



Public Health
England

Protecting and improving the nation's health

Trends in drug misuse deaths in England, 1999-2013

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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Contents

About Public Health England	2
Executive summary	4
Introduction	7
Reporting methodology and format of report	7
Format of report	8
Section 1: Trends in drug misuse deaths in England	9
Overall trends	9
Substances mentioned	10
Age and sex	15
Cause of death	17
Regional variations	18
Section 2: Results from matching between drug poisoning and drug treatment data	19
Next steps	21
References	22

Executive summary

In September 2014, the Office for National Statistics (ONS) reported a **21% increase in drug misuse deaths registered in England in 2013**. Public Health England, DrugScope and the Local Government Association held a national summit in January 2015 to explore the reasons for the reported rise. This included preliminary analysis by PHE of the base data collected by ONS.

DrugScope published a **briefing** on the main points of the discussion at the summit, which drew on the experience of experts from across the sector, including treatment providers, commissioners, the research community, and service users. This statistical bulletin supplements the briefing with more in-depth analysis of the data, including the results of an analysis of the drug misuse death data in conjunction with an analysis of drug treatment data.

PHE analysis, reporting by year of death, found a high number of drug misuse deaths registered in 2013 where the person had died during 2013, when compared to equivalent figures in previous years (figure 1). The scale of any increase in drug misuse deaths in 2013 is not clear because not all deaths in that year have yet been registered, and will become much clearer after ONS publish figures for 2014 (on 3 September 2015).

A proportion of the increase reported by ONS is attributable to deaths registered after more than a year (figure 2). These contribute to the increase in registrations of drug misuse deaths reported by ONS for 2013, but these deaths occurred in earlier years.

Across the period 1999-2013, opiates are consistently the type of substance most frequently mentioned in drug misuse deaths – 83% of deaths in 2011 (figure 3). The most commonly mentioned opiates are heroin and methadone, and tramadol is now the third most common (figure 4).

Alcohol was mentioned in combination with illicit drugs in around one-third of drug misuse deaths in 2011 (figure 3). This proportion has remained broadly similar in recent years. Alcohol is consistently the most commonly mentioned substance in drug misuse deaths aside from opiates.

Mentions of benzodiazepines, anti-depressants and z-drugs in drug misuse deaths all appear to be increasing in recent years (figure 5a).

Following a marked drop from a peak in around 2007, mentions of cocaine and amphetamines in drug misuse deaths appear to be increasing (figure 5b). In addition,

there were at least 55 deaths in 2012 where new psychoactive substances were mentioned. This is around 4% of all drug misuse deaths in that year.

Among heroin deaths, there is a clear trend towards increased mentions of other substances as well, including alcohol, benzodiazepines and methadone, indicating increasingly complex poly substance deaths (figure 6).

The median age at drug misuse death has increased from 35 to 42 between 1999 and 2011 (figure 7) and there is a general trend of increasing drug misuse deaths among women (figure 8).

Around three-quarters of drug misuse deaths are classed as accidental poisonings (figure 9). The number of suicides among drug misuse deaths has remained broadly similar across the period, although there were successive rises in 2010 and 2011. Drug misuse deaths classified as suicide are notably different from accidental poisonings, with relatively high proportions of women, older age groups and mentions of opiates other than heroin and methadone.

Regional variations were considered, but are not reported here as it was concluded that PHE analysis added little to the published ONS statistics at a regional level.

Matching between the ONS database and data from the National Drug Treatment Monitoring System (NDTMS) suggested:

- the majority of individuals who suffered opiate misuse deaths in 2011 had not been in treatment since at least the start of 2007
- there was little change in the proportion of opiate misuse deaths where the individual had recently been in treatment (ie, within one year) over the five-year period studied

When considered in the context of treatment and prevalence data, this suggested:

- the majority of opiate users were in treatment, while the majority of opiate misuse deaths were among individuals outside treatment, suggesting a significant protective effect of treatment
- between 2008 and 2012, the proportion of opiate users in treatment each year remained broadly stable. Together with the relatively stable proportion of opiate misuse deaths where the individual had recently been in treatment, this suggests there has been little change – in either direction – in the extent to which treatment is protective

By way of next steps, PHE will:

- rapidly update this analysis from the data ONS supplies following publication of its 2014 report in September

- consider further analysis to explore themes highlighted in this analysis, including further consideration of poly substance deaths, the role of alcohol in drug misuse deaths, and additional intelligence on overdose risk from NDTMS
- continue to explore with stakeholders – including through the National Intelligence Network on health harms – the causes and prevention of drug misuse deaths
- consider what additional advice and support it can provide to local authority commissioners and drug treatment providers
- support local areas to further improve access to treatment for those not currently not engaging with the treatment system

Introduction

Drug misuse is a significant cause of premature mortality in the UK. An analysis of the Global Burden of Disease Survey 2010 reported that, in the UK, drug misuse disorders were the sixth most common cause of years of life lost in the 20-54 age group.¹ Nearly one in nine deaths registered among people in their 20s and 30s in England and Wales in 2013 were related to drug misuse.^a Preventing drug-related deaths should be a core aim of all local drug treatment systems.²

A recent reported rise in drug misuse deaths registered in 2013 led PHE, DrugScope and the Local Government Association to host a national summit in January 2015. DrugScope's report of the summit described the rise as 'a cause for concern among a wide range of stakeholders in the fields of drug and alcohol treatment, policy and research'.³ PHE presented early findings of its analysis of ONS and National Drug Treatment Monitoring System (NDTMS) data and agreed to publish this more detailed analysis briefing to follow DrugScope's report. The briefing is therefore designed to provide local authority commissioners and drug treatment providers with further insight on the current situation and recent trends in relation to drug misuse deaths.

Reporting methodology and format of report

Criteria for inclusion and method of reporting

This analysis is based on data from the drug poisoning database collected by the Office for National Statistics (ONS). ONS reports annual mortality statistics based on the year deaths are registered. ONS estimates that the median delay to register a drug misuse death is around six months, and that around half of drug misuse deaths are registered in a different calendar year to the year the person died. These delays occur because overdose deaths are routinely referred to coroners and are subject to an inquest, and in England a death cannot be registered until an inquest has been completed.⁴

The analysis included in this briefing is reported according to the year that each death occurred. This may be regarded as clearer for depicting long-term trends, as any trend will solely reflect the timing of deaths, whereas trends reported by registration date may also be affected by changes in practice around the registration process (eg, increases or decreases in delays, or in the event of a push to conclude long-running inquests). To be included in this analysis, a death must have been registered by the end of 2013. This means that, when reporting by year of death, figures reported for 2013 will be

^a Figure supplied by ONS upon request for use in this briefing. Exact proportion is 10.6%

significantly lower than the actual number of drug misuse deaths in that year, as many deaths will not yet be registered. Figures for 2012 will also be an undercount, though to a much lesser degree, while 2011 and earlier can be regarded as effectively complete.

To account for data incompleteness, the following approaches are taken when reporting by year of death:

- figures for 2012 are reported throughout, but lines between 2011 and 2012 are dotted on graphs
- an overall figure for 2013 is reported in Figure 1 but the line between 2012 and 2013 is both dotted and faded
- 2011 is generally used in the text as the latest complete year. Later years are referred to in the text where these might offer additional insight (eg, where a figure for 2012 already exceeds the figure for 2011)

Reporting by substance and definition of 'drug misuse death'

Where we report by substance, this means that the substance was mentioned on the death certificate. A mention of a substance does not necessarily mean that the substance was implicated in the person's death. Where the report refers to, for example, 'heroin deaths', this terminology is used for brevity and the above meaning still applies.

Only deaths that fit the UK 'drug misuse' definition are included in this analysis. This definition takes into account the underlying cause of death and mentions of substances controlled under the Misuse of Drugs Act 1971 (MDA), seeking to identify deaths related to drug misuse.⁵ Although data is available back to 1993, ONS advises that the baseline year for monitoring deaths related to drug misuse was set as 1999 and accordingly this is used as the start point in this analysis.

Format of report

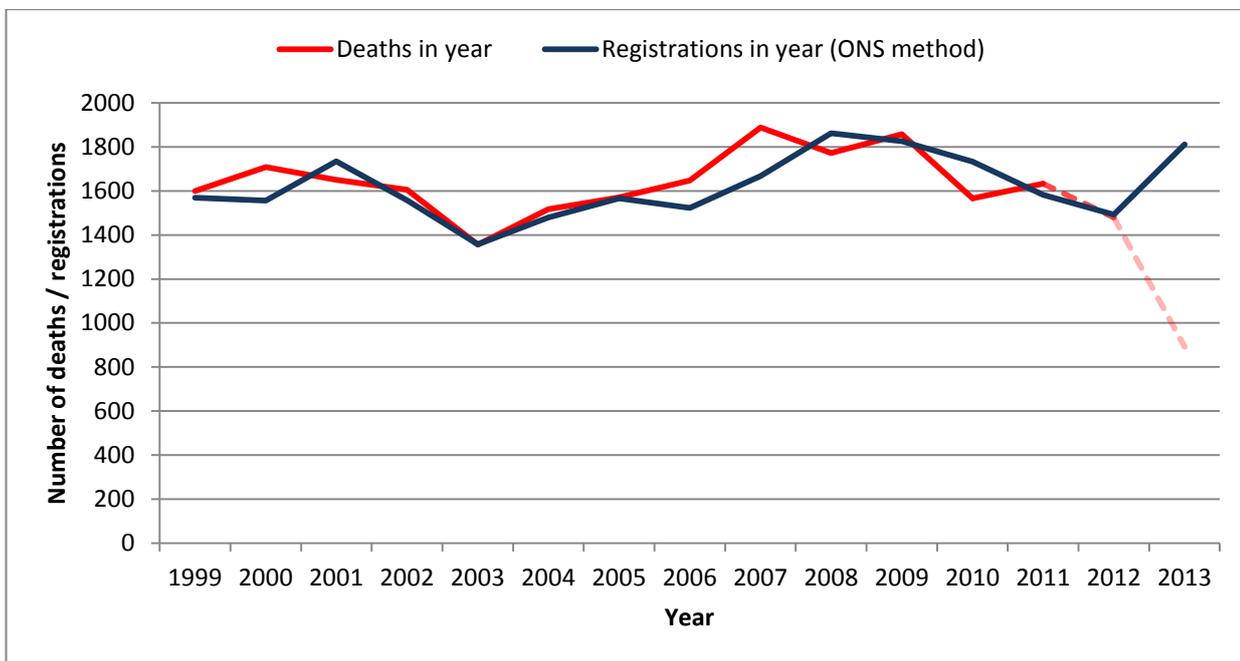
The report has two sections. The first considers trends in drug misuse deaths in England, including breakdowns by substances mentioned, age, gender and cause of death. The second shows the results from matching data on drug misuse deaths to drug treatment data to explore the timing of drug misuse deaths in relation to treatment. The report concludes with the next steps for PHE following the findings in the report.

Section 1. Trends in drug misuse deaths in England

Overall trends

Figure 1 shows the trend in drug misuse deaths in England from 1999 onwards. For reference, the graph also shows the ONS published statistics (based on year of registration). In September 2014, ONS reported a 21% increase drug misuse deaths registered in 2013 compared to 2012, following four successive annual falls since 2008. Similar peaks were observed in the ONS data in 2001 and 2008, and on both occasions our analysis showed that the peak in deaths occurred in the preceding year, but that the peaks appeared a year later in the ONS report as many deaths were registered in the next year. However, the available data does not suggest that the rise reported by ONS against 2013 is a result of a rise in deaths in 2012, suggesting a different explanation is required in terms of the timing of these deaths.

Figure 1. Drug misuse deaths by year of death compared to by registration year

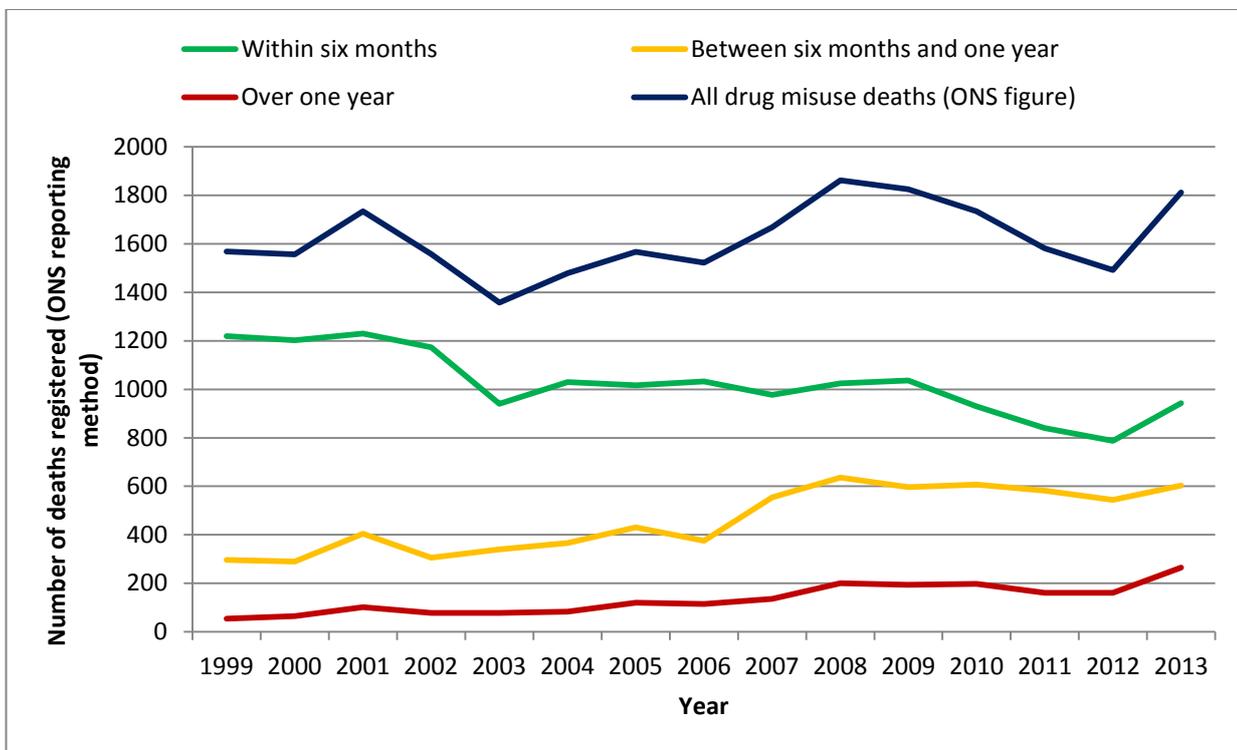


Note: Dotted and faded lines on graphs reflect incomplete data for later years (see reporting methodology)

To assess the reported rise in more detail, we broke down the drug misuse deaths reported by ONS against each year by the time taken to register each death. This analysis showed that in 2013 there was an increase in deaths registered within six months, but there were also increases in deaths taking between six months and one year and, most notably, more than a year to be registered (figure 2). There were 892

drug misuse deaths occurring in 2013 which were registered by the end of that year (shown in figure 1), which is higher than equivalent figures for previous years and may suggest an increase in deaths once we have complete data for deaths occurring in that year. However, there was a notable increase in registrations of deaths after over a year in 2013; these, by definition, occurred prior to 2013 but contribute to the reported increase in registrations in that year. ONS are due to publish figures for deaths registered in 2014 on 3 September 2015, which should report most of the remaining deaths that occurred in 2013 and therefore give a clearer picture of the extent of the genuine change in trend.

Figure 2. Drug misuse deaths registered each year, by time to register death



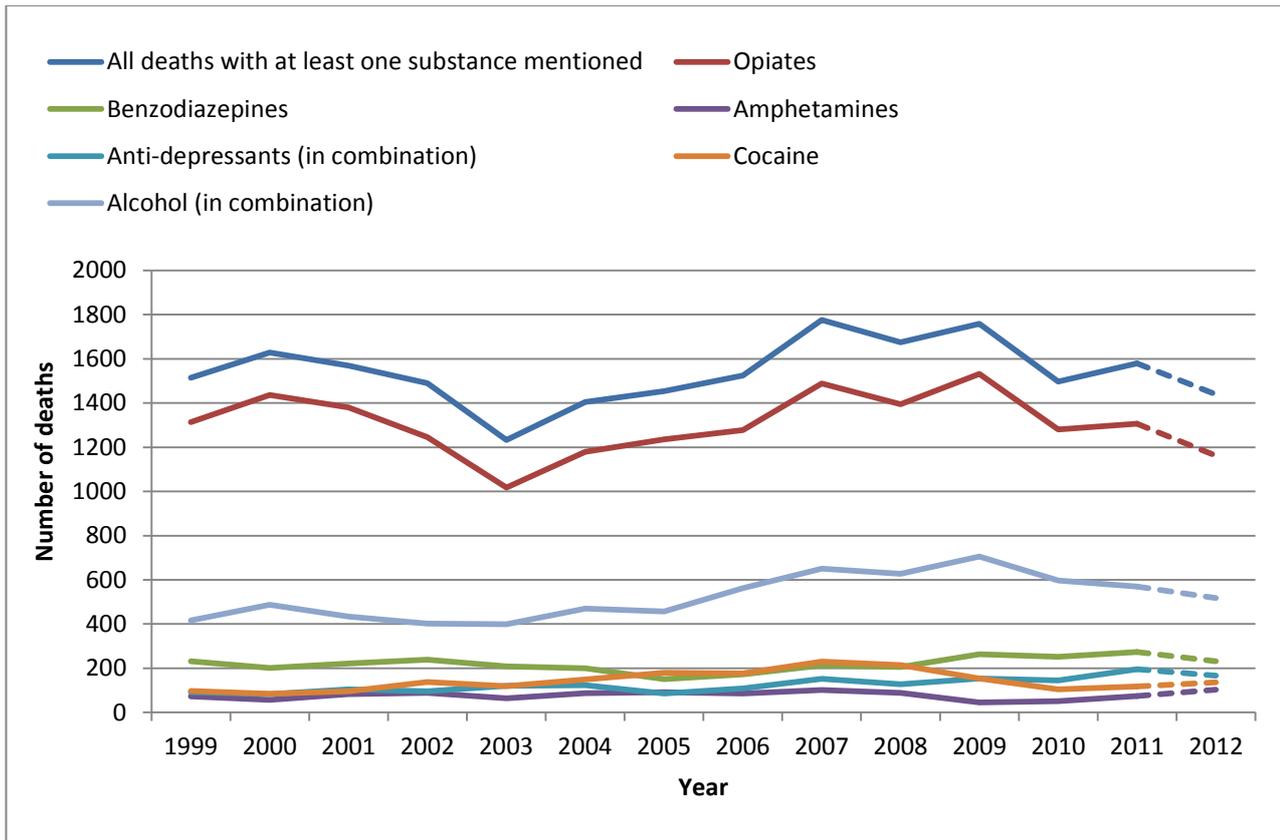
Substances mentioned

Figure 3 shows the breakdown of substances mentioned in drug misuse deaths over the period for key substance groups. For this breakdown, an individual death may be counted in more than one of these classes and drug misuse deaths with unspecific information^b are excluded (3% of deaths in 2011). Figure 3 shows that across the whole period the large majority of drug misuse deaths included the mention of at least one opiate (83% in 2011), and that the overall trend in drug misuse deaths over this period is largely driven by trends in deaths involving opiates. The next most common

^b Where the available information is too vague to enable any classification by substance group, eg, mention of 'drug', 'narcotic'

substance mentioned was alcohol (35% in 2011^c), and this proportion has remained reasonably stable in recent years, with alcohol consistently the most mentioned substance aside from opiates. It should be noted that generally alcohol must be in combination with an illicit substance to be included, and overall ONS reported that 8,416 alcohol-related deaths were registered in 2013, which considerably exceeds the total of drug-related deaths.⁶

Figure 3. Drug misuse deaths in each year, by substance groups



Notes: i) Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology); ii) Where a substance group is listed as ‘in combination’, this means it would not itself qualify for the drug misuse definition, so must be reported alongside another substance.

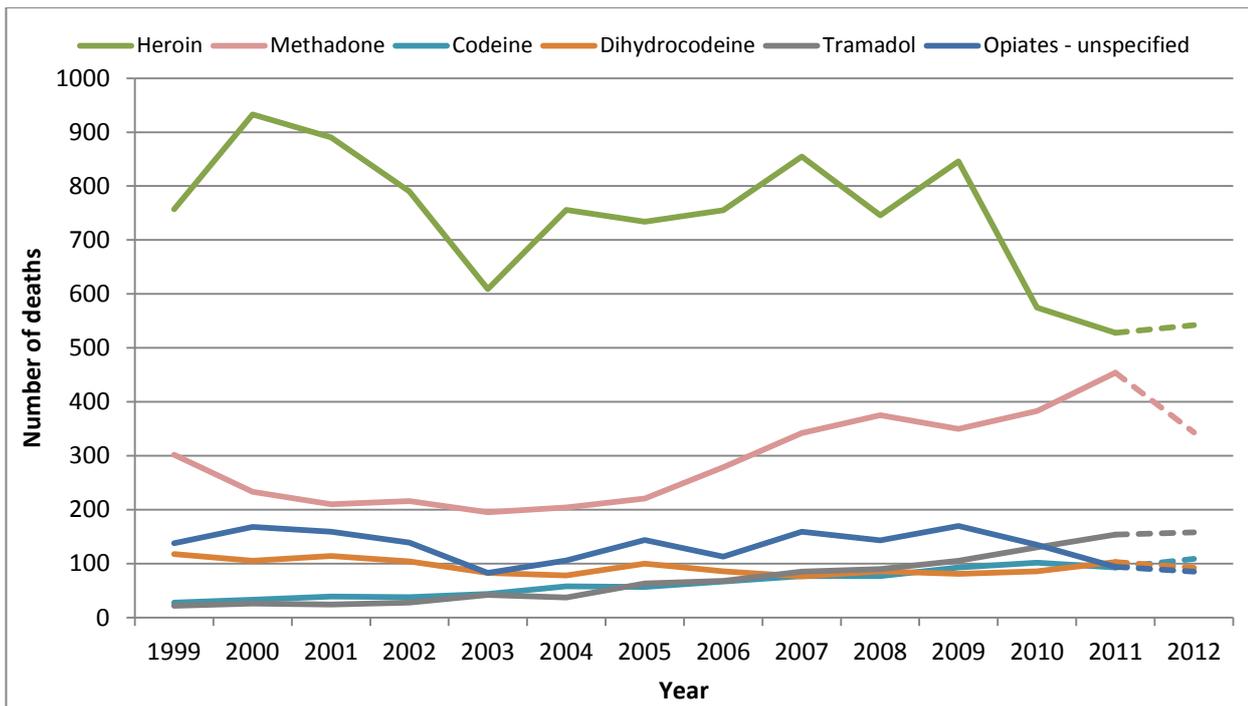
Figure 4 shows a breakdown of opiate deaths by the five most commonly mentioned opiate drugs in recent years. In a substantial number of cases, no further information was available beyond that an opiate was mentioned, and this figure is also reported, as ‘Opiates – unspecified’.

Heroin was the most commonly mentioned opiate drug in drug misuse deaths throughout the period. The peak year for heroin deaths was 2000 (933 deaths),

^c ONS has advised that the thresholds used to flag the possible involvement of alcohol may be lower than those required for other substances. An alternative method is to consider the proportion where an equivalent ICD-10 code for alcohol poisoning or a mental and behavioural disorder due to alcohol was included among the causes of death. This would lead to a slightly reduced estimate of 31% in 2011.

following which there were several year-on-year falls through to 2003 (609 deaths) and then a general increasing trend towards the end of the decade, followed by a sharp fall in 2010 (575 deaths) and a further small fall in 2011. The provisional data suggests that heroin deaths increased slightly in 2012 and a further increase is likely to have taken place in 2013, where there were 377 known heroin deaths registered by the end of the year.

Figure 4. Mentions of opiates, by year



Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

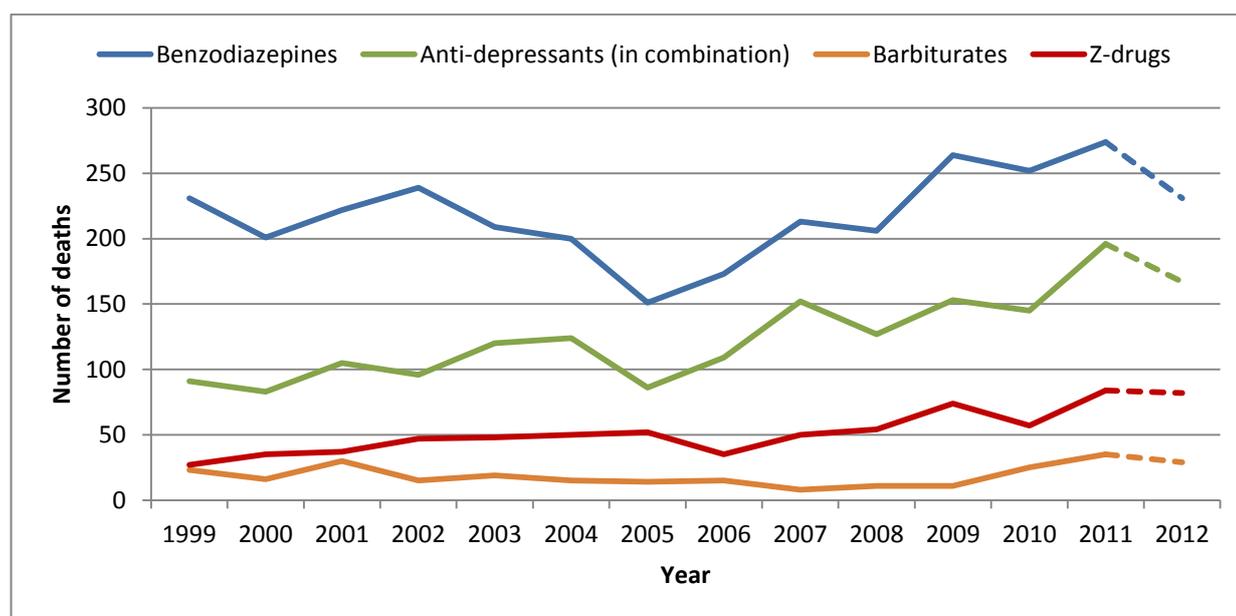
Having fallen from a peak of around 300 deaths in the late 1990s, mentions of methadone in drug misuse deaths began to increase from 2004. The drug treatment system rapidly expanded throughout the 2000s and there was therefore an increase in the amount of methadone prescribed, which may partially explain increases in methadone deaths. Strang et al (2010) developed an index to show this relationship and found that methadone deaths as a function of methadone prescriptions had reduced, which they suggested was ‘closely related to the introduction of supervised dosing of methadone’.⁷ Following a slight fall in 2009, methadone deaths increased again, to a peak of 454 in 2011. Provisional figures suggest that methadone deaths decreased from this peak level in 2012.

In recent years, tramadol has been the third most commonly mentioned opiate on death certificates and tramadol deaths have steadily risen (154 deaths in 2011, and at least 158 in 2012). These figures predate tramadol being controlled as a Class C drug under the MDA in 2014 and therefore it remains to be seen what impact this change will have

in counteracting this rising trend. Drug misuse deaths where codeine was mentioned have also increased in recent years, with 93 in 2011 and at least 109 in 2012, while mentions of dihydrocodeine have remained at a similar level to this since the late 1990s, with 103 in 2011.^d As of 2011, oxycodone and fentanyl are the next most mentioned opiate drugs (37 and 28 deaths in 2011 respectively), and mentions of any other opiates are rare, although other opiates have historically been mentioned frequently (eg, dextropropoxyphene).

Figures 5a and 5b show the numbers of mentions of selected non-opiate substances in death certificates, on a scale that allows more detail than shown in figure 3. These are split into two categories: Figure 5a shows anti-depressants, sedatives and hypnotics. Figure 5b shows deaths related to stimulants (cocaine and amphetamines) as well as new psychoactive substances.

Figure 5a. Mentions of anti-depressants, sedatives and hypnotics, by year



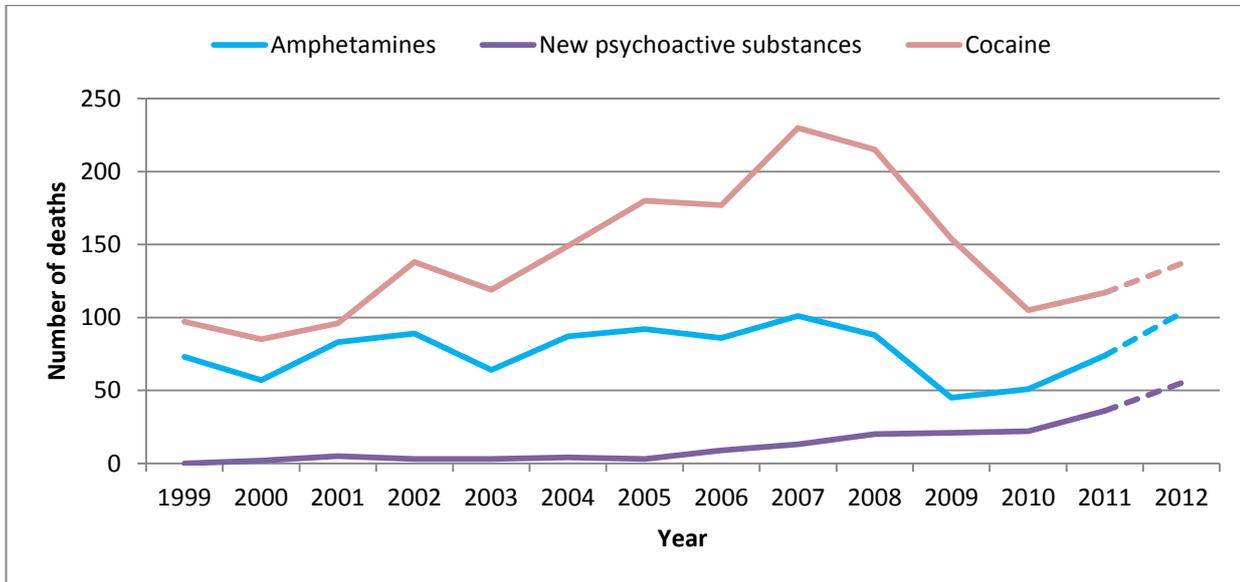
Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

Figure 5a shows that benzodiazepines are the most commonly mentioned substance in drug misuse deaths aside from opiates and alcohol (17% of deaths in 2011). In 2011, the majority of benzodiazepine deaths mentioned diazepam (176 deaths, or 64%), and since 1999 there has been a reduction in the number of mentions of temazepam (38 in 2011). The large majority of benzodiazepine deaths involve other substances. Mentions of anti-depressants in combination with illicit substances have risen in recent years. As with alcohol, it should be noted that anti-depressants do not meet the definition of drug

^d Codeine and dihydrocodeine mentioned as part of a compound (eg co-codamol) are counted towards the definition of drug misuse, so totals for codeine and dihydrocodeine not represent all poisonings involving these drugs.

misuse, so this represents a subset of anti-depressant deaths where an illicit substance is generally also mentioned.

Figure 5b. Mentions of stimulants and new psychoactive substances, by year



Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

Figure 5b shows that mentions of cocaine and amphetamines had fallen markedly after peaking around 2007, but figures for 2011 and provisional figures for 2012 suggest a turnaround in this trend, with at least 137 deaths mentioning cocaine and 103 mentioning amphetamines in 2012. Within the amphetamines group, mentions of MDMA dropped hugely after 2007 but appear to be increasing again (at least 35 in 2012). Another recent development has been deaths involving PMA or PMMA: there were at least 41 such deaths in 2012 and 2013, while there were very few prior to 2012.

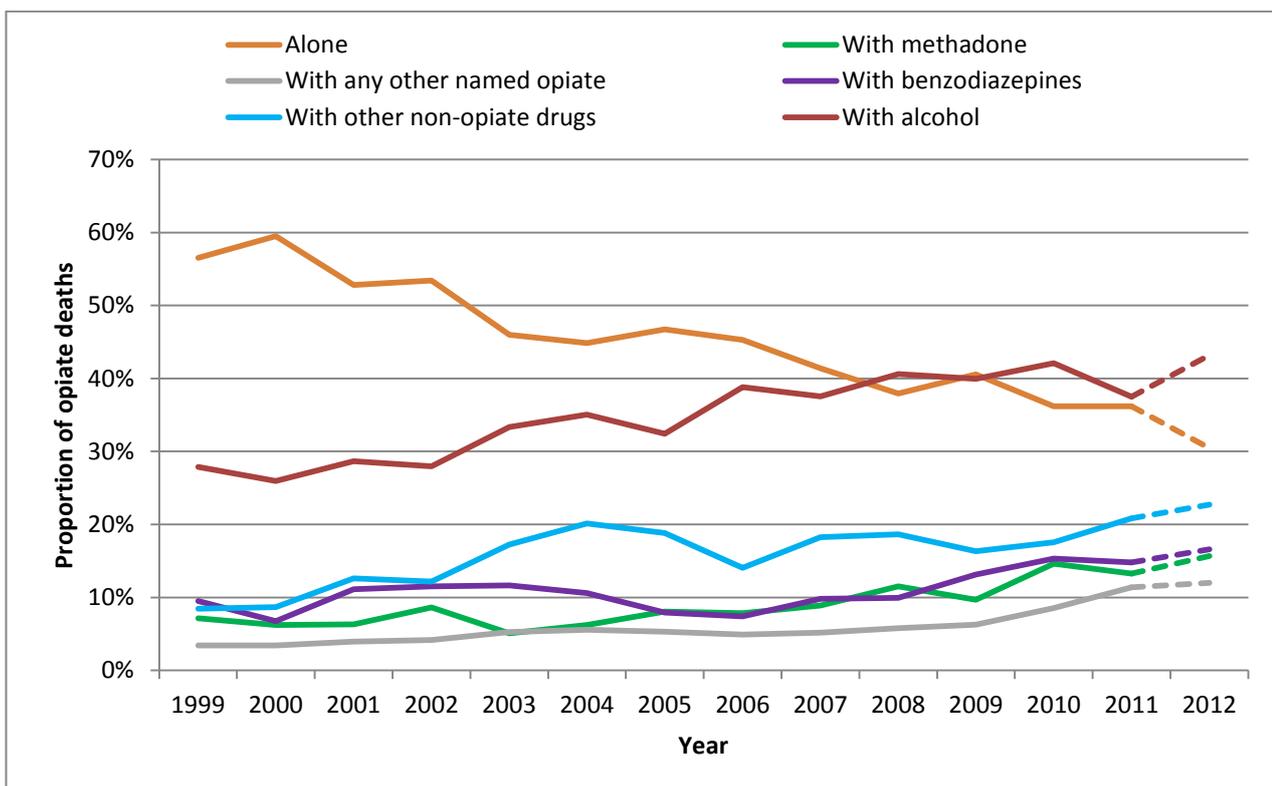
There were at least 55 mentions of new psychoactive substances (NPS) in 2012, using the definition provided by ONS.⁵ Despite often being referred to as ‘legal highs’, the NPS mentioned are often controlled substances under the MDA, and almost all NPS deaths are counted as ‘drug misuse’ deaths using the ONS definition. There were a wide range of substances mentioned among the 55 known cases in 2012, with the largest numbers being mentions of mephedrone (16 deaths) and GHB/GBL (14 deaths), both of which are controlled drugs under the MDA.

As well as considering each substance mentioned individually, it is also useful to consider the combinations of substances reported against drug misuse deaths. Figure 6 shows the breakdown of heroin deaths by the other substance(s) mentioned alongside heroin. This shows a general falling trend in the proportion of heroin deaths where only heroin was mentioned (36% in 2011), whereas the proportion where alcohol was mentioned alongside heroin has increased and now exceeds the figure for heroin alone

(being 38% in 2011). The proportion of heroin deaths where benzodiazepines were mentioned has increased markedly in recent years, from under 10% in 2006 to 17% in 2011. The proportion where another opiate was mentioned has also increased, with methadone mentioned in 13% of heroin deaths in 2011 and other opiates mentioned in 11%, as has the proportion where other substances are mentioned: 21% in 2011, the largest shares of which were mentions of anti-depressants (8%) and cocaine (7%).

The clear overall trend, therefore, is that heroin deaths increasingly also include mentions of other substances and deaths where only heroin is mentioned are becoming rarer. This presents a significant challenge for interpretation of the data, as it is more difficult to establish the role each substance may have in a death. If this trend continues, reporting at national level by individual substance may become less adequate as the trends for each substance are increasingly related to one another.

Figure 6. Heroin deaths by other substances mentioned alongside heroin, by year



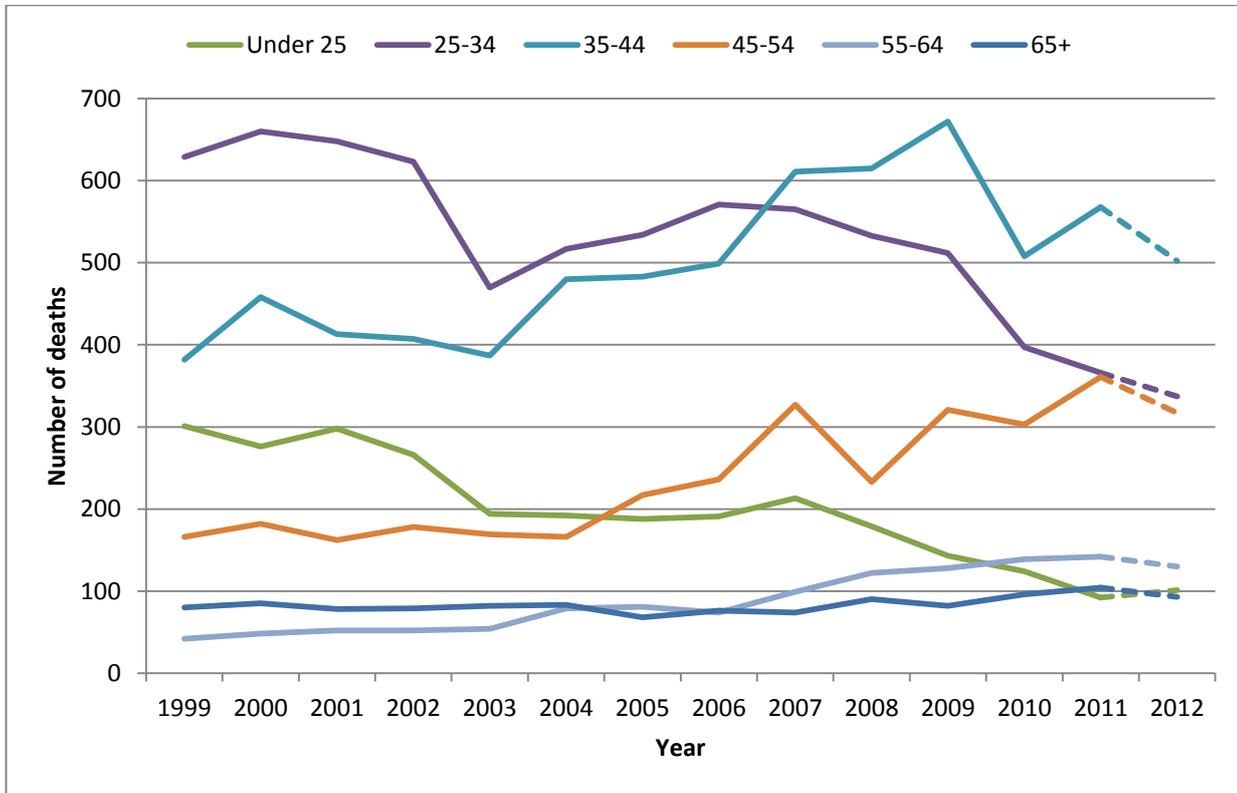
Notes: i) Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology) ii) An individual death may be counted under more than one category, except 'Alone' which is exclusive from other categories

Age and sex

Figure 7 shows the trend over time in drug misuse deaths by age group. Over this period, the median age at death increased from 32 in 1999 through to 41 in 2011. This

correlates with indications of an ageing drug using population, including treatment data⁸ and estimated prevalence of opiate and/or crack cocaine use.⁹

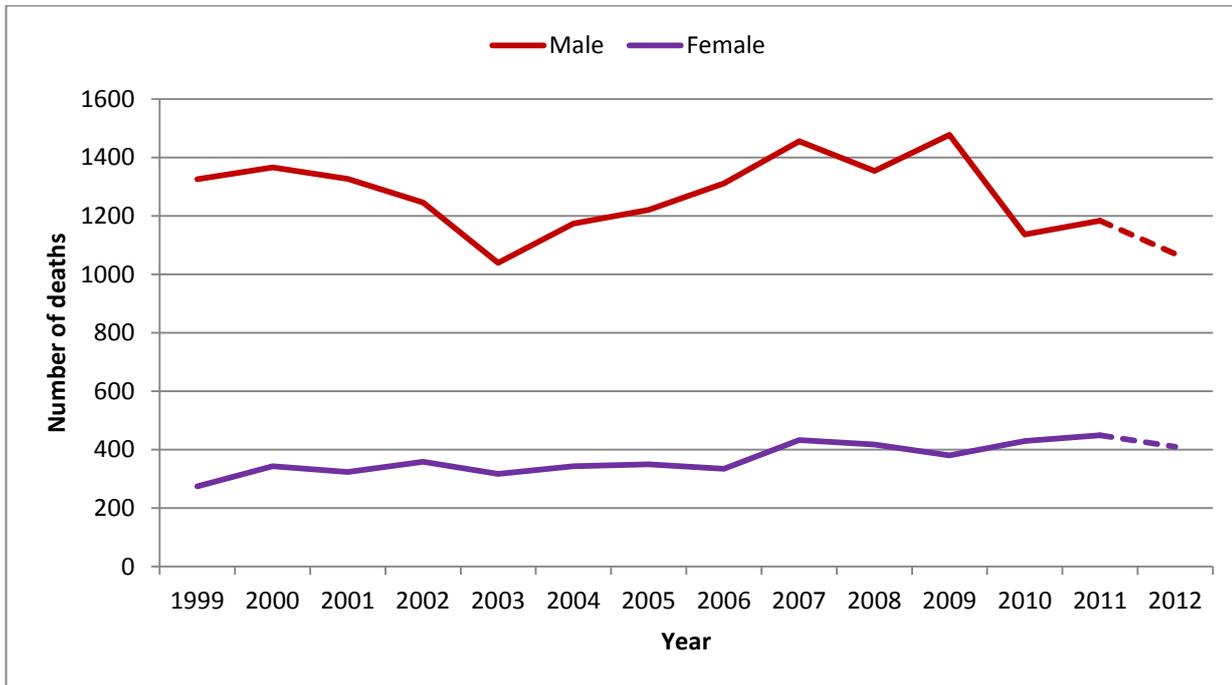
Figure 7. Drug misuse deaths, by age and by year



Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

Figure 8 (overleaf) shows the breakdown of drug misuse deaths by sex over the period. Across the period, the majority of drug misuse deaths have been among men. However, deaths among women have been on a general increasing trend over the whole period. The median age at death for women who suffered a drug misuse death was higher than for men (44 compared to 40 in 2011), with the median age for both sexes generally increasing over the period.

Figure 8. Drug misuse deaths, by sex



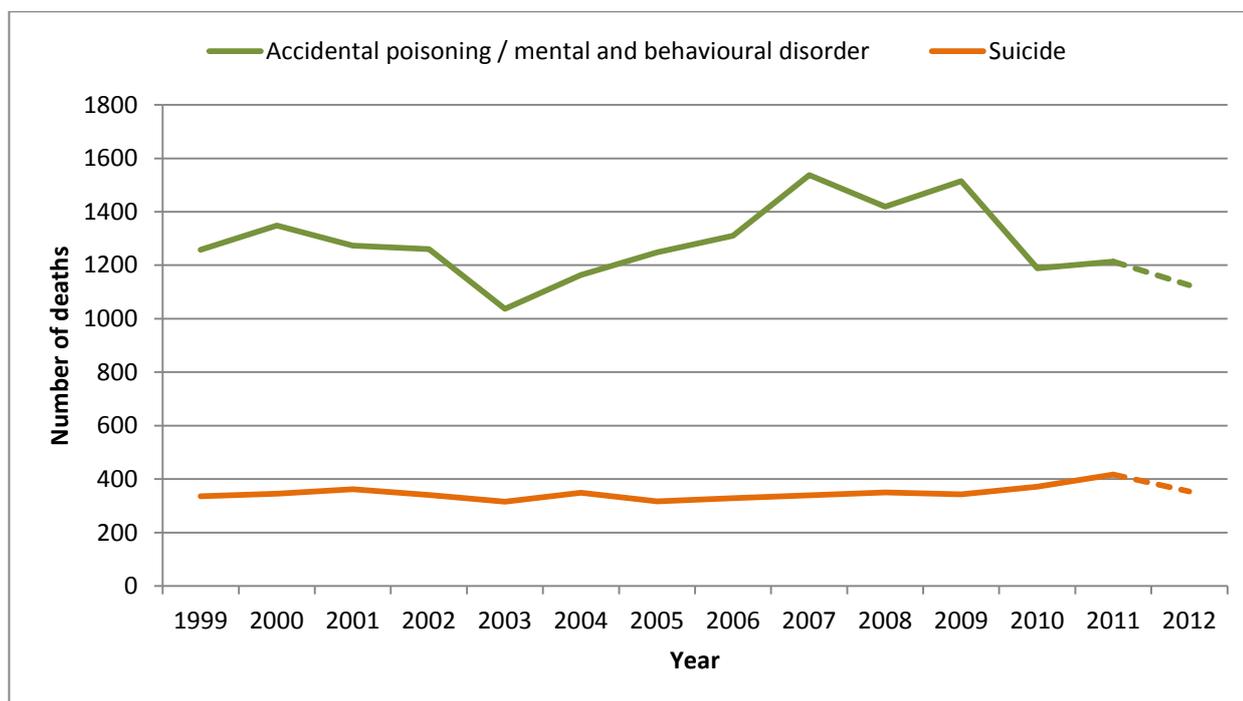
Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

Cause of death

Figure 9 (overleaf) shows the breakdown of drug misuse deaths by the underlying cause of death. The large majority of drug misuse deaths are accidental poisonings (74% in 2011). The number of suicides (as defined by ONS)¹⁰ among drug misuse deaths has stayed broadly similar across the period, although there were successive increases in 2010 and 2011 (from 343 in 2009 to 417 in 2011).

There are considerable disparities between accidental poisonings and suicides among drug misuse deaths when considered by age, sex and substances mentioned: 41% of drug misuse deaths in 2011 among those aged 45 or over and 37% of deaths among women were classed as suicides, compared to 16% of drug misuse deaths among those aged under 45 and 21% among men; 43% of drug misuse deaths involving an ‘other opiate’ (ie, not methadone or heroin) in 2011 were classed as suicides, compared to 18% of heroin deaths, 11% of methadone deaths, 4% of amphetamine deaths and 3% of cocaine deaths.

Figure 9. Drug misuse deaths, by underlying cause of death^e



Note: Dotted line for 2012 reflects partially incomplete data and 2013 data is omitted due to being substantially incomplete (see reporting methodology)

Regional variations

Although PHE has carried out regional analyses, it was decided that we would not include them in this bulletin. The principal reason for this exclusion is that our findings essentially support the findings on geographical variation in drug misuse death that ONS have published. The most notable points are that the North West and North East regions have consistent significantly higher rates of drug misuse death than the national average in recent years, while London has in more recent years had a significantly lower rate than the national average.¹¹ It should be borne in mind that regional rates will fluctuate more than the national rate due to smaller populations, and therefore it is important to take into account confidence intervals when making regional comparisons.

^e Due to changes in coding practice over the period which affect the numbers reported against each category, accidental poisoning and mental and behavioural disorders have been reported together. Intentional poisonings and poisonings of undetermined intent are reported together and described as 'suicides', following ONS methodology. 'Assault by drugs' also falls under the definition, but is disregarded here due to low numbers.

Section 2. Results from matching between drug poisoning and drug treatment data

To assess the relationship between drug misuse deaths and contact with drug treatment, we undertook a high-level matching exercise between the ONS database and data from NDTMS.

We matched all drug misuse deaths between 2007 and 2012 to all drug treatment contacts in NDTMS in that time. We then categorised deaths into mutually exclusive categories according to whether the person died:

- while in treatment
- outside of treatment, but had received treatment in the previous year. This category was divided into four further categories, reflecting the time since the person exited and the reason for their exit:
 - successfully completed treatment within the last six months
 - successfully completed treatment between six and 12 months prior
 - exited treatment in an unplanned way within the last six months
 - exited treatment in an unplanned way between six and 12 months prior
- outside of treatment and had received treatment at some time during this period, but not in the previous year
- having had no treatment contact during the period

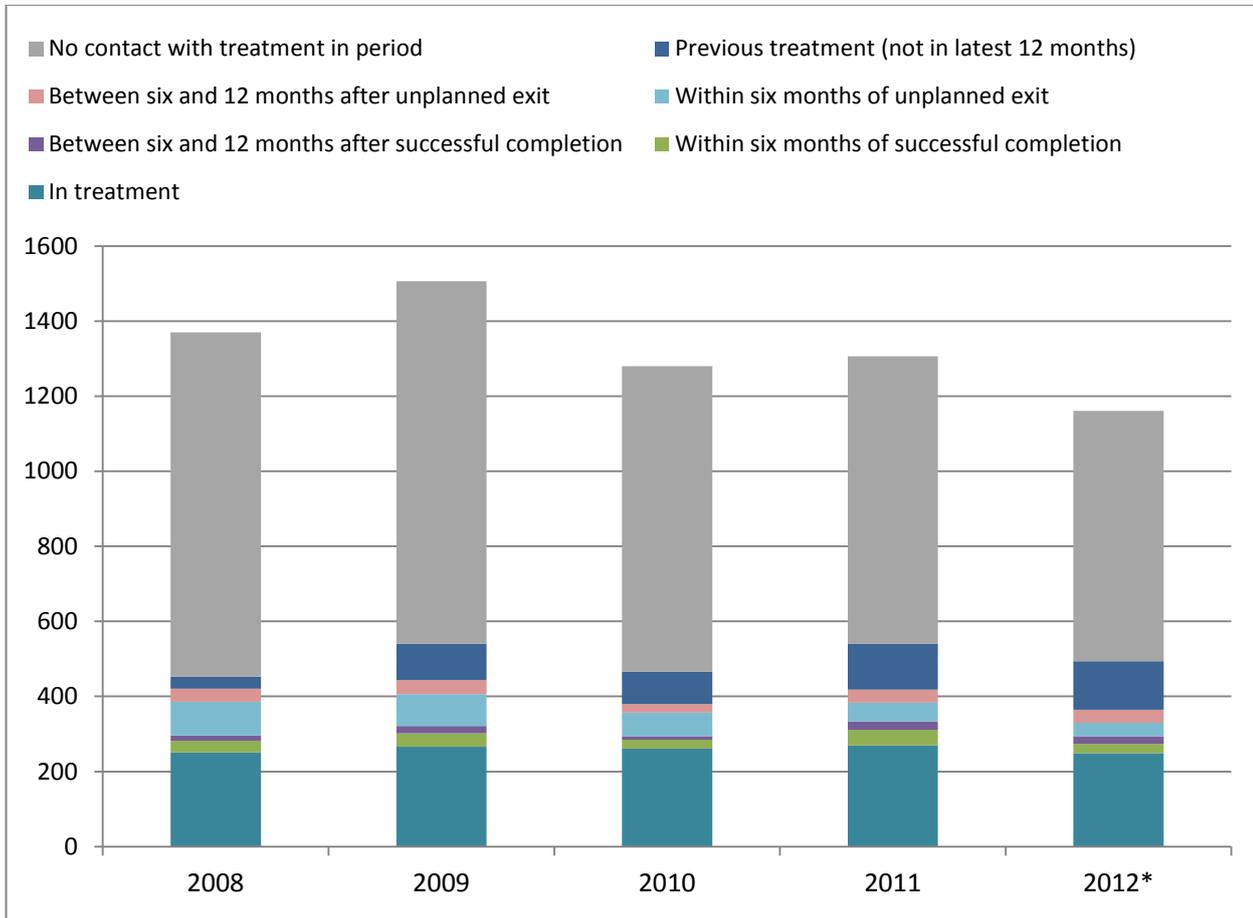
Figure 11 shows the results of this match for drug misuse deaths where an opiate was mentioned (the term 'opiate misuse death' will be used for brevity) for each year between 2008 and 2012 – the latter year should be regarded as partially complete, as in the rest of this analysis.^f In 2011, 269 people suffered an opiate misuse death while in contact with drug treatment. This was around 21% of all opiate misuse deaths in that year, a proportion that had slightly increased since 2008 (18%). The proportion who had successfully completed treatment in the year before an opiate misuse death was 5% in 2011, up slightly from 3% in 2008, while the proportion who had exited treatment in an unplanned way in the previous year decreased to 7% in 2011 from 9% in 2008.

Altogether, the proportion who either were currently in treatment or had received treatment in the preceding 12 months changed little over the period: 31% in 2008 and 32% in 2011. The overall proportion with a treatment history increased from 33% to 41% between 2008 and 2011, but the majority of this difference was attributable to those who had treatment contact more than a year previously – a group that will

^f 2007 was disregarded in order to ensure that each individual was followed up for at least a year in NDTMS.

naturally increase over time when analysed in this way. This leaves 59% of opiate misuse deaths in 2011 mentioned and the person had no contact with treatment since at least 2006.

Figure 11. Breakdown of opiate misuse deaths by treatment status, 2008-2012



*Note: figures for 2012 should be regarded as partially incomplete.

It is illustrative to consider this breakdown in the context of the available opiate prevalence and treatment numbers. It is estimated that there were around 256,000 opiate users aged 15-64 in England in the 2011/12 financial year.⁹ There were 159,542 adult opiate users in treatment at some point during 2011/12, and of these, 120,701 (76%) remained in treatment at the end of the year, while 9% had a successful completion in the preceding 12 months and 15% exited treatment in an unplanned way.¹² Opiate prevalence estimates and numbers in treatment are both available for most of this period: both figures fell slightly in 2011/12, having been broadly similar from 2008/09 to 2010/11, suggesting that the proportion of opiate users in treatment in each year has remained fairly similar.

Although for various reasons these sources of data do not allow us to draw precise conclusions about the relative risk in each category, several things are notable. Firstly, the majority of adult opiate users during the five-year period had recently been in

contact with treatment. By contrast, the majority of opiate misuse deaths occurred among people who have not recently been in contact with treatment, suggesting treatment is likely to be highly protective. This protective effect is explored in much greater detail in a recent paper by a research group including PHE researchers and academic colleagues, where a counterfactual model was used to estimate that 880 (95% confidence intervals: 702 to 1,084) fatal opioid poisonings were prevented annually by treatment services between 2008 and 2011.¹³ However, the proportions of deaths with and without recent treatment changed only slightly across the five years. Considered alongside the relatively stable proportion of opiate users in treatment, this suggests that over this period activity in the treatment system neither increased nor decreased the general protective effect.

Next steps

Following the publication of this report, PHE will continue to investigate the trends around drug misuse death. An important first step will be to rapidly update this analysis using ONS data on deaths registered in 2014, which will be possible following the publication of the next ONS report on 3 September. Updated analysis will enable a much more complete picture of drug misuse deaths in 2013 than we have been able to report here, as well as potentially offering initial insights into whether the current trends identified in this report have continued into 2014.

This analysis has highlighted some notable trends that may warrant further exploration. A key point from this analysis is that it is increasingly common to see multiple substances (including alcohol) involved in a single drug misuse death as opposed to deaths involving only a single substance. Further consideration should be given to how this increasing complexity can best be understood and presented. In addition, NDTMS holds considerable information on potential risk factors for drug misuse death, and this too presents opportunities for more in-depth analysis, albeit limited to those in drug treatment.

Following this report, PHE will continue to explore with stakeholders the causes of drug misuse deaths and possible preventive measures via established forums such as the National Intelligence Network on Health Harms. Furthermore, PHE will consider what additional advice and support it can provide to local authority commissioners and drug treatment providers. In particular, PHE will aim to support local areas to further improve access to treatment, which appears to have a continuing protective effect.

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