



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

ANNUAL REPORT:
England, Wales, Scotland, and Northern Ireland

JULY 2012

CONTENTS

ACKNOWLEDGEMENTS	5
KEY FINDINGS	6
KEY MESSAGES FOR SERVICES	6
PRESENTATION OF FINDINGS	7
1. ENGLAND	14
1.1 Suicide	14
1.1.1 Suicide in the general population	14
1.1.2 Patient suicide	20
1.2 Homicide	32
1.2.1 Homicide in the general population	32
1.2.2 Homicide by mentally ill people in the general population	35
1.2.3 Patient homicide	36
1.3 Sudden unexplained death in mental health in-patients (SUD)	42



2.	WALES	44
2.1	Suicide	44
2.1.1	Suicide in the general population	44
2.1.2	Patient suicide	51
2.2	Homicide	58
2.2.1	Homicide in the general population	58
2.2.2	Homicide by mentally ill people in the general population	59
2.2.3	Patient homicide	59
2.3	Sudden unexplained death in mental health in-patients (SUD)	60
3.	SCOTLAND	61
3.1	Suicide	61
3.1.1	Suicide in the general population	61
3.1.2	Patient suicide	68
3.2	Homicide	76
3.2.1	Homicide in the general population	76
3.2.2	Homicide by mentally ill people in the general population	77
3.2.3	Patient homicide	78



4. NORTHERN IRELAND	80
4.1 Suicide	80
4.1.1 Suicide in the general population	80
4.1.2 Patient suicide	86
4.2 Homicide	93
4.2.1 Homicide in the general population	93
4.2.2 Homicide by mentally ill people in the general population	94
4.2.3 Patient homicide	94
5. UK COMPARISONS	95
5.1 Suicide	95
5.2 Homicide	99
6. RECENT PUBLICATIONS FROM THE INQUIRY	101
7. REFERENCES	103
FUNDING	105



REPORT AUTHORS

Louis Appleby
Nav Kapur
Jenny Shaw
Isabelle M Hunt
Sandra Flynn
David While
Kirsten Windfuhr
Alyson Williams
Cathryn Rodway
Alison Roscoe
Mohammad S Rahman

A list of Inquiry members of staff can be found on the Inquiry website: www.manchester.ac.uk/medicine/nci

ACKNOWLEDGEMENTS

The Inquiry would like to acknowledge the assistance it has received from individuals throughout the NHS, government departments and other organisations, including: the Department of Health, the Home Office Statistics Unit of Home Office Science, the Office for National Statistics, Health Solutions Wales, the Scottish Government, the General Register Office for Scotland, the Scottish Crown Office, the Scottish Government Justice Analytical Services, the Northern Ireland Statistics and Research Agency (the General Register Office Northern Ireland), the Northern Ireland Courts and Tribunal Service, the Department of Health, Social Services and Public Safety in Northern Ireland, Hospital Episode Statistics and Greater Manchester Police.

Responsibility for the analysis and interpretation of the data provided from government offices rests with the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness and not with the original data provider.



KEY FINDINGS

- In-patient suicides show a sustained fall across all countries.
- There was a substantial fall in in-patient suicides following absconding in England. Numbers were too small for analysis in other countries.
- Deaths under crisis resolution/home treatment are now more frequent than under in-patient care in England and Wales.
- In England and Wales, there has been a fall in the number of patient suicides following refusal of treatment or care.
- There are few suicides by patients refusing treatment or care while under a community treatment order (England and Wales).
- There has been a decrease in the number of patient suicides by overdose of tricyclic antidepressants in England, Wales and Scotland.
- Figures for alcohol misuse/dependence among suicides and homicides are higher in Scotland and Northern Ireland. Drug dependence is higher in Scotland.
- Suicides in Northern Ireland continue to increase in contrast to England, Wales and Scotland.
- The number of patient homicides in England has fallen since a peak in 2006.

KEY MESSAGES FOR SERVICES

- There have been improvements in patient safety across all countries, especially among in-patients. Services should maintain these successful measures.
- Safer prescribing of psychotropic drugs remains an important aspect of suicide prevention.
- Services should now focus on safety in crisis resolution/home treatment. More evidence is needed on deaths of patients under these services.
- Safety in mental health services could be improved by addressing co-morbid use of alcohol, especially in Scotland and Northern Ireland.
- Suicide prevention in Northern Ireland faces particular difficulties because of rising rates, increased suicides by hanging, and a strong association with alcohol.



PRESENTATION OF FINDINGS

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

- Suicide
- Homicide

Findings for the Sudden Unexplained Death study are presented for England and Wales only.

England and Wales

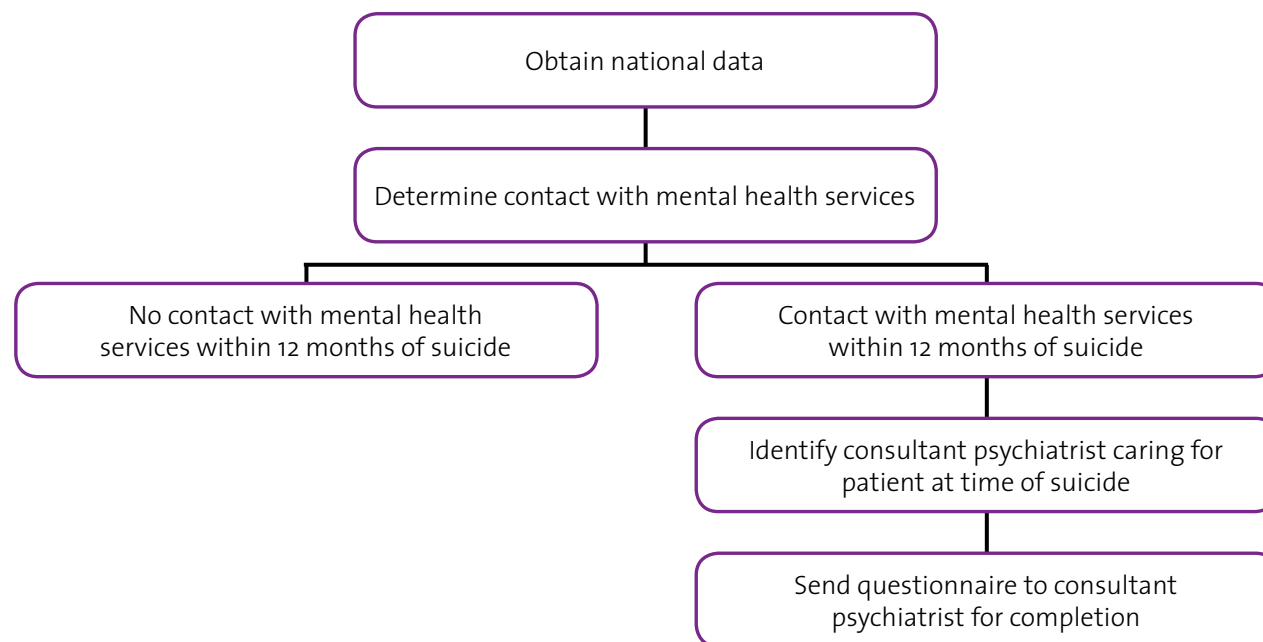
Method of data collection

The method of data collection for suicide, homicide, and sudden unexplained death is similar in England and Wales.

Suicide

The report covers deaths by suicide for the period January 2000 to December 2010. 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).¹

Figure A: The stages of data collection for cases of suicide



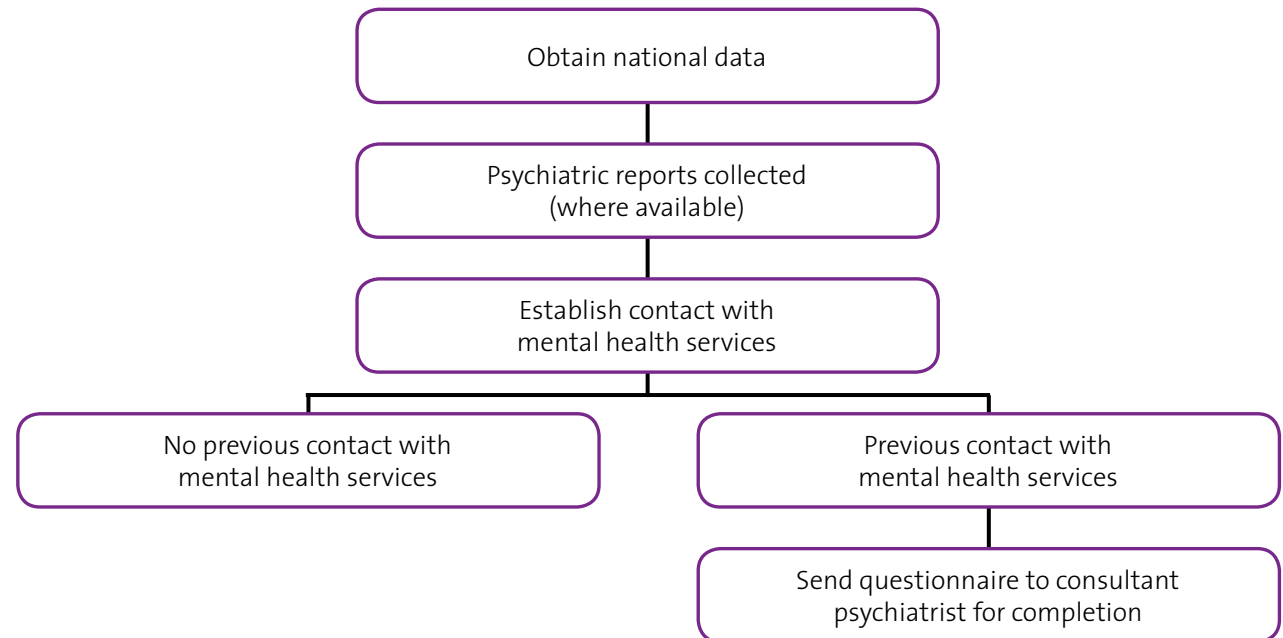
Homicide

The report covers people convicted of homicide, presented by year of conviction between January 1999 and December 2009. The Inquiry is notified of all convictions for homicide by the Home Office Statistics Unit of Home Office Science.² Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain.

Not all people who had symptoms of mental illness at the time of the offence were patients, and not all patients had symptoms of mental illness at the time of the offence.

General population homicide conviction figures in sections 1.2 and 2.2 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 Home Office in January 2012.³

Figure B: The stages of data collection for cases of homicide



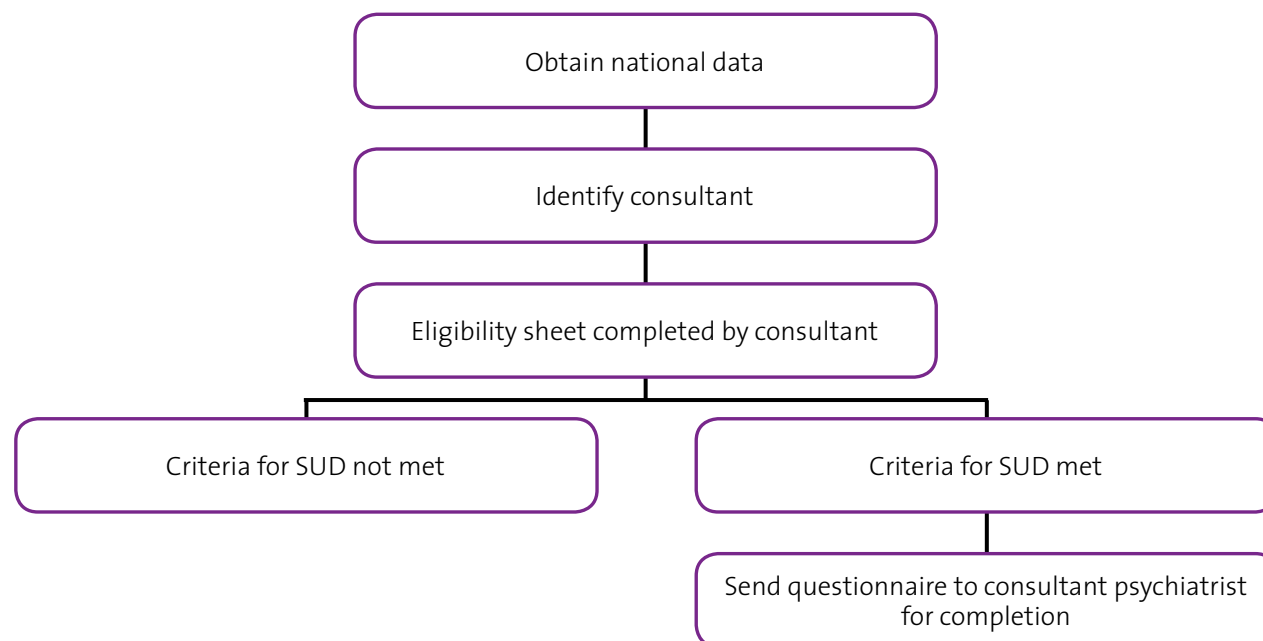
Sudden unexplained death

This report covers sudden unexplained death (SUD) in psychiatric in-patients for the period January 2000 to December 2010. To identify cases of SUD, data on all patient deaths within psychiatric and learning disabilities in-patient hospitals in England are provided by Hospital Episode Statistics (HES) ⁴, previously the NHS-Wide Clearing Service. For Wales, data are provided by Health Solutions Wales (HSW).⁵ During the report period the number of all in-patient deaths notified to the Inquiry for England was 6,412 and in Wales 690.

A summary of our data collection processes are outlined in Figures A – C. A detailed description of data collection methods in England and Wales is available in previous reports: *Annual Report* (2009, 2010) ^{6,7}, and *Avoidable Deaths* (2006)⁸, which are accessible on our website www.manchester.ac.uk/medicine/nci/.

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

Figure C: The stages of data collection for sudden unexplained death



Data completeness

Data completeness for patient suicides is 97% for England and 98% for Wales in the report period. Completeness is lower in the final year reported (71% for England, 77% for Wales), reflecting the time required to process the data. For patient homicides, data completeness is 98% in England in the report period. Completeness was 76% in the final year reported for England.

For the final year of the suicide and homicide analysis we therefore estimate the final number of cases based on data completeness in previous years (presented as a dotted line in the figures). Projected figures for suicide are based on the average annual return of Inquiry questionnaires, i.e. adjusted to an assumed final figure of 97% for England and 98% for Wales, and for homicide in England, 98%. For homicide in Wales, numbers are too small to calculate projected figures. For sudden unexplained death, actual figures are shown, including those in the final year.

Scotland

Method of data collection

Suicide

This report covers deaths by suicide for the period January 2000 to December 2010. Information on all general population suicides (as defined in England and Wales) is collected from the General Register Office for Scotland (GROS).⁹

Homicide

This report covers homicide convictions, presented by year of conviction between January 1999 and December 2009. Information is collected from the Scottish Government Justice Analytical Services, with additional data obtained from the Scottish Crown Office. Homicides that do not lead to conviction are not included in this report. Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain.

Not all people who had symptoms of mental illness at the time of the offence were patients, and not all patients had symptoms of mental illness at the time of the offence.

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 December 2011.¹⁰

See Figures A – B for a summary description of our data collection processes. A detailed description of data collection methods in Scotland are described in a previous report for Scotland, *Lessons for Mental Health Care in Scotland*¹¹, accessible on our website www.manchester.ac.uk/medicine/nci/.

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



Data completeness

Data completeness for patient suicides is 99% in the report period. Completeness is lower in the final year reported (89%), reflecting the time required to process the data. For patient homicide, data completeness is 100% in the report period.

As in England and Wales, for the final year of the suicide analysis we estimate the final number of cases based on data completeness in previous years (presented as a dotted line in the figures). Projected figures are based on the average annual return of Inquiry questionnaires, i.e. adjusted to an assumed final figure of 99% complete. As the data is 100% complete for homicide, projections were not carried out.

Northern Ireland

Method of data collection

Suicide

This report covers deaths by suicide for the period January 2000 to December 2010. Information on all general population suicides (as defined in England and Wales) is collected from the Northern Ireland Statistics and Research Agency (NISRA).¹²

Homicide

This report covers homicide convictions, presented by year of conviction between January 1999 and December 2009. Information is collected from the Northern Ireland Courts and Tribunal Service. Identification of mental illness in non-patients relies on psychiatrists preparing a report for the court, which the Inquiry then obtain.

Not all people who had symptoms of mental illness at the time of the offence were patients, and not all patients had symptoms of mental illness at the time of the offence.

General population homicide conviction figures in section 4.2 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 2012.¹³

See figures A-B for a summary description of our data collection processes. A detailed description of data collection methods in Northern Ireland are described in a previous report for Northern Ireland, *Suicide and Homicide in Northern Ireland*¹⁴, accessible on our website www.manchester.ac.uk/medicine/nci/.

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

Data completeness

Data completeness for patient suicides is 98% in the report period. Completeness is lower in the final year reported (62%), reflecting the time required to process the data.

As in England, Wales, and Scotland, for the final year of the suicide analysis we estimate the final number of cases based on data completeness in previous years (presented as a dotted line in the figures). Projected figures are based on the average annual return of Inquiry questionnaires, i.e. adjusted to an assumed final figure of 98% complete. For homicide in Northern Ireland, numbers are too small to calculate projected figures.



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 v11.¹⁵ 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 incomplete final year, i.e. 2000-2009 for suicide and 1999-2008 for homicide for patients. General population trends were calculated using all years. 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 (age 10 and over) as a denominator obtained from ONS and GROS. These were also used to calculate rates for suicide by Strategic Health Authority (England) and Health Boards (Wales, Scotland, and Northern Ireland). 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). Mid-year population estimates obtained from GROS have been revised for the period 2002 to 2009/10 only. Rates by Scottish Health Boards are therefore reported for this time period only. In April 2009, the former regional Health Boards of Northern Ireland were merged to form one Health and Social Care Board, therefore rates are reported up to 2009 only.

General population and Strategic Health Authority 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 Health¹⁶, the Scottish Public Health Observatory website¹⁷, and the NISRA website¹² due to differences in measurement described in *Avoidable Deaths*⁸, *Lessons for Mental Health Care in Scotland*¹¹, and *Suicide and Homicide in Northern Ireland*¹⁴. The main reason for the difference in our general population rates compared to those published on the ONS and Scottish Public Health Observatory websites is that the Inquiry rates are crude rates based upon the number in the general population aged 10 and over. ONS rates include suicides aged 15 and over, whilst GROS rates are based on the whole population (including those aged under 10) which means the denominator is bigger and the resulting rates are lower. Both ONS and GROS also calculate rates based on European age-standardised population data (to adjust for differences in age structure across countries). Further details regarding rate differences in Scotland can be found in the report *Lessons for Mental Health Care in Scotland* (page 27).¹¹



General population suicide numbers and rates in this report differ from those published on the NISRA website¹² as our figures are based on the date of death occurrence while NISRA figures are based on the date the death was registered. The period of time between when a suicide occurs and when the death is registered can be many months. Rates also differ because Inquiry calculations are based upon the number of people in the general population aged 10 years and over, whilst NISRA use the total number in the general population. Further details can be found in the report *Suicide and Homicide in Northern Ireland* (page 23).¹⁴

In addition to general population suicide rates, the Mental Health Minimum Dataset (MHMD)¹⁸ was used to ascertain rates of suicide in those in contact with NHS mental health services in England. Rates of suicide (for England only based on clinical denominators from the MHMD) were calculated for the years that currently overlap with Inquiry data (2004-2010) (see section 1.1.2, Figure 8). During this period there was an average of 1,192,965 people in contact with NHS mental health services each year in England.

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 2000-2010, the Inquiry was notified of 49,145 deaths in the general population that received a suicide or undetermined verdict. These are referred to as suicides throughout the report.

1.1.1 Suicide in the general population

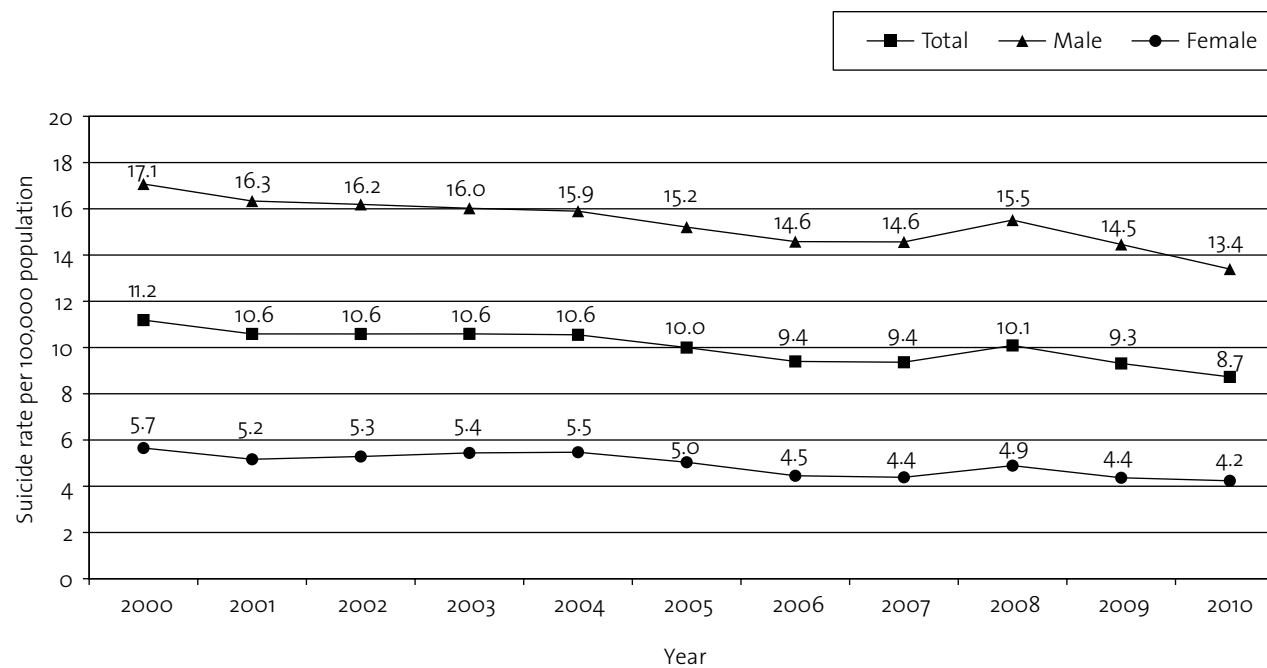
- There was an overall fall in the number and rate of suicides despite an increase in 2008 (Table 1; Figure 1). This pattern was seen in both males and females.
- Rates fell in all age-groups except those aged 45-64, where the rate remained stable but the number of suicides increased (Figure 2).

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	3564	3442	3439	3428	3426	3308	3196	3219	3454	3241	3027
Female	1255	1154	1187	1228	1241	1151	1023	1013	1136	1019	994
Total	4819	4596	4626	4656	4667	4459	4219	4232	4590	4260	4021



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



Variation in suicide by Strategic Health Authority (SHA)

- There was some variation in suicide rates by SHA of residence at the time of death (average rate 2008-2010). The highest rate of suicide was in the North West, at 10.5 per 100,000 population, and the lowest in London at 8.1 per 100,000 population (Figure 3).
- The rate of suicide within each SHA decreased over the report period. The greatest falls in the rate of suicide were seen in London, East Midlands, the North West, the North East, and Yorkshire and the Humber (Figure 4). The South West showed the smallest fall.

Figure 2: Rates of suicide in the general population, by age-group

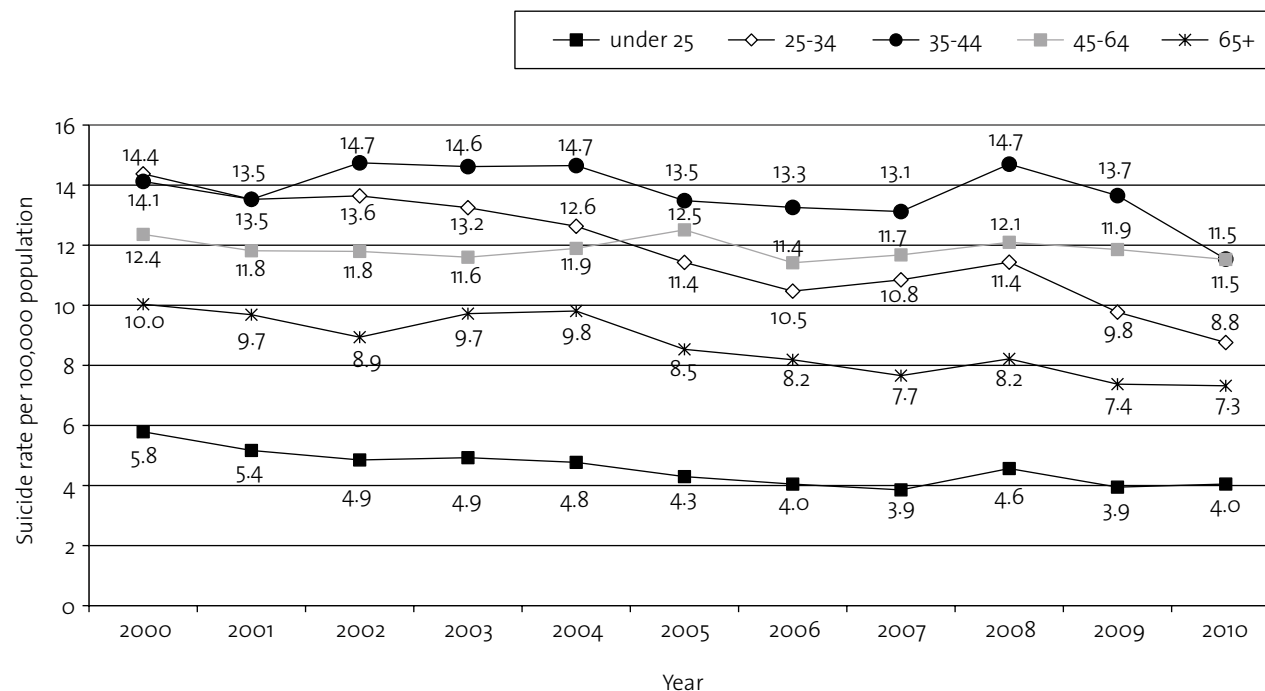


Figure 3: Rate of suicide, by Strategic Health Authority (average rate 2008-2010)

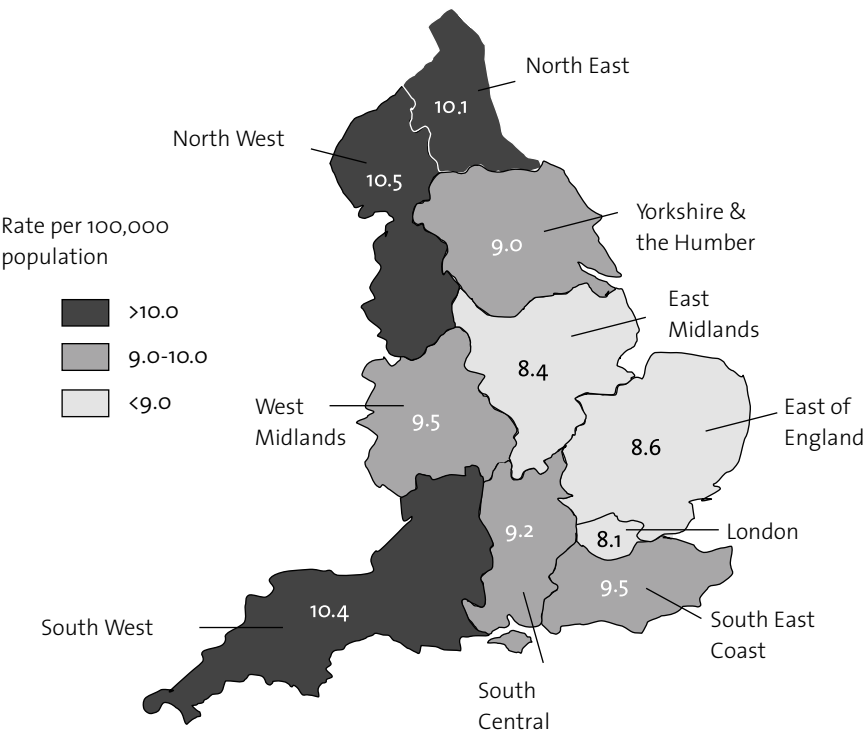
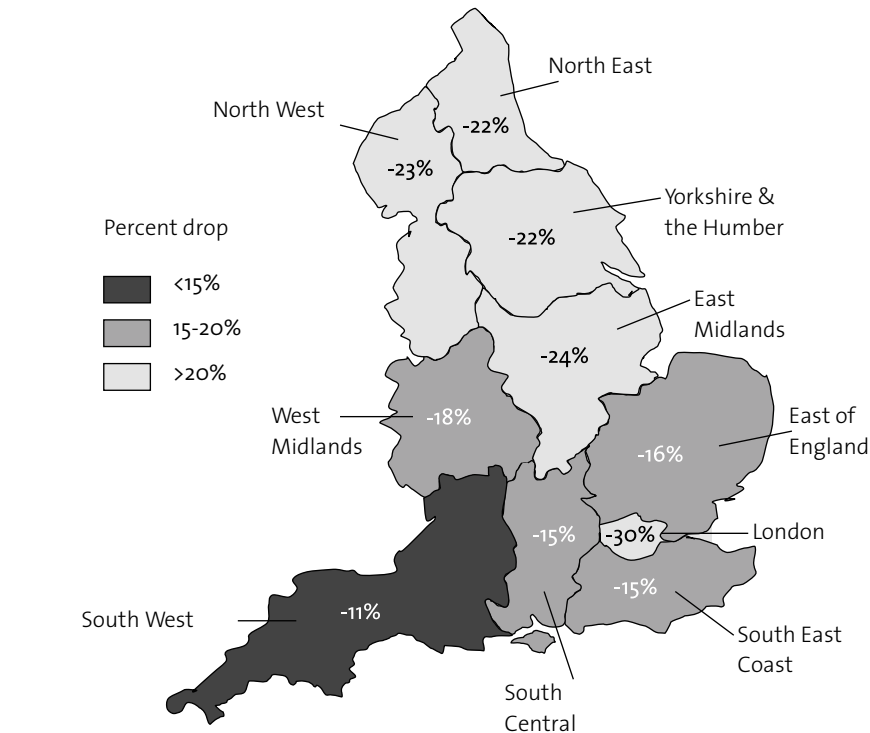


Figure 4: Change in the rate of suicide from 2000 to 2010, by Strategic Health Authority



Note: These before and after rates are based on 3-year averages (1998-2000 and 2008-2010)



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report), self-poisoning (overdose) and jumping/multiple injuries (mainly jumping from a height or being struck by a train). Less frequent methods were drowning, carbon monoxide (CO) poisoning, firearms, and cutting/stabbing.
- Over the report period there were changes in method of suicide. Suicide deaths by hanging increased, whilst those by self-poisoning and jumping decreased (Figure 5). Of the less common methods, deaths by drowning, CO poisoning, and firearms decreased (Figure 6).

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

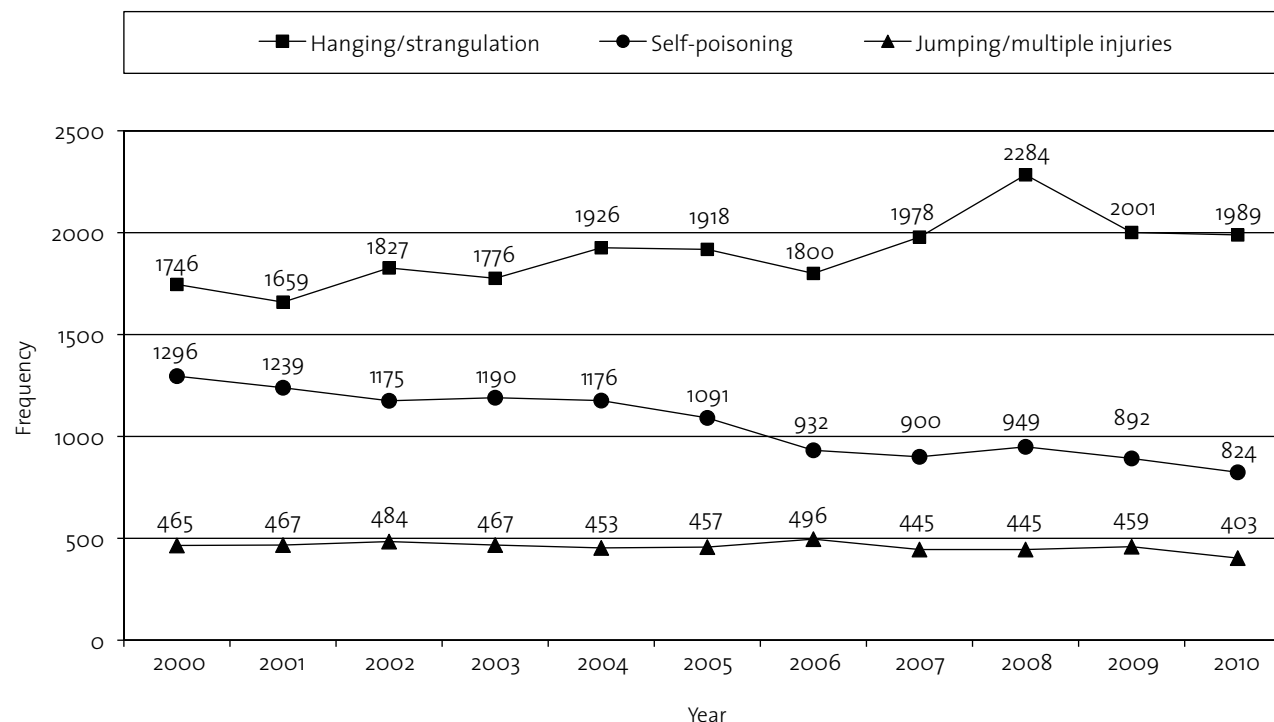
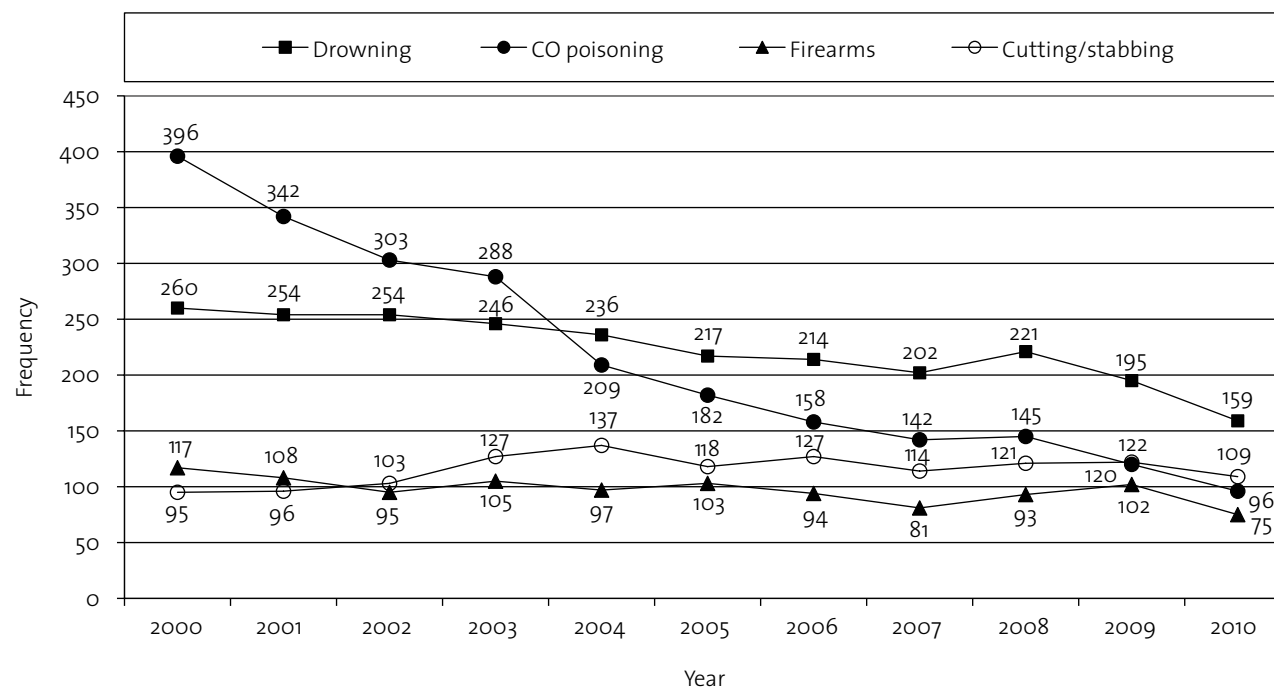


Figure 6: Suicide in the general population: other causes of death



1.1.2 Patient suicide

Patient suicide: numbers and rates

- During 2000-2010, 13,315 individuals (27% of general population suicides) were identified as patient suicides, i.e. the person had been in contact with mental health services in the 12 months prior to death. This represented an average of 1,210 patient suicides per year.
- There was a decrease in the number and rate of patient suicide using a general population denominator (Table 2; Figure 7).

- There was also a decrease in the rate of suicide between 2004-2010 when patient numbers rather than general population figures were used as the denominator (Figure 8).
- The number of patient suicides decreased in those aged under 25, and aged 25-44, but increased in those aged 45-64 (Figure 9). Numbers remained stable in those aged 65 and over.

Table 2: Number of patient suicides, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Male	823	845	834	800	866	794	737	758	791	726	788
Female	430	416	416	456	451	482	380	377	394	352	399
Total	1253	1261	1250	1256	1317	1276	1117	1135	1185	1078	1187

* Projected figures



- In many patient groups there was an apparent increase in suicide in 2010, but this should be interpreted cautiously as it is a provisional figure based on incomplete data.
- There were 9 suicide deaths among patients subject to a community treatment order (CTO) between 2009-2010. In addition, 6 patients who died had previously been on a CTO, but were not on a CTO at the time of suicide.

Figure 7: Rates of patient suicide, by sex

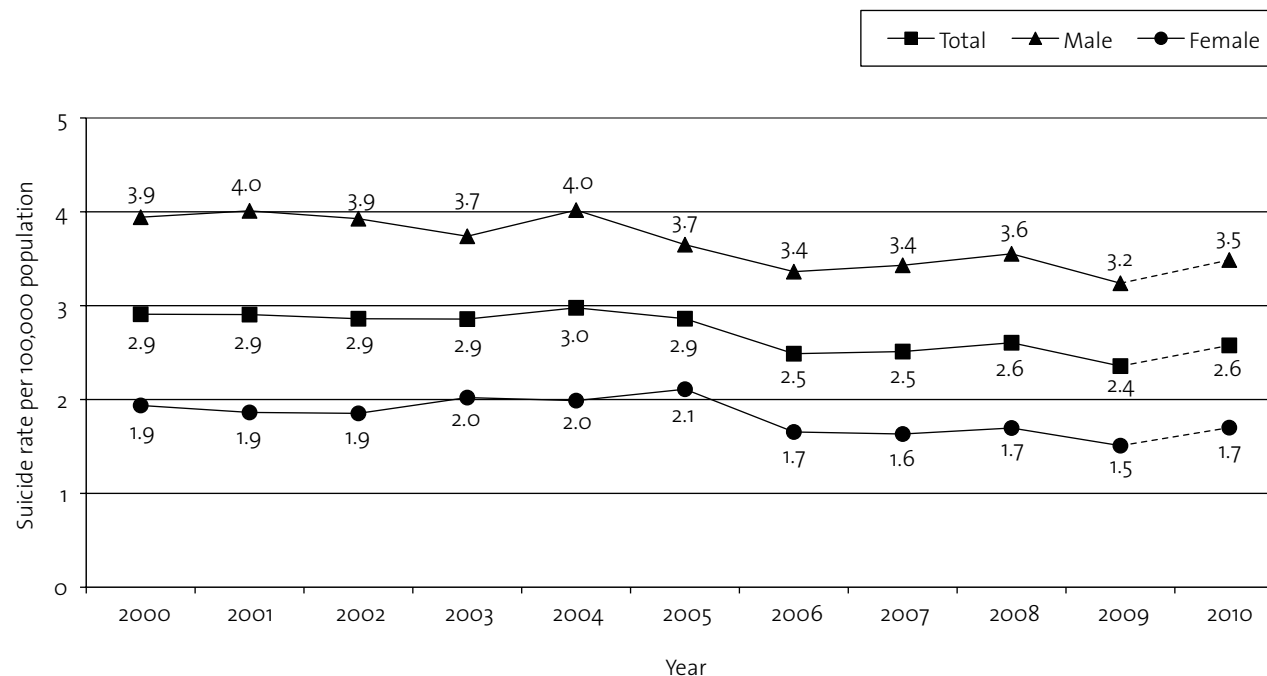
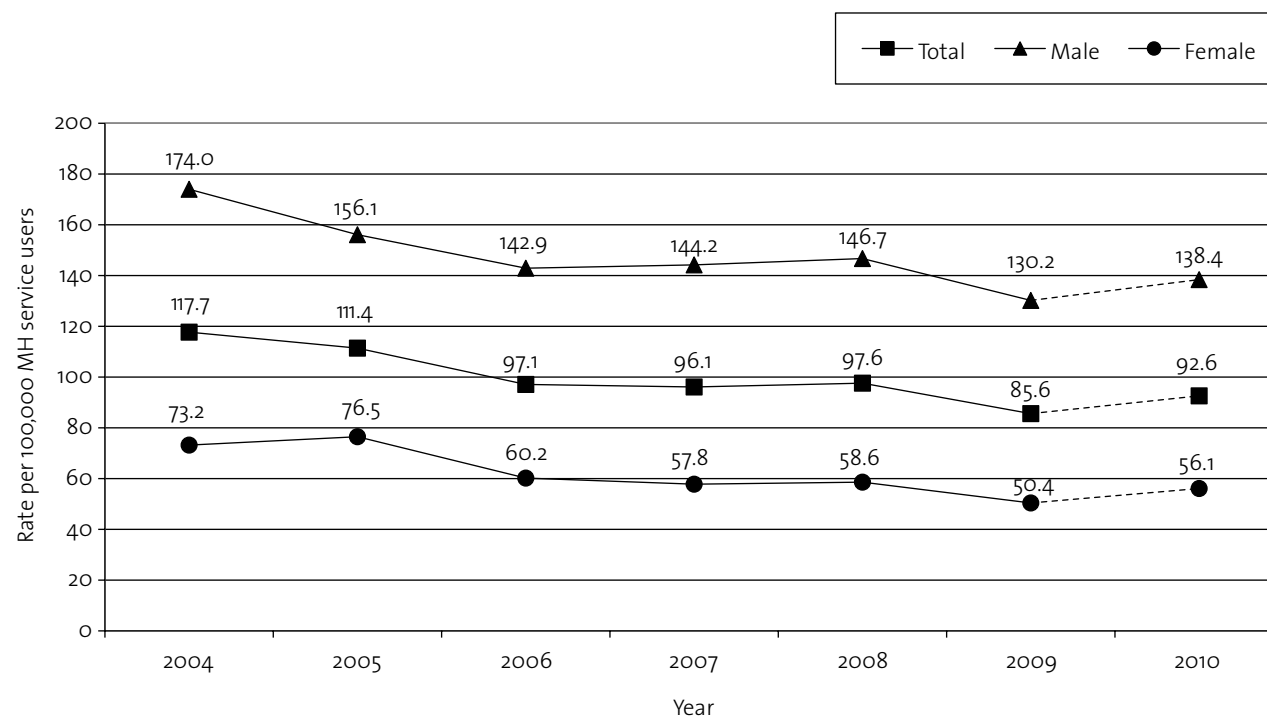


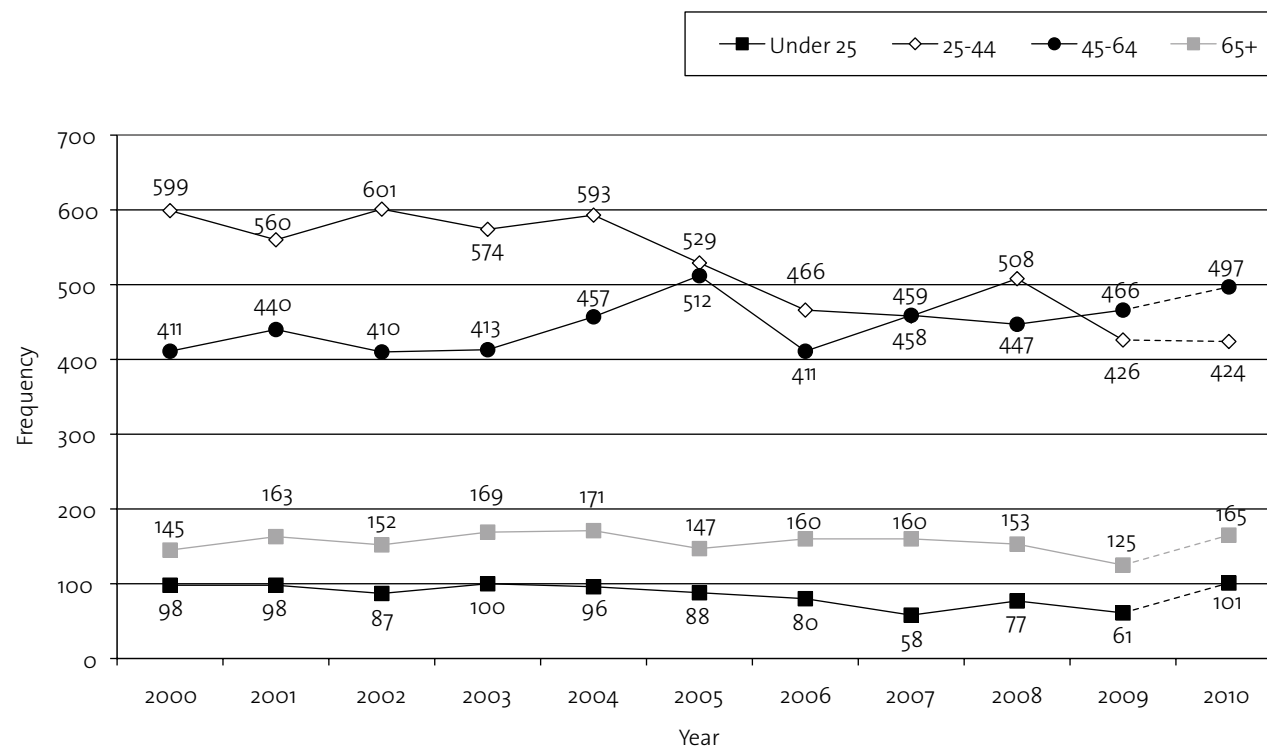
Figure 8: Rates of suicide per 100,000 mental health service users †



† The Mental Health Minimum Dataset was used to calculate rates for the available years (2004-2010)



Figure 9: Number of patient suicides, by age-group



Method of suicide by patients

- The most common methods of suicide by patients were hanging, self-poisoning, and jumping/multiple injuries.
- The number of deaths by self-poisoning, carbon monoxide (CO) poisoning, and drowning decreased (Figure 10). There was also a fall in the number of deaths by firearms (from an average of 15 deaths in 2000-2001 to 5 deaths in 2009-2010). Numbers remained stable for hanging, jumping/multiple injuries, and cutting/stabbing.
- The most common substances used in deaths by self-poisoning were opiates (21%), tricyclic antidepressants (16%) and paracetamol/opiate compounds (13%).
- There was a decrease of self-poisonings by tricyclic antidepressants and paracetamol/opiate compounds over the report period (Figure 11).

Figure 10: Patient suicide: main causes of death

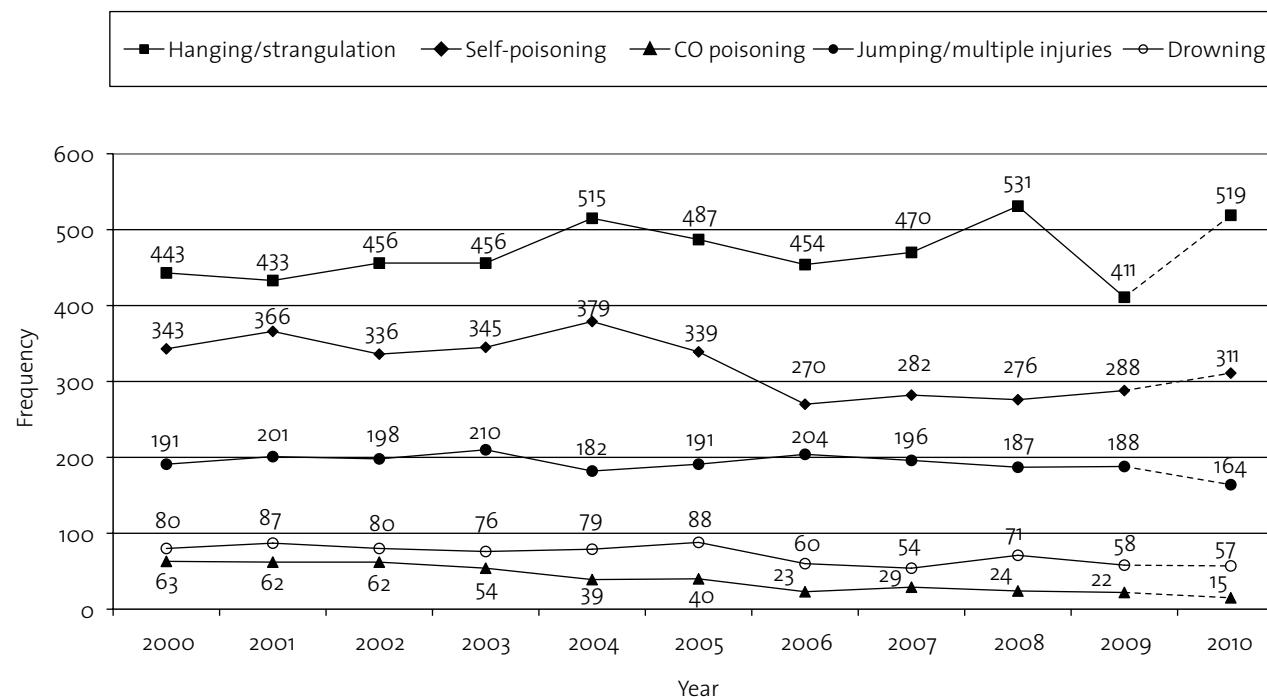
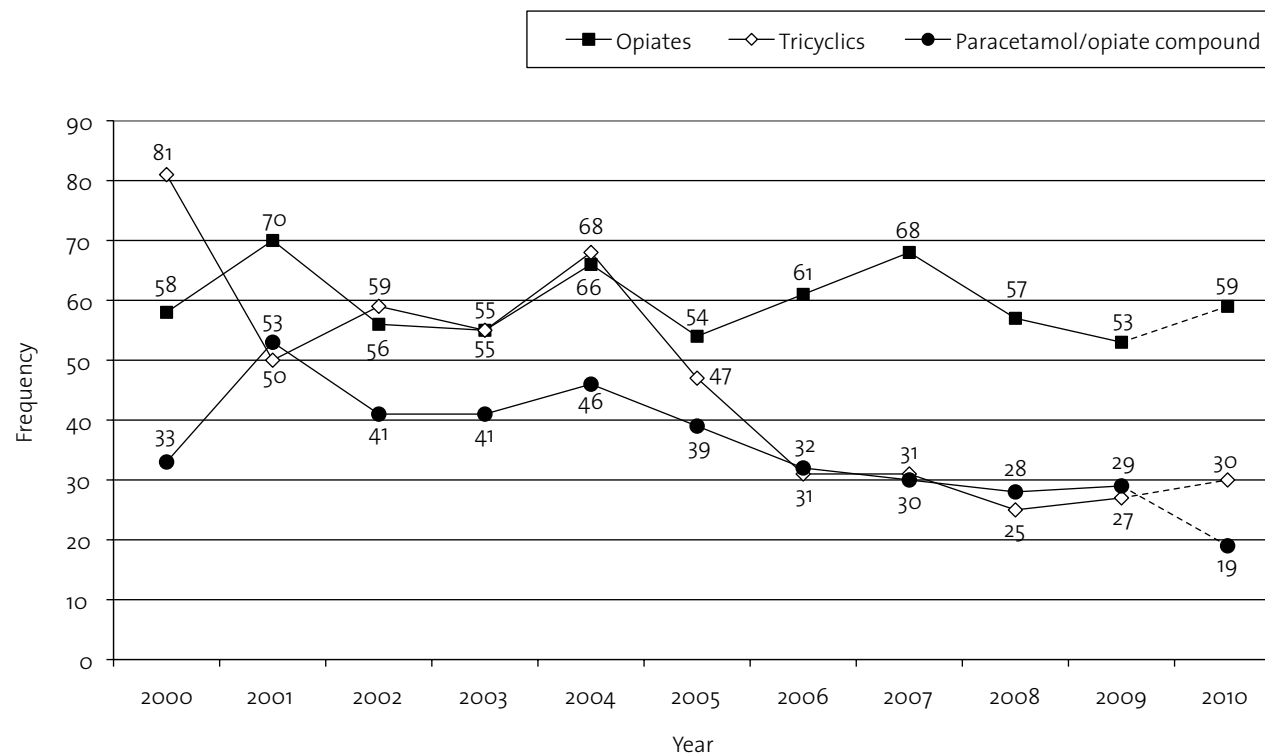


Figure 11: Patient suicide: main substances used in deaths by self-poisoning



In-patient suicide

- There were 1,556 in-patient deaths by suicide during the report period, 12% of patient cases, an average of 141 deaths per year.
- From 2000, there was a 62% fall in the number of in-patients dying by suicide (Figure 12). A reduction in the rate of in-patient suicide has previously been found^{19,20} (i.e. taking into account admission figures and time under in-patient care).
- The number of patients who died on the ward by hanging fell by 54% (Figure 12).
- In 2010 there were 14 confirmed hanging deaths on mental health wards (we estimate that this figure will rise to 19 once data collection is complete – see Figure 12). The ligature points in 11 of these related to doors or windows; in 6 cases, sheets or towels were used as the ligature.
- There were 388 (25%) detained in-patients who died by suicide, an average of 35 per year. The number of detained suicides decreased over the report period (Figure 13).

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

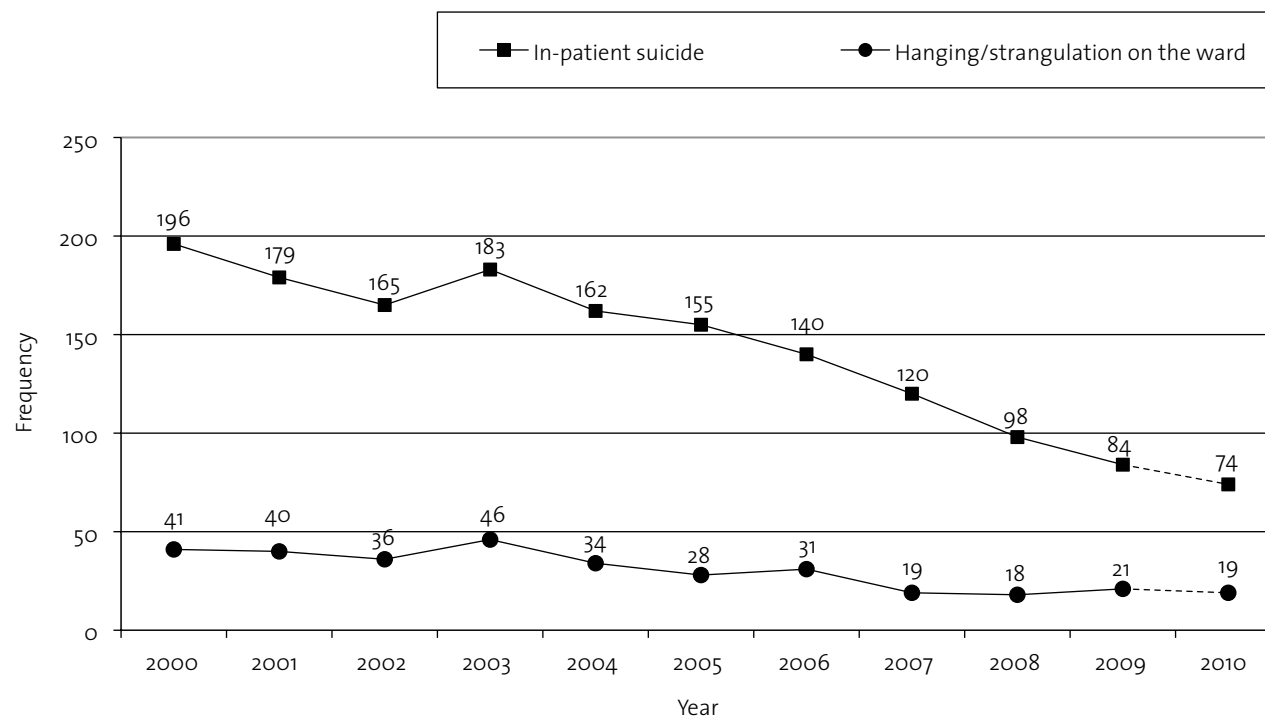
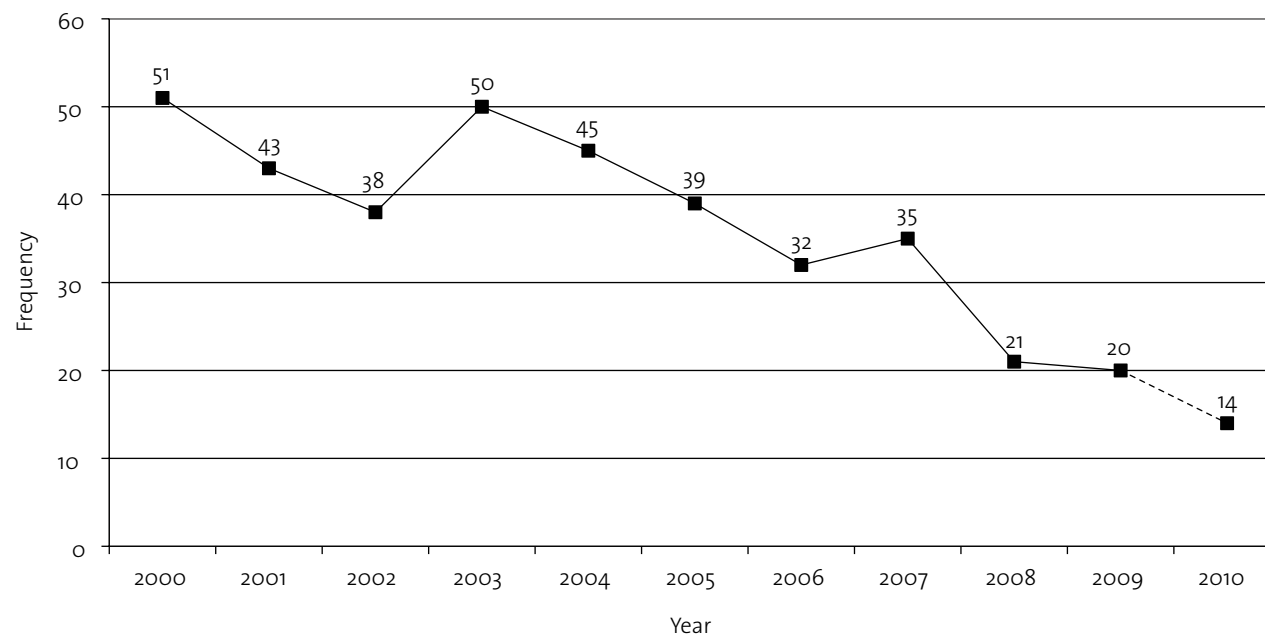


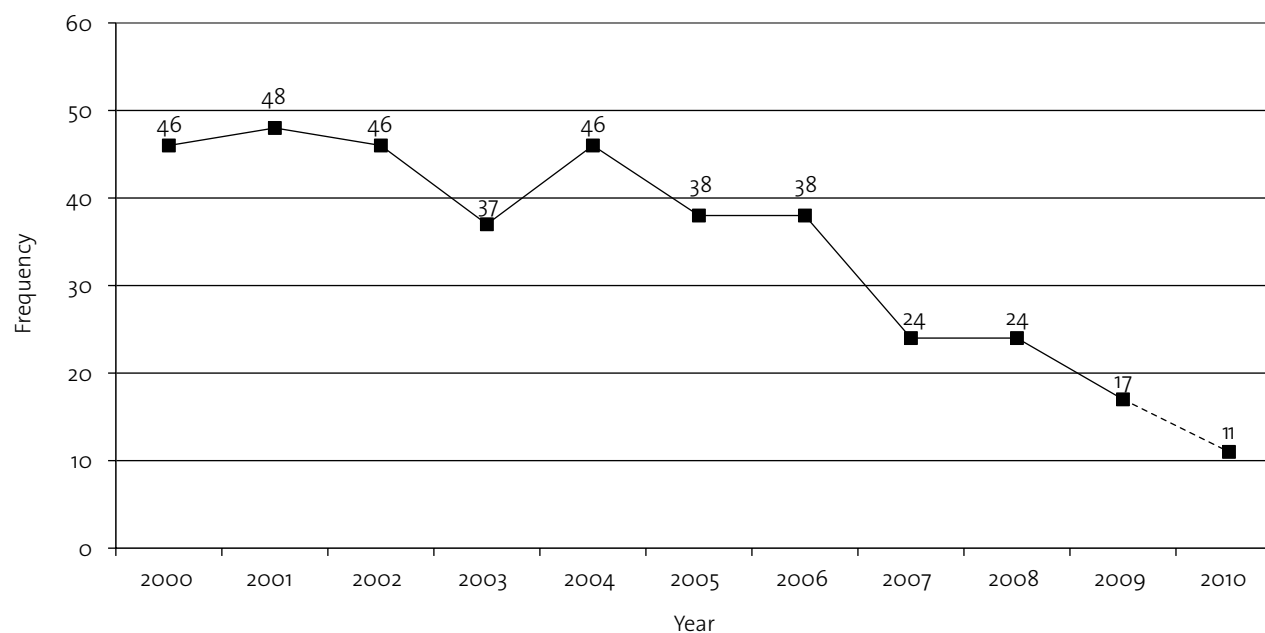
Figure 13: Number of detained in-patients who died by suicide



Absconding

- There were 375 in-patients who had absconded from the ward, 24% of all in-patient suicides, an average of 34 deaths per year.
- There was an overall fall in the number of suicides after absconding (Figure 14).

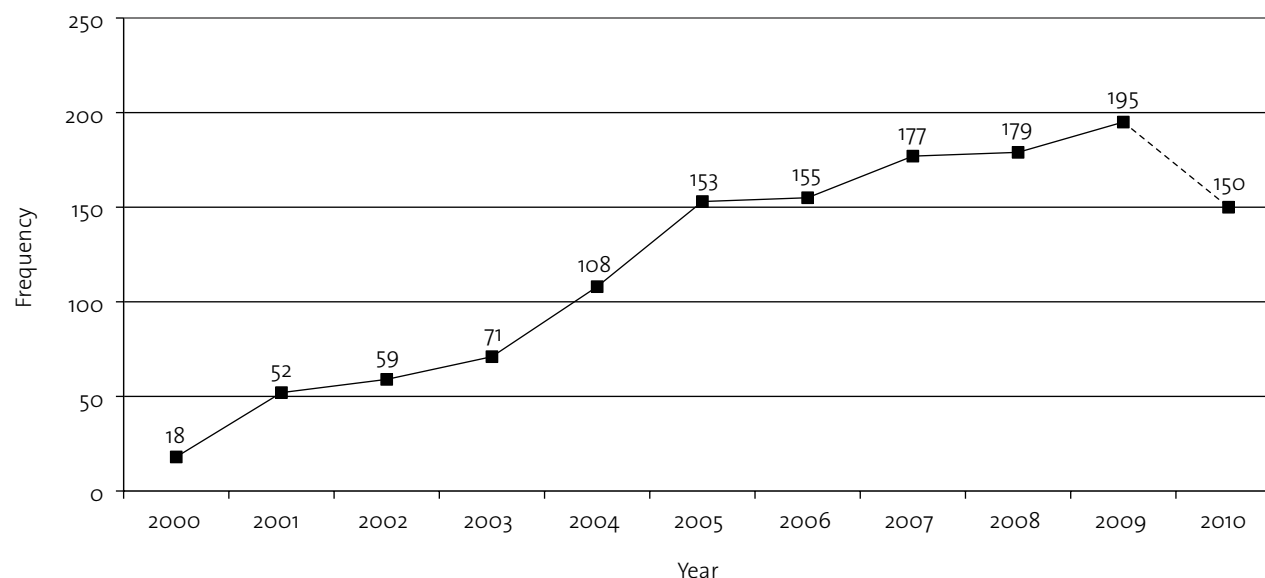
Figure 14: Patient suicide: number of in-patients who absconded from the ward



Crisis resolution/home treatment

- There were 1,317 suicides who had been under crisis resolution/home treatment teams, 11% of the total sample, an average of 120 deaths per year.
- There was an overall increase in the number of suicides under crisis resolution/home treatment services (Figure 15). As discussed previously²⁰ we were unable to calculate a rate of suicide in this group due to a lack of available denominator data.
- Since 2006 there have been more patient suicides under crisis resolution/home treatment services than in in-patient care reflecting a change in the nature of acute care. In the last 3 years almost twice as many suicides have occurred under crisis resolution/home treatment services.

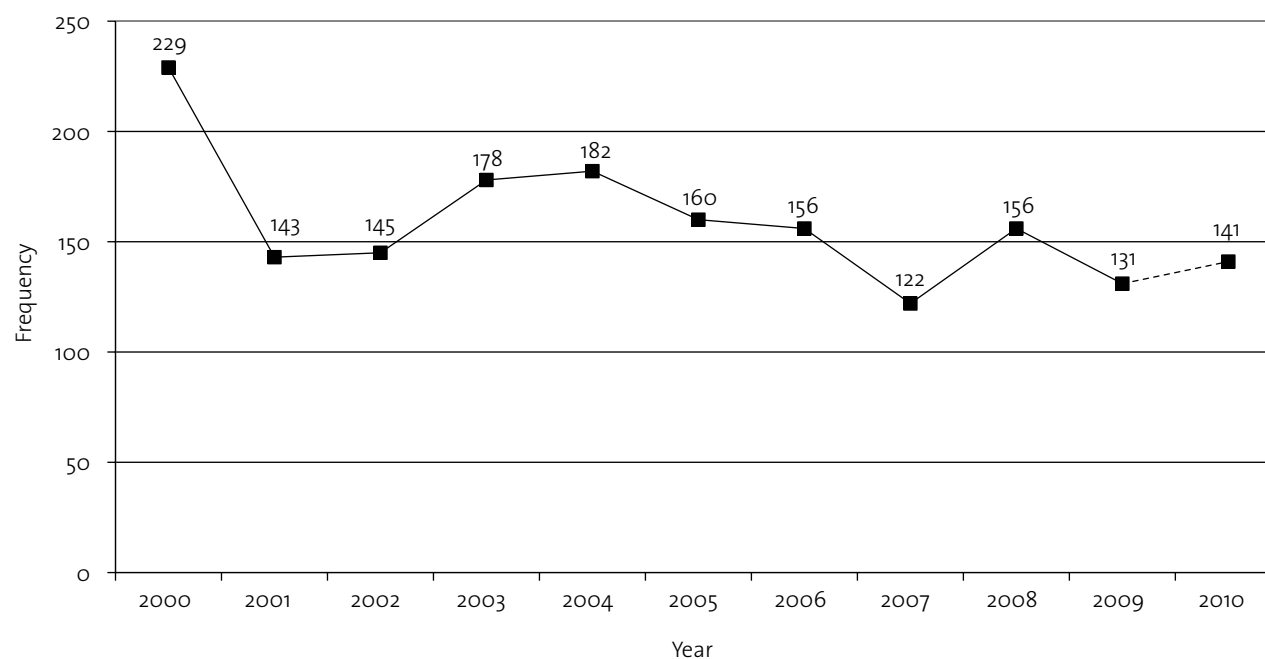
Figure 15: Patient suicide: number of patients under crisis resolution/home treatment services



Treatment refusal

- There were 1,743 suicides in which the patient was known to have refused drug treatment in the month before death, 14% of the total sample, an average of 158 deaths per year.
- There was an overall fall in the number of suicides in patients who refused drug treatment (Figure 16).
- Of the 131 patient suicides who refused drug treatment in 2009, only 2 were subject to a CTO at the time of death.

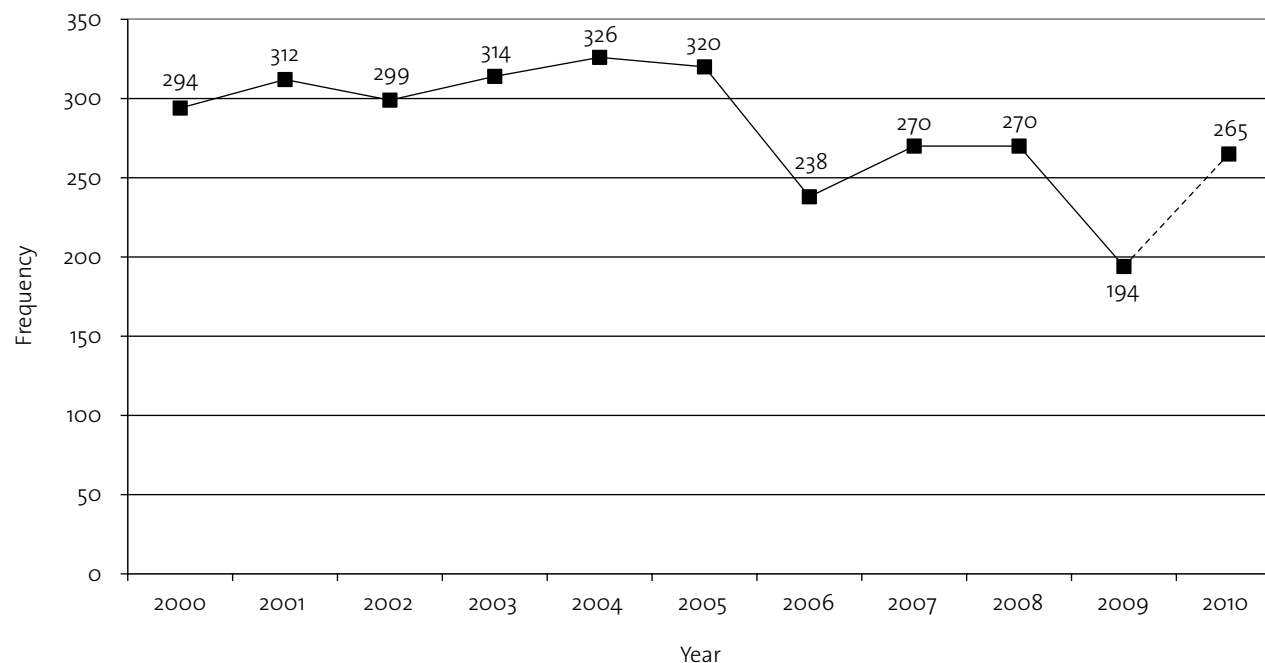
Figure 16: Patient suicide: number of patients who refused drug treatment



Missed contact

- There were 3,102 suicides by people who missed their final service contact, 27% of the total sample, an average of 282 deaths per year.
- There was an overall fall in the number of suicides in patients who missed their last appointment with services (Figure 17).
- Of the 194 patient suicides who missed their last appointment in 2009, 1 was subject to a CTO order at the time of death.

Figure 17: Patient suicide: number of patients who missed their last appointment with services



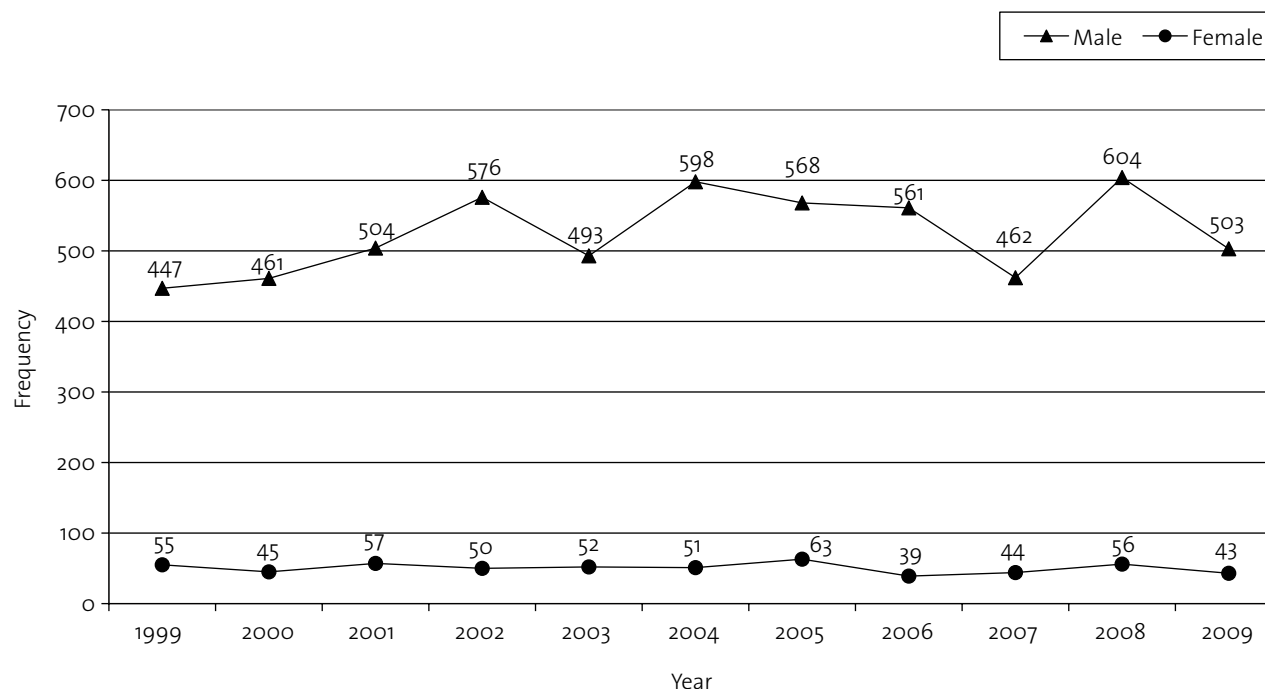
1.2 HOMICIDE

The Inquiry was notified by Home Office Statistics of 6,332 homicide convictions in the report period, 1999-2009. A psychiatric report was obtained on 2,425 (38%) homicide perpetrators.

1.2.1 Homicide in the general population

- The annual number of homicide convictions in the general population is shown in Figure 18. These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Home Office.³
- The most common method of homicide was the use of a sharp instrument (38% of the total sample); this increased over the report period.

Figure 18: Number of homicides in the general population, by sex of perpetrator



Variation in homicide by Strategic Health Authority (SHA)

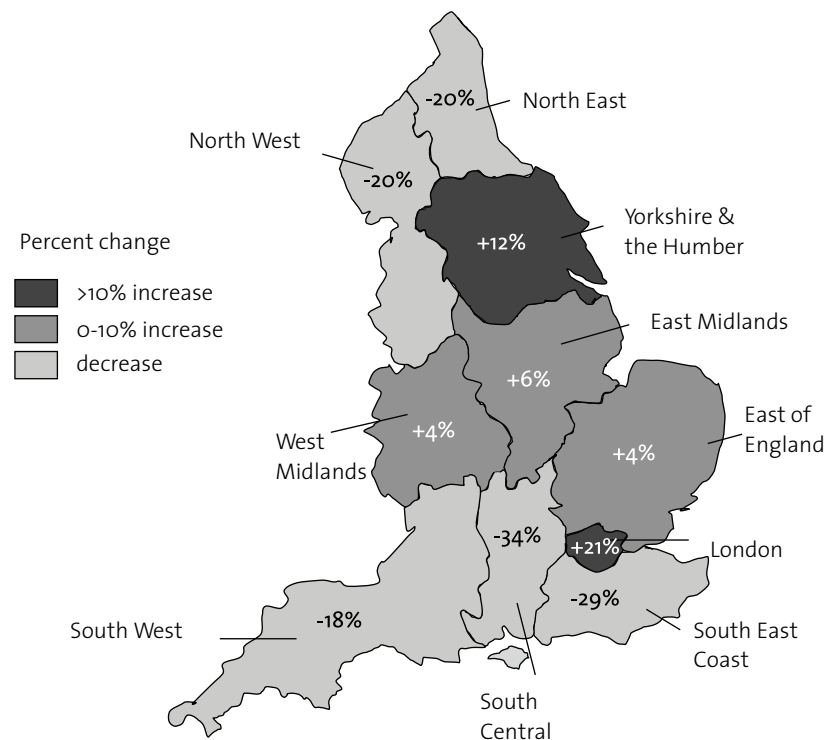
- There was some variation in homicide rates by SHA of residence at the time of the offence (2007-2009). The highest rate of homicide was in London, and the lowest in South East Coast and South Central (Figure 19).
- Five SHAs experienced a rise in homicide from 1997-1999 to 2007-2009 (Figure 20). The largest rise was in London.



Figure 19: Rate of perpetrators convicted of homicide, by Strategic Health Authority (average rate 2007-2009)



Figure 20: Change in the rate of perpetrators convicted of homicide from 1997 to 2009, by Strategic Health Authority



Note: These before and after rates are based on 3-year averages (1997-1999 and 2007-2009)

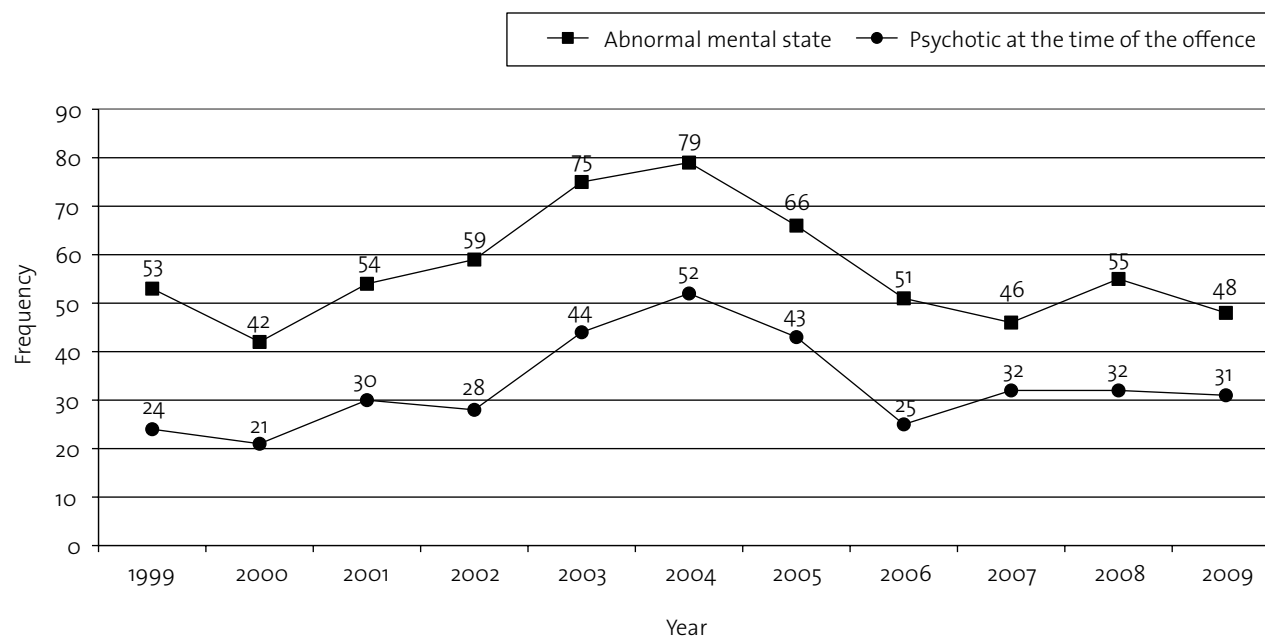


1.2.2 Homicide by mentally ill people in the general population

Perpetrators who were mentally ill at the time of the homicide

- The overall number of people with an abnormal mental state at the time of the homicide was 628, 10% of the total sample, an average of 57 per year.
- Three hundred and sixty-two were psychotic at the time of the offence, 6% of the total sample, an average of 33 per year.
- We previously reported a rise in homicides by people with symptoms of mental illness and psychosis at the time of the offence in England and Wales.⁶ However, for England, data from 2004 onwards suggested that this trend increase has reversed for those of abnormal mental state and psychosis at the time of the homicide (Figure 21).

Figure 21: Perpetrators with mental illness at the time of the homicide



1.2.3 Patient homicide

- During 1999-2009, 631 people convicted of homicide (10% of the total sample) were identified 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 57 homicides per year.
- The numbers fell from a peak in 2006 (Figure 22).
- There was an increase in the number of patient homicides by people aged under 25 (Figure 23).

Figure 22: Number of patient homicides, by sex of perpetrator

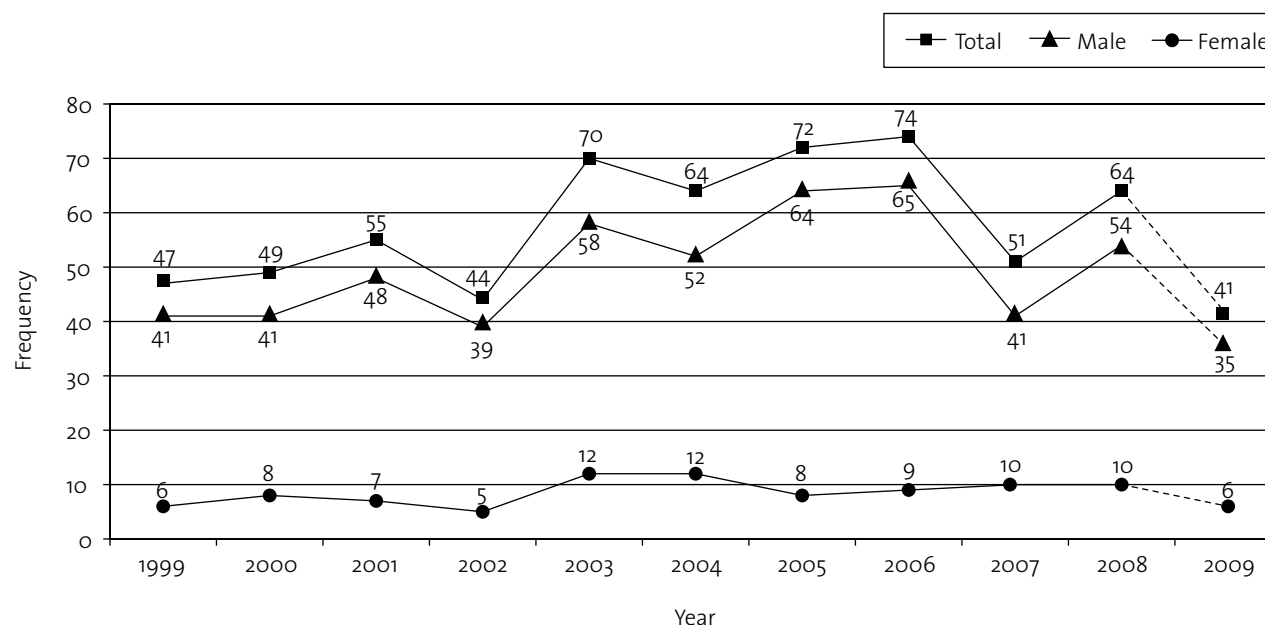
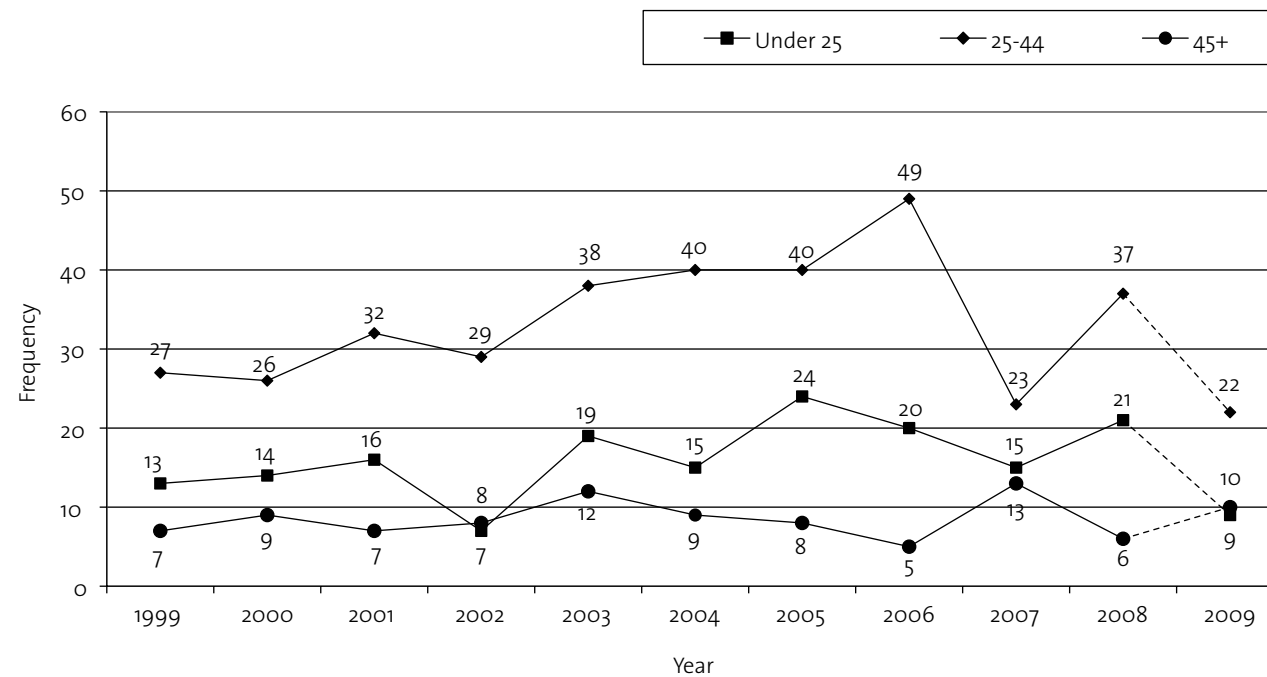


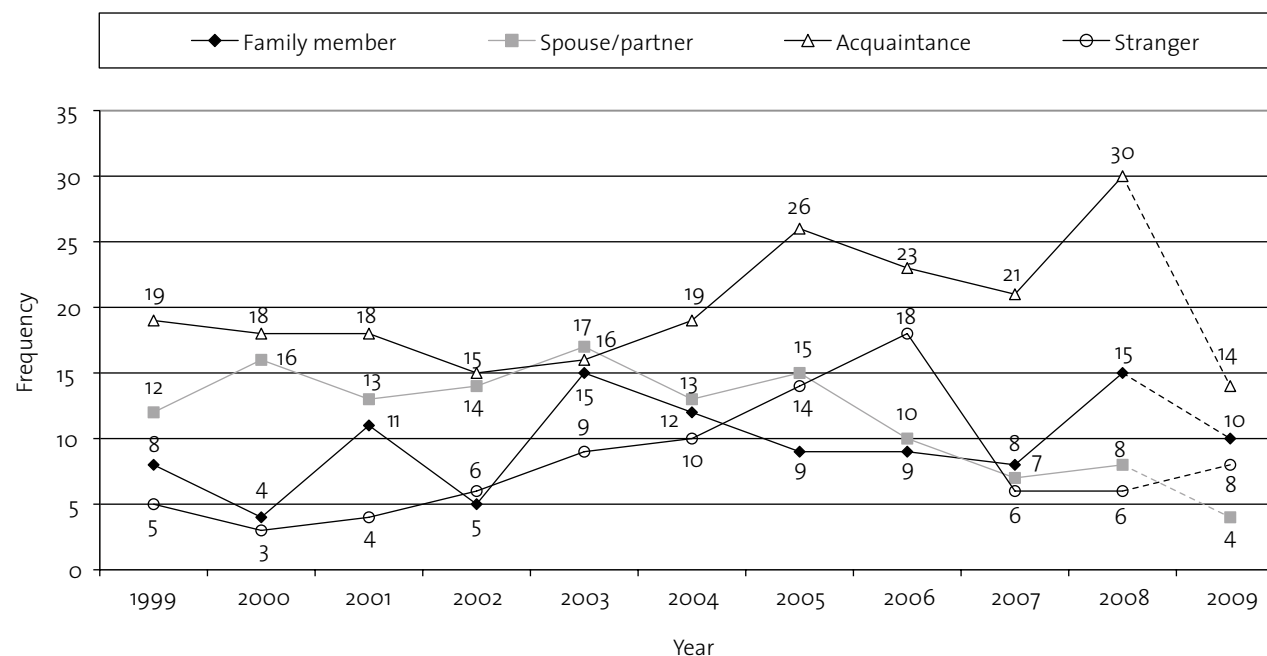
Figure 23: Number of patient homicides, by age-group of perpetrator



Relationship of victim to perpetrator: patient homicide

- The relationship of victim to perpetrator is shown in Figure 24.
- There were 89 stranger homicides by patients (16%), an average of 8 per year.
- The victims for male patients were most likely to be acquaintances whereas females most commonly killed family members or spouses/partners (including ex-spouses/partners).

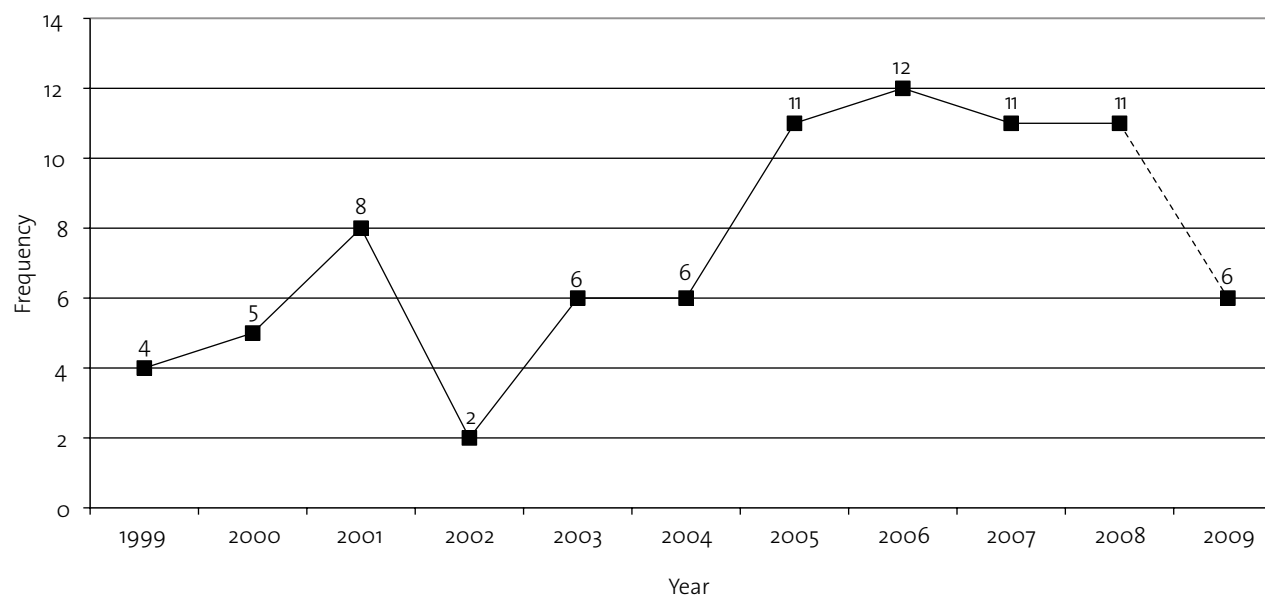
Figure 24: Patient homicide: relationship of victim to perpetrator



Treatment refusal

- There were 82 patients (15%) known to have refused drug treatment in the month before the homicide, an average of 7 per year.
- The numbers increased over the report period, but projected figures have fallen in 2009 (Figure 25).

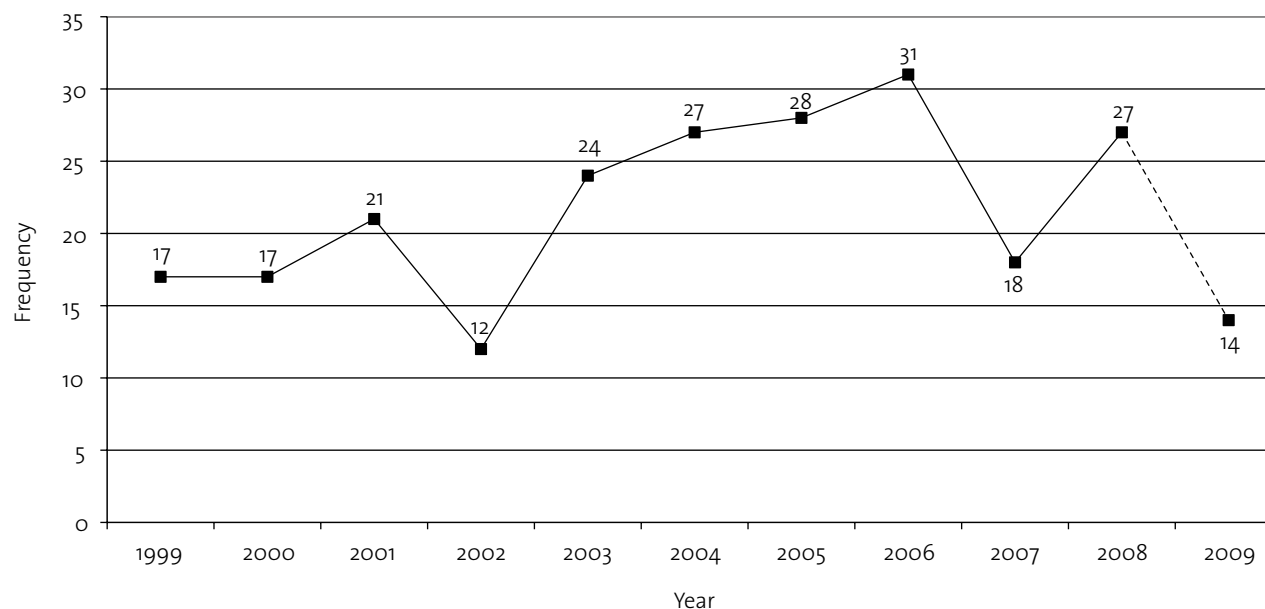
Figure 25: Patient homicide: number of patients who refused drug treatment



Missed contact

- Two hundred and thirty-six patients (40%) missed their last appointment with services before the homicide occurred, an average of 21 per year.
- There was an increase in the number of patients who missed their last appointment.
- There was a fall in 2007 (42%) and in the projected figures for 2009 (48%) (Figure 26).

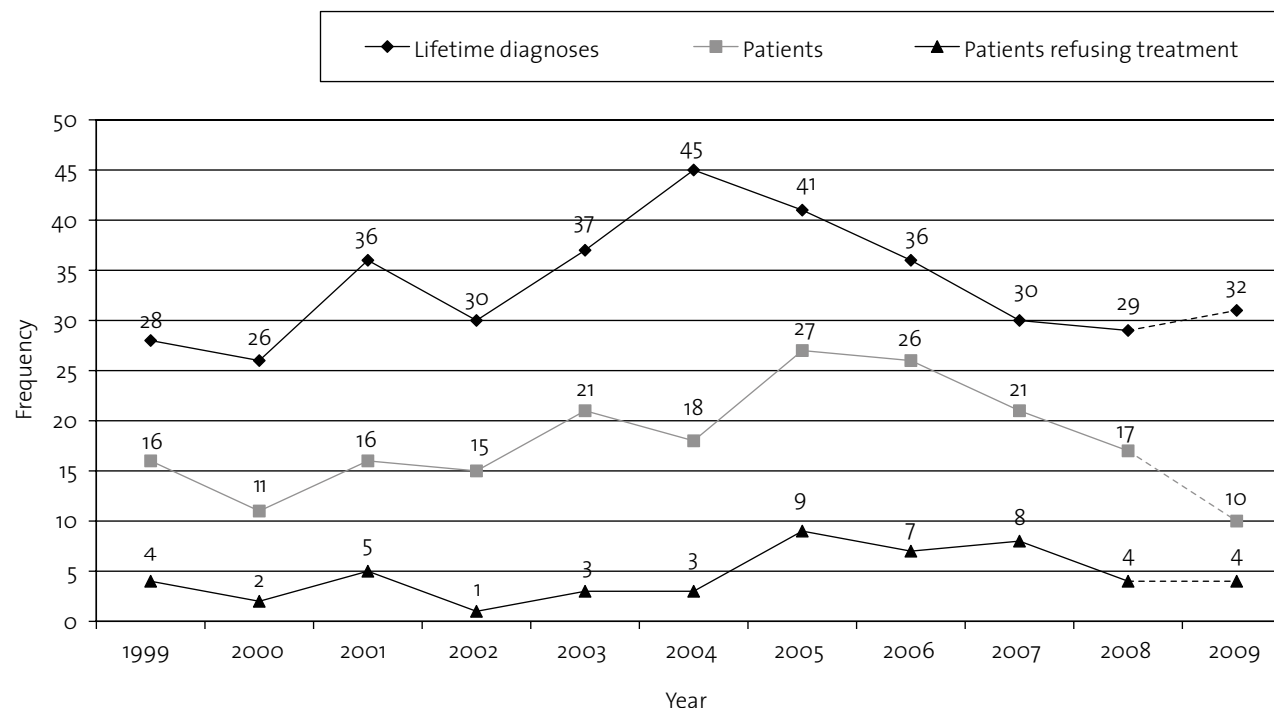
Figure 26: Patient homicide: number of patients who missed their last appointment with services



Homicide and schizophrenia

- There were 370 homicides by people with schizophrenia (based on lifetime history) over the 11-year report period, 6% of the total sample, an average of 34 per year.
- There was no significant overall trend in the number of homicides by people with schizophrenia over the report period (Figure 27); substantial fluctuations occurred.
- The numbers fell significantly from 2004, having risen previously.
- One-hundred and ninety-eight (54%) people with schizophrenia were patients, an average of 18 per year (Figure 27).
- Fifty (28%) patients with schizophrenia had refused drug treatment in the month before the homicide.

Figure 27: Perpetrators with a primary diagnosis of schizophrenia



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

- There were 373 SUD cases over the report period, an average of 34 per year (Figure 28).
- There was an overall fall in the number of SUD cases over the report period. However, due to a change in data provider, recent numbers may not be strictly comparable with historical data.

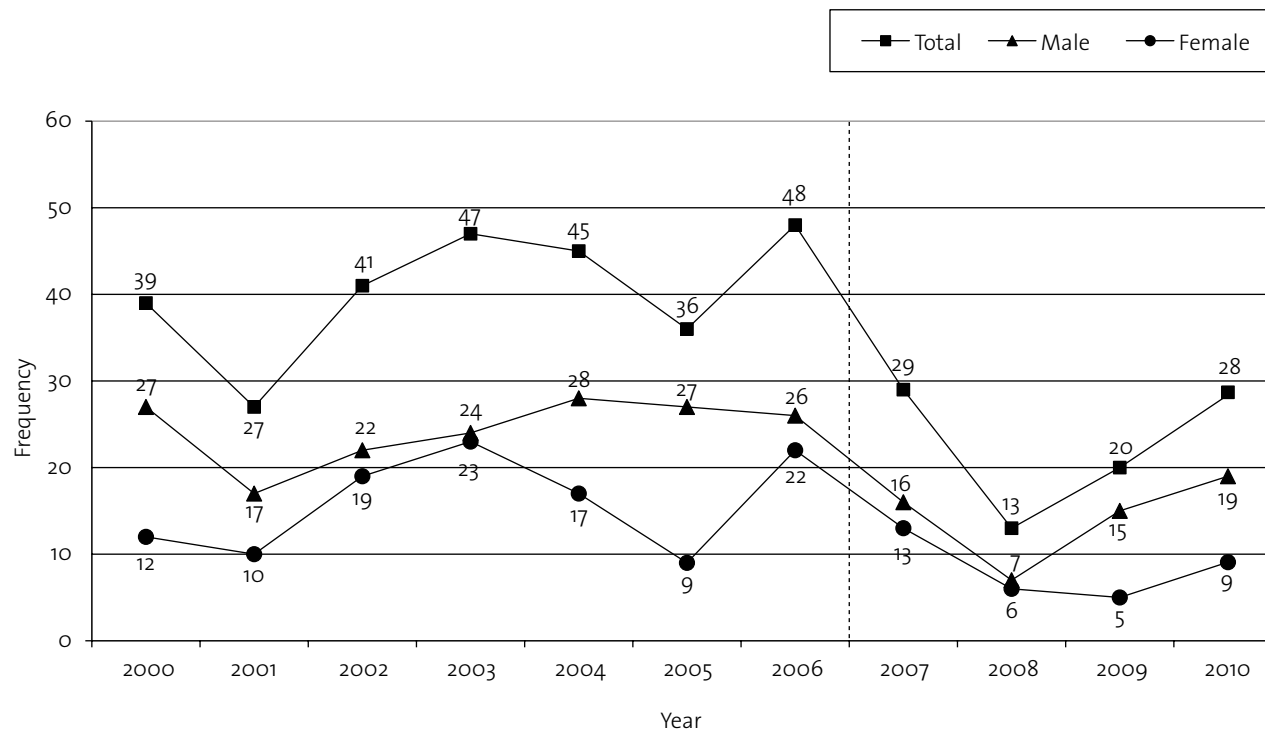
Sudden unexplained death and patient ethnicity

- There were 42 SUD cases in patients from a black and minority ethnic group over the report period. The number of these cases varied from 1-6 per year, and showed no clear pattern over time.
- There were 15 post-restraint deaths between 2002 and 2010. The number ranged from 0-4 per year. Four of these post-restraint deaths were patients from a black and minority ethnic group. We do not know whether restraint caused these deaths.
- There were 101 (27%) cases of SUD who were aged under 45.

- 171 (50%) SUD cases had a history of cardiovascular disease; 87 (25%) had a history of respiratory disease; 54 (16%) had a history of cerebrovascular disease, and 34 (10%) had a history of epilepsy.
- 32 (9%) SUD cases were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).



Figure 28: Number of sudden unexplained deaths, by sex



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



2. WALES

2.1 SUICIDE

Between 2000-2010, the Inquiry was notified of 3,446 deaths in the general population that received a suicide or undetermined verdict. These are referred to as suicides throughout the report.

2.1.1 Suicide in the general population

- There was an overall fall in the number and rate of suicides (Table 3; Figure 29). Falls in rates were seen in both males and females.
- Rates fell in those aged under 25 and aged 25-34 (Figure 30).

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	257	252	257	291	239	245	227	236	224	226	223
Female	73	75	72	82	75	70	65	60	77	57	63
Total	330	327	329	373	314	315	292	296	301	283	286



Figure 29: Rates of suicide in the general population, by sex

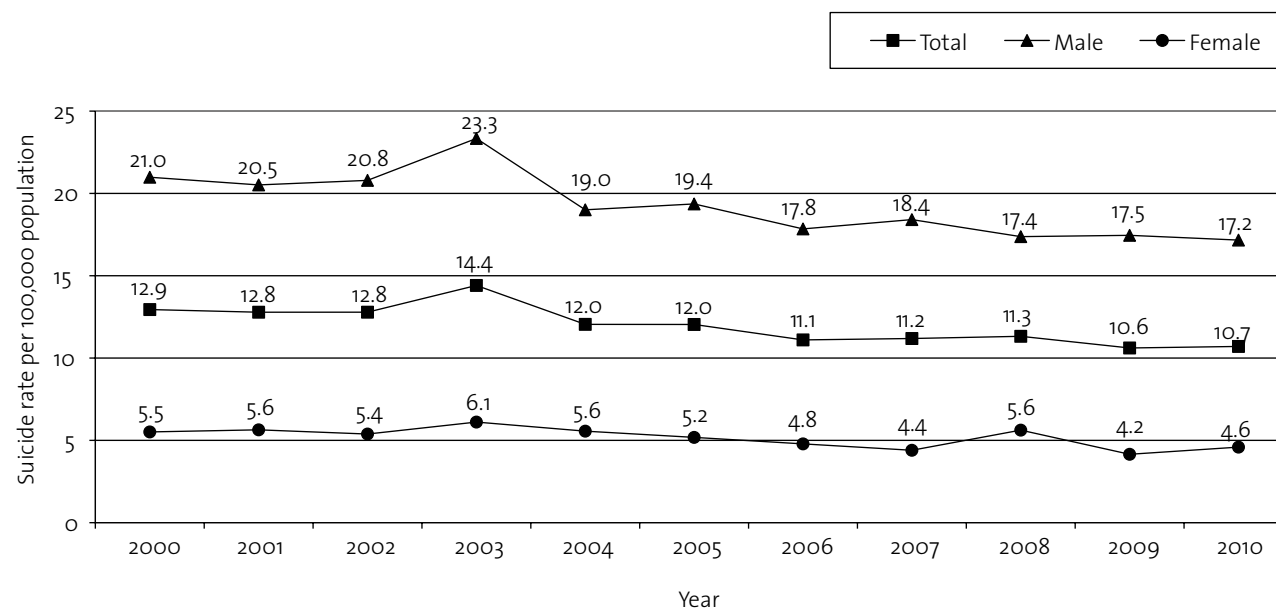
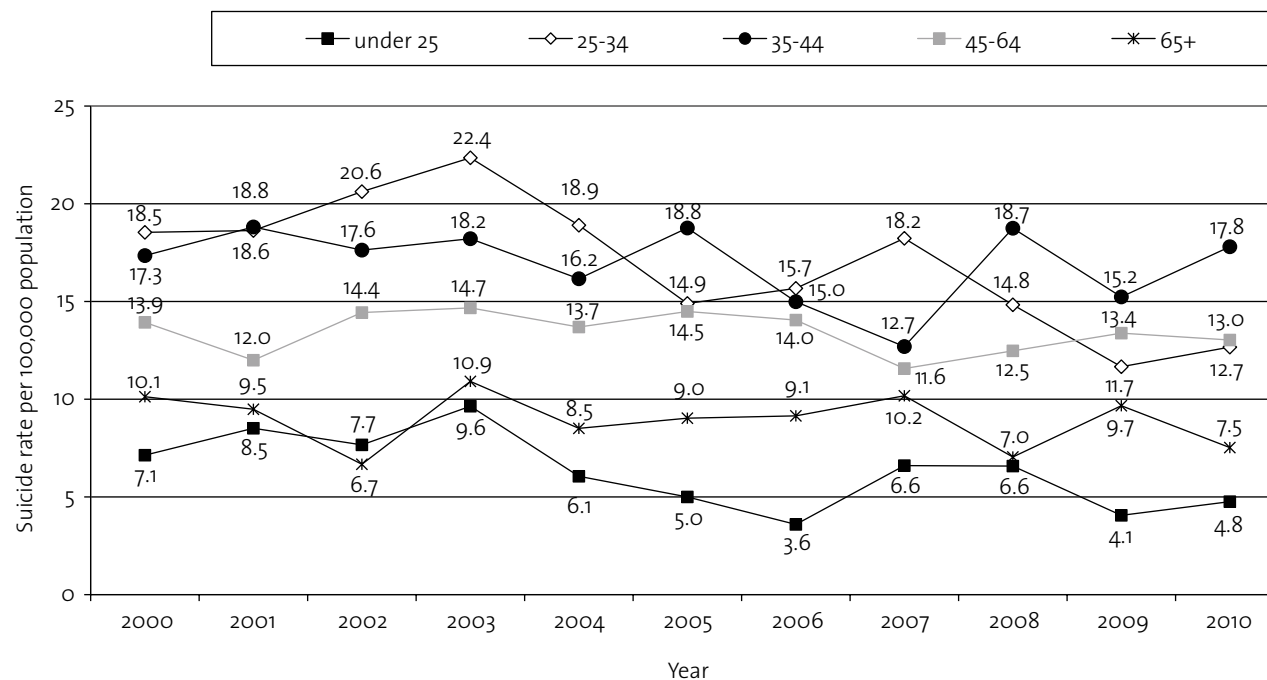


Figure 30: Rates of suicide in the general population, by age-group



Variation in suicide by Health Board

- There was some variation in suicide rates by Health Board of residence at the time of death (2008-2010). The highest rates of suicide were in Betsi Cadwaladr University and Cwm Taf, at 12.0 per 100,000 population, and the lowest in Hywel Dda at 8.1 per 100,000 population (Figure 31).
- The greatest falls in the rate of suicide were seen in Hywel Dda, Aneurin Bevan, and Abertawe Bro Morgannwg University (Figure 32). Powys Teaching Health Board showed a slight increase in suicide rates.



Figure 31: Rate of suicide, by Health Board
(average rate 2008-2010)

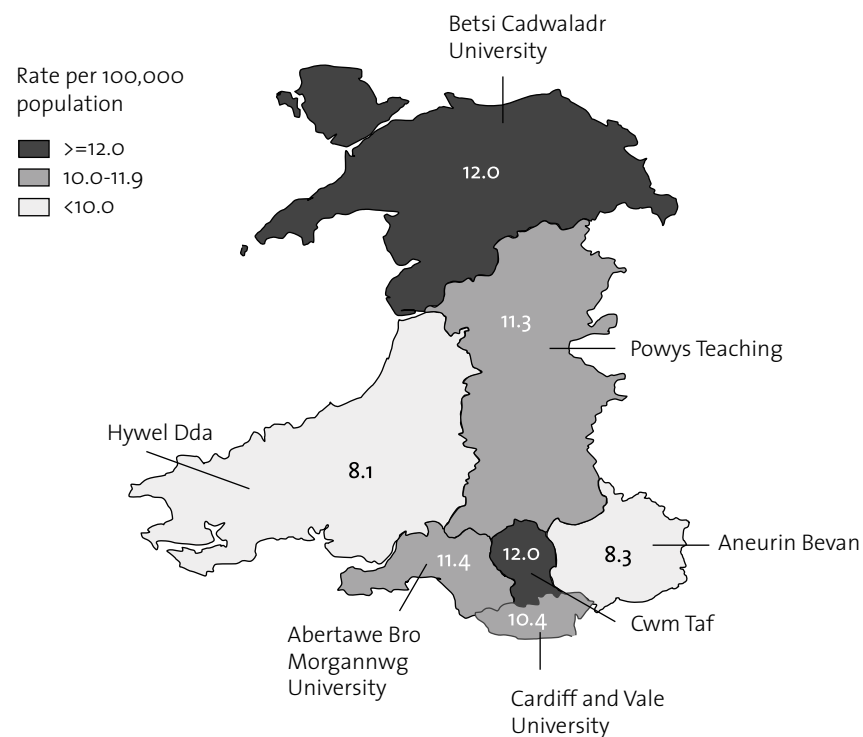
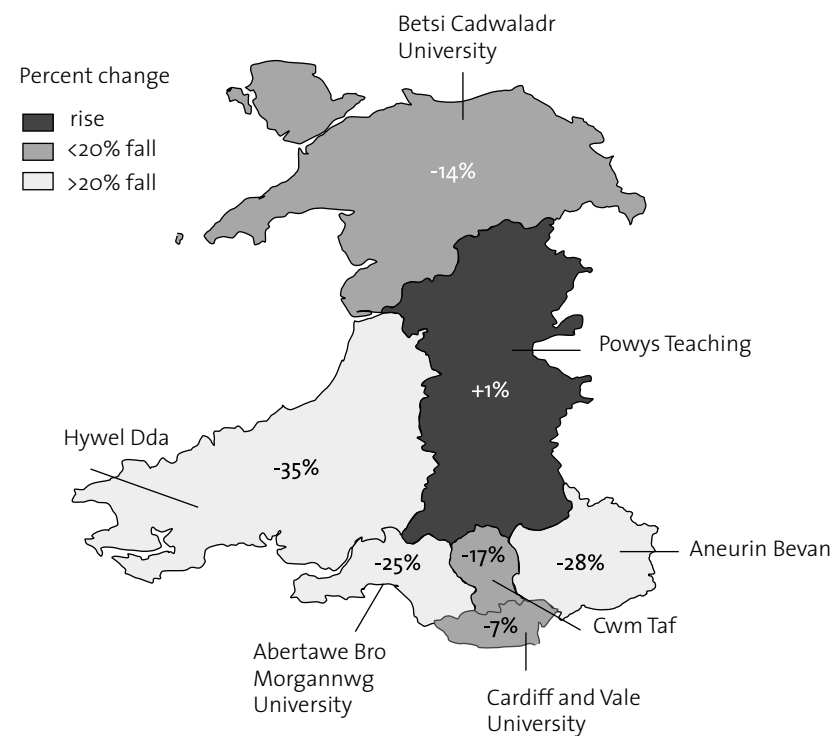


Figure 32: Change in the rate of suicide from 2000 to 2010, by Health Board



Note: These before and after rates are based on 3-year averages (1998-2000 and 2008-2010)



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report), self-poisoning (overdose) and jumping/multiple injuries (mainly jumping from a height or being struck by a train). Less frequent methods were drowning, carbon monoxide (CO) poisoning, firearms, and cutting/stabbing.
- Over the report period there were changes in method of suicide. Suicide deaths by hanging increased, whilst deaths by self-poisoning decreased (Figure 33). Of the less common methods, deaths by CO poisoning, drowning, and firearms decreased (Figure 34).

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

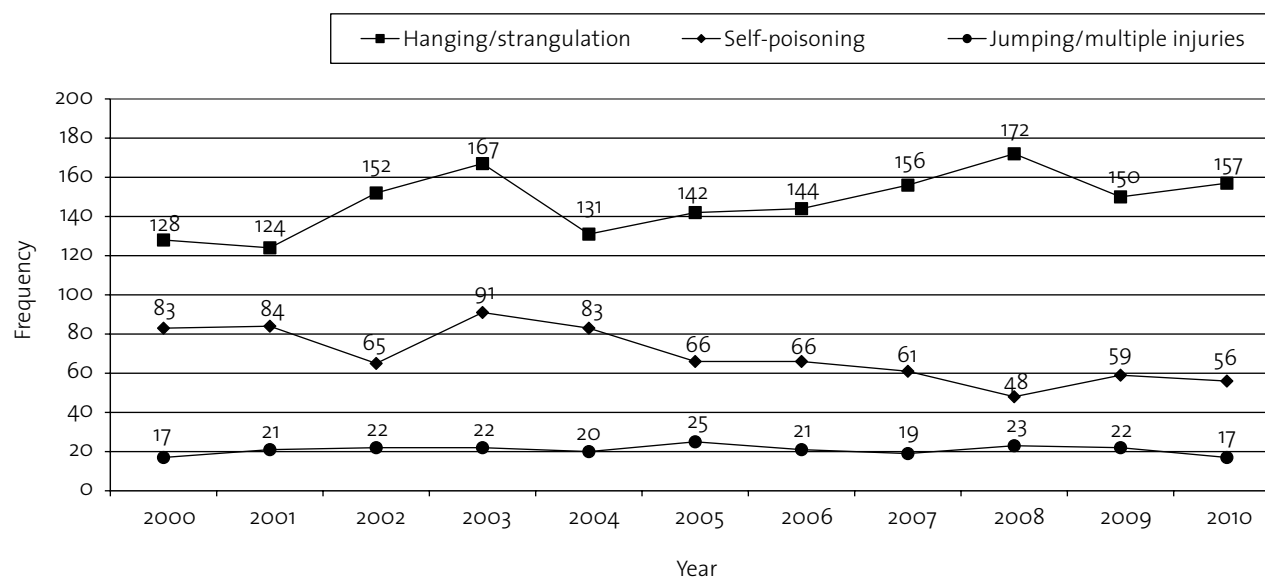
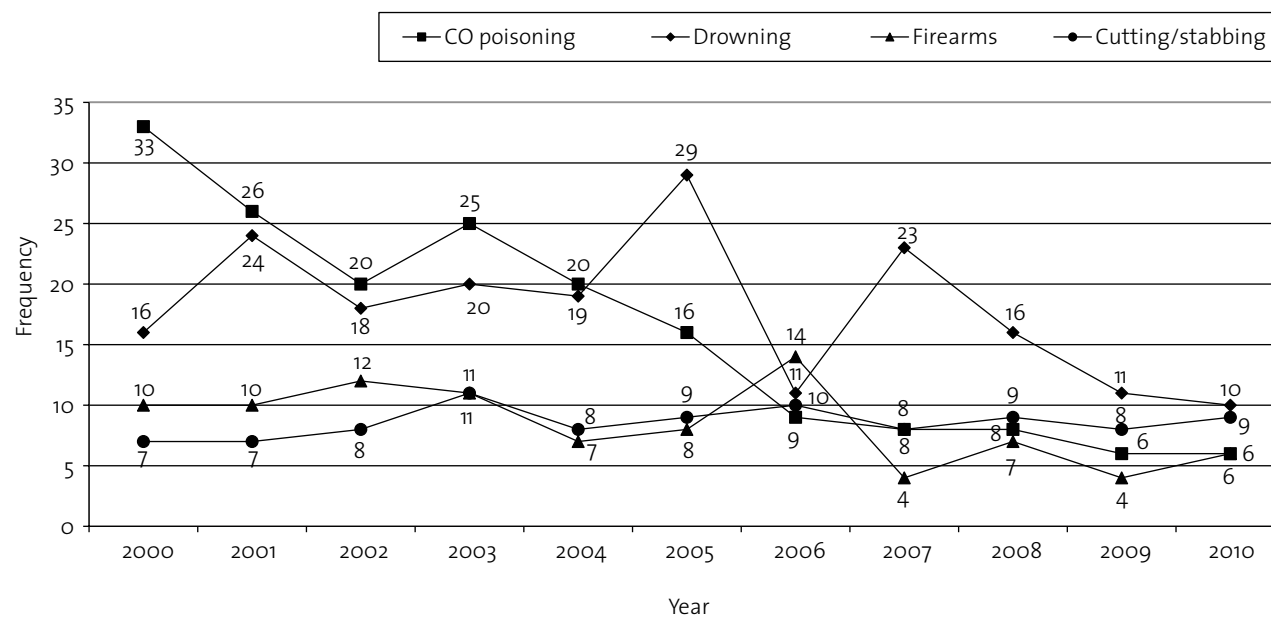


Figure 34: Suicide in the general population: other causes of death



2.1.2 Patient suicide

Patient suicide: numbers and rates

- During 2000-2010, 813 suicides (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 represented an average of 74 patient suicides per year.
- There was a decrease in the number and rate of suicide using a general population denominator (Table 4; Figure 35). Rates fell overall and for males but not females.

- The number of suicides by age-group is shown in Figure 36.
- There were 2 suicides among patients subject to a community treatment order (CTO) between 2009-2010.

Table 4: Number of patient suicides, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Male	66	63	51	54	45	59	38	49	38	49	57
Female	17	22	25	30	27	30	21	22	17	20	13
Total	83	85	76	84	72	89	59	71	55	69	70

*Projected figures



Figure 35: Rates of patient suicide, by sex

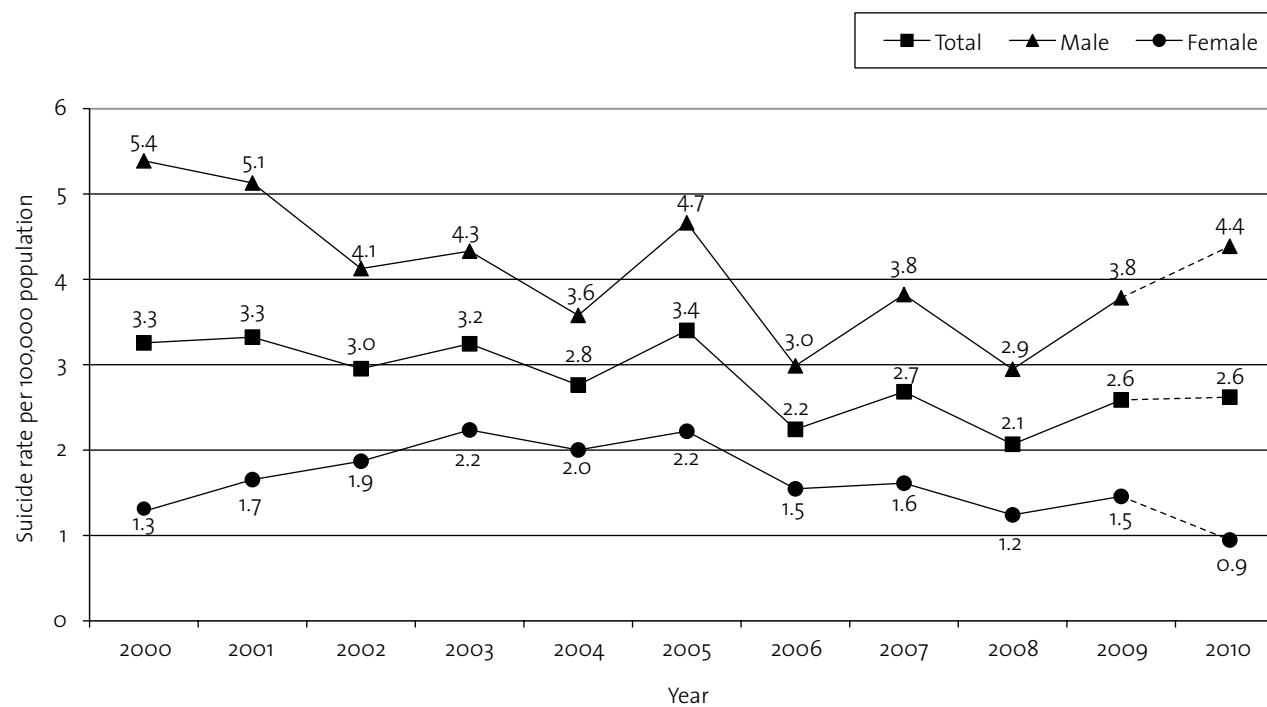
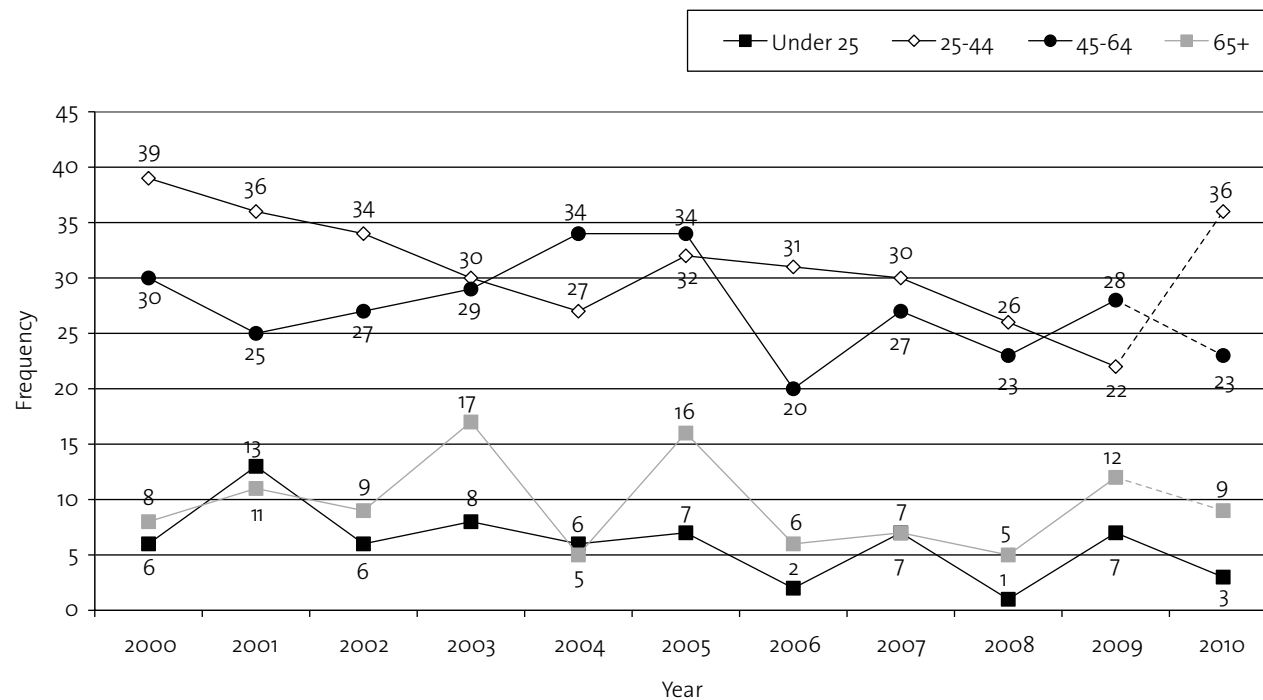


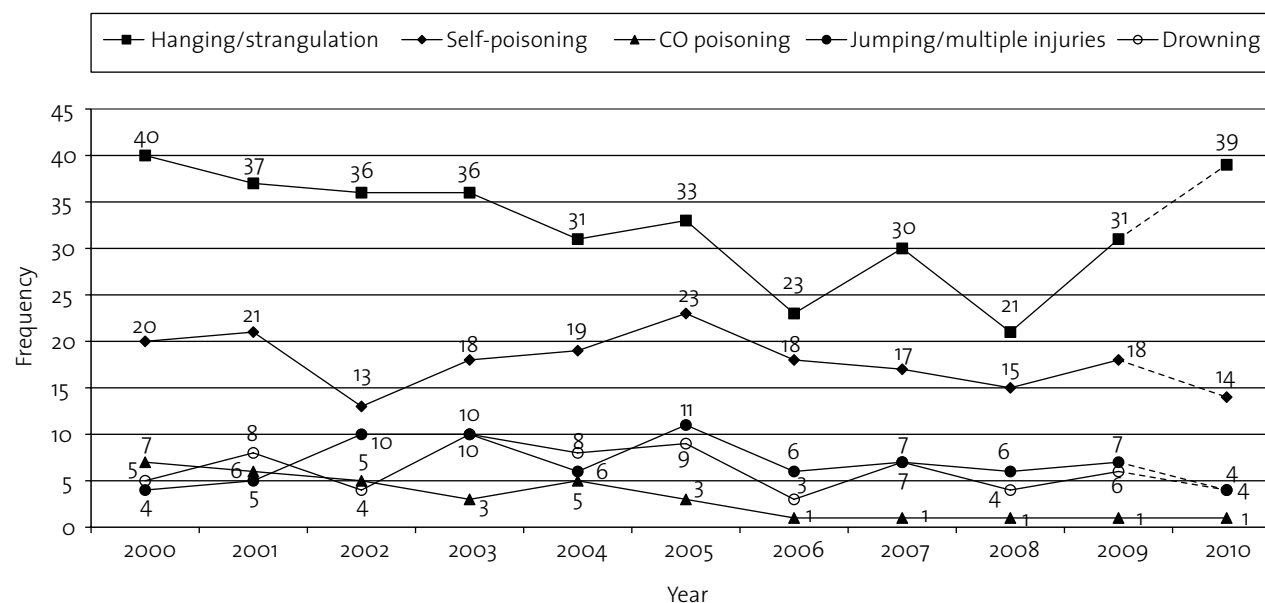
Figure 36: Number of patient suicides, by age-group



Method of suicide by patients

- The most common methods of suicide by patients were hanging and self-poisoning.
- The number of deaths by hanging and carbon monoxide (CO) poisoning decreased (Figure 37). Figures for other methods remained stable.
- The most common substances used in deaths by self-poisoning were opiates (23%), tricyclic antidepressants (18%) and paracetamol/opiate compounds (13%).
- The number of suicides by overdose of tricyclic antidepressants has fallen over the report period, from an average of 7 in 2000/2001 to 2 in 2009/2010.

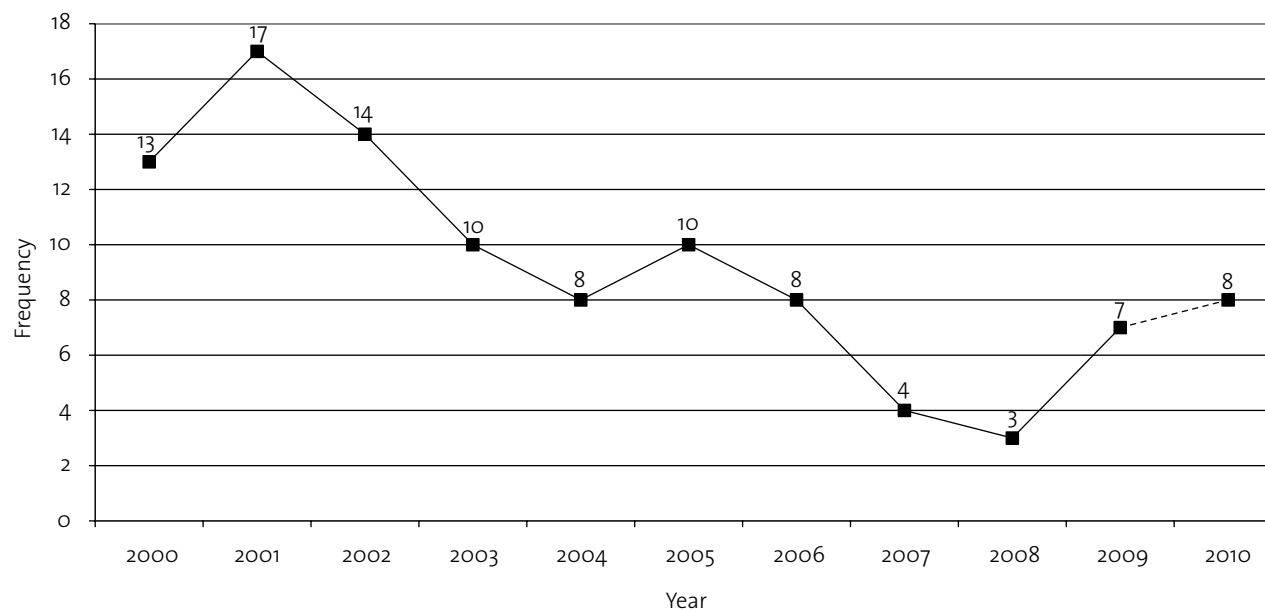
Figure 37: Patient suicide: main causes of death



In-patient suicide

- There were 102 in-patient deaths by suicide during the report period, 13% of patient cases, an average of 9 deaths per year.
- The number of in-patient suicides peaked in 2001, after which there was a sustained fall (Figure 38).
- There were 24 patients who died on the ward by hanging over the 11-year period; this number fluctuated from 0 to 6 cases per year.
- There were 20 (20%) detained in-patients who died by suicide, an average of 2 per year. The number of detained suicides remained stable over the report period.

Figure 38: Patient suicide: number of mental health in-patients



Absconding

- There were 33 in-patients who had absconded from the ward, 32% of all in-patient suicides, an average of 3 deaths per year.

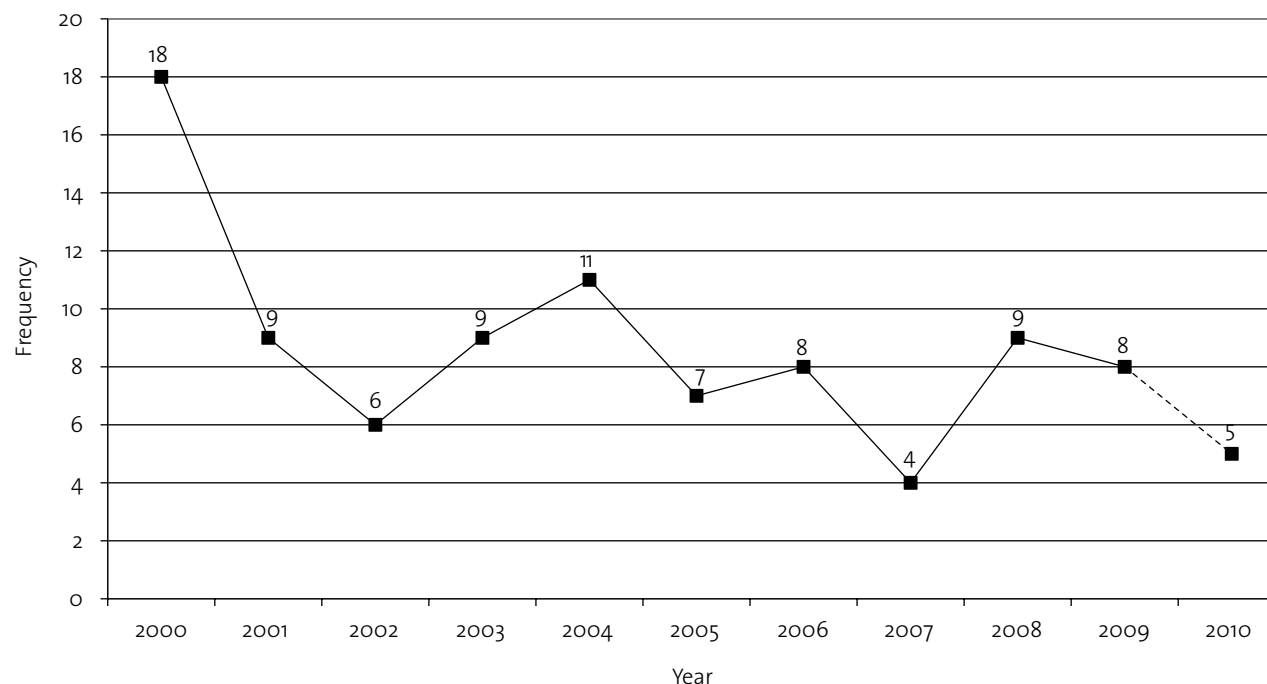
Crisis resolution/home treatment

- There were 51 suicides who had been under crisis resolution/home treatment teams, 7% of the total sample, an average of 5 deaths per year.

Treatment refusal

- There were 94 suicides in which the patient was known to have refused drug treatment in the month before death, 13% of the total sample, an average of 9 deaths per year.
- There was an overall fall in the number of suicides in patients who refused drug treatment (Figure 39).
- Of the 8 patient suicides who refused drug treatment in 2009, none was subject to a CTO at the time of death.

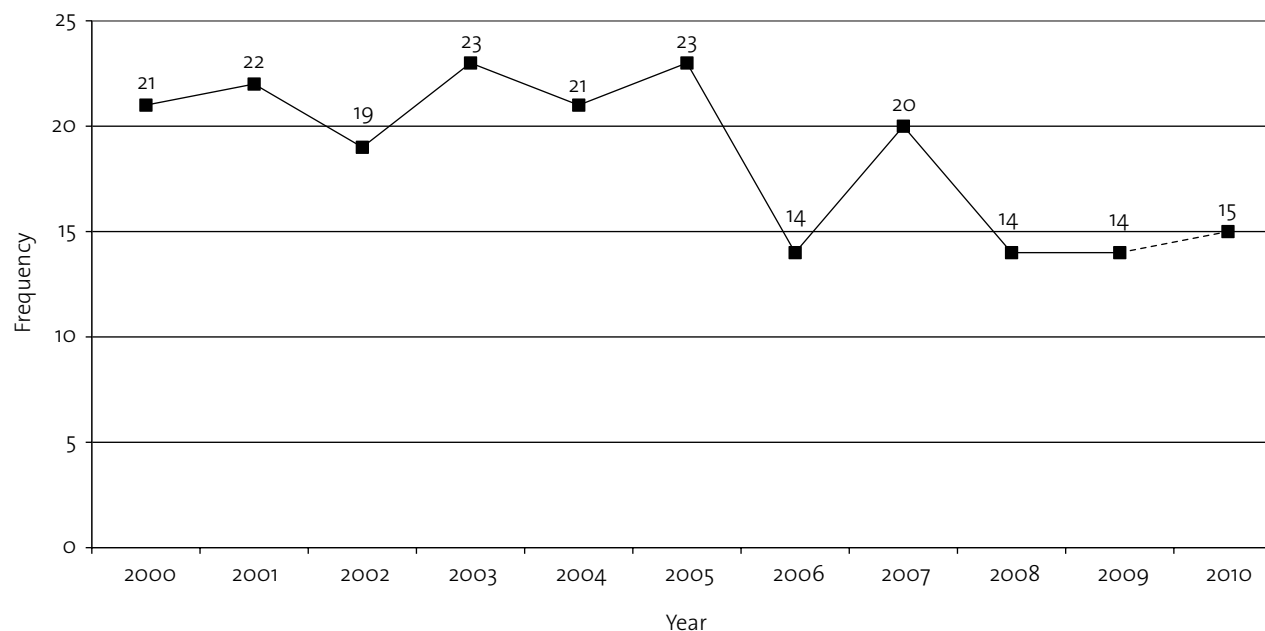
Figure 39: Patient suicide: number of patients who refused drug treatment



Missed contact

- There were 206 suicides by people who missed their last appointment with services, 30% of the total sample, an average of 19 deaths per year.
- There was no significant fall in the number of suicides in patients who missed their final service contact (Figure 40).
- Of the 14 patient suicides who missed their last appointment in 2009, none was subject to a CTO at the time of death.

Figure 40: Patient suicide: number of patients who missed their last appointment with services



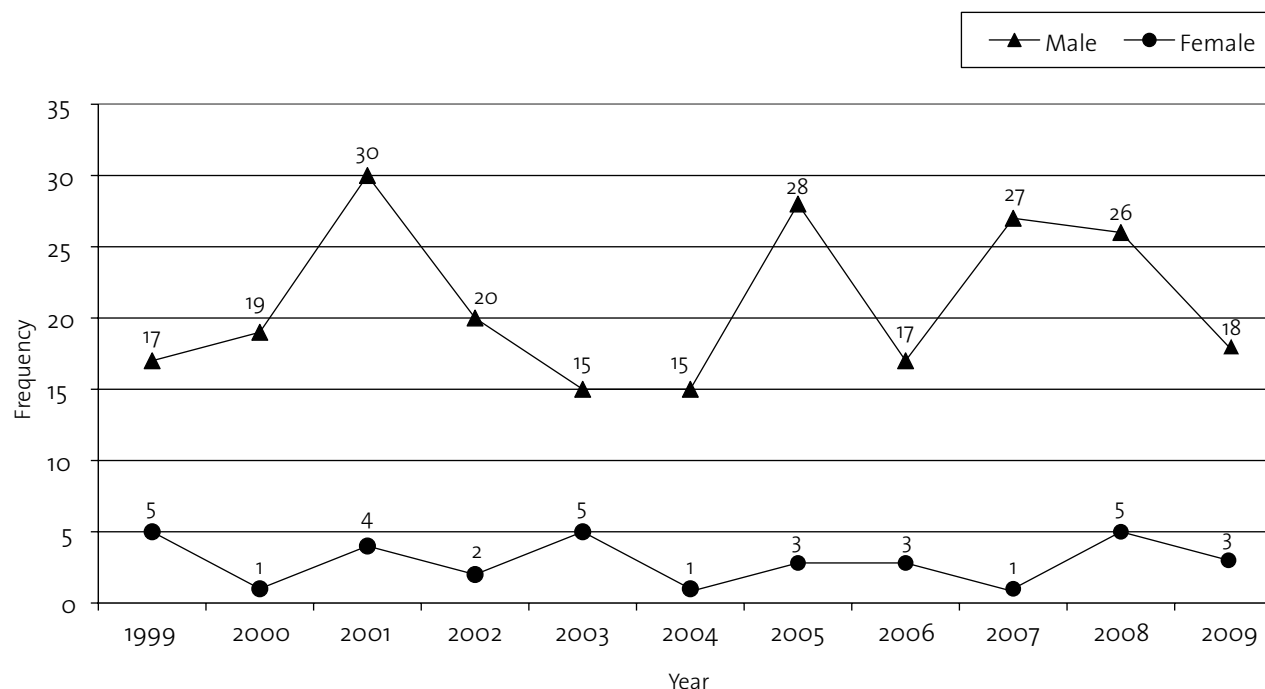
2.2 HOMICIDE

The Inquiry was notified by Home Office Statistics of 265 homicide convictions in the report period 1999-2009. A psychiatric report was obtained on 123 (46%) homicide perpetrators.

2.2.1 Homicide in the general population

- The number of homicide convictions in the general population is shown in Figure 41. These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by the Home Office.³
- The most common method of homicide was the use of a sharp instrument (37% of the total sample).

Figure 41: Number of homicides in the general population, by sex of perpetrator



2.2.2 Homicide by mentally ill people in the general population

Perpetrators who were mentally ill at the time of the homicide

- Thirty-one people had an abnormal mental state at the time of the homicide, 12% of the total sample, an average of 3 per year, ranging between 1 and 4 annually.
- Nineteen (7% of the total sample) had symptoms of psychosis at the time of the offence, an average of 2 per year, ranging between 0 and 4 annually.

2.2.3 Patient homicide

- During 1999-2009, 33 people convicted of homicide (12% of the total sample) were identified 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 3 per year, ranging between 1 and 5 annually.
- The number of cases fluctuated. In this section the numbers were too small to examine trends over time.

Relationship of victim to perpetrator: patient homicide

- Victims were most commonly an acquaintance (13, 41%), followed by a spouse/partner or ex-spouse/partner (8, 25%), and a family member (9, 28%).
- Of the patients who were convicted of homicide, 2 (6%) killed a stranger.

Treatment refusal

- Seven patients (23%) were known to have refused drug treatment in the month before the homicide, ranging between 0 and 2 annually.

Missed contact

- Nine patients (28%) missed their last appointment with services before the homicide, ranging between 0 and 2 annually.

Homicide and schizophrenia

- There were 21 homicides by people with schizophrenia (based on lifetime history), 8% of the total sample, an average of 2 homicides annually.
- These figures are too small to identify a trend.
- Eleven (52%) people with schizophrenia were patients, ranging between 0 and 2 annually.
- Four patients with schizophrenia were known to have refused drug treatment in the month before the homicide.



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

- There were 31 SUD cases over the report period, an average of 3 per year.
- Numbers fluctuated and no trends were found.
- No patients were from a black and minority ethnic group.
- There was one post-restraint death, reported in 2006. We do not know whether restraint caused this death.
- 4 (13%) cases of SUD were aged under 45.
- 11 (38%) SUD cases had a history of cardiovascular disease; 7 (24%) had a history of respiratory disease; 5 (17%) had a history of cerebrovascular disease, and 1 (3%) had a history of epilepsy.
- 2 (7%) SUD cases were receiving 2 or more antipsychotic drugs (i.e. polypharmacy).



3. SCOTLAND

3.1 SUICIDE

Between 2000-2010, the Inquiry was notified of 9,048 deaths in the general population that received a suicide or undetermined verdict. These are referred to as suicides throughout the report.

3.1.1 Suicide in the general population

- There was an overall fall in the number and rate of suicides (Table 5; Figure 42).
- The fall in rates was seen in both males and females.
- Rates fell in those aged under 25, aged 25-34, and aged 65 and over, but remained stable in those aged 35-44 and 45-64 (Figure 43).

Table 5: Number of suicides in the general population, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	679	633	670	576	620	560	594	622	628	559	579
Female	202	240	220	218	224	220	174	214	213	205	198
Total	881	873	890	794	844	780	768	836	841	764	777



Figure 42: Rates of suicide in the general population, by sex

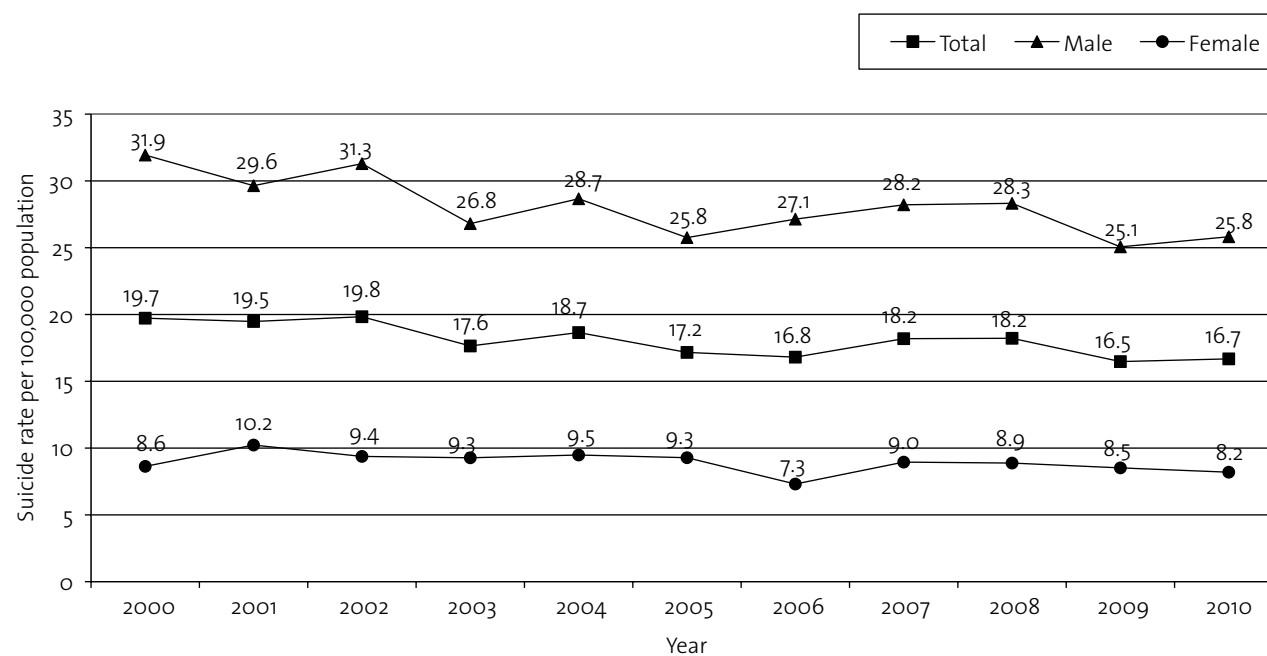
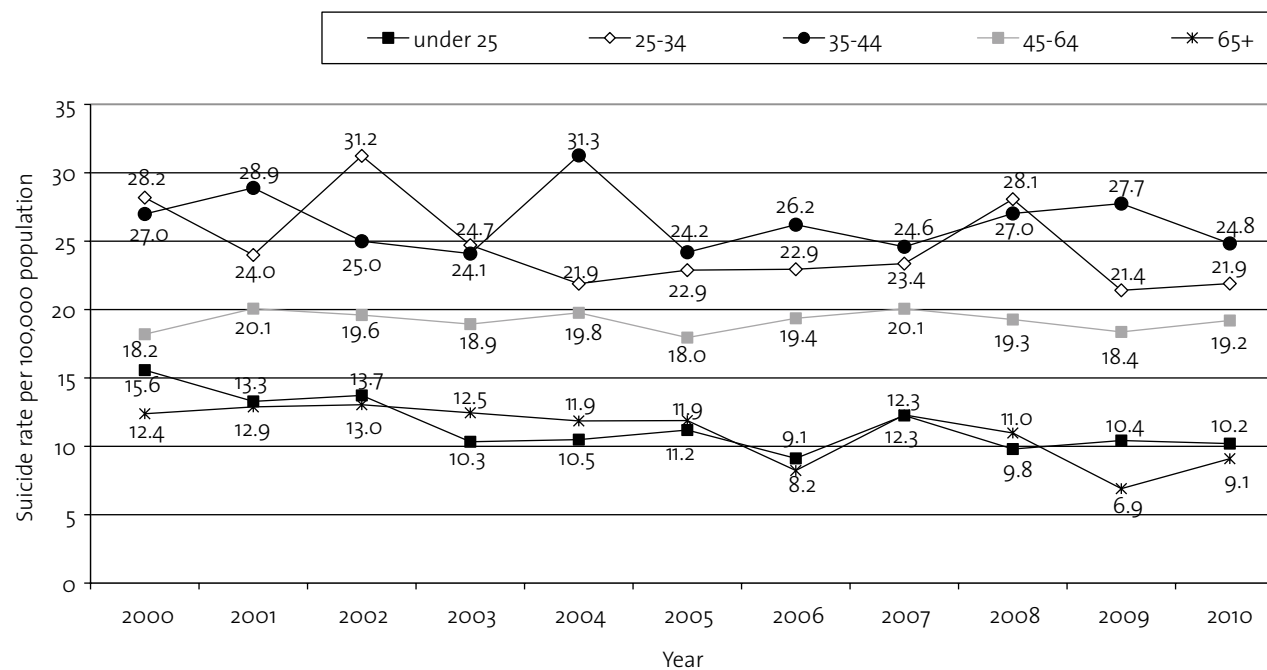


Figure 43: Rates of suicide in the general population, by age-group



Variation in suicide by Health Board

- There was some variation in suicide rates by Health Board of residence at the time of death (2008-2010). The highest rate of suicide was in the Shetlands, at 22.1 per 100,000 population but the small numbers there make it difficult to compare with other Health Boards. The lowest rate was in Forth Valley at 12.6 per 100,000 population (Figure 44).
- The greatest falls in the rate of suicide were seen in Forth Valley, Shetland, and Tayside (Figure 45). Whilst numbers were small, the Western Isles and Orkney showed the greatest increases.



Figure 44: Rate of suicide, by Health Board (average rate 2008-2010)

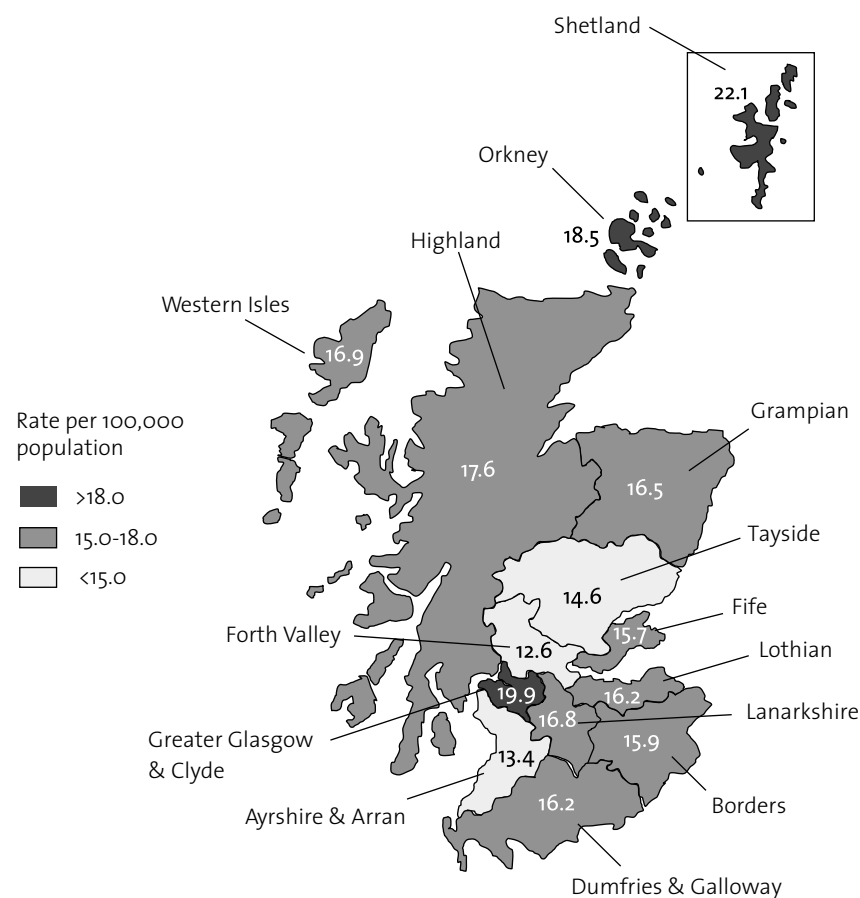
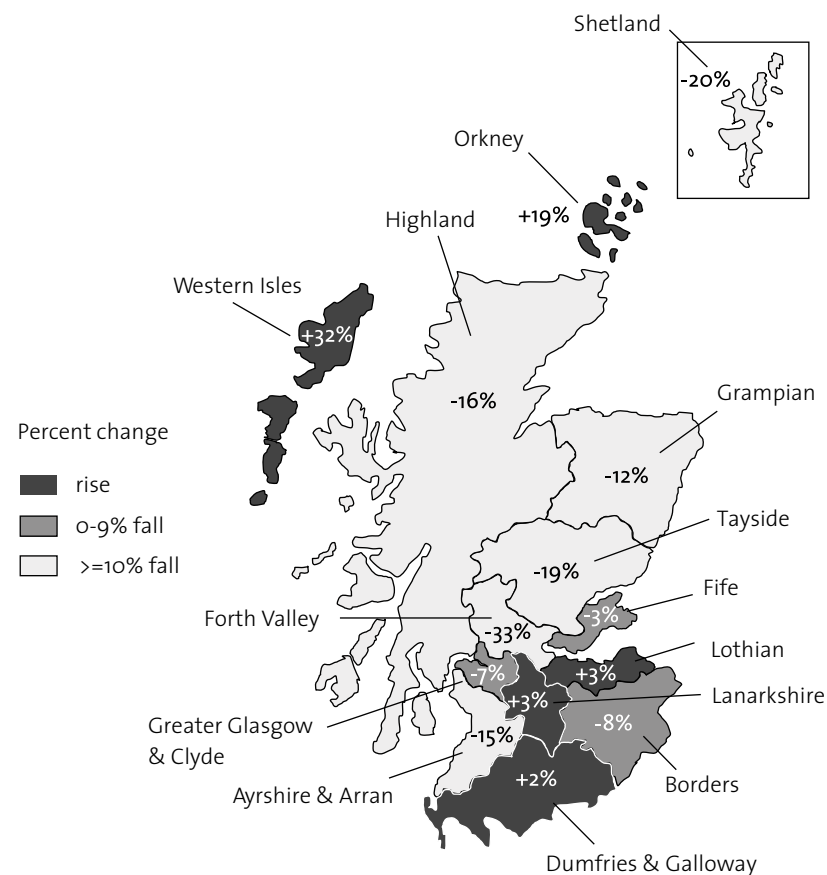


Figure 45: Change in the rate of suicide from 2004 to 2010, by Health Board



Note: These before and after rates are based on 3-year averages (2002-2004 and 2008-2010)



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report), self-poisoning (overdose), and jumping/multiple injuries (mainly jumping from a height or being struck by a train). Less frequent methods were drowning, carbon monoxide (CO) poisoning, firearms, and cutting/stabbing.
- Over the report period, the number of suicides by the most common methods remained stable (Figure 46). Deaths by drowning and carbon monoxide (CO) poisoning decreased (Figure 47).

Figure 46: Suicide in the general population: main causes of death

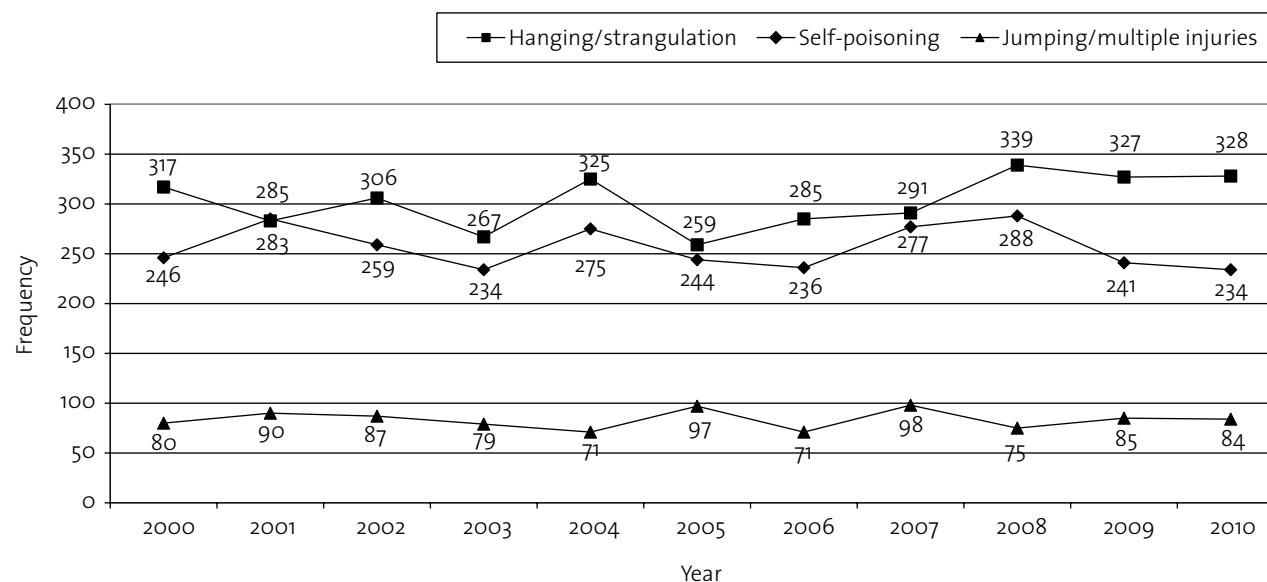
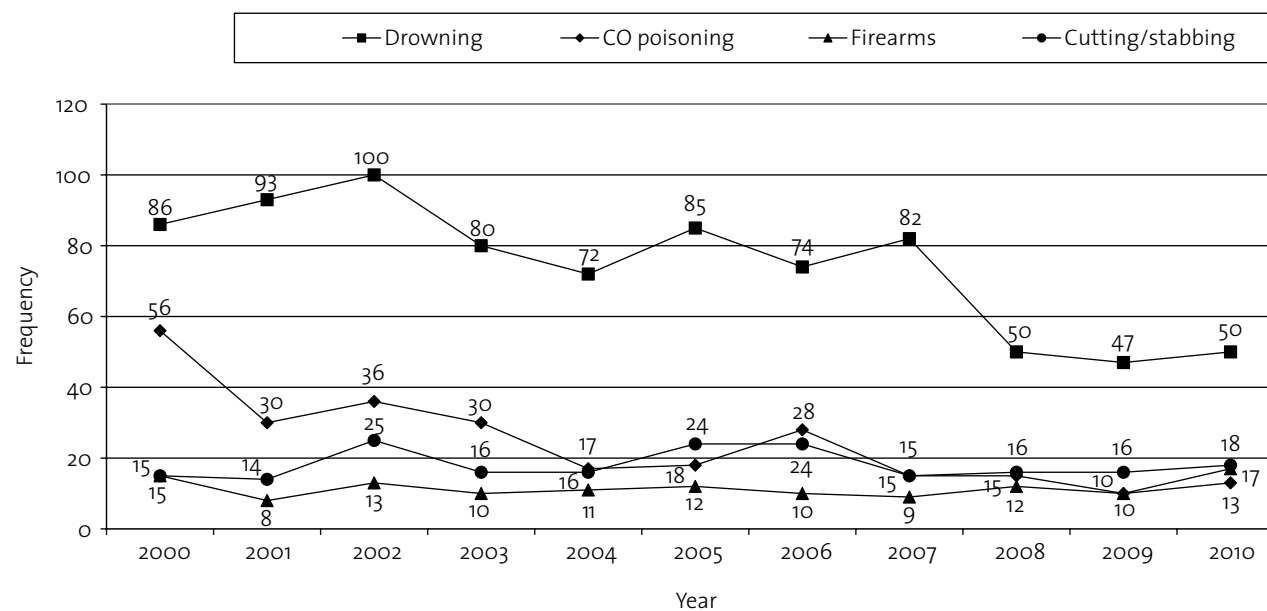


Figure 47: Suicide in the general population: other causes of death



3.1.2 Patient suicide

Patient suicide: numbers and rates

- During 2000-2010, 2,588 suicides (29% 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 represented an average of 235 patient suicides per year.

- There was no trend in the number or rate of patient suicides using a general population denominator (Table 6; Figure 48).
- The number of patient suicides increased in those aged between 45 and 64, but remained stable in all other age-groups (Figure 49).

Table 6: Number of patient suicides, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Male	148	142	164	164	161	135	136	181	160	130	161
Female	60	96	74	82	90	83	73	101	67	90	90
Total	208	238	238	246	251	218	209	282	227	220	251

*Projected figures



Figure 48: Rates of patient suicide, by sex

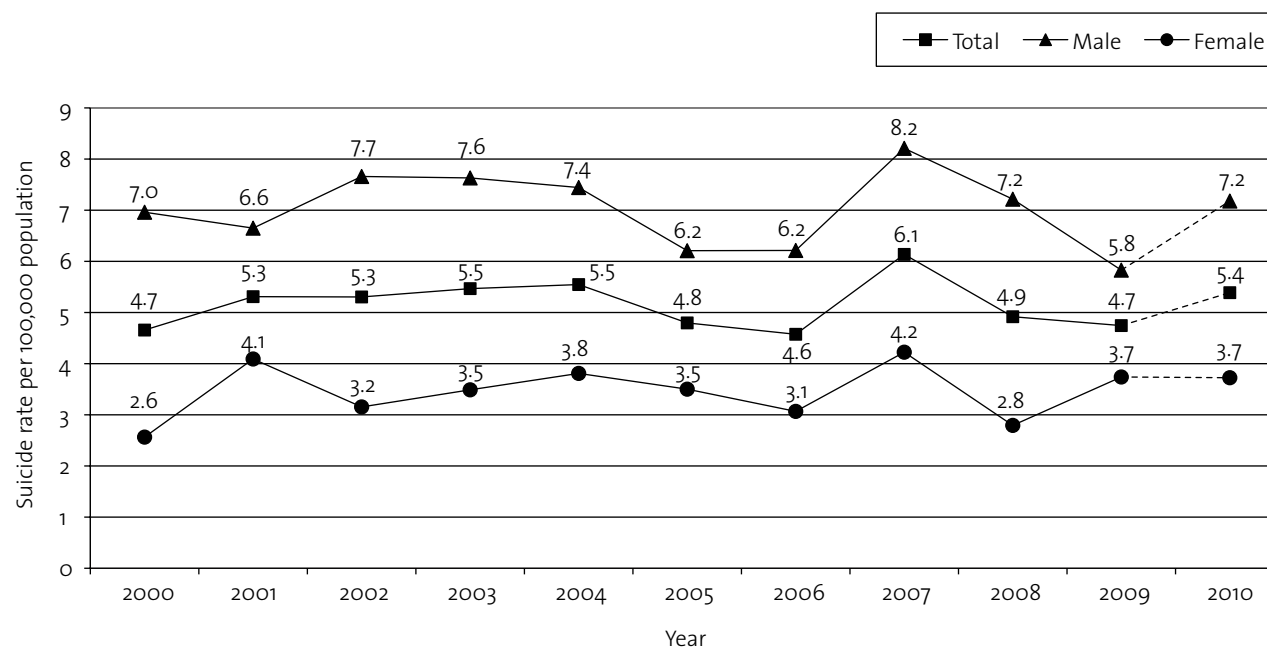
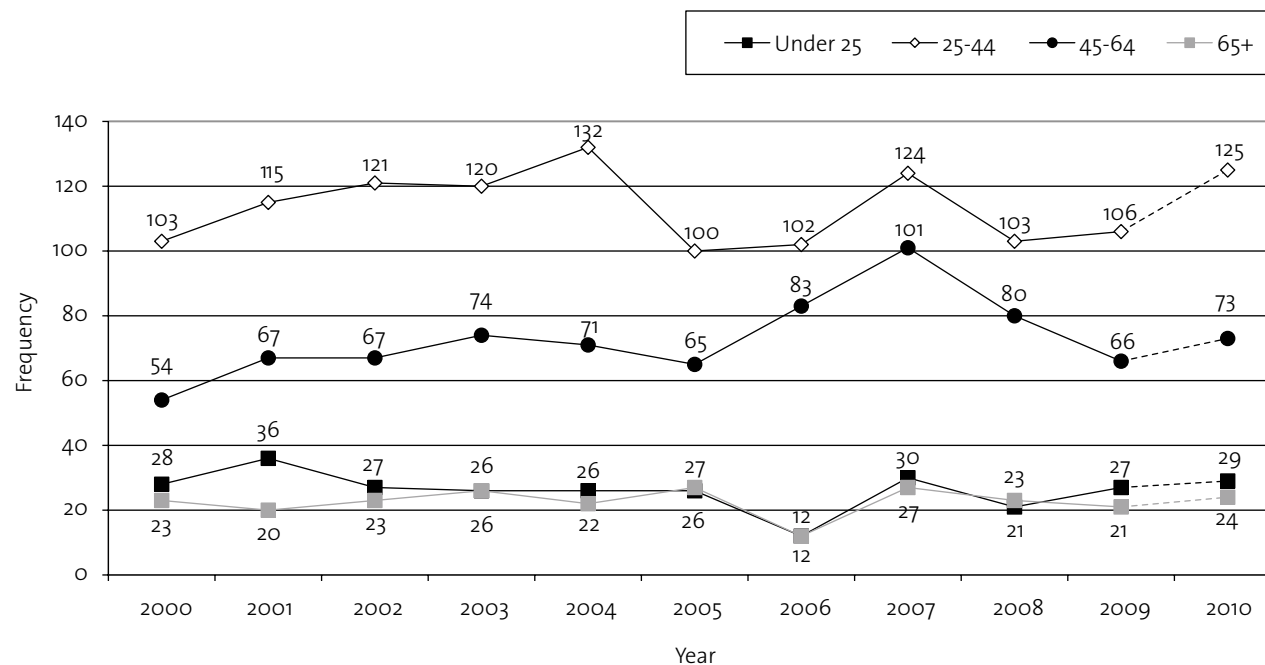


Figure 49: Number of patient suicides, by age-group



Method of suicide by patients

- The most common methods of suicide by patients were hanging and self-poisoning.
- The number of deaths by jumping/multiple injuries increased (Figure 50). A downward trend occurred in deaths by drowning. Figures for other methods remained stable.
- The most common substances used in deaths by self-poisoning were opiates (29%), tricyclic antidepressants (15%) and paracetamol/opiate compounds (12%).
- There was an increase of borderline significance in suicides by overdose of opiates and a fall in suicides by overdose of tricyclic antidepressants since 2001 (Figure 51).

Figure 50: Patient suicide: main causes of death

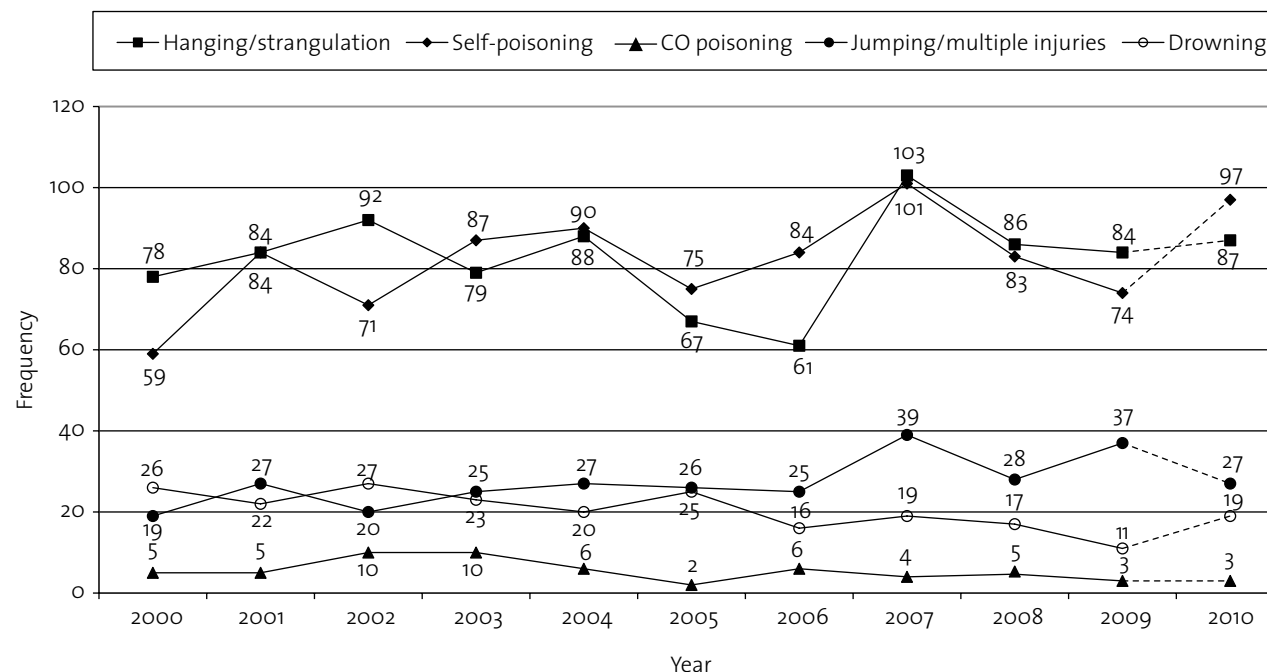
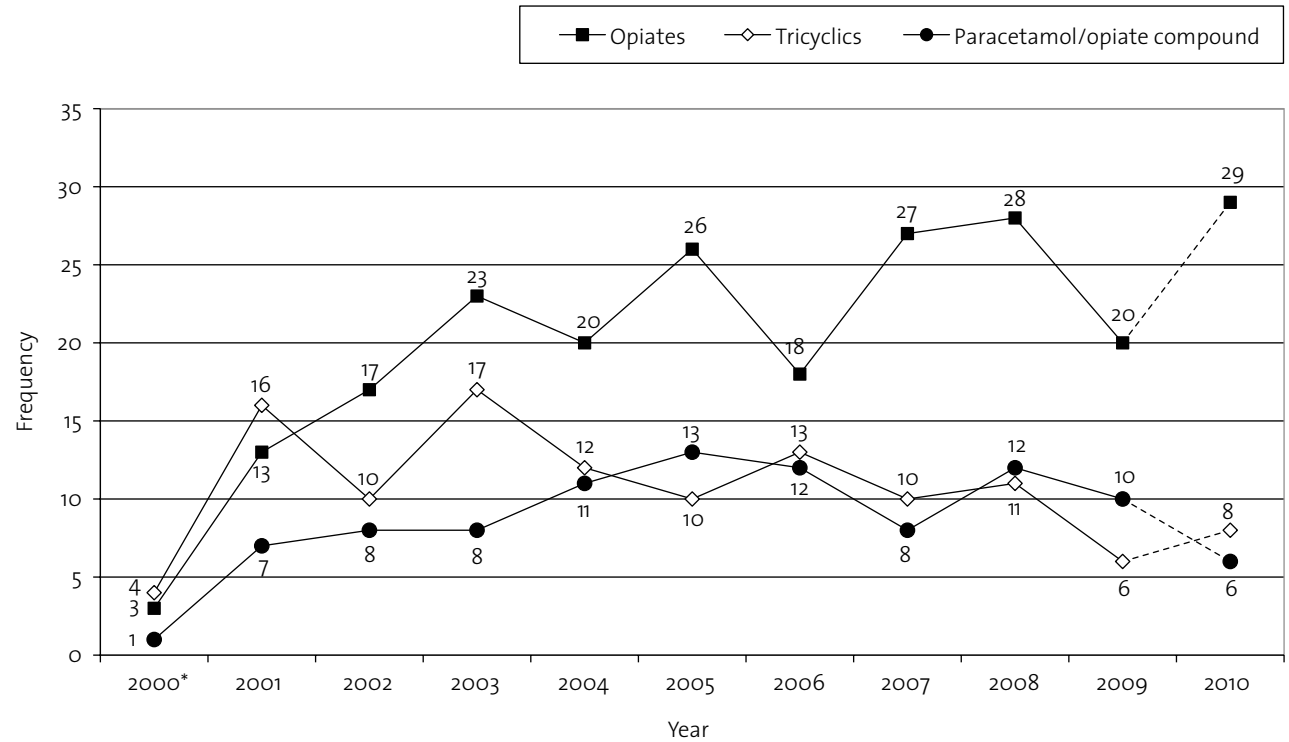


Figure 51: Patient suicide: main substances used in deaths by self-poisoning



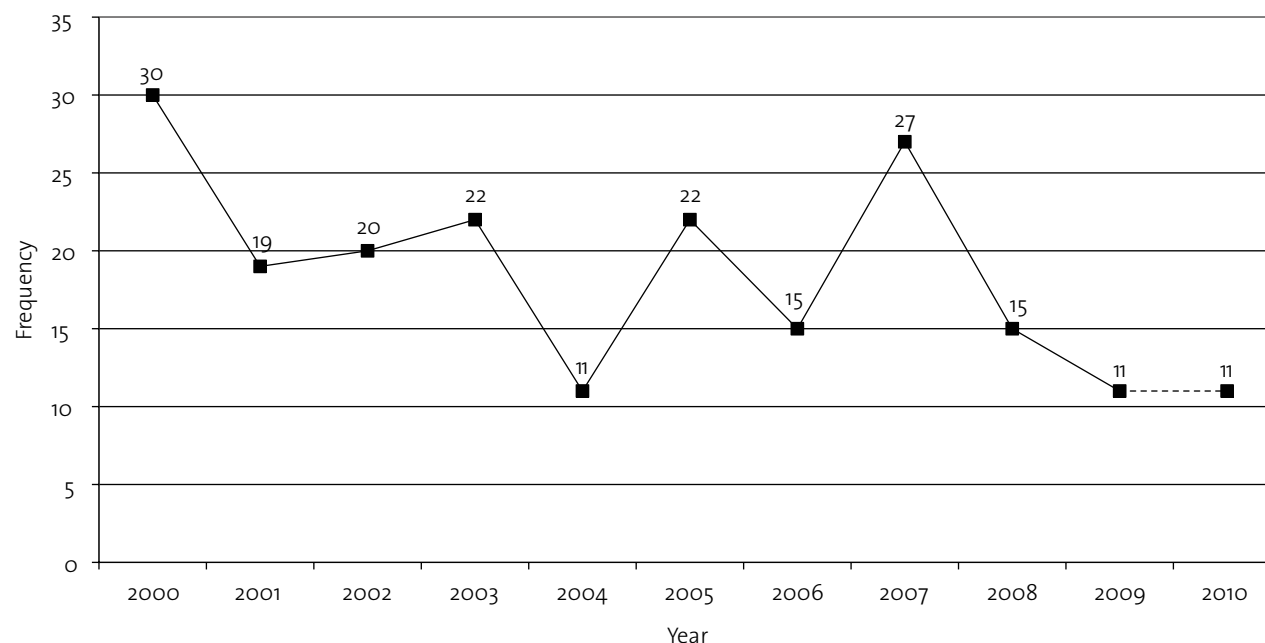
*Incomplete data in 2000.



In-patient suicide

- There were 203 in-patient deaths by suicide during the report period, 8% of patient cases, an average of 18 deaths per year.
- There was an overall fall in in-patient suicide numbers (Figure 52).
- Over the 11-year period, there were 41 patients who died on the ward by hanging; this number fluctuated from 1 to 7 cases per year.
- The ligature points in 12 of these related to doors or windows; in 15 cases a belt was used as the ligature.
- There were 51 (25%) detained in-patients who died by suicide, an average of 5 per year. The number of detained suicides remained stable over the report period.

Figure 52: Patient suicide: number of mental health in-patients



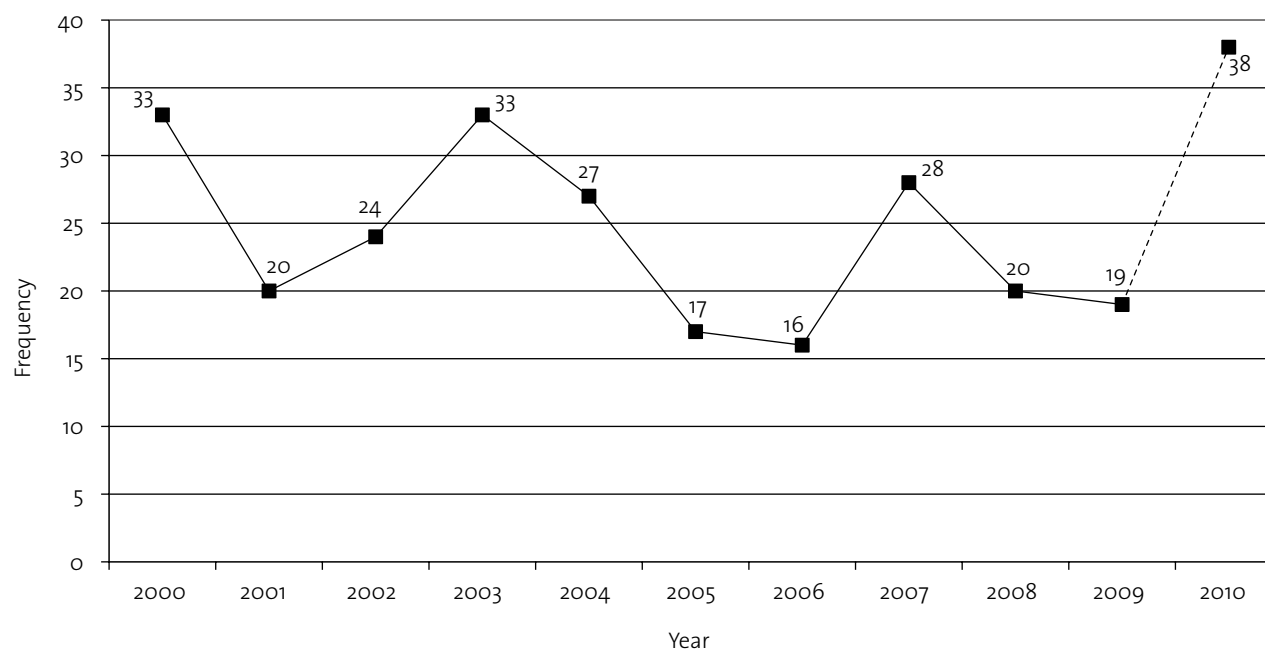
Absconding

- There were 45 in-patients who had absconded from the ward, 22% of all in-patient suicides, an average of 4 deaths per year.

Treatment refusal

- There were 275 suicides in which the patient was known to have refused drug treatment in the month before death, 12% of the total sample, an average of 25 deaths per year.
- There was no trend in the number of suicides in patients who refused drug treatment. The projected figure in the latest year is higher than in previous years (Figure 53).

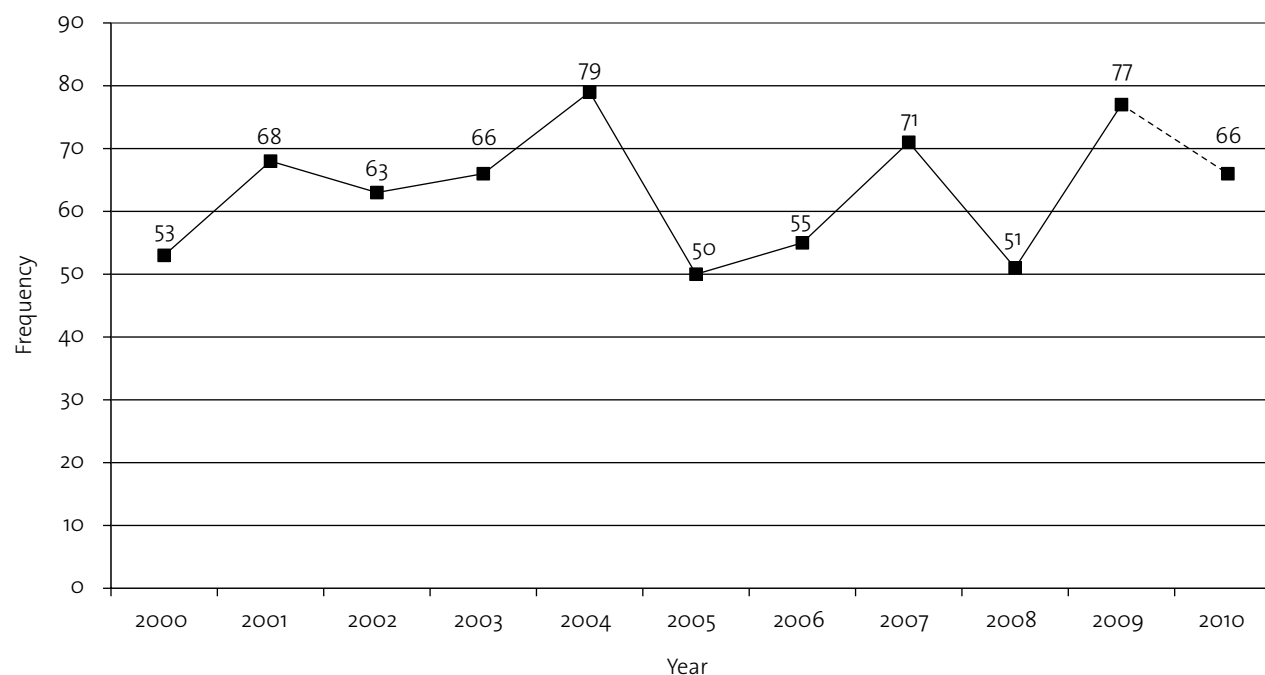
Figure 53: Patient suicide: number of patients who refused drug treatment



Missed contact

- There were 699 suicides by people who missed their last appointment with services, 30% of the total sample, an average of 64 deaths per year.
- There was no overall trend in the number of suicides in patients who missed their final service contact (Figure 54).

Figure 54: Patient suicide: number of patients who missed their last appointment with services



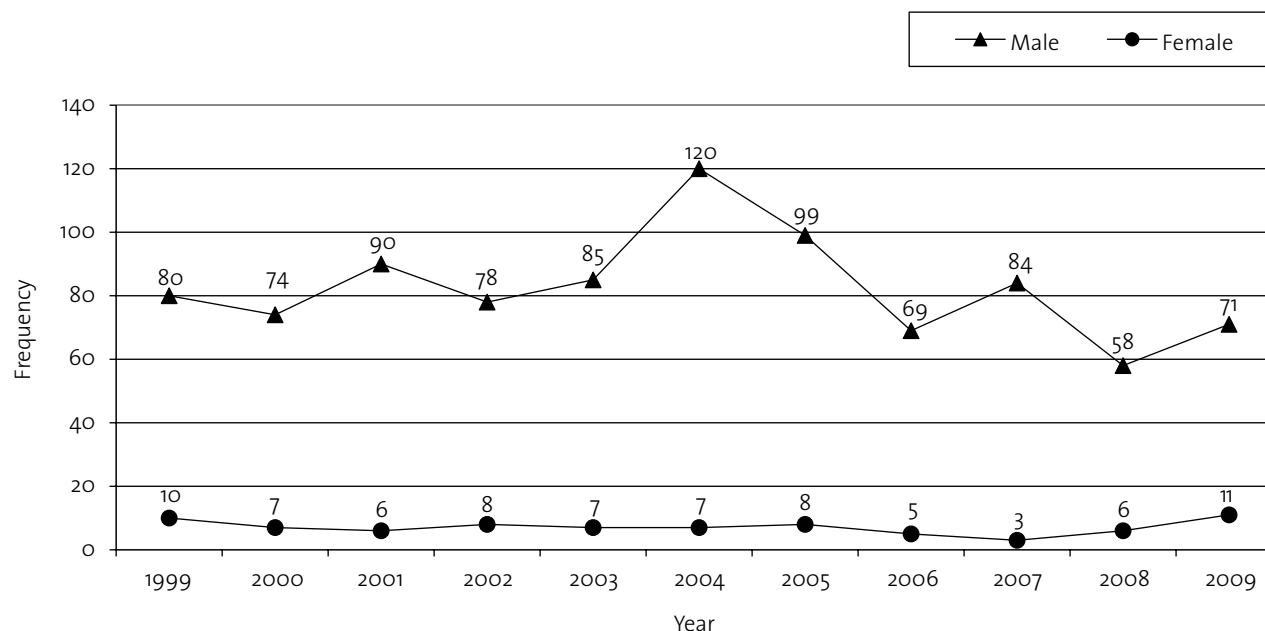
3.2 HOMICIDE

The Inquiry was notified by the Scottish Government Justice Analytical Services of 986 homicide convictions in the report period, 1999-2009. A psychiatric report was obtained on 777 (79%) homicide perpetrators.

3.2.1 Homicide in the general population

- The number of homicide convictions in the general population is shown in Figure 55. 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.¹⁰
- Despite a rise in 2009, there has been a fall in the number of homicides since a peak in 2004. The number of homicides in 2008 was the lowest recorded over the report period.
- The most common method of homicide was the use of a sharp instrument (53% of the total sample).

Figure 55: Number of homicides in the general population, by sex of perpetrator



3.2.2 Homicide by mentally ill people in the general population

Perpetrators who were mentally ill at the time of the homicide

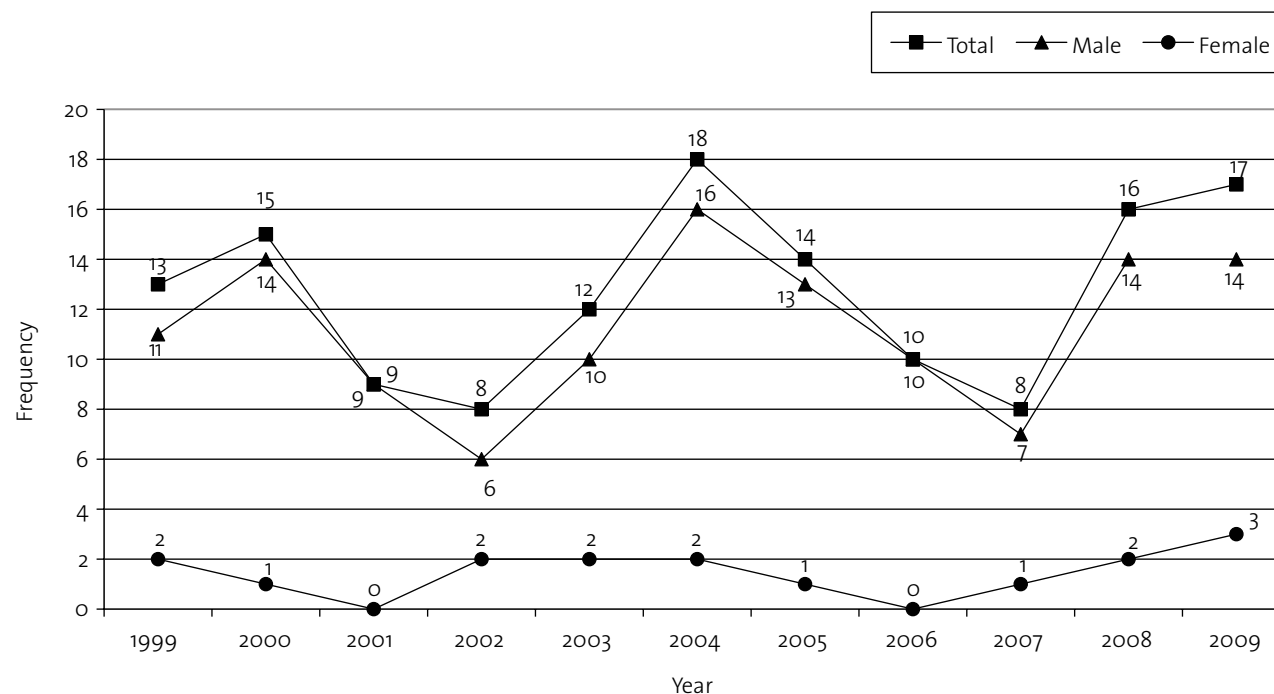
- Fifty-three people had an abnormal mental state at the time of the offence, 5% of the total sample, an average of 5 per year, ranging between 3 and 8 annually.
- Twenty-four people (2% of the total sample) had symptoms of psychosis at the time of the offence, an average of 2 per year, ranging between 0 and 5 annually.



3.2.3 Patient homicide

- During 1999-2009, 140 people convicted of homicide (14% of the total sample) were identified as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence. This was an average of 13 patient homicides per year.
- The numbers fluctuated over the period of the report, but no trend was found (Figure 56).
- There were no trends in the number of patient homicides by age-group.

Figure 56: Number of patient homicides, by sex of perpetrator



Relationship of victim to perpetrator: patient homicide

- The number of stranger homicides perpetrated by patients fluctuated over the report period, and ranged between 0 and 4 annually.
- The victims for male patients were most likely to be acquaintances whereas females most commonly killed spouses/partners (including ex-spouses/partners).

Treatment refusal

- Sixteen patients (13%) were known to have refused drug treatment in the month before the homicide, ranging between 0 and 3 annually.
- The numbers fluctuated over the report period; no trends were found.

Missed contact

- Fifty-four patients (40%) had missed their last appointment with services before the offence, an average of 5 per year, ranging between 2 and 7 annually.
- Numbers were small and no overall trend was found.

Homicide and schizophrenia

- There were 26 homicides by people with schizophrenia (based on lifetime history), 3% of the total sample, an average of 2 per year.
- Sixteen (62%) people with schizophrenia were patients, ranging between 0 and 4 annually.
- Two patients with schizophrenia were known to have refused drug treatment in the month before the homicide.



4. NORTHERN IRELAND

4.1 SUICIDE

Between 2000-2010, the Inquiry was notified of 2,426 deaths in the general population that received a suicide or undetermined verdict. These are referred to as suicides throughout the report.

4.1.1 Suicide in the general population

- There was an overall increase in the number and rate of suicide (Table 7; Figure 57). This increase was seen in both males and females.
- Rates increased in those aged under 25, aged 35-44, and aged 45-64 (Figure 58).

Table 7: Number of suicides in the general population, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	139	139	159	123	175	180	173	193	200	170	212
Female	37	41	45	40	62	50	52	65	53	57	61
Total	176	180	204	163	237	230	225	258	253	227	273



Figure 57: Rates of suicide in the general population, by sex

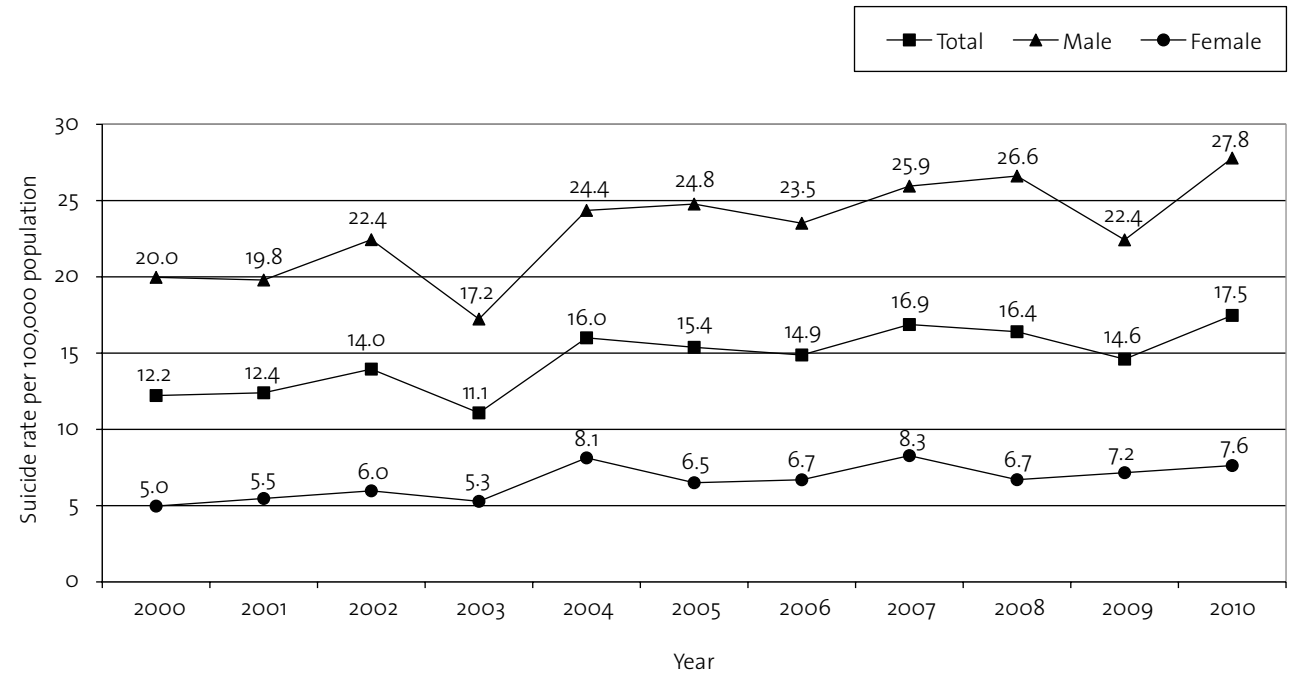
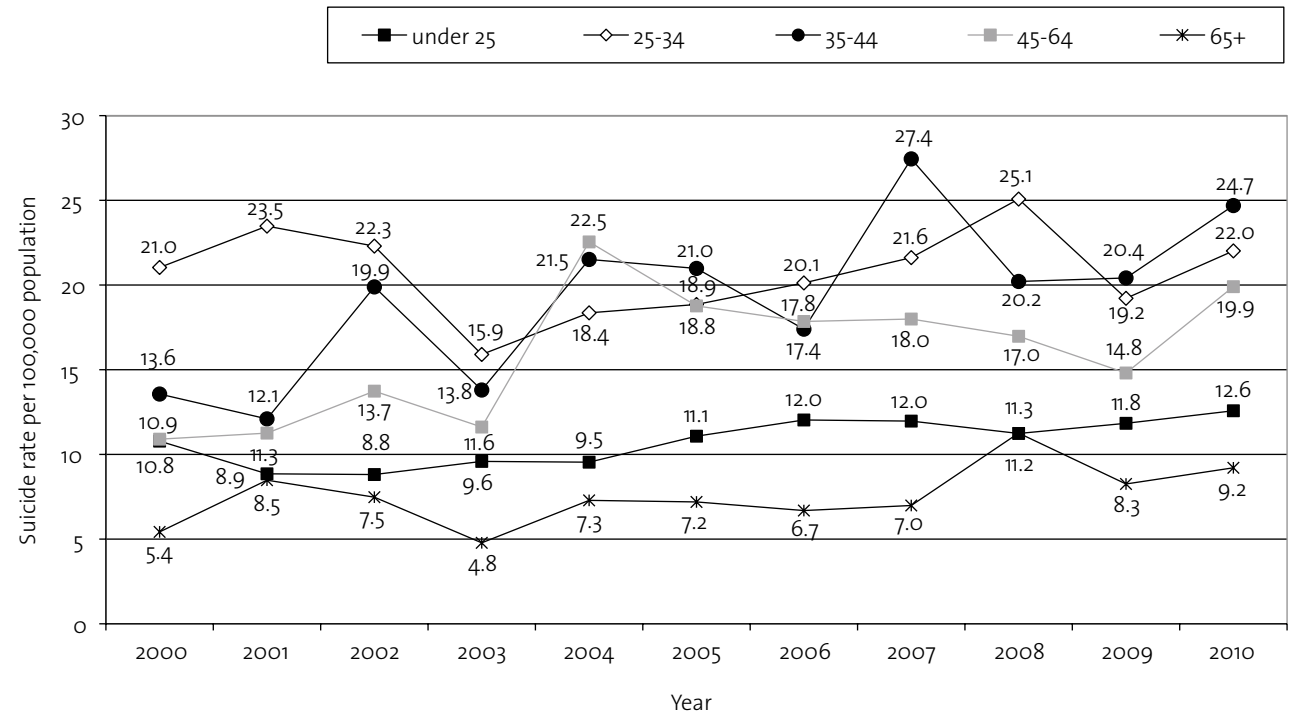


Figure 58: Rates of suicide in the general population, by age-group



Variation in suicide by Health Board

- There was some variation in suicide rates by Health Board of residence at the time of death (2007-2009). The highest rate of suicide was in the Western Area, at 18.1 per 100,000 population, and the lowest in the Northern Area at 13.3 per 100,000 population (Figure 59).
- The rate of suicide within each Health Board increased over the report period. The greatest increases in the rate of suicide were seen in the Northern and Southern Areas (Figure 60).



Figure 59: Rate of suicide, by Health Board (average rate 2007-2009)

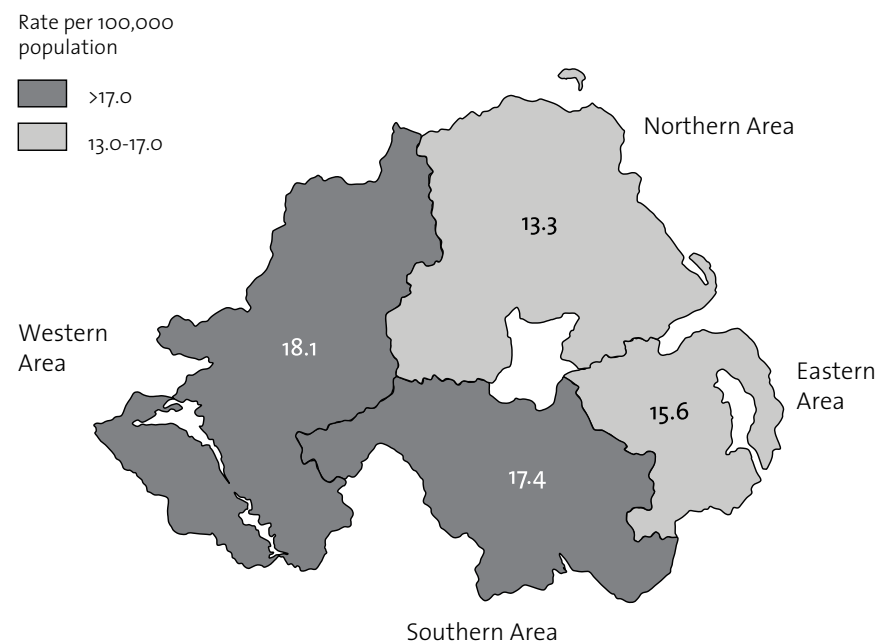
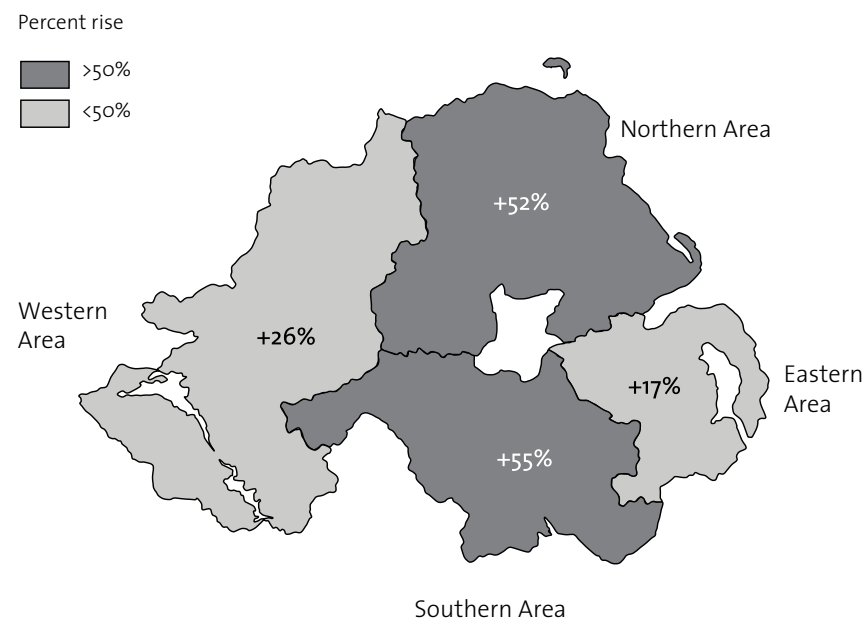


Figure 60: Change in the rate of suicide from 2000 to 2009, by Health Board



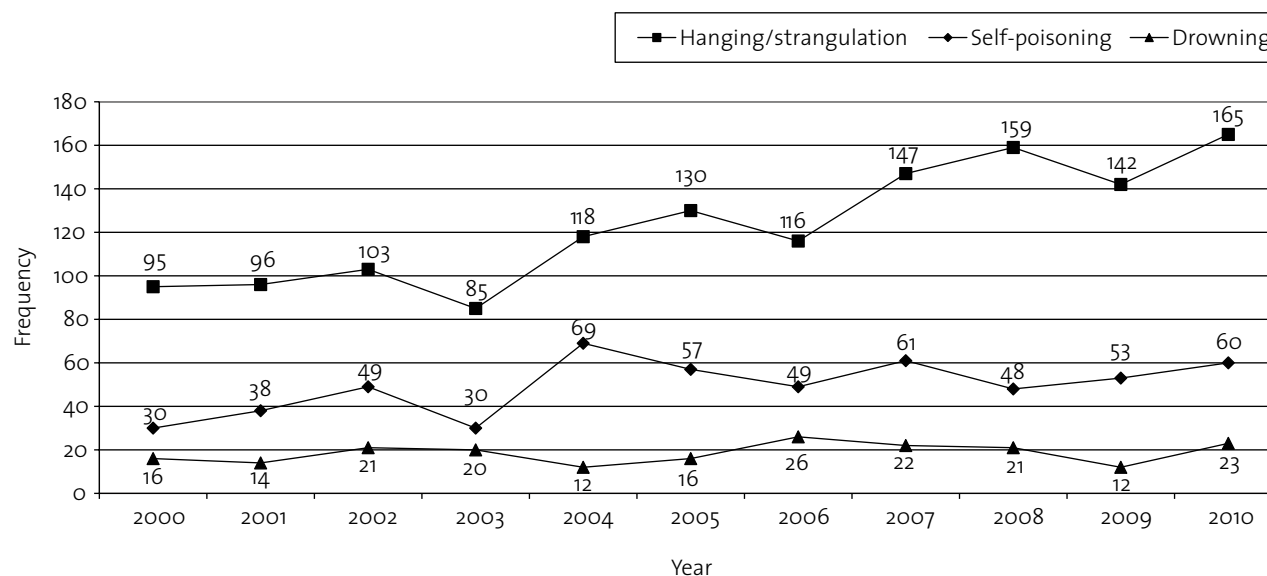
Note: These before and after rates are based on 3-year averages (1998-2000 and 2007-2009)



Method of suicide

- The most common methods of suicide were hanging/strangulation (referred to as hanging in the remainder of this report), self-poisoning (overdose), and drowning. Less frequent methods were jumping/multiple injuries (mainly jumping from a height or being struck by a train), carbon monoxide (CO) poisoning, firearms, and cutting/stabbing.
- Over the report period there were changes in method of suicide. Suicide deaths by hanging and self-poisoning increased (Figure 61), whilst deaths by carbon monoxide (CO) poisoning decreased. Figures for other methods remained stable.

Figure 61: Suicide in the general population: main causes of death



4.1.2 Patient suicide

Patient suicide: numbers and rates

- During 2000-2010, 682 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 represented an average of 62 patient suicides per year.

- There was an overall increase in the number and rate of suicide using a general population denominator (Table 8; Figure 62). Rates increased in females but not males.
- The number of patient suicides increased in those aged 45 to 64 but remained stable in all other age-groups (Figure 63).

Table 8: Number of patient suicides, by sex

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Male	28	40	49	33	45	49	43	49	48	40	52
Female	9	17	16	12	26	15	17	25	24	21	24
Total	37	57	65	45	71	64	60	74	72	61	76

*Projected figures



Figure 62: Rates of patient suicide, by sex

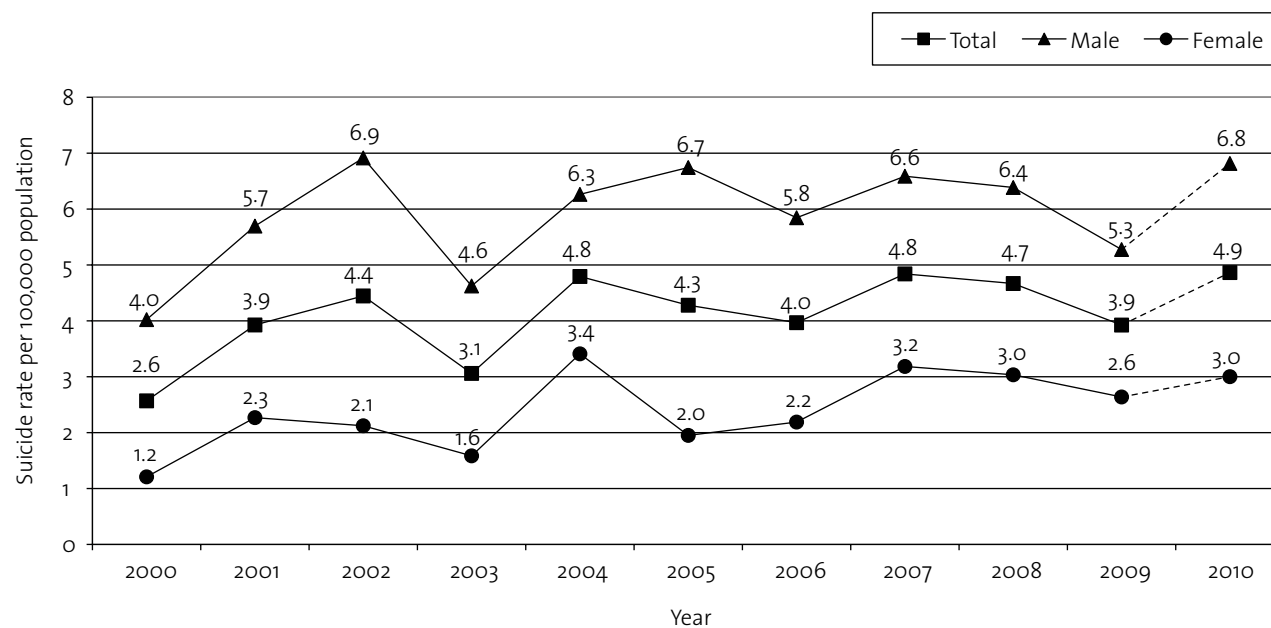
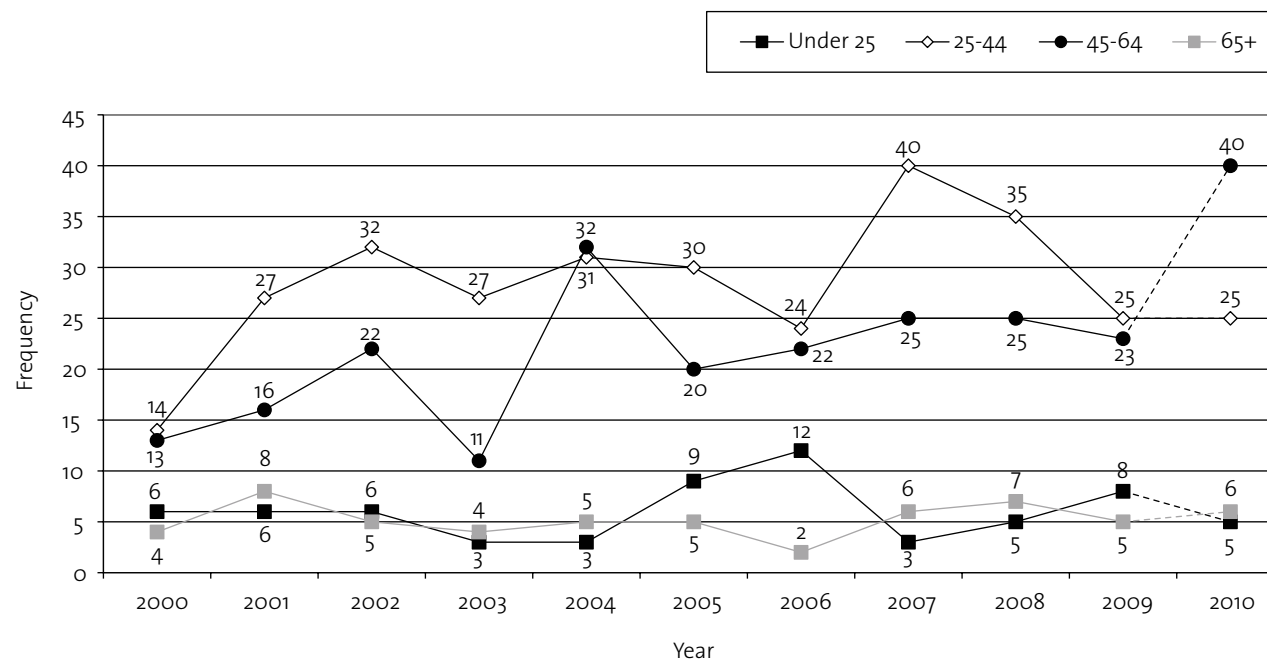


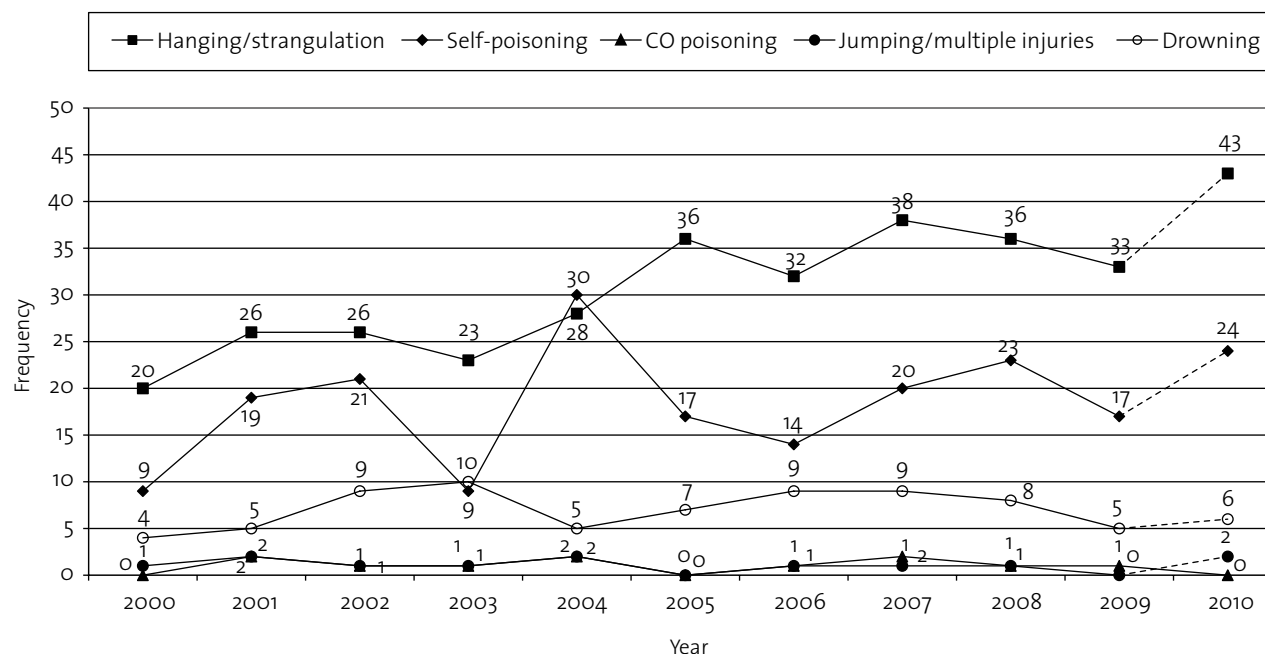
Figure 63: Number of patient suicides, by age-group



Method of suicide by patients

- The most common methods of suicide by patients were hanging, self-poisoning, and drowning.
- The number of deaths by hanging increased (Figure 64). There was a fall in the number of suicides by firearms. Figures for other methods remained stable.
- The most common substances used in deaths by self-poisoning were opiates (23%), benzodiazepines/hypnotics (11%), and paracetamol/opiate compounds (10%).
- There has been an increase in the use of opiates over the report period, from 0 in 2000/2001 to an average of 6 in 2009/2010.

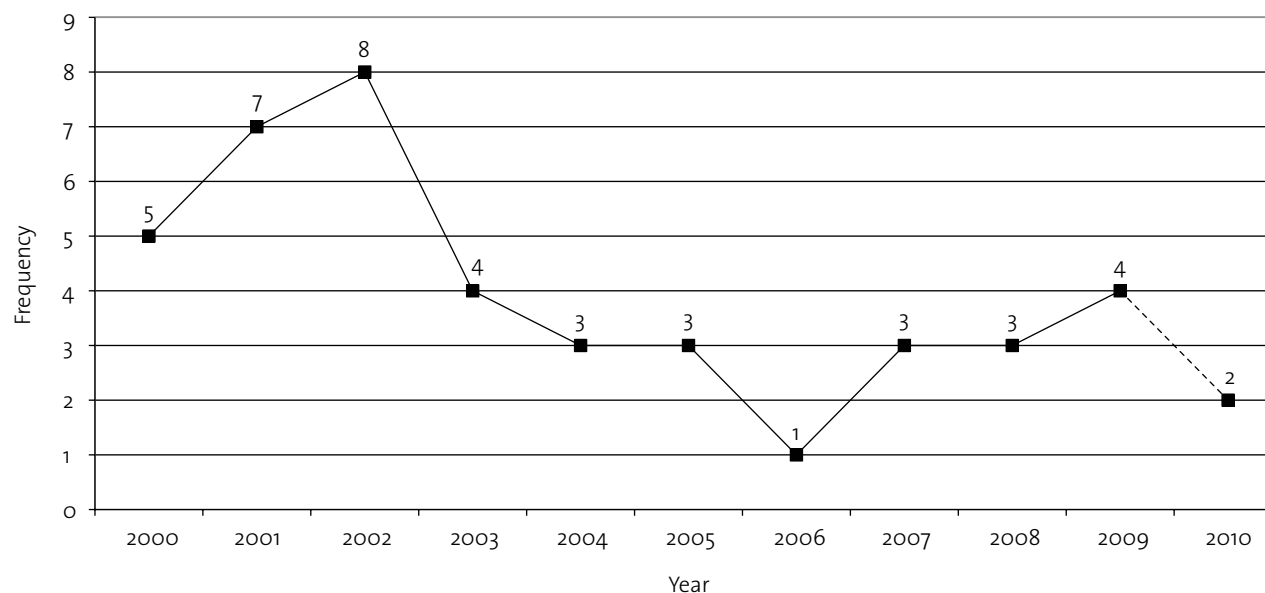
Figure 64: Patient suicide: main causes of death



In-patient suicide

- There were 43 in-patient deaths by suicide during the report period, 6% of patient cases, an average of 4 deaths per year.
- The number of in-patient suicides peaked in 2002, after which there was a steady fall (Figure 65).
- There were 7 patients who died on the ward by hanging over the 11-year period; this number fluctuated from 0 to 2 cases per year.
- There were 8 (19%) detained in-patients who died by suicide over the report period.

Figure 65: Patient suicide: number of mental health in-patients



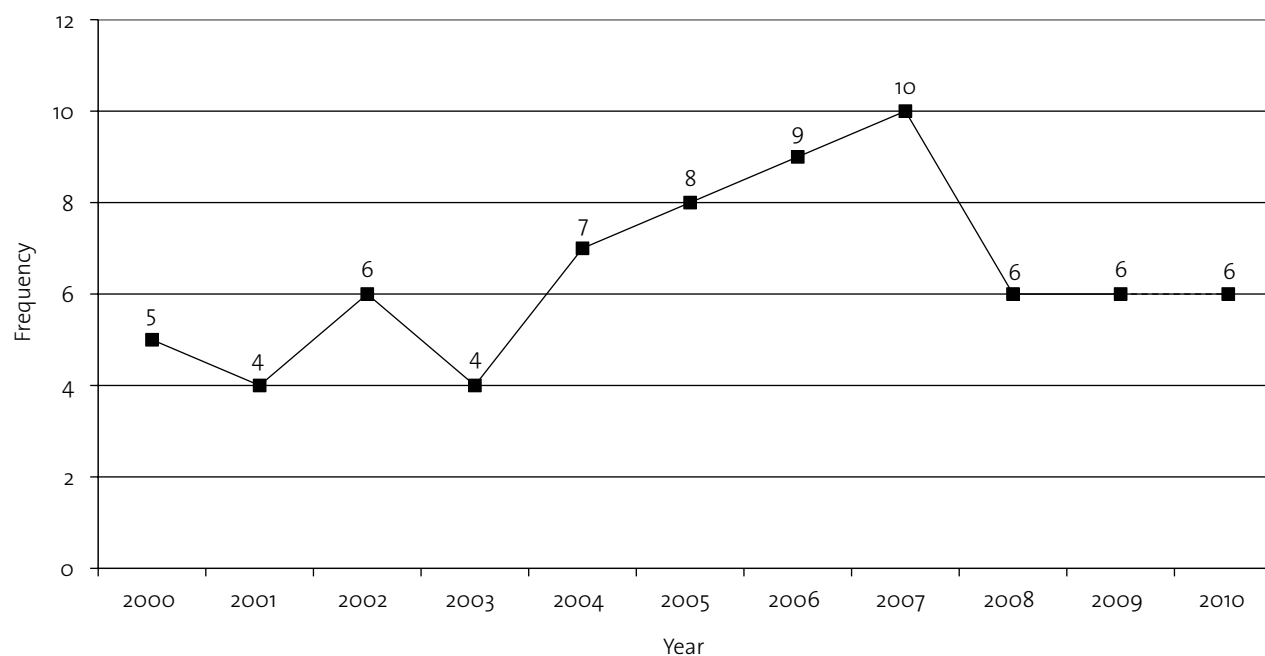
Absconding

- There were 14 in-patients who had absconded from the ward, 33% of all in-patient suicides, an average of 1 death per year.

Treatment refusal

- There were 71 suicides in which the patient was known to have refused drug treatment in the month before death, 12% of the total sample, an average of 6 deaths per year.
- There was no overall trend in the number of suicides in patients who refused drug treatment (Figure 66).

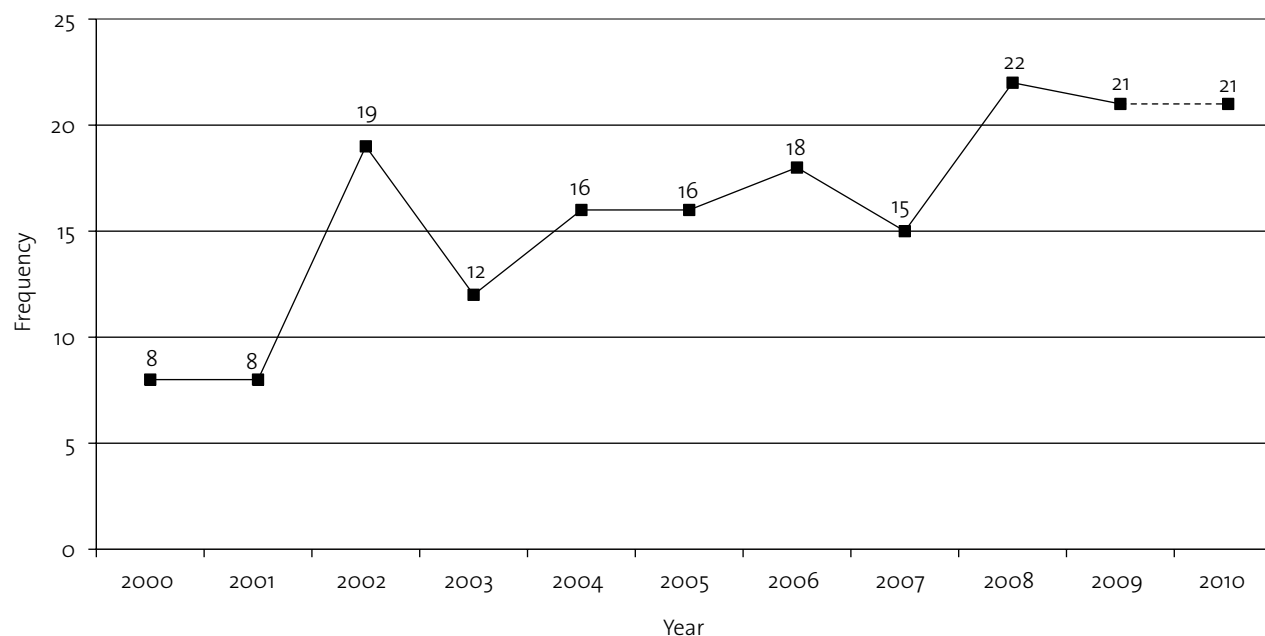
Figure 66: Patient suicide: number of patients who refused drug treatment



Missed contact

- There were 176 suicides by people who missed their last appointment with services, 28% of the total sample, an average of 16 deaths per year.
- There was an overall increase in the number of suicides in patients who missed their final service contact (Figure 67).

Figure 67: Patient suicide: number of patients who missed their last appointment with services



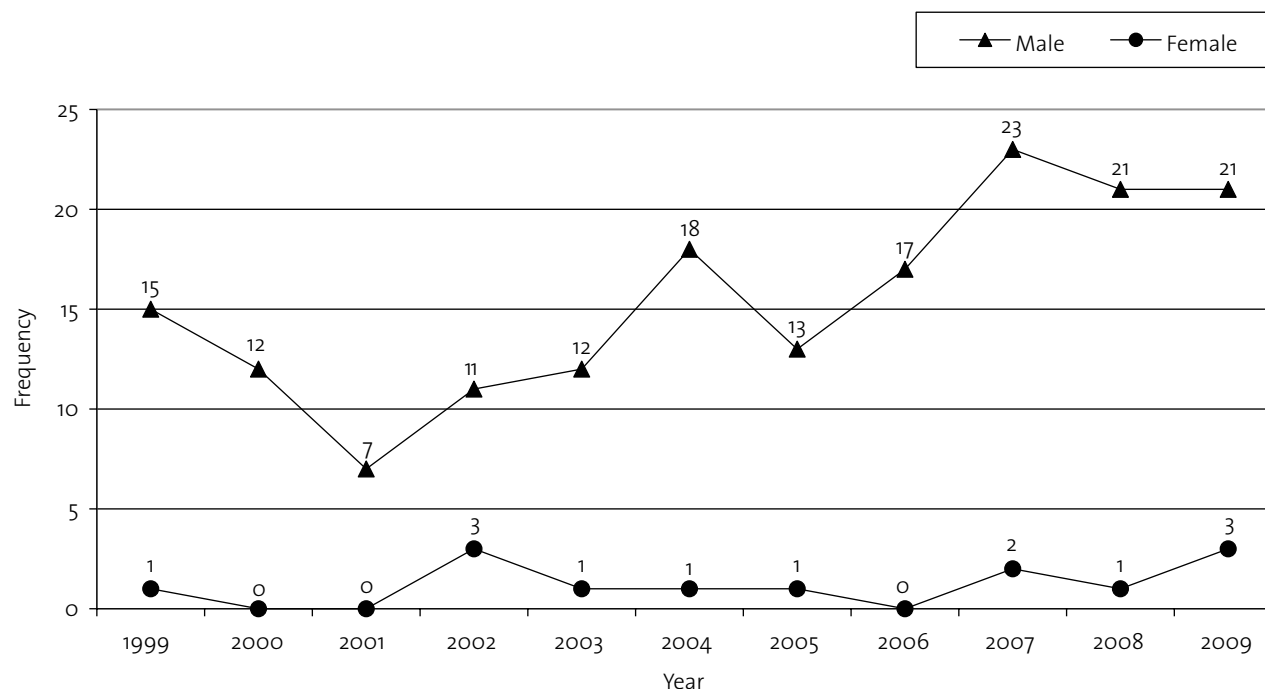
4.2 HOMICIDE

The Inquiry was notified by the Northern Ireland Courts and Tribunal Service of 183 homicide convictions in the report period, 1999-2009. A psychiatric report was obtained on 108 (59%) homicide perpetrators.

4.2.1 Homicide in the general population

- The number of homicide convictions in the general population notified to us is shown in Figure 68. These figures are provided as context for our data on homicides by people with mental illness. More recent homicide statistics are published by Police Service Northern Ireland.¹³
- The most common method of homicide was the use of a sharp instrument (38% of the total population).

Figure 68: Number of homicides in the general population, by sex of perpetrator



4.2.2 Homicide by mentally ill people in the general population

Perpetrators who were mentally ill at the time of the homicide

- Sixteen people had an abnormal mental state at the time of the offence, 9% of the total sample, ranging between 0 and 4 annually.
- Eight people over the 11-year report period (4% of the total sample) had symptoms of psychosis at the time of the offence, ranging between 0 and 2 annually.

4.2.3 Patient homicide

- During 1999-2009, 26 people convicted of homicide (14% of the total sample) were identified as patients, i.e. the person had been in contact with mental health services in the 12 months prior to the offence. This was an average of 2 patient homicides per year, ranging between 1 and 4 annually.
- The numbers fluctuated over the period of the report. In this section the numbers were too small to examine trends over time.

Relationship of victim to perpetrator: patient homicide

- One stranger homicide was notified to us over the report period.
- The victims for male patients were most likely to be acquaintances whereas females killed spouses/partners (including ex-spouses/partners).

Treatment refusal

- Four patients (20%) were known to have refused drug treatment in the month before the homicide.

Missed contact

- Thirteen patients (54%) had missed their last appointment with services before the offence, ranging between 0 and 2 annually.

Homicide by people with schizophrenia

- There were 7 homicides by people with schizophrenia (based on lifetime history) over the 11-year report period, 4% of the total sample.
- Three (43%) people with schizophrenia were patients.
- Two of the patients with schizophrenia were known to have refused drug treatment in the month before the homicide.



5. UK COMPARISONS

5.1 SUICIDE

Suicide rates in the general population

- Rates were highest in Scotland until 2010, when rates in Northern Ireland were the highest across all countries. Rates were lowest in England (Figure 69).
- In England, Wales, and Scotland the rate of suicide fell during the period of study but increased in Northern Ireland.
- Differences in rates between countries over the report period (2000-2010) were greatest in the youngest age-groups. Rates in Scotland were highest at all ages up to 85 years (Figure 70).
- The number of hangings increased in all countries except Scotland. Suicides by self-poisoning decreased in England and Wales but increased in Northern Ireland. The number of suicides by drowning decreased in England, Wales, and Scotland. Suicides by firearms decreased in England and Wales

Figure 69: Suicide rates in the general population, by country

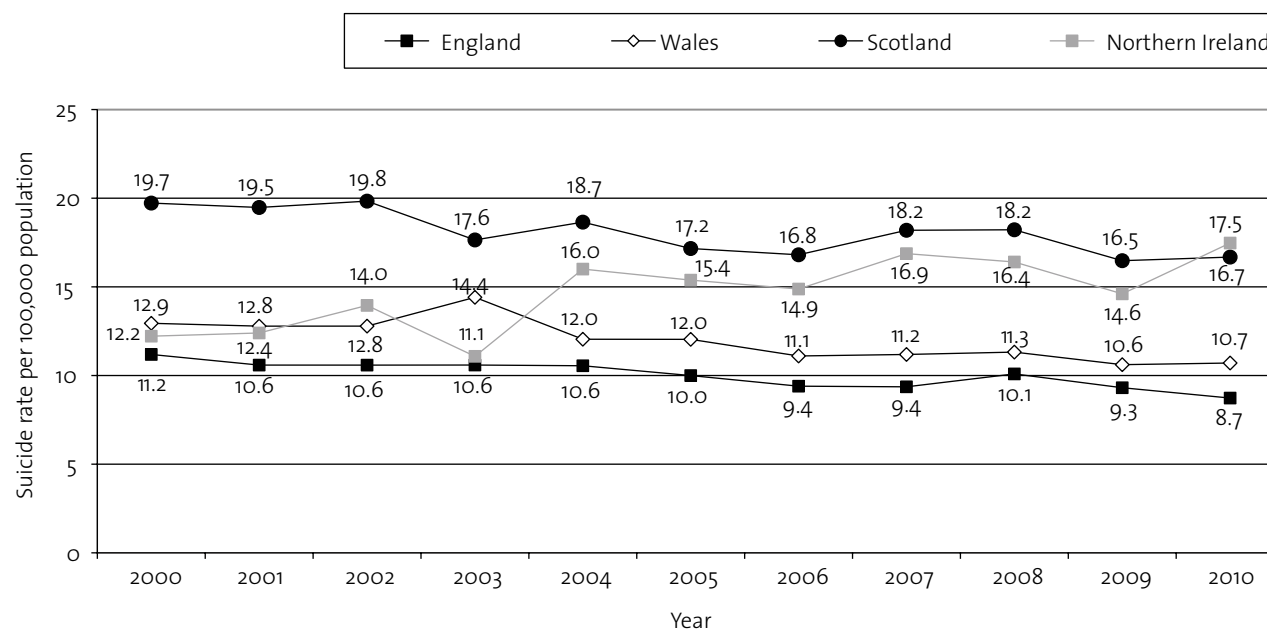
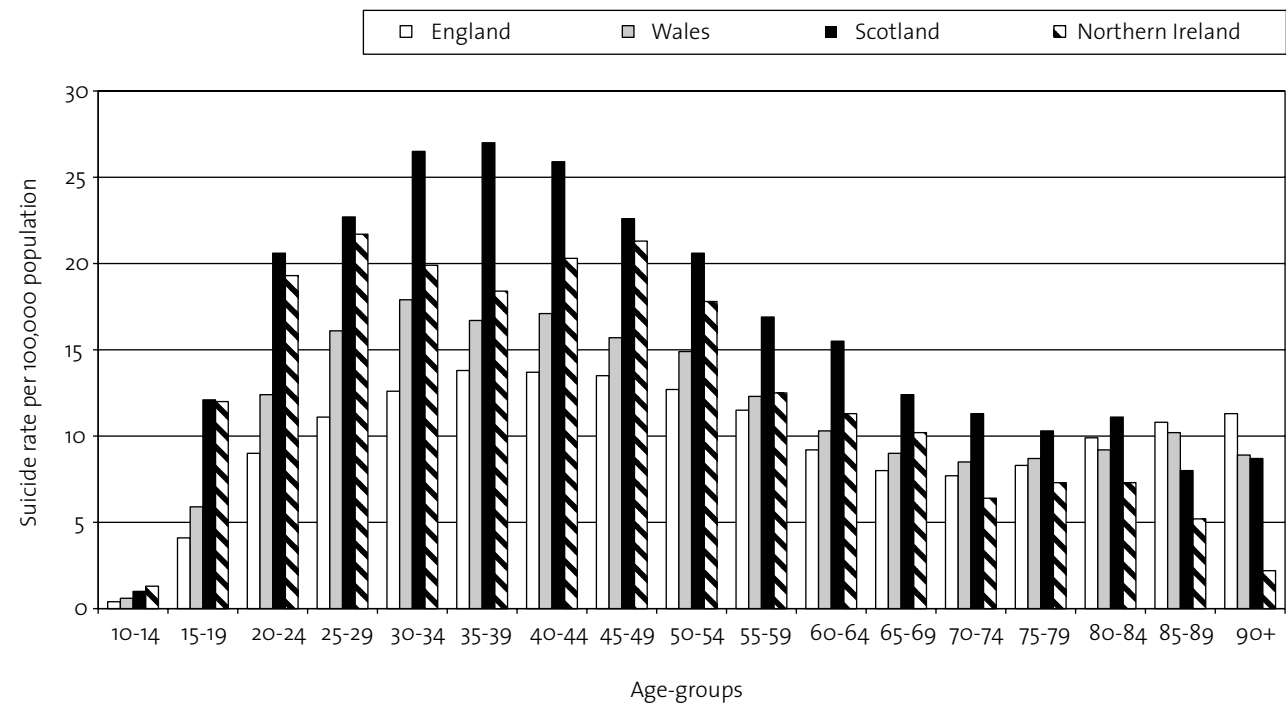


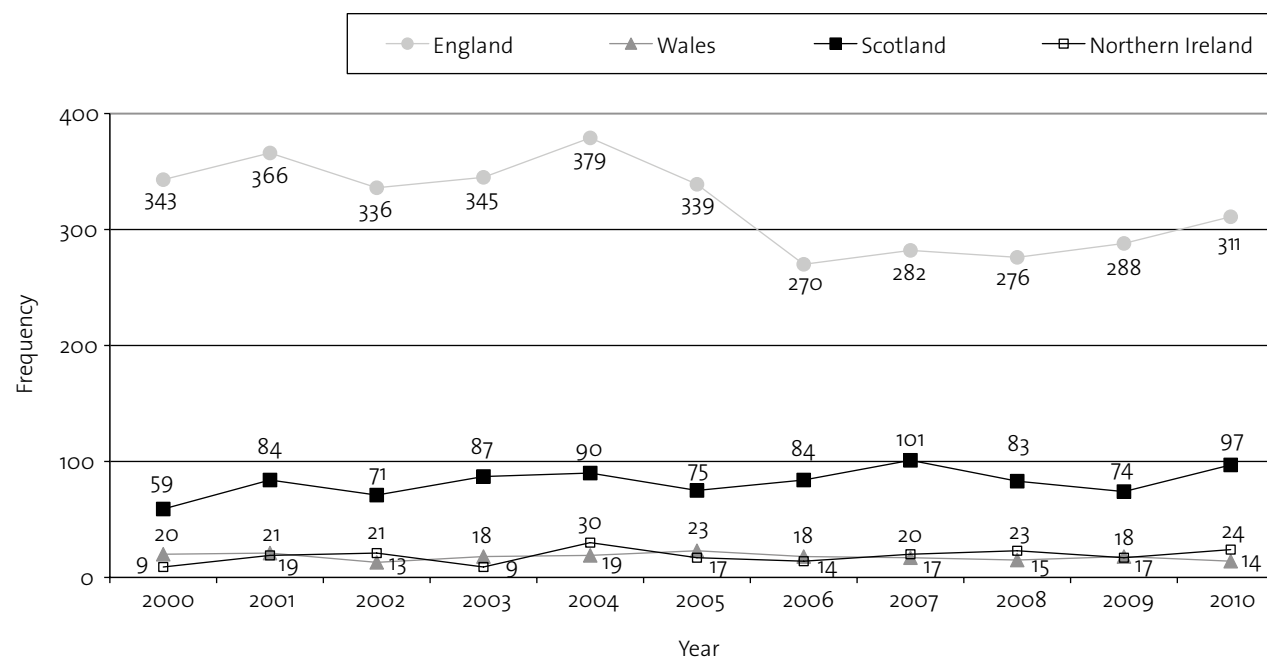
Figure 70: Suicide rates in the general population, by age-group and country (2000-2010)



Patient suicide method

- The number of suicides by hanging increased in Northern Ireland, decreased in Wales, and remained stable in England and Scotland. In Scotland there was an increase in suicides by jumping/multiple injuries. There was a fall in suicides by drowning in England and Scotland. Suicides by firearms decreased in England only.
- Overall, suicides by self-poisoning decreased in England only (Figure 71). Overdose by paracetamol/opiate compounds decreased in England; overdose by tricyclic antidepressants fell in England, Wales, and Scotland. In contrast, overdose by opiates increased in Scotland and Northern Ireland.

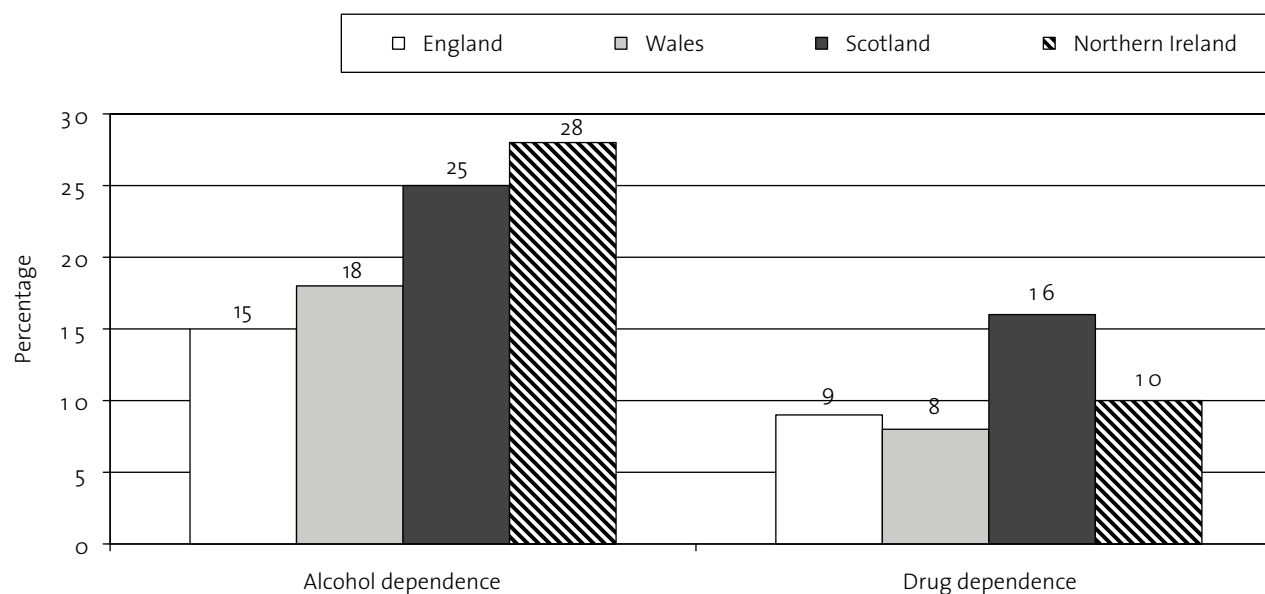
Figure 71: Patient suicide: number of patients who died by self-poisoning, by country



Patient suicide: alcohol and drugs

- Northern Ireland had a higher proportion of patient suicides with a diagnosis (primary, secondary or tertiary) of alcohol dependence compared to England and Wales, but a similar proportion to Scotland (Figure 72). Scotland had a higher proportion of patient suicides with a diagnosis of drug dependence compared to all other countries.

Figure 72: Patient suicide: proportion of patients with alcohol or drug dependence, by country (2000-2010)

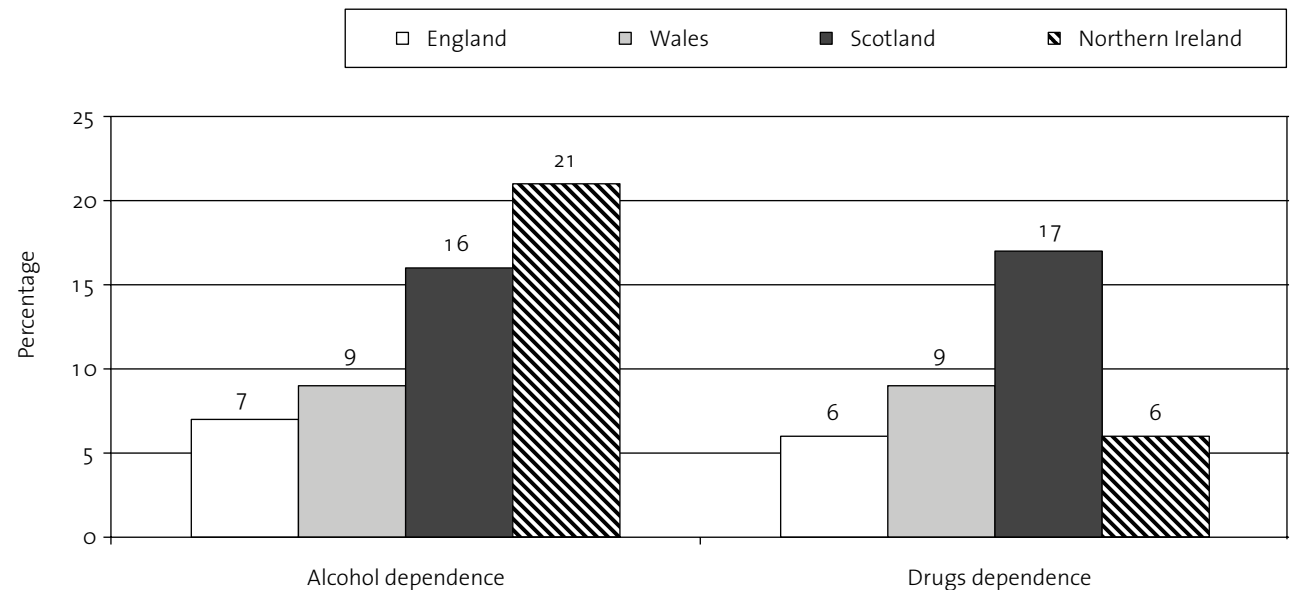


5.2 HOMICIDE

Alcohol and drug dependence and misuse

- More perpetrators in Northern Ireland and Scotland had a diagnosis (primary, secondary or tertiary) of alcohol dependence than in England or Wales. A history of alcohol misuse was more common among perpetrators in Northern Ireland than in England, Wales, or Scotland (Figure 73).
- Drug dependence was more common in Scotland than in England, Wales, or Northern Ireland (Figure 73).

Figure 73: General population homicide: proportion of perpetrators with alcohol or drug dependence, by country (1999-2009)



Homicide by mentally ill people in the general population

- In England, the number of people with schizophrenia, and the number with an abnormal mental state or psychosis at the time of the offence fell after a peak in 2004. This is consistent with the fall in homicide in the general population. However, it is too early to identify a definite downward trend.
- In Scotland, despite a fall in general population homicide from 2004, the same pattern of decline was not observed in people with mental illness convicted of homicide. No overall trend was found.
- The numbers were too small to examine trends for Wales.

Patient homicide

- Although there was a fall in the number of homicides after 2006 in England, it is too early to comment on whether this decrease will continue. This decrease in numbers should be interpreted with caution.
- The numbers were too small to examine differences in trends across UK countries.



6. RECENT PUBLICATIONS FROM THE INQUIRY

A full list of Inquiry reports and publications can be found on the Inquiry website:
[http://www.manchester.ac.uk/medicine/nci - Publications](http://www.manchester.ac.uk/medicine/nci-Publications)

While D, Bickley H, Roscoe A, Windfuhr K, Rahman MS, Shaw J, Appleby L, Kapur N. Implementation of mental health service recommendations in England and Wales and suicide rates, 1997-2006: a cross sectional and before-and-after observational study. *Lancet* (2012) DOI: 10.1016/S0140-6736(11)61712-1.

Kapur N, Hunt IM, Windfuhr K, Rodway C, Webb R, Rahman MS, Shaw J, Appleby L. Psychiatric in-patient care and suicide in England, 1997-2008: longitudinal study. *Psychological Medicine* (2012). In press.

Hunt IM, Bickley H, Windfuhr K, Shaw J, Appleby L, Kapur N. Suicide in recently admitted psychiatric in-patients: a case-control study. *Journal of Affective Disorders* (2012). In press.

Roscoe A, Rahman MS, Mehta H, While D, Appleby L, Shaw J. Comparison of a national sample of homicides committed by lone and multiple perpetrators. *Journal of Forensic Psychiatry and Psychology* (2012). In press.

Gunnell D, Metcalfe C, While D, Hawton K, Ho D, Appleby L, Kapur N. Impact of national policy initiatives on fatal and non-fatal self-harm after psychiatric hospital discharge: time series analysis. *British Journal of Psychiatry* (2012). In press.

Hunt IM, Windfuhr K, Shaw J, Appleby L, Kapur N. Ligature points and ligature types used by psychiatric in-patients who die by hanging: a national study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention* (2012) 33: 87-94.



Windfuhr K, Kapur N. Suicide and mental illness: a clinical review of 15 years of findings from the UK National Confidential Inquiry into Suicide. British Medical Bulletin (2011) DOI: 10.1093/bmb/lrdo42.

Windfuhr K. Suicide: Rates, risk factors and future directions for prevention. Editorial, British Journal of Hospital Medicine (2011) 72(7): 364-365.

Windfuhr K, Swinson N (2011) Suicide and homicide by people with mental illness: a national overview. (pp. 97-117). In R. Whittington & C. Logan (Eds.) Self-harm and violence: Towards best practice in managing risk in mental health services. Publishers: West Sussex, Wiley-Blackwell.

Windfuhr K, Kapur N (2011) International perspectives on the epidemiology and aetiology of suicide and self-harm. (pp.27-57). In R O'Connor, S. Platt, J. Gordon (Eds.) 'The International Handbook of Suicide Prevention: Research, Policy, and Practice'. Publishers: West Sussex, Wiley-Blackwell.



7. REFERENCES

- 1 Office for National Statistics. <http://www.statistics.gov.uk/default.asp>
- 2 Home Office Statistics Unit of Home Office Science. <http://www.homeoffice.gov.uk/science-research/research-statistics/>
- 3 Home Office (2012). <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosbo212/>
- 4 Hospital Episode Statistics. <http://www.hesonline.nhs.uk/>
- 5 Health Solutions Wales. <http://www.hsw.wales.nhs.uk/>
- 6 Appleby, L., Kapur, N., Shaw, J. et al. (2009). National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report: England and Wales. http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/inquiry_reports/
- 7 Appleby, L., Kapur, N., Shaw, J. et al. (2010). National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Annual Report: England and Wales. http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/inquiry_reports/
- 8 Appleby, L., Kapur, N., Shaw, J. et al. (2006). Avoidable Deaths: Five year report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/inquiry_reports/
- 9 General Register Office for Scotland (GROS). www.gro-scotland.gov.uk
- 10 The Scottish Government. Statistical Release Crime and Justice Series: Homicide in Scotland, 2010-11. <http://www.scotland.gov.uk/Publications/2011/12/14124940/1>



- 11 Appleby, L., Kapur, N., Shaw, J. et al. (2008). Lessons for Mental Health Care in Scotland. http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/inquiry_reports/
- 12 Northern Ireland Statistics and Research Agency. <http://www.nisra.gov.uk/>
- 13 Police Service of Northern Ireland. Trends in police recorded crime in Northern Ireland, 1998/99 to 2011/12. http://www.psni.police.uk/police_recorded_crime_in_northern_ireland_1998-99_to_2011-12.pdf
- 14 Appleby, L., Kapur, N., Shaw, J. et al. (2011). Suicide and homicide in Northern Ireland, June 2011. http://www.medicine.manchester.ac.uk/mentalhealth/research/suicide/prevention/nci/inquiry_reports
- 15 Statacorp Statistical Software: Release 11.0. College Stations, TX: Stata Corporation, 2007
- 16 Department of Health (2011). Consultation on preventing suicide in England: a cross-government outcome strategy to save lives. http://www.dh.gov.uk/en/Consultations/Liveconsultations/DH_128065
- 17 Scottish Public Health Observatory: Health, well-being and disease. <http://www.scotpho.org.uk/health-wellbeing-and-disease/suicide/data/national-trends>
- 18 Mental Health Minimum Dataset. Online: <http://www.ic.nhs.uk/services/mental-health/mental-health-minimum-dataset-mhmds>
- 19 Kapur, N., Hunt, I.M., Webb, R., Bickley, H., Windfuhr, K., Shaw, J., Appleby, L (2006). Suicide in psychiatric in-patients in England, 1997-2003. *Psychological Medicine*, 36:1485-1492.
- 20 Kapur, N., Hunt, I.M., Windfuhr, K., Rodway, C., Webb, R., Rahman, M.S., Shaw, J., Appleby, L (2012). Psychiatric in-patient care and suicide in England, 1997-2008: longitudinal study. *Psychological Medicine*, in press.



FUNDING

The National Confidential Inquiry into Suicide and Homicide is based at the University of Manchester and is commissioned by the Healthcare Quality Improvement Partnership (HQIP) on behalf of the funding bodies of the Department of Health, DHSSPS Northern Ireland, the Scottish Government, NHS Wales, and the states of Jersey and Guernsey.

