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The University of Manchester

National Confidential Inquiry into Suicide and Homicide

by ***People with Mental Illness***

Annual Report 2017

HQIP
Healthcare Quality Improvement Partnership

Annual Report:
England, Northern Ireland, Scotland and Wales
October 2017

NCISH IS COMMISSIONED BY THE HEALTHCARE QUALITY IMPROVEMENT PARTNERSHIP (HQIP)

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the Mental Health Clinical Outcome Review Programme, funded by NHS England, NHS Wales, the Health and Social Care division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey. The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data.

More details can be found at: **www.hqip.org.uk/national-programmes/a-z-of-clinical-outcome-review-programmes**

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EXECUTIVE SUMMARY

INTRODUCTION

i. The 2017 annual report from the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH) provides findings relating to people who died by suicide or were convicted of homicide in 2005-2015 across all UK countries. Additional findings are presented on sudden unexplained deaths (SUD) under mental health care in England and Wales.

ii. The NCISH database is a national case series of suicide, homicide and SUD by mental health patients over 20 years. The current suicide database stands at almost 120,000 suicides in the general population, including over 30,000 patients. This large and internationally unique database allows NCISH to examine the antecedents of these incidents and make recommendations for clinical practice and policy that will improve safety in mental health care.

iii. As with previous annual reports, the main findings are presented here by country for the baseline year of 2005 and the subsequent 10 years, including the most recent year for which comprehensive data are available (2015). A UK-wide section provides selected findings from the UK as a whole.

METHODOLOGY

iv. The NCISH method of data collection is equivalent across all UK countries and consists of three stages:

- National data used to identify individuals in the general population who die by suicide or are convicted of homicide.
- Those who have been in contact with specialist mental health services in the 12 months before the incident are identified with the help of mental health providers.
- Detailed clinical information obtained for individuals via questionnaires completed by clinicians.

v. Co-operation from front-line professionals is excellent - the questionnaire response rate is around 95% overall. In the final year of a report period - 2015 in this report - the completeness figures are lower and we therefore estimate final figures taking into account the number of outstanding questionnaires and the accuracy of our estimates in previous years.

ANALYSIS

vi. The main findings of the report are presented in a combination of figures, maps and tables. These show changes in key figures in patient safety over the report period.

vii. General population and patient rates for suicide are calculated using ONS mid-year population estimates and, where available, denominators based on patient activity obtained from NHS Digital (England).

viii. We examine for statistically significant time trends over the report period. However, because 2015 figures are partly estimates, these are not included in the analysis of trends.

KEY FINDINGS

Suicide numbers and rates

ix. Northern Ireland continues to have the highest general population suicide rate, while the rates in the other countries have fallen, especially in Scotland which had the highest rate previously.

x. There were 1,538 patient suicides in the UK in 2015, the figure having fallen in recent years, particularly in England and Scotland. During 2005-2015, 28% of suicides in the UK general population were in mental health patients, although this figure is slightly higher in Scotland and slightly lower in Wales.

xi. Similar falls are also apparent in specific patient groups that have been of concern. There has been a downward trend in the number of suicides by patients recently discharged from hospital in England and Scotland: there were 230 post-discharge deaths in the UK in 2015, down from 299 in 2011. A similar fall is found in suicides by patients who were non-adherent with drug treatment in the month before death, in England down from 160 in 2010 to 110 in 2015. These downward trends have occurred despite more patients being treated by mental health services.

In-patient suicide

xii. Suicide by mental health in-patients continues to fall but the longstanding downward trend has slowed. In the 5 years after 2005, in-patient suicide numbers in the UK fell by 39%; in the 5 years after 2010, the fall was 10%. In England the equivalent in-patient suicide rates, i.e. taking into account the number of admissions, were similar: 31% and 14%. In recent years there has been an average of 114 suicides by in-patients in the UK per year, including 89 in England.

Diagnostic groups

xiii. In previous reports, our focus has been on the diagnoses that are found most frequently in studies of patient suicide, e.g. depression and schizophrenia. In this report, we present figures for less common diagnoses to highlight the need for vigilance in these groups also. The diagnoses examined were:

Eating disorders:
In the UK in 2005-2015, there were 205 suicides by patients with a diagnosis of an eating disorder – 19 deaths per year on average. The number of deaths has risen and our estimate for 2015 is 27 deaths, though it should be treated with caution at this stage. Over two thirds had been ill for longer than 5 years. However only 7% were in contact with specialist eating disorders services. A history of self-harm was common, presenting an important sign of risk and opportunity for intervention.

Autism spectrum disorder:
There were 119 suicides by patients with a diagnosis of an autistic spectrum disorder (ASD) in 2005-2015 in the UK, an average of around 11 deaths per year. The annual figure has risen during the report period and our estimate for 2015 is 17 suicides. Certain risk factors, including alcohol misuse, were less frequent in this group compared to all patients who died by suicide, while previous self-harm was more common.

Dementia:
There were 203 suicides by patients with a diagnosis of dementia in 2005-2015 in the UK, an average of around 18 deaths per year. This figure has risen steadily since 2011 and our estimate for 2015 is 24 suicides. Only 16% overall were in the early phase of dementia, having been ill for less than a year.

xiv. The numbers of suicides in patients with a diagnosis of an eating disorder, ASD or dementia have risen. However, this is likely to reflect a rising number of patients with these diagnoses under mental health care. We cannot conclude that care has become less safe in these conditions.

Method of suicide

xv. The commonest method of suicide by patients in the UK is hanging; we estimate 751 patient suicides by hanging in 2015, almost half of all suicide deaths. The next most common method is self-poisoning: opiates (and opiate-containing compounds) remain the main type of drug taken in fatal overdose in the UK, including both prescribed and illicit drugs. However, the number of opiate deaths continues to fall in England, Scotland and Wales since a peak in 2011, resulting in a drop in fatal self-poisoning overall. In Northern Ireland, the number of opiate deaths has risen over 2005-2015.

Carers

xvi. 938 patients who died by suicide in the UK in 2005-2015 were carers (i.e. providing care for young children or someone else at home, or living with a mental health patient), 5% of all patient suicides, an average of 85 deaths per year. They had fewer risk factors for suicide compared to other patients who died; carers were more likely to be female.

Current or former members of the Armed Forces

xvii. In the UK in 2011-2015, 208 patients who died by suicide were current or former members of the Armed Forces, 3% of all patient suicides during this period, an average of 42 deaths per year. Most were male. A history of alcohol misuse was more common than in other patients, occurring in 57% of patient suicides in this group.

Patient homicide

xviii. During 2005-2015, 11% of homicide convictions were in mental health patients, a total of 835 patient homicides over the report period, an average of 76 homicides per year. In England, the number of patient homicides since 2009 has been lower than in previous years. Our estimate is for 45 patient homicides in 2015.

xix. The number of stranger homicides (victims and offenders unknown to each other) has fallen since a peak in 2006. There are around 11 stranger homicides committed by mental health patients in the UK per year.

xx. In all four UK countries, most patients convicted of homicide also have a history of alcohol or drug misuse, between 88% in England and 100% in N Ireland. In other words it is unusual for mental health patients to commit homicide unless there is a co-existing problem of substance misuse.

xxi. During 2005-2015, over half of mental health patients who committed a homicide in the UK were convicted of murder and 76% were sent to prison rather than hospital. Even in patients with schizophrenia, 34% were convicted of murder and 41% sent to prison (figures for England).

CLINICAL MESSAGES

In-patient care	**xxii.** There should be a renewed emphasis on suicide prevention on in-patient wards, with the aim of re-establishing the previous rate of decrease in in-patient suicide. This could include: (a) measures to improve the physical environment, e.g. removing low-lying ligature points, (b) ensuring care plans are in place during agreed leave, (c) measures to reduce leaving the ward without agreement, e.g. improvements to ward milieu, better monitoring of ward access and exit points, and observation protocols.
Post-discharge care	**xxiii.** Services should build on the recent fall in suicide following discharge from in-patient care: this remains a time of particularly high risk. This should include: (a) patient follow-up within 3 days of hospital discharge (see page 37), [1] (b) care plans in place on discharge from hospital to community, [2] (c) ending 'out of area treatments' (OATs) for acutely ill patients.[1] National clinical guidelines have been developed with reference to NCISH findings (e.g. NICE guideline on transition between in-patient and community care settings[3]).
Diagnostic groups	**xxiv.** Services should be aware of the potential suicide risk in patients with a diagnosis of an eating disorder, ASD or dementia, and this should be part of a comprehensive assessment. Mental health staff should have access to specialist support in these conditions.
Reducing suicide by opiate overdose	**xxv.** Clinicians and pharmacists should be aware of the potential risks of opiate and opiate-containing analgesics. Safer prescribing in primary and secondary care remains crucial, particularly for patients with long-term pain, a group at high suicide risk. This should include prescribing only short-term supplies and enquiring about opiate-containing painkillers kept at home.
Alcohol and drug misuse	**xxvi.** Our findings add to the evidence that much of the risk to others from mental health patients is related to co-existing drug or alcohol misuse rather than mental illness itself. This is an important message in combating stigma. **xxvii.** A greater focus on alcohol and drug misuse is required as a key component of risk management in mental health care, with specialist substance misuse and mental health services working closely together as reflected in published guidance.[4,5]
Patient homicides and courts	**xxviii.** Our findings raise concern about patients with severe mental illness being sent to prison rather than hospital following conviction for homicide. Further investigation of the appropriateness of these decisions should now be undertaken by health and justice agencies.

Box 1: NCISH methodology

1. NCISH is a comprehensive national project collecting data on all patient suicides and homicides in the UK, with a response rate from clinicians of around 95%.

2. Suicide and homicide are defined legally, e.g. inquest conclusion or determination by a court. This provides consistency of definition but may under-estimate because of the high standard of evidence required.

3. Patients are defined by recorded contact with specialist mental health services in the 12 months prior to suicide/homicide - this omits some contacts, e.g. those seen in A&E but not referred to mental health.

4. NCISH is not a risk factor study but examines in detail circumstances in which deaths occur, e.g. the number of deaths in certain patient groups or settings, and how common remediable factors are. Findings describe the deaths that must be prevented to achieve a major reduction in suicide and homicide.

5. The comprehensive nature of the NCISH database spanning 20 years gives the opportunity to analyse large numbers, allowing the monitoring of changes in figures over time, including in patient sub-groups.

6. Additional NCISH studies use a range of methodologies, e.g. case control, evaluations, and triangulation with qualitative methods.[2,6,7]

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INTRODUCTION

1. The 2017 annual report from the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH) provides findings relating to people who died by suicide or were convicted of homicide in 2005-2015 across all UK countries. Additional findings are presented on sudden unexplained deaths (SUD) under mental health care in England and Wales.

2. NCISH is commissioned by the Healthcare Quality Improvement Partnership (HQIP) to undertake the Mental Health Clinical Outcome Review Programme on behalf of NHS England, NHS Wales, the Health and Social Care Division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey.

3. The NCISH database is a national case series of suicide, homicide and SUD by people who have been in contact with mental health services in the 12 months prior to the incident (see Box 1). The current database stands at almost 120,000 suicides in the general population including over 30,000 patients. This large and internationally unique dataset allows NCISH to:

- examine the antecedents of suicide and homicide by people under the recent care of specialist psychiatric services;
- identify factors in patient care which may have contributed to suicide or homicide;
- recommend measures designed to reduce the number of patient suicides and homicides;
- examine specific topics as part of a rolling programme;
- conduct studies based on other research methods including case control studies and evaluations.

4. For over 20 years, NCISH has provided definitive national figures on suicide and homicide to patients, health services and governments, helping to inform the development of policy and strategies for safer care locally, nationally and internationally. NCISH findings have also contributed to local patient safety audits and national clinical guidelines (see pages 120-121 for further information).

5. Our publications have included major UK and national reports, topic-specific reports and peer–reviewed academic papers (see pages 121-125 for further information).

6. We have previously shown a fall in the number of suicides among in-patients and patients recently discharged from hospital, both NCISH "priority groups", which we believe reflects safer care informed by our findings.[1] We have examined changes in patient suicide rates in relation to service configuration and re-design, showing widespread uptake of our recommendations and improved patient safety subsequently. This has led to our recent "10 ways to improve safety" clinical message.[1]

7. As with previous annual reports, the main findings here are presented by country for the baseline year of 2005, and the following 10 years up to the most recent year of reasonably comprehensive data (2015). A UK wide section provides a summary of findings across the UK as a whole and includes data on specific sub-groups. This year we also include findings from our investigation of general population suicides in people aged under 25, containing previously unreported data from Scotland.[7]

PRESENTATION OF FINDINGS AND METHODOLOGY

Definitions

Patients

8. Patient cases are those in contact with psychiatric, drug and alcohol, child and adolescent or learning disabilities services (if they are within mental health services) within 12 months of their death or the homicide, with their care usually under a Consultant Psychiatrist. These include a range of patients from those seen for one-off assessments to those who had been under the long term care of services.

Suicide

9. General population suicides are defined as deaths by intentional self-harm and deaths of undetermined intent by individuals aged 10 and over.

Homicide

10. General population homicides are legally defined as convictions for murder, manslaughter, (culpable homicide in Scotland), infanticide, and verdicts of not guilty by reason of insanity and unfit to plead and are presented by year of conviction. Identification of mental illness in non-patients relies on information from psychiatric reports prepared by psychiatrists for the court.

Sudden unexplained death (SUD)

11. A sudden unexplained death is defined as a death in which a person dies a) from an unknown, uncertain or cardiac cause (other than confirmed myocardial infarction), b) within 1 hour of symptom onset.

Changes to suicide death coding

12. Following an update to the International Statistical Classification of Diseases and Related Health Problems (ICD-10) in 2011, new rules for coding drug misuse deaths were introduced. Some drug-related deaths previously coded as due to 'mental and behavioural disorders due to psychoactive substance use' are now coded as suicide or undetermined deaths. Analysis by the Office for National Statistics (ONS) has shown these new coding rules have had no significant impact on the suicide figures in England.[8] However, they have affected numbers in Scotland and therefore the overall numbers of suicides in Scotland between 2011 and 2015 are not directly comparable with previous years. Unlike previous reports where we have presented the number of suicides using the new coding rules alongside an estimate of the figures using the old coding rules, in this report for Scotland, the number of suicides using the new coding rules only is reported.

Annual report period

13. In this report, findings are presented for England, Northern Ireland, Scotland, and Wales for:

- suicide (based on date of death - **this differs from the ONS who present figures by date of death registration**)
- homicide (based on year of conviction)
- SUD (this data collection takes place in England and Wales only and is based on date of death)
- homicide-suicide (based on date of offence, England and Wales only).

14. The main findings are presented for the baseline year of 2005 and the subsequent 10 years including the most recent year (2015).

Method of data collection

15. The NCISH method of data collection is similar across all UK countries. Briefly, to identify patients (i.e. individuals in contact with mental health services within 12 months of suicide or homicide) national data are used to identify the individuals' addresses. Data are then sent to mental health services in each individual's district of residence. Detailed clinical data are obtained for these individuals via questionnaires sent to the consultant psychiatrist who had been responsible for the patient's care. A full explanation is provided in the **FAQ section of our website** or in our previous national reports: *Annual Report* (2009, 2010) [9,10]. *Avoidable Deaths* [11]. *Suicide and Homicide in Northern Ireland* [12]. and *Lessons for Mental Health Care in Scotland* [13] which are accessible on our website at: **www.research.bmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci**

Data completeness

Suicide

16. In our annual reports, figures for the most recent year - in this case 2015 - are incomplete, in part because of delays in legal processes. We therefore adjust estimates for the most recent years according to the number of unreturned questionnaires and the accuracy of the previous year's estimates. In analysing trends the final year is not included because of these estimations.

17. For the period 2005-2014 overall data completeness for patient suicide is 97% in England and 98% in Northern Ireland, Scotland and Wales. Completeness is lower in the more recent years reported, reflecting the time required to process the data. For example, in 2013, 2014 and 2015 completeness for England is 94%, 89% and 64% respectively. For these years, therefore, we have uplifted the number of cases based on the expected final return of NCISH questionnaires for the previous eight years (2005-2012). These estimations vary by UK country which have differential return rates. Some patient sub-groups are more often subject to late notification - for example in-patient deaths can take up to 4 years to be registered. In these circumstances we have projected the figures in 2013-2015 using a more individualised approach, i.e. taking into account the proportion of all deaths in recent years in particular sub-groups.

18. The number of patient suicides in 2015 in Northern Ireland show a marked fall - we have not received data from all sites in Northern Ireland and therefore the estimated figures for 2015 should be viewed with caution.

Homicide

19. For the period 2005-2015 we have presented patient homicide numbers notified to NCISH plus additional cases for 2014-2015 in England and 2015 in Scotland which account for questionnaires sent to Trusts/Health Boards but not yet returned at the time of analysis. We have therefore uplifted the number of cases for these years based on the expected final return of NCISH questionnaires.

20. We are aware that data on homicide convictions for Northern Ireland and Scotland are incomplete, therefore the figures presented may be an underestimate and should be treated with caution. We are unable to present any figures for homicide in Northern Ireland for 2015. We are currently working towards resolving these issues.

Sudden unexplained death (SUD)

21. For the period 2005-2014 overall data completeness for SUD is 99% in England and Wales. For 2015 completeness is 62% and we have therefore uplifted the number of cases based on the expected final return of questionnaires for the previous 10 years.

Psychiatric reports

22. Our figures for patient homicide are based on service providers' records only. In January 2017, we stopped obtaining psychiatric reports prepared for the court. Previously, we used reports to generate data on abnormal mental state and symptoms of psychosis at the time of the offence, diagnosis of schizophrenia, and history of alcohol and drug misuse, whether the offender was a patient or not. The number of psychiatric reports undertaken and disclosed in court has fallen over the report period from 265 in 2005 to 102 in 2015 (a 62% fall). We assume that those with serious mental illness, particularly psychosis, are more likely to have been assessed, but there is no direct way of confirming this. However, of the people we know to have serious mental illness (i.e. patients with schizophrenia) nearly all (91%) had a psychiatric report. We therefore think it is probable that non-patients with serious mental illness will also have a psychiatric report. We acknowledge, however, some may not. We stopped collecting psychiatric reports as the proportion of convictions with a report had reduced so significantly over time. Therefore we will no longer be able to report data on abnormal mental state and symptoms of psychosis at the time of the offence, diagnosis of schizophrenia and history of alcohol and drug misuse, whether the offender was a patient or not.

Analysis

23. To examine for statistically significant time trends, trend tests were carried out using categorical data methods in Stata v13[14]. Poisson models were fitted with the number of suicides or homicides per year as the outcome and year as a linear predictor. For rates, general population per year was the exposure. Within the patient sample, the exposure was the total number of suicides or homicides per year. Tests for trends over time were calculated excluding the final year which was least complete (i.e. 2015) for suicide and homicide, for both general population and patients. For each model, the likelihood-ratio-test p-value and the predictor (and 95% confidence intervals) for year were examined. The number of suicides and homicides is small in certain patient sub-groups, particularly in Wales and Northern Ireland, and therefore significant variations are seen year on year.

24. We have followed guidance from the Office for National Statistics (ONS) on disclosure control to protect confidentiality within death statistics, and have suppressed cell counts under 3, including zero. We have applied this rule to all data in this report.

Rates of suicide

25. General population and patient rates for suicide were calculated using ONS mid-year population estimates (age 10 and over) as denominators. These were also used to calculate rates for suicide by Sustainability and Transformation Plan (STP) footprint (England), Health and Social Care Trust (Northern Ireland) and Health Boards (Scotland and Wales). Discrepancies may arise between NCISH national numbers and rates and those presented by the ONS, the Department of Health[15], the Scottish Public Health Observatory website[16], and the Northern Ireland Statistics and Research Agency (NISRA) website[17] due to differences in measurement described in *Avoidable Deaths*[11], *Suicide and Homicide in Northern Ireland*[12], and *Lessons for Mental Health Care in Scotland*[13]. Our website FAQs summarises how discrepancies may be explained. **One important difference in comparison to ONS figures is that our suicide figures are presented by date of death, not date of registration.**

26. Estimated numbers in the final year (2015) are presented as dotted lines in the figures or in a different shade in the bar diagrams. Changes in annual figures will occur subject to further information received.

ENGLAND

ENGLAND

SUICIDE

27. Between 2005-2015, NCISH was notified of 49,545 deaths in the general population that were registered as suicide or "undetermined", an average of 4,504 per year. These are referred to as suicides throughout the report.

Suicide in the general population

28. Our suicide rates differ from ONS rates because we base our figures on date of death rather than the date when the death was registered. In addition, our figures include people aged 10-14 and are not age-standardised, i.e. they are not adjusted to reflect differences in the age of the population.

29. Some inquests do not take place for several months which means that our confirmed figures for the most recent years underestimate the final figures.

30. The pattern of suicide since 2005 is (a) a continued fall from previous years, reaching a historical low in 2006 and 2007, (b) a rise in 2008 and 2012, with intervening years being lower, influenced by under-recording of "narrative" verdicts, (c) falling rates in 2013 and 2014, (4) a continued lower figure in 2015 compared to 2012 (Figure 1).

31. The pattern of male suicide rates during the report period varies by age-group (Figure 2). Since 2005, there had been a general fall in male suicide rates in those aged 25-34; increases in those aged 45-54 and 55-64; and no overall changes in other age groups. In females, rates fell in those aged 25-34 by 22% between 2005 and 2015. In 2014-2015 the number of female suicides increased compared to previous years, driven by an increase in the number of female suicides aged 45-54 (a 18% increase since 2005).

32. These changes have been substantial and largely maintained year on year. The rise in suicide rates in men aged 45-54 and those aged 55-64 from 2006-2015 has been 17%. The fall in men aged 25-34 from 2005 to 2015 has been 15%.

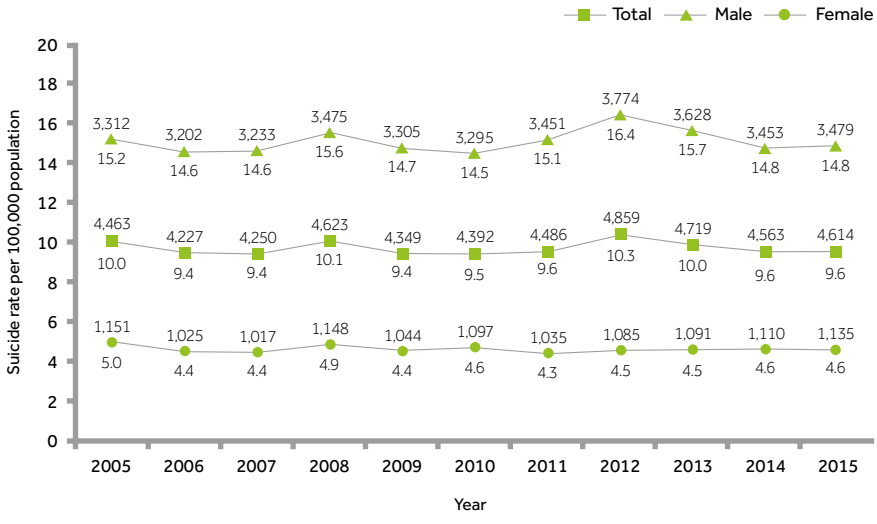


Figure 1: Rates of suicide in the general population in England, by gender. Number of suicides are included on the figure and are shown above the rates

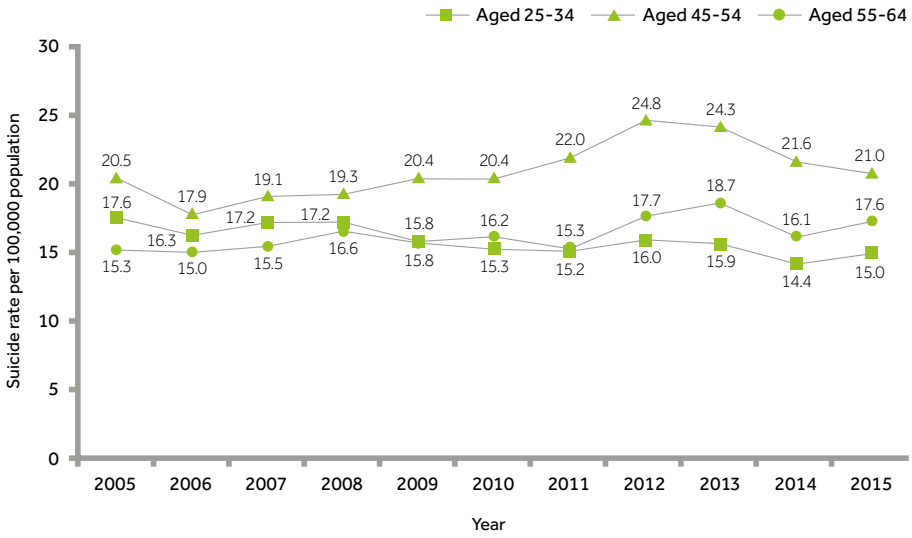


Figure 2: Male suicide rates in the general population in England in those aged 25-34, 45-54 and 55-64.
Note: Age-groups shown are those with increased rates in 2005-2014.

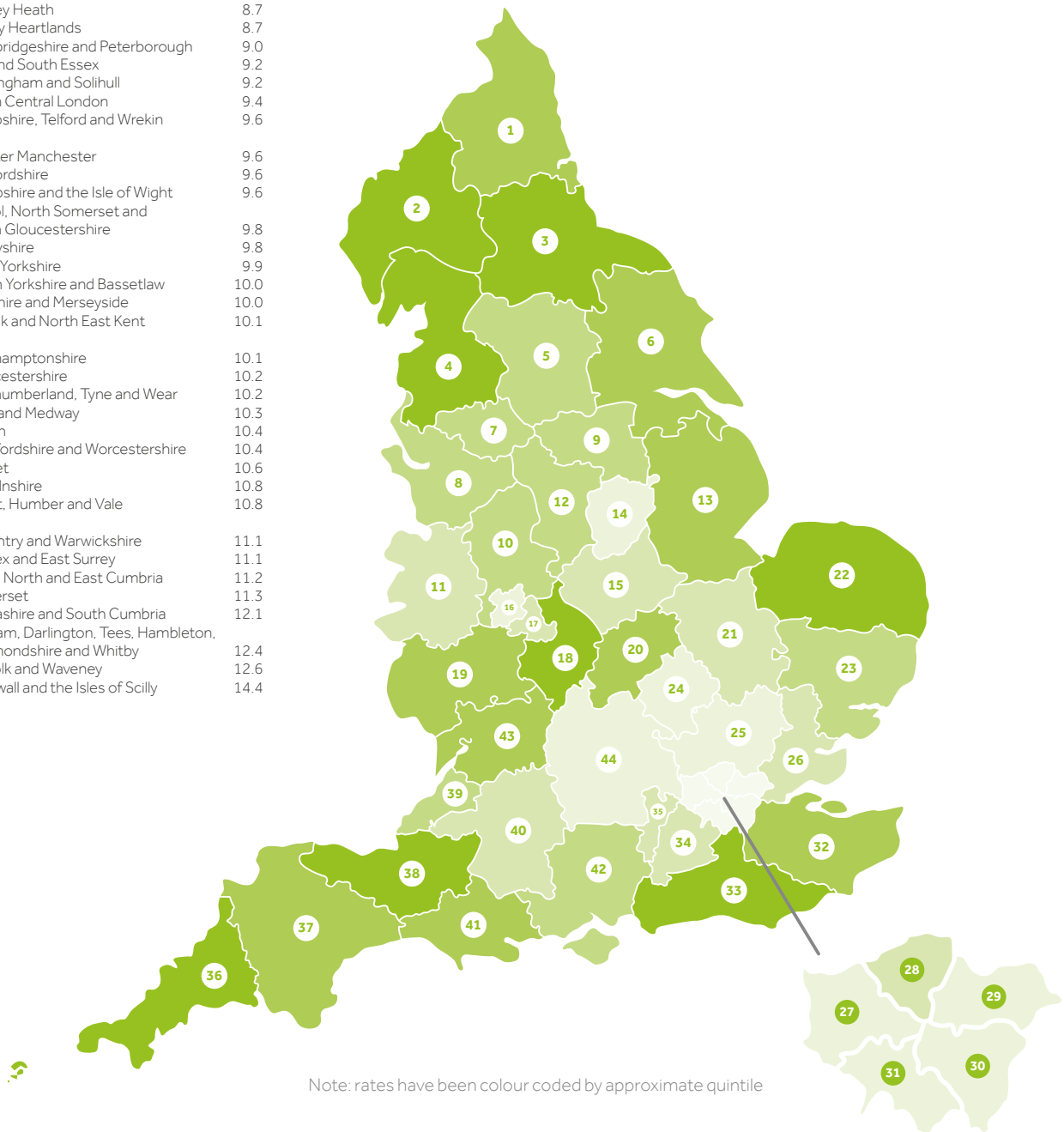
Variation in suicide rates by local health and care systems (Sustainability and Transformation Plan (STP) 'footprints')

33. Suicide rates varied by the 44 Sustainability and Transformation Plan (STP) 'footprints'. Average rates for 2013-2015 are shown in Figure 3. The highest rate of suicide was in Cornwall and the Isles of Scilly, at 14.4 per 100,000 population, and the lowest in Hertfordshire and West Essex, at 7.4 per 100,000 population. In general the highest rates were in the north and south-west, with the lowest rates in London and the south-central areas. However, there were also high rates in rural areas such as Norfolk and Lincolnshire.

34. Information on the 44 areas that make up the STP footprints can be found on the NHS England website at: **https://www.england.nhs.uk/stps/view-stps/**. ONS suicide rates mapped to English local authorities can be found on the Public Health England website at: **https://fingertips.phe.org.uk/search/suicide**

Area	Rate
25. Hertfordshire and West Essex	7.4
16. The Black Country	7.4
24. Milton Keynes, Bedforshire and Luton	7.5
31. South West London	7.5
14. Nottinghamshire	7.6
30. South East London	7.8
29. North East London	8.1
44. Buckinghamshire, Oxfordshire and Berkshire West	8.2
27. North West London	8.6
15. Leicester, Leicestershire and Rutland	8.6
40. Bath, Swindon and Wiltshire	8.7
34. Frimley Heath	8.7
35. Surrey Heartlands	8.7
21. Cambridgeshire and Peterborough	9.0
26. Mid and South Essex	9.2
17. Birmingham and Solihull	9.2
28. North Central London	9.4
11. Shropshire, Telford and Wrekin	9.6
7. Greater Manchester	9.6
10. Staffordshire	9.6
42. Hampshire and the Isle of Wight	9.6
39. Bristol, North Somerset and South Gloucestershire	9.8
12. Derbyshire	9.8
5. West Yorkshire	9.9
9. South Yorkshire and Bassetlaw	10.0
8. Cheshire and Merseyside	10.0
23. Suffolk and North East Kent	10.1
20. Northamptonshire	10.1
43 Gloucestershire	10.2
1. Northumberland, Tyne and Wear	10.2
32. Kent and Medway	10.3
37. Devon	10.4
19. Herefordshire and Worcestershire	10.4
41. Dorset	10.6
13. Lincolnshire	10.8
6. Coast, Humber and Vale	10.8
18. Coventry and Warwickshire	11.1
33. Sussex and East Surrey	11.1
2. West, North and East Cumbria	11.2
38. Somerset	11.3
4. Lancashire and South Cumbria	12.1
3. Durham, Darlington, Tees, Hambleton, Richmondshire and Whitby	12.4
22. Norfolk and Waveney	12.6
36. Cornwall and the Isles of Scilly	14.4

Figure 3: Rates of suicide per 100,000 population, by STP 'footprint' area of residence (average rate 2013-2015)



Note: rates have been colour coded by approximate quintile

Method of suicide

35. The most common methods of suicide were hanging and strangulation (referred to as hanging in the remainder of this report) (23,970, 48%), self-poisoning (overdose) (9,827, 20%), and jumping and multiple injuries (mainly jumping from a height or being struck by a train) (5,336, 11%). Less frequent methods were drowning (2,193, 4%), gas inhalation (1,914, 4%), cutting and stabbing (1,384, 3%), and firearms (971, 2%).

36. Deaths by hanging and jumping and multiple injuries increased whilst deaths by self-poisoning decreased (Figure 4). Of the less common methods, deaths by drowning and firearms decreased (Figure 5). Deaths from gas inhalation fell between 2005 and 2010 reflecting a fall in car exhaust asphyxiation but rose after this time with an increase in other gases, e.g. helium. There was an increase in deaths by cutting/stabbing between 2007 and 2013, though the reported number fell substantially in 2014 and rose again in 2015.

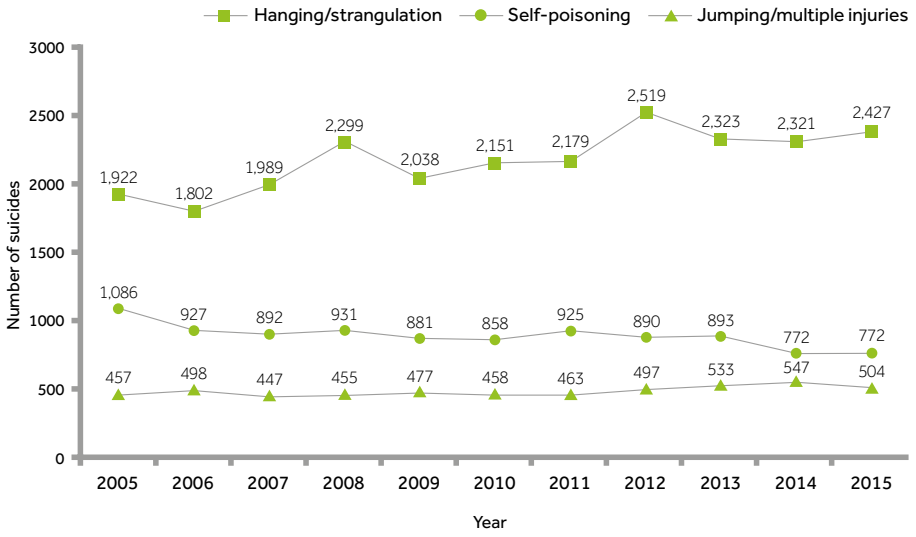


Figure 4: Suicide in the general population in England: main causes of death

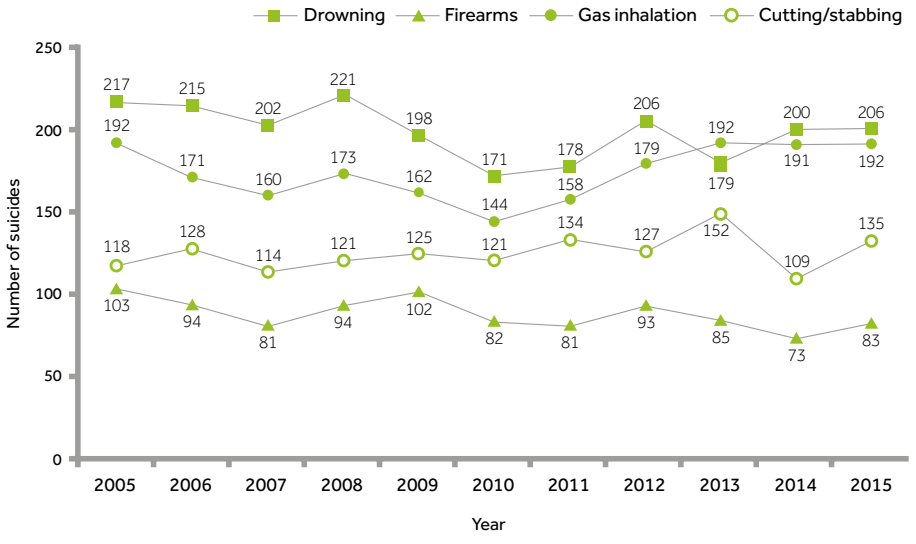


Figure 5: Suicide in the general population in England: other causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

37. During 2005-2015, 13,576 deaths (27% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 1,234 patient suicides per year, though the number has fallen each year since 2012 (Figure 6).

38. Completeness of our data is lower in the more recent years reported, reflecting the time required to process the data. Currently, figures in 2013-2015 are uplifted based on the expected final return of questionnaires for previous years (see paragraph 16). Other methods could also be used to estimate the final year figures based on the number of questionnaires sent out and returned, or adjusting for any over-estimates that have occurred in previous reports. Our current estimate for the number of suicides in 2015 is 1,164 but using other estimation methods, the range could be between 1,013 and 1,302 patient suicides.

39. The number of suicides in male patients increased until a peak in 2012 but has fallen in the last three years (Figure 7). The rise in male patient suicides since 2006 is 4%, whereas the general population rise in male suicides is greater, at 7% from 2006 to 2014 (although 18% to the peak in 2012). For females, there was an initial fall after 2005 followed by a 15% rise in the years to 2014.

40. There was an increase overall in the number of male suicides in those aged under 25, 45-54, and 65+, though numbers have fallen since a peak in 2012 (Figure 8). The number of female suicides increased in those aged under 25 but did not change in any other age-group.

41. However, rates of patient suicide - taking into account the rising number of patients under mental health care[18] - show a different pattern (Figure 9). Although rates pre- and post-2011 are not comparable because of changes to methodology,[19] rates fell in both periods, suggesting a fall overall. Patient suicide rates measured in this way show a fall in males, and in males aged 25-34, 35-44, 55-64 and 65+ since 2011 (Figure 10). The rise seen in the number of male patient suicides aged 45-54 and 65+ (Figure 8) therefore appears to be a reflection of increased overall patient numbers.

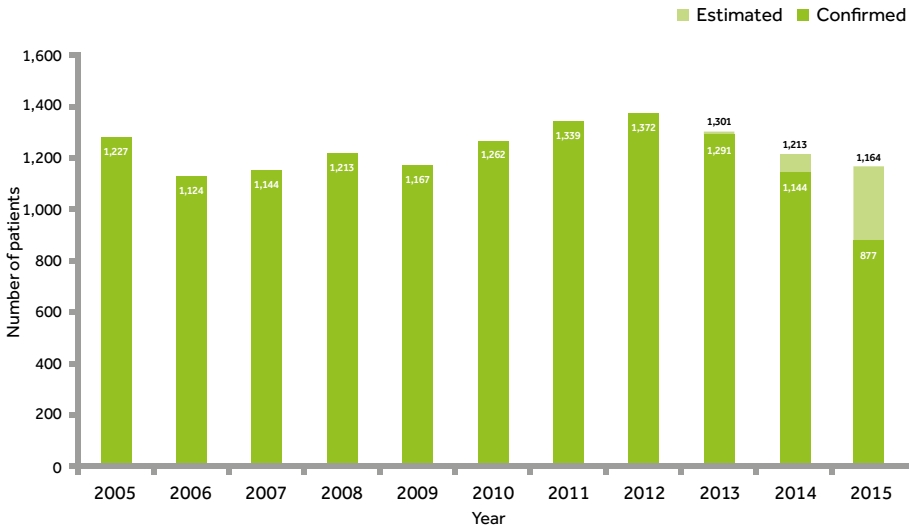


Figure 6: Number of patient suicides in England

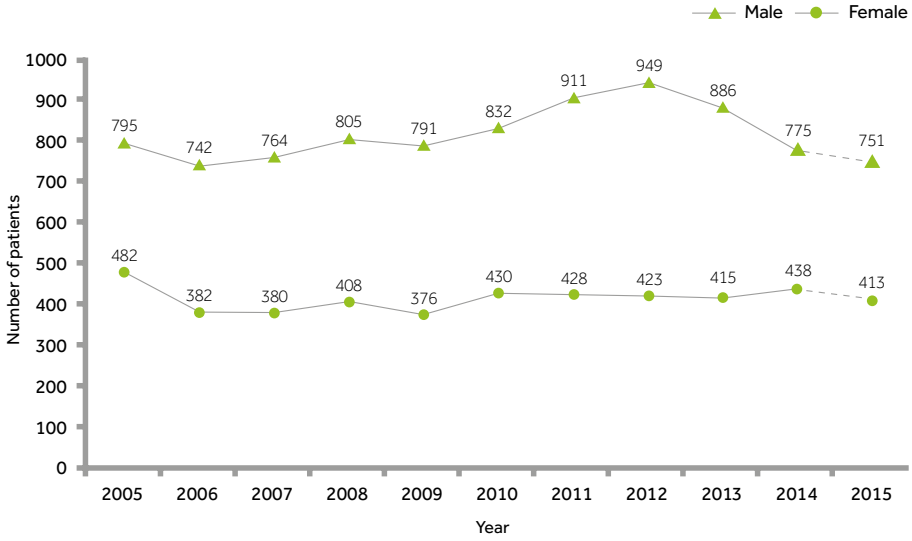


Figure 7: Number of patient suicides in England, by gender

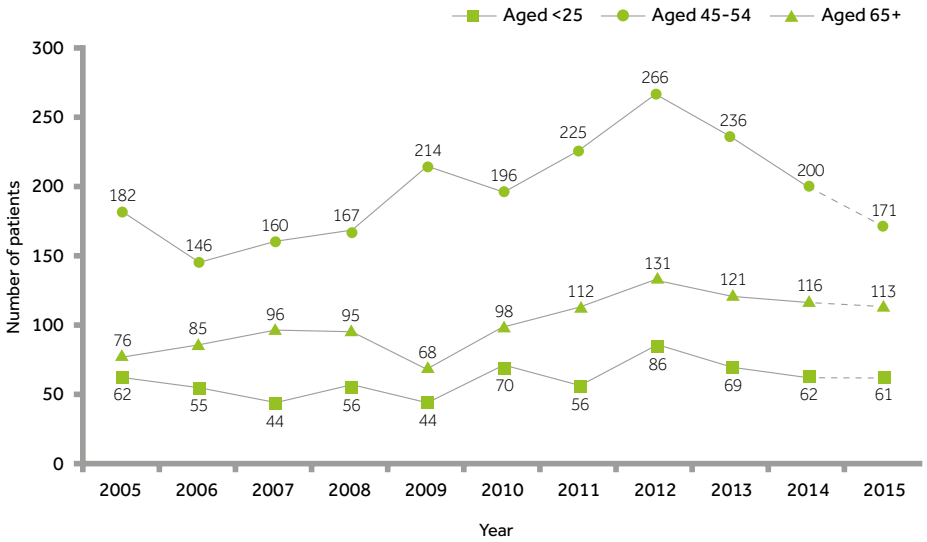


Figure 8: Patient suicide in England: number of male suicides in those aged <25, 45-54, and 65+

Note: Age-groups shown are those where numbers had significantly increased in 2005-2014.

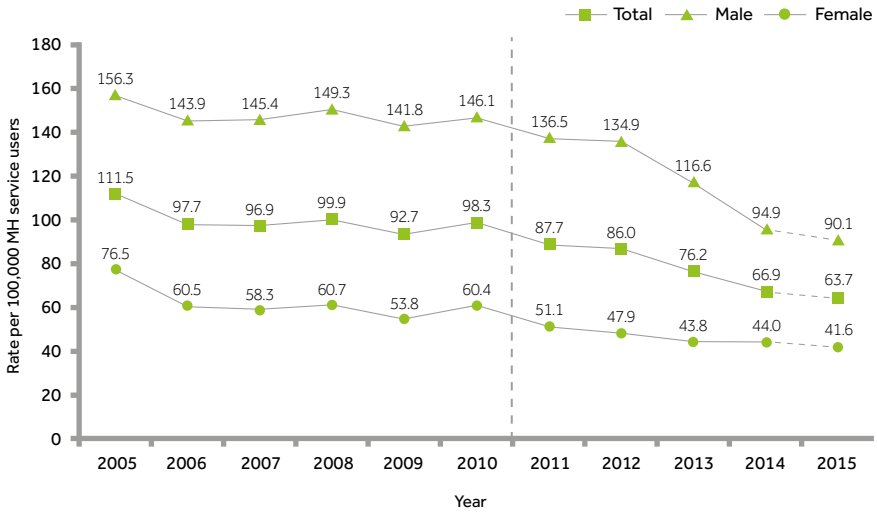


Figure 9: Rates of suicide per 100,000 mental health service users† in England

† The Mental Health Services Data Set (MHSDS)[18] was used to calculate rates. Changes in MHSDS methodology[19] means rates between 2005-2010 and 2011-2015 are not directly comparable. Rates in 2011-2015 are based on 1,517,613 service users in 2011, 1,578,409 in 2012, 1,703,247 in 2013, 1,813,672 in 2014 and 1,828,428 in 2015.

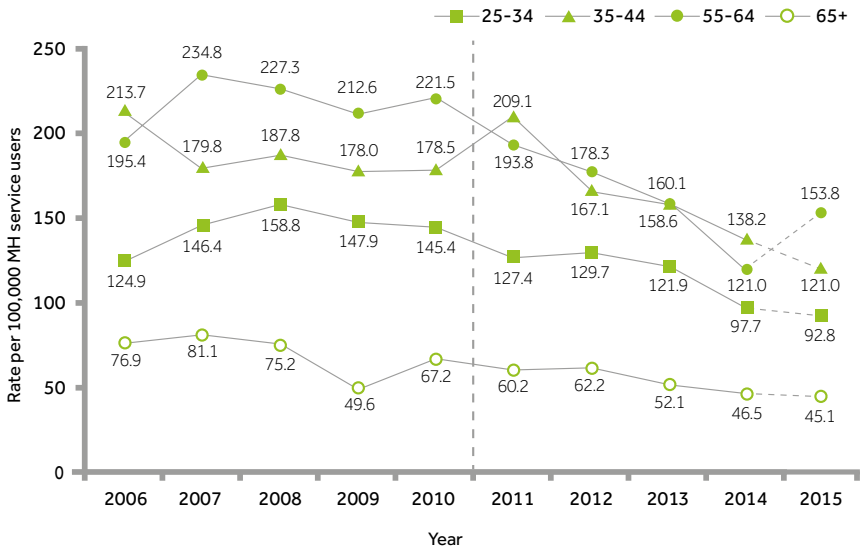


Figure 10: Rates of suicide per 100,000 mental health service users† in England in males aged 25-34, 35-44, 55-64 and 65+

† The Mental Health Services Data Set (MHSDS)[18] was used to calculate rates. Changes in MHSDS methodology[19] means rates between 2006-2010 and 2011-2015 are not directly comparable. Age-groups shown are those with a significant fall in the suicide rate in 2006-2014.

Method of suicide by patients

42. The most common methods of suicide by patients were hanging, self-poisoning, and jumping/multiple injuries, together accounting for 84% of all suicides (Figure 11). These methods were the most prevalent for both males and females, though hanging was more common among males (48% v. 35%) and self-poisoning was more common among females (33% v. 19%).

43. Hanging increased by 20% during 2005-2014. The number of self-poisoning deaths increased because of a rise in opiate deaths between 2005 and 2011 (Figure 12) but has been declining since. There have been no significant changes in other suicide methods.

44. Opiates were the most common type of drug in self-poisoning (755, 26%) followed by anti-psychotic drugs (320, 11%) and tricyclic antidepressants (306, 10%) (Figure 12). The next most common substances were SSRI/SNRIs antidepressants (272, 9%) and paracetamol/opiate compounds (231, 8%). Paracetamol was used in 181 (6%) of deaths by self-poisoning.

45. The number of deaths by opiates increased over the report period, though has fallen since a peak in 2011 (Figure 12). In 151 (43% excluding unknowns) the opiates had been prescribed for the patient, in 29 (8%) they had been prescribed for someone else, and in 169 (49%) they had not been prescribed. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (99, 41%), codeine (42, 18%), and tramadol (42, 18%). 29 (12%) used methadone. Among those who died by heroin/morphine overdose, in 33 (57% excluding unknowns) this had not been prescribed for the patient. Among those who died by codeine or tramadol overdose, 22 (63% excluding unknowns) were prescribed these drugs.

46. The number of self-poisoning deaths by tricyclic antidepressants fell after 2005 and, after a smaller rise in 2009-2011, fell again from 2012 (Figure 12). There was a fall in self-poisonings using paracetamol/opiate compounds over the report period but an increase in paracetamol deaths since 2009, though the number of paracetamol deaths fell in 2014 (Figure 13).

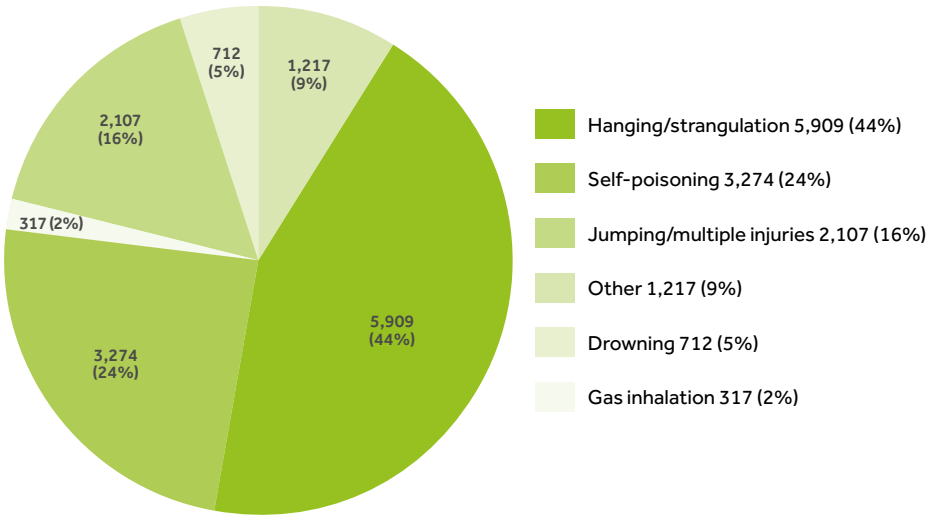


Figure 11: Patient suicide in England: main causes of death

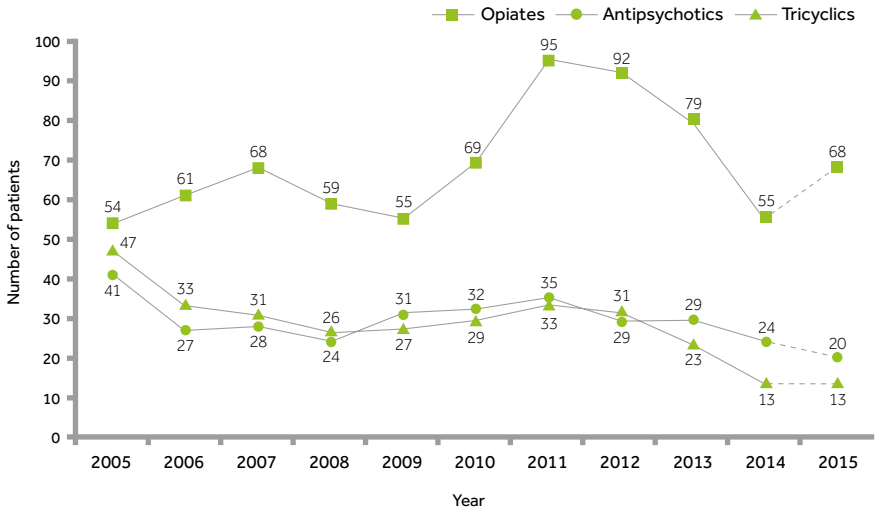


Figure 12: Patient suicide in England: main substances used in deaths by self-poisoning

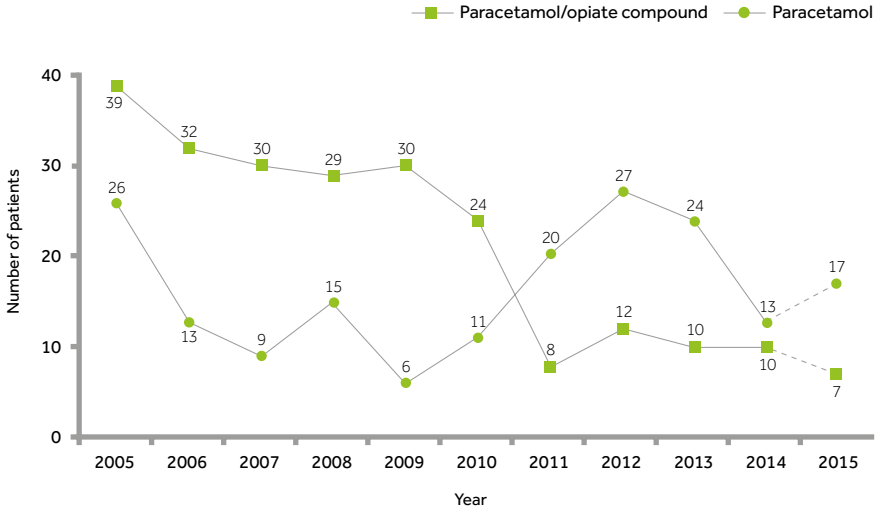
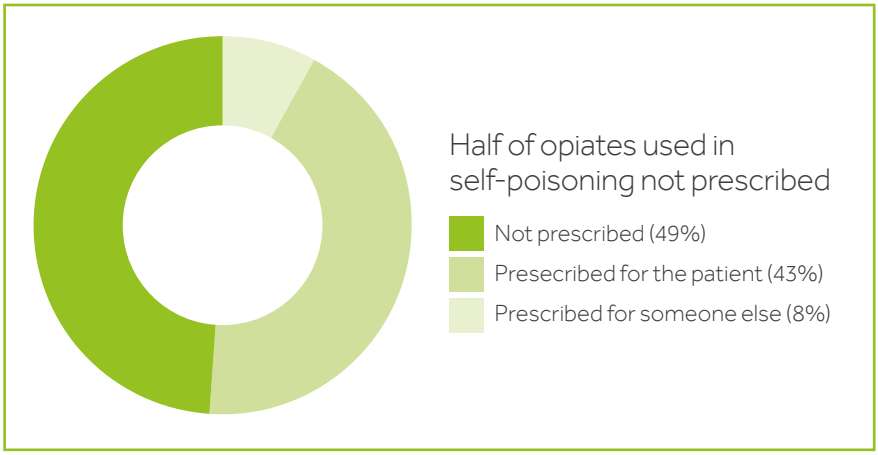


Figure 13: Patient suicide in England: number of deaths by self-poisoning using paracetamol/ opiate compound and paracetamol



Suicides in people aged under 25

47. During 2005-2015, there were 4,751 suicides in the general population in people aged under 25, 10% of all suicides, an average of 432 per year. 1,529 were aged under 20, an average of 139 per year, and 694 were aged under 18, an average of 63 per year.

48. 995 of those under 25 were patients, 7% of patient suicides and 21% of all suicides in this age-group. This represents an average of 90 deaths per year. 285 were aged under 20, an average of 26 per year, and 121 were aged under 18, an average of 11 per year.

49. Patient suicides in under 25s decreased until 2007 - since then figures have been higher but with no consistent pattern (Figure 14).

50. We carried out a detailed investigation of general population suicides in this age-group in England and Wales by collecting information from a range of investigations by official bodies, mainly coroners (see page 122 for a summary of the report findings). The report was published in July 2017 and can be found on our website at: **www.research.bmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci**

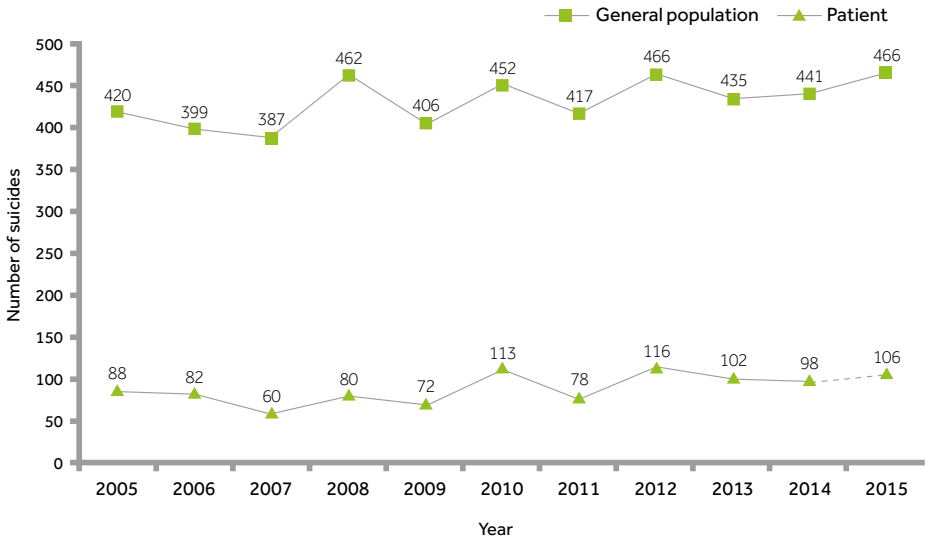


Figure 14: Number of general population and patient suicides in those aged under 25 in England

Social and clinical characteristics

51. Table 1 shows the main social and clinical features of patients dying by suicide whose deaths would have to be prevented to reduce suicide figures. These patients have high rates of social adversity and isolation, e.g. unemployment and living alone. Around half have a co-morbid condition, and rates of previous self-harm and alcohol misuse are high. Many are in acute care settings (in-patients, under crisis resolution/home treatment, recently discharged from in-patient care), and half have been in recent (<7 days) contact with mental health services.

52. There were 51 suicides by women who were pregnant or who had died within a year of childbirth, 1% of all female suicides, an average of 5 per year.

53. During 2011-2015, there were 174 suicides in patients with a hearing or visual impairment, 3% of all suicides during this time period, an average of 35 per year.

Table 1: Characteristics of patients who died by suicide in England (2005-2015)

	Number =13,576 Number	%
Demographic features:		
Age: median (range)	46 (10-100)	
Aged under 25	995	7
Male	9,001	66
Not currently married	9,328	71
Living alone	6,165	47
Unemployed	5,694	44
On long-term sick leave	1,783	14
Black and minority ethnic group	1,058	8
Homeless	328	3
Priority groups:		
In-patients	1,162	9
Recent (<3 months) discharge	2,288	17
Under crisis resolution/home treatment services	2,043	16
Missed last contact in previous month	2,967	24
Non-adherence with medication in previous month	1,576	13
Clinical features:		
Any secondary diagnosis	6,808	51
Duration of illness (<12 months)	2,758	21
Over 5 previous admissions	1,393	11
First contact with mental health services:		
<12 months	3,732	31
>5 years	5,009	42
Last admission was a re-admission	948	14
Behavioural features:		
History of self-harm	8,960	68
History of violence	2,822	22
History of alcohol misuse	5,954	45
History of drug misuse	4,343	33
Contact with services:		
Last contact within 7 days of death	6,617	49
Symptoms of mental illness at last contact	8,353	64

Diagnosis

54. The most common primary diagnoses were affective disorders (6,021, 45%, including 4,795 (36%) with depressive illness and 1,227 (9%) with bipolar disorder); schizophrenia (includes other delusional disorders) (2,275, 17%) and personality disorder (1,234, 9%) (Figure 15). Suicide in patients with affective disorders rose between 2006 and 2012 but have since fallen (Figure 16), with an average of 547 per year during the report period. In patients with schizophrenia this figure is 207 per year, with lower numbers in 2014 and 2015. In personality disorder, the number has fallen after a peak in 2012, with an average of 112 per year over the time period.

55. Patients with eating disorders, dementia, and autism spectrum disorders are described in detail in the UK-wide data section (see page 109).

56. We are carrying out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection (to be published in autumn 2017).

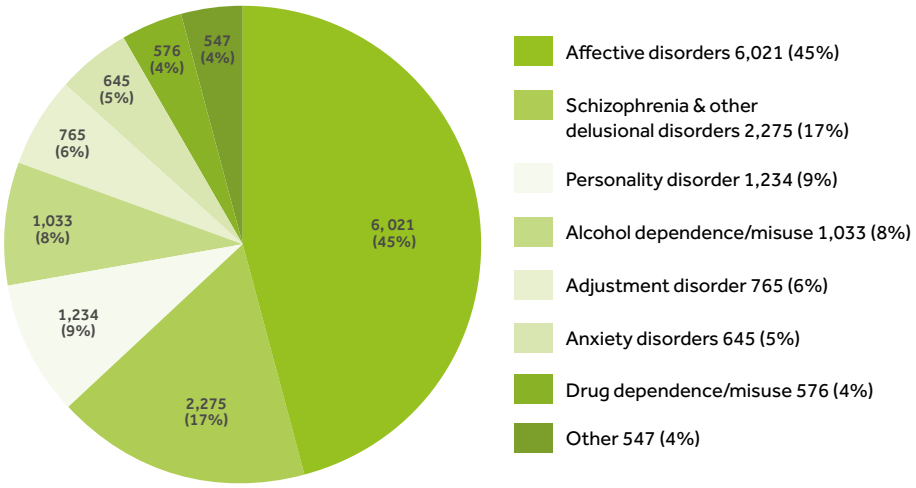


Figure 15: Patient suicide in England: primary psychiatric diagnoses

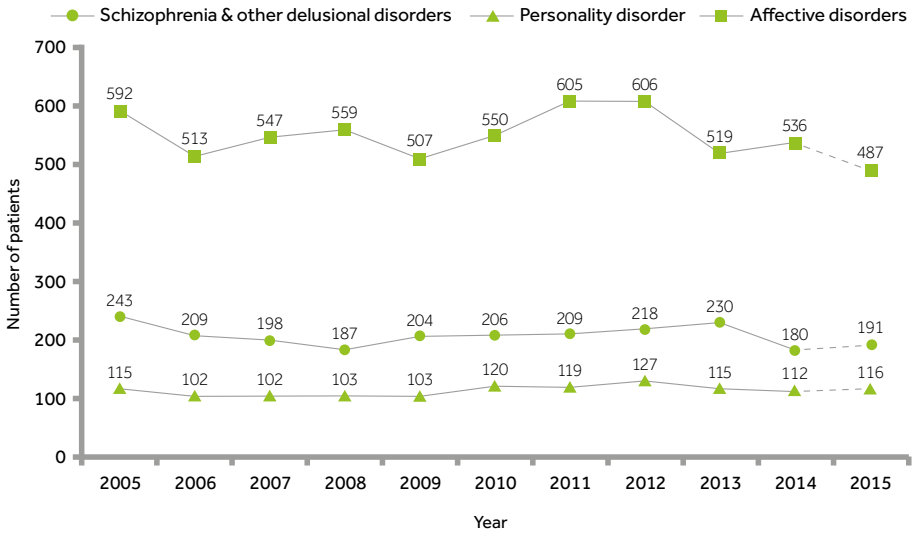


Figure 16: Patient suicide in England: main primary psychiatric diagnoses (2005-2015)

Patients with alcohol and drug misuse

57. There were 5,954 suicides in patients with a history of alcohol misuse, 45% of the total sample, an average of 541 deaths per year. 4,343 had a history of drug misuse, 33% of the total sample, an average of 395 deaths per year. 7,186 had a history of either alcohol or drug misuse or both, 54% of patient suicides, an average of 653 deaths per year.

58. The number of suicides in patients with a history of alcohol or drug misuse has fallen since a peak in 2011 (Figure 17). Between 2011-2015, 375 (7%) patients who died were under drug services, 389 (7%) were under alcohol services, and 612 (11%) were under either drug or alcohol services.

59. The most common substances misused in the 3 months prior to suicide were alcohol (59%), cannabis (21%), stimulants (15%) and heroin (13%) (Figure 18). The number of patients misusing alcohol or heroin fell between 2011 and 2014.

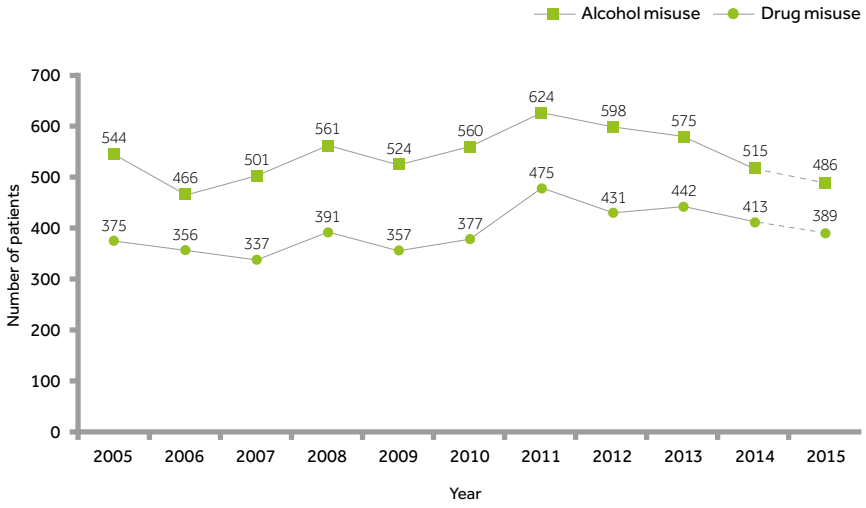


Figure 17: Patient suicide in England: number with a history of alcohol or drug misuse

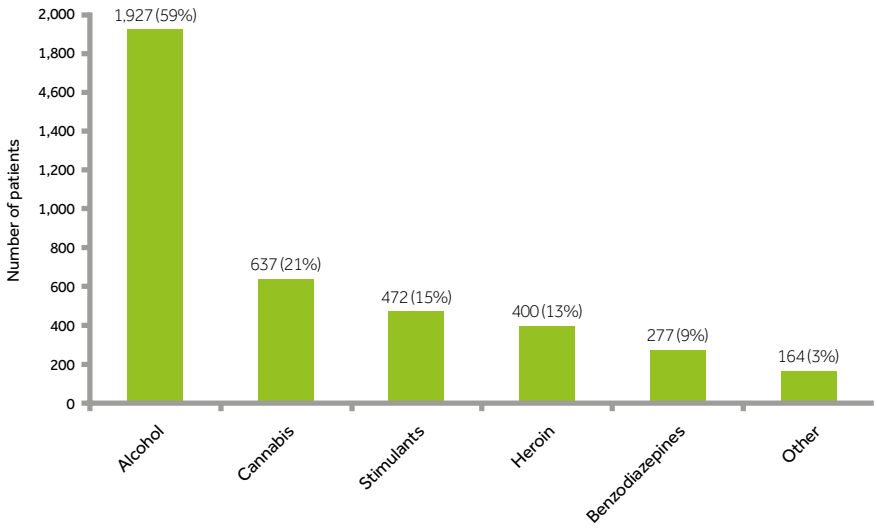


Figure 18: Patient suicide in England: substances used in the 3 months before suicide

Websites promoting suicide

151 patients had visited a "pro-suicide" internet site - 27 were aged under 25

60. In 2011-2015 there were 151 patients who died by suicide after visiting websites that may have encouraged suicide, e.g. those providing information on methods of suicide. This represents an average of 30 per year, 2% of all patient suicides during this period. This proportion increased to 5% (27 patients) in patients aged under 25. The figures increased during 2011-2015 but this was not significant as overall numbers were small. As these figures are based on clinical reports, they may underestimate how often this occurs.

61. In our study of suicide by children and young people[7] we recommend further efforts are needed to remove information on suicide methods from the internet, and to encourage on-line safety for young people.

MENTAL HEALTH CARE

In-patient suicide

62. There were 1,162 in-patient deaths by suicide in 2005-2015, representing 9% of patient suicides.

63. From 2005 to 2015, there was a 48% fall (70 cases) in the number of in-patient suicides (Figure 19) and this follows a fall in previous years. However in-patient deaths are more often subject to late notification – up to 4 years. We have therefore estimated the figures in 2013-2015 using the average proportion of all patient suicides that were in-patients in recent years.

64. In-patient suicide numbers may be affected by changes in the number of admissions. However, we found rates of in-patient suicide per 10,000 admissions still fell by 40% in 2005-2015 (Figure 20).

65. However, the fall in in-patient suicide seems to have slowed in recent years. The fall in numbers in the 5 years after 2005 was 41% but 12% in the 5 years after 2010. The equivalent figures for in-patient suicide rates are 31% and 14%. In the most recent 5 years the average number of in-patient suicides has been 89 per year.

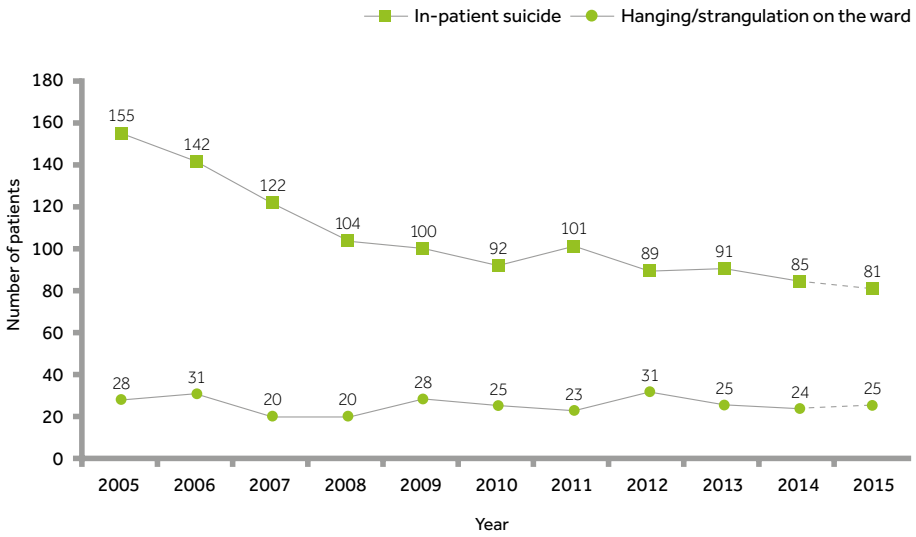


Figure 19: Patient suicide in England: number of mental health in-patients; number who died by hanging and strangulation on the ward

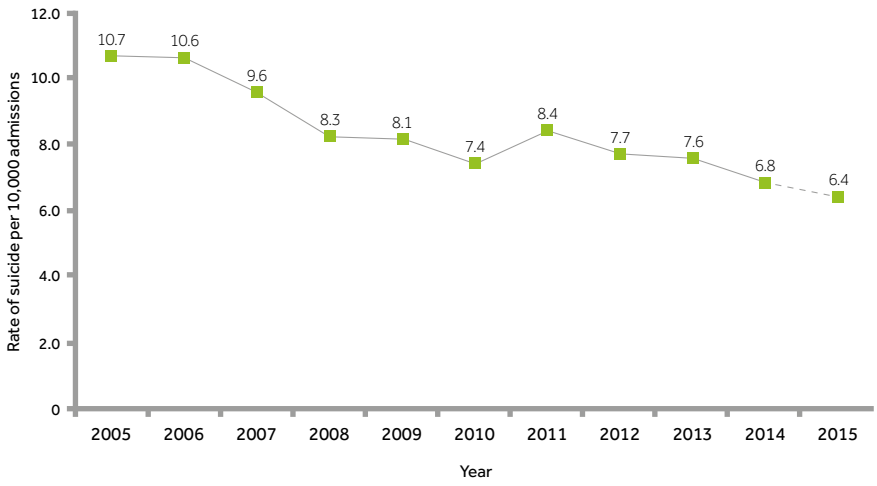


Figure 20: Patient suicide in England: rate of in-patient suicide per 10,000 admissions

66. 359 (31%) patients died on the ward itself. Of the 799 suicides that occurred off the ward, 603 (78%) were on agreed leave or had left with staff agreement.

67. 251 in-patients died after leaving the ward without staff agreement, 22% of all in-patient suicides, an average of 23 deaths per year, representing an overall fall in suicides. These patients were more likely than other in-patients to be male (73% v. 62%), and to have died in the first week of admission (20% v. 5%). A similar proportion had schizophrenia and other delusional disorders (33% v. 28%) but they were less likely to have affective disorders (41% v. 54%). A history of drug misuse was a particular feature of these patients (40% v. 24%). They were also more likely to have been ill for longer than 5 years (61% v. 53%). Immediate risk of suicide was more often viewed by clinicians as moderate or high (28% v. 11%).

68. Deaths by hanging on the ward are usually from low-lying ligature points (i.e. strangulation). There were approximately 20-30 such deaths per year over the report period (Figure 19). The majority (68%) died by hanging in a single bedroom or a toilet/bathroom (23%). The most common ligature points were doors (46%) or windows (16%) and the most common ligatures were a belt (35%) or sheets/towels (27%).

69. 167 suicides (15%) took place in the first week after admission. The proportion who died in the first week of admission did not change over the report period. Within this first week, the highest number occurred on day 2 (29 cases) or day 4 (29 cases). 49 (29%) patients who died in the first week had left the ward without staff agreement and died off the ward.

70. There were 333 suicides in detained in-patients, 29% of in-patient suicides, an average of 30 per year. The number of these deaths did not change over the report period. Patients who had been detained differed from other in-patients: they were more often aged under 25 (13% v. 6%) and the majority had schizophrenia and other delusional disorders (55% v. 20%). 65% had been ill for longer than 5 years and they had more often misused alcohol (46% v. 35%), drugs (47% v. 26%) or had previously self-harmed (82% v. 76%). Long-term risk of suicide was more often viewed as moderate or high in patients who had been detained (64% v. 54%).

71. 255 (34%) in-patient suicides were under a medium or high level of observation, an average of 23 deaths per year. In a study of suicide by patients under observation, we recommended that observations should be seen as a skilled intervention carried out by experienced staff.[20]

Crisis Resolution/ Home Treatment

72. There were 2,043 suicides in patients under crisis resolution/home treatment (CRHT) teams, 16% of the total sample, an average of 186 deaths per year over the whole report period. The figures for 2013-2015 have been estimated to take into account late notifications.

73. Overall, the annual number of suicides under CRHT increased over the report period (Figure 21), initially reflecting its increasing use. Our recent estimates mean there are now around 2-3 times as many patient suicides under CRHT. This highlights the importance of reducing suicide in this setting.

74. When we calculated rates of suicide under CRHT in 2012-2015 (the years when denominator data, i.e. the number of CRHT attendances, were available), the rates averaged at 11.2 per 100,000 attendances, and the pattern followed broadly the trend in the number of deaths in recent years.

75. In 674 (34%) the patient had been discharged from in-patient care in the preceding 3 months; 284 (43%) died within 2 weeks of discharge, 174 (26%) within a week.

76. We have collected data on length of time under CRHT since 2012. 262 (38%) patients who died had been under CRHT services for less than a week, 87 (33%) of whom died within 3 months of discharge from in-patient care.

77. In 883 (44%) the patient lived alone. In 383 (55% excluding unknowns) the care plan included additional social support from outside the home, e.g. from a relative, friend or neighbour. However, those living alone were less likely to receive additional support (128, 42%).

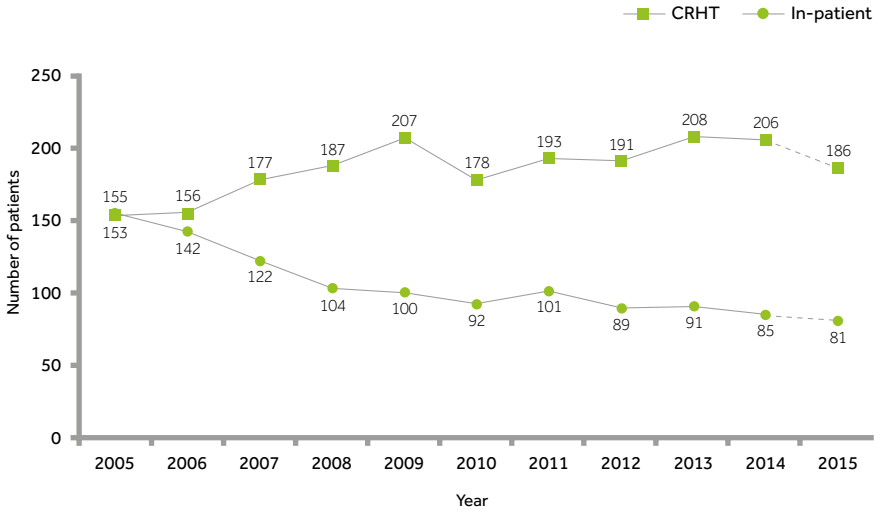


Figure 21: Patient suicide in England: number under crisis resolution/home treatment services and mental health in-patients

Patients recently discharged from hospital

78. There were 2,288 suicides within 3 months of discharge from in-patient care, 17% of all patient suicides and 18% of suicides in community patients, an average of 208 deaths per year. The figures for 2013-2015 have been estimated to take into account late notifications as described on page 16. There were 1,081 suicides in the first month after discharge, 48% of all suicides within 3 months of discharge, an average of 98 deaths per year. Post-discharge suicides were most frequent in the first week after leaving hospital when 349 deaths occurred, an average of 32 per year, 16% of all suicides within 3 months of discharge (Figure 22).

79. The number of post-discharge suicides fell between 2005-2014 (Figure 23). The average rate of suicide was 16.7 per 10,000 discharges. The rate of post-discharge suicide increased from 2005 to a peak in 2011 but has since fallen, in line with numbers (Figure 23).

80. The proportion who died in the first week after discharge did not change over the report period. Of all patients who died in the first week after discharge, the highest number occurred on the second (19%) and third (21%) day. We continue to recommend all patients are followed up within 3 days of discharge from in-patient care.

81. Of all post-discharge suicides, 269 (12%) died before the first follow-up appointment. This proportion increased to 22% of those who died in the first month after discharge and 40% in those who died within a week after discharge. There was no change over the report period in the number or proportion of patients who died before the first follow-up appointment.

82. In 432 (19%) of post-discharge suicides the patient had been detained under the MHA at the last admission. In 619 (28%) patients the last admission had lasted less than a week. In 418 (19%) the patients had initiated their own discharge from hospital, including self-discharge and breaching of ward rules. The number of patients initiating their own discharge did not change over the report period.

83. Patients who died in the first week after leaving hospital were more likely than those who died later after discharge to have a diagnosis of personality disorder (15% v. 10%). Proportionally more patients who died early after discharge had experienced recent adverse life events compared to other post-discharge suicides (54% v. 48%). These life events were most often financial problems (24% v. 15%), family problems (20% v. 11%), and health issues in the patient (12% v. 8%).

84. 212 (10%) died after being discharged from a non-local in-patient unit. This proportion increased to 13% (79 cases) of those who died within 2 weeks of discharge. In 2015 we are estimating 18 suicides after discharge from a non-local unit, 11% of all post-discharge suicides, lower than a recent peak in 2013 (25 deaths, 13% of all post-discharge suicides), though these numbers are too small for analysis.

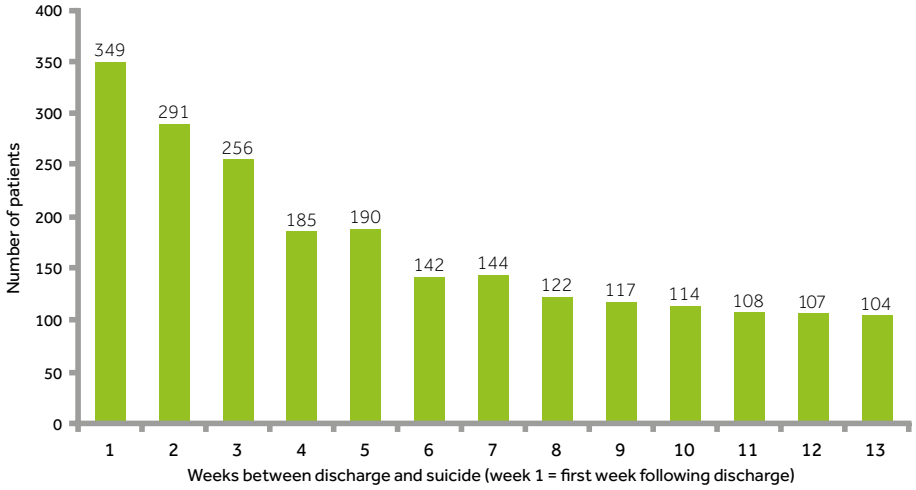


Figure 22: Patient suicide in England: number per week following discharge (2005-2015)

The highest number of suicides occurred on the 2nd and 3rd day after discharge

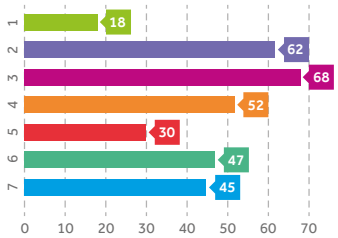


Figure 23: Patient suicide in England: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges

Non-adherence and missed contact

85. 1,576 (13%) patients were non-adherent with drug treatment in the month before death, an average of 143 deaths per year, and 2,967 (24%) patients missed their final service contact, an average of 270 deaths per year.

86. During 2005-2014 the number of patient suicides following missed contact fell to a low in 2009 and although it subsequently rose, it has now fallen back to the 2009 figure. The number of deaths following non-adherence decreased between 2008 and 2014. Both sets of figures should be seen against a rise in overall patient numbers (Figure 24).

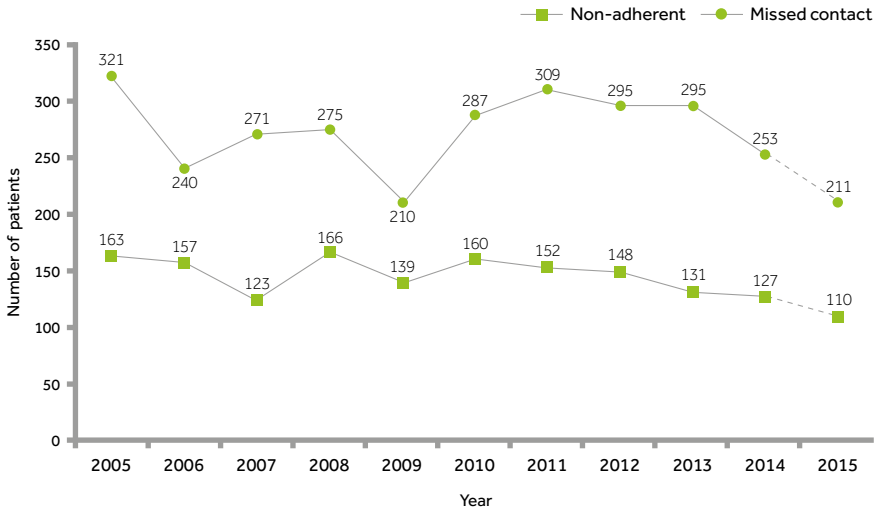


Figure 24: Patient suicide in England: number non-adherent with drug treatment or missed contact

Community Treatment Orders

87. There were 66 suicides in patients subject to a community treatment order (CTO) in 2009-2015, 1% of all patient suicides in this time period, an average of 9 per year. 35 patients who died had previously been on a CTO but were not on a CTO at the time of suicide. The rate of suicide in patients under CTO was 2.2 per 1,000 CTOs in 2009-2015. The number or rate did not change between 2009-2014.

88. 26 of the 66 deaths under CTO (39%) occurred within 3 months of hospital discharge. 10 patients who died while subject to a CTO were non-adherent with drug treatment in the month before death and 15 missed the last appointment with services; 3 had both refused treatment and missed the last appointment. Therefore 33% of those who died were not receiving care as intended despite CTO powers.

Section 136

89. In 2012-2015, there were 155 patients who had been conveyed to a hospital (n=133) or custody (n=43) based place of safety under Section 136 of the MHA in the 3 months prior to suicide. This represents 4% of all suicides in this time period, an average of 39 per year.

90. Compared to other patients, those under Section 136 were more likely to have a primary diagnosis of personality disorder (34, 22% v. 302, 9%). They were also more likely to have any secondary diagnosis (89, 59% v. 1,684, 49%). The most common secondary diagnoses were alcohol dependence/misuse (20%), drug dependence/misuse (14%) and depressive illness (13%).

91. Short-term risk was viewed as low/none in 106 (80%), similar to other patients (83%). Long-term risk was viewed as low/none in 56 (44%), significantly lower than for other patients (58%).

Improving Access to Psychological Therapies (IAPT)

92. There were 180 suicides in patients under IAPT services in specialist mental health trusts in the years 2011-2015, 3% of all patient suicides in this time period, an average of 36 per year (Figure 25). The number increased over this time period and rates of suicide showed a similar pattern, i.e. taking into account the number of attendances under these services. It is possible that this increase could reflect better recording by mental health services.

93. The majority had affective disorders (99, 59%), anxiety disorders (29, 17%) or adjustment disorders (18, 11%). 83 (49%) had a secondary diagnosis, though this was less likely to be alcohol or drug dependence/misuse ("dual diagnosis") compared to other patients (23, 14% v. 1,086, 21%).

94. Compared to other patients, those under IAPT services were less likely to live alone (59, 36% v. 2,519, 49%), be unmarried (105, 63% v. 3,728, 72%) or unemployed (58, 35% v. 2,342, 46%).

95. They were more likely to be ill for less than a year (67, 41% v. 1,079, 21%) and for long-term risk to be viewed as low/none (109, 69% v. 2,682, 58%).

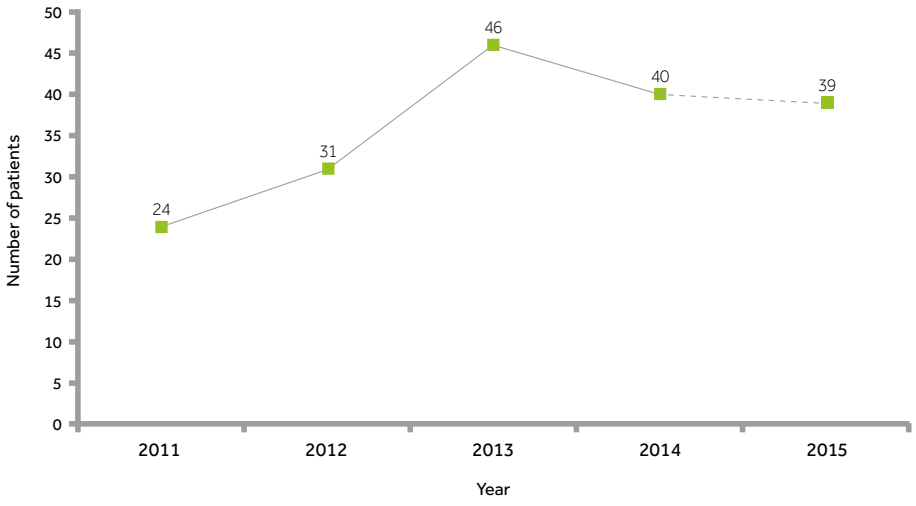


Figure 25: Patient suicide in England: number under IAPT

Assertive outreach

96. There were 346 suicides in patients under assertive outreach services in 2005-2015, 3% of all patient suicides, an average of 31 per year. The number of patient suicides under assertive outreach decreased between 2005 and 2014 (Figure 26) but we saw no evidence for a fall in rates in recent years. This means that the fall in numbers seen in Figure 26 is likely to be related to reduced provision of assertive outreach services rather than a true fall. Our previous studies have identified outreach as an important element of safer services.

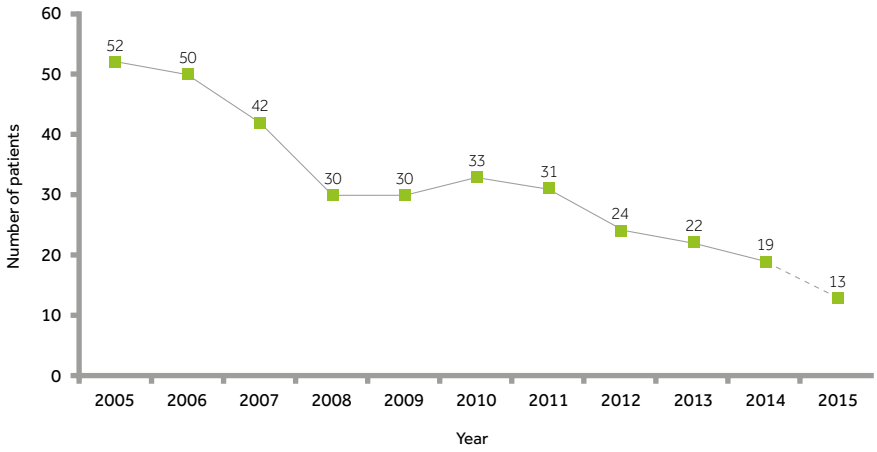


Figure 26: Patient suicide in England: number under assertive outreach services

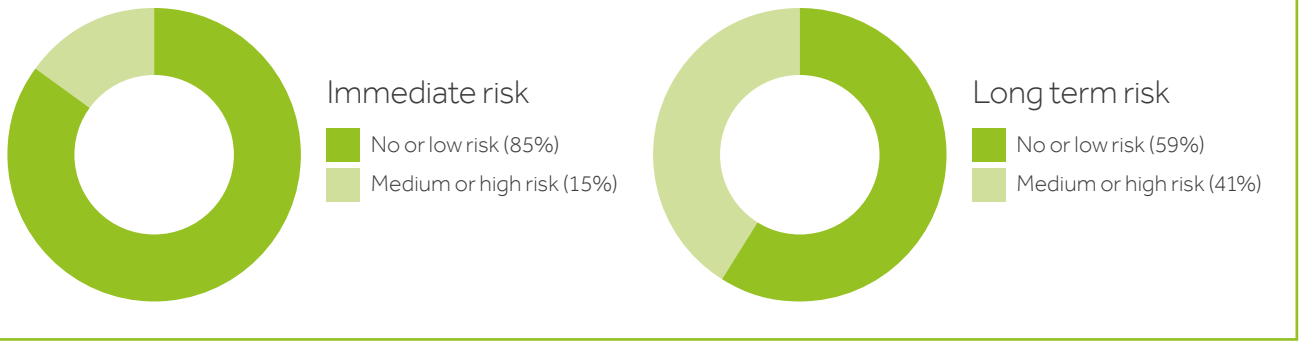
Risk of suicide at last contact

97. Immediate risk of suicide at last contact was judged to be low or not present in 10,396 (85%), and long-term risk low or not present in 7,050 (59%).

98. We are currently undertaking a new UK study on the use of risk assessment scales in mental health services. Our findings will be published in 2018.

99. From 2011 we asked clinicians, in their opinion, what was the main reason the suicide occurred. The most common responses were mental illness (46%) and social factors (23%) (Figure 27). Other factors (21%) included lack of experience or skill in staff, services not being available, poor out of hours cover, and delays in referral from a GP or other professional.

100. The most common factors that clinicians stated may have made the suicide less likely at the time were: closer supervision of the patient (25%), closer contact with the patient's family (18%), better communication between teams (13%), and access to psychological treatment (12%).



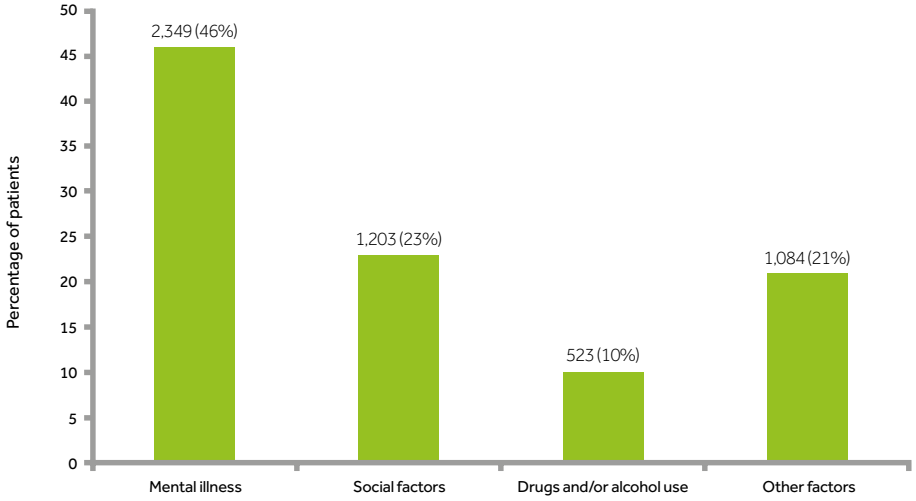


Figure 27: Patient suicide in England: clinicians' views on the main reason the suicide occurred

HOMICIDE

101. In 2005-2015, NCISH was notified of 6,004 homicide convictions, an average of 546 per year. There were 6,333 victims, an average of 576 per year.

Homicide in the general population

102. The annual number of convictions in the general population is shown in Figure 28. More recent statistics have been published for England and Wales by the Office for National Statistics (ONS) based on the number of offences recorded annually.[21] There was a decrease in the number of people convicted of homicide over the report period and since a peak in 2008.

103. The most common method of homicide was the use of a sharp instrument (2,449, 43%) and hitting and kicking (1,082, 19%).

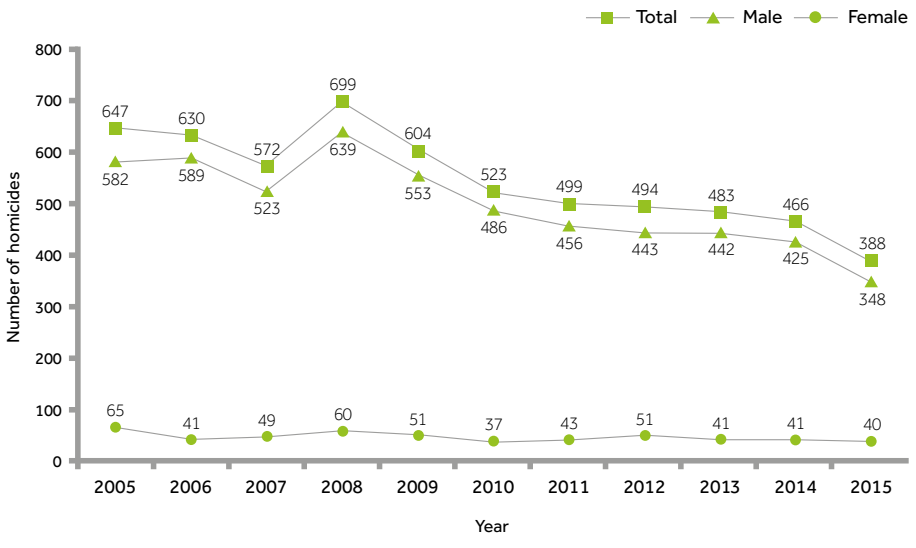


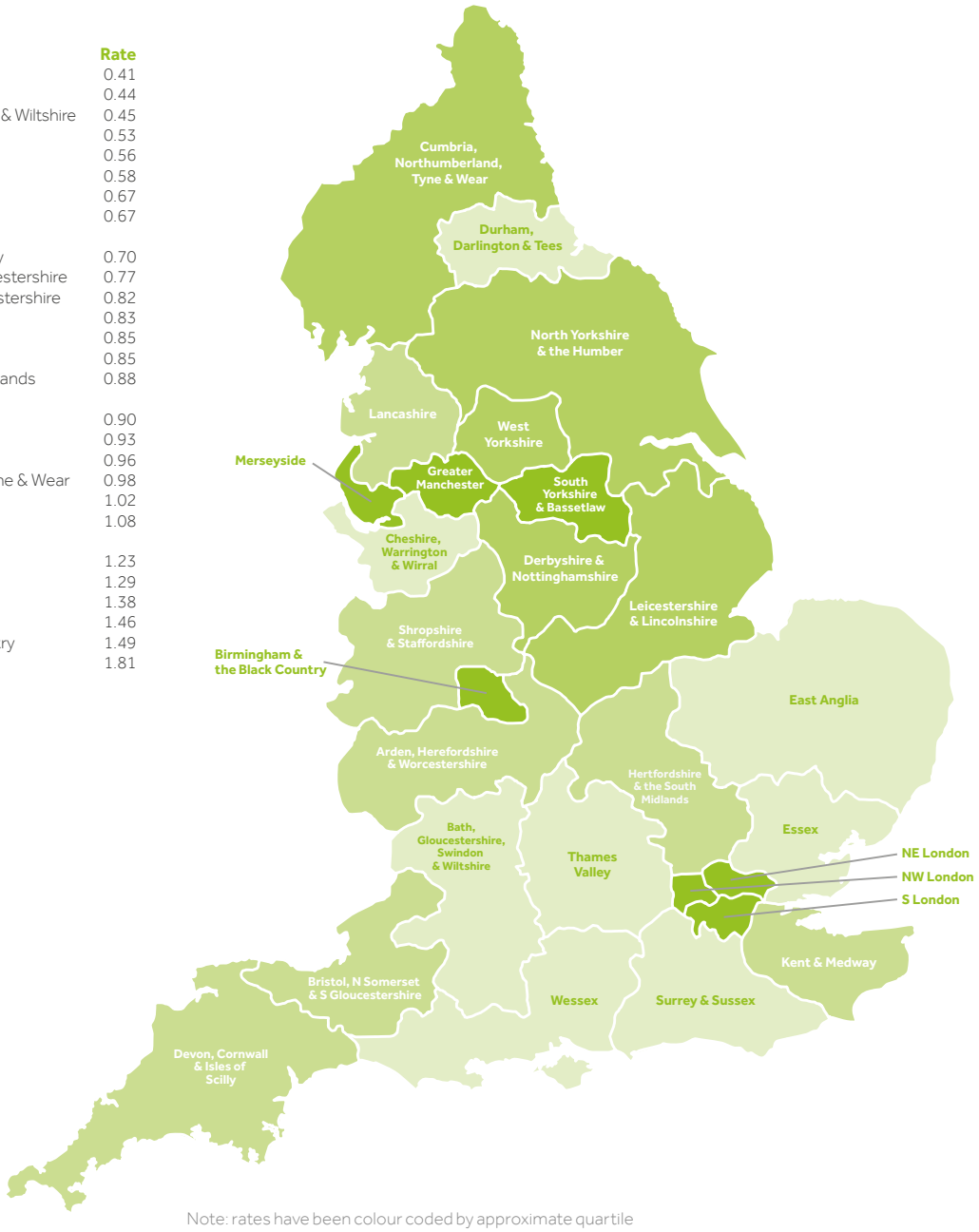
Figure 28: Number of homicide convictions in the general population in England, by gender of offender

Variation in homicide convictions by area of residence (NHS England Area Teams)

104. Homicide conviction rates varied by area of residence (by NHS England Area Team) (average rate 2013-2015). The highest rate was in North East London at 1.81 per 100,000 population, and the lowest in Thames Valley at 0.41 per 100,000 (Figure 29).

Figure 29: Rates of homicide convictions per 100,000 population by NHS area of residence (average rate 2013-2015)

Area	Rate
Thames Valley	0.41
Surrey & Sussex	0.44
Bath, Gloucestershire, Swindon & Wiltshire	0.45
East Anglia	0.53
Essex	0.56
Wessex	0.58
Durham, Darlington & Tees	0.67
Cheshire, Warrington & Wirral	0.67
Devon, Cornwall & Isles of Scilly	0.70
Bristol, N Somerset & S Gloucestershire	0.77
Arden, Herefordshire & Worcestershire	0.82
Kent & Medway	0.83
Lancashire	0.85
Shropshire & Staffordshire	0.85
Hertfordshire & the South Midlands	0.88
North Yorkshire & the Humber	0.90
Greater Manchester	0.93
Leicestershire & Lincolnshire	0.96
Cumbria, Northumberland, Tyne & Wear	0.98
Derbyshire & Nottinghamshire	1.02
West Yorkshire	1.08
North West London	1.23
Merseyside	1.29
South London	1.38
South Yorkshire & Bassetlaw	1.46
Birmingham & the Black Country	1.49
North East London	1.81



Note: rates have been colour coded by approximate quartile

HOMICIDE FOLLOWED BY SUICIDE

105. Homicide followed by suicide is defined here as when the offender dies by suicide within 3 days of committing homicide. As there is no conviction for homicide, these cases are analysed separately.

106. We were notified of 200 homicide-suicide offences between 2005 and 2015, an average of 18 per year. There were 301 victims in total. 36 (18%) incidents involved multiple victims, of which most (32, 89%) were family members of the offender (i.e. spouse including current/ex, son/daughter, parent). The median age of offenders was 45 (range 16-93). Most offenders were male (177, 89%).

107. The relationship of victim to offender (as a principal victim if there was more than one victim) was: spouse/partner (including current/ex) (133, 67%); son/daughter (including stepchild) (33, 17%); other family member (13, 7%); acquaintance (12, 6%) and stranger (8, 4%).

108. 14 (7%) homicide-suicides were identified as patients, i.e. the individual had been in contact with mental health services in the 12 months prior to the offence. This is a lower figure than for homicide in general (11%). It equates to 1-2 patients per year in England.

PATIENT HOMICIDE

109. The following analysis is based on 632 confirmed patient cases plus an additional 8 cases for 2015 and 1 for 2014, which we have estimated based on the proportion of expected final return of NCISH questionnaires, to give a total figure of 641 (Figure 30); this represents an average of 58 homicides per year. There were 674 victims, an average of 61 per year.

110. There was a fall in the number of patient homicides over the whole report period when examined by both year of conviction, and by year of offence (Figures 30 and 31). However, this fall has not continued since 2009. There was a broadly similar pattern when incidents are shown by year of offence, but the peak in 2008 is not seen. The most likely explanation for the conviction peak that year was administrative backlog in the courts so more people were convicted in 2008 but there was no such peak in homicide offences.

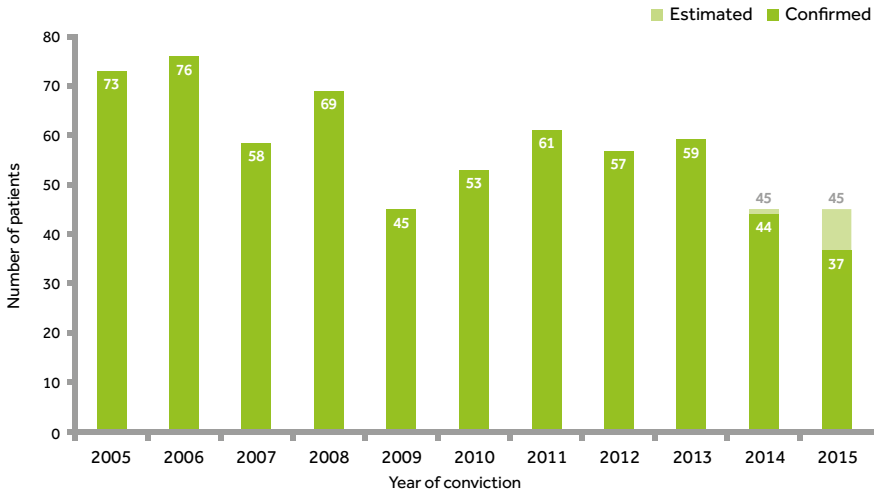


Figure 30: Number of patient homicides in England

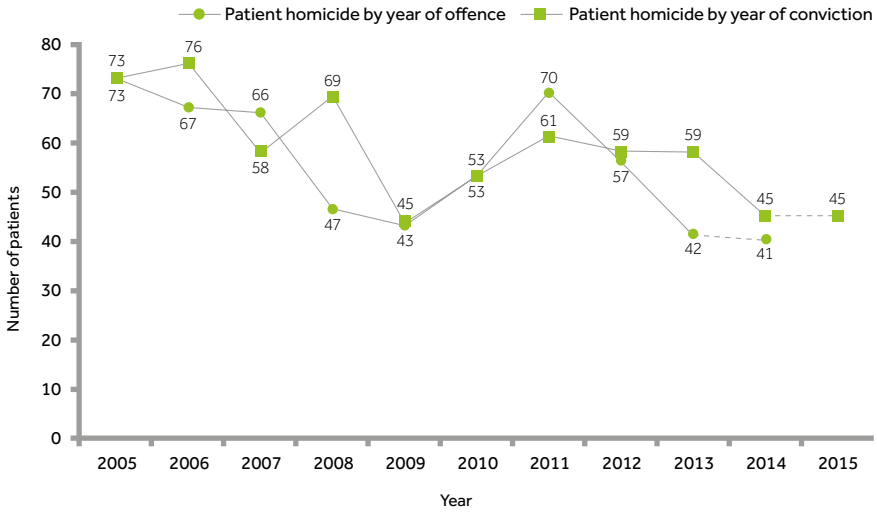


Figure 31: Number of patient homicides in England, by year of offence and year of conviction

Note: homicide numbers by year of offence for 2015 are not provided due to incomplete data

Social and clinical characteristics of homicide offenders

111. Table 2 shows the main social, clinical and offence features of patients convicted of homicide. These patients had high rates of social adversity, e.g. unemployment. Over half had a history of violence or self-harm and co-morbidities were common. Half of the patients were convicted of murder and the majority received a custodial sentence. There was a fall in homicides by those convicted of manslaughter (other including provocation, self-defence) over the report period.

112. The most common primary diagnosis was schizophrenia and other delusional disorders (Figure 32).

Table 2: Characteristics of patient homicide offenders in England (2005-2015)

	Number =641 Number	 %
Demographic features:		
Age: median (range)	32 (13-83)	
Male	548	85
Not currently married	301 /375	80
Living alone	102 /338	30
Unemployed/on long-term sick	301 /366	82
Black and minority ethnic group	122	19
Homeless	26 /349	7
Behavioural features:		
History of self-harm	308	50
History of violence	332	53
Any previous convictions	469	77
History of alcohol misuse	455	73
History of drug misuse	489	78
Abnormal mental state at the time of offence	229	36
Offence variables:		
Age of victim: median (range)	43 (0-89)	
Male victim	438	68
Victim was a stranger	93	16
Sharp instrument used	345	56
Final Outcome:		
Murder	325	51
Manslaughter (diminished responsibility)	104	16
Manslaughter (other including provocation, self-defence)	196	31
Infanticide	4	1
Unfit to plead/not guilty by reason of insanity	12	2
Sentencing Outcome:		
Prison	468	73
Hospital order (with or without restriction)	153	24
Other non-custodial sentence	17	3

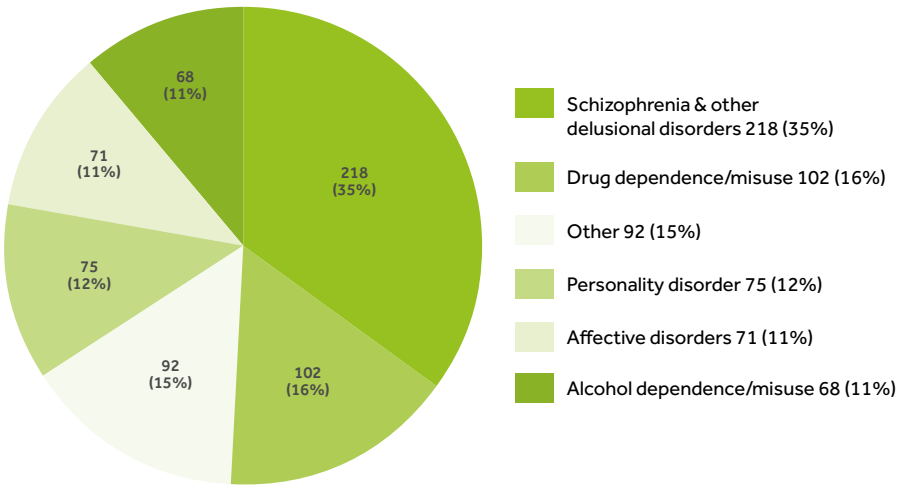


Figure 32: Patient homicide in England: primary psychiatric diagnosis

Relationship of victim to offender

113. The relationship of victim to offender was acquaintance (265, 46%); family member (111, 19%); spouse/partner (including current/ex) (104, 18%); and stranger (93, 16%).

114. The number of stranger homicides fell over the report period and since a peak in 2006, having risen in the previous years. There were 80 homicides in which a male patient killed a female spouse, 12% of all patient homicides (compared with 15% for general population homicides).

Homicide and schizophrenia

115. There were 356 homicides by people with a history of schizophrenia (includes other delusional disorders) over 2005-2015, 6% of all those convicted of homicide, an average of 32 per year. The numbers fell steadily over the report period, however there were peaks of 41 cases in 2005 and 44 cases in 2013 (Figure 33). This peak in 2013 was likely to reflect the court process with more offenders tried in that year, as no similar rise was shown when examined by year of offence (Figure 34). After a fall in the number of homicides by people with a diagnosis of schizophrenia in 2014, we are estimating a rise in 2015. 281 (92%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.

116. 218 (61%) were patients, an average of 20 per year. There was an overall fall in homicides by patients with schizophrenia over the report period, and we estimate a rise in 2015 (Figures 33 and 34).

117. 65 (32%) patients with schizophrenia were non-adherent with drug treatment in the month before the homicide, an average of 6 per year. There had been no fall since 2008. 75 (39%) patients with schizophrenia missed their final service contact before the homicide, an average of 7 per year, and again there had been no fall since 2008. In total 116 (59%) were either non-adherent or missed their final contact with services. There was a fall overall in this group over the report period.

118. 192 (88%) patients with a primary diagnosis of schizophrenia had a history of alcohol and/or drug misuse, i.e. it was unusual (12%) for patients with schizophrenia to be convicted of homicide unless they also had a history of alcohol and/or drug misuse (Table 3). Half of all patients with schizophrenia misused cannabis (100, 50%), 99 (48%) misused alcohol, whilst 67 (35%) misused stimulants.

119. A third of all patients with a primary diagnosis of schizophrenia were convicted of murder (74, 34%), and 89 (41%) received a custodial sentence.

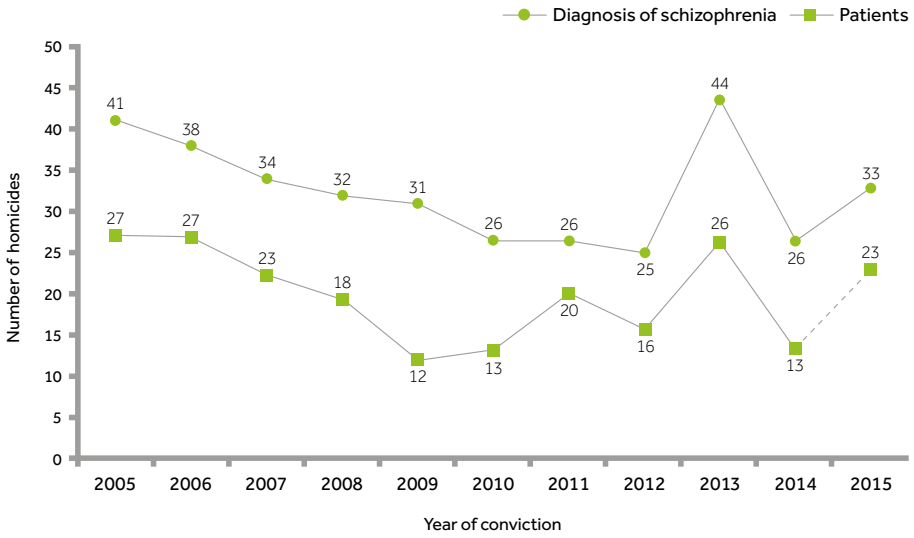


Figure 33: Offenders with a primary diagnosis of schizophrenia and other delusional disorders in England, by year of conviction

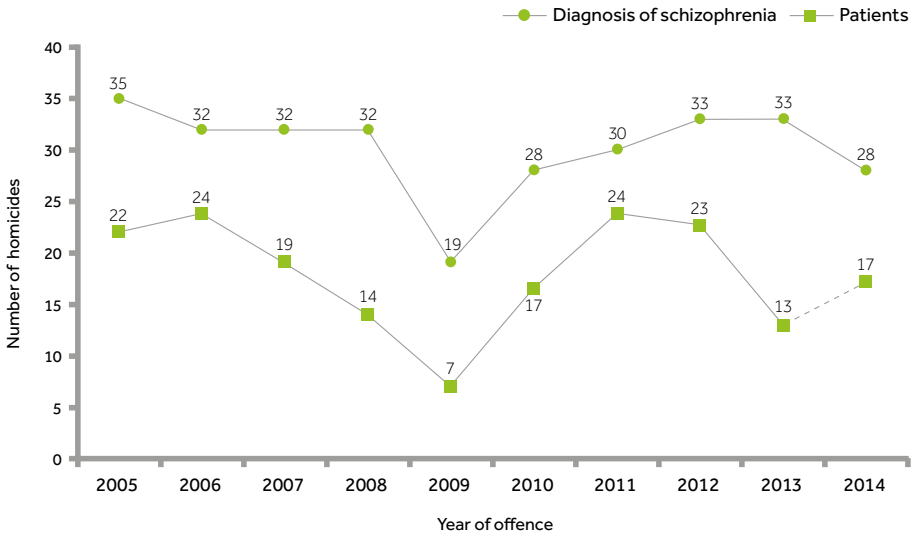


Figure 34: Offenders with a primary diagnosis of schizophrenia and other delusional disorders in England, by year of offence

Patients with alcohol and drug misuse

120. 455 (73%) patients had a history of alcohol misuse, an average of 41 per year (Figure 35). 489 (78%) patients had a history of drug misuse, an average of 44 per year (Figure 35). 555 (88%, excluding unknowns) had a history of either alcohol or drug misuse or both, an average of 50 homicides per year. Therefore, only 12% of patients who committed a homicide had no history of alcohol and/or drug misuse (Table 3). There was a fall in the number of patients with alcohol and/or drug misuse over the report period. Since 2005 there has been a 41% fall in patient homicides with a history of drug misuse and a 52% fall in those with a history of alcohol misuse.

121. The most common substances misused were alcohol (301, 53%), cannabis (208, 39%), and stimulants (179, 33%).

122. One third (23, 32%) of patients with a primary diagnosis of affective disorder and only 4 (5%) patients with personality disorder had no history of alcohol and/or drug misuse prior to homicide.

Table 3: Patient homicide in England: primary diagnosis and history of alcohol and/or drug misuse

Primary Diagnosis	History of alcohol misuse N (%)	History of drug misuse N (%)	History of alcohol and/or drug misuse N (%)	No history of alcohol or drug misuse N (%)
Schizophrenia (& other delusional disorders)	154 (71%)	181 (84%)	192 (88%)	26 (12%)
Affective disorder	44 (62%)	34 (48%)	48 (68%)	23 (32%)
Personality disorder	66 (89%)	64 (88%)	71 (95%)	4 (5%)
All patients	**455 (73%)**	**489 (78%)**	**555 (88%)**	**74 (12%)**

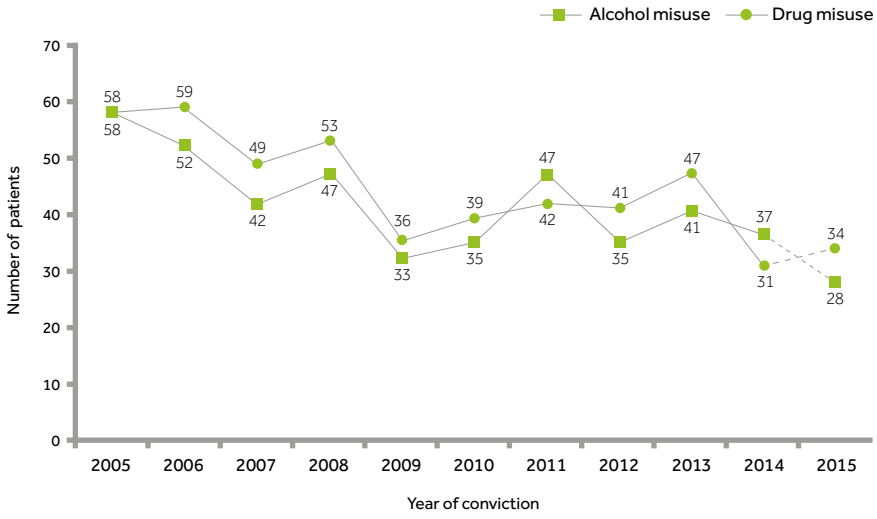


Figure 35: Patient homicide in England: number with a history of alcohol or drug misuse

123. 167 (27%) patients had "dual diagnosis", defined as severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 15 per year. The number of patient homicides with "dual diagnosis" fell after a peak in 2005 but has risen since 2010 (Figure 36).

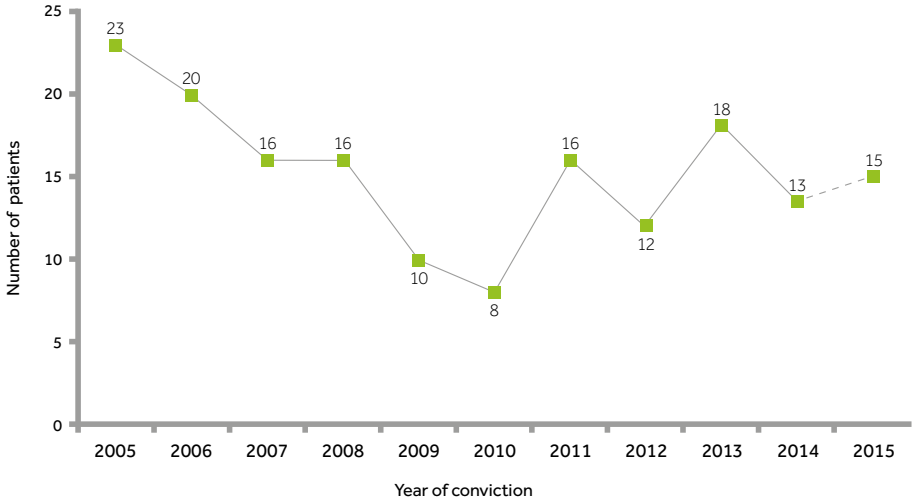


Figure 36: Patient homicide in England: number with dual diagnosis (severe mental illness and alcohol or drug dependence/misuse)

MENTAL HEALTH CARE

Acute care

124. There were 21 (3%) homicides by in-patients. There was fluctuation in numbers over the report period. Over half of all victims were acquaintances (12, 57%).

125. There were 42 homicides within 3 months of discharge from in-patient care, 7% of all patient homicides, an average of 4 homicides per year. The number of post-discharge homicides fell between 2006-2013 but there was a rise in 2014 (6 cases). Over a third of all victims in post-discharge homicides were an acquaintance (14, 38%), 10 (27%) were a spouse/partner and 6 (16%) were other family members.

126. In this post-discharge period, over a third of patient homicides occurred within the first 3 weeks of discharge (15, 36%) (Figure 37), 4 (10%) occurred within the first 4 days of discharge. In 6 (18%) cases, the offence occurred before follow up took place. 4 (10% of all post-discharge patients) were discharged from a non-local in-patient unit.

127. 16 (39%) patients had a duration of last admission of less than 7 days. 6 (15%) patients had been readmitted within 3 months of a previous discharge. 16 (40%) had been detained at the last admission, 4 (25%) of whom had been discharged within 2 weeks prior to the homicide. There were 9 (23%) homicides by patients who had initiated their own discharge from in-patient care, and, of these, 3 had been detained.

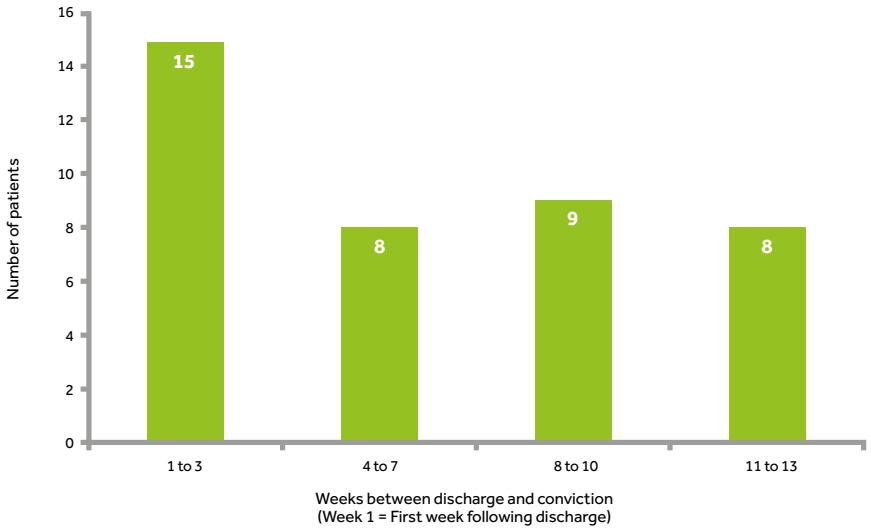


Figure 37: Patient homicide in England: number per week following discharge (2005-2015)

Crisis Resolution/ Home treatment

128. 35 (6%) patients in 2005-2015 were under crisis resolution/home treatment (CRHT) teams at the time of the homicide. This is an average of 3 per year, with the highest number recorded in 2006 (6 cases). The majority of all known victims were either a spouse/partner (12,35%) or other family member (10, 29%).

Recent contact with mental health services

129. 322 (50%) patients committed homicide 1-4 weeks after their last contact with services, 129 (20%) between 5-13 weeks and 186 (29%) more than 13 weeks. Of those patients who committed homicide within a month of their final service contact, 140 (44%) had schizophrenia, 20 (6%) were in-patients, and 31 (10%) had recently been discharged from in-patient care.

130. 127 (66%, excluding unknowns) patients who committed homicide within a month of their final service contact had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. Of these, 12 (10%) were under the care of an early intervention team for psychosis.

Non-adherence and missed contact

131. 113 (20%) patients were non-adherent with drug treatment in the month before the homicide, an average of 10 homicides per year, and 217 (37%) patients missed their final service contact, an average of 20 homicides per year.

132. During 2006-2012 the number of patient homicides following non-adherence decreased by 60%, though recent figures show a rise (Figure 38). The number of homicides following missed contact has fallen since a peak in 2006 (Figure 38).

133. In total, 277 (49%) patients were either non-adherent or had missed their final contact with services and were therefore not in receipt of planned treatment prior to the homicide. This number has fallen over the report period, with a 38% fall between 2005-2014.

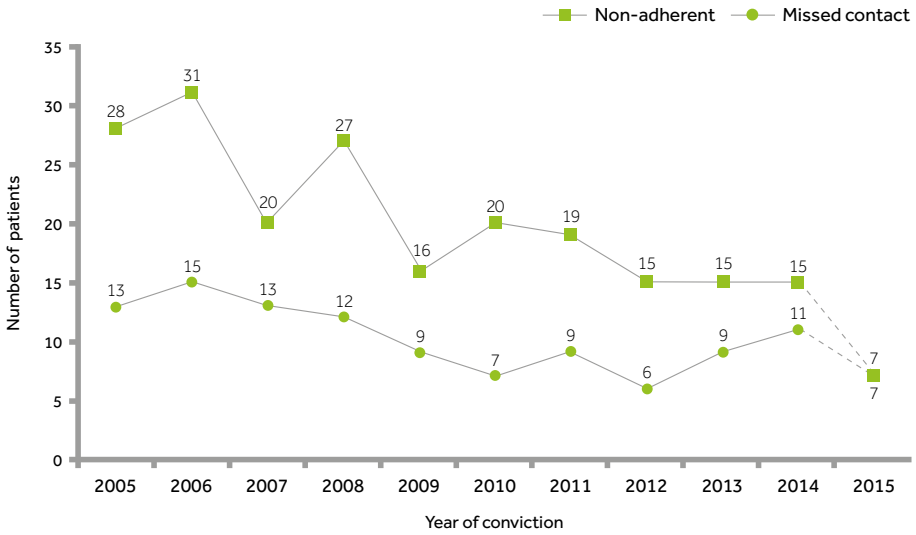


Figure 38: Patient homicide in England: number non-adherent with drug treatment or missed contact

Forensic and clinical history

134. 332 (53%) patients had been convicted of a previous violent offence, 290 (48%) had previously been in prison. 40 (6%) had a history of admission to a secure unit. 157 (25%) patients had previously been involuntarily detained under mental health legislation. Almost one-third (194, 31%) of all patients had no forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to the homicide.

NORTHERN IRELAND

NORTHERN IRELAND

SUICIDE

135. In 2005-2015, NCISH was notified of 2,903 deaths in the general population that were registered as suicide or "undetermined", an average of 264 per year. These are referred to here as suicides.

Suicide in the general population

136. There was an increase in the overall number and rate of suicides in 2005-2014 and a similar figure in 2015 (Figures 39 and 40). Some deaths are not registered for several months or longer which means that our figures for the most recent years underestimate the final figures.

137. Despite fluctuations, the number and rate of male suicides increased in 2005-2014, whilst the number of female suicides increased in 2005-2013.

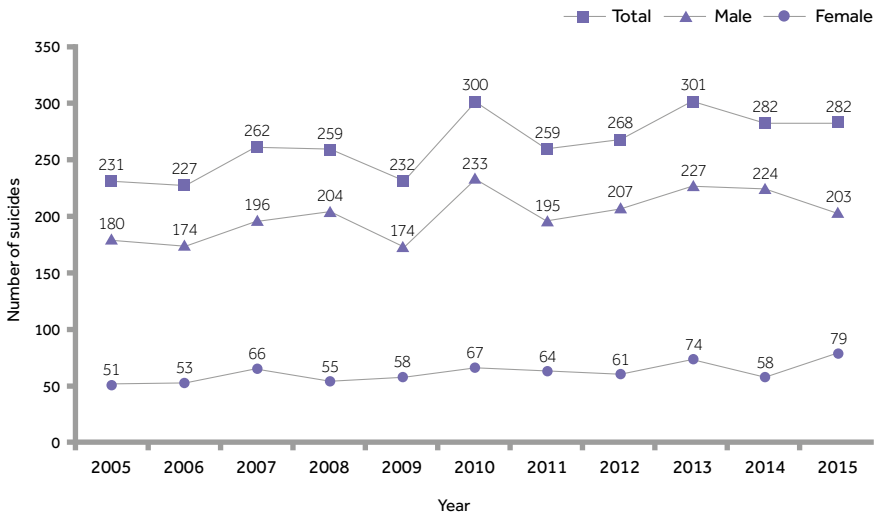


Figure 39: Number of suicides in the general population in Northern Ireland, by gender

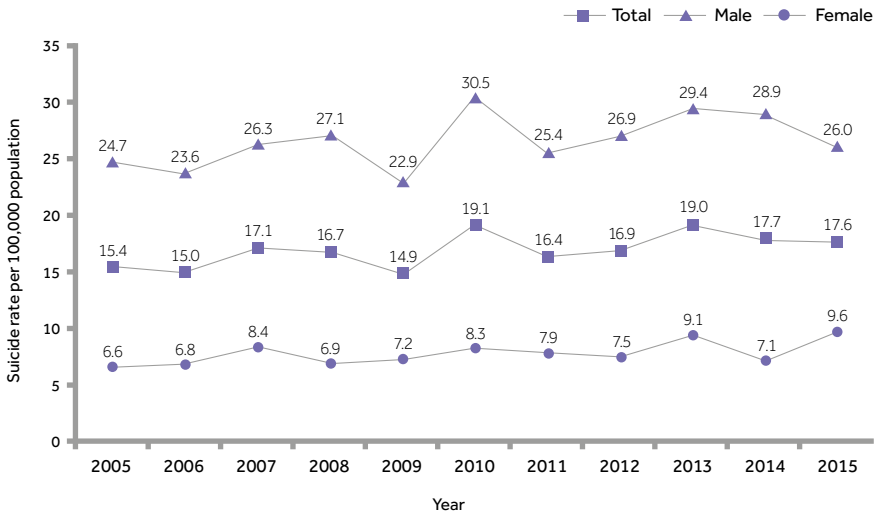
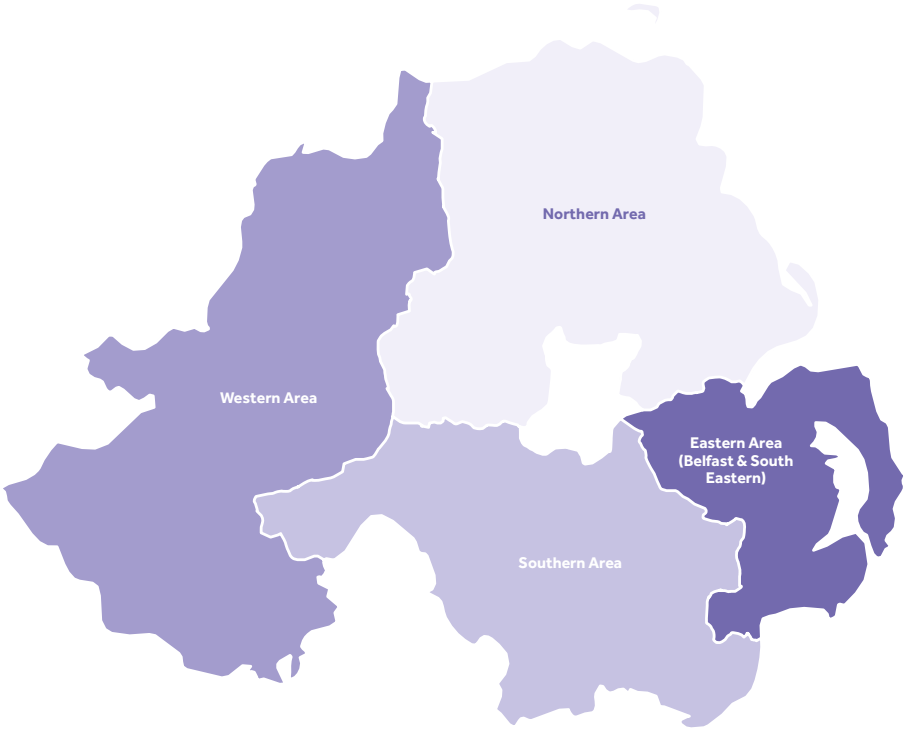


Figure 40: Rates of suicide in the general population in Northern Ireland, by gender

Variation in suicide rates by area of residence

138. There were only small variations by area of residence (by Health and Social Care Trust) at the time of death (average rate 2013-2015). The highest rate of suicide was in the Eastern Area (which includes Belfast), at 19.4 per 100,000 population, and the lowest in the Northern Area, at 16.3 per 100,000 population (Figure 41).



Area	Rate
Northern Area	16.3
Southern Area	17.2
Western Area	17.3
Eastern Area	19.4

Figure 41: Rates of suicide per 100,000 population, by Health and Social Care Trust of residence (average rate 2013-2015)

Method of suicide

139. The most common methods of suicide were hanging and strangulation (referred to here as hanging) (1,622, 56%), self-poisoning (overdose) (776, 27%), and drowning (221, 8%). Less frequent methods were firearms (88, 3%), gas inhalation (58, 2%), jumping and multiple injuries (mainly jumping from a height or being struck by a train) (43, 1%), and cutting and stabbing (36, 1%).

140. Deaths by hanging have increased since 2006, with a peak in 2010 and a possible recent fall (Figure 42). Deaths by self-poisoning have increased since 2008, and in 2015 rose to the highest number during the report period, nearly doubling in 3 years. Some of this increase is accounted for by an increase in opiate deaths. There was a fall in deaths by gas inhalation but no change in the number of deaths by other methods over the report period.

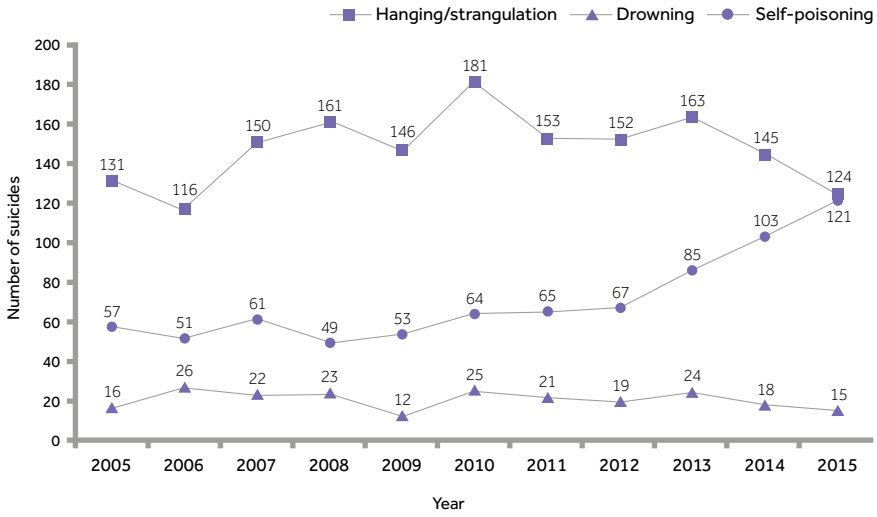


Figure 42: Suicide in the general population in Northern Ireland: main causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

141. During 2005-2015, 778 suicides (27% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 71 patient suicides per year.

142. There was no change overall in the number of suicides between 2005 and 2014 (Figure 43) but there was an increase in the number of female suicides related to a rise in 2006 and 2007 (Figure 44). There was no change in the rate of suicide using a general population denominator in 2005-2014 (Figure 45).

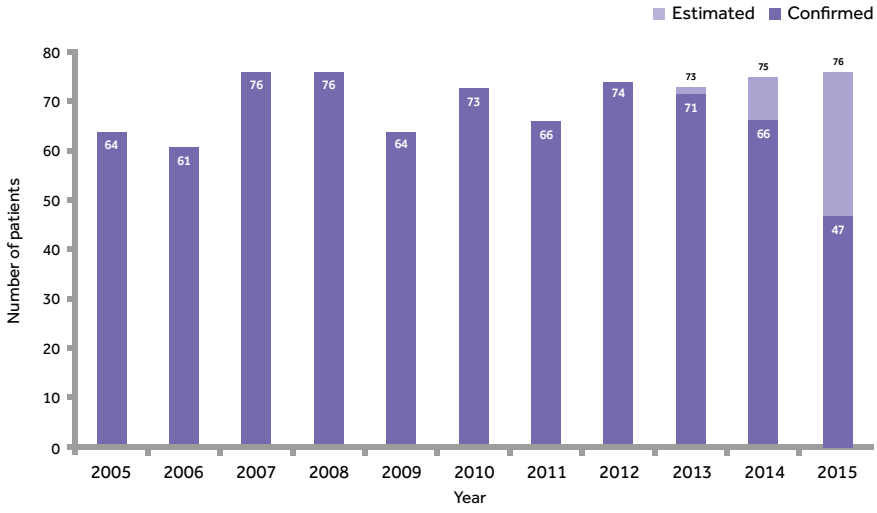


Figure 43: Number of patient suicides in Northern Ireland

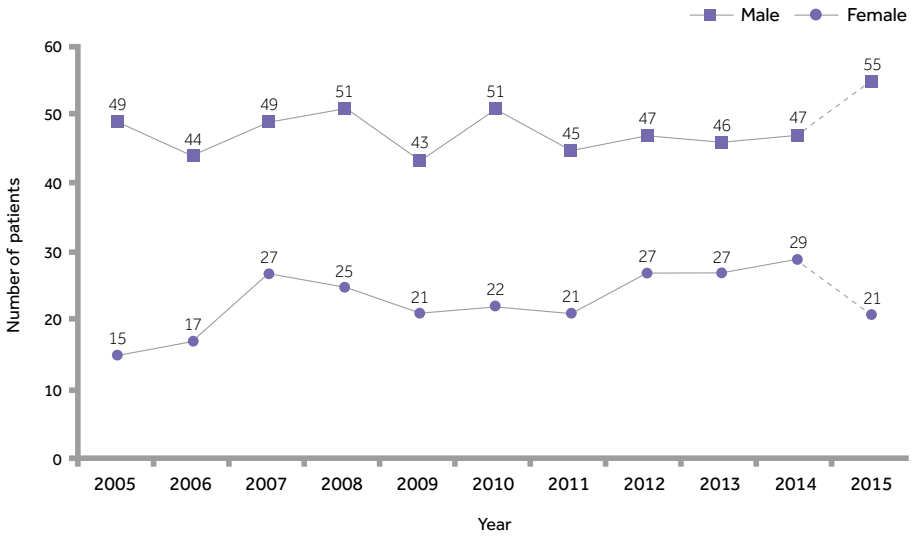


Figure 44: Number of patient suicides in Northern Ireland, by gender

Note: some figures do not tally with the total figures in Figure 43 due to rounding

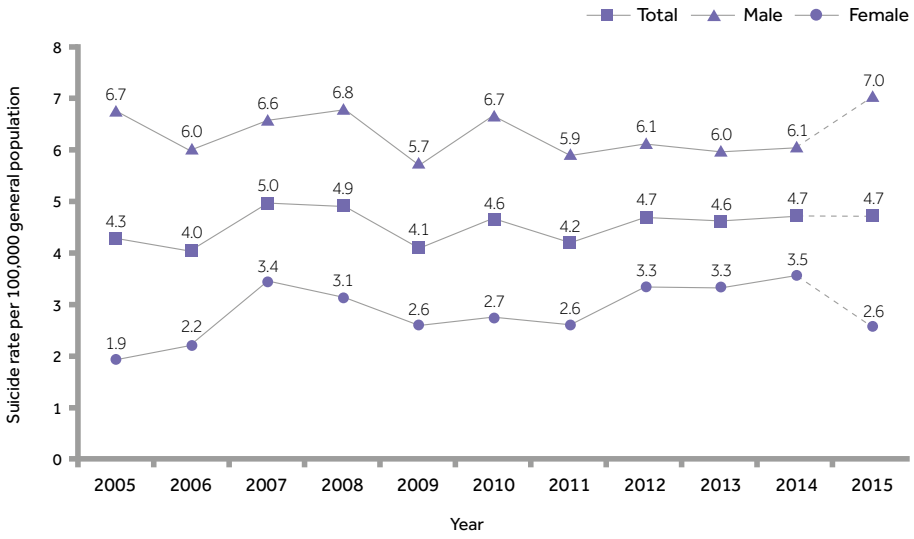


Figure 45: Rates of patient suicide in Northern Ireland, by gender

Method of suicide by patients

143. The most common methods of suicide by patients were hanging (396, 51%), self-poisoning (244, 31%) and drowning (73, 9%) (Figure 46). The number of suicides by self-poisoning increased by 71% between 2005 and 2014. The most common substances used in self-poisoning were opiates (80, 37%), anti-psychotic drugs (35, 16%) and benzodiazepines/ hypnotics (15, 7%).

144. The number of deaths by opiates increased by 83% between 2005 and 2014. In 21 (70%) the opiates had not been prescribed for the patient. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (10, 28%), tramadol (9, 25%) and codeine (6, 17%).

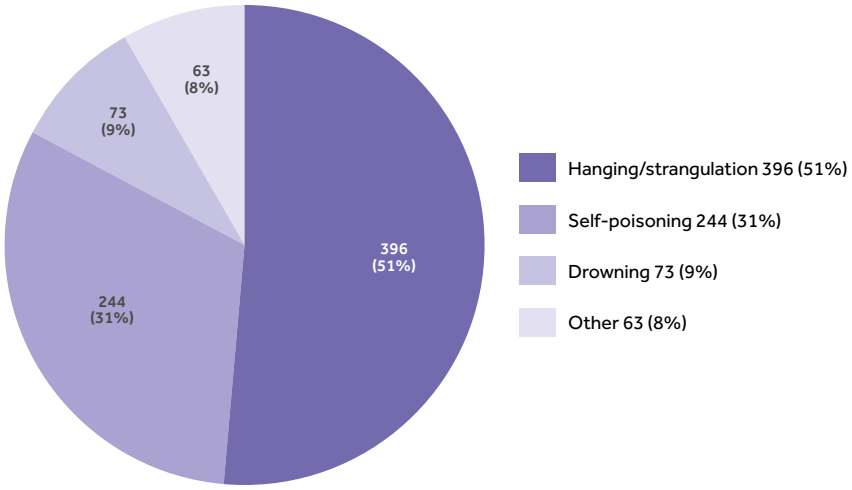


Figure 46: Patient suicide in Northern Ireland: main causes of death

Suicides in people aged under 25

145. During 2005-2015, there were 503 suicides in the general population in people aged under 25, 17% of all suicides, an average of 46 per year. 200 were aged under 20, an average of 18 per year, and 93 were aged under 18, an average of 8 per year.

146. 81 of those under 25 were patients, 10% of patient suicides and 16% of all suicides in this age-group. This represents an average of 7 deaths per year. 16 were aged under 20 and 4 were aged under 18.

147. Patient suicides in under 25s decreased in 2007 after which there has been an increase (Figure 47).

148. We are currently carrying out a national investigation of suicide in children and young people and we hope to collect data from Northern Ireland shortly.

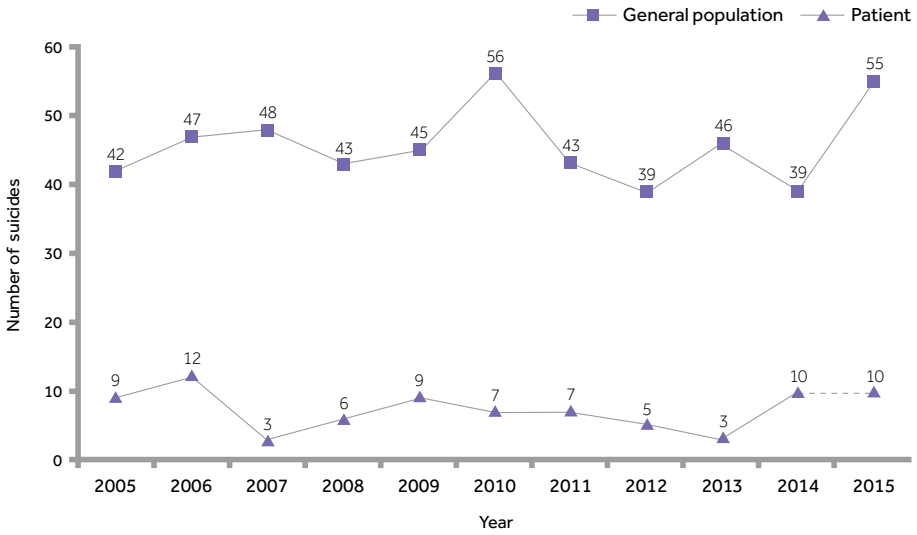


Figure 47: Number of general population and patient suicides in those aged under 25 in Northern Ireland

Social and clinical characteristics

149. Table 4 shows the main social and clinical features of patients dying by suicide whose deaths would have to be prevented to reduce suicide figures.

150. These patients had high rates of social adversity and isolation, e.g. unemployment and living alone. 10% were aged under 25. There were high rates of alcohol misuse and drug misuse. The proportion receiving in-patient care was low at 4%. Of all community patients, a third missed their last appointment with mental health services.

Table 4: Characteristics of patients who died by suicide in Northern Ireland (2005-2015)

	Number = 778 Number	%
Demographic features:		
Age: median (range)	42 (16-92)	
Aged under 25	81	10
Male	527	68
Not currently married	564	75
Living alone	335	45
Unemployed	377	50
On long-term sick leave	137	18
Black and minority ethnic group	7	1
Homeless	13	2
Priority groups:		
In-patients	31	4
Recent (<3 months) discharge	131	17
Under crisis resolution/home treatment services	51	7
Missed last contact in previous month	254	34
Non-adherence with medication in previous month	82	12
Clinical features:		
Any secondary diagnosis	434	56
Duration of illness (<12 months)	123	17
Over 5 previous admissions	93	12
First contact with mental health services:		
<12 months	173	24
>5 years	332	47
Last admission was a re-admission	66	14
Behavioural features:		
History of self-harm	560	73
History of violence	200	27
History of alcohol misuse	485	63
History of drug misuse	323	43
Contact with services:		
Last contact within 7 days of death	279	36
Symptoms of mental illness at last contact	448	59

Diagnosis

151. The most common primary diagnoses were affective disorders (bipolar and depressive illness) (239, 31%); alcohol dependence/misuse (169, 22%) and schizophrenia (includes other delusional disorders) (107, 14%) (Figure 48).

152. Patients with eating disorders, dementia, and autism spectrum disorders are described in detail in the UK-wide data section (see page 109).

153. We are carrying out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection (to be published in autumn 2017).

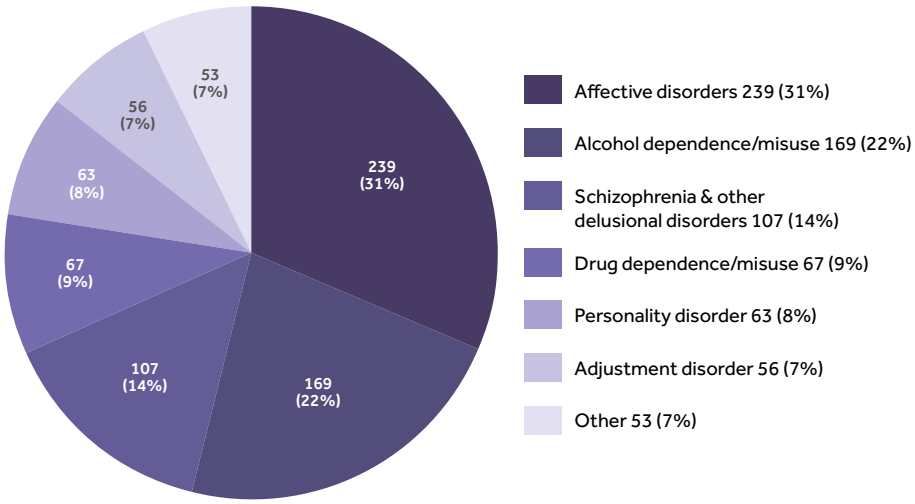


Figure 48: Patient suicide in Northern Ireland: primary diagnosis

Patients with alcohol and drug misuse

154. There were 485 suicides in patients with a history of alcohol misuse, 63% of the total sample, an average of 44 deaths per year (Figure 49). 323 had a history of drug misuse, 43% of the total sample, an average of 29 deaths per year (Figure 49). 540 had a history of either alcohol or drug misuse or both, 71% of patient suicides, an average of 49 deaths per year.

155. Between 2005 and 2014, there was no significant trend in the annual number or proportion of patient suicides with a history of alcohol misuse, though numbers were lower in 2005-2006. There was an increase in patients with drug misuse over the report period. Between 2011-2015, 44 (13%) patients who died were under drug services, 62 (19%) were under alcohol services, and 79 (23%) were under either drug or alcohol services.

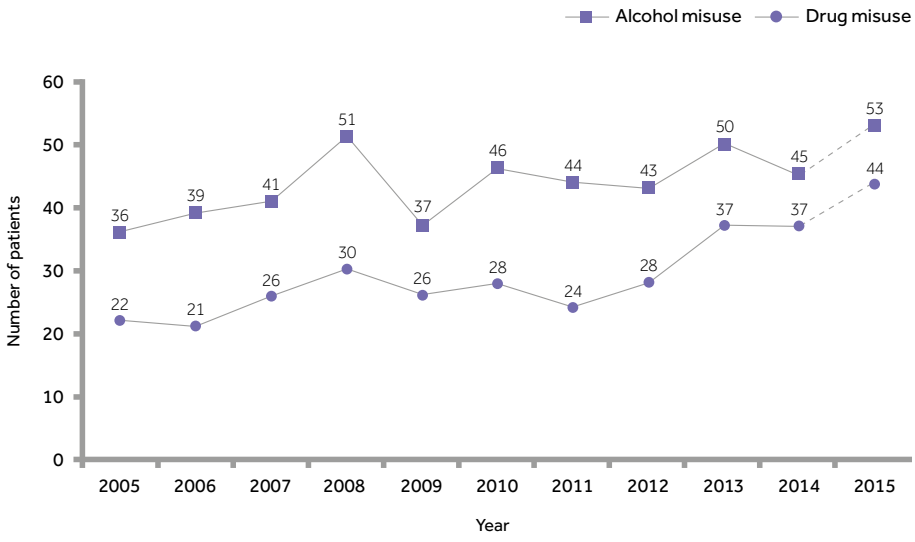


Figure 49: Patient suicide in Northern Ireland: number with a history of alcohol or drug misuse

MENTAL HEALTH CARE

In-patient suicide

156. There were 31 in-patient deaths by suicide between 2005-2015, 4% of patient suicides. The highest number of in-patient suicides was in 2009 (5 deaths).

157. 6 patients died on the ward by hanging over the report period. 10 in-patients died after leaving the ward without staff agreement, 32% of all in-patient suicides.

Crisis Resolution/ Home Treatment

158. There were 51 suicides in patients under crisis resolution/home treatment (CRHT) teams, 7% of all deaths. There was no overall trend in the number of suicides under CRHT, but the highest figures were in 2007 (7 deaths) and 2012 (7 deaths). Since 2011 there have been 29 suicides in patients under CRHT compared to 14 in in-patient care.

Patients recently discharged from hospital

159. There were 131 suicides within 3 months of discharge from in-patient care, 17% of all patient suicides and 18% of suicides in community patients, an average of 12 deaths per year. The number of post-discharge suicides peaked in 2007 (15 deaths) but otherwise there was no trend over the report period.

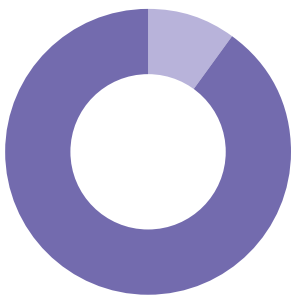
160. Post-discharge suicides were most frequent in the first week after leaving hospital when 29 deaths occurred, 23% of all suicides within 3 months of hospital discharge, an average of 3 per year. Of these, the highest number occurred on the fourth day (7 deaths) after discharge.

161. In 15 (12%) of post-discharge suicides the patient had been detained under the MHA at the last admission. For 53 (41%) patients the last admission had lasted less than a week. 33 (24%) patients had initiated their own discharge from hospital, including self-discharge and after breaching ward rules.

Risk of suicide at final contact

162. Immediate risk of suicide at last contact was judged to be low or not present in 649 (90%), and long-term risk low or not present in 426 (60%).

163. We are currently undertaking a new UK study on the use of risk assessment scales in mental health services. Our findings will be published in 2018.



Immediate risk

No or low risk (90%)

Medium or high risk (10%)

Long term risk

No or low risk (60%)

Medium or high risk (40%)

164. From 2011 we asked clinicians, in their opinion, what was the main reason the suicide occurred. The most common responses were the use of alcohol and drugs (38%), the patient's mental illness (32%) and social factors (20%) (Figure 50).

165. The most common factors that clinicians stated may have made the suicide less likely at the time were: closer contact with the patient's family (11%), closer supervision of the patient (10%), and adherence with treatment (8%).

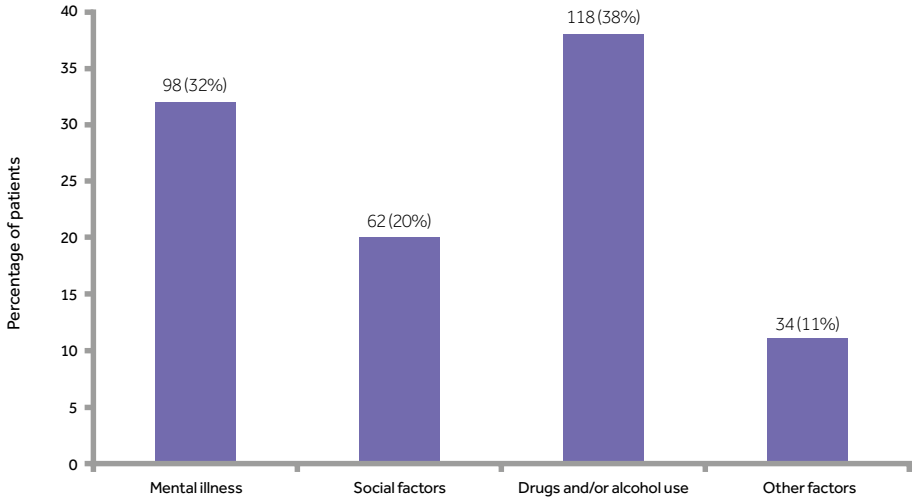


Figure 50: Patient suicide in Northern Ireland: clinicians' views on the main reason the suicide occurred

HOMICIDE

166. In 2005-2014, NCISH was notified of 202 homicide convictions, an average of 18 per year. There were 211 victims, an average of 19 per year.

Homicide in the general population

167. The annual number of homicide convictions in the general population is shown in Figure 51. More recent homicide statistics are published by the Police Service of Northern Ireland.[22] There was a rise in homicide convictions up to 2007, and the numbers have fluctuated since then with no overall trend.

168. The most common method of homicide was the use of a sharp instrument (65, 38%) followed by hitting and kicking (50, 29%).

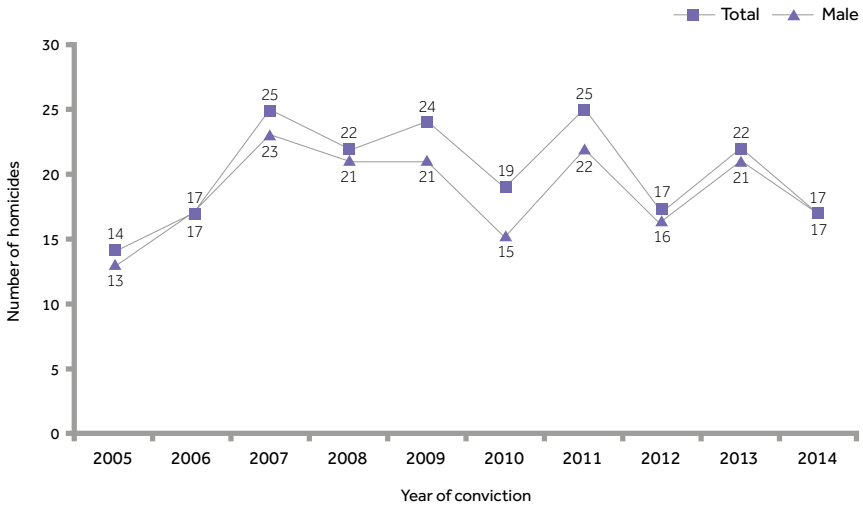


Figure 51: Number of homicide convictions in the general population in Northern Ireland, by gender of offender

Note: data not available for 2015

PATIENT HOMICIDE

169. During 2005-2014, 18 people convicted of homicide (9% of the total sample), were confirmed as patients, i.e. the individual had been in contact with mental health services in the 12 months prior to the offence, an average of 2 per year. There were 18 victims. The numbers fluctuated over the report period but were too small to examine trends over time.

Social and clinical characteristics of homicide offenders

170. Table 5 shows the main social and clinical features of patient homicide offenders. These patients had high rates of unemployment and most of the offenders and victims were male. The majority had a history of violence, self-harm and alcohol or drug misuse. Over a quarter were convicted of murder and 94% received a custodial sentence.

Table 5: Characteristics of patient homicide offenders in Northern Ireland

	Number =18 Number	%
Demographic features:		
Age: median (range)	29 (18-48)	
Male	17	94
Not currently married	13	81
Unemployed/on long-term sick	12 / 14	86
Black and minority ethnic group	<3	-
Living alone	<3	-
Homeless	3 / 13	23
Behavioural features:		
History of self-harm	12	71
History of violence	12	80
Any previous convictions	15	88
History of alcohol misuse	18	100
History of drug misuse	16	89
Abnormal mental state at the time of offence	6	38
Primary diagnosis (lifetime):		
Schizophrenia and other delusional disorders	4	22
Affective disorders (bipolar and depression)	<3	-
Personality disorder	3	17
Alcohol dependence/misuse	5	28
Drug dependence/misuse	3	17
Offence variables:		
Age of victim: median (range)	50 (19-76)	
Male victim	16	89
Victim was a stranger	<3	-
Sharp instrument used	8	50
Final outcome:		
Murder	5	28
Manslaughter (diminished responsibility)	<3	-
Manslaughter (other including provocation, self defence)	11	61
Infanticide	<3	-
Unfit to plead/not guilty by reason of insanity	<3	-
Sentencing outcome:		
Prison	17	94
Hospital order (with or without restriction)	<3	-
Other non-custodial sentence	<3	-

Relationship of victim to offender

171. The most common relationship of victim to offender was acquaintance (11, 65%) followed by a family member or spouse/partner (5, 29%).

Homicide and schizophrenia

172. 7 people had a history of schizophrenia (includes other delusional disorders), 3% of those convicted of homicide. Of these, 6 (86%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. 4 (57%) were patients.

173. All patients with a primary diagnosis of schizophrenia, affective disorder or personality disorder had a history of alcohol and drug misuse (9, 100%).

174. None of the patients suffering from severe mental illness (schizophrenia or affective disorders) were convicted of murder. 5 (83%) of the patients suffering from severe mental illness received a custodial sentence.

175. 6 (38%) patients had "dual diagnosis", defined as severe mental illness and co-morbid alcohol or drug dependence/misuse, an average of 1 per year.

Patients with alcohol and drug misuse

176. All of the patients had a history of either alcohol or drug misuse or both, an average of 2 homicides per year.

177. The commonest substances misused were alcohol (12, 71%) and cannabis (7, 44%).

MENTAL HEALTH CARE

Contact with mental health services

178. There were no homicides committed by in-patients or patients under crisis resolution/home treatment teams. 8 (47%) patients committed homicide 1-4 weeks after their last contact with services, 5 (29%) between 5-13 weeks and 4 (24%) more than 13 weeks after last contact.

Non-adherence and missed contact

179. 14% of patients were known to have been non-adherent with drug treatment in the month before the homicide. 7 (44%, excluding the unknowns) patients missed their final service contact before the homicide. In total, 9 (64%) were either non-adherent or missed their final contact with services and were therefore not in receipt of planned treatment just prior to the homicide.

Forensic and clinical history

180. 12 (80%) had been convicted of a previous violent offence. 9 (56%) had previously been in prison. 3 (19%) patients had no forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to the homicide.

SCOTLAND

SCOTLAND

SUICIDE

181. In 2005-2015, NCISH was notified of 8,662 deaths in the general population that were registered as suicide or "undetermined", an average of 787 per year. These are referred to here as suicides.

Suicide in the general population

182. Figures 52 and 53 show trends in suicide in the general population. An apparent increase in 2011 occurred due to the introduction of new death coding rules for drug misuse deaths in the International Statistical Classification of Diseases and Related Health Problems (ICD-10) (see paragraph 12). This meant deaths that would previously have been coded as due to 'mental and behavioural disorders due to psychoactive substance use' are in some cases now coded as suicide or undetermined deaths. For example, the figure in 2015 would be 656 deaths using the old coding compared to 682 deaths using the new coding rules. Throughout this report we show figures based on the new coding.

183. There has generally been a sustained fall in the number and rate since a peak in 2007-2008 (Figures 52 and 53). However, there was an increase in 2005-2014 in males aged 45-54.

Figure 52: Number of suicides in the general population in Scotland, by gender

Note: the dotted line indicates when the change in death coding rules occurred. Figures presented are those using the new coding rules.

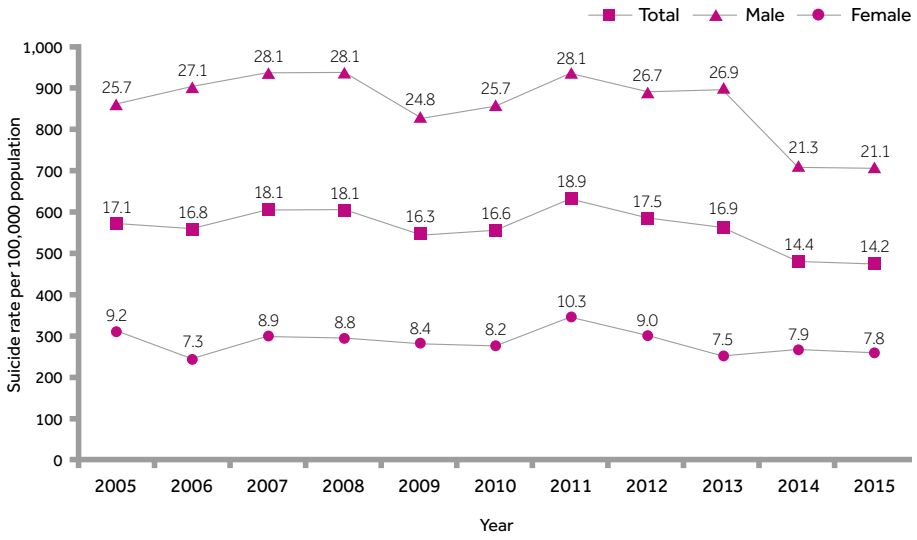


Figure 53: Rates of suicide in the general population in Scotland, by gender

Variation in suicide rates by area of residence

184. Suicide rates varied by area of residence (by NHS Health Board) at the time of death (average rate 2013-2015). The highest rate of suicide was in the combined isles of Shetlands, Orkney and Western Isles, at 17.6 per 100,000 population, and the lowest rate was in Ayrshire and Arran, at 12.6 per 100,000 population (Figure 54).

Area	Rate
Ayrshire & Arran	12.6
Dumfries & Galloway	12.8
Lanarkshire	13.1
Borders	14.0
Tayside	14.5
Greater Glasgow & Clyde	14.9
Grampian	15.3
Highland	15.8
Lothian	15.9
Fife	16.6
Forth Valley	16.9
Shetlands, Orkney & Western Isles	17.6

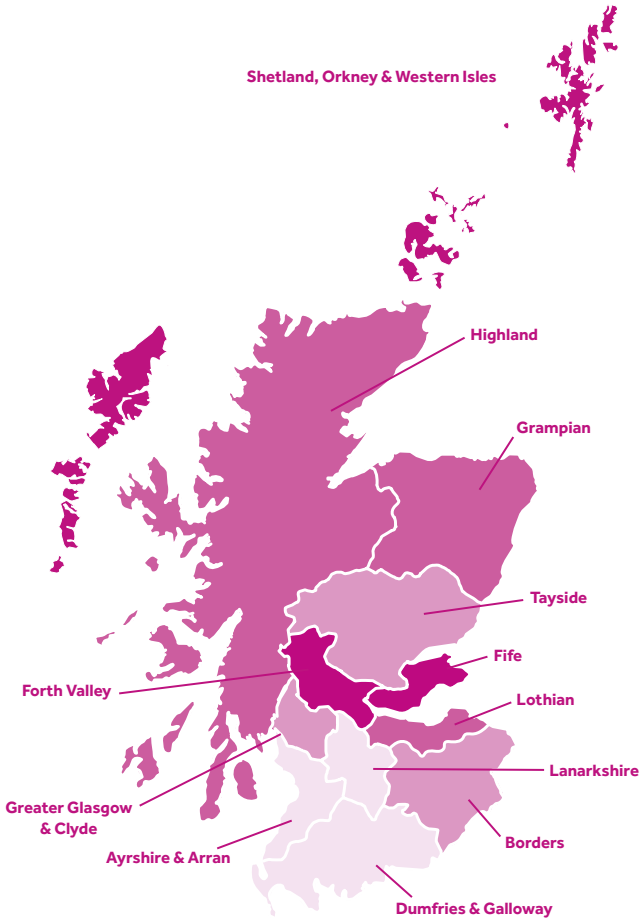


Figure 54: Rates of suicide per 100,000 population, by NHS Health Board of residence (average rate 2013-2015)
Note: rates have been colour coded by approximate quartile

Method of suicide

185. The most common methods of suicide were hanging and strangulation (referred to here as hanging) (3,471, 40%), self-poisoning (overdose) (2,725, 32%), jumping and multiple injuries (mainly jumping from a height or being struck by a train) (879, 10%) and drowning (618, 7%). Less frequent methods were gas inhalation (239, 3%), cutting and stabbing (199, 2%), and firearms (111, 1%).

186. Deaths by hanging increased over the whole report period, though the number has not changed since 2008 (Figure 55). The apparent increase in suicides by self-poisoning in 2011-2012 is the result of the death coding rule change described earlier, but the number has fallen to the lowest figure over the report period. Deaths by drowning decreased by 69% between 2005 and 2015 (Figure 55) whilst there was no overall change in the number of deaths by less common methods despite fluctuations year on year (Figure 56).

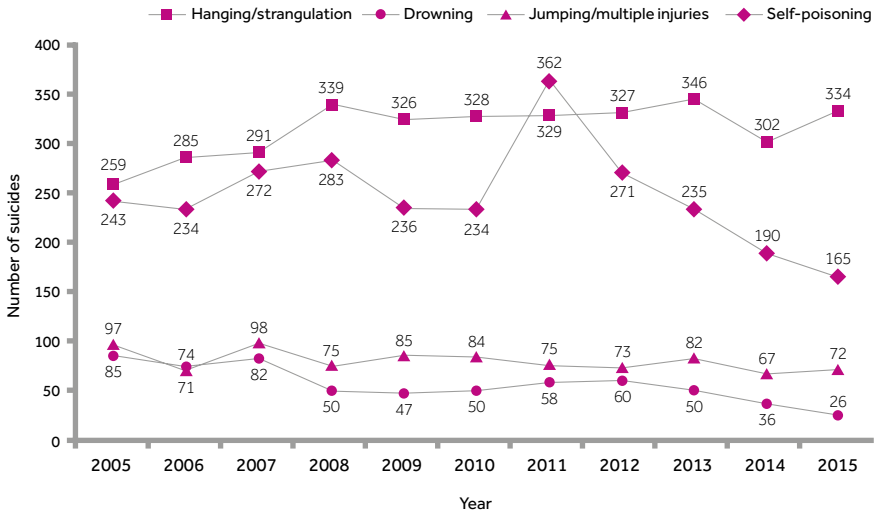


Figure 55: Suicide in the general population in Scotland: main causes of death

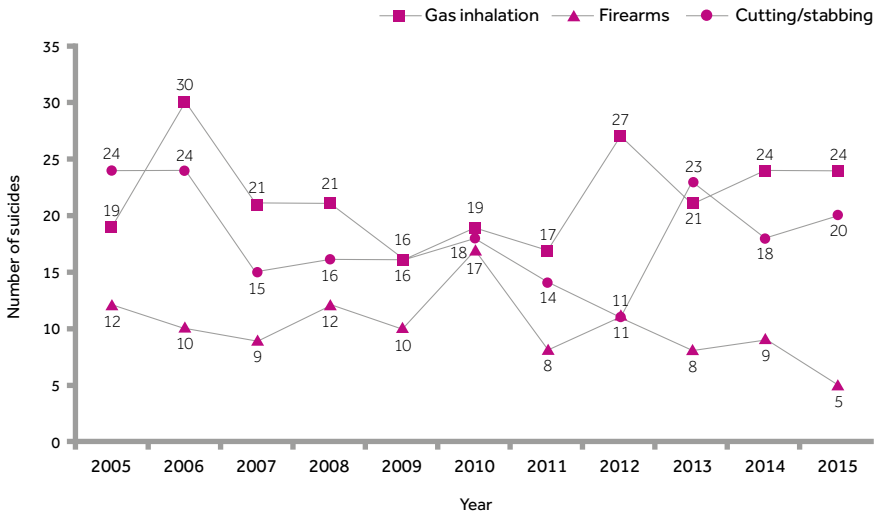


Figure 56: Suicide in the general population in Scotland: other causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

187. During 2005-2015, 2,652 suicides (31% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 241 patient suicides per year.

188. The increase in suicide figures in 2011-2013 for the general population resulting from a death coding change is also reflected in the figures for patient suicides in these years (Figures 57-59). As with suicide in the general population, there has been a steady fall in patient suicides since 2013.

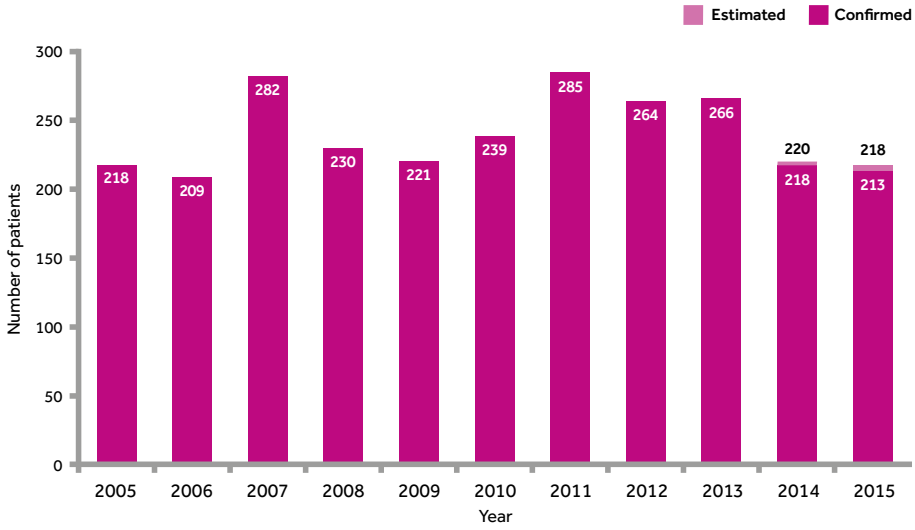


Figure 57: Number of patient suicides in Scotland

Figure 58: Number of patient suicides in Scotland, by gender

Figure 59: Rates of patient suicide in Scotland, by gender

Method of suicide by patients

189. The most common methods of suicide by patients were self-poisoning (959, 36%) and hanging (955, 36%) (Figure 60) – in 2013, 2014 and 2015, hanging has been the most common method.

190. The number of deaths by hanging has fluctuated over the report period though there has been an increase since 2011. There have been no significant changes in other suicide methods.

191. The most common substances used in deaths by self-poisoning were opiates (358, 40%), antidepressants (139, 15%), anti-psychotics (96, 11%), and paracetamol/opiate compounds (78, 9%). Paracetamol was used in 48 (5%).

192. The 2011 increase in suicides by self-poisoning overall and by opiate overdose reflects the change in coding rules (see paragraph 12) (Figure 61), though numbers have fallen substantially since. In 41 (27% excluding unknowns) the opiates had been prescribed for the patient, in 13 (9%) they had been prescribed for someone else, and in 97 (64%) they had not been prescribed. We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (34, 36%) and methadone (23, 24%).

193. There has been a decrease in suicide by antidepressants (Figure 61) and by paracetamol/opiate compounds from an average of 11 deaths per year in 2005-07 to 2 deaths per year in 2012-14.

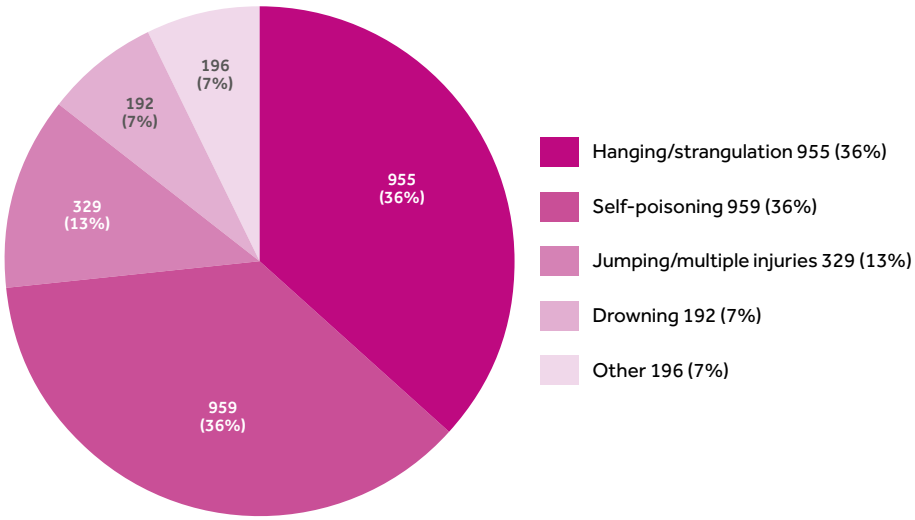


Figure 60: Patient suicide in Scotland: main causes of death

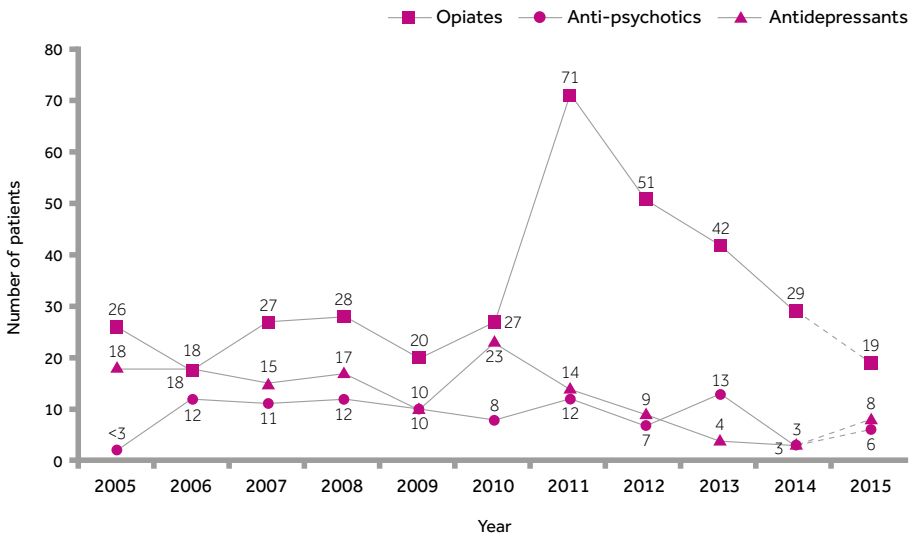


Figure 61: Patient suicide in Scotland: main substances used in deaths by self-poisoning

Suicides in people aged under 25

194. During 2005-2015, there were 992 suicides in the general population in those aged under 25, 11% of all suicides, an average of 90 per year. 349 were aged under 20, an average of 32 per year, and 149 were aged under 18, an average of 14 per year.

195. 221 of those under 25 were patients, 8% of patient suicides and 22% of all suicides in this age-group. This represents an average of 20 deaths per year. 74 were aged under 20, an average of 7 per year, and 33 were aged under 18, an average of 3 per year.

196. The number of general population suicides in people under 25 decreased after a peak in 2007. The number of suicides in patients under 25 appears to be lower in recent years (Figure 62).

197. We are currently carrying out a national investigation of general population suicides in this age-group. Some initial findings are given in the UK section on page 113.

Figure 62: Number of general population and patient suicides in those aged under 25 in Scotland

Social and clinical characteristics

198. Patient characteristics are presented in Table 6. A high proportion showed signs of social adversity and isolation, e.g. unemployment and living alone. Around half had a co-morbid condition, and rates of previous alcohol and drug misuse were high. Taking into account overlap, 28% were in acute care settings (in-patients, under crisis resolution/home treatment, recently discharged from in-patient care), and 28% had missed their final service contact.

199. There were 13 suicides by women who were pregnant or who had died within a year of childbirth, 2% of all female suicides.

200. During 2012-2015, there were 15 suicides in patients with a hearing or visual impairment, 2% of all suicides during this time period.

Table 6: Characteristics of patients who died by suicide in Scotland (2005-2015)

	Number =2,652 Number	 %
Demographic features:		
Age: median (range)	42 (11-94)	
Aged under 25	221	8
Male	1,705	64
Not currently married	1,951	77
Living alone	1,366	54
Unemployed	1,284	51
On long-term sick leave	425	17
Black and minority ethnic group	49	2
Homeless	69	3
Priority groups:		
In-patients	184	7
Recent (<3 months) discharge	416	17
Under crisis resolution/home treatment services	203	8
Missed last contact in previous month	678	28
Non-adherence with medication in previous month	252	11
Clinical features:		
Any secondary diagnosis	1,369	52
Duration of illness (<12 months)	341	13
Over 5 previous admissions	395	15
First contact with mental health services:		
<12 months	505	21
>5 years	1,382	57
Last admission was a re-admission	213	15
Behavioural features:		
History of self-harm	1,759	68
History of violence	630	25
History of alcohol misuse	1,503	58
History of drug misuse	1,189	46
Contact with services:		
Last contact within 7 days of death	991	38
Symptoms of mental illness at last contact	1,514	59

Diagnosis

201. The most common primary diagnoses were affective disorders (794, 30%; 159 (6%) with bipolar disorder and 634 (24%) with depressive illness); schizophrenia (includes other delusional disorders) (434, 17%) and alcohol dependence/misuse (432, 16%) (Figure 63). 261 (10%) had personality disorder.

202. There was no overall trend in the number of suicides in relation to diagnosis. From 2011, there was an increase in the number of patients with schizophrenia as a result of changes in the death coding rules, though the numbers fell in 2014 and 2015.

203. Patients with eating disorders, dementia, and autism spectrum disorders are described in detail in the UK-wide data section (see page 109).

204. We are carrying out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection (to be published in autumn 2017).

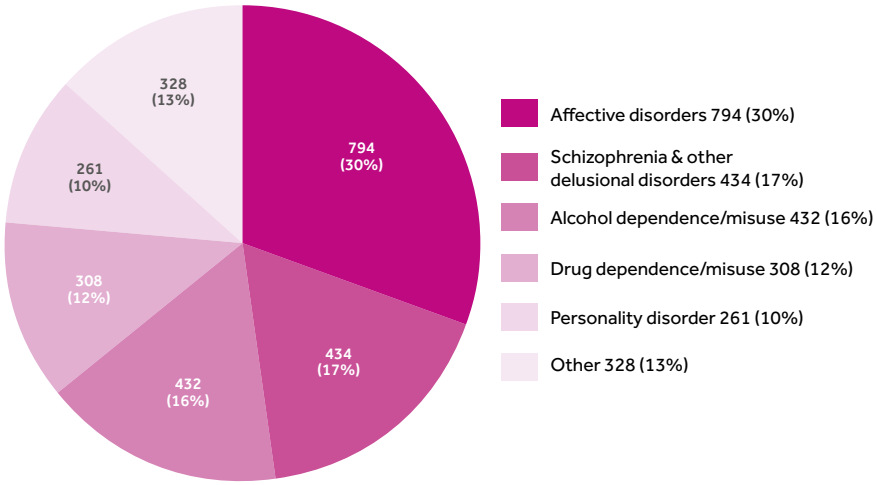


Figure 63: Patient suicide in Scotland: primary diagnosis

Patients with alcohol and drug misuse

205. There were 1,503 patients with a history of alcohol misuse, 58% of the total sample, an average of 137 deaths per year. 1,189 had a history of drug misuse, 46% of the total sample, an average of 108 deaths per year. 1,815 had a history of either alcohol or drug misuse or both, 69% of patient suicides, an average of 165 deaths per year.

206. The apparent rise in 2011 in the number with a history of alcohol or drug misuse is the result of the change in coding rules, though numbers have fallen since (Figure 64).

207. Between 2012-2015, 132 (15%) patients who died were under drug services, 115 (13%) were under alcohol services, and 220 (25%) were under either drug or alcohol services.

208. The most common substances misused in the 3 months prior to suicide were alcohol (56%), cannabis (24%), benzodiazepines (23%) and heroin (22%).

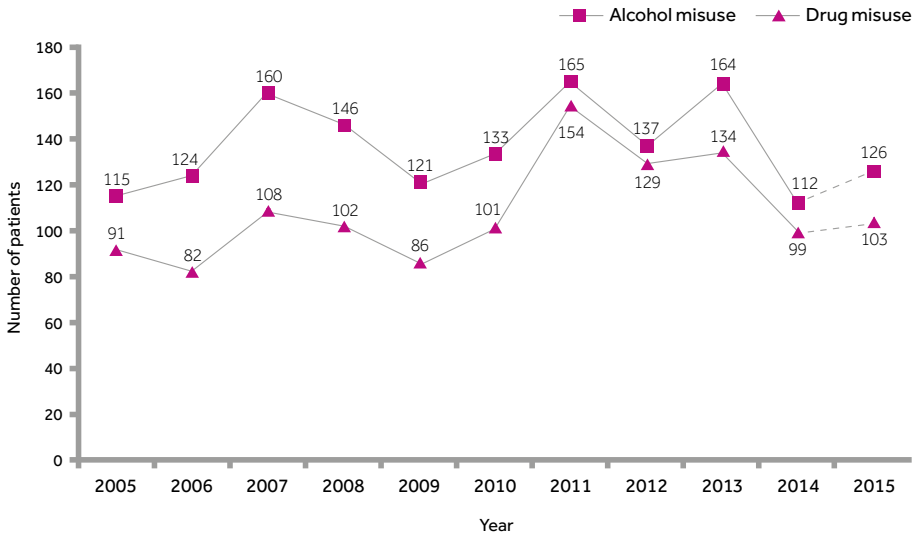


Figure 64: Patient suicide in Scotland: number with a history of alcohol or drug misuse

Websites promoting suicide

209. In 2012-2015 there were 18 (3%) patients who died by suicide after visiting a "pro-suicide" internet site, i.e. providing information on methods or encouraging suicide. As these figures are based on clinical reports, they may underestimate how often this occurs.

MENTAL HEALTH CARE

In-patient suicide

210. There were 184 in-patient suicide deaths between 2005-2015, 7% of patient suicides, an average of 17 deaths per year. The rate of in-patient suicide averaged at 7.4 per 10,000 admissions. The number and rate declined after peaks in 2007 and 2011 (Figure 65).

Figure 65: Patient suicide in Scotland: number of mental health in-patients and rate of suicide per 10,000 admissions

211. 50 (27%) patients died on the ward itself. Of the 134 suicides that occurred off the ward, 69 (52%) were on agreed leave or had left with staff agreement.

212. 49 in-patients died after leaving the ward without staff agreement, 27% of all in-patient suicides, an average of 4 deaths per year, representing no change over the report period. These patients had similar characteristics to other in-patients, though immediate risk of suicide was more often viewed by clinicians as moderate or high (28% v. 13%).

213. Deaths by hanging on the ward are usually from low-lying ligature points (i.e. strangulation). There were 38 patients who died by this method; this number fluctuated from 1 to 7 per year. The majority died by hanging in a single bedroom (17, 45%) or a toilet/bathroom (17, 45%). The most common ligature points were doors (14, 39%) or windows (6, 17%) and the most common ligatures were a belt (18, 49%) or shoelaces/items of clothing (8, 22%).

214. 31 suicides (17%) took place in the first week after admission. The proportion who died in the first week of admission increased over the report period, from an average of 11% in 2005 and 2006 to 29% in 2013 and 2014. Within this first week, the highest number occurred on the first day (8 cases). 9 (53%) patients who died in the first week had left the ward without staff agreement and died off the ward.

215. There were 50 suicides in detained in-patients, 27% of all in-patient suicides, an average of 5 per year. The number of these deaths did not change over the report period. Over half (54%) of these patients had schizophrenia and other delusional disorders, and, compared to other patients, they were more likely to have a history of drug misuse (46% v. 18%) and violence (40% v. 19%). Immediate risk of suicide was more often viewed as moderate or high in patients who had been detained (35% v. 16%).

216. 15 (12%) in-patient suicides were under a medium or high level of observation.

Crisis Resolution/ Home Treatment

217. There were 203 suicides in patients under crisis resolution/home treatment (CRHT) teams, 8% of the total sample, an average of 18 deaths per year. There has been no overall change since 2005 (Figure 66).

218. In the last 5 years there have been 85 CRHT suicides compared to 83 in-patient suicides.

219. In 67 (34%) the patient had been discharged from in-patient care in the preceding 3 months; 27 (22%) died within 2 weeks of discharge, 17 (14%) within a week.

220. We have collected data on length of time under CRHT since 2012. 18 (44%) patients who died had been under CRHT services for less than a week, 5 (28%) of whom died within 3 months of discharge from in-patient care.

221. In 111 (55%) the patient lived alone. In 19 (46% excluding unknowns) the care plan included additional social support from outside the home, e.g. from a relative, friend or neighbour.

Figure 66: Patient suicide in Scotland: number under crisis resolution/home treatment services

Patients recently discharged from hospital

222. There were 416 suicides within 3 months of discharge from in-patient care, 17% of all patient suicides and 17% of suicides in community patients, an average of 38 deaths per year. There were 208 suicides in the first month after discharge, 51% of all suicides within 3 months of discharge, an average of 19 deaths per year. Post-discharge suicide were most frequent in the first week after leaving hospital when 72 deaths occurred, an average of 7 per year, 18% of all suicides within 3 months of discharge (Figure 67).

223. Despite fluctuations, there has been a downward trend since a peak in 2007, with the lowest figures in the last 4 years (Figure 68). The rate of suicide showed a similar pattern, and averaged at 16.6 per 10,000 discharges.

224. The number who died in the first week after discharge decreased over the report period. Of those who died in the first week after discharge, the highest number occurred on the third day after discharge (19, 26%). We continue to recommend all patients are followed up within 3 days of discharge from in-patient care.

225. Of all post-discharge suicides, 73 (20%) died before the first follow-up appointment. This proportion increased to 30% of those who died in the first month after discharge and 60% in those who died within a week after discharge. There was no change over the report period in the number or proportion of patients who died before the first follow-up appointment.

226. In 58 (14%) of post-discharge suicides the patient had been detained under the MHA at the last admission. In 139 (34%) patients the last admission had lasted less than a week. In 115 (28%) the patients had initiated their own discharge from hospital, including self-discharge and breaching of ward rules. The number of patients initiating their own discharge fell over the report period.

227. Patients who died in the first week after discharge were more likely than other patients to have been viewed by clinicians as moderate or high immediate risk of suicide (26% v. 15%).

228. 30 (8%) died after being discharged from a non-local in-patient unit. For patients who died within 2 weeks of discharge, the proportion discharged from a non-local in-patient unit increased to 11% (13 patients). The proportion of suicides after discharge from a non-local unit did not change from 8% in 2005-2009 and 2010-2014, but the number decreased from 17 to 12.

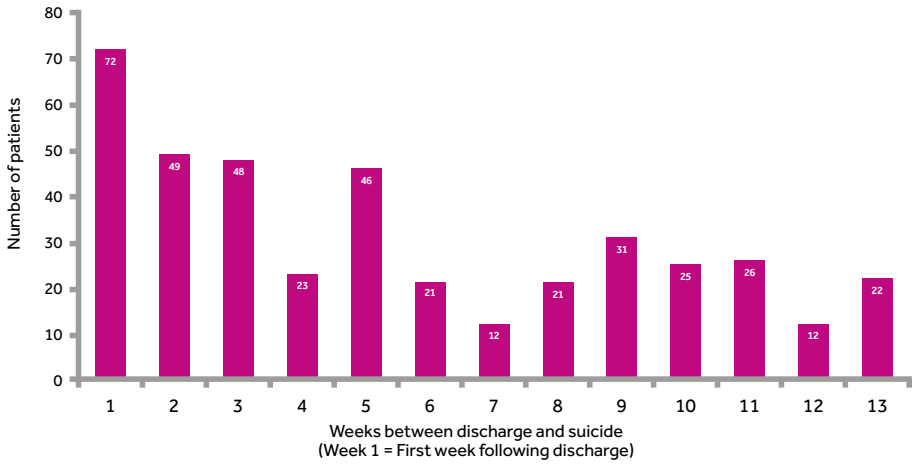


Figure 67: Patient suicide in Scotland: number of suicides per week following discharge (2005-2015)

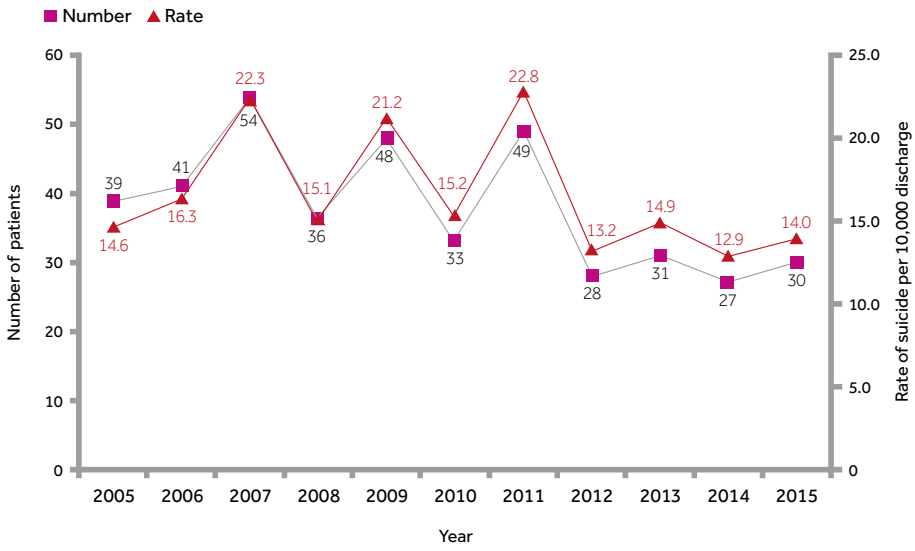


Figure 68: Patient suicide in Scotland: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges

Compulsory Treatment Orders in the community

229. There were 34 suicides in patients subject to a compulsory treatment order in the community between 2007-2015, 2% of all patient suicides, an average of 4 deaths per year. The highest number was in 2008 (8 patients).

230. 10 patients subject to a compulsory treatment order were non-adherent with drug treatment in the month before death and 6 missed their final service contact. Therefore almost half of those who died were not receiving care as intended despite compulsory treatment order powers. 13 deaths under a compulsory treatment order occurred within 3 months of hospital discharge.

Assertive outreach

231. There were 95 suicides in patients under assertive outreach services in 2005-2015, 4% of all patient suicides, an average of 9 per year. The number of patients under assertive outreach decreased between 2005 and 2014 (Figure 69) and is likely to be related to reduced levels of activity of assertive outreach services rather than a true fall.

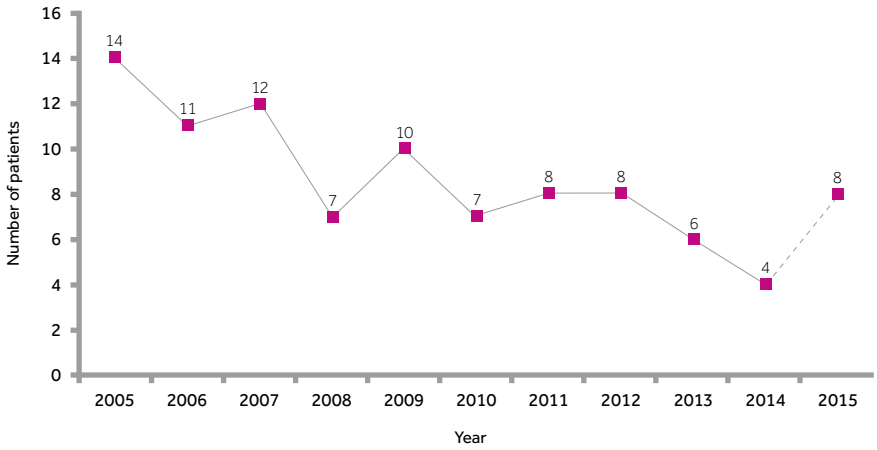
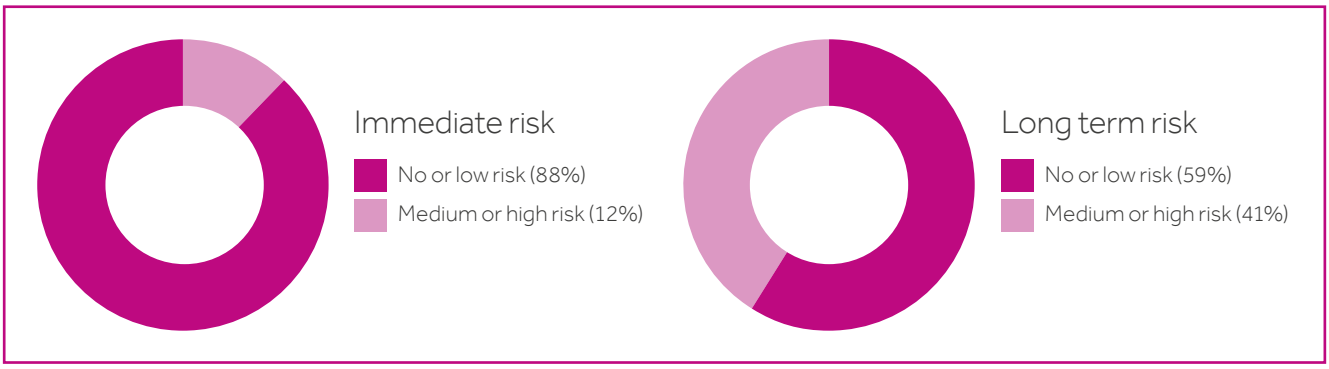


Figure 69: Patient suicide in Scotland: number under assertive outreach services

Risk of suicide at final contact

232. Immediate risk of suicide at last contact was judged to be low or not present in 2,165 (88%), and long-term risk low or not present in 1,439 (59%).

233. We are currently undertaking a new UK study on the use of risk assessment scales in mental health services. Our findings will be published in 2018.



234. From 2011 we asked clinicians, in their opinion, what was the main reason the suicide occurred. The most common responses were mental illness (36%), alcohol and drug misuse (20%), and social factors (18%) (Figure 70).

235. The most common factors that clinicians stated may have made the suicide less likely at the time were: adherence with treatment (15%), closer supervision of the patient (14%), and closer contact with the patient's family (9%).

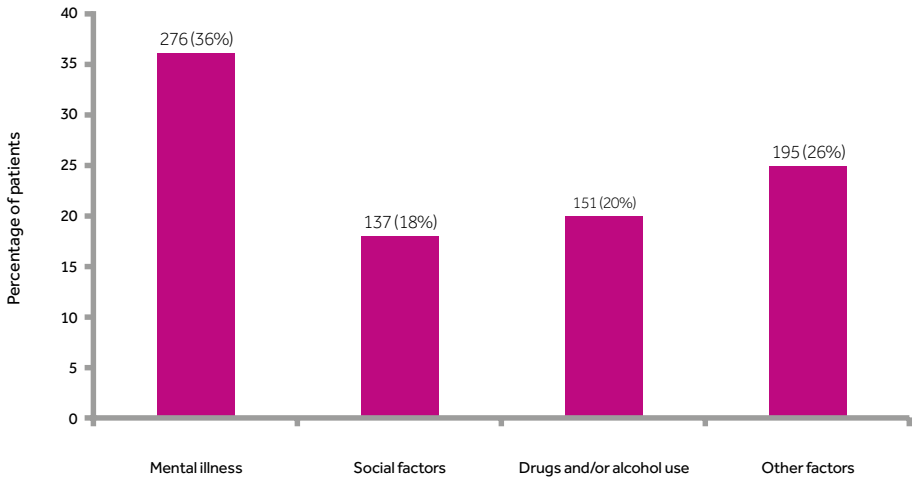


Figure 70: Patient suicide in Scotland: clinicians' views on the main reason the suicide occurred

HOMICIDE

236. In 2005-2015, NCISH was notified of 915 homicide convictions, an average of 83 per year. There were 936 victims, an average of 85 per year.

Homicide in the general population

237. There was a fall in the number of homicide convictions in the general population over the report period (Figure 71). These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Scottish Government based on the number of offences recorded annually.[23]

238. The most common method of homicide was the use of a sharp instrument (476, 54% of all homicides) followed by hitting and kicking (151, 17%); the number of homicides in both methods fell over the report period.

Figure 71: Number of homicide convictions in the general population in Scotland, by gender of offender

PATIENT HOMICIDE

239. The following analysis is based on 135 confirmed patient cases for 2005-2015 plus an additional 2 cases which we estimated based on the proportion of expected returns for 2015, a total figure of 137 (15% of all homicide convictions). This represents an average of 12 patient homicides per year. There were 140 victims, an average of 13 per year.

240. Although the number of patient homicides fluctuated over the report period, there has been a decrease in the number after peaks in 2009 and 2012 (Figure 72). On average there were 10 homicides committed by male patients and 2 by female patients per year.

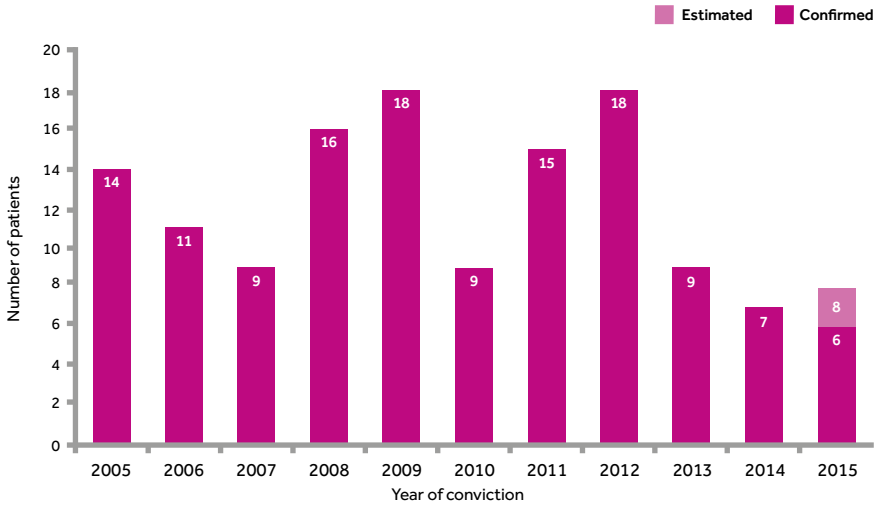


Figure 72: Number of patient homicides in Scotland

Social and clinical characteristics of homicide offenders

241. Patient characteristics are presented in Table 7. These patients had high levels of social adversity, e.g. unemployment. The majority had a history of alcohol and/or drug misuse and over half had previously self-harmed. Over 70% of patients were convicted of murder and most (88%) received a custodial sentence.

242. The most common primary diagnosis was drug dependence (43, 32%) (Figure 73).

Table 7: Characteristics of patient homicide offenders in Scotland

	Number = 137 Number	 %
Demographic features:		
Age: median (range)	32 (15-74)	
Male	116	85
Not currently married	83	76
Unemployed/on long-term sick leave	95	84
Black and minority ethnic group	3	2
Living alone	26	26
Homeless	4	4
Behavioural features:		
History of self-harm	71	58
History of violence	41	58
Any previous convictions	71	86
History of alcohol misuse	109	91
History of drug misuse	117	92
Abnormal mental state at the time of offence	18	20
Offence variables:		
Age of victim: median (range)	41 (1-91)	
Male victim	102	77
Victim was a stranger	21	16
Sharp instrument used	82	63
Final outcome:		
Murder	98	72
Culpable homicide	38	28
Unfit to plead / not guilty by reason of insanity	<3	
Sentencing outcome:		
Prison	120	88
Hospital order (with or without restriction)	15	11
Other non-custodial sentence	<3	-

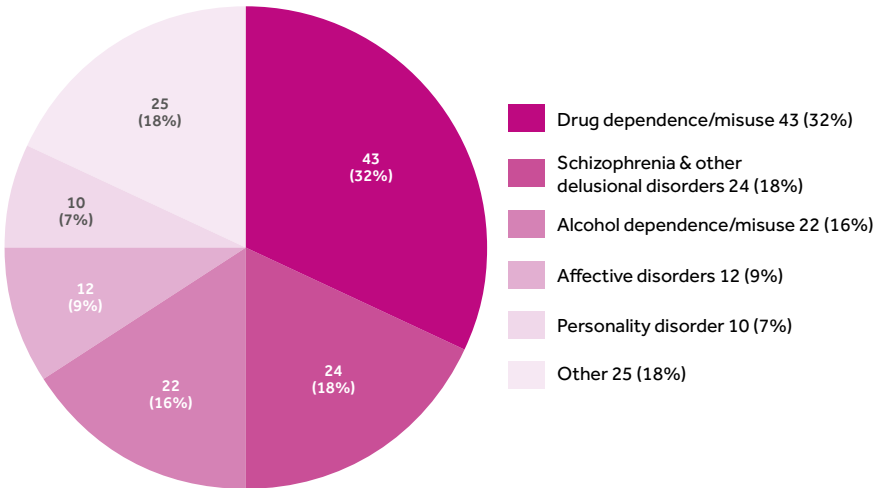


Figure 73: Patient homicide in Scotland: primary psychiatric diagnosis

Relationship of victim to offender

243. The most common relationship of victim to offender was acquaintance (66, 50%); spouse/partner (including current/ex) (26, 20%); other family member (21, 16%); and stranger (21, 16%). The average number of stranger homicides was 2 per year over the report period, 4 cases occurred in 2013. There were 15 homicides in which a male patient killed a female spouse/partner (including current/ex), 11% of all patient homicides.

Homicide and schizophrenia

244. There were 32 homicides by people with a history of schizophrenia (includes other delusional disorders), 3% of the total sample, an average of 3 per year. Of these, 18 (82% excluding unknowns) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. 24 (75%) were patients, an average of 2 per year. 4 (17%) patients with schizophrenia were non-adherent with drug treatment in the month before the homicide and 7 (35%) missed their final service contact before the homicide.

245. All patients (22, 100% excluding unknowns) with a primary diagnosis of schizophrenia had a history of alcohol and/or drug misuse (Table 8), i.e. no patient with schizophrenia was convicted of homicide unless they also had a substance misuse problem. 12 (57%) patients with schizophrenia had misused alcohol, 6 had misused benzodiazepines and 5 had misused cannabis or heroin/opiates.

Patients with alcohol and drug misuse

246. 109 (91%) patients had a history of alcohol misuse, an average of 10 per year (Figure 74). 117 (92%) patients had a history of drug misuse, an average of 11 per year (Figure 74). 128 (96%, excluding unknowns) had a history of either alcohol or drug misuse or both, an average of 12 homicides per year. Therefore, only 4% of all patients had no history of alcohol and/or drug misuse (Table 8). The number of patient homicides where alcohol and/or drug misuse were a factor have fallen in recent years in line with patient homicides overall.

247. The most common substances misused in the last 12 months were alcohol (75, 62%), benzodiazepines (52, 49%), and cannabis (48, 45%). 11 (92%) patients with a primary diagnosis of affective disorder and all (9, 100%, excluding unknowns) patients with personality disorder had a history of alcohol and/or drug misuse.

248. 33 (24%) patients had severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 3 per year. The number with dual diagnosis has remained relatively constant with a peak of 5 cases in 2008.

Table 8: Patient homicide in Scotland: primary diagnosis and alcohol and/or drug misuse

Primary Diagnosis	History of alcohol misuse N (%)	History of drug misuse N (%)	History of alcohol and/or drug misuse N (%)	No history of alcohol or drug misuse N (%)
Schizophrenia (& other delusional disorders)	18 (95%)	21 (95%)	22 (100%)	<3
Affective disorder	8 (67%)	7 (78%)	11 (92%)	<3
Personality disorder	9 (100%)	9 (100%)	9 (100%)	<3
All patients	**109 (91%)**	**117 (92%)**	**128 (96%)**	**5 (4%)**

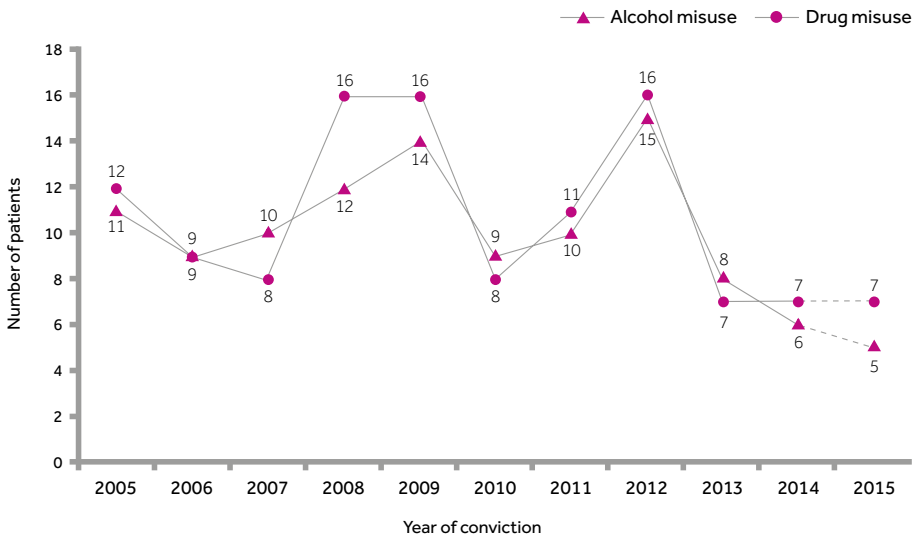


Figure 74: Patient homicide: number with a history of alcohol or drug misuse

MENTAL HEALTH CARE

Acute care

249. 6 (5%) patients had been under crisis resolution/home treatment teams (CRHT) at the time of the homicide.

250. There were 14 homicides within 3 months of discharge from in-patient care, 11% of all patient homicides, an average of 1 homicide per year.

Recent contact with mental health services

251. 52 (39%) patients committed homicide 1-4 weeks after their last contact with services, 30 (23%) between 5-13 weeks and 50 (39%) more than 13 weeks later. In cases where the homicide occurred within a month of final service contact, 15 (29%) patients had a primary diagnosis of drug dependence/misuse, 15 (29%) had schizophrenia, 8 (16%) had recently been discharged from in-patient care.

Non-adherence and missed contact

252. 15 (13%) patients were non-adherent with drug treatment in the month before the homicide. 45 (35%) patients missed their final service contact before the homicide, an average of 4 per year. In total, 55 (45%) were either non-adherent or missed their final contact with services and were therefore not in receipt of planned treatment just prior to the homicide.

Forensic and clinical history

253. 69 (57%) had previously been in prison. Between 2005-2011, 41 (58%) had been convicted of a previous violent offence. We have been unable to obtain data on previous convictions for 2012-2015 (see page 17). 4 had a history of admission to a secure unit. 11 (9%) patients had previously been involuntarily detained under mental health legislation. 23 (20%) patients had no forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to the homicide.

WALES

WALES

SUICIDE

254. Between 2005-2015, NCISH was notified of 3,493 deaths in the general population that received a suicide or undetermined conclusion, an average of 318 per year. These are referred to here as suicides.

Suicide in the general population

255. The number and rate of suicide in the general population rose between 2009 and 2013 with lower figures subsequently (Figures 75 and 76). There was an increase in the number and rate of male suicides between 2006 and 2012. The increase was particularly seen in males aged 55-64. Some deaths are not registered for several months or longer which means that our figures for the most recent years underestimate the final figures.

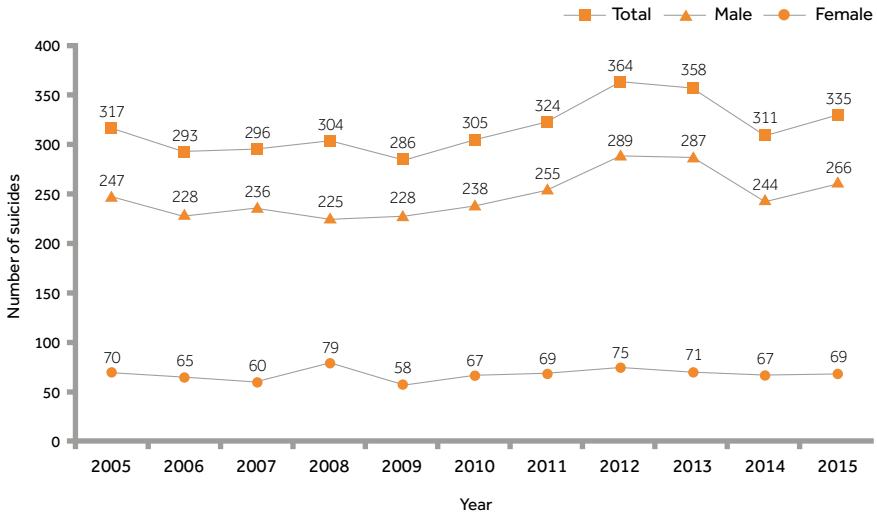


Figure 75: Number of suicides in the general population in Wales, by gender

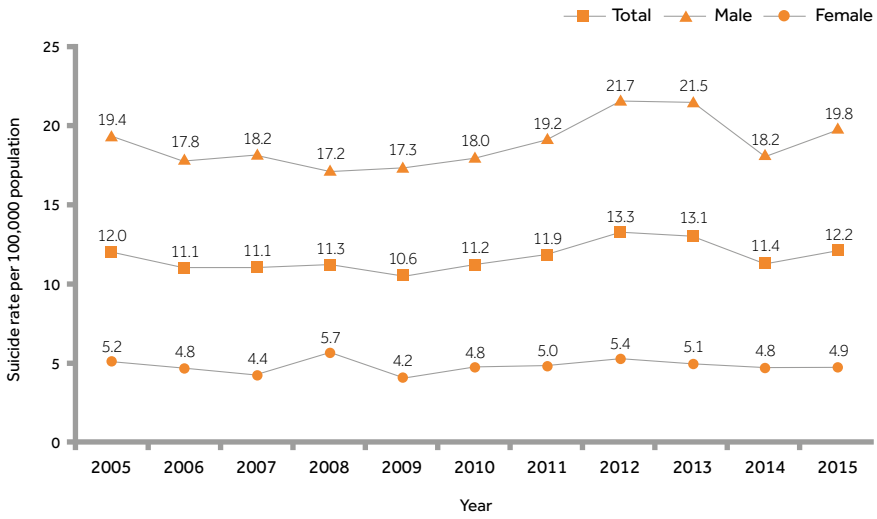


Figure 76: Rates of suicide in the general population in Wales, by gender

Variation in suicide rates by area of residence

256. There was some variation in suicide rates by area of residence (by Health Board) at the time of death (average rate 2013-2015). The highest rate of suicide was in Powys Teaching at 13.4 per 100,000 population, and the lowest in Betsi Cadwaladr University, at 10.1 per 100,000 population (Figure 77).

Area	Rate
Betsi Cadwaladr University	10.1
Aneurin Bevan	10.5
Hywel Dda	12.1
Abertawe Bro Morgannwg University	12.1
Cwm Taf	12.8
Cardiff and Vale University	13.2
Powys Teaching	13.4

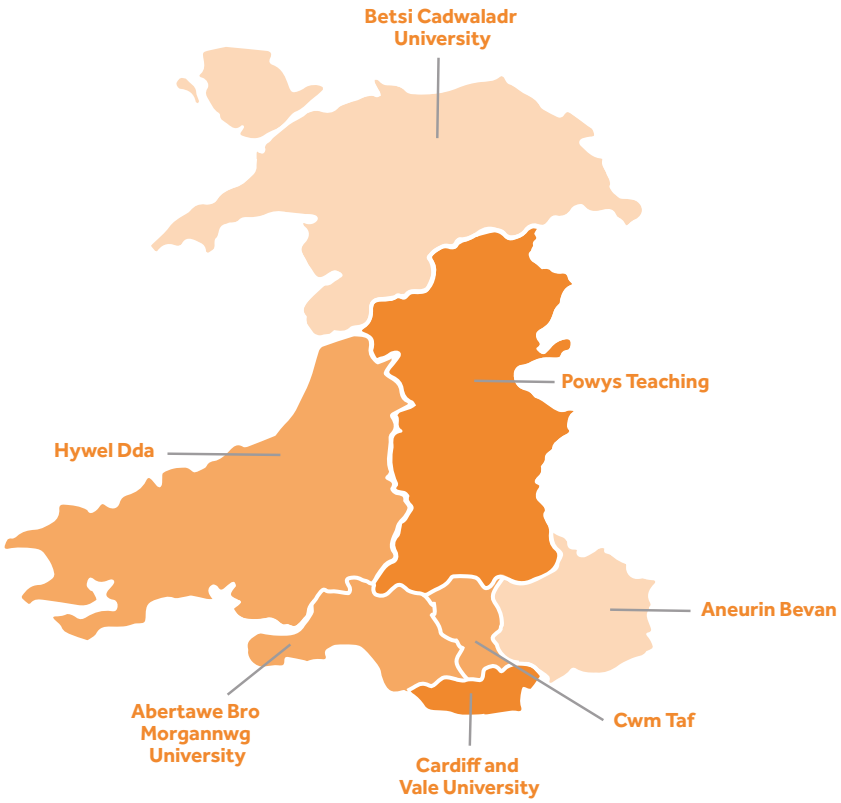


Figure 77: Rates of suicide per 100,000 population, by Health Board of residence (average rate 2013-2015)

Note: rates have been colour coded by approximate tertile.

Method of suicide

257. The most common methods of suicide were hanging and strangulation (referred to here as hanging) (1,920, 55%) and self-poisoning (overdose) (624, 18%).Less frequent methods were jumping and multiple injuries (mainly jumping from a height or being struck by a train) (247, 7%), drowning (175, 5%), gas inhalation (140, 4%), cutting and stabbing (97, 3%), and firearms (71, 2%).

258. Deaths by hanging increased over the report period (Figure 78). Of the less common methods, deaths by drowning decreased.

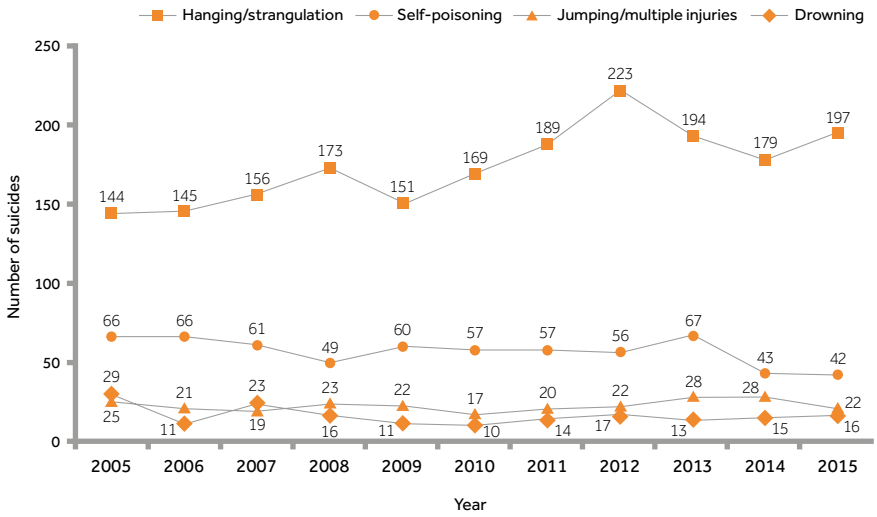


Figure 78: Suicide in the general population in Wales: main causes of death

PATIENT SUICIDE

Patient suicide: numbers and rates

259. During 2005-2015, 817 deaths (23% of general population suicides) were identified as patient suicides, i.e. the individual had been in contact with mental health services in the 12 months prior to death. This represents an average of 74 patient suicides per year.

260. There was an increase in the number of patient suicides between 2005 and 2013 with a large rise in 2012 and 2013, broadly in line with general population figures (Figures 79 and 80). The rate of suicide using a general population denominator increased between 2006 and 2013 but fell in 2014 (Figure 81) and we are estimating an increase in the rate and number in 2015, particularly in females, but final year estimates should always be interpreted cautiously.

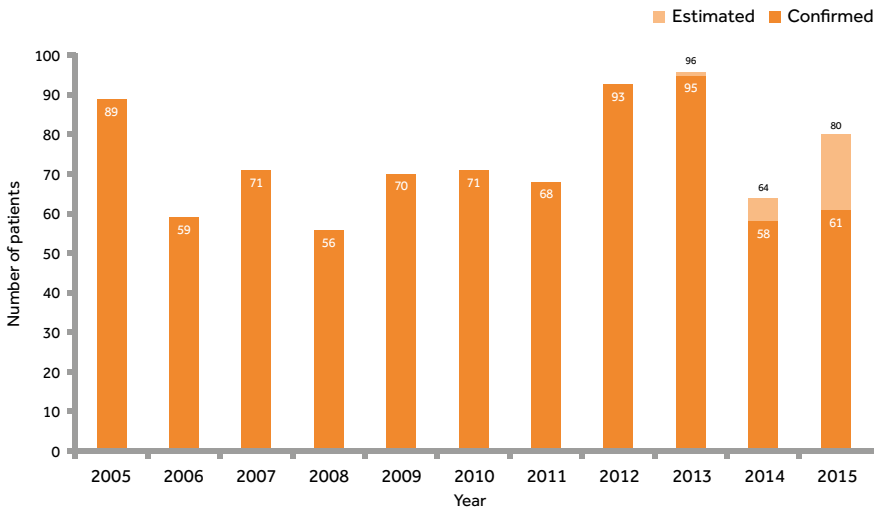


Figure 79: Number of patient suicides in Wales

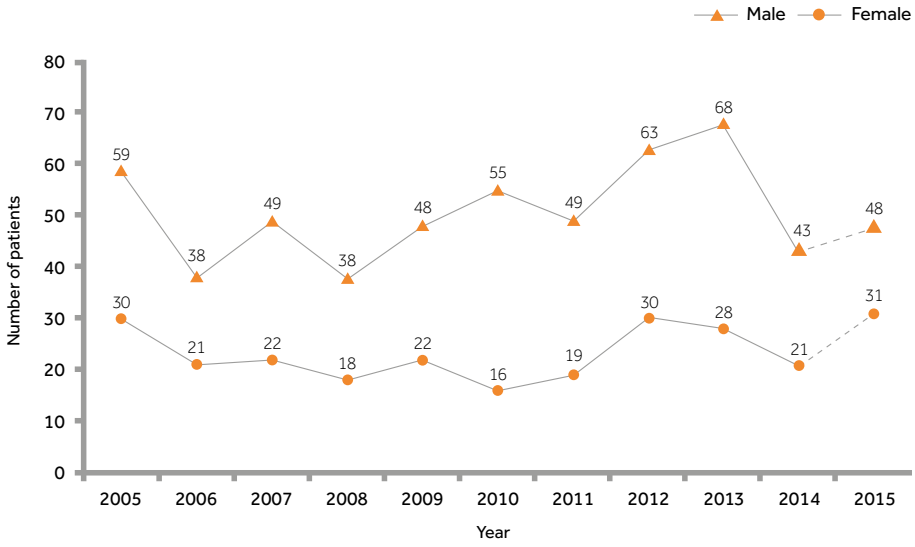


Figure 80: Number of patient suicides in Wales, by gender

Note: the figure in 2015 does not tally with the total number in Figure 79 due to rounding

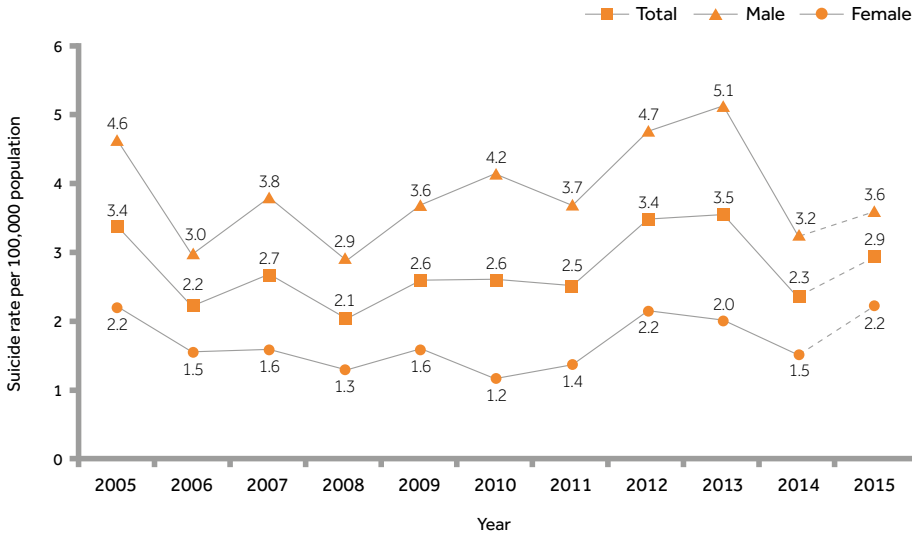


Figure 81: Rates of patient suicide in Wales, by gender

Method of suicide by patients

261. The most common methods of suicide by patients were hanging (394, 48%), self-poisoning (188, 23%) and jumping/multiple injuries (82, 10%) (Figure 82).

262. Hanging increased from 2005 to a peak in 2012 but has since fallen. The number of deaths by other methods has changed little but there was a peak in 2013 in self-poisoning and jumping/multiple injuries with lower figures subsequently. The most common substances used in deaths by self-poisoning were opiates (43, 24%), anti-psychotics (25, 14%), and SSRI/SNRI antidepressants (24, 13%).

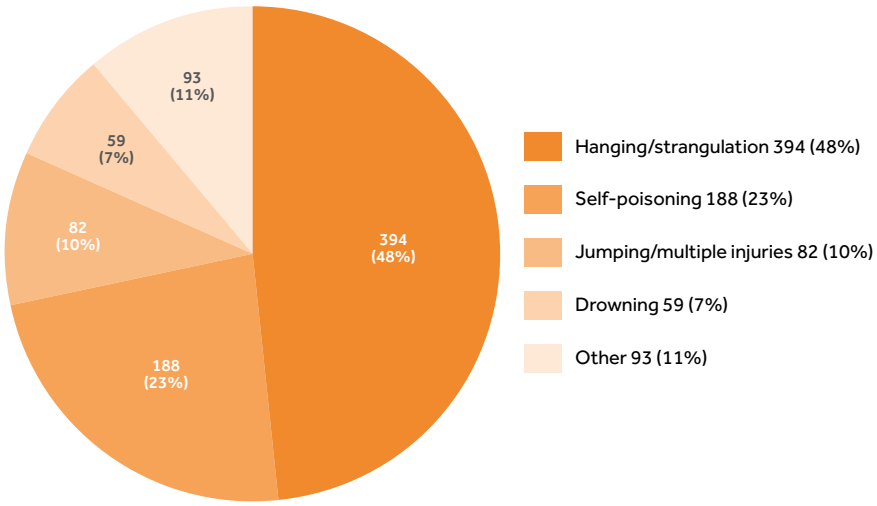


Figure 82: Patient suicide in Wales: main causes of death

Suicides in people aged under 25

263. During 2005-2015, there were 348 suicides in the general population in those aged under 25, 10% of all suicides, an average of 32 per year. 126 were aged under 20, an average of 11 per year, and 52 were aged under 18, an average of 5 per year.

264. 55 of those under 25 were patients, 7% of patient suicides and 16% of all suicides in this age-group. This represents an average of 5 deaths per year. 15 were aged under 20 and 8 were aged under 18.

265. There has been no overall change in the number of general population or patient suicides aged under 25 over the report period (Figure 83).

266. We carried out a detailed investigation of general population suicides in this age-group in England and Wales by collecting information from a range of investigations by official bodies, mainly coroners (see page 122 for a summary of the report findings). The report was published in July 2017 and can be found on our website at: **www.research.bmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci**

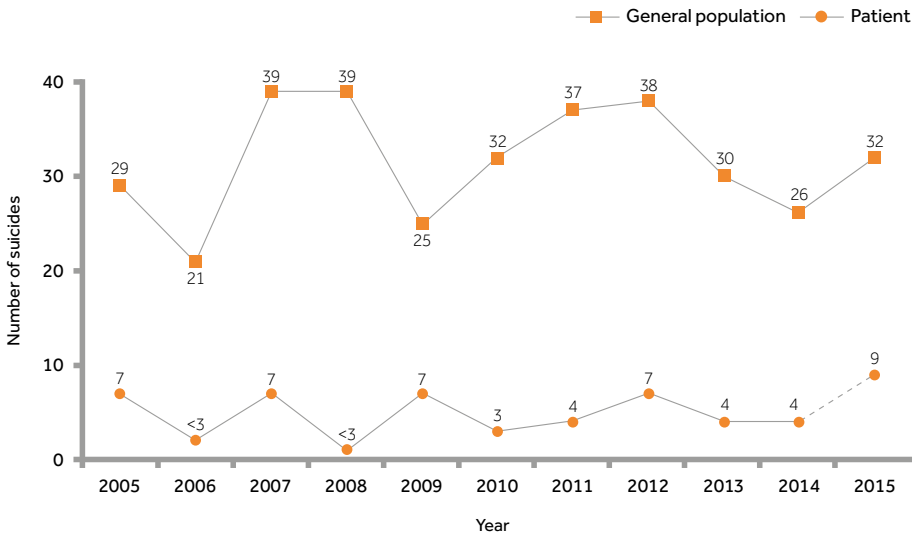


Figure 83: Number of general population and patient suicides in those aged under 25 in Wales

Social and clinical characteristics

267. Table 9 shows the main social and clinical features of patients who died by suicide. 31% (taking into account overlap) were in acute care settings (in-patients, under crisis resolution/home treatment, recently discharged from in-patient care). There was a high proportion (29%) whose first contact with mental health care had been in the 12 months before suicide. Over half had a co-morbid condition and rates of previous self-harm, alcohol and drug misuse were high.

Table 9: Characteristics of patients who died by suicide in Wales (2005-2015)

	Number = 817 Number	%
Demographic features:		
Age: median (range)	45 (13-96)	
Aged under 25	55	7
Male	558	68
Not currently married	541	68
Living alone	343	44
Unemployed	337	43
On long-term sick leave	159	20
Black and minority ethnic group	12	2
Homeless	17	2
Priority groups:		
In-patients	66	8
Recent (<3 months) discharge	149	18
Under crisis resolution/home treatment services	72	9
Missed last contact in previous month	185	25
Non-adherence with medication in previous month	91	12
Clinical features:		
Any secondary diagnosis	415	52
Duration of illness (<12 months)	161	20
Over 5 previous admissions	86	11
First contact with mental health services:		
<12 months	222	29
>5 years	353	47
Last admission was a re-admission	59	13
Behavioural features:		
History of self-harm	559	70
History of violence	195	25
History of alcohol misuse	393	49
History of drug misuse	301	38
Contact with services:		
Last contact within 7 days of death	382	47
Symptoms of mental illness at last contact	473	60

Diagnosis

268. The most common primary diagnoses were affective disorders (332, 41%, including 263 (33%) with depressive illness and 69 (9%) with bipolar disorder), schizophrenia (includes other delusional disorders) (132, 16%) and alcohol dependence/misuse (76, 9%) (Figure 84).

269. There was no overall trend in the number of suicides in relation to diagnosis. The number of patient suicides with affective disorders increased between 2008 and 2013 but subsequently fell.

270. Patients with eating disorders, dementia, and autism spectrum disorders are described in detail in the UK-wide data section (see page 109).

271. We are carrying out a detailed mixed-methods investigation of suicide in patients with personality disorder, combining quantitative and qualitative data collection (to be published in autumn 2017).

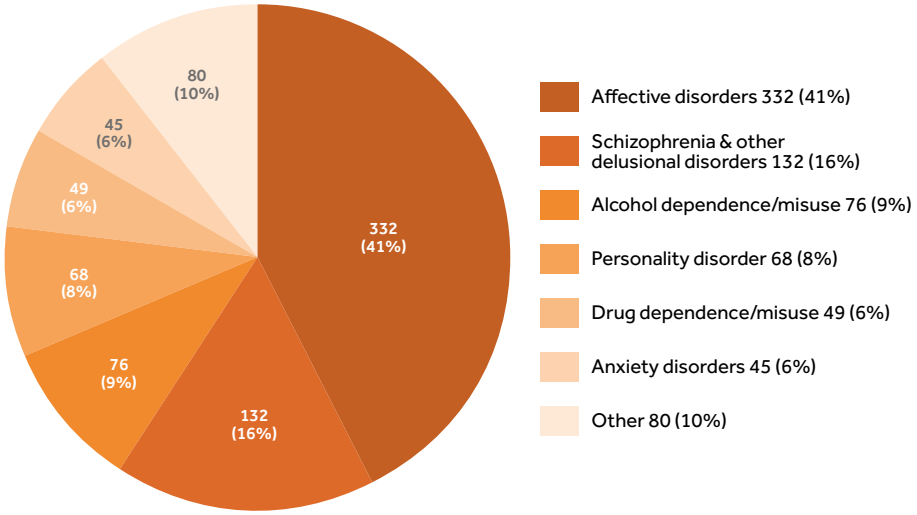


Figure 84: Patient suicide in Wales: primary psychiatric diagnosis

Patients with alcohol and drug misuse

272. There were 393 patients with a history of alcohol misuse, 49% of the total sample, an average of 36 deaths per year (Figure 85). 301 had a history of drug misuse, 38% of the total sample, an average of 27 deaths per year (Figure 85). 477 patients had a history of either alcohol or drug misuse or both, 59% of patient suicides, an average of 43 deaths per year.

273. In both alcohol and drug misuse, numbers rose since a low point in 2008 but have fallen since 2012.

274. Between 2011-2015, 36 (10%) patients who died were under drug services, 33 (9%) were under alcohol services, and 51 (14%) were under either drug or alcohol services.

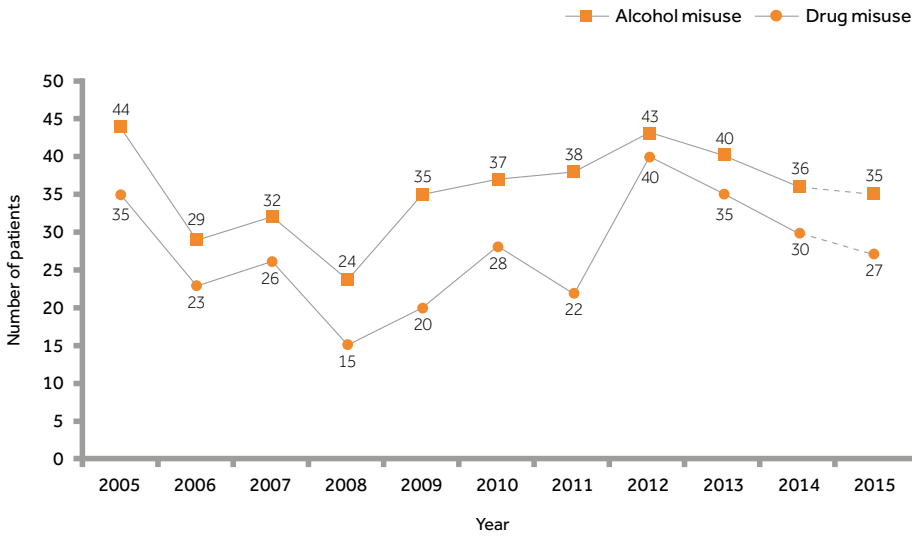


Figure 85: Patient suicide in Wales: number with a history of alcohol or drug misuse

Websites promoting suicide

275. Between 2011-2015 there were 5 (2% excluding unknowns) patients who died by suicide after visiting a "pro-suicide" internet site, i.e. providing information on methods or encouraging suicide. As these figures are based on clinical reports, they may underestimate how often this occurs.

MENTAL HEALTH CARE

In-patient suicide

276. There were 66 in-patient deaths by suicide in 2005-2015, representing 8% of patient suicides. The number fluctuated from 3 to 10 per year.

277. There were 14 patients who died on the ward by hanging in 2005-2012, with no such cases reported in the last 3 years. There were 14 suicides in detained in-patients, 22% of all in-patient suicides. 8 in-patients died after leaving the ward without staff agreement, 12% of all in-patient suicides.

278. 10 suicides (15%) took place in the first week after admission. 23 (35%) patients died on the ward itself. Of the 43 suicides that occurred off the ward, 36 (84%) were on agreed leave or had left with staff agreement.

279. 9 (15%) in-patient suicides were under a medium or high level of observation.

Crisis Resolution/ Home Treatment

280. There were 72 suicides in patients under crisis resolution/home treatment (CRHT) teams, 9% of the total sample, an average of 7 deaths per year.

281. There was an increase in the number of suicides under CRHT between 2005 and 2010 after which the number has fluctuated with small numbers annually and no clear pattern. Since 2007 there have been more patient suicides under CRHT (62 patients) than in in-patient care (48 patients), reflecting a change in the nature of acute care.

282. We have collected data on length of time under CRHT since 2012. 12 (40%) patients who died had been under CRHT services for less than a week.

283. In 29 (40%) the patient lived alone. In 6 (30% excluding unknowns) the care plan included additional social support from outside the home, e.g. from a relative, friend or neighbour.

Patients recently discharged from hospital

284. There were 149 suicides within 3 months of discharge from in-patient care, 18% of all patient suicides and 19% of suicides in community patients, an average of 14 deaths per year. The number of post-discharge suicides fell after 2005 and there was an apparent peak in 2013 with lower figures subsequently (Figure 86).

285. Post-discharge suicides were most frequent in the 2 weeks after leaving hospital when 58 deaths occurred, 38% of all suicides within 3 months of hospital discharge, an average of 5 deaths per year. There were 24 patients who died in the first week after discharge.

286. In 22 (15%) of post-discharge suicides the patient had been detained under the MHA at the last admission. For 56 (37%) patients the last admission had lasted less than a week. 33 (22%) patients had initiated their own discharge from hospital, including self-discharge and after breaching ward rules.

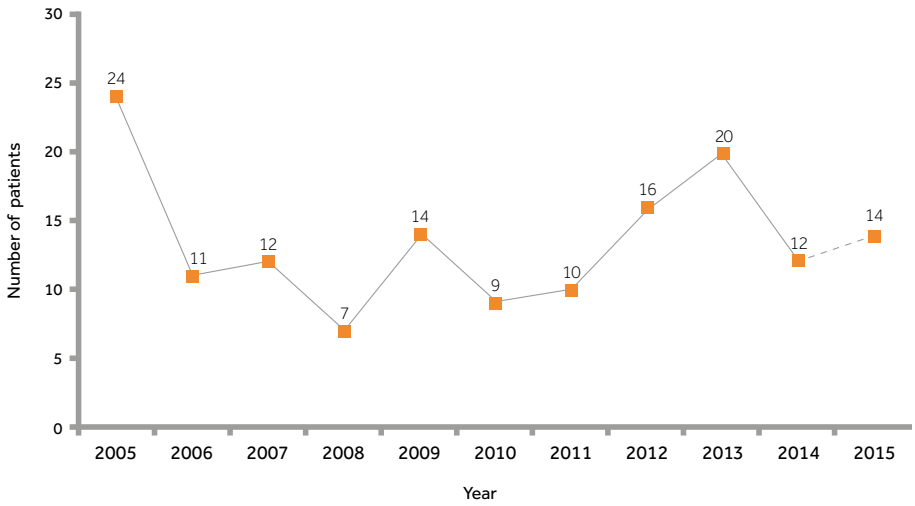


Figure 86: Patient suicide in Wales: number who died within 3 months of in-patient discharge

Community Treatment Orders

287. There were 8 suicides in patients subject to a community treatment order (CTO) in 2009-2015, 2% of all patient suicides in this time period.

Section 136

288. In 2012-2015, there were 16 patients who had been conveyed to a hospital or custody based place of safety under Section 136 of the MHA in the 3 months prior to suicide. This represents 7% of all suicides in this time period.

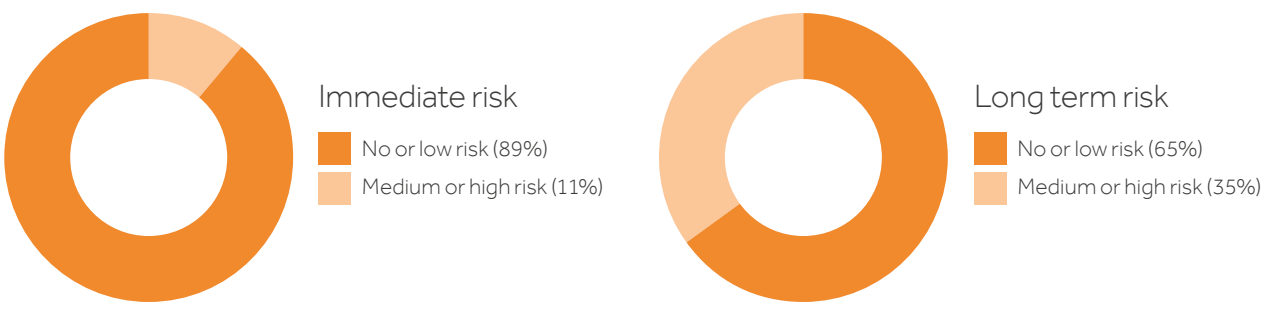
Assertive outreach

289. There were 14 suicides in patients under assertive outreach services in 2005-2015, 2% of all patient suicides.

Risk of suicide at final contact

290. Immediate risk of suicide at last contact was judged to be low or not present in 681 (89%), and long-term risk low or not present in 485 (65%).

291. We are currently undertaking a new study on the use of risk assessment scales in mental health services. Our findings will be published in 2018.



292. From 2011 we asked clinicians, in their opinion, what was the main reason the suicide occurred. The most common responses were mental illness (42%), social factors (28%), and drugs and alcohol (11%) (Figure 87).

293. The most common factors that clinicians stated may have made the suicide less likely at the time were: closer supervision of the patient (20%), adherence to treatment (14%), closer contact with the patient's family (13%), and access to psychological treatment (11%).

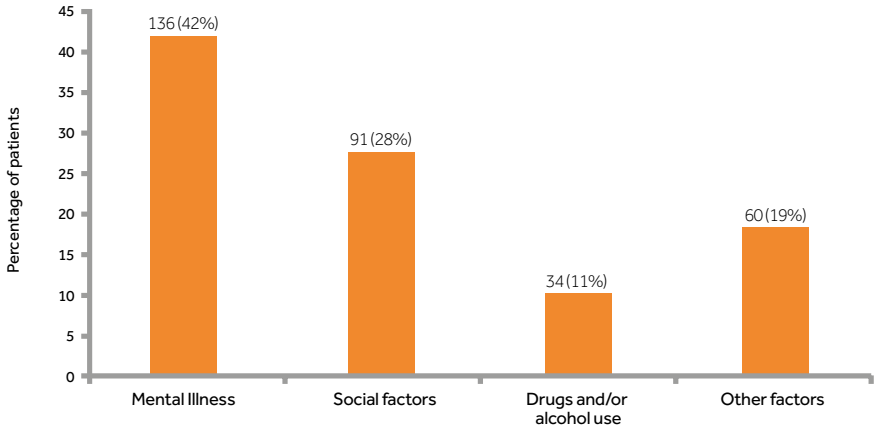


Figure 87: Patient suicide in Wales: clinicians' views on the main reason the suicide occurred

HOMICIDE

294. In 2005-2015, NCISH was notified of 285 homicide convictions, an average of 26 per year. There were 296 victims, an average of 27 per year.

Homicide in the general population

295. The annual number of homicide convictions in the general population is shown in Figure 88. More recent data are published for England and Wales by the Office for National Statistics[21]. The number of homicide convictions has fallen since a peak in 2008. The most common method of homicide was the use of a sharp instrument (98, 35% of all homicides), followed by hitting and kicking (60, 21%).

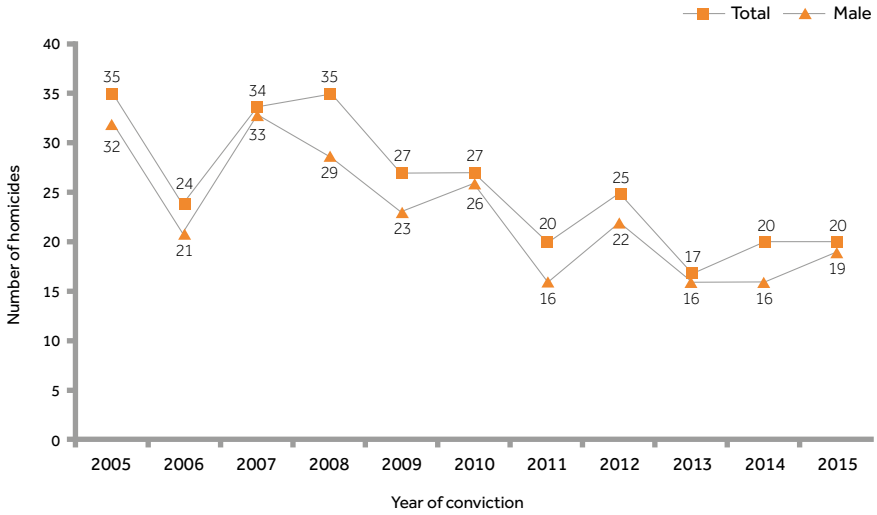


Figure 88: Number of homicide convictions in the general population in Wales, by gender of offender

HOMICIDE FOLLOWED BY SUICIDE

296. Homicide followed by suicide is defined here as when the offender dies by suicide within 3 days of committing homicide. As there is no conviction for homicide, these cases are analysed separately.

297. We were notified of 9 offences between 2005 and 2015. There were 10 victims in total. Most of the offenders were male (7, 78%), with a median age of 44 (range 36-81).

298. The relationship of victim to offender (principal victim if there was more than one victim) was most commonly spouse/partner (including current/ex) (7, 78%).

PATIENT HOMICIDE

299. During 2005-2015, 39 people convicted of homicide (14% of the total sample) were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence, an average of 4 per year. There were 45 victims, an average of 4 per year.

Social and clinical characteristics of homicide offenders

300. On average per year there were 3 homicides committed by male patients and 1 by female patients. Patient characteristics are presented in Table 10. These patients had high rates of unemployment and almost all of the offenders were male. The majority had a history of violence, previous convictions, self-harm and alcohol or drug misuse. 59% were convicted of murder and 82% received a custodial sentence.

301. 10 (28%) homicides were by people who had a diagnosis of schizophrenia (including other delusional disorders) and 7 (19%) had a diagnosis of affective disorder. 7 (19%) patients had a diagnosis of personality disorder and 5 (14%) had a diagnosis of alcohol dependence/misuse.

302. 28 (74%) patients had a history of alcohol misuse and drug misuse. 33 (87%) had a history of alcohol and/or drug misuse.

303. Of the patients with a history of drug misuse, cannabis (12, 52% excluding unknowns) was the most commonly misused drug in the previous 12 months. 9 (43%) patients had misused stimulants, 6 (29%) had misused heroin/opiates and 6 (30%) had misused benzodiazepines.

Relationship of victim to offender

304. The relationship of victim to offender was mainly acquaintance (15, 42%); spouse/partner (including current/ex) (8, 22%); other family member (7, 19%) and stranger (6, 17%). There were 6 homicides in which a male patient killed a female spouse.

Table 10: Characteristics of patient homicide offenders in Wales

	Number = 39 Number	%
Demographic features:		
Age: median (range)	34 (15-61)	
Male	32	82
Not currently married	15	71
Living alone	<3	-
Unemployed/on long-term sick leave	17	85
Black and minority ethnic group	3	8
Homeless	<3	-
Behavioural features:		
History of self-harm	22 / 36	61
History of violence	18	46
Any previous convictions	27 / 36	75
History of alcohol misuse	28	74
History of drug misuse	28	74
Primary diagnosis (lifetime):		
Schizophrenia and other delusional disorders	10	28
Affective disorders (bipolar and depression)	7	19
Personality disorder	7	19
Alcohol dependence/misuse	5	14
Drug dependence/misuse	<3	-
Abnormal mental state at time of offence	12	31
Offence variables:		
Age of victim: median (range)	37 (4-84)	-
Male victim	23	59
Victim was a stranger	6	17
Sharp instrument used	22	56
Final outcome:		
Murder	23	59
Manslaughter (diminished responsibility)	7	18
Manslaughter (other including provocation, self-defence)	9	23
Infanticide	<3	-
Unfit to plead/not guilty by reason of insanity	<3	-
Sentencing outcome:		
Prison	32	82
Hospital order (with or without restriction)	7	18
Other non-custodial sentence	<3	-

Homicide and schizophrenia

305. Of the total number of general population homicides, 22 were by people with schizophrenia (includes other delusional disorders), 8% of the total sample, an average of 2 homicides annually. Of these, 20 (95%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence. 10 (45%) people with schizophrenia were patients.

306. 8 (80%) patients with a primary diagnosis of schizophrenia had a history of alcohol misuse. All patients with schizophrenia had a history of drug misuse (10, 100%).

307. 7 (41%) patients with severe mental illness (schizophrenia or affective disorder) were convicted of murder and 10 (59%) received a custodial sentence.

MENTAL HEALTH CARE

Acute care

308. There were 3 homicides within 3 months of discharge from in-patient care, 8% of all patient homicides.

Recent contact with mental health services

309. 20 (51%) patients committed homicide 1-4 weeks after their last contact with services, 9 (23%) between 5-13 weeks and 10 (26%) more than 13 weeks later. Among the 20 patients who committed homicide within a month of their final service contact, 6 (33%) had schizophrenia.

Non-adherence and missed contact

310. 4 (13%, excluding unknowns) patients were non-adherent with drug treatment in the month before the homicide. 5 (13%) missed their final service contact before the homicide. In total, 9 (26%) were either non-adherent or missed their final service contact and were therefore not in receipt of planned treatment just prior to the homicide.

Forensic and clinical history

311. 18 (46%) had been convicted of a previous violent offence. 16 (44%) had previously been in prison. 7 patients had previously been involuntarily detained under mental health legislation. A third (13, 33%) of all patients had no known forensic history (previous violent offence, admission to a secure unit or been in prison) and no previous detention prior to the homicide.

UK-WIDE DATA

Suicide in the general population

312. Suicide rates for each UK country are shown in Figure 89. Northern Ireland continues to have the highest general population rate, while the rate in Scotland, which was previously the highest, has fallen.

Figure 89: Suicide rates in the general population, by UK country

PATIENT SUICIDE

313. There were 17,823 suicides by patients in the UK in 2005-2015. We were also notified of 12 patient suicides in Jersey, from a general population total of 42 in 2012-2015 (29%). In Guernsey in 2015 (the first year of data collection), we were notified of 6 suicides in the general population, 4 of whom were patients. Overall for the UK, the highest figures were in 2011-13, with an apparent fall since then (Table 11).

Table 11: Patient suicide: numbers by year and UK country (2005-2015)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
England	1,277	1,124	1,144	1,213	1,167	1,262	1,339	1,372	1,301	1,213	1,164
N. Ireland	64	61	76	76	64	73	66	74	73	75	76
Scotland	218	209	282	230	221	239	285	264	266	220	218
Wales	89	59	71	56	70	71	68	93	96	64	80
Total	**1,648**	**1,453**	**1,573**	**1,575**	**1,522**	**1,645**	**1,758**	**1,803**	**1,736**	**1,572**	**1,538**

Note: figures from 2013 include estimates based on late notifications

314. 28% of general population suicides were in people who had been in contact with mental health services in the previous 12 months. This figure was similar for all UK countries but slightly higher in Scotland and lower in Wales (Table 12).

Table 12: Suicide figures by UK country (2005-2015)

	England	Northern Ireland	Scotland	Wales	UK
General population	49,545	2,903	8,662	3,493	64,603
Mental health patients	13,576 (27%)	778 (27%)	2,652 (31%)	817 (23%)	17,823 (28%)

315. Suicides by mental health in-patients continue to fall (Table 13). However, the large fall in the 5 years after 2005 (39%) has become more modest. In the 5 years after 2010, the rate fell by 10%; in this period there was an average of 114 suicides per year by in-patients in the UK.

Table 13: Patient suicide: number of in-patient suicides by year and UK country (2005-2015)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
England	155	142	122	104	100	92	101	89	91	85	81
N. Ireland	3	<3	3	3	5	<3	3	3	3	3	<3
Scotland	22	15	27	15	11	11	20	19	16	12	16
Wales	10	8	4	3	7	10	3	6	8	3	4
Total UK	**190**	**166**	**156**	**125**	**123**	**115**	**127**	**117**	**118**	**103**	**103**

Note: figures from 2013 include estimates based on late notifications

316. Methods of suicide in patients are broadly similar across the UK countries, with hanging the most common method, followed by self-poisoning (Figure 90), and opiates the most commonly used type of drug in fatal overdose. In Scotland, self-poisoning has been as common as hanging over the report period (see Figure 60).

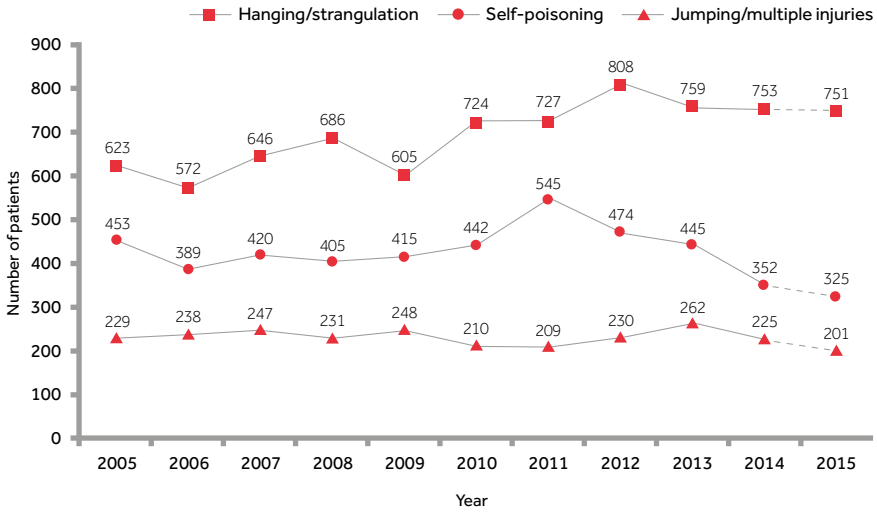


Figure 90: Main methods of suicide by patients in the UK

SUICIDE IN DIAGNOSTIC GROUPS

317. Our reports regularly present figures for the most frequent diagnoses, such as affective disorders, schizophrenia, etc. In this section we are presenting figures for additional diagnostic groups. The data are UK-wide because of the small numbers in some of the UK countries.

EATING DISORDERS

318. In the UK, there were 205 suicides in patients who had a diagnosis (primary, secondary, tertiary) of an eating disorder, including anorexia and bulimia. This is around 1% of all patient suicides, an average of 19 deaths per year. The number has increased during the report period, though our estimated rise in 2015 should be treated with caution at this stage (Figure 91).

319. The average age was 34 but there was a wide range of between 14 and 90; 56% were aged 25-44. 10% (20 patients) were male.

320. The main methods of suicide were self-poisoning (43%) and hanging (35%). Patients with an eating disorder more often died by self-poisoning compared to other patients (43% v. 24%), and the most common substances used were SSRI/SNRI antidepressants (24%) and opiates (20%).

321. 68% had been ill for more than 5 years, 7% for less than a year.

322. There was a high rate of previous self-harm compared to other patients (84% v. 68%), but fewer had a history of alcohol misuse (44% v. 47%) or drug misuse (25% v. 36%).

323. Only 7% of patients were confirmed as receiving care under specialist eating disorder services.

324. Immediate risk of suicide was more often viewed by clinicians as moderate or high in patients with an eating disorder compared to other patients (24% v. 14%).

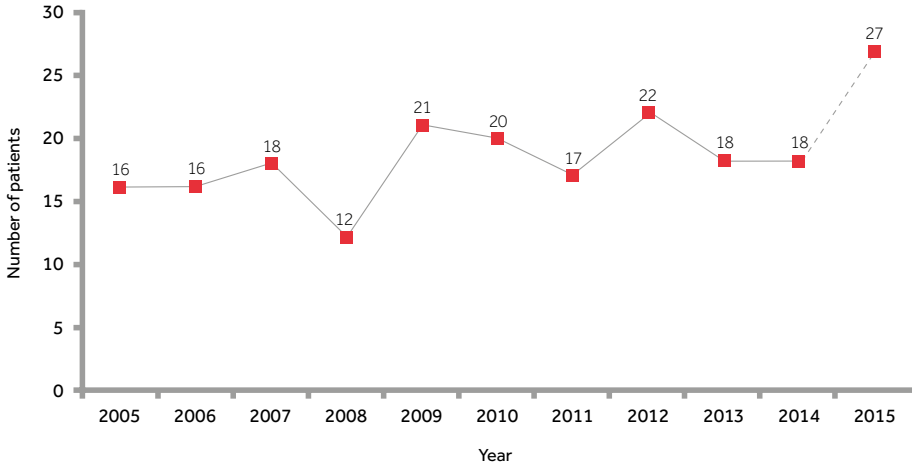


Figure 91: Suicide by patients with an eating disorder (UK)

AUTISM SPECTRUM DISORDERS

325. There were 119 suicides in patients who had a diagnosis of an autism spectrum disorder (ASD), less than 1% of the total sample, an average of 11 deaths per year. The number increased over the report period with a peak in 2012 (Figure 92).

326. 87% of patients with ASD were male, 38% were aged under 25.

327. The main methods of suicide were hanging (39%), self-poisoning (23%) and jumping/multiple injuries (21%). These patients more often had a history of self-harm (79% v. 68%) and less often had a history of alcohol misuse (29% v. 48%).

328. Immediate and long-term risk of suicide was viewed as low/none in 85% and 54% respectively, similar to the sample as a whole.

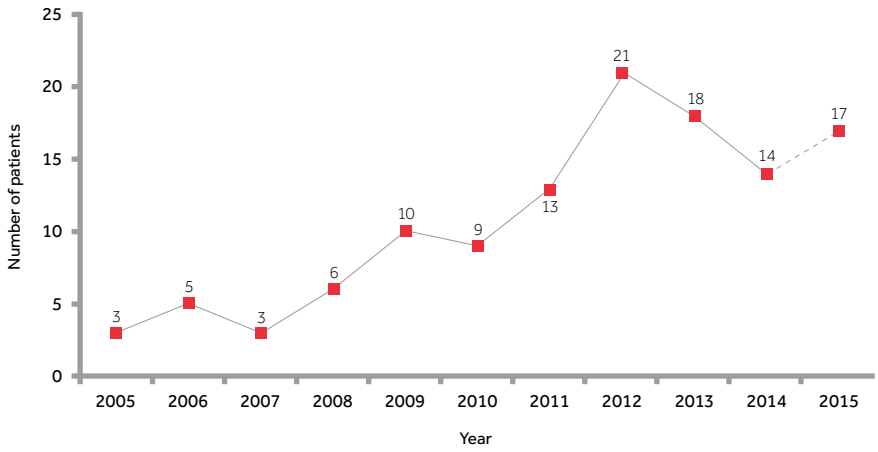


Figure 92: Suicide by patients with autism spectrum disorder (UK)

DEMENTIA

329. There were 203 suicides in patients with a diagnosis of dementia, around 1% of the total sample, an average of 18 deaths per year. The number of patients with dementia was unchanged between 2005 and 2011 but subsequently rose (Figure 93).

330. 67% of patients with dementia were male. The average age was 78 (range 36-96) – 24% were aged 65-74, 45% were aged 75-84 and 24% were aged 85 and over. Compared to other patients aged 65 and over, those with dementia more often had a major physical illness (56% v. 43%).

331. The main methods of suicide were hanging (23%), self-poisoning (23%) and drowning (18%). The most common substances used in overdose were paracetamol/opiate compounds (24%) and paracetamol (17%).

332. Fewer patients with dementia had a history of common risk factors, e.g. a history of self-harm (29% v. 69%), alcohol misuse (18% v. 49%) or drug misuse (4% v. 36%). 44% lived alone, similar to other patients (48%).

333. 16% had been ill for less than a year, similar to the total sample (20%). Immediate risk of suicide was usually viewed by clinicians as low/none (92%).

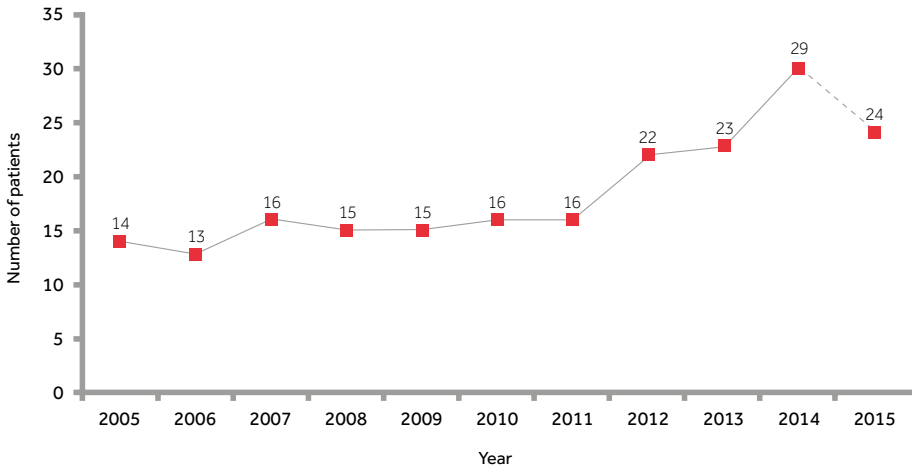


Figure 93: Suicide by patients with dementia (UK)

SUICIDE IN CARERS

334. In the UK, there were 938 suicides in patients who had a "caring responsibility" role, i.e. they were providing care for young children (413 patients), caring for someone else at home (400 patients since 2011 when this information was first collected), or living with someone who was also a mental health patient (210 patients since 2011). This represents 5% of all patient suicides, an average of 85 per year.

335. The average age of these patients was 39 (range 13-91); the majority (58%) were aged 25-44. Around half (48%) were female.

336. The main methods of suicide were hanging (47%) and self-poisoning (26%). The most common substances used in overdose were opiates (28%) and tricyclic antidepressants (13%).

337. The most common diagnoses were affective disorder (46%) and personality disorder (12%). Nearly half (47%) had a secondary diagnosis. 26% had been ill for less than a year – more than in other patients (19%).

338. 43% had a history of alcohol misuse and 36% a history of drug misuse.

339. Short-term risk was viewed by clinicians as low/none in 83% and long-term risk as low/none in 59%.

SUICIDE IN CURRENT OR FORMER MEMBERS OF THE ARMED FORCES

340. In the UK in 2011-2015, there were 208 suicides in current or former members of the Armed Forces, 3% of all suicides in this time period, an average of 42 per year.

341. The majority (198, 95%) were male. The average age was 51 (range 22-95) and they were more likely than other patients to be aged 65 and over (30% v. 11%).

342. The most common method of suicide was hanging (48%). Whilst numbers were small, these patients were more likely than others to die by firearms (3% v. <1%).

343. The most common diagnoses were affective disorder (40%), schizophrenia and other delusional disorders (12%) and alcohol dependence/misuse (11%). Approximately half (49%) had a secondary diagnosis – this was more likely than other patients to be an anxiety disorder (including phobia, panic disorder, obsessive compulsive disorder, post-traumatic stress disorder) (35% v. 21%).

344. These patients had high rates of alcohol misuse (57% v. 48%) and 30% had a history of violence compared to 23% of other patients.

345. Short-term risk was viewed as low/none in 169 (88%) patients and long-term risk as low/none in 109 (61%).

SUICIDE IN PEOPLE AGED UNDER 25 (ENGLAND AND WALES, AND SCOTLAND)

346. We have carried out a detailed investigation of general population suicides in people aged under 25 by collecting information from a range of investigations by official bodies, mainly from coroners (England and Wales) and police death reports (Scotland) - both take evidence from families and professionals, if available. Data from Northern Ireland are not currently available.

347. Detailed findings for suicide by children and young people in England and Wales were published in July 2017 (see page 122 for a summary of the report) and can be found on our website at: **www.research.bbmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci**
In this published report findings from Scotland were not included. However, we are able to report on the combined findings here. In general, the police reports from Scotland were less detailed than coroners' reports.

348. During 2014-2015, there were 1,046 suicides (includes undetermined) by people aged under 25 in England, Scotland and Wales, an average of 523 deaths per year (Table 14). This included 355 deaths of people aged 10-19 and 691 deaths of people aged 20-24, from whom we selected a random sample of 141 (20%).

349. The number of suicides increased steadily with age, particularly in the mid to late teens, with almost twice as many suicides in 20-24 year olds compared to under 20 year olds. The number of male suicides was higher than females (796, 76% v. 250, 24%), with similar proportions in England and Wales and Scotland. The most common methods of suicide were hanging (634, 61%) and jumping/multiple injuries (183, 18%). Proportionally more young people in Scotland died by self-poisoning (15, 12% v. 66, 7%), whilst young people in England and Wales were more likely to die by jumping/multiple injuries (170, 18% v. 13, 10%).

350. Of the 1,046 suicide deaths by young people in England, Scotland and Wales in 2014-2015, information was sought on all of the 355 deaths in people aged under 20, and on a 20% sample of all deaths in people aged 20-24 (n=141). In total, information was received from one or more data sources for 444 (90%) of these 496 children and young people. 322 (91%) were aged under 20; 122 were aged 20-24 (87%) (Table 14). If an item, i.e. abuse, bullying, was not recorded in any data source then it was assumed to be absent or not relevant.

Table 14: Suicide by children and young people: numbers by age group and country (2014-2015)

	England and Wales		Scotland		Total
	Under 20	20-24	Under 20	20-24	
Deaths by suicide in children and young people	316	606	39	85	1,046
Deaths on which at least 1 report obtained	285	106*	37	16*	444

*Note: represents a 20% sample of all deaths in these age groups

351. Table 15 shows the pattern of antecedents between England and Wales and Scotland, by age group. Some antecedents were too infrequent to report (e.g. abuse, bullying).

352. There were few differences between Scotland and England and Wales in the reported antecedents of suicide. In Scotland, suicide by LGBT young people aged 20-24 was significantly more common, as was unemployment in the under 20s. Suicide-related internet use (i.e. searching the internet for information on suicide method) was less likely in Scotland in the under 20s.

353. Figure 94 shows the pattern of contact with frontline agencies. 68% of under 20s and 50% of 20-24 year olds in Scotland were in contact with any agency. This was mainly mental health services in under 20s and youth justice/police in 20-24 year olds. Proportionally more young people who died by suicide in England and Wales had previous contact with mental health services than their counterparts in Scotland, across both age groups (125, 44% v. 11, 30% of under 20s; 48, 45% v. 3, 19% of 20-24 year olds), although this may be a reflection of data quality.

354. A diagnosis of mental illness was reported in 18 (35%) children and young people who died by suicide in Scotland – 14 (40%) under 20s and 4 (25%) 20-24 year olds. The most common diagnosis in under 20s was depression (7, 19%). This was similar to the pattern in England and Wales, although a diagnosis of mental illness was less common in 20-24 year olds in Scotland (4, 25% v. 50, 47%).

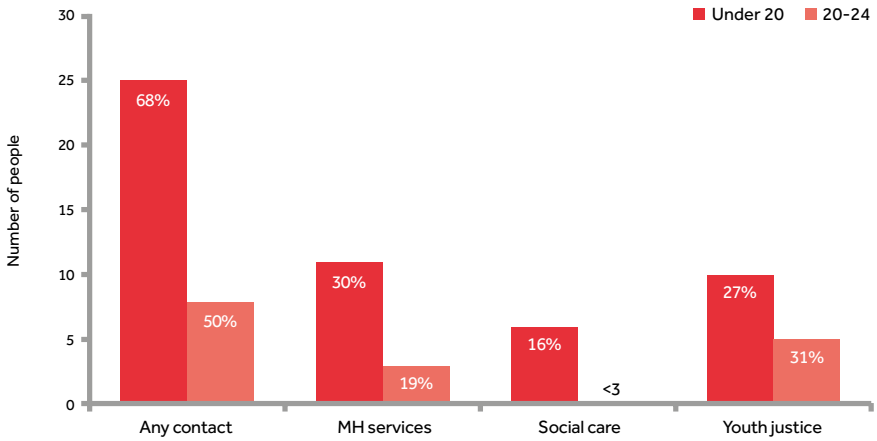


Figure 94: Suicide by children and young people: contact with services in Scotland, by age group (2014-2015)

Table 15: Antecedents of children and young people who die by suicide, by age group and country (2014-2015)

	Scotland		England and Wales	
	Under 20 (n = 37) N (%)	20-24 (n = 16) N (%)	Under 20 (n = 285) N (%)	20-24 (n = 106) N (%)
Demographic features:				
Male	27 (73%)	10 (63%)	204 (72%)	87 (82%)
LGBT (or uncertain of sexuality)	<3	3 (19%)	17 (6%)	3 (4%)
In education (i.e. school pupil, student in further or higher education)	13 (35%)	3 (19%)	145 (51%)	15 (14%)
Living with parents (including step-parents)	17 (46%)	5 (31%)	123 (43%)	24 (23%)
Living with single parent	5 (14%)	<3	64 (22%)	17 (16%)
Looked after child	3 (8%)	<3	26 (9%)	<3
Family environment:				
Family (parent, carer, sibling) history of mental illness	4 (11%)	<3	45 (16%)	11 (10%)
Experience of loss:				
Bereaved	6 (16%)	5 (31%)	70 (25%)	30 (28%)
Suicide-related internet use:				
Suicide-related internet use overall	4 (11%)	<3	74 (26%)	14 (13%)
Academic pressures:				
Academic pressures overall (of those in education)	6 (46%)	<3	63 (43%)	7 (47%)
Medical history:				
Physical health condition	12 (32%)	3 (19%)	90 (32%)	24 (23%)
Excessive alcohol use	9 (24%)	4 (25%)	64 (22%)	44 (42%)
Illicit drug use	9 (24%)	6 (38%)	98 (34%)	54 (51%)
Self-harm and suicidal ideas:				
Previous self-harm	14 (38%)	4 (25%)	147 (52%)	43 (41%)
Suicidal ideas (at any time)	18 (49%)	6 (38%)	163 (58%)	58 (55%)
Economic adversity:				
Unemployment	11 (30%)	<3	44 (15%)	32 (30%)
Workplace problems	7 (19%)	<3	50 (18%)	32 (30%)
Housing instability	5 (14%)	3 (19%)	49 (17%)	27 (25%)

PATIENT HOMICIDE

355. During 2005-2015 there were 835 mental health patients convicted of a homicide offence. The number of convictions has fallen steadily during this period.

356. 11% of people convicted of homicide were mental health patients (Table 16). This figure varied a little across the UK countries, being highest in Scotland and Wales where the general population homicide rates are also higher.

357. 6% of the homicides were by people with schizophrenia (compared to a population rate of schizophrenia of around 1%). The number was broadly similar across the UK countries, taking into account population size.

Table 16: Characteristics of homicide offenders by UK country (2005-2015)

General population	England N = 6,004 N (%)	Northern Ireland N = 202 N (%)	Scotland N = 915 N (%)	Wales N = 283 N (%)	UK N = 7,404 N (%)
Mental health patients	641 (11%)	18 (9%)	137 (15%)	39 (14%)	835 (11%)
Schizophrenia (& other delusional disorders)	356 (6%)	7 (3%)	32 (3%)	22 (8%)	417 (6%)
Alcohol dependence/misuse	254 (4%)	29 (14%)	92 (10%)	17 (6%)	392 (5%)
Drug dependence/misuse	205 (3%)	9 (4%)	118 (13%)	5 (2%)	337 (5%)

358. The primary diagnoses for patients convicted of homicide varied by UK country. The commonest diagnosis in England and Wales was schizophrenia. Alcohol dependence or misuse was the most common in Northern Ireland while drug dependence or misuse was the most common in Scotland.

SUDDEN UNEXPLAINED DEATH (SUD) IN MENTAL HEALTH IN-PATIENTS (ENGLAND AND WALES)

359. During 2005-2015, there were 300 SUD cases in England and Wales, an average of 27 per year (Figure 95). There was an overall fall in the reported annual number of SUDs over the report period. However, due to a change in data provider, numbers since 2007 are not comparable with previous data. There has been no overall change since 2007, the average number being 22 per year, though estimated figures were lower in 2014 and 2015.

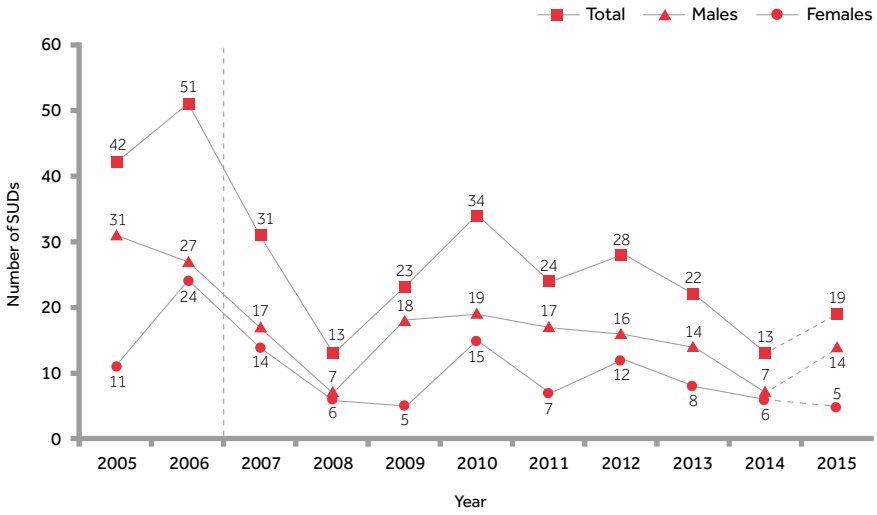


Figure 95: Number of sudden unexplained deaths in England and Wales, by gender

Note: between 2006 and 2007 data providers changed from the NHS-Wide Clearing Service (NWCS) to Hospital Episode Statistics (HES), therefore the numbers before and after 2006 are not strictly comparable.

360. Around half had a history of cardiovascular disease and a quarter had a history of respiratory disease. In 12% there was a history of cerebrovascular disease and 7% had a history of epilepsy. 185 (65%) had any one of these physical illnesses (Table 17).

Table 17: Clinical characteristics of SUD in mental health in-patients

History of:	N	%
Cardiovascular disease	135	48
Respiratory disease	77	27
Cerebrovascular disease	34	12
Epilepsy	19	7
Any of the above illnesses	185	65

361. 24 (8%) were receiving 2 or more anti-psychotic drugs (i.e. polypharmacy). The most common drugs received were quetiapine (30%), clozapine (26%), haloperidol (22%) and amisulpride (22%).

362. There were 43 (14%) SUD cases in patients from black and minority ethnic (BME) groups over the report period. The number of these deaths varied from 2-8 per year and showed no trend over time.

Restraint

363. There were 4 deaths within 1 hour of restraint in 2005-2015. We do not know whether restraint caused these deaths.

364. There were 24 deaths within 24 hours of restraint in 2005-2015, ranging from 0-4 per year. The number of post-restraint deaths is too small to identify a trend. There were 8 deaths in BME patients within 24 hours of restraint.

Patients aged under 45

365. There were 75 (25%) patients under 45 years, an average of 7 per year. The number of patients aged under 45 fell over the report period, for example the average figure was 9 for 2005-09 and 4 for 2011-15.

366. 16 (24%) had a history of cardiovascular disease; 15 (22%) had a history of respiratory disease and 6 (9%) had a history of epilepsy. 40 (58%) had no history of these physical illnesses (Table 18).

367. 12 (17%) patients were receiving 2 or more anti-psychotic drugs (i.e. polypharmacy).

368. Patients aged under 45 were more likely to be from a BME group (23 cases, 31% v. 21 cases, 9%).

Table 18: Clinical characteristics of SUD in mental health in-patients aged under 45

History of:	N	%
Cardiovascular disease	16	24
Respiratory disease	15	22
Cerebrovascular disease	<3	-
Epilepsy	6	9
None of the above illnesses	40	58

THE IMPACT OF NCISH: ACTIONS FOLLOWING PUBLICATION ON NCISH FINDINGS

369. NCISH has provided definitive national figures on suicide and homicide to clinical services and the Government for over 20 years, helping to inform the development of government policy and strategies for suicide prevention both nationally and internationally. Some key national initiatives are summarised below. We are also aware of local suicide prevention planning, using NCISH findings as a resource, within specific NHS Trusts.

Preventing suicide in England: Third progress report of the cross-government outcomes strategy to save lives (2017) [24]
The recent suicide prevention strategy for England highlights the 10 key elements of safer care in mental health services that we recommended the NHS should be working towards in our 2016 annual report. These service features reflect the evidence which has emerged during over 20 years of data collection.

House of Commons Health Committee: Suicide Prevention. Sixth Report of Session 2016-17 (2017) [25]
The Health Committee convened to review recent evidence to help inform the suicide prevention strategy for England. NCISH provided both oral and written evidence to the Committee.

The Five Year Forward View for Mental Health (2016) [26]
In this report from the independent Mental Health Taskforce to the NHS in England, NCISH findings on the impact of staff shortages on safe in-patient care from our 2015 annual report are cited.

Old Problems, New Solutions - Improving Acute Psychiatric Care for Adults in England (The Commission on Acute Adult Psychiatric Care, 2016) [27]
This independent Commission on behalf of the Royal College of Psychiatrists to address problems in accessing acute in-patient care cites findings from NCISH's 2015 annual report, specifically the number of suicides after discharge from a non-local unit and the increase in the number of patients under the care of CRHT teams.

Talk to me 2: Suicide and Self Harm Prevention Strategy for Wales 2015-2020. Welsh Government (2015) [28]
The Welsh suicide prevention strategy and associated action plan both highlight key guidance from previous NCISH publications for mental health services for suicide prevention.

Suicide Prevention Strategy 2013-2016. Scottish Government (2013) [29]
Scotland's most recent suicide prevention strategy refers to NCISH findings informing the introduction of local patient safety improvements, particularly the follow-up of patients after discharge and supporting a focus on action to tackle drinking and drug use.

Protect Life: A Shared Vision. The Northern Ireland Suicide Prevention Strategy 2012-March 2014 (2012) [30]
Northern Ireland's update to its 2006 suicide prevention strategy cites NCISH findings and implemented recommendations from the NCISH national report on suicide and homicide in Northern Ireland (2011).

Safer Services: a toolkit for specialist mental health services and primary care [31]
Based on evidence from 20 years of patient safety we have developed a toolkit for local self-assessment. The toolkit formulates a list of key elements of safer care in mental health services into a number of quality and safety statements regarding clinical, organisational and training aspects of care. The NCISH toolkit has been downloaded more than 2,000 times worldwide.

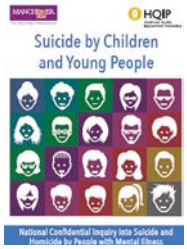
370. NCISH findings have also contributed to the development of national clinical guidelines:

- Transition between inpatient mental health settings and community or care home settings. NICE guideline (2016).[3]
- Management of self-harm. NICE guidelines (2004, 2011) [32-33] and quality standards (2013).[34]
- CQC guidance on the removal of ligature points and 7 day follow up.

RECENT PUBLICATIONS FROM NCISH

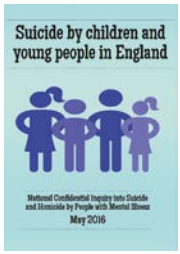
371. NCISH has published a number of major UK and national reports, and numerous publications using a wide range of methodologies (e.g. case-control, case series, psychological autopsy, and qualitative studies) and data sources (e.g. coroner data, primary care records). Below is a list of all NCISH reports and publications from 2016-2017. A full list of reports and publications can be found on the NCISH website: **www.bbmh.manchester.ac.uk/cmhs/research/centreforsuicideprevention/nci**

REPORTS



Download 2017 report **here**

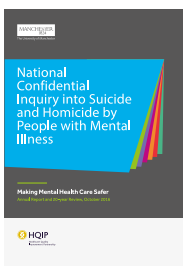
Suicide by children and young people. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester, 2017.



Download 2016 report **here**

Suicide by children and young people in England. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester, 2016.

We are conducting the first national investigation into suicide by children and young people both in the general population and among patients of mental health services, in order to identify possible sources of stress and to examine the role of support services. Two reports have been published from this study. The first, published in May 2016, examined suicides by people aged under 20 in England. The second, published in July 2017, extended data collection to people aged up to 24, in England and Wales. Our most recent report, examining the antecedents of suicide in 391 young people, confirmed the main findings of the first – there are themes that were common to many suicides that should be a target for prevention (e.g. support and management of family factors, childhood abuse, bullying, physical health, mental ill-health, and alcohol or drug misuse). In addition, we found specific actions are needed for certain groups: (1) support for young people who are bereaved, especially by suicide; (2) greater priority for mental health in colleges and universities; (3) housing and mental health care for looked after children; (4) mental health support for LGBT young people. Data collection is continuing for this study, including in Scotland and Northern Ireland.



Download report **here**

Making Mental Health Safer. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). Manchester: University of Manchester, 2016.

Our Annual Report and 20-year Review presents findings from 2004 to 2014, and reviews 20 years of data collection. It provides figures for suicide, homicide and sudden unexplained deaths and highlights the priorities for safer services.

PAPERS

Appleby L, Hunt IM, Kapur N (2017 New policy and evidence on suicide prevention. *Lancet Psychiatry*, 4 (9); 658-660 http://dx.doi.org/10.1016/S2215-0.366(17)30238-9

This commentary summarises recent reports and policy changes in suicide prevention. It highlights key findings from the NCISH 2016 report which demonstrate the changing pattern of patient suicide over twenty years of research.

Pitman AL, Hunt IM, McDonnel SJ, Appleby L, Kapur N (2017) Support for relatives bereaved by psychiatric patient suicide: National Confidential Inquiry into Suicide and Homicide findings. *Psychiatric Services*, DOI: 10.1176/appi.ps.201600004.

This paper aimed to measure the proportion of cases in which mental health services contacted next of kin after a patient's suicide and to examine whether patient characteristics influenced whether the family were contacted. Relatives were not contacted after the patient's suicide in 33% of cases. A violent method of suicide was associated with greater likelihood of contact with relatives. Four potentially stigmatising patient-related factors (forensic history, unemployment, and primary diagnosis of alcohol or drug dependence or misuse) reduced the likelihood of contacting next of kin, suggesting inequitable access to support after a potentially traumatic bereavement.

Flynn S, Nyathi T, Tham S-G, Williams A, Windfuhr K, Kapur N, Appleby L, Shaw J (2017) Suicide by mental health in-patients under observation. *Psychological Medicine*, Apr 11:1-8. doi: 10.1017/S0033291717000630.

We aimed to explore characteristics of in-patients who were under observation prior to suicide. There were 113 suicides by in-patients under observation in England and Wales between 2006 and 2012, an average of 16 per year. Most were under intermittent observation (i.e. checked every 5–25 minutes). Five deaths occurred while patients were under constant observation. We identified key elements of observation that could improve safety, including only using experienced and skilled staff for the intervention, adhering to procedures and using observation levels determined by clinical need not resources.

Farrell S, Kapur N, While D, Appleby L, Windfuhr K (2016) Suicide in a national student mental health patient population: 1997-2012. *Crisis*, DOI: 10.1027/0227-5910/a000412.

This study aimed to compare the characteristics of mental health patients who died by suicide as students with other young people who died by suicide. From 1997 to 2012, 214 university students in the UK aged 18-35 died by suicide within 12 months of mental health service contact. Compared with other young people who died by suicide, factors associated with student deaths were: being younger, female, from an ethnic minority group, and a primary diagnosis of affective disorder. Medication nonadherence was less likely to be associated with student deaths. The study showed clear differences in the characteristics of the student and non-student groups, although causation could not be established.

Windfuhr K, While D, Kapur N, Ashcroft D, Kontopantelis E, Carr M, Webb R (2016) Suicide risk linked with clinical consultation frequency, psychiatric diagnosis and psychotropic medication prescribing in a national study of primary care patients. *Psychological Medicine*, 46(16), 3407-3417. DOI:10.1017/S0033291716001823.

We examined suicide risk in relation to patterns of clinical consultation, psychotropic drug prescribing, and psychiatric diagnoses. Patients aged over 16 who died by suicide in 2002–2011 (N = 2,384) were matched on gender, age and practice with up to 20 living control patients (N = 46,899). Risk was raised among patients with several psychiatric diagnoses, those prescribed multiple psychotropic medication types, those who consulted at very high frequency and those living in more socially deprived localities. These groups might be considered for referral to mental health services by their general practitioners. Non-consulters were also at increased risk, suggesting that conventional models of primary care may not be effective in meeting the needs of all people in the community experiencing major psychosocial difficulties.

Cavanagh B, Ibrahim S, Roscoe A, Bickley H, While D, Windfuhr K, Appleby L, Kapur N (2016). The timing of general population and patient suicide in England, 1997-2012. *Journal of Affective Disorders*, DOI:10.1016/j.jad.2016.02.055.

This study investigated temporal patterns in suicide risk. Data on 73,591 general population and 19,318 patient suicide deaths in England between 1997 and 2012 were collected. Suicide incidence fell over successive months of the year and there was evidence of an overall spring peak. Monday was associated with the highest suicide rates. This effect appeared to be more pronounced in patients aged over 50 or those who lived alone. Suicide risk was significantly lower during Christmas, particularly for women. There was a peak in suicide on New Year's Day in the general population. Other 'special days' were not associated with a change in suicide incidence. Clinical services should be aware of the risk of suicide just after the weekend, especially in people who live alone, and the potential need for closer supervision during this period.

Kapur N, Ibrahim S, Hunt IM, Turnbull P, Shaw J, Appleby L (2016) Mental health services, suicide and 7-day working. *British Journal of Psychiatry*, 1-6, DOI: 10.1192/bjp.bp.116.184788.

We aimed to investigate the timing of suicide in high-risk mental health patients. We compared the incidence of suicide at the weekend v. during the week, and also in August (the month of junior doctor changeover) v. other months in in-patients, patients within 3 months of discharge and patients under the care of crisis resolution home treatment (CRHT) teams (2001–2013). The incidence of suicide was 12-15% lower at the weekends among high-risk mental health patients (in-patients, post-discharge patients and CRHT patients). Patients who died by suicide were also less likely to have been admitted at weekends than during the week. The incidence of suicide in August was not significantly different from other months. Our study does not support the claim that safety is compromised at weekends, at least in mental health services.

Kapur N, Ibrahim S, While D, Baird A, Rodway C, Hunt IM, Windfuhr K, Moreton A, Shaw J, Appleby L (2016) Mental health service changes, organizational factors, and patient suicide in England in 1997-2012. *Lancet Psychiatry*, DOI: http://dx.doi.org/10/1016/S2215-0366(16)00063-8.

We examined the association between service changes, organisational factors, and suicide rates in a national sample by doing a before-and-after analysis in relation to suicide rates, in providers of mental health care in England. 19,248 individuals who died by suicide within 12 months of contact with mental health services were included (1997–2012). Various service changes related to ward safety, improved community services, staff training, and implementation of policy and guidance were associated with a lower suicide rate after the introduction of these changes. Some wider organisational factors, such as non-medical staff turnover and incident reporting were also related to suicide rates but others, such as staff sickness and patient satisfaction, were not. Aspects of mental health service provision might have an effect on suicide rates in clinical populations but the wider organisational context in which service changes are made are likely to be important too.

Rodway C, Tham S-G, Ibrahim S, Turnbull P, Windfuhr K, Shaw J, Kapur N, Appleby L (2016) Suicide in children and young people in England: a consecutive case series. *Lancet Psychiatry*, http://dx.doi.org/10.1016/S2215-0366(16)30094-3

This study aimed to establish how frequently suicide is preceded by child-specific and young person-specific suicide risk factors and to identify contact with health-care and social-care services and justice agencies. 145 suicides in people aged under 20 were notified to us during the study period. The number of suicides rose sharply during the late teens with 79 deaths by suicide in people aged 18–19 years compared with 66 in people younger than 18. Various antecedents were reported including academic pressures, bullying, bereavement, suicide in family or friends, physical health conditions, family problems, excessive drinking, and illicit drug use. Suicide-related internet use was recorded in 23% of cases. 43% individuals had no known contact with health care and social care services or justice agencies. We concluded that improved services for self-harm and mental health are crucial to suicide prevention, but that the identified antecedents emphasise the roles of schools, primary care, social services, and the youth justice system.

Flynn S, Gask L, Appleby L, Shaw J (2016) Homicide-suicide and the role of mental disorder: a national consecutive case series. *Social Psychiatry and Psychiatric Epidemiology*, 51(6), 877-884 DOI: 10.1007/s00127-016-1209-4.

We aimed to describe the characteristics of offenders and victims in 60 cases of homicide-suicide that were recorded in England and Wales in 2006-2008. Most victims were spouse/partners and/or children. Most perpetrators were male (88%) and most victims were female (77%). Incidents were commonly preceded by relationship breakdown and separation. 62% had mental health problems. A quarter visited a GP for emotional distress within a month of the incident. Few had been in recent contact with mental health services before the incident (12%). Self-harm (26%) and domestic violence (39%) were common. GPs cannot be expected to prevent homicide-suicide directly, but they can reduce risk generally, via the treatment of depression and recognising the risks associated with domestic violence.

Kalifeh H, Hunt IM, Appleby L, Howard L (2016) Trend, nature and correlates of perinatal suicide compared to non-perinatal suicide among women in contact with psychiatric services: 15-year findings from a UK national inquiry. *Lancet Psychiatry*, DOI: 10.1016/S2215-0366(16)00003-1.

This study compared the trend, nature, and correlates of suicide in perinatal (during pregnancy or the first postnatal year) and non-perinatal women in contact with psychiatric services. Women who died by suicide within versus outside the perinatal period were more likely to be younger and married, with shorter illness duration and no history of alcohol misuse. In women in contact with UK psychiatric services, suicides in the perinatal period were more likely to occur in those with depression and no active treatment at the time of death. Assertive follow-up and treatment of perinatal women in contact with psychiatric services are needed to address suicide risk in this group.

Hunt IM, Clements C, Saini P, Rahman MS, Shaw J, Appleby L, Kapur N, Windfuhr K (2016) Suicide after absconding from inpatient care in England: An exploration of mental health professionals' experiences. *Journal of Mental Health*, DOI: 10.3109/09638237.2015.1124394.

The aim of this study was to identify the characteristics of inpatients who died by suicide after absconding and to explore issues relating to suicide risk from the perspective of clinical staff. We analysed quantitative data on all patient suicides in England between 1997 and 2011 and conducted a thematic analysis of semi-structured interviews with 21 clinical staff. Four themes were identified as areas of concern for clinicians: problems with ward design, staffing issues, difficulties in assessing risk, and patient specific factors. Results suggest that inpatients who died by suicide after absconding may have more complex and severe illness along with difficult life events, such as homelessness. Closer monitoring of inpatients and access points, and improved risk assessments are important to reduce suicide in this patient group.

Hunt IM, Appleby L, Kapur N (2016) Suicide under crisis resolution home treatment – a key setting for patient safety. *British Journal of Psychiatry Bulletin*, 1-3; DOI: 10.1192/pb.bp.115.051227.

This editorial describes the recent increase in the use of crisis resolution home treatment (CRHT) teams as an alternative to psychiatric in-patient admission. It discusses the functions of these services and their effectiveness, and highlights NCISH findings of high rates of suicide in patients under CRHT. Suggestions to improve safety in this care setting are discussed.

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