of the years from 2000 to 2006, due to the use of a new database (paragraph A4 of [Annex A](#)).

- 1.3 The following improvements have been made for this edition.
- Figures for Volatile Substance Abuse deaths have been included in [Table Z](#), and some information about them has been provided in paragraph B13 of [Annex B](#).
  - [Annex B](#) has also been expanded to give an example of the kinds of differences that can arise between these and other bodies' figures for parts of Scotland and suggest why there are such differences ([paragraphs B7](#) and [B8](#)), and to mention the first report from the NHS drug-related deaths database ([paragraph B9](#)).
- 1.4 Users of the statistics are reminded that, with effect from the previous edition of this publication, the standard basis of the figures for individual drugs for 2008 and subsequent years is 'drugs which were implicated in, or which potentially contributed to, the cause of death'. Section 2 of

the previous edition included an explanation of why there was a change from the basis which was used before then ('all drugs which were [reported as having been] found present in the body'), which did not actually cover all drugs in all cases – ([paragraph 2.3](#)).

[Table 6](#) allows users of the statistics to compare the figures for 2010 on the two bases, and also shows how the numbers on the two bases for 2010 break down by sex and by age-group. In addition, alternative versions of Tables HB3 and C3 are available on this web site (via links from the pages which give access to the editions for 2008, 2009 and 2010), providing figures for NHS Boards and Councils:

- for 2008 on the standard basis ('drugs which were implicated in, or which potentially contributed to, the cause of death'); and
- for 2009 and 2010 on the basis which was used in the editions of the publication for 2008 and earlier years ('all drugs which were [reported as having been] found present in the body').

- 1.5 More detailed statistical information about the nature and circumstances of people whose deaths were drug-related is available from the first report from the NHS's National Drug Related Deaths Database - paragraph B9 of [Appendix B](#).

## 2 Data sources

- 2.1 The National Records of Scotland (NRS) - formerly General Register Office for Scotland (GROS) holds details of all deaths which are registered in Scotland. By convention, deaths are counted on the basis of the calendar year in which they are registered rather than the year of occurrence (as the latter might not be known). NRS closes its statistical database for a calendar year about five or six months after the end of the calendar year. The statistics for 2010 are based upon the information which NRS had obtained by the end of May 2011. NRS classifies the underlying cause of each death using International Statistical Classification of Diseases and Related Health Problems (ICD) codes, based on what appears in the medical certificate of the cause of death together with any additional information which is provided subsequently by (e.g.) certifying doctors, pathologists and Procurators Fiscal.
- 2.2 Drug-related deaths are identified using details from the death registrations supplemented by information from a specially-designed questionnaire, which is completed by forensic pathologists and lists the drugs and solvents that were found. NRS requests this information for all deaths involving drugs or persons known, or suspected, to be drug-dependent. Additionally, NRS follows up all cases of deaths of people where the information on the death certificate is vague or suggests that there might be a background of drug abuse. This enhancement to the data collection system was described in a paper published by NRS in June 1995 ([Annex C](#): References). A copy of the questionnaire used with effect from 2008 is in [Annex D](#). In the case of deaths which involved drugs which are available on prescription, it should be noted that NRS does not know whether those drugs had been prescribed to the deceased: such information is not collected by the death registration process nor by the pathologists' questionnaires. Therefore, NRS does not know how many of the deaths which involved (say) methadone were of people who had been prescribed the drug (some information about this is available from the NHS report referred to above paragraph B9 of [Annex B](#)).

2.3 The questionnaire was revised for 2008, in order to collect more complete information about the substances present in the body. This caused a break in the series of figures for 'drugs reported'.

The discontinuity arose because:

- pre-2008, the form asked about the 'principal drug or solvent found in a fatal dose' and about 'any other drugs or solvents involved in this death' - so some pathologists reported only the substances which, they believed, contributed directly to each death;
- now the form asks about the drugs or solvents 'implicated in, or which potentially contributed to, the cause of death' and about 'any other[s] ... which were present, but which were not considered to have had any direct contribution to this death'- so some pathologists now report substances which they would not have mentioned previously.

2.4 NRS's data from the questionnaires for 2008 onwards distinguish between (a) drugs which were implicated in, or which potentially contributed to, the cause of death and (b) any other drugs which were present, but which were not considered to have had any direct contribution to the death. As a result, NRS can produce figures for 2008 onwards:

- (i) on the 'drugs which were implicated in, or which potentially contributed to, the cause of death' basis - i.e. counting only drugs which were reported under (a); and
- (ii) on the 'all drugs which were found to be present in the body' basis - i.e. covering drugs which were reported under either (a) or (b).

Following consultation with the National Forum on Drug-related Deaths in 2009 and 2010, 'drugs which were implicated in, or which potentially contributed to, the cause of death' became the standard basis for the figures for 2008 onwards that NRS produces for individual drugs.

2.5 It should be noted that:

- the introduction of the new questionnaire caused a break in the series of figures for individual drugs between 2007 and 2008. This is because, in 2007 and earlier years, some pathologists reported, in the old questionnaire, all the drugs that they found (i.e. not just the drugs that they believed were implicated in, or contributed to, the cause of death) - so they provided information on the 'all drugs which were found to be present in the body' basis (i.e. not on the new standard basis); and
- the change in the basis of the figures for individual drugs has not affected the overall total number of drug-related deaths - it has just reduced the number of drugs which are counted, for the purpose of the standard figures, for some deaths.

2.6 Users of the statistics are reminded that:

- in this publication, [Tables 3 and Y](#) provide figures for 2008 to 2010 on the standard basis, [Tables HB3 and C3](#) give figures for 2010 on the standard basis, and [Table 6](#) shows the figures for 2010 on the two bases;
- alternative versions of [Tables HB3 and C3](#), giving figures for 2009 and 2010 on the 'all drugs which were found to be present in the body' basis, are available on the web site (which makes it clear that they are not on the standard basis).

2.7 More information about the change (including why NRS cannot produce figures on the standard basis for 2007 or earlier years) is available in the previous edition.

2.8 The statistics of drug-related deaths may be affected by other differences, between years and/or between areas, in the way in which the information was produced. For example:

- technical advances may enable the detection of small quantities of substances that could not have been found in the post-mortems that were performed several years ago;
- the range of substances for which tests are conducted may change - e.g. for a number of years, a laboratory did not routinely test for the presence of cannabis (because the view was that, in general, it did not contribute to causing deaths), but now does so more often, because Procurators Fiscal are now more likely to want to know whether the deceased had been using it. More generally, advice is that there is a demand to obtain more complete and thorough toxicology on all cases tested for drugs, which includes fuller examinations for, and hence a greater possibility of finding, more drugs; and
- pathologists in one area report any findings of benzodiazepines by referring to that group of drugs unless they are sure that only one particular benzodiazepine (e.g. diazepam) was used, so the areas which they serve appear to have low proportions of deaths for which diazepam is mentioned (compared to areas where diazepam is more likely to be named specifically, and where there are proportionately fewer reports of benzodiazepines as a group).

### **3 Drug-related deaths: trends, causes of death, drugs reported, sex and age**

#### **3.1 Overall numbers**

3.1.1 On the basis of the definition used for these statistics, there were 485 drug-related deaths in 2010. While this represents 60 (11 per cent) fewer deaths than in 2009, it was still the third-highest number recorded since this series of figures began in 1996, and was 30 (7 per cent) more than in 2007, 193 (66 per cent) more than in 2000, and 241 (99 per cent) more than in 1996. The figures in [Table 1](#) show that the number of drug-related deaths has risen in six of the past ten years: until recently, the long-term trend clearly appeared to be upwards.

3.1.2 The statistics show some year to year fluctuations. For this reason, moving annual averages are likely to provide a better guide to the long-term trend than the change between one year and the next. [Figure 1](#) illustrates this:

- the black blobs show the figures for each year;
- the continuous grey lines show two moving annual averages - a 3-year average (thin grey line) and a 5-year average (thick grey line). The latter should provide a better indication of the overall long-term trend; and
- the broken grey lines show the likely range of random statistical variation around the 5-year moving average. Statistical theory suggests that, if the number of deaths can be represented as the result of a Poisson process,

for which the underlying rate at which the events (deaths) occur is given by the 5-year moving average, then random year to year variation would result in only about one year in 20 having a figure outwith this range (which is a '95% confidence interval', calculated thus: the underlying rate of occurrence plus or minus 1.96 times its standard deviation; for a Poisson process, the standard deviation is the square root of the underlying rate of occurrence).

3.1.3 Looking at the chart, it is clear that, for many years, the individual years' figures tended to fluctuate around a long-term upward trend, and were generally within the likely range for random statistical year to year variation about the trend. It also appears that:

- the figure for 2008 was unusually high (being above the upper end of the likely range of random statistical variation around the 5-year moving average);
- the figure for 2009 was broadly in line with the long-term trend (it is close to what one would expect the 5-year moving average to be, if the line showing its values for previous years were extrapolated to 2009); and
- the figure for 2010 may have been unusually low, relative to the long-term trend (it would be below the lower end of the likely range of random statistical variation, if that were extrapolated to 2010).

Despite the falls in 2009 and 2010, the number of deaths in 2010 was still above the level of 2007 and earlier years, so it is unclear whether the long-term trend has definitely changed. For example, if (in August 2012) it were found that there had been a significant rise in the number of deaths in 2011, one would assume that the long-term trend from previous years still applied and that the figure for 2010 had been unusually low relative to that long-term trend. However, it would be reasonable to conclude that the long-term trend had definitely changed if there were a further significant reduction in the number of deaths in 2011.

## 3.2 Underlying causes of death

3.2.1 [Table 2](#) shows the number of drug-related deaths categorised by the underlying cause, using groupings of the ICD codes. The majority (312 or 64 per cent in 2010) were coded to 'drug abuse' (which is described within the ICD classification as 'Mental and behavioural disorders due to psychoactive substance use').

3.2.2 As some of the figures can fluctuate markedly from year-to-year, a better indication of the main changes over the years shown in the table should be obtained from a comparison of the averages for the

5-year periods at the start and end. These show that there have been increases in the numbers of deaths for which the underlying cause is 'drug abuse' (from an average of 189 per year in 1996-2000 to an average of 328 in 2006-2010), 'accidental poisoning' (from an average of 13 to an average of 55), and 'undetermined intent' (from an average of 25 to an average of 80). There was little change in the number of deaths caused by intentional self-poisoning (averages of 34 per year in 1996-2000, and 33 in 2006-2010).

### 3.3 Selected drugs reported

- 3.3.1 The NRS database records a wide range of drug combinations (e.g., in 2006, diazepam was mentioned in almost a fifth of the deaths for which heroin or morphine were reported; and heroin, morphine or methadone were mentioned in over half of the deaths for which cocaine was reported). A complete list of all the substances which were reported to NRS for every death from poisoning (including deaths which are not counted as 'drug-related' for the purpose of these statistics) can be found in Table 6.12 of the [Vital Events Reference Tables](#), which are available on this website. . 'Unspecified drug(s)' is recorded in only a small proportion of cases (on average, under 3 per cent per year). [Table 3](#), [Table 6](#) and [Tab7](#) give information on the frequency of reporting of selected drugs, whether alone or in combination with other substances. The drugs listed in these tables are reported in the majority of drug-related deaths (for example, not counting alcohol, at least one of them was reported in 91 per cent of the drug-related deaths in 2000, and in 88 per cent of cases in 2010). The tables show a combined figure for 'heroin/morphine' because it is believed that, in the overwhelming majority of cases where morphine has been identified in post-mortem toxicological tests, its presence is a result of heroin use.
- 3.3.2 Since these tables record individual mentions of particular drugs, there will be multiple-counting of some deaths (e.g. if both heroin and diazepam were implicated in, or potentially contributed to, the cause of a death in 2010, that death will be counted in three of the columns of [Table 3](#): under 'heroin/morphine', under 'benzodiazepines' and under 'diazepam'). Therefore, these tables do not give the numbers of deaths that are attributable to each of the drugs mentioned. When more than one drug was reported for a particular death, it may not be possible to deduce, from the information held in the NRS database, which (if any) of them was thought to be the (main) cause of the death, except to the extent that, for 2008 onwards, the database distinguishes between (a) drugs which were implicated in, or which potentially contributed to, the cause of death and (b) any other drugs which were present, but which were not considered to have had any direct contribution to the death. NRS's database has no information about the amounts of each drug that were found, or the possible consequences of taking particular combinations of drugs.
- 3.3.3 For 2008 onwards, the standard basis for figures for individual drugs is 'drugs which were implicated in, or which potentially contributed to, the cause of death' (further information in [Section 2](#)). [Table 3](#) shows that heroin/morphine was implicated in, or potentially contributed to, the cause of 254 (52 per cent) of the deaths in 2010; methadone was implicated in, or potentially contributed to, 174 (36 per cent) of the deaths; and benzodiazepines were implicated in, or potentially contributed to, 122 (25 per cent) of the deaths. Cocaine, ecstasy and amphetamines were implicated in, or potentially contributed to, 33, 0 and 3 deaths respectively. Alcohol was implicated in, or potentially contributed to, the cause of 127 of the 485 drug-related deaths in 2010.
- 3.3.4 [Table 3](#) also shows that there were clearly fewer cases in 2010 (compared with 2008 and 2009) where heroin/morphine, benzodiazepines or alcohol were implicated in, or potentially contributed to, the death. For example, heroin/morphine was implicated in,

or potentially contributed to, 324 deaths in 2008, 322 deaths in 2009 and 254 deaths in 2010; for benzodiazepines, the corresponding figures were 115, 116 and 93. However, between 2008, 2009 and 2010, there were only small changes in the numbers of cases where methadone or cocaine were implicated in, or potentially contributed to, the cause of death: for methadone, the figures were 169 in 2008, 173 in 2009 and 174 in 2010; for cocaine, the corresponding figures were 36, 32 and 33.

3.3.5 It is not possible to make a direct comparison with the figures for earlier years because there is a break in the series between 2007 and 2008, due to the revision, with effect from 2008, of the questionnaire which collects information about the drugs which were found in the body (paragraphs 2.3 to 2.7). The statistics may also be affected by other differences, between years or between areas, in the reporting of drugs found in the body (paragraph 2.8). Therefore, apparent changes in the numbers of deaths for which particular drugs were reported must be interpreted with caution, and with the knowledge that there is a clear break in the figures between 2007 and 2008. The change in the method of data collection may have contributed to the apparent large percentage increases, between 2007 and 2008, in the figures for methadone, benzodiazepines generally and diazepam specifically.

3.3.6 Because some of the figures can fluctuate markedly from year to year, the main changes over time are best identified by comparing the averages for 1996-2000 and 2003-2007 (the latter being the final 5-year period before the break in the series). These show that there were marked increases in the numbers of deaths for which there were reports of:

- heroin and/or morphine - from an average of 128 per year in 1996-2000 to an average of 229 in 2003-2007;
- cocaine - from an average of 6 to an average of 38;
- alcohol - from an average of 91 to an average of 129; that there was not much change in the numbers of deaths for which there were reports of:
  - methadone (averages of 74 and 90);
  - diazepam (averages of 116 and 103); and
  - ecstasy (averages of 7 and 13);and a marked fall in the number of deaths for which temazepam was reported (from an average of 47 per year in 1996-2000 to an average of 12 in 2003-2007).

3.3.7 However, while comparing 5-year averages should reduce the effect of year-to-year fluctuations, it will not necessarily give the full picture. In this case, it does not reveal some marked changes during the period:

- the number of deaths for which diazepam was reported rose from under 100 in 1996 and 1997 to over 200 in 2002 and then fell back to under 100 in 2005, 2006 and 2007; and
- the number of deaths for which methadone was reported appeared to fall in the late 1990s, but then rose to 114 in 2007 - above the level recorded in 1996 (100).

3.3.8 As mentioned in Section 2, NRS can also produce, for 2008 onwards, figures on the basis of 'all drugs which were found to be present in the body', including any other drugs which were present, but which were not considered to have had any direct contribution to the death. The lower half of Table 6 shows figures for 2010 on this basis. The main differences between the two halves of the table are in the figures for benzodiazepines (and diazepam in particular): benzodiazepines were found to be

present in the body in the case of 324 of the drug-related deaths in 2010, but had been implicated in, or potentially contributed to, only 122 of those deaths (for diazepam, the equivalent figures are 288 and 93). There are also large percentage differences between the figures in the two halves of the table for cocaine (found present in 50 cases; implicated in, or potentially contributed to, 33 deaths), amphetamines (for which the numbers are 9 and 3, respectively) and alcohol (219 and 127). The figures for heroin/morphine and methadone do not differ much between the two halves of the table: these drugs were believed to be implicated in, or to have contributed to, the death in almost every case in which they were found.

3.3.9 Most drug-related deaths are of people who took more than one drug: in such cases, it may not be possible to say which particular drug caused the death. Table 7 shows the numbers of drug-related deaths for which only one drug was reported, which are the minimum numbers of deaths which may be wholly attributable to the specified drugs. The top half of the table shows deaths for which only one drug (and, perhaps, alcohol) was found to be present in the body: all these deaths must be wholly attributable to the specified drug (or, perhaps, to that drug in combination with alcohol). These numbers are all small, when compared to the total number of drug-related deaths: there were 30 deaths for which the only drug reported was heroin/morphine; 20 deaths for which only methadone was mentioned; and 7 deaths for which only a benzodiazepine was reported. In total, there were 37 deaths for which alcohol was mentioned along with only one drug.

3.3.10 The lower half of [Table 7](#) shows deaths for which only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to, the death.

The numbers here are larger, because this part of the table will include deaths for which other drugs were mentioned as being present but not considered to have had any direct contribution to the death. So, for example, the figures for methadone are the numbers of deaths for which only methadone (and, perhaps, alcohol) was implicated in, or potentially contributed to, the death - any other drugs (such as diazepam) which were found to be present in the body were not considered to have had any direct contribution to the death. There were 123 deaths for which heroin/morphine was the only drug which was believed to have been implicated in, or to have contributed to, the death; 69 deaths for which methadone was the only such drug; and 73 deaths for which alcohol was implicated in, or potentially contributed to, the cause of death, along with one drug. The numbers for each of the other drugs shown are all in single figures, so there were very few deaths which were believed to be due solely to one of those drugs alone.

3.3.11 In the lower half of [Table 7](#), the sum of the figures for heroin/morphine, methadone, benzodiazepines, cocaine, ecstasy and amphetamines is 204, or 42 per cent of the total of 485 drug-related deaths in 2010. This means that one of these drugs was the only drug which was implicated in, or potentially contributed to, the cause of two-fifths of all drug-related deaths in 2010. Information from NRS's database (which does not appear in any of the tables) shows that there were also 40 deaths for which a drug which is not shown in the table was the only drug which was implicated in, or potentially contributed to, the cause of death (including 16 cases where the only drug was dihydrocodeine; 3 cases where it was gamma hydroxybutyrate; 3 cases where it was mephedrone; and 5 cases where it was 'unspecified drug' - in some of these cases, alcohol was also implicated). Therefore, there was a total of 244 cases (50 per cent of all drug-related deaths) where only one drug was believed to have been implicated in, or potentially contributed to, the cause of death.

## 3.4 Sex and age

- 3.4.1 **Table 4** shows that males accounted for the vast majority (363, or 75 per cent) of the drug-related deaths in 2010. This was the case throughout the past decade, although the precise balance between the sexes has varied from year to year. For example, between 2008 and 2010, the number of male drug-related deaths dropped (from 461 to 363) whereas the number of female deaths was more stable, so the male percentage fell from 80 per cent to 75 per cent. Comparing the averages for 1996-2000 and 2006-2010, to reduce the effects of year-to-year fluctuations on the figures, the percentage increases in the number of drug-related deaths were about the same for males (90 per cent) and females (94 per cent).
- 3.4.2 In recent years, of the age-groups shown, the largest number of drug-related deaths has tended to be among 25-34 year olds: using the averages for 2006-2010, 171 out of 496 deaths (34 per cent) were of 25-34 year olds. There were almost as large numbers in the 35-44 age-group (on average, 159 per year from 2006 to 2010, or 32 per cent). In 2010, there were 161 drug-related deaths of people aged 25-34 (representing 33 per cent of all drug-related deaths) and 158 drug-related deaths of 35-44 year olds (also 33 per cent). In addition, 65 people aged under 25 died (13 per cent), as did 76 people aged 45-54 (16 per cent) and 25 who were aged 55 and over (5 per cent). The table shows that the number of deaths in a particular age-group can fluctuate markedly over the years (for example, the number of under 25s who died was 100 in 2002, 48 in 2005, 94 in 2007 and 65 in 2010). However, some clear trends can be seen. Comparing the averages for 1996-2000 and 2006-2010 (to reduce the effects of year-to-year fluctuations on the figures), there have been large percentage increases in the number of deaths of 35-44 year olds (from an average of 46 per year in 1996-2000 to an average of 159 in 2006-2010) and people aged 45-54 (from an average of 12 to an average of 65); the number of deaths of 25-34 year olds rose less rapidly (from an average of 108 to an average of 171), as did deaths of people aged 55 and over (from an average of 10 to an average of 23); and there was a fall in the number of people aged under 25 who died (from an average of 83 to an average of 78).
- 3.4.3 Changes in the ages of drug-related deaths can also be seen from the values of the lower quartile (a quarter of drug-related deaths were of people of this age or under), median (half the deaths were of people of this age or under) and upper quartile (a quarter of the deaths were of people of this age or older), which appear in the table.
- The lower quartile age at death rose from 22 years in 1996 to 28 years in 2010.
  - The median age at death increased from 28 years in 1996 to 35 years in 2010.
  - The upper quartile age at death rose from 34 years in 1996 to 43 years in 2010.

The median is used (rather than the average) because it should be affected less by any unusually high (or low) values.

- 3.4.4 **Table 5** shows that, in 2010, 250 (69 per cent) of the male deaths were of known or suspected drug abusers compared to 62 (51 per cent) of the female deaths. Of the 25 deaths aged 55 and over, only 8 (32 per cent) were of people who were known, or suspected, to be drug-dependent. The table also provides a more detailed breakdown of the numbers by age-group for each sex.
- 3.4.5 **Table 6** provides information about the ages and sexes of people who died having taken various drugs (perhaps more than one of the substances listed in the table, and maybe other drugs as well). The top half of the table provides figures on the standard

basis: 'drugs which were implicated in, or potentially contributed to, the cause of death'. As mentioned earlier, men accounted for 75 per cent of all drug-related deaths in 2010. However, where the drugs listed below were implicated in, or potentially contributed to, the cause of death, men accounted for the following percentages of the deaths:

- heroin/morphine - 81 per cent (206 out of 254)
- cocaine - 79 per cent (26 out of 33)
- alcohol - 77 per cent (98 out of 127)
- methadone - 70 per cent (122 out of 174).

There were no great differences between the distributions by age of people for whom heroin/morphine, methadone, benzodiazepines or alcohol were implicated in, or potentially contributed to, the cause of their deaths - but there was a clear difference for cocaine (for which people aged 25-34 accounted for almost two-thirds of the deaths, compared with only a third of all drug-related deaths).

3.4.6 The lower part of [Table 6](#) provides figures for all drugs which were found present in the body, including those which were not considered to have had any direct contribution to the death. Women accounted for 25 per cent of all drug-related deaths in 2010, but for a higher percentage of the deaths for which methadone was found (29 per cent - 53 out of 182) and for lower proportions of deaths for which heroin/morphine was found (20 per cent - 54 out of 269) and alcohol was found (19 per cent - 42 out of 219). Again, there was a marked difference between the distributions by age of the people who died having taken cocaine and those who died after taking other drugs.

3.4.7 The top half of [Table 7](#) gives the numbers of deaths for which only one drug (and, perhaps, alcohol) was found to be present in the body: all these deaths must be wholly attributable to the specified drug (or, perhaps, to that drug in combination with alcohol). The numbers are all relatively small, so there is little that can be said about the ages and sexes of the people involved. The bottom half of the table shows deaths for which only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to, the death. [Paragraph 3.3.10](#) explained why these numbers are larger. However, only for heroin/morphine (123 deaths) and, possibly, methadone (69 deaths) are the figures large enough for analysis of the ages and sexes of the people involved. The main points to note are that females accounted for only 19 per cent (23 out of 123) of the deaths for which heroin/morphine (and, perhaps, alcohol) was the only drug which was implicated in, or potentially contributed to, the cause of death, and for 32 per cent (22 out of 69) of the deaths for which methadone (and, perhaps, alcohol) was the only drug which was implicated in, or potentially contributed to, the cause of death, compared with 25 per cent of all drug-related deaths in 2010. The distributions by age were similar to that of all drug-related deaths.

3.4.8 [Table 8](#) provides, for a number of age-groups, drug-related death rates per 1,000 population. The top part of the table shows how these rates have changed, for Scotland as a whole, over the years from 2000 to 2010. Throughout the period, the drug-related death rate per 1,000 population has been highest for people aged 25-34 (it was 0.24 in 2010, and averaged 0.27 over the five years from 2006 to 2010). The rate for 35-44 year olds was a little lower (0.22 in 2010, with a latest 5-year average of 0.21). For both the 15-24 and 45-54 age-groups, the rate has been around 0.10 in recent years; for 55-64 year olds it has been about 0.03. Since 2000, the rates for the

25-34, 35-44 and 45-54 age-groups have tended to increase, whereas there has been relatively little change in the rates for 15-24 and 55-64 year olds.

## 4 NHS Board areas: trends, causes, drugs reported, and death rates by age-group

- 4.1 Deaths are normally classified by geographical area on the basis of the usual place of residence of the deceased (or, if that is not known, or is outwith Scotland, on the basis of the location of the place of death). [Table HB1](#) shows the numbers of drug-related deaths for each NHS Board area. Of the 485 deaths in 2010, 167 (34 per cent) were counted against the Greater Glasgow & Clyde NHS Board area. Lothian, with 73 (15 per cent), had the next highest total followed by Lanarkshire (53 or 11 per cent) and Grampian (44 or 9 per cent).
- 4.2 Because of the generally small numbers involved, particularly for some NHS Board areas, great care should be taken when assessing any apparent trends shown in the table. Year-to-year variation in the figures could result in apparently large percentage changes. This is more likely for the areas with smaller populations, but can also be seen sometimes in the figures for the more populous areas (e.g. Greater Glasgow & Clyde: 151 in 2004; 111 in 2005; 162 in 2006). Therefore, using 5-year moving annual averages should 'smooth out' the effects of any fluctuations, and so provide a better indication of the longer-term trends. The areas with the largest increases between their annual averages for 1996-2000 and 2006-2010 were Greater Glasgow & Clyde (up by 64, from 113 to 177), Lanarkshire (up by 27, from 19 to 46), Lothian (up by 26, from 44 to 70), Ayrshire & Arran (up by 24, from 10 to 34) and Fife (up by 21, from 9 to 30). Forth Valley, Grampian and Tayside all had increases of 17 or 18.
- 4.3 The table also shows the population of each NHS Board area, and what its average number of drug-related deaths per year (for 2006-2010) represented per 1,000 population (using the population in the middle of the 5-year period as a proxy for the average population over the whole period). For Scotland as a whole, the average of 496 drug-related deaths per year represented a rate of 0.10 per 1,000 population. Only one area had a higher rate than this: Greater Glasgow & Clyde (0.15). The next highest rate was for Tayside (0.10); two areas had rates of 0.09, and three had rates of 0.08.
- 4.4 [Table HB2](#) gives a breakdown by cause of death for each NHS Board area for 2010. [Table HB3](#) shows some geographical differences in the reporting of certain drugs: figures which should be used with particular care, in the light of the points mentioned in [sections 2](#) and [3.3](#), the effects of which could be proportionately greater on the figures of some of the areas with lower populations. Note also that the figures given in [Table HB3](#) are on the standard basis (drugs implicated in, or which potentially contributed to, the cause of death), and so are not comparable to figures (in the editions for 2008 and earlier years) on the basis of 'all drugs which were [reported as having been] found to be present in the body'. As mentioned earlier, this web site has versions of [Table HB3](#) which give (i) figures for 2008 on the standard basis and (ii) figures for 2009 and 2010 on the 'all drugs which were found to be present in the body' basis.
- 4.5 [Table HB3](#) shows that, for most NHS Board areas, heroin/morphine was believed to have been implicated in, or to have potentially contributed to, a majority of the total number of deaths in 2010 (which are given in [Table HB2](#)) - for example, 19 out of 31 in Ayrshire & Arran, 92 out of 167 in Greater Glasgow & Clyde, and 34 out of 53 in Lanarkshire. However, there were lower proportions in Grampian (14 out of 44) and

Lothian (26 out of 73). Fife had an above-average proportion for which methadone was implicated in, or potentially contributed (17 out of 35) as did Grampian (19 out of 44) and Lothian (33 out of 73); there were below-average proportions in Forth Valley (3 out of 18), Lanarkshire (15 out of 53) and Tayside (9 out of 34). The table also shows that benzodiazepines were implicated in, or potentially contributed to, only small proportions of the deaths in some areas in 2010, compared with three-quarters of the deaths in Grampian (33 out of 44) and almost a third of those in Lothian (23 out of 73) - although this comparison might be affected by differences in reporting practices ([section 2](#)).

- 4.6 The lower part of [Table 8](#) provides, for each NHS Board area, for a number of age-groups, the drug-related death rate per 1,000 population. As with the overall rates in [Table HB1](#), the figures were calculated using the average number of drug-related deaths per year (for 2006-2010), by taking the population in the middle of the 5-year period as a proxy for the average population over the whole period. Even though the figures are five-year averages, they must still be used with caution for the less populated areas (e.g. just three 15-24 year old drug-related deaths in the five years from 2006 to 2010, inclusive, caused Shetland to have a death rate for that age-group which was double its rate for Scotland as a whole). Of the more populous areas, Greater Glasgow & Clyde had the highest drug-related death rates: 0.35 for 25-34 year olds and 0.36 for the 35-44 age-group; both well above the overall average rates for Scotland as a whole for the same 5-year period (0.27 and 0.21, respectively). Ayrshire & Arran and Tayside had rates for 25-34 year olds which were above-average (0.30 and 0.31, respectively), but their rates for the 35-44 age-group were much lower (0.22 in both cases) and only just above the average level for Scotland as a whole for the five years. Greater Glasgow & Clyde's death rate for 45-54 year olds was 0.14, well above the overall level of 0.09, which also happened to be the highest figure for any of the other areas. However, the pattern was less clear for the 15-24 age-group, for which several areas had death rates which were above the overall average level for Scotland for the five years.

## 5 Council areas (trends, causes and drugs reported) and areas with smaller populations

- 5.1 Tables [C1](#), [C2](#) and [C3](#) provide figures for individual Council areas. Again, because of the relatively small numbers involved, particularly for some areas, great care should be taken when using these figures. Even the numbers for the most populous areas may be subject to large percentage year-to-year fluctuations (e.g. Glasgow's figures from 2004 to 2008 were as follows: 106, 75, 113, 90, 121; Edinburgh's from 2003 to 2009 were: 26, 17, 41, 30, 43, 66, 45). Again, the points mentioned in [sections 2](#) and [3.3](#) may have a proportionately greater effect on the numbers for some of the areas with smaller populations. Again, the figures given in [Table C3](#) are on the standard basis (drugs implicated in, or which potentially contributed to, the cause of death), and so are not comparable to figures (in the editions for 2008 and earlier years) on the basis of 'all drugs which were [reported as having been] found to be present in the body'. As mentioned earlier, the web site has versions of [Table C3](#) which give (i) figures for 2008 on the standard basis and (ii) figures for 2009 and 2010 on the 'all drugs which were found to be present in the body' basis.
- 5.2 As the numbers of drug-related death for areas with smaller populations will be lower, and may be subject to proportionately larger year-to-year fluctuations, it is unlikely that much useful information could be obtained from looking at the figures for small areas for a single year, or for a few years taken together. There could also be concerns about the sensitivity of data relating to small areas, as it might be possible, in some

circumstances, to infer something about identifiable individuals from such data. Therefore, one should only look at such figures for several years taken together. Even then, the smaller the areas are, the more (in percentage terms) their figures may be influenced by how NRS allocates deaths to areas, based upon the details that are collected by the registration process. Information about the basis of NRS's statistics about deaths, plus examples of the fluctuations in and possible unreliability of figures for small areas, is available via:

<http://www.gro-scotland.gov.uk/statistics/theme/vital-events/general-bckgr-info/index.html>

and

<http://www.gro-scotland.gov.uk/statistics/theme/vital-events/deaths/bckgr-info/index.html>

- 5.3 An example of the scale of the numbers for small areas is given by an analysis for the National Forum on Drug-related Deaths, which used data for postal districts for the eight years from 2000 to 2007 (inclusive). This was done in response to a request, at a Forum meeting in September 2008, to 'identify any geographical concentrations of drug-related deaths'. Postal districts are not normally used for statistical analysis, but in this case they provided a convenient way to describe the extent to which the numbers of drug-related deaths were concentrated in certain parts of Scotland, by using a geography that would be more meaningful to Forum members than, say, the Datazones or Intermediate Zones that are used in Neighbourhood Statistics. The then GROS database had records for 2,893 drug-related deaths (on the basis of the standard definition) in Scotland in the specified eight years. Of the postal districts, 'G21' had the largest number (67 - an average of 8.4 per year). Four other postal districts had totals of 50 or more drug-related deaths for that period: 'G33' (54); 'G20' (53); 'G32' (51); and 'AB24' (50). Figures were not provided for every individual postal district, because of the numbers involved. There were 25 postal districts which each had 29 or more drug-related deaths over the eight years: each of them accounted for more than 1% of the total for Scotland for that period. Taken together, these 25 postal districts accounted for about a third of all drug-related deaths in Scotland between 2000 and 2007. The remaining two-thirds of drug-related deaths in that period were deaths of residents of postal districts which had, at most, 28 such deaths over the eight years - i.e. areas which had, on average, at most 3½ drug-related deaths per year (many averaged fewer than one drug-related death per year). It follows that, while some postal districts have markedly more drug-related deaths than others, the problem is clearly a very widespread one, with most deaths being of people who had been living in areas which had relatively few drug-related deaths.

## Annex A The definition of drug-related deaths used for these statistics (the NRS implementation of the 'baseline' definition for the UK Drugs Strategy)

- A1. The definition of a 'drug-related death' is not straightforward. Useful discussions on definitional problems may be found in articles in the Office for National Statistics publication 'Population Trends' and in the journal 'Drugs and Alcohol Today' (please go to References in [Annex C](#)). A report by the Advisory Council on the Misuse of Drugs (ACMD – mentioned in the References) considered current systems used in the United Kingdom to collect and analyse data on drug related deaths. In its report, the ACMD recommended that 'a short life technical working group should be brought together to reach agreement on a consistent coding framework to be used in future across England, Wales, Scotland and Northern Ireland'. National Records of Scotland (NRS) formerly General Register Office for Scotland (GROS) was represented on this group, and this publication presents information on drug-related deaths using the approach that was agreed, on the basis of the definition as it was implemented by NRS.
- A2. The 'baseline' definition for the UK Drugs Strategy 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':
    - (i) opioids (F11);
    - (ii) cannabinoids (F12);
    - (iii) sedatives or hypnotics (F13);
    - (iv) cocaine (F14);
    - (v) other stimulants, including caffeine (F15);
    - (vi) hallucinogens (F16); and
    - (vii) multiple drug use and use of other psychoactive substances (F19).
  
  - b) deaths coded to the following categories and where a drug listed under the Misuse of Drugs Act (1971) was known to be present in the body at the time of death:
    - (i) accidental poisoning (X40 – X44);
    - (ii) intentional self-poisoning by drugs, medicaments and biological substances (X60 – X64);
    - (iii) assault by drugs, medicaments and biological substances (X85); and
    - (iv) event of undetermined intent, poisoning (Y10 – Y14).

**Note:** If a drug's legal status changes, NRS aims to count it on the basis of its classification on the day the person died (as NRS does not know when the drug was taken). For example,

mephedrone was banned under the Misuse of Drugs Act with effect from 00.01 on 16 April 2010. Therefore, if mephedrone was the only drug found to be present in the body, a death coded to one of the categories listed under (b) would not be counted in NRS's implementation of the 'baseline' definition if it occurred before 16 April 2010.

- A3. A number of categories of what may be regarded as 'drug-related' deaths are excluded from the definition because the underlying cause of death was not coded to one of the ICD10 codes listed above.

These include:

- deaths coded to mental and behavioural disorders due to the use of alcohol (ICD10 code: F10), tobacco (F17) and volatile substances (F18);
- deaths from AIDS where the risk factor was believed to be the sharing of needles;
- deaths from drowning, falls, road traffic and other accidents (except the inhalation of gastric contents, or choking on food) which occurred under the influence of drugs; and
- deaths due to assault by a person who was under the influence of drugs, or as a result of being involved in drug-related criminal activities. National Records of Scotland (NRS) formerly General Register Office for Scotland (GROS) also excluded from its implementation of the definition a small proportion of the deaths which were coded to one of the ICD10 codes listed in paragraph A2, specifically:
- deaths coded to drug abuse where the direct cause of death was secondary infections or related complications. These include deaths which were due to clostridium novyi infection that was the result of the injection of contaminated heroin (Annex A of ['Drug-related Deaths in Scotland in 2000'](#) explained that 22 such cases had been identified when the 2000 deaths data file was closed in May 2001, adding that it was not clear whether additional deaths had subsequently been identified). Similarly, these figures exclude the 13 deaths which were caused by the outbreak of anthrax that was associated with contaminated heroin and started in December 2009. Also excluded from the statistics are deaths caused by bronchopneumonia, organ failure and other later complications of drug use, in cases where drug misuse was not the direct and immediate cause of death (even though it may have damaged greatly the person's health);
- deaths where a drug listed under the Misuse of Drugs Act was present as part of a compound analgesic or cold remedy. These deaths are excluded in order that deaths from overdoses of legally prescribed non-controlled drugs are not counted as 'drug-related'. Examples of such combinations include:
  - co-proxamol (paracetamol and dextropropoxyphene);
  - co-dydramol (paracetamol and dihydrocodeine); and
  - co-codamol (paracetamol and codeine sulphate).

All three of these compound analgesics, particularly co-proxamol, have commonly been used in suicidal overdoses. As it is believed that dextropropoxyphene has rarely, if ever, been available other than as a constituent of a paracetamol compound, deaths caused by dextropropoxyphene have been excluded even if there is no mention of a compound analgesic or paracetamol. However, deaths for which codeine or dihydrocodeine were reported without any mention of

paracetamol have been included, as these drugs are available on their own and are known to be abused in that form.

- A4. From time to time, there may be minor discrepancies between the figures that were published previously and those which are produced henceforth. This is due to a change in the way in which 'drug-related' deaths are identified using the data held by NRS. This process has two stages:
- first, extract all the records of deaths which satisfy the 'wide' definition ([Annex B](#)). The method used for this stage has not been changed; and
  - second, scrutinise the extracted records and identify the ones which should be counted under NRS's implementation of the 'baseline' definition. The method used for this stage was changed with effect from June 2008.
    - Previously, the data were examined by the then GROS Vital Events Statistician, who had considerable knowledge and experience of dealing with information about drug-related deaths. He used Excel's facilities to set a number of indicators, and so identified the cases which should be counted under GROS's implementation of the 'baseline' definition. This method clearly relied greatly on the Statistician's personal expertise. He retired in Spring 2008.
    - Now, most of this work is done by SAS computer programs, using a look-up table to identify particular types of drugs (John Corkery of the National Programme on Substance Abuse Deaths supplied most of the content of the look-up table).

The new method was tested by using it to prepare figures for each year for 2000 to 2006, inclusive. The results were the same as, or within just 1-2 of, the figures which had been published previously. After examining the cases which were being counted differently by the old and the new methods, it was concluded that any flaws in the new method were not significant, and that it should be used henceforth. However, to avoid confusing users of these statistics, the tables which appeared in editions of this publication which were produced before the method was changed give figures for 2006 and earlier years which were extracted from the database produced by the old method, and so are as published previously. However, any subsequent new analyses of the data for 2000 onwards are likely to use the database produced by the new method, and so may include some totals or sub-totals (for the years from 2000 to 2006, inclusive) that differ slightly from the figures which were published previously, because the new method was used to produce the database of relevant cases for those years.

## Annex B Some other definitions of drug-related 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.
- B2. First, there is a 'wide' definition which is used by the Office for National Statistics (ONS) to provide figures for deaths from drug poisoning. It covers the following cause of death categories (the relevant codes from the International Classification of Diseases, Tenth Revision [ICD10], are given in brackets):
- 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).
  - deaths coded to the following categories:
    - accidental poisoning (X40 – X44);
    - intentional self-poisoning by drugs, medicaments and biological substances (X60 – X64);
    - assault by drugs, medicaments and biological substances (X85); and
    - event of undetermined intent, poisoning (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 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 UK Drug Strategy definition, but which cover deaths which

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 UK Drug Strategy definition, and vice versa.

- B4. Because NRS has details of all the deaths which were registered in Scotland, it can produce figures using the ONS 'wide' definition and the EMCDDA 'general mortality register' definition, as well as using the definition of the 'baseline' for the UK Drug Strategy. These are given in [Table X](#). As the table and [Figure 2](#) 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.
- B5. As explained above, the 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 2000 onwards for which a range of drugs (including anti-depressants, anti-psychotics, paracetamol or a compound, and tramadol) were reported: for example, the number of deaths for which anti-depressants were reported tended to be in the range 70-90 per year between 2000 and 2007, whereas for paracetamol or a compound the number fell from around 120 to about 60. [Section 2](#) explains why there is a break in the series between 2007 and 2008.
- B6. The Scottish Crime and Drug Enforcement Agency (SCDEA) uses a different definition. In Autumn 2007, the then 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:
    - 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, 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; and
- 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 do 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 [paragraph 2.1](#), 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 <http://www.gro-scotland.gov.uk/statistics/theme/vital-events/general-bckgr-info/index.html> ), 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 the then 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
- 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.

- 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 do not include suicides in their drug-related death figures because their need for such figures is 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 do not include suicides involving drugs in their drug-related death figures. In addition, NRS and other bodies may hold different information in some cases (e.g. 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 (e.g. 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 [sections 4 and 5](#), 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. 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, and is available via:

[http://www.drugmisuse.isdscotland.org/publications/abstracts/NDRDD\\_2009.htm](http://www.drugmisuse.isdscotland.org/publications/abstracts/NDRDD_2009.htm) .

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 includes 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 has 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 ISD's exclusion of confirmed suicides) and the fact that ISD's local contacts did not provide data for some drug-related 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 the previous edition of this publication, and has been expanded in this edition.

B11. The top part of [Table Z](#) gives the numbers of deaths which are counted as ‘drug-related’ (on the basis of the ‘wide’ definition), with separate figures for:

- the basis used for the statistics in this publication (i.e. 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 paragraph A3 of [Annex A](#);
- all other deaths which are counted as ‘drug-related’ in terms of the ‘wide’ definition.

B12. The remainder 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 may be transmitted through sharing needles when injecting recreational drugs. It has been estimated that nearly 40% of intravenous drug users have the infection and around 35% of people with the virus will have contracted it this way (source: [http://www.bbc.co.uk/health/physical\\_health/conditions/hepatitisc1.shtml](http://www.bbc.co.uk/health/physical_health/conditions/hepatitisc1.shtml) , 27 July 2010). However, the infection can be transmitted in other ways, such as through a tattoo or body piercing with equipment that has not been properly sterilised, or a blood transfusion or medical treatment in a country where blood screening for hepatitis C is not routine, or where medical equipment is reused but not adequately sterilised. Therefore, only a proportion of deaths caused by Hepatitis C will be due to drug misuse.
- 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.

B13. The next part of [Table Z](#) shows the number of volatile substance abuse deaths in Scotland, as published by the International Centre for Drug Policy (ICDP) at St George's, University of London. For the purposes of ICDP's statistics:

- volatile substance abuse is the deliberate abuse of a volatile substance to achieve a change in mental state; and
- a volatile substance abuse death is one which would not have occurred if the deceased had not been abusing a volatile substance.

A few deaths per year may be counted as both 'drug-related' and 'volatile substance abuse' (an example might be a case where the cause of death was reported as 'combined toxic effects of methadone and butane'). ICDP produces its figures for Scotland using information from NRS, the Crown Office and Procurator Fiscal Service, and other sources. However, ICDP's statistics relate to the year of death (whereas NRS's are for the year of registration), and may be revised later, if ICDP obtains further information on some deaths. More details of ICDP's figures are given in its Volatile Substance Abuse Mortality Report, which can be found via:

<http://www.sgul.ac.uk/research/projects/icdp/news-and-publications> .

- B14. [Table Z](#) may be expanded further in subsequent editions of this publication, in the light of discussions between NRS and members of the National Forum.

## Annex C References

Arrundale J and Cole S K	<b>Collection of information on drug related deaths by the General Register Office for Scotland</b>	General Register Office for Scotland 1995
Christophersen O, Rooney C and Kelly S	<b>Drug related mortality: methods and trends</b>	'Population Trends' 93, Office for National Statistics, 1998
Corkery, J	<b>UK drug-related mortality – issues in definition and classification</b>	'Drugs and Alcohol Today' volume 8 issue 2, Pavillion Journals, 2008
The Advisory Council on the Misuse of Drugs	<b>Reducing drug related deaths</b>	Home Office, 2000

# Annex D The questionnaire used to obtain further information about drug-related deaths, with effect from 2008

NB: A different questionnaire was used for 2007 and earlier years. Following consultation with members of the Pathologists sub-group of the National Forum on Drug-related Deaths, the current version was introduced for use with effect from 2008.

**Confidential**  
General Register Office for Scotland

**Form ME4**  
Crown Office

## DEATHS INVOLVING OR RESULTING FROM ABUSE OF CONTROLLED SUBSTANCES

**Please return to:** Vital Events Branch, GROS, Ladywell House, Ladywell Road, Edinburgh EH12 7TF

**Name of deceased:** .....

**Date of birth (dd/mm/yyyy):**                    /                    /                    **Date of death: (dd/mm/yyyy):**                    /                    /

1. Was the deceased a known or suspected **habitual** drug/solvent abuser?                    Yes  No

2. Was the death the result of overdose / intoxication?                    Yes  No

3. Was the death due to a complication of drug abuse?                    Yes  No

(e.g. acute infection or cocaine-related cardiac arrhythmia  
- but **not** chronic infections or diseases, such as Hepatitis C or HIV )

If 'Yes', please specify .....

4(i) Based on the available evidence, what were the main drugs or solvents you believe were implicated in, or which potentially contributed to, the cause of death? (If possible, list in **descending** order of importance in relation to the cause of death):

- |         |         |
|---------|---------|
| a. .... | d. .... |
| b. .... | e. .... |
| c. .... | f. .... |

4(ii) Please specify any other drug(s)/solvent(s) which were present, but which were not considered to have had any direct contribution to this death:

- |         |         |
|---------|---------|
| a. .... | c. .... |
| b. .... | d. .... |

5. Was alcohol present at the time of death?                    Yes  No

If 'Yes', was it implicated in the cause of death                    Yes  No

6. Pathologist's view of cause of death (*full details - as would appear on a medical certificate of cause of death*):

- I    (a) .....
- (b) .....
- (c) .....
- (d) .....
- II    .....

7. Any other comments or information which may help in coding this death?

.....

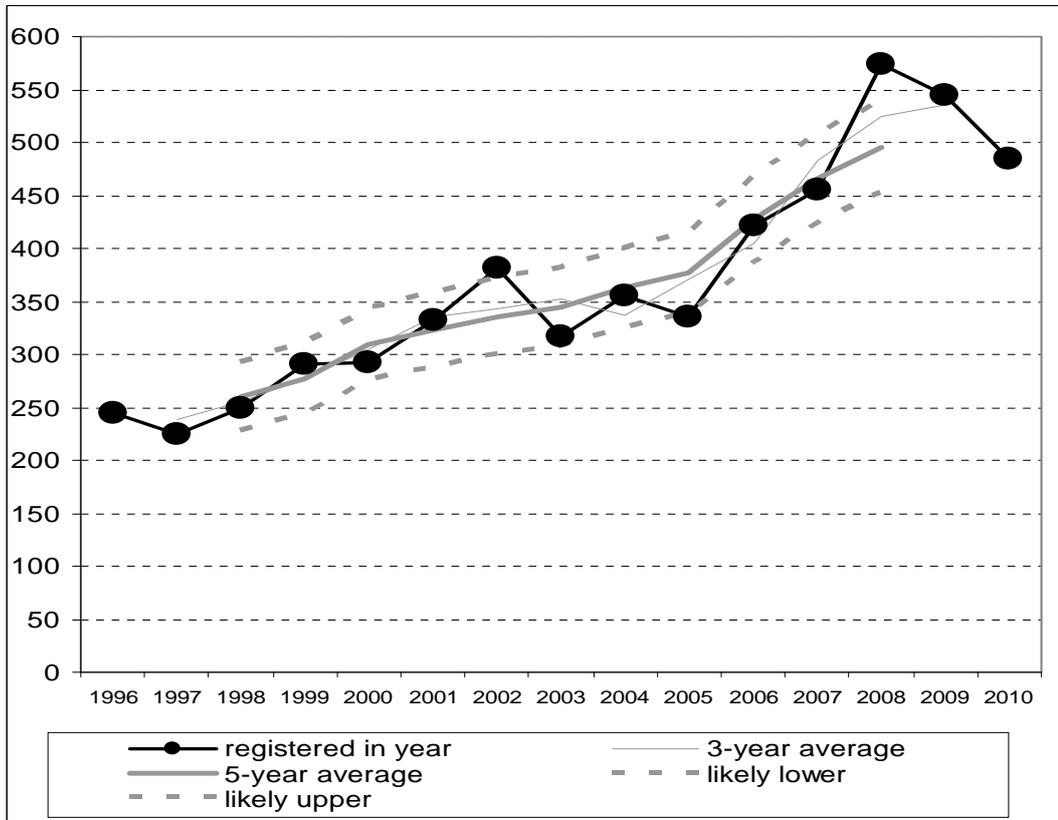
.....

**Table 1 Drug-related deaths in Scotland, 1996 – 2010**

Year	Drug-related deaths registered in year	Annual moving averages		Likely range of values around 5-year average #	
		3-year average	5-year average	likely lower	likely upper
1996	244				
1997	224	239			
1998	249	255	260	228	292
1999	291	277	278	245	310
2000	292	305	309	275	344
2001	332	335	323	288	358
2002	382	344	336	300	372
2003	317	352	345	308	381
2004	356	336	362	325	400
2005	336	371	377	339	415
2006	421	404	428	388	469
2007	455	483	466	424	509
2008	574	525	496	452	540
2009	545	535			
2010	485				

# please go to [paragraph 3.1.2](#) of commentary

**Figure 1 Drug-related deaths in Scotland, 3- and 5-year moving averages, and likely range of values around 5-year moving average**



**Table 2 Drug-related deaths by cause of death, Scotland, 1996 - 2010**

Year	All categories	Cause of death category (ICD10 codes)				
		Drug abuse (F11-F16, F19)	Accidental poisoning (X40-X44)	Intentional self-poisoning (X60-X64)	Assault by drugs, etc. (X85)	Undetermined intent (Y10-Y14)
1996-2000						
average	260	189	13	34	0	25
1996	244	175	10	41	0	18
1997	224	142	14	42	0	26
1998	249	179	16	32	0	22
1999	291	227	12	19	1	32
2000	292	220	11	34	0	27
2001	332	227	19	34	0	52
2002	382	280	17	30	0	55
2003	317	216	15	40	0	46
2004	356	232	32	32	0	60
2005	336	204	31	43	0	58
2006	421	280	51	40	0	50
2007	455	299	39	27	0	90
2008	574	370	59	34	0	111
2009	545	380	60	34	0	71
2010	485	312	67	28	0	78
2006-2010						
average	496	328	55	33	0	80

**Table 3 Drug-related deaths by selected drugs reported<sup>1</sup>, Scotland, 1996 - 2010**

Year	Heroin / morphine	Methadone	Benzodiazepines Any of which: benzo- diazepine	Diazepam	Temazepam	Cocaine	Ecstasy	Amphetamines	Alcohol
1996-2000 average	128	74	..	116	47	6	7	..	91
1996	84	100	..	84	48	3	9	..	87
1997	74	86	..	93	33	5	2	..	70
1998	121	64	..	113	58	4	3	..	86
1999	167	63	..	142	56	12	8	..	89
2000	196	55	164	146	39	4	11	3	123
2001	216	69	182	156	20	19	20	5	140
2002	248	98	245	214	16	31	20	13	156
2003	175	87	186	153	35	29	14	10	128
2004	225	80	140	113	5	38	17	10	116
2005	194	72	110	90	7	44	10	11	114
2006	260	97	94	78	10	33	13	11	131
2007	289	114	109	79	4	47	11	11	157
2008	324	169	149	115	7	36	5	11	167
2009	322	173	154	116	9	32	2	6	165
2010	254	174	122	93	3	33	0	3	127
annual averages:									
2003-2007	229	90	128	103	12	38	13	11	129
2006-2010	290	145	126	96	7	36	6	8	149

1. More than one drug may be reported per death. These are mentions of each drug, and should not be added to give total deaths.

Up to 2007, some pathologists reported only those drugs which they thought caused, or contributed to, the death;

from 2008, they report separately (a) drugs which were implicated in, or which potentially contributed to the cause of death

and (b) other drugs which were present but which were not considered to have had any direct contribution to the death

**The figures for 2008 onwards are on the first basis - i.e. basis (a) - which is now the standard basis for**

**figures for individual drugs. The figures for 2008 have been revised from those published in the "... in 2008" edition.**

There may be other differences between years and/or areas in the way in which the information was produced - see Section 2.

2. Further information in paragraph 3.3.1 of commentary.

**Table 4 Drug-related deaths by sex and age, Scotland, 1996 - 2010**

Year	Drug-related deaths	Sex		Age-group #					Age		
		Male	Female	under 25	25 - 34	35 - 44	45 - 54	55 & over	Lower quartile	Median	Upper quartile
1996-2000											
average	260	207	53	83	108	46	12	10	..	..	..
1996	244	185	59	86	103	32	13	10	22	28	34
1997	224	179	45	76	89	31	14	14	23	29	35
1998	249	194	55	88	103	37	9	12	23	27	34
1999	291	237	54	94	118	62	10	7	23	28	35
2000	292	239	53	73	126	69	16	8	25	30	36
2001	332	267	65	80	140	70	31	12	25	31	38
2002	382	321	61	100	153	92	27	10	24	30	37
2003	317	256	61	78	123	81	20	17	25	31	37
2004	356	289	67	81	138	92	35	10	25	31	38
2005	336	259	77	48	104	126	37	21	28	36	41
2006	421	334	87	69	154	127	54	16	27	34	40
2007	455	393	62	94	149	149	45	18	26	34	41
2008	574	461	113	92	211	174	71	26	27	34	41
2009	545	413	132	71	178	189	78	29	28	35	43
2010	485	363	122	65	161	158	76	25	28	35	43
2006-2010											
average	496	393	103	78	171	159	65	23	..	..	..

#. For 2001, 2003 and 2006, there are differences of one or two between the overall total for the year and the sum of the figures for the individual age-groups. This is due to the use of a new database - see Annex A, paragraph A4.

**Table 5 Drug-related deaths by sex, age and cause of death, Scotland, 2010**

	All categories	Cause of death category (ICD10 codes)				Undetermined intent (Y10-Y14)
		Drug abuse (F11-F16, F19)	Accidental poisoning (X40-X44)	Intentional self-poisoning (X60-X64)	Assault by drugs, etc. (X85)	
<b>All deaths</b>	<b>485</b>	312	67	28	0	78
Males	<b>363</b>	250	45	18	0	50
Females	<b>122</b>	62	22	10	0	28
Under 25	<b>65</b>	39	10	2	0	14
25-34	<b>161</b>	113	22	14	0	12
35-44	<b>158</b>	111	18	5	0	24
45-54	<b>76</b>	41	11	7	0	17
55 and over	<b>25</b>	8	6	0	0	11
<b>Males</b>						
Under 25	<b>49</b>	31	9	0	0	9
25-34	<b>124</b>	87	18	11	0	8
35-44	<b>126</b>	93	10	5	0	18
45-54	<b>50</b>	34	4	2	0	10
55 and over	<b>14</b>	5	4	0	0	5
<b>Females</b>						
Under 25	<b>16</b>	8	1	2	0	5
25-34	<b>37</b>	26	4	3	0	4
35-44	<b>32</b>	18	8	0	0	6
45-54	<b>26</b>	7	7	5	0	7
55 and over	<b>11</b>	3	2	0	0	6

**Table 6 Drug-related deaths by sex, age and selected drugs reported<sup>1</sup>, Scotland, 2010**

	Heroin / morphine <sup>2</sup>	Meth- adone	Benzodiazepines			Cocaine	Ecstasy	Amphet- amines	Alcohol
			Any benzo- diazepine	of which: Diaz- epam	Temaz- epam				
<b>(a) drugs which were implicated in, or which potentially contributed to, the cause of death</b>									
<b>All deaths</b>	<b>254</b>	<b>174</b>	<b>122</b>	<b>93</b>	<b>3</b>	<b>33</b>	<b>0</b>	<b>3</b>	<b>127</b>
Males	206	122	91	69	2	26	0	2	98
Females	48	52	31	24	1	7	0	1	29
Under 25	33	19	19	14	1	5	0	0	11
25-34	96	54	41	31	0	21	0	2	46
35-44	84	64	43	32	1	6	0	1	41
45-54	31	32	16	13	0	1	0	0	25
55 and over	10	5	3	3	1	0	0	0	4
<b>Males</b>									
Under 25	27	14	15	11	1	3	0	0	10
25-34	81	35	33	26	0	16	0	1	36
35-44	71	49	34	25	1	6	0	1	33
45-54	21	21	8	6	0	1	0	0	17
55 and over	6	3	1	1	0	0	0	0	2
<b>Females</b>									
Under 25	6	5	4	3	0	2	0	0	1
25-34	15	19	8	5	0	5	0	1	10
35-44	13	15	9	7	0	0	0	0	8
45-54	10	11	8	7	0	0	0	0	8
55 and over	4	2	2	2	1	0	0	0	2
<b>(b) all drugs which were found to be present in the body</b>									
<b>All deaths</b>	<b>269</b>	<b>182</b>	<b>324</b>	<b>288</b>	<b>14</b>	<b>50</b>	<b>1</b>	<b>9</b>	<b>219</b>
Males	215	129	253	226	9	39	1	7	177
Females	54	53	71	62	5	11	0	2	42
Under 25	37	19	46	40	2	8	0	1	24
25-34	100	59	114	104	3	31	1	3	79
35-44	86	66	106	93	5	8	0	2	75
45-54	36	32	51	45	3	3	0	3	36
55 and over	10	6	7	6	1	0	0	0	5
<b>Males</b>									
Under 25	29	14	36	31	2	4	0	1	21
25-34	83	39	94	87	3	25	1	2	64
35-44	72	51	85	74	4	7	0	2	63
45-54	25	21	34	31	0	3	0	2	26
55 and over	6	4	4	3	0	0	0	0	3
<b>Females</b>									
Under 25	8	5	10	9	0	4	0	0	3
25-34	17	20	20	17	0	6	0	1	15
35-44	14	15	21	19	1	1	0	0	12
45-54	11	11	17	14	3	0	0	1	10
55 and over	4	2	3	3	1	0	0	0	2

1. More than one drug may be reported per death. These are mentions of each drug, and should not be added to give total deaths.

Part (a) counts only drugs which, the pathologist believed, were implicated in, or potentially contributed to, the cause of death

Part (b) counts all the drugs which the pathologist found to be present in the body, including those which the pathologist did not consider to have had any direct contribution to the death

2. Further information in paragraph 3.3.1 of commentary.

**Table 7 Drug-related deaths involving only one drug by sex, age and selected drugs reported<sup>1</sup>, Scotland, 2010**

	Heroin / morphine <sup>2</sup>	Meth- adone	Benzodiazepines <i>Any of which:</i> benzo- Diaz- Temaz- diazepine epam epam			Cocaine	Ecstasy	Amphet- amines	Alcohol (with only one drug - see notes)
<b>(a) only one drug (and, perhaps, alcohol) was found to be present in the body</b>									
All such deaths	30	20	7	5	1	1	0	0	37
Males	24	10	7	5	1	1	0	0	30
Females	6	10	0	0	0	0	0	0	7
Under 25	4	2	1	1	0	0	0	0	4
25-34	8	10	1	1	0	0	0	0	10
35-44	9	3	2	1	1	1	0	0	8
45-54	5	4	3	2	0	0	0	0	11
55 and over	4	1	0	0	0	0	0	0	4
<b>Males</b>									
Under 25	3	1	1	1	0	0	0	0	3
25-34	7	4	1	1	0	0	0	0	7
35-44	7	1	2	1	1	1	0	0	7
45-54	3	3	3	2	0	0	0	0	10
55 and over	4	1	0	0	0	0	0	0	3
<b>Females</b>									
Under 25	1	1	0	0	0	0	0	0	1
25-34	1	6	0	0	0	0	0	0	3
35-44	2	2	0	0	0	0	0	0	1
45-54	2	1	0	0	0	0	0	0	1
55 and over	0	0	0	0	0	0	0	0	1
<b>(b) only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to the cause</b>									
All such deaths	123	69	8	6	1	4	0	0	73
Males	100	47	8	6	1	4	0	0	55
Females	23	22	0	0	0	0	0	0	18
Under 25	18	7	1	1	0	0	0	0	5
25-34	48	24	2	2	0	2	0	0	23
35-44	37	21	2	1	1	2	0	0	25
45-54	16	15	3	2	0	0	0	0	17
55 and over	4	2	0	0	0	0	0	0	3
<b>Males</b>									
Under 25	14	4	1	1	0	0	0	0	4
25-34	41	15	2	2	0	2	0	0	17
35-44	30	15	2	1	1	2	0	0	19
45-54	11	11	3	2	0	0	0	0	13
55 and over	4	2	0	0	0	0	0	0	2
<b>Females</b>									
Under 25	4	3	0	0	0	0	0	0	1
25-34	7	9	0	0	0	0	0	0	6
35-44	7	6	0	0	0	0	0	0	6
45-54	5	4	0	0	0	0	0	0	4
55 and over	0	0	0	0	0	0	0	0	1

1. Part (a) of this table gives the number of deaths for which each of the specified drugs was the only drug which was found to be present in the body. For example, a death for which:

(a) both cocaine and alcohol were implicated would be counted twice: once under "cocaine" and once under "alcohol"

(b) both cocaine and alcohol were implicated, and methadone was found to be present in the body but was not considered to have had any direct contribution to the death, would NOT be counted at all in the upper part of the table

The final column of part (a) gives the number of drug-related deaths for which alcohol was found to be present in the body together with only one drug

Part (b) of this table gives the number of deaths for which each of the specified drugs was the only drug which was considered to have been implicated in, or potentially contributed, to the cause of death. The pathologist may have reported that other drugs were present in the body - but, if so, the pathologist did not consider that they had any direct contribution to the death.

The final column of part (b) gives the number of drug-related deaths for which alcohol was thought, by the pathologist, to be implicated in the cause of death together with only one drug

For example, a death for which:

(a) both cocaine and alcohol were implicated would be counted twice: once under "cocaine" and once under "alcohol"

(b) both cocaine and alcohol were implicated, and methadone was found to be present in the body but was not considered to have had any direct contribution to the death, would also be counted under "cocaine" and "alcohol" (but not under "methadone")

(c) cocaine, methadone and alcohol were ALL implicated would NOT be counted at all in this table

2. Further information in paragraph 3.3.1 of commentary.

**Table 8 Drug-related deaths per 1,000 population, Scotland, 2000 to 2010, and NHS Boards, annual averages for 2006 to 2010**

	Age-group					
	15 - 24 <sup>1</sup>	25 - 34	35 - 44	45 - 54	55 - 64 <sup>2</sup>	All ages <sup>3</sup>
<b>(a) Scotland</b>						
2000	0.12	0.18	0.09	0.02	0.01	0.06
2001	0.12	0.20	0.09	0.04	0.01	0.07
2002	0.16	0.23	0.12	0.04	0.01	0.08
2003	0.12	0.19	0.10	0.03	0.02	0.06
2004	0.12	0.22	0.12	0.05	0.00	0.07
2005	0.07	0.17	0.16	0.05	0.02	0.07
2006	0.10	0.25	0.16	0.08	0.02	0.08
2007	0.14	0.24	0.19	0.06	0.02	0.09
2008	0.13	0.33	0.23	0.10	0.03	0.11
2009	0.10	0.28	0.25	0.10	0.03	0.10
2010	0.09	0.24	0.22	0.10	0.03	0.09
average of rates for latest five years (2006 to 2010)	0.11	0.27	0.21	0.09	0.03	0.10
<b>(b) NHS Board areas: annual averages for 2006 to 2010 <sup>4</sup></b>						
Ayrshire & Arran	0.14	0.30	0.22	0.07	0.02	0.09
Borders	0.08	0.16	0.13	0.01	0.01	0.05
Dumfries & Galloway	0.15	0.19	0.06	0.05	0.02	0.05
Fife	0.12	0.28	0.18	0.07	0.00	0.08
Forth Valley	0.14	0.23	0.10	0.07	0.02	0.07
Grampian	0.11	0.26	0.15	0.08	0.02	0.08
Greater Glasgow & Clyde <sup>5</sup>	0.13	0.35	0.36	0.14	0.05	0.15
Highland <sup>5</sup>	0.09	0.19	0.10	0.04	0.02	0.05
Lanarkshire	0.08	0.26	0.18	0.07	0.01	0.08
Lothian	0.08	0.18	0.18	0.09	0.04	0.09
Orkney	0.19	0.22	0.00	0.00	0.00	0.04
Shetland	0.24	0.24	0.06	0.00	0.00	0.06
Tayside	0.14	0.31	0.22	0.08	0.02	0.10
Western Isles	0.15	0.33	0.00	0.05	0.00	0.05

1. Other tables which provide figures by age-group give the number of drug-related deaths of people who were aged under 25.

However, this column's figures are for ages 15-24, inclusive, as there are very few drug-related deaths of people aged 0-14

2. Other tables which provide figures by age-group give the number of drug-related deaths of people who were aged 55 and over

However, this column's figures are for ages 55-64, inclusive, as there are few drug-related deaths of people aged 65 and over

3. Including ages 0-14 and 65+

4. Calculated by dividing the average number of drug-related deaths per year over the specified 5-year period by the estimated population in the middle of the 5-year period (which is a proxy for the average population over the whole of the period).

5. New NHS Board areas including parts of former Argyll & Clyde prior to its dissolution on 1 April 2006.

**Table HB1 Drug-related deaths by NHS Board area, 2000 - 2010 (with averages for 1996-2000 and 2006-2010)**

NHS Board area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Annual averages		Population in 2008	2006-2010 average deaths per 1,000 pop'n <sup>1</sup>
												1996 to 2000	2006 to 2010		
<b>Scotland</b>	<b>292</b>	<b>332</b>	<b>382</b>	<b>317</b>	<b>356</b>	<b>336</b>	<b>421</b>	<b>455</b>	<b>574</b>	<b>545</b>	<b>485</b>	<b>260</b>	<b>496</b>	<b>5,168,500</b>	<b>0.10</b>
Ayrshire & Arran	20	35	33	19	20	15	25	36	40	39	31	10	34	367,510	0.09
Borders	1	1	0	2	2	7	2	4	7	5	9	1	5	112,430	0.05
Dumfries & Galloway	7	8	9	9	7	7	5	10	9	8	6	6	8	148,580	0.05
Fife	12	11	12	12	17	21	19	28	37	32	35	9	30	361,815	0.08
Forth Valley	4	9	24	12	16	14	24	26	23	14	18	4	21	290,047	0.07
Grampian	31	46	47	37	39	23	47	45	41	52	44	29	46	539,630	0.08
Greater Glasgow & Clyde <sup>2</sup>	132	117	152	131	151	111	162	157	197	200	167	113	177	1,194,675	0.15
Highland <sup>2</sup>	4	6	13	10	12	13	12	16	24	21	10	4	17	309,900	0.05
Lanarkshire	29	24	37	25	33	40	40	48	44	47	53	19	46	561,174	0.08
Lothian	37	54	39	40	36	57	46	54	94	81	73	44	70	817,727	0.09
Orkney	0	0	0	0	0	0	1	0	1	0	2	0	1	19,890	0.04
Shetland	1	1	1	0	0	1	2	2	1	0	2	0	1	21,980	0.06
Tayside	14	19	14	19	23	26	35	29	53	44	34	21	39	396,942	0.10
Western Isles	0	1	1	1	0	1	1	0	3	2	1	0	1	26,200	0.05
Argyll & Clyde <sup>3</sup>	31	22	31	27	35	29	36	..	..	..	..	..	..	..	..
Greater Glasgow & Clyde pt.	28	21	26	24	31	26	35	..	..	..	..	..	..	..	..
Highland pt.	3	1	5	3	4	3	1	..	..	..	..	..	..	..	..
Greater Glasgow <sup>3</sup>	104	96	126	107	120	85	127	..	..	..	..	..	..	..	..
Highland <sup>3</sup>	1	5	8	7	8	10	11	..	..	..	..	..	..	..	..

1. using the population in the middle of the 5-year period as a proxy for the average population over the whole period

2. New NHS Board areas including parts of former Argyll & Clyde.

3. Former NHS Board areas (before dissolution of Argyll & Clyde on 1 April 2006).

**Table HB2 Drug-related deaths by cause of death and NHS Board area, 2010**

NHS Board area	All categories	Cause of death category (ICD10 codes)				
		Drug abuse (F11-F16, F19)	Accidental poisoning (X40-X44)	Intentional self-poisoning (X60-X64)	Assault by drugs, etc. (X85)	Undetermined intent (Y10-Y14)
<b>Scotland</b>	<b>485</b>	<b>312</b>	<b>67</b>	<b>28</b>	<b>0</b>	<b>78</b>
Ayrshire & Arran	31	23	5	3	0	0
Borders	9	8	0	0	0	1
Dumfries & Galloway	6	0	1	3	0	2
Fife	35	16	15	1	0	3
Forth Valley	18	10	1	0	0	7
Grampian	44	34	6	0	0	4
Greater Glasgow & Clyde	167	118	25	6	0	18
Highland	10	6	1	1	0	2
Lanarkshire	53	29	4	6	0	14
Lothian	73	40	3	6	0	24
Orkney	2	0	0	0	0	2
Shetland	2	1	0	0	0	1
Tayside	34	27	5	2	0	0
Western Isles	1	0	1	0	0	0

**Table HB3 Drug-related deaths by selected drugs reported<sup>1</sup> and NHS Board area, 2010**

NHS Board area	Heroin / morphine <sup>2</sup>	Methadone	Benzodiazepines			Cocaine	Ecstasy	Amphetamines	Alcohol
			Any benzodiazepine	of which: Diazepam	Temazepam				
<b>Scotland</b>	<b>254</b>	<b>174</b>	<b>122</b>	<b>93</b>	<b>3</b>	<b>33</b>	<b>0</b>	<b>3</b>	<b>127</b>
Ayrshire & Arran	19	11	10	10	0	1	0	0	9
Borders	7	1	6	6	0	0	0	0	5
Dumfries & Galloway	3	2	3	3	0	0	0	0	1
Fife	20	17	6	6	0	0	0	1	6
Forth Valley	12	3	6	6	0	1	0	0	6
Grampian	14	19	33	6	1	9	0	0	16
Greater Glasgow & Clyde	92	63	16	15	1	15	0	1	44
Highland	7	1	1	1	0	2	0	1	2
Lanarkshire	34	15	9	9	0	3	0	0	12
Lothian	26	33	23	23	1	2	0	0	22
Orkney	0	0	0	0	0	0	0	0	0
Shetland	2	0	0	0	0	0	0	0	1
Tayside	18	9	8	8	0	0	0	0	3
Western Isles	0	0	1	0	0	0	0	0	0

1. More than one drug may be reported per death. These are mentions of each drug, and should not be added to give total deaths. Up to 2007, some pathologists reported only those drugs which they thought caused, or contributed to, the death. With effect from 2008, pathologists report separately (a) drugs which were implicated in, or which potentially contributed to, the cause of death and (b) other drugs which were present but which were not considered to have had any direct contribution to the death. **The figures in this table are on the first basis - i.e. basis (a) - which is now the standard basis for figures for individual drugs. They are on a different basis from those published in Table HB3 of the "... in 2008" and earlier editions.** There may be other differences between years and/or areas in the way in which the information was produced - see Section 2.

2. Further information in paragraph 3.3.1 of commentary.

**Table C1 Drug-related deaths by Council area, 2000 - 2010 (with averages for 1996-2000 and 2006-2010)**

Council area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Annual averages		Population in 2008	2006-2010 average deaths per 1,000 pop'n
												1996 to 2000	2006 to 2010		
<b>Scotland</b>	<b>292</b>	<b>332</b>	<b>382</b>	<b>317</b>	<b>356</b>	<b>336</b>	<b>421</b>	<b>455</b>	<b>574</b>	<b>545</b>	<b>485</b>	<b>260</b>	<b>496</b>	<b>5,168,500</b>	<b>0.10</b>
Aberdeen City	22	32	34	21	27	11	26	23	27	27	31	20	27	210,400	0.13
Aberdeenshire	6	14	9	13	8	10	16	17	11	18	10	7	14	241,460	0.06
Angus	3	1	4	5	8	8	11	3	8	9	9	2	8	110,310	0.07
Argyll & Bute	3	1	5	3	4	3	1	9	4	7	4	1	5	90,500	0.06
Clackmannanshire	0	0	7	2	5	3	7	5	4	3	1	1	4	50,480	0.08
Dumfries & Galloway	7	8	9	9	7	7	5	10	9	8	6	6	8	148,580	0.05
Dundee City	7	13	6	9	11	11	16	23	29	30	22	14	24	142,470	0.17
East Ayrshire	3	10	12	3	4	4	9	13	13	12	11	2	12	119,920	0.10
East Dunbartonshire	4	3	1	6	5	1	2	7	6	5	6	3	5	104,720	0.05
East Lothian	1	2	6	4	2	5	3	4	7	6	7	2	5	96,100	0.06
East Renfrewshire	4	3	5	3	5	1	3	3	6	7	4	2	5	89,220	0.05
Edinburgh, City of	28	39	27	26	17	41	30	43	66	45	47	32	46	471,650	0.10
Eilean Siar	0	1	1	1	0	1	1	0	3	2	1	0	1	26,200	0.05
Falkirk	1	7	8	6	7	8	10	15	10	5	10	2	10	151,570	0.07
Fife	12	11	12	12	17	21	19	28	37	32	35	9	30	361,890	0.08
Glasgow City	96	84	111	93	106	75	113	90	121	135	94	82	111	584,240	0.19
Highland	1	5	8	7	8	10	11	7	20	14	6	3	12	219,400	0.05
Inverclyde	11	12	8	7	9	7	9	10	5	7	17	9	10	80,780	0.12
Midlothian	3	5	2	3	5	5	6	1	6	9	7	3	6	80,560	0.07
Moray	3	0	4	3	4	2	5	5	3	7	3	2	5	87,770	0.05
North Ayrshire	11	15	14	9	13	6	11	18	15	19	12	4	15	135,920	0.11
North Lanarkshire	18	12	28	22	20	25	24	27	30	35	36	11	30	325,520	0.09
Orkney Islands	0	0	0	0	0	0	1	0	1	0	2	0	1	19,890	0.04
Perth & Kinross	4	5	4	5	4	7	8	3	16	5	3	5	7	144,180	0.05
Renfrewshire	11	5	9	11	14	10	17	21	27	26	19	9	22	169,800	0.13
Scottish Borders	1	1	0	2	2	7	2	4	7	5	9	1	5	112,430	0.05
Shetland Islands	1	1	1	0	0	1	2	2	1	0	2	0	1	21,980	0.06
South Ayrshire	6	10	7	7	3	5	5	5	12	8	8	3	8	111,670	0.07
South Lanarkshire	12	16	14	8	17	16	22	31	23	19	26	11	24	310,090	0.08
Stirling	3	2	9	4	4	3	7	6	9	6	7	1	7	88,350	0.08
West Dunbartonshire	5	6	13	6	8	15	12	16	23	13	18	5	16	90,940	0.18
West Lothian	5	8	4	7	12	7	7	6	15	21	12	6	12	169,510	0.07

**Table C2 Drug-related deaths by cause of death and Council area, 2010**

Council area	All categories	Cause of death category (ICD10 codes)				
		Drug abuse (F11-F16, F19)	Accidental poisoning (X40-X44)	Intentional self-poisoning (X60-X64)	Assault by drugs, etc. (X85)	Undetermined intent (Y10-Y14)
<b>Scotland</b>	<b>485</b>	<b>312</b>	<b>67</b>	<b>28</b>	<b>0</b>	<b>78</b>
Aberdeen City	31	25	5	0	0	1
Aberdeenshire	10	6	1	0	0	3
Angus	9	9	0	0	0	0
Argyll & Bute	4	2	0	1	0	1
Clackmannanshire	1	0	0	0	0	1
Dumfries & Galloway	6	0	1	3	0	2
Dundee City	22	16	4	2	0	0
East Ayrshire	11	8	2	1	0	0
East Dunbartonshire	6	5	1	0	0	0
East Lothian	7	4	0	0	0	3
East Renfrewshire	4	3	1	0	0	0
Edinburgh, City of	47	28	0	5	0	14
Eilean Siar	1	0	1	0	0	0
Falkirk	10	6	0	0	0	4
Fife	35	16	15	1	0	3
Glasgow City	94	70	14	5	0	5
Highland	6	4	1	0	0	1
Inverclyde	17	11	1	0	0	5
Midlothian	7	3	0	0	0	4
Moray	3	3	0	0	0	0
North Ayrshire	12	8	3	1	0	0
North Lanarkshire	36	21	3	4	0	8
Orkney Islands	2	0	0	0	0	2
Perth & Kinross	3	2	1	0	0	0
Renfrewshire	19	15	1	0	0	3
Scottish Borders	9	8	0	0	0	1
Shetland Islands	2	1	0	0	0	1
South Ayrshire	8	7	0	1	0	0
South Lanarkshire	26	12	5	2	0	7
Stirling	7	4	1	0	0	2
West Dunbartonshire	18	10	3	1	0	4
West Lothian	12	5	3	1	0	3

**Table C3 Drug-related deaths by selected drugs reported<sup>1</sup>  
and Council area, 2010**

Council area	Heroin / morphine <sup>2</sup>	Methadone	Benzodiazepines			Cocaine	Ecstasy	Amphetamines	Alcohol
			Any benzo-diazepine	<i>of which:</i> Diazepam	Temazepam				
<b>Scotland</b>	<b>254</b>	<b>174</b>	<b>122</b>	<b>93</b>	<b>3</b>	<b>33</b>	<b>0</b>	<b>3</b>	<b>127</b>
Aberdeen City	13	13	23	2	0	6	0	0	12
Aberdeenshire	1	5	7	3	1	2	0	0	3
Angus	6	0	1	1	0	0	0	0	1
Argyll & Bute	2	1	0	0	0	1	0	0	1
Clackmannanshire	1	0	0	0	0	0	0	0	1
Dumfries & Galloway	3	2	3	3	0	0	0	0	1
Dundee City	10	9	7	7	0	0	0	0	2
East Ayrshire	6	4	4	4	0	0	0	0	4
East Dunbartonshire	4	1	0	0	0	0	0	0	2
East Lothian	3	3	3	3	0	0	0	0	2
East Renfrewshire	4	0	0	0	0	0	0	0	2
Edinburgh, City of	16	22	19	19	1	1	0	0	14
Eilean Siar	0	0	1	0	0	0	0	0	0
Falkirk	6	2	3	3	0	1	0	0	2
Fife	20	17	6	6	0	0	0	1	6
Glasgow City	48	38	8	8	0	8	0	1	25
Highland	5	0	1	1	0	1	0	1	1
Inverclyde	10	6	2	2	0	0	0	0	4
Midlothian	1	6	1	1	0	0	0	0	2
Moray	0	1	3	1	0	1	0	0	1
North Ayrshire	10	2	2	2	0	1	0	0	5
North Lanarkshire	23	11	8	8	0	1	0	0	10
Orkney Islands	0	0	0	0	0	0	0	0	0
Perth & Kinross	2	0	0	0	0	0	0	0	0
Renfrewshire	15	6	4	4	0	2	0	0	3
Scottish Borders	7	1	6	6	0	0	0	0	5
Shetland Islands	2	0	0	0	0	0	0	0	1
South Ayrshire	3	5	4	4	0	0	0	0	0
South Lanarkshire	16	8	1	1	0	4	0	0	5
Stirling	5	1	3	3	0	0	0	0	3
West Dunbartonshire	6	8	2	1	1	3	0	0	5
West Lothian	6	2	0	0	0	1	0	0	4

1. More than one drug may be reported per death. These are mentions of each drug, and should not be added to give total deaths.

Up to 2007, some pathologists reported only those drugs which they thought caused, or contributed to, the death

With effect from 2008, pathologists report separately (a) drugs which were implicated in, or which potentially contributed to, the cause of death and (b) other drugs which were present but which were not considered to have had any direct contribution to the death

**The figures in this table are on the first basis - i.e. basis (a) - which is now the standard basis for the figures for individual drugs. They are on a different basis from those published in Table C3 of the "... in 2008" and earlier editions.**

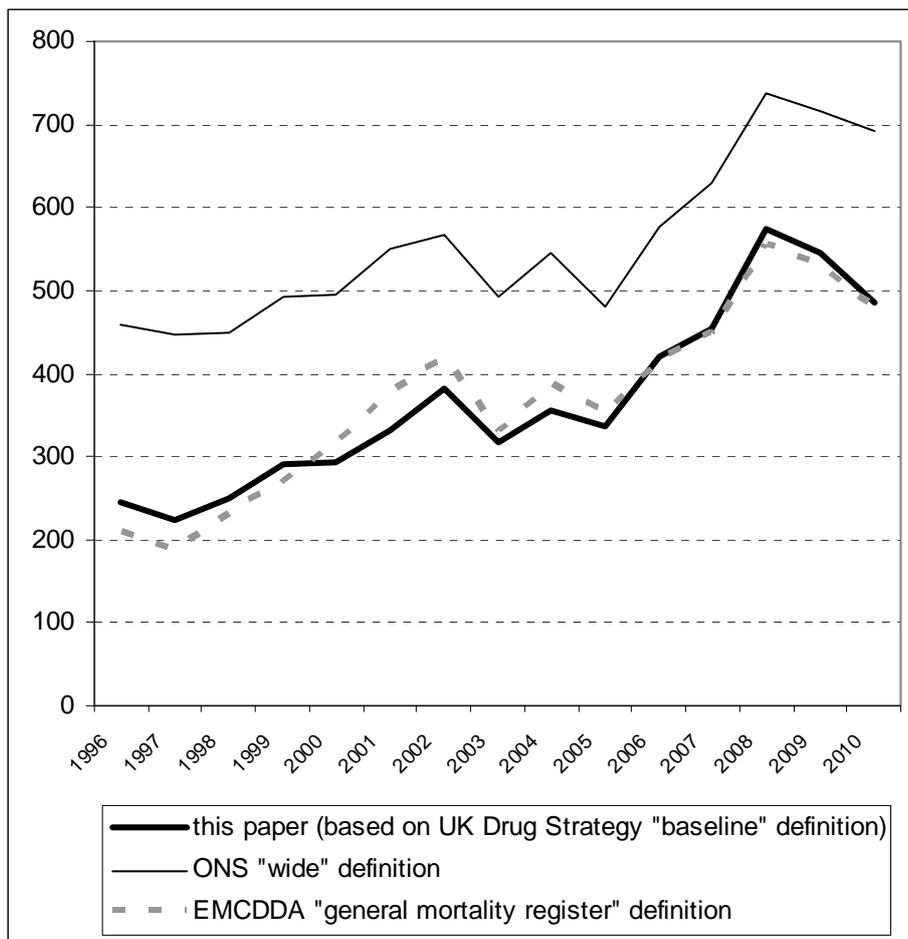
There may be other differences between years and/or areas in the way in which the information was produced - see Section 2.

2. Further Information in paragraph 3.3.1 of commentary.

**Table X Drug-related deaths in Scotland - different definitions, 1996 - 2010**

<b>Year</b>	<b>this paper (based on UK Drug Strategy "baseline" definition)</b>	<b>ONS "wide" definition</b>	<b>EMCDDA "general mortality register" definition</b>
1996	244	460	208
1997	224	447	188
1998	249	449	230
1999	291	492	272
2000	292	495	318
2001	332	551	376
2002	382	566	417
2003	317	493	331
2004	356	546	387
2005	336	480	352
2006	421	577	416
2007	455	630	450
2008	574	737	556
2009	545	716	532
2010	485	692	479

**Figure 2 Drug-related deaths in Scotland - different definitions**



**Table Y Drug-related deaths, on the basis of the ONS 'wide' definition, by selected drugs reported, 2000 - 2010**

Drugs <sup>1, 2</sup>	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>All drug-related deaths (on the "wide" definition)</b>	<b>495</b>	<b>551</b>	<b>566</b>	<b>493</b>	<b>546</b>	<b>480</b>	<b>577</b>	<b>630</b>	<b>737</b>	<b>716</b>	<b>692</b>
Amphetamines	3	5	13	10	10	11	11	12	12	7	3
Anti-depressants <sup>3</sup>	78	93	82	83	86	67	93	84	101	97	123
Anti-psychotics <sup>4</sup>	12	10	8	8	11	5	21	26	25	19	21
Benzodiazepines <sup>5</sup>	165	185	248	189	140	110	94	109	150	158	124
Cannabis	24	23	35	21	5	6	3	8	1	0	0
Cocaine	4	20	31	30	38	44	33	47	41	33	34
Diazepam	147	159	217	154	113	90	78	79	116	120	94
Ecstasy-type	12	21	20	15	17	10	12	12	5	2	0
Heroin/diamorphine or Morphine <sup>6</sup>	218	221	250	176	226	194	260	291	327	326	256
Methadone	56	71	100	91	80	71	96	115	171	177	177
Paracetamol or a compound <sup>7</sup>	120	127	117	85	107	62	53	56	55	43	48
Temazepam	39	20	16	37	5	7	9	4	7	9	3
Tramadol	1	8	6	15	11	16	17	26	32	40	40
Alcohol	164	186	190	168	145	134	151	181	196	187	151

1. More than one drug may be reported per death. These are mentions of each drug, so do not add up to the overall total.

Up to 2007, some pathologists reported only those drugs which they thought caused, or contributed to, the death.

With effect from 2008, pathologists report separately:

(a) drugs which were implicated in, or which potentially contributed to, the cause of death; and

(b) other drugs which were present but which were not considered to have had any direct contribution to the death

**The figures for 2008 onwards are on the first basis - i.e. basis (a) - which is now the standard basis for figures for individual drugs. The figures for 2008 have been revised from those published in the "... in 2008" edition.**

There may be other differences between years and/or areas in the way in which the information was produced - see Section 2.

2. The figures for some of the "controlled" drugs may differ slightly from those given in earlier tables for two reasons.

First, they were produced from what was the then GROS's new database, rather than the old database (see paragraph A4).

Second, a small proportion of the deaths which involved controlled drugs were excluded from the figures which appear in the earlier tables, for reasons such as those given in paragraph A3.

3. e.g. amitriptyline, citalopram, dothiepin, fluoxetine, prothaiaden

4. e.g. chlorpromazine, clozapine, olanzapine

5. including diazepam and temazepam (which appear separately below)

6. Further information in paragraph 3.3.1 of commentary.

7. e.g. co-codamol or co-proxamol, or mention of dextropropoxyphene or propoxyphene (even if there is no mention of paracetamol or a compound analgesic)

**Table Z Drug-related deaths, on the basis of the ONS 'wide' definition, by how they relate to the Drug Strategy 'baseline' definition, deaths from some causes which may be associated with present or past drug misuse, and volatile substance abuse deaths, 2000 - 2010**

Cause of death	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<u>All drug-related deaths (on the "wide" definition)</u>	495	551	566	493	546	480	577	630	737	716	692
<i>of which:</i>											
<b>on the basis used for this report's statistics</b> (i.e. the Drug Strategy "baseline" definition, as implemented by NRS)	<b>292</b>	<b>332</b>	<b>382</b>	<b>317</b>	<b>356</b>	<b>336</b>	<b>421</b>	<b>455</b>	<b>574</b>	<b>545</b>	<b>485</b>
deaths within the Drug Strategy "baseline" definition, but excluded from this report's statistics because ... <sup>1</sup>											
(a) ... cause of death was a secondary infection or a related complication <sup>2</sup>	22	9	10	9	6	12	13	10	23	22	33
(b) ... controlled substance was present only as part of a compound analgesic or a cold remedy	3	4	6	0	0	1	2	8	10	3	5
other deaths counted as "drug-related" by the "wide" definition - but not on the basis used for this report <sup>3</sup>	178	206	168	167	184	131	141	157	130	146	169
<u>Deaths from some causes which may be associated with present or past drug misuse</u> <sup>4</sup>											
Underlying cause of death, with its ICD10 <sup>5</sup> code(s):											
Hepatitis C (B18.2)	1	2	3	5	5	10	14	12	18	21	19
HIV (B20-24)	23	33	33	33	16	31	19	21	18	27	21
Total all deaths from the specified causes	24	35	36	38	21	41	33	33	36	48	40
<u>Volatile Substance Abuse deaths</u>											
Deaths in Scotland - ICDP figures <sup>6</sup>	9	9	8	6	1	4	9	10	3	..	..

1. paragraph A3 of Annex A explains why these kinds of deaths are excluded from the standard definition of "drug-related death" figures produced by NRS

2. including (e.g.) deaths caused by infections that resulted from the use of heroin which was contaminated by, say, anthrax

3. including (e.g.) accidental deaths which were caused by the use of drugs which were not controlled at the time, such as those before 16 April 2010 which resulted from using mephedrone (assuming that no controlled drugs were found in the body)

4. only a proportion of deaths from these causes can be attributed to drug misuse - see paragraph B8 of Annex B

5. "ICD10" is the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision

6. "ICDP" is the International Centre for Drugs Policy - see paragraph B13 of Annex B for more information about the statistics that it produces.

A few deaths per year may be counted both in the "ICDP" figures and in the standard drug-related death statistics produced by NRS.

## Notes on statistical publications

### National Statistics

This is a National Statistics publication. It has been produced to the high professional standards set out in the UK Statistics Authority Code of Practice for Official Statistics ([www.statisticsauthority.gov.uk/assessment/code-of-practice](http://www.statisticsauthority.gov.uk/assessment/code-of-practice)). These statistics go through regular quality-assurance reviews to make sure that they meet customers' needs. They are produced in a way that is free from any political interference.

### National Records of Scotland

From 1 April 2011, the General Register Office for Scotland merged with the National Archives of Scotland to become the National Records of Scotland (NRS). The GROS website will remain active until it is replaced by a new website for NRS.

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our aim is to provide relevant and reliable information, analysis and advice that meets the needs of government, business and the people of Scotland. We do this as follows.

- Preserving the past – We look after Scotland's national archives so that they are available for current and future generations, and we make available important information for family history.
- Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.
- Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.

You can get other detailed statistics that we have produced from the Statistics section on our website ([www.gro-scotland.gov.uk/statistics](http://www.gro-scotland.gov.uk/statistics)). Statistics from the 2001 Census are on Scotland's Census Results On-Line website ([www.scrol.gov.uk](http://www.scrol.gov.uk)) and on the Census section of the NRS/GROS website ([www.gro-scotland.gov.uk/census](http://www.gro-scotland.gov.uk/census)).

We provide information about future publications on our website ([www.gro-scotland.gov.uk/futurepb.html](http://www.gro-scotland.gov.uk/futurepb.html)). If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government ScotStat website at [www.scotland.gov.uk/scotstat](http://www.scotland.gov.uk/scotstat).

## **Enquiries and suggestions**

Please visit our enquiries page if you need any further information.

If you have comments or suggestions that would help us improve our standards of service, please contact:

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## Related organisations

Organisation	Contact
<p>The Scottish Government (SG) forms the bulk of the devolved Scottish Administration. The aim of the statistical service in the SG is to provide relevant and reliable statistical information, analysis and advice that meets the needs of government, business and the people of Scotland.</p>	<p>Office of the Chief Statistician            Scottish Government            1.N04, St Andrew's House            Edinburgh, EH1 3DG            Phone: 0131 244 0442            Email: <a href="mailto:statistics.enquiries@scotland.gsi.gov.uk">statistics.enquiries@scotland.gsi.gov.uk</a>            Website: <a href="http://www.scotland.gov.uk/Topics/Statistics">www.scotland.gov.uk/Topics/Statistics</a></p>
<p>The Office for National Statistics (ONS) is responsible for producing a wide range of economic and social statistics. It also carries out the Census of Population for England and Wales.</p>	<p>Customer Contact Centre            Room 1.015            Office for National Statistics            Cardiff Road            Newport, NP10 8XG            Phone: 0845 601 3034            Minicom: 01633 812399            Email: <a href="mailto:info@statistics.gsi.gov.uk">info@statistics.gsi.gov.uk</a>            Website: <a href="http://www.ons.gov.uk">www.ons.gov.uk</a></p>
<p>The Northern Ireland Statistics and Research Agency (NISRA) is Northern Ireland's official statistics organisation. The agency is also responsible, for registering births, marriages, adoptions and deaths in Northern Ireland, and the Census of Population.</p>	<p>Northern Ireland Statistics and Research Agency            McAuley House            2-14 Castle Street            Belfast, BT1 1SA            Phone: 028 9034 8100            Website: <a href="http://www.nisra.gov.uk">www.nisra.gov.uk</a></p>

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