



The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

ANNUAL REPORT:
England, Northern Ireland, Scotland and Wales

JULY 2014

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Responsibility for the analysis and interpretation of the data provided from government offices rests with the Inquiry and not with the original data provider.

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness provides definitive figures on suicide, homicide and sudden unexplained death in patients under mental healthcare in the countries of the UK.



CONTRIBUTORS

Louis Appleby, FRCPsych*
Nav Kapur, FRCPsych*
Jenny Shaw, FRCPsych*
Kirsten Windfuhr, PhD*
Alyson Williams, PhD*
Isabelle M Hunt, PhD*
David While, PhD*
Sandra Flynn, PhD*
Alison Roscoe, MSc
Cathryn Rodway, MA
Saied Ibrahim, MSc
Su-Gwan Tham, BSc

Director
Head of Suicide Research
Head of Homicide Research
Senior Project Manager and Research Fellow
Deputy Project Manager
Research Fellow
Research Fellow
Research Fellow
Research Associate
Research Associate
Research Assistant
Research Assistant

and all staff at the Inquiry

Rebecca Lowe, James Burns, Philip Stones, Julie Hall, Thabiso Nyathi, and Huma Daud.

*main contributors



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

The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices.

HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, funded by NHS England, the Scottish Government, NHS Wales, the Northern Ireland Department of Health, Social Services and Public Safety (DHSSPS) and the States of Jersey.

The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data. More details can be found at: www.hqip.org.uk/clinical-outcome-review-programmes-2/



MEMBERSHIP OF THE INQUIRY INDEPENDENT ADVISORY GROUP (IAG)

Ben Thomas (Chair), Director of Mental Health and Learning Disability Nursing, Department of Health, England

Richard Bunn, Consultant Forensic Psychiatrist, Belfast Trust, Shannon Clinic, Northern Ireland

Jeremy Butler (lay representative), Non-executive Director at the National Patient Safety Agency and the Berkshire Healthcare NHS Trust, retired pilot and General Manager for British Airways, advisor to Boeing on aircraft accidents

Jonathan Campion, Visiting Professor of Population Mental Health, University College London; Director of Population Mental Health, UCL Partners; Director for Public Mental Health and Consultant Psychiatrist, South London and Maudsley NHS Foundation Trust

Moira Connolly, Principal Medical Officer for Mental Health, Scottish Government, Consultant Psychiatrist

Mick Dennis, Professor of Psychiatry for Older People and Honorary Consultant Psychiatrist, Swansea University and Abertawe Bro Morgannwg University Health Board, Swansea

Michael Holland, Consultant Psychiatrist and Associate Medical Director for Revalidation and Quality at South London and Maudsley NHS Foundation Trust

Ian McMaster, Medical Advisor, Department of Health, Social Services and Public Safety (DHSSPS), Northern Ireland

Jenny Mooney, Business Manager, Clinical Outcome Review Programme, HQIP

John Morgan, Consultant General Adult Psychiatrist, Leeds and York Partnership Foundation Trust

Sian Rees, Interim Director, University of Oxford Health Experiences Institute, Department of Primary Care Health Sciences

Geraldine Strathdee, National Clinical Director for Mental Health, NHS England, Consultant Psychiatrist

Sarah Watkins, Senior Medical Officer, Department for Health and Social Services and Children (DHSSC) and Department of Public Health and Health Professions (DPHHP), Welsh Government



KEY FINDINGS

1. Suicide after discharge from hospital

- The first 3 months after discharge remain a time of particularly high suicide risk – this is especially true in the first 1-2 weeks. Between 2002-12 there were 3,225 suicides in the UK by mental health patients in the post-discharge period, 18% of all patient suicides.
- In our related research, suicide in the first 2 weeks post-discharge has been linked to admissions lasting less than 7 days and to adverse life events.
- There have been improvements since we first drew attention to the suicide risk at this time 15 years ago. The number of these suicides has fallen and the percentage of patients having no follow-up before suicide has dropped. However, this percentage has not changed since 2006 and the pattern of high risk immediately after discharge continues.

2. Suicide by hanging

- Hanging remains the commonest method of suicide in both the general and patient populations.
- Our figures show that deaths by hanging continue to rise. In 2012 there were 2,994 suicides by hanging in the UK, 813 in mental health patients.

3. Intimate partner homicides

- Figures for intimate partner homicides have fallen but remain a serious problem. In 2002-12 there were 1,152 intimate partner homicides in the UK.
- Most incidents involve male perpetrators and female victims – 884 of 1,152 (77%).
- Across the UK, 13% of intimate partner homicide perpetrators in 2002-12 were mental health patients. This is similar to the percentage for all homicides (11%).

4. Suicide by patients under crisis resolution and home treatment (CR/HT)

- Suicide by patients receiving care under crisis resolution/home treatment teams (CR/HT) is now substantially more common than in in-patient care. In 2002-12 there were 1,943 patient suicides in the UK under CR/HT.
- However, our recent paper on suicide under CR/HT in England showed that the suicide rate (i.e. taking into account rising patient numbers in this setting) has fallen in recent years, suggesting improving safety.
- Living alone is a common antecedent of suicide by patients under CR/HT.



5. Patient suicides

- Higher suicide rates from 2008 have been widely reported and linked to the economic crisis. Our figures suggest that the impact of the crisis has been varied and inconsistent, affecting age and gender groups differently, showing fluctuations since 2008 and different patterns for the UK countries.
- For example, general population suicides have risen in Wales and fallen (following a rise in 2007-08) in Scotland. Patient suicides have risen in 2012 in Wales but fallen in England.

6. Patient homicides

- The previous fall in patient homicides (England) has been maintained, although there is no further fall. We have previously reported this fall to be related to better care for people with mental illness and substance misuse.

7. Sudden unexplained death (England and Wales)

- We were notified of 24 deaths within 24 hours of restraint during 2002-12 in England and Wales; 6 of which occurred within 1 hour of restraint.
- Annual figures are low but the 2012 figure (5 in England only) for deaths within 24 hours was the highest in the report period, although none of these 5 occurred within 1 hour.



RECOMMENDATIONS

This report highlights areas of mental health care where safety should be strengthened. Responsibility for this is shared between mental health providers, partner agencies, commissioners, education and training bodies and professional organisations.

1. Suicide after discharge from hospital

Our findings suggest the care of patients on hospital discharge should be a priority, specifically:

- Careful and effective care planning is needed on discharge, including for patients who discharge themselves.
- Early follow up should be routine: we suggest that suicide within 3 days of discharge should be considered as an NHS 'never event' in England and Wales (or as a serious adverse event in Northern Ireland and Scotland).

- Adverse events that precede admission should have been addressed before discharge.
- The link to short admissions is a concern: benefits of reducing length of in-patient stay should be balanced with risks and it should not be an aim in itself.

2. Suicide by hanging

This is a difficult method to prevent outside institutional settings such as hospital wards or prisons. Limited evidence on why hanging is chosen as a suicide method¹ suggests it is seen as quick and painless although this is not the case – it also ignores the distress to families who discover a victim.

- Under national policies on suicide prevention, there should be a re-examination of the portrayal of hanging in the media.

3. Intimate partner homicides

- Mental health services should play a stronger role in protecting victims of domestic violence by ensuring perpetrators receive treatment for mental disorder, including substance misuse.
- Mental health services should also play a full part in multi-agency collaboration through information sharing and joint case review.

4. Suicide by patients under crisis resolution and home treatment (CR/HT)

- CR/HT should be a priority setting for suicide prevention in mental health services.
- CR/HT may not be suitable for patients at high risk or those who do not have adequate family or social support: services should review their criteria for its use.



5. Patient suicides

- Despite varying suicide rates, services should recognise the economic pressures patients might be facing and offer help with employment, housing and debt, working with relevant agencies.

6. Patient homicides

- Services should continue to address patients' co-morbidities through the use of assertive outreach, and through better provision for alcohol and drug misuse and 'dual diagnosis'.

7. Sudden unexplained death (England and Wales)

We do not know whether restraint was causal in the 24 post-restraint deaths in this report. However, patients with mental illness can be more vulnerable to the effects of restraint due to medication and particular care should be taken to ensure safe use of restraint.

- Services should implement the approach to restraint described in the 2014 report by the Department of Health on reducing the need for restrictive interventions.²
- Deaths and serious injuries caused by restraint should be considered as an NHS 'never event' in England and Wales.



PRESENTATION OF FINDINGS

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

- Suicide (from January 2002 to December 2012 based on date of death).
- Homicide (from January 2002 to December 2012 based on year of conviction).

Findings for the Sudden Unexplained Death (SUD) study are presented for England and Wales for the period January 2002 to December 2012 based on date of death.

England and Wales

Method of data collection

The method of data collection for suicide, homicide, and sudden unexplained death is similar in England and Wales. A full explanation is provided in the **FAQ section** of our website or in our previous national reports: *Annual Report (2009, 2010)*^{3,4} and *Avoidable Deaths (2006)*⁵ which are accessible on our website at www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci.

Suicide

Information on all general population suicides (i.e. deaths by intentional self-harm and deaths from undetermined intent) by individuals aged 10 and over is collected from the Office for National Statistics (ONS).⁶

To identify patients (i.e. individuals who died by suicide within 12 months of mental health service contact) national data are submitted to mental health services in each individual's district

of residence or district of death and adjacent districts. Detailed clinical data are obtained for these individuals via a questionnaire sent to the consultant psychiatrist.

Homicide

The Inquiry is notified of all convictions for homicide recorded by the police in England and Wales by the Home Office Statistics Unit of Home Office Science.⁷ Only homicides that have resulted in a conviction are included in the main analysis of this report. Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain. Homicides followed by suicide have been reported separately for England and Wales.

General population homicide conviction figures in sections 1.2 and 4.2 are provided for the period of the report as context for our data on homicides by people with mental illness. A full analysis of homicide offences recorded by police in England and Wales was published by the ONS in February 2014.⁸



To identify patients (i.e. individuals convicted of homicide within 12 months of mental health service contact) national data are used to identify the individuals' addresses. Data are then sent to mental health services in each individual's district of residence. Detailed clinical data are obtained for these individuals via questionnaires sent to the consultant psychiatrist.

Sudden unexplained death

To identify cases of SUD, data on all patient deaths within psychiatric and learning disabilities in-patient hospitals in England are provided by the Health and Social Care Information Centre (HSCIC),⁹ previously Hospital Episode Statistics (HES), and the NHS-Wide Clearing Service. For Wales, data are provided by Health Solutions Wales (HSW).¹⁰ During the report period the number of all in-patient deaths notified to the Inquiry for England was 5,482 and in Wales 522.

Northern Ireland

Method of data collection

A detailed description of data collection methods in Northern Ireland is provided in the **FAQ section** of our website and in our previous report for Northern Ireland, *Suicide and Homicide in Northern Ireland*¹¹, accessible on our website at www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci.

Suicide

Information on all general population suicides (as defined in England and Wales) is collected from the Northern Ireland Statistics and Research Agency (NISRA).¹²

To identify patients (i.e. individuals who died by suicide within 12 months of mental health service contact) national data are submitted to mental health services in each individual's district of residence or district of death and adjacent districts. Detailed clinical data are obtained for these individuals via a questionnaire sent to the consultant psychiatrist.

Homicide

Information is collected from the Northern Ireland Courts and Tribunal Service and the Coroners Service for Northern Ireland. Only homicides that have resulted in a conviction are included in the main analysis of this report. Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain.



General population homicide conviction figures in section 2.2 are provided for the period of the report as context for our data on homicides by people with mental illness. An analysis of homicide offences recorded by police in Northern Ireland was published by the Police Service of Northern Ireland in July 2013.¹³

To identify patients (i.e. individuals convicted of homicide within 12 months of mental health service contact) national data are used to identify the individuals' addresses. Data are then sent to mental health services in each individual's district of residence. Detailed clinical data are obtained for these individuals via questionnaires sent to the consultant psychiatrist.

Scotland

Method of data collection

A detailed description of data collection methods in Scotland is provided in the **FAQ section** of our website or in our previous report for Scotland, *Lessons for Mental Health Care in Scotland*,¹⁴ accessible on our website at www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci.

Suicide

Information on all general population suicides (as defined in England and Wales) is collected from the National Records of Scotland (NRS),¹⁵ formerly known as the General Register Office for Scotland (GROS).

Following a World Health Organization (WHO) update to the International Statistical Classification of Diseases and Related Health Problems (ICD-10) in 2011, new rules for coding drug misuse deaths were introduced. Deaths which would previously

have been coded as due to 'mental and behavioural disorders due to psychoactive substance use' are in some cases now coded as suicide or undetermined deaths. This means that the overall numbers of suicides in 2011 and 2012 are not directly comparable with previous years. The number of suicides using the new coding rules is reported. We have also estimated what the figures for 2011 and 2012 would have been following the old coding rules. Where the new coding rules have made a substantial difference to the longitudinal trends, the figures have been amended to include data using both old and new rules. These figures are also described in the text.

To identify patients (i.e. individuals who died by suicide within 12 months of mental health service contact) national data are submitted to mental health services in each individual's district of residence or district of death and adjacent districts. Detailed clinical data are obtained for these individuals via a questionnaire sent to the consultant psychiatrist.



Homicide

Information is collected from the Management Information Analysis Team at the Scottish Court Service, with additional data obtained from the Scottish Crown Office and Procurator Fiscal Services (including relationship between offender and victim).

Only homicides that have resulted in a conviction are included in the main analysis of this report. Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain.

General population homicide conviction figures in section 3.2 are provided for the period of the report as context for our data on homicides by people with mental illness. A full analysis of homicide offences recorded by police in Scotland was published by the Scottish Government in October 2013.¹⁶

To identify patients (i.e. individuals convicted of homicide within 12 months of mental health service contact) national data are used to identify the individuals' addresses. Data are then sent to mental health services in each individual's district of residence. Detailed clinical data are obtained for these individuals via questionnaires sent to the consultant psychiatrist.

Data completeness

For the period 2002-2011 overall data completeness for patient suicide is 97% in England and 98% in Wales, Northern Ireland and Scotland. Completeness is lower in the more recent years reported, reflecting the time required to process the data. For example, in 2011 and 2012 completeness for England is 92% and 60% respectively. For the five most recent years (2008-2012) of the patient suicide analysis completeness is below 98% and we have, therefore, uplifted the number of cases based on the expected final return of Inquiry questionnaires for the previous six years (2002-2007).

Data was returned for all patient homicides (excluding those that could not be returned, i.e. missing case notes) between 2002 and 2006 for England and Scotland. As with suicide (outlined above), in the final year, completeness is lower (50% in England, 34% in Scotland) reflecting the time required to process the data. In addition, homicide data were less complete in Scotland due to delays in notification from the Scottish Court Service. These issues have since been resolved. Figures are therefore adjusted in the final years to estimate the number of homicide patients. In Northern Ireland and Wales homicide numbers are too small to calculate estimated figures.



For sudden unexplained death (England and Wales), data completeness is 100% in the report period 2002-2011 and 78% in 2012. We have therefore uplifted the number of SUD numbers in 2012 based on completeness in previous years.

Estimated numbers in the final year (2012) are presented as dotted lines in the figures or in a different shade in the bar diagrams, reflecting the more provisional nature of data in this year.

Information collected (including diagnosis) was based on the clinical judgement of the consultant caring for the patient.

Psychiatric reports

Our figures for patient homicide are based on Trust records only. In addition we obtain psychiatric reports and use these for our figures on symptoms of psychosis at the time of the offence, diagnosis history of schizophrenia and history of alcohol and drug misuse, whether the offender was a patient or not.

The number of psychiatric reports undertaken and disclosed in court has fallen over the report period. We have examined how this impacted our figures on psychosis at the time of offence and diagnosis of schizophrenia derived from psychiatric reports. Our analysis suggests that psychiatric assessments were used in the court for 86% of patients with severe mental illness such as schizophrenia and other delusional disorders.

Therefore the validity of our analysis of mental state at the time of offence is considered to be good, but we acknowledge that this may be an underestimate and we will continue to monitor this.

For the final year, data collection from courts is currently incomplete. We have therefore estimated figures for 2012 based on the proportion of homicide offenders with a psychiatric report in the previous year (2011).

Analysis

The following section describes how data were analysed in this report.

Trends over time

To examine for statistically significant time trends, trend tests were carried out using categorical data methods in Stata v12.¹⁷ Poisson models were fitted with the number of suicides or homicides per year as the outcome and year as a linear predictor. For rates, general population per year was the exposure. Within the patient sample, the exposure was the total number of suicides or homicides per year. Tests for trends over time were calculated excluding the final year which was least complete (i.e. 2012) for suicide and homicide, for both general population and patients.

For each model, the likelihood-ratio-test p-value and the predictor (and 95% confidence intervals) for year were examined.



Rates of suicide and homicide

General population and patient rates for suicide were calculated using mid-year population estimates revised in light of the 2011 census (age 10 and over) as denominators obtained from ONS and GROS. These were also used to calculate rates for suicide by NHS England Area Team (England) and Health Boards (Northern Ireland, Scotland, and Wales). The Health Board rates in Wales and Scotland reflect the new health area boundaries that came into place on 1 October 2009 (Wales) and 1 April 2006 (Scotland).

The smaller populations in the Scottish islands makes it difficult to compare rates with other Health Boards and we have therefore combined Shetland, Orkney and the Western Isles to generate an overall rate. In April 2009, the former regional Health Boards of Northern Ireland were merged to form one Health and Social Care Board. However, in order to indicate geographical patterns of suicide, we present suicide rates for each of the Health and Social Care Trusts.

General population and NHS area rates were also calculated for homicide (England only).

Discrepancies may arise between Inquiry national numbers and rates and those presented by the ONS, the Department of Health¹⁸, the Scottish Public Health Observatory website¹⁹, and the NISRA website¹² due to differences in measurement described in *Avoidable Deaths*⁵, *Lessons for Mental Health Care in Scotland*¹⁴, and *Suicide and Homicide in Northern Ireland*.¹¹ Our website FAQs summarises how discrepancies may be explained.

Individuals are categorised into NHS England Local Area Teams based on district of residence. Addresses were unknown for 148 (14%) homicide offenders. In these cases, NHS England Local Area Teams were assigned using the police force area where the person was charged with homicide.

The Inquiry database is dynamic. Changes in annual figures will occur subject to further information received from coroners or as a result of additional court hearings, e.g. following a successful appeal against a homicide conviction.



1. ENGLAND

1.1 SUICIDE

Between 2002-2012, the Inquiry was notified of 49,047 deaths in the general population that received a suicide or undetermined verdict, an average of 4,459 per year. These are referred to as suicides throughout the report.

1.1.1 Suicide in the general population

- Our suicide rates differ from ONS rates because Inquiry rates are based on date of death in those aged ≥ 10 and are not age-standardised - ONS rates are based on date of death registration in those aged ≥ 15 and are age-standardised.
- Current figures for the report period show 4,222 (in 2006) to 4,668 (in 2004) suicides per year, with a male to female ratio of 3:1 (Table 1).
- Delayed registration means that figures for the most recent years presented here will increase.

- The rise after 2006 and 2007 is thought to reflect financial pressures leading to unemployment and debt, as well as a growing population. The rise may have been partly offset by narrative coroner verdicts that were not officially recorded as suicides.
- Despite an increase in 2008, there was an overall fall in the number and rate of suicides between 2002 and 2011 although rates have not changed since 2009 (Table 1; Figure 1). The decrease in rates was seen in both males and females, although the number of male suicides did not fall.

Table 1: Number of suicides in the general population, by gender

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	3443	3430	3427	3312	3198	3231	3474	3300	3276	3402	3446
Female	1190	1228	1241	1151	1024	1016	1147	1041	1092	1020	958
Total	4633	4658	4668	4463	4222	4247	4621	4341	4368	4422	4404



- The pattern of male suicide rates during the report period varies by age-group. There was a fall in male suicide rates in those aged under 25, 25-34, 35-44 and 65 and over, but an increase in those aged 45-54 and 55-64 (Figure 2). In females, rates fell in all age-groups except 45-54 years.
- Our recent study on patterns of GP contact in patients who died by suicide found 37% of people had not seen their GP in the previous year. These ‘non-attenders’ were more likely to be male and younger than those who did consult their GP.²⁰

Figure 1: Rates of suicide in the general population, by gender

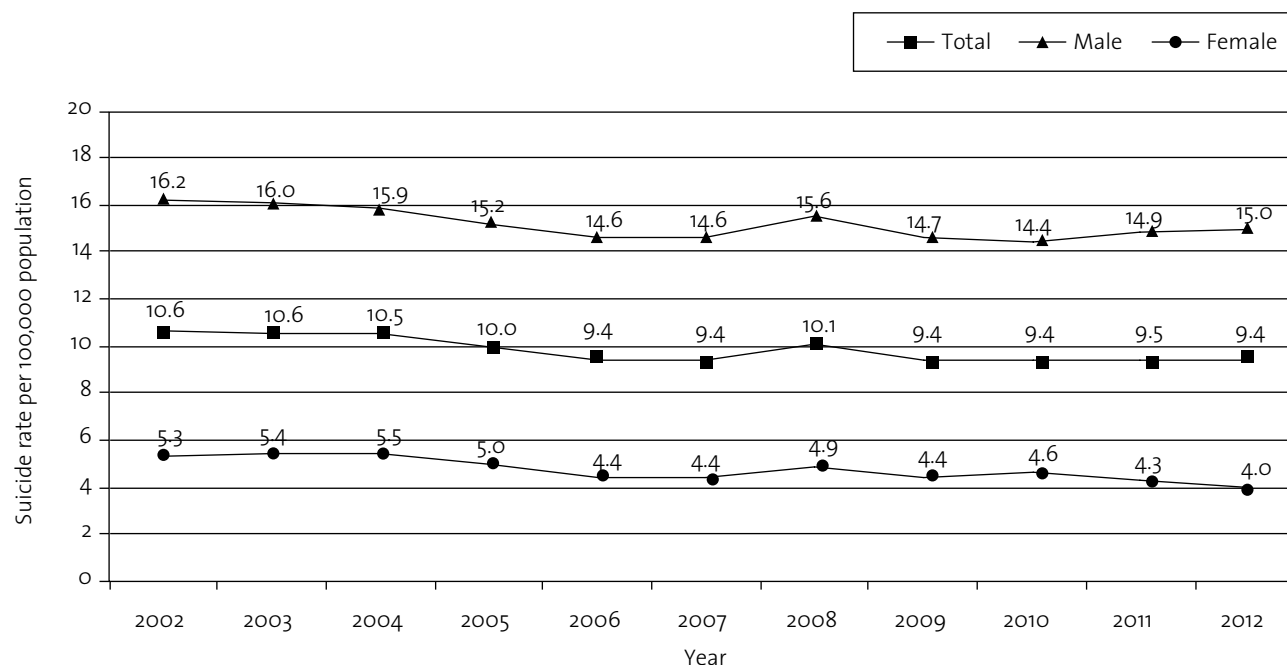
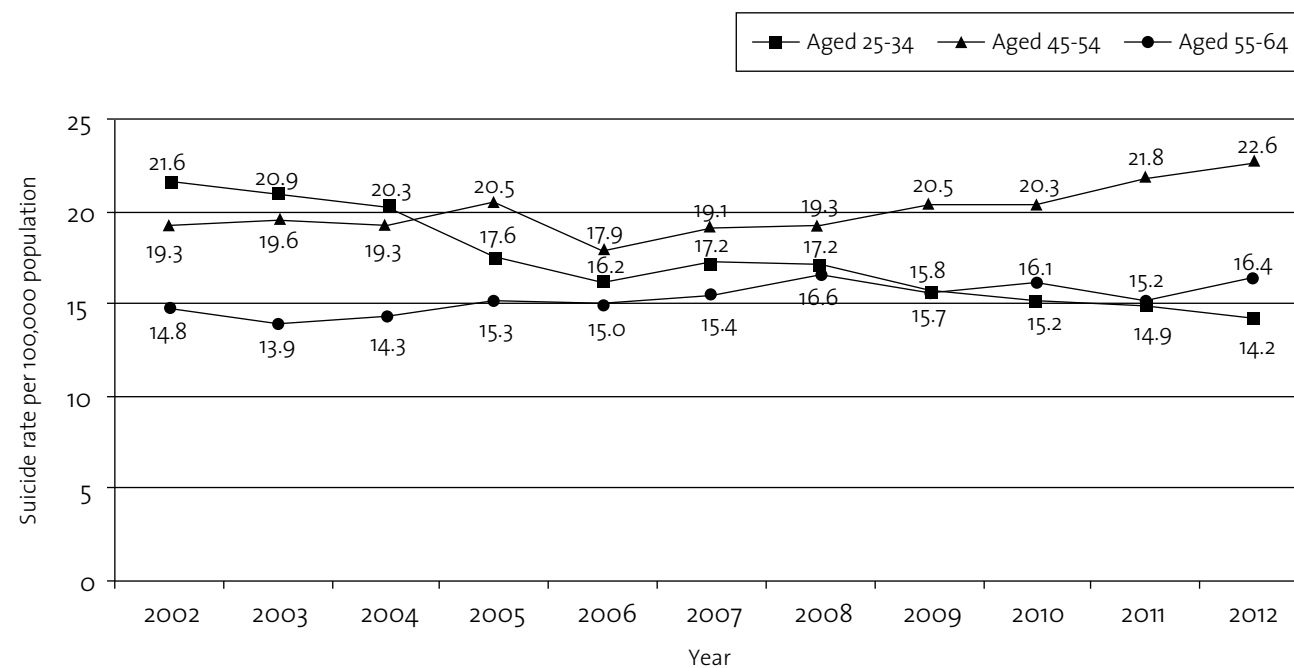


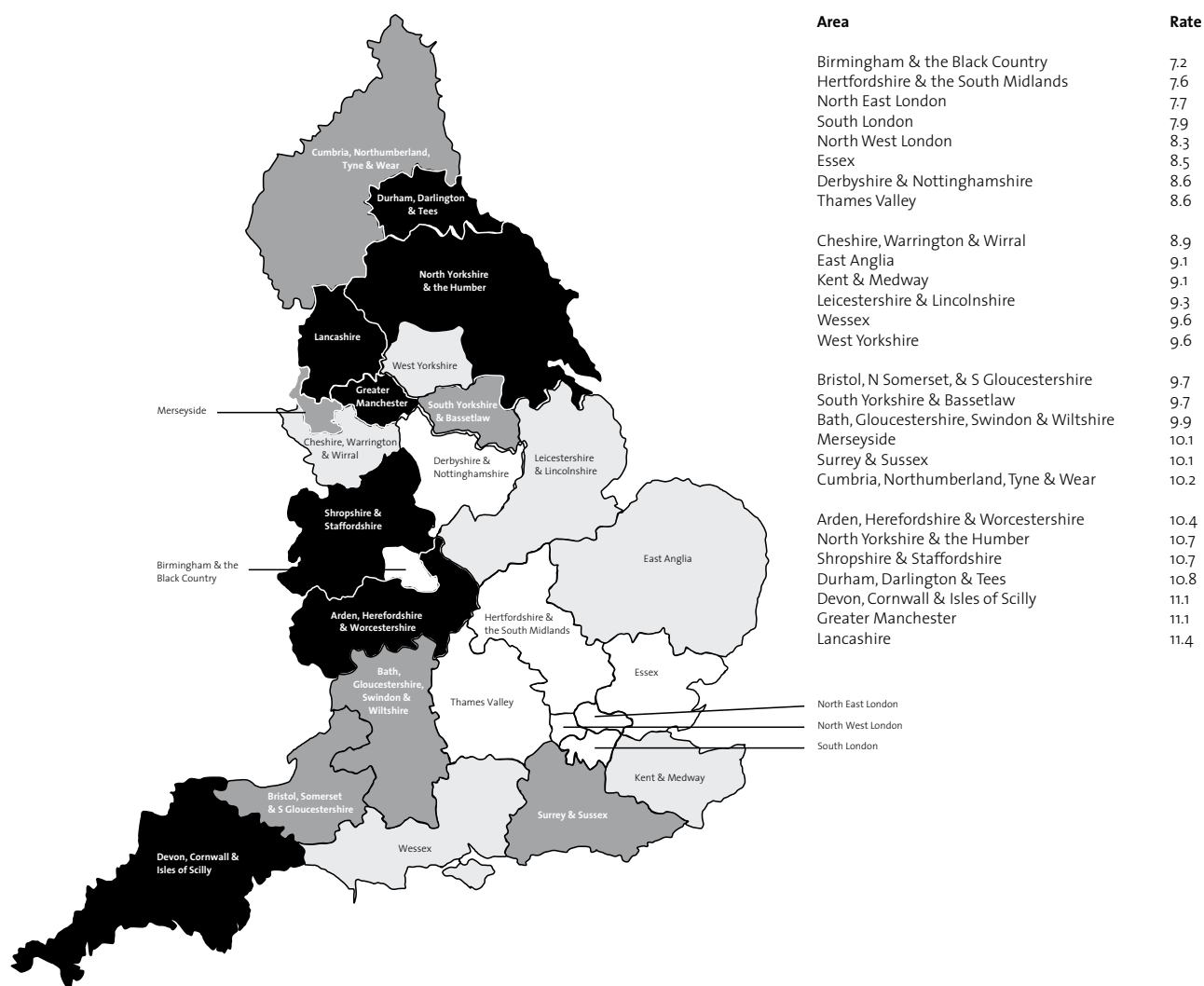
Figure 2: Male suicide rates in the general population in those aged 25-34, 45-54 and 55-64



Variation in suicide rates by area of residence (NHS England Area Teams)

- There was some variation in suicide rates by area of residence (NHS England Area Team) at the time of death (average rate 2010-2012). The highest rate of suicide was in Lancashire, at 11.4 per 100,000 population and the lowest in Birmingham and the Black Country, at 7.2 per 100,000 population (Figure 3).
- ONS suicide rates mapped to English areas can be found on the Public Health England website at: www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/par/E12000004

Figure 3: Rates of suicide per 100,000 population, by NHS area of residence (average rate 2010-2012)



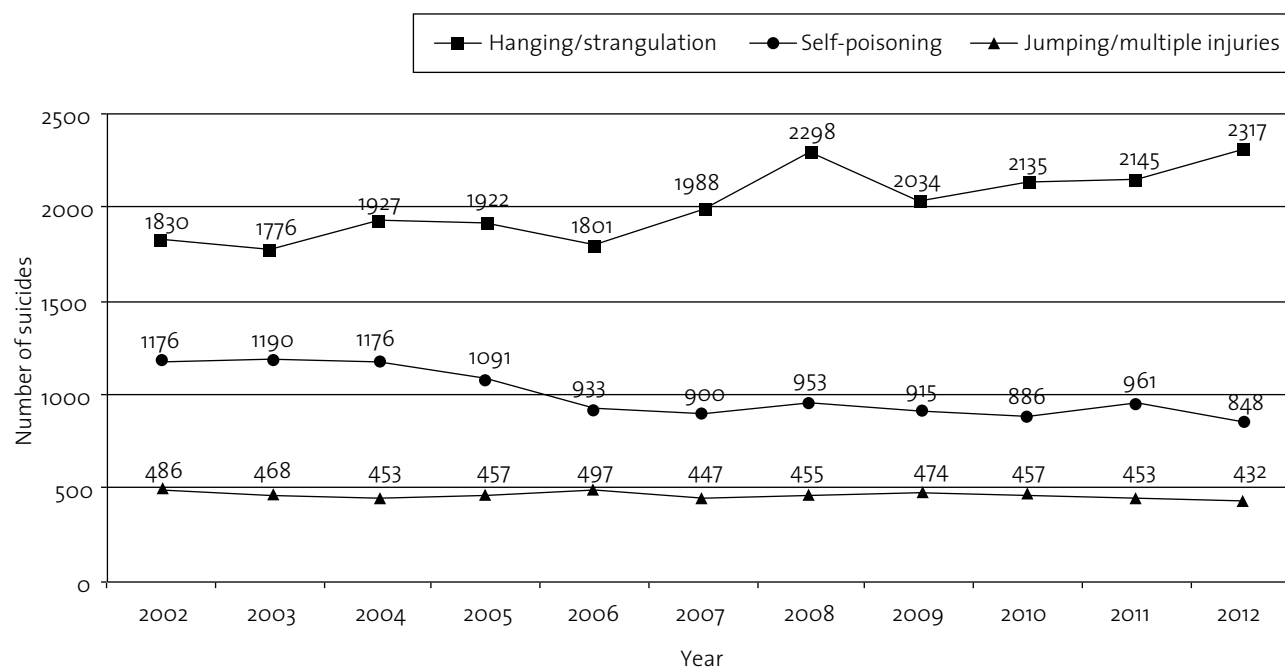
Note: rates have been colour coded by approximate quartile



Method of suicide

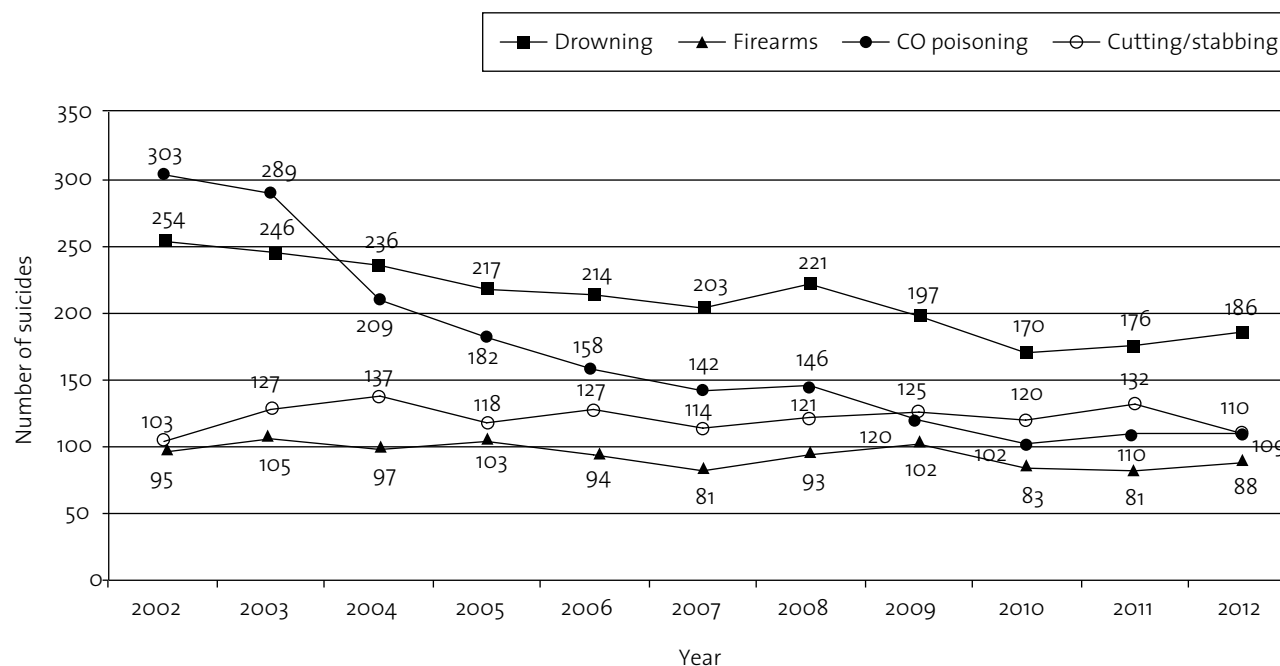
- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report) (22,173, 45%), self-poisoning (overdose) (11,029, 23%), and jumping/multiple injuries (mainly jumping from a height or being struck by a train) (5,079, 10%). Less frequent methods were drowning (2,320, 5%), carbon monoxide (CO) poisoning (1,870, 4%), cutting/stabbing (1334, 3%), and firearms (1,022, 2%).
- Deaths by hanging increased over the report period (Figure 4). Deaths by self-poisoning decreased, and those by jumping/multiple injuries did not change. Of the less common methods, deaths by drowning and CO poisoning decreased (Figure 5).
- The increase in hanging may be related to restrictions on the availability of other methods, e.g. drugs used in overdose, and to a misconception that hanging is a quick and painless way to die.¹ The fall in CO poisoning deaths is related to the introduction of catalytic converters in 1993.²¹

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



- Firearms account for 2% of all deaths. This is a more common method in countries with greater gun availability.
- The number of suicides by drowning has fallen by 68 (27%) between 2002 and 2012.

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

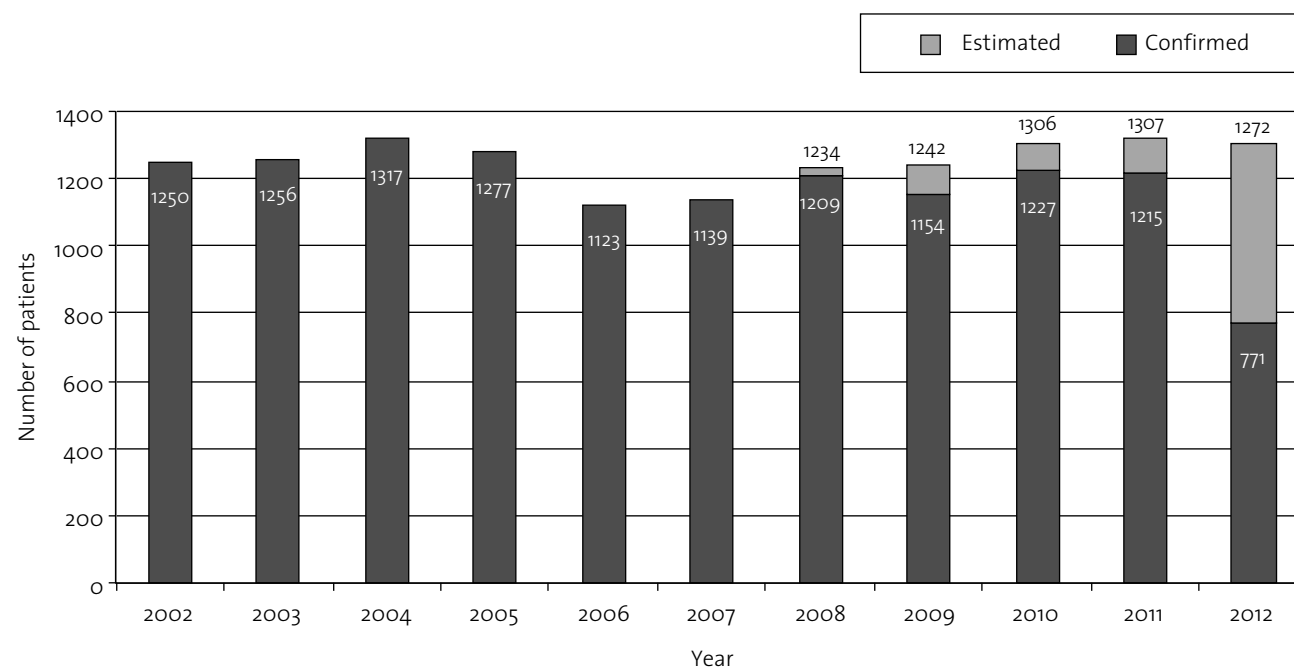


1.1.2 Patient suicide

Patient suicide: numbers and rates

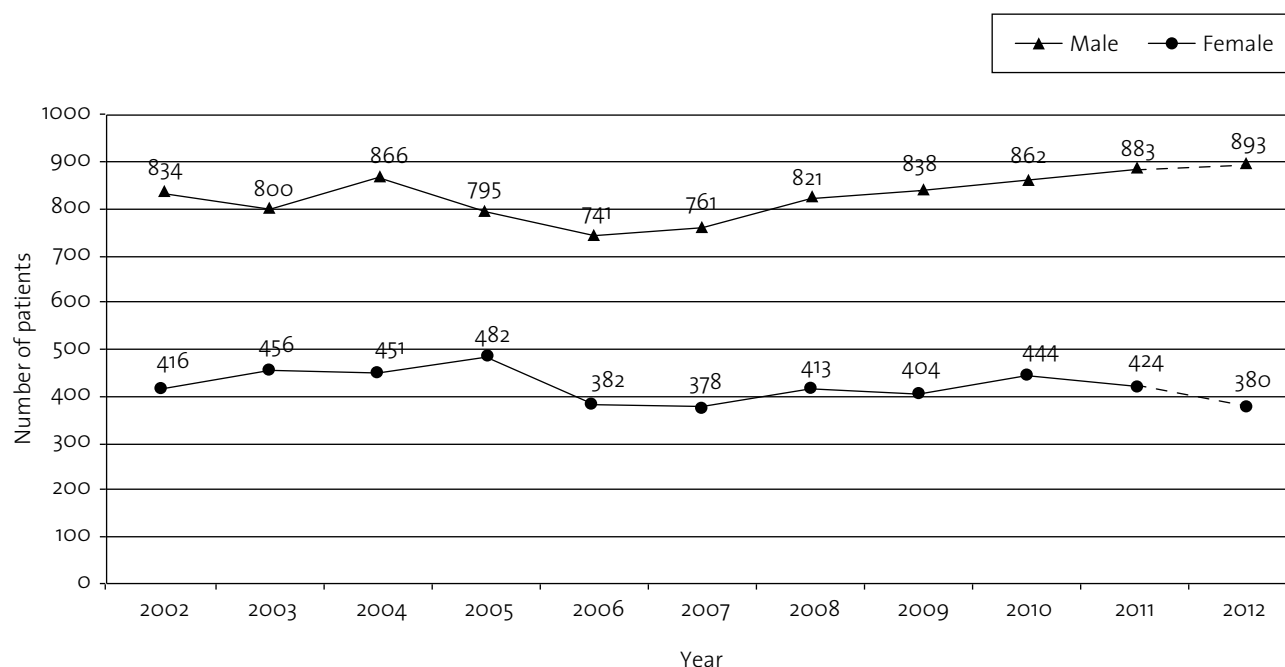
- During 2002-2012, 13,723 deaths (28% of general population suicides) were identified as patient suicides, i.e. the person had been in contact with mental health services in the 12 months prior to death. This represents an average of 1,248 patient suicides per year.
- There was no change between 2002 and 2011 in the number of patient suicides overall (Figure 6). Our figure for suicide by patients shows a decrease in 2012. The exact figure should be interpreted cautiously as it is a provisional figure based on incomplete data. However, we are estimating a lower number of patient suicides than in the last 2 years.
- The number of suicides in male patients has been increasing since 2006 (Figure 7), although taking the full report period, numbers by gender have not changed.

Figure 6: Number of patient suicides



- We have calculated patient suicide rates with figures from the Mental Health Minimum Dataset (MHMDs)²² as the denominator (Figure 8). Falling rates are seen from 2004. However, changes in MHMDs methodology²³ means rates in 2011 and 2012 are not directly comparable to earlier years.
- We have previously found an association between lower patient suicide rates and features of services such as specialised community teams and multidisciplinary review of previous deaths.^{24, 25}
- The number of suicides in male and female patients aged 25-34 fell in the report period. There was an increase in the number of male suicides in those aged 45-54, 55-64 and 65+.
- In 2008-2011, a higher proportion of patients were unemployed (2,056, 45%) compared to the pre-recession years of 2004-2007 (1,906, 41%). 913 (7%) patients were homeless, living in bed and breakfast, or hostels, i.e. 'unstable housing'. This proportion did not change over the report period.

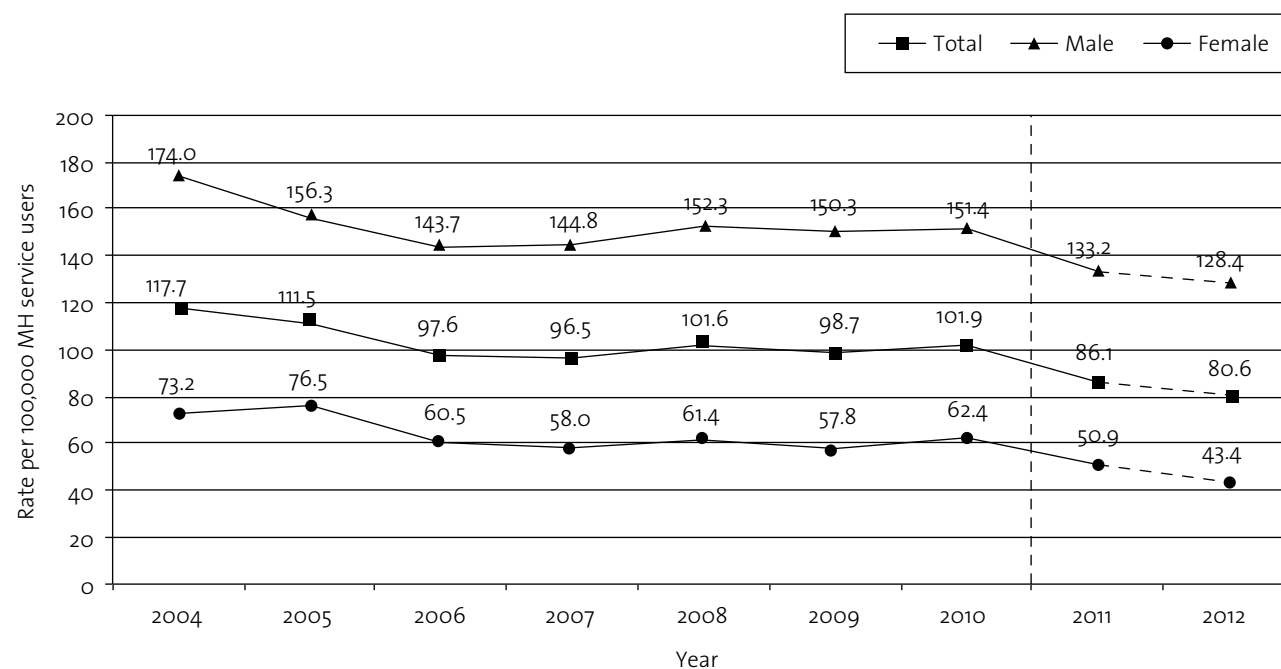
Figure 7: Number of patient suicides, by gender



Note: figures in 2012 do not tally with the total figure in Figure 6 due to rounding



Figure 8: Rates of suicide per 100,000 mental health service users [†]



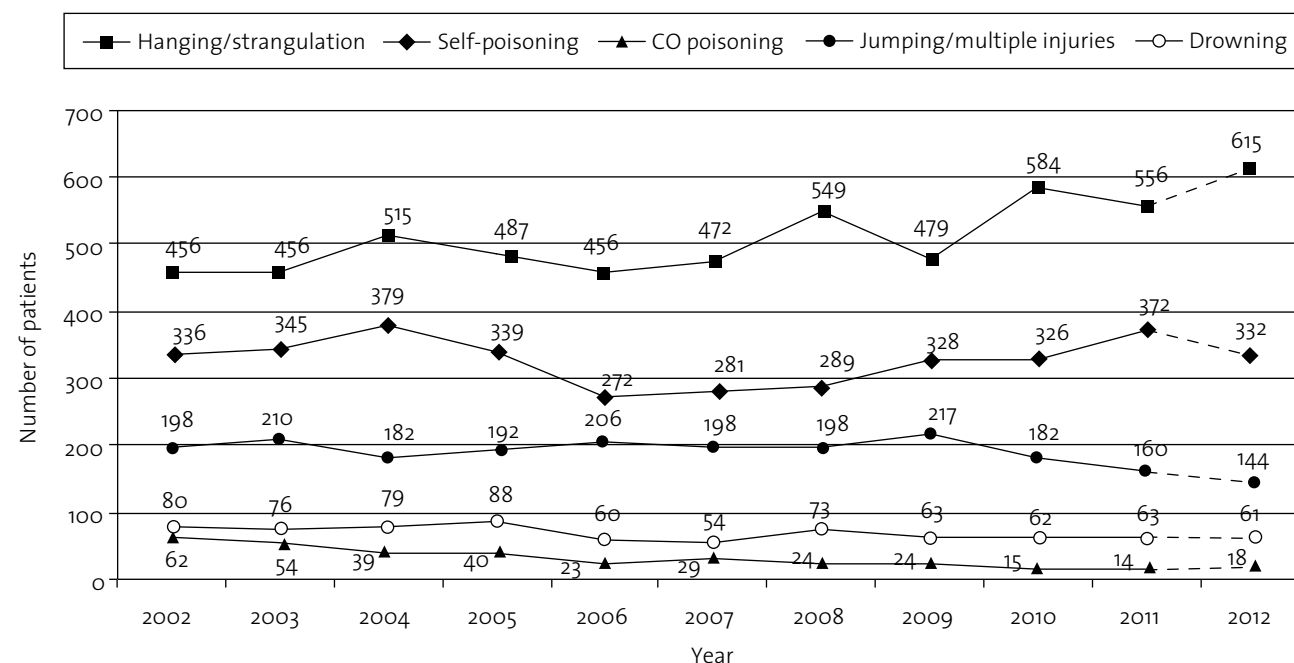
[†] The Mental Health Minimum Dataset (MHMDs) was used to calculate rates for the available years (2004-2012). Changes in MHMDs methodology²³ means rates between 2004-2010 and 2011-2012 are not directly comparable. Rates in 2011 and 2012 are based on 1,517,613 service users in 2011 and 1,578,409 in 2012.



Method of suicide by patients

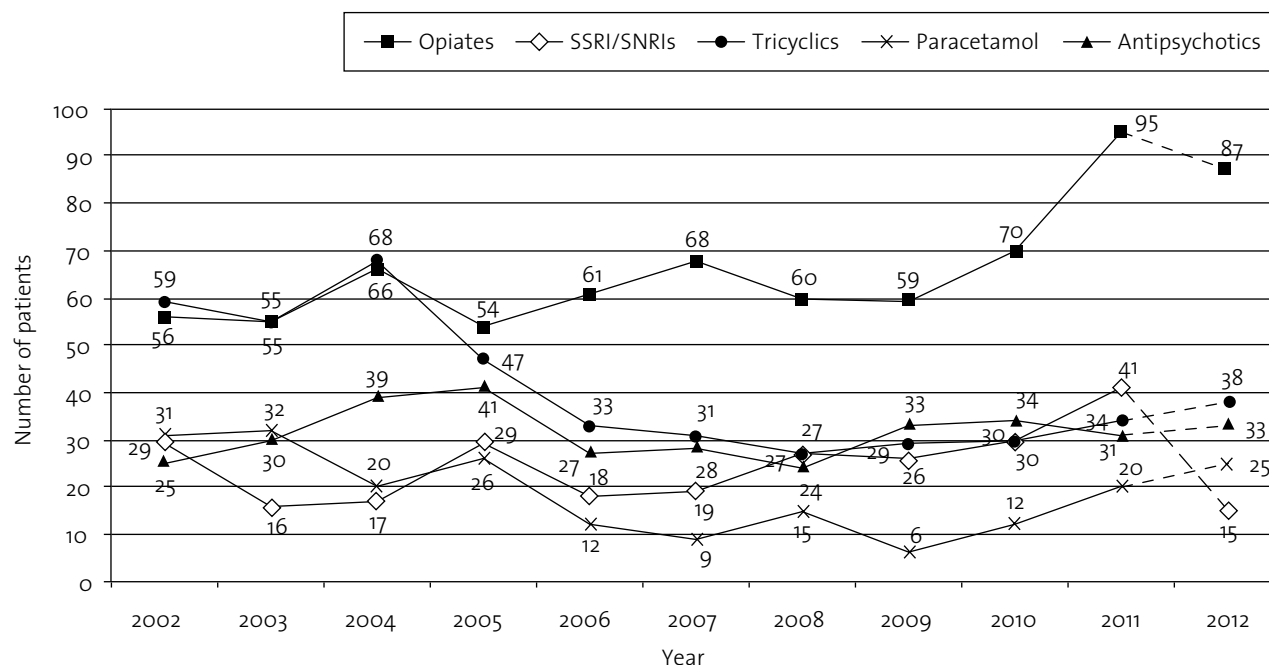
- The most common methods of suicide by patients were hanging (5,625, 41%), self-poisoning (3,599, 26%), and jumping/multiple injuries (2,087, 15%).
- Hangings increased in number during 2002-2011 and a further rise is estimated in 2012 (Figure 9).
- The number of self-poisoning deaths did not change overall between 2002 and 2011, although there has been an increase since 2006 (Figure 9).
- The number of suicides by CO poisoning and drowning decreased over the report period.
- Opiates were the most common type of drug in self-poisoning (731, 23%; Figure 10). Of those who died using opiates, 131 (18%) had a primary diagnosis of drug dependence/misuse and 41 (25%) were under the care of drug services. Forty-three (25%) of those aged under 25 who died by self-poisoning used opiates.

Figure 9: Patient suicide: main causes of death



- The next most common substances used in deaths by self-poisoning were tricyclic antidepressants (451, 14%), paracetamol/opiate compounds (338, 11%) and anti-psychotic drugs (345, 11%). Paracetamol was used in 208 (6%) patient suicides. The number of self-poisoning deaths by tricyclic antidepressants and paracetamol fell during 2002-2011 (Figure 10). However there has been an increase in paracetamol deaths since 2009, with the highest number in 2012 since 2005. The number of deaths by opiates and SSRI/SNRIs increased over the report period.
- There were 231 deaths by suicide in the general population which were related to inhalation of helium gas, increasing from an average of 5 per year in 2002-2007 to 40 per year in 2008-2012. Of these, 60 (26%) were in patients, similar to the proportion for all suicides. Although this is less than 1% of all patient suicides during the report period, there has been a rise in deaths by this method in line with the general population pattern. For example, there were 8 deaths from helium in 2002-2007 and 10 in 2012 alone.

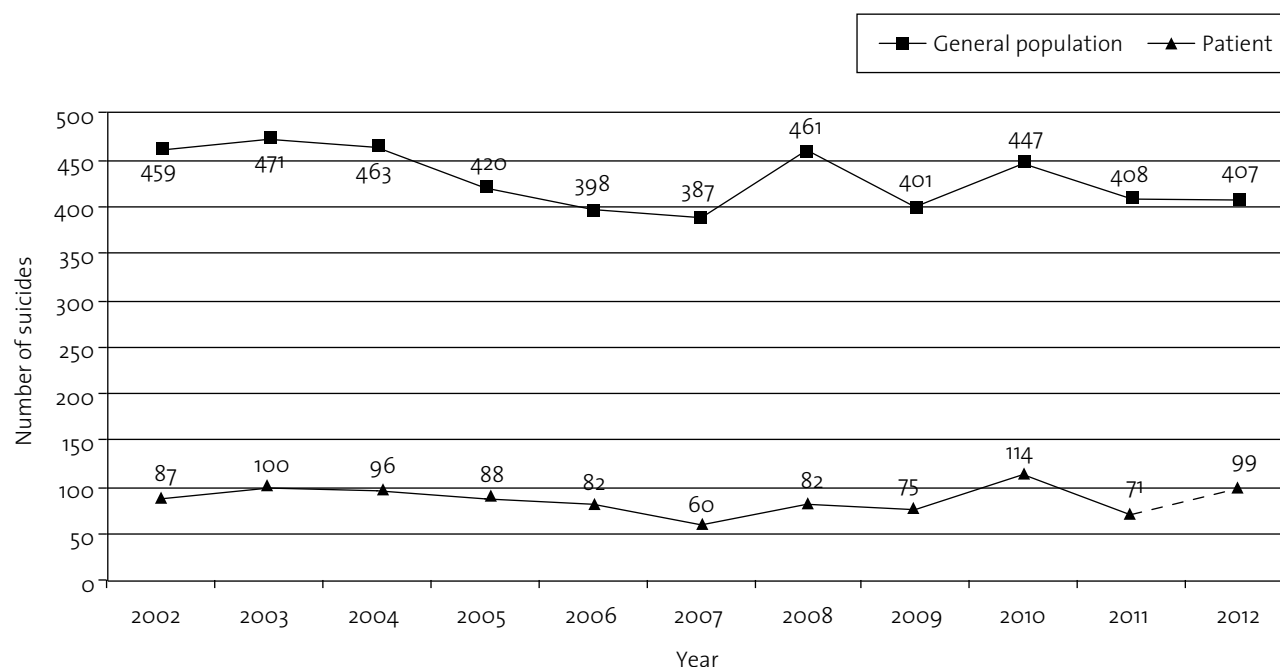
Figure 10: Patient suicide: main substances used in deaths by self-poisoning



Patient suicide in those aged under 25

- During 2002-2012, there were 4,722 suicides in the general population in those aged under 25, 10% of all suicides, an average of 429 per year. 1,508 were aged under 20, an average of 137 per year, and 653 were aged under 18, an average of 59 per year.
- 954 suicides in people under 25 were in patients, 7% of patient suicides and 20% of all suicides in this age-group. This represents an average of 87 deaths per year. 246 were aged under 20, an average of 22 per year, and 104 were aged under 18, an average of 9 per year.
- Patient suicides in under 25s decreased until 2007 but fluctuated thereafter with no overall trend (Figure 11). The peak number was in 2010.
- Suicides in under 25s were more likely than in older (25+) people to be by hanging (428, 48% v. 4,836, 40%) and jumping/multiple injuries (187, 21% v. 1,802, 15%) and less likely to be by self-poisoning (181, 20% v. 3,212, 27%).

Figure 11: Number of general population and patient suicides in those aged under 25



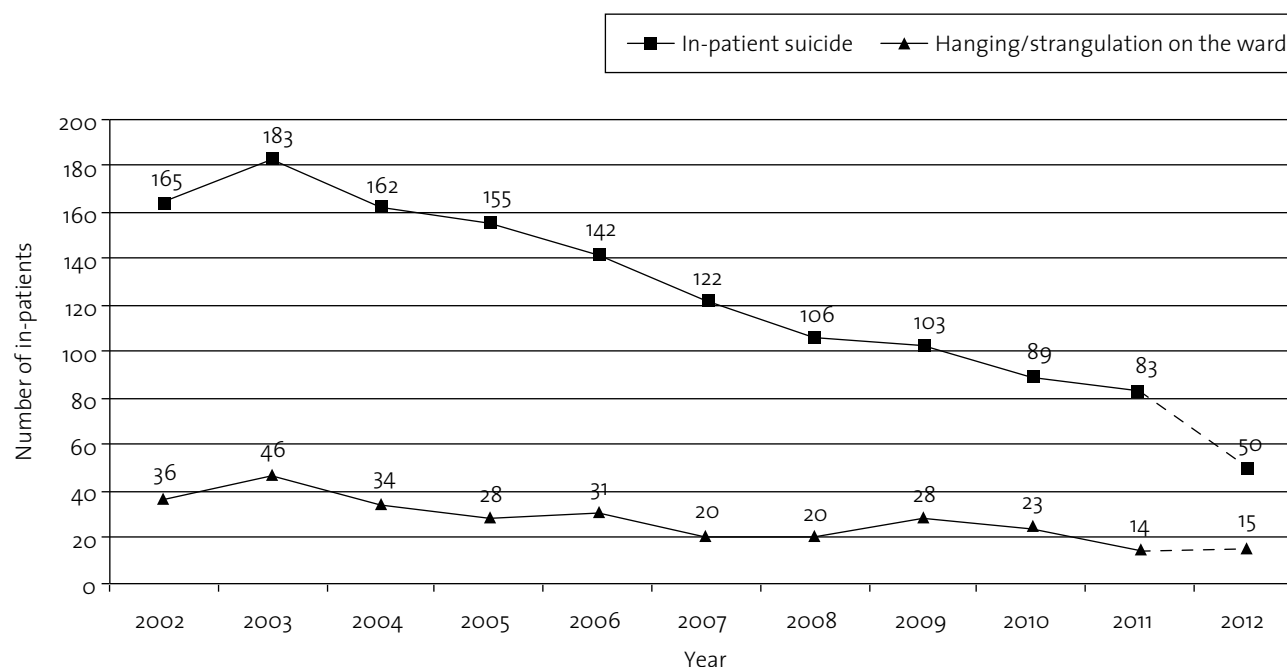
- The diagnostic profile was different from those aged 25+: more patients had a primary diagnosis of schizophrenia (228, 26% v. 2,006, 17%) or personality disorder (153, 18% v. 975, 8%) while fewer had affective disorder (bipolar disorder/depression) (222, 26% v. 5,676, 48%).
- Similarly, a history of self-harm (644, 74% v. 7,980, 68%), alcohol misuse (440, 51% v. 5,222, 44%) and drug misuse (518, 61% v. 3,453, 30%) were more common.
- Unemployment was more common in under 25s compared to those aged 25+ (478, 57% v. 4,768, 41%).
- 92 (11%) had a history of Local Authority Care.



In-patient suicide

- There were 1,360 in-patient deaths by suicide between 2002-2012, 10% of patient suicides, an average of 124 per year.
- From 2002 to 2011, there was a 50% fall (82 cases) in the number of in-patient suicides (Figure 12). We are estimating a continuation of this trend in 2012 but in-patient deaths are more often subject to late notification and our estimated figure should be viewed with caution. A reduction in the rate of in-patient suicide has previously been found (i.e. taking into account admission figures and time under in-patient care).^{26, 27}
- Deaths by hanging on the ward are usually from low-lying ligature points (i.e. strangulation). The number of deaths by hanging on the ward fell by 61% (22 cases) from 2002 to 2011 (Figure 12).

Figure 12: Patient suicide: number of mental health in-patients; number who died by hanging/strangulation on the ward



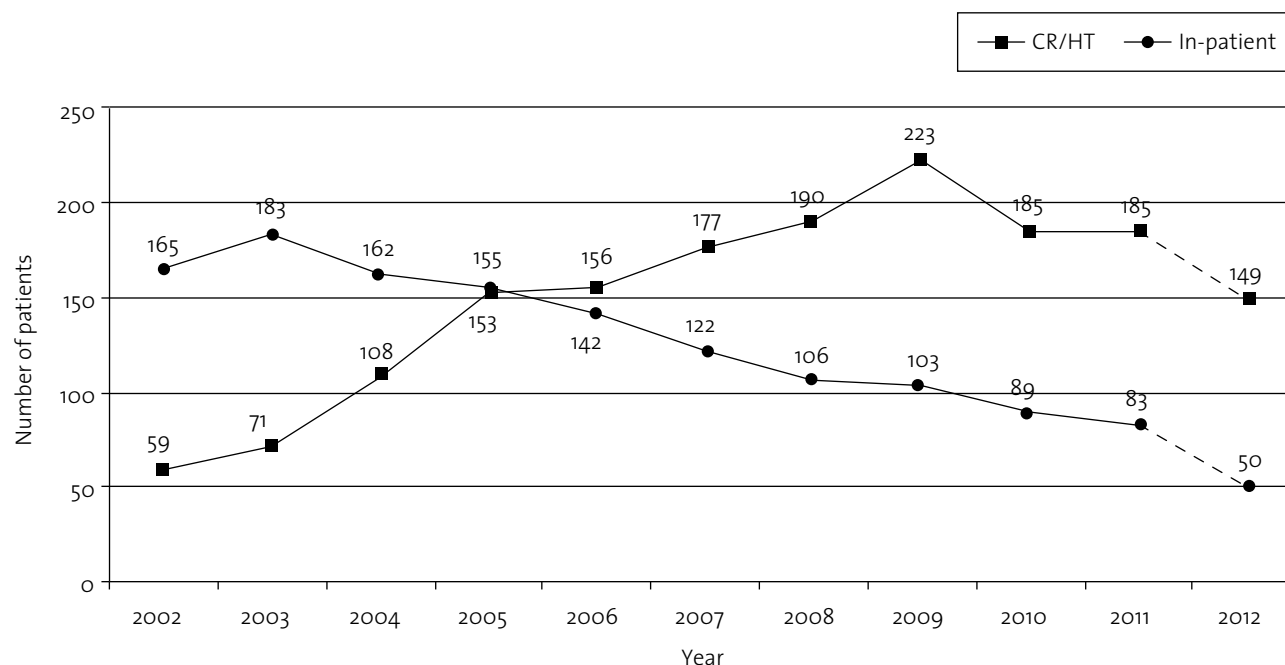
- There were 359 suicides in detained in-patients, 27% of all in-patient suicides, an average of 33 per year. The number of these deaths decreased over the report period.
- 314 in-patients died after absconding from the ward, 23% of all in-patient suicides, an average of 29 deaths per year. There was an overall fall in the number of suicides after absconding. In our previous case-control study on in-patient suicide, we found suicide to be linked to absconding and that use of the Mental Health Act was protective.²⁸



Crisis Resolution/Home Treatment

- There were 1,656 suicides in patients under crisis resolution/home treatment teams (CR/HT), 13% of the total sample, an average of 151 deaths per year.
- Overall, the number of suicides under CR/HT increased over the report period, reflecting its introduction in 2004-2006, although numbers have fallen since 2009 and we are estimating a continued fall in 2012 to the lowest number since 2004 (Figure 13).
- Since 2006 there have been more patient suicides under CR/HT than in in-patient care, reflecting a change in the nature of acute care. In the last 3-4 years over twice as many patient suicides have occurred under CR/HT (Figure 13).

Figure 13: Patient suicide: number under crisis resolution/home treatment services and mental health in-patients



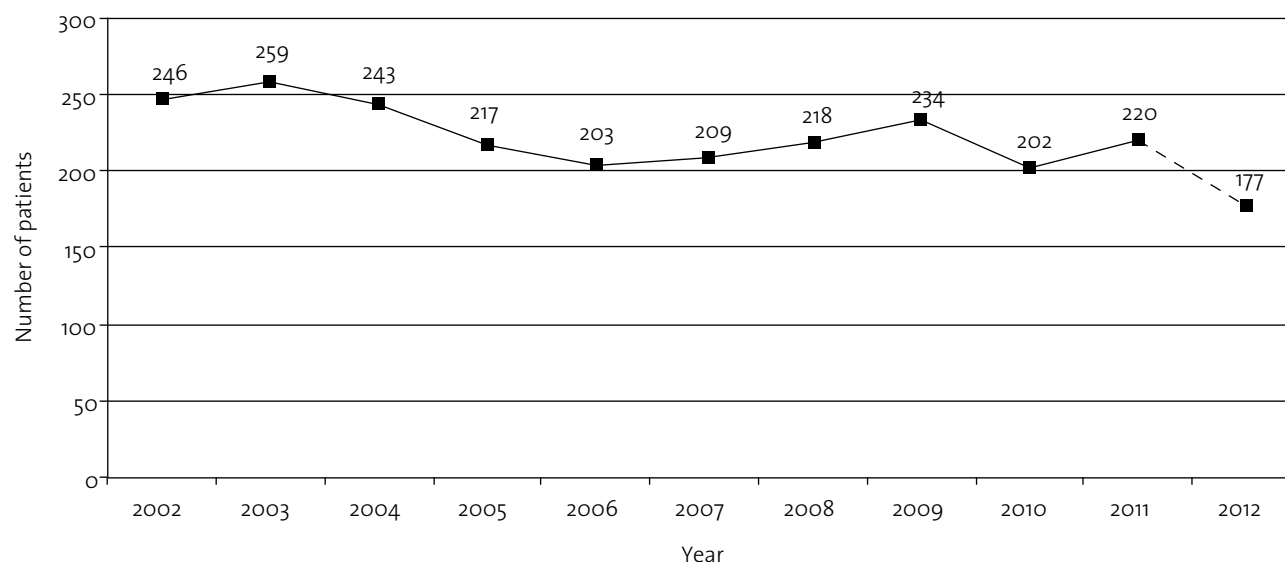
- 498 (34%) CR/HT patients died within 3 months of hospital discharge. In many of these cases CR/HT will have been used to allow earlier discharge rather than as an alternative to admission. 195 (40%) of these patients died within 2 weeks of discharge.
- 209 (14%) CR/HT patients had been non-adherent with drug treatment in the month before suicide.
- 666 (43%) CR/HT patients lived alone.



Patients recently discharged from hospital

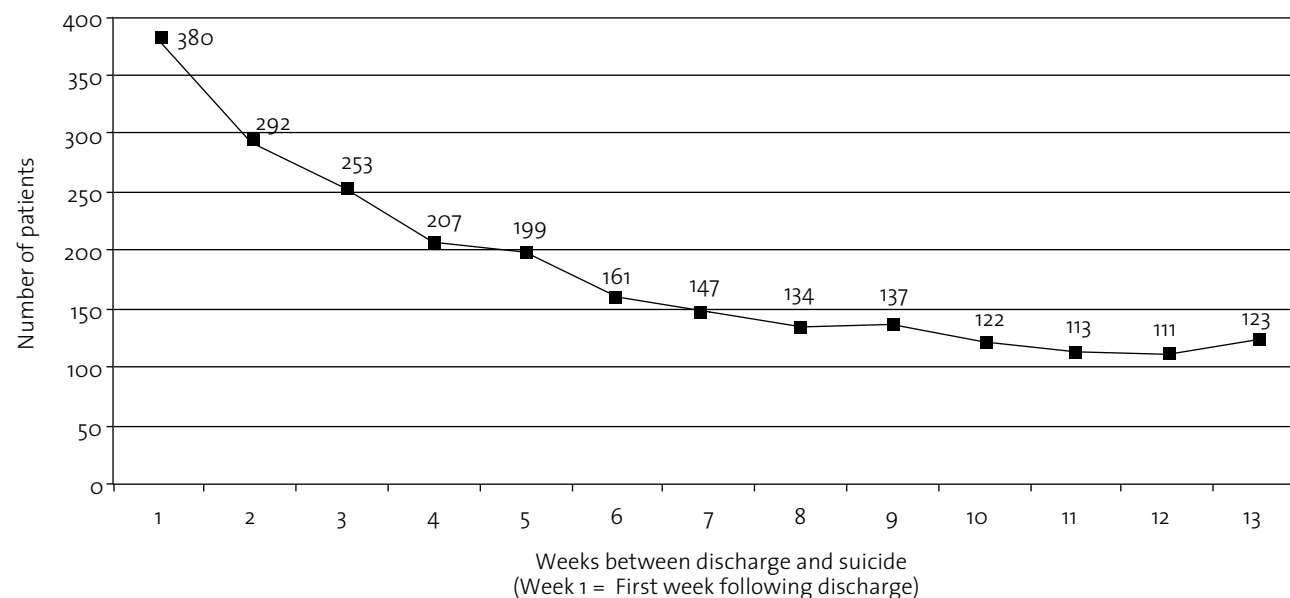
- There were 2,428 suicides within 3 months of discharge from in-patient care, 18% of all patient suicides and 20% of suicides in community patients, an average of 221 deaths per year.
- There was an overall fall in the number of post-discharge suicides between 2002-2011, and we are estimating a continued fall in 2012 to the lowest figure over the report period (Figure 14).
- Post-discharge suicides were most frequent in the first week after leaving hospital when 380 deaths occurred, an average of 35 per year, 16% of all suicides within 3 months of hospital discharge (Figure 15). The number and proportion who died in the first week after discharge has not changed over the report period. Of all patients who died in the first week after discharge, the highest number occurred on day 2 (20%).

Figure 14: Patient suicide: number who died within 3 months of in-patient discharge



- Of the 181 patients who discharged themselves from hospital, 47 (26%) died in the first week after leaving hospital.
- 183 (8%) died after being discharged from a non-local in-patient unit. This increased to 66 (11%) of those who died within 2 weeks of discharge.
- 353 (16%) died before the first follow-up appointment. Between 2002 and 2011, there has been a decrease in the number and proportion of patients who died before first follow-up, although figures have remained stable since 2006.
- In our previous case-control study, suicide within 2 weeks of hospital discharge was associated with short (<1 week) last admission, adverse life events, and co-morbid psychiatric disorders. Being under the Care Programme Approach (CPA) was protective.²⁷

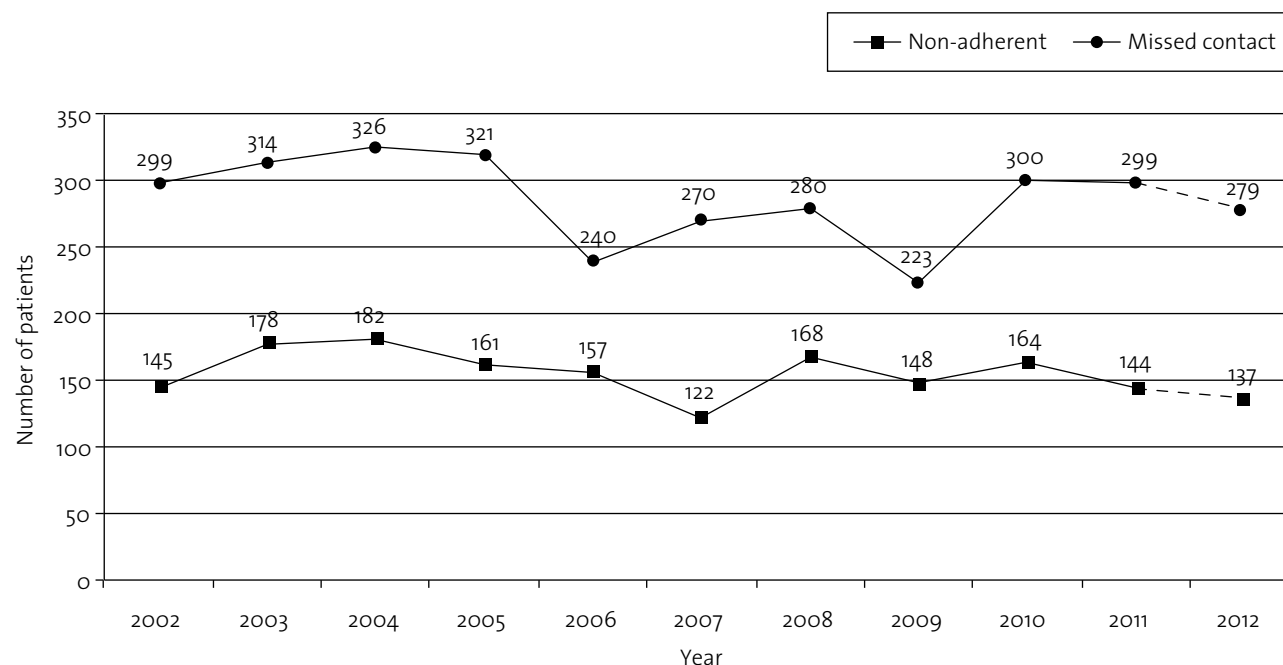
Figure 15: Patient suicide: number of suicides per week following discharge (2002-2012)



Non-adherence and missed contact

- 1,706 (14%) patients had been non-adherent with drug treatment in the month before death, an average of 155 deaths per year.
- 3,151 (26%) patients missed their final service contact before death, an average of 286 deaths per year.
- There was no overall change in 2002-2011 in the number of patient suicides following non-adherence but there was a fall in the number of patients who died following missed contact, mainly around 2006 (Figure 16).
- Non-adherence and missed contact often occur together. In 547 deaths both were present.
- In total, 4,310 were either non-adherent or missed final contact, meaning that 39% of patients were not in receipt of planned treatment before suicide.

Figure 16: Patient suicide: number non-adherent with drug treatment or missed contact



Community Treatment Orders

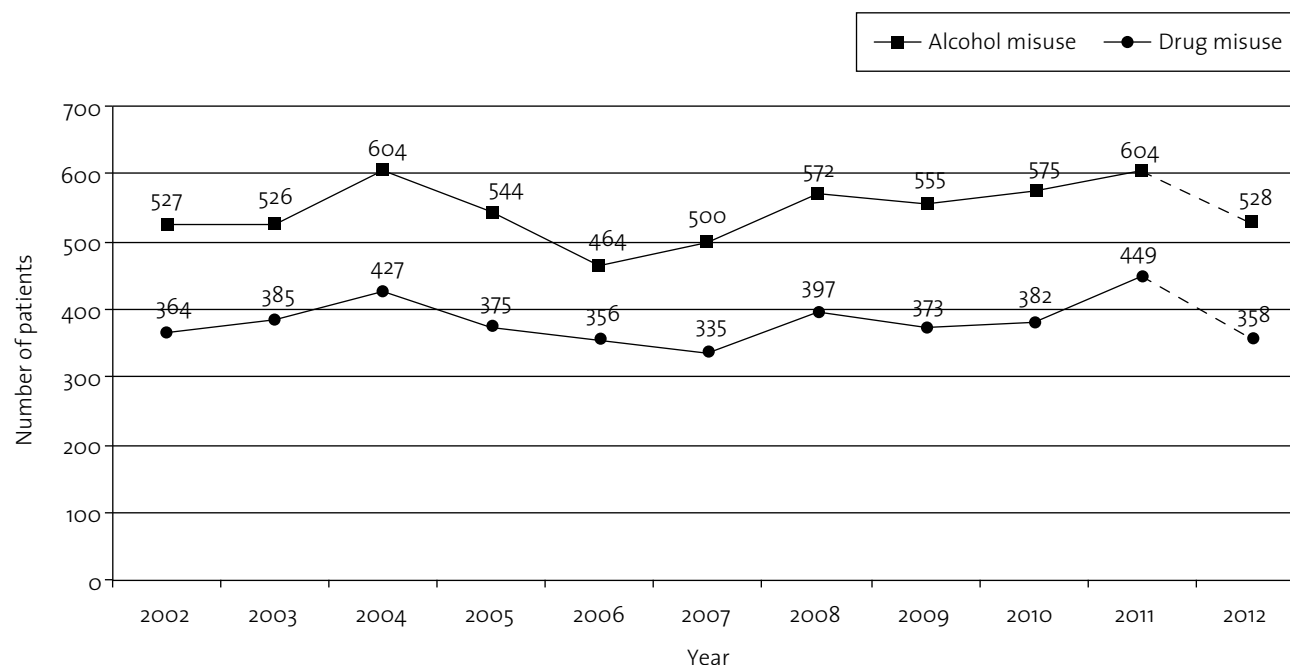
- There were 35 suicides in patients subject to a community treatment order (CTO) between 2009-2012, <1% of all patient suicides in this time period, an average of 9 per year. In addition, 14 patients who died had previously been on a CTO but were not on a CTO at the time of suicide.
- The rate of suicide in patients under CTO was 2.2 per 1,000 CTOs in 2009-2012. This figure is higher than the suicide rate for all patients, as would be expected as CTO patients are selected for risk and in general are recently discharged. On the basis of these figures, we cannot say whether CTOs have reduced risk at this stage.
- 19 of the 35 deaths under CTO (54%) occurred within 3 months of hospital discharge.
- 4 patients subject to a CTO had been non-adherent with drug treatment in the month before death and 8 had missed the last appointment with services; 2 had both refused treatment and missed the last appointment.



Alcohol and drug misuse

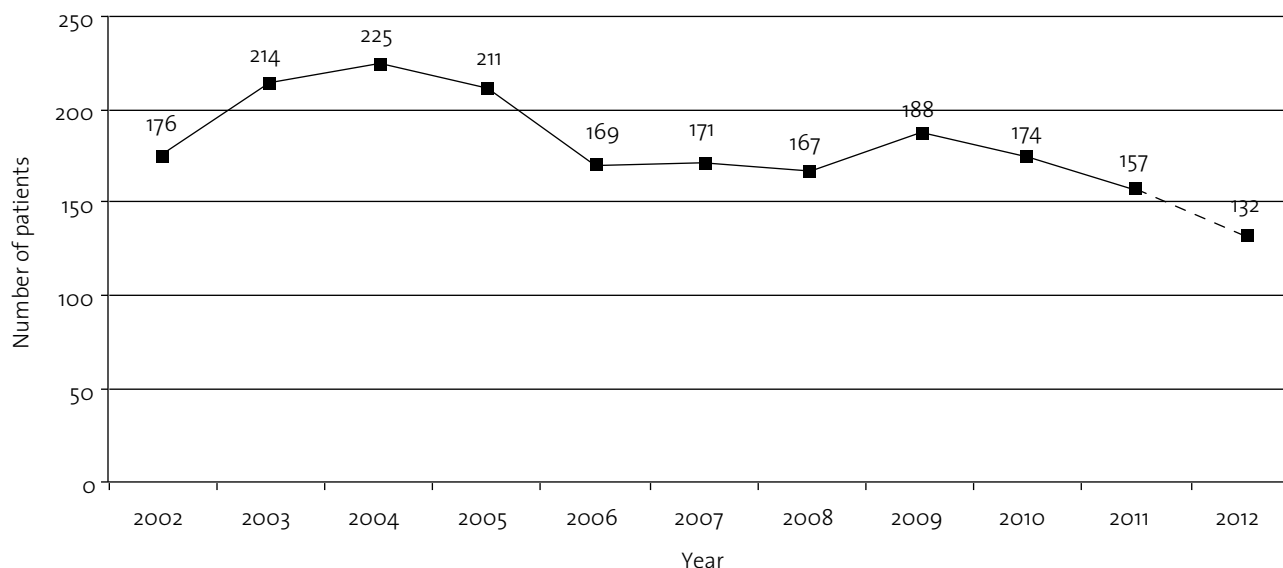
- There were 5,999 suicides in patients with a history of alcohol misuse, 45% of the total sample, an average of 545 deaths per year (Figure 17).
- 4,201 had a history of drug misuse, 32% of the total sample, an average of 382 deaths per year (Figure 17).
- 7,209 had a history of either alcohol or drug misuse or both, 54% of patient suicides, an average of 655 deaths per year.
- Between 2002 and 2011, the overall number of patient suicides with a history of alcohol misuse increased. The number with drug misuse did not change overall although there has been an increase since 2007. However, we are estimating a fall in patient suicides with alcohol and/or drug misuse in 2012 (Figure 17).

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



- 1,112 (8%) patients had a primary diagnosis of alcohol dependence/misuse; 571 (4%) drug dependence/misuse. The number with alcohol dependence/misuse did not change over the report period, whilst the number with drug dependence/misuse increased from an average of 49 per year in 2002-2003 to 67 per year in 2011-2012.
- 1,984 (15%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 180 deaths per year. However, the number decreased over the report period and our estimated figure in 2012 shows a continued fall (Figure 18).

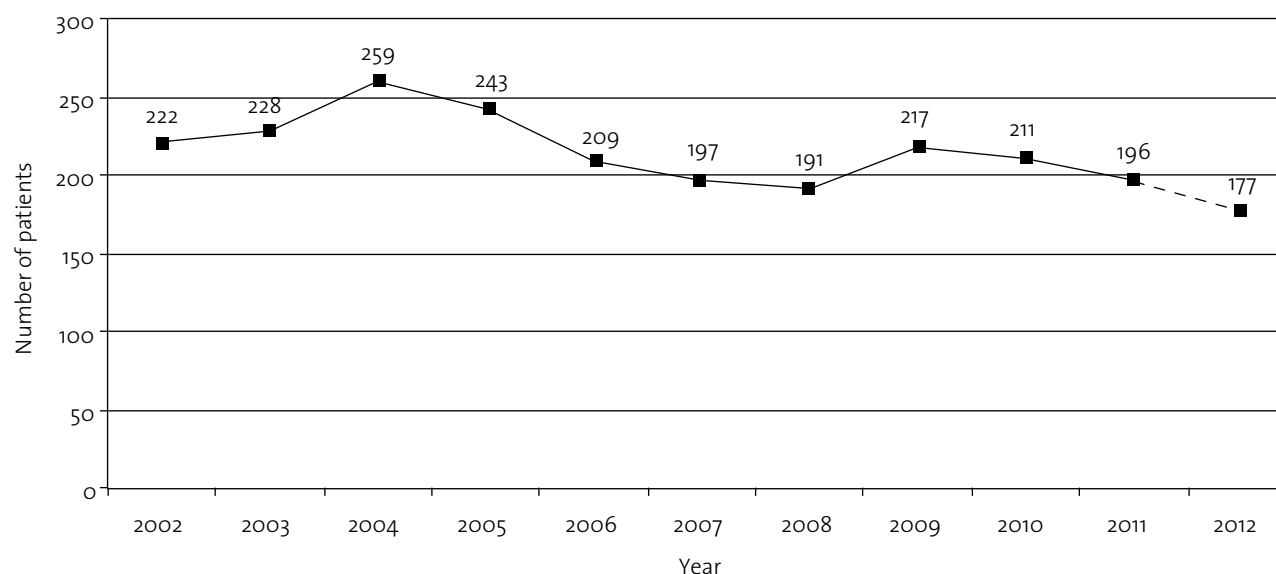
Figure 18: Patient suicide: number with dual diagnosis (severe mental illness and alcohol or drug dependence/misuse)



Patients with schizophrenia

- There were 2,350 suicides in patients with a primary diagnosis of schizophrenia (includes other delusional disorders, referred to as schizophrenia in the remainder of the report), 17% of the total sample, an average of 214 deaths per year.
- There was an overall fall in the number of suicides in patients with schizophrenia between 2002 and 2011 with a peak in 2004 (Figure 19). In 2002-2006, the annual average number was 232 while in 2007-2011 it was 202. We are estimating a further decrease in 2012.
- Patients with schizophrenia who died by suicide were younger than other patients (median age 39 compared to 46).
- There was a higher proportion of males in this group, 75% (1,684) compared to 66% (8,422) overall. 1,201 (55%) lived alone.

Figure 19: Patient suicide: number with a primary diagnosis of schizophrenia and other delusional disorders



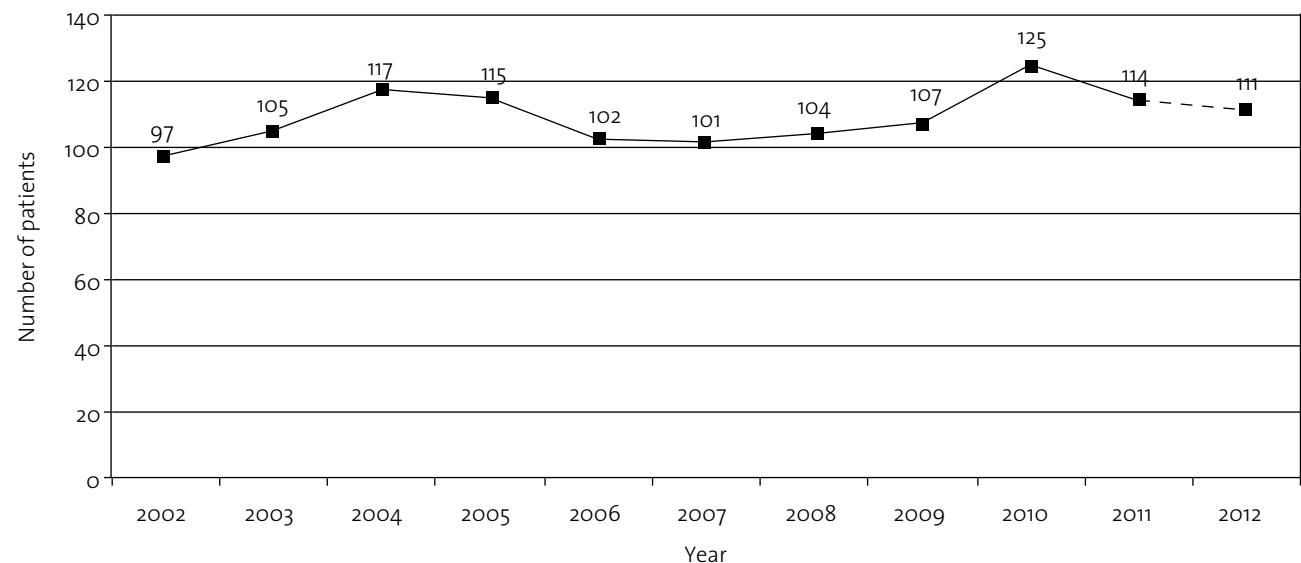
- They were more likely than other patients to die by jumping/multiple injuries (585, 26% v. 1,389, 13%) or drowning (160, 7% v. 551, 5%) or cutting/stabbing (100, 4% v. 278, 3%) and less likely to die by hanging (736, 33% v. 4,442, 42%) or self-poisoning (492, 22% v. 2,859, 27%).
- 528 patients with schizophrenia had been non-adherent with drug treatment in the month before death, 23% of the sample (excluding unknowns), an average of 48 deaths per year.
- 518 (27% excluding unknowns) had missed their last appointment with services, an average of 47 deaths per year.



Patients with personality disorder

- There were 1,198 suicides in patients with a primary diagnosis of personality disorder, 9% of the total sample, an average of 109 deaths per year.
- There was no overall change between 2002-2011 in the number or proportion of suicides in patients with personality disorder despite a peak in 2010 (Figure 20).
- There was a higher proportion of females in this group, 48% (543) compared to 34% (4,337) overall.
- The majority (807, 72%) were aged under 45.
- 826 (73%) had a co-morbid psychiatric disorder, most commonly alcohol dependence/misuse (354, 43%) or drug dependence/misuse (263, 32%).
- We will be investigating suicide in patients with personality disorder in a detailed study due to commence in 2015. We have studied suicide in personality disorder in primary care and will be publishing this study soon.

Figure 20: Patient suicide: number with a primary diagnosis of personality disorder



1.2 HOMICIDE

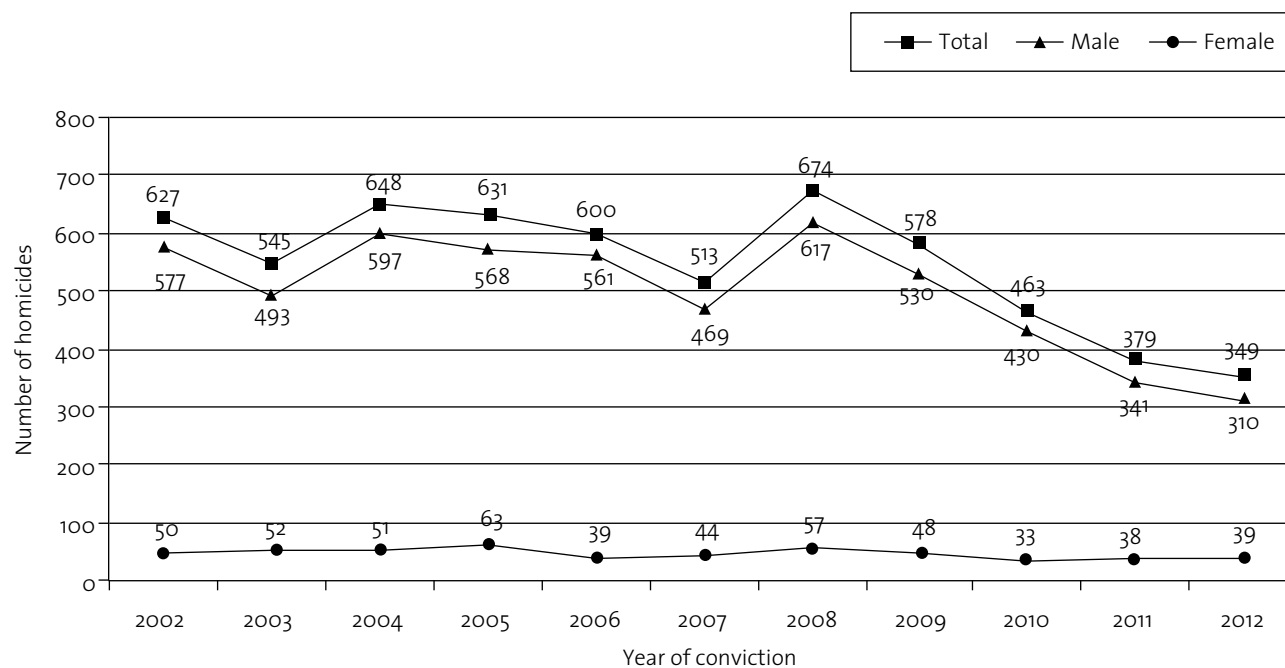
Between 2002-2012, the Inquiry was notified of 6,007 homicide convictions, an average of 546 per year. There were 6,314 victims, an average of 574 per year.

1.2.1 Homicide in the general population

- The annual number of convictions in the general population is shown in Figure 21. These figures are provided as context for our data on homicides by people with mental illness. More recent statistics are published (for England and Wales) by the Office for National Statistics.⁸
- There has been a decrease in the number of people convicted of homicide over the report period from a peak in 2008 (Figure 21).
- The apparent fall in homicide convictions is large and may be due to: (1) a true fall in homicide; (2) delays in the legal process; (3) delays in data notification following conviction. A full explanation on how we adjust for delays has been provided in the 'presentation of findings' section.
- A downward trend in homicide offences has been reported by the Office for National Statistics.⁸ However, the report highlighted a 4% increase in recorded offences from 2011/12 to 2012/13. This increase was found for the year the offence was recorded and not the year when the case was heard by the court.
- The proportion of offences resulting in conviction (around 60%) has remained fairly consistent.⁸
- The most common method was the use of a sharp instrument (2,311, 40% of the total sample).



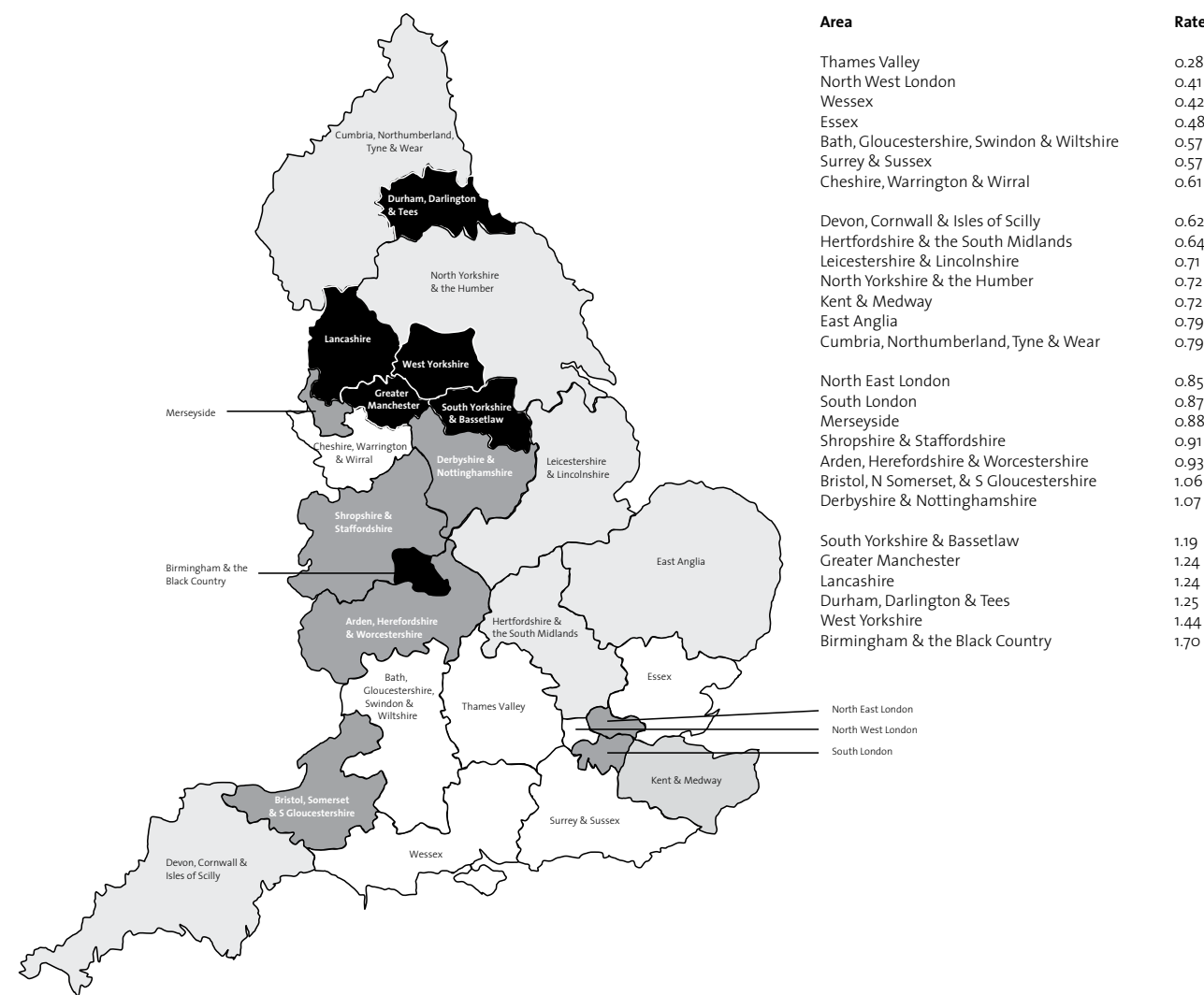
Figure 21: Number of homicide convictions in the general population, by gender of offender



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

- There was some variation in homicide conviction rates by area of residence (NHS England Area Team) (average rate 2010-2012). The highest rate was in Birmingham and the Black Country, at 1.70 per 100,000 population, and the lowest in the Thames Valley region, at 0.28 per 100,000 (Figure 22).

Figure 22: Rates of offenders convicted of homicide per 100,000 population by NHS area of residence (average rate 2010-2012)



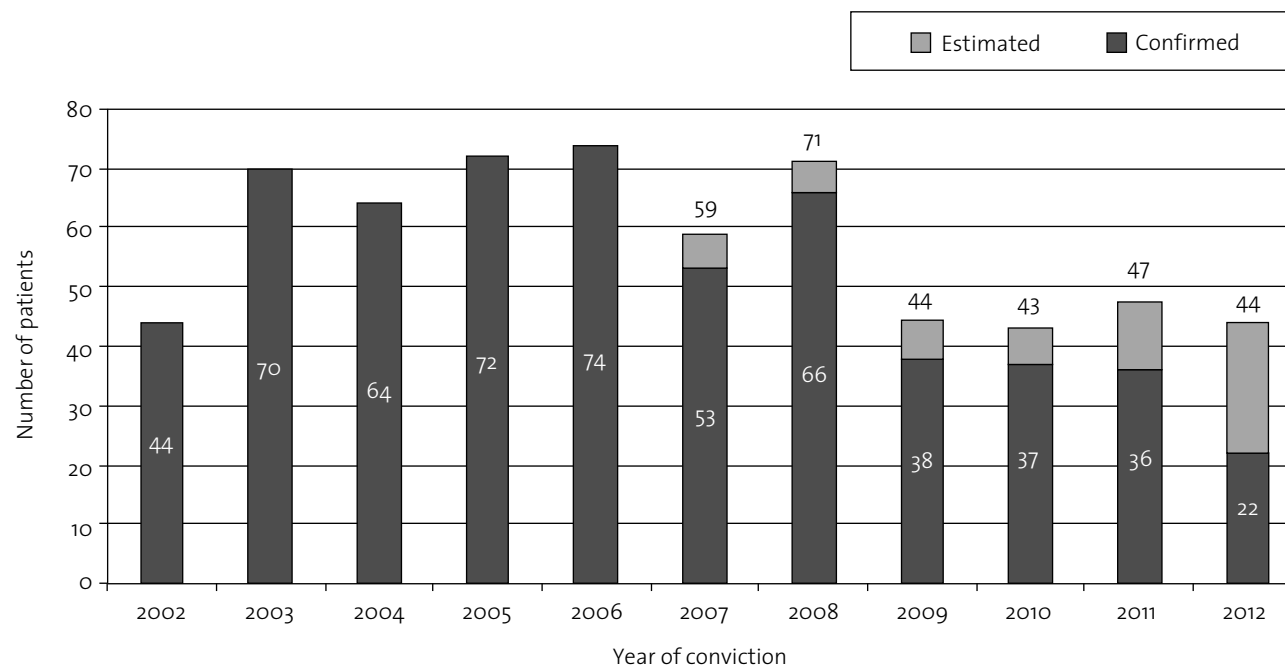
Note: rates have been colour coded by approximate quartile



1.2.2 Patient homicide

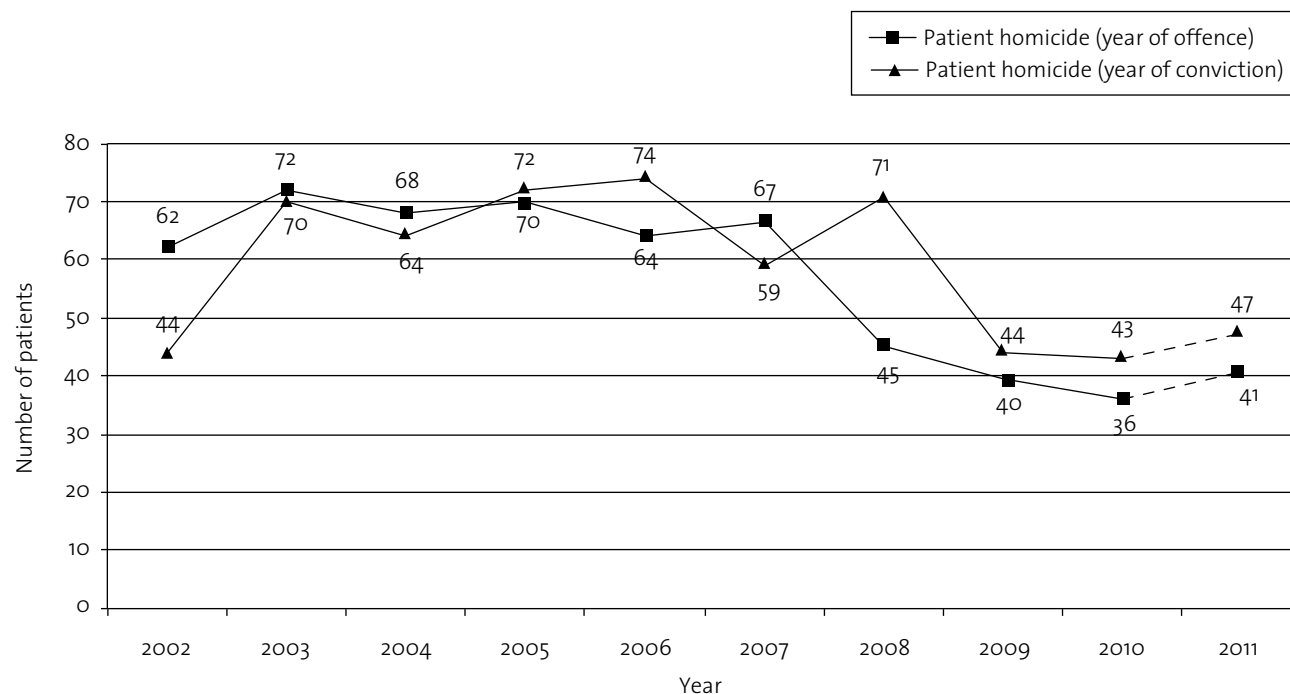
- During 2002-2012, 576 people convicted of homicide (10% of the total sample) were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence. This represents an average of 52 homicides per year. There were 613 victims, an average of 56 per year.
- We estimate that we will be notified of 22 additional patient homicides for the final year of the report period, 2012 (Figure 23). The following analysis is based on the confirmed patient homicides for 2002-2006 and estimated numbers for 2007-2012, a total of 632 (11% of the total sample).
- The number of patient homicides has fallen since a peak in 2006, and the fall is more marked from 2008, and appears to have stabilised since 2009 (Figure 23).

Figure 23: Number of patient homicides



- There was a fall in the number of patient homicides over the report period when examined by year of conviction, and a fall in number by year of offence (Figure 24).
- The lower patient homicide figures in 2009-2010 appear more pronounced in men, figures for females being already low (Figure 25).
- 17 (3%) were in-patients at the time of the offence.
- 22 homicides in 2005-2012 were under crisis resolution/home treatment teams (CR/HT).
- 1 homicide was committed by a patient subject to a community treatment order (CTO); another 2 by patients who had previously been on a CTO.

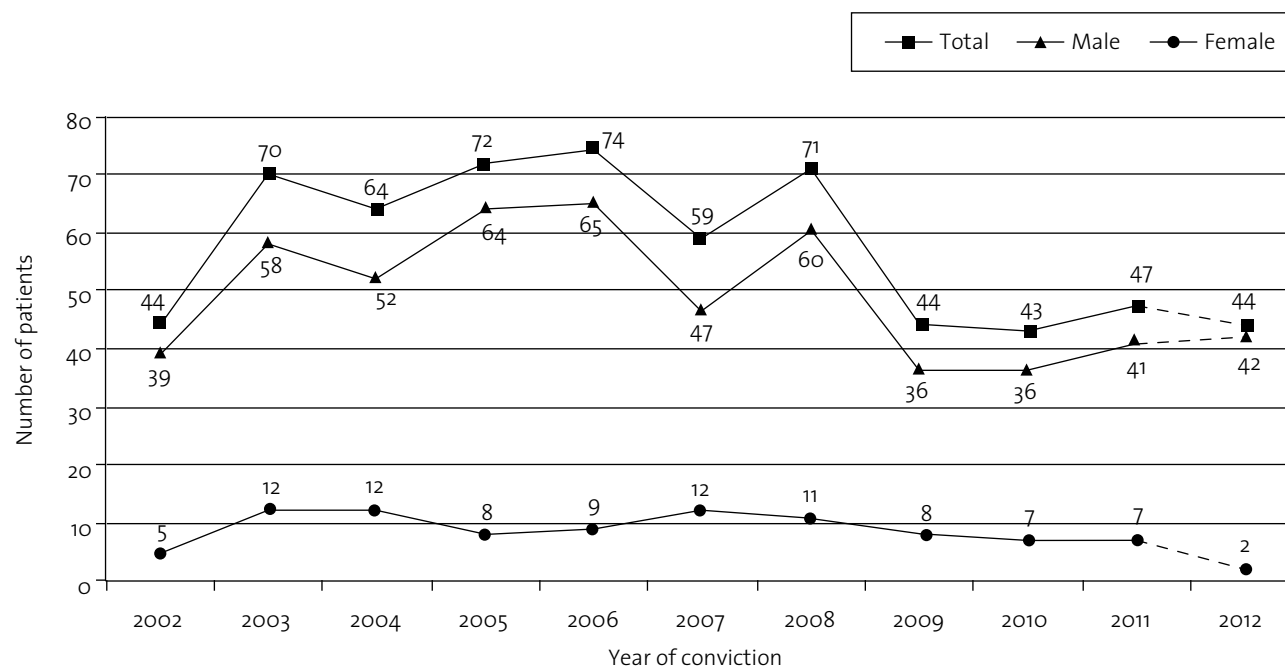
Figure 24: Number of patient homicides, by year of offence and year of conviction



Forensic and clinical history

- 453 (78%) patients convicted of homicide had previously been convicted of an offence, 330 (53%) had been convicted of committing a violent offence.
- 274 (47%) had been in prison before the offence.
- 39 (6%) had previously been admitted to a high, medium or regional secure unit.
- 70 (12%) had previously been admitted to a psychiatric intensive care unit.
- 60 (11%) patients had previously been involuntarily detained under mental health legislation at some time prior to the offence. The numbers have increased over the report period.

Figure 25: Number of patient homicides, by gender of offender



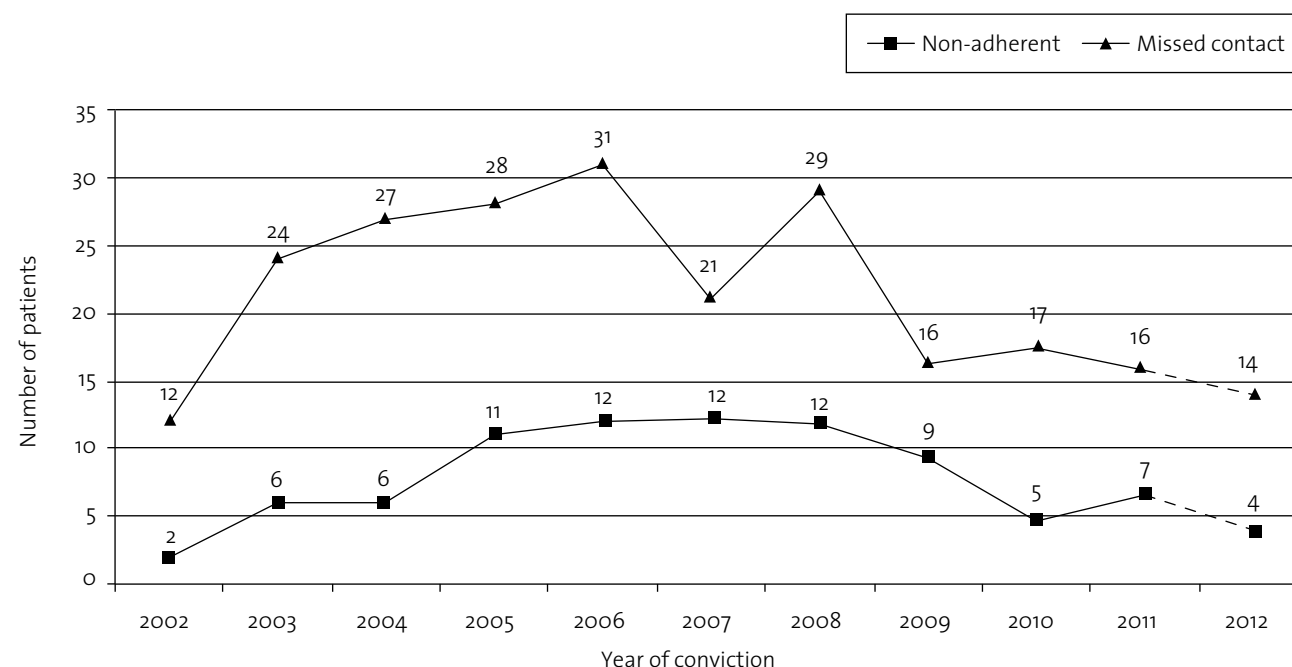
Note: figures in 2011 do not tally with the total due to rounding



Non-adherence and missed contact

- 86 (16%) patients had been non-adherent with drug treatment in the month before the homicide, an average of 8 per year.
- The numbers have been lower since 2009, having risen in the period leading up to 2006 (Figure 26).
- In 2010-2012, non-adherence with drug treatment was reported in 14% of patient homicides compared to 20% in 2005-2007. However, this difference does not reach statistical significance.
- 235 (40%) patients missed their final service contact before the homicide occurred, an average of 21 per year.
- The numbers have been lower in 2009-2012, having risen in the years up to 2006 (Figure 26).

Figure 26: Patient homicide: number non-adherent with drug treatment or missed contact



- In 2010-2012, missed final contact was reported in 37% of patient homicides, compared to 40% in 2007-2009. However, this difference does not reach statistical significance.
- Non-adherence and missed contact often occur together. In 45 patients both were present.
- In total, 276 were either non-adherent or missed final contact, meaning that 49% were not in receipt of planned treatment before homicide.



Alcohol and drug misuse

- 465 patients had a history of alcohol misuse, 76% of the patient sample, an average of 42 per year (Figure 27).
- 474 patients had a history of drug misuse, 77% of the patient sample, an average of 43 per year (Figure 27).
- There were 554 patients who had a history of either alcohol or drug misuse or both, 89% of patients, an average of 50 homicides per year.
- 73 (12%) patients had a primary diagnosis of alcohol dependence/misuse; 91 (14%) had drug dependence/misuse.
- 144 (23%) had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/ misuse, an average of 13 per year. The number with dual diagnosis has fallen since a peak in 2005 (Figure 28).

Figure 27: Patient homicide: number with a history of alcohol or drug misuse

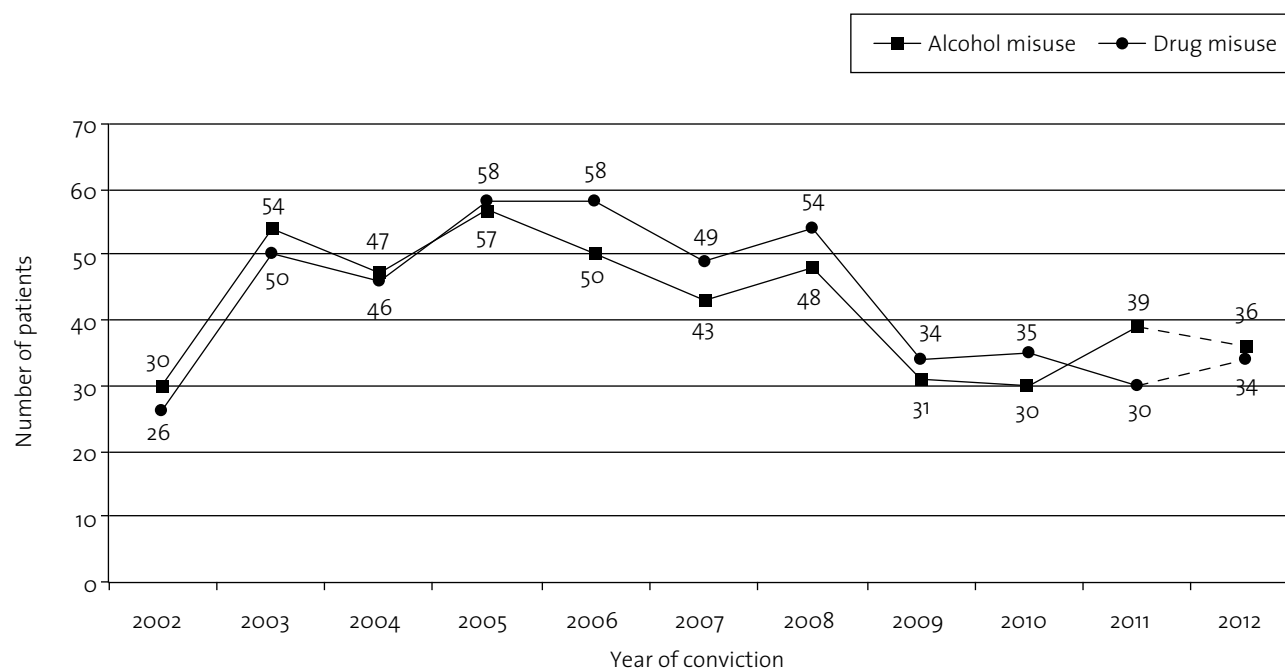
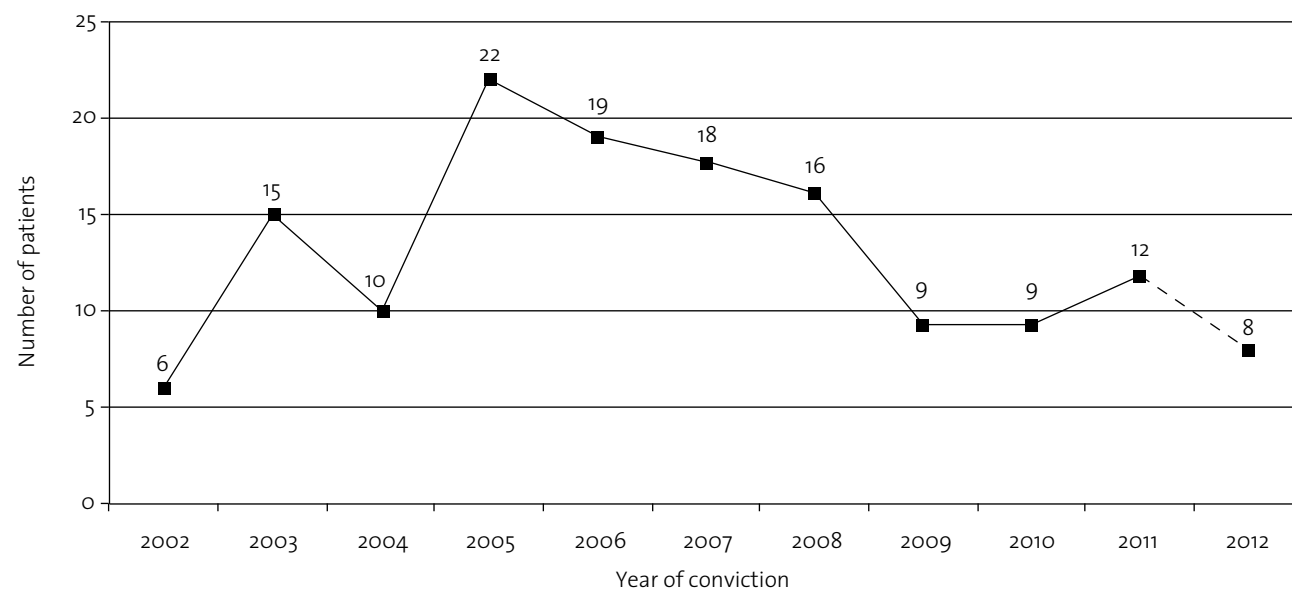


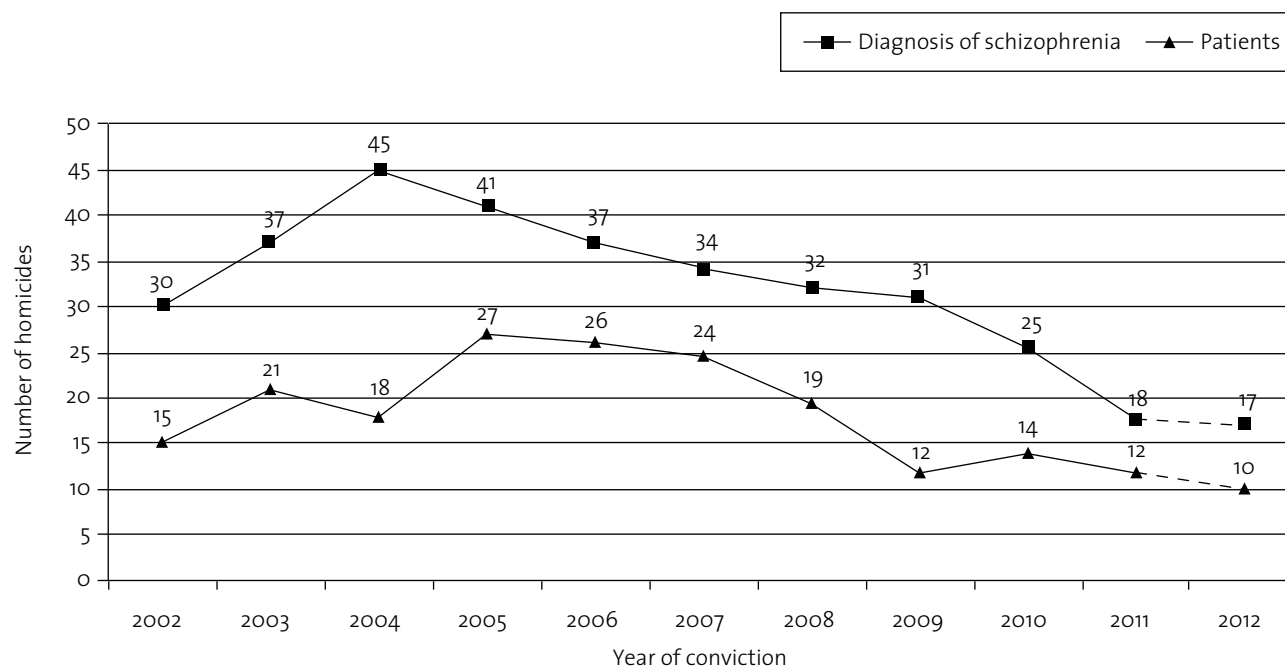
Figure 28: Patient homicide: number with dual diagnosis
(severe mental illness and alcohol or drug dependence/misuse)



Homicide and schizophrenia

- There were 347 homicides by people with a history of schizophrenia (includes other delusional disorders) over 2002-2012, 6% of the total sample, an average of 32 per year.
- Of these, 273 (79%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.
- 198 (57%) were patients, an average of 18 per year (Figure 29).
- The figures for homicide by patients with schizophrenia in 2009-2012 are the lowest in the report period and the lowest since data collection began in 1997.
- 48 (28%) patients had been non-adherent with drug treatment in the month before the homicide.
- 76 (42%) patients with schizophrenia missed their final service contact before the homicide, an average of 7 per year, with a peak of 13 in 2006.

Figure 29: Offenders with a primary diagnosis of schizophrenia and other delusional disorders



1.2.3 Relationship of victim to offender

General population

- The relationship of victim to offender was: acquaintance (2,043, 42%); stranger (1,294, 26%); spouse/partner (current/ex) (959, 20%); and other family member (609, 12%).
- There has been a fall in the number of victims who were strangers, and family members over the report period. There has been an increase in the proportion of homicides who were acquaintances, but not in the number.

Patients

- Of the patients, the relationship of victim to offender was: acquaintance (230, 42%); spouse/partner (current/ex) (115, 21%); and family member (113, 21%). There were 91 (17%) stranger homicides, an average of 8 per year.

- The number and proportion of homicides where the victim was a spouse/partner or (current/ex) fell to 2010 but our estimated figures for 2011 and 2012 show a rise (Figure 30).
- For male patients, the relationship of victim to offender was: acquaintance (205, 44%); spouse/partner (current/ex) (90, 19%); stranger (86, 18%) and family member (83, 18%).
- For female patients, the relationship of victim to offender was: family member (28, 33%); acquaintance (27, 31%); spouse/partner (current/ex) (23, 27%); and stranger (5, 6%).

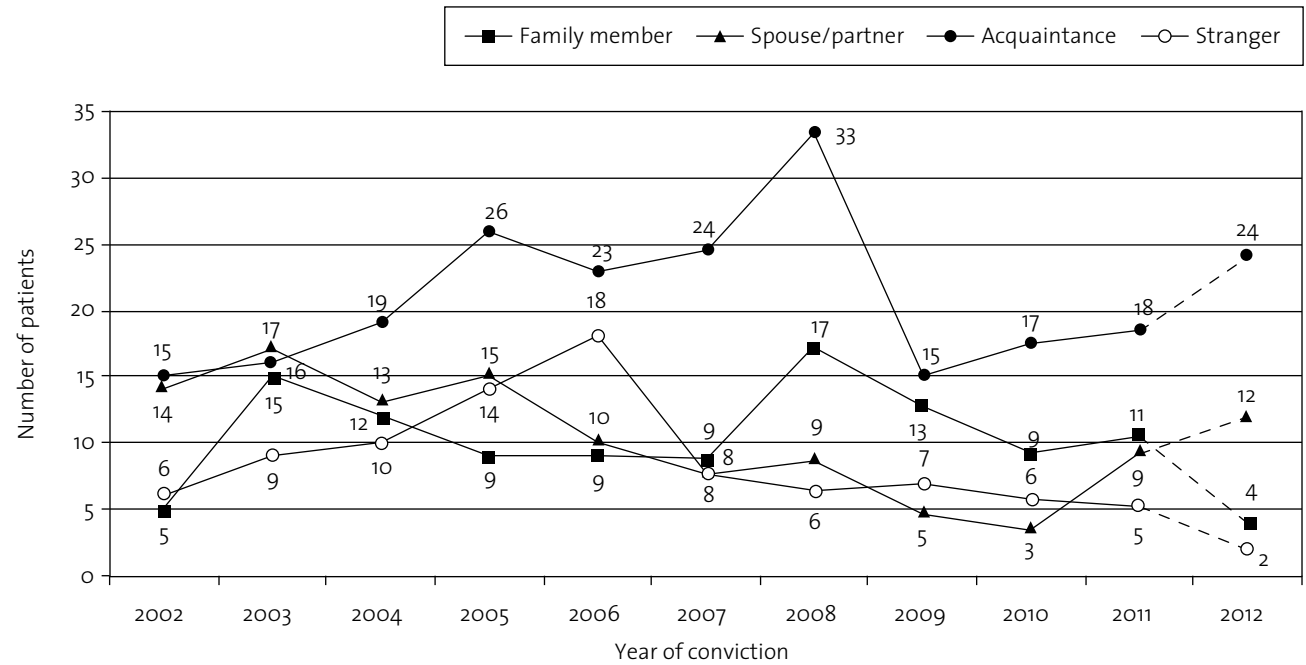
Intimate partner homicide

- In a fifth of homicides the victim was a spouse/partner (current/ex), an average of 87 per year.
- There has been a decrease in the number of intimate partner homicides over the report period, but no change in the proportion.

- Most of these homicides were carried out by males (800, 83%); in these cases 750 (94%) victims were female, an average of 68 per year.
- The most common methods were the use of a sharp instrument (487, 53%) and strangulation (163, 18%).
- Of all intimate partner homicides, 115 (12%) were carried out by a patient in contact with mental health services in the 12 months prior to the offence; 90 (78%) of these were male.
- 8 (10%) were under alcohol and/or drug treatment services at the time of the offence.
- 48 of these patients (42%) had previous convictions for violence.
- The most common diagnoses were affective disorder (bipolar disorder and depression; 29, 26%); schizophrenia and other delusional disorders (25, 22%); alcohol dependence/misuse (18.6%); and drug dependence/misuse (9.8%).



Figure 30: Patient homicide: relationship of victim to offender



1.2.4 Homicide followed by suicide

General population homicide-suicide

- Homicide followed by suicide is defined here as cases in which the perpetrator dies by suicide within 3 days of committing homicide. As there is no conviction for homicide in these cases, they are not included in the previous homicide analysis.
- We were notified of 180 offences between 2002 and 2011, an average of 18 per year. Data for 2012 are incomplete.
- There was no trend in the number of homicide-suicides over the report period, or as a proportion of all homicides.
- There were 247 victims in total. 28 (16%) incidents involved multiple victims. 22 multiple victim incidents involved family members.

- 36 (20%) had previous convictions for violence.
- Most of the offenders were male (165, 92%), with a median age of 43 (range 17-92).
- The relationship of victim to offender (as a principal victim) was: spouse/partner (current/ex) (113, 70%); son/daughter including stepchild (26, 16%); acquaintance (10, 6%); other family member (7, 4%); and stranger (5, 3%).

Patient homicide-suicide

- As these offenders did not undergo a psychiatric assessment after the offence, we do not have information regarding diagnosed symptoms of mental illness at the time of the offence.
- Few homicide-suicides involved patients under the care of mental health services prior to the offence (13, 7%), the most common diagnosis was affective disorder (4 cases), followed by schizophrenia (2 cases); adjustment disorder (2 cases); other diagnosis (2 cases); and personality disorder (1 case).

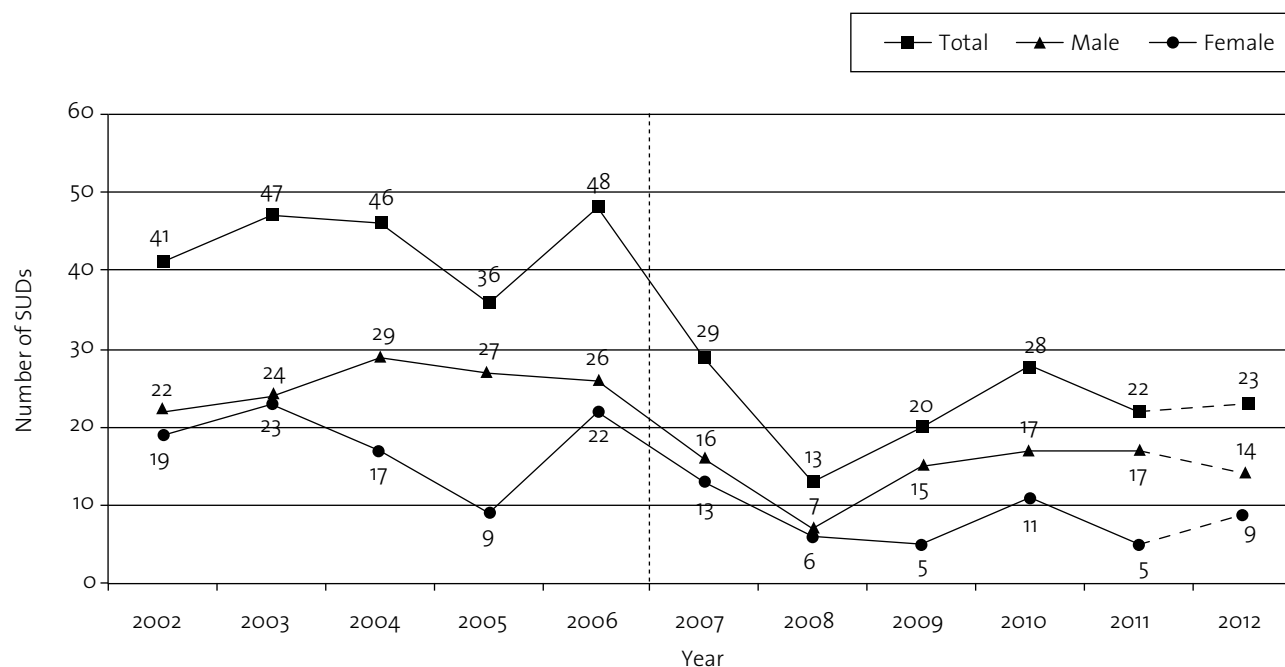
- 7 (58%) had been ill for between 1 and 5 years.
- 2 had previous convictions for violence.
- The relationship of victim to offender (as a principal victim) was: spouse/partner (current/ex) (8, 62%); son/daughter including stepchild (4 cases); and acquaintance (1 case).



1.3 Sudden unexplained death in mental health in-patients (SUD)

- There were 353 SUD cases over the report period, an average of 32 per year (Figure 31).
- There was an overall fall in the number of SUDs over the report period. However, due to a change in data provider, recent numbers are not strictly comparable with historical data.
- 145 (49%) had a history of cardiovascular disease; 76 (26%) had a history of respiratory disease; 39 (13%) had a history of cerebrovascular disease, and 28 (9%) had a history of epilepsy.
- 26 (9%) were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).
- No patients who died by SUD were reported to be receiving antipsychotic drug doses above British National Formulary (BNF) limits.
- There were 42 SUD cases in patients from black and minority ethnic (BME) groups over the report period. The number of these deaths varied from 1-8 per year and showed no trend over time.

Figure 31: Number of sudden unexplained deaths, by gender



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



Restraint

- There were 5 deaths within 1 hour of restraint between 2002-2012. We do not know whether restraint caused these deaths. We are currently working with the Care Quality Commission (CQC) to investigate deaths which occurred within 1 hour of restraint.
- There were 23 deaths within 24 hours of restraint between 2002-2012, ranging from 0-4 per year.
- In the last 5 years of data collection (2008-2012) there were 11 deaths within 24 hours of restraint, of which 5 were in BME patients. One of these deaths occurred within 1 hour of restraint. The number of post-restraint deaths is too small to identify a trend.

Patients aged under 45

- There were 93 (26%) cases of SUD in patients under 45 years. The number of these cases did not change over the report period.
- Those aged under 45 were more likely to be from a BME group (24 cases, 26% v. 18 cases, 7%).
- 17 (22%) had a history of cardiovascular disease; 15 (19%) had a history of respiratory disease and 10 (13%) had a history of epilepsy. There was one SUD case aged under 45 with a history of cerebrovascular disease. 44 (57%) SUD cases had no history of these physical illnesses.
- 16 (20%) patients were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).



2. NORTHERN IRELAND

2.1 SUICIDE

Between 2002-2012, the Inquiry was notified of 2,597 deaths in the general population that received a suicide or undetermined verdict, an average of 236 per year. These are referred to as suicides throughout the report.

2.1.1 Suicide in the general population

- There was an overall increase in the number and rate of suicides over the 10-year period, although there has been a slight fall in 2012 (Table 2; Figure 32).
- Delayed registrations mean that figures for the most recent years presented here will increase.

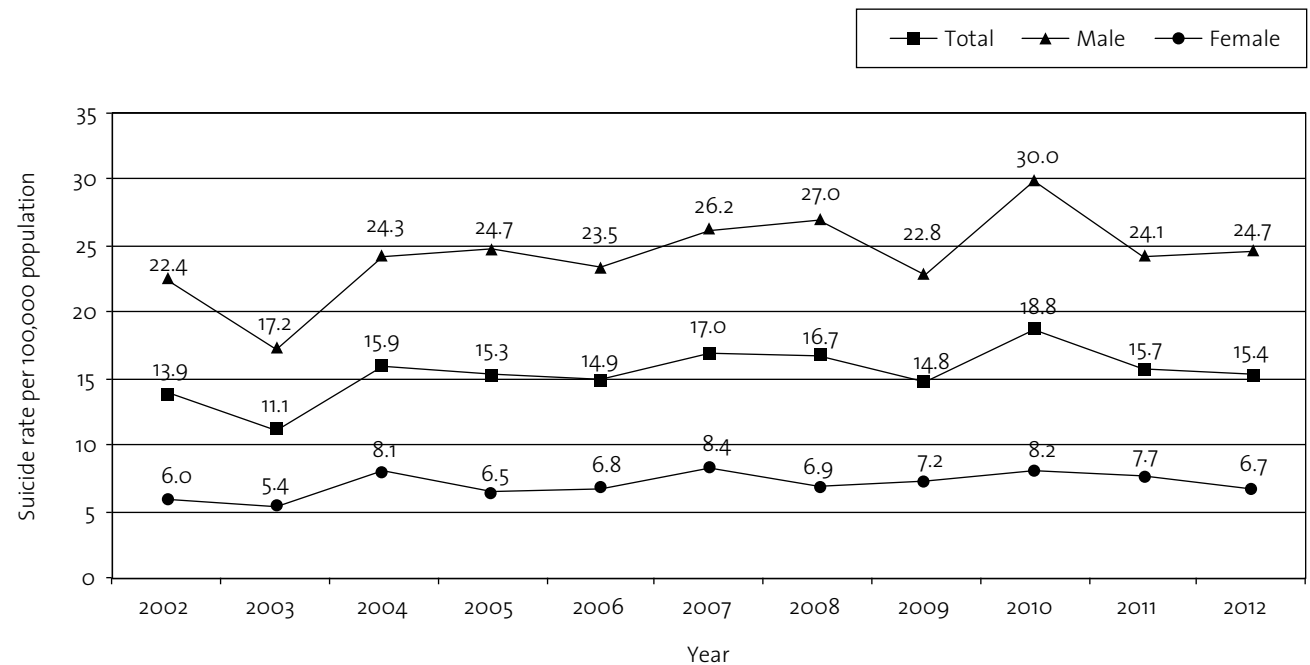
- The increase in numbers in 2002-2011 was observed in males and females, although there was no increase in the rate of female suicides (Figure 32). The increase was mainly found in men aged 25-34 who have the highest suicide rate in recent years; there was no increase in any age-group in women.

Table 2: Number of suicides in the general population, by gender

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	159	123	175	180	173	195	203	173	229	185	190
Female	45	41	62	50	53	66	55	58	66	62	54
Total	204	164	237	230	226	261	258	231	295	247	244



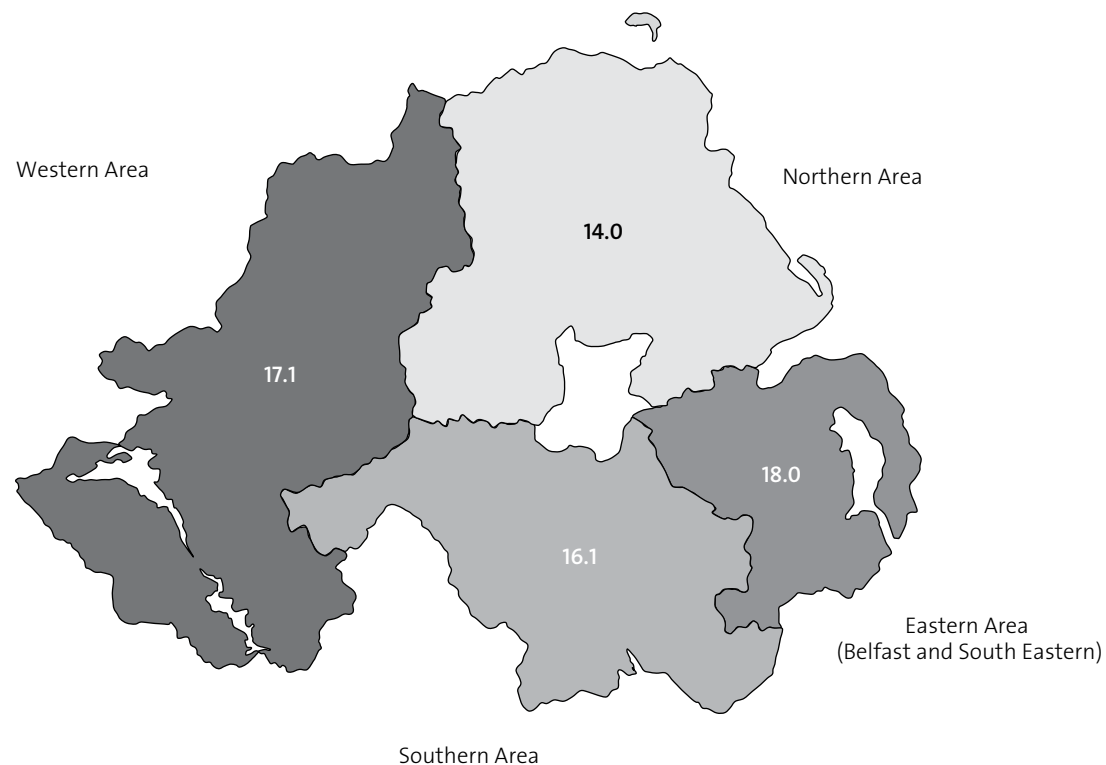
Figure 32: Rates of suicide in the general population, by gender



Variation in suicide rates by area of residence

- There was some variation in suicide rates by area of residence (Health and Social Care Trust) at the time of death (average rate 2010-2012). The highest rate of suicide was in the Eastern Area, at 18.0 per 100,000 population, and the lowest in the Northern Area, at 14.0 per 100,000 population (Figure 33).

Figure 33: Rates of suicide per 100,000 population, by Health and Social Care Trust of residence (average rate 2010-2012)



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report) (1,471, 57%), self-poisoning (overdose) (611, 24%), and drowning (213, 8%). Less frequent methods were firearms (102, 4%), carbon monoxide (CO) poisoning (59, 2%), jumping/multiple injuries (mainly jumping from a height or being struck by a train) (51, 2%), and cutting/stabbing (33, 1%).
- Deaths by hanging increased over the report period, with a peak in 2010 (Figure 34). Self-poisoning rose overall but there has been little change in the number of these deaths in recent years.
- Of the less common methods, deaths by CO poisoning and firearms decreased.

Figure 34: Suicide in the general population: main causes of death



2.1.2 PATIENT SUICIDE

Patient suicide: numbers and rates

- During 2002-2012, 736 suicides (28% 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 67 patient suicides per year.
- There was no overall change between 2002 and 2011 in the number of patient suicides overall or by gender (Figures 35 and 36), or in the rate of suicide (using a general population denominator) (Figure 37).
- The number of patient suicides did not change in any age-group overall or by gender over the report period.
- In 2008-2011, a higher proportion of patients were unemployed (130, 50%) compared to the pre-recession years of 2004-2007 (112, 42%), although this difference was not statistically significant. 36 (5%) were homeless, living in bed and breakfast, or hostels, i.e. 'unstable housing'. This proportion did not change over the report period.

Figure 35: Number of patient suicides

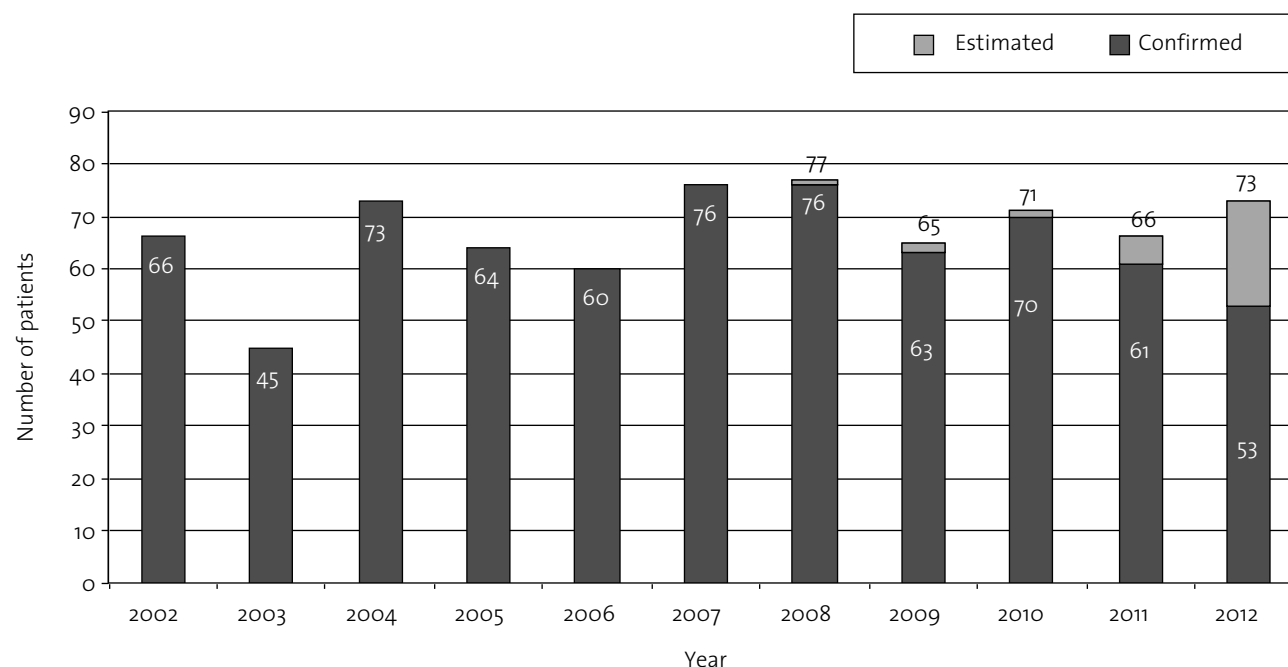
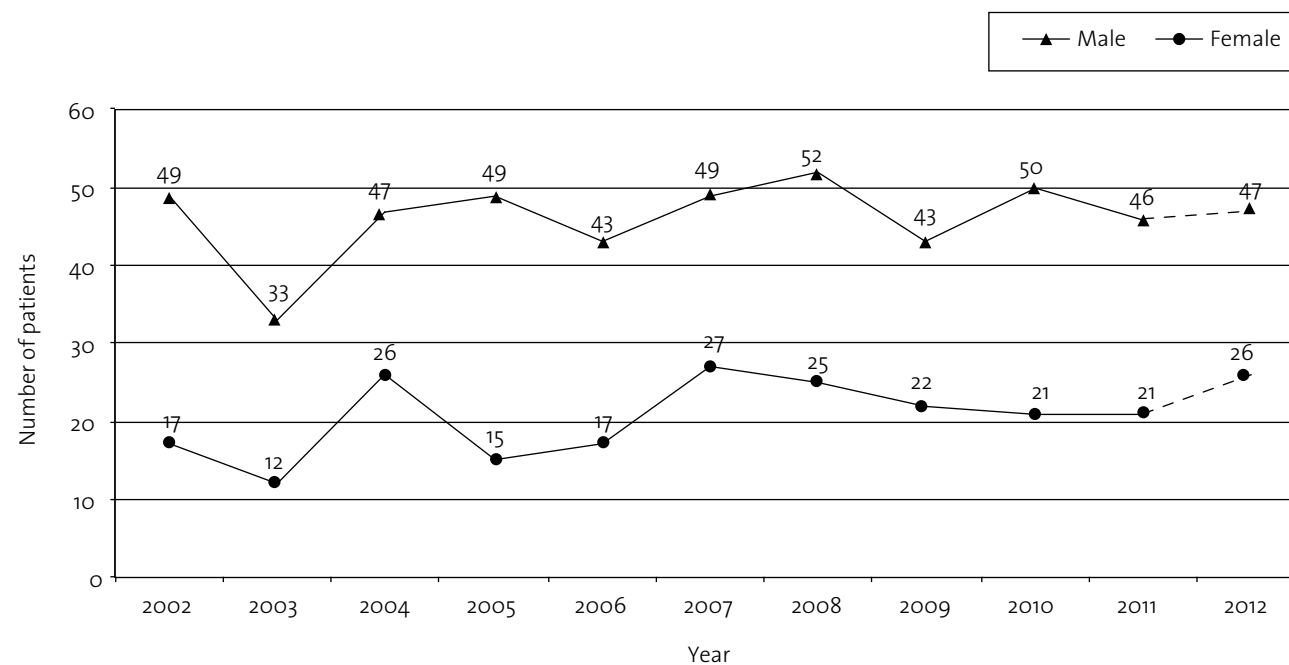


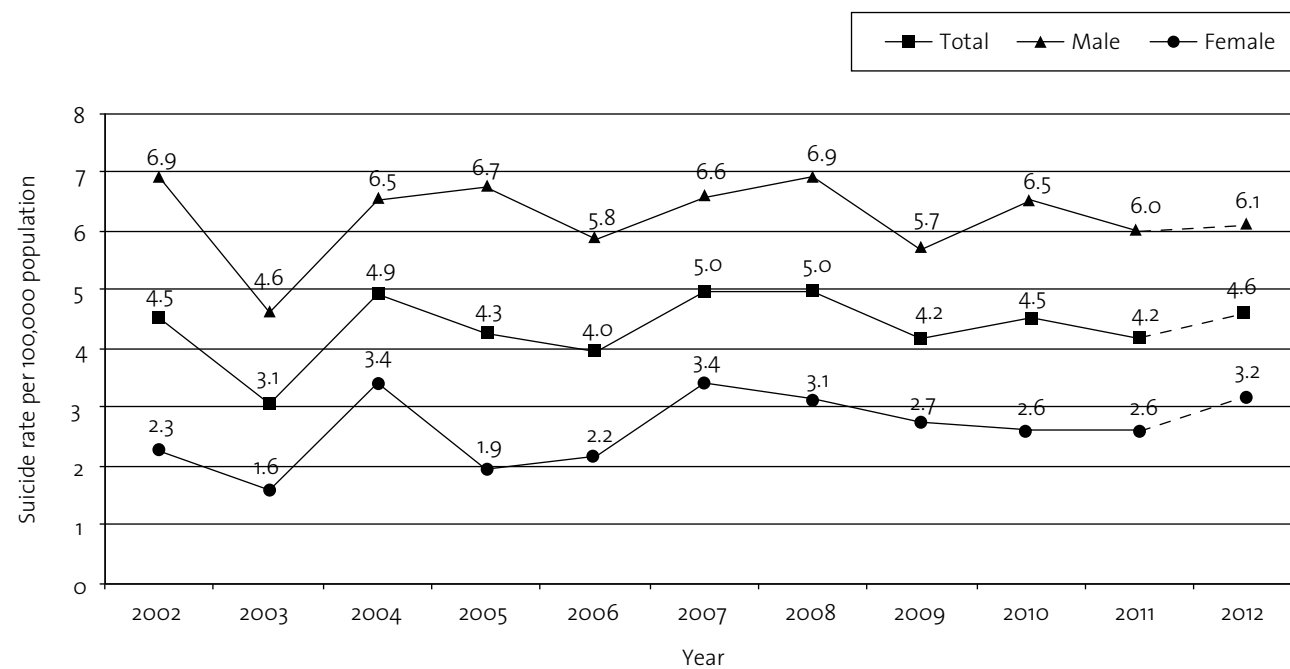
Figure 36: Number of patient suicides, by gender



Note: figures in 2011 do not tally with the total figure in Figure 35 due to rounding



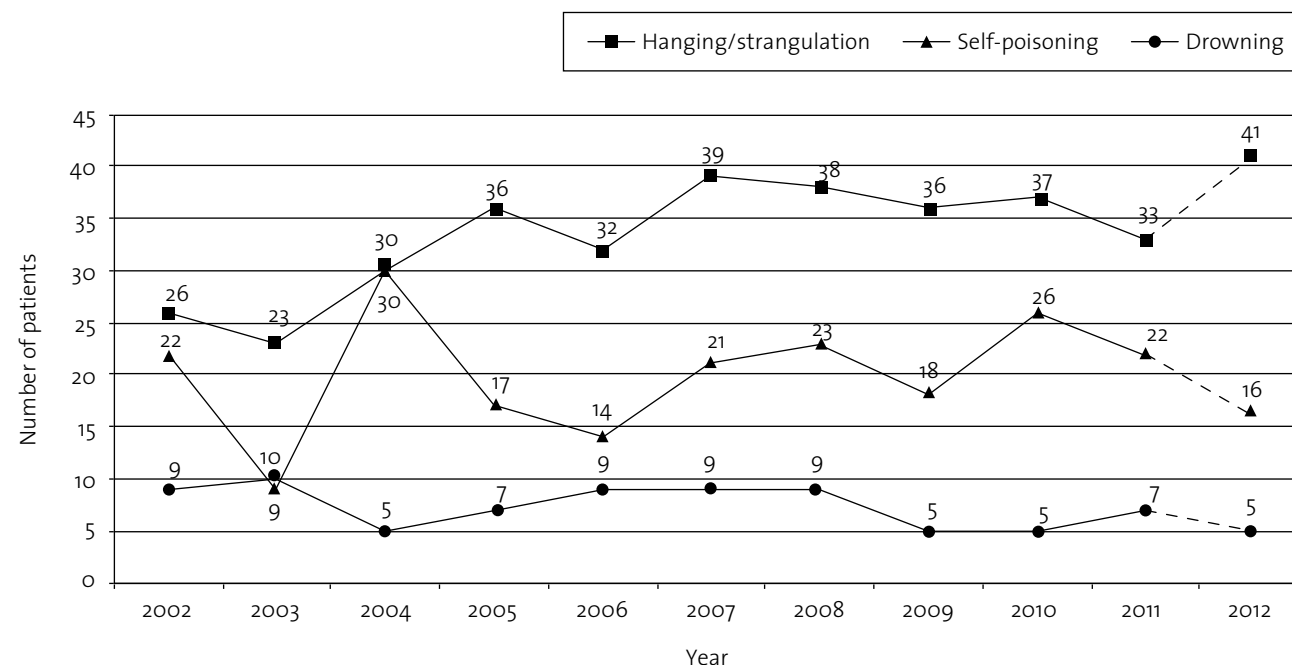
Figure 37: Rates of patient suicide, by gender



Method of suicide by patients

- The most common methods of suicide by patients were hanging (371, 50%), self-poisoning (218, 30%), and drowning (80, 11%).
- The number of suicides by hanging increased between 2002 and 2007 but there was no overall trend. Our estimation for 2012 suggests an increase in hanging and a decrease in self-poisoning (Figure 38).
- The most common substances used in self-poisoning were opiates (47, 27%), anti-psychotic drugs (22, 12%), benzodiazepines/hypnotics (17, 10%), and paracetamol/opiate compounds (17, 10%). There were no trends in substances used in deaths by self-poisoning over the report period.
- There were 4 deaths by suicide in the general population which were related to inhalation of helium gas. Of these, 1 was a patient.

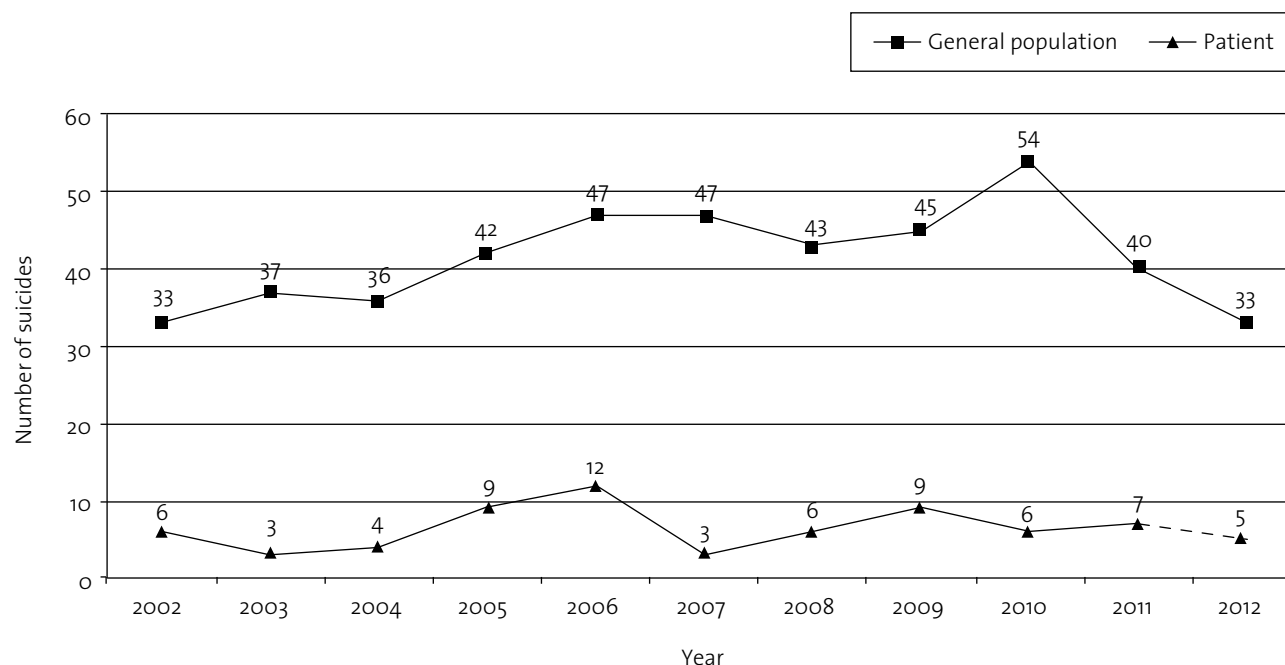
Figure 38: Patient suicide: main causes of death



Patient suicide in those aged under 25

- During 2002-2012, there were 457 suicides in the general population in people aged under 25, 18% of all suicides, an average of 42 per year. 187 were aged under 20, an average of 17 per year, and 95 were aged under 18, an average of 9 per year.
- 70 suicides in people under 25 were in patients, 10% of patient suicides and 15% of all suicides in this age-group, an average of 6 per year. 16 were aged under 20 and 5 were aged under 18.
- The number of general population suicides in people under 25 increased steadily from 2002 and reached a peak in 2010 with lower (though possibly incomplete) numbers in 2011-2012 (Figure 39). However, there was no change in the number of patient suicides in under 25s over the report period (Figure 39). The peak number was in 2006.

Figure 39: General population and patient suicides in those aged under 25



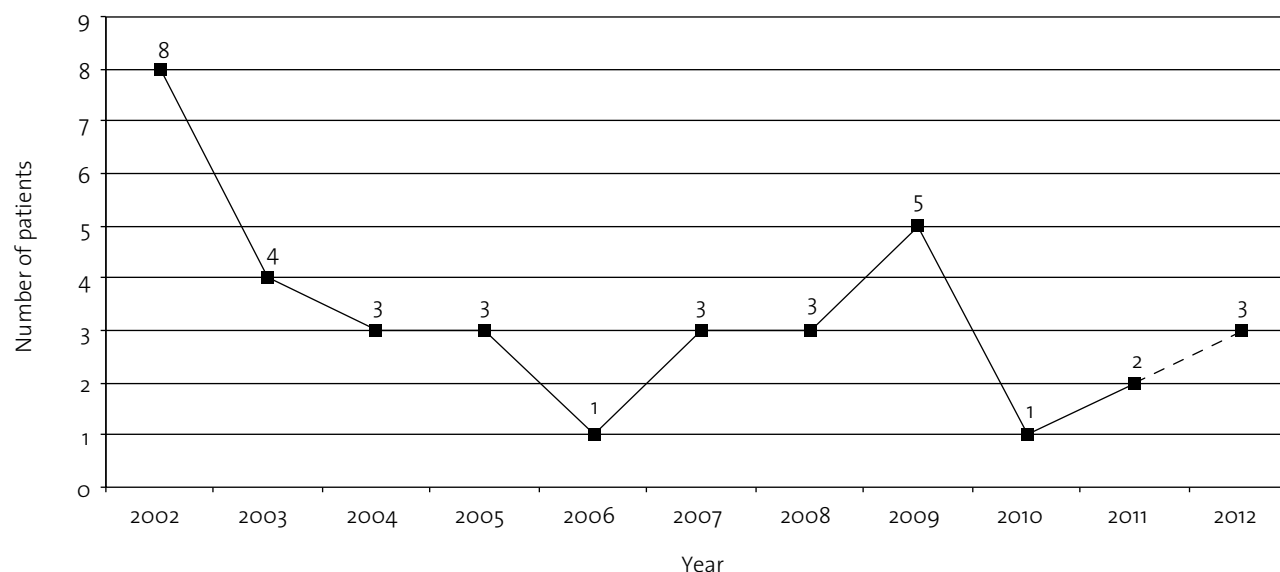
- Suicides in patients aged under 25 were more likely than in older (25+) patients to be by hanging (49, 73% v. 306, 48%) and less likely to be by self-poisoning (12, 18% v. 198, 31%).
- Their diagnostic profile was different: more patients under 25 had a primary diagnosis of drug dependence (11, 17% v. 34, 5%) while fewer had affective disorder (bipolar disorder/ depression) (13, 20% v. 226, 36%).
- More patients under 25 had a history of drug misuse (46, 70% v. 202, 33%), but there were no differences in alcohol misuse (46, 70% v. 378, 60%) or previous self-harm (48, 74% v. 446, 71%).
- Unemployment was more common in under 25s (47, 71% v. 260, 42%).
- 3 had a history of Local Authority Care.



In-patient suicide

- There were 36 in-patient suicide deaths between 2002-2012, 5% of patient suicides, an average of 3 deaths per year.
- The highest number of in-patient suicides was in 2002, after which numbers ranged from 1-5 per year with no overall change (Figure 40).
- 5 patients died on the ward by hanging over the report period; this number fluctuated from 0 to 2 per year.
- There were 6 suicides in detained in-patients, 17% of all in-patient suicides.
- There were 12 in-patients who died after absconding from the ward, 33% of all in-patient suicides.

Figure 40: Patient suicide: number of mental health in-patients



Crisis Resolution/Home Treatment

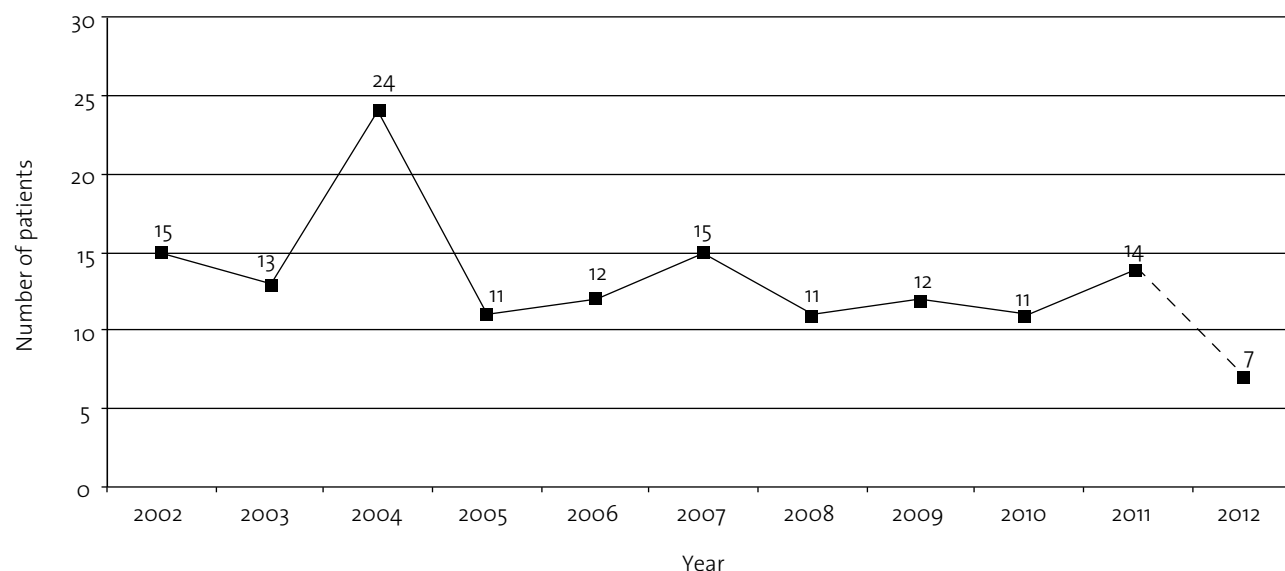
- There were 39 suicides in patients under crisis resolution/home treatment teams (CR/HT), 5% of the total sample.
- From 2005 there have been 35 suicides in patients under CR/HT compared to 21 in in-patient care.
- There was no overall trend in the number of suicides under CR/HT, but the highest figure was in 2007 (7 deaths) although we are estimating 8 deaths in 2012.
- 10 (27%) CR/HT patients died within 3 months of hospital discharge.
- 10 (27%) CR/HT patients lived alone. 4 had been non-adherent with drug treatment in the month before suicide.



Patients recently discharged from hospital

- There were 145 suicides within 3 months of discharge from in-patient care, 20% of all patient suicides and 21% of suicides in community patients, an average of 13 deaths per year.
- The number of post-discharge suicides peaked in 2004 but otherwise there was no trend over the report period (Figure 41). However, we are estimating a fall in 2012.
- Post-discharge suicides were most frequent in the first week after leaving hospital when 31 deaths occurred, an average of 3 per year. Of these, the highest number occurred on the first day after discharge (10, 32%).
- Of the 16 patients in this group who discharged themselves from hospital, 6 (38%) died in the first week after leaving hospital.
- 8 (6%) died after being discharged from a non-local in-patient unit.
- Overall, 35 (26%) died before the first follow-up appointment. This figure was consistent over the report period.

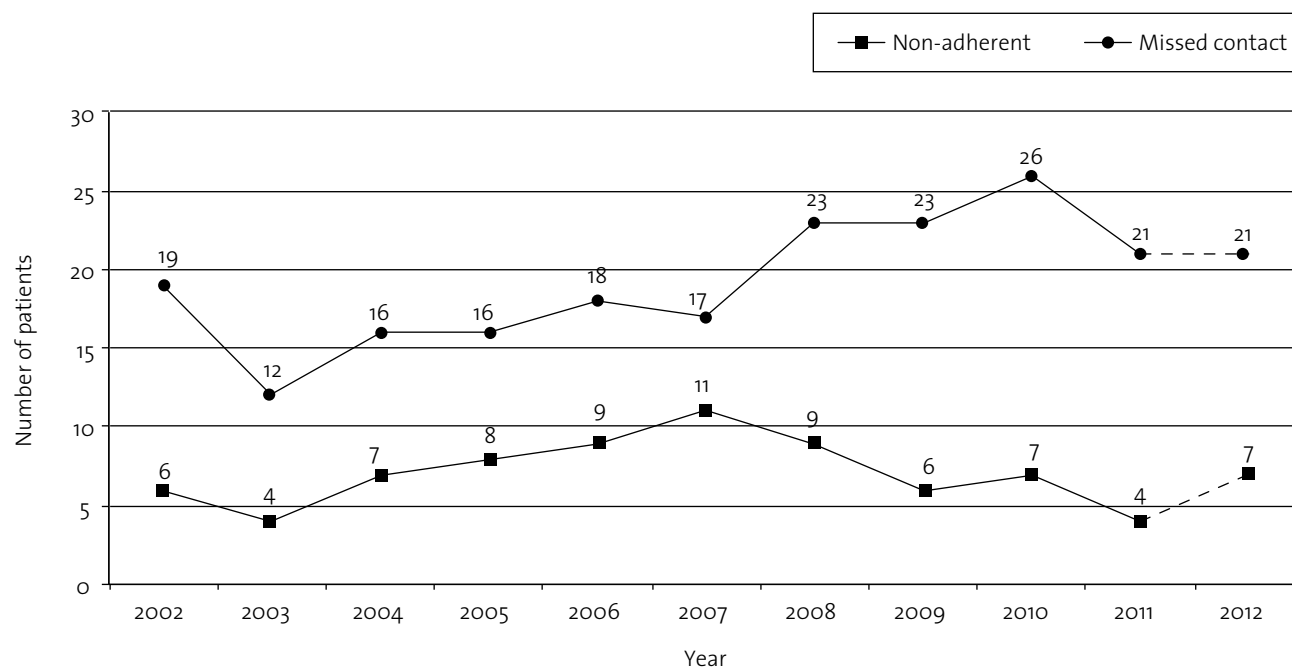
Figure 41: Patient suicide: number who died within 3 months of in-patient discharge



Non-adherence and missed contact

- 78 (12%) patients had been non-adherent with drug treatment in the month before death, an average of 7 deaths per year.
- 212 (31%) patients missed their final service contact before death, an average of 19 deaths per year.
- There was no overall trend in the number of patient suicides following non-adherence, although in recent years numbers have fallen since a peak in 2007 (Figure 42). There was an overall increase in the number of patient suicides following missed contact (Figure 42).
- Non-adherence and missed contact often occur together. In 29 deaths both were present.
- In total, 260 were either non-adherent or missed final contact; meaning that 41% of patients were not in receipt of planned treatment before suicide.

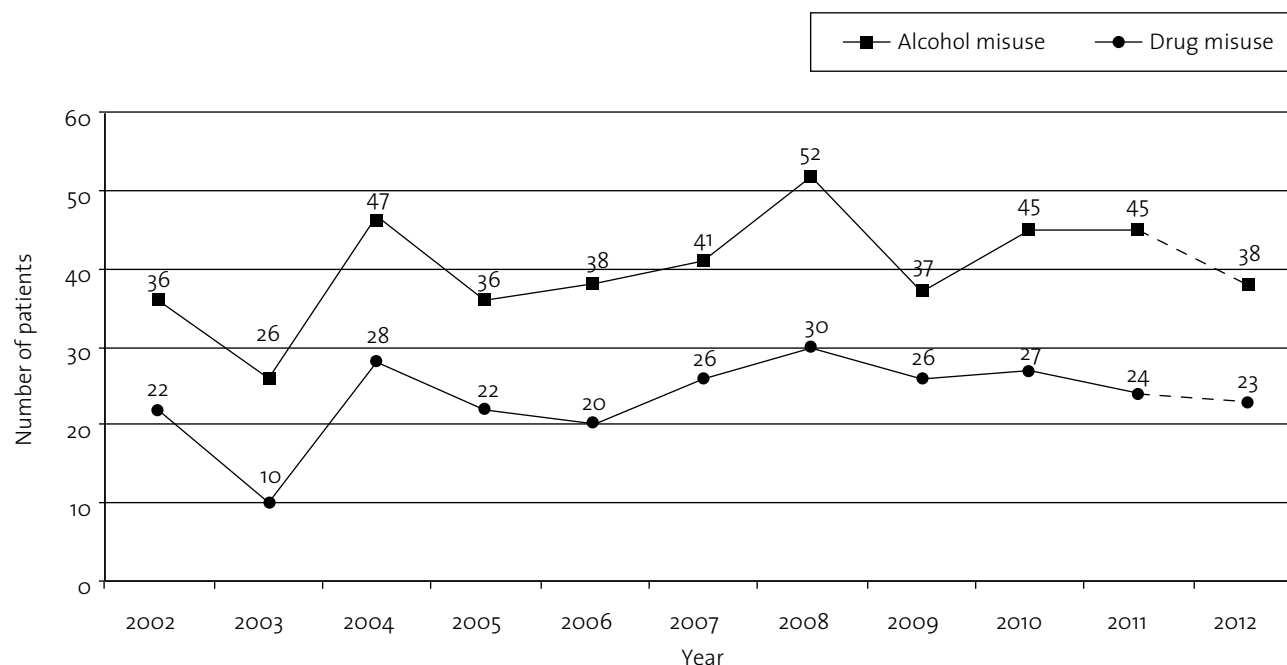
Figure 42: Patient suicide: number non-adherent with drug treatment or missed last contact



Alcohol and drug misuse

- There were 441 suicides in patients with a history of alcohol misuse, 61% of the total sample, an average of 40 deaths per year (Figure 43).
- 258 had a history of drug misuse, 37% of the total sample, an average of 23 deaths per year (Figure 43).
- 485 had a history of either alcohol or drug misuse or both, 67% of patient suicides, an average of 44 deaths per year.
- Between 2002 and 2011, there was no overall trend in the number of patient suicides with a history of alcohol or drug misuse.
- 143 (20%) patients had a primary diagnosis of alcohol dependence/misuse; 47 (6%) had drug dependence/misuse. The number with alcohol or drug dependence/misuse did not change over the report period.
- 112 (15%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 10 deaths per year. The number with dual diagnosis peaked in 2008 but there was no overall trend between 2002-2011.

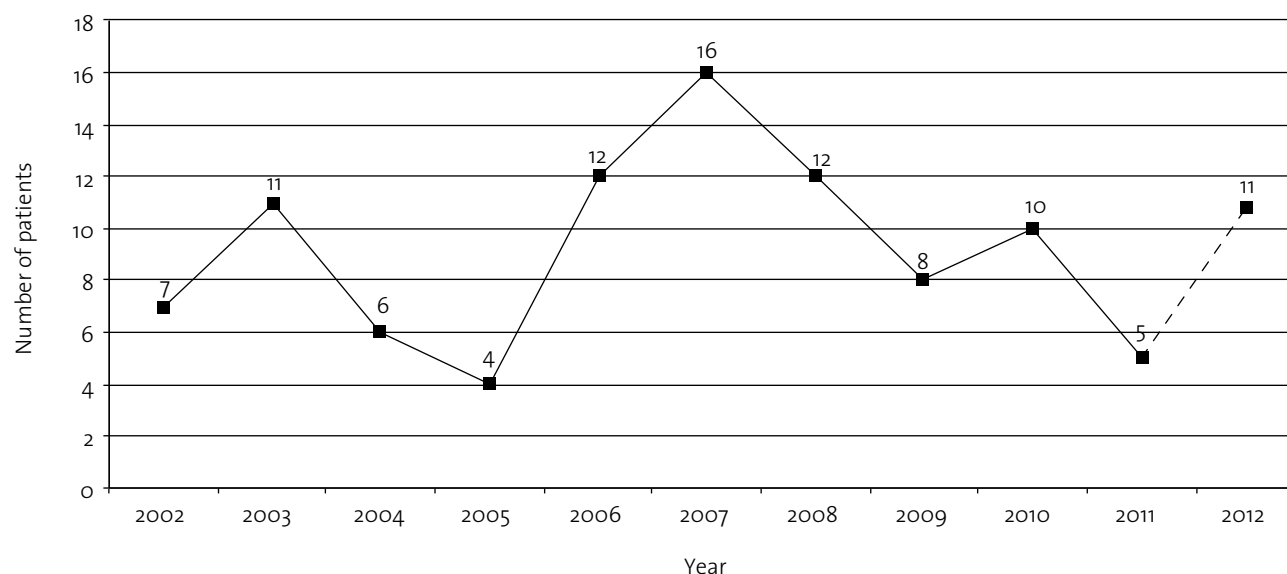
Figure 43: Patient suicide: number with a history of alcohol or drug misuse



Patients with schizophrenia

- There were 102 suicides in patients with a primary diagnosis of schizophrenia (includes other delusional disorders, referred to as schizophrenia in the remainder of the report), 14% of the total sample, an average of 9 deaths per year.
- There was no overall trend in the number of suicides in patients with schizophrenia - numbers have fallen since a peak in 2007 (Figure 44).
- The median age of patients with schizophrenia was 41, similar to patients with other diagnoses (median age 42). There was a higher proportion of males in this diagnostic group, 80% (79) compared to 69% (481) overall. 50 (51%) lived alone.
- Patients with schizophrenia were more likely than older patients to die by drowning (19, 19% v. 59, 10%) or jumping/multiple injuries (6, 6% v. 6, 1%) but less likely to die by hanging (37, 37% v. 313, 52%).
- 19 (20%) patients with schizophrenia had been non-adherent with drug treatment in the month before death; 25 (27%) had missed their last appointment with services.

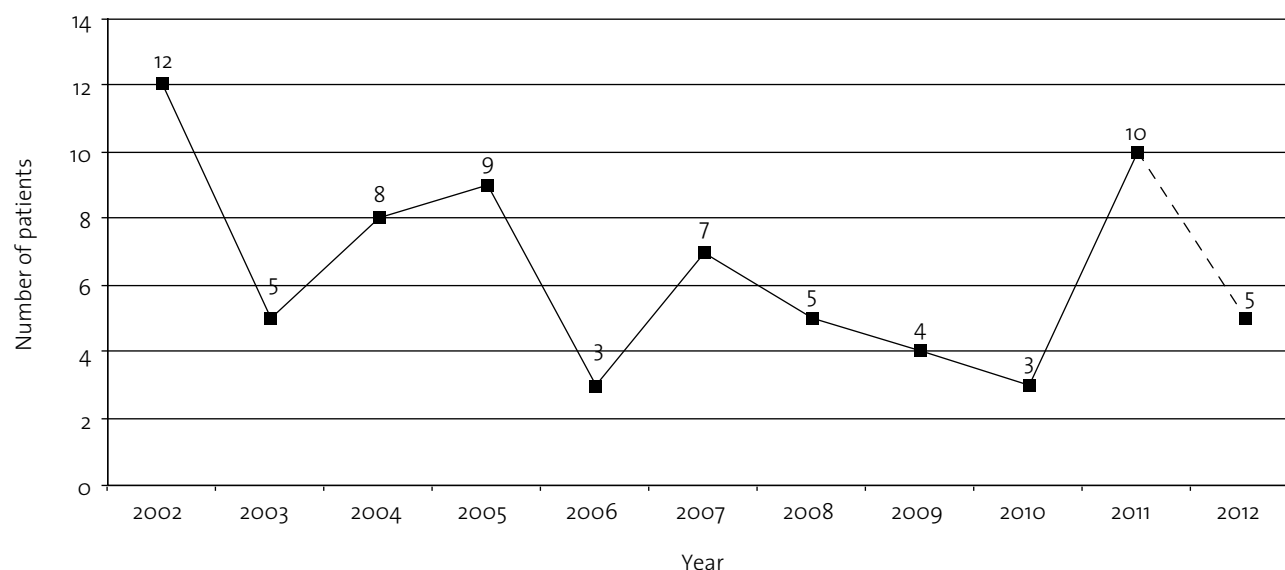
Figure 44: Patient suicide: number with a primary diagnosis of schizophrenia and other delusional disorders



Patients with personality disorder

- There were 71 suicides in patients with a primary diagnosis of personality disorder, 10% of the total sample, an average of 6 deaths per year.
- The number of suicides in patients with personality disorder fluctuated over the report period with peaks in 2002 and 2011 but there was no overall trend (Figure 45).
- There was a higher proportion of females in this group, 48% (33) compared to 31% (218) overall.
- The majority (48, 70%) were aged under 45.
- 54 (78%) had a co-morbid psychiatric disorder, most commonly alcohol dependence/misuse (34, 63%) or drug dependence/misuse (17, 31%).

Figure 45: Patient suicide: number with a primary diagnosis of personality disorder



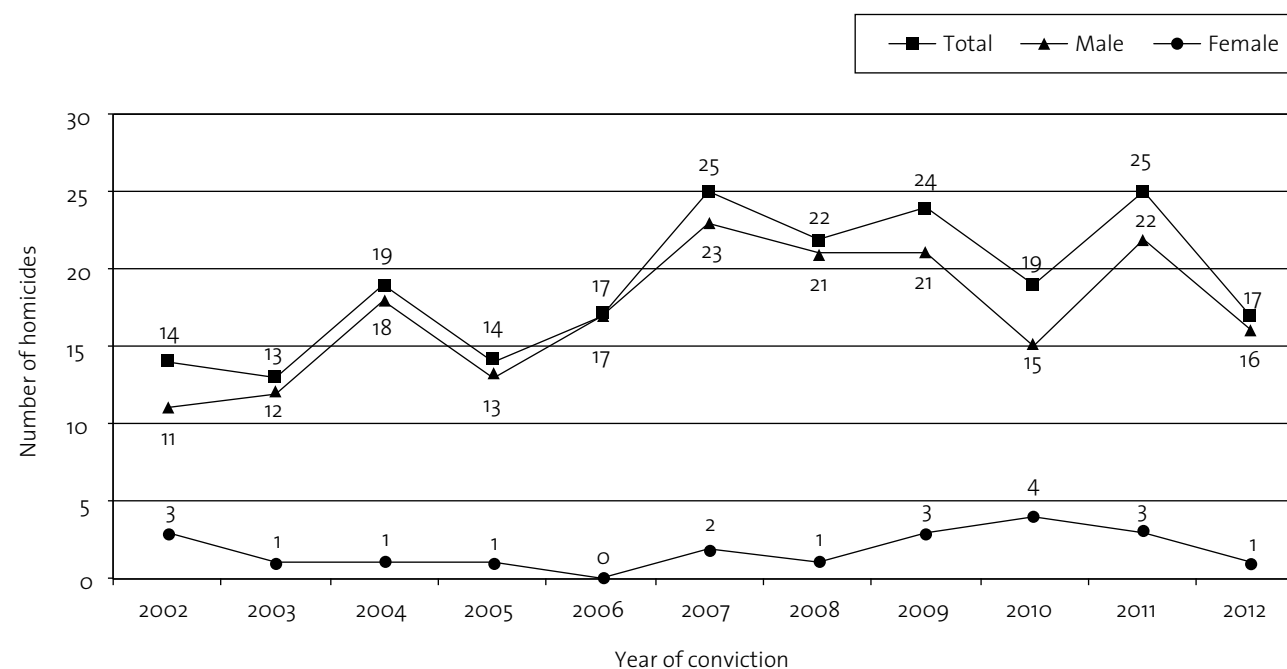
2.2 HOMICIDE

Between 2002-2012, the Inquiry was notified of 209 homicide convictions, an average of 19 a year. There were 215 victims, an average of 20 per year.

2.2.1 Homicide in the general population

- The annual number of homicide convictions in the general population is shown in Figure 46. These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Police Service Northern Ireland.¹³
- There has been an apparent increase in homicide convictions over the report period (Figure 46).
- The most common method of homicide was the use of a sharp instrument (76, 39%).

Figure 46: Number of homicide convictions in the general population, by gender of offender



2.2.2 Patient homicide

- During 2002-2012, 26 people convicted of homicide (12% of the total sample), were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence. There were 27 victims, an average of 2 per year.
- The numbers fluctuated over the report period but were too small to examine trends over time.
- No in-patients or patients under crisis resolution/home treatment (CR/HT) or Community Treatment Orders (CTO) committed homicide.

Forensic and clinical history

- 20 (87%) patients had previously been convicted of an offence, 14 (64%) had been convicted of committing a violent offence.
- 9 (43%) had been in prison before the offence.
- 1 patient had previously been admitted to a high, medium or regional secure unit.

- 3 had a previous admission to a psychiatric intensive care unit.
- 1 patient had previously been involuntarily detained under mental health legislation.

Non-adherence and missed contact

- 5 (25%) patients were known to have been non-adherent with drug treatment in the month before the homicide.
- 11 (48%) patients had missed their final service contact before the homicide.
- Both non-adherence and missed contact occurred together in 2 patients.
- In total, 14 were either non-adherent or missed final contact, meaning that 64% of patients were not in receipt of planned treatment before homicide.

Alcohol and drug misuse

- 26 patients had a history of alcohol misuse, 100% of the patient sample. This was an average of 2 patient homicides per year, ranging between 1 and 4 annually.

- 22 patients had a history of drug misuse, 85% of the patient sample, an average of 2 per year, ranging between 1 and 3 annually.
- All 26 patients had a history of either alcohol or drug misuse or both.
- 9 (35%) patients had a primary diagnosis of alcohol dependence/misuse; 2 (8%) had drug dependence/misuse.
- 8 (33%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse.

Homicide and schizophrenia

- Of the total number of homicides, 8 people had a history of schizophrenia (includes other delusional disorders) over the report period, 4% of the total sample.
- Of these, 7 (88%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.
- 5 (71%) were patients.



2.2.3 Relationship of victim to offender

General population

- The relationship of victim to offender was: acquaintance (78, 40%); stranger (65, 34%); spouse/partner (current/ex) (38, 20%); and other family member (13, 7%).

Patients

- Of the patient homicides, the relationship of victim to offender was: acquaintance (14, 58%); spouse/partner (current/ex) (6, 25%); 2 were family members and 2 were strangers.
- For male patients, the victims were most likely to be acquaintances; all female patients killed a spouse/partner (current/ex).

Intimate partner homicide

- In a fifth (38, 20%) of intimate partner homicides the victim was a spouse/partner (current/ex), an average of 3 per year.
- Most of these homicides were carried out by males (27, 71%). In these cases 23 (85%) victims were female, an average of 2 per year.
- The most common method was the use of a sharp instrument (19, 53%).
- Of all intimate partner homicides, 6 (16%) were carried out by a patient in contact with mental health services in the 12 months prior to the offence; 4 were male.
- 3 of these patients had previous convictions for violence.



3. SCOTLAND

3.1 SUICIDE

Between 2002-2012, the Inquiry was notified of 9,019 deaths in the general population that received a suicide or undetermined verdict, an average of 820 per year. These are referred to as suicides throughout the report.

3.1.1 Suicide in the general population

Table 3 and Figure 47 show trends in general population suicide. An apparent increase in 2011 occurred due to the introduction of new death coding rules, and we therefore show figures based both on old and new coding to enable comparison with earlier years. Based on the old coding rules, we calculate there would have been 124 fewer suicides in 2011 and 78 fewer suicides in 2012, making the totals 769 and 749 respectively. Using these figures there is an overall fall in the rate and number of suicides over the report period.

- There was a fall in rates between 2002-2011 in males only (Figure 47). The fall in male rates occurred in those aged 25-34 and 65 and over. In women, there was a fall in the number and rate in those aged 65 and over. In males, numbers and rates rose in those aged 45-54 (Figure 48).

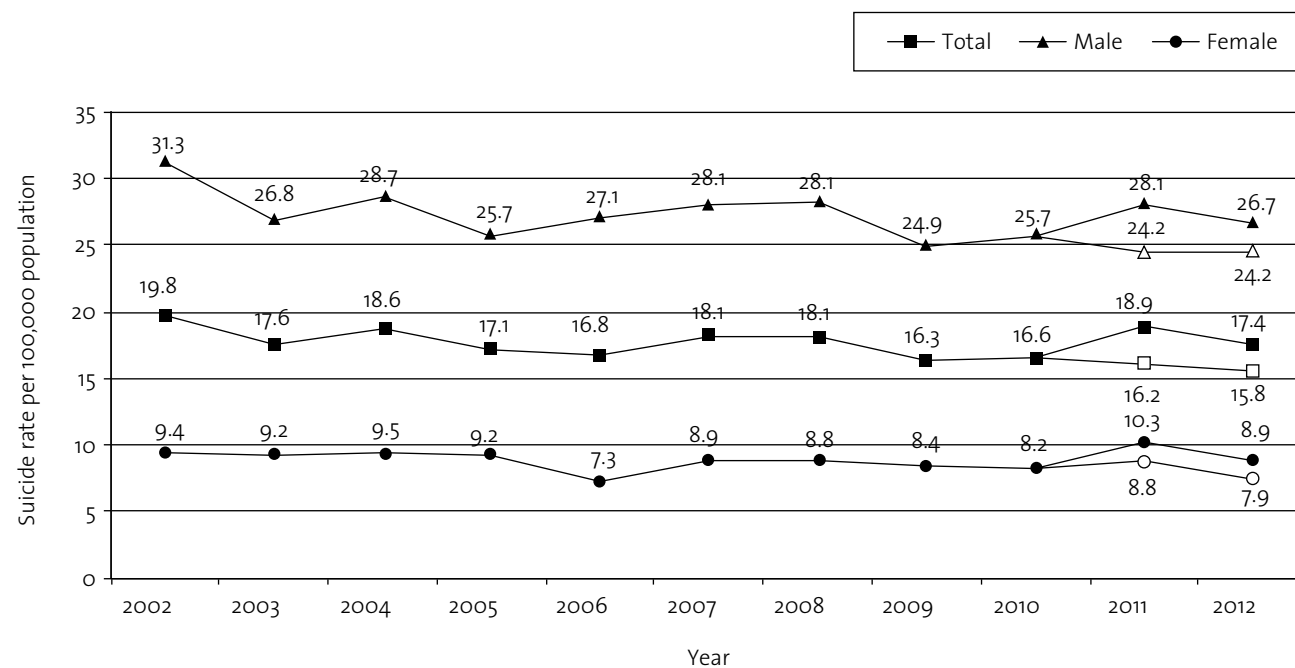
Table 3: Number of suicides in the general population, by gender

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	670	576	620	560	594	622	628	559	581	641 (552 [†])	609 (554 [†])
Female	220	218	224	220	174	214	213	205	201	252 (217 [†])	218 (195 [†])
Total	890	794	844	780	768	836	841	764	782	893 (769 [†])	827 (749 [†])

[†] Indicates the number of suicides using the old death coding rules; see also Scotland methods section at the front of the report



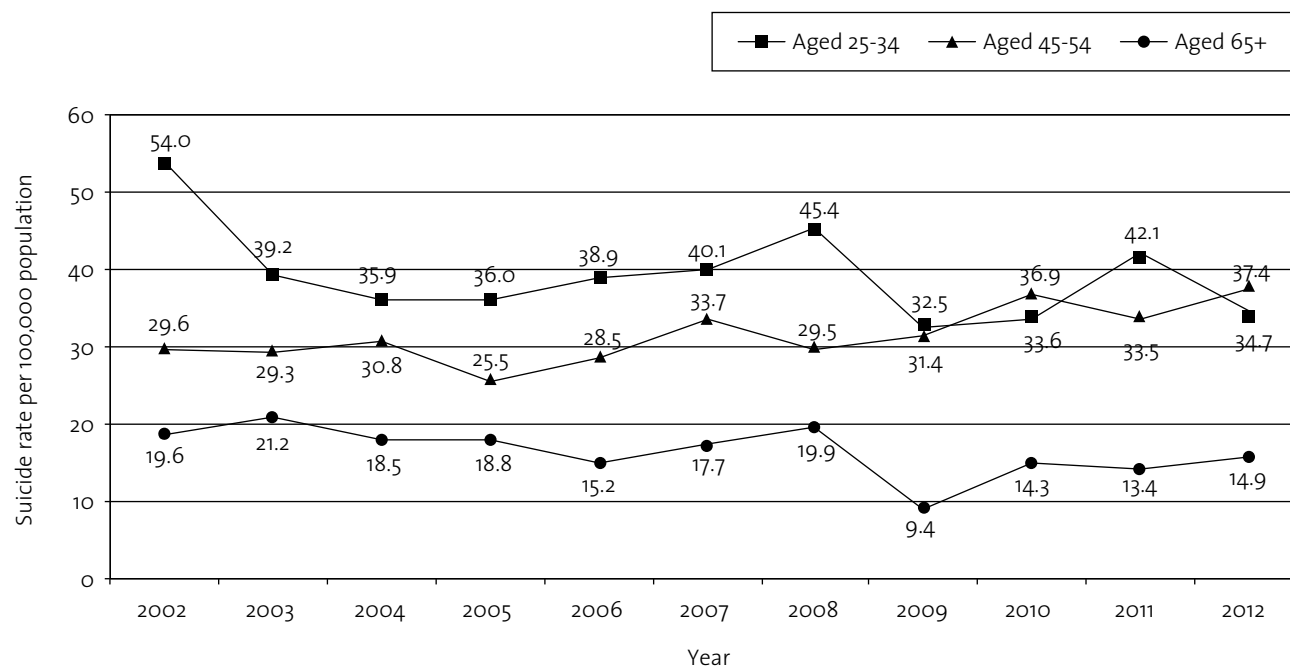
Figure 47: Rates of suicide in the general population, by gender



Note: the unfilled markers in 2011 and 2012 indicate rates using the old death coding rules



Figure 48: Male suicide rates in the general population in those aged 25-34, 45-54 and 65+



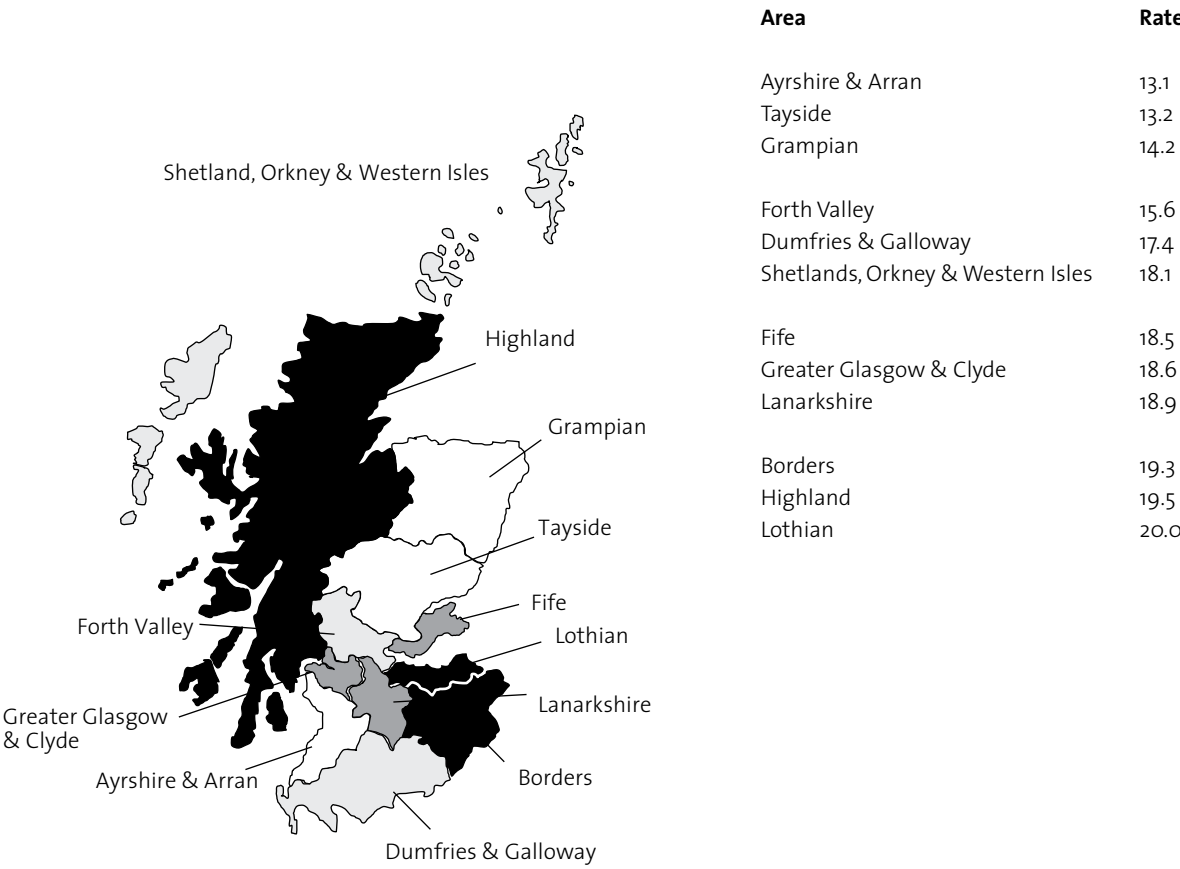
Note: In 2011 and 2012 the rates using the old death coding rules are: 31.5 and 28.1 for those aged 25-34; 33.0 and 34.0 for those aged 45-54; and 13.2 and 14.9 for those aged 65+.



Variation in suicide rate by area of residence

- There was some variation in suicide rates by area of residence (by NHS Health Board) at the time of death (average rate 2010-2012). The highest rate of suicide was in Lothian, at 20.0 per 100,000 population, and the lowest rate was in Ayrshire and Arran, at 13.1 per 100,000 population (Figure 49).

Figure 49: Rates of suicide per 100,000 population, by NHS Health Board of residence (average rate 2010-2012)



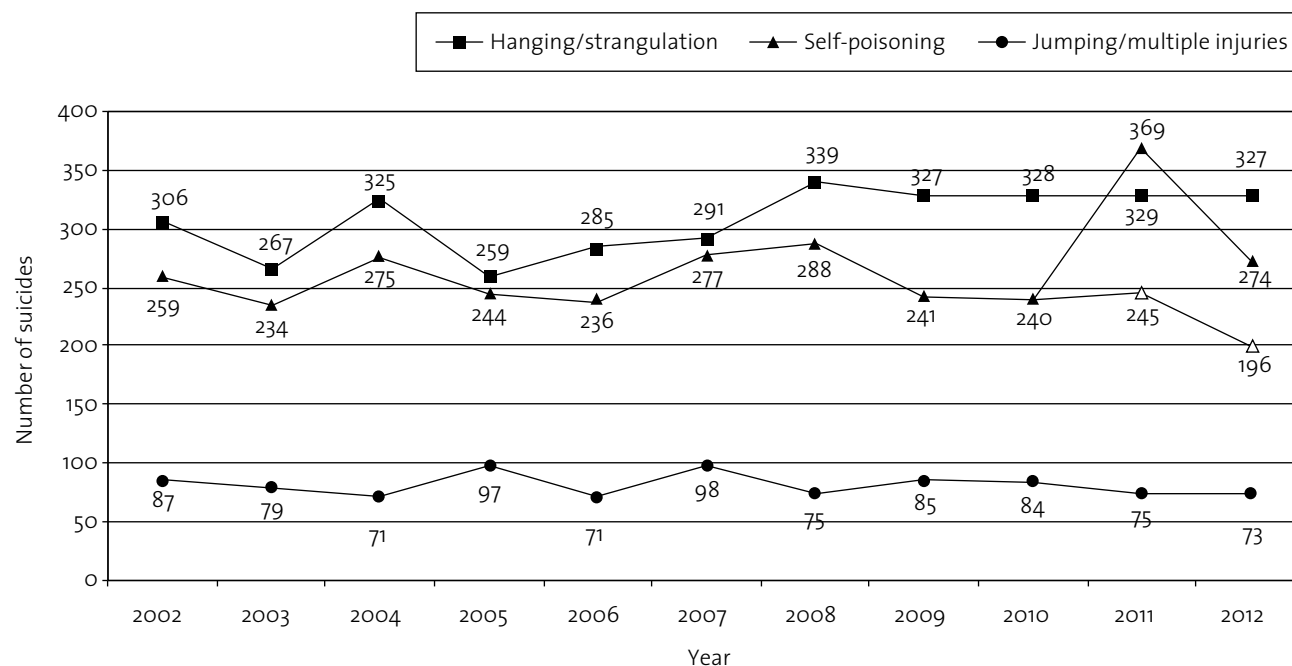
Note: rates have been colour coded by approximate quartile



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report) (3,383, 38%), self-poisoning (overdose) (2,937, 33%), and jumping/multiple injuries (mainly jumping from a height or being struck by a train) (895, 10%). Less frequent methods were drowning (758, 8%), carbon monoxide (CO) poisoning (206, 2%), cutting/stabbing (196, 2%), and firearms (123, 1%).
- Deaths by hanging increased over the report period, although the number has not changed since 2009 (Figure 50). The apparent increase in suicides by self-poisoning in 2011-2012 is the result of additional cases arising from new rules for death coding introduced in 2011. Using the old coding rules, we estimate the number of self-poisonings in 2012 would drop from 274 to 196 and there would be no overall change in the number of deaths by self-poisoning over the report period. Deaths by drowning and CO poisoning decreased (Figure 51).
- The fall in CO deaths reflects the lower toxicity of modern cars. The fall in drowning, by which numbers have fallen by almost half, is unexplained.

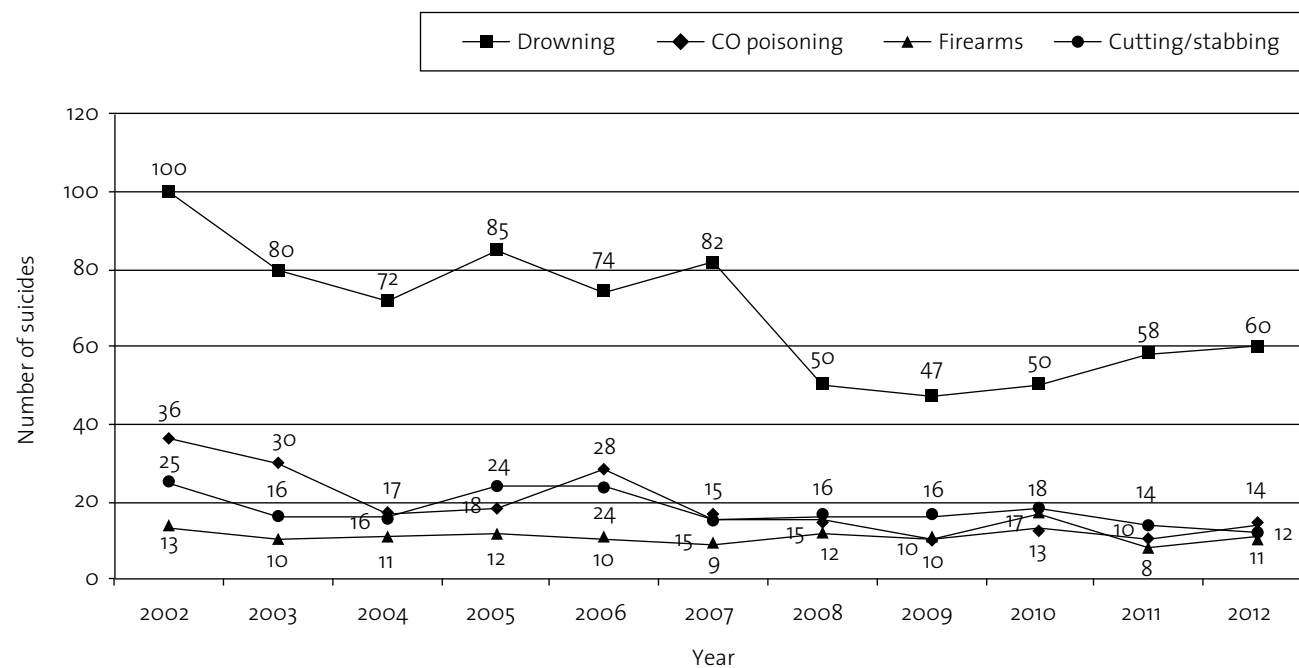
Figure 50: Suicide in the general population: main causes of death



Note: unfilled markers in 2011 and 2012 indicate the number of self-poisonings using the old death coding rules



Figure 51: Suicide in the general population: other causes of death

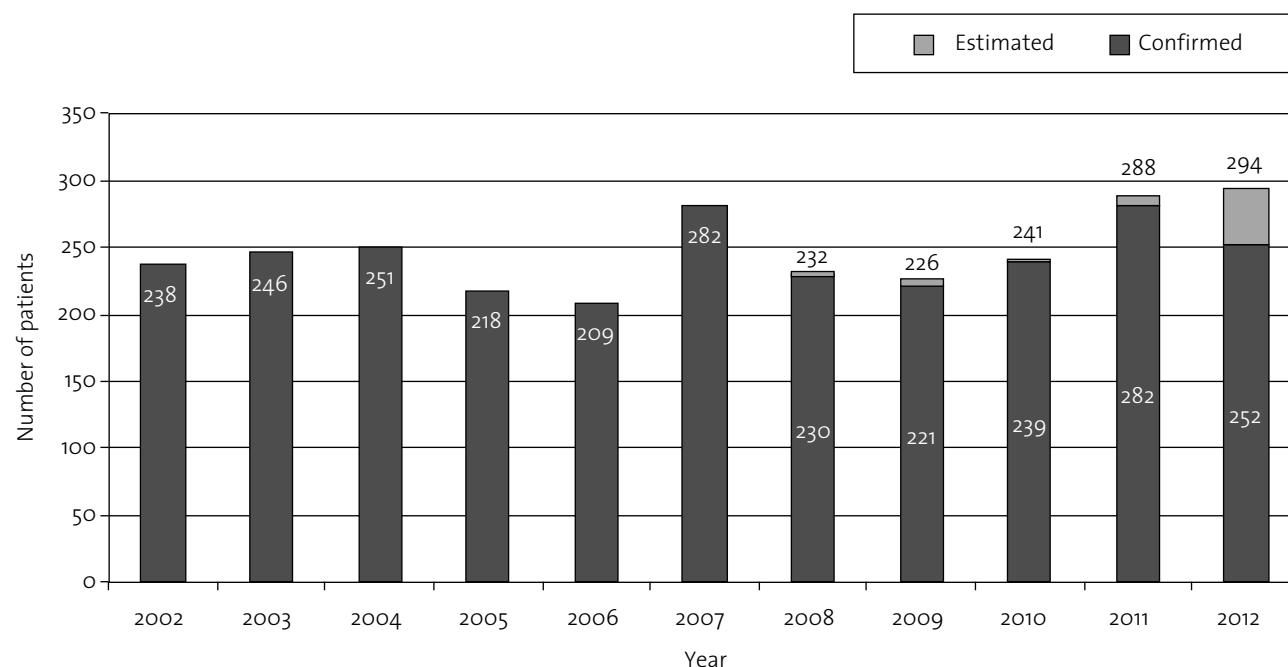


3.1.2 PATIENT SUICIDE

Patient suicide: numbers and rates

- During 2002-2012, 2,725 suicides (30% 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 248 patient suicides per year.
- The increase in suicide figures in 2011 and 2012 for the general population resulting from a death coding change, is also reflected in the figures for patient suicides in these years (Figure 52). Based on the old coding rules, we calculate there would have been 40 fewer suicides in 2012, making the total 254.
- There was no overall trend in the number of patient suicides in 2002-2011 (Figures 52 and 53), or in the rate of suicide (using a general population denominator) (Figure 54). This is also the case using the old death coding rules.

Figure 52: Number of patient suicides

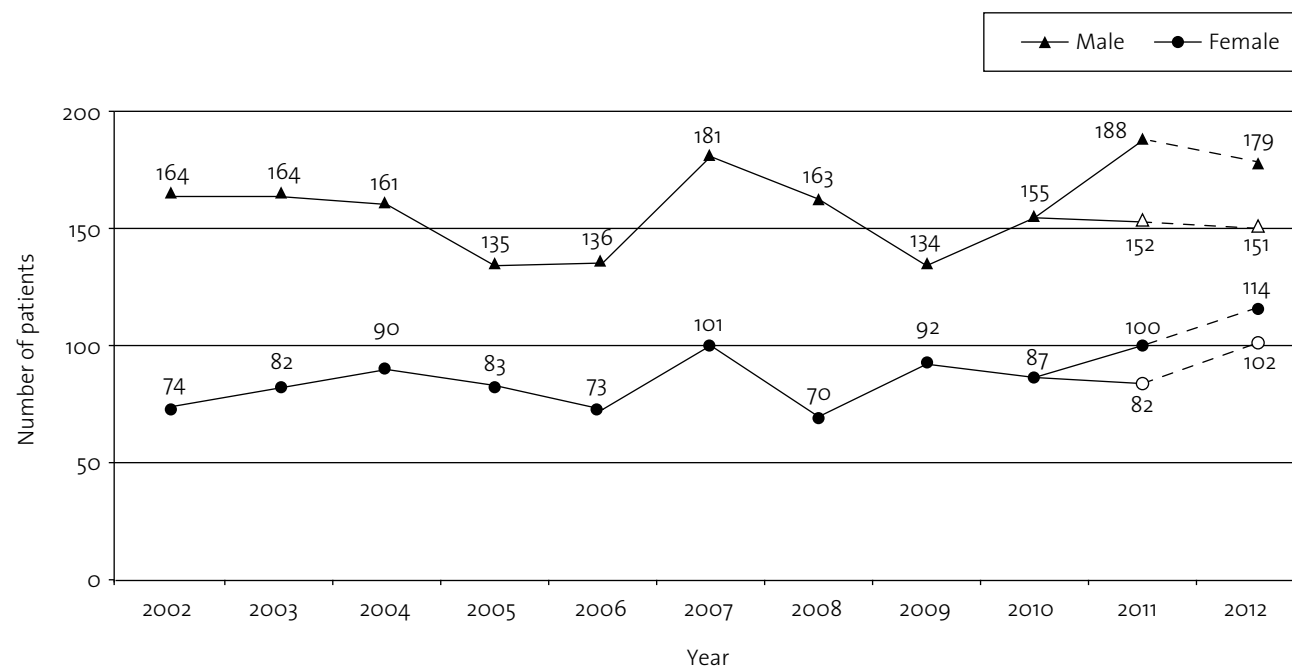


Note: the total estimated numbers in 2011 and 2012 would be 234 and 254 respectively, using the old death coding rules



- There was an increase in the number of male suicides in those aged 45-54 and a decrease in those aged 25-34. There was an increase in females suicides aged 25-34 and 35-44. No trend was found for males or females in the remaining age-groups.
- In 2008-2011, a higher proportion of patients were unemployed (465, 51%) compared to the pre-recession years of 2004-2007 (398, 44%). 146, (6%) were homeless, living in bed and breakfast, or hostels, i.e. 'unstable housing'. This proportion did not change over the report period.

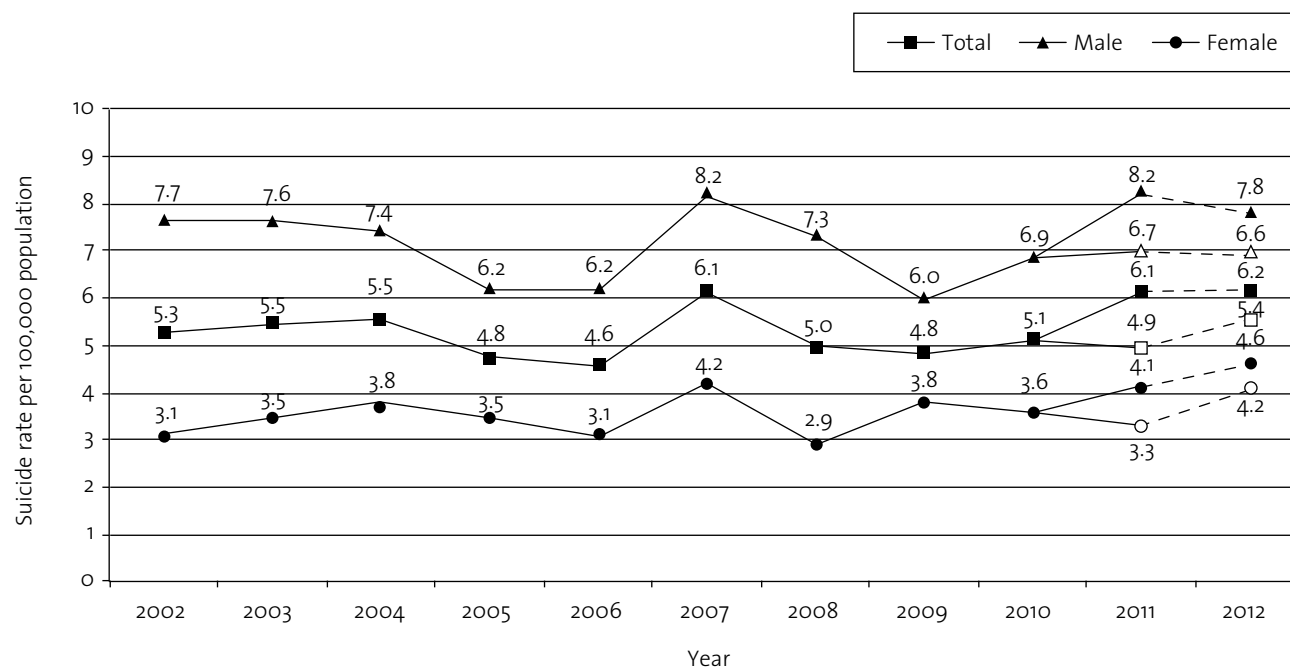
Figure 53: Number of patient suicides, by gender



Note: Figures do not tally with total figures in Figure 52 due to rounding. Unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules.



Figure 54: Rates of patient suicide, by gender



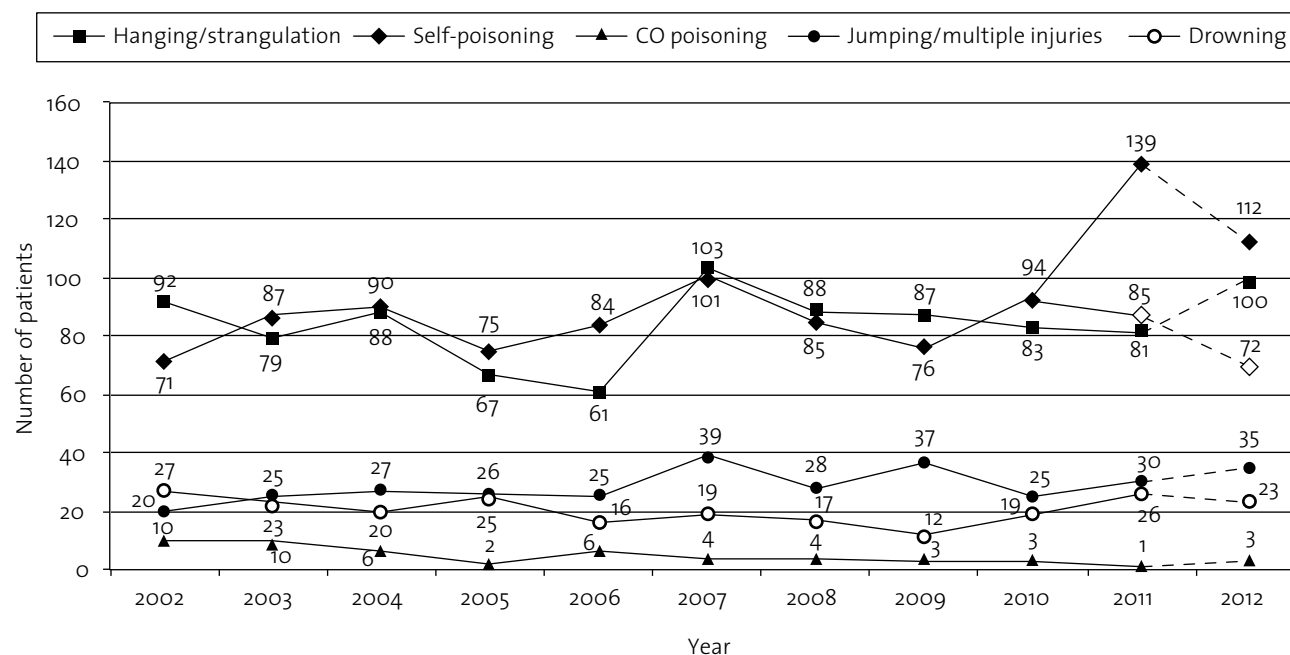
Note: unfilled markers in 2011 and 2012 indicate the rate of suicides using the old death coding rules



Method of suicide by patients

- The most common methods of suicide by patients were self-poisoning (1,014, 37%) and hanging (929, 34%). There was an overall increase in deaths by self-poisoning in 2002-2011 using the new coding rules (Figure 55). The number of deaths by hanging has not changed over the report period although we are estimating an increase in 2012.
- The number of deaths by CO poisoning decreased during the reporting period (Figure 55).
- Figures 55 and 56 show the marked effect of a coding change in cause of death which has caused an apparent increase in self-poisoning deaths using opiates. Under the old coding rules we estimate that these figures would have been consistent with previous years.
- The most common substances used in deaths by self-poisoning were opiates (328, 35%), tricyclic antidepressants (113, 12%) and paracetamol/opiate compounds (96, 10%).

Figure 55: Patient suicide: main causes of death

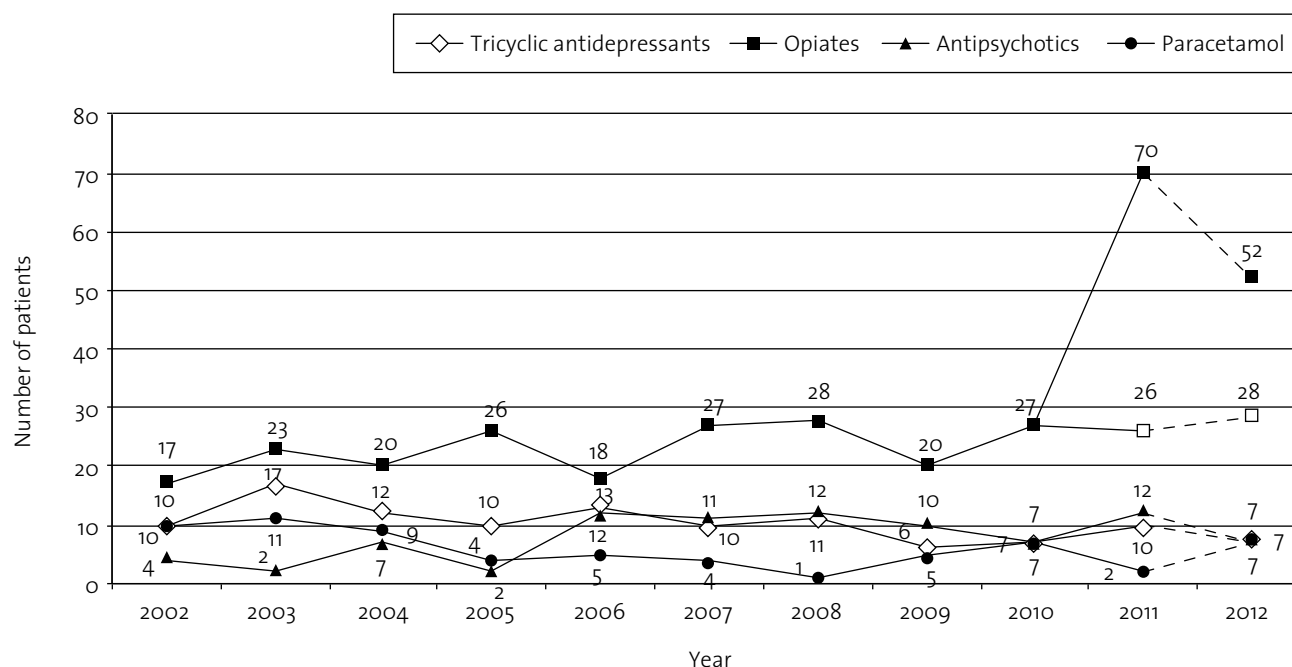


Note: unfilled markers in 2011 and 2012 indicate the number of self-poisonings using the old death coding rules



- Between 2002 and 2011, there was an increase in suicides by overdose of opiates and antipsychotics (Figure 56). Using the old death coding rules, there was no change in the number of opiate suicides over the report period.
- Since 2005, there were 38 suicides in the general population which were related to inhalation of helium, an average of 5 per year. The number of deaths by helium has increased between 2005-2011. Of these, 4 (11%) were in patients.

Figure 56: Patient suicide: main substances used in deaths by self-poisoning



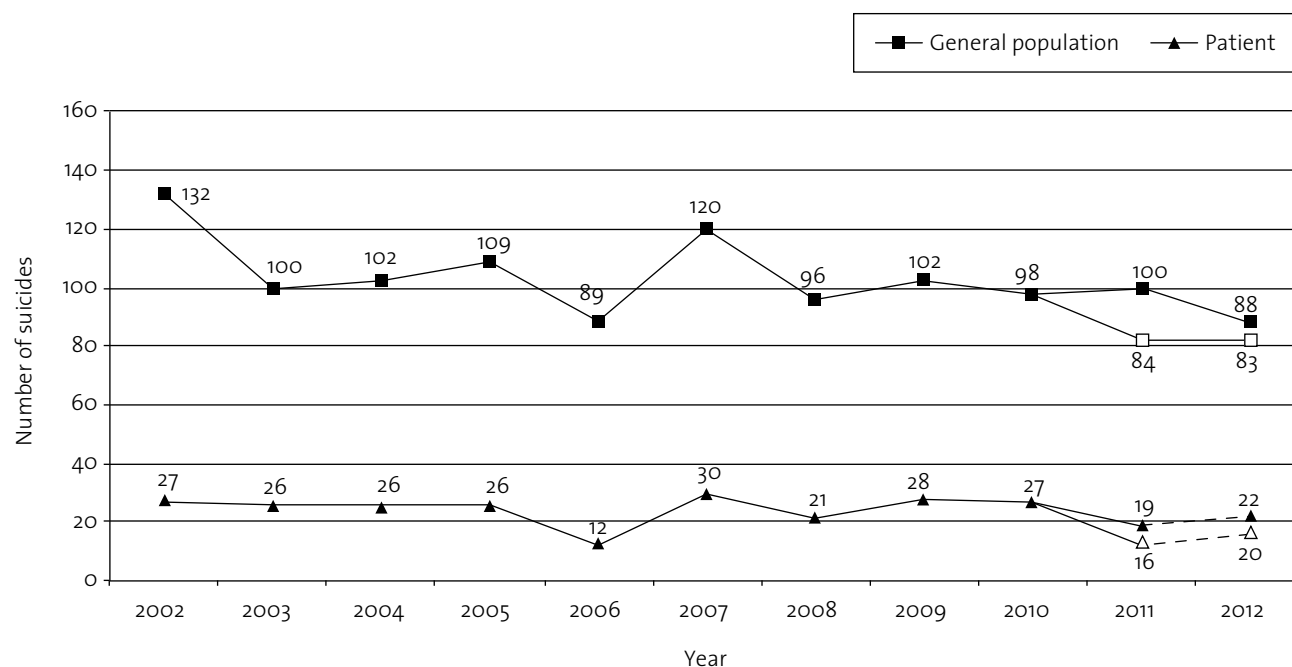
Note: unfilled markers in 2011 and 2012 indicate the number of deaths by opiates using the old death coding rules



Patient suicide in those aged under 25

- During 2002-2012, there were 1,136 suicides in the general population in those aged under 25, 13% of all suicides, an average of 103 per year. 417 were aged under 20, an average of 38 per year, and 190 were aged under 18, an average of 17 per year.
- 264 suicides in people under 25 were in patients, 10% of patient suicides and 23% of all suicides in this age-group. This represents an average of 24 deaths per year. 79 were aged under 20, an average of 7 per year, and 37 were aged under 18, an average of 3 per year.
- There was no overall change in the number of general population or patient suicides aged under 25 over the report period (Figure 57). Using the old death coding rules, there was a fall in the number of general population suicides aged under 25 over the report period, but no change in the number of patient suicides.
- Suicides in under 25s were more likely than in older (25+) people to be by hanging (118, 46% v. 791, 33%) and less likely to be by self-poisoning (75, 29% v. 916, 38%).

Figure 57: Number of general population and patient suicides in those aged under 25



Note: unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules



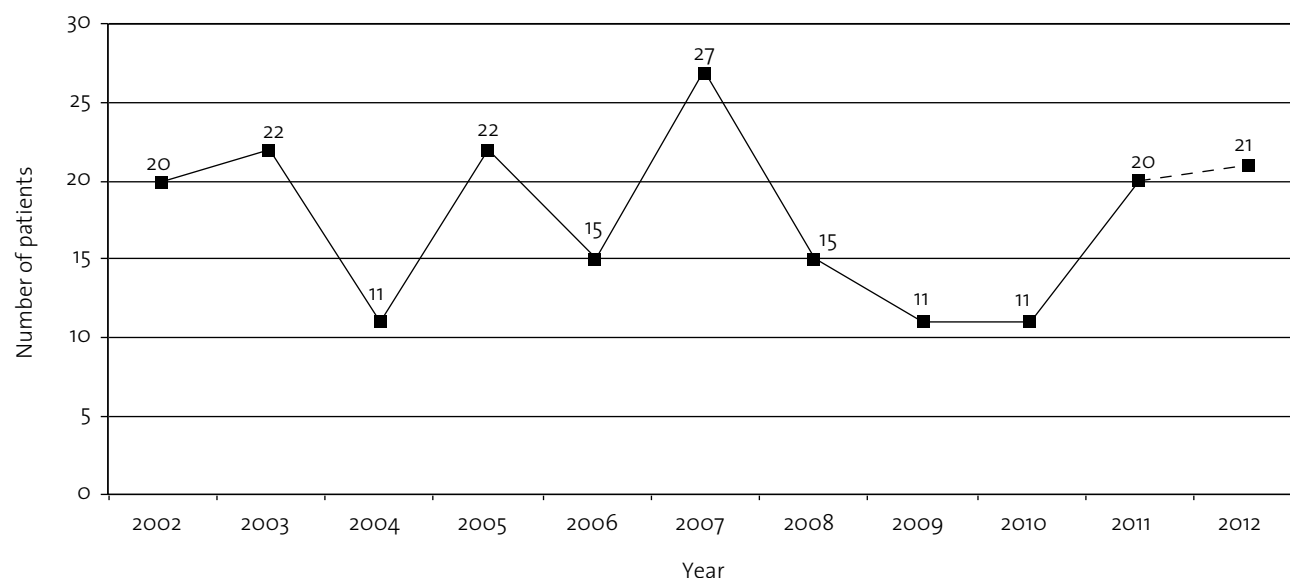
- The diagnostic profile was different from those aged 25+: more patients had a primary diagnosis of drug dependence (39, 15% v. 260, 11%) or personality disorder (33, 13% v. 203, 9%) while fewer had affective disorder (bipolar disorder/depression) (44, 17% v. 795, 33%).
- Similarly, drug misuse was more common among those aged under 25 (177, 71% v. 949, 41%). However, there was no difference in the proportion with alcohol misuse (154, 60% v. 1,376, 58%) or a history of self-harm (184, 73% v. 1,594, 68%).
- Unemployment was more common in under 25s (148, 62%) compared to those aged 25+ (1,053, 46%).
- 38 (15%) had a history of Local Authority Care.



In-patient suicide

- There were 195 in-patient suicide deaths between 2002-2012, 7% of patient suicides, an average of 18 deaths per year. The number of in-patient suicides has fluctuated with no overall trend between 2002 and 2011 (Figure 58).
- Over the report period, there were 37 patients who died on the ward by hanging; this number fluctuated from 1 to 7 per year, with no overall trend.
- The ligature points in 15 of these related to doors or windows; in 15 a belt was used as the ligature.
- There were 52 suicides in detained in-patients, 27% of all in-patient suicides, an average of 5 per year.
- 52 in-patients died after absconding from the ward, 27% of all in-patient suicides, an average of 5 per year, with no overall trend.

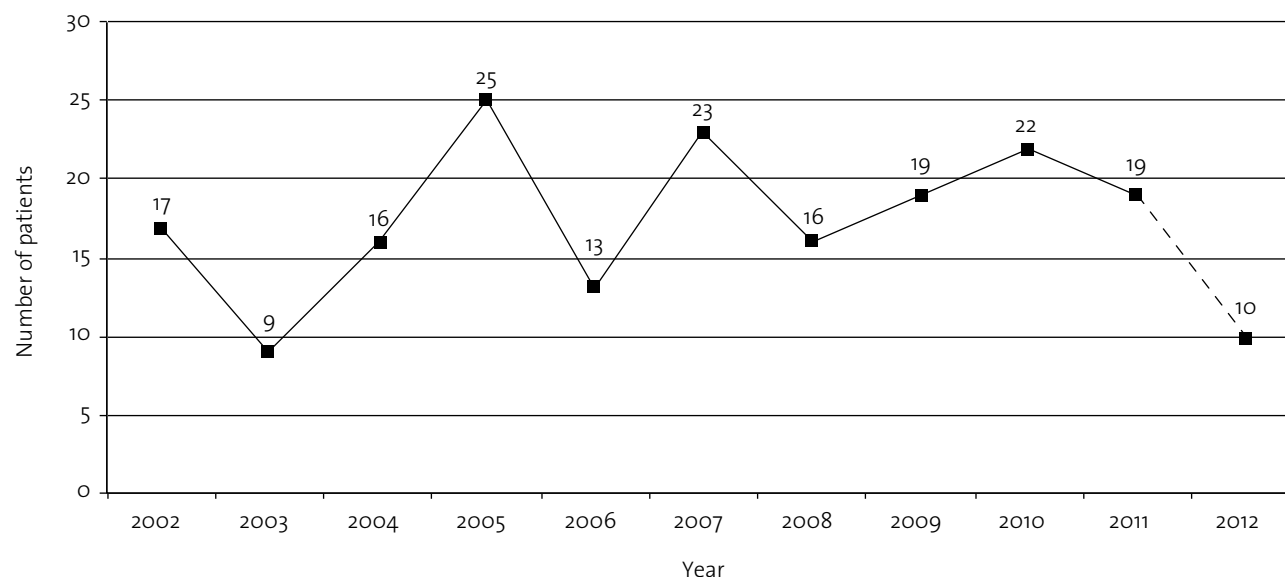
Figure 58: Patient suicide: number of mental health in-patients



Crisis Resolution/Home Treatment

- There were 189 suicides in patients under crisis resolution/home treatment teams (CR/HT), 7% of the total sample, an average of 17 deaths per year.
- Suicides under CR/HT rose in the early part of the report period, reflecting increasing services of this kind. There has been no overall rise since 2005 and we estimate a fall in 2012 (Figure 59).
- 74 (41%) CR/HT patients died within 3 months of hospital discharge, 26 (35%) within 2 weeks.
- 28 (15%) had been non-adherent with drug treatment in the month before suicide.
- 104 (56%) CR/HT patients lived alone.

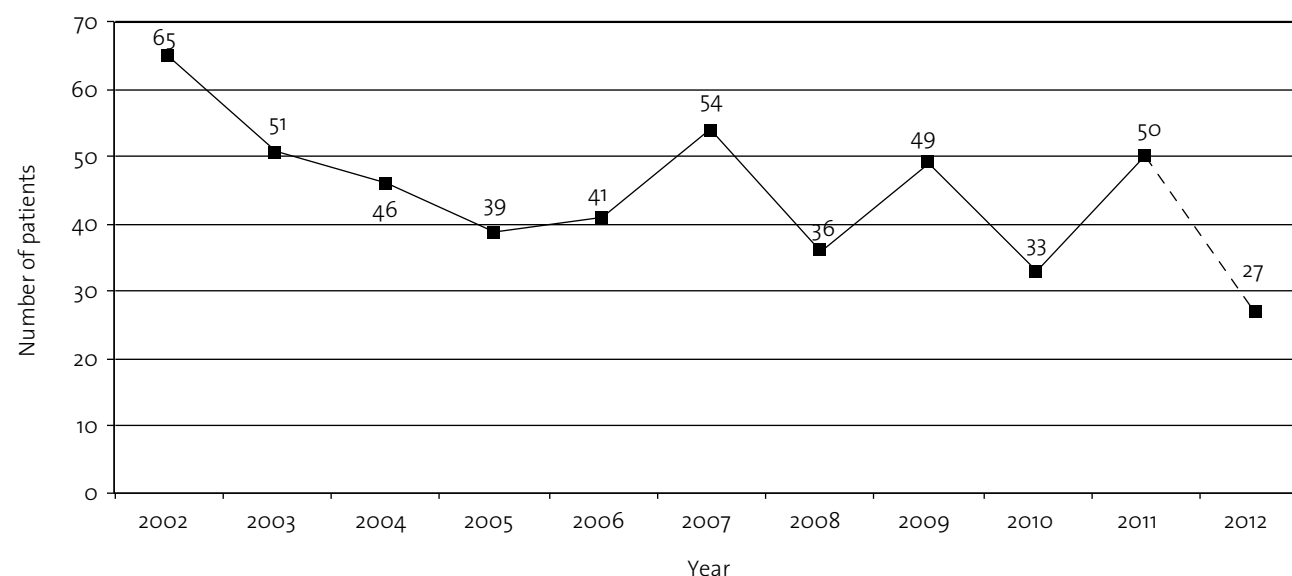
Figure 59: Patient suicide: number under crisis resolution/home treatment services



Patients recently discharged from hospital

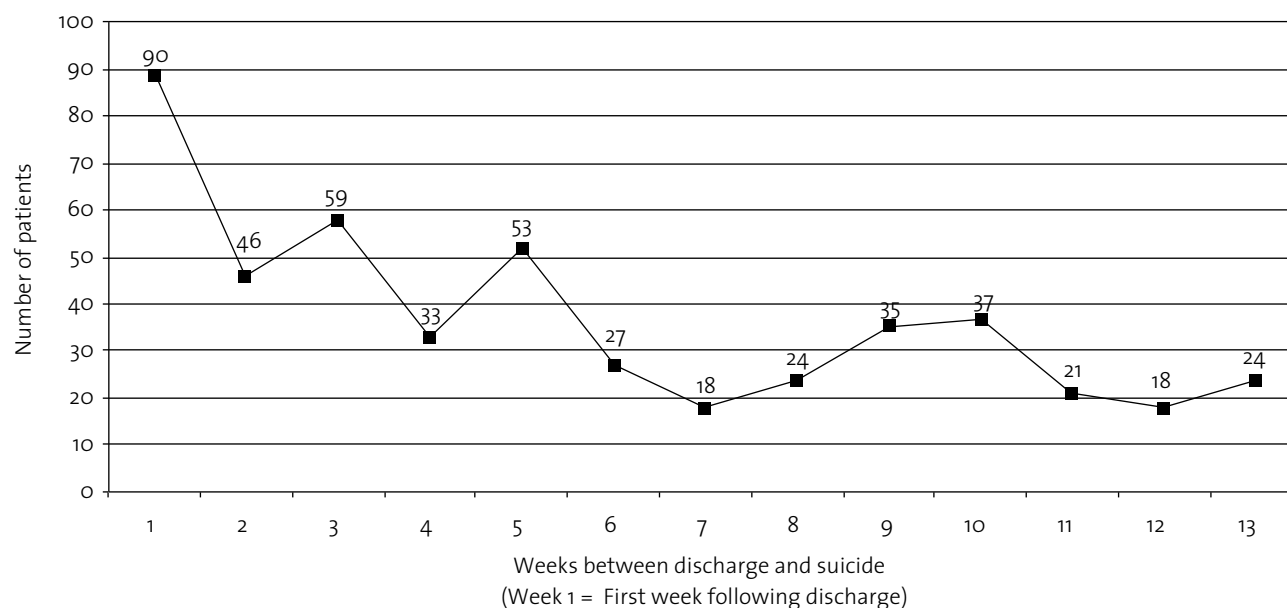
- There were 491 suicides within 3 months of discharge from in-patient care, 18% of all patient suicides and 19% of suicides in community patients, an average of 45 deaths per year.
- There was no overall change in the number of post-discharge suicides between 2002-2011, with numbers fluctuating between 2006 and 2011. Our estimated figures show a fall in 2012 (Figure 6o).
- Post-discharge suicides were most frequent in the first week after leaving hospital when 90 deaths occurred, an average of 8 per year, 18% of all suicides within 3 months of hospital discharge (Figure 6i). Of those who died in the first week after discharge, the highest number occurred on the second day after discharge (18, 20%).

Figure 6o: Patient suicide: number who died within 3 months of in-patient discharge



- Of the 67 patients who discharged themselves from hospital, 18 (27%) died in the first week after leaving hospital.
- 27 (6%) patients died by suicide after being discharged from a non-local in-patient unit. This increased to 12 (9%) of those who died within 2 weeks of discharge.
- 93 (21%) died before the first follow-up appointment.

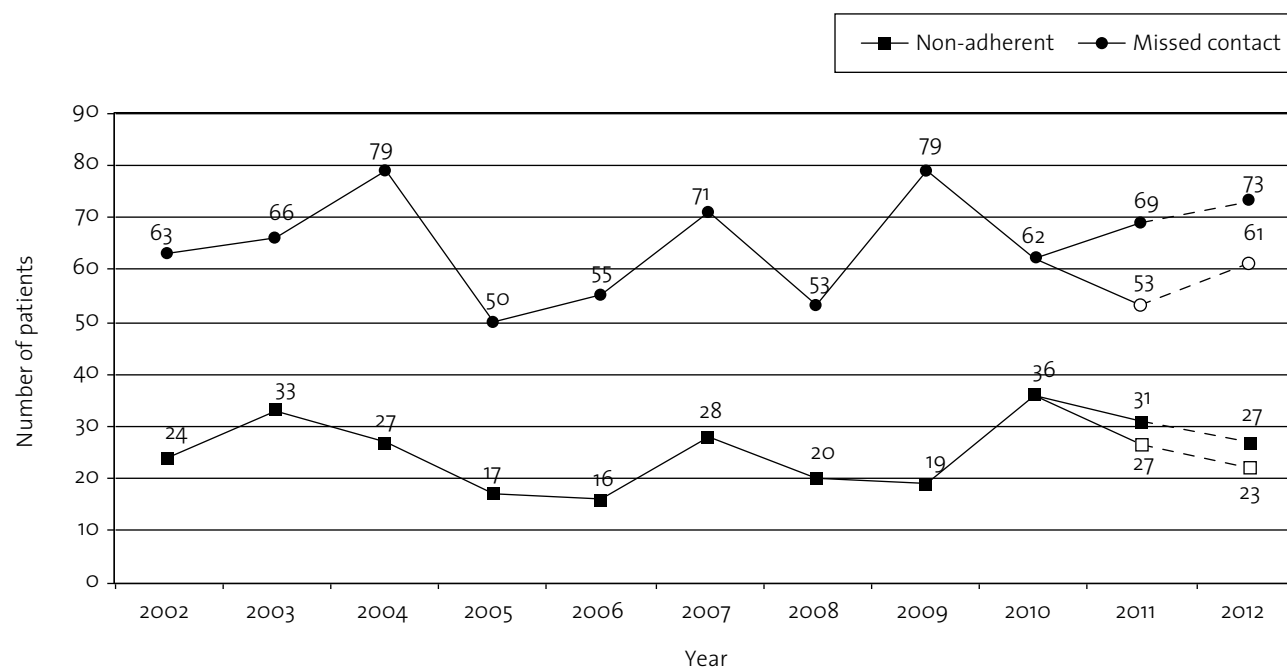
Figure 61: Patient suicide: number of suicides per week following discharge (2002-2012)



Non-adherence and missed contact

- 278 (12%) patients had been non-adherent with drug treatment in the month before death, an average of 25 deaths per year.
- 720 (29%) patients missed their final service contact before death, an average of 65 deaths per year.
- There were fluctuations in the number of suicides in patients following non-adherence or missed last appointment, with no clear trends (Figure 62).
- Non-adherence and missed contact often occur together. In 89 deaths both were present.
- In total, 909 were either non-adherent or missed final contact, meaning that 39% of patients were not in receipt of planned treatment before suicide.

Figure 62: Patient suicide: number non-adherent with drug treatment or missed contact



Note: unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules



Compulsory Treatment Orders in the community

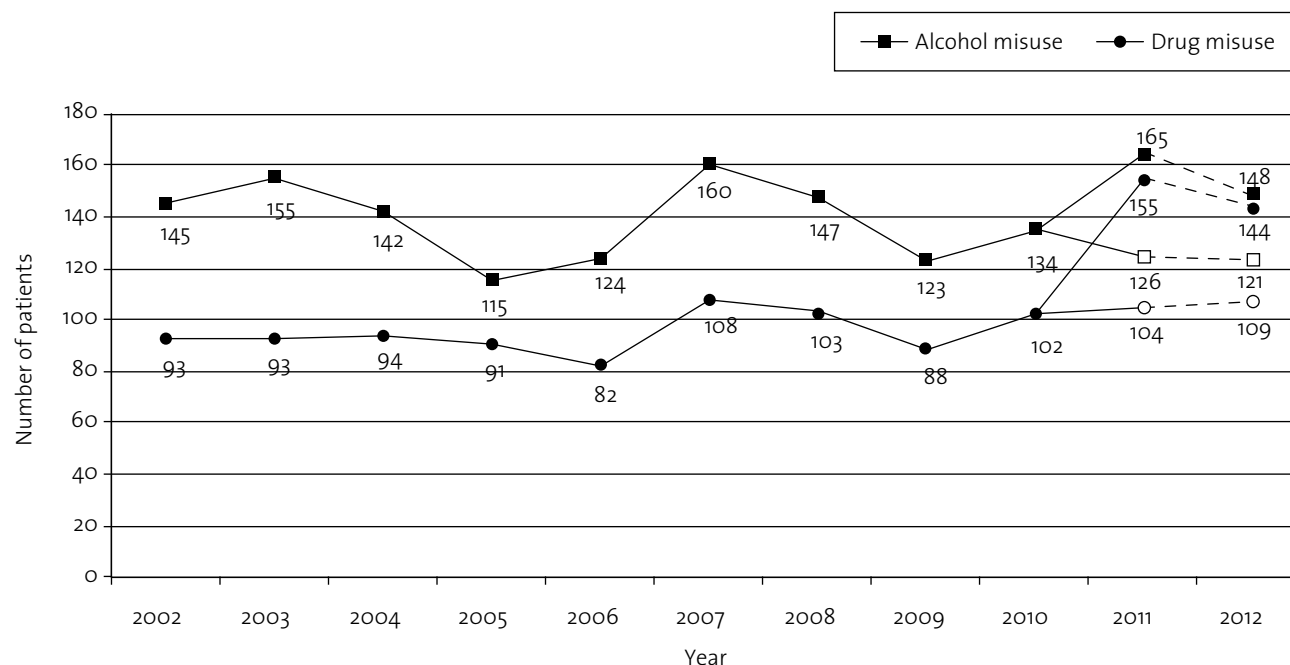
- There were 26 suicides in patients subject to a compulsory treatment order (CTO) in the community between 2007-2012, 2% of all patient suicides, an average of 4 deaths per year. The highest annual number was in 2008 (8 patients).
- 8 patients subject to a CTO had been non-adherent with drug treatment in the month before death and 4 had missed the last appointment with services; 1 had been both non-adherent and missed the last appointment.
- 9 deaths under a CTO occurred within 3 months of hospital discharge.



Alcohol and drug misuse

- There were 1,558 patients with a history of alcohol misuse, 58% of the total sample, an average of 142 deaths per year.
- 1,153 had a history of drug misuse, 44% of the total sample, an average of 105 deaths per year.
- 1,865 had a history of either alcohol or drug misuse or both, 69% of patient suicides, an average of 170 deaths per year.
- Between 2002 and 2011, the number of patient suicides with a history of alcohol misuse did not change. There was an apparent rise in the number with a history of drug misuse, but when the old death coding rules were applied there was no overall increase (Figure 63).
- 453 (17%) patients had a primary diagnosis of alcohol dependence/misuse; 306 (11%) drug dependence/misuse. The number with alcohol dependence/misuse did not change over the report period. The number with drug dependence/misuse appeared to increase but not if using the old coding rules.
- 427 (16%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 39 deaths per year. The number of patient suicides with dual diagnosis did not change over the 10-year period using the new coding rules, although using the old rules there was a significant fall.

Figure 63: Patient suicide: number with a history of alcohol or drug misuse



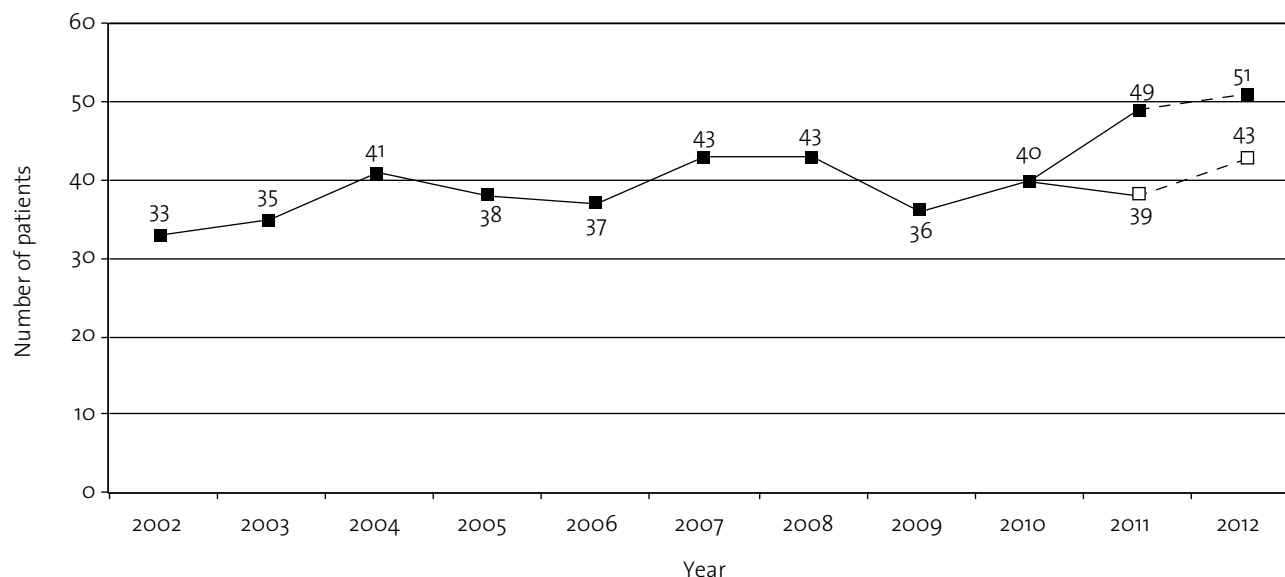
Note: unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules



Patients with schizophrenia

- There were 446 suicides in patients with a primary diagnosis of schizophrenia (includes other delusional disorders, referred to as schizophrenia in the remainder of the report), 16% of the total sample, an average of 41 deaths per year.
- There was no overall trend between 2002-2011 in the number of suicides in patients with schizophrenia (Figure 64). The estimated increase from 2011 should be treated with caution because of the changes in the coding of cause of death. Using the old death coding rules, the numbers of suicides in patients with schizophrenia in 2011 and 2012 are 39 and 43 respectively.
- Patients with schizophrenia who died by suicide were of similar age to other patients (median age 40 compared to 42).

Figure 64: Patient suicide: number with a primary diagnosis of schizophrenia and other delusional disorders



Note: unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules



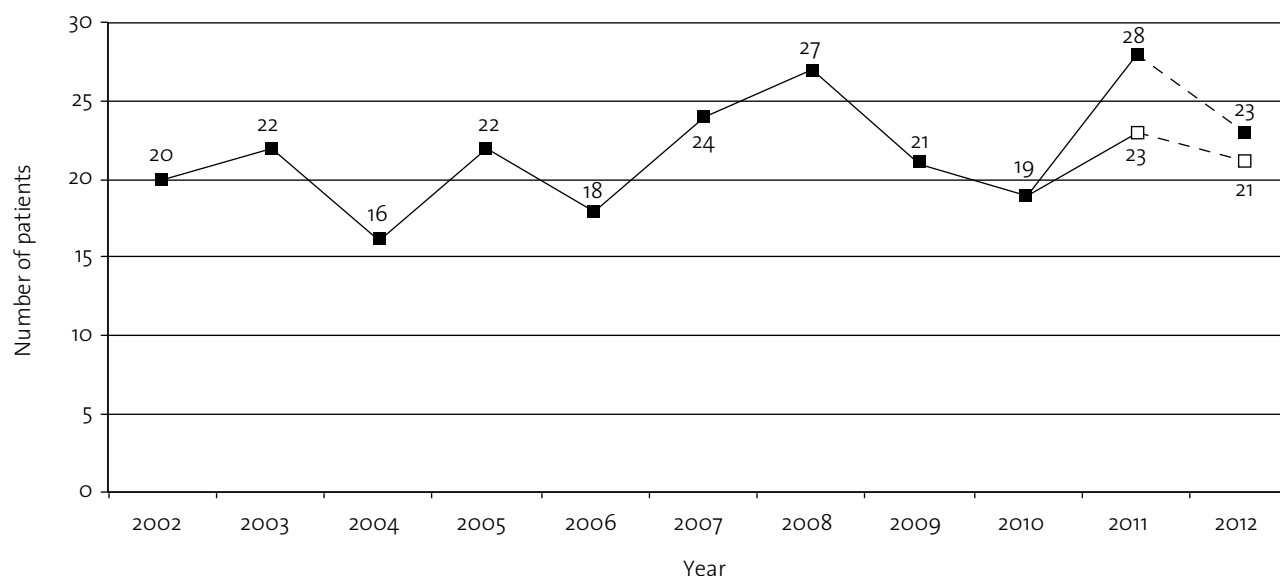
- There was a higher proportion of males, 75% (326) compared to 65% (1,706) overall. 284 (66%) lived alone.
- Patients with schizophrenia were more likely than other patients to die by jumping/multiple injuries (86, 20% v. 221, 10%) or drowning (47, 11% v. 171, 8%) or cutting/stabbing (17, 4% v. 48, 2%) but less likely to die by hanging (110, 25% v. 790 36%).
- 80 patients with schizophrenia had been non-adherent with drug treatment in the month before death, 19% of the sample (excluding unknowns), an average of 7 deaths per year.
- 88 (23% excluding unknowns) had missed their last appointment with services, an average of 8 deaths per year.



Patients with personality disorder

- There were 240 suicides in patients with a primary diagnosis of personality disorder, 9% of the total sample, an average of 22 deaths per year.
- There was no overall trend between 2002-2011 in the number of suicides in patients with personality disorder (Figure 65). Using the old death coding rules, the numbers of suicides in patients with personality disorder in 2011 and 2012 are 23 and 21 respectively.
- There was a higher proportion of females in this group, 57% (134) compared to 35% (937) overall.
- The majority (169, 72%) were aged under 45.
- 161 (68%) had a co-morbid psychiatric disorder, most commonly alcohol dependence/misuse (71, 44%) or drug dependence/misuse (67, 42%).

Figure 65: Patient suicide: number with a primary diagnosis of personality disorder



Note: unfilled markers in 2011 and 2012 indicate the number of suicides using the old death coding rules



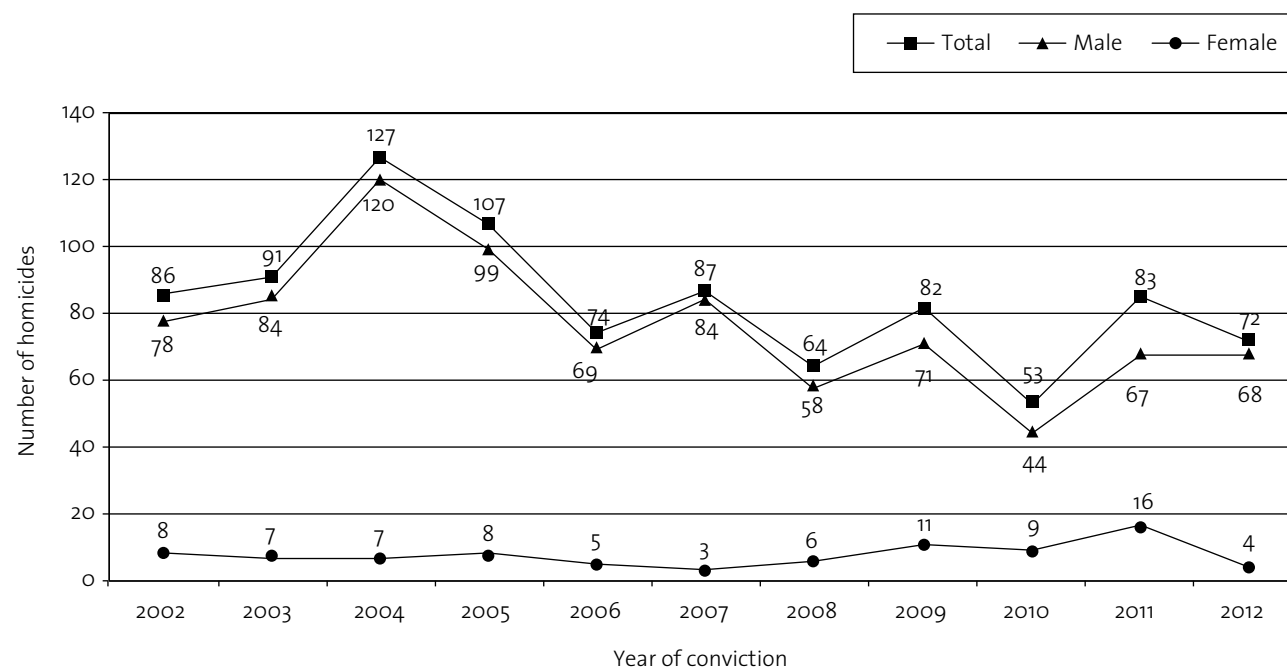
3.2 HOMICIDE

Between 2002-2012 the Inquiry was notified of 926 homicide convictions in the report period, an average of 84 a year. There were 944 victims, an average of 86 per year.

3.2.1 Homicide in the general population

- The number of homicide convictions in the general population is shown in Figure 66. These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Scottish Government.¹⁶
- There has been a fall in the number of homicide convictions since a peak in 2004 (Figure 66). The number of homicides in 2010 was the lowest recorded over the report period, although an increase has been recorded in 2011 and 2012.
- The most common method of homicide was the use of a sharp instrument (505, 57% of all homicides).

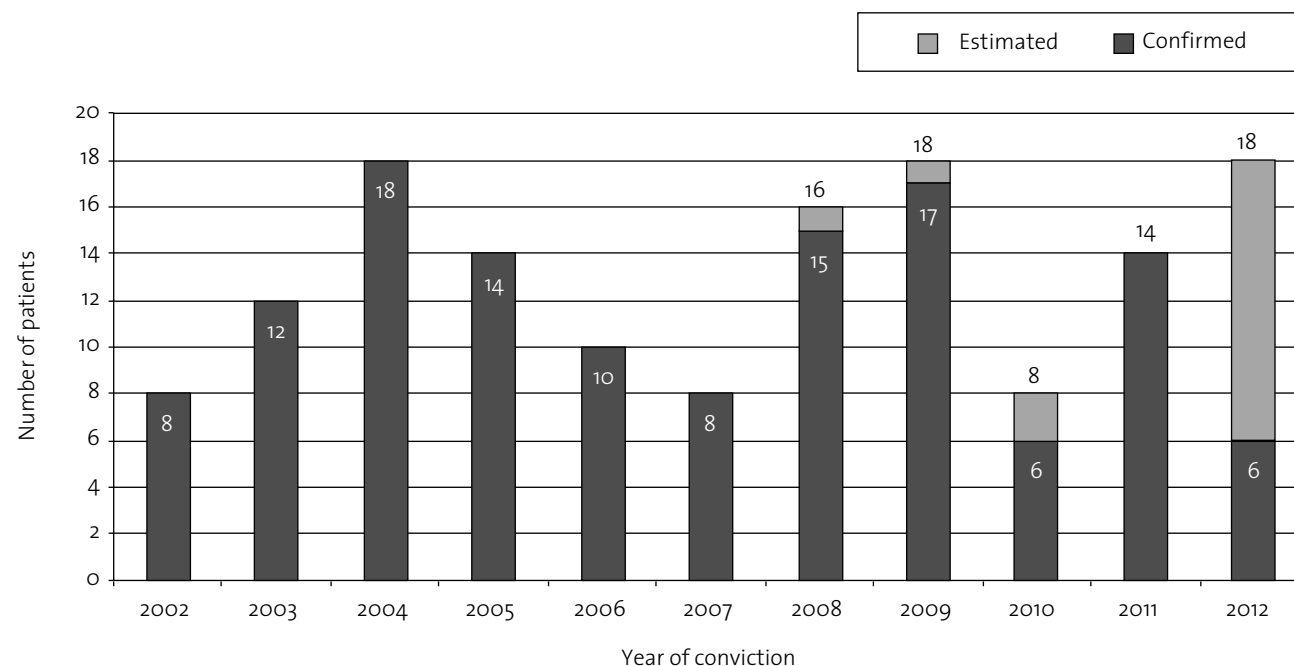
Figure 66: Number of homicide convictions in the general population, by gender of offender



3.2.2 Patient homicide

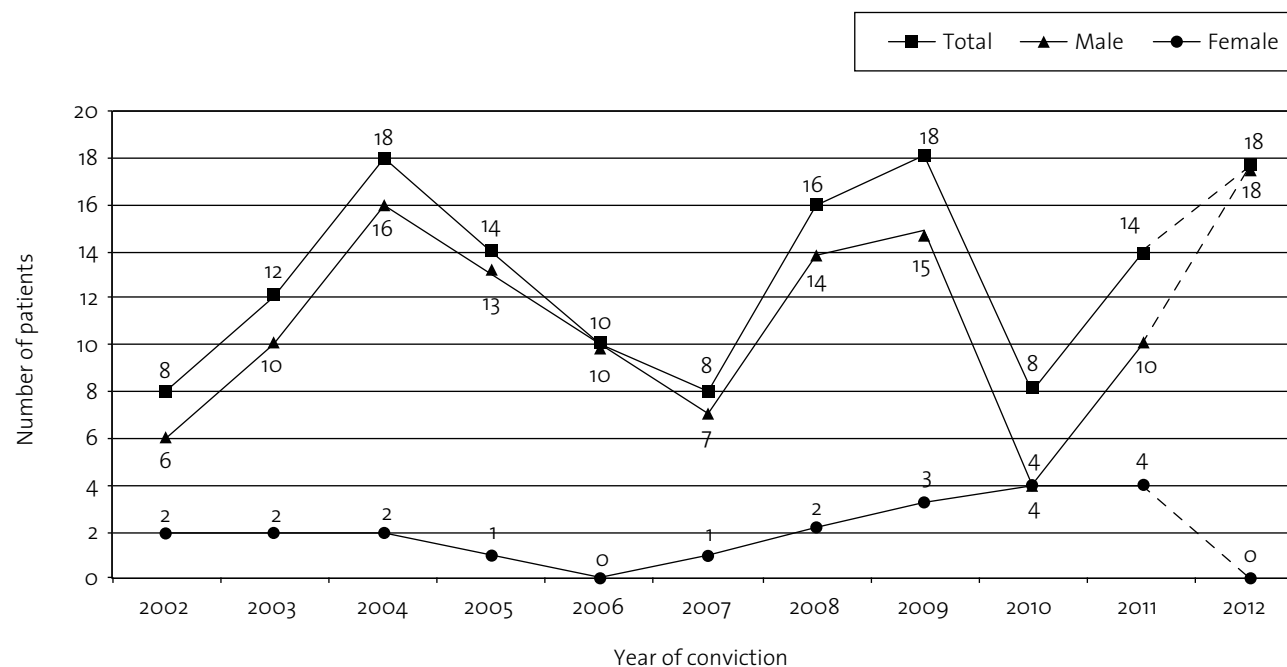
- During 2002-2012, 128 people convicted of homicide (14% of the total sample), were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence. This represents an average of 12 patient homicides per year. There were 129 victims, an average of 12 per year.
- We estimate that we will be notified of 12 additional patient homicides for the final year of the report period, 2012 (Figure 67). The following analysis is based on the confirmed patient homicides for 2002-2006 and estimated numbers for 2007-2012, a total of 144 (16% of the total sample).

Figure 67: Number of patient homicides



- The numbers fluctuated over the period of the report, and no overall trend was found (Figures 67 and Figure 68). Numbers for 2010 were comparatively low but our estimate for 2012 is similar to figures for previous years. No trends were found in different age-groups.
- 2 were in-patients at the time of the homicide.
- 7 (5%) patients had been under crisis resolution/home treatment teams (CR/HT) at the time of the homicide.
- No patients were subject to a compulsory treatment order (CTO) at last discharge or at the time of the offence.

Figure 68: Number of patient homicides, by gender of offender



Forensic and clinical history

- 80 (90%) patients convicted of homicide had previously been convicted of an offence, 75 (61%) had been convicted of committing a violent offence.
- 77 (58%) had been in prison before the offence.
- 3 had previously been admitted to a high, medium or regional secure unit, 10 (7%) had previously been admitted to a psychiatric intensive care unit.
- 6 (4%) patients had previously been involuntarily detained under mental health legislation at some time prior to the offence.

Non-adherence and missed contact

- 15 (11%) patients had been non-adherent with drug treatment in the month before the homicide, ranging between 0 and 3 annually, with no overall trend.

- 49 (35%) patients missed their final service contact before the homicide, an average of 4 per year, ranging between 2 and 7 annually.
- Non-adherence and missed contact can often occur together. In 8 patients both were present.
- In total, 57 were either non-adherent or missed final contact, meaning that 42% of patients were not in receipt of planned treatment before homicide.

Alcohol and drug dependence/misuse

- 112 patients had a history of alcohol misuse, 88% of the patient sample. This was an average of 10 patient homicides per year, ranging between 7 and 15 annually.
- 117 patients had a history of drug misuse, 81% of the patient sample, an average of 11 per year, ranging between 6 and 16 annually.
- There were 130 patients who had a history of either alcohol or drug misuse or both, 95% of patients, an average of 12 homicides per year.
- There was no trend in the number of patient homicides with alcohol or drug misuse over the report period.

- 25 (17%) patients had a primary diagnosis of alcohol dependence/misuse; 46 (32%) had drug dependence/misuse.
- 22 (15%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse.

Homicide and schizophrenia

- There were 27 homicides by people with a history of schizophrenia (includes other delusional disorders), 3% of the total sample, an average of 2 per year.
- Of these, 16 (59%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.
- 19 (70%) were patients, ranging between 0 and 4 annually.
- 3 patients had been non-adherent with drug treatment in the month before the homicide.
- 4 patients with schizophrenia missed their final service contact before the homicide.



3.2.3 Relationship of victim to offender

General population

- The relationship of victim to offender was: acquaintance (487, 59%); stranger (161, 20%); spouse/partner (current/ex) (95, 12%); and other family member (78, 10%).
- There has been a fall in the number and proportion of victims who were strangers, and a fall in the number of acquaintances over the report period.

Patients

- Of the patient homicides, the relationship of victim to offender was: acquaintance (73, 54%); spouse/partner (current/ex) (22, 16%); family member (22, 16%); and stranger (16, 12%).
- The number of stranger homicides by patients fluctuated over the report period, and ranged between 0 and 3 annually, with no overall trend.
- For male patients, the relationship of victim to offender was most often acquaintances (66, 57%). For female patients, family members (7, 37%), acquaintances (6, 32%) and spouse/partners (current/ex) were most common (6, 32%).

Intimate partner homicide

- 95 (12%) homicide victims were a spouse/partner (current/ex), an average of 9 per year.
- Most of these homicides were carried out by males (70, 74%); in these cases 65 (93%) victims were female, an average of 6 per year.
- The most common methods were use of a sharp instrument (56, 60%) and strangulation (15, 16%).
- Of all intimate partner homicides, 22 (19%) were carried out by a patient in contact with mental health services in the 12 months prior to the offence, 16 (73%) were males. One was under alcohol and/or drug treatment services at the time of offence.
- The most common diagnoses were affective disorder (4 cases) and drug dependence/misuse (4 cases).
- 10 (48%) had previous convictions for violence.



4. WALES

4.1 SUICIDE

Between 2002-2012, the Inquiry was notified of 3,481 deaths in the general population that received a suicide or undetermined verdict, an average of 316 per year. These are referred to as suicides throughout the report.

4.1.1 Suicide in the general population

- There was a fall in the overall number and rate of suicides between 2002 and 2011, although numbers and the overall rate have risen since 2009 (Table 4; Figure 69). Falls in rates over the whole report period were observed for males but not females. However, rates of male suicide have been rising since 2008 (Figure 69).
- Our figure for 2012 is the highest since 2003 and may rise further once delayed notifications are added.

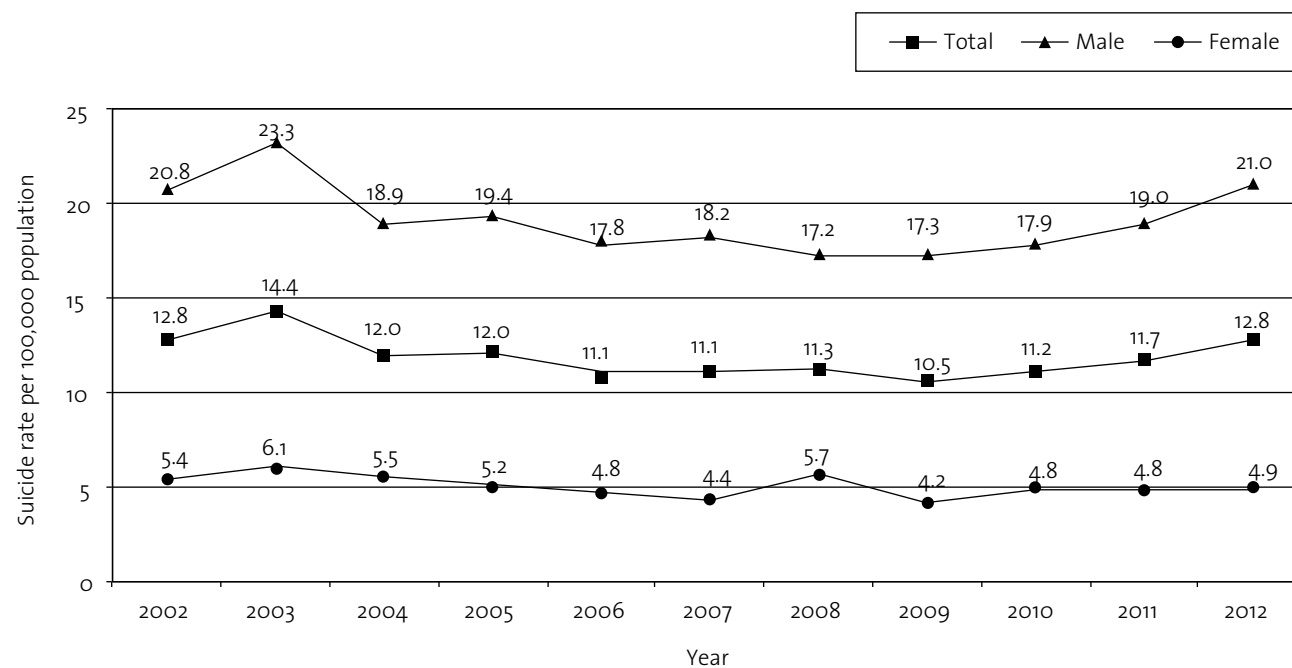
- A large single year increase should be treated with caution because it includes an estimate based on unreturned questionnaires. These are numbers and not rates, and will be affected by the number of people under mental health services. However, our previous estimates have proved reliable.
- Rates fell between 2002 and 2011 in males aged under 25 and 25-34; there was no fall in rate in any age-group in women.

Table 4: Number of suicides in the general population, by gender

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	257	291	239	247	228	236	225	227	236	252	280
Female	72	82	75	70	65	60	79	58	67	67	68
Total	329	373	314	317	293	296	304	285	303	319	348



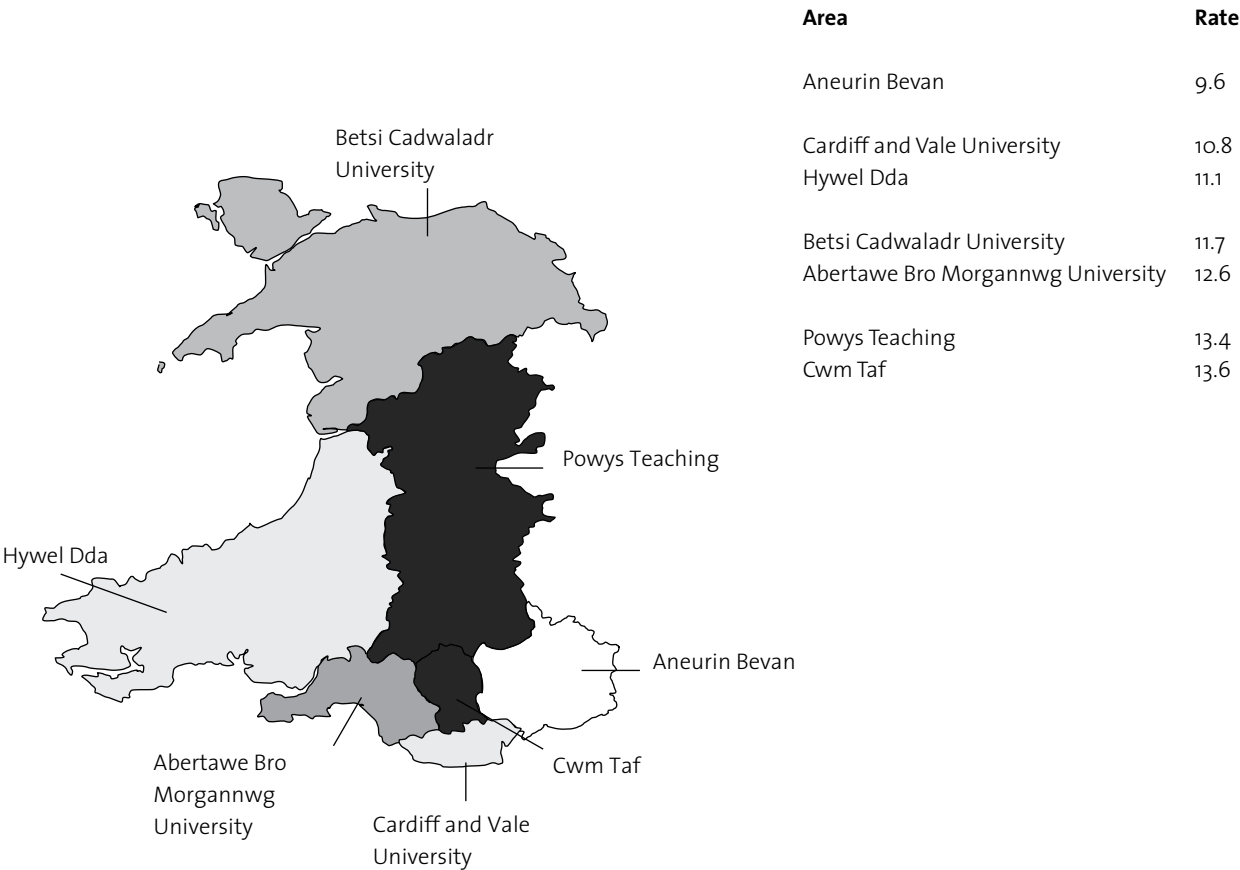
Figure 69: Rates of suicide in the general population, by gender



Variation in suicide by area of residence

- There was some variation in suicide rates by area of residence (by Health Board) at the time of death (average rate 2010-2012). The highest rate of suicide was in Cwm Taf, at 13.6 per 100,000 population, and the lowest in Aneurin Bevan, at 9.6 per 100,000 population (Figure 70).

Figure 70: Rate of suicide per 100,000 population, by Health Board of residence (average rate 2010-2012)



Note: rates have been colour coded by approximate quartile



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report) (1,781, 51%) and self-poisoning (overdose) (722, 21%). Less frequent methods were jumping/multiple injuries (mainly jumping from a height or being struck by a train) (233, 7%), drowning (187, 5%), carbon monoxide (CO) poisoning (136, 4%), cutting/stabbing (98, 3%), and firearms (83, 2%).
- Deaths by hanging have increased over the report period whilst deaths by self-poisoning have decreased (Figure 71). Of the less common methods, deaths by CO poisoning, drowning, and firearms decreased (Figure 72).

Figure 71: Suicide in the general population: main causes of death

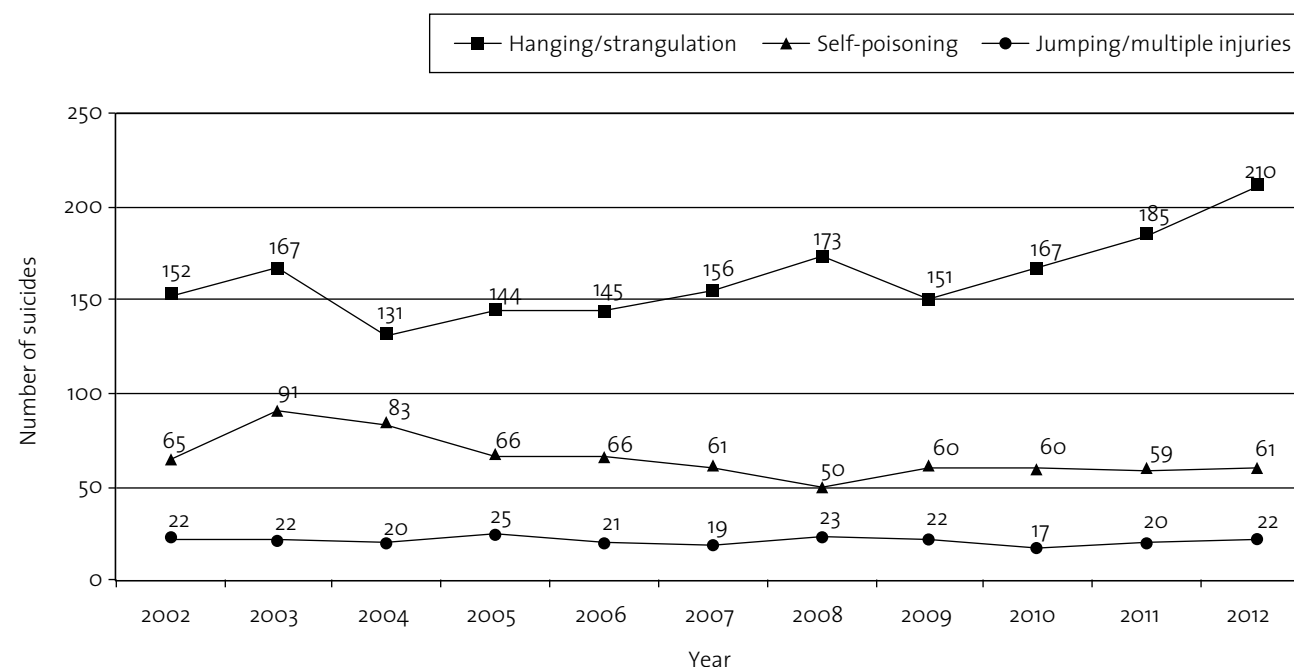
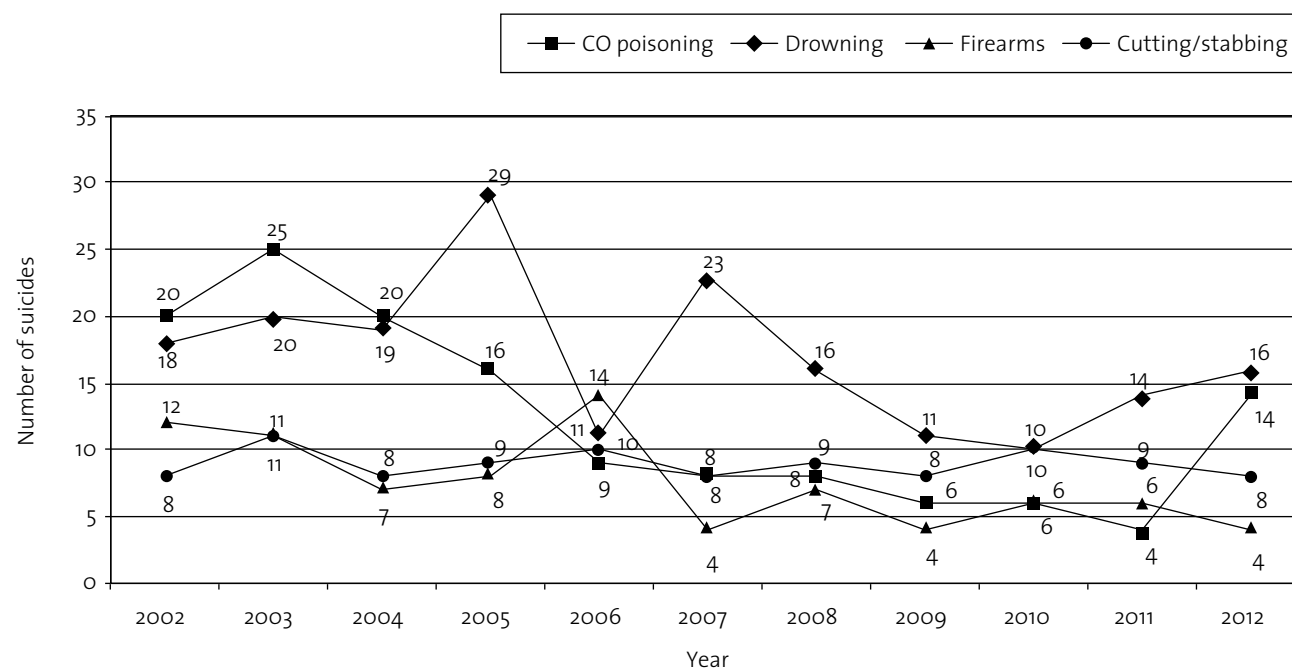


Figure 72: Suicide in the general population: other causes of death

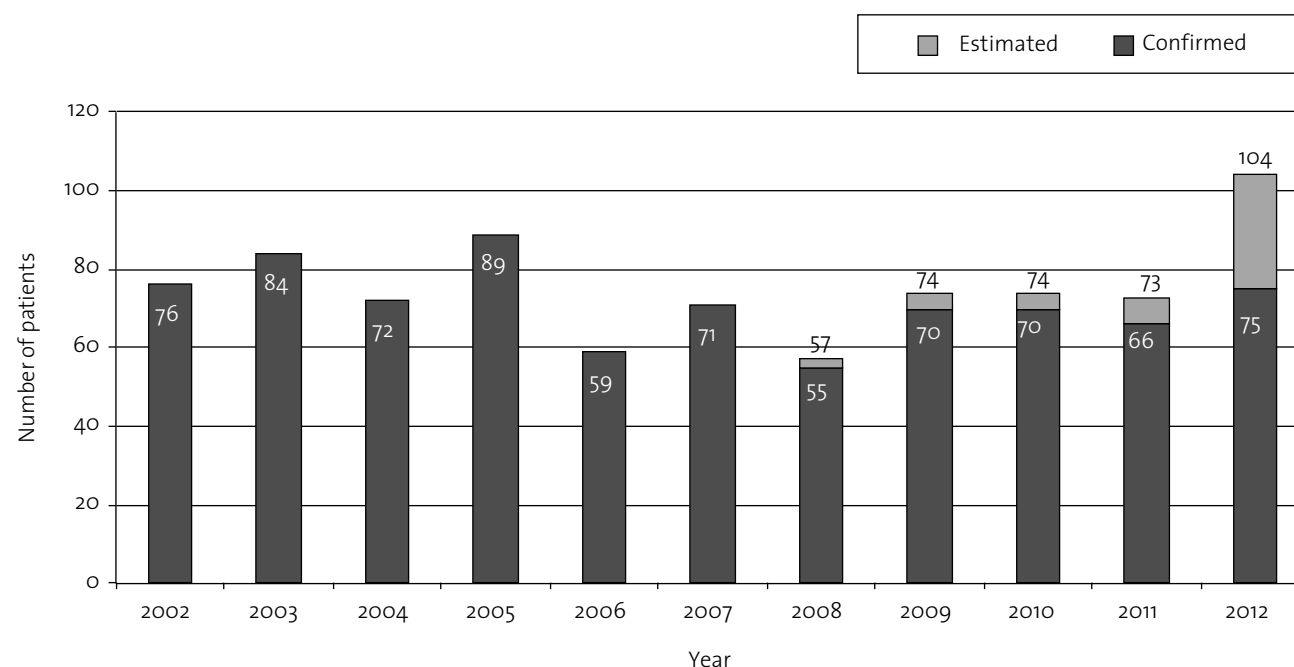


4.1.2 Patient suicide

Patient suicide: numbers and rates

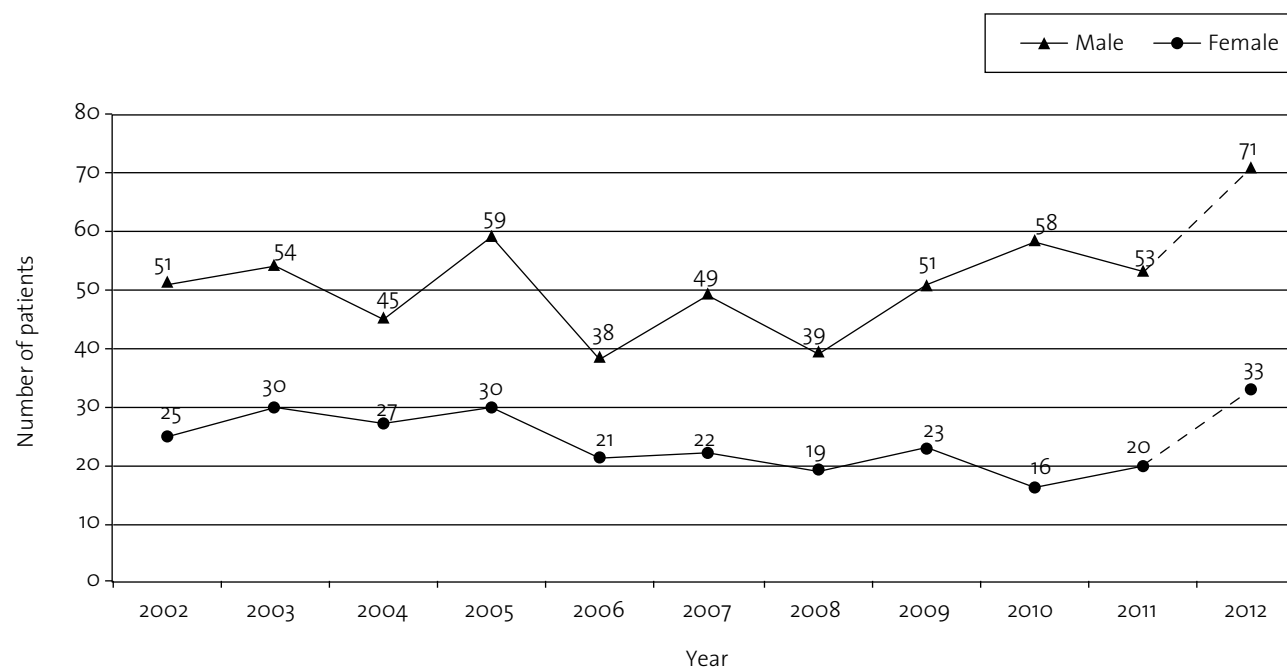
- During 2002-2012, 833 deaths (24% of general population suicides) were identified as patient suicides, i.e. the person had been in contact with mental health services in the 12 months prior to death. This represents an average of 76 patient suicides per year.
- There was no overall change between 2002 and 2011 in the number (Figures 73 and 74) or the rate of patient suicide (using a general population denominator; Figure 75). Our estimated figure for 2012 suggests an increase. The increase in the number of older suicides in the general population has contributed to this but the estimation procedures used are based on a method that has been shown to be reliable.

Figure 73: Number of patient suicides



- The number and rate of male suicides have increased since 2008 but there was no overall trend (Figures 74 and 75). Rates and numbers fell overall for females over the period 2002-2011 although we estimate an increase in 2012. Numbers for individual age-groups by gender fluctuated with no overall trend.
- In 2008-2011, a similar proportion of patients were unemployed (107, 42%) compared to the pre-recession years of 2004-2007 (115, 41%). 35 (5%) patients were homeless, living in bed and breakfast, or hostels, i.e. 'unstable housing'. This proportion did not change over the report period.

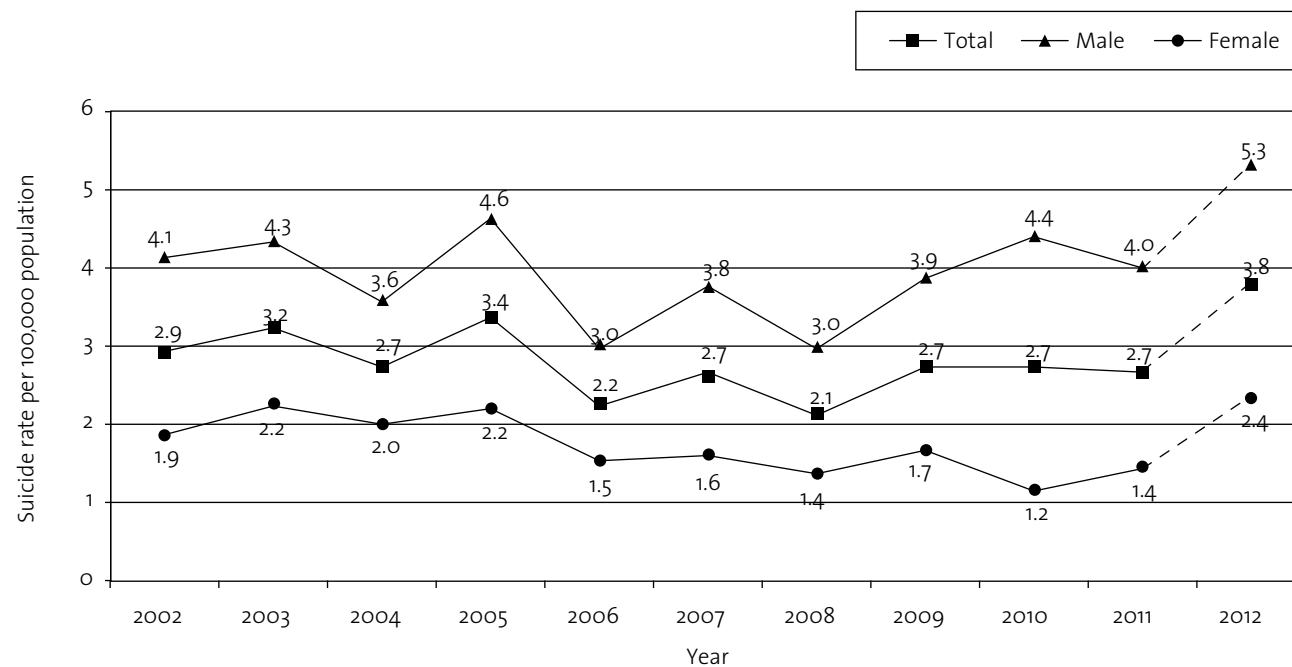
Figure 74: Number of patient suicides, by gender



Note: figures in 2008 do not tally with the total figure in Figure 73 due to rounding



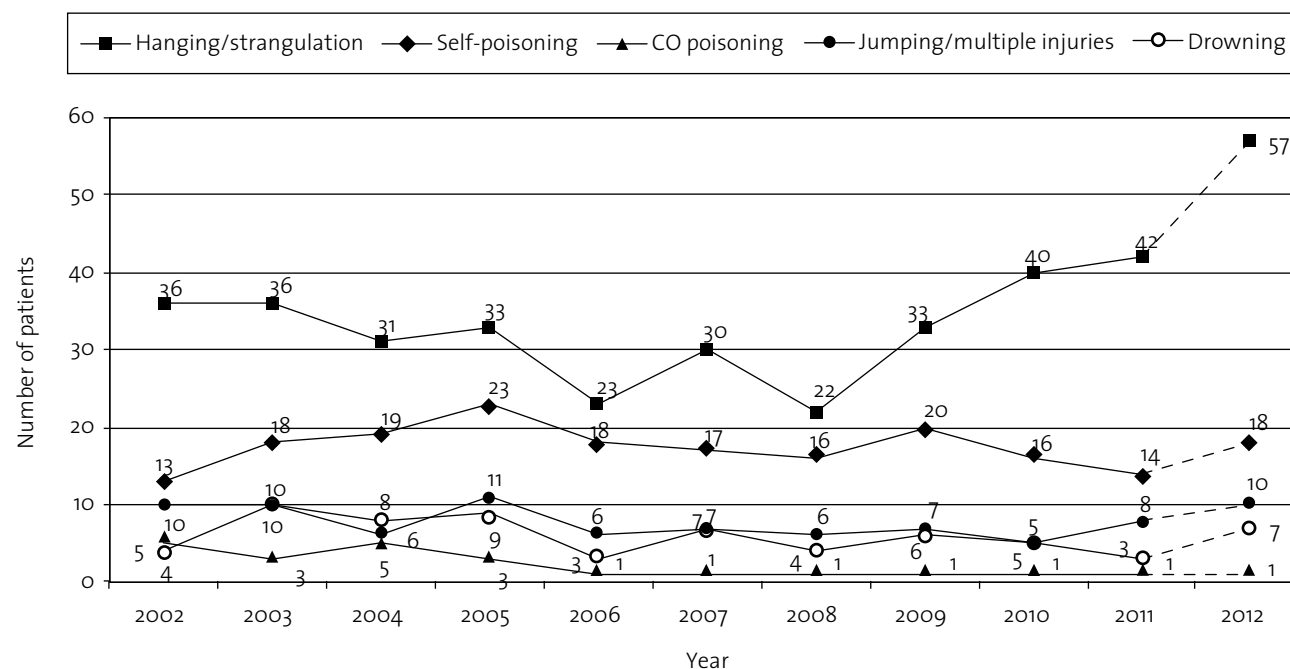
Figure 75: Rates of patient suicide, by gender



Method of suicide by patients

- The most common methods of suicide by patients were hanging (383, 46%) and self-poisoning (192, 23%).
- Hangings fell overall until 2008 but rose in 2009-2011, and our estimation for 2012 suggests a further rise (Figure 76). Deaths by CO poisoning decreased while figures for other methods did not change between 2002-2011.
- The most common substances used in deaths by self-poisoning were opiates (40, 24%) and tricyclic antidepressants (22, 13%). Numbers are too small for statistical analysis but there were 9 self-poisonings with opiates in 2002-2004 and 12 in 2010-2012.
- Since 2008, there have been 12 deaths by suicide in the general population related to inhalation of helium gas. Of these, 1 was a patient.

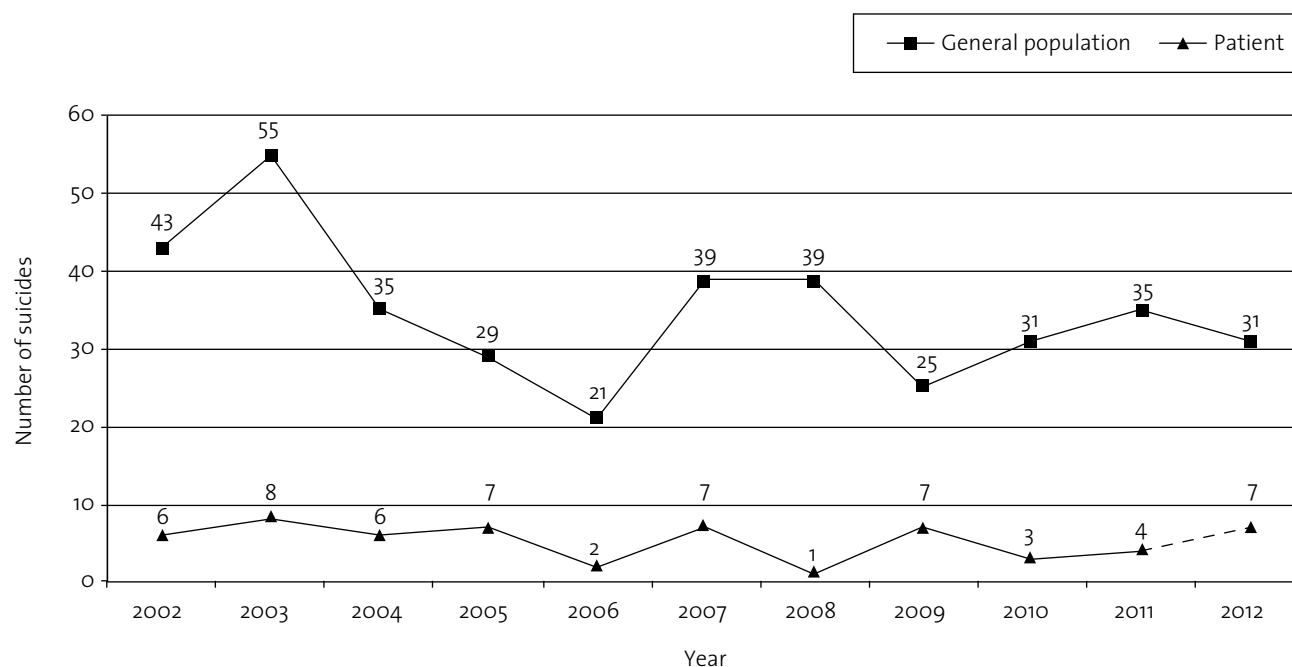
Figure 76: Patient suicide: main causes of death



Patient suicide in those aged under 25

- During 2002-2012, there were 383 suicides in the general population in those aged under 25, 11% of all suicides, an average of 35 per year. 132 were aged under 20 and 66 were aged under 18.
- 58 suicides in under 25s were in patients, 7% of patient suicides and 15% of all suicides in this age-group. This represents an average of 5 deaths per year. 16 were aged under 20 and 13 were aged under 18.
- Suicide numbers in under 25s decreased in the general population over the report period, whilst patient suicides in this age-group fluctuated with no overall trend (Figure 77).
- Suicides in under 25s were more likely than in older (25+) people to be by hanging (36, 64% v. 322, 44%).

Figure 77: General population and patient suicides in those aged under 25



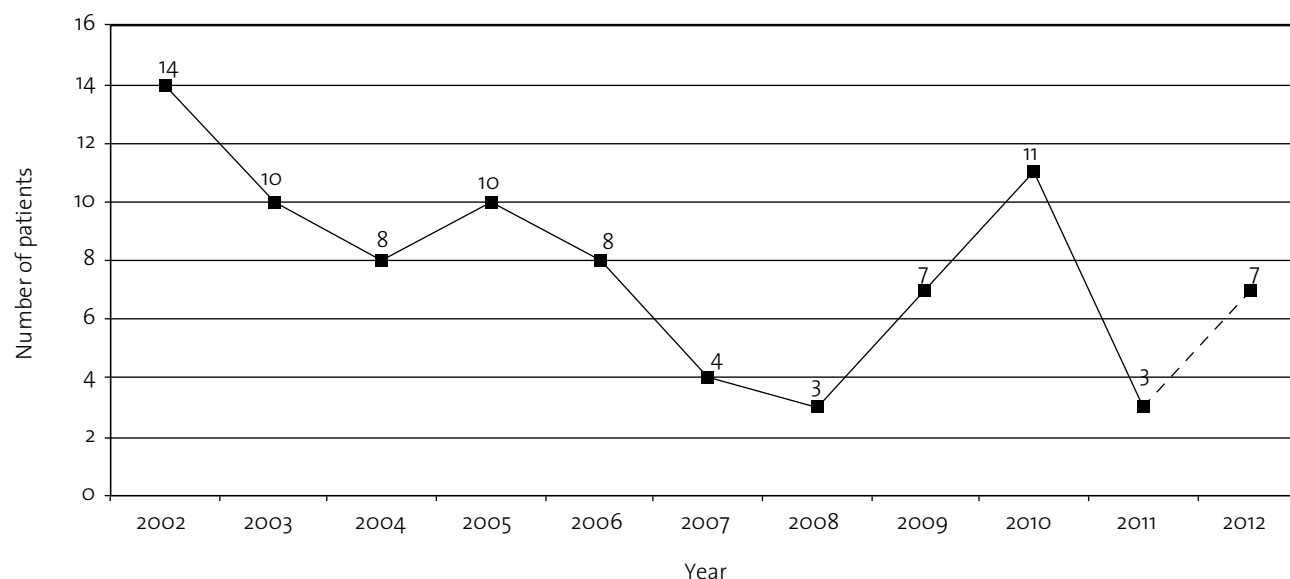
- The diagnostic profile was different from those aged 25+: more patients had a primary diagnosis of drug dependence (6, 11% v. 32, 4%) while fewer had affective disorder (bipolar disorder/depression) (15, 28% v. 317, 44%).
- There were more patients aged under 25 with a history of drug misuse compared to those aged 25+ (30, 54% v. 228, 32%), but no differences in the proportion with alcohol misuse (27, 51% v. 339, 47%) or previous self-harm (42, 78% v. 499, 70%).
- The proportion who were unemployed was similar (24, 44% v. 277, 39%).
- 7 (13%) had a history of Local Authority Care.



In-patient suicide

- There were 85 in-patient deaths by suicide between 2002-2012, 10% of patient suicides, an average of 8 per year.
- From 2002-2011, there was an overall fall in the number of in-patient suicides despite a rise in 2009-2010 (Figure 78).
- There were 20 patients who died on the ward by hanging over the 11-year period; this number fluctuated from 0 to 3 per year.
- There were 14 suicides in detained in-patients, 17% of all in-patient suicides, an average of 1 per year.
- 24 in-patients died after absconding from the ward, 28% of all in-patient suicides, an average of 2 per year. The number fell between 2002-2011: only 6 of these deaths following absconding have occurred since 2004.

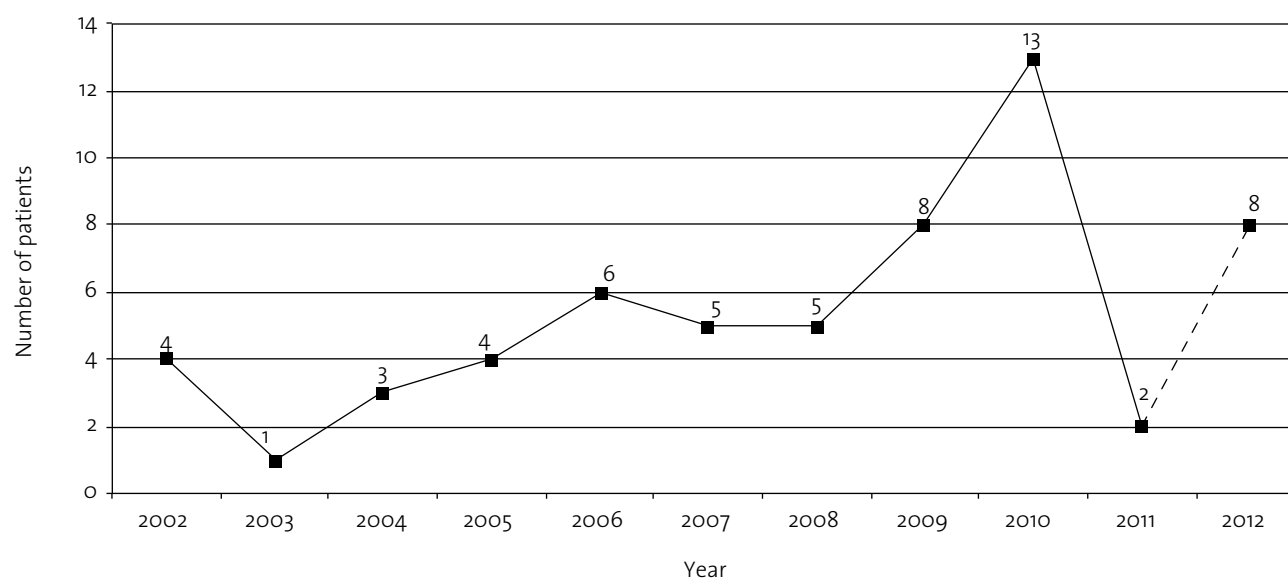
Figure 78: Patient suicide: number of mental health in-patients



Crisis Resolution/Home Treatment

- There were 59 suicides in patients under crisis resolution/home treatment teams (CR/HT), 7% of the total sample, an average of 5 deaths per year.
- There was an overall increase in the number of suicides under CR/HT with a peak in 2009 and a substantial fall in 2011 (Figure 79).
- 17 (33%) CR/HT patients died within 3 months of hospital discharge, the majority (11, 65%) of whom died within 2 weeks.
- 8 (14%) had been non-adherent with drug treatment in the month before suicide.
- 23 (41%) CR/HT patients lived alone.

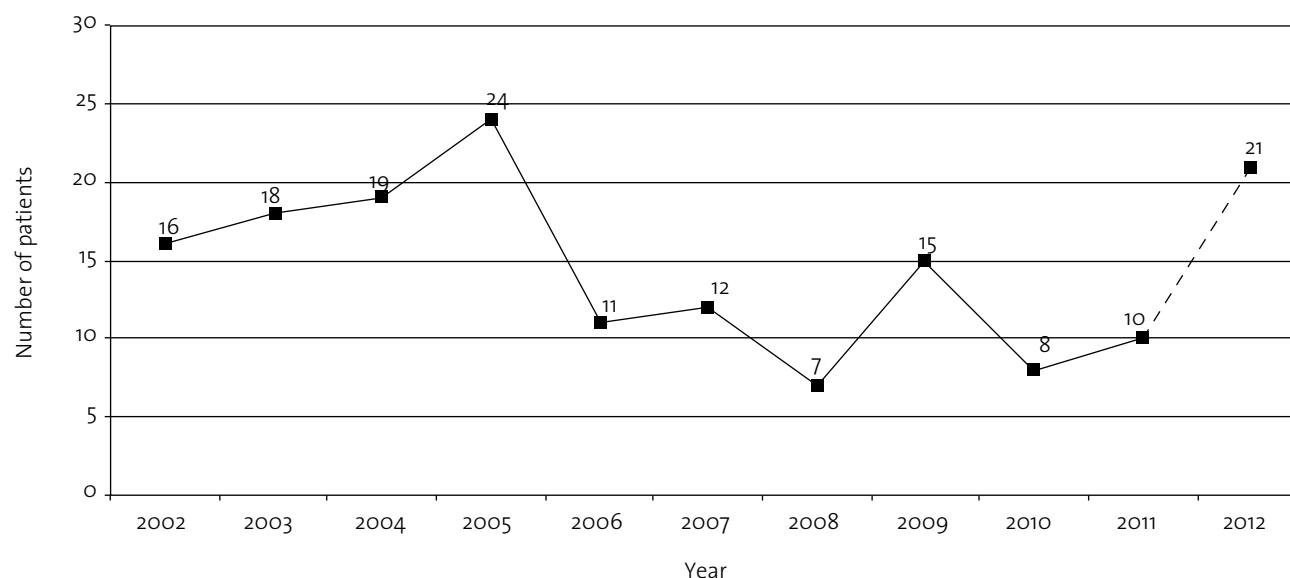
Figure 79: Patient suicide: number under crisis resolution/home treatment services



Patients recently discharged from hospital

- There were 161 suicides within 3 months of discharge from in-patient care, 19% of all patient suicides and 22% of suicides in community patients, an average of 15 deaths per year.
- There was an overall fall in the number of post-discharge suicides between 2002-2011, although we estimate an increase in 2012 (Figure 8o).
- Post-discharge suicides were most frequent in the 2 weeks after leaving hospital when 57 deaths occurred, 37% of all suicides within 3 months of hospital discharge, an average of 5 deaths per year. There were 25 patients who died in the first week after discharge - the highest number occurred on days 3 and 5.
- Of the 10 patients who discharged themselves from hospital, 2 died in the first week after leaving hospital.
- 6 (4%) died by suicide after being discharged from a non-local in-patient unit.
- 40 (28%) died before the first follow-up appointment. The number and proportion of patients who died before their first follow-up decreased over the report period, from 38 in 2002 to 17 in 2012.

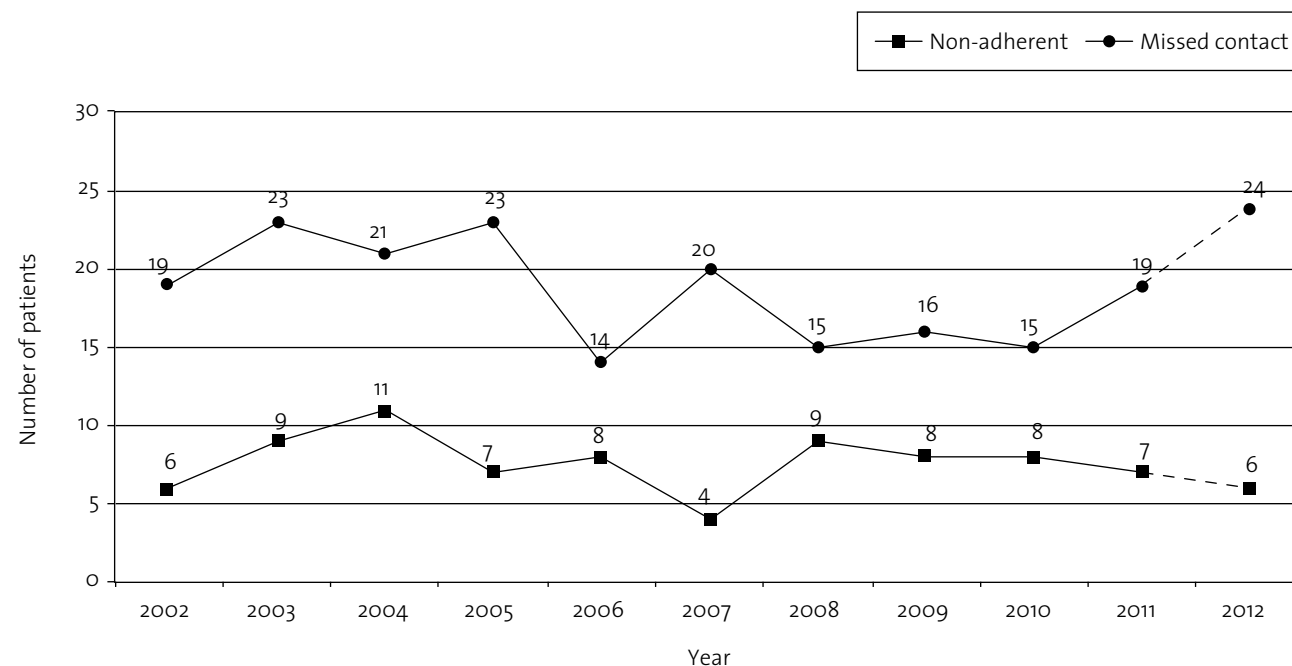
Figure 8o: Patient suicide: number who died within 3 months of in-patient discharge



Non-adherence and missed contact

- 83 (11%) patients had been non-adherent with drug treatment in the month before death, an average of 8 deaths per year.
- 209 (28%) patients had missed their final service contact before death, an average of 19 deaths per year.
- There was no overall change in 2002-2011 in the number of patient suicides following non-adherence (Figure 81). The number of patient suicides who had missed their last appointment fluctuated with no overall trend but we are estimating an increase in 2012 (Figure 81).
- Non-adherence and missed contact often occur together. In 25 deaths both were present.
- In total, 265 were either non-adherent or missed final contact, meaning that 38% were not in receipt of planned treatment before suicide.

Figure 81: Patient suicide: number non-adherent with drug treatment or missed contact



Community Treatment Orders

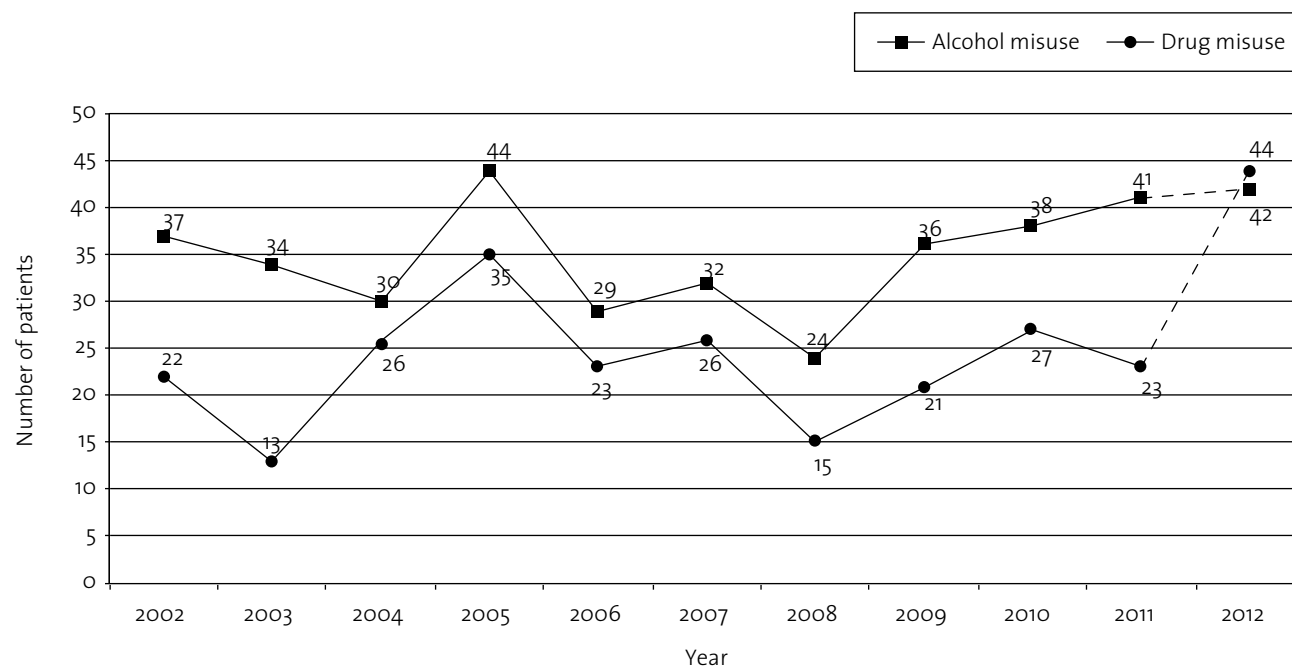
- There were 5 suicides in patients subject to a community treatment order (CTO) between 2009-2012, 2% of all patient suicides in this time period.
- 1 patient subject to a CTO was non-adherent with drug treatment in the month before death and missed the final service contact.



Alcohol and drug misuse

- There were 387 patients with a history of alcohol misuse, 48% of the total sample, an average of 35 deaths per year (Figure 82).
- 275 had a history of drug misuse, 34% of the total sample, an average of 25 deaths per year (Figure 82).
- 460 patients had a history of either alcohol or drug misuse or both, 56% of patient suicides, an average of 42 deaths per year.
- Between 2002 and 2011, the overall number of patient suicides with a history of alcohol or drug misuse did not change, although numbers have increased since 2008 and we estimate further rises in 2012.
- 89 (11%) patients had a primary diagnosis of alcohol dependence/misuse; 42 (5%) drug dependence/misuse. The number with alcohol or drug dependence/misuse did not change over the report period.
- 119 (15%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse, an average of 11 deaths per year. The number of dual diagnosis patient suicides has remained lower since a peak in 2005.

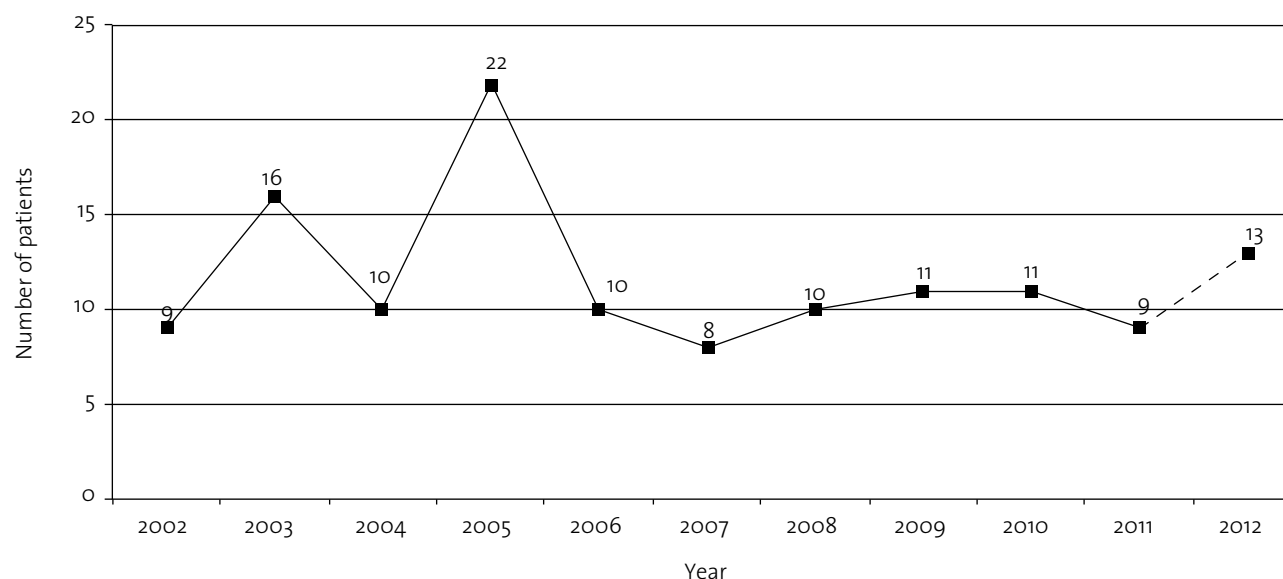
Figure 82: Patient suicide: number with a history of alcohol or drug misuse



Patients with schizophrenia

- There were 129 suicides in patients with a primary diagnosis of schizophrenia (includes other delusional disorders, referred to as schizophrenia in the remainder of the report), 16% of the total sample, an average of 12 deaths per year.
- There was a peak in 2005 in the number of suicides in patients with schizophrenia, with no overall trend (Figure 83).
- Patients with schizophrenia who died by suicide were younger than other patients (median age 41 compared to 46).
- 87 (71%) were males – similar to the proportion overall (522, 68%). 57 (48%) lived alone.
- There were more patients with schizophrenia who died by jumping/multiple injuries compared to other patients (25, 20% v. 56, 9%).
- 16 (14%) patients with schizophrenia had been non-adherent with drug treatment in the month before death; 27 (27%) had missed their last appointment with services.

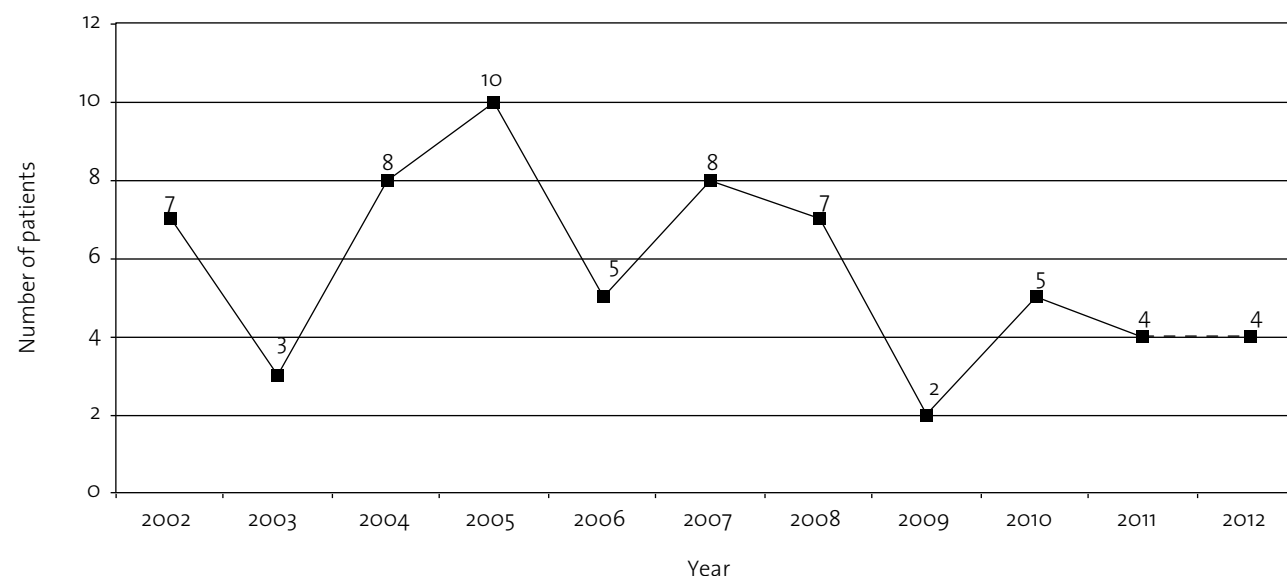
Figure 83: Patient suicide: number with a primary diagnosis of schizophrenia and other delusional disorders



Patients with personality disorder

- There were 63 suicides in patients with a primary diagnosis of personality disorder, 8% of the total sample, an average of 6 deaths per year.
- The number of suicides in patients with personality disorder fluctuated over the report period and there was no overall trend, although numbers have been lower since 2008 (Figure 84).
- There was a higher proportion of females in this group, 48% (30) v. 32% (250) overall.
- 38 (61%) were aged under 45.
- 44 (71%) had a co-morbid psychiatric disorder, most commonly depressive illness (19, 43%), alcohol dependence/misuse (16, 36%) or drug dependence/misuse (16, 36%).

Figure 84: Patient suicide: number with a primary diagnosis of personality disorder



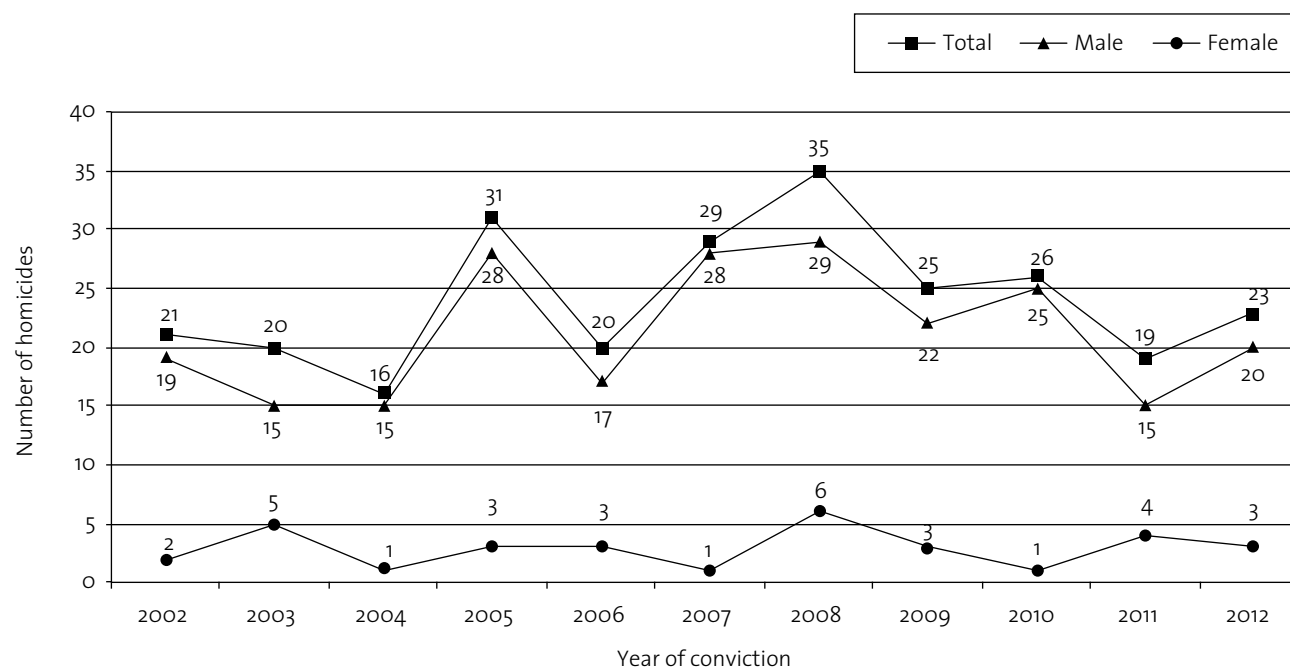
4.2 HOMICIDE

Between 2002-2012 the Inquiry was notified of 265 homicide convictions, an average of 24 a year. There were 276 victims, an average of 25 per year.

4.2.1 Homicide in the general population

- The annual number of homicide convictions in the general population is shown in Figure 85. These figures are provided as context for our data on homicides by people with mental illness. More recent data are published for England and Wales by the Office for National Statistics.⁸
- There was no overall trend in the number of homicide convictions over the report period, though figures have fallen since a peak in 2008.
- The most common method of homicide was the use of a sharp instrument (90, 34% of the total sample).

Figure 85: Number of homicide convictions in the general population, by gender of offender



4.2.2 Patient homicide

- During 2002-2012, 26 people convicted of homicide (10% of the total sample) were confirmed as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence, an average of 2 per year, ranging between 1 and 5 annually. There were 27 victims, an average of 2 per year.
- The number of patient homicides fluctuated over the report period. In this section the numbers were too small to examine trends over time. There were no homicides by in-patients; 1 patient was under crisis resolution/home treatment care (CR/HT) at the time of the homicide.
- No patients were subject to a community treatment order (CTO) at the time of last discharge or at the time of the homicide.

Forensic and clinical history

- 17 (74%) patients convicted of homicide had previously been convicted of an offence, 13 (50%) had been convicted of committing a violent offence.
- 10 (42%) had been in prison before the offence.
- 2 people had previously been detained in a high, medium or regional secure unit.
- 2 had previously been admitted to a psychiatric intensive care unit.
- 1 patient had previously been involuntarily detained under mental health legislation at some time prior to the offence.

Non-adherence and missed contact

- 4 (17%) patients had been non-adherent with drug treatment in the month before the homicide.
- 6 (23%) missed their final service contact before the homicide.
- Both non-adherence and missed contact occurred together in 1 patient.
- In total, 9 were either non-adherent or missed final contact, meaning that 38% of patients were not in receipt of planned treatment before the homicide.



Alcohol and drug dependence/misuse

- 21 patients had a history of alcohol misuse, 84% of the patient sample. This was an average of 2 patient homicides per year, ranging between 1 and 5 annually.
- 20 patients had a history of drug misuse, 77% of the patient sample, an average of 2 per year, ranging between 0 and 4 annually.
- There were 24 patients who had a history of either alcohol or drug misuse or both, 92% of patients, an average of 2 homicides per year.
- 2 patients had a primary diagnosis of alcohol dependence/misuse; 2 had drug dependence/misuse.
- 7 (27%) patients had dual diagnosis, i.e. severe mental illness (schizophrenia or affective disorders) and co-morbid alcohol or drug dependence/misuse.

Homicide and schizophrenia

- Of the total number of homicides, 18 were by people with schizophrenia (includes other delusional disorders) 7% of the total sample, an average of 2 homicides annually.
- Of these, 16 (94%) had symptoms of psychosis (delusions and/or hallucinations) at the time of the offence.
- 9 (50%) were patients.

4.2.3 Relationship of victim to offender

General population

- The relationship of victim to offender was: acquaintance (98, 42%); spouse/partner (current/ex) (60, 26%); stranger (46, 20%); and other family member (31, 13%).

Patients

- Of the patient homicides, victims were most commonly an acquaintance (11, 46%), followed by a spouse/partner (current/ex) (6, 25%), family member (5, 21%), and 2 were strangers.

Intimate partner homicide

- In a quarter of homicides the victim was a spouse/partner (current/ex), an average of 5 per year.
- Most of these homicides were carried out by males (48, 80%); in these cases 46 (96%) victims were female, an average of 4 per year.
- The most common method used was a sharp instrument (32, 53%).
- Of all intimate partner homicides, 6 (10%) were carried out by a patient in contact with mental health services in the 12 months prior to the offence; 4 were male.
- 2 of these patients had previous convictions for violence.



4.2.4 Homicide followed by suicide

General population homicide-suicide

- Homicide followed by suicide is defined here as cases in which the perpetrator dies by suicide within 3 days of committing homicide. As there was no conviction for homicide in these cases, they are not included in the previous homicide analysis.
- We were notified of 11 offences between 2002 and 2011. Data for 2012 are incomplete.
- There were 12 victims in total. One incident involved 2 victims. The victims in this incident were family members, both being children.
- Most of the offenders were male (10, 91%), with a median age of 44 (range 34-81).
- 3 had convictions for violence.
- The relationship of victim to offender (as a principal victim) was most commonly spouse/partner (current/ex) (8, 73%).

Patient homicide-suicide

- As these offenders did not undergo a psychiatric assessment after the offence, we do not have information regarding diagnosed symptoms of mental illness at the time of the offence.
- 2 cases of homicide-suicides involved patients under the care of mental health services prior to the offence.

4.3 SUDDEN UNEXPLAINED DEATH IN MENTAL HEALTH IN-PATIENTS (SUD)

- There were 27 deaths meeting the criteria for SUD over the report period, an average of 2 per year. Numbers fluctuated between 0 and 6 and there was no trend.
- No patients were from a black and minority ethnic (BME) group.
- There was 1 death within one hour of restraint reported in 2006. We do not know whether restraint caused this death.
- 3 were aged under 45.
- 10 (40%) had a history of cardiovascular disease; 8 (32%) had a history of respiratory disease; 5 (20%) had a history of cerebrovascular disease, and 1 had a history of epilepsy.
- 2 were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).

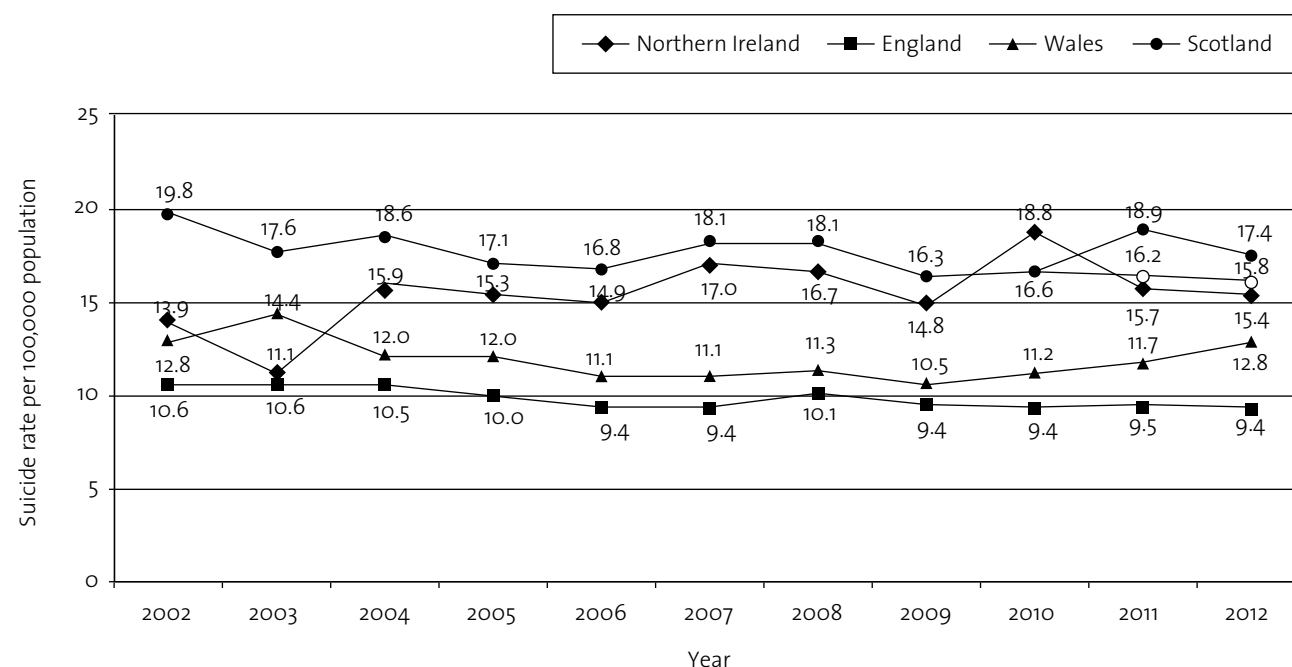


5. UK-WIDE DATA AND UK COMPARISONS

5.1. Suicide in the general population

- Suicide rates by UK country are shown in Figure 86.
- Scotland and Northern Ireland continue to have the highest general population suicide rates (Figure 86).
- Over the last 11 years, the largest difference in suicide rates between countries is in the youngest age groups (Figure 87).

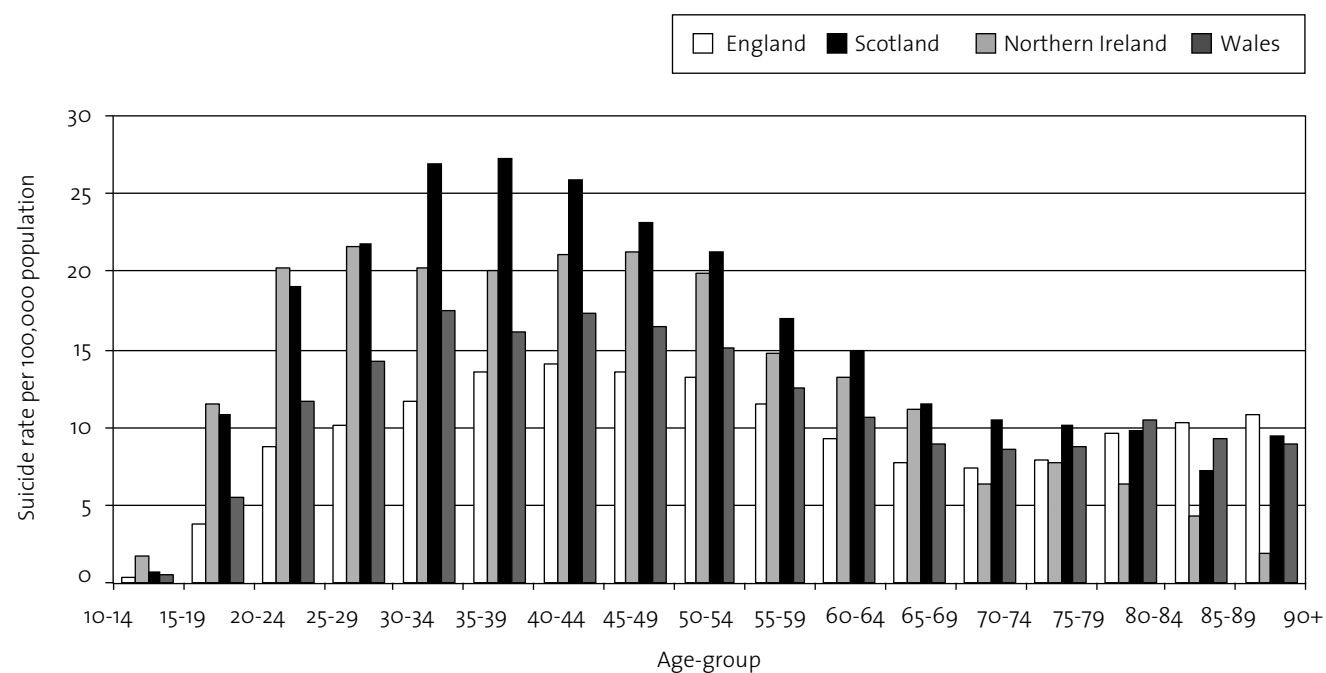
Figure 86: Suicide rates in the general population, by UK country



Note: unfilled markers in 2011 and 2012 indicate rates using the old death coding rules in Scotland



Figure 87: Suicide rates in the general population, by age-group and UK country (2002-2012)



5.2 Patient suicide

- UK figures show a rise in the number of patient suicides since 2006, with the highest number estimated in 2012 (Figure 88). The number of patient suicides is influenced by death coding and the number of people under mental healthcare.
- Patient suicide numbers have been rising in all UK countries over the report period although there is variation in trends between countries (Table 5). Rates of patient suicide are showing a different pattern in England (see Figure 8 on page 34).
- We have found an association between lower patient suicide rates and features of services such as specialised community teams and multidisciplinary review of previous deaths.^{28, 29}

Figure 88: Number of patient suicides in the UK

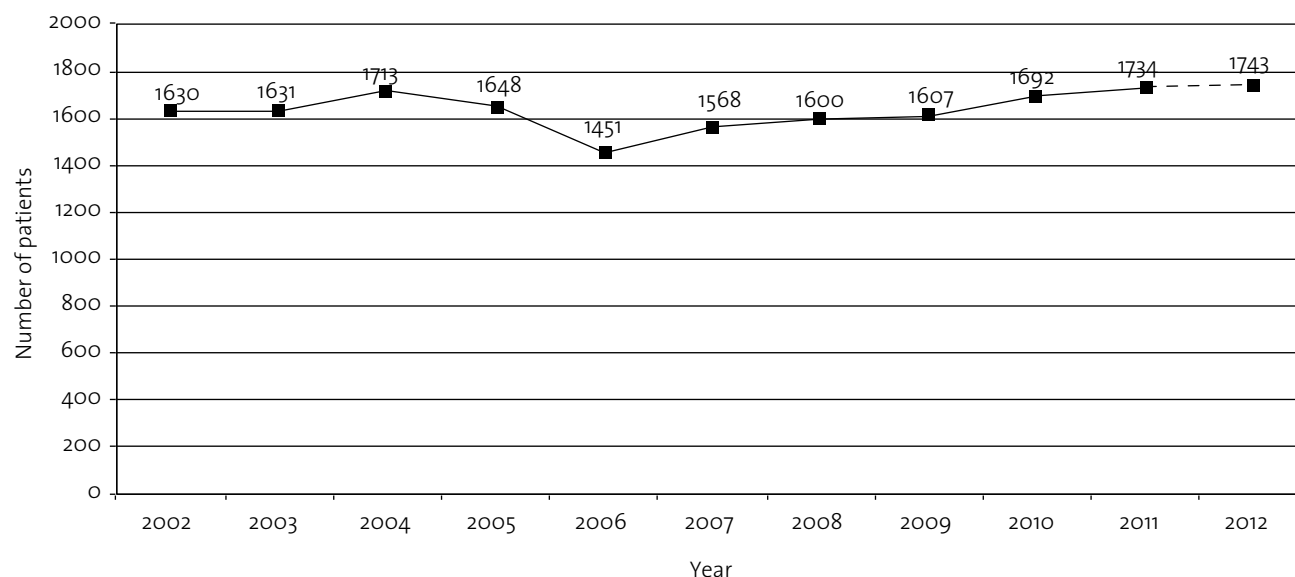


Table 5: Patient suicide numbers by year and UK country

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
England	1250	1256	1317	1277	1123	1139	1234	1242	1306	1307	1272
N. Ireland	66	45	73	64	60	76	77	65	71	66	73
Scotland	238	246	251	218	209	282	232	226	241	288 (234†)	294 (254†)
Wales	76	84	72	89	59	71	57	74	74	73	104

Note: Figures from 2008 include estimates based on late notifications. †indicates the number of suicides in Scotland using the old death coding rules.



5.3 Suicide method: hanging

- In the UK, hanging is the most common method of suicide in the general population and among patient suicides (Figure 89 and Table 6).

Figure 89: Number of general population and patient suicides by hanging in the UK

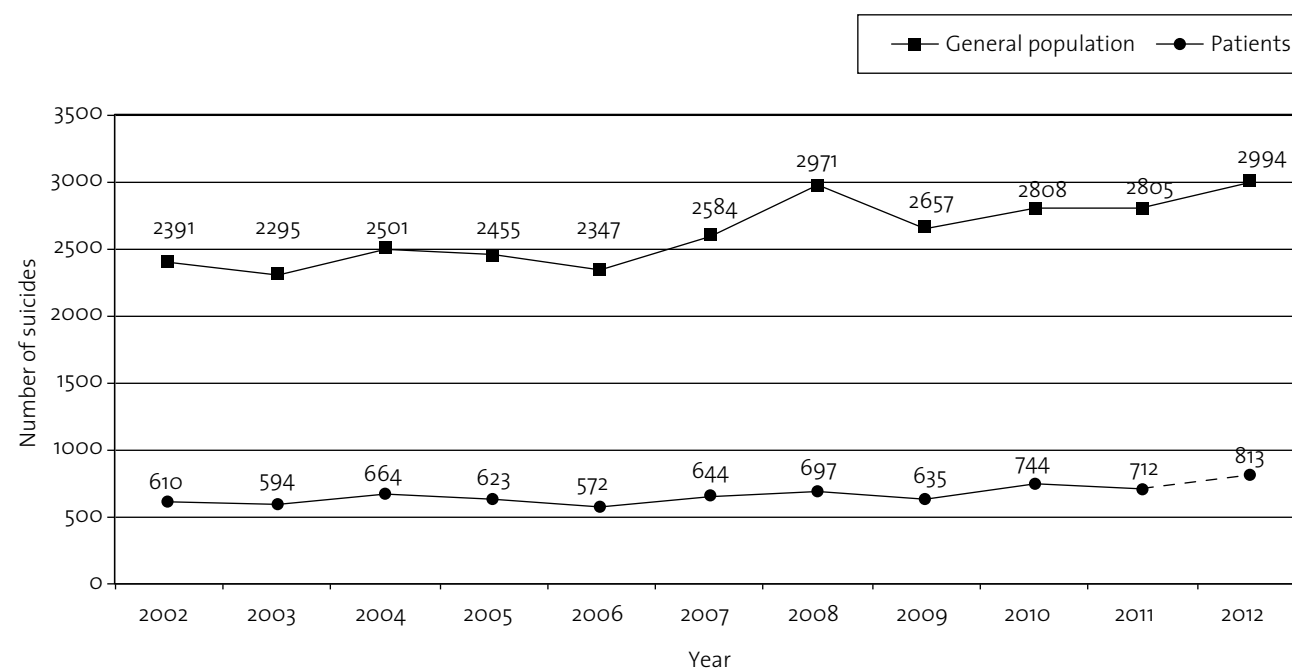


Table 6: Patient suicide: number of suicides by hanging, by UK country

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
England	456	456	515	487	456	472	549	479	584	556	615
N. Ireland	26	23	30	36	32	39	38	36	37	33	41
Scotland	92	79	88	67	61	103	88	87	83	81	100
Wales	36	36	31	33	23	30	22	33	40	42	57

Note: Figures from 2008 include estimates based on late notifications.



5.4 Post-Discharge Suicide Deaths

- Characteristics of post-discharge suicide deaths are shown in Table 7.
- The figures for post-discharge suicide also includes those discharged from in-patient wards to home care.



Table 7: Patient suicide: characteristics of post-discharge deaths, by UK country (2002-2012)

	UK Number = 18,017	England Number = 13,723	Northern Ireland Number = 736	Scotland Number = 2,725	Wales Number = 833
Number of post-discharge patient suicides	3225	2428	145	491	161
Post-discharge suicides as a % of all patient suicides	18%	18%	20%	18%	19%
Percentage of post-discharge suicides before first follow-up with mental health services	18%	16%	26%	21%	28%
Number of post-discharge suicides in the first week after discharge	526	380	31	90	25
Post-discharge suicides in the first week after discharge as a % of all post-discharge suicides	17%	16%	22%	18%	16%



5.5 Patient Suicide Under Crisis Resolution Home/Treatment Teams

- The number of patients who have died whilst under crisis resolution/home treatment teams (CR/HT) is shown in Table 8.
- The number of these deaths has been rising in England and Wales and they now account for more suicides than those in in-patient care.
- Our recent study found that whilst the number of suicides under CR/HT has increased in England, the rate of suicide under these services has fallen. However, the rate remains consistently higher than rates among psychiatric in-patients.³⁰



Table 8: Patient suicide: number of suicides under crisis resolution/home treatment teams, by UK country

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
England	59	71	108	153	156	177	190	223	185	185	149
N. Ireland	1	1	2	5	2	7	3	2	3	5	8
Scotland	17	9	16	25	13	23	16	19	22	19	10
Wales	4	1	3	4	6	5	5	8	13	2	8

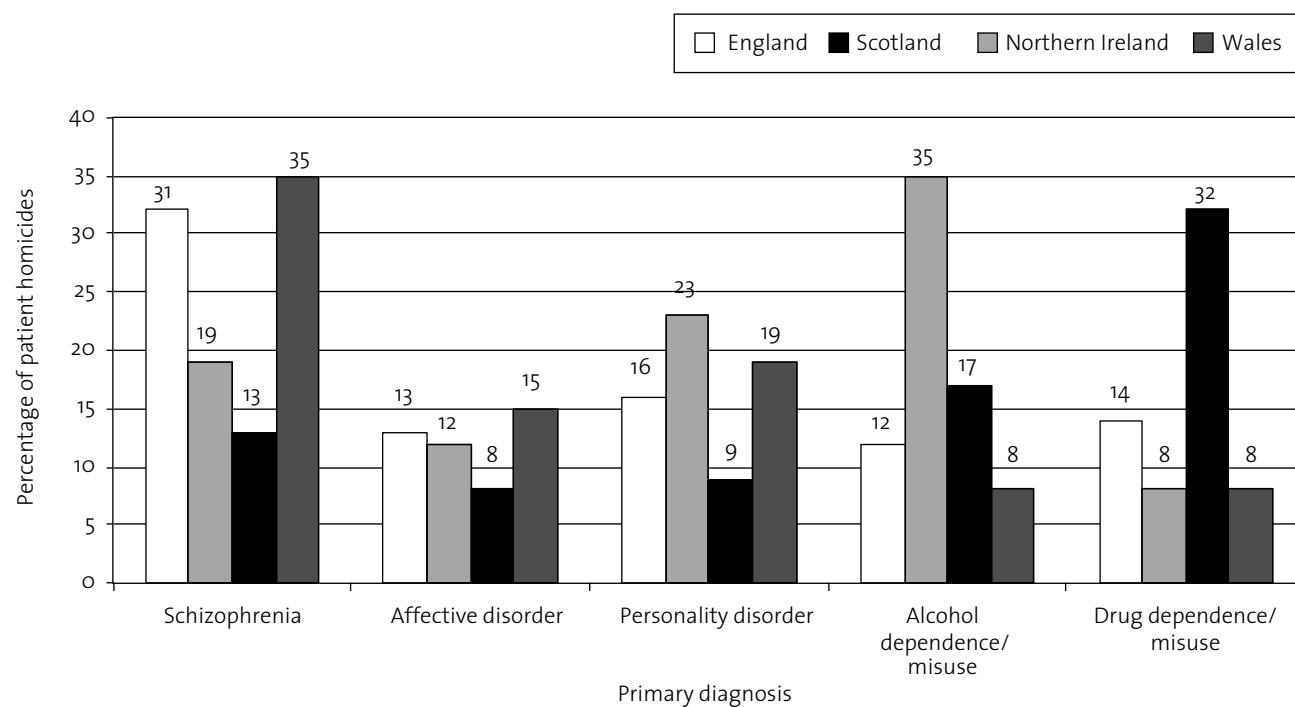
Note: Figures from 2008 include estimates based on late notifications.



5.6 Patient homicide

- In 2002-2012 there were 828 homicides by patients in the UK, an average of 75 per year. The figure for 2012 was 66.
- The primary diagnoses for patient homicide vary by UK country (Figure 90).
- Many patients did not have severe mental illness and had a primary diagnosis of personality disorder or drug/alcohol dependence/misuse. This varied by country.

Figure 90: Primary diagnosis in patient homicide, by UK country (2002-2012)



5.7 Intimate partner homicide

- Overall, most of these people were not receiving mental health care; therefore most were not preventable by mental health services (Table 9).
- The percentage of intimate partner homicide perpetrators who were mental health patients (13%) is similar to the figure for homicide overall (11%).
- Mental health services have a role in reducing intimate partner homicides where individuals are in contact with services.



Table 9: Intimate partner homicide by UK country (2002-2012)

	UK Number = 7,407	England Number = 6,007	Northern Ireland Number = 209	Scotland Number = 926	Wales Number = 265
Number of IPH: general population	1152	959	38	95	60
*IPH as a % of all homicides	19%	20%	20%	12%	26%
Number of IPH by male perpetrators with female victims	884	750	23	65	46
Number of IPH perpetrators with convictions for violence	367	301	8	34	24
Number of IPH patient perpetrators	149	115	6	22	6
*Patient IPH as a % of all IP homicide	13%	12%	16%	23%	10%

* The denominator only includes cases where the relationship between the victim and offender was known (i.e. this is a valid percent).



6. RECENT PUBLICATIONS FROM THE INQUIRY

A full list of Inquiry reports and publications can be found on the Inquiry website:

[www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci - Publications](http://www.bbmh.manchester.ac.uk/cmhr/research/centreforsuicideprevention/nci-Publications)

Appleby L (2014). What will the Francis Inquiry mean for mental health research? *Lancet Psychiatry* DOI: 10.1016/S2215-0366(14)70242-1.

Hunt IM, Rahman MS, While D, Windfuhr K, Shaw J, Appleby L, Kapur N (2014). Safety in crisis resolution home treatment services in England: an investigation of suicide trends 2003-2011. *Lancet Psychiatry* DOI: 10.1016/S2215-0366(14)70250-0.

Rodway C, Flynn S, While D, Rahman MS, Kapur N, Appleby L, Shaw J (2014) Mental health patients as victims of homicide: a national clinical survey. *Lancet Psychiatry* DOI: 10.1016/S2215-0366(14)70221-4.

Flynn S, Rodway R, Appleby L and Shaw J (2014) Serious Violence by People with Mental Illness: National Clinical Survey. *Journal of Interpersonal Violence*, 29(8):1438-1458.

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Contact us:

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness,
Centre for Mental Health and Risk
Jean McFarlane Building
University of Manchester
Oxford Road
Manchester,
M13 9PL

E-mail:

nci@manchester.ac.uk

Visit us on our website:

www.bbmh.manchester.ac.uk/cmhr



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