

# National Confidential Inquiry

into Suicide and Safety in Mental Health

**ANNUAL REPORT:  
ENGLAND, NORTHERN IRELAND,  
SCOTLAND AND WALES 2021**

Patient and general population data 2008-2018,  
and NCISH COVID-19 related work

## 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. Its aim is to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage, and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP), comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England and NHS Improvement, the Welsh Government and, with some individual projects, other devolved administrations, and crown dependencies.

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### Please cite this report as:

The National Confidential Inquiry into Suicide and Safety in Mental Health. Annual Report: England, Northern Ireland, Scotland and Wales. 2021. University of Manchester.

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### Service users and patients

For many people with mental ill-health the pandemic has brought new stresses and disruption to daily life and the availability of care. In our work on patient safety we will continue to listen to their experiences and to reflect these back to services. In such difficult times we want to acknowledge the contribution of experts by experience throughout our work programme.

### Mental health staff

This has been a gruelling period for all health staff, including those in mental health services. We would like to thank clinical and social care staff for continuing to support our work during the pandemic. The need to strengthen our suicide prevention effort is as great as ever. The cooperation from staff remains invaluable.

### This report

COVID-19 is dominating care across the NHS. Some of those most affected by the pandemic - young people, ethnic minorities, people who live alone - have also been a concern in suicide prevention. Their mental health will be an important feature of society's recovery. In this report we do not yet have data from 2020 but our findings highlight key issues in patient safety in these groups.

## EXECUTIVE SUMMARY

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### Introduction

The 2021 annual report from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) provides findings relating to people who died by suicide between 2008 and 2018 across all UK countries. Additional findings are presented on the number of people under mental health care who have been convicted of homicide, and those in the general population.

The NCISH database includes a national case series of suicide by patients under the care of mental health services over more than 20 years. The current suicide database stands at over 144,000 deaths by suicide in the general population, including over 36,000 patients. This internationally unique database allows NCISH to make recommendations for clinical practice and policy that will improve safety locally, nationally and internationally.

As with our previous annual reports, the main findings are presented by country for the baseline year of 2008 and the subsequent 10 years, including the most recent year (2018) for which comprehensive data are available. A UK-wide section provides themed findings for all countries combined. In this year's report, though we present data from deaths occurring between 2008 and 2018, most of the themes presented relate to groups that we now know are likely to have been particularly vulnerable during the COVID-19 pandemic: patients who live alone; those aged under 25; those from an ethnic minority group; and those who have died by hanging/strangulation. This year we also present information on our work to support clinicians working through the pandemic, as well as some data from our pilot real-time surveillance of suspected suicide by people under mental health care in England.

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### Methodology and analysis

The NCISH method of data collection is provided in our previous annual reports and on our [website](#).

The main findings of the report are presented in a combination of figures, tables and maps. These show changes in key figures in patient safety over the report period. In the final year of the report period – 2018 in this report for the core data – figures are incomplete, in part because of the time associated with legal processes, but also due to NCISH suspension of data collection during the early months of the COVID-19 pandemic to support reducing burden and releasing capacity in clinical services. We therefore estimate final figures for the most recent years taking into account the number of outstanding questionnaires and the accuracy of our estimates in previous years. We examine for statistically significant time trends over the report period. However, because 2018 figures are partly estimates, these are not included in the analysis of trends.

We have not received complete 2018 patient data from Northern Ireland as a result of the new GDPR regulations and COVID-19-related disruptions in data collection but findings will be presented in future reports. Therefore, we present data on patient suicide deaths in Northern Ireland for the period 2008-2017 in the country specific and UK-wide sections of the report. This report follows current guidance from the Northern Ireland Statistics and Research Agency (NISRA) to include only deaths resulting from self-inflicted injury registered between 2015 and 2018. This means the figures relating to date of death in Northern Ireland in these years, and to a lesser extent in 2013 and 2014, have fallen and cannot be compared with the number of suicides in earlier years. We no longer present information relating to homicide in Northern Ireland as we are unable to obtain conviction data.

## KEY FINDINGS

### Suicide numbers and rates

**I.** Suicide rates in the general population in the UK show a recent rise in most countries since 2016 or 2017, the exception being Northern Ireland where a change in the coding of drug-related deaths has led to lower figures (see details on page 11). Differences in suicide rates remain between the UK countries, though recent rates in Northern Ireland are not comparable due to changes in the death coding process. The largest between-country differences in rates over the 11-year report period were in young adults; and in Northern Ireland the highest rates were in this group. In the other UK countries, the highest rates were in middle aged groups but in Scotland rates were highest in people in their late 30s and 40s while in England and Wales rates were highest in people in their 40s and early 50s.

**II.** There were 1,601 suicides by people under mental health care in the UK in 2018, this figure having fallen in recent years (see details on page 14). Over the whole report period 2008-2018, there were 18,029 patient suicides, 27% of all suicides in the general population, although this percentage was higher in Scotland and lower in Wales. In 2018 the number of patient suicides rose in England. However, the increase was not reflected in the rate of suicide among patients under mental health care, where there has been a continued fall since 2011, i.e. taking into account the total number of people under mental health care.

### Method of suicide

**III.** The commonest method of suicide by patients was hanging/strangulation, accounting for 825 patient deaths UK-wide in 2018 (excluding Northern Ireland), over half (52%) of all patient suicides. Over the report period, the number of deaths by hanging/strangulation increased, most markedly in female patients and those aged under 25. Specific findings relating to hanging/strangulation are shown on page 29.

**IV.** The second commonest suicide method among patients was self-poisoning, accounting for 335 deaths in 2018, almost a quarter (22%) of patient suicides. The number of deaths by self-poisoning among patients has fallen over the report period. The main substances taken in fatal overdose were opiates/opioids and the main source (where known) was by prescription.

**V.** Suicides by methods resulting in multiple injuries (jumping from a height or in front of a train) accounted for an average of 222 patient deaths per year. The number of deaths by jumping/multiple injuries has fallen since 2013.

### Clinical care

**VI.** There were 74 suicides by mental health in-patients in the UK (excluding Northern Ireland) in 2018, around 4% of all patient suicides, continuing a downward trend since 2011 (see details on page 15). The lower number of in-patient suicides in the last few years has mostly been due to reductions in England. Over the report period around a third of in-patient suicides took place on the ward itself. Many of these deaths were by hanging/strangulation from low-lying ligature points.

**VII.** There were 179 deaths by suicide in the 3 months after hospital discharge in the UK (excluding Northern Ireland) in 2018, 13% of all patient suicides, a small increase since the previous year, in the context of an overall downward trend (see details on page 16). The highest risk was in the first 1-2 weeks after discharge and the highest number of deaths occurred on the second full day after discharge.

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### Suicide by patients who lived alone

**VIII.** There were 746 deaths per year on average by patients who lived alone over the period 2008-2018, nearly half (48%) of all patient suicides. The number fell over the report period, though figures in 2017 and 2018 show a rise in men (see details on page 17).

**IX.** These patients were more likely to be aged over 45, unemployed, on long-term sick leave, and single or widowed than those who did not live alone. More had experienced recent financial difficulties and relationship break-up.

**X.** These patients had more conventional risk factors for suicide including previous self-harm and alcohol and drug misuse than those who did not live alone. They also had higher rates of psychiatric and physical co-morbidity, most commonly musculoskeletal disease, cardiovascular disease, and chronic pain.

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### Suicide by patients from ethnic minority groups

**XI.** There were 107 deaths per year in patients from ethnic minority groups, 7% of all patient suicides. There was no overall trend over the report period (see details on page 20).

**XII.** There were differences between ethnic groups in social and clinical characteristics that could be important to suicide prevention. Patients from a South Asian background were less likely to be unmarried or living alone and they had high rates of affective disorder. Black Caribbean and Black African patients were more likely to live alone and had the highest rates of schizophrenia and other delusional disorders and previous violence. Black Caribbean patients also had higher rates of alcohol and drug misuse. Chinese patients were more often female and had a short history of psychiatric illness. Patients from a multiple/mixed ethnic background had higher rates of personality disorder, co-morbidity and previous self-harm and substance misuse.

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### Suicide in children, young people, and young adults

**XIII.** There were 626 deaths per year on average in people aged under 25 (10-24 year) in the general population, though the number was higher in 2017 and 2018 (see details on page 26). Around a fifth (21%) were patients under the care of mental health services. The number of young patients who died by suicide increased over the report period, particularly in those aged 15-17 and in female patients.

**XIV.** Compared to older patients, children and young people who died by suicide were more likely to die by hanging/strangulation and jumping/multiple injuries and less likely to die by self-poisoning. The number of deaths by hanging/strangulation in this group increased over the report period.

**XV.** Diagnoses of personality disorder, drug dependence/misuse and eating disorders were more common. A third had a combination of previous self-harm, co-morbidity and a history of substance misuse.

## Suicide by hanging/ strangulation

**XVI.** There were 3,080 deaths per year by hanging/strangulation in the general population; 746 were by patients under mental health care (see details on page 29). There was an increase in the number of deaths by hanging/strangulation in both the general and patient populations. The increase was seen in those aged under 25, particularly in women.

**XVII.** Patients who died by hanging/strangulation were more likely to be male, employed and married than patients who died by other methods. Affective disorder (bipolar disorder and depression) and adjustment disorders were common and they were more likely to have been recently diagnosed with psychiatric illness. More had been seen in an Emergency Department for self-harm in the preceding 3 months.

**XVIII.** These patients more often reported recent financial problems, relationship break-up, and workplace problems.

## Suicide prevention during COVID-19

**XIX.** There were 133 suspected suicide deaths that mental health trusts in England told us about between 23rd March and 30th September 2020 (see details on page 32). This is not a representative case series, being based on deaths notified to us voluntarily in a pilot data collection of "real-time" surveillance of suspected suicides.

**XX.** Most deaths notified to us occurred in community (i.e. CMHT) rather than in acute or crisis care settings.

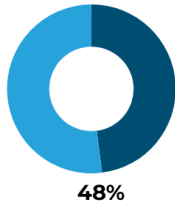
**XXI.** Two thirds of the patients who died had reported adverse experiences related to the pandemic, particularly feelings of anxiety, isolation, and loneliness.

**XXII.** Over a third had experienced disruption to their usual mental health care.



## CLINICAL MESSAGES

### PATIENTS WHO LIVE ALONE



#### 1. Suicide by patients who live alone

Clinicians need to be aware of the vulnerability of patients living alone, who represent approximately half of all patient suicides. Their increased risk arises both from their mental and physical ill-health and from factors weakening their ties with society, such as a lack of employment, recent relationship breakdowns and financial difficulties. Care packages devised by clinical services and other agencies for patients who live alone should address these clinical and social risks.

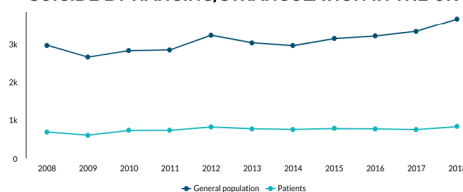
#### 2. Suicide by patients from ethnic minority groups

Clinical services should be aware that the suicide risk profile of patients differs between ethnic groups. Different suicide prevention approaches will be needed, in relation to severe mental illness or depression, alcohol or drug misuse, likely suicide method, or recent migration.

#### 3. Suicide in people aged under 25

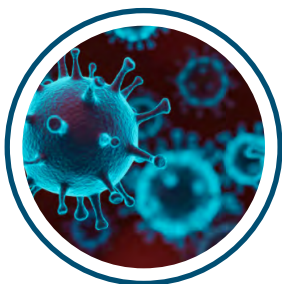
Clinical services should ensure that services for children, young people, and young adults have the skills to respond to the clinical complexity of many younger patients, including combinations of personality disorder diagnosis, eating disorder, self-harm and alcohol or drug misuse. These co-morbidities add to suicide risk but can act as a reason for non-acceptance by services designed for single conditions.

### SUICIDE BY HANGING/STRANGULATION IN THE UK



#### 4. Suicide by hanging/strangulation

Clinical services should be aware of a continuing increase in suicide by hanging/strangulation among patients under mental health care. This is a difficult method to prevent outside institutional settings. Clinicians assessing risk should consider the factors associated with this method; recent risk factors such as self-harm, adverse life events and diagnosis of depression; apparent protective factors such as employment and marriage.



#### 5. Suicide prevention during COVID-19

People under mental health care may be at risk during the pandemic. Some groups who have been especially vulnerable to the acute pandemic may need additional mental health support, as described above. Suicide prevention measures for services should particularly support those who are anxious, isolated or lonely. There should be a focus on patients who are receiving care under community services as well as in acute settings. It is important to minimise disruption to usual care where possible, making use of digital technology where this is appropriate.



#### 6. Suicide prevention in mental health services

Healthcare organisations can use our NCISH toolkit 'Safer Services' to self-assess their services against our 10 key elements of safer care for patients. We recommend that responses be based on recent local audit data or equivalent evidence, and that each element is reviewed annually. Our toolkit has been updated to reflect the key findings and clinical messages within this report.



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## INTRODUCTION

The 2021 annual report from the National Confidential Inquiry into Suicide and Safety in Mental Health (NCISH) provides findings relating to people who died by suicide in 2008-2018 across all UK countries. Additional figures are presented on people convicted of homicide, and on the work we have undertaken in response to the COVID-19 global pandemic.

The NCISH database includes a national case series of suicides by people who have been in contact with mental health services in the previous 12 months. The overall database now stands at over 144,000 suicides in the general population, including over 36,000 patients by this 12 month definition.

Complete details of the NCISH methodology are provided in our previous reports and on our website at: [www.manchester.ac.uk/ncish](http://www.manchester.ac.uk/ncish). In brief, we are notified of all deaths assigned a suicide or undetermined conclusion at coroner's inquest. Currently the median time from the occurrence of a suicide to its registration is 166 days. We then determine which of these people had contact with mental health services in the year before they died, and request that the clinician responsible for their care complete our questionnaire.

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. Our publications have included major UK and national reports, topic-specific reports and peer-reviewed academic papers (see pages 85-91 for further information).

In this report, findings are presented for England, Northern Ireland, Scotland, and Wales for suicide (based on date of death), homicide (based on year of conviction) and homicide-suicide (based on date of offence, in England and Wales only). Our suicide figures differ from official statistics from the Office for National Statistics (ONS) who present figures by date of death registration. We no longer present information relating to homicide in Northern Ireland as we are unable to obtain conviction data.

In our annual reports, figures for the most recent year - in this case 2018 - are incomplete, in part because of the time associated with legal processes but also due to NCISH suspension of data collection during the early months of the COVID-19 pandemic to support reducing burden and releasing capacity in clinical services. 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. Some patient sub-groups are more often subject to late notification - for example in-patient deaths can take up to four years to be registered. In these circumstances we have projected the figures in 2017-2018 using a more individualised approach, i.e. taking into account the proportion of all deaths in recent years in particular sub-groups. In analysing trends the final year is not included because of these estimations. Estimated numbers in the final year are presented as dotted lines in the figures or in a different shade in the bar diagrams. Changes in figures from previous annual reports occur as further information is received.

We have followed guidance from ONS on disclosure control to protect confidentiality within death statistics, and have omitted numbers less than three, including zero. We have applied this rule to all data in this report. The denominator in all estimates is the number of valid cases. All proportions are provided as valid percentages.

### Changes to suicide death coding in Northern Ireland

The Northern Ireland Statistics and Research Agency (NISRA) and the Coroners' Service are reviewing drug-related deaths registered between 2015 and 2018 which were originally recorded as 'undetermined intent' and reclassifying some of these to 'accidental' deaths. These deaths would therefore no longer fall within our suicide definition. NISRA recommends that until the review process is complete, to use figures from 2015 relating to registered deaths from self-inflicted injury only.

This means the figures relating to date of death in Northern Ireland in 2015-2018, and to a lesser extent in 2013 and 2014, have fallen and cannot be compared with the number of suicides in earlier years. Our suicide figures also differ from NISRA who present figures by date of death registration.

## UK-WIDE FINDINGS

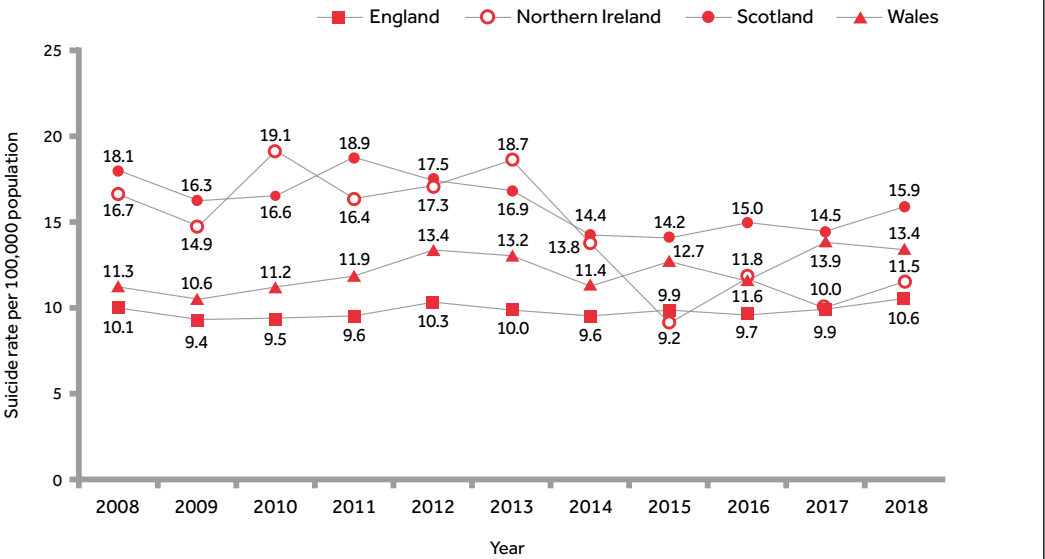


## SUICIDE IN THE UK

Suicide rates for each UK country are shown in Figure 1, presented by date of death. Northern Ireland has had the highest general population rates in recent years but the fall in 2015-2018 is a reflection of the change in how some drug-related deaths are classified. The rate in Scotland has fallen significantly since 2011 but rose in 2018 and remains higher than in England and Wales. The rate in Wales was higher in 2017 but has fallen in 2018, though this single year decrease should be viewed cautiously at this stage.

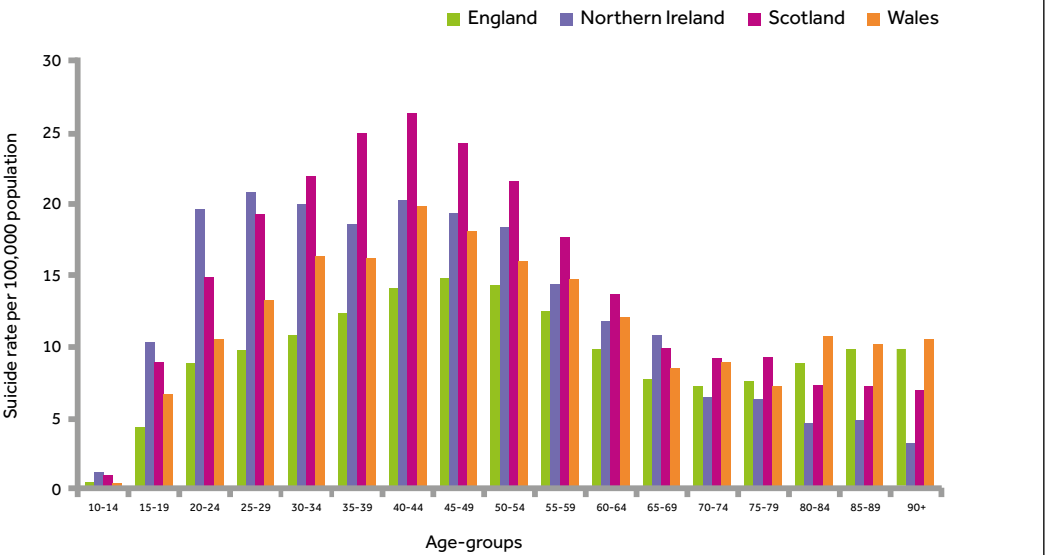
In all countries except Northern Ireland the rates were highest in the middle-aged groups (Figure 2), though the precise age group at highest risk was slightly younger in Scotland. The biggest differences between UK rates, especially in Northern Ireland and Scotland, were in the younger age groups. In England and Wales rates were higher in those aged 80 and above.

Figure 1: Suicide rates by year of death in the general population, by UK country



Note: the rates in 2015-2018 in Northern Ireland indicate the current guidance from NISRA to include only registered deaths resulting from self-inflicted injury (see further details on page 11). Recent ONS figures suggest an increase in 2019 in England and Wales.

Figure 2: Suicide rates in the general population by age-group, by UK country (2008-2018)



## PATIENT SUICIDE

There were 18,029 suicide deaths by patients (i.e. people in contact with mental health services within 12 months of suicide) in the UK in 2008-2018 (excluding data in Northern Ireland in 2018), 27% of all general population suicides. This figure was slightly higher in Scotland and lower in Wales (Table 1). Overall, the highest figures were in 2011-13 (Figure 3), with an apparent fall since then, though we estimate an increase in England in 2018 (Table 2). The fall in Northern Ireland since 2014 reflects the change in coding of certain drug-related deaths.

We were also notified of 22 patient suicides in Jersey, from a general population total of 75 in 2012-2018 (29%). In Guernsey in 2015-2018 (available years of data), we were notified of 28 suicides in the general population, 12 of whom were patients. Suicides by mental health in-patients continue to fall - the average for 2008-12 being 122, and for 2013-17 being 95 (Figure 4) and we estimate the numbers from 2016 onwards to be the lowest over the report period. Suicide by patients within 3 months of discharge have also fallen over the report period - the average for 2008-12 being 275, and for 2013-17 being 202 (Figure 5).

Table 1: Suicide figures by UK country (2008-2018)

	England	Northern Ireland	Scotland	Wales	UK
General population	51,511	2,527	8,473	3,683	66,194
Mental health patients	13,984 (27%)	613 (26%)*†	2,619 (31%)	813 (22%)	18,029 (27%)*

\*patient data unavailable in Northern Ireland in 2018; †the proportion in contact with mental health care is calculated from 2008-2017 general population data

Table 2: Patient suicide: numbers by year and UK country

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
England	1,213	1,168	1,264	1,339	1,379	1,323	1,241	1,260	1,244	1,247	1,306
Northern Ireland	76	64	73	67	78	76	61	35	44	39	*
Scotland	230	221	239	285	264	267	223	226	223	219	222
Wales	56	70	71	68	96	99	62	78	61	79	73
Total	1,575	1,523	1,647	1,759	1,817	1,765	1,587	1,599	1,572	1,584	1,601*

Note: figures from 2016-2018 include estimates based on late notifications. The numbers in Northern Ireland indicate the current guidance from NISRA to include only registered deaths in 2015-2018 resulting from self-inflicted injury (see further details on page 11).

\* patient data unavailable in Northern Ireland in 2018

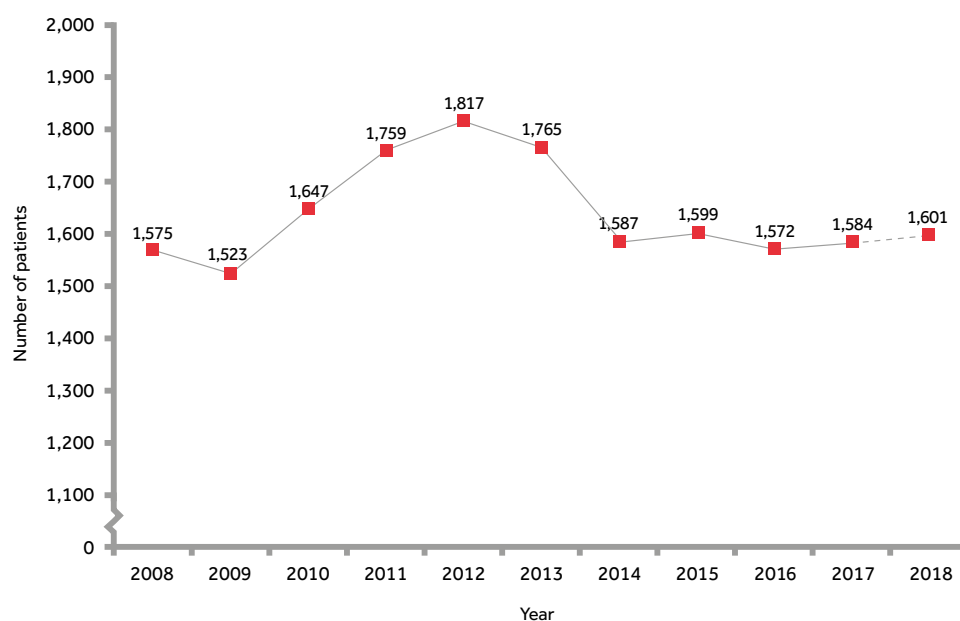
Table 3: Patient suicide: number of in-patient suicides by year and UK country

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
England	104	100	92	101	93	97	77	89	64	56	57
Northern Ireland	3	5	<3	3	4	3	<3	<3	<3	<3	*
Scotland	15	11	11	20	19	16	12	19	15	9	13
Wales	3	7	10	3	7	4	4	5	3	3	4
Total	125	123	113	127	123	120	93	113	82	68	74*

Note: figures from 2016–2018 include estimates based on late notifications

\* patient data unavailable in Northern Ireland in 2018

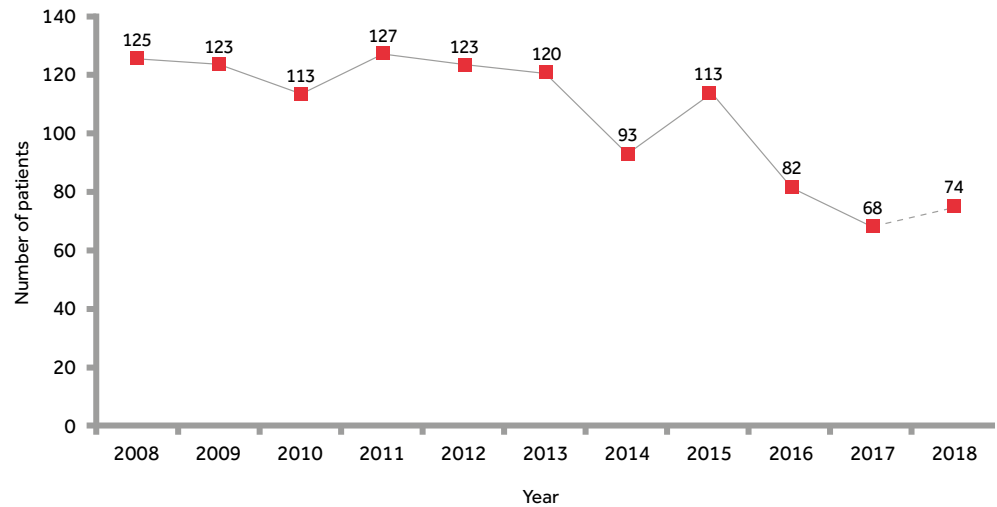
Figure 3: Patient suicide in the UK: numbers by year



Note: excludes data in Northern Ireland in 2018

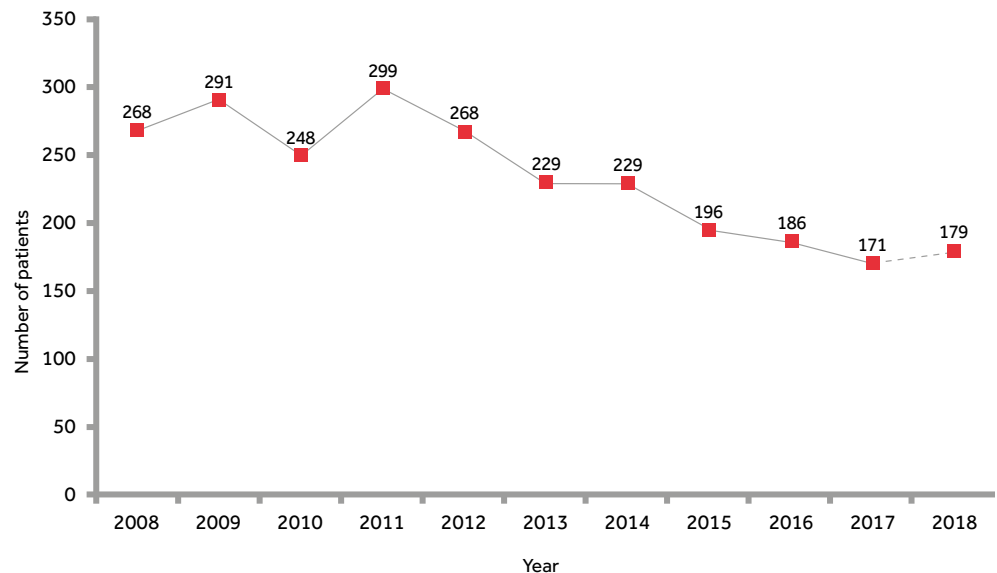


Figure 4: Patient suicide in the UK: number of in-patient suicides by year



Note: excludes data in Northern Ireland in 2018

Figure 5: Patient suicide in the UK: number who died within 3 months of in-patient discharge by year

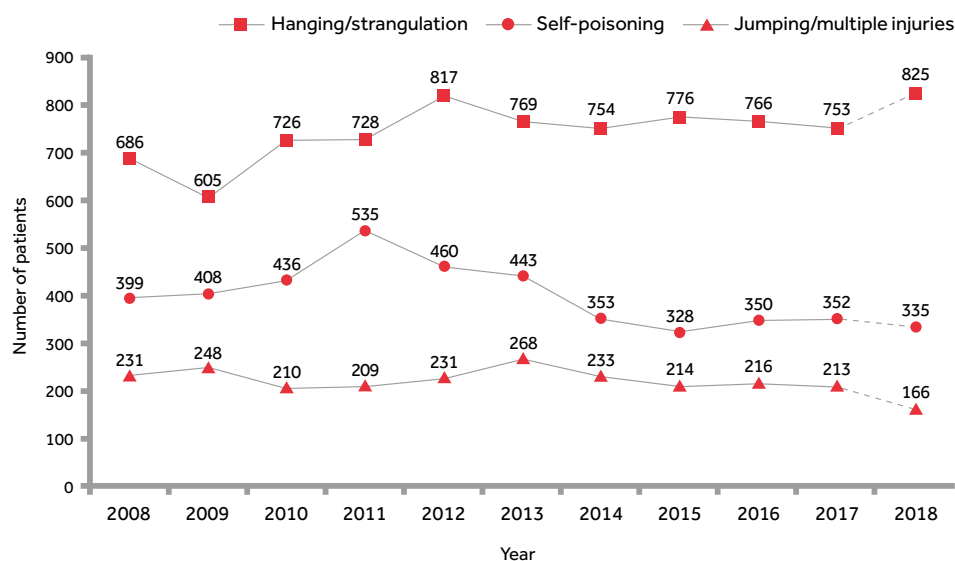


Note: excludes data in Northern Ireland in 2018

Methods of suicide in patients are broadly similar across the UK countries, with hanging/strangulation the most common method overall (45%) followed by self-poisoning (overdose) (25%) and jumping/multiple injuries (14%) (Figure 6 presents these main methods of suicide). Opiates (including opiate compounds) are the most commonly used type of drug in fatal overdose (36%). Less frequent methods were drowning (5%), cutting and stabbing (3%), gas inhalation (3%), suffocation/asphyxiation (2%) and firearms (<1%).

In the themed section on page 29 we provide more details of deaths by hanging/strangulation.

Figure 6: Three main methods of suicide by patients in the UK



Note: excludes data in Northern Ireland in 2018

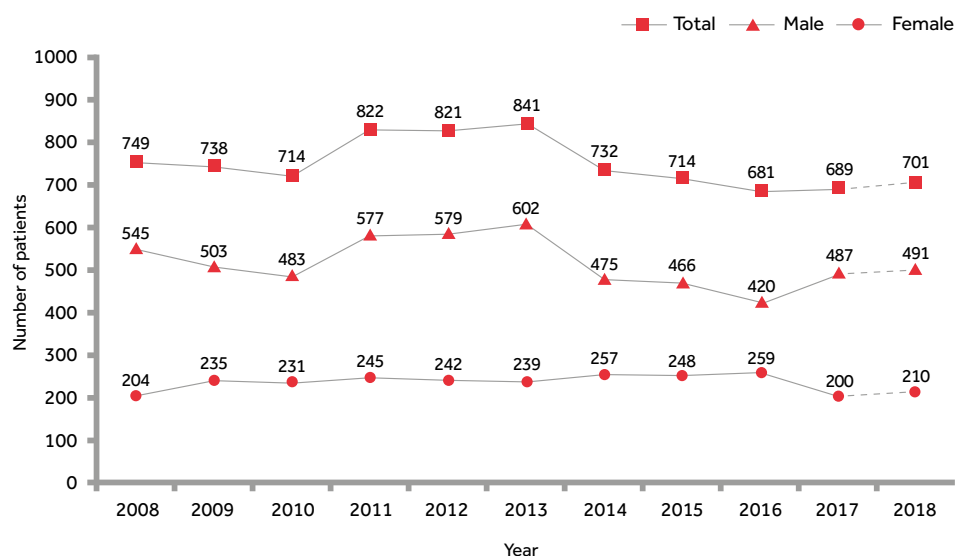
## THEMED TOPICS

In our reports we provide more detailed data on particular themed topics. Some of the groups below reflect those who have been vulnerable and a source of concern during the pandemic. We are therefore presenting pre-pandemic data from the full report period 2008-2018 that can contribute to suicide prevention.

## SUICIDE BY PATIENTS WHO LIVED ALONE (UK)

In the UK in 2008-2018, there were 8,202 patients who died by suicide who were living alone. This represents 48% of all patient suicides, an average of 746 deaths per year. The number increased between 2008 and 2013 but has since fallen, though the number has risen in men in 2017 and 2018 (Figure 7).

Figure 7: Suicide by patients who lived alone (UK)



Note: patient data unavailable in Northern Ireland in 2018. Male and female numbers in 2016 and 2017 do not total the overall figure due to rounding.

Those who lived alone were more likely than other patients to die by self-poisoning (29% v. 20%) and less likely to die by hanging/strangulation (41% v. 49%). The most common drug types used in self-poisoning were opioids (opiates or paracetamol/opiate compounds) – these were more likely to be used in overdose compared to other patients (38% v. 33%).

Tables 4-6 show the characteristics of patients who lived alone. They were more likely to be aged 45-64 or aged 65 and above, be male, unemployed or on long-term sick leave, and White compared to other patients (Table 4). More patients who lived alone had a diagnosis of schizophrenia (including other delusional disorders), alcohol or drug dependence/misuse, and personality disorder compared to other patients, and fewer had affective disorder (bipolar disorder and depression) or anxiety disorders (Table 5). Comorbidity was more common among patients who lived alone and they were also more likely to have a concurrent physical illness (26% v. 23%), most commonly musculoskeletal disease (492, 25%), cardiovascular disease (473, 24%) and chronic pain (422, 22%).

They were more likely to have been ill for longer than 5 years, to have died within 3 months of hospital discharge, and to have missed their last contact with services. Since 2015, we have asked clinicians whether patients were discharged to poor social support, and this was the case for 22% of those living alone, significantly more than other discharged patients (8%).

Factors commonly associated with suicide, including previous self-harm, alcohol or drug misuse and violence were all more common among patients who lived alone (Table 6). They were also more likely to have experienced serious financial difficulties in the preceding three months (18% v. 15%).

Table 4: Demographic characteristics of patients who lived alone and died by suicide (UK, 2008-2018)

	Lived alone N=8,202	
	Number	%
Age: median (range)	47 (16-96)	▲
Age group:		
Under 25	321	4 ▼
25-44	3,019	39
45-64	3,367	43 ▲
≥65	1,133	14 ▲
Male <sup>†</sup>	5,628	69 ▲
Marital status:		
Single	3,968	52 ▲
Divorced/separated	2,766	36 ▲
Widowed	701	9 ▲
Married	160	2 ▼
Employment status:		
In paid employment	1,086	14 ▼
Unemployed	4,119	54 ▲
Long-term sick leave	1,099	14 ▲
Retired	1,137	15
Ethnic minority group	423	6 ▼

<sup>†</sup> includes estimated figures in 2016-2018

▲▼ = significantly (p<0.01) higher or lower than patients who did not live alone; see [supplementary information](#) for comparative percentages

Table 5: Clinical and service contact characteristics of patients who lived alone and died by suicide (UK, 2008-2018)

	Lived alone N=8,202		
	Number	%	
<b>Clinical features</b>			
Primary diagnosis:			
Schizophrenia and other delusional disorders	1,507	19	▲
Affective disorder (bipolar disorder and depression)	2,855	37	▼
Alcohol dependence/misuse	759	10	▲
Drug dependence/misuse	500	6	▲
Personality disorder	860	11	▲
Dementia	364	5	▼
Any secondary diagnosis	4,307	56	▲
Duration of illness (<12m)	4,555	63	▲
<b>Priority groups</b>			
In-patients	482	6	▼
Recent (<3 months) discharge	1,250	17	▲
Under crisis resolution/home treatment services	976	13	▼
Missed last contact	1,937	27	▲
Non-adherence with medication	934	13	
<b>Service contact</b>			
First contact with mental health services <12 months	1,501	21	▼
Last admission was a re-admission	574	14	
Last contact within 7 days of death	3,641	47	▼
Immediate risk: low or none	5,909	84	
Long-term risk: low or none	3,835	56	▼

▲▼ = significantly (p<0.01) higher or lower than patients who did not live alone; see [supplementary information](#) for comparative percentages

Table 6: Behavioural characteristics of patients who lived alone and died by suicide (UK, 2008-2018)

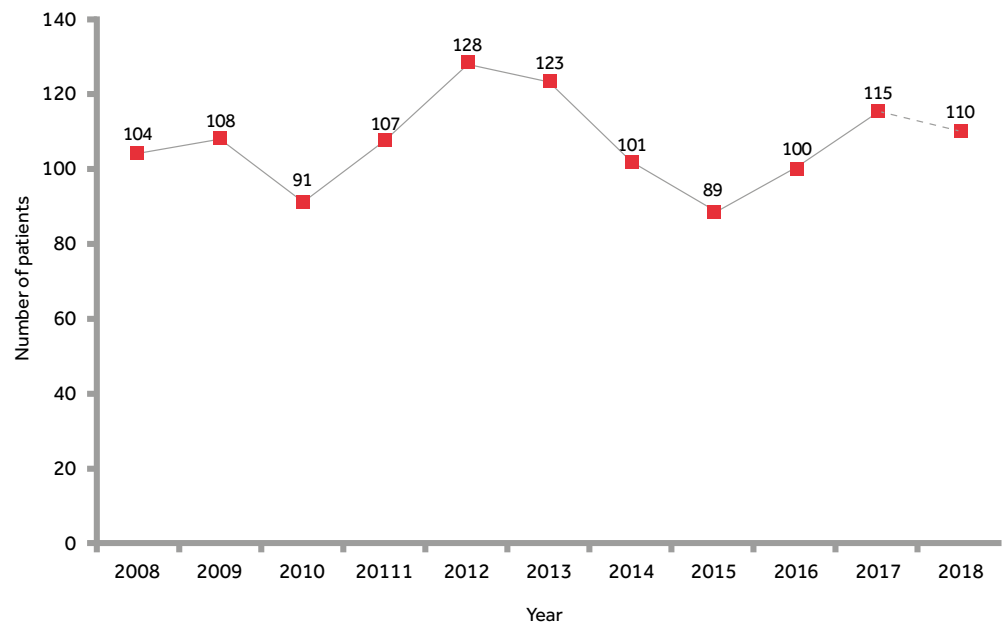
	Lived alone N=8,202		
	Number	%	
<b>Behavioural features</b>			
History of self-harm	5,069	67	▲
History of violence	1,760	24	▲
History of alcohol misuse	4,059	53	▲
History of drug misuse	3,077	41	▲

▲▼ significantly (p<0.01) higher than patients who did not live alone; see [supplementary information](#) for comparative percentages.

## SUICIDE BY PATIENTS FROM DIFFERENT ETHNIC MINORITY GROUPS (UK)

In the UK in 2008-2018, there were 1,176 patients who died by suicide and who were from different ethnic minority groups. This represents 7% of all patient suicides, an average of 107 deaths per year. There was no overall trend over the report period, though the number fell after 2012 but has increased since 2015 (Figure 8). The number of patients in the different ethnic groups were: 380 (34%) South Asian; 130 (12%) Black African; 113 (10%) Black Caribbean; 48 (4%) Chinese; 222 (20%) mixed/multiple ethnicity; and 221 (20%) 'other' ethnicity.

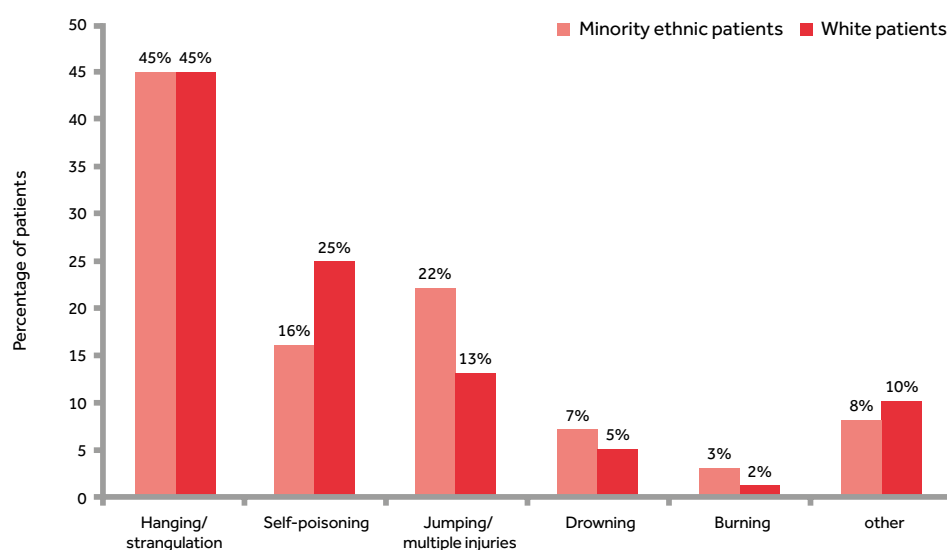
Figure 8: Suicide by patients from ethnic minority groups (UK)



Note: patient data unavailable in Northern Ireland in 2018

The most common methods of suicide in ethnic minority groups overall were hanging/strangulation, jumping/multiple injuries, and self-poisoning (Figure 9). Suicides by these patients were more often by jumping/multiple injuries and burning and less often by self-poisoning.

Figure 9: Method of suicide by patients from ethnic minority groups (UK, 2008-2018)



Tables 7-9 show the characteristics of South Asian, Black African, Black Caribbean, Chinese and multiple/mixed ethnicity patients. Although the numbers were relatively small, there were some differences between groups.

South Asian patients were older, more likely to be male (71% v. 65%) and less likely to be unmarried (59% v. 80%) or living alone (26% v. 47%). They were more likely to have affective disorder (bipolar disorder and depression; 42% v. 34%) and less likely to have a co-morbid diagnosis (42% v. 49%). A higher proportion were under the care of crisis resolution/home treatment services (14% v. 9%). South Asian patients were less likely to have missed their last contact with services (20% v. 29%). Fewer had a history of alcohol (28% v. 39%) or drug misuse (30% v. 44%).

Patients from a Black African background were younger, more likely to be unmarried (82% v. 71%) and living alone (51% v. 39%). Over half had schizophrenia and other delusional disorders (53% v. 31%) and more had missed their last contact with services (34% v. 24%). Long-term risk was more often viewed as low or none by clinicians (72% v. 62%).

Patients from a Black Caribbean background were older compared to other ethnic minority patients, and more likely to be unmarried (82% v. 71%), living alone (52% v. 39%) and on long-term sick leave (20% v. 10%). A diagnosis of schizophrenia and other delusional disorders was common (42% v. 33%) and they had high rates of previous violence (37% v. 24%), alcohol (49% v. 34%) and drug misuse (54% v. 38%).

Of the Chinese patients, 63% were female, significantly more than other ethnic minority patients (32%). Over a third had been ill for less than 12 months (37% v. 21%). Fewer Chinese patients had a history of alcohol (21% v. 36%) or drug misuse (17% v. 41%).

Patients from a multiple/mixed ethnic group were more likely to be younger, unmarried (85% v. 69%) and living alone (51% v. 37%) compared to other groups. A higher proportion had a diagnosis of personality disorder (15% v. 5%) but they were less likely to have schizophrenia and other delusional disorders (26% v. 36%). Co-morbidity was more common (53% v. 45%) and the majority had been ill for longer than 12 months (85% v. 77%). Around a third had missed their last contact with services (32% v. 24%). Long-term risk was less likely to be viewed by clinicians as low or none (56% v. 65%). A history of self-harm (73% v. 55%), alcohol (48% v. 32%) and drug misuse (56% v. 35%) were all more common characteristics.

## Recent immigrants to the UK

Since 2011 we have collected data on suicide by patients who were either seeking permission to stay in the UK or were resident in the UK for less than 5 years (referred to here as recent migrants). There were 92 (12%) recent migrants from an ethnic minority background who died by suicide, an average of 12 deaths per year. The most common method of suicide in these migrants was hanging/strangulation (43, 47%) and jumping/multiple injuries (22, 24%). Three-quarters were male (66, 72%) and over one in five were aged under 25 (21, 23%). The majority had a primary diagnosis of affective disorder (bipolar disorder and depression; 37, 41%) and schizophrenia and other delusional disorders (28, 31%). They were less likely to have a secondary diagnosis (32% v. 50%) and more likely to have been ill for less than 12 months (31% v. 21%). Fewer had a history of drug misuse (24% v. 42%) but other characteristics commonly associated with suicide including self-harm, previous violence and alcohol misuse were similar to all patients from ethnic minority groups.

Table 7: Demographic characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	South Asian N=380		Black African N=130		Black Caribbean N=113	
	Number	%	Number	%	Number	%
Age: median (range)	42 (15-83)	▲	34 (18-79)	▼	43 (12-83)	▲
Male	270	71 ▲	85	65	84	74
Unmarried	216	59 ▼	103	82 ▲	88	82 ▲
Unemployed	185	50	72	60	56	52
On long-term sick leave	37	10	12	10	22	20 ▲
Living alone	93	26 ▼	63	51 ▲	55	52 ▲
Homeless	9	2	4	3	4	4

▲▼ = significantly (p<0.05) higher or lower than other ethnic minority patients

Table 7 (continued): Demographic characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	Chinese N=48		Multiple/mixed N=222		White N=15,634	
	Number	%	Number	%	Number	%
Age: median (range)	38 (19-91)		36 (15-82)	▼	46 (10-100)	▲
Male	18	38 ▼	138	62	10,358	63
Unmarried	30	67	182	85 ▲	10,873	73
Unemployed	20	43	110	52	6,901	47 ▼
On long-term sick leave	<3	-	30	14	1,810	12
Living alone	16	35	107	51 ▲	7,277	49 ▲
Homeless	<3	-	5	2	380	3

▲▼ = significantly (p<0.05) higher or lower than other ethnic minority patients



Table 8: Clinical and service contact characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	South Asian N=380		Black African N=130		Black Caribbean N=113	
	Number	%	Number	%	Number	%
<b>Clinical features</b>						
Primary diagnosis:	116	31	67	53 ▲	48	42 ▲
Schizophrenia and other delusional disorders	157	42 ▲	35	28 ▼	33	29
Affective disorder (bipolar disorder and depression)						
Alcohol dependence/misuse	14	4	5	4	6	5
Drug dependence/misuse	18	5	3	2	6	5
Personality disorder	22	6	5	4	5	4
Any secondary diagnosis	156	42 ▼	50	40	58	52
Duration of illness <12 months	89	25	25	21	17	16
<b>Priority groups</b>						
In-patients	26	7	4	3	12	11
Recent (<3 months) discharge	55	16	24	19	11	11
Under crisis resolution/home treatment services	51	14 ▲	9	7	11	11
Missed last contact	69	20 ▼	41	34 ▲	22	23
Non-adherence with medication	65	19	22	18	14	13
<b>Service contact</b>						
First contact with mental health services <12mo	99	28	33	28	17	17 ▼
Last admission was a re-admission	34	18	10	13	10	15
Last contact within 7 days of death	185	49	57	44	56	50
Immediate risk: low or none	309	90	109	90	85	88
Long-term risk: low or none	218	67	86	72 ▲	62	66

▲▼ = significantly (p<0.05) higher or lower than other ethnic minority patients

Table 8 (continued): Clinical and service contact characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	Chinese N=48		Multiple/mixed N=222		White N=15,634	
	Number	%	Number	%	Number	%
<b>Clinical features</b>						
Primary diagnosis:						
Schizophrenia and other delusional disorders	17	35	58	26 ▼	2,245	15 ▼
Affective disorder (bipolar disorder and depression)	22	45	79	36	6,362	41 ▲
Alcohol dependence/misuse	<3	-	7	3	1,395	9 ▲
Drug dependence/misuse	<3	-	13	6	915	6
Personality disorder	<3	-	32	15 ▲	1,523	10 ▲
Any secondary diagnosis	20	41	116	53 ▲	8,098	53 ▲
Duration of illness <12 months	17	37 ▲	32	15 ▼	2,974	21
<b>Priority groups</b>						
In-patients	5	10	17	8	1,025	7
Recent (<3 months) discharge	6	14	38	19	2,278	16
Under crisis resolution/home treatment services	7	16	15	7	2,071	14 ▲
Missed last contact	10	23	63	32 ▲	3,400	24
Non-adherence with medication	5	11	29	15	1,744	12 ▼
<b>Service contact</b>						
First contact with mental health services <12mo	21	46 ▲	44	22	3,749	26
Last admission was a re-admission	3	12	15	13	1,039	14
Last contact within 7 days of death	24	49	107	49	7,230	47
Immediate risk: low or none	39	93	173	85	11,763	84 ▼
Long-term risk: low or none	27	66	113	56 ▼	7,859	58 ▼

▲▼ = significantly (p&lt;0.05) higher or lower than other ethnic minority patients

Table 9: Behavioural characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	South Asian N=380		Black African N=130		Black Caribbean N=113	
	Number	%	Number	%	Number	%
<b>Behavioural features</b>						
History of self-harm	195	55	63	51	64	58
History of violence	81	23	40	32	39	37 ▲
History of alcohol misuse	101	28 ▼	36	30	52	49 ▲
History of drug misuse	108	30 ▼	49	41	58	54 ▲

▲ ▼ = significantly (p<0.05) higher or lower than other ethnic minority patients

Table 9 (continued): Behavioural characteristics of patients who died by suicide by ethnic group (UK, 2008-2018)

	Chinese N=48		Multiple/mixed N=222		White N=15,634	
	Number	%	Number	%	Number	%
<b>Behavioural features</b>						
History of self-harm	23	47	156	73 ▲	9,926	66 ▲
History of violence	7	15	56	27	3,127	22 ▼
History of alcohol misuse	10	21 ▼	102	48 ▲	7,273	48 ▲
History of drug misuse	8	17 ▼	121	56 ▲	5,449	36

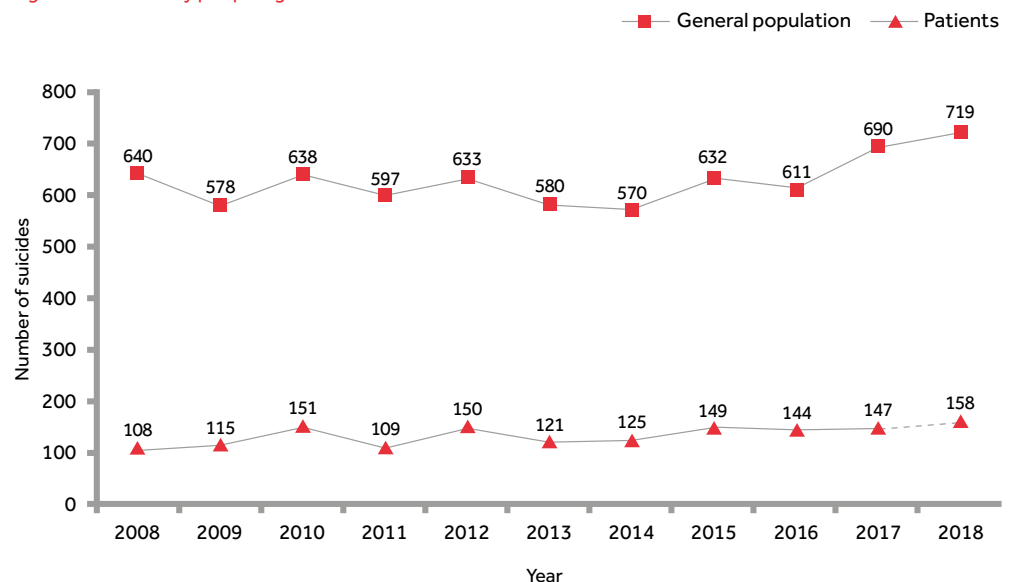
▲ ▼ = significantly (p<0.05) higher or lower than other ethnic minority patients

## SUICIDE BY YOUNG PEOPLE (UK)

In the UK in 2008-2018, there were 6,888 suicides in the general population by people aged under 25, an average of 626 deaths per year. 2,364 were aged under 20, an average of 215 per year, and 1,058 were aged under 18, an average of 96 per year. The number of deaths by people aged under 25 increased over the report period (Figure 10). This increase has been driven by those aged 15-17 where there was a 28% increase in the number between 2008 and 2011 (n=274) and 2015-2018 (n=350).

1,477 (21%) were suicides by patients, i.e. people who had been in contact with mental health services in the previous 12 months, an average of 134 per year. The majority (86%) were aged 18-24; 205 (14%) were aged under 18, an average of 19 deaths per year (Figure 11). The number of patients aged under 25 who died by suicide increased over the report period (Figure 10). This was driven by a 57% increase in young female patients between 2008 and 2011 (n=155) and 2015-2018 (n=243). There was also an increase in the number of patients aged under 18 who died by suicide (Figure 12), driven by a 62% increase in patients aged 15-17 (from 50 in 2008-2011 to 81 in 2015-2018).

Figure 10: Suicide by people aged under 25 in the UK



Note: patient data unavailable in Northern Ireland in 2018

Figure 11: Number of patient suicides by age and gender (UK, 2008-2018)

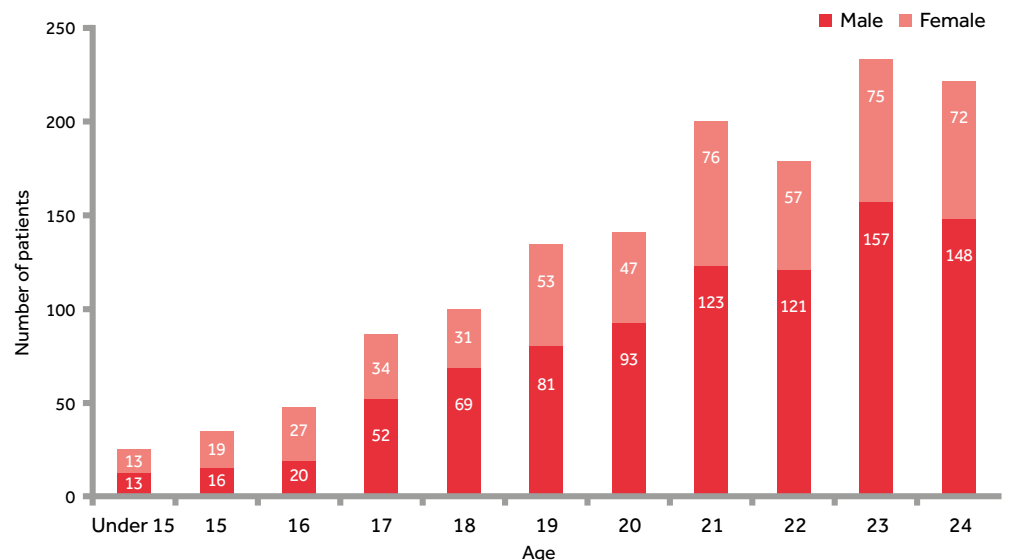
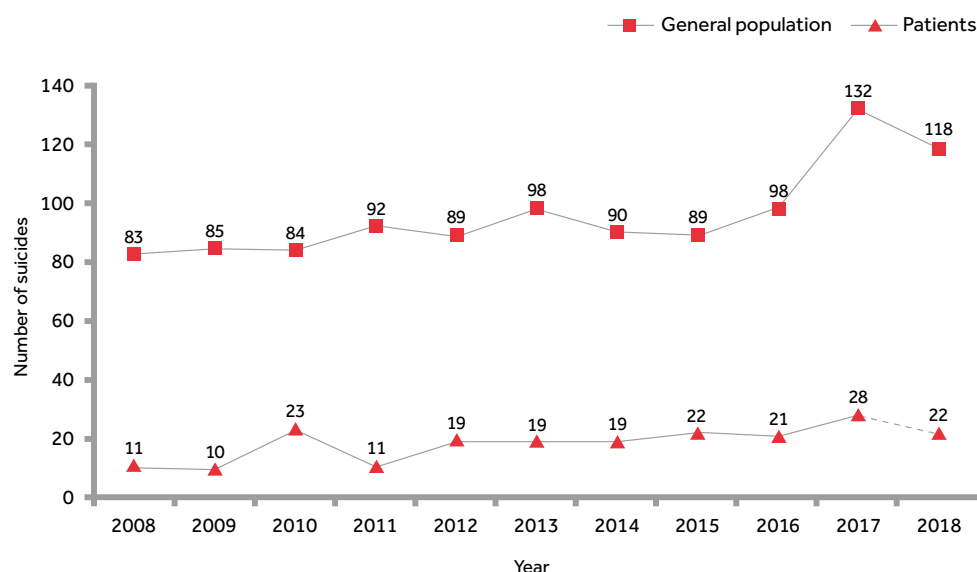


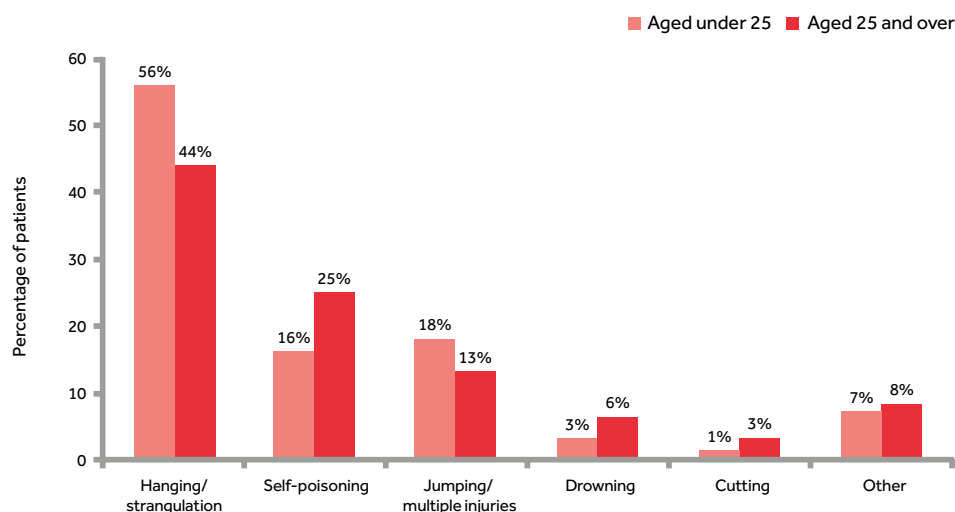
Figure 12: Suicide by people aged under 18 in the UK



Note: patient data unavailable in Northern Ireland in 2018

The most common methods of suicide in patients aged under 25 were hanging/strangulation and jumping/multiple injuries (Figure 13). Suicide by hanging/strangulation and jumping/multiple injuries were proportionally more common compared to older patients while self-poisoning, drowning, and cutting were less common. The number of young patients who died by hanging/strangulation increased over the report period - an 82% increase between 2008 and 2017.

Figure 13: Method of suicide in patients aged under 25 (UK, 2008-2018)



Tables 10-12 show the characteristics of patients aged under 25. Diagnoses of personality disorder were common among patients under 25 (18% of patients aged 18-24, 5% of patients under 18), as were drug dependence/misuse and eating disorders, while affective disorder (bipolar disorder and depression) and alcohol dependence/misuse were less common (Table 11). There was an increase in the number (but not the proportion) of younger patients with affective disorder and anxiety disorders over the report period. 76% had a history of self-harm; higher than older patients (64%). A third (33%) had a combination of previous self-harm, a co-morbid diagnosis (mostly depressive illness) and a history of alcohol or drug misuse, indicating clinical complexity.

Younger patients were more likely to have been ill for less than a year, to have missed their last contact with services and been non-adherent with medication compared to older patients (Table 11). In 2011–2018, 15% had reportedly used the internet for suicide-related purposes (e.g. visited pro-suicide websites), significantly more than older patients (7%).

Table 10: Demographic characteristics of patients aged under 25 (UK, 2008–2018)

	Patients aged under 25 N=1,477	
	Number	%
Male	893	64
Living alone	321	25 ▼
Full time student	279	22 ▲
Ethnic minority group	163	12 ▲
Homeless	58	4 ▲

▲▼ = significantly (p<0.01) higher or lower than older patients; see [supplementary information](#) for comparative percentages

Table 11: Clinical and service contact characteristics of patients aged under 25 (UK, 2008–2018)

	Patients aged under 25 N=1,477	
	Number	%
<b>Clinical features</b>		
Primary diagnosis:		
Schizophrenia and other delusional disorders	233	17
Affective disorder (bipolar disorder and depression)	349	26 ▼
Alcohol dependence/misuse	72	5 ▼
Drug dependence/misuse	109	8 ▲
Personality disorder	219	16 ▲
Eating disorders (primary or secondary diagnosis)	54	4 ▲
Anxiety disorders	63	5
Any secondary diagnosis	736	55
Duration of illness (<12 months)	309	26 ▲
<b>Priority groups</b>		
In-patients	94	7
Recent (<3 months) discharge	177	14
Under crisis resolution/home treatment services	114	9 ▼
Missed last contact	370	29 ▲
Non-adherence with medication	186	15 ▲
<b>Service contact</b>		
First contact with mental health services <12 months	427	33 ▲
Last admission was a re-admission	86	16
Last contact within 7 days of death	566	41 ▼
Immediate risk: low or none	1,032	83
Long-term risk: low or none	663	57

▲▼ = significantly (p<0.01) higher or lower than older patients; see [supplementary information](#) for comparative percentages

Table 12: Behavioural characteristics of patients aged under 25 (UK, 2008-2018)

	Patients aged under 25 N=1,477	
	Number	%
History of self-harm	1,019	76 ▲
History of violence	349	27 ▲
History of alcohol misuse	645	48
History of drug misuse	747	56 ▲

▲▼ = significantly ( $p < 0.01$ ) higher than older patients; see [supplementary information](#) for comparative percentages

Information relating to child suicide rates during the COVID-19 pandemic can be found in the following report from the National Child Mortality Database: [Child Suicide Rates during the COVID-19 Pandemic in England: Real-time Surveillance \(July 2020\)](#).

## SUICIDE BY HANGING/STRANGULATION (UK)

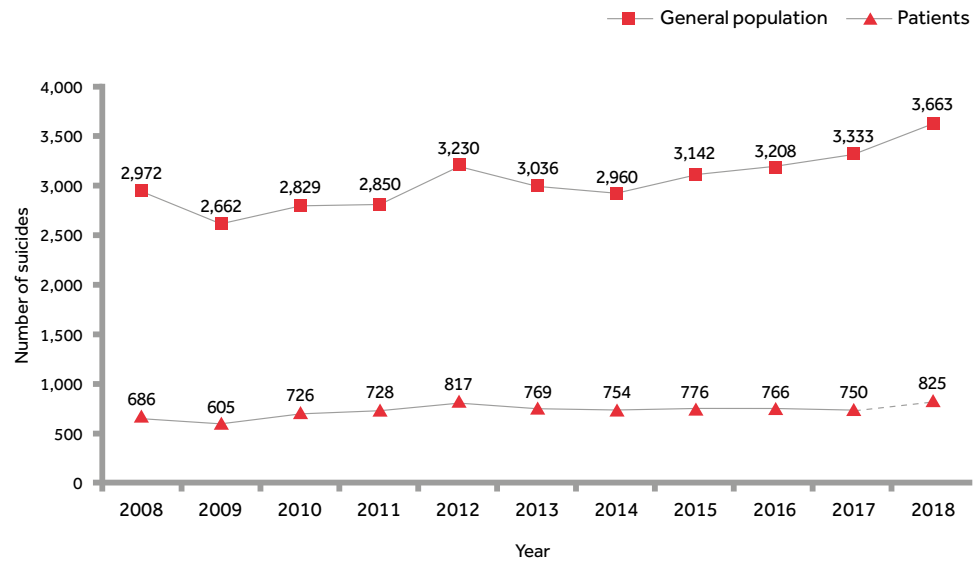
Here we present information on people who have died by hanging/strangulation, in order to inform prevention of these deaths under mental health care. We are aware that discussing methods of death in detail may be distressing for some readers.

In the UK in 2008-2018, there were 33,885 suicides in the general population by hanging/strangulation, an average of 3,080 deaths per year. The number of deaths by hanging/strangulation increased over the report period (Figure 14).

8,202 (24%) were suicides by patients, i.e. people who had been in contact with mental health services in the previous 12 months, an average of 746 per year, 46% of all patient suicides. The number of patients who died by hanging/strangulation increased by 20% between 2008 and 2018 (Figure 13). This increase was in both male and female patients and in those aged under 25. Hanging/strangulation was most prevalent in those aged 35 to 54 in both men and women (48% and 46% respectively).



Figure 14: Suicide by hanging/strangulation in the UK



Note: patient data unavailable in Northern Ireland in 2018

Tables 13-15 show the characteristics of patients who died by hanging/strangulation. They were more likely to be male, employed and married compared to those who died by other means (Table 13). Diagnoses of affective disorder (bipolar disorder and depression) and adjustment disorder were more common, while fewer had schizophrenia and other delusional disorders (Table 14). Over a quarter had been ill for less than a year, a higher proportion than other patients (26% v. 17%). Those who died by hanging/strangulation were more likely to be receiving care under crisis resolution/home treatment teams (15% v. 13%) or psychological therapies services (IAPT - England only) (5% v. 3%). Between 2013 and 2018, 18% had been urgently referred to services by their GP, more than other patients (13%).

The proportion with a history of self-harm was similar to other patients (Table 15). However, more had been seen by the emergency department for self-harm in the preceding 3 months (20% v. 17%). Recent adverse life events were experienced by 54%, with serious financial difficulties (19% v. 15%), relationship break-up (13% v. 7%) and workplace problems (7% v. 4%) more commonly reported than among other patients.

Table 13: Demographic characteristics of patients who died by hanging/strangulation (UK, 2008-2018)

	Patients who died by hanging/strangulation N=8,202	
	Number	%
Age: median (range)	44 (10-98)	▼
Male	5,627	72 ▲
Married	2,231	30 ▲
Living alone	3,183	44 ▼
In full time employment	1,858	26 ▲
On long-term sick leave	714	10 ▼
Ethnic minority group	495	7
Homeless	213	3

▲▼ = significantly ( $p < 0.01$ ) higher or lower than other patients; see [supplementary information](#) for comparative percentages

Table 14: Clinical and service contact characteristics of patients who died by hanging/strangulation (UK, 2008-2018)

	Patients who died by hanging/strangulation N=8,202	
	Number	%
<b>Clinical features</b>		
Primary diagnosis:		
Schizophrenia and other delusional disorders	931	12 ▼
Affective disorder (bipolar disorder and depression)	3,298	43 ▲
Alcohol dependence/misuse	685	9
Drug dependence/misuse	479	6
Personality disorder	681	9
Adjustment disorder	483	6 ▲
Any secondary diagnosis	3,859	51 ▼
Duration of illness (<12 months)	1,835	26 ▲
<b>Priority groups</b>		
In-patients	539	7
Recent (<3 months) discharge	1,165	16
Under crisis resolution/home treatment services	1,116	15 ▲
Missed last contact	1,689	24
Non-adherence with medication	885	13
<b>Service contact</b>		
First contact with mental health services <12 months	2,229	31 ▲
Last admission was a re-admission	508	15
Last contact within 7 days of death	3,581	47
Immediate risk: low or none	5,741	83 ▼
Long-term risk: low or none	3,845	58

▲▼ = significantly (p<0.01) higher or lower than other patients; see [supplementary information](#) for comparative percentages

Table 15: Behavioural characteristics of patients who died by hanging/strangulation (UK, 2008-2018)

	Patients who died by hanging/strangulation N=8,202	
	Number	%
History of self-harm	4,836	65
History of violence	1,633	23 ▲
History of alcohol misuse	3,540	48
History of drug misuse	2,769	37

▲▼ = significantly (p<0.01) higher or lower than other patients; see [supplementary information](#) for comparative percentages

## NCISH SUICIDE PREVENTION DURING COVID-19

This year, we have changed our way of working to support clinicians to deliver care safely during the global COVID-19 pandemic.

### UK-wide support for local suicide prevention

As part of our NHSE/I-funded work to support local areas to develop suicide prevention quality improvement plans, we are in contact with the majority of local health and care systems in England. We extended our offer of support to specifically cover suicide prevention during the global pandemic. This has included our research team quality-assuring publications and guidance, and sending summaries, links, and documents directly to clinical staff. We asked our contacts in local areas to tell us about concerns they had, and ran interactive webinars around these themes, hosted by our colleagues at the National Collaborating Centre for Mental Health, and joined by people with lived experience. Our research team collated evidence and guidance in common themes that our clinical colleagues told us about, and these are kept updated on our website. As well as the local areas we already had contact with through our work in England, we extended this support offer to all mental health organisations in England, Northern Ireland, Scotland, and Wales.

### Contributing to the national academic suicide prevention response

Our senior clinical academics are part of the national academic suicide prevention response to COVID-19. Alongside other experts, they have advised the government, and published on suicide prevention and self-harm during the pandemic. Key publications include:

*[Suicide risk and prevention during the COVID-19 pandemic](#)*

*[Child suicide rates during the COVID-19 pandemic in England: Real Time Surveillance](#)*

*[The impact of COVID-19 pandemic on self-harm and suicidal behaviour: a living systematic review](#)*

*[Effects of the COVID-19 pandemic on self-harm](#)*

*[Effects of the COVID-19 pandemic on self-harm in primary care](#)*

*[Trends in suicide during the COVID-19 pandemic](#)*

*[Suicide trends in the early months of the COVID-19 pandemic](#)*

### Real-time surveillance of suspected suicides

We have worked with several local areas in England to collate numbers of deaths from their real-time surveillance (RTS) of suspected suicides for the months before and after lockdown. The median time to inquest after a suicide death is 5-6 months, too long for close monitoring. RTS provides us with numbers of suspected deaths as they occur, unconfirmed by inquest. We found no rise in the number of suspected suicides in the general population in these areas in the months after first lockdown in 2020. However, caution is needed in interpretation as we cannot rule out higher figures in some local areas or in demographic subgroups, and because it is too early to examine the long term impact of the pandemic on mental health and suicide. You can access our article in the Lancet Regional Health [here](#).

### Real-time surveillance of suspected suicide deaths under mental health care

In response to concerns about the effects of COVID-19 and related social distancing measures on people with pre-existing mental illness, we established a 10-question real-time data collection of suspected suicide deaths (i.e. unconfirmed by inquest) occurring under the care of mental health services in England.

Here we present initial findings from the deaths reported to us in the first six months of the pandemic (23rd March 2020 – 30th September 2020). These findings represent fewer than a quarter of the number of patient suicides recorded each year, and as such cannot be considered representative. It is possible that the patient deaths included here represent the deaths that clinicians are most concerned about or aware of.

### Box 1: Suspected suicide deaths by patients under mental health care during COVID-19: questions

1. Date of death
2. Name of mental health trust the patient was receiving care under
3. Age in years
4. Sex
5. Ethnicity
6. Method of probable suicide
7. Primary psychiatric diagnosis
8. Which services was the patient under at the time of death?
9. Did the patient have any adverse experiences as a result of COVID-19 or social distancing measures?
10. Was there a disruption to mental health care as a result of COVID-19 or social distancing measures?

### Numbers of suspected suicide deaths reported to NCISH

We were notified about 133 suspected suicide deaths by people under the care of mental health services in England in the 6 months from the introduction of lockdown measures on the 23rd March 2020 to 30th September 2020. The most common method of death was hanging/strangulation (60, 46%), followed by self-poisoning (24, 18%).

### Demographic and clinical characteristics

Most patients who died were male (83, 64%) and 25 (19%) of the deaths we were told about were in people aged under 25. The most common diagnoses were affective disorders (bipolar disorder and depression; 37, 28%), followed by personality disorders (22, 17%). The majority of these suspected suicide deaths occurred under community clinical settings, rather than acute or crisis care settings (Table 16). We acknowledge that mental health services have adapted in many ways during the COVID-19 pandemic, including discharging patients from in-patient settings to manage infection risk.

Table 16: Clinical setting of patients who died by suspected suicide in England (23 March 2020-30 September 2020)

Clinical setting	Total=133	
	Number	%
In-patient	<3	-
Community Mental Health Team	46	38
Crisis Resolution/Home Treatment Team	12	10
Improving Access to Psychological Therapies (IAPT)	12	10
Older People's Mental Health Services	11	9
Primary care	7	6
Substance misuse services	5	4

## Experiences and disruptions to care as a result of COVID-19 or social distancing measures

Information was provided by the reporting clinician on their patients' experiences as a result of the COVID-19 pandemic for 86 (65%) patient deaths (Tables 17 and 18). In many cases these patients had experienced anxiety, isolation or loneliness, loss of job or other financial stressors. 8% (7/86) had experienced loss of coping mechanisms and in 9% (n=8) of patients there was evidence of increased substance misuse.

Our findings suggest that over a third of the patients whose deaths were notified to us experienced disruption to mental health care as a result of the COVID-19 pandemic. Where disruptions to mental health care were reported, this was most often disruption to regular support (i.e. support that the patient was receiving prior to the pandemic), loss of facilities, and loss of face-to-face contact (Table 18). Clinicians also reported delayed help seeking (4%) and limited access to technology (4%). A third (7/27) of patients who experienced anxiety and over a quarter (8/30) of patients reported as having experienced isolation or loneliness were over 65 years of age.

Table 17: Patient experiences as a result of COVID-19 or social distancing measures

Patient experience	Total=86	
	Number	%
Loss of job/other financial stressors	14	16
Anxiety	27	31
Isolation or loneliness	30	35
Increased use of alcohol/drugs	8	9

Table 18: Disruption to mental health care as a result of COVID-19 or social distancing measures

Disruption to mental health care	Total=47	
	Number	%
Loss of facilities	10	21
Disruption to regular support	26	55
Patient delayed seeking help	<3	-
Limited access to technology	<3	-
Loss of face-to-face contact	7	15

## HOMICIDE IN THE UK

In 2008–2018, NCISH was notified of 6,383 homicide convictions, an average of 580 per year. There were 6,651 victims, an average of 604 per year.

There were 704 patients under the care of mental health services convicted of a homicide offence, an average of 64 per year. The number of convictions has fallen steadily during this period (Figure 15). There were 761 victims, an average of 69 per year.

11% of people convicted of homicide were patients under mental health care (Table 19). Across the UK countries, this figure was higher in Scotland and Wales and where the general population homicide rates are also higher.

More information taken from independent investigations following homicides committed while perpetrators were under the care of mental health services can be found in [An Independent Review of the Independent Investigations for Mental Health Homicides in England](#).

Figure 15: Patient homicide in the UK: numbers by year

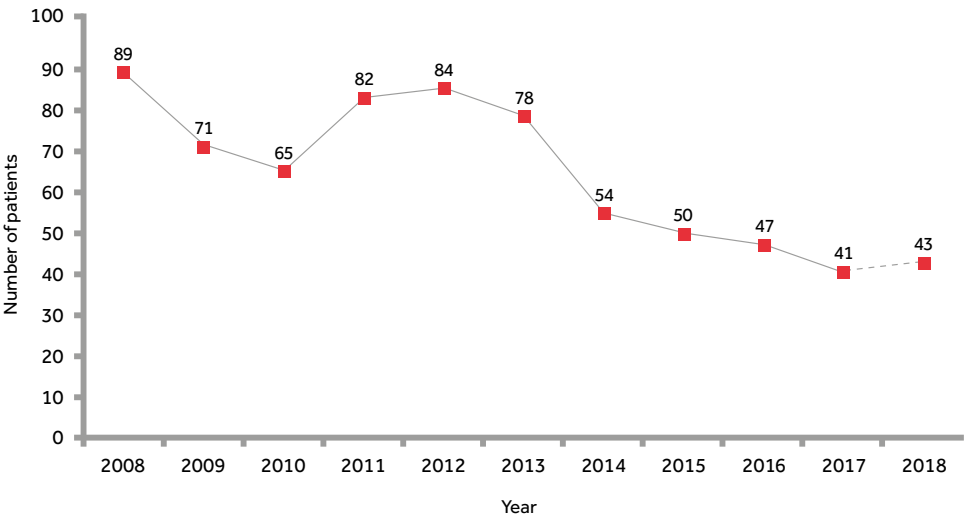


Table 19: Number of homicide offenders by UK country (2008–2018)

	England N (%)	Northern Ireland N (%)	Scotland N (%)	Wales N (%)	UK N (%)
General population	5,261	146	715	261	6,383
Patients under mental health care	541 (10%)	13 (9%)	114 (16%)	36 (14%)	704 (11%)

\* Northern Ireland data between 2008–2014

## HOMICIDE FOLLOWED BY SUICIDE IN ENGLAND AND WALES

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 not included in the homicide analysis.

We were notified of 175 homicide-suicide incidents between 2008 and 2018, an average of 16 per year. Most offenders were male (153, 87%) and their median age was 46 (range 16-93). There were 245 victims in total, of which 3 in 4 (75%) were female.

The relationship of victim to offender (principal victim if there was more than one victim) was most commonly spouse/partner (current/ex) (120, 69%), followed by son/daughter (28, 16%) or acquaintance (11, 6%). Most of the victims who were a spouse/partner were female (98%). 12 (7%) of the homicide-suicides were identified as patients.





ENGLAND

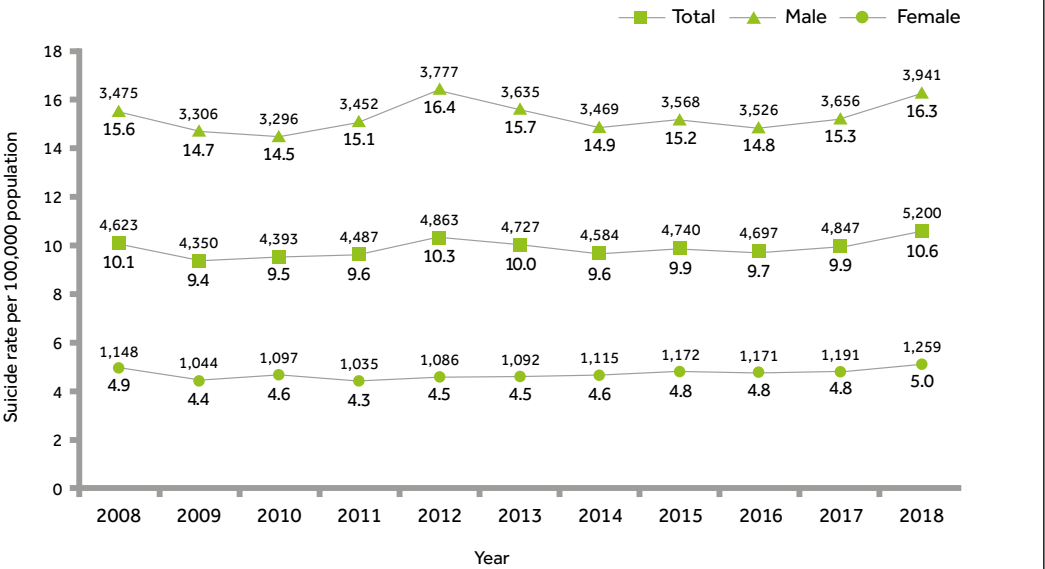
SUICIDE

Between 2008 and 2018, NCISH was notified of 51,511 deaths in the general population that were registered as suicide or “undetermined”, an average of 4,683 per year. These are referred to as suicides throughout the report.

SUICIDE IN THE GENERAL POPULATION

The pattern of suicide since 2008 is (a) a fall until a rise in 2012, with intervening years being lower, (b) lower rates since 2012, (c) a rise in 2017 and 2018 (Figure 16). However, there may be a further increase in 2018 based on ONS figures showing an increase in the number of suicides registered in 2018 and 2019, driven by a rise in male suicide deaths and those aged under 25.<sup>2</sup>

Figure 16: 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

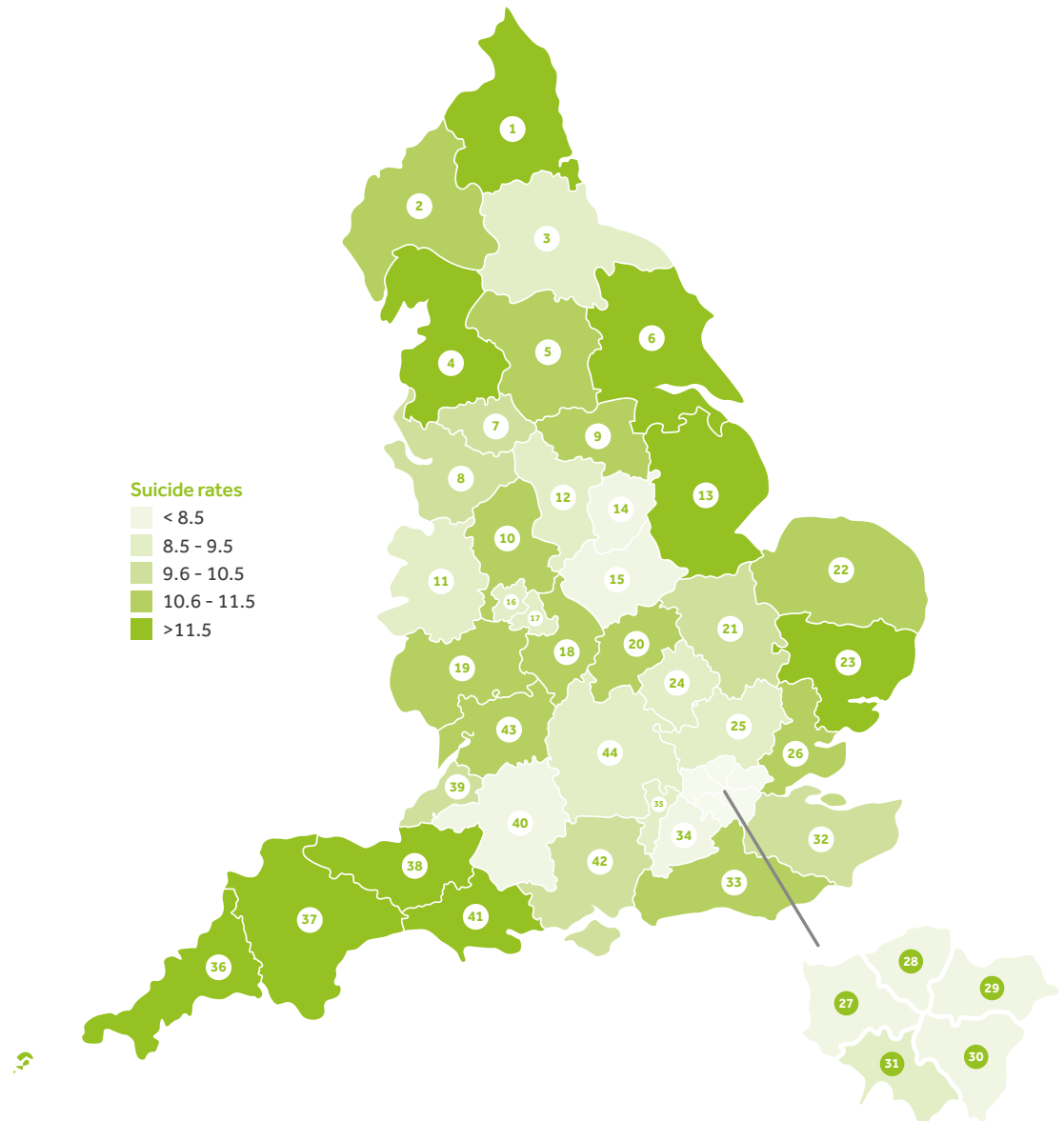


<sup>2</sup> Office for National Statistics (ONS) Suicide in England and Wales: 2019 registrations. September 2020. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2019registrations>

Variation in suicide rates by local health and care systems (Sustainability and Transformation Partnership (STP) ‘footprints’)

Suicide rates varied across the 44 Sustainability and Transformation Partnership (STP) ‘footprints’ that were in existence at the time of data collection and analysis. These STPs are now becoming Integrated Care Systems (ICSs), and so the footprints of these partnerships may change. Average rates for 2016–2018 are shown in Figure 17. The highest rate of suicide was in Northumberland, Tyne and Wear, at 13.4 per 100,000 population, nearly 80% higher than the lowest rate in North East London, at 7.5 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 coastal areas such as Norfolk and Suffolk.

Figure 17: Rates of suicide per 100,000 population, by STP 'footprint' area of residence (average rate 2016-2018)



Note: rates have been colour coded by approximate quintile; for a full list of rates by STP 'footprint' area see [supplementary information](#)

## Method of suicide

Deaths by hanging/strangulation increased after a fall in 2009; there was a 12% increase in the number of these deaths in 2018 compared to 2017. The increase in hanging/strangulation was in men and women, and in those aged under 25, aged 45-64 and aged 65 and over. Deaths from jumping/multiple injuries increased but have fallen since 2014, whilst deaths by self-poisoning decreased overall but the number has increased in recent years (Figure 18). Of the less common methods, there was an overall increase in deaths from gas inhalation since 2010 (Figure 19). The number of deaths by cutting/stabbing fell after a peak in 2013, but has been rising and the figure in 2018 is the highest over the report period. Firearms remain a minor method, constituting less than 2% of all deaths, with a fall since a small peak in 2009.

Figure 18: Suicide in the general population in England: main causes of death

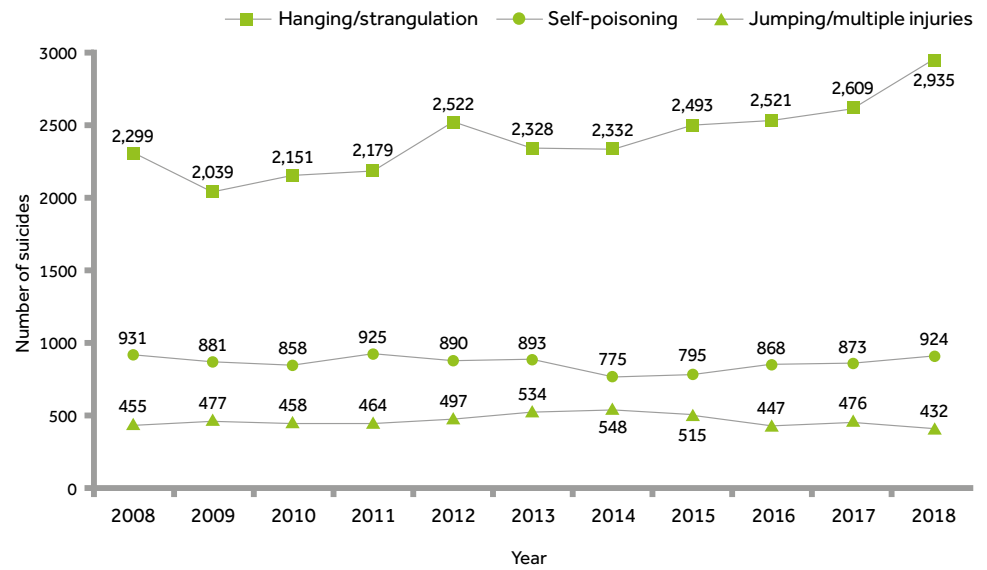
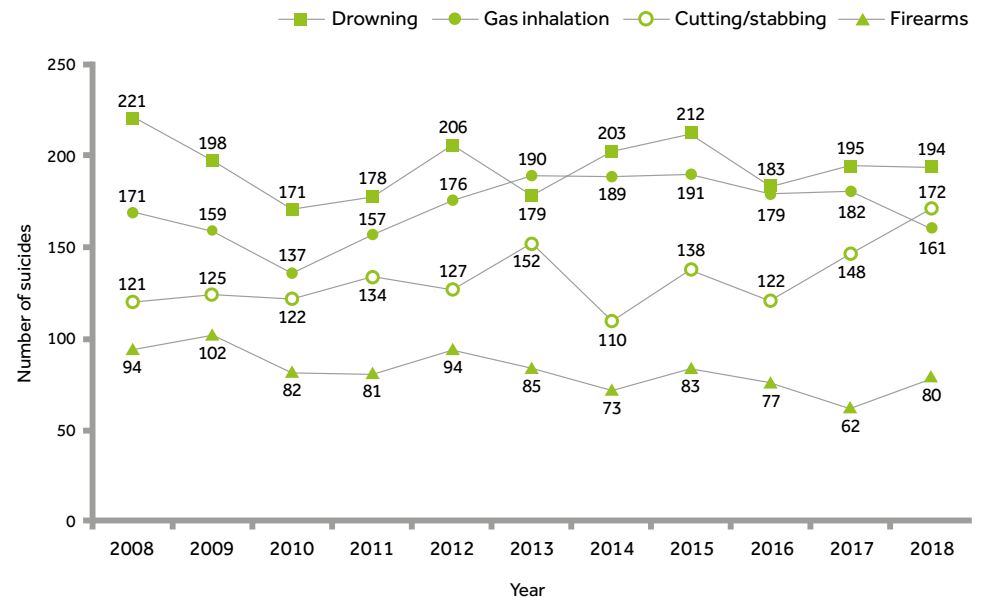


Figure 19: Suicide in the general population in England: other causes of death



## PATIENT SUICIDE

### Patient suicide: numbers and rates

During 2008–2018, 13,984 deaths (27% of general population suicides) were identified as patient suicides, i.e. the person had been in contact with mental health services in the 12 months prior to death. This represents an average of 1,271 patient suicides per year. The number increased between 2008 and 2012, fell in 2013 and 2014, and has remained stable between 2014 and 2017 (Figures 20 and 21). We are estimating an increase in 2018, though less than the rise in the general population.

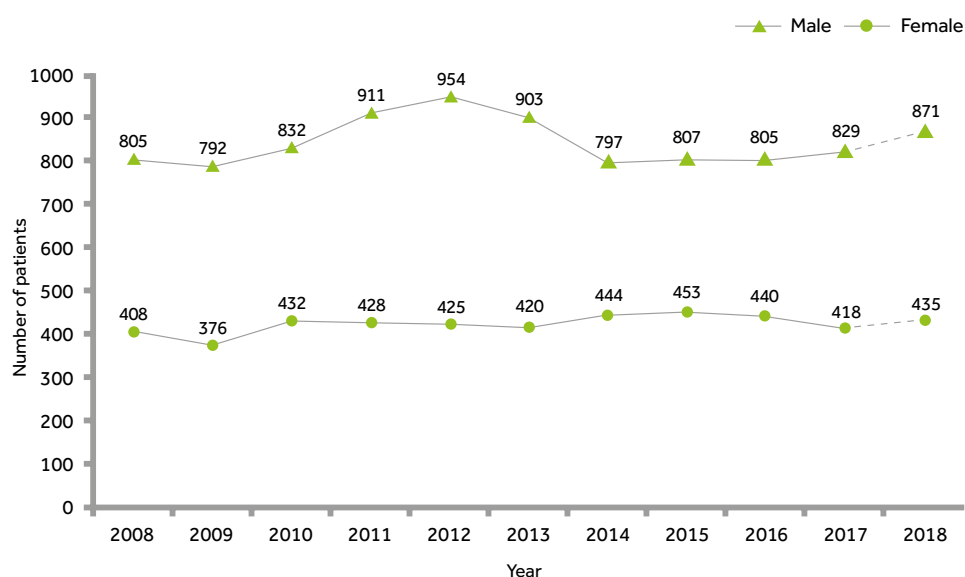
Rates of patient suicide, taking into account the rising number of patients under mental health care,<sup>3</sup> suggest a fall (Figure 22), though rates pre- and post-2011 are not comparable because of changes to methodology.<sup>4</sup>

Figure 20: Number of patient suicides in England



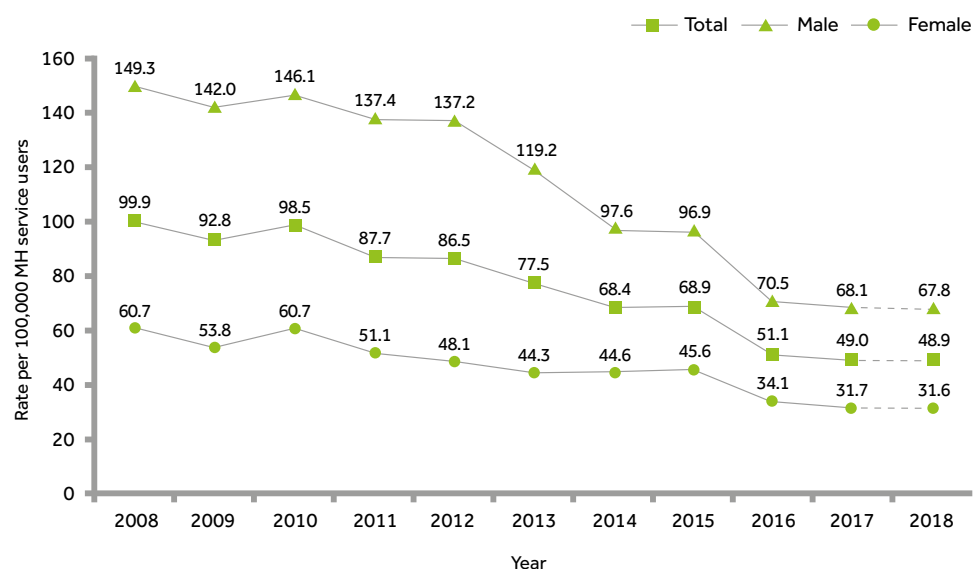
Key findings	UK-Wide Data	England	Northern Ireland	Scotland	Wales	Recent NCISH reports and publications
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Figure 21: Number of patient suicides in England, by gender



Note: the number in 2016 does not total that in Figure 20 due to rounding

Figure 22: Rates of suicide per 100,000 mental health service users<sup>†</sup> in England



<sup>†</sup> The Mental Health Services Data Set (MHSDS)<sup>3</sup> was used to calculate rates. Changes in MHSDS methodology<sup>4</sup> means rates between 2008–2011 and 2011–2018 are not directly comparable. Rates in 2011–2018 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, 1,828,428 in 2015, 2,434,913 in 2016, 2,542,538 in 2017, and 2,672,727 in 2018.

<sup>3</sup> Mental Health Services Data Set. <https://data.gov.uk/dataset/mental-health-services-monthly-statistics>

<sup>4</sup> Health and Social Care Information Centre (2012). Mental Health Bulletin: Annual report from MHMDs returns – England 2011–12, initial national figures. February, 2012. <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-bulletin/mental-health-bulletin-annual-report-from-mhmds-returns-england-2011-12-further-analysis-and-organisation-level-data>

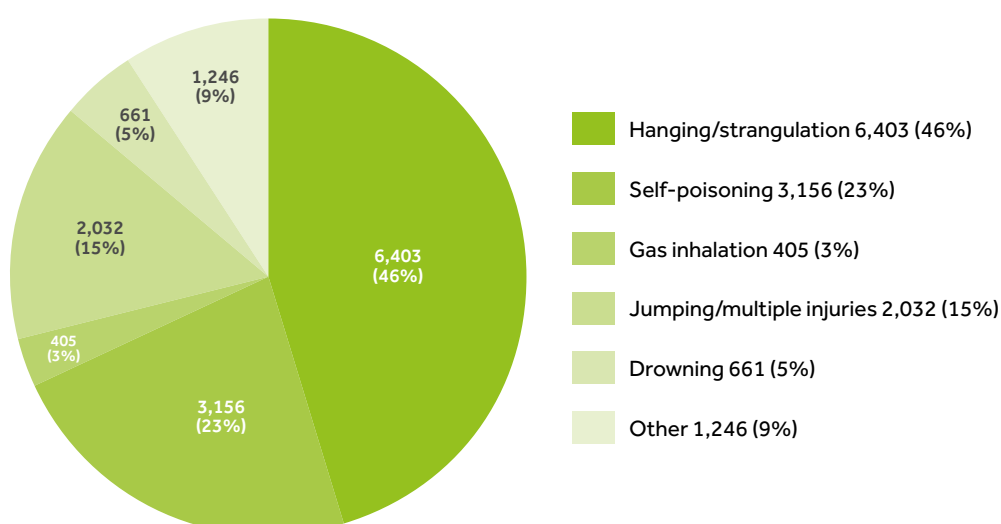
## Method of suicide by patients

The most common methods of suicide are shown in Figure 23. Hanging/strangulation increased by 9% during 2008-2017. The increase was especially seen in women, from an average of 34% in 2008-2011 to 41% in 2015-2018. Further details on patients who died by hanging/strangulation are shown in the UK-wide themed section on page 29.

The number of self-poisoning deaths increased because of a rise in opiate deaths between 2008 and 2012 but has been falling since. Overall, opiates and opioids accounted for 31% of deaths by self-poisoning, though the number of deaths using opiates and opioids fell by 34% between 2008 and 2017. There was no change in the number of self-poisonings using paracetamol over the report period. The number of deaths by psychotropic drugs fell by 33% between 2008 and 2017.

We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (146, 41%), codeine (68, 19%) and tramadol (60, 17%). 40 (11%) used methadone. Information on the source of the opiates/opioids was available in 47%. In 56% (excluding unknowns) these had been prescribed for the patient.

Figure 23: Patient suicide in England: main causes of death



## Social and clinical characteristics

Tables 20-22 show the main social, clinical and behavioural features of patients dying by suicide. These patients had high rates of social adversity and isolation, e.g. unemployment and living alone. Since 2015 we have asked whether the patient was within a transgender or gender non-conformity group of which there were 12 (<1%) patients. Around half had a co-morbid condition, and rates of previous self-harm and alcohol misuse were high. The number and proportion of patients with a history of self-harm decreased by 25% and 22% respectively between 2008 and 2017. There was an 11% increase in the number of patients with co-morbidity during this time period.

Since 2015, we have collected data on whether the contact with services was a one-off contact. This was the case in 372 (13% excluding unknowns) patients in 2015-2018. In 432 (6%) the suicide had occurred on or near an anniversary or other significant date.

Key findings	UK-Wide Data	England	Northern Ireland	Scotland	Wales	Recent NCISH reports and publications
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Table 20: Demographic characteristics of patients who died by suicide in England (2008-2018)

Demographic features	Total=13,984	
	Number	%
Age: median (range)	46 (10-100)	
Aged under 18 <sup>†</sup>	158	1
Aged under 25 <sup>†</sup>	1,138	8
Male <sup>†</sup>	9,306	67
Not currently married	9,057	72
Living alone	5,939	47
Unemployed	5,658	46
On long-term sick leave	1,422	11
Ethnic minority group	1,054	8
Homeless	331	3

<sup>†</sup> includes estimated figures in 2016-2018

Table 21: Clinical characteristics of patients who died by suicide in England (2008-2018)

Clinical features	Total=13,984	
	Number	%
Any secondary diagnosis	6,713	52
Duration of illness (<12 months)	2,727	23
First contact with mental health services:		
<12 months	3,414	28
>5 years	5,373	44
Last admission was a re-admission	851	14

Table 22: Behavioural characteristics of patients who died by suicide in England (2008-2018)

Behavioural features	Total=13,984	
	Number	%
History of self-harm	8,206	65
History of violence	2,545	21
History of alcohol misuse <sup>†</sup>	5,993	45
History of drug misuse <sup>†</sup>	4,531	34

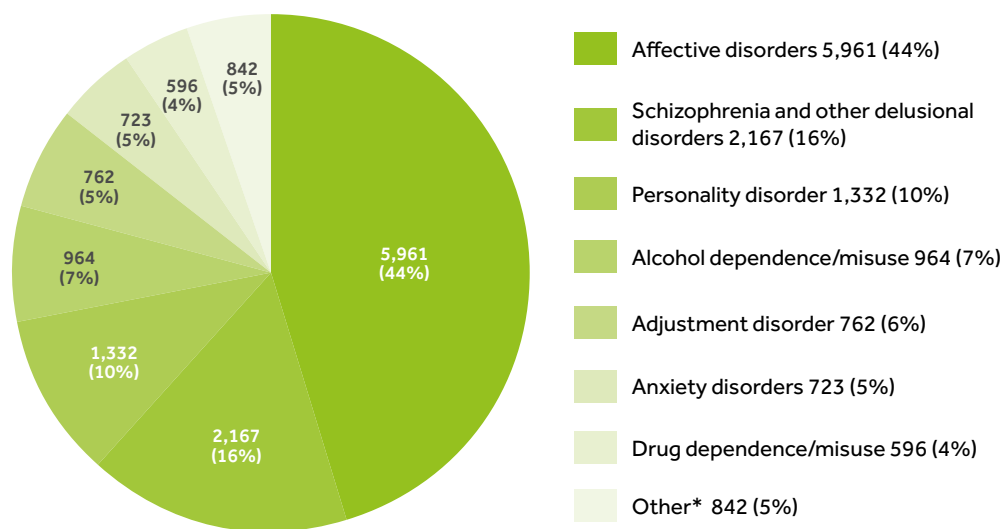
<sup>†</sup> includes estimated figures in 2016-2018



## Diagnosis

The main primary psychiatric diagnoses are shown in Figure 24. Suicide by patients with affective disorder (bipolar disorder and depression) rose between 2008 and 2012 but has since fallen, with an average of 542 per year during the report period. In patients with schizophrenia and other delusional disorders, the number increased after 2008 to a peak in 2013 and then fell, with an average of 197 per year. In patients with a diagnosis of personality disorder, the number has generally risen since 2008, with an average of 121 per year. The number of patients with anxiety disorders rose from 224 in 2008-11 to 270 in 2015-18, a 21% increase.

Figure 24: Patient suicide in England: primary psychiatric diagnoses



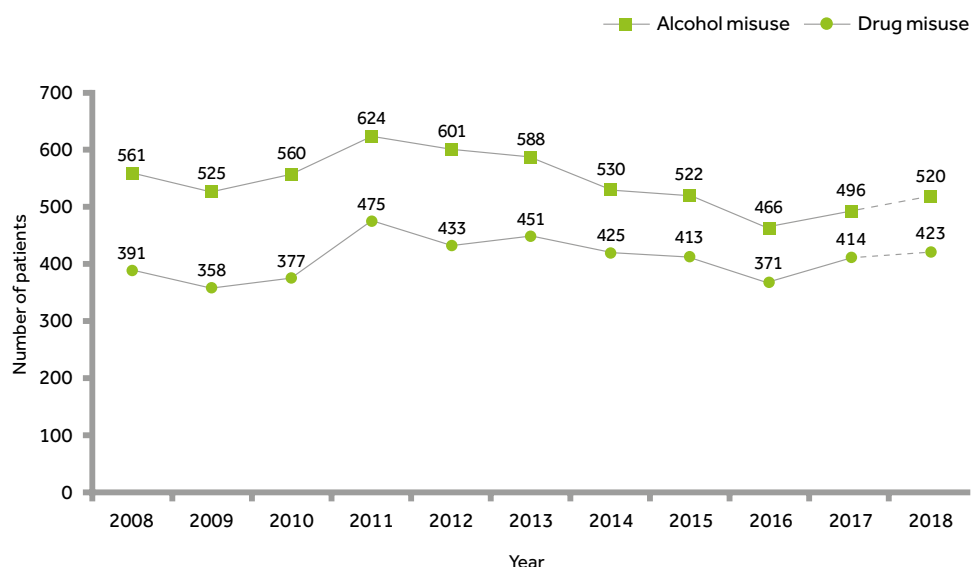
\*"other" diagnoses include: eating disorders, learning disability, conduct disorder, autism spectrum disorder, somatisation disorder, ADHD, organic disorder, drug induced psychosis, dementia and other specified.

## Patients with alcohol and drug misuse

There were an estimated 5,993 (45%) suicides in patients with a history of alcohol misuse, an average of 545 deaths per year; 4,531 (34%) had a history of drug misuse, an average of 412 deaths per year; and 7,322 (54%) had a history of either alcohol or drug misuse or both, an average of 666 deaths per year.

The number of suicides in patients with a history of alcohol or drug misuse has fallen since a peak in 2011 (Figure 25). Between 2011-2018, 903 (21%) of those with a drug or alcohol problem were under the care of substance misuse services.

Figure 25: Patient suicide in England: number with a history of alcohol or drug misuse



## MENTAL HEALTH CARE

Table 23 shows some of the key service-related characteristics, including priority patient groups, recent contact with services, and estimations of risk. Many are in acute care settings (in-patients, under crisis resolution/home treatment (CRHT), recently discharged from in-patient care), and half had been in recent (<7 days) contact with mental health services. The immediate risk of suicide at the time of final service contact was judged by clinicians to be low or not present for the majority of patients who died by suicide. Our recent report "[The assessment of clinical risk in mental health services](#)" examined current practice and views of staff on risk assessment; our recommendation is that risk assessment tools should not be seen as a way of predicting future suicidal behaviour.

Table 23: Service characteristics of patients who died by suicide in England (2008-2018)

	N=13,984	
	Number	%
In-patients <sup>†</sup>	930	7
Recent (<3 months) discharge <sup>†</sup>	1,988	15
Under crisis resolution/home treatment services <sup>†</sup>	2,006	16
Missed last contact in previous month	2,713	23
Non-adherence with medication in previous month	1,548	13
<b>Contact with services</b>		
Last contact within 7 days of death	6,331	48
Short-term risk: low or none	9,731	83
Long-term risk: low or none	6,534	58

<sup>†</sup> includes estimated figures in 2016-2018

## In-patient suicide

There were 930 in-patient deaths by suicide in 2008-2018, representing 7% of patient suicides overall during this time period, but with lower proportions (5% or less) since 2016. Twelve (1%) were aged under 18. From 2008 to 2018, there was a 45% fall in the number of in-patient suicides (Figure 26). However, in-patient deaths are more often subject to late notification – up to 4 years. We have therefore estimated the overall figures in 2016-2018 using the average proportion of all patient suicides that were in-patients in recent years and adjusting for expected questionnaire returns.

In-patient suicide numbers may be affected by changes in the number of admissions. Nonetheless, we found rates of in-patient suicide per 10,000 admissions still fell by 45% in 2008-2018 (Figure 27). Our figures since 2015 appear to show an important fall, although at this stage this includes a degree of estimation and so should be treated with caution. For example, our current estimate for the number of in-patient suicides in 2018 is 57 but using other estimation methods, the range could be between 55 and 59 in-patient suicides.

Between 2008 and 2014 there were approximately 20-30 deaths per year by hanging/strangulation on the ward but since 2015 the number has fallen to between 15-20 deaths per year (Figure 26). Many are from low-lying ligature points (i.e. strangulation) but also include deaths by strangulation with no ligature point (i.e. self-strangulation). The majority died by hanging/strangulation in a single bedroom (146, 65%) or a toilet/bathroom (59, 26%). The most common ligature points were doors (103, 51%) or windows (23, 11%) and the most common ligatures were a belt (70, 32%) or sheets/towels (59, 27%).

Figure 26: Patient suicide in England: number of mental health in-patients; number who died by hanging/strangulation on the ward

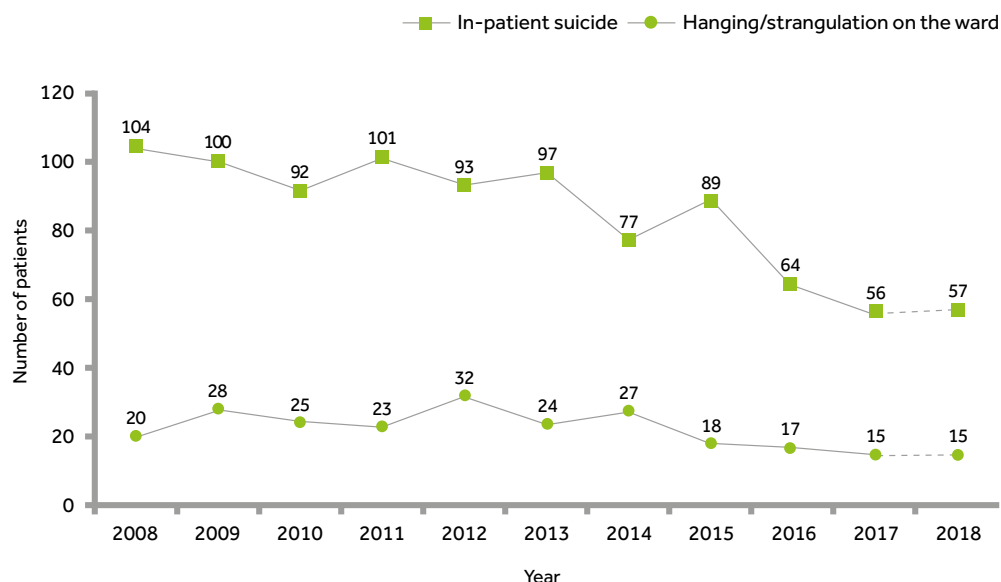
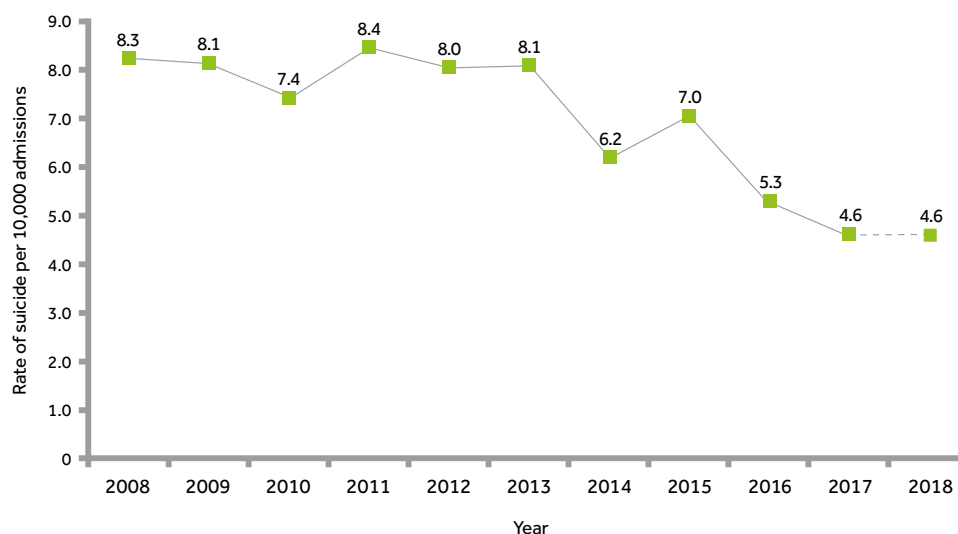


Figure 27: Patient suicide in England: rate of in-patient suicide per 10,000 admissions



The following sections are based on actual figures and do not include estimations for recent years. Service characteristics of in-patient suicides are shown in Table 24. 115 in-patient suicides took place in the first week after admission, most often on day 2 (23 patients) or day 7 (20 patients); the lowest number occurred on the day of admission (8 patients).

Certain characteristics of in-patient suicide have changed over the report period. For example, there have been falls in the number who died in the first week of admission, who left the ward without staff agreement, and who were detained under the Mental Health Act (MHA).

Table 24: Service characteristics of in-patients who died by suicide in England (2008-2018)

Characteristic	Total=930	
	Number	%
Died within a week of admission	115	13
Leave status:		
On agreed leave	424	51
On the ward	288	35
Off the ward without staff agreement or with agreement but failed to return	122	15
Detained under the MHA	258	30
Died within a local in-patient unit	572	67
Under medium/high level of observation	159	32
Short-term risk assessment viewed as low or none	614	76

Note: MHA = Mental Health Act

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### Detained in-patients

There were 258 patients detained under the Mental Health Act at the time of suicide, 30% of in-patient suicides, an average of 23 deaths per year. Four (2%) were aged under 18. While the number of detained in-patient suicides fell over the report period, the proportion did not change.

19 (7%) occurred within the first week of admission; 108 (42%) died on the ward and 40 (28%) had left the ward without staff agreement (or with staff agreement but failed to return). Over a third (64, 38%) were under a medium or high level of observation. Detained patients were more likely than other in-patients to be aged under 25 (40, 16% v. 41, 7%), be from an ethnic minority group (38, 15% v. 35, 6%), have a history of substance misuse (157, 62% v. 252, 43%) and have been ill for longer than five years (161, 63% v. 291, 49%). The most common methods of suicide were hanging/strangulation (50%) and jumping/multiple injuries (27%).

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### Patients recently discharged from hospital

There were 1,988 suicides within 3 months of discharge from in-patient care, 15% of all patient suicides, an average of 181 deaths per year. Thirteen (1%) were aged under 18. The overall figures for 2016-2018 (Figure 28) have been estimated to take into account late notifications. The remaining figures in this section will present the actual figures.

The number and rate of post-discharge suicides have fallen since a peak in 2011 (Figure 28). The average rate of suicide was 15.2 per 10,000 discharges.

Post-discharge suicides were most frequent in the first week after leaving hospital when 273 (15%) deaths occurred (Figure 29); the highest number (60, 22%) occurred on the second full day after the day of discharge. Of the patients who died in the first week after discharge, 56% had experienced recent adverse life events, with serious financial difficulties (27% v. 16%) and family problems (11% v. 5%) significantly more common than other post-discharge patients. We have recommended all patients are followed up within 3 days of discharge from in-patient care. The NICE guidance of following up all discharged patients within 7 days was formally reviewed as part of the [NHS Commissioning for Quality and Innovation \(CQUIN\) 2019/20](#) scheme and, based on our findings, the time frame has since been reduced to 72 hours. NHSE/I has included 72hr follow-up in the standard NHS contract.

Of all post-discharge suicides, 186 (10%) died before the first follow-up appointment. The number and proportion of patients who died before the first follow-up fell over the report period.

191 (10%) died after being discharged from a non-local in-patient unit. This proportion was higher in those who died within 2 weeks of discharge (65 patients, 13%). In 2018 there were 11 (6%) suicides after discharge from a non-local unit.

Figure 28: Patient suicide in England: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges

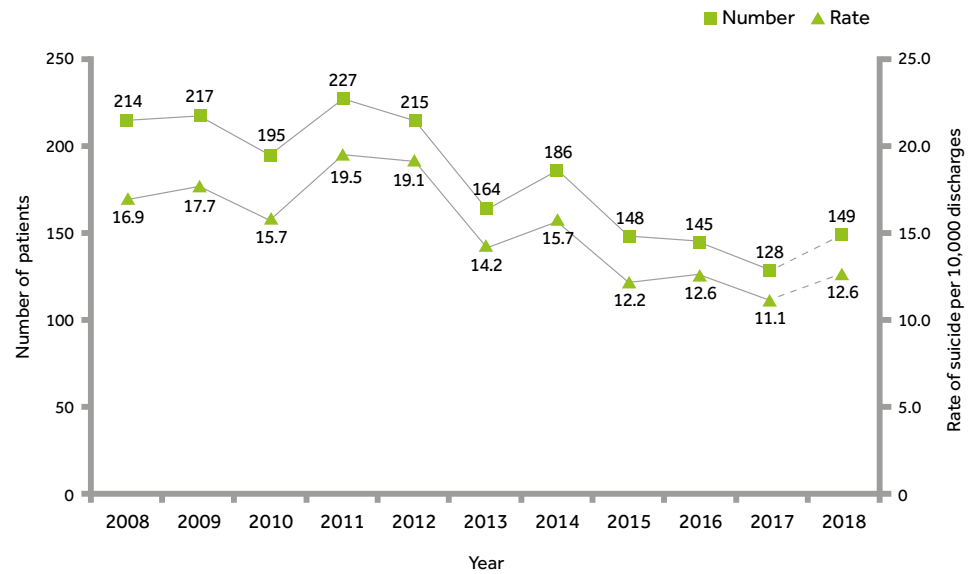
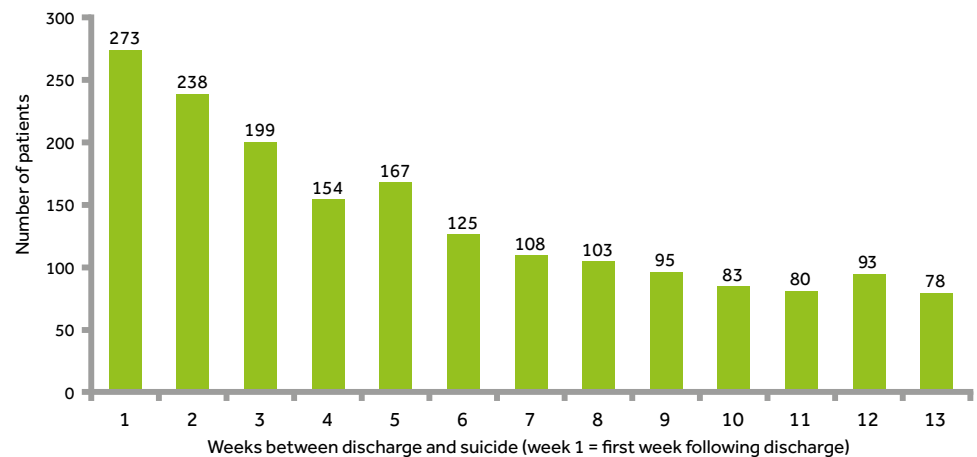


Figure 29: Patient suicide in England: number per week following discharge (2008-2018)



## Contact with other community services

Table 25 shows the number of patients receiving care under specialist community services. There was an increase between 2010 and 2018 in the number of patients under IAPT care, which reflects the increase in the use of these services. There was no change in the number of patients under other community treatment services over the report period.

Table 25: Contact with specialist community services in patients who died by suicide in England (2008-2018)

Specialist service	Total=13,984	
	Number	%
Community treatment order (2009-2018)	137	1
Improving Access to Psychological Therapies (IAPT) (2010-2018)	312	4
Section 136* (2012-2018)	309	5

\* includes conveyed to hospital or custody based safety under Section 136 of the MHA

## NORTHERN IRELAND





## NORTHERN IRELAND

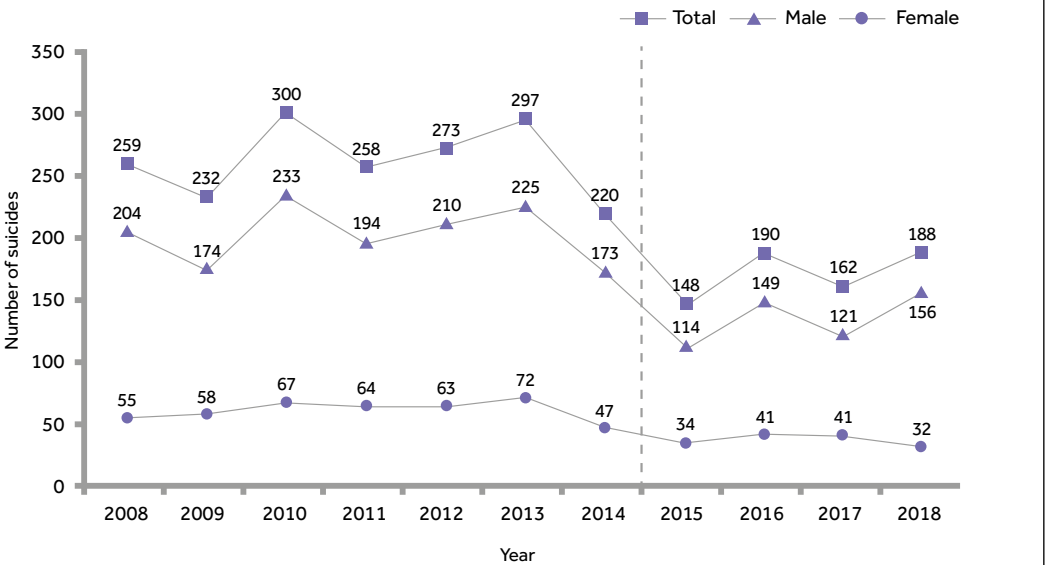
### SUICIDE

NCISH was notified of 2,606 deaths in the general population that were registered as either suicide or “undetermined” in 2008-2014 and deaths registered as suicide in 2015-2018. These are referred to here as suicides, and represent an average of 237 deaths per year. The removal of deaths registered with an undetermined outcome from 2015 onwards is recommended by NISRA who are currently reviewing the coding of certain drug-related deaths (see further details on page 11).

#### SUICIDE IN THE GENERAL POPULATION

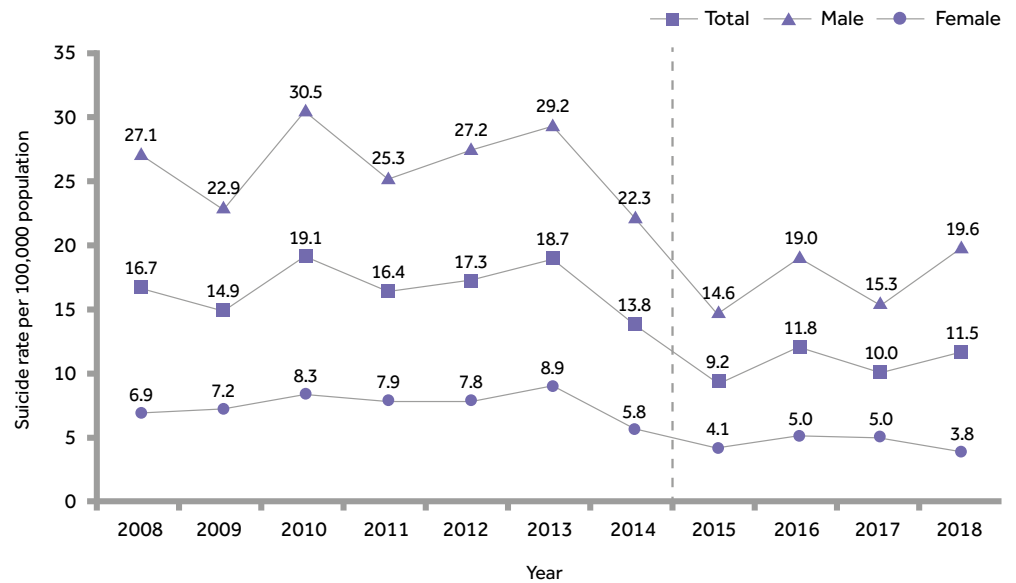
There was an overall increase in the number and rate of suicides in 2008-2013 (Figures 30 and 31). The subsequent fall is a reflection of the change in how some drug-related deaths are classified and are therefore not comparable to earlier years. In addition, some deaths are not registered for several months or longer which means that our figures for the most recent years underestimate the final figures.

Figure 30: Number of suicides in the general population in Northern Ireland, by gender



Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

Figure 31: Rates of suicide in the general population in Northern Ireland, by gender

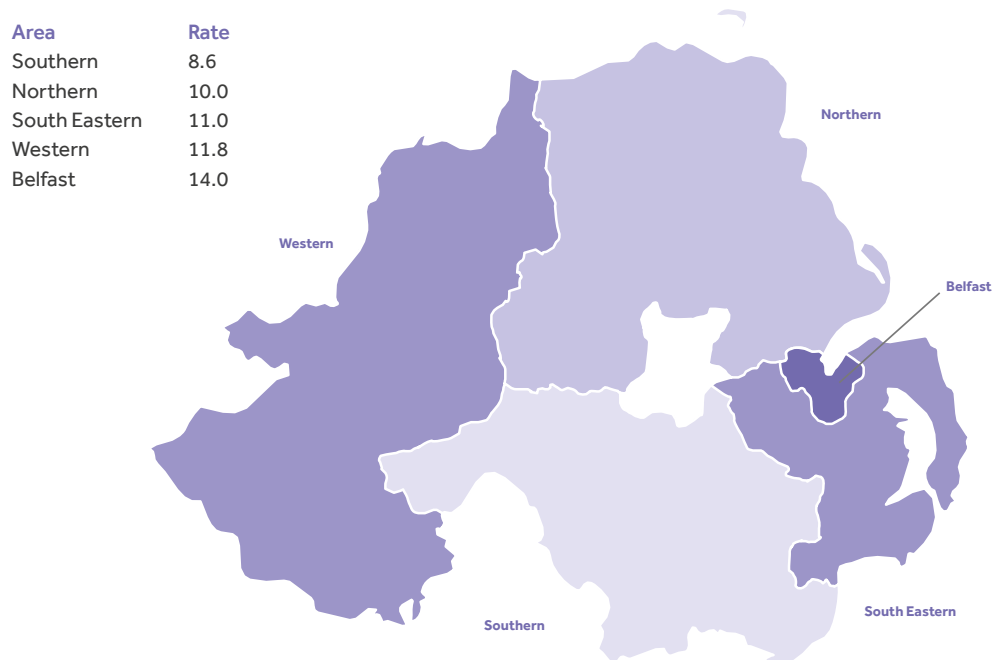


Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

#### Variation in suicide rates by area of residence

There were variations by area of residence (by Health and Social Care Trust) at the time of death (average rate 2016–2018). The highest rate of suicide was in Belfast at 14.0 per 100,000 population, and the lowest in the Southern Area, at 8.6 per 100,000 population (Figure 32). These rates are significantly lower than in our earlier reports as they represent deaths by suicide and do not include deaths recorded as undetermined by coroners (see further details on page 11).

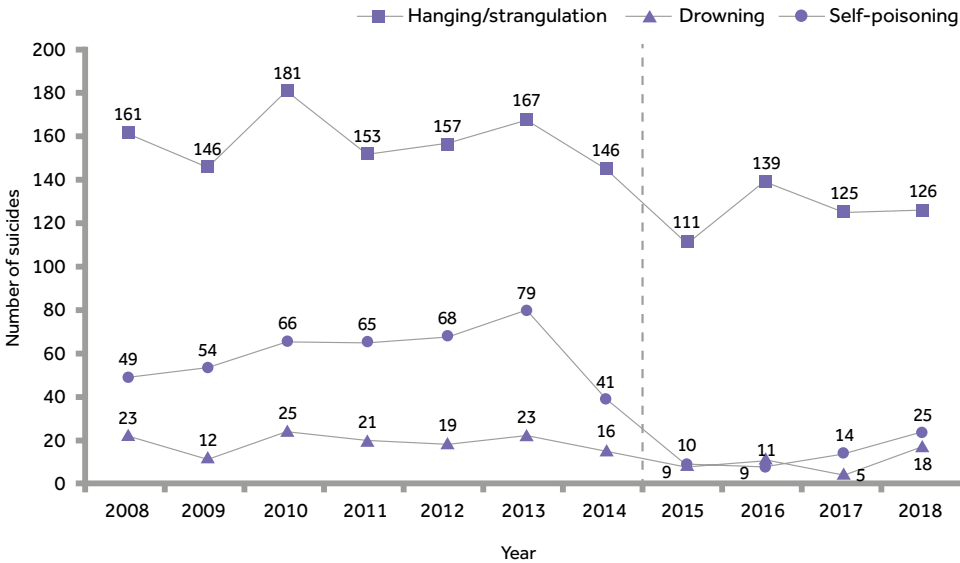
Figure 32: Rates of suicide per 100,000 population, by Health and Social Care Trust of residence (2016–2018)



### Method of suicide

Deaths by hanging/strangulation have been falling since a peak in 2010 (Figure 33). Deaths by self-poisoning increased between 2008 and 2013. Some of this increase is accounted for by an increase in opiate deaths. However, the substantial fall since 2014 in the number of deaths by self-poisoning reflects the change in death coding where certain drug-related deaths are no longer classified as suicide by NISRA. There was no change in the number of deaths by other methods over the report period.

Figure 33: Suicide in the general population in Northern Ireland: main causes of death



Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

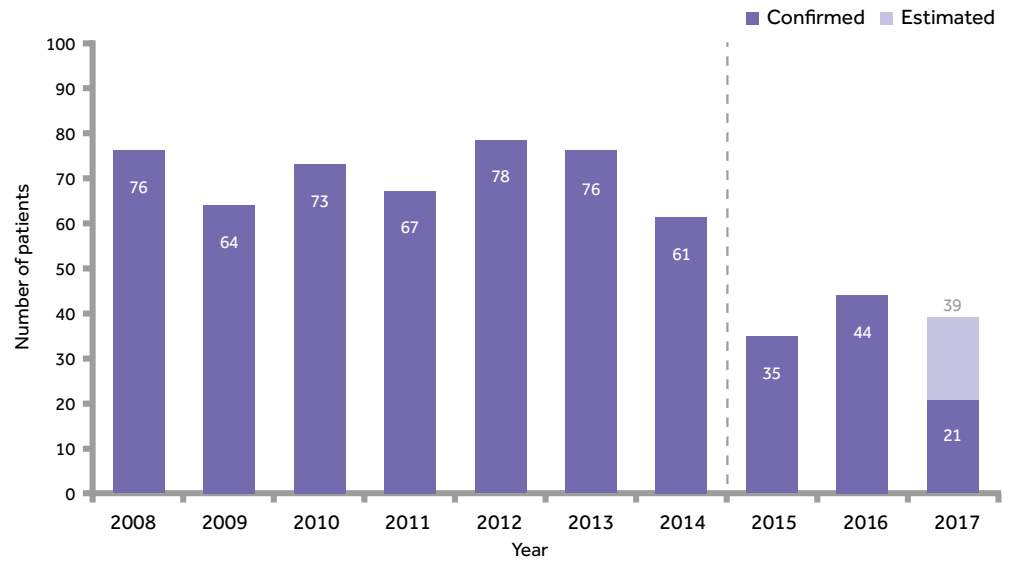
## PATIENT SUICIDE

### Patient suicide: numbers and rates

During 2008–2017, 613 deaths (26% of general population suicides in this time period) were identified as patient suicides, i.e. people in contact with mental health services in the 12 months prior to death. This represents an average of 61 patient suicides per year.

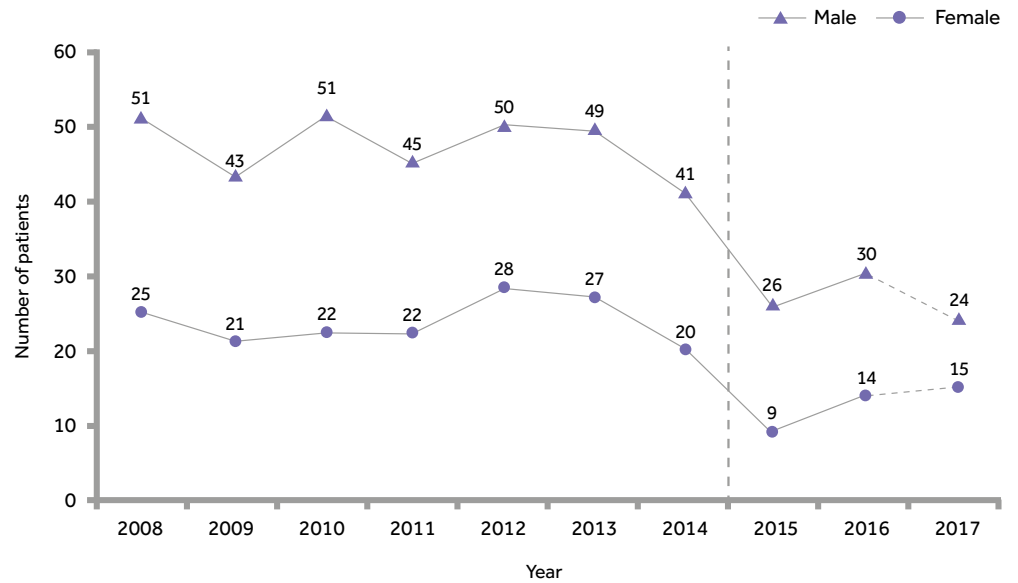
The fall between 2015 and 2017 reflects the change in how some drug-related deaths are classified and are therefore not comparable to earlier years (Figures 34 and 35). We are estimating a similar number in 2017 to figures in 2015 and 2016 (Figures 34 and 35).

Figure 34: Number of patient suicides in Northern Ireland



Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

Figure 35: Number of patient suicides in Northern Ireland, by gender



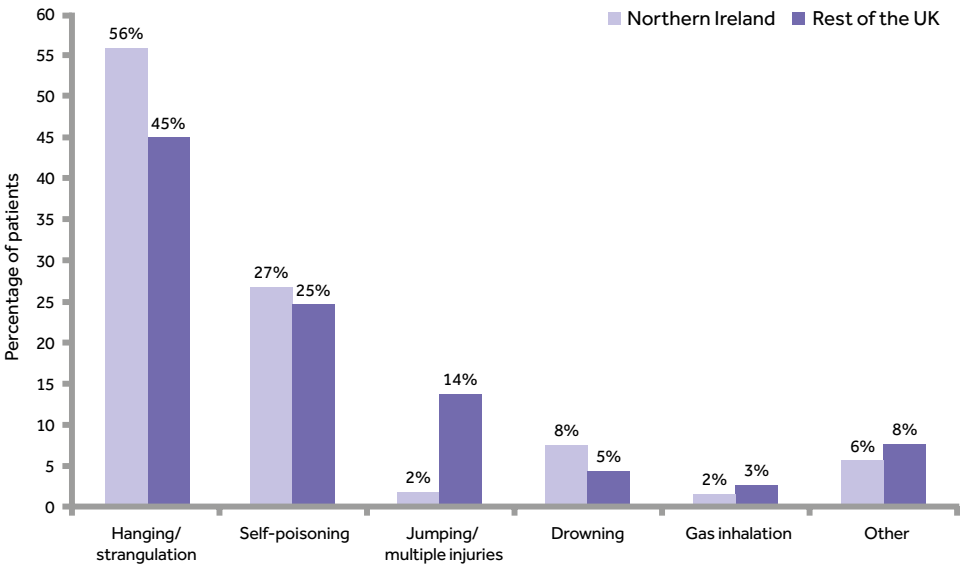
Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

### Method of suicide by patients

The proportion of deaths by hanging/strangulation, self-poisoning and drowning was higher compared to the rest of the UK (Figure 36). There were fewer deaths by jumping/multiple injuries compared to the rest of the UK.

The number of deaths by self-poisoning was stable between 2008 and 2014 but has since fallen due to the change in the coding of certain drug-related deaths. The most common substances used in deaths by self-poisoning were opiates (including opiate compounds) (62, 43%), antipsychotics (20, 14%), and benzodiazepine/hypnotics (12, 8%).

Figure 36: Patient suicide in Northern Ireland v. rest of the UK: main causes of death



### Social and clinical characteristics

Tables 26-28 show the main social, clinical and behavioural features of patients who died by suicide. Patients in Northern Ireland were more likely to be aged under 25 and be unemployed or on long-term sick leave compared to the rest of the UK. They were more likely to have been ill for longer than 12 months before suicide and had higher rates of previous self-harm, violence and substance misuse.

In 10 (3%) the suicide had occurred on or near an anniversary or other significant date.

Table 26: Demographic characteristics of patients who died by suicide in Northern Ireland (2008-2017)

Demographic features	Total=613	
	Number	%
Age: median (range)	42 (15-92)	▼
Aged under 25 <sup>†</sup>	65	11
Male <sup>†</sup>	410	67
Not currently married	417	73
Living alone	247	44
Unemployed	301	53 ▲
On long-term sick leave	91	16 ▲
Ethnic minority group	4	1 ▼
Homeless	11	2

<sup>†</sup> includes estimated figures in 2017

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Table 27: Clinical characteristics of patients who died by suicide in Northern Ireland (2008-2017)

Clinical features	Total=613	
	Number	%
Any secondary diagnosis	330	57
Duration of illness (<12 months)	99	18
First contact with mental health services:		
<12 months	127	23
>5 years	264	48
Last admission was a re-admission	45	13

See [supplementary information](#) for comparative percentages

Table 28: Behavioural characteristics of patients who died by suicide in Northern Ireland (2008-2017)

Behavioural features	Total=613	
	Number	%
History of self-harm	422	72 ▲
History of violence	147	26
History of alcohol misuse <sup>†</sup>	385	64 ▲
History of drug misuse <sup>†</sup>	251	43 ▲

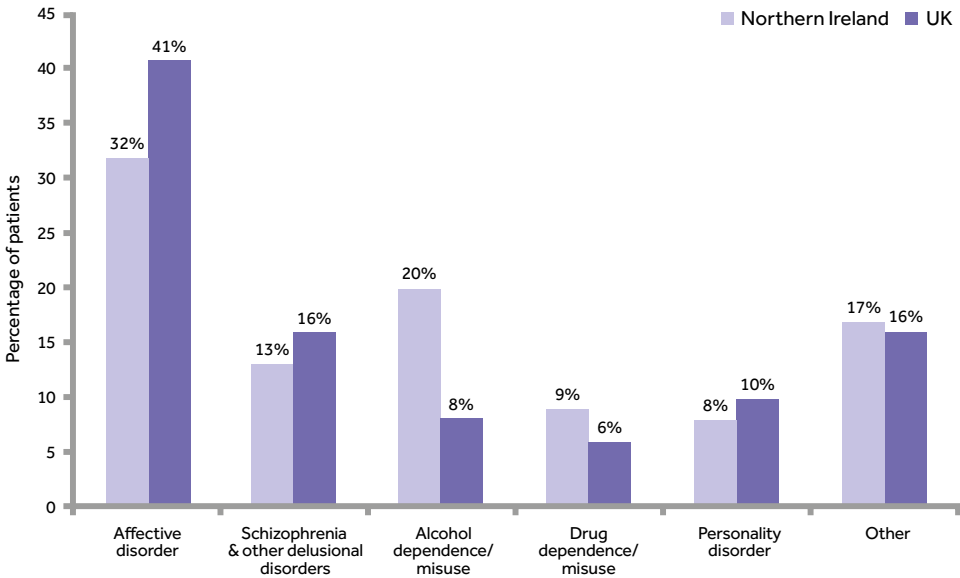
<sup>†</sup> includes estimated figures in 2017

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

### Diagnosis

A higher proportion of patients in Northern Ireland had alcohol or drug dependence/misuse and a lower proportion had affective disorder (bipolar disorder and depression) compared with the rest of the UK (Figure 37). Of the 'other' diagnoses, 5% were anxiety disorder and 7% were adjustment disorder. There was no overall trend in the number of patient suicides in relation to diagnosis over the report period.

Figure 37: Patient suicide in Northern Ireland v. rest of the UK: primary psychiatric diagnosis

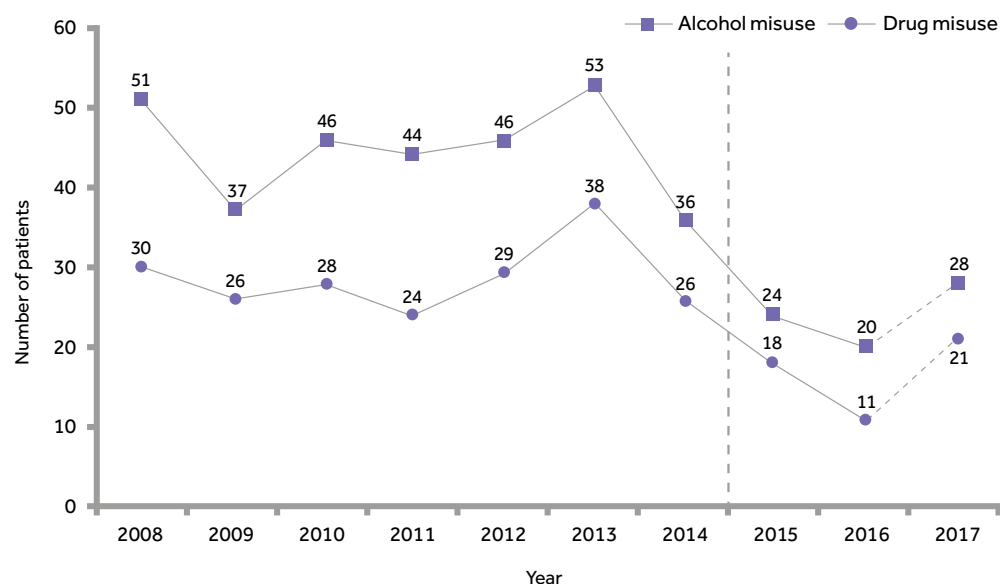


### Patients with alcohol and drug misuse

There were an estimated 385 (64%) patients with a history of alcohol misuse, an average of 39 deaths per year; 251 (43%) had a history of drug misuse, an average of 25 deaths per year; and 427 (71%) patients had a history of either alcohol or drug misuse or both, an average of 43 deaths per year. The number of patients with a history of alcohol or drug misuse fell after a peak in 2013 (Figure 38).

Between 2011-2017, 70 (29%) of those with a drug or alcohol problem were under the care of substance misuse services.

Figure 38: Patient suicide in Northern Ireland: number with a history of alcohol or drug misuse



Note: the dotted line indicates when registered deaths with undetermined outcomes have been removed

## MENTAL HEALTH CARE

Table 29 and Figure 39 show some of the key service-related characteristics of the patients, including priority patient groups, recent contact with services, and estimations of risk. Compared to the rest of the UK, there were fewer in-patient suicides and fewer receiving care under crisis resolution/home treatment services. More patients in Northern Ireland had missed their last contact with services.

Table 29: Service characteristics of patients who died by suicide in Northern Ireland (2008-2017)

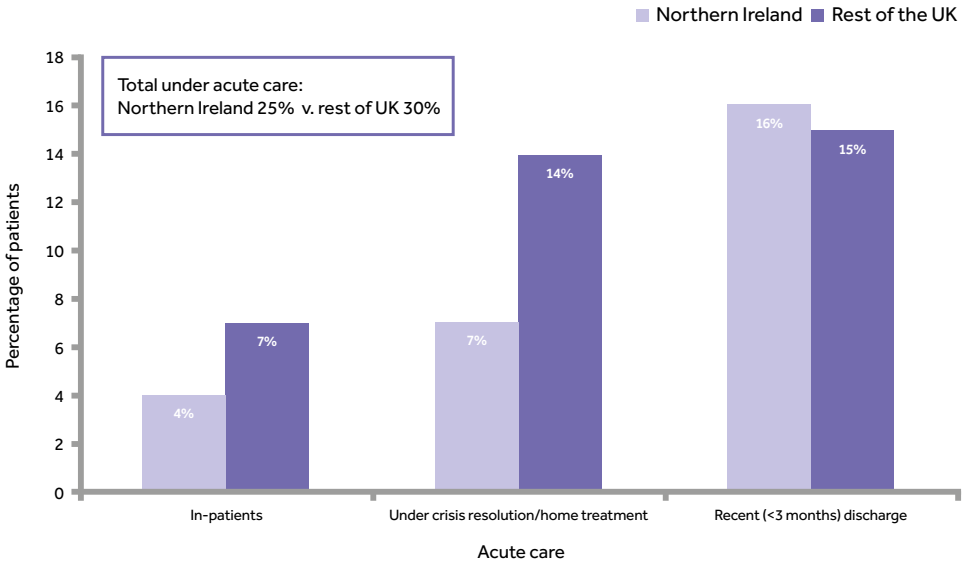
Characteristic	Total=613	
	Number	%
In-patient <sup>†</sup>	24	4 ▼
Recent (<3 months) discharge <sup>†</sup>	97	16
Under crisis resolution/home treatment service <sup>†</sup>	44	7 ▼
Missed last contact in previous month	203	36 ▲
Non-adherence with medication in previous month	53	10
<b>Contact with services</b>		
Last contact within 7 days of death	218	37 ▼
Short-term risk: low or none	473	88
Long-term risk: low or none	318	61

<sup>†</sup> includes estimated figures in 2017

▲▼ = significantly ( $p < 0.01$ ) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages



Figure 39: Patient suicide in Northern Ireland v. rest of the UK: percentage under acute care



**In-patient suicide**

There were 24 in-patient deaths by suicide in 2008-2017, 4% of patient suicides, lower than the rest of the UK (Figure 39). The highest number of in-patient suicide deaths was 5 in 2009 (Table 3). Half died on the ward itself (11, 50%); 6 (27%) were on agreed leave or had left the ward with staff agreement; and 5 (23%) died after leaving the ward without staff agreement or with staff agreement but failed to return.

**Patients recently discharged from hospital**

There were 97 suicides within 3 months of discharge from in-patient care, 16% of all patient suicides, an average of 10 deaths per year. The proportion was similar to the rest of the UK (Figure 39). There was no trend over the report period in the number of post-discharge suicides.

Post-discharge suicides were most frequent in the 2 weeks after leaving hospital when 31 (35%) deaths occurred. 19 (22%) patients died in the first week after discharge – the highest number occurred on the third full day after discharge (5 patients). 19 (21%) died before the first follow-up appointment.

## SCOTLAND



## SCOTLAND

### SUICIDE

In 2008-2018, NCISH was notified of 8,473 deaths in the general population that were registered as suicide or “undetermined”, an average of 770 per year. These are referred to here as suicides.

#### SUICIDE IN THE GENERAL POPULATION

There has generally been a sustained fall in the number and rate of suicide since 2011 but the number and rate has increased in 2018 (Figures 40 and 41).

Figure 40: Number of suicides in the general population in Scotland, by gender



Note: the dotted line indicates when a change in death coding rules occurred, increasing the eligibility of deaths to be recorded as suicide subsequently.  
Scotland have published higher rates for 2019 and these are being followed by NCISH for future report.

Figure 41: Rates of suicide in the general population in Scotland, by gender

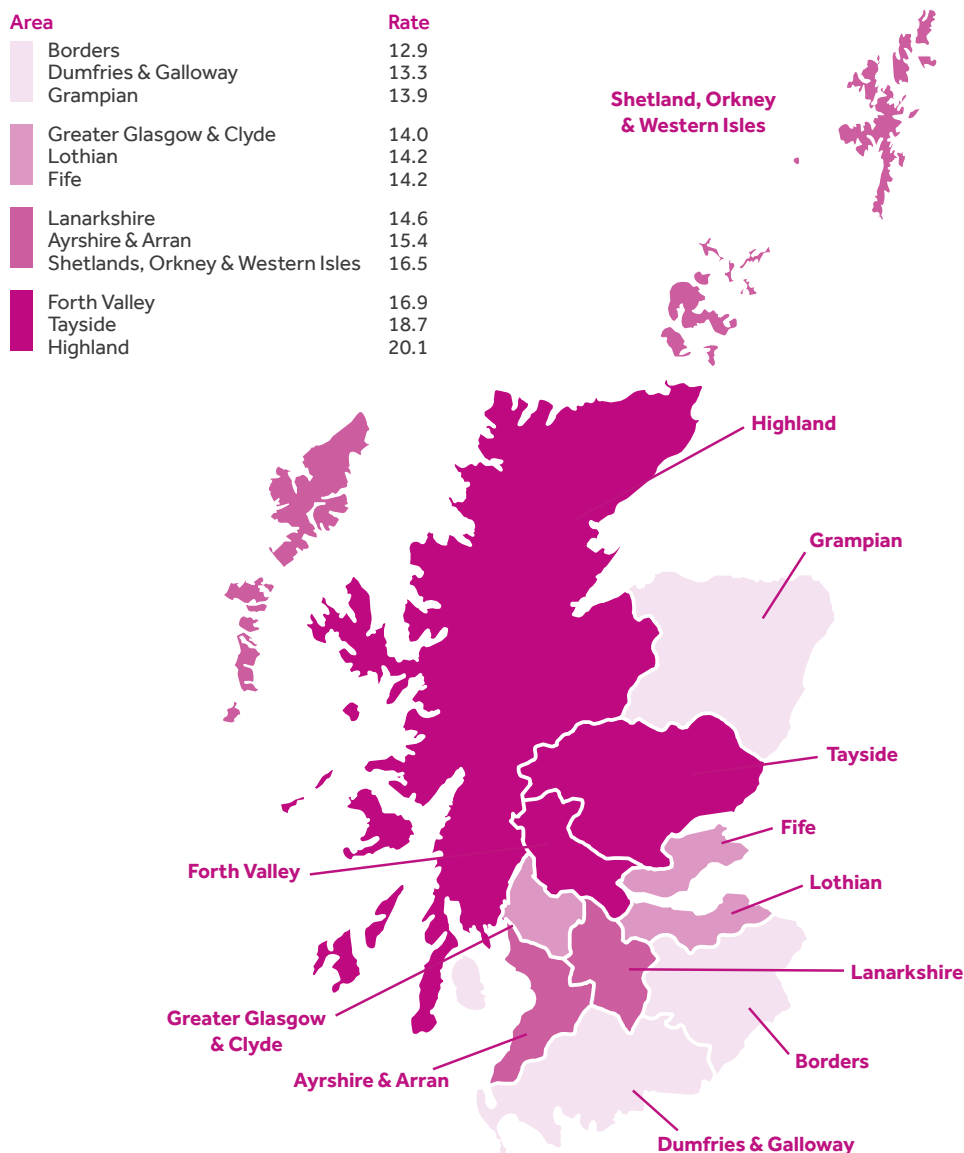


Note: the dotted line indicates when a change in death coding rules occurred.

## Variation in suicide rates by area of residence

Suicide rates varied by area of residence (by NHS Health Board) at the time of death (average rate 2016-2018). The highest rate of suicide was in the Highland health board, at 20.1 per 100,000 population, and the lowest rate was in the Borders, at 12.9 per 100,000 population (Figure 42).

Figure 42: Rates of suicide per 100,000 population, by NHS Health Board of residence (average rate 2016-2018)

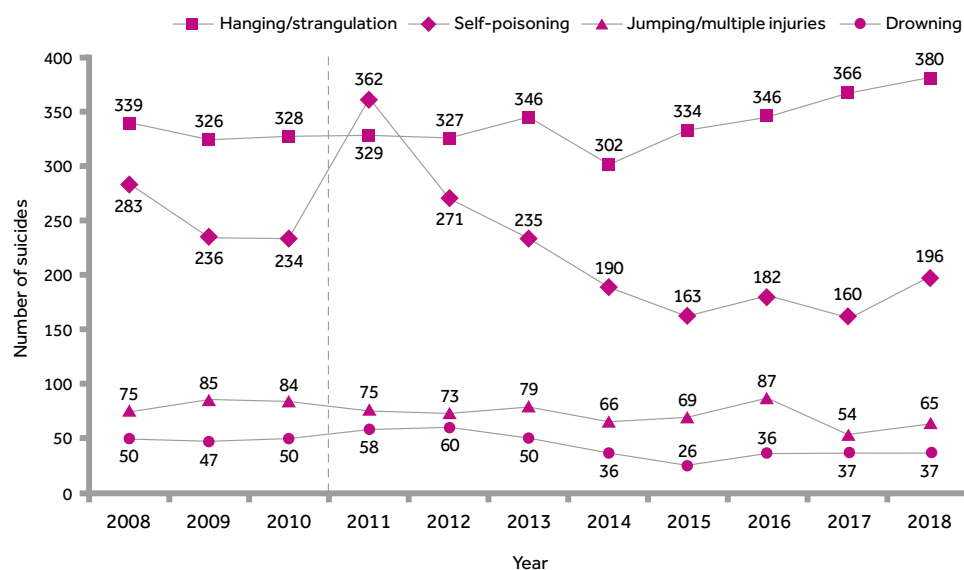


Note: rates have been colour coded to approximate quartile

## Method of suicide

The main suicide methods are shown in Figure 43. Deaths by hanging/strangulation increased in 2008 but the recent rise in the number is not statistically significant, though the 2018 figure is the highest in the report period. The apparent increase in suicides by self-poisoning in 2011-2012 is the result of a death coding rule change in 2011, but the number has since fallen. Deaths by drowning decreased by 55% between 2008 and 2018 (Figure 43). Less common methods were gas inhalation (3%), cutting/stabbing (2%) and firearms (1%). There has been no overall change in the number of deaths by these methods.

Figure 43: Suicide in the general population in Scotland: main causes of death



Note: the dotted line indicates when the change in death coding rules occurred.

## PATIENT SUICIDE

### Patient suicide: numbers and rates

During 2008–2018, 2,619 suicides (31% of general population suicides) were identified as patient suicides, i.e. the person had been in contact with mental health services in the 12 months prior to death. This represents an average of 238 patient suicides per year.

The increase in suicide figures for the general population resulting from a death coding change in 2011 is also reflected in the figures for patient suicides (Figures 44–45). There was a fall in patient suicides after 2011, especially in men after 2013, but with little change in 2014–2018 (Figures 44–45).

Figure 44: Number of patient suicides in Scotland

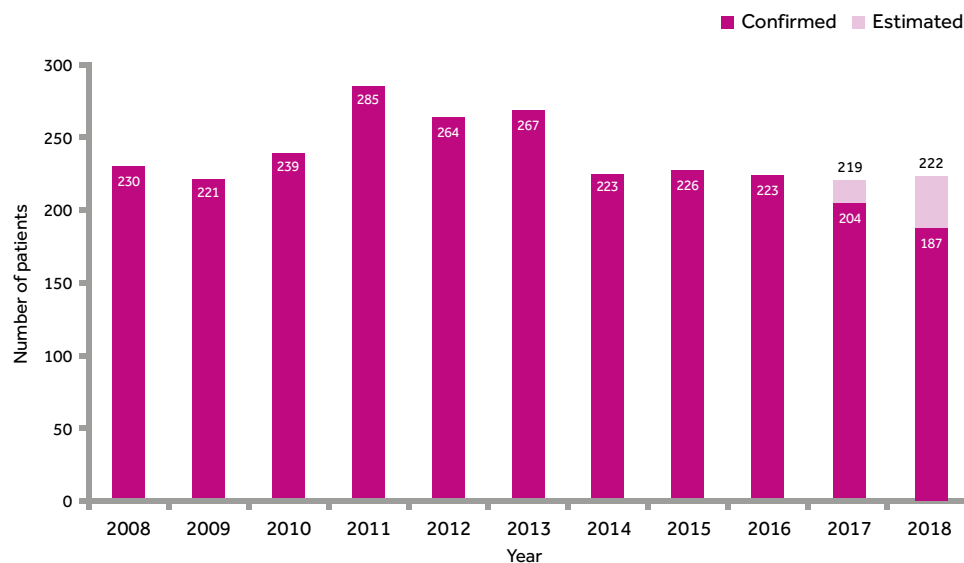
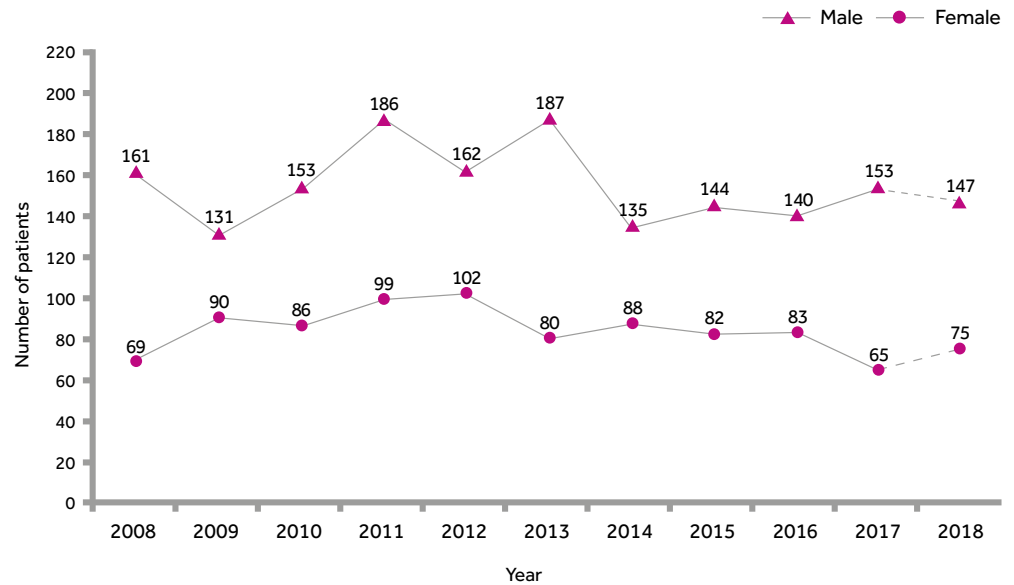


Figure 45: Number of patient suicides in Scotland, by gender



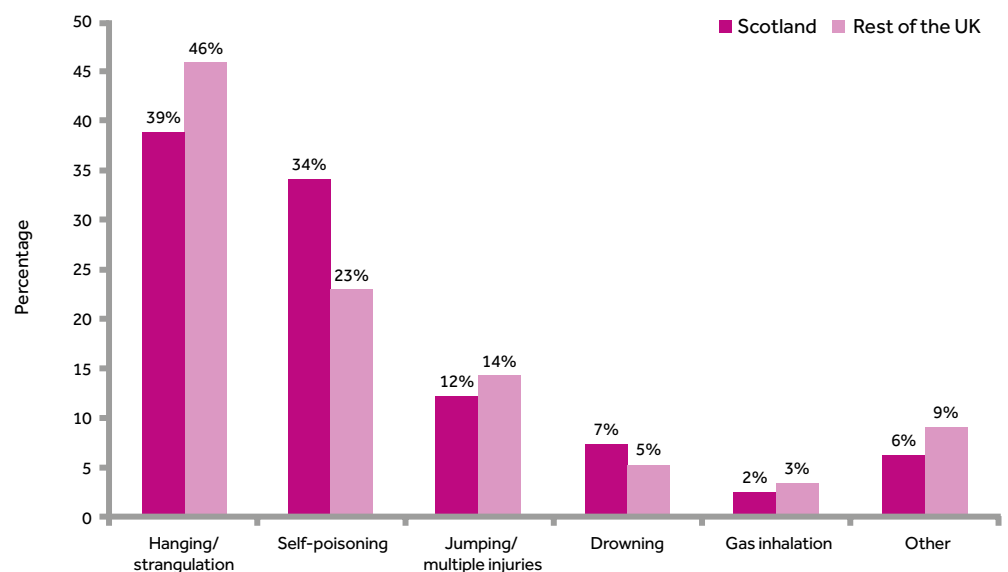
Note: the number in 2017 does not total that in Figure 44 due to rounding

## Method of suicide by patients

The percentage of deaths by hanging/strangulation in Scotland was lower than in the rest of the UK whilst for self-poisoning, the percentage was higher (Figure 46). The number of deaths by hanging/strangulation has fluctuated over the report period though there has been an increase since 2011. After a peak in 2011 in suicides by self-poisoning (reflecting the change in coding rules), the numbers have fallen substantially.

Opiates and opioids accounted for almost half (49%) of all drugs used in self-poisoning, significantly higher than the rest of the UK (33%). Non-opiate analgesics were used in 7%, with the majority (47, 6% of all self-poisonings) by paracetamol. Antipsychotic drugs were used in 10% and antidepressants (typically tricyclics or SSRI/SNRIs) in 12%.

Figure 46: Patient suicide in Scotland v. rest of the UK: main causes of death



We have collected data on the types of opiates used since 2012, the most common being heroin/morphine (49, 34%) followed by methadone (29, 20%) and tramadol (25, 17%). Information on the source of the opiates/opioids was available in 49%. In 38% (excluding unknowns) these had been prescribed for the patient.

There has been a decrease in suicide by antipsychotics and antidepressants over the report period. Self-poisonings using paracetamol or other analgesics have remained stable. The number of deaths by psychotropic drugs fell by 68% between 2008 and 2017.

## Social and clinical characteristics

Tables 30-32 show the main social, clinical and behavioural characteristics of patients dying by suicide. A high proportion showed evidence of social adversity and isolation, e.g. unemployment and living alone, compared to the rest of the UK. Over half had a co-morbid condition, and rates of previous violence, alcohol and drug misuse were higher compared to the rest of the UK. 13% had been ill for less than a year, lower than the rest of the UK (22%).

In 70 (5%) the suicide had occurred on or near an anniversary or other significant date.

Table 30: Demographic characteristics of patients who died by suicide in Scotland (2008-2018)

Demographic features	Total=2,619	
	Number	%
Age: median (range)	43 (11-94)	▼
Aged under 25 <sup>†</sup>	216	8
Male <sup>†</sup>	1,699	65
Not currently married	1,870	77 ▲
Living alone	1,335	56 ▲
Unemployed	1,297	54 ▲
On long-term sick leave	328	14
Ethnic minority group	44	2 ▼
Homeless	65	3

<sup>†</sup> includes estimated figures in 2017-2018

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Table 31: Clinical characteristics of patients who died by suicide in Scotland (2008-2018)

Clinical features	Total=2,619	
	Number	%
Any secondary diagnosis	1,331	53
Duration of illness (<12 months)	311	13 ▼
First contact with mental health services:		
<12 months	434	18 ▼
>5 years	1,408	59 ▲
Last admission was a re-admission	187	14

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Table 32: Behavioural characteristics of patients who died by suicide in Scotland (2008-2018)

Clinical features	Total=2,619	
	Number	%
History of self-harm	1,617	66
History of violence	591	25 ▲
History of alcohol misuse <sup>†</sup>	1,407	56 ▲
History of drug misuse <sup>†</sup>	1,209	48 ▲

<sup>†</sup> includes estimated figures in 2017-2018

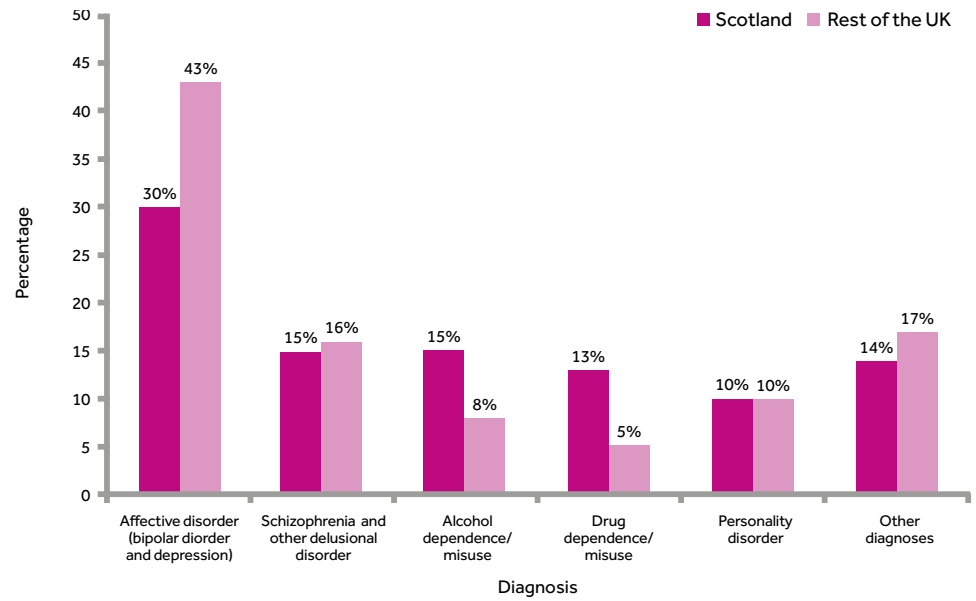
▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

## Diagnosis

A higher proportion of patients in Scotland had alcohol and drug dependence/misuse and a lower proportion had affective disorder (bipolar disorder and depression) compared with the rest of the UK (Figure 47). Of the 'other' diagnoses, 5% had anxiety disorder and 4% adjustment disorder. There was an overall fall in the number of patients with alcohol dependence/misuse over the report period.



Figure 47: Patient suicide in Scotland v. rest of the UK: primary diagnosis

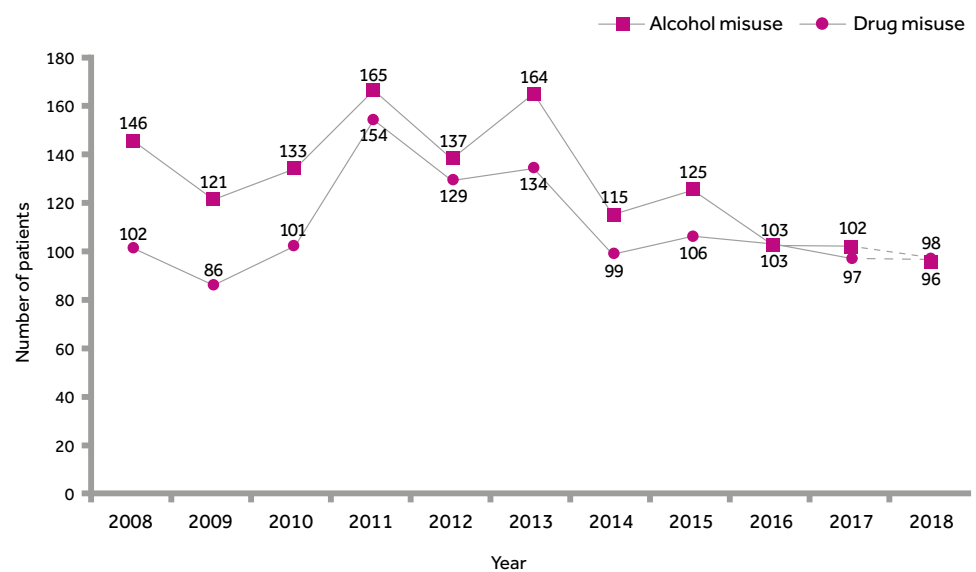


## Patients with alcohol and drug misuse

There were an estimated 1,407 (56%) patients with a history of alcohol misuse, an average of 128 deaths per year; 1,209 (48%) had a history of drug misuse, an average of 110 deaths per year; and 1,769 (69%) had a history of either alcohol or drug misuse or both, an average of 161 deaths per year.

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 48). Between 2012-2018, 337 (35%) of those with a drug or alcohol problem were under the care of substance misuse services.

Figure 48: Patient suicide in Scotland: number with a history of alcohol or drug misuse



## MENTAL HEALTH CARE

Table 33 and Figure 49 show some of the key service-related characteristics, including priority patient groups, recent contact with services, and estimations of risk.

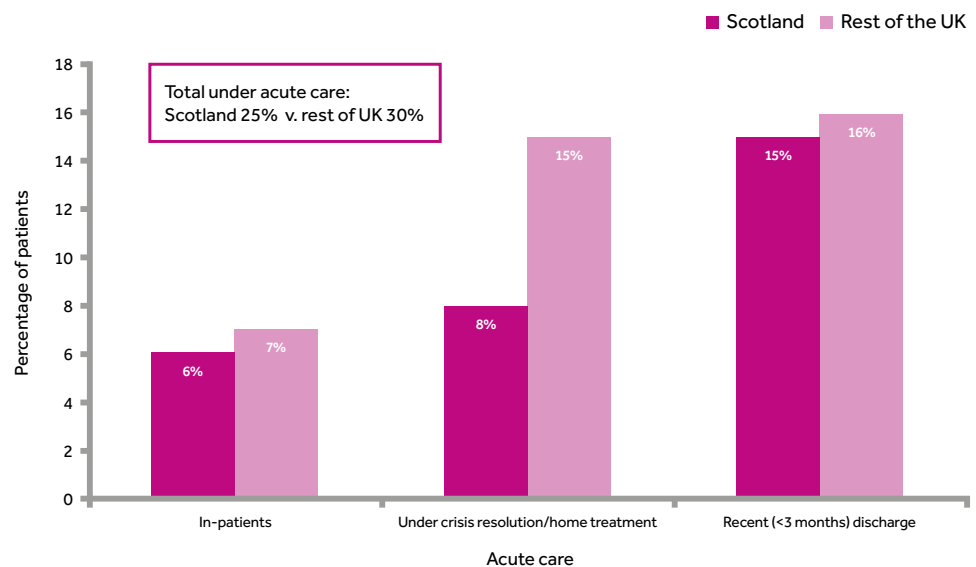
Table 33: Service characteristics of patients who died by suicide in Scotland (2008-2018)

Characteristic	Total=2,619	
	Number	%
In-patient <sup>†</sup>	160	6
Recent (<3 months) discharge	357	15
Under crisis resolution/home treatment services	176	8 ▼
Missed last contact in previous month	663	28 ▲
Non-adherence with medication in previous month	251	11
<b>Contact with services</b>		
Last contact within 7 days of death	968	38 ▼
Short-term risk: low or none	2,041	88 ▲
Long-term risk: low or none	1,357	60

<sup>†</sup> includes estimated figures in 2017-2018

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Figure 49: Patient suicide in Scotland v. rest of the UK: percentage under acute care



## In-patient suicide

There were 160 in-patient suicide deaths between 2008-2018, 6% of patient suicides, an average of 14 deaths per year. This proportion was similar to the rest of the UK (Figure 49). The rate of in-patient suicide has averaged at 6.7 per 10,000 admissions with fluctuations (Figure 50). The service characteristics of in-patients are shown in Table 34. A fifth (21%) died in the first week of admission, higher than in the rest of the UK (13%).

More in-patients in Scotland had left the ward without staff agreement or with staff agreement but failed to return (26% v. 14%), and fewer were under a medium or high level of observation (11% v. 31%).

Figure 50: Patient suicide in Scotland: number of mental health in-patients and rate of suicide per 10,000 admissions

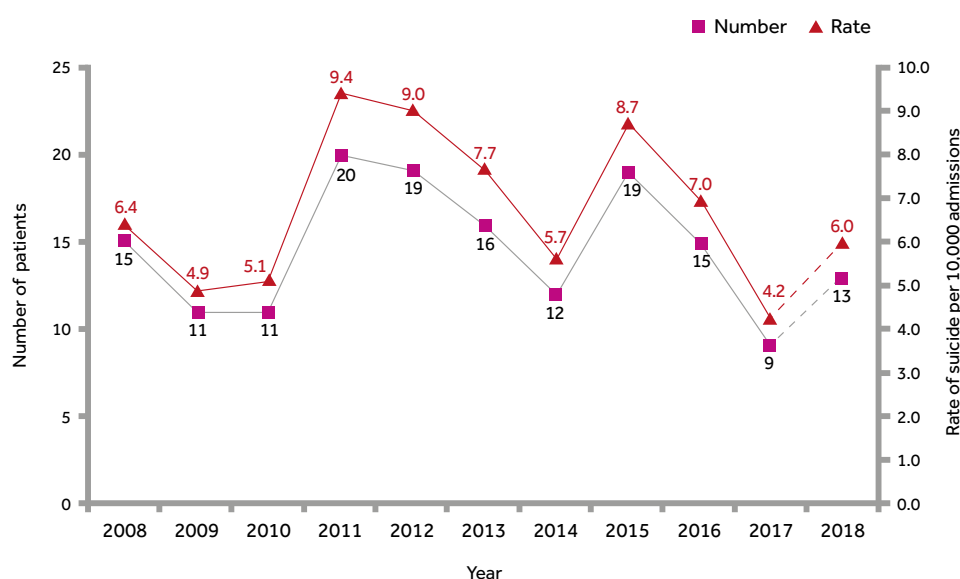


Table 34: Service characteristics of in-patients who died by suicide in Scotland (2008-2018)

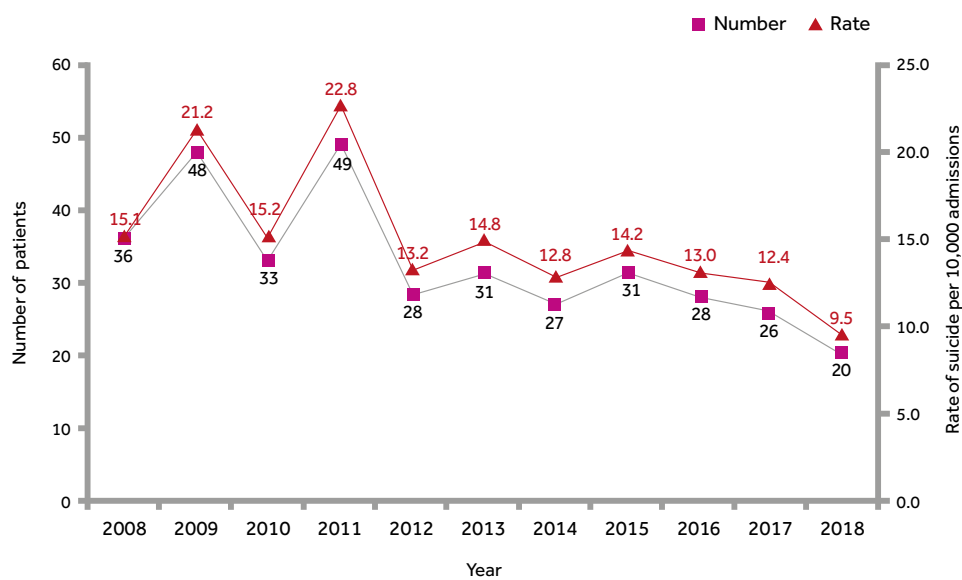
Characteristic	Total=160	
	Number	%
Died within a week of admission	32	21 ▲
Leave status:		
On the ward	43	29
On agreed leave	66	45
Off the ward without staff agreement or with agreement but failed to return	39	26 ▲
Detained under the MHA	48	32
Died within a local in-patient unit	113	77
Under medium/high level of observation	12	11 ▼
Short-term risk assessment viewed as low or none	107	74

▲▼ = significantly ( $p < 0.01$ ) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages  
MHA=Mental Health Act

## Patients recently discharged from hospital

There were 357 suicides within 3 months of discharge from in-patient care, 15% of all patient suicides, an average of 32 deaths per year. This proportion was the same as the rest of the UK (Figure 49). Despite fluctuations, there has been a downward trend (since a peak in 2011) in the number and rate of patients who died within 3 months of in-patient discharge, with the lowest figures in the last 7 years (Figure 51). The average rate of suicide was 15.0 per 10,000 discharges.

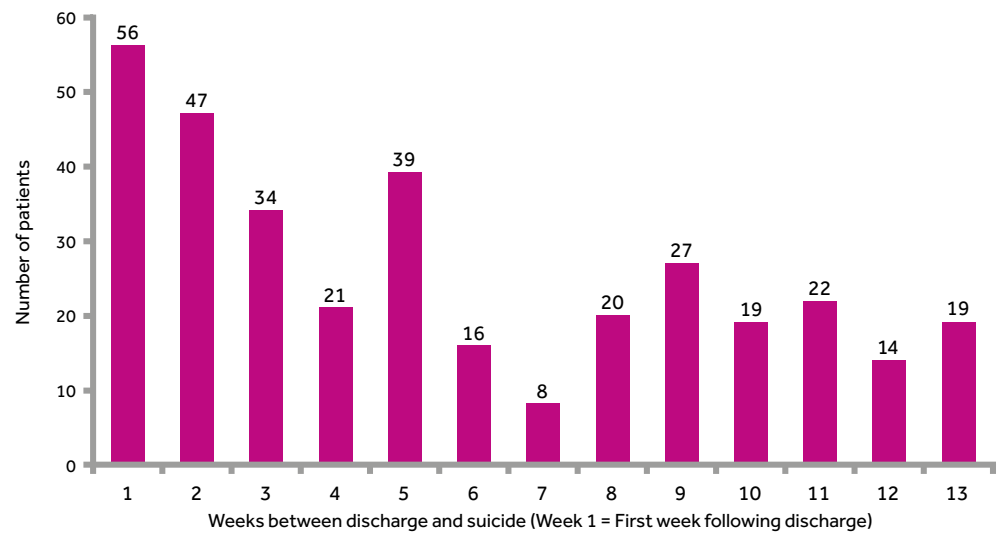
Figure 51: Patient suicide in Scotland: number who died within 3 months of in-patient discharge and rate of suicide per 10,000 discharges



Post-discharge suicides were most frequent in the first week after leaving hospital when 56 (16%) deaths occurred (Figure 52); the highest number occurred on the second full day after discharge (12, 21%). Of the patients who died in the first week, 46% had experienced recent adverse life events. We have recommended all patients are followed up within 3 days of discharge from in-patient care.

Of all post-discharge suicides, 61 (19%) died before the first follow-up appointment; the number of these patients did not change over the report period. 29 (9%) died after being discharged from a non-local in-patient unit.

Figure 52: Patient suicide in Scotland: number per week following discharge (2008-2018)



## Contact with other community services

Table 35 shows the number of patients receiving care under specialist community services. Fewer patients in Scotland were under a Section 297 of the MHA compared to the rest of the UK.

Table 35: Contact with specialist services in patients who died by suicide in Scotland (2008-2018)

Specialist service	Total=2,619	
	Number	%
Compulsory treatment order	65	3 ▲
Section 297 (2013-2018)*	14	1 ▼

\* includes conveyed to hospital or custody based safety under Section 297 of the MHA

▲▼ = significantly ( $p < 0.01$ ) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages



# WALES

## SUICIDE

Between 2008-2018, NCISH was notified of 3,683 deaths in the general population that received a suicide or “undetermined” conclusion, an average of 335 per year. These are referred to here as suicides.

### SUICIDE IN THE GENERAL POPULATION

The number and rate of suicide in the general population rose between 2009 and 2012-2013 with lower figures subsequently but an increase in 2017 and 2018, particularly for women (Figures 53 and 54). 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 53: Number of suicides in the general population in Wales, by gender

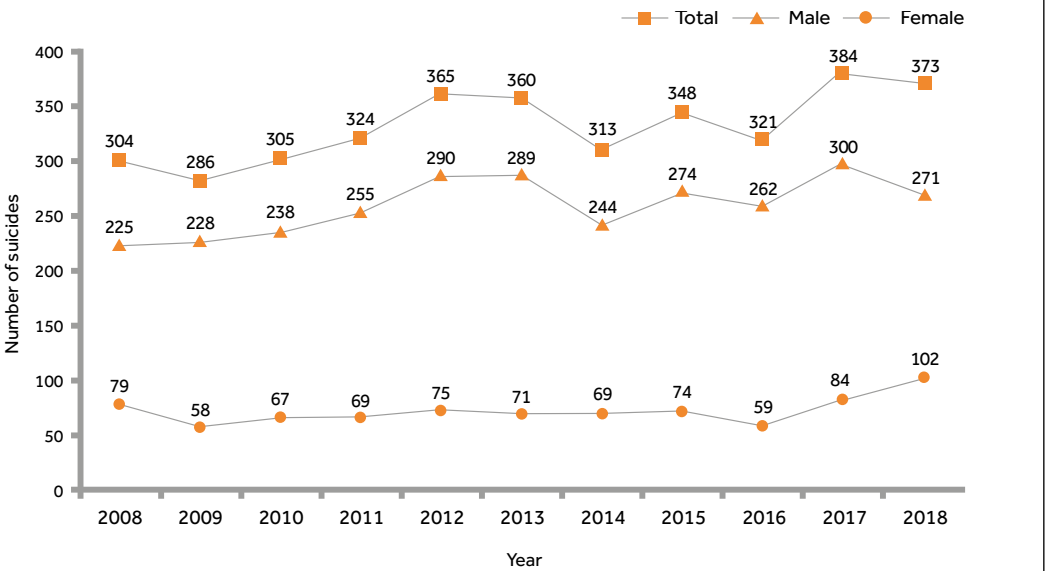
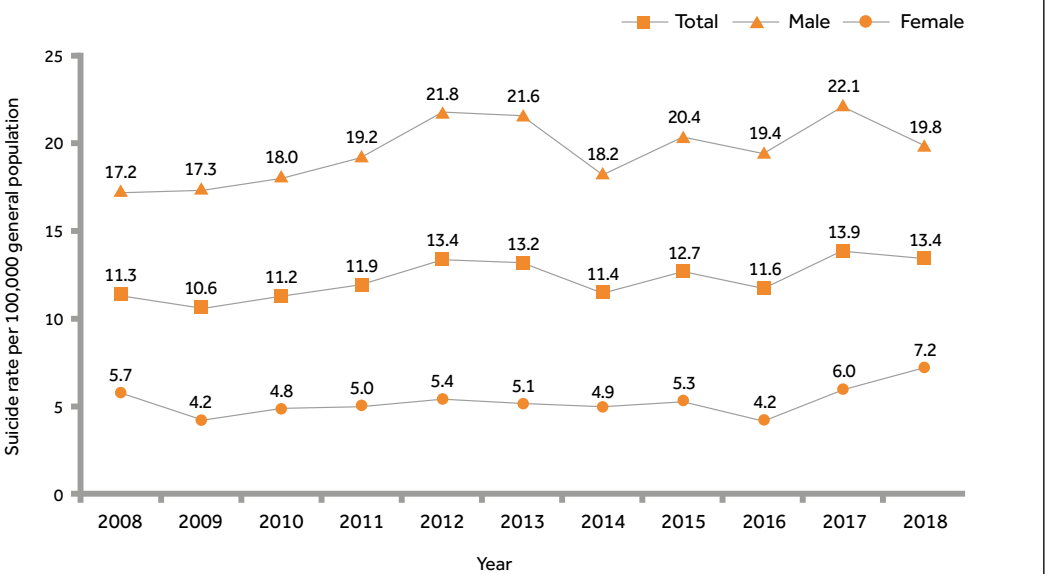


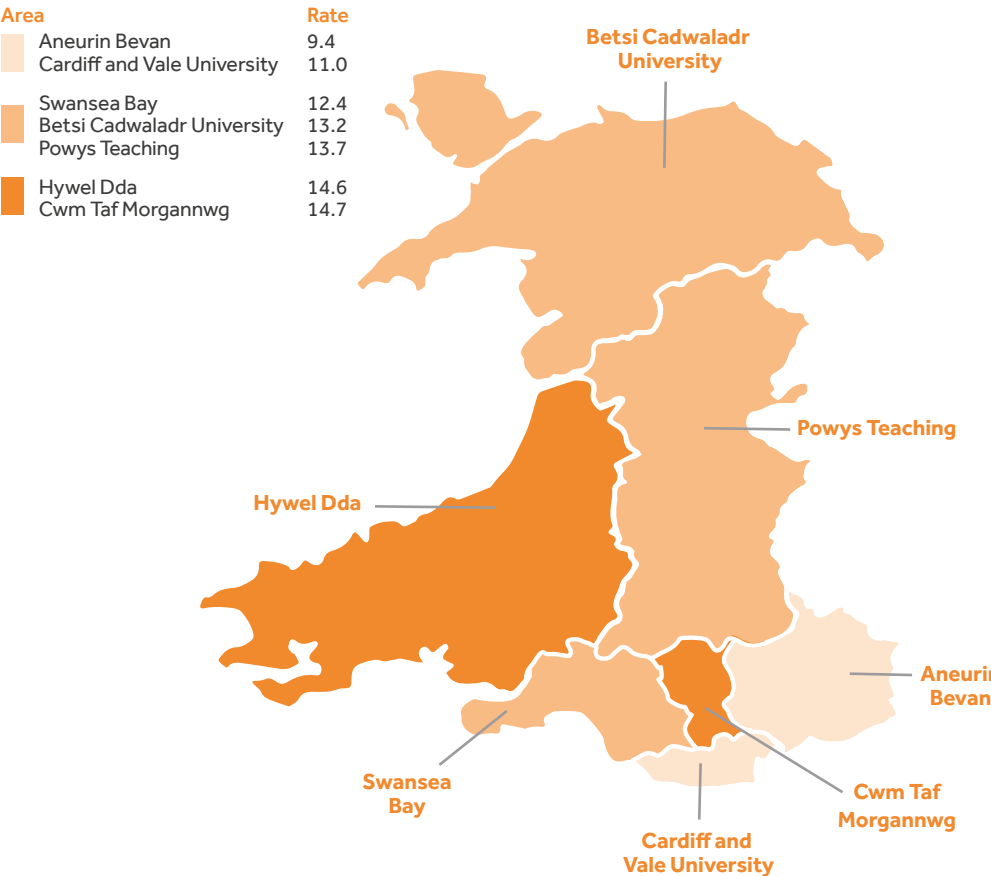
Figure 54: Rates of suicide in the general population in Wales, by gender



Variation in suicide rates by area of residence

There was variation in suicide rates by area of residence (by Health Board) at the time of death (average rate 2016-2018). The highest rate of suicide was in Cwm Taf Morgannwg at 14.7 per 100,000 population, over 50% higher than the lowest in Aneurin Bevan at 9.4 per 100,000 population (Figure 55).

Figure 55: Rates of suicide per 100,000 population, by Health Board of residence (average rate 2016-2018)



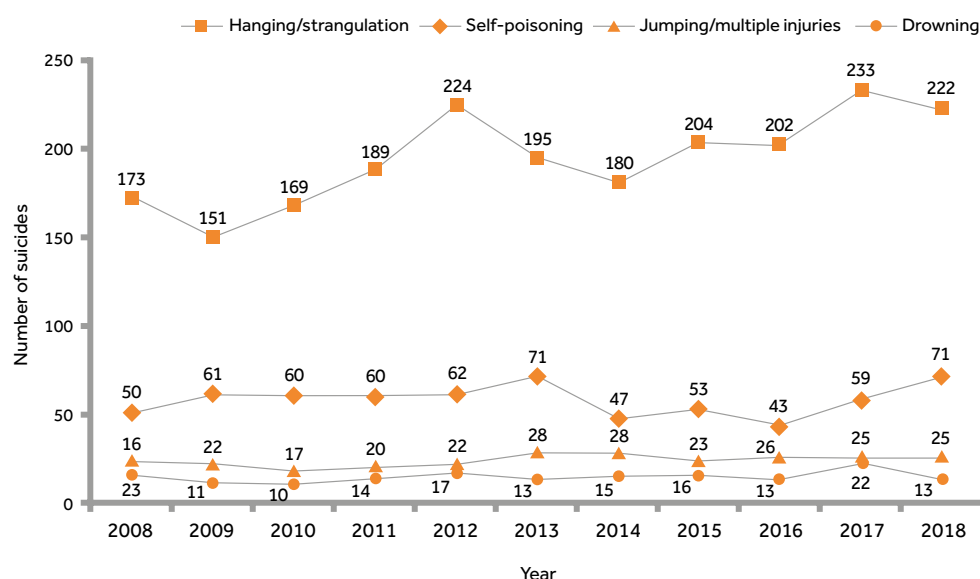
Note: rates have been colour coded by approximate tertile.

Method of suicide

The main methods of suicide are shown in Figure 56. Deaths by hanging/strangulation increased over the report period. The number of deaths by self-poisoning fell after a peak in 2013 but rose in 2017-2018. The less common methods were gas inhalation (4%), cutting (3%) and firearms (2%).



Figure 56: Suicide in the general population in Wales: main causes of death



## PATIENT SUICIDE

### Patient suicide: numbers and rates

During 2008-2018, 813 deaths (22% of general population suicides) were identified as patient suicides, i.e. people in contact with mental health services in the 12 months prior to death. This represents an average of 74 patient suicides per year.

There was an increase in the number of patient suicides between 2008 and 2013 (Figures 57 and 58), broadly in line with general population figures (Figures 53 and 54). Figures have been lower since 2013, the main fall being in male patients (Figure 58).

Figure 57: Number of patient suicides in Wales

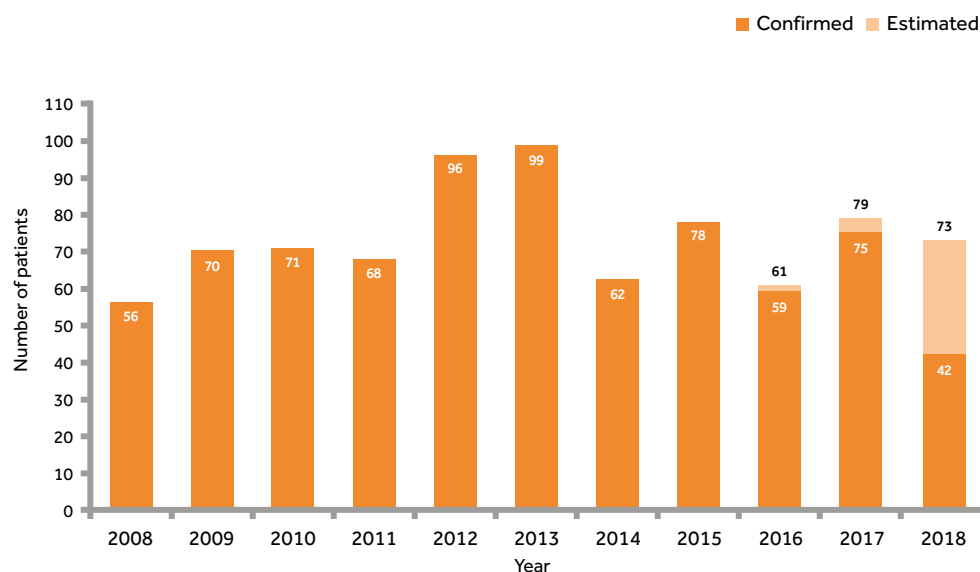
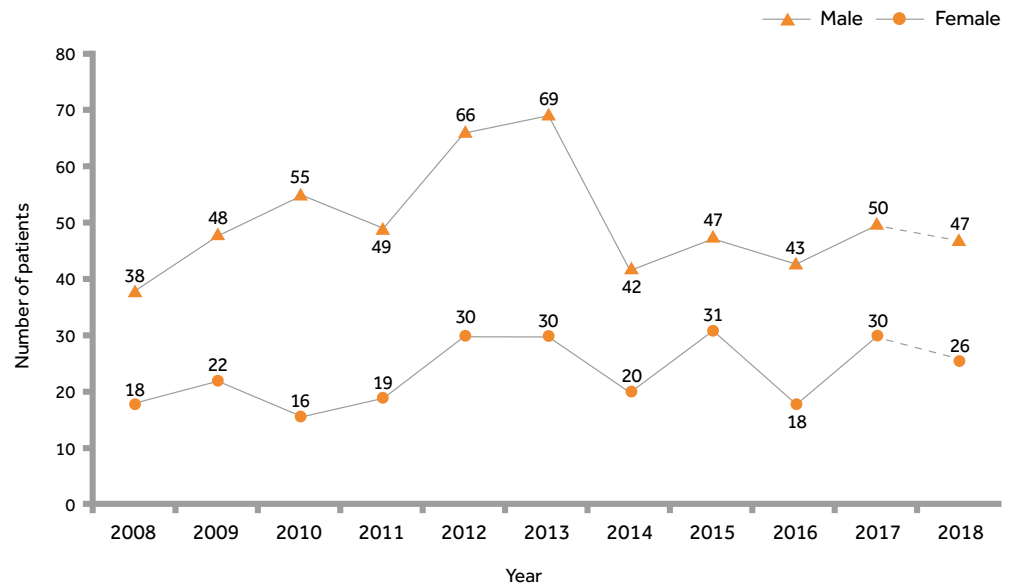


Figure 58: Number of patient suicides in Wales, by gender



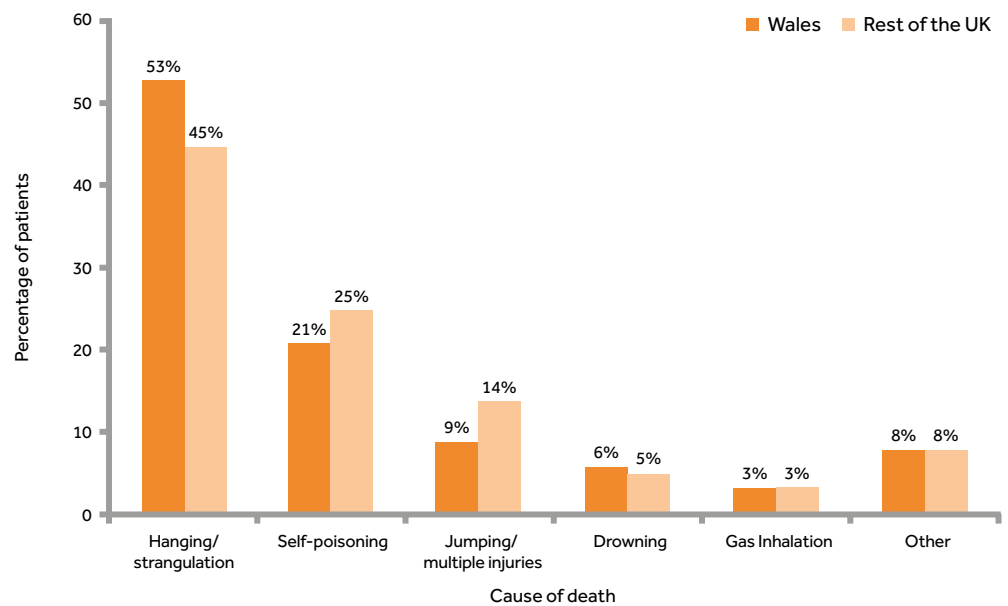
Note: the number in 2017 does not total that in Figure 57 due to rounding

## Method of suicide by patients

The percentage of deaths by hanging/strangulation was higher compared to the rest of the UK (Figure 59). There were fewer deaths by jumping/multiple injuries compared to the rest of the UK.

Hanging/strangulation increased from 2008 to a peak in 2012 but recent figures have fallen. The number of deaths by other methods has changed little. The most common substances used in deaths by self-poisoning were opiates (including opiate compounds) (49, 34%), SSRI/SNRI antidepressants (22, 15%), and antipsychotics (19, 13%).

Figure 59: Patient suicide in Wales v. rest of the UK: main causes of death



## Social and clinical characteristics

Tables 36–38 show the main social, clinical and behavioural features of patients who died by suicide. The proportion who were living alone was lower in Wales compared to the rest of the UK, whilst those on long-term sick leave was higher.

In 36 (7%) the suicide had occurred on or near an anniversary or other significant date.

Table 36: Demographic characteristics of patients who died by suicide in Wales (2008–2018)

Demographic features	Total=813	
	Number	%
Age: median (range)	45.5 (15–96)	
Aged under 25 <sup>†</sup>	58	7
Male <sup>†</sup>	554	68
Not currently married	515	69
Living alone	319	43 ▼
Unemployed	337	46
On long-term sick leave	115	16 ▲
Ethnic minority group	12	2 ▼
Homeless	15	2

<sup>†</sup> includes estimated figures in 2016–2018

▲▼ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Table 37: Clinical characteristics of patients who died by suicide in Wales (2008–2018)

Clinical features	Total=813	
	Number	%
Any secondary diagnosis	412	54
Duration of illness (<12 months)	159	22
First contact with mental health services:		
<12 months	196	27
>5 years	356	49
Last admission was a re-admission	56	14

See [supplementary information](#) for comparative percentages

Table 38: Behavioural characteristics of patients who died by suicide in Wales (2008–2018)

Behavioural features	Total=813	
	Number	%
History of self-harm	502	67
History of violence	177	24
History of alcohol misuse <sup>†</sup>	387	50
History of drug misuse <sup>†</sup>	302	39

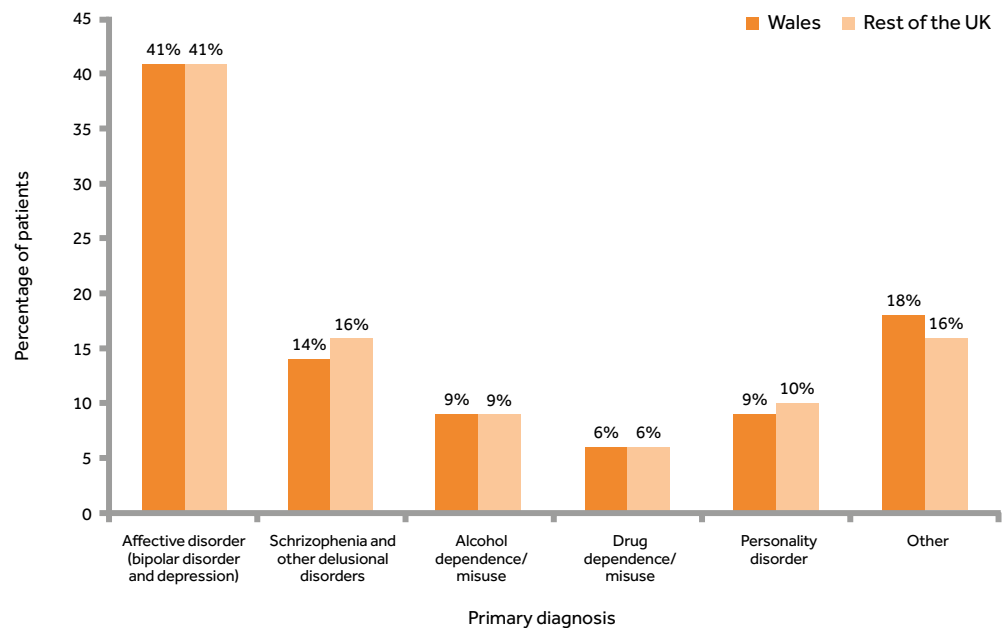
<sup>†</sup> includes estimated figures in 2016–2018.

See [supplementary information](#) for comparative percentages

## Diagnosis

The diagnostic profile was similar to the rest of the UK (Figure 60). Of the 'other' diagnoses, 6% were anxiety disorder and 5% were adjustment disorder. There was no overall trend in the number of suicides in relation to diagnosis.

Figure 60: Patient suicide in Wales v. rest of the UK: primary psychiatric diagnosis

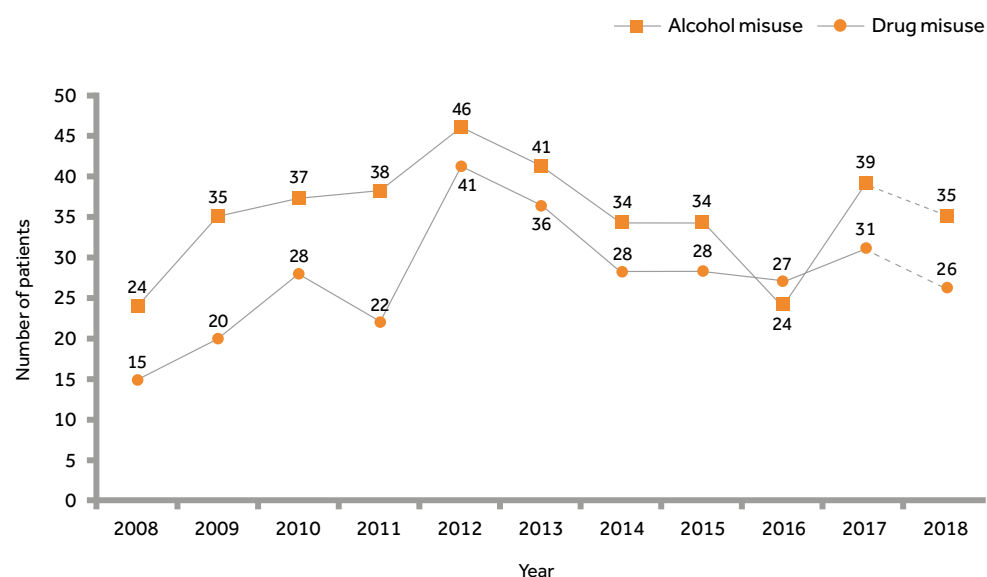


## Patients with alcohol and drug misuse

There were an estimated 387 (50%) patients with a history of alcohol misuse, an average of 35 deaths per year; 302 (39%) had a history of drug misuse, an average of 27 deaths per year; and 468 (59%) patients had a history of either alcohol or drug misuse or both, an average of 43 deaths per year. In both alcohol and drug misuse, numbers have been lower since a peak in 2012 (Figure 61).

Between 2011–2018, 79 (26%) of those with a drug or alcohol problem were under the care of substance misuse services.

Figure 61: Patient suicide in Wales: number with a history of alcohol or drug misuse



## MENTAL HEALTH CARE

Table 39 and Figure 62 show some of the key service-related characteristics of the patients, including priority patient groups, recent contact with services, and estimations of risk.

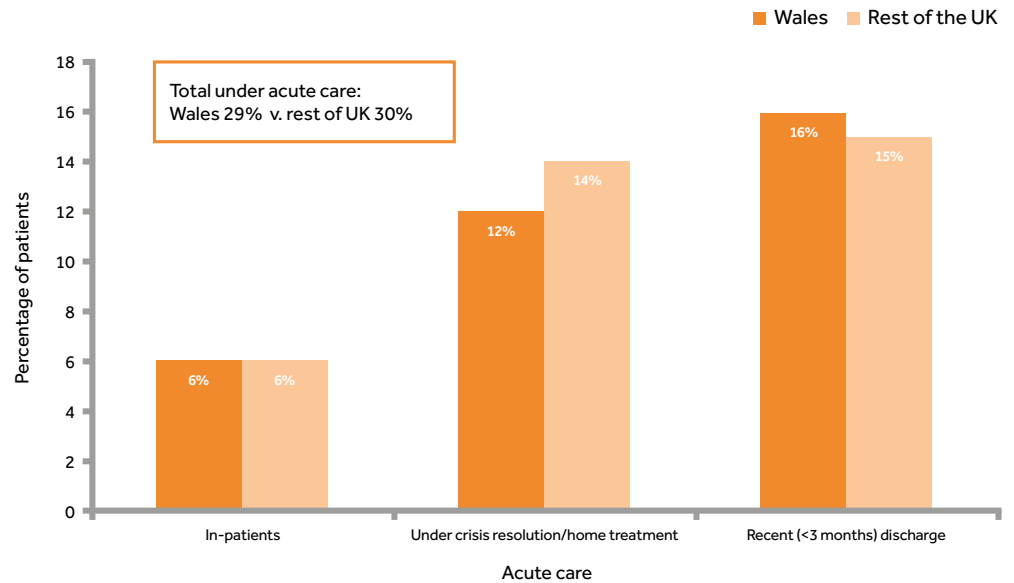
Table 39: Service characteristics of patients who died by suicide in Wales (2008-2018)

Characteristic	Total=813	
	Number	%
In-patient <sup>†</sup>	53	6
Recent (<3 months) discharge <sup>†</sup>	122	16
Under crisis resolution/home treatment services <sup>†</sup>	89	12
Missed last contact in previous month	157	22
Non-adherence with medication in previous month	87	12
<b>Contact with services</b>		
Last contact within 7 days of death	354	46
Short-term risk: low or none	641	89 ▲
Long-term risk: low or none	445	64 ▲

<sup>†</sup> includes estimated figures in 2016-2018

▲ = significantly (p<0.01) higher or lower than the rest of the UK; see [supplementary information](#) for comparative percentages

Figure 62: Patient suicide in Wales v. rest of the UK: percentage under acute care



#### In-patient suicide

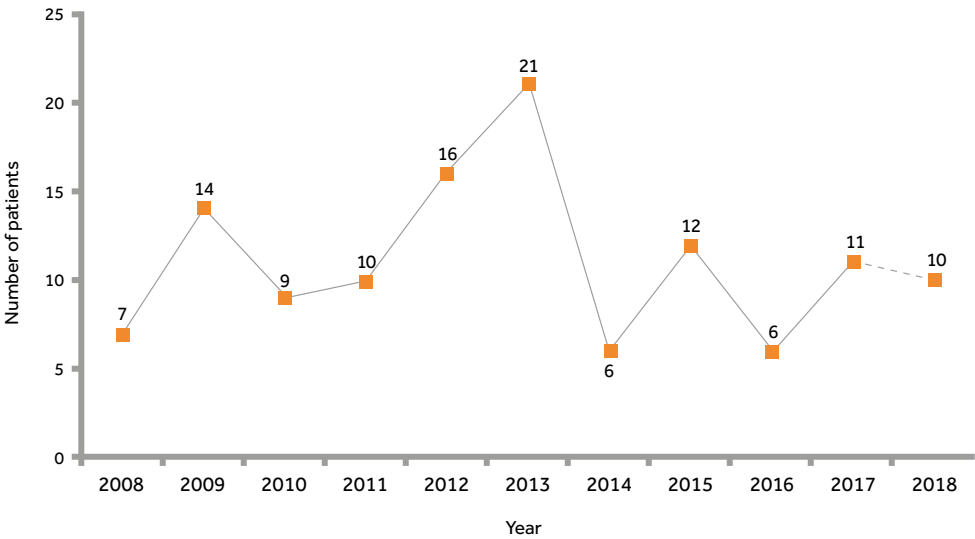
There were 53 in-patient deaths by suicide in 2008–2018, representing 6% of patient suicides, similar to the rest of the UK (Figure 62). The number fluctuated from 3 to 10 per year (Table 3). Over a quarter of patients died on the ward itself (14, 29%); 31 (63%) were on agreed leave or had left the ward with staff agreement; and 4 (8%) died after leaving the ward without staff agreement.

#### Patients recently discharged from hospital

There were 122 suicides within 3 months of discharge from in-patient care, 16% of all patient suicides, an average of 11 deaths per year. The proportion was similar to the rest of the UK (Figure 62). The number of post-discharge suicides reached a peak in 2013 with lower figures subsequently (Figure 63). The overall figures for 2016–2018 have been estimated to take into account late notifications.

Post-discharge suicides were most frequent in the 2 weeks after leaving hospital when 36 (32%) deaths occurred. 17 (15%) patients died in the first week after discharge – the highest number occurred on the second and third full days after discharge (4 patients). 12 (11%) died before the first follow-up appointment.

Figure 63: Patient suicide in Wales: number who died within 3 months of in-patient discharge



Contact with other community services

Table 40 shows the number of patients receiving care under specialist community services.

Table 40: Contact with specialist services in patients who died by suicide in Wales (2008-2018)

Specialist service	Total=813	
	Number	%
Community Treatment Orders (CTO)	10	1
Section 136* (2013-2018)	21	6

\*includes conveyed to hospital or custody based safety under Section 136 of the MHA

## CURRENT NCISH PROJECTS

We are commissioned to undertake standalone projects, looking at particular groups of interest. This allows us to respond to concerns raised by clinicians, service users, and other stakeholders, and to make recommendations for prevention. Our current projects are detailed here.

### REDUCING SUICIDE: QUALITY IMPROVEMENT AND PATIENT SAFETY

As part of NHS England and NHS Improvement's (NHSE/I) suicide prevention programme, outlined in the Long Term Plan, we are working with experts in Quality Improvement from the National Collaborating Centre for Mental Health (NCCMH) to support local areas to strengthen their suicide prevention plans.

In particular we are focusing on three of the main priority areas identified in the National Suicide Prevention Strategy<sup>5</sup>:

- Mental health services.
- Self-harm services.
- Suicide prevention in men.

Together with NCCMH, we are working with Quality Improvement Teams in each STP to:

- help them review their services against established guidelines and recommendations, and improve the quality of care they offer, using bespoke data provided from the NCISH database, benchmarked against the national average;
- provide expert knowledge of suicide prevention in the three priority areas;
- identify and help STPs adopt and embed national evidence including NCISH “10 ways to improve safety” into local quality improvement plans;
- advise on local data collection and suicide prevention plans.

The study is commissioned by the Healthcare Quality Improvement Partnership (HQIP) on behalf of NHSE/I.

### SUPPORT FOR IMPROVING COMMUNITY-BASED CARE FOR SELF-HARM

We are working alongside experts from the Manchester Self-Harm Project and the Patient Safety Translational Research Centre to support 12 areas in England to improve community-based services and care for people who self-harm. This is part of a national programme of transformation funded by NHSE/I linked to establishing new and integrated models of primary and community mental health care across England.

These new models will provide improved care for adults and older adults who self-harm in the community, as laid out in the NHS Long Term Plan.

We will support teams in participating areas by:

- providing broad expert knowledge of current self-harm data and research;
- providing guidance on national guidelines and recommendations for the care of people who self-harm;
- advising on methods of data collection to monitor and evaluate the impact of service changes for people who self-harm;
- developing an online resource to gather useful information in an easily accessible format.

This study is commissioned by the Healthcare Quality Improvement Partnership (HQIP), with funding from NHSE/I.

<sup>5</sup> Suicide Prevention Strategy for England. Department of Health  
<https://www.gov.uk/government/publications/suicide-prevention-strategy-for-england>

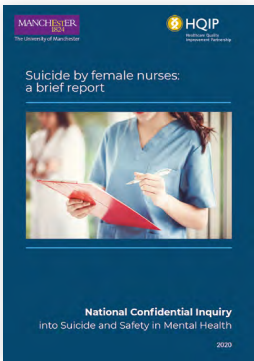


APPENDIX 2

RECENT REPORTS AND PUBLICATIONS FROM NCISH

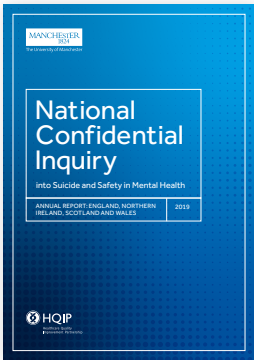
NCISH has published a number of major UK and national reports, and numerous publications using a wide range of methodologies (e.g. case-control, case series, psychological autopsy, and qualitative studies) and data sources (e.g. coroner data, primary care records). Below is a list of all NCISH reports and publications from 2019-2020. A full list of reports and publications can be found on the [NCISH website](#).

REPORTS



***Suicide by female nurses: a brief report. National Confidential Inquiry into Suicide and Safety in Mental Health. June 2020. University of Manchester.***  
[Download report here](#)

NHSEI requested a rapid-response study of female nurses who died by suicide be carried out between January 2019 and March 2019. There were 281 nurses of working age who died by suicide between January 1st 2011 and December 31st 2016 identified in the general population; 73% (204) were women. Of these, 102 nurses were patients, 79% (81) of them women. Female nurses had similar rates of contact with mental health services to women in other occupations (40% vs. 38%). More detailed studies should help identify priorities for prevention.



***National Confidential Inquiry into Suicide and Safety in Mental Health. Annual Report: England, Northern Ireland, Scotland and Wales. October 2019. University of Manchester.*** [Download report here](#)

Our Annual Report presents findings from 2007 to 2017 and provides figures for suicide, homicide and sudden unexplained deaths, highlighting the priorities for safer services.

## PAPERS RELATING TO THE MENTAL HEALTH CLINICAL OUTCOME PROGRAMME

**Baird A, Webb RT, Hunt IM, Appleby L, Shaw J. Homicide by men diagnosed with schizophrenia: national case-control study. *BJPsych Open*, 2020; 6, e143, 1-8.**  
<https://doi.org/10.1192/bjo.2020.129>

The aim of this national nested case-control study was to determine the risk factors for homicide by men diagnosed with schizophrenia. Between 1997 and 2012, 160 male patients with schizophrenia were convicted of homicide. They were matched with 542 male control patients who had not been convicted of homicide. Almost all homicides were committed by patients who had a history of substance misuse and/or who were not in receipt of planned treatment. To prevent serious violence, mental health services should focus on drug and alcohol misuse, treatment adherence and maintaining contact with services.

**Graney J, Hunt IM, Quinlivan L, Rodway C, Turnbull P, Gianatsi M, Appleby L, Kapur N. Suicide risk assessment in mental health services: a national mixed methods study from the UK. *Lancet Psychiatry*, 2020; 7, 12, 1046-1053.**  
[https://doi.org/10.1016/S2215-0366\(20\)30381-3](https://doi.org/10.1016/S2215-0366(20)30381-3)

This mixed-methods study examined which risk assessment tools were currently in use in the UK, and collected views from clinicians, service-users and carers on the use of these tools. Findings showed little consistency in use of these instruments and clinicians, patients and carers expressed both positive and negative views of them. The findings indicate that assessment processes need to be consistent across mental health services and include adequate training. In line with national guidance, risk assessment should not be seen as a way to predict future behaviour and should not be used as a means of allocating treatment. Management plans should be personalised and collaboratively developed with patients and their families and carers.

**Rodway C, Tham S, Turnbull P, Kapur N, Appleby L. Suicide in children and young people: Can it happen without warning? *Journal of Affective Disorders*, 2020; 275, 307-310.**  
<https://doi.org/10.1016/j.jad.2020.06.069>

Parents bereaved by suicide often say the death of their loved one happened "out of the blue". We examined whether there is a group of young people who die by suicide without explicit warning signs, and if they indicate risk indirectly, through other suicide risk factors. There were 595 suicides by young people between 2014 and 2016. We obtained data for 544 (91%). Around a third had no known history of suicidal ideas or self-harm. This group also had low rates of other risk factors for suicide, including substance misuse, a mental health diagnosis, recent adverse life events, and of contact with services. The findings show that suicide after minimal warning appears to be relatively common in young people. Suicidal ideas may develop rapidly in this age group and crisis services should therefore be widely available. Therefore, future prevention cannot rely on explicit expressions of risk.

**Rodway C, Tham S-G, Ibrahim S, Turnbull P, Kapur N, Appleby L. Children and young people who die by suicide: childhood-related antecedents, gender differences and service contact. *BJPsych Open*, 2020; 6, e49, 1-9. <https://doi.org/10.1192/bjo.2020.33>**

This study aimed to investigate the stresses experienced by young people who died by suicide, their contact with services, and whether these differed in girls and boys. Through analysis of undertaken investigations, the antecedents of suicide in 595 young people aged 10-19 who died by suicide between 2014 and 2016 were explored. A number of previous and recent stresses were reported including witnessing domestic violence, bullying, self-harm, bereavement (including by suicide) and academic pressures; all were more common in girls. Drug misuse and workplace problems were more common in boys. The findings show that these antecedents are important in a multiagency approach to prevention incorporating education, social care, health services and the third sector. Some of these may also have contributed to the recent rise in suicide in girls.

**Gianatsi M, Burns H, Hunt IM, Ibrahim S, Windfuhr K, While D, Appleby L, Kapur N. Treatment of mental illness prior to suicide: a national investigation of 12,909 patients, 2001-2016. *Psychiatric Services*, 2020; 71(8) 772-778. <https://doi.org/10.1176/appi.ps.201900452>**

This study aimed to examine undertreatment among patients with mental health conditions who died by suicide and to assess the association between patients' clinical and sociodemographic characteristics and treatment receipt. The study's sample included 12,909 patients in England and Wales who had received a diagnosis of bipolar affective disorder, schizophrenia, depression, or an anxiety disorder and died by suicide between 2001 and 2016. We found that one-quarter of patients with mental health conditions who die by suicide may not be receiving relevant interventions at the time of death. Levels of and reasons for nontreatment vary by diagnosis, but our findings suggest that measures to address comorbid diagnoses and implement interventions to improve adherence in specific groups could have an impact.

**Tham S-G, Ibrahim S, Hunt IM, Kapur N, Gooding P. Examining the mechanisms by which adverse life events affect having a history of self-harm, and the protective effect of social support. *Journal of Affective Disorders*, 2020; 263, 621-628. <https://doi.org/10.1016/j.jad.2019.11.037>.**

This study examined NCISH questionnaire data on 24,444 patient suicide deaths (1996-2015). Mediation analyses investigated direct and indirect pathways between negative stressors, hopelessness and a proxy measure of suicide, namely, self-harm history. There was a direct effect of negative life events on suicidal behaviours. Supporting contemporary psychological models of suicide, a mediated effect via hopelessness and a protective effect of social support were identified. Social support buffered the pathway between stressful life events and hopelessness, with hopelessness decreasing as social support increased. This is the first time that population data has been used to test psychological pathways to suicidal acts involving negative stressors, hopelessness and social support. Findings suggest that psychological interventions should focus on increasing social support following negative life events together with ameliorating perceptions of hopelessness.

**Bojanić L, Hunt IM, Baird A, Appleby L, Kapur N, Turnbull P. Early post-discharge suicide in mental health patients: Findings from a national clinical survey. *Frontiers in Psychiatry*, 2020; 11:502.**

<https://doi.org/10.3389/fpsy.2020.00502>

In this study, we aimed to examine factors associated with immediate suicide following discharge from psychiatric in-patient care, and any subsequent practical implications for the management of care. More recently, we proposed a more “stringent” follow-up period of 2–3 days after discharge. Patients who died within this early time-frame post-discharge were more likely to die before the follow-up appointment occurred. They more often had a primary diagnosis of a personality disorder, self-discharged, and had a higher frequency of death by jumping from a height or in front of a vehicle compared to later deaths. Our findings suggest that clinicians should be aware of the increased risk of immediate suicide in the post-discharge period by people with a diagnosis of personality disorder, immediate suicide risk in patients who initiate their own discharge, and the increased risk of death by jumping from a height or in front of a vehicle in the immediate post-discharge period. The findings support the recent recommendation from NCISH that follow-up should occur within 3 days of discharge from in-patient care.

**Littlewood D, Quinlivan L, Graney J, Appleby L, Turnbull P, Webb R, Kapur N. Learning from clinicians’ views of good quality practice in mental healthcare services in the context of suicide prevention: a qualitative study. *BMC Psychiatry*, 2020; 19, 346.**

<https://doi.org/10.1186/s12888-019-2336-8>

In this study, we aimed to explore clinicians’ views of what constitutes good practice in mental healthcare services in the context of suicide prevention. We looked at the following key areas of practices that: 1) promote safer environments, 2) develop stronger relationships with patients and families, 3) provide timely access to tailored and appropriate care, 4) facilitate seamless transitions, and 5) establish a sufficiently skilled, resourced and supported staff team. We concluded that clinicians possess important understanding of optimal practice but there are few opportunities to share such insight on a broader scale. A further challenge is to implement optimal practice into routine, daily care to improve patient safety and reduce suicide risk.

**Pitman A, Tham S-G, Hunt IM, Webb R, Appleby L, Kapur N. Access to means of lethal overdose among psychiatric patients with co-morbid physical health problems: analysis of national suicide case series data from the UK. *Journal of Affective Disorders*, 2019; 257:173–179.**

<https://doi.org/10.1016/j.jad.2019.06.027>

The aim of this study was to examine suicide by mental health patients with co-morbid physical illness. Between 2004 and 2015, there were 3,525 suicides by mental health patients with physical co-morbidity. These patients were more likely to die by self-poisoning than those without physical co-morbidity, and to use medications for a physical disorder, e.g. opioids and paracetamol/opioid compounds. Findings indicate the potential for means restriction in preventing suicide among patients with physical co-morbidities.

**Ibrahim S, Hunt IM, Rahman MS, Shaw J, Appleby L, Kapur N. Recession, recovery and suicide in mental health patients in England: time trend analysis. *British Journal of Psychiatry*, 2019; 215:608-614.**

<https://doi.org/10.1192/bjp.2019.119>

This study examined suicide rates in relation to the recession in mental health patients in England between 2000 and 2016. There was a steady fall in male suicide rates before the recession (2000-2009) but an upward trend during the recession (2009-2011). The rise was found in men aged 45-54, those who were unemployed or had a diagnosis of substance dependence/misuse. The rates of suicide in male patients decreased in the period after the recession (2012-2016). There were no significant recession-related trends in suicide for female patients. The study highlighted the need for more targeted interventions for patients with financial difficulties, and awareness of alcohol and drug misuse at times of economic hardship.

**Baird A, While D, Flynn S, Ibrahim S, Kapur N, Appleby L, Shaw J. Do homicide rates increase during weekends and national holidays? *The Journal of Forensic Psychiatry & Psychology*, 2019; 30:3,367-380.**

<https://doi.org/10.1080/14789949.2019.1600711>

This study examined the timing of homicide offences committed in England in 1996-2015. Offences were more likely to occur at the weekend, mostly on a Saturday. Weekend homicides were associated with: younger perpetrators, being male, and alcohol consumption. Homicides increased markedly on New Year's Day, and public holidays. Those with a history of mental illness more commonly committed homicide during weekdays. No change in pattern was found after licensing hours were extended in 2005 to allow 24-h licencing for the sale of alcohol. The study indicated a public health approach on educating young people on the health risks associated with alcohol, promoting responsible drinking and conflict avoidance, specifically on special events and at weekends.

**Flynn S, Raphael J, Graney J, Nyathi T, Williams A, Kapur N, Appleby L, Shaw J. The personality disorder patient pathway: Service user and clinical perspectives. *Personality and Mental Health*, 2019; 13(3):134-143.**

<https://doi.org/10.1002/pmh.1444>

This qualitative study focused on service users with a diagnosis of personality disorder and examined perspectives on how services could be improved. 131 service users contributed to an online survey and 45 clinicians discussed their experiences in focus groups. Both staff and patients raised issues with the diagnosis of personality disorder, the absence of a coherent care pathway, access to psychological treatment and staff training. The study highlighted that elements of the care pathway are disjointed and not working as effectively as they could.

## OTHER PAPERS PUBLISHED BY NCISH

**Bojanić L, Pitman A, Kapur N. Suicide prevention through means restriction: the example of firearms control in Croatia. *Journal of Public Health*, 2021; 1-6.**  
<https://doi.org/10.1093/pubmed/fdaa251>

Restricting access to lethal means of suicide is one of the most effective approaches to suicide prevention. This case study of firearms control in Croatia provides valuable insights for countries in a post-conflict era. The aftermath of conflict increases the prevalence of those with multiple risk factors for suicide, where lethal means of suicide are readily available, and where cultural sensitivities must be considered. It also provides potentially helpful lessons for public health agencies and others involved in suicide prevention, where there may be strong political or individual objections to firearm legislation and any country where discussion of suicide is stigmatised. The Croatian paradigm suggest that careful social marketing of safety messages, tailored to respect local sensitivities, may have the potential to reduce suicides and accidental deaths without the need for legislative change.

**Bojanić L, Flynn S, Gianatsi M, Kapur N, Appleby L, Shaw J. The typology of parricide and the role of mental illness: data-driven approach. *Aggressive Behavior*, 2020; 46, 6, 516-522.**  
<https://doi.org/10.1002/ab.21906>

The aims of this study were to (a) describe the characteristics of parricide offenders with a focus on mental illness and clinical care and (b) examine Heide's widely used typology of parricide through a data-driven approach. We found that in England and Wales between 1997 and 2014, parricide offenders were most often male, unmarried, and unemployed, with a third of offenders diagnosed with schizophrenia. Just over a quarter had been in contact with mental health services before the offence. The latent class analysis resulted in three types of parricide offenders: middle-aged with affective disorder, previously abused, and to have a serious mental illness, which confirmed, to an extent, Heide's typology. This suggests that health and social care services should actively engage with carers of people with mental illness and support to those caring for older relatives and victims of abuse.

**Quinlivan L, Littlewood DL, Webb RT, Kapur N. Patient safety and suicide prevention in mental health services: time for a new paradigm? *Journal of Mental Health*, 2020; 29, 1, 1-5.**  
<https://doi.org/10.1080/09638237.2020.1714013>

This is an editorial discussing how adopting a patient safety paradigm can provide additional insights into suicidal behaviour in mental health services and generate new opportunities for suicide prevention.

**Littlewood D, Quinlivan L, Steeg S, Bennett C, Bickley H, Rodway C, Webb R, Kapur N. Evaluating the impact of patient and carer involvement in suicide and self-harm research: A mixed-methods, longitudinal study protocol. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, 2020; <https://doi.org/10.1111/hex.13000>**

Patient and public involvement (PPI) is becoming more commonplace in mental health research. There are strong moral and ethical arguments for good quality PPI. This study will examine the effect of PPI on self-harm and suicide research and explore patients', carers' and researchers' experiences and views in relation to the quality of PPI practice and provision of appropriate support for PPI members using a longitudinal, mixed methodological approach. Findings from this study will inform practical guidance to support self-harm and suicide researchers in effectively involving people with experiential knowledge in their research.

**Appleby L, Turnbull P, Kapur N, Gunnell D, Hawton K. New standard of proof for suicide at inquest. *British Medical Journal*, 2019; 366:l4745. <https://doi.org/10.1136/bmj.l4745>**

Leading suicide prevention experts discuss the implications of the Appeal Court of England and Wales recent ruling on the determination of suicide at inquest from a criminal standard (beyond reasonable doubt) to a civil standard (balance of probabilities).

## NCISH GOVERNANCE

An Independent Advisory Group (IAG) provides independent external oversight of the work of NCISH, which is guided by members of its Project Board. Both the IAG and the Project Board include representation of key stakeholder groups, including clinicians and experts by experience.

### MEMBERS OF THE MENTAL HEALTH CLINICAL OUTCOME REVIEW PROGRAMME INDEPENDENT ADVISORY GROUP (IAG)

Tim Kendall (Chair)	NHS England and NHS Improvement
Ainsley Bladon	Mental Health and Vulnerable Groups Division, Welsh Government
Richard Bunn	Shannon Clinic Regional Forensic Unit, Belfast Health and Social Care Trust, Northern Ireland
Carolyn Chew-Graham	Keele University
Caroline Dollery	East of England Strategic Clinical Network for Mental Health Neurology and Learning Disability
Frances Healey	NHS Improvement
Tasneem Hoosain	Healthcare Quality Improvement Partnership (HQIP)
Ann John	Public Health Wales
Karine Macritchie	South London and Maudsley NHS Foundation Trust
Sarah Markham	Lay member
Ian McMaster	Department of Health, Northern Ireland (DoH-NI)
John Mitchell	Mental Health and Protection of Rights Division, Scottish Government
Sian Rees	University of Oxford Health Experiences Institute, Department of Primary Care Health Sciences
Tina Strack	Healthcare Quality Improvement Partnership (HQIP)
Ben Thomas	Department of Health, England



## MEMBERS OF NCISH PROJECT BOARD

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Lisa Edwards	Expert by Experience
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