Drug-related deaths in Scotland in 2015

Statistics of drug-related deaths in 2015 and earlier years, broken down by age, sex, selected drugs reported, underlying cause of death and NHS Board and council areas

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Main Points

The main findings from this report include the following:

- Based on the definition used for these statistics, 706 drug-related deaths were registered in Scotland in 2015, 93 (15 per cent) more than in 2014. This was the largest number ever recorded, and 370 (110 per cent) higher than in 2005 (paragraph 3.1.1).
- Males accounted for 69 per cent of the drug-related deaths in 2015 (paragraph 3.4.1).
- In 2015, there were 249 drug-related deaths of people aged 35-44 (35 per cent of all drug-related deaths), 183 in the 45-54 age-group (26 per cent), and 163 drug-related deaths of 25-34 year olds (23 per cent) (paragraph 3.4.2).
- The NHS Board areas which accounted for most of the 706 drug-related deaths in 2015 were:
    - Greater Glasgow & Clyde - 221 (31 per cent);
    - Lothian - 100 (14 per cent);
    - Lanarkshire - 73 (10 per cent);
    - Grampian - 69 (10 per cent); and
    - Tayside - 63 (9 per cent) – refer to paragraph 4.1 .

Using the annual average for 2011-2015, to reduce the effect on the figures of year-to-year fluctuations:

- for Scotland as a whole, the average of 602 drug-related deaths per year represented a death rate of 0.11 per 1,000 population;
- the NHS Board area with the highest rate was Greater Glasgow & Clyde (0.16);
- the next highest rate was for Tayside (0.12) – refer to paragraph 4.3.

However, there is a narrower (in percentage terms) range of values when death rates are calculated using the estimated numbers of problem drug users (paragraph 4.9).

Comparing the annual average for 2011-2015 with that for 2001-2005:

- the percentage increase in the number of drug-related deaths was greater for females (153 per cent) than for males (56 per cent) (paragraph 3.4.1);
- the largest increase in numbers was for 35-44 year olds, the next largest was for people aged 45-54, and there was a fall in the number of drug-related deaths of people aged under 25 (paragraph 3.4.2); and
- the NHS Board areas with the largest increases in the number of drug-related deaths were Greater Glasgow & Clyde (up by 56), Lothian (up by 47), Lanarkshire (up by 33) and Tayside (up by 30) (paragraph 4.2).

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 706 drug-related deaths in 2015:

- heroin and/or morphine were implicated in, or potentially contributed to, the cause of 345 deaths (49 per cent of the total);

- methadone was implicated in, or potentially contributed to, 251 deaths (36 per cent);
- one or more opiates or opioids (including heroin/morphine and methadone) were implicated in, or potentially contributed to, 606 deaths (86 per cent);
- benzodiazepines (for example, diazepam) were implicated in, or potentially contributed to, 191 deaths (27 per cent);
- cocaine, ecstasy-type drugs and amphetamines were implicated in, or potentially contributed to, 93, 15 and 17 deaths respectively; and
- alcohol was implicated in, or potentially contributed to, 107 of the drug-related deaths (paragraph 3.3.3).

(The percentages add up to more than 100 because more than one drug was implicated in, or contributed to, many of the deaths.)

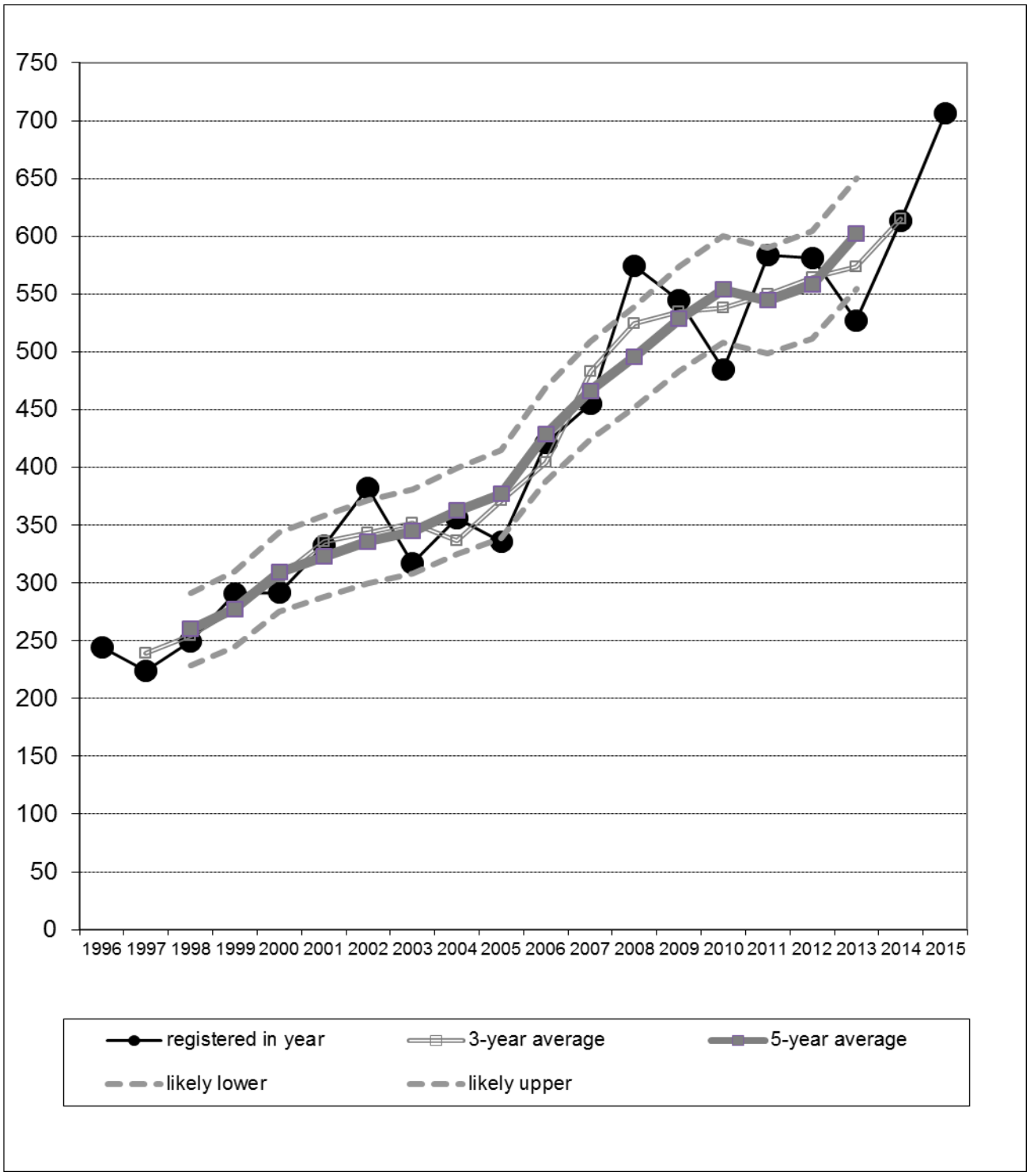
In 2015, heroin and/or morphine were implicated in, or potentially contributed to, more deaths than in any previous year (hitherto, the largest figure had been 324 in 2008). The corresponding figure for methadone was below its peak (275 in 2011) but more than in the previous three years. Opiates or opioids (including heroin/morphine and methadone) were implicated in 606 deaths: more than the previous highest ever number (535 in 2014). The number for benzodiazepines rose, to around the level seen in 2011 (185) and 2012 (196) (paragraph 3.3.4).

Most drug-related deaths are of people who took more than one substance. Of the 706 drug-related deaths in 2015, there were just 73 for which only one drug (and, perhaps, alcohol) was found to be present in the body. There were 248 cases where only one drug (and, perhaps, alcohol) was believe to have been implicated in, or potentially contributed to, the cause of the death. The latter figure covers both the ‘only one drug found’ deaths and cases where one drug was implicated and the other drugs present were not considered to have had any direct contribution to the death (paragraph 3.3.9 to 3.3.11)

Annex E of this publication provides information about deaths which involved so-called ‘New Psychoactive Substances’ (NPSs). The definition used for the purpose of those figures is set out in first half of that Annex. On that basis, in 2015:

- there were 74 deaths for which NPSs were implicated in, or potentially contributed to the cause of death. In 57 cases, the only NPSs present were benzodiazepines (usually etizolam, but sometimes - for example - diclazepam or phenazepam); in 17 cases, other types of NPS were present (for example ethylphenidate, mephedrone, methiopropamine); there were no deaths for which both benzodiazepine NPSs and other types of NPS were present. Almost all of these deaths (72 out of 74) fall within the definition of ‘drug-related deaths’ that is used to produce the main statistics in this report – these, are included in the 706 drug-related deaths. In only a small proportion (3 out of the 74 deaths) were NPSs the only substances implicated in the death. (paragraph E9)
- there were 38 deaths for which NPSs were present but were not considered to have contributed to the death. In most cases (30 out of 38) the only NPSs present were benzodiazepines; almost all of the deaths (36 out of 38) are included in the 706 drug-related deaths (paragraph E11).

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



1. Introduction

1.1 This annual publication provides statistics of drug-related deaths which were registered in Scotland over the period from 1996. 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 are used in the development of policy by the Scottish Government and by a number of other interested parties such as NHS Boards and local Alcohol and Drug Partnerships. The Scottish Government has worked with other interested parties to develop new arrangements for advice on drug-related matters, and the Partnership for Action on Drugs in Scotland was established in January 2016.

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 here, 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 2014. Annex E covers so-called New Psychoactive Substances, and Annex F explains the basis of the consistent series of drug-related death numbers. The tables and charts can be grouped as follows:

- Tables 1 to 9, Figure 1 - statistics for Scotland;
- Tables HB1 to HB5, Figure 2 - statistics for NHS Board areas;
- Tables C1 to C5, Figure 3 - statistics for council areas; and
- Tables X to Z, NPS1 to NPS3, CS1 and CS2, Figure 4 - 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 (as explained in paragraph A4 of Annex A).

1.3 The following improvements have been made for this edition:

- Table X and Figure 4 have been expanded to provide the numbers of drug-related deaths on the Office for National Statistics 'wide' definition for 1979 to 1995, and to show the numbers of drug-related deaths, on all three bases, per million population.

1.4 Users of the statistics are reminded that, with effect from the 2009 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 2009 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. Some information about this is given in paragraphs 2.3 to 2.5 of this edition.

1.5 Table 6 allows users of the statistics to compare the figures for the latest year on the two bases, and also shows how the numbers on the two bases for the latest year 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 onwards), providing figures for NHS Boards and councils on the following bases:

- for 2008 on the standard basis ('drugs which were implicated in, or which potentially contributed to, the cause of death'); and
- for 2009 onwards 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').

1.6 More detailed statistical information about the nature and circumstances of people whose deaths were drug-related is available in the reports from the NHS's National Drug Related Deaths Database, which are described briefly in paragraph B9 of Annex B.

2. Data sources

2.1 The National Records of Scotland (NRS) 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 2015 are based upon the information which NRS had obtained by early June 2016. 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 (for example) 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 (which is referred to in Annex C). A copy of the questionnaire that was used from 2008 to 2013 appears in those years' editions of this publication. A new version of the questionnaire was introduced at the start of 2014, a copy of which is in Annex D. The new questionnaire did not change greatly what was collected in respect of each death, but covers a wider range of deaths than before. This does not change the definition of drug-related deaths used for these statistics, but will allow NRS to produce information about a wider range of deaths than that covered by the standard definition. It should be noted that, in the case of deaths which involved drugs which are available on prescription, 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 reports referred to in 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' 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; and
- the form now 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:

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

Following consultation with the National Forum on Drug-related Deaths, '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, with effect from the 2009 edition.

2.5 It should be noted that, although the old questionnaire referred to the 'principal drug …' and 'other drugs … involved', the figures for 2007 and earlier years are not directly comparable to the figures for 2008 onwards on the new standard basis. This is because, in 2007 and earlier years, some pathologists reported, in the old questionnaire, all the drugs that they found (this is 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 (this is not on the new standard basis). More information about the change (including why NRS cannot produce figures on the standard basis for 2007 or earlier years) is available in the 2009 edition.

2.6 At the start of 2011, NRS implemented a number of World Health Organisation (WHO) updates to the ICD rules for identifying the underlying cause of death. This caused a break in the series of figures for the underlying cause of death. 'Drug abuse' deaths from 'acute intoxication', which would previously have been counted under 'mental and behavioural disorders due to psychoactive substance use', are now counted under the appropriate 'poisoning' category. Examples are the deaths of known or suspected habitual drug abusers, for whom the cause of death was certified as 'adverse effects of heroin', 'methadone toxicity' or 'morphine intoxication'. Under the old coding rules, the underlying cause of those deaths

would have been ‘mental and behavioural disorders due to use of opioids’ (unless NRS had been informed that the deaths were due to intentional self-harm, or assault, in which case the underlying cause would have been ‘intentional self-poisoning …’ or ‘assault by drugs …’, whichever was appropriate).

2.7 Under the new coding rules, the underlying cause of such deaths is the appropriate type of poisoning. For example, if NRS is informed that the overdose is believed to have been accidental, the underlying cause will be coded as ‘accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens)’. A note on the changes to the way in which NRS has coded the underlying cause of death with effect from the start of 2011 is available within the Death Certificates and Coding Cause of Death section of its website. NRS has estimated what the figures for 2011 onwards would have been, had the data been coded using the old rules. This makes it possible to notice the changes between 2010 and 2011, and the longer-term trends, without a break in the series. NRS hopes to continue to estimate the breakdown by underlying cause of death on the basis of the old coding rules for at least a few more years.

2.8 The overall total number of drug-related deaths has not been affected by the changes to (i) the basis of the figures for individual drugs and (ii) how the underlying cause of death is coded. The first change has just reduced the number of drugs that are counted, for the purpose of the standard figures, for some deaths; the second has just altered the categories for the underlying cause of death against which many deaths are counted.

2.9 However, the total number of drug-related deaths has been affected by changes in the list of drugs which are controlled under the Misuse of Drugs Act. Annex F explains that the ‘coverage’ of NRS’s standard definition ‘widens’ every time another drug is added to the list of controlled substances, because all subsequent deaths from poisoning by that drug will be counted as drug-related. In practice, changes in the classification of drugs that occurred in the years up to and including 2013 had little effect on the figures (refer to paragraph F4 of Annex F), but the change in the classification of tramadol and zopiclone in 2014 could have caused a noticeable break in the continuity of NRS’s figures (as explained in paragraph F5 of Annex F). Therefore, in order to give more accurate indications of changes and trends, NRS developed a ‘consistent series’ of numbers of drug-related deaths in previous years, which is based on the classification of each substance at the end of the latest year covered by the publication.

2.10 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 – for example 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;

- if 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 (for example diazepam) was used, the areas which they serve will 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);
- pathologists may decide not to describe a drug as being 'implicated in, or potentially contributing to, the cause of death' if it is found at what they would regard as within the levels that one might expect for the therapeutic use of a drug, and may change what they regard as the minimum level for reporting a substance. For example, in one part of Scotland, diazepam used to be reported if its level was at least 0.4 mg/litre, but the 'cut-off' was raised to about 1 mg/litre. All else being equal, the area would then have fewer deaths in which diazepam was implicated, because cases with levels of between 0.4 and 1 mg/litre would no longer be counted; and
- there may be cases where different pathologists could have different views on whether a particular drug should be described as 'implicated in, or potentially contributing to, a death' - for example, because they have different views on what would have been a fatal dose of the drug for the person concerned, or (if the person had also taken other substances) on the level of harm that would be caused by the combination of the drug and one or more of the other substances taken.

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

3.1 Overall numbers

3.1.1 Based on the definition used for these statistics, there were 706 drug-related deaths in 2015, 93 (15 per cent) more than in 2014. This was the highest number recorded since the series of figures began in 1996, and was 370 (110 per cent) more than in 2005. The 'underlying' increase since 2005 is only slightly smaller when account is taken of the effect on the statistics of changes in the classification of drugs – refer to paragraphs 3.1.4 to 3.1.6.

3.1.2 The figures on the left-hand side of Table 1 show that the past ten years have had six rises and four falls in the number of drug-related deaths. The rises have tended to be greater than the falls, and the trend in the number of drug-related deaths has been upwards. Because the statistics show some year to year fluctuations, moving annual averages are likely to provide a better guide to the long-term trend than the change between any two individual years. Figure 1 illustrates this:

- the black dots show the figures for each year;
- the continuous grey lines show two moving annual averages - a 3-year average (thin hollow grey line) and a 5-year average (thick solid 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 per cent 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, up to (and including) 2007, 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 figures for 2010 and 2013 were unusually low, relative to the long-term trend (the figures for both years being below the lower end of the likely range of random statistical variation);
- the figures for 2009, 2011, 2012, 2014 and 2015 were all broadly in line with the long-term trend: they were all either close to the 5-year moving average value or were not far from what one would expect the 5-year moving average to be, if the trend over the previous decade were extrapolated to those years.

The chart and the table show that the 5-year moving average rose for many years, suggesting that there was a clear long-term upward trend, and that the figure for 2010 had been unusually low relative to that long-term trend. When the figure for 2013 was obtained, there was a slight fall in the 5-year moving average (from 554 for 2008 to 2012, to 544 for 2009 to 2013), because there were fewer deaths in the year which had entered the calculation (2013, with 527 deaths) than in the year which had dropped out of the calculation (2008, with 574 deaths). However, with 613 deaths in 2014, and 706 in 2015, the 5-year moving average has increased again, to 602 for 2011 to 2015. The pattern of rises and falls in recent years meant that there was not much change in the 3-year moving average for several years: its values were 525 (for 2007 to 2009), 535, 538, 550, 564 and 574 (for 2012 to 2014), suggesting at most only a slight upward trend (compared to much more rapid growth in earlier years). Therefore, there was a possibility that the large year-to-year increases and decreases in the period from 2010 to 2014 were fluctuations around the general level of the much more stable 3-year moving average. However, the large rise to 706 deaths in 2015 has increased the 3-year moving average to 615 (for 2013 to 2015), so the trend appears to be clearly upwards.

3.1.4 As mentioned in paragraph 2.9 (and explained in detail in Annex F) the 'coverage' of NRS's standard definition of a drug-related death 'widens' every time another drug is added to the list of substances which are controlled under the Misuse of Drugs Act, because all subsequent deaths from poisoning by that drug will be counted as drug-related. Therefore, in order to give more accurate indications of changes and trends, NRS has developed a 'consistent series' which is based on the classification of drugs at the end of the latest year covered by the publication. The rightmost three columns of Table 1 show the consistent series' number of drug-related deaths, and the 'extra' deaths (number and percentage) that would be counted as drug-related on that basis.

3.1.5 As will be seen from Table 1, the consistent series' figures have never been as much as six per cent above the number of drug-related deaths on the standard definition (they were 5.6 per cent higher in 2010, and 5.7 per cent more in 2013). It follows that the changes in the classification of drugs have not had a great effect on

the overall total number of drug-related deaths. The year-to-year variation in the number of 'extra' deaths has not been large, so the consistent series' patterns (of rises and falls, and of 'peaks' and 'troughs') are similar to those of the numbers produced by the standard definition.

3.1.6 The most noticeable break in the continuity of the number of drug-related deaths was caused by the change to the classification of tramadol and zopiclone in 2014. The relevant numbers and changes for 2013 and 2014 are as follows:

- standard definition: 613 deaths in 2014, compared with 527 in 2013 – implying a rise of 86 or 16 per cent; and
- consistent series: 618 deaths in 2014, compared with 557 in 2013 – implying a rise of 61 or 11 per cent

Using the consistent series, the increase between 2005 and 2015 is 360, or 104 per cent: only slightly smaller than the rise of 370 or 110 per cent calculated using the standard definition.

3.2 Underlying causes of death

3.2.1 As explained in paragraph 2.6, National Records of Scotland (NRS) implemented WHO updates to the coding rules at the start of 2011. This changed the classification of the underlying cause of many drug-related deaths. However, NRS has estimated what the figures for 2011 onwards would have been, had the data been coded using the old rules.

3.2.2 Table 2 shows the number of drug-related deaths categorised by the underlying cause, defined in terms of groupings of the ICD codes. The penultimate row gives the figures for 2015 that were produced by applying the new coding rules: the majority of drug-related deaths (553, or 78 per cent) were coded to 'accidental poisoning'. This covers the relevant categories within the ICD's section for 'Accidental poisoning by and exposure to noxious substances' (for example, it includes ICD-10 code X42 which is defined as 'Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens] not elsewhere classified').

3.2.3 Table 2 also provides NRS's estimates of the figures that would have been produced for 2011 onwards, had the old coding rules been used. On that basis, the underlying cause for the majority of drug-related deaths (495, or 70 per cent) would have been 'drug abuse', which covers the relevant categories within the ICD's section for 'Mental and behavioural disorders due to psychoactive substance use'.

3.2.4 Because some of the figures can fluctuate markedly from year-to-year, a better indication of the longer-term changes should be obtained from a comparison of the averages for 5-year periods. These show large percentage increases in deaths for which the underlying cause (on the basis of the old coding rules) was 'drug abuse' (from an average of 232 per year in 2001-2005 to an average of 416 per year in 2011-2015) and 'accidental poisoning' (from an average of 23 to an average of 87). There was not as much change in deaths caused by intentional self-poisoning (averages of 36 per year in 2001-2005 and 50 per year in 2011-2015) and 'undetermined intent' (from an average of 54 to an average of 49).

3.3 Selected drugs reported

3.3.1 NRS database records a wide range of drug combinations (for example 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 annual Vital Events Reference Tables, which are available on the NRS website. 'Unspecified drug(s)' is recorded in only a small proportion of drug-related deaths (on average, only a couple of per cent per year). Table 3, Table 6 and Table 7 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 96 per cent of the drug-related deaths in 2000, and in 97 per cent of cases in 2015). 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. With effect from the '… in 2014' edition, the tables and text refer to 'ecstasy-type drugs' (rather than to 'ecstasy' alone), to make clearer what it is that those figures cover: the numbers for 2013 and earlier years are the same as those that were given in earlier editions, but are now described more precisely.

3.3.2 Since these tables record individual mentions of particular drugs, there will be multiple-counting of some deaths (for example if both heroin and diazepam were implicated in, or potentially contributed to, the cause of a death in the latest year, that death will be counted in five of the 'drug' columns of Table 3: 'heroin/morphine', 'heroin/morphine, methadone or buprenorphine', 'any opiate or opioid', 'any benzodiazepine' and '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 about this is given in Section 2). Table 3 shows that heroin/morphine was implicated in, or potentially contributed to, the cause of 345 (49 per cent) of the 706 deaths in 2015; methadone was implicated in, or potentially contributed to, 251 (36 per cent); one or more opiates or opioids (including heroin/morphine and methadone) were implicated in, or potentially contributed to, 606 deaths (86 per cent); and benzodiazepines were implicated in, or potentially contributed to, 191 (27 per cent). Cocaine, ecstasy-type drugs and amphetamines were implicated in, or potentially contributed to, 93, 15 and 17 deaths respectively. Alcohol was implicated in, or potentially contributed to, the cause of 107 of the 706 drug-related deaths in 2015.

3.3.4 Table 3 also shows that, in 2015, heroin and/or morphine were implicated in, or potentially contributed to, far more deaths (345) than in any previous year, including what had been, until now, the largest figure of 324 in 2008. Methadone was implicated in, or potentially contributed to, more deaths (251) than in the previous three years (237 in 2012, 216 in 2013 and 214 in 2014), but not as many

as its peak in 2011 (275). The number of deaths in which opiates or opioids (including heroin/morphine and methadone) were implicated (606) was higher than in any previous year (having been 535 in 2014, 524 in 2011 and 507 in 2008). Deaths in which benzodiazepines were implicated, or to which they potentially contributed, rose, from 121 (in 2014) to 191, which is around the level seen in 2011 (185) and 2012 (196). The number of deaths for which cocaine was implicated, or to which it potentially contributed, more than doubled to 93 (it had been 45 in both 2013 and 2014, and 30-something in each of the previous five years). The relatively small numbers for ecstasy-type drugs and amphetamines have had some large percentage year-to-year fluctuations.

3.3.5 It is not possible to make a direct comparison with the figures for 2007 and earlier years because there is a break in the series between 2007 and 2008, due to the revision of the questionnaire which collects information about the drugs found in the body (as explained in paragraphs 2.3 to 2.5). The statistics may also be affected by other differences, between years or between areas, in the reporting of drugs found in the body (examples of which are given in 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 before 2008 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; and
- alcohol - from an average of 91 to an average of 129.

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-type (averages of 7 and 13).

It may also be noted that Table 3 in the editions of this publication for 2013 and some earlier years showed that there was 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 2015 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 501 of the drug-related deaths in 2015, but had been implicated in, or potentially contributed to, only 191 of those deaths (for diazepam, the equivalent figures are 434 and 128). There are also notable percentage differences between the figures in the two halves of the table for codeine (or a codeine-containing compound), which was found in 63 deaths but was believed to have been implicated in, or to have contributed to, only 31 of them; for dihydrocodeine or a compound thereof (for which the numbers are 126 and 94, respectively) and for alcohol (258 and 107). The figures for heroin/morphine and methadone do not differ much (in percentage terms) 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 that there were 73 deaths for which only one drug (and, perhaps, alcohol) was found to be present in the body: with a few possible exceptions (the footnote to the table gives further details), these deaths will 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 22 deaths for which the only drug reported was heroin/morphine; five deaths for which only methadone was mentioned; two for which only codeine (or a codeine-containing compound) was reported, six for which dihydrocodeine (or a dihydrocodeine-containing compound) was reported, five deaths for which only a benzodiazepine was reported; four deaths for which only cocaine was reported; one death for which only an ecstasy-type drug was reported; and one death for which only amphetamines were reported. Information from NRS's database (which does not appear in any of the tables) shows that 11 of the 15 remaining 'only one drug (and, perhaps, alcohol)' deaths were due to 'unspecified drug'; in case of the other deaths, the only substances reported were cannabis (one death), fluoxetine (one deaths), MDPV (one death) and methiopropamine (one death). In total, there were 26 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 includes deaths for which other drugs were mentioned as being present but were 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 109 deaths for which heroin/morphine was the only drug which was believed to have been implicated in,

or to have contributed to, the death; 34 deaths for which methadone was the only such drug; 25 deaths for which dihydrocodeine (or a dihydrocodeine-containing compound) was the only such drug, 14 deaths for which cocaine was the only such drug, and 50 deaths for which alcohol was implicated in, or potentially contributed to, the cause of death, along with one drug. Apart from 'heroin/morphine, methadone or buprenorphine', 'any opiate or opioid' and 'any other drug', the numbers for each of the other individual drugs that are shown in the table are all in single figures, so there were very few deaths which were believed to be due solely to one of those particular drugs alone.

3.3.11 In the lower half of Table 7, the sum of the figures for 'any opiate or opioid' (which includes heroin/morphine, methadone, buprenorphine, codeine, dihydrocodeine and compounds containing them), benzodiazepines, cocaine, ecstasy-type drugs and amphetamines is 225, or 32 per cent of the total of 706 drug-related deaths in 2015. This means that one of these drugs was the only drug which was implicated in, or potentially contributed to, the cause of almost a third of all drug-related deaths in 2015. There were also 23 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. Information from NRS's database (which does not appear in any of the tables) shows that they included three cases where that drug was amitriptyline, two cases where it was fluoxetine,seven cases where it was a drug that was responsible for only one such death (the substances reported being cannabis, citalopram, diphenhydramine, MDPV, methiopropamine, propranolol and zopiclone), and 11 cases where it was 'unspecified drug' (alcohol was also implicated in some of these deaths). Therefore, there was a total of 248 cases (35 per cent of all drug-related deaths) where only one drug (plus, perhaps, alcohol) 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 majority (484, or 69 per cent) of the drug-related deaths in 2015. This was the case throughout the past two decades, although the precise balance between the sexes has varied from year to year. For example, between 2008 and 2013, the number of male drug-related deaths dropped (from 461 to 393, having been as low as 363 in 2010) whereas the number of female deaths rose (from 113 to 134, having fallen back slightly from 165 in 2012) so the male percentage fell from 80 per cent to 75 per cent. Comparing the averages for 2001-2005 and 2011-2015, to reduce the effects of year-to-year fluctuations on the figures, the percentage increase in the number of drug-related deaths was greater for females (153 per cent) than for males (56 per cent).

3.4.2 From 2003 to 2014, of the age-groups shown, the largest number of drug-related deaths have been among 25-34 and 35-44 year olds: using the averages for 2011-2015, 163 out of 602 deaths (27 per cent) were of 25-34 year olds and even more were in the 35-44 age-group (211, or 35 per cent). However, recent years have seen large percentage increases in drug-related deaths in the 45-54 age-group. In 2015, there were 249 drug-related deaths of people aged 35-44 (representing 35 per cent of that year's total number of drug-related deaths), 183 of 45-54 year olds (26 per cent) and 163 in the 25-34 age-group (23 per cent of the total). In addition, 30 people aged 15 to 24 died (4 per cent), as did 61 in the 55 to 64 age-group (9 per cent) and 20 people who were 65 or over (3 per cent). There are very few drug-related deaths aged 14 and under. The table shows that the number of deaths in a particular age-group can fluctuate markedly over the years

(for example, the number of 15 to 24 year olds who died was 100 in 2002, 47 in 2005, 94 in 2007, 65 in 2010, 32 in 2013, 46 in 2014 and 30 in 2015). However, some clear trends can be seen. Comparing the averages for 2001-2005 and 2011-2015 (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 92 per year in 2001-2005 to an average of 211 in 2011-2015) and people aged 45-54 (from an average of 30 to an average of 133); the number of deaths of 25-34 year olds rose less markedly (from an average of 132 to an average of 163). Deaths of people aged 55 to 64 rose (from an average of 8 to an average of 39), and there was a fall in the number of people aged under 25 who died (from an average of 77 to an average of 42).

3.4.3 Changes in the ages of drug-related deaths can also be seen from the values of the lower quartile age at death (a quarter of drug-related deaths were of people of this age or under), the median age at death (half the deaths were of people of this age or under) and the upper quartile age at death (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 34 years in 2015;
- the median age at death increased from 28 years in 1996 to 41 years in 2015; and
- the upper quartile age at death rose from 34 years in 1996 to 49 years in 2015.

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

3.4.4 The lower part of Table 5 shows that, when the underlying cause of death is determined using the old coding rules, 357 (74 per cent) of the male deaths in 2015 were of known or suspected drug abusers compared to 138 (62 per cent) of the female deaths. Of the 81 deaths aged 55 and over, only 24 (30 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 69 per cent of all drug-related deaths in 2015. 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:

- ecstasy-type drugs – 100 per cent (15 out of 15);
- cocaine - 88 per cent (82 out of 93);
- alcohol - 79 per cent (84 out of 107);
- heroin/morphine - 77 per cent (266 out of 345);
- amphetamines – 71 per cent (12 out of 17);
- methadone - 63 per cent (157 out of 251);
- benzodiazepines - 61 per cent (117 out of 191);

- dihydrocodeine (or a dihydrocodeine-containing compound) - 60 per cent (56 out of 94); and
- codeine (or a codeine-containing compound) - 58 per cent (18 out of 31).

There were some differences between the distributions by age of people for whom the drugs listed in Table 6 were implicated in, or potentially contributed to, the cause of their deaths. For example, the under 25s accounted for 47 per cent of (the relatively small number of) deaths in which an ecstasy-type drug was implicated, or to which it potentially contributed, compared with only four per cent of all drug-related deaths. In addition, 38 per cent of the 93 'cocaine' deaths were of people who were aged 25-34, compared with 23 per cent of all drug-related deaths. About 65 percent of the 31 'codeine' deaths and about 46 per cent of the 94 'dihydrocodeine' deaths were of people aged 45 and over, compared with 37 per cent 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 31 per cent of all drug-related deaths in 2015, but for only 23 per cent of the deaths for which heroin/morphine were found, just 16 per cent of deaths for which cocaine was found, and none of the 15 deaths for which ecstasy-type drugs were found. The main differences between the distributions by age of those who died having taken the different drugs was that people aged under 25 accounted for 47 per cent of the 15 deaths following the use of ecstasy-type drugs compared with four per cent of all drug-related deaths; and for 8 per cent of the 105 deaths for which cocaine was found. People aged 25 to 34 accounted for 33 per cent of deaths for which ecstasy-type drugs were found, 36 per cent of deaths for which cocaine was found, and 36 per cent of deaths for which amphetamines were found, compared with 23 per cent of all drug-related deaths.

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. 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 (109 deaths) are the figures for particular drugs large enough for analysis of the ages and sexes of the people involved. The main point to note is that females accounted for 26 per cent of all deaths in 2015 for which only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to, the cause of death, but for only 18 per cent (20 out of 109) of the cases where heroin/morphine (and, perhaps, alcohol) was the only drug which was implicated in, or potentially contributed to, the cause of death.

3.4.8 Table 8 provides drug-related death rates per 1,000 population for a number of age-groups, and shows how these have changed, from 2000 to 2015. For much of that period, the drug-related death rate per 1,000 population was highest for people aged 25-34: it was 0.23 in 2015 and averaged 0.24 over the latest five years (from 2011 to 2015). However, the rate for 35-44 year olds was higher in 2011 and every year since, was 0.37 per 1,000 population in 2015, and had a latest 5-year average of 0.31. For both the 15-24 and 45-54 age-groups, the rate per 1,000 population has usually been much lower: for 15-24 year olds, it was 0.04 in 2015 and averaged 0.06 over the latest five years; for 45-54 year olds, while it was 0.23 in 2015, it had a latest 5-year average of 0.17. The rate for 55-64 year olds has never been more than 0.09 per 1,000 population. Since 2000, there have been increases

in the rates for all the age-groups apart from 15-24 year olds, whose rates have tended to decline (with some year-to-year fluctuations).

3.5 Death rates for problem drug users

3.5.1 The drug-related death rates per 1,000 population (shown in Table 8) are based on the size of the whole population of each age-group, the vast majority of whom do not use drugs. Therefore, those figures do not indicate the likely death rate for people who use drugs. Drug-related death rates for the part of the population whose put their lives at risk by using drugs can be calculated using the numbers of problem drug users (age 15-64) that are estimated by the Information Services Division (ISD) of NHS National Services Scotland. The latest such estimates, for the 2012/13 financial year, are available from the ISD web-site . For the purpose of ISD's estimates,'problem drug use' is defined as the problematic use of opiates (including illicit and prescribed methadone use) and/or the illicit use of benzodiazepines, and implies routine and prolonged use (as opposed to recreational and occasional use). It follows that ISD's estimates will be smaller than the total number of people who used illicit drugs at some time during the year.

3.5.2 Table 9 shows the annual average number of drug-related deaths for 2011-2015 and ISD's estimates of the number of problem drug users in 2012/13. The first two figures on the first row show that Scotland had 602 drug-related deaths (of all ages) per year (on average) between 2011 and 2015, and an estimated 61,500 problem drug users (aged 15-64) in 2012/13. Combining those figures gives an annual average of 9.8 drug-related deaths per 1,000 problem drug users. The difference between the coverage of the two figures ('all ages' for deaths; '15-64' for problem drug users) should not matter much, as Table 4 showed that there are relatively few drug-related deaths of people aged 0-14 or 65+.

3.5.3 Using ISD's estimates of the numbers of problem drug users by age and by sex in the same way, it appears that the annual average drug-death rate (per 1,000 problem drug users) is higher for males (10.0) than for females (9.2), and increases with age (4.0 for problem drug users who are aged 15-24, 7.6 for 25-34 year olds, and 13.0 for those aged 35-64). For each sex, the death rate clearly rises with age, though it should be noted that ISD did not consider the estimated numbers of female problem drug users broken down by age to be sufficiently reliable for publication.

3.5.4 The ISD publication explains that the estimates are produced by combining data from a number of sources, and provides '95 per cent confidence intervals' to indicate the likely margins of error in some of the figures. For the estimated total number of problem drug users for 2012/13, the 95 per cent confidence interval is from 59,900 to 63,300 (or roughly +/- 3 per cent). The values of the lower and upper ends of the confidence intervals can be used to calculate a likely range for the drug-related death rate. Dividing the annual average of 602 drug-related deaths by the value at the upper end (63,300 problem drug users) givers a minimum for the drug-death rate of 9.5 per 1,000 problem drug users; dividing by the value at the lower end (59,900 problem drug users) gives a maximum for the drug-death rate of 10.1 per 1,000 problem drug users.

3.5.5 ISD did not calculate 95 per cent confidence intervals for its estimates of problem drug users broken down by age and sex, but one would expect them to be wider (in percentage terms) for the smaller sub-groups of the population (that is generally the case for the 95 per cent confidence intervals for NHS Board and council areas in Tables HB5 and C5).

4. NHS Board areas: trends, causes, drugs reported, and death rates by age-group and relative to the estimated number of problem drug users

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). In this publication, the statistics for each NHS Board's area are based on the boundaries which apply with effect from 1 April 2014. The figures for earlier years show what the numbers would have been, had the new boundaries applied in those years. Table HB1 shows the numbers of drug-related deaths for each NHS Board area. Of the 706 deaths in 2015, 221 (31 per cent) were in the Greater Glasgow & Clyde NHS Board area. Lothian, with 100 (14 per cent), had the next highest total followed by Lanarkshire (73 or 10 per cent), Grampian (69 or 10 per cent), Tayside (63 or 9 per cent), Fife (44 or 6 per cent), and Ayrshire & Arran (43 or 6 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 (for example some previous editions of this publication showed that Greater Glasgow & Clyde had 147 deaths in 2004, 109 in 2005 and 156 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 2001-2005 and 2011-2015 were Greater Glasgow & Clyde (up by 56, from 128 to 184), Lothian (up by 47, from 45 to 92), Lanarkshire (up by 33, from 36 to 69), Tayside (up by 30, from 20 to 50), Fife (up by 25, from 15 to 40), Ayrshire & Arran (up by 18, from 24 to 42), Highland (up by 16, from 11 to 27), Forth Valley (up by 12, from 15 to 27) and Grampian (up by 11, from 38 to 49).

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 2011-2015) 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 602 drug-related deaths per year represented a rate of 0.11 per 1,000 population. The area with the highest rate was Greater Glasgow & Clyde (0.16); next highest was Tayside, with a rate of 0.12. Finally, the lower part of the table shows the number of 'extra' deaths that would be counted, for each area, in the consistent series (refer to paragraph 2.9 and Annex F). As all the figures are relatively small, it is clear that the use of the consistent series would not change markedly the level of, or the trend in, the number of drug-related deaths for any area.

4.4 Table HB2 gives a breakdown by cause of death for each NHS Board area for 2015. 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 website has versions of Table HB3 which give (i) figures for 2008 on

the standard basis and (ii) figures for 2009 onwards on the 'all drugs which were found to be present in the body' basis.

4.5 Table HB3 shows the drugs reported for NHS Board areas. Overall, heroin/morphine was believed to have been implicated in, or to have potentially contributed to, 49 per cent of the total number of drug-related deaths in 2015, and the figures for most of the most populous areas were not too far from this level: broadly speaking, around 40-60 per cent, with the exceptions of Lothian (34 out of 100, or 34 per cent), Ayrshire & Arran (29 out of 43, or 67 per cent) and Tayside (42 out of 63, or 67 per cent). Methadone was implicated in, or potentially contributed to, 36 per cent of drug-related deaths overall; with an unusually high proportion in Ayrshire & Arran (22 out of 43, or 51 per cent) and a rather low one in Lanarkshire (14 out of 73, or 19 per cent). The table also shows that benzodiazepines were implicated in, or potentially contributed to, high proportions of drug-related deaths in Grampian (43 out of 69, or 62 per cent) and Tayside (36 out of 63, or 57 per cent), and a low proportion in Lanarkshire (8 out of 73, or 11 per cent), compared to 27 per cent for Scotland as a whole - although this comparison might be affected by the differences in reporting practices which are mentioned in section 2.

4.6 Table HB4 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 2011-2015), 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 (for example when the annual averages for 2007 to 2011 were calculated, just three 15-24 year old drug-related deaths in Shetland caused it to have a rate for that age-group which was double that of Scotland as a whole). Of the more populous areas, Greater Glasgow & Clyde had the highest drug-related death rates for the three oldest of the five age-groups for which figures are provided: 0.48 for 35-44 year olds, 0.27 for the 45-54 age-group, and 0.10 for the 55-64 age-group; all well above the overall average rates for Scotland as a whole for the same 5-year period (0.31, 0.17 and 0.06 respectively). Fife and Tayside had rates for 25-34 year olds which were clearly above-average (0.33 and 0.34, respectively, compared with 0.23 for Scotland as a whole), and Highland had the highest rate for 15-24 year olds (0.10, compared with 0.06 for Scotland as a whole)

4.7 As mentioned in Section 3.5, Information Services Division (ISD) has estimated the numbers of problem drug users (aged 15-64) for parts of Scotland. Table HB5 provides those figures for NHS Board areas, with their '95 per cent confidence intervals', each area's estimated drug-related death rate per 1,000 problem drug users, and the likely range of values for that figure; Figure 2 shows the rates and their confidence intervals, and Section 3.5 gives more information about the basis of the figures. For Scotland as a whole, it is estimated that (between 2011 and 2015) there were, on average, 9.8 drug-related deaths per year per 1,000 problem drug users.

4.8 Among the more populous areas, this rate was lowest in Forth Valley and Greater Glasgow & Clyde (both 8.8) and highest in Fife (13.9) and Highland (13.3). The table shows wide (in percentage terms) confidence intervals for some areas, particularly for the ones with relatively small populations. As a result, some areas have wide likely ranges of values for their death rates, including some of the more populous areas (for example, for Fife, the likely range of values for the drug-related death rate is from 11.8 to 15.5 per 1,000 problem drug users).

4.9 There is a narrower (in percentage terms) range of values for the 'mainland' NHS Board areas when drug-related death rates are calculated on this basis (which takes account of the number of people who put their lives at risk) than when they are calculated per 1,000 population. For example, Table HB5 shows that the lowest 'mainland' drug-related death rate per 1,000 problem drug users was 7.8 (Dumfries & Galloway), and the highest was 13.9 (Fife), so the highest figure was less than twice the lowest one. In contrast, in Table HB4, the lowest 'mainland' drug-related death rate per 1,000 population was 0.07 (Dumfries & Galloway), and the highest was 0.16 (Greater Glasgow & Clyde), so the highest figure was more than double the lowest one. (The 'island' areas are excluded from such comparisons because their relatively small numbers may lead to large percentage fluctuations in their rates.)

5. Council areas (trends, causes, drugs reported and death rates by age-group) and areas with smaller populations

5.1 Tables C1 to C5 provide figures for individual council areas, and Figure 3 shows their death rate per 1,000 problem drug users. 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 (for example, 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 onwards on the 'all drugs which were found to be present in the body' basis.

5.2 As the numbers of drug-related deaths 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 National Records of Scotland (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, and examples of the fluctuations in and possible unreliability of figures for small areas, are available from the Vital Events – General Background Information and the Deaths – Background Information pages within the vital events section of the NRS website.

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 Scottish Neighbourhood Statistics. The database had records for 2,893 drug-related deaths (on the basis of the standard definition) in Scotland in the specified eight years (paragraph A4 of Annex A explains why there is a slight difference from the total of the published figures for those 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 one per cent 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 – that is,. areas which had, on average, at most three and a half 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 living in areas which had relatively few drug-related deaths.

Annex A: –The definition of drug-related deaths used for these statistics (the National Records of Scotland (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), which is mentioned in the References, considered (what were, at that time) the 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 GROS and, now, 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 (even if the pathologist did not consider the drug to have had any direct contribution to the 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. Examples of deaths which are not counted for this reason are:

- 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.

Also excluded from the GROS/NRS implementation of the definition are 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 any kind of pneumonia (for example, bronchopneumonia, lobar pneumonia or bilateral pneumonia), 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).
    - However, the statistics include some deaths for which the cause refers to both medical problems and the immediate effects of drugs (for example, 'intoxication', 'poisoning', 'toxicity', 'overdose' or 'adverse effects of'), and which were coded to one of the ICD10 codes listed in paragraph A2. For example, deaths for which the cause was given as 'bronchopneumonia, heroin intoxication' or 'hypoxic brain injury, morphine and methadone intoxication' would be included in these statistics. It would be assumed that either the person was killed by the effects of the drugs (rather than by the medical condition) or that the medical condition was an immediate

consequence of the drug-taking. In such cases, references such as ‘suspected drug overdose’ and ‘possible opiate intoxication’ are usually sufficient for a death to be counted in the statistics.

- 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 for 2006 and earlier years that were published previously and those which are produced now. 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 former 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 University of Hertfordshire and, prior to that, the Programme Manager 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, new analyses of the data for 2000 onwards now 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):

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

b) deaths coded to the following categories:
   - accidental poisoning (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. In this edition, the EMCDDA figures for some of the years from 2000 to 2014 have been revised slightly from those published previously, following advice, from Public Health England (which co-ordinates the provision of figures for the UK to the EMCDDA) that deaths satisfying some other criteria should be counted in the EMCDDA definition.

B4. Because National Records of Scotland (NRS) has details of all the deaths which were registered in Scotland, it can produce figures using the 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 4 show, the numbers produced using the three definitions tend to rise and fall in broadly similar ways, and so all three definitions give similar impressions of the long-term trend, although they differ regarding the numbers of deaths in each year. Figures based on the ONS 'wide' definition have been provided for 1979 onwards, but numbers based on the other two definitions are only available for 1996 and later years. A separate note, 'Figures for drug-related deaths for Scotland for 1995 and earlier years' explains why NRS cannot produce figures for drug-related deaths for 1995 and earlier years on the basis of the standard definition, comments on the potential reliability of the numbers on the basis of the ONS 'wide' definition for 1979 to 1999, and explains why it is not possible to produce reliable figures for drug-related deaths on that basis for 1978 or earlier years.

B5. As explained above, the ONS 'wide' definition includes all deaths coded to accidental poisoning, and to intentional self-poisoning by drugs, medicaments and biological substances, whether or not a drug listed under the Misuse of Drugs Act was present in the body. Table Y shows the numbers of deaths (on this basis) in each year for the latest year, and over the previous ten years, for which a range of drugs (including anti-depressants, anti-psychotics, paracetamol or a compound, and tramadol) were reported. Section 2 explains why there is a break in the series between 2007 and 2008. In some of the earlier editions of this publication, the table showed that, 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. The table also shows recent years' rises in the numbers of deaths involving certain drugs, such as gabapentin, mirtazapine and pregabalin.

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

- 321 deaths were counted by both GROS and SCDEA;
- 100 deaths were counted by GROS but not by SCDEA. These included:
    - 14 deaths occurring in December 2005 which were not registered until 2006;
    - 28 definite suicides;
    - 19 probable suicides (classified as 'events of undetermined intent');

- 8 cases coded to ‘accidental overdose’; and
- 29 cases coded to ‘drug abuse’.

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

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

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

- two deaths which occurred in December 2009 but which had not been registered until 2010 (and so were not in the GROS figures for 2009);
- a death caused by a medical condition upon which the consumption of controlled drugs had a bearing (GROS had counted this death as being due to the medical condition rather than as being drug-related); and
- 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 did not include suicides in their drug-related death figures because their need for such figures was to monitor the numbers of cases where people have died accidentally after taking controlled drugs, as they have a duty to investigate any potential criminal activity involved in the supply of controlled drugs to the deceased. The Police investigate suicides in a different way (for which it does not matter what method was used, such as legal or illegal drugs, hanging, or falling from a height), and therefore did not include suicides involving drugs in their drug-related death figures. In addition, NRS and other bodies may hold different information in some cases (for example, when registering a young person's death, a parent may say that the person's usual place of residence was the family's home address, whereas the Police records may hold a different address). This may sometimes lead to differences in the direction of the year-to-year change shown by NRS's and another body's statistics (for example, one set of data might suggest a slight rise, the other a slight fall). However, such differences between NRS's and other bodies' figures should not be a cause for concern, because they can be explained by the kinds of reasons given above. In addition, as mentioned in 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. For example, drug-related deaths which were known to be suicides were excluded from the National Drug-Related Deaths Database (Scotland) Report 2009, which was prepared by the Information Services Division (ISD) of NHS National Services Scotland, and is available (along with the corresponding reports for 2010 and later years) on the ISD website. However, that definition of drug-related deaths was changed to include confirmed suicides for the first time in the ISD database for 2012. ISD's database was established to collect detailed information, from a range of local data sources, on the nature and circumstances of people who had died a drug-related death - for example, including data on the person's social circumstances, medical and drug use history, and previous contact with health and criminal justice services. The ISD publication for 2009 included sections on

Sociodemographics, Drug Use History, Medical and Psychiatric History and Adverse Life Events, the Death, Toxicology and Substance Prescribing, and Contact With Services. It also had an appendix on the reasons for differences between ISD's figures and those given here, which include some differences in coverage and definitions (such as the exclusion of confirmed suicides for the years before 2012) and the fact that ISD's local contacts did not provide data for some drug-related deaths.

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

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

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

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

B11. The top part of Table Z gives the numbers of deaths counted as 'drug-related' on the basis of the 'wide' definition, with separate figures for:

- the basis used for the statistics in this publication (this is the Drug Strategy 'baseline' definition, as implemented by GROS/NRS);
- deaths which are within the 'baseline' definition but are excluded from the figures produced by GROS/NRS for reasons which are given in 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 per cent of intravenous drug users have the infection and around 35 per cent of people with the virus will have contracted it this way (source: BBC www.bbc.co.uk, 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 final part of Table Z shows the number of volatile substance abuse deaths in Scotland, which used to be produced and 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 could be counted as both 'drug-related' and 'volatile substance abuse' (for example, if the cause was 'combined toxic effects of methadone and butane'). ICDP produced its figures for Scotland using information from NRS, the Crown Office and Procurator Fiscal Service, and other sources.

However, ICDP's statistics related to the year of death (rather than the year of registration). More details of the figures that ICDP used to produce are given in its Volatile Substance Abuse Mortality Report, available via the news and publication section of the St George's website.

Annex C – References

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

Annex D – The questionnaire used to obtain further information about drug-related deaths, with effect from 2014

Note: Different questionnaires were used for 2007 and earlier years, and for 2008 to 2013. Copies of those questionnaires can be found in the relevant editions of this publication. Following consultation with members of the Pathologists sub-group of the National Forum on Drug-related Deaths, the version shown here was used with effect from 2014.

Confidential **Form ME4** (deaths reg'd 2014 on)
National Records of Scotland *Crown Office*

Deaths (i) involving or resulting from the use of drugs or solvents (e.g. illicit drugs, controlled substances that had been prescribed, or new psychoactive substances) or (ii) from other causes (e.g. from medical conditions, suicides, accidents, etc) in those cases where the deceased was a known or suspected drug/solvent abuser

***Please return to**:* Vital Events Branch, NRS, 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/problem drug/solvent abuser? Yes ☐ No ☐

2. Did the death involve or result from the use of drugs/solvents? Yes ☐
No ☐ ===> *if "No", go to Question 5*

3. Was the death the result of drug/solvent overdose / intoxication? Yes ☐ No ☐

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?

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 NRS to classify correctly this death ?

……
……

Annex E:– So-called ‘New Psychoactive Substances’

E1 The term ‘New Psychoactive Substances’ (NPSs) is meant to cover the kinds of substances that people have, in recent years, begun to use for intoxicating purposes. NPSs include so-called ‘legal highs’ (by which is meant substances which were legally available at the time of the death, whether or not they have since become controlled). In general, when an NPS first became available, it would not have been a controlled substance under the Misuse of Drugs Act 1971. Some NPSs may still not be controlled under the Act. The definition of NPSs therefore includes current so-called ‘legal highs’, and also substances which used to be described as ‘legal highs’ but are now controlled.

E2 Tables NPS1 to NPS3 show the numbers of deaths involving NPSs. The main points from those figures are set out in paragraph E8 onwards, but first we must say something about the kinds of statistics that are available and which drugs are counted as NPSs. The tables distinguish between deaths for which NPSs:

a) were implicated in, or potentially contributed to the death; and
b) were present but not considered to have contributed to the death.

In each case, the figures are sub-divided into:

(i) deaths which fall within the definition of ‘drug-related deaths’ that is used to produce the statistics that are given in the main body of this report (whether because the NPS was controlled at the time, or because the person had also used a controlled substance, like heroin or methadone); and
(ii) deaths not counted in the statistics in the main body of this report (for example cases where the deceased person appears to have used only an NPS that was not controlled at that time).

In addition, the figures under (a) are further sub-divided, in order to show the extent to which deaths appear to have been due to the use of one (or more) NPSs alone or due to the use of combination of them and other types of substance.

E3 Deaths involving a particular substance may be counted in different ways at different times, because the classification of that substance may have changed. For example, mephedrone is an NPS. It was a ‘legal high’ until 15 April 2010, because it was not a controlled substance until it became a Class B drug with effect from 00.01 hours on 16 April 2010. Therefore, a death which was due solely to mephedrone, with no other substance found to be present in the body, would be counted as follows:

- if it occurred up to 15 April 2010, it would not be included in this publication's statistics of drug-related deaths, because the death did not involve any substance that was controlled at the time of the death. However, it would be counted in the figures for deaths involving NPSs (for example, in the first line of part (a) (ii) of Table NPS2).
- if it occurred after 15 April 2010, it would be included in this publication's statistics of drug-related deaths, because the death involved a substance that was controlled at the time of death. It would also be counted in the figures for deaths involving NPSs (for example, in the first line of part (a) (i) of Table NPS2).

Note: National Records of Scotland (NRS) uses the date of death to determine how to count a drug because the information that NRS has does not include when the person used the drug.

E4. The next three paragraphs list the NPSs which are counted for the purpose of statistics of deaths registered in Scotland up to the end of 2015, distinguishing between:

- NPSs which were already controlled substances at the start of 2009 (as that was the first year in which deaths involving NPSs were registered in Scotland);
- NPSs which became controlled substances between the start of 2009 and the end of 2015 (that is, whose classification changed during the period covered by these figures for deaths involving NPSs); and
- NPSs which were not controlled substances at the end of 2015 (some of which may have since become controlled substances).

Note that these are not comprehensive lists of NPSs: they cover only the NPSs which were involved in deaths which were registered in Scotland by the end of 2015. (They do not include a few other NPSs whose names are in the look-up table that NRS uses to identify the types of substance that are involved in drug-related deaths.)

E5 The following NPSs were already controlled substances at the start of 2009:

- cathinone
- PMA / paramethoxyamphetamine
- PMMA / paramethoxymethamphetamine

A death due solely to one of these drugs would be counted in this publication's statistics of drug-related deaths. It would also be counted in the figures for deaths involving NPSs.

E6 The following NPSs became controlled substances between the start of 2009 and the end of 2015.

Substance	Controlled with effect from:
BZP / Benzylpiperazine	23 December 2009
CPP / Chlorophenylpiperazine	23 December 2009
TFMPP / Trifluoromethylphenlpiperazine	23 December 2009
MDPV / Methylenedioxypyrovalerone	16 April 2010
Mephedrone / 4-Methylmethcathinone	16 April 2010
4-MEC / Methylethcathinone/	16 April 2010
Methylone	16 April 2010
Naphyrone	23 July 2010
Phenazepam	13 June 2012
APB / 2-aminopropyl-benzofuran/ 5 APB / 6 APB	10 June 2013 (temporary class order); 10 June 2014 (class B drug)
API / 5-API / 5-IT / 5-(2-aminopropyl)indole - APB	10 June 2013 (temporary class order); 10 June 2014 (class B drug)
AMT / Alphamethyltryptamine	7 January 2015 (class A drug)
5-MEO-DALT	7 January 2015 (class A drug)
4-4’DMAR	11 March 2015 (class A drug)
Ethylphenidate	10 April 2015 (temporary class order)

A death due solely to one of these drugs would not be counted in this publication's statistics of drug-related deaths if it occurred before the relevant date, because it would not have involved a drug that was controlled at the time. However, it would be counted in the figures for deaths involving NPSs.

A death due solely to one of these drugs would be counted in this publication's statistics of drug-related deaths if the person died on or after the specified date. It would also be counted in the figures for deaths involving NPSs.

E7 The following are among the NPSs that had not become controlled substances by the end of 2015:

- Acetyl fentanyl
- Camfetamine
- Chloromethcathinone
- Diclazepam
- Diphenidine
- Etizolam
- Flubromazepam
- Flubromazolam
- Kratom
- Mexedrone
- Mitragynine
- MPA / Methylthienylpropamine / Methiopropamine
- MXP
- PVP
- Pyrazolam
- 5F PB 22

A death involving only these substances would not be counted in this publication's statistics of drug-related deaths because it would not have involved a drug that was controlled at the time. However, it would be counted in the figures for deaths involving NPSs.

E8 Table NPS1 provides the numbers of deaths involving NPSs which were registered in Scotland in 2015. The figures are broken down as described in paragraph E2, and also by the type(s) of NPS that were involved, distinguishing between cases where:

- benzodiazepine-type NPSs were present, with no other types of NPS present;
- other types of NPS were present, with no benzodiazepine-type NPS present; and
- both benzodiazepine-type NPSs and other types of NPS were present.

The figures in Table NPS1 may be understood better by looking also at Table NPS3, which lists all the substances that were reported to NRS for every death, registered in Scotland in 2015, which involved NPSs. From Table NPS3, one can observe which NPSs were found in the body in each case, whether the person had taken more than one NPS, and whether other substances (such as heroin, methadone and/or other 'traditional' drugs) were also present.

E9. The top part of Table NPS1 shows that there were 74 deaths in 2015 for which one or more NPSs were implicated in, or potentially contributed to, the cause of death. In 57 cases, the only NPSs present were benzodiazepines (usually etizolam, but sometimes another, such as diclazepam or phenazepam); in 17 cases, other types of NPS were present (for example ethylphenidate, mephedrone, methiopropamine); and there were no deaths for which both benzodiazepine NPSs and other types of NPS were present. Almost all of these deaths (72 out of 74) fall within the definition of 'drug-related deaths' that is used to produce the statistics given in the main body of this report –that is 72 out of 74 are included in the 706 drug-related deaths that were registered in 2015. In only a small proportion of cases (3 out of 74) were NPSs the only substances that were implicated in the death. This can be seen from part (i) of Table NPS3: its lists of the substances which were reported for each death show that, in most cases, 'traditional' drugs (such as heroin and methadone) were also implicated in these deaths.

E10. The middle of Table NPS1 provides a breakdown of the 74 deaths (in which one or more NPSs were implicated in, or potentially contributed to, the cause of death) by the deceased's person's age (for example, there were 17 aged 25-34, 34 were in the 35-44 age-group, and 17 were 45-54 year olds) and sex (47 were men).

E11. The lower part of Table NPS1 shows that there were 38 deaths in 2015 for which NPSs were present but were not considered to have contributed to the death. In most cases (30 out of 38) the only NPSs present were benzodiazepines; and almost all of the deaths (36 out of 38) were counted in the statistics in the main body of this report – that is 36 out of 38 are included in the 706 drug-related deaths that were registered in 2015. The table shows that most of these deaths were of people who were aged 35-44 (17) or 45-54 (13), and most were men (28). In Table NPS3, part (ii) lists the substances which were reported for such deaths: it shows that 'traditional' drugs (such as heroin and methadone) were usually implicated in these deaths.

E12. Table NPS2 provides a summary of the numbers of deaths which have involved NPSs in recent years. It appears that the first Scottish deaths involving NPSs were registered in 2009. Of course, it is possible that NPSs were involved in some deaths in Scotland in earlier years, but their presence was not identified (for example perhaps because other drugs were found, and it appeared to the investigators that those other drugs had caused the deaths) - but all the data can tell us is that none of the deaths that were registered in Scotland in 2008 or earlier years were reported to involve NPSs.

E13. The number of deaths involving NPSs increased rapidly between 2009 and 2013, and was almost unchanged in 2014 and 2015: 4 were registered in 2009, 11 in 2010, 47 in 2011, 47 in 2012, 113 in 2013, 114 in 2014 and 112 in 2015. The sub-totals at the foot of Table NPS2 show that this report's statistics of drug-related deaths for each year include almost all the deaths which involved NPSs (3 out of 4 such deaths in 2009, 8 out of 11 in 2010, 45 out of 47 in 2011, 45 out of 47 in 2012, 110 out of 113 in 2013, 106 out of 114 in 2014, and 108 out of 112 in 2015).

E14. Table NPS2 also shows that deaths for which NPSs were the only substances implicated in, or potentially contributing to, the death, generally represented only a small proportion of deaths which involved NPSs. The relevant numbers are 0 out of 4 in 2009, 7 out of 11 in 2010, 1 out of 47 in 2011, 5 out of 47 in 2012, 6 out of 113 in 2013, 7 out of 114 in 2014, and 3 out of 112 in 2015: so the proportion was small in every year apart from 2010. The main reason for 2010 being the exception is that there were several deaths in that year for which mephedrone was the only substance that was implicated in the death.

Annex F:– A consistent series of drug-related death numbers, based on the classification at the end of the latest year covered by the publication

F1. The standard definition of a drug-related death that National Records of Scotland (NRS) uses for its statistics is set out in paragraph A2 of Annex A. Simplifying slightly, NRS counts a death as 'drug-related' if:

either (a) the underlying cause of death was coded to one of certain specified categories of mental and behavioural disorders due to psychoactive substance use

or (b) the underlying cause was coded to one of certain specified categories of poisoning (or self-poisoning) and a drug listed under the Misuse of Drugs Act (1971) was known to be present in the body at the time of death.

F2. Following the definition, a note at the end of paragraph A2 adds that:

> If a drug's legal status changes, NRS aims to count it on the basis of its classification on the day the person died … . 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.

(Other notes explain why a few deaths in the specified categories are excluded.)

F3. As the 'mephedrone' example indicates, the requirement that a drug listed under the Misuse of Drugs Act must be present for a death to be counted as drug-related (under part [b] of the standard definition) means that whether NRS will count as drug-related a death from poisoning by a drug which is now controlled depends on when the death occurred: pre- or post-control. So the 'coverage' of NRS's standard definition 'widens' every time another drug is added to the list of controlled substances, because all subsequent deaths from poisoning by that drug will be counted as drug-related. In theory, this could cause a break in the continuity of NRS's figures for drug-related deaths (using the standard definition) every time that another drug becomes controlled.

F4. In practice, changes in the classification of drugs that occurred in the years up to and including 2013 had little effect on the figures: in that period, almost all the deaths which involved substances that were uncontrolled then, but are now controlled, also involved drugs that were already controlled, and so were counted as drug-related (in terms of the standard definition). For example, the foot of Table NPS2 (in the '… in 2013' edition of this publication) showed that almost all the deaths which involved New Psychoactive Substances (as defined for the purposes of that publication) were included in NRS's standard figures for drug-related deaths (in total, over the five years from 2009 to 2013, only 11 'NPS' deaths were not included in the standard figures). This is because (for example) there were few 'mephedrone only' deaths before it was controlled; any deaths from (say) 'mephedrone and diazepam intoxication' were counted as drug-related because (say) diazepam was present.

F5. However, changes in the classification of drugs that occurred in 2014 could have caused a noticeable break in the continuity of NRS's figures (based on the standard definition). Tramadol became a controlled substance with effect from 10 June 2014, along with some other substances. In 2013, there were over two dozen 'poisoning' deaths which involved only tramadol, or only tramadol and one or more other

substances which were not controlled at that time. Using NRS's standard definition, such deaths (and those like them in the first part of 2014) are not counted as drug-related, but their equivalents from 10 June 2014 are counted as drug-related. So tramadol being controlled with effect from 10 June 2014 could have increased the number of deaths in 2014 counted as drug-related by a few percent (compared to what would have happened without that change), and there could, in due course, have been a similar effect on the figure for 2015 (because that will be the first year for which tramadol was controlled throughout). It follows that NRS's standard figures could give a misleading impression of changes and any trends in drug-related deaths between 2013 and 2014, and between 2014 and 2015.

F6. Therefore, in order to give more accurate indications of changes and trends, NRS developed a 'consistent series' of numbers of drug-related deaths in previous years, which is based upon the classification of each substance at the end of the latest year covered by the publication. This 'consistent series' includes all the deaths involving tramadol, mephedrone and the other substances which have become controlled in recent years, regardless of their status at the time of death. It should show changes and trends which would be unaffected by the reclassification of substances. The consistent series goes back to 2000, as that is the first year of NRS's current drug-related deaths database.

F7. For simplicity, the consistent series is based on the classification of drugs at the end of the latest year covered by the publication (rather than, say, at the time the publication was prepared), so it does not take account of any reclassifications after the final year for which the publication gives figures. The basis of the consistent series is therefore 'as at 31 December 2014' for the 'in 2014' edition, 'as at 31 December 2015' for the 'in 2015' edition, 'as at 31 December 2016' for the 'in 2016' edition, and so on. In consequence, the consistent series' figures for previous years may be revised retrospectively every year, following more substances becoming controlled, if those substances had been involved in deaths (registered in earlier years) which had not been counted in the consistent series before because none of the substances involved were controlled at the end of the previous year.

F8. The consistent series appears in Table 1 in order to show the underlying trends for Scotland (comments on those figures can be found in Section 3.1). In addition, Tables CS1 and CS2 provide the consistent series' numbers of 'extra' deaths in each year (that is the deaths which have been added retrospectively to the numbers that were originally produced using the standard definition), broken down by the names of the relevant drugs (that is the drugs for which the change in classification has caused deaths which were not counted as drug-related at the time to be included in the consistent series) and by sex and age-group. Finally, the numbers of 'extra' deaths counted in the consistent series for NHS Board areas appper in Table HB1, in order to show their scale (comments on those figures can be found in Section 4). The consistent series and the numbers of 'extra' deaths do not appear in any other tables, because a proliferation of additional figures could cause confusion – especially as the consistent series figures may, in theory, be revised every year (for the reason given in the previous paragraph).

F9. Table CS1 shows how the number of 'extra' deaths, based on the classification of drugs at the end of the latest year covered by this edition, varied from year to year. It should be noted that the total number of 'extra' deaths could be less than the sum of the figures for the individual drugs, due to deaths which involved more than one of the drugs. For example, a death in (say) 2013 for which the cause was given as

'tramadol and zopiclone intoxication' would be counted in the figures for both of those drugs, but only once in the total number of 'extra' deaths.

F10. The number of 'extra' deaths for 2014 (5) is not on the same basis as the figure for 2013 (30), because the figure for 2014 includes (for example) 'tramadol only' deaths only for the period up to 9 June 2014 whereas the figure for 2013 includes such deaths for the whole of the year. 'Tramadol only' deaths in the rest of 2014 are included in the standard definition (and are therefore not counted as 'extra' deaths) because tramadol became a controlled substance with effect from 10 June 2014.

F11. The fact that the consistent series has only five 'extra' deaths for 2014 indicates that the drug classification changes in 2014 had less effect on the figures than one would have expected from the previous years' numbers of (for example .) 'tramadol only' deaths. With between 22 and 30 'extra' deaths in each of the previous five years, one would have expected a dozen or so between 1 January and 9 June 2014 (assuming that, say, 'tramadol only' deaths continued at the same rate, a dozen or so would be the 'pro rata' number for the part of 2014 for which they would not be counted in the standard definition). However, as it turned out, 1 January to 9 June 2014 had few (for example) 'tramadol only' deaths, so the consistent series has only five 'extra' deaths for 2014. (It will be seen from Table Y that tramadol was implicated in, or potentially contributed to, the cause of 38 deaths in 2014: markedly fewer than the 64 in 2013. Note: these figures cover both 'tramadol only' deaths and those for which tramadol and one or more other drugs were implicated in, or potentially contributed to, the cause of death.)

F12. The table shows that a majority of the 'extra' deaths involved tramadol, and most of the rest involved zopiclone (which has also been controlled from 10 June 2014). Three 'extra' deaths involved mephedrone, with none after 2010 because it has been controlled from 16 April 2010; similarly, there were no 'extra' deaths involving phenazepam after it became controlled on 13 June 2012. A few of the 'extra' deaths involved other substances, not controlled at the time, which were controlled by the end of the period covered by this edition, but none of tramadol, zopiclone, mephedrone or phenazepam.

F13. It can be seen, from Table CS2 that women tend to account for a higher proportion of the 'extra' deaths than of the deaths which are counted in the standard definition: in some years, there were more 'extra' deaths of women than of men. The table also shows the number of 'extra' deaths in each of five age-groups: in some recent years, this has tended to be highest for the '55 and over' age-group (in contrast to the standard figures for drug-related deaths, which are much higher for '25-34', '35-44' and '45-54' than for '55 and over' – refer to Table 4).

F14. NRS data for the years 2000 to 2013 combined (which do not appear in a table) show that the vast majority of the 'extra' deaths which involved tramadol were of people who were aged 35 and over, and that, of all the age-groups, 55+ was the one which had the largest number (around a third) of the 'extra' deaths which involved tramadol. This was the case for both males and females. The position was broadly similar for the 'extra' deaths which involved zopiclone. The numbers of extra deaths involving other substances were too small for such analysis.

Table 1: Drug-related deaths in Scotland, 1996 – 2015

Year	Drug-related deaths registered in year	Annual moving averages		Likely range of values around 5-year average [1]		Drug-related deaths: consistent series [2]	"Extra" deaths counted in consistent series [3]	
		3-year average	5-year average	likely lower	likely upper		number	percent [4]
1996	244							
1997	224	239						
1998	249	255	260	228	292			
1999	291	277	278	245	310			
2000	292	305	309	275	344	293	1	0.3%
2001	332	335	323	288	358	339	7	2.1%
2002	382	344	336	300	372	388	6	1.6%
2003	317	352	345	308	381	330	13	4.1%
2004	356	336	362	325	400	365	9	2.5%
2005	336	371	377	339	415	346	10	3.0%
2006	421	404	428	388	469	430	9	2.1%
2007	455	483	466	424	509	474	19	4.2%
2008	574	525	496	452	540	590	16	2.8%
2009	545	535	529	484	574	570	25	4.6%
2010	485	538	554	508	600	512	27	5.6%
2011	584	550	544	499	590	606	22	3.8%
2012	581	564	558	512	604	604	23	4.0%
2013	527	574	602	554	650	557	30	5.7%
2014	613	615				618	5	0.8%
2015	706					706	0	0.0%

Footnote

1) More information can be found in paragraph 3.1.2 of the commentary.

2) broadly speaking, counting deaths on the basis of the classification of the drugs at the end of the latest year which is covered by the publication (rather than on the standard definition basis of the classification at the time of the death). See Annex F for the full definition. The year 2000 is the first for which a "consistent series" figure is available, because that is the first year in NRS's current drug-related deaths database.

3) i.e. deaths which are counted in the consistent series but are not counted in the standard definition

4) percentage of the total number of drug-related deaths on the basis of the standard definition

Table 2: Drug-related deaths by underlying cause of death[1], Scotland, 1996 – 2015

Year	All causes of death	Underlying cause of death (ICD10 codes)				
		Drug abuse	Accidental poisoning	Intentional self-poisoning	Assault by drugs, etc.	Undetermined intent
		(F11-F16, F19)	(X40-X44)	(X60-X64)	(X85)	(Y10-Y14)
annual averages:						
1996-2000	260	189	13	34	0	25
2001-2005	345	232	23	36	0	54
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
old rules - 2011	584	417	56	36	0	75
old rules - 2012	581	381	72	65	0	63
old rules - 2013	527	359	74	50	1	43
old rules - 2014	613	429	108	45	0	31
old rules - 2015	706	495	123	54	0	34
2011-2015 average (old coding rules)	602	416	87	50	0	49
new coding rules						
2011	584	12	346	36	0	190
2012	581	26	365	65	0	125
2013	527	22	366	50	1	88
2014	613	32	470	45	0	66
2015	706	49	553	54	0	50
2011-2015 average (new coding rules)	602	28	420	50	0	104

Footnote

1) The coding rules were changed with effect from the start of 2011, as explained in paragraph 2.6 of the commentary.

Briefly, 'drug abuse' deaths from 'acute intoxication' were previously counted under 'mental and behavioural disorders due to psychoactive substance use' (unless they were known to be due to intentional self-harm or assault). They are now counted under the appropriate 'poisoning' category.

For example, if the cause of death of a known drug abuser was given as 'adverse effects of heroin' (and it was not intentional self-harm or assault), the underlying cause of death would be coded as follows:

(a) up to 2010 - as 'F11 - mental and behavioural disorders due to use of opioids'

(b) from 2011 - the appropriate 'poisoning' category, such as 'X42 - accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens) not elsewhere classified'

National Records of Scotland has estimated what the figures for 2011 onwards would have been, had the data been coded using the old rules.

Table 3: Drug-related deaths by selected drugs reported[1], Scotland, 1996 – 2015

Year	All drug-related deaths	Heroin / morphine [2]	Methadone	Heroin / morphine, Methadone or Bupren-orphine	Codeine or a codeine-containing compound	Dihydro-codeine or a d.h.c-containing compound	Any opiate or opioid	Benzodiazepines		Cocaine	Ecstasy-type	Amphet-amines	Alcohol
								Any benzo-diazepine	of which: Diazepam				
annual averages:													
1996-2000	260	128	74	..	..	..	..	..	116	6	7	..	91
2001-2005	345	212	81	264	15	49	307	173	145	32	16	10	131
1996	244	84	100	..	..	..	..	..	84	3	9	..	87
1997	224	74	86	..	..	..	..	..	93	5	2	..	70
1998	249	121	64	..	..	..	..	..	113	4	3	..	86
1999	291	167	63	..	..	..	..	..	142	12	8	..	89
2000	292	196	55	232	17	32	263	164	146	4	11	3	123
2001	332	216	69	253	9	51	301	182	156	19	20	5	140
2002	382	248	98	309	11	55	339	245	214	31	20	13	156
2003	317	175	87	239	18	51	285	186	153	29	14	10	128
2004	356	225	80	275	25	41	324	140	113	38	17	10	116
2005	336	194	72	246	12	49	288	110	90	44	10	11	114
2006	421	260	97	328	25	42	366	94	78	33	13	11	131
2007	455	289	114	370	15	50	409	109	79	47	11	11	157
2008	574	324	169	445	24	67	507	149	115	36	5	11	167
2009	545	322	173	432	33	64	498	154	116	32	2	6	165
2010	485	254	174	395	11	58	442	122	93	33	0	3	127
2011	584	206	275	430	32	85	524	185	123	36	8	24	129
2012	581	221	237	399	33	84	499	196	160	31	9	18	111
2013	527	221	216	383	33	81	461	149	107	45	17	27	103
2014	613	309	214	449	38	69	535	121	86	45	14	22	106
2015	706	345	251	493	31	94	606	191	128	93	15	17	107
annual averages:													
2003-2007	377	229	90	292	19	47	334	128	103	38	13	11	129
2008-2012	554	265	206	420	27	72	494	161	121	34	5	12	140
2011-2015	602	260	239	431	33	83	525	168	121	50	13	22	111

Footnotes

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 became the standard basis for figures for individual drugs with effect from "Drug-related Deaths in Scotland in 2009'.

There may be other differences between years and/or areas in the way in which the information was produced - more information can be found in Section 2 of the commentary.

2) More information can be found in paragraph 3.3.1 of the commentary.

Table 4: Drug-related deaths by sex and age, Scotland, 1996 – 2015

Year	Drug-related deaths	Sex		Age-group [1]							Age		
		Male	Female	14 and under	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 and over	Lower quartile	Median	Upper quartile
annual averages:													
1996-2000	260	207	53	83		108	46	12	10		..	..	..
2001-2005	345	278	66	0	77	132	92	30	8	6	..	..	..
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	0	73	126	69	16	3	5	25	30	36
2001	332	267	65	1	79	140	70	31	8	4	25	31	38
2002	382	321	61	0	100	153	92	27	7	3	24	30	37
2003	317	256	61	0	78	123	81	20	11	6	25	31	37
2004	356	289	67	0	81	138	92	35	2	8	25	31	38
2005	336	259	77	1	47	104	126	37	11	10	28	36	41
2006	421	334	87	0	69	154	127	54	15	1	27	34	40
2007	455	393	62	0	94	149	149	45	11	7	26	34	41
2008	574	461	113	0	92	211	174	71	17	9	27	34	41
2009	545	413	132	2	69	178	189	78	20	9	28	35	43
2010	485	363	122	0	65	161	158	76	20	5	28	35	43
2011	584	429	155	0	58	184	212	94	26	10	30	37	43
2012	581	416	165	0	46	171	199	115	34	16	31	38	46
2013	527	393	134	0	32	138	184	125	39	9	32	40	47
2014	613	452	161	1	46	157	213	148	36	12	32	40	47
2015	706	484	222	0	30	163	249	183	61	20	34	41	49
2011-2015 average	602	435	167	0	42	163	211	133	39	13	..	..	..

Footnote

1) 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 - further information can be found in Annex A, paragraph A4.

Table 5: Drug-related deaths by sex, age and underlying cause of death[1], Scotland, 2015

	All causes of death	Underlying cause of death (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)
(i) New coding rules						
All deaths	**706**	49	553	54	0	50
Males	**484**	33	393	31	0	27
Females	**222**	16	160	23	0	23
Under 25	**30**	1	28	1	0	0
25-34	**163**	11	140	3	0	9
35-44	**249**	21	195	16	0	17
45-54	**183**	13	138	17	0	15
55 and over	**81**	3	52	17	0	9
Males						
Under 25	**24**	1	23	0	0	0
25-34	**118**	5	105	2	0	6
35-44	**170**	15	138	9	0	8
45-54	**122**	9	94	12	0	7
55 and over	**50**	3	33	8	0	6
Females						
Under 25	**6**	0	5	1	0	0
25-34	**45**	6	35	1	0	3
35-44	**79**	6	57	7	0	9
45-54	**61**	4	44	5	0	8
55 and over	**31**	0	19	9	0	3
(ii) Old coding rules						
All deaths	**706**	495	123	54	0	34
Males	**484**	357	78	31	0	18
Females	**222**	138	45	23	0	16
Under 25	**30**	18	11	1	0	0
25-34	**163**	136	21	3	0	3
35-44	**249**	192	31	16	0	10
45-54	**183**	125	29	17	0	12
55 and over	**81**	24	31	17	0	9
Males						
Under 25	**24**	15	9	0	0	0
25-34	**118**	102	11	2	0	3
35-44	**170**	137	20	9	0	4
45-54	**122**	89	16	12	0	5
55 and over	**50**	14	22	8	0	6
Females						
Under 25	**6**	3	2	1	0	0
25-34	**45**	34	10	1	0	0
35-44	**79**	55	11	7	0	6
45-54	**61**	36	13	5	0	7
55 and over	**31**	10	9	9	0	3

Footnote

1) The coding rules were changed with effect from the start of 2011, as explained in paragraph 2.6 of the commentary.
Briefly, 'drug abuse' deaths from 'acute intoxication' were previously counted under 'mental and behavioural disorders due to psychoactive substance use' (unless they were known to be due to intentional self-harm or assault). They are now counted under the appropriate 'poisoning' category.

For example, if the cause of death of a known drug abuser was given as 'adverse effects of heroin' (and it was not intentional self-harm or assault), the underlying cause of death would be coded as follows:

(a) up to 2010 - as 'F11 - mental and behavioural disorders due to use of opioids'
(b) from 2011 - the appropriate 'poisoning' category, such as 'X42 - accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens) not elsewhere classified'

National Records of Scotland has estimated what the figures for 2015 would have been, had the data been coded using the old rules.

Table 6: Drug-related deaths by sex, age and selected drugs reported[1], Scotland, 2015

	All drug-related deaths	Heroin / morphine [2]	Methadone	Heroin / morphine, Methadone or Bupren-orphine	Codeine or a codeine-containing compound	Dihydro-codeine or a d.h.c-containing compound	Any opiate or opioid	Benzodiazepines		Cocaine	Ecstasy-type	Amphet-amines	Alcohol
								Any benzo-diazepine	of which: Diazepam				
(i) drugs which were implicated in, or which potentially contributed to, the cause of death													
All deaths	**706**	**345**	**251**	**493**	**31**	**94**	**606**	**191**	**128**	**93**	**15**	**17**	**107**
Males	**484**	266	157	352	18	56	414	117	80	82	15	12	84
Females	**222**	79	94	141	13	38	192	74	48	11	0	5	23
Under 25	**30**	12	3	17	1	4	21	7	2	8	7	1	7
25-34	**163**	101	59	127	1	13	137	56	41	35	5	4	34
35-44	**249**	128	97	187	9	34	217	78	53	30	2	8	35
45-54	**183**	74	77	123	13	25	161	38	27	17	1	4	14
55 and over	**81**	30	15	39	7	18	70	12	5	3	0	0	17
Males													
Under 25	**24**	9	2	12	1	2	15	6	2	8	7	1	7
25-34	**118**	81	38	95	0	10	100	38	26	32	5	3	28
35-44	**170**	101	61	132	4	19	148	48	34	24	2	5	27
45-54	**122**	54	49	85	10	14	107	21	16	16	1	3	10
55 and over	**50**	21	7	28	3	11	44	4	2	2	0	0	12
Females													
Under 25	**6**	3	1	5	0	2	6	1	0	0	0	0	0
25-34	**45**	20	21	32	1	3	37	18	15	3	0	1	6
35-44	**79**	27	36	55	5	15	69	30	19	6	0	3	8
45-54	**61**	20	28	38	3	11	54	17	11	1	0	1	4
55 and over	**31**	9	8	11	4	7	26	8	3	1	0	0	5
(ii) all drugs which were found to be present in the body													
All deaths	**706**	**356**	**272**	**509**	**63**	**126**	**629**	**501**	**434**	**105**	**15**	**25**	**258**
Males	**484**	274	172	359	35	75	423	336	290	88	15	17	189
Females	**222**	82	100	150	28	51	206	165	144	17	0	8	69
Under 25	**30**	13	4	17	3	4	21	16	11	8	7	1	8
25-34	**163**	101	63	130	7	20	140	120	108	38	5	9	71
35-44	**249**	134	109	195	25	44	225	193	166	39	2	9	90
45-54	**183**	76	80	126	17	37	170	131	116	17	1	6	55
55 and over	**81**	32	16	41	11	21	73	41	33	3	0	0	34
Males													
Under 25	**24**	10	3	12	2	2	15	13	9	8	7	1	8
25-34	**118**	81	40	96	3	15	100	87	77	34	5	7	59
35-44	**170**	105	71	136	13	25	153	130	110	28	2	5	61
45-54	**122**	56	51	87	12	21	110	86	78	16	1	4	39
55 and over	**50**	22	7	28	5	12	45	20	16	2	0	0	22
Females													
Under 25	**6**	3	1	5	1	2	6	3	2	0	0	0	0
25-34	**45**	20	23	34	4	5	40	33	31	4	0	2	12
35-44	**79**	29	38	59	12	19	72	63	56	11	0	4	29
45-54	**61**	20	29	39	5	16	60	45	38	1	0	2	16
55 and over	**31**	10	9	13	6	9	28	21	17	1	0	0	12

Footnotes

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

Part (ii) 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) More information can be found in paragraph 3.3.1 of the commentary.

Table 7: Drug-related deaths involving only one drug by sex, age and selected drugs reported[1], Scotland, 2015

	Any drug: all such deaths	Heroin / morphine [2]	Methadone	Heroin / morphine, Methadone or Buprenorphine	Codeine or a codeine-containing compound	Dihydrocodeine or a d.h.c-containing compound	Any opiate or opioid	Benzodiazepines		Cocaine	Ecstasy-type	Amphetamines	Any other drug [3]	Alcohol (with only one drug - see the examples given in footnote 1)
								Any benzodiazepine	of which: Diazepam					
(i) only one drug (and, perhaps, alcohol) was found to be present in the body														
All such deaths	**73**	**22**	**5**	**30**	**2**	**6**	**47**	**5**	**4**	**4**	**1**	**1**	**15**	**26**
Males	59	19	4	26	1	4	39	5	4	3	1	1	10	24
Females	14	3	1	4	1	2	8	0	0	1	0	0	5	2
Under 25	2	1	1	2	0	0	2	0	0	0	0	0	0	1
25-34	16	5	1	6	0	0	7	0	0	3	1	0	5	6
35-44	22	6	1	8	0	1	11	2	2	1	0	1	7	7
45-54	16	4	2	7	2	2	12	3	2	0	0	0	1	5
55 and over	17	6	0	7	0	3	15	0	0	0	0	0	2	7
Males														
Under 25	2	1	1	2	0	0	2	0	0	0	0	0	0	1
25-34	11	3	1	4	0	0	5	0	0	2	1	0	3	5
35-44	19	6	1	8	0	1	11	2	2	1	0	1	4	7
45-54	12	3	1	5	1	2	8	3	2	0	0	0	1	4
55 and over	15	6	0	7	0	1	13	0	0	0	0	0	2	7
Females														
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-34	5	2	0	2	0	0	2	0	0	1	0	0	2	1
35-44	3	0	0	0	0	0	0	0	0	0	0	0	3	0
45-54	4	1	1	2	1	0	4	0	0	0	0	0	0	1
55 and over	2	0	0	0	0	2	2	0	0	0	0	0	0	0
(ii) only one drug (and, perhaps, alcohol) was implicated in, or potentially contributed to, the cause of death *(other drugs may have been reported as being present, but were not considered to have had any direct contribution to the death)*														
All such deaths	**248**	**109**	**34**	**148**	**6**	**25**	**197**	**6**	**4**	**14**	**2**	**6**	**23**	**50**
Males	183	89	23	117	4	14	150	5	4	10	2	3	13	41
Females	65	20	11	31	2	11	47	1	0	4	0	3	10	9
Under 25	7	4	1	5	0	2	7	0	0	0	0	0	0	1
25-34	58	34	6	41	0	2	45	0	0	6	1	0	6	15
35-44	84	40	12	53	0	5	63	2	2	4	1	4	10	17
45-54	65	20	13	35	4	10	54	4	2	2	0	2	3	9
55 and over	34	11	2	14	2	6	28	0	0	2	0	0	4	8
Males														
Under 25	5	3	1	4	0	1	5	0	0	0	0	0	0	1
25-34	41	28	3	32	0	1	34	0	0	3	1	0	3	12
35-44	62	33	7	41	0	3	48	2	2	4	1	2	5	14
45-54	48	15	10	27	3	6	40	3	2	2	0	1	2	6
55 and over	27	10	2	13	1	3	23	0	0	1	0	0	3	8
Females														
Under 25	2	1	0	1	0	1	2	0	0	0	0	0	0	0
25-34	17	6	3	9	0	1	11	0	0	3	0	0	3	3
35-44	22	7	5	12	0	2	15	0	0	0	0	2	5	3
45-54	17	5	3	8	1	4	14	1	0	0	0	1	1	3
55 and over	7	1	0	1	1	3	5	0	0	1	0	0	1	0

Footnotes

1) Part (i) 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 (i) gives the number of drug-related deaths for which alcohol was found to be present in the body together with only one drug.

Part (ii) 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 (ii) 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
(c) cocaine, methadone and alcohol were all implicated would not be counted at all in this table.

NB: almost all the deaths which are counted in part (i) of the table are also counted in part (ii) of the table.
However, there may be a few exceptions:
a drug-related death for which National Records of Scotland (NRS) was told that only one drug (and, perhaps, alcohol) was found to be present, and for which NRS was not told that it was considered to have been implicated in (or potentially contributed to) the cause of the death, will be counted in part (i) of the table but not in part (ii).
As a result, an occasional figure in part (i) of the table may be larger than the corresponding figure in part (ii) of the table.

2) More information can be found in paragraph 3.3.1 of the commentary.

3) i.e. any kind of drug other than an opiate or opioid, a benzodiazepine, cocaine, an ecstasy-type drug or an amphetamine.

Table 8: Drug-related deaths per 1,000 population, Scotland, 2000 to 2015

	Age-group						
	15 - 24 [1]	25 - 34	35 - 44	45 - 54	55 - 64 [2]	Ages 15 - 64	All ages [3]
average of rates for 2000 to 2004	0.13	0.20	0.10	0.04	0.01	0.10	0.07
average of rates for 2001 to 2005	0.12	0.20	0.12	0.04	0.01	0.10	0.07
2000	0.12	0.18	0.09	0.02	0.01	0.09	0.06
2001	0.12	0.20	0.09	0.04	0.01	0.10	0.07
2002	0.16	0.23	0.12	0.04	0.01	0.11	0.08
2003	0.12	0.19	0.10	0.03	0.02	0.09	0.06
2004	0.12	0.22	0.12	0.05	0.00	0.10	0.07
2005	0.07	0.16	0.16	0.05	0.02	0.10	0.07
2006	0.10	0.24	0.16	0.08	0.02	0.12	0.08
2007	0.14	0.23	0.19	0.06	0.02	0.13	0.09
2008	0.14	0.33	0.22	0.09	0.03	0.16	0.11
2009	0.10	0.27	0.25	0.10	0.03	0.15	0.10
2010	0.09	0.24	0.21	0.10	0.03	0.14	0.09
2011	0.08	0.27	0.29	0.12	0.04	0.16	0.11
2012	0.07	0.25	0.28	0.14	0.05	0.16	0.11
2013	0.05	0.20	0.27	0.16	0.06	0.15	0.10
2014	0.07	0.22	0.32	0.18	0.05	0.17	0.11
2015	0.04	0.23	0.37	0.23	0.09	0.19	0.13
average of rates for 2011 to 2015	0.06	0.24	0.31	0.17	0.06	0.17	0.11

Footnotes

1) Some 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) Some 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 relatively few drug-related deaths of people aged 65 and over.

3) Including ages 0-14 and 65+.

Table 9: Drug-related deaths by sex and age-group: average for 2011 to 2015, and relative to the estimated number of problem drug users

	2011-2015 average number of drug-related deaths per year	Problem drug users (aged 15-64) in 2012/13 [1]				Annual average drug-deaths: 2011-2015 per 1,000 problem drug users in 2012/13 [4]		
			95% Confidence Interval [2]				Likely range of values	
		Estimate	Lower end	Upper end	+ / - [3]	Estimate	from [5]	to [5]
All	**602**	**61,500**	**59,900**	**63,300**	**3%**	**9.8**	**9.5**	**10.1**
Males	435	43,300	..	..	..	10.0	..	..
Females	167	18,200	..	..	..	9.2	..	..
15 to 24	42	10,500	..	..	..	4.0	..	..
25 to 34	163	21,500	..	..	..	7.6	..	..
35 to 64	384	29,500	..	..	..	13.0	..	..
Males								
15 to 24	34	6,400	..	..	..	5.3	..	..
25 to 34	124	14,700	..	..	..	8.5	..	..
35 to 64	268	22,200	..	..	..	12.1	..	..
Females [6]								
15 to 24	9	4,100	..	..	..	2.1	..	..
25 to 34	38	6,800	..	..	..	5.6	..	..
35 to 64	115	7,300	..	..	..	15.8	..	..

Footnotes

1) Estimates of problem drug users aged 15 to 64, as published by the Information Services Division (ISD) of NHS National Services Scotland - REVISED estimates, as published by ISD on 4 March 2016.

2) The 95% Confidence Intervals are the range within which it is expected that the true value will lie. On the basis of statistical theory, there is only a 5% chance that a 95% Confidence Interval will not include the (unknown) true value of the quantity which is being estimated - so, on average, one would expect that 19 out of 20 of all 95% Confidence Intervals will include the (unknown) true values. ISD did not publish confidence intervals for the numbers for each sex or for each age-group.

3) The average of the percentage differences between (a) the estimate and the lower end of the 95% Confidence Interval and (b) the estimate and the upper end of the 95% Confidence Interval. It is calculated using the rounded values of the estimate and the two ends.

4) These death rates are broad indications only, as (e.g.) the estimated numbers of problem drug users may be subject to wide confidence intervals.

5) The 'from' value in the range for the rate is calculated using the upper end of the 95% Confidence Interval for the estimated number of problem drug users, and the 'to' value in the range for the rate is calculated using the lower end of the 95% Confidence Interval for the estimated number of problem drug users.

6) The 'female' figure for each age-group has been estimated by subtracting the corresponding 'male' figure from the total for the age-group. ISD did not publish estimates of the number of female problem drug users broken down by age-group because of their potential unreliability.

Table HB1: Drug-related deaths by NHS Board area, 2005 - 2015 (with averages for 2001-2005 and 2011-2015)

NHS Board area [2]	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annual averages 2001 to 2005	Annual averages 2011 to 2015	Population in 2013	2011-2015 average deaths per 1,000 population [1]
(a) Drug-related deaths - standard definition															
Scotland	**336**	**421**	**455**	**574**	**545**	**485**	**584**	**581**	**527**	**613**	**706**	**345**	**602**	**5,327,700**	**0.11**
Ayrshire & Arran	15	25	36	40	39	31	47	43	36	43	43	24	42	372,240	0.11
Borders	7	2	4	7	5	9	8	7	8	11	13	2	9	113,880	0.08
Dumfries & Galloway	7	5	10	9	8	6	12	6	9	13	11	8	10	150,280	0.07
Fife	21	18	28	37	32	35	34	38	39	46	44	15	40	366,900	0.11
Forth Valley	14	24	26	23	14	18	26	31	24	25	31	15	27	299,670	0.09
Grampian	23	47	45	41	52	44	58	31	50	36	69	38	49	579,200	0.08
Greater Glasgow & Clyde [3]	109	156	147	188	193	158	183	187	138	189	221	128	184	1,137,920	0.16
Highland [3]	13	12	16	24	21	10	33	22	18	25	35	11	27	320,980	0.08
Lanarkshire	41	46	58	53	54	62	61	67	75	67	73	36	69	652,590	0.11
Lothian	58	46	54	94	81	73	73	90	90	105	100	45	92	849,720	0.11
Orkney	0	1	0	1	0	2	0	1	1	0	1	0	1	21,560	0.03
Shetland	1	2	2	1	0	2	3	2	0	4	1	1	2	23,200	0.09
Tayside	26	35	29	53	44	34	45	55	37	48	63	20	50	412,160	0.12
Western Isles	1	1	0	3	2	1	1	1	2	1	1	1	1	27,400	0.04
(b) extra deaths counted in the consistent series [4]															
Scotland	**10**	**9**	**19**	**16**	**25**	**27**	**22**	**23**	**30**	**5**	**0**				
Ayrshire & Arran	1	2	3	0	1	2	2	1	1	1	0				
Borders	0	0	0	0	0	0	2	0	0	0	0				
Dumfries & Galloway	0	1	0	0	1	0	1	0	1	0	0				
Fife	1	0	2	0	2	3	2	3	1	0	0				
Forth Valley	2	1	0	1	1	0	0	1	0	0	0				
Grampian	0	1	1	2	5	3	1	1	3	1	0				
Greater Glasgow & Clyde [3]	3	3	8	3	4	7	6	7	6	1	0				
Highland [3]	0	0	0	0	1	3	3	2	1	0	0				
Lanarkshire	1	1	2	2	5	3	2	6	5	0	0				
Lothian	2	0	1	4	3	2	0	2	6	1	0				
Orkney	0	0	0	0	0	0	1	0	0	0	0				
Shetland	0	0	0	0	0	0	0	0	0	0	0				
Tayside	0	0	2	4	2	4	2	0	5	1	0				
Western Isles	0	0	0	0	0	0	0	0	1	0	0				

Footnotes

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

2) The statistics for each area are based on the boundaries that apply with effect from 1st April 2014. Earlier years' figures show what the numbers would have been had the new boundaries applied in those years. 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 - further information can be found in Annex A, paragraph A4.

3) Including the relevant parts of the former Argyll & Clyde Board area.

4) broadly speaking, the additional deaths which would be counted on the basis of the classification of the drugs at the end of the latest year which is covered by the publication (rather than on the standard definition basis of the classification at the time of the death). See Annex F for the full definition.

Table HB2: Drug-related deaths by underlying cause of death[1] and NHS Board area, 2015

NHS Board area	All causes of death	Underlying cause of death (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)
(i) New coding rules						
Scotland	**706**	**49**	**553**	**54**	**0**	**50**
Ayrshire & Arran	43	0	40	2	0	1
Borders	13	1	5	4	0	3
Dumfries & Galloway	11	2	8	0	0	1
Fife	44	2	31	5	0	6
Forth Valley	31	3	20	3	0	5
Grampian	69	1	51	7	0	10
Greater Glasgow & Clyde	221	25	180	9	0	7
Highland	35	0	23	5	0	7
Lanarkshire	73	4	61	6	0	2
Lothian	100	7	79	7	0	7
Orkney	1	0	1	0	0	0
Shetland	1	0	1	0	0	0
Tayside	63	4	53	5	0	1
Western Isles	1	0	0	1	0	0
(ii) Old coding rules						
Scotland	**706**	**495**	**123**	**54**	**0**	**34**
Ayrshire & Arran	43	38	3	2	0	0
Borders	13	5	1	4	0	3
Dumfries & Galloway	11	9	1	0	0	1
Fife	44	33	4	5	0	2
Forth Valley	31	25	1	3	0	2
Grampian	69	54	3	7	0	5
Greater Glasgow & Clyde	221	159	47	9	0	6
Highland	35	18	5	5	0	7
Lanarkshire	73	39	26	6	0	2
Lothian	100	69	19	7	0	5
Orkney	1	1	0	0	0	0
Shetland	1	1	0	0	0	0
Tayside	63	44	13	5	0	1
Western Isles	1	0	0	1	0	0

Footnote

1) The coding rules were changed with effect from the start of 2011, as explained in paragraph 2.6 of the commentary.

Briefly, 'drug abuse' deaths from 'acute intoxication' were previously counted under 'mental and behavioural disorders due to psychoactive substance use' (unless they were known to be due to intentional self-harm or assault). They are now counted under the appropriate 'poisoning' category.
For example, if the cause of death of a known drug abuser was given as 'adverse effects of heroin' (and it was not intentional self-harm or assault), the underlying cause of death would be coded as follows:
(a) up to 2010 - as 'F11 - mental and behavioural disorders due to use of opioids'.
(b) from 2011 - the appropriate 'poisoning' category, such as 'X42 - accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens) not elsewhere classified'.

National Records of Scotland has estimated what the figures for 2015 would have been, had the data been coded using the old rules.

Table HB3: Drug-related deaths by selected drugs reported[1] and NHS Board area, 2015

NHS Board area	All drug-related deaths	Heroin / morphine [2]	Methadone	Heroin / morphine, Methadone or Bupren-orphine	Codeine or a codeine-containing compound	Dihydro-codeine or a d.h.c-containing compound	Any opiate or opioid	Benzodiazepines		Cocaine	Ecstasy-type	Amphet-amines	Alcohol
								Any benzo-diazepine	of which: Diazepam				
Scotland	**706**	**345**	**251**	**493**	**31**	**94**	**606**	**191**	**128**	**93**	**15**	**17**	**107**
Ayrshire & Arran	43	29	22	38	0	3	41	10	2	9	0	1	8
Borders	13	8	0	8	2	2	12	1	1	0	0	0	0
Dumfries & Galloway	11	6	2	7	0	1	8	0	0	0	2	0	2
Fife	44	27	19	34	0	3	37	11	8	1	1	2	7
Forth Valley	31	18	10	21	0	4	24	8	7	4	0	2	5
Grampian	69	29	33	48	3	12	61	43	30	16	2	0	10
Greater Glasgow & Clyde	221	99	77	154	10	24	187	42	25	42	1	10	35
Highland	35	14	9	21	2	5	29	12	6	3	1	0	4
Lanarkshire	73	38	14	46	5	8	60	8	3	8	4	1	14
Lothian	100	34	43	66	4	20	86	19	17	8	3	1	9
Orkney	1	0	0	0	0	1	1	1	1	0	0	0	0
Shetland	1	1	0	1	0	0	1	0	0	0	0	0	0
Tayside	63	42	22	49	5	10	58	36	28	2	1	0	13
Western Isles	1	0	0	0	0	1	1	0	0	0	0	0	0

Footnotes

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 has been the standard basis for figures for individual drugs with effect from "Drug-related Deaths in Scotland in 2009".
There may be other differences between years and/or areas in the way in which the information was produced - more information can be found in Section 2 of the commentary.
2) More information can found in paragraph 3.3.1 of the commentary.

Table HB4: Drug-related deaths per 1,000 population, NHS Board areas, annual averages for 2011 to 2015 [1]

	Age-group						
	15 - 24 [2]	25 - 34	35 - 44	45 - 54	55 - 64 [3]	Ages 15 - 64	All ages [4]
Scotland [5]	**0.06**	**0.23**	**0.31**	**0.17**	**0.06**	**0.17**	**0.11**
Ayrshire & Arran	0.08	0.28	0.35	0.17	0.04	0.18	0.11
Borders	0.10	0.23	0.19	0.12	0.01	0.12	0.08
Dumfries & Galloway	0.05	0.26	0.18	0.09	0.02	0.11	0.07
Fife	0.06	0.33	0.29	0.15	0.03	0.17	0.11
Forth Valley	0.05	0.18	0.25	0.15	0.05	0.14	0.09
Grampian	0.05	0.20	0.21	0.10	0.04	0.12	0.08
Greater Glasgow & Clyde	0.06	0.24	0.48	0.27	0.10	0.23	0.16
Highland	0.10	0.22	0.15	0.12	0.05	0.12	0.08
Lanarkshire	0.08	0.26	0.27	0.12	0.06	0.16	0.11
Lothian	0.05	0.17	0.26	0.18	0.08	0.15	0.11
Orkney	0.00	0.18	0.08	0.00	0.00	0.04	0.03
Shetland	0.00	0.15	0.39	0.00	0.13	0.13	0.09
Tayside	0.06	0.34	0.36	0.15	0.05	0.18	0.12
Western Isles	0.07	0.08	0.00	0.14	0.05	0.07	0.04

Footnotes

1) 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).

2) Some 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.

3) Some 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 relatively few drug-related deaths of people aged 65 and over.

4) Including ages 0-14 and 65+.

5) An occasional figure for Scotland may differ slightly from the corresponding 5-year average in Table 8, because the latter was calculated simply by taking the average of the figures for Scotland for each of the five individual years (rather than by applying the method described in footnote 1 to the figures for Scotland)

NB: The figures for each area are based on the Board boundaries that apply with effect from 1st April 2014.
The figures that have been used for earlier years are the numbers that would have been seen had the new boundaries applied in those years.

Table HB5: Drug-related deaths by NHS Board area: average for 2011 to 2015, and relative to the estimated number of problem drug users

	2011-2015 annual average drug-deaths (all ages)	Problem drug users (aged 15-64) in 2012/13 [1]				Annual average drug-deaths: 2011-2015 per 1,000 problem drug users in 2012/13 [4]		
		95% Confidence Interval [2]				Likely range of values		
		Estimate	Lower end	Upper end	+ / - [3]	Estimate	from [5]	to [5]
Scotland	**602**	**61,500**	**59,900**	**63,300**	**3%**	**9.8**	**9.5**	**10.1**
Ayrshire & Arran	42	4,100	3,800	4,500	9%	10.3	9.4	11.2
Borders	9	710	610	860	18%	13.2	10.9	15.4
Dumfries & Galloway	10	1,300	1,100	1,600	19%	7.8	6.4	9.3
Fife	40	2,900	2,600	3,400	14%	13.9	11.8	15.5
Forth Valley	27	3,100	2,800	3,500	11%	8.8	7.8	9.8
Grampian	49	4,600	4,100	5,000	10%	10.6	9.8	11.9
Greater Glasgow & Clyde	184	20,900	20,100	21,800	4%	8.8	8.4	9.1
Highland	27	2,000	1,800	2,300	13%	13.3	11.6	14.8
Lanarkshire	69	6,900	6,400	7,400	7%	9.9	9.3	10.7
Lothian	92	9,800	8,900	10,900	10%	9.3	8.4	10.3
Orkney	1	30	20	110	150%	20.0	5.5	30.0
Shetland	2	340	130	1,300	172%	5.9	1.5	15.4
Tayside	50	4,600	4,300	5,000	8%	10.8	9.9	11.5
Western Isles	1	110	70	240	77%	10.9	5.0	17.1

Footnotes

1) Estimates of problem drug users aged 15 to 64, as published by the Information Services Division (ISD) of NHS National Services Scotland - REVISED estimates, as published by ISD on 4 March 2016. Some of the estimates are subject to potentially large percentage margins of error, as indicated by the 95% Confidence Intervals.

2) The 95% Confidence Intervals are the range within which it is expected that the true value will lie. On the basis of statistical theory, there is only a 5% chance that a 95% Confidence Interval will not include the (unknown) true value of the quantity which is being estimated - so, on average, one would expect that 19 out of 20 of all 95% Confidence Intervals will include the (unknown) true values.

3) The average of the percentage differences between (a) the estimate and the lower end of the 95% Confidence Interval and (b) the estimate and the upper end of the 95% Confidence Interval. It is calculated using the rounded values of the estimate and the two ends.

4) These death rates are broad indications only, as (e.g.) the estimated numbers of problem drug users may be subject to wide confidence intervals.

5) The 'from' value in the range for the rate is calculated using the upper end of the 95% Confidence Interval for the estimated number of problem drug users, and the 'to' value in the range for the rate is calculated using the lower end of the 95% Confidence Interval for the estimated number of problem drug users,

NB: The numbers of drug-related deaths for each area are based on the Board boundaries that apply with effect from 1st April 2014.

The figures that have been used for earlier years are the numbers that would have been seen had the new boundaries applied in those years.

The estimated numbers of problem drug users are also based on the Board boundaries that applied with effect from April 2014

Figure 2: Drug-related deaths per 1,000 problem drug users - NHS Board areas

NB: these figures were calculated using the annual average number of drug-deaths for 2011-2015 and the estimated numbers of problem drug users for 2012/13 The 'error bars' indicate the likely ranges of values - see the text.

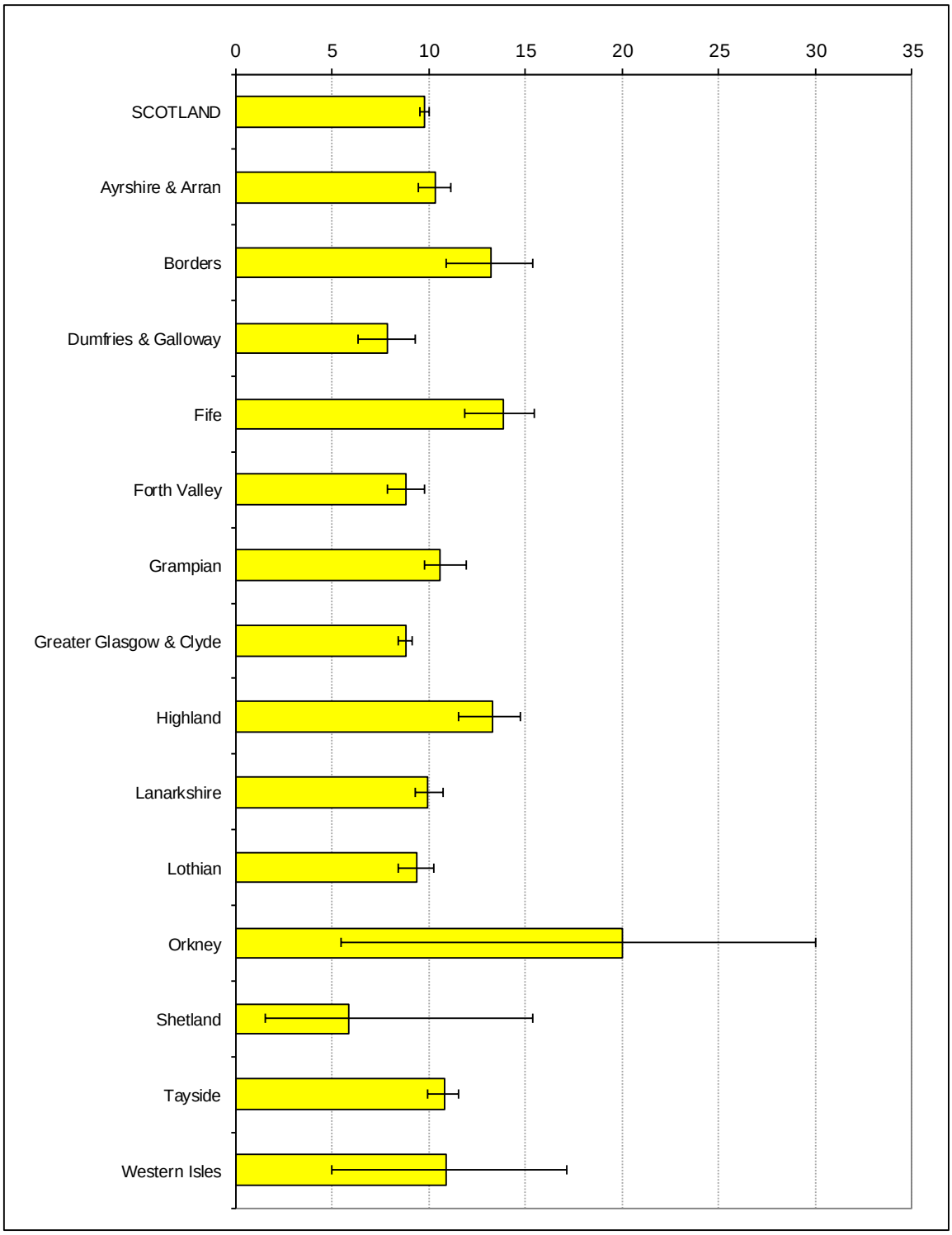


Table C1: Drug-related deaths by council area, 2005 - 2015 (with averages for 2001-2005 and 2011-2015)

Council area	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Annual averages 2001 to 2005	Annual averages 2011 to 2015	Population in 2013	2011-2015 average deaths per 1,000 population
Scotland	**336**	**421**	**455**	**574**	**545**	**485**	**584**	**581**	**527**	**613**	**706**	**345**	**602**	**5,327,700**	**0.11**
Aberdeen City	11	26	23	27	27	31	29	16	24	26	45	25	28	227,070	0.12
Aberdeenshire	10	16	17	11	18	10	19	9	21	8	14	11	14	257,770	0.06
Angus	8	11	3	8	9	9	8	8	10	8	17	5	10	116,290	0.09
Argyll & Bute	3	1	9	4	7	4	12	7	5	8	11	3	9	88,050	0.10
Clackmannanshire	3	7	5	4	3	1	6	11	7	6	7	3	7	51,280	0.14
Dumfries & Galloway	7	5	10	9	8	6	12	6	9	13	11	8	10	150,280	0.07
Dundee City	11	16	23	29	30	22	32	39	24	31	36	10	32	148,100	0.22
East Ayrshire	4	9	13	13	12	11	17	15	12	17	14	7	15	122,430	0.12
East Dunbartonshire	1	2	7	6	5	6	2	4	1	4	9	3	4	105,840	0.04
East Lothian	5	3	4	7	6	7	8	6	8	11	10	4	9	101,390	0.08
East Renfrewshire	1	3	3	6	7	4	3	4	3	5	8	3	5	91,530	0.05
Edinburgh, City of	41	30	43	66	45	47	48	57	64	71	69	30	62	487,460	0.13
Eilean Siar	1	1	0	3	2	1	1	1	2	1	1	1	1	27,400	0.04
Falkirk	8	10	15	10	5	10	11	14	11	9	14	7	12	157,160	0.08
Fife	21	19	28	37	32	35	34	38	39	46	44	15	40	366,900	0.11
Glasgow City	75	113	90	121	135	94	117	121	103	114	157	94	122	596,520	0.21
Highland	10	11	7	20	14	6	21	15	13	17	24	8	18	232,930	0.08
Inverclyde	7	9	10	5	7	17	20	13	10	17	16	9	15	80,340	0.19
Midlothian	5	6	1	6	9	7	4	8	8	7	6	4	7	84,710	0.08
Moray	2	5	5	3	7	3	10	6	5	2	10	3	7	94,360	0.07
North Ayrshire	6	11	18	15	19	12	16	19	11	15	15	11	15	136,940	0.11
North Lanarkshire	25	24	27	30	35	36	27	38	38	33	42	21	36	337,780	0.11
Orkney Islands	0	1	0	1	0	2	0	1	1	0	1	0	1	21,560	0.03
Perth & Kinross	7	8	3	16	5	3	5	8	3	9	10	5	7	147,770	0.05
Renfrewshire	10	17	21	27	26	19	24	26	13	30	19	10	22	173,890	0.13
Scottish Borders	7	2	4	7	5	9	8	7	8	11	13	2	9	113,880	0.08
Shetland Islands	1	2	2	1	0	2	3	2	0	4	1	1	2	23,200	0.09
South Ayrshire	5	5	5	12	8	8	14	9	13	11	14	6	12	112,870	0.11
South Lanarkshire	16	22	31	23	19	26	34	29	37	34	31	14	33	314,810	0.10
Stirling	3	7	6	9	6	7	9	6	6	10	10	4	8	91,230	0.09
West Dunbartonshire	15	12	16	23	13	18	17	19	8	19	12	10	15	89,800	0.17
West Lothian	7	7	6	15	21	12	13	19	10	16	15	8	15	176,160	0.08

Table C2: Drug-related deaths by underlying cause[1] and council area, 2015

Council area	All causes of death	Underlying cause of death (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)
(i) New coding rules						
Scotland	**706**	**49**	**553**	**54**	**0**	**50**
Aberdeen City	45	1	34	3	0	7
Aberdeenshire	14	0	9	3	0	2
Angus	17	1	15	1	0	0
Argyll & Bute	11	0	7	1	0	3
Clackmannanshire	7	1	4	0	0	2
Dumfries & Galloway	11	2	8	0	0	1
Dundee City	36	3	29	3	0	1
East Ayrshire	14	0	14	0	0	0
East Dunbartonshire	9	1	8	0	0	0
East Lothian	10	1	7	0	0	2
East Renfrewshire	8	1	5	2	0	0
Edinburgh, City of	69	5	55	5	0	4
Eilean Siar	1	0	0	1	0	0
Falkirk	14	2	10	1	0	1
Fife	44	2	31	5	0	6
Glasgow City	157	14	131	6	0	6
Highland	24	0	16	4	0	4
Inverclyde	16	3	12	1	0	0
Midlothian	6	1	4	1	0	0
Moray	10	0	8	1	0	1
North Ayrshire	15	0	13	2	0	0
North Lanarkshire	42	2	36	2	0	2
Orkney Islands	1	0	1	0	0	0
Perth & Kinross	10	0	9	1	0	0
Renfrewshire	19	3	15	0	0	1
Scottish Borders	13	1	5	4	0	3
Shetland Islands	1	0	1	0	0	0
South Ayrshire	14	0	13	0	0	1
South Lanarkshire	31	2	25	4	0	0
Stirling	10	0	6	2	0	2
West Dunbartonshire	12	3	9	0	0	0
West Lothian	15	0	13	1	0	1
(ii) Old coding rules						
Scotland	**706**	**495**	**123**	**54**	**0**	**34**
Aberdeen City	45	38	2	3	0	2
Aberdeenshire	14	8	1	3	0	2
Angus	17	14	2	1	0	0
Argyll & Bute	11	3	4	1	0	3
Clackmannanshire	7	7	0	0	0	0
Dumfries & Galloway	11	9	1	0	0	1
Dundee City	36	25	7	3	0	1
East Ayrshire	14	12	2	0	0	0
East Dunbartonshire	9	7	2	0	0	0
East Lothian	10	9	0	0	0	1
East Renfrewshire	8	4	2	2	0	0
Edinburgh, City of	69	46	15	5	0	3
Eilean Siar	1	0	0	1	0	0
Falkirk	14	11	1	1	0	1
Fife	44	33	4	5	0	2
Glasgow City	157	111	35	6	0	5
Highland	24	15	1	4	0	4
Inverclyde	16	12	3	1	0	0
Midlothian	6	5	0	1	0	0
Moray	10	8	0	1	0	1
North Ayrshire	15	12	1	2	0	0
North Lanarkshire	42	21	17	2	0	2
Orkney Islands	1	1	0	0	0	0
Perth & Kinross	10	5	4	1	0	0
Renfrewshire	19	15	3	0	0	1
Scottish Borders	13	5	1	4	0	3
Shetland Islands	1	1	0	0	0	0
South Ayrshire	14	14	0	0	0	0
South Lanarkshire	31	18	9	4	0	0
Stirling	10	7	0	2	0	1
West Dunbartonshire	12	10	2	0	0	0
West Lothian	15	9	4	1	0	1

Footnote

1) The coding rules were changed with effect from the start of 2011, as explained in paragraph 2.6 of the commentary.
Briefly, 'drug abuse' deaths from 'acute intoxication' were previously counted under 'mental and behavioural disorders due to psychoactive substance use' (unless they were known to be due to intentional self-harm or assault). They are now counted under the appropriate 'poisoning' category.
For example, if the cause of death of a known drug abuser was given as 'adverse effects of heroin' (and it was not intentional self-harm or assault), the underlying cause of death would be coded as follows:
(a) up to 2010 - as 'F11 - mental and behavioural disorders due to use of opioids'
(b) from 2011 - the appropriate 'poisoning' category, such as 'X42 - accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens) not elsewhere classified'
National Records of Scotland has estimated what the figures for 2015 would have been, had the data been coded using the old rules.

Table C3: Drug-related deaths by selected drugs reported[1] and council area, 2015

Council area	All drug-related deaths	Heroin / morphine [2]	Meth-adone	Heroin / morphine, Methadone or Bupren-orphine	Codeine or a codeine-containing compound	Dihydro-codeine or a d.h.c-containing compound	Any opiate or opioid	Benzodiazepines		Cocaine	Ecstasy-type	Amphet-amines	Alcohol
								Any benzo-diazepine	of which: Diazepam				
Scotland	**706**	**345**	**251**	**493**	**31**	**94**	**606**	**191**	**128**	**93**	**15**	**17**	**107**
Aberdeen City	45	18	21	31	2	7	40	30	21	12	2	0	5
Aberdeenshire	14	6	7	9	0	3	12	8	4	3	0	0	3
Angus	17	12	7	13	2	2	14	10	10	1	1	0	4
Argyll & Bute	11	7	1	8	2	1	10	2	1	1	0	0	3
Clackmannanshire	7	6	3	6	0	0	6	1	1	0	0	1	1
Dumfries & Galloway	11	6	2	7	0	1	8	0	0	0	2	0	2
Dundee City	36	25	13	30	3	4	35	22	15	1	0	0	6
East Ayrshire	14	9	5	13	0	0	14	6	0	4	0	0	4
East Dunbartonshire	9	4	3	7	1	2	8	3	2	3	1	0	0
East Lothian	10	4	3	6	0	2	9	2	2	2	1	0	0
East Renfrewshire	8	3	4	5	1	3	8	1	1	1	0	0	0
Edinburgh, City of	69	20	32	46	3	15	60	11	10	3	1	1	5
Eilean Siar	1	0	0	0	0	1	1	0	0	0	0	0	0
Falkirk	14	7	5	9	0	2	10	4	4	4	0	0	3
Fife	44	27	19	34	0	3	37	11	8	1	1	2	7
Glasgow City	157	73	54	109	4	17	132	23	13	31	0	9	25
Highland	24	7	8	13	0	4	19	10	5	2	1	0	1
Inverclyde	16	1	9	10	2	0	13	9	5	3	0	0	3
Midlothian	6	1	1	2	0	1	3	1	1	2	0	0	1
Moray	10	5	5	8	1	2	9	5	5	1	0	0	2
North Ayrshire	15	10	7	12	0	2	14	1	1	2	0	1	2
North Lanarkshire	42	20	6	24	4	6	33	5	3	6	3	1	9
Orkney Islands	1	0	0	0	0	1	1	1	1	0	0	0	0
Perth & Kinross	10	5	2	6	0	4	9	4	3	0	0	0	3
Renfrewshire	19	11	5	14	2	1	16	3	2	4	0	1	4
Scottish Borders	13	8	0	8	2	2	12	1	1	0	0	0	0
Shetland Islands	1	1	0	1	0	0	1	0	0	0	0	0	0
South Ayrshire	14	10	10	13	0	1	13	3	1	3	0	0	2
South Lanarkshire	31	18	8	22	1	2	27	3	0	2	1	0	5
Stirling	10	5	2	6	0	2	8	3	2	0	0	1	1
West Dunbartonshire	12	7	2	9	0	1	10	3	2	0	0	0	3
West Lothian	15	9	7	12	1	2	14	5	4	1	1	0	3

Footnotes

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 has been the standard basis for the figures for individual drugs with effect from "Drug-related Deaths in Scotland in 2009"

There may be other differences between years and/or areas in the way in which the information was produced - more information can be found in Section 2 of the commentary.

2) More information can be found in paragraph 3.3.1 of the commentary.

Table C4: Drug-related deaths per 1,000 population, council areas, annual averages for 2011 to 2015 [1]

	Age-group						
	15 - 24 [2]	25 - 34	35 - 44	45 - 54	55 - 64 [3]	Ages 15 - 64	All ages [4]
Scotland [5]	**0.06**	**0.23**	**0.31**	**0.17**	**0.06**	**0.17**	**0.11**
Aberdeen City	0.04	0.24	0.30	0.19	0.05	0.17	0.12
Aberdeenshire	0.05	0.12	0.17	0.03	0.03	0.08	0.06
Angus	0.08	0.26	0.20	0.14	0.04	0.14	0.09
Argyll + Bute	0.08	0.24	0.16	0.16	0.08	0.14	0.10
Clackmannanshire	0.00	0.34	0.43	0.24	0.06	0.22	0.14
Dumfries + Galloway	0.05	0.26	0.18	0.09	0.02	0.11	0.07
Dundee City	0.05	0.52	0.74	0.29	0.09	0.32	0.22
East Ayrshire	0.12	0.34	0.27	0.19	0.04	0.19	0.12
East Dunbartonshire	0.06	0.09	0.11	0.02	0.03	0.06	0.04
East Lothian	0.05	0.27	0.22	0.10	0.02	0.13	0.08
East Renfrewshire	0.00	0.20	0.16	0.05	0.03	0.08	0.05
Edinburgh City	0.05	0.16	0.31	0.24	0.11	0.17	0.13
Eilean Siar	0.07	0.08	0.00	0.14	0.05	0.07	0.04
Falkirk	0.07	0.16	0.20	0.07	0.04	0.11	0.08
Fife	0.06	0.33	0.29	0.15	0.03	0.17	0.11
Glasgow City	0.06	0.22	0.61	0.39	0.16	0.28	0.21
Highland	0.10	0.21	0.15	0.10	0.04	0.12	0.08
Inverclyde	0.08	0.44	0.58	0.29	0.09	0.29	0.19
Midlothian	0.04	0.15	0.24	0.11	0.07	0.12	0.08
Moray	0.05	0.24	0.13	0.08	0.03	0.11	0.07
North Ayrshire	0.06	0.20	0.43	0.17	0.03	0.17	0.11
North Lanarkshire	0.09	0.27	0.22	0.13	0.07	0.16	0.11
Orkney Islands	0.00	0.18	0.08	0.00	0.00	0.04	0.03
Perth + Kinross	0.06	0.14	0.12	0.04	0.03	0.07	0.05
Renfrewshire	0.07	0.25	0.40	0.17	0.04	0.18	0.13
Scottish Borders	0.10	0.23	0.19	0.12	0.01	0.12	0.08
Shetland Islands	0.00	0.15	0.39	0.00	0.13	0.13	0.09
South Ayrshire	0.05	0.32	0.35	0.16	0.04	0.17	0.11
South Lanarkshire	0.08	0.24	0.33	0.11	0.04	0.16	0.10
Stirling	0.06	0.12	0.23	0.22	0.05	0.14	0.09
West Dunbartonshire	0.07	0.38	0.47	0.26	0.07	0.25	0.17
West Lothian	0.05	0.21	0.17	0.11	0.06	0.12	0.08

Footnotes

1) 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).

2) Some 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.

3) Some 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 relatively few drug-related deaths of people aged 65 and over.

4) Including ages 0-14 and 65+.

5) An occasional figure for Scotland may differ slightly from the corresponding 5-year average in Table 8, because the latter was calculated simply by taking the average of the figures for Scotland for each of the five individual years (rather than by applying the method described in footnote 1 to the figures for Scotland)

Table C5: Drug-related deaths by council area: average for 2011 to 2015, and relative to estimated problem drug user numbers

	2011-2015 average drug-deaths per year (all ages)	Problem drug users (aged 15-64) in 2012/13 [1]				Annual average drug-deaths: 2011-2015 per 1,000 problem drug users in 2012/13 [4]		
			95% Confidence Interval [2]				Likely range of values	
		Estimate	Lower end	Upper end	+ / - [3]	Estimate	from [5]	to [5]
Scotland	**602**	**61,500**	**59,900**	**63,300**	**3%**	**9.8**	**9.5**	**10.1**
Aberdeen City	28	3,100	2,700	3,500	13%	9.0	8.0	10.4
Aberdeenshire	14	1,100	970	1,300	15%	12.9	10.9	14.6
Angus	10	700	590	860	19%	14.6	11.9	17.3
Argyll & Bute	9	710	590	900	22%	12.1	9.6	14.6
Clackmannanshire	7	630	550	740	15%	11.7	10.0	13.5
Dumfries & Galloway	10	1,300	1,100	1,600	19%	7.8	6.4	9.3
Dundee City	32	2,800	2,500	3,100	11%	11.6	10.5	13.0
East Ayrshire	15	1,600	1,400	1,800	13%	9.4	8.3	10.7
East Dunbartonshire	4	390	300	530	29%	10.3	7.5	13.3
East Lothian	9	880	640	1,300	38%	9.8	6.6	13.4
East Renfrewshire	5	900	770	1,100	18%	5.1	4.2	6.0
Edinburgh, City of	62	6,600	5,900	7,500	12%	9.4	8.2	10.5
Eilean Siar	1	110	70	240	77%	10.9	5.0	17.1
Falkirk	12	1,700	1,400	2,100	21%	6.9	5.6	8.4
Fife	40	2,900	2,600	3,400	14%	13.9	11.8	15.5
Glasgow City	122	13,600	13,000	14,500	6%	9.0	8.4	9.4
Highland	18	1,300	1,200	1,500	12%	13.8	12.0	15.0
Inverclyde	15	1,700	1,500	1,900	12%	8.9	8.0	10.1
Midlothian	7	920	620	1,500	48%	7.2	4.4	10.6
Moray	7	350	260	510	36%	18.9	12.9	25.4
North Ayrshire	15	1,800	1,600	2,100	14%	8.4	7.2	9.5
North Lanarkshire	36	3,700	3,400	4,100	9%	9.6	8.7	10.5
Orkney Islands	1	30	20	110	150%	20.0	5.5	30.0
Perth & Kinross	7	1,100	920	1,400	22%	6.4	5.0	7.6
Renfrewshire	22	2,800	2,500	3,200	13%	8.0	7.0	9.0
Scottish Borders	9	710	610	860	18%	13.2	10.9	15.4
Shetland Islands	2	340	130	1,300	172%	5.9	1.5	15.4
South Ayrshire	12	780	670	930	17%	15.6	13.1	18.2
South Lanarkshire	33	3,200	2,800	3,600	13%	10.3	9.2	11.8
Stirling	8	820	710	970	16%	10.0	8.5	11.5
West Dunbartonshire	15	1,500	1,300	1,800	17%	10.0	8.3	11.5
West Lothian	15	1,400	1,200	1,700	18%	10.4	8.6	12.2

Footnotes

1) to 5) refer to the corresponding footnotes to Table HB5

Figure 3: Drug-related deaths per 1,000 problem drug users - council areas

NB: these figures were calculated using the annual average number of drug-deaths for 2011-2015 and the estimated numbers of problem drug users for 2012/13 The 'error bars' indicate the likely ranges of values - see the text.

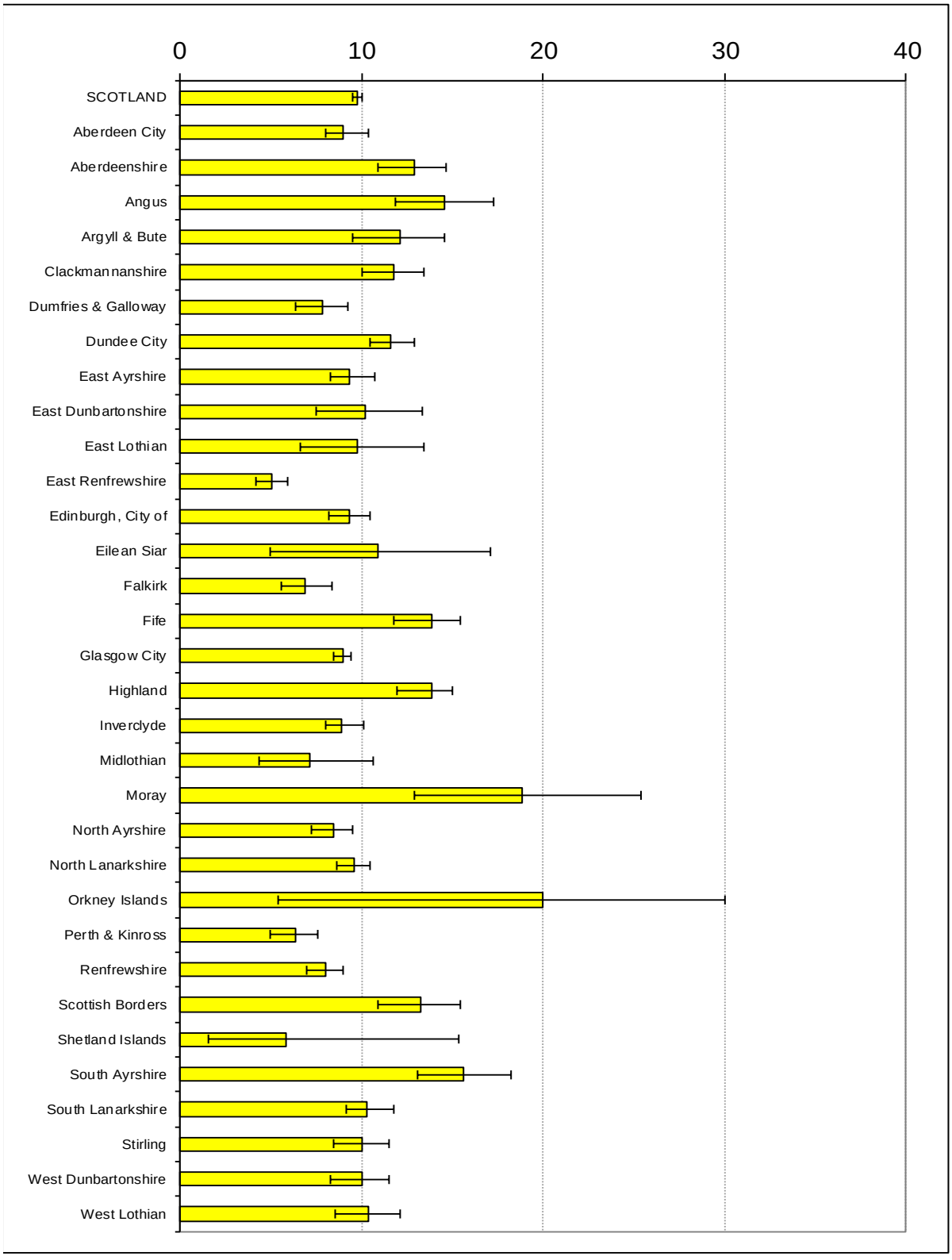


Table X: Drug-related deaths in Scotland - different definitions[1], 1979 – 2015

Year	Number of drug-related deaths, on the basis of:			Population	Drug-deaths per million population		
	this paper (based on UK Drug Strategy 'baseline' definition)	Office for National Statistics 'wide' definition	European Monitoring Centre for Drugs and Drug Addiction 'general mortality register' definition [2]		this paper (based on UK Drug Strategy 'baseline' definition)	Office for National Statistics 'wide' definition	European Monitoring Centre for Drugs and Drug Addiction 'general mortality register' definition [2]
1979		339		5,203,600		65.1	
1980		306		5,193,900		58.9	
1981		307		5,180,200		59.3	
1982		265		5,164,540		51.3	
1983		212		5,148,120		41.2	
1984		201		5,138,880		39.1	
1985		242		5,127,890		47.2	
1986		223		5,111,760		43.6	
1987		250		5,099,020		49.0	
1988		238		5,077,440		46.9	
1989		264		5,078,190		52.0	
1990		275		5,081,270		54.1	
1991		275		5,083,330		54.1	
1992		311		5,085,620		61.2	
1993		372		5,092,460		73.0	
1994		422		5,102,210		82.7	
1995		426		5,103,690		83.5	
1996	244	460	208	5,092,190	47.9	90.3	40.8
1997	224	447	188	5,083,340	44.1	87.9	37.0
1998	249	449	230	5,077,070	49.0	88.4	45.3
1999	291	492	272	5,071,950	57.4	97.0	53.6
2000	292	495	320	5,062,940	57.7	97.8	63.2
2001	332	551	378	5,064,200	65.6	108.8	74.6
2002	382	566	417	5,066,000	75.4	111.7	82.3
2003	317	493	331	5,068,500	62.5	97.3	65.3
2004	356	546	387	5,084,300	70.0	107.4	76.1
2005	336	480	352	5,110,200	65.8	93.9	68.9
2006	421	577	415	5,133,100	82.0	112.4	80.8
2007	455	630	450	5,170,000	88.0	121.9	87.0
2008	574	737	559	5,202,900	110.3	141.7	107.4
2009	545	716	534	5,231,900	104.2	136.9	102.1
2010	485	692	482	5,262,200	92.2	131.5	91.6
2011	584	749	558	5,299,900	110.2	141.3	105.3
2012	581	734	549	5,313,600	109.3	138.1	103.3
2013	527	685	516	5,327,700	98.9	128.6	96.9
2014	613	743	574	5,347,600	114.6	138.9	107.3
2015	706	813	637	5,373,000	131.4	151.3	118.6

Footnote

1) Refer to Annex B for information about the other definitions.

2) the figures for some of the years from 2000 to 2014 have been revised slightly from those that were published in "Drug-related Deaths in Scotland in 2014"

Figure 4: Drug-related deaths in Scotland - different definitions

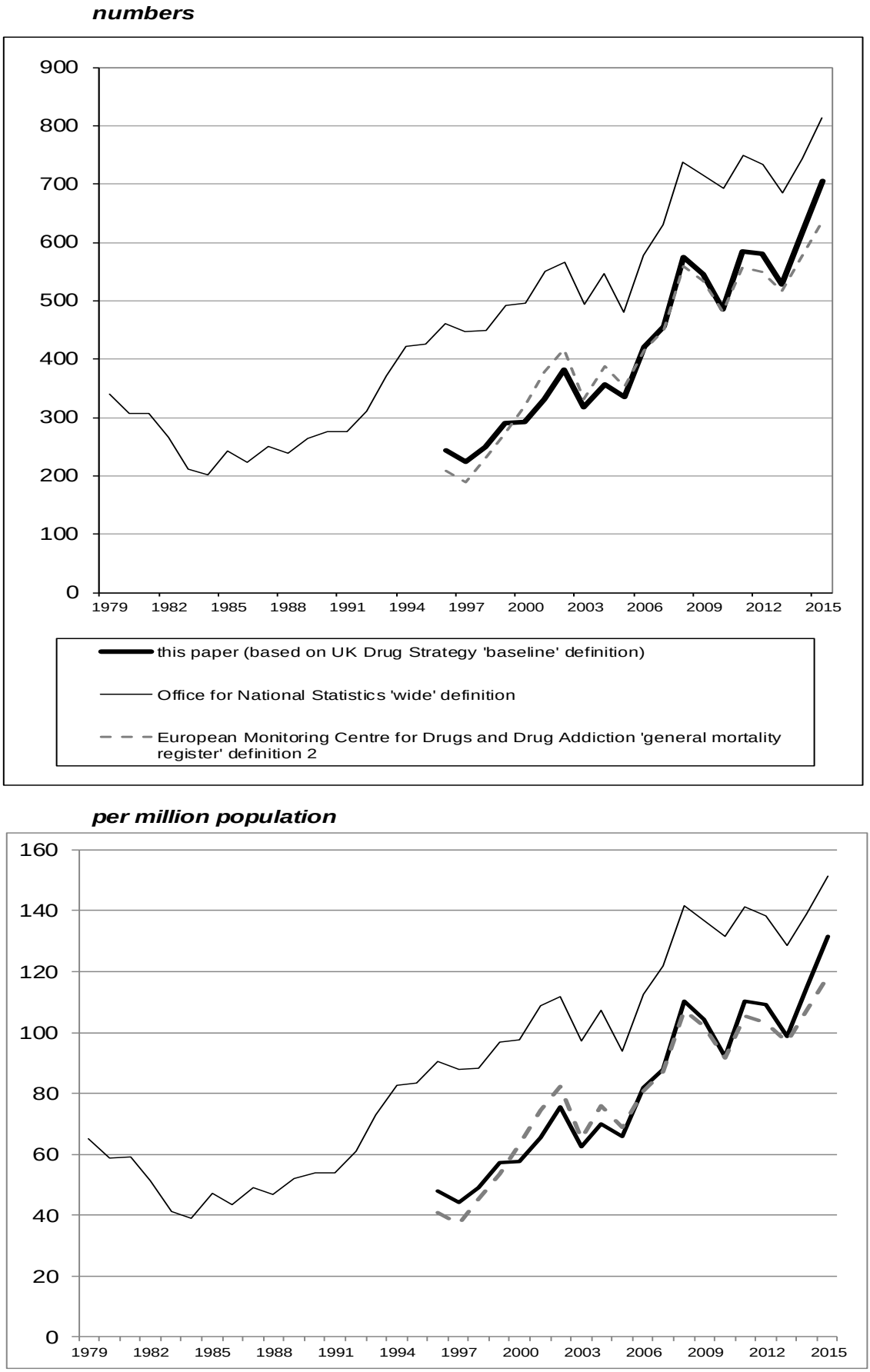


Table Y: Drug-related deaths, on the basis of the Office for National Statistics (ONS) 'wide' definition, by selected drugs reported, 2005 – 2015

Drugs [1, 2]	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All drug-related deaths (on the 'wide' definition)	**480**	**577**	**630**	**737**	**716**	**692**	**749**	**734**	**685**	**743**	**813**
Amitriptyline	30	29	24	41	32	41	37	44	60	41	47
Amphetamines	11	11	12	12	7	3	24	18	27	22	17
Anti-depressants [3]	67	93	84	101	97	123	116	121	120	103	132
Anti-psychotics [4]	5	21	26	25	19	21	32	35	29	23	30
Benzodiazepines [5]	110	94	109	150	158	124	187	198	149	125	192
Cannabis	6	3	8	1	0	0	0	0	0	2	7
Cocaine	44	33	47	41	33	34	36	31	45	45	94
Codeine or a compound thereof [6]	18	38	30	40	46	20	48	41	46	45	40
Dihydrocodeine or a compound thereof [7]	50	45	55	74	65	65	87	86	81	72	95
Diazepam	90	78	79	116	120	94	124	161	107	87	129
Ecstasy-type	10	12	12	5	2	0	9	9	17	14	15
Gabapentin	0	0	0	3	2	4	10	24	51	67	102
Heroin/diamorphine or Morphine [8]	194	260	291	327	326	256	207	222	221	312	349
Heroin / morphine, Methadone or Buprenorphine [9]	246	328	372	449	440	400	431	403	383	454	497
Methadone	71	96	115	171	177	177	275	241	216	216	252
Mirtazepine	3	5	8	12	14	9	18	24	26	20	39
Opiate or opioid [10]	337	403	451	550	540	480	558	531	499	553	619
Paracetamol or a compound [11]	62	53	56	55	43	48	45	37	38	43	36
Phenazepam	0	0	0	0	0	0	14	20	34	6	8
Pregablin	0	0	0	0	0	1	1	5	12	26	42
Temazepam	7	9	4	7	9	3	8	6	4	4	8
Tramadol	16	17	26	32	40	40	34	48	64	38	53
Alcohol	134	151	181	196	187	151	148	136	129	116	123

Footnotes

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 has been the standard basis for figures for individual drugs with effect from "Drug-related Deaths in Scotland in 2009".
There may be other differences between years and/or areas in the way in which the information was produced - more information can be found in Section 2 of the commentary.

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 General Register Office for Scotland's new database, rather than the old database (more information can be found in 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, fluoexetine, prothaiaden.

4) e.g. chlorpromazine, clozapine, olanzapine.

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

6) e.g. co-codamol

7) e.g. co-dydramol

8) More information can be found in paragraph 3.3.1 of the commentary.

9) i.e. one or more of heroin/diamorphine, morphine, methadone and buprenorphine

10) any opiate or opioid, including (e.g.) co-codamol, codeine, dihydrocodeine, heroin, methadone, morphine, oxycodone and tramadol.

11) 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 Office for National Statistics (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, 2005 – 2015

Cause of death	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All drug-related deaths (on the 'wide' definition)	480	577	630	737	716	692	749	734	685	743	813
of which:											
on the basis used for this report's statistics (i.e. the Drug Strategy 'baseline' definition, as implemented by National Records of Scotland (NRS))	**336**	**421**	**455**	**574**	**545**	**485**	**584**	**581**	**527**	**613**	**706**
deaths within the Drug Strategy 'baseline' definition, but excluded from this report's statistics because: [1]											
(a) cause of death was a secondary infection or a related complication [2]	12	13	10	23	22	33	16	14	22	22	23
(b) controlled substance was present only as part of a compound analgesic or a cold remedy	1	2	8	10	3	5	4	1	4	5	4
other deaths counted as 'drug-related' by the 'wide' definition - but not on the basis used for this report [3]	131	141	157	130	146	169	145	138	132	103	80
Deaths from some causes which may be associated with present or past drug misuse [4]											
Underlying cause of death, with its ICD10 [5] code(s):											
Hepatitis C (B18.2)	10	14	12	18	21	19	25	22	23	18	45
HIV (B20-24)	31	19	21	18	17	21	16	18	14	14	12
Total all deaths from the specified causes	41	33	33	36	38	40	41	40	37	32	57
Volatile Substance Abuse deaths											
Deaths in Scotland - International Centre for Drugs Policy (ICDP) figures [6]	4	9	10	3	4	17	..	..	..	..	..

Footnotes

1) Paragraph A3 in 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 - more information can be found in paragraph B8 of Annex B.

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

6) More information can be found in paragraph B13 of Annex B 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.

Table NPS1: Drug-related deaths, on the basis of the Office for National Statistics (ONS) 'wide' definition, which involved New Psychoactive Substances, 2015

(i) Deaths for which one or more NPSs was implicated in, or potentially contributed to, the death

	Type(s) of NPS that were present			
	Benzodiaz-'epine-type NPS present; no other types of NPS	Other types of NPS present; no Benzodiaz-epine-type NPS	Both benzo-diazepine-type NPS and other types of NPS	All type(s) of NPS
Included in this report's statistics[2]				
NPS the only substance(s)* implicated in the death	0	2	0	2
Other substance(s)** implicated in the death	56	14	0	70
All	56	16	0	72
NOT included in this report's statistics				
NPS the only substance(s)* implicated in the death	0	1	0	1
Other substance(s)** implicated in the death	1	0	0	1
All	1	1	0	2
All deaths for which one or more NPSs was implicated in, or potentially contributed to, the death				
NPS the only substance(s)* implicated in the death	0	3	0	3
Other substance(s)** implicated in the death	57	14	0	71
All	57	17	0	74

	Age at Death						Sex	
	under 25	25 to 34	35 to 44	45 to 54	55 & over	All	Male	Female
Included in this report's statistics[2]								
Benzodiazepine-type NPS present; no other types of NPS	2	12	25	15	2	56	34	22
Other types of NPS present; no Benzodiazepine-type NPS	2	5	7	2	0	16	13	3
Both Benzodiazepine-type NPS and other types of NPS present	0	0	0	0	0	0	0	0
All	4	17	32	17	2	72	47	25
NOT included in this report's statistics								
Benzodiazepine-type NPS present; no other types of NPS	0	0	1	0	0	1	0	1
Other types of NPS present; no Benzodiazepine-type NPS	0	0	1	0	0	1	0	1
Both Benzodiazepine-type NPS and other types of NPS present	0	0	0	0	0	0	0	0
All	0	0	2	0	0	2	0	2
All deaths for which one or more NPSs was implicated in, or potentially contributed to, the death								
Benzodiazepine-type NPS present; no other types of NPS	2	12	26	15	2	57	34	23
Other types of NPS present; no Benzodiazepine-type NPS	2	5	8	2	0	17	13	4
Both Benzodiazepine-type NPS and other types of NPS present	0	0	0	0	0	0	0	0
All	4	17	34	17	2	74	47	27

(ii) Deaths for which NPSs were present but were NOT considered to have contributed to the death

	Age at Death						Sex	
	under 25	25 to 34	35 to 44	45 to 54	55 & over	All	Male	Female
Included in this report's statistics[2]								
Benzodiazepine-type NPS present; no other types of NPS	1	5	13	11	0	30	22	8
Other types of NPS present; no Benzodiazepine-type NPS	0	2	3	0	0	5	5	0
Both Benzodiazepine-type NPS and other types of NPS present	0	0	1	0	0	1	0	1
All	1	7	17	11	0	36	27	9
NOT included in this report's statistics								
Benzodiazepine-type NPS present; no other types of NPS	0	0	0	0	0	0	0	0
Other types of NPS present; no Benzodiazepine-type NPS	0	0	0	2	0	2	1	1
Both Benzodiazepine-type NPS and other types of NPS present	0	0	0	0	0	0	0	0
All	0	0	0	2	0	2	1	1
All deaths for which NPSs were present but were not considered to have contributed to the death								
Benzodiazepine-type NPS present; no other types of NPS	1	5	13	11	0	30	22	8
Other types of NPS present; no Benzodiazepine-type NPS	0	2	3	2	0	7	6	1
Both Benzodiazepine-type NPS and other types of NPS present	0	0	1	0	0	1	0	1
All	1	7	17	13	0	38	28	10

Footnotes

1) The substances which are counted (for the purpose of these figures) as New Psychoactive Substances are described in Annex E.

2) i.e. within the Drug Strategy 'baseline' definition, as implemented by National Records of Scotland

* apart, perhaps, from alcohol. For example, a death for which mephedrone and alcohol were the only substances that were implicated in the death would be counted under 'NPS the only substance(s) implicated in the death'.

** apart, perhaps, from alcohol.

Table NPS2: Drug-related deaths, on the basis of the Office for National Statistics (ONS) 'wide' definition, which involved New Psychoactive Substances, 2005 to 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All drug-related deaths (on the 'wide' definition)	480	577	630	737	716	692	749	734	685	743	813
Deaths which involved 'New Psychoactive Substances' [1]	**0**	**0**	**0**	**0**	**4**	**11**	**47**	**47**	**113**	**114**	**112**
of which:											
(a) deaths for which one (or more) New Psychoactive Substances w											
implicated in, or potentially contributed, to the death	0	0	0	0	3	9	28	32	60	62	74
(i) included in this report's statistics	0	0	0	0	2	6	26	30	58	55	72
(i.e. in the Drug Strategy "baseline" definition, as implemented by NRS)											
of which:											
NPS the only substance(s)* implicated in the death [2]	0	0	0	0	0	4	0	3	4	2	2
Other substance(s)** also implicated in the death [3]	0	0	0	0	2	2	26	27	54	53	70
(ii) <u>not</u> included in this report's statistics	0	0	0	0	1	3	2	2	2	7	2
of which:											
NPS the only substance(s)* implicated in the death [4]	0	0	0	0	0	3	1	2	2	5	1
Other substance(s)** also implicated in the death [5]	0	0	0	0	1	0	1	0	0	2	1
(iii) total of (i) + (ii):											
NPS the only substance(s)* implicated in the death	0	0	0	0	0	7	1	5	6	7	3
Other substance(s)** also implicated in the death	0	0	0	0	3	2	27	27	54	55	71
(b) deaths for which one (or more) New Psychoactive Substances was											
present but <u>not</u> considered to have contributed to the death	0	0	0	0	1	2	19	15	53	52	38
of which:											
(i) included in this report's statistics [6]	0	0	0	0	1	2	19	15	52	51	36
(ii) <u>not</u> included in this report's statistics [7]	0	0	0	0	0	0	0	0	1	1	2
Total: all deaths which involved New Psychoactive Substances	0	0	0	0	4	11	47	47	113	114	112
of which:											
(i) included in this report's statistics	0	0	0	0	3	8	45	45	110	106	108
(ii) <u>not</u> included in this report's statistics	0	0	0	0	1	3	2	2	3	8	4

Footnotes

1) The substances which are counted (for the purpose of these figures) as 'New Psychoactive Substances' are described in Annex E.

2) e.g. the death was after 15 April 2010, the cause of death was certified as "mephedrone intoxication", and no other substance was said to have been f

3) e.g. the cause of death was certified as 'adverse effects of methadone and mephedrone'.

Note that the date of death is not a factor, because methadone has 'always' been controlled.

4) e.g. the death occurred up to 15 April 2010, the cause of death was certified as "mephedrone intoxication", and no other substance was said to have been four

5) e.g. the death occurred up to 15 April 2010, and both mephedrone and an uncontrolled volatile substance were said to be implicated in, or potentially contributed, to the death.

6) e.g. the cause of death was given as 'heroin, alcohol and diazepam toxicity', and BZP and TFMPP were also present.

7) an artificial example would be a death which occurred up to 15 April 2010, co-codamol was said to be implicated in, or potentially contributed, to the death; mephedrone was said to be present but did not contribute to the death

* apart, perhaps, from alcohol.

** apart, perhaps, from alcohol.

Table NPS3: Drug-related deaths, on the basis of the Office for National Statistics (ONS) 'wide' definition, which involved New Psychoactive Substances, 2015

(i) Deaths for which one or more NPSs were implicated in, or potentially contributed to, the death

(a) Benzodiazepine-type NPS present; no other types of NPS

Included in this report's statistics[2]

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	MIRTAZAPINE, FLUBROMAZEPAM, COCAINE	CHLORDIAZEPOXIDE, PARACETAMOL, ALCOHOL
2	HEROIN, ETIZOLAM, ALCOHOL	.
3	METHADONE, PREGABALIN, ETIZOLAM, DIAZEPAM	.
4	HEROIN, ETIZOLAM, PREGABALIN	.
5	HEROIN, ETIZOLAM	ALCOHOL
6	ETIZOLAM, METHADONE, GABAPENTIN, PREGABALIN, MIRTAZAPINE	.
7	METHADONE, AMITRIPTYLINE, PHENAZEPAM	.
8	METHADONE, GABAPENTIN, ETIZOLAM, MORPHINE, DIAZEPAM	.
9	HEROIN, METHADONE, PREGABALIN, ETIZOLAM, PHENAZEPAM	DOTHIEPIN, QUETIAPINE, CANNABIS
10	OPIATE, BENZODIAZEPINE, MORPHINE, METHADONE, CODEINE, DIAZEPAM, ETIZOLAM	MIRTAZAPINE, CANNABIS, DELORAZEPAM, LORAZEPAM, DICLAZEPAM
11	HEROIN, DIAZEPAM, ETIZOLAM	CANNABIS
12	BENZODIAZEPINE, FLUBROMAZEPAM, FLUBROMAZOLAM, DELORAZEPAM, LORAZEPAM, ALCOHOL	.
13	METHADONE, PHENAZEPAM, AMPHETAMINE	DIAZEPAM, CHLORPROMAZINE, MIRTAZAPINE
14	HEROIN, METHADONE, PHENAZEPAM	DIAZEPAM, CANNABIS, CODEINE, ALCOHOL
15	HEROIN, METHADONE, PHENAZEPAM	DIAZEPAM, PARACETAMOL
16	MORPHINE, METHADONE, ETIZOLAM	AMITRIPTYLINE, DIAZEPAM, GABAPENTIN
17	ETIZOLAM, GABAPENTIN, COCAINE, ALCOHOL	CANNABIS
18	METHADONE, ETIZOLAM	CARBAMAZEPINE
19	HEROIN, ETIZOLAM	.
20	MORPHINE, CODEINE, PHENAZEPAM	PARACETAMOL
21	COCAINE, ETIZOLAM, MIRTAZAPINE, ALCOHOL	.
22	HEROIN, ETIZOLAM	.
23	METHADONE, ETIZOLAM	DIAZEPAM, MIRTAZAPINE, CHLORPROMAZINE, PROPRANOLOL, ALCOHOL
24	METHADONE, ETIZOLAM	DIAZEPAM, GABAPENTIN
25	METHADONE, GABAPENTIN, ETIZOLAM	.
26	COCAINE, MORPHINE, METHADONE, GABAPENTIN, ETIZOLAM, ALCOHOL	DIHYDROCODEINE, CANNABIS
27	HEROIN, BUPRENORPHINE, ETIZOLAM, METHADONE	NEFOPAM, GABAPENTIN, QUETIAPINE, AMITRIPTYLINE, MIRTAZAPINE
28	HEROIN, ETIZOLAM	METHADONE, DIAZEPAM, PREGABALIN, MIRTAZAPINE, CANNABIS
29	HEROIN, METHADONE, DICLAZEPAM	MIRTAZAPINE, DESMETHYLIMIPRAMINE
30	PREGABALIN, METHADONE, ETIZOLAM	DIAZEPAM, PARACETAMOL
31	HEROIN, ETIZOLAM, GABAPENTIN, PREGABALIN	DIAZEPAM, AMITRIPTYLINE
32	METHADONE, GABAPENTIN, ETIZOLAM	CLOMIPRAMINE, DIAZEPAM, QUETIAPINE
33	METHADONE, ETIZOLAM	GABAPENTIN, CANNABIS
34	ETIZOLAM, DICLAZEPAM, DIAZEPAM, METHADONE	MIRTAZAPINE, ALCOHOL
35	METHADONE, GABAPENTIN, DICLAZEPAM	VENLAFAXINE, ZOPICLONE, CANNABIS
36	METHADONE, GABAPENTIN, ETIZOLAM, DICLAZEPAM	PAROXETINE
37	GABAPENTIN, ETIZOLAM, METHADONE, COCAINE	MIRTAZAPINE
38	METHADONE, DIAZEPAM, ETIZOLAM, PREGABALIN, LAMOTRIGINE, OLANZAPINE, SERTRALINE	.
39	METHADONE, GABAPENTIN, ETIZOLAM, COCAINE	MIRTAZAPINE, DIAZEPAM, CANNABIS
40	ETIZOLAM, DIAZEPAM, ALCOHOL	.
41	METHADONE, ETIZOLAM	GABAPENTIN, MIRTAZAPINE, DIAZEPAM
42	HEROIN, METHADONE, ETIZOLAM	.
43	HEROIN, ETIZOLAM, ALCOHOL	COCAINE, DIAZEPAM, MIRTAZAPINE
44	HEROIN, METHADONE, DICLAZEPAM	SERTRALINE
45	ETIZOLAM, MORPHINE	.
46	HEROIN, DIHYDROCODEINE, PREGABALIN, ETIZOLAM	DIAZEPAM, OLANZAPINE, AMITRIPTYLINE, MIRTAZAPINE, CYCLIZINE, PARACETAMOL, PROPRANOLOL, CANNABIS
47	HEROIN, ETIZOLAM, COCAINE, ALCOHOL	DIAZEPAM
48	HEROIN, METHADONE, ETIZOLAM	DIAZEPAM, MIRTAZAPINE, ALCOHOL
49	GABAPENTIN, ETIZOLAM, METHADONE, ALCOHOL	DIPHENHYDRAMINE
50	METHADONE, PREGABALIN, ETIZOLAM	MIRTAZAPINE
51	HEROIN, ETIZOLAM, GABAPENTIN	MIRTAZAPINE
52	HEROIN, DICLAZEPAM	GABAPENTIN, METHADONE, DIAZEPAM, CANNABIS
53	HEROIN, ETIZOLAM	MIRTAZAPINE, PARACETAMOL, ALCOHOL
54	MORPHINE, METHADONE, PREGABALIN, ETIZOLAM, COCAINE	DIAZEPAM, CANNABIS
55	HEROIN, METHADONE, AMITRIPTYLINE, DICLAZEPAM, TRAMADOL, GABAPENTIN	DIAZEPAM
56	DIHYDROCODEINE, HYDROCODONE, DICLAZEPAM, CITALOPRAM	ALCOHOL

NOT included in this report's statistics

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	HEROIN, PREGABALIN, DIAZEPAM, CHLORPHENIRAMINE, FLUOXETINE, DIHYDROCODEINE, DICLAZEPAM	ALCOHOL

Table: NPS3 (continued)

(i) (continued) **Deaths for which one or more NPSs were implicated in, or potentially contributed to, the death**

(b) Other types of NPS present; no Benzodiazepine-type NPS

Included in this report's statistics[2]

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	MDMA, MEPHEDRONE	CANNABIS
2	HEROIN, METHIOPROPAMINE, MEXEDRONE, GABAPENTIN, DIAZEPAM	.
3	HEROIN, METHADONE, ETHYLPHENIDATE	LAMOTRIGINE, CARBAMAZEPINE
4	METHIOPROPAMINE, QUETIAPINE, DIAZEPAM, LORAZEPAM	.
5	HEROIN, METHADONE, GABAPENTIN, MEPHEDRONE, AMPHETAMINE, DIAZEPAM, AMITRIPTYLINE	ALCOHOL
6	MDMA, ECSTASY, PVP	.
7	PMMA, PMA, MDMA, AMPHETAMINE, BZP	.
8	MDPV	.
9	PMA, COCAINE, AMPHETAMINE	DIAZEPAM, LORAZEPAM, ALCOHOL
10	HEROIN, METHADONE, GABAPENTIN, DIAZEPAM, ETHYLPHENIDATE	MIDAZOLAM, MORPHINE, ZOPICLONE
11	DIHYDROCODEINE, ETHYLPHENIDATE	.
12	METHADONE, PARACETAMOL, CODEINE, CITALOPRAM, ETHYLPHENIDATE, CHLORPROMAZINE	DIAZEPAM, ALCOHOL
13	HEROIN, COCAINE, MITRAGYNINE	DIHYDROCODEINE, ALCOHOL
14	GAMMA HYDROXYBUTYRATE, CHLOROMETHCATHINONE	SILDENAFIL
15	METHIOPROPAMINE	.
16	ETHYLPHENIDATE, DIAZEPAM, BUPRENORPHINE, PREGABALIN	CANNABIS

NOT included in this report's statistics

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	METHIOPROPAMINE	.

(c) Both Benzodiazepine-type NPS and other types of NPS present

Included in this report's statistics[2]

no such deaths

NOT included in this report's statistics

no such deaths

Table: NPS3 (continued)

(ii) Deaths for which NPSs were present but were NOT considered to have contributed to the death

(a) Benzodiazepine-type NPS present; no other types of NPS

Included in this report's statistics[2]

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	MORPHINE, ALCOHOL	PYRAZOLAM
2	TRAMADOL	AMITRIPTYLINE, OLANZAPINE, MIRTAZAPINE, GABAPENTIN, DICLAZEPAM, LORAZEPAM, ALCOHOL
3	OPIATE, MORPHINE, DIHYDROCODEINE, GABAPENTIN, MIRTAZAPINE	DIAZEPAM, PARACETAMOL, CANNABIS, DICLAZEPAM
4	MORPHINE, HEROIN, METHADONE, DIAZEPAM	MIRTAZAPINE, CANNABIS, ETIZOLAM
5	OPIATE, BENZODIAZEPINE, MORPHINE, HEROIN, METHADONE, DIAZEPAM	CANNABIS, DICLAZEPAM, PYRAZOLAM
6	AMPHETAMINE	CODEINE, NORFLUOXETINE, ETIZOLAM, CANNABIS
7	HEROIN, METHADONE	MIRTAZAPINE, PREGABALIN, COCAINE, DIAZEPAM, DICLAZEPAM, CANNABIS
8	MDMA, ECSTASY, COCAINE	DICLAZEPAM, DIAZEPAM
9	HEROIN	MIRTAZAPINE, QUETIAPINE, DICLAZEPAM, PREGABALIN
10	HEROIN	PHENAZEPAM, AMITRIPTYLINE, PARACETAMOL
11	METHADONE, HEROIN	DIAZEPAM, QUININE, MIRTAZAPINE, PHENAZEPAM
12	HEROIN, COCAINE, ALCOHOL	DIHYDROCODEINE, SERTRALINE, DICLAZEPAM
13	OXYCODONE, DIHYDROCODEINE	PARACETAMOL, DIAZEPAM, CITALOPRAM, ETIZOLAM, LORAZEPAM, DELORAZEPAM, PROMETHAZINE
14	TRAMADOL, GABAPENTIN, ZOPICLONE	DIAZEPAM, DICLAZEPAM
15	GABAPENTIN, METHADONE	ETIZOLAM, RISPERIDONE, CANNABIS, ALCOHOL
16	METHADONE	ETIZOLAM, VENLAFAXINE, PROCYCLIDINE, ZUCLOPENTHIXOL
17	COCAINE, HEROIN, ALCOHOL	ETIZOLAM, DIAZEPAM, CANNABIS
18	MORPHINE, METHADONE, GABAPENTIN	MIRTAZAPINE, ETIZOLAM, TRAZODONE, CANNABIS
19	METHADONE	ETIZOLAM, DIAZEPAM
20	.	MORPHINE, ETIZOLAM, CANNABIS
21	HEROIN, ALCOHOL	METHADONE, ETIZOLAM
22	HEROIN, METHADONE	DIAZEPAM, ETIZOLAM, ALCOHOL
23	METHADONE, TRAMADOL	PREGABALIN, ETIZOLAM
24	HEROIN, METHADONE	ETIZOLAM, ALCOHOL
25	HEROIN	ETIZOLAM, DIHYDROCODEINE, ALCOHOL
26	COCAINE, METHADONE, ALCOHOL	ETIZOLAM, CANNABIS
27	COCAINE, HEROIN, METHADONE	ETIZOLAM, GABAPENTIN, PREGABALIN, CANNABIS, DIAZEPAM
28	HEROIN, METHADONE	DIAZEPAM, ETIZOLAM, GABAPENTIN, MIRTAZAPINE, DIHYDROCODEINE, ALCOHOL
29	METHADONE	DIAZEPAM, GABAPENTIN, AMITRIPTYLINE, MIRTAZAPINE, DICLAZEPAM, CANNABIS, ALCOHOL
30	.	DELORAZEPAM, FLUBROMAZEPAM, ZOLPIDEM, PREGABALIN

NOT included in this report's statistics

no such deaths

Table: NPS3 (continued)

(ii) (continued) **Deaths for which NPSs were present but were NOT considered to have contributed to the death**

(b) Other types of NPS present; no Benzodiazepine-type NPS

Included in this report's statistics[2]

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	DIHYDROCODEINE, DIAZEPAM, OXAZEPAM, TEMAZEPAM, LORAZEPAM	METHADONE, MEPHEDRONE, EDDP, CANNABIS
2	METHADONE, GABAPENTIN	DIAZEPAM, CODEINE, MORPHINE, METHIOPROPAMINE. ALCOHOL
3	HEROIN, ALCOHOL	METHIOPROPAMINE, CODEINE, DIAZEPAM, BUPRENORPHINE
4	.	AMITRIPTYLINE, DIAZEPAM, TRAMADOL, GABAPENTIN, MIRTAZAPINE, CODEINE, MORPHINE, METHADONE, ETHYLPHENIDATE, ALCOHOL
5	METHADONE, ALCOHOL	METHYLETHCATHINONE, DIAZEPAM, FLUOXETINE

NOT included in this report's statistics

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	UNSPECIFIED DRUG	ETHYLPHENIDATE
2	HELIUM	DIHYDROCODEINE, KRATOM, DIAZEPAM, ALCOHOL

(c) Both Benzodiazepine-type NPS and other types of NPS present

Included in this report's statistics[2]

no.	Substances which were implicated in, or potentially contributed to, the cause of death	Substances which were present, but which were not considered to have contributed to the death
1	MORPHINE, HEROIN, DIAZEPAM	DICLAZEPAM, MIRTAZAPINE, PREGABALIN, QUETIAPINE, MPA, ETHYLPHENIDATE

NOT included in this report's statistics

no such deaths

Footnotes

1) The substances which are counted (for the purpose of these figures) as New Psychoactive Substances are described in Annex E.

2) i.e. within the Drug Strategy 'baseline' definition, as implemented by National Records of Scotland.

Table CS1: Consistent series of drug-related deaths – 'extra' deaths and which of the drugs that were present for each of the 'extra' deaths meant that they were counted in the consistent series: 2000 to 2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Drug-related deaths: consistent series [1]	293	339	388	330	365	346	430	474	590	570	512	606	604	557	618	706
Drug-related deaths: standard definition [2]	292	332	382	317	356	336	421	455	574	545	485	584	581	527	613	706
"Extra" deaths counted in the consistent series [3]	1	7	6	13	9	10	9	19	16	25	27	22	23	30	5	0
of which:																
Mephedrone[4] present	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Phenazepam[5] present	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Tramadol[6] present	0	5	2	12	8	9	9	16	14	19	17	12	17	27	3	0
Zopiclone[6] present	1	2	4	1	1	1	0	4	2	6	7	9	7	1	0	0
None of the above, but one or more other substances which are now controlled were present [7]	0	0	0	0	0	0	0	0	0	1	0	0	1	2	2	0

Footnotes

1) broadly speaking, counting deaths on the basis of the classification of the drugs at the end of the latest year which is covered by the publication. See Annex F for the full definition.
2) broadly speaking, counting deaths on the basis of the classification of the drugs at the time of death. See Annex A for the full definition.
3) i.e. deaths which are counted in the consistent series but are not counted in the standard definition
4) mephedrone has been a controlled substance with effect from 16 April 2010, so subsequent deaths involving it are counted in the "standard definition" figures (and not "extra" deaths)
5) phenazepam has been a controlled substance with effect from 13 June 2012, so subsequent deaths involving it are counted in the "standard definition" figures (and not "extra" deaths)
6) tramadol and zopiclone have been controlled substances with effect from 10 June 2014, so subsequent deaths involving either (or both) of them are counted in the "standard definition" figures (and not "extra" deaths)
7) e.g. one or more of APB, API and BZP were present

Table CS2: Consistent series of drug-related deaths – 'extra' deaths by sex and age: 2000 to 2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Drug-related deaths: consistent series [1]	293	339	388	330	365	346	430	474	590	570	512	606	604	557	618	706
Drug-related deaths: standard definition [2]	292	332	382	317	356	336	421	455	574	545	485	584	581	527	613	706
"Extra" deaths counted in the consistent series [3]	1	7	6	13	9	10	9	19	16	25	27	22	23	30	5	0
of which:																
Male	0	3	3	6	2	6	7	6	10	13	16	12	15	9	3	0
Female	1	4	3	7	7	4	2	13	6	12	11	10	8	11	2	0
under 25	0	0	0	2	0	0	2	0	2	1	3	0	0	3	1	0
25 to 34	0	0	1	2	2	1	2	0	2	2	0	2	3	4	0	0
35 to 44	0	3	2	3	2	2	2	4	4	7	8	6	2	8	2	0
45 to 54	1	3	1	0	2	4	3	6	1	6	7	9	7	4	0	0
55 and over	0	1	2	6	3	3	0	9	7	9	9	5	11	11	2	0
Males																
under 25	0	0	0	0	0	0	2	0	2	1	3	0	0	1	0	0
25 to 34	0	0	0	1	1	0	1	0	1	2	0	0	2	3	0	0
35 to 44	0	2	0	2	0	2	1	1	3	3	4	6	2	5	2	0
45 to 54	0	1	1	0	0	1	3	2	1	2	4	4	4	4	0	0
55 and over	0	0	2	3	1	3	0	3	3	5	5	2	7	6	1	0
Females																
under 25	0	0	0	2	0	0	0	0	0	0	0	0	0	2	1	0
25 to 34	0	0	1	1	1	1	1	0	1	0	0	2	1	1	0	0
35 to 44	0	1	2	1	2	0	1	3	1	4	4	0	0	3	0	0
45 to 54	1	2	0	0	2	3	0	4	0	4	3	5	3	0	0	0
55 and over	0	1	0	3	2	0	0	6	4	4	4	3	4	5	1	0

Footnotes

1) broadly speaking, counting deaths on the basis of the classification of the drugs at the end of the latest year which is covered by the publication. See Annex F for the full definition.
2) broadly speaking, counting deaths on the basis of the classification of the drugs at the time of death. See Annex A for the full definition.
3) i.e. deaths which are counted in the consistent series but are not counted in the standard definition

6. Notes on statistical publications

National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in line with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics (available on the UK Statistics Authority website).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is National Records of Scotland's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Information on background and source data

Further details on data source(s), timeframe of data and timeliness, continuity of data, accuracy, etc can be found in the About this Publication document that is published alongside this publication on the NRS website.

National Records of Scotland

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- 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 of our website. Scottish Census statistics are available on the Scotland's Census website.

We also provide information about future publications on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government ScotStat website.

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Revisions and Corrections

We, the National Records of Scotland, label any revisions and corrections that we have applied to any of our statistics. These revisions and corrections are clearly marked on the webpage of the publication as well on our revisions and corrections page available on the NRS website.

Where applicable, revisions will also be carried out in accordance with the revisions policy for population, migration and life events statistics available on the ONS website.

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information.
Email: statisticscustomerservices@nrscotland.gov.uk

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7. Related organisations

Organisation	Contact
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.	Office of the Chief Statistician and Strategic Analysis Scottish Government 2W, St Andrews House Edinburgh EH1 3DG Phone: 0131 244 0442 Email: statistics.enquiries@gov.scot Website: http://www.gov.scot/Topics/Statistics
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	Customer Contact Centre Office for National Statistics Room 1.101 Government Buildings Cardiff Road Newport NP10 8XG Phone: 0845 601 3034 Minicom: 01633 815044 Email: info@statistics.gsi.gov.uk Website: www.ons.gov.uk/
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.	Northern Ireland Statistics and Research Agency McAuley House 2-14 Castle Street Belfast BT1 1SA Phone: 028 9034 8100 Email: info.nisra@dfpni.gov.uk Website: www.nisra.gov.uk