Safety First

Five-Year Report of the
National Confidential Inquiry
into Suicide and Homicide
by People with Mental Illness

Report 2001

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This publication represents the views of the authors, and not necessarily those of the Institute.

SUMMARY: KEY FINDINGS AND RECOMMENDATIONS

Key Findings: Suicide

Suicides under mental health services

1. Approximately one quarter of suicides in England and Wales, Scotland and Northern Ireland had been in contact with mental health services in the year before death; this represents around 1,500 cases per year.

2. The commonest methods of suicide were hanging and self-poisoning by overdose.

3. Younger suicides more often had a history of schizophrenia, personality disorder, drug or alcohol misuse, and violence. *

4. Most people with schizophrenia who committed suicide were unemployed and unmarried. *

5. Four per cent of suicides were the lone carers of children. *

6. Mental health teams in England and Wales regarded 22% of the suicides as preventable, with lower figures in Scotland and Northern Ireland, but around three-quarters identified factors that could have reduced risk, mainly improved patient compliance and closer supervision.

In-patient suicides

7. Sixteen per cent of suicide Inquiry cases in England and Wales, 12% in Scotland and 10% in Northern Ireland were psychiatric in-patients.

8. In-patient suicides, particularly those occurring on the ward, were most likely to be by hanging, most commonly from a curtain rail and using a belt as a ligature.

9. Around one quarter of in-patient suicides died during the first week of the admission.

10. Around one-fifth of in-patient suicides were under non-routine observation (constant or intermittent).

11. Around one third of in-patient suicides in England and Wales and Scotland, and almost half of in-patient suicides in Northern Ireland were on agreed leave at the time of death.

12. Mental health teams more often regarded in-patient suicides as preventable.

* Refers to findings that apply to England and Wales only.

Suicides within three months of discharge

13. Twenty-three per cent of suicide Inquiry cases in England and Wales, 26% of cases in Scotland and 30% of cases in Northern Ireland died within three months of discharge from in-patient care.

14. Post-discharge suicides were at a peak in the first 1-2 weeks following discharge.

15. Forty per cent of post-discharge suicides in England and Wales, 35% in Scotland and 66% in Northern Ireland, occurred before the first follow-up appointment.

16. Compared to all community cases, post-discharge suicides were associated with final admissions lasting less than seven days, re-admissions within three months of previous discharge and self-discharge. *

Care Programme Approach *

17. Forty-seven per cent of suicide Inquiry cases in England and Wales were subject to the Care Programme Approach at a level requiring multi-disciplinary review (enhanced CPA).

18. Around a quarter of these suicides were non-compliant with treatment in the month before death and the same proportion missed their final appointment with services in the community.

19. A quarter of suicides with a diagnosis of schizophrenia were not subject to enhanced CPA.

Non-compliance with treatment

20. Around one fifth of suicides were non-compliant with medication in the month before death (22% in England and Wales, 21% in Northern Ireland, 17% in Scotland).

21. Twenty-nine per cent of non-compliant suicides in England and Wales, 27% in Scotland and 13% in Northern Ireland had a diagnosis of schizophrenia.

22. Mental health teams made a face-to-face attempt to encourage compliance with treatment in 62% of non-compliant cases in England and Wales, 57% in Northern Ireland and 44% in Scotland.

Missed contact

23. Just under one third of suicides in the community missed their final appointment with services (30% in Northern Ireland, 29% in Scotland, 28% in England and Wales).

* Refers to findings that apply to England and Wales only.

24. Seventeen per cent of suicides in England and Wales who missed their final appointment in the community, 11% in Scotland and 8% in Northern Ireland, had schizophrenia.

25. Mental health teams made an assertive attempt to re-establish contact (e.g. home visit) in 55% in England and Wales, 56% in Scotland and 52% in Northern Ireland.

Ethnic minorities

26. Six per cent of suicides in England and Wales, 2% in Scotland and 1% in Northern Ireland were from an ethnic minority.

27. Suicides in ethnic minorities usually had severe mental illness; three quarters of black Caribbean suicides had a diagnosis of schizophrenia.*

28. Suicides in ethnic minorities had high rates of recent non-compliance.*

Homelessness

29. Three per cent of suicides in England and Wales, 2% in Scotland and 1% in Northern Ireland were homeless or of no fixed abode.

30. Seventy-one per cent of suicides among homeless people occurred in in-patients or within three months of discharge from in-patient care.*

31. Half of homeless suicides were subject to enhanced CPA, yet almost two-thirds were out of contact with services at the time of death.*

Key Findings: Homicide

Homicides in the general population

32. Around a third of all perpetrators of homicide had a diagnosis of mental disorder based on life history; the most common diagnoses were alcohol dependence, drug dependence and personality disorder.

33. Seven per cent of people convicted of homicide in England and Wales, and 6% in Scotland, were committed to psychiatric hospital.

34. Five per cent of all perpetrators of homicide in England and Wales (7% of those with a psychiatric report), and 2% in Scotland, had a diagnosis of schizophrenia.

35. Nine per cent of people convicted of homicide had a diagnosis of personality disorder. *

* Refers to findings that apply to England and Wales only.

Mental illness at the time of homicide

36. Fifteen per cent of people convicted of homicide in England and Wales (for whom reports were available), and 5% in Scotland, had symptoms of mental illness at the time of the offence.

37. These mentally ill perpetrators had a lower rate of previous convictions for violence than homicides who were not mentally ill at the time of the offence.

38. Alcohol and drugs were more likely to contribute to the offence in people convicted of homicide who were not mentally ill. *

39. Mentally ill perpetrators were less likely to kill a stranger than those without mental illness. *

Homicides by people in contact with mental health services

40. Nine per cent of all perpetrators in England and Wales had been in contact with mental health services in the year before the offence. At least 18% had been in contact with services at some time. In Scotland, the corresponding figures were substantially higher, at 18% and 29%. These figures represent around 55 cases per year with contact in the previous year.

41. The most common diagnoses were personality disorder and schizophrenia and almost half of those with any service contact had a history of alcohol and drug misuse.

42. At final service contact, both immediate and long-term risk of violence were estimated to be low or absent in over 75% of cases.

43. Few of the homicides were regarded as preventable by mental health teams; perceived preventability was associated with schizophrenia, non-compliance, recent contact and higher estimations of risk at final contact.

Priority groups

44. Among perpetrators with contact with mental health services within a year of the offence (recent contact homicides), 3% were in-patients at the time of the offence. *

45. In 16% of recent contact cases in England and Wales, and in 11% in Scotland, the perpetrator had been discharged from psychiatric in-patient care within three months of the offence.

46. In only 35% of recent contact cases the perpetrator was subject to the higher levels of the Care Programme Approach (enhanced CPA). Among those who were not under enhanced CPA, a third had severe mental illness.*

* Refers to findings that apply to England and Wales only.

*Homicide and schizophrenia **

47. Over a quarter of perpetrators with schizophrenia had no contact with mental health services prior to committing homicide.

48. Among perpetrators with schizophrenia who had a history of service contact, around three-quarters had previous convictions for violence against the person or threatening behaviour; just over half were subject to enhanced CPA.

49. Half the perpetrators with schizophrenia were out of contact with services by the time of the offence.

50. One fifth of perpetrators with schizophrenia were sent to prison rather than hospital.

*Homicide and personality disorder**

51. Half of perpetrators with personality disorder had never been in contact with mental health services.

52. Among perpetrators with personality disorder who had a history of service contact, almost two-thirds had previous convictions for violence against the person or threatening behaviour.

53. Over 90% of perpetrators with personality disorder had no symptoms of mental illness at the time of the offence and received a prison disposal.

*Homicides not leading to conviction**

54. Three people per year were found "unfit to plead" and two per year were "not guilty by reason of insanity".

55. Around 20 people per year were reported to have committed suicide after homicide and before conviction; only 7% of these were known to have been in contact with mental health services.

* Refers to findings that apply to England and Wales only.

New Recommendations

1. A broadly based suicide prevention strategy, is needed in each country. This should set out what actions should be taken by mental health services, as well as other health and social care services.

2. Clinical services should place priority for suicide prevention and monitoring on:

   - In-patients under non-routine observations
   - In-patients who are assessed to be at high risk or who are detained and in the first seven days of admission
   - In-patients who are at high risk and who are sufficiently recovered to allow home leave but whose home circumstances lack support (particularly those who live alone)
   - Recently discharged patients who are high risk or who were recently detained (in Scotland this should include those who are allowed to leave hospital under Leave of Absence)
   - Patients who become non-compliant or who miss service contact while under enhanced CPA (or its equivalent in Scotland, Wales and Northern Ireland)

In-patients and Post-discharge follow-up

3. In-patient units should remove (or make inaccessible) all likely ligature points.

4. In-patient teams should, in consultation with local service user representatives, develop protocols that allow the removal of potential ligatures from patients who are at high risk.

5. In-patients going on leave should have close community follow-up.

6. Patients under non-routine observations (special observation in Scotland) should not normally be allowed time off the ward or leave.

7. In-patient services should ensure that there are no gaps, however brief, in one-to one observation.

8. All discharged in-patients who have severe mental illness or a recent (less than three months) history of deliberate self-harm should be followed up within one week, (in Scotland this should include patients on Leave of Absence).

Care Programme Approach
(These recommendations refer to England and Wales though most are also applicable to care planning processes in Scotland and Northern Ireland)

9. There should be a major overhaul of the operation of the Care Programme Approach and equivalent systems, with the establishment of national criteria for enhanced CPA – these criteria should emphasise the importance of risk.

10. All care plans for enhanced CPA should include explicit plans for responding to non-compliance and missed contact.

11. Enhanced CPA should normally apply to patients with schizophrenia (exceptions should be explained in case notes), all those with a combination of severe mental illness and self-harm or violence, all homeless patients who have been admitted and all patients with severe mental illness who are lone parents.

12. Monitoring of these aspects of the CPA should be a priority for local clinical governance and the Commission for Health Improvement (in Scotland, the Mental Welfare Commission and the Clinical Standards Board).

Training

13. NHS and social care training organisations should have a system of approving training courses, and staff should attend only approved training. Approval should be based on the evidence that training leads to benefits.

14. Courses on risk management should cover aspects of risk presented in this report, (see page 151).

Substance misuse

15. Local services should have a strategy for the comprehensive care of patients with dual diagnosis, to include liaison between mental health and substance misuse services, statutory and voluntary agencies, staff training and the appointment of key staff who will lead clinical developments.

Ethnic minorities

16. Local services should have a strategy for providing care for ethnic minorities to include staff training, staff recruitment, and links with the voluntary sector.

Criminal Justice System

17. People with schizophrenia who have complex needs for health and social care should, if convicted of an offence, be sent to hospital rather than prison, unless there are exceptional and explicit circumstances.

Stigma

18. Anti-stigma campaigns, including those run by or in association with the Department of Health and the Royal College of Psychiatrists, should emphasise the low risk to strangers posed by people with mental illness.

Twelve Points to a Safer Service

In this report and in *Safer Services* we have presented a series of recommendations that address policy and practice in mental health. Below we list what we consider to be the most important clinical recommendations from both reports. This is intended as a checklist for local services.

- Staff training in the management of risk – both suicide and violence – every 3 years
- All patients with severe mental illness and a history of self-harm or violence to receive the most intensive level of care
- Individual care plans to specify action to be taken if patient is non-compliant or fails to attend
- Prompt access to services for people in crisis and for their families
- Assertive outreach teams to prevent loss of contact with vulnerable and high-risk patients
- Atypical anti-psychotic medication to be available for all patients with severe mental illness who are non-compliant with "typical" drugs because of side-effects
- Strategy for dual diagnosis covering training on the management of substance misuse, joint working with substance misuse services, and staff with specific responsibility to develop the local service
- In-patient wards to remove or cover all likely ligature points, including all non-collapsible curtain rails
- Follow-up within 7 days of discharge from hospital for everyone with severe mental illness or a history of self-harm in the previous 3 months
- Patients with a history of self-harm in the last 3 months to receive supplies of medication covering no more than 2 weeks
- Local arrangements for information-sharing with criminal justice agencies
- Policy ensuring post-incident multi-disciplinary case review and information to be given to families of involved patients

How the Inquiry is Conducted

Background and aims

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness was established at the University of Manchester in 1996, having previously been based in London. It was initially funded by the Department of Health in England. From 1997 additional funding was provided by the Scottish Office (now the Scottish Executive), the Welsh Office and the HSS Executive in Northern Ireland. In 1999, the National Institute for Clinical Excellence was given administrative responsibility for all confidential inquiries in England and Wales. The Inquiry is conducted in association with the Royal College of Psychiatrists. Its main aims are:

- to collect detailed clinical data on people who die by suicide or commit homicide and who have been in contact with mental health services
- to make recommendations on clinical practice and policy that will reduce the risk of suicide and homicide by people under mental health care

The Inquiry is particularly interested in the circumstances of suicide and homicide in specific "priority groups" for whom recommendations are most needed. These are people who are known to be at high risk or to have greater treatment needs, or who are likely to experience difficulty in maintaining contact with services. The priority groups are patients who:

- were in-patients at the time of the incident
- were discharged from in-patient care less than three months earlier
- were subject to the Care Programme Approach at a level requiring regular multidisciplinary review
- were not compliant with treatment
- had missed their final appointment with services
- were from an ethnic minority
- were homeless

Overview of Inquiry method

There are three stages to both the suicide and homicide components of the Inquiry. The first stage is the collection of a comprehensive national sample, irrespective of mental health history. The second stage is the identification of individuals within the sample who have been in contact with mental health services. The third stage is the collection of clinical data about these individuals.

The Inquiry does not yet collect equivalent information on "controls", individuals who have been in contact with mental health services but who have not committed suicide or homicide. This means it cannot yet identify the causes of suicide or homicide by psychiatric patients or say with certainty how people who commit suicide or homicide differ from other patients. However, the Inquiry has now begun case control studies of suicide by in-patients and recently discharged patients. Findings will be published in future reports.

Currently, the Inquiry collects detailed information on the activities of clinical services prior to suicide and homicide and on patterns of events leading to these incidents. As a result it can say how often certain kinds of problems occur prior to suicide and link these to service responses. For example, the Inquiry can tell us how often patients lose contact with services before suicide or homicide, and what actions services take. It can also carry out comparisons within the sample of patients committing suicide (their number being much larger than the number committing homicide), highlighting the features of suicides in different settings, e.g. suicides within three months of discharge versus later suicides in the community. Some of these findings will reflect differences between patients in these settings in general, whether or not they commit suicide; others will show particular problems associated with suicide in a particular setting.

Data collection processes

Suicide

Information on people who die by suicide or who receive an open verdict at coroner's inquest is obtained from the Office for National Statistics (ONS) for England and Wales, and the General Register Offices (GRO) in Northern Ireland. In the first three years of the Inquiry this information was also obtained from District Directors of Public Health in England and Wales and cross-checked to ensure a comprehensive sample. In Scotland, all sudden unexpected deaths are investigated by the local Procurator Fiscal's office and information on these is obtained from the General Register Office.

The majority of open verdicts are suicides and it is conventional to include some or all open verdicts in studies of suicide. In the Inquiry all open verdicts are included unless it is clear that suicide was not considered at inquest, e.g. in deaths in which a clear medical cause cannot be found but which were not self-inflicted. As a result the Inquiry suicide sample consists of suicides and probable suicides but all cases are referred to as suicides in this report. This may have the effect of lowering the proportion of the suicide sample that are in contact with services – because the sample may contain a number of non-suicides who had no reason to be under mental health care. The estimate for the rate of contact with services should therefore be seen as a minimum figure.

The Inquiry next determines which suicides were in contact with mental health services in the year before death with the help of hospital and

community trusts in each person's area of residence. This includes the trust in the person's health district (i.e. the catchment area of the trust) and any other trusts to which patients in that district are frequently referred (e.g. adjacent trusts in the same health authority). When trust records show that contact occurred in the twelve months before suicide the person becomes an "Inquiry case" and the responsible consultant psychiatrist is contacted. An assessment of the accuracy of checks by trusts, carried out in sixteen trusts in the north-west, showed that 95% of eligible cases were identified. Most omissions arose because of minor inaccuracies in trust records or in personal information notified to the Inquiry, e.g. mis-spellings of names. As a result a checking protocol was developed and recommended to trusts.

The consultant is then sent a questionnaire and asked to complete it in consultation with other members of the mental health team. The questionnaire consists of sections covering the following:

- identification of priority groups (see above)
- demographic details
- clinical history
- details of suicide
- details of care in in-patient suicides
- details of care in community suicides
- details of final contact with services
- events leading to suicide
- respondents' views on prevention
- additional information

Individual reporting arrangements have been made for patients under the care of most regional and national units, including Regional Secure Units, and with most private sector mental health units.

Homicide

In England and Wales people convicted of homicide – murder, manslaughter or infanticide – are notified to the Inquiry by the Home Office who routinely collect this information in the Homicide Index. In Scotland and Northern Ireland, convictions for homicide – murder and culpable homicide in Scotland and murder and manslaughter in Northern Ireland – it is the Crown Office and

the Belfast Crown Court respectively who notify the Inquiry of homicide convictions. Data collection then proceeds in two ways. Firstly, psychiatric reports and records of previous offences are sought on all homicides, whether or not they have ever had contact with mental health services. Psychiatric reports are usually prepared prior to a trial for homicide and may subsequently be retained in court files. We have sought reports from the following sources: courts, the Crown Prosecution Service, solicitors, prisons, secure units and hospitals, individual psychiatrists and the Home Office itself. In Scotland the Crown Office provides us with psychiatric reports. Lists of previous offences have been obtained from the Police National Computer and court files.

Secondly, the Inquiry proceeds as with suicides, in that individuals who have been in contact with mental health services are identified with the help of trusts in the local district and in many cases several surrounding districts, and questionnaires are sent to the consultants whose teams provided care. However, there is no one year limit for contact with services, as there is in the Suicide Inquiry, and people who are known to have had contact with services at any time become Inquiry cases. Those with contact in the last year are an identifiable sub-group and information on them rather than on the whole sample is more suitable for some analyses.

The psychiatric reports provide information on psychiatric and social history and mental state at the time of the offence. The questionnaires are similar to those used in cases of suicide but there are additional items on previous violence.

Findings in this report

Sample

The suicide findings in this report, for England and Wales are based on notifications to the Inquiry during the four years from April 1996 until March 2000. The sample is defined by date of notification to District Directors of Public Health or ONS rather than date of death and is a four-year consecutive case series. For Scotland and Northern Ireland the findings are based on notifications for a three-year period from April 1997. The homicide findings are based on notifications from the Homicide Index during a period of approximately 3 years from April 1996, the shorter period reflecting the longer data collection process in the Homicide Inquiry. The sample is therefore defined by date of conviction rather than date of homicide and is a three-year consecutive case series. For Scotland and Northern Ireland the samples are based upon date of conviction between April 1997 and March 2000 and again these are three-year consecutive case series.

The Inquiry also collects data on the following three groups separately and findings for these groups are included in this report. These are people who commit suicide after the homicide (but before conviction), people who are unfit to plead and people who are found not guilty by reason of insanity.

Presentation of findings

This report is intended for a broad readership, and the style of presentation aims to balance the requirements of a scientific publication with those of a public document. Many of the main figures are presented in tables of "key variables", the composition of which is equivalent in all sections, and in a series of graphs. The text then comments on these main findings and presents additional specific figures. Ninety-five per cent confidence intervals are included for all estimates in the key variable tables. These indicate the accuracy of each estimate by showing the range of values within which the true figure is likely to lie. For many of our estimates the sample is large and confidence intervals are correspondingly small. Wherever differences between groups are referred to in the text, these are statistically significant. In most analyses statistical significance has been set at 1%, i.e. there is a 1% probability that a reported difference between groups has arisen by chance. In the Homicide Inquiry and when comparisons in the Suicide Inquiry involve small groups, e.g. ethnic minorities or homeless people, the conventional figure of 5% has been adopted. When percentages are quoted, these refer to "valid cases", i.e. those for whom the relevant information was available. In other words, if an item of information was not known about a person, he/she was excluded from the analysis of that item in the sample. As a result, the denominator varies a little in any group of calculations.

Suicide Findings

England and Wales

General population suicides

The Inquiry was notified of 20,927 suicides and probable suicides during the four years from April 1996. This included 14,048 cases in which the coroner's verdict was suicide and 6,879 open verdicts or deaths from undetermined cause. This corresponds to an average annual suicide rate of 10.0 per 100,000 people. For the remainder of this section, these cases are referred to as suicides regardless of verdict at inquest. The number of suicide notifications rose during the first 1–2 years of the Inquiry but has fallen in most three-month periods since the beginning of 1998.

Seventy-five per cent (15,777) were male, giving a male to female ratio of 3:1 (fig. 1). The ratio of males to females was highest in the 25–34 year olds in whom 82% were male and lowest in those over 75 in whom 62% were male.

Three methods of suicide together accounted for 71% of suicides: hanging (the most common method overall), self-poisoning (overdose) and carbon monoxide poisoning (using car exhaust fumes) (fig. 2). The frequency of methods differed between the sexes: in males the commonest methods were hanging, self-poisoning by overdose and self-poisoning with car exhaust fumes; in females, overdose was by far the commonest method, followed by hanging. Violent or "active" methods, i.e. those involving physical injury including hanging and jumping from a height or in front of a moving vehicle, were used in 51% of deaths overall: 57% of male deaths and 39% of female deaths.

Inquiry cases

Of the total sample, 5,099 suicides, i.e. 24%, were known to be in contact with mental health services in the year before death. This figure was consistent throughout the period of data collection. However, it varied widely between districts, from 15% to 36%.

Questionnaires have been returned on 4,859 cases, a response rate of 95% to date. These are referred to in this report as Inquiry cases.

The Inquiry cases were predominantly male but there was a smaller male to female ratio, 1.9:1 (fig. 3) than in the general population suicides. The preponderance of males was generally higher in the younger age groups. Fifty per cent were aged forty-one or under. Twelve per cent were over sixty-five. Self-poisoning by overdose and hanging accounted for 64% of deaths (fig. 4).

The main social and clinical characteristics of all Inquiry cases are presented in table 1. Tables 2 and 3 break down these findings by age group and primary diagnosis.

Figure 1: Age and sex profile (England and Wales – General population suicides)

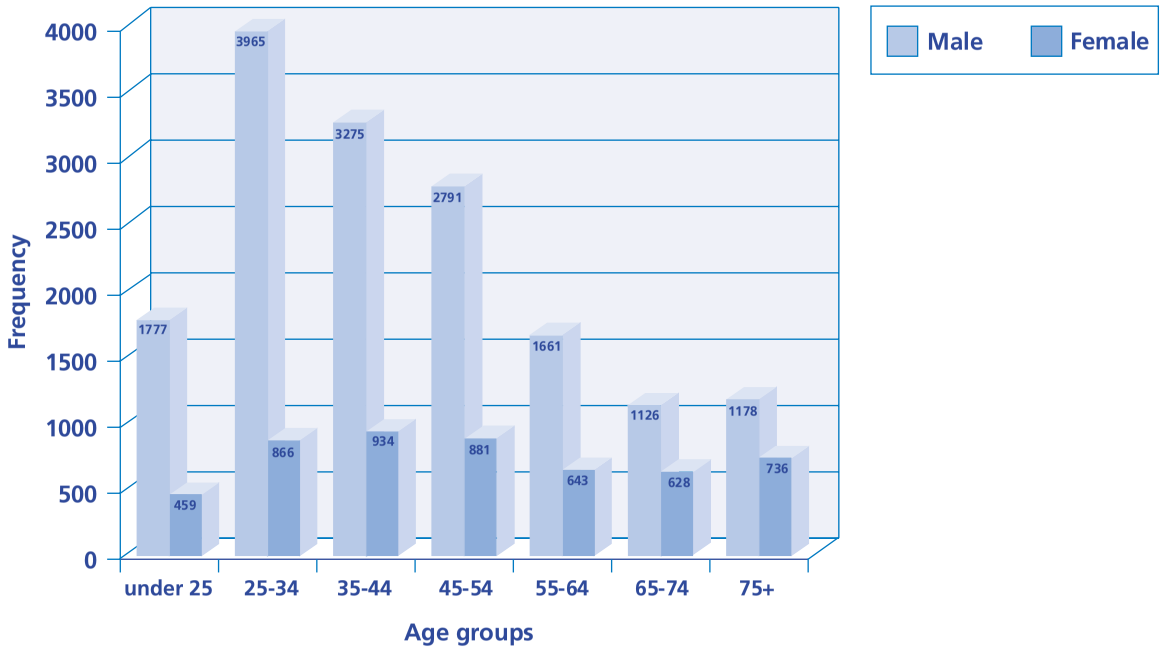
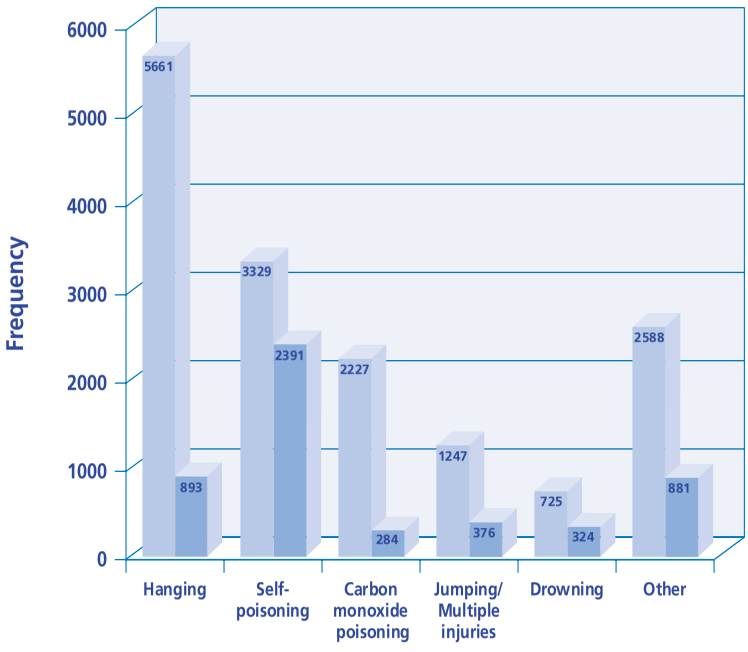


Figure 2: Cause of death (England and Wales – General population suicides)



Male Female

OTHER	Male	Female
Burning	212	86
Cutting or stabbing	293	53
Suffocation	262	214
Firearms	456	23
Electrocution	73	11
Other	745	272
Unknown	547	222
TOTAL	2588	881

Figure 3: Age and sex profile (England and Wales Suicide Inquiry cases)

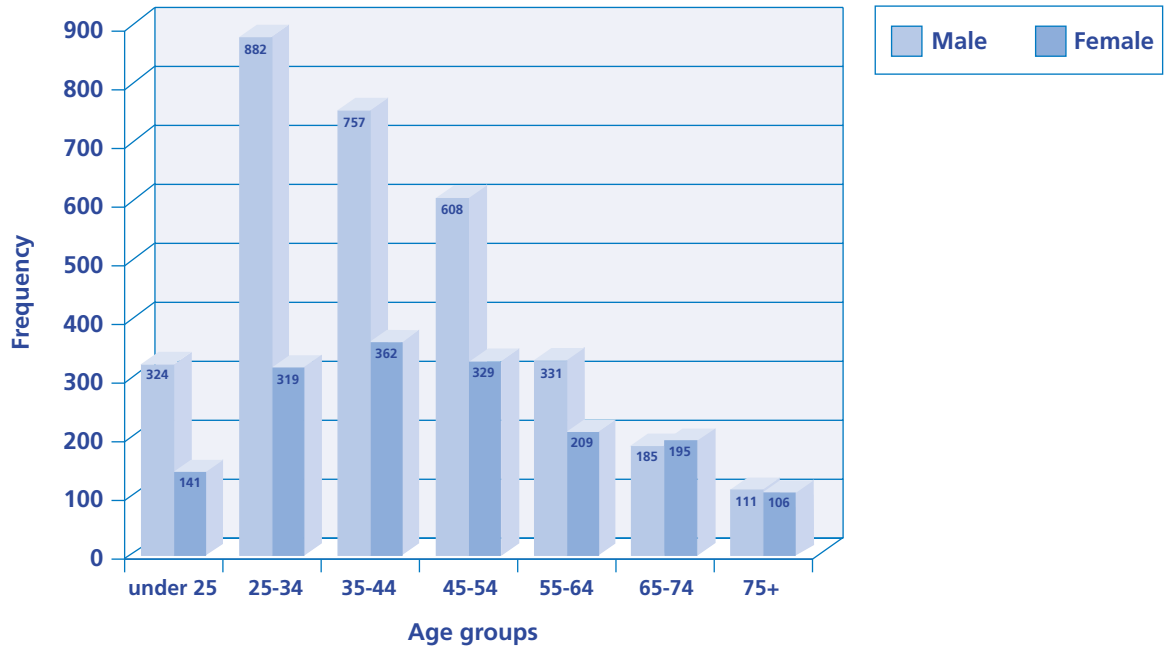
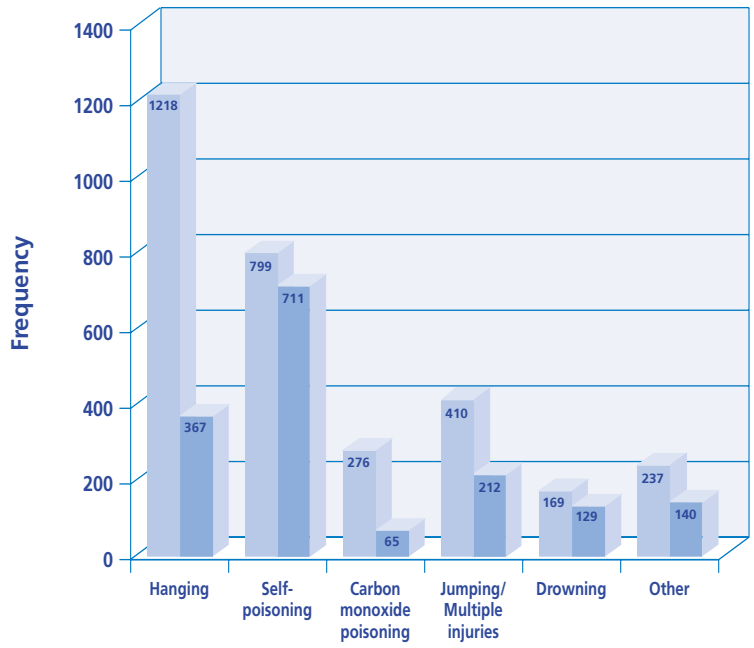


Figure 4: Cause of death (England and Wales Suicide Inquiry cases)



Male Female

SELF-POISONING	Male	Female
Psychotropic drug	282	274
Paracetamol	89	89
Opiate	68	36
Other analgesic	33	57
Other/Unknown	327	255
TOTAL	799	711

OTHER	Male	Female
Burning	48	33
Cuttingor stabbing	62	17
Suffocation	45	57
Firearms	30	3
Electrocution	13	2
Other specified	39	28
TOTAL	237	140

Table 1: Suicides in contact with services in the 12 months before death (England & Wales)

	Total sample (n=4859) Number	% (95% CI)
Demographic features		
Age: median (range)	41 (13-95)	
Male	3198	66% (64-67)
Ethnic minority	282	6% (5-7)
Not currently married	3405	71% (70-73)
Unemployed/long-term sick	2765	58% (58-60)
Living alone	2006	43% (41-44)
Priority groups		
In-patients	754	16% (15-16)
Post-discharge patients	1100	27% (25-28)
CPA	2243	41% (45-48)
Missed contact	1133	28% (27-30)
Non-compliance	929	22% (21-24)
Diagnostic features		
Primary diagnosis		
Schizophrenia & other delusional	960	20% (19-21)
Affective disorder (bipolar & dep.)	2036	42% (41-44)
Alcohol dependence	439	9% (8-10)
Drug dependence	216	4% (4-5)
Personality disorder	505	11% (10-11)
Any secondary diagnosis	2460	52% (51-54)
Duration of history (under 12 months)	1000	21% (20-23)
Over 5 previous admissions	712	16% (15-17)
Last admission was a re-admission	478	17% (15-18)
Behavioural features		
History of self-harm	3077	64% (63-66)
History of violence	920	19% (18-21)
History of alcohol misuse	1899	40% (38-41)
History of drug misuse	1348	28% (27-30)
Contact with services		
Last contact within 7 days of death	2308	48% (47-50)
Symptoms at last contact	2990	64% (63-65)
Requested contact but not taken place	161	4% (4-5)
Estimate of immediate risk: low or none	3950	85% (84-86)
Estimate of long-term risk: low or none	763	57% 54-60)
Out of contact	1153	29% (27-30)
Suicide thought to be preventable	876	21% (19-22)

Table 2: Inquiry Suicides by age group

	Age group						
	< 25 N=465 % CI	25–34 N=1201 % CI	35–44 N=1119 % CI	45–54 N=937 % CI	55–64 N=540 % CI	65–74 N=380 % CI	75+ N=217 % CI
Demographic features							
Male	70% (65-74)	73% (71-76)	68% (65-70)	65% (62-68)	61% (57-65)	49% (44-54)	51% (45-58)
Ethnic minority	9% (6-11)	8% (7-10)	6% (5-8)	4% (3-5)	4% (2-6)	3% (2-5)	2% (0-4)
Not currently married	92% (90-95)	80% (78-82)	72% (69-74)	64% (61-67)	53% (48-57)	61% (56-66)	74% (68-80)
Unemployed/long-term sick	75% (71-79)	74% (71-76)	66% (63-69)	62% (59-65)	55% (50-59)	7% (5-10)	1% (0-3)
Living alone	27% (23-31)	42% (39-45)	45% (42-48)	44% (41-47)	41% (37-45)	49% (44-54)	57% (50-63)
Priority groups							
In-patients	19% (16-23)	17% (15-20)	15% (13-17)	13% (11-16)	17% (14-21)	15% (11-19)	7% (4-11)
Post-discharge	24% (19-28)	29% (26-31)	28% (25-30)	29% (25-32)	26% (22-30)	24% (19-28)	20% (15-26)
CPA	44% (40-49)	47% (44-50)	45% (42-48)	46% (42-49)	48% (44-52)	52% (47-57)	51% (44-57)
Missed contact	32% (27-36)	34% (31-36)	31% (28-34)	26% (23-30)	26% (22-30)	19% (14-23)	12% (7-16)
Non-compliance	26% (22-30)	26% (24-29)	22% (19-25)	19% (16-22)	18% (14-21)	23% (19-28)	21% (15-27)
Clinical features							
Primary diagnosis							
Schizophrenia & other delusional	31% (27-35)	25% (23-28)	20% (18-23)	18% (16-21)	15% (12-18)	10% (7-13)	4% (2-7)
Affective disorder	20% (16-24)	31% (28-33)	37% (34-40)	46% (43-49)	62% (58-66)	71% (66-75)	68% (61-74)
Alcohol dependence	4% (2-6)	8% (7-10)	13% (11-15)	14% (12-16)	6% (4-8)	3% (1-4)	2% (0-4)
Drug dependence	9% (6-11)	9% (7-10)	5% (3-6)	2% (1-3)	1% (0-1)	0.3% (0-1)	0%
Personality disorder	19% (16-23)	16% (14-18)	11% (9-13)	8% (6-10)	3% (2-5)	4% (2-6)	2% (0-4)
Any secondary diagnosis	54% (50-59)	58% (56-61)	56% (53-59)	51% (48-55)	44% (39-48)	43% (38-48)	37% (30-43)
Duration of history (under 12 months)	25% (21-29)	19% (17-22)	19% (17-22)	19% (17-22)	23% (20-27)	27% (23-32)	29% (22-35)
Over 5 previous admissions	7% (5-10)	15% (12-17)	18% (15-20)	21% (18-23)	20% (16-23)	15% (11-18)	4% (2-7)
Last admission was a re-admission	22% (16-27)	17% (15-20)	16% (19-26)	18% (15-21)	15% (11-19)	13% (9-18)	16% (9-22)

Table 2: Inquiry Suicides by age group *(continued)*

	Age group						
	< 25 N=465 % CI	25–34 N=1201 % CI	35–44 N=1119 % CI	45–54 N=937 % CI	55–64 N=540 % CI	65–74 N=380 % CI	75+ N=217 % CI
Behavioural features							
History of self-harm	72% (68-76)	69% (67-72)	66% (63-69)	62% (59-65)	57% (53-61)	57% (52-62)	51% (44-58)
History of violence	29% (25-33)	28% (26-31)	21% (19-24)	16% (14-18)	10% (8-13)	6% (3-8)	3% (1-5)
History of alcohol misuse	46% (42-51)	50% (47-53)	47% (44-50)	41% (38-45)	23% (20-27)	16% (13-20)	9% (5-13)
History of drug misuse	65% (61-70)	49% (47-52)	26% (23-28)	14% (12-16)	6% (4-8)	5% (3-7)	2% (0-4)
Contact with services							
Last contact within 7 days of death	49% (45-54)	48% (45-51)	46% (44-49)	44% (41-48)	52% (48-56)	55% (50-60)	54% (47-61)
Symptoms at last contact	65% (60-69)	64% (61-67)	64% (61-67)	62% (59-65)	65% (61-69)	64% (59-69)	65% (59-72)
Requested contact but not taken place	5% (2-7)	4% (3-6)	5% (3-6)	5% (3-6)	4% (2-6)	1% (0-3)	5% (2-8)
Estimate of immediate risk: low or none	85% (82-89)	85% (83-88)	85% (83-87)	86% (84-88)	83% (80-86)	88% (84-91)	84% (79-87)
Estimate of long-term risk: low or none	53% (44-62)	51% (45-56)	58% (52-64)	59% (53-65)	59% (51-67)	64% (56-73)	66% (54-77)
Out of contact	37% (32-42)	33% (30-36)	29% (26-32)	28% (25-31)	24% (20-28)	18% (14-23)	20% (15-26)
Suicide thought to be preventable	22% (18-26)	19% (17-21)	21% (19-24)	22% (19-25)	22% (18-26)	16% (12-20)	23% (17-29)

Table 3: Inquiry Suicides by diagnostic group

	Schizophrenia n=960 % CI	Bipolar affective disorder n=391 % CI	Depressive illness n=1645 % CI	Personality disorder n=505 % CI	Alcohol dependence n=439 % CI
Demographic features					
Age: median (range)	36 (17–82)	44 (17–85)	49 (13–92)	33 (15–85)	42 (18–84)
Male	73% (70–76)	58% (53–62)	58% (55–60)	65% (60–69)	77% (73–81)
Ethnic minority	14% (12–16)	7% (5–10)	4% (3–5)	2% (1–4)	3% (1–4)
Not currently married	85% (83–88)	68% (63–73)	59% (56–61)	82% (79–86)	74% (70–78)
Unemployed/long-term sick	81% (78–83)	60% (55–64)	39% (37–42)	76% (71–78)	73% (68–77)
Living alone	45% (42–48)	45% (40–50)	36% (33–38)	52% (48–57)	54% (49–59)
Priority groups					
In–patients	27% (24–30)	24% (20–28)	15% (13–17)	13% (10–16)	3% (1–4)
Post-discharge	27% (23–30)	30% (25–35)	26% (24–28)	31% (27–36)	30% (26–34)
CPA	76% (73–79)	67% (63–72)	44% (41–46)	44% (40–48)	20% (16–23)
Missed contact	27% (24–30)	26% (21–31)	25% (22–27)	31% (27–35)	36% (31–41)
Non–compliance	30% (27–33)	25% (20–29)	20% (18–22)	22% (18–26)	20% (15–24)
Clinical features					
Any secondary diagnosis	55% (52–59)	36% (31–41)	44% (42–47)	70% (66–74)	68% (63–72)
Duration of history (under 12 months)	8% (7–10)	9% (27–33)	34% (32–37)	5% (3–7)	7% (4–9)
Over 5 previous admissions	28% (26–31)	37% (32–42)	8% (7–10)	23% (19–27)	11% (8–14)
Last admission was a re-admission	17% (14–19)	20% (15–24)	16% (14–19)	25% (20–29)	18% (13–22)

Table 3: Inquiry Suicides by diagnostic group *(continued)*

	Schizophrenia n=960 % CI	Bipolar affective disorder n=391 % CI	Depressive illness n=1645 % CI	Personality disorder n=505 % CI	Alcohol dependence n=439 % CI
Behavioural features					
History of self–harm	57% (54–60)	59% (54–64)	64% (62–66)	89% (86–91)	66% (61–70)
History of violence	29% (26–32)	20% (16–24)	7% (5–8)	42% (38–46)	24% (20–28)
History of alcohol misuse	32% (29–34)	30% (25–34)	24% (22–26)	64% (59–68)	100%
History of drug misuse	39% (36–42)	21% (17–25)	10% (9–12)	51% (46–55)	33% (28–37)
Contact with services					
Last contact within 7 days of death	64% (61–67)	60% (56–65)	51% (49–53)	45% (40–49)	23% (19–27)
Symptoms at last contact	53% (49–56)	65% (60–70)	69% (67–71)	70% (66–74)	66% (62–71)
Requested contact but not taken place	4% (3–6)	5% (2–7)	4% (3–5)	3% (1–4)	6% (4–9)
Estimate of immediate risk: low or none	88% (86–90)	86% (82–89)	83% (81–85)	80% (76–83)	88% (85–91)
Estimate of long-term risk: low or none	57% (51–63)	55% (45–64)	58% (53–62)	30% (22–38)	56% (47–65)
Out of contact	13% (10–15)	17% (13–21)	24% (22–27)	32% (28–37)	50% (45–55)
Suicide thought to be preventable	22% (19–24)	26% (21–31)	25% (23–27)	11% (8–14)	16% (12–20)

Table 3: Inquiry Suicides by diagnostic group *(continued)*

	Drug dependence n=216 % CI	Eating disorder n=19 % CI	Anxiety n=170 % CI	Dementia n=24 % CI
Demographic features				
Age: (median) range	30 (18-68)	30 (19-76)	40.5 (15-86)	80.5 (52-94)
Male	75% (70-81)	21% (3-39)	68% (61-75)	58% (39-78)
Ethnic minority	4% (1-6)	5% (0-15)	1% (0-3)	0%
Not currently married	80% (75-86)	74% (54-93)	60% (53-68)	71% (53-89)
Unemployed/long-term sick	85% (80-90)	53% (30-75)	54% (47-62)	8% (0-19)
Living alone	49% (42-56)	39% (16-61)	38% (31-45)	58% (39-78)
Priority groups				
In-patients	5% (2–7)	11% (0–24)	11% (6–16)	0%
Post-discharge	20% (15–26)	24% (3–44)	21% (14–27)	17% (2–32)
CPA	22% (16–27)	58% (36–80)	31% (24–38)	48% (27–68)
Missed contact	39% (32–45)	41% (18–65)	29% (22–36)	17% (2–32)
Non–compliance	27% (21–34)	24% (3–44)	17% (11–24)	17% (2–33)
Clinical features				
Any secondary diagnosis	62% (56–69)	79% (61–97)	70% (64–77)	46% (26–66)
Duration of history (under 12 months)	7% (3–10)	11% (0–24)	25% (19–32)	13% (0–26)
Over 5 previous admissions	7% (4–11)	11% (0–24)	4% (1–7)	0%
Last admission was a re-admission	9% (4–14)	13% (0–35)	13% (6–20)	20% (0–45)

Table 3: Inquiry Suicides by diagnostic group *(continued)*

	Drug dependence n=216 % CI	Eating disorder n=19 % CI	Anxiety n=170 % CI	Dementia n=24 % CI
Behavioural features				
History of self-harm	59% (52–65)	63% (41–85)	57% (49–64)	17% (2–33)
History of violence	31% (24–37)	11% (0–24)	8% (4–12)	13% (0–27)
History of alcohol misuse	68% (62–74)	21% (3–39)	30% (23–37)	17% (2–33)
History of drug misuse	100%	21% (3–39)	19% (13–25)	0%
Contact with services				
Last contact within 7 days of death	27% (21–33)	53% (30–75)	45% (38–53)	38% (18–57)
Symptoms at last contact	67% (61–74)	84% (68–100)	56% (49–64)	39% (19–59)
Requested contact but not taken place	4% (1–6)	13% (0–31)	6% (2–10)	0%
Estimate of immediate risk: low or none	91% (87–95)	74% (54–93)	92% (87–96)	96% (87–100)
Estimate of long-term risk: low or none	60% (46–74)	75% (33–100)	68% (55–81)	100%
Out of contact	45% (38–52)	24% (3–44)	26% (19–33)	14% (0–29)
Suicide thought to be preventable	15% (10–21)	17% (0–34)	14% (8–19)	16% (0–32)

Social characteristics

Social adversity and isolation were common. Seventy one per cent were not currently married (fig. 5), and in those aged over 65, 41% were widowed. In the overall sample, most were either unemployed or long-term sick (fig. 6) but the rate of unemployment was particularly high in the under 25s (64% were unemployed and 11% were long-term sick). Forty-three per cent lived alone (fig. 7), but the figure was higher in those over 65. Three per cent were homeless or of no fixed abode.

One per cent were current prisoners. This group consists of those suicides in prison who had been under NHS mental health care in the previous year. They will be included in a future report on all prison suicides.

Figure 5: Marital status (England and Wales Suicide Inquiry cases)

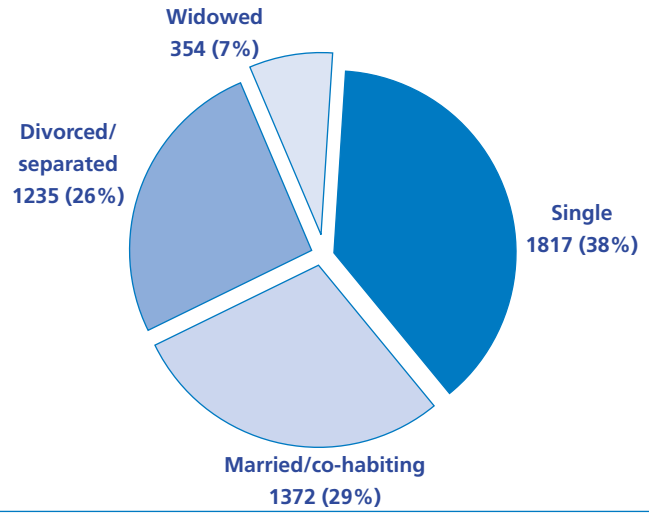


Figure 6: Employment status (England and Wales Suicide Inquiry cases)

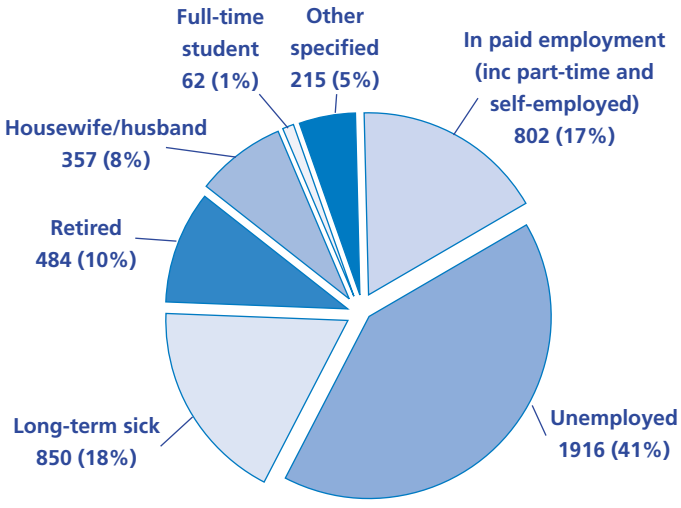
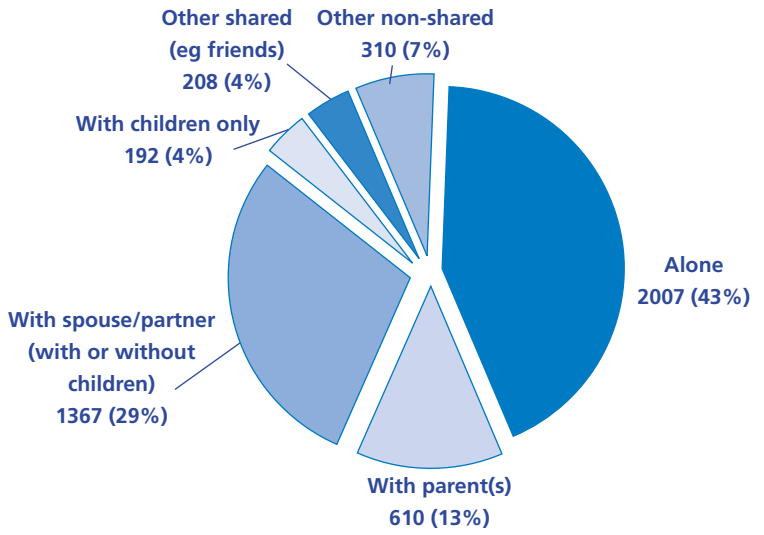


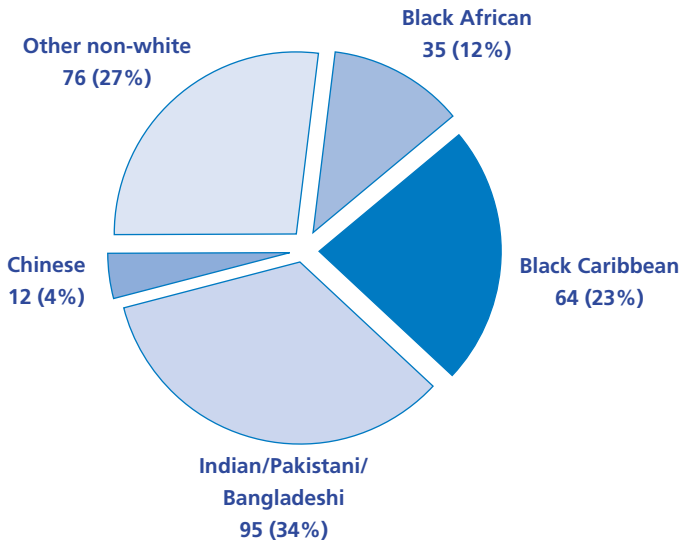
Figure 7: Living circumstances (England and Wales Suicide Inquiry cases)



Four per cent were the lone carers of children (fig. 7). This group was predominantly female (71%). The characteristics of males and females were similar: most (58%) were suffering from affective disorder. However, females more often had a diagnosis of schizophrenia (14% compared to 6% of men) and fewer women had been ill for less than a year. Twenty per cent of women in this group had more than five previous admissions. In the 109 patients (60%) who experienced adverse life events in the three months before suicide, family-related events – separation, divorce or family problems were the most common.

Six per cent were from an ethnic minority (fig. 8) – see below.

Figure 8: Ethnic origin (not including white – England and Wales Suicide Inquiry cases)

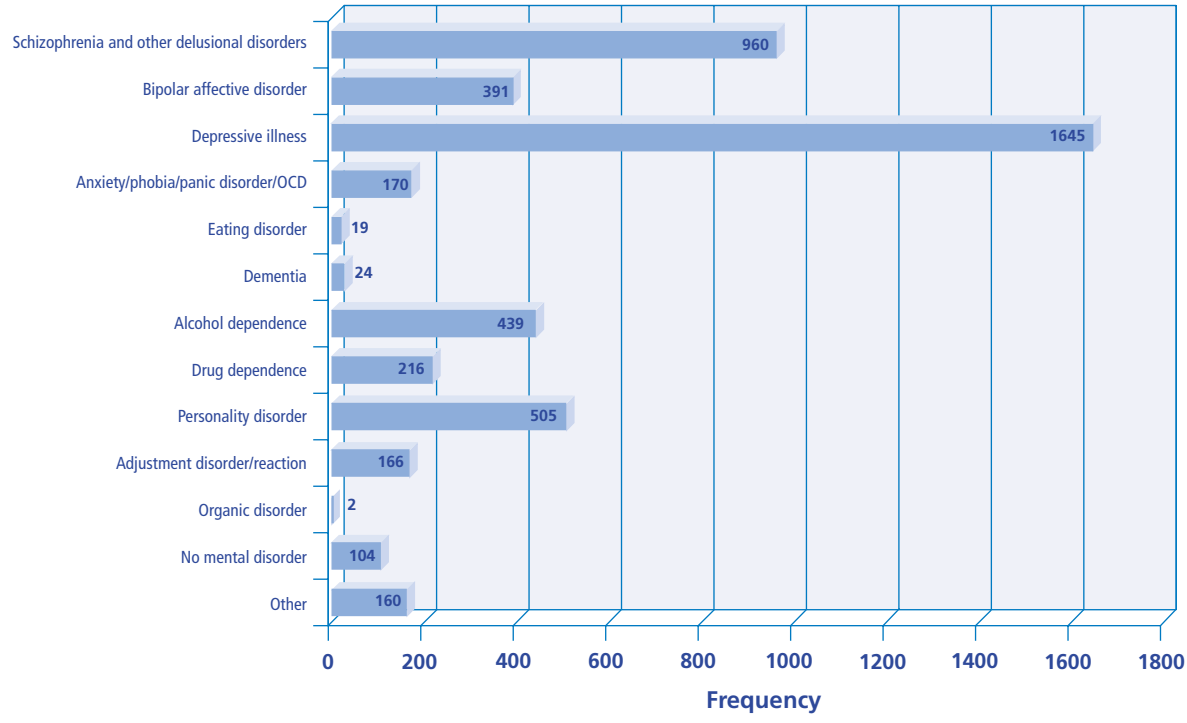


Clinical characteristics

Diagnosis The frequencies of the main primary diagnoses are given in figure 9. Major affective disorders occurred in 42% of all cases, the other principal diagnoses being schizophrenia and related disorders (20%), personality disorder (11%) and alcohol dependence (9%). Fifty-two per cent also had at least one secondary diagnosis (fig. 10). The most common secondary diagnoses were depressive illness, personality disorder and alcohol or drug dependence.

There were substantial differences in clinical characteristics across the age groups. Almost a third of the suicides in the under 25s were suffering from schizophrenia, while almost a fifth had a primary diagnosis of personality disorder. Both these diagnoses decreased proportionally with increasing age, though the highest *numbers* in both cases were in the 25-34 year olds. In contrast, the proportion of suicides with affective disorder increased with age. The rate of co-morbidity was highest in the younger age groups.

Figure 9: Primary diagnosis (England and Wales Suicide Inquiry cares)



Behaviour There were high rates of alcohol and drug misuse and 19% of the sample were misusing both alcohol and drugs. Sixty-four per cent had a history of self-harm; nineteen per cent had a history of violence. Rates of previous self-harm, violence, and alcohol and drug misuse were higher in the younger age groups and in those with personality disorder or drug dependence. People with depression and anxiety had the lowest rates of previous violence.

Figure 10: Secondary diagnoses (England and Wales Suicide Inquiry cases)

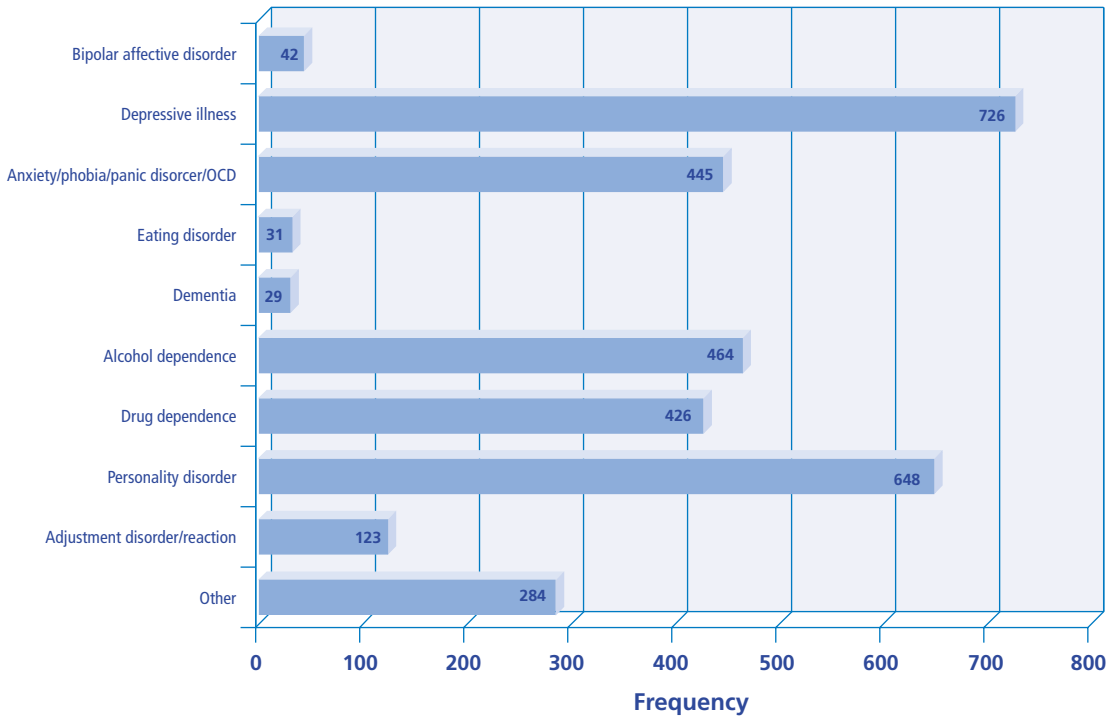
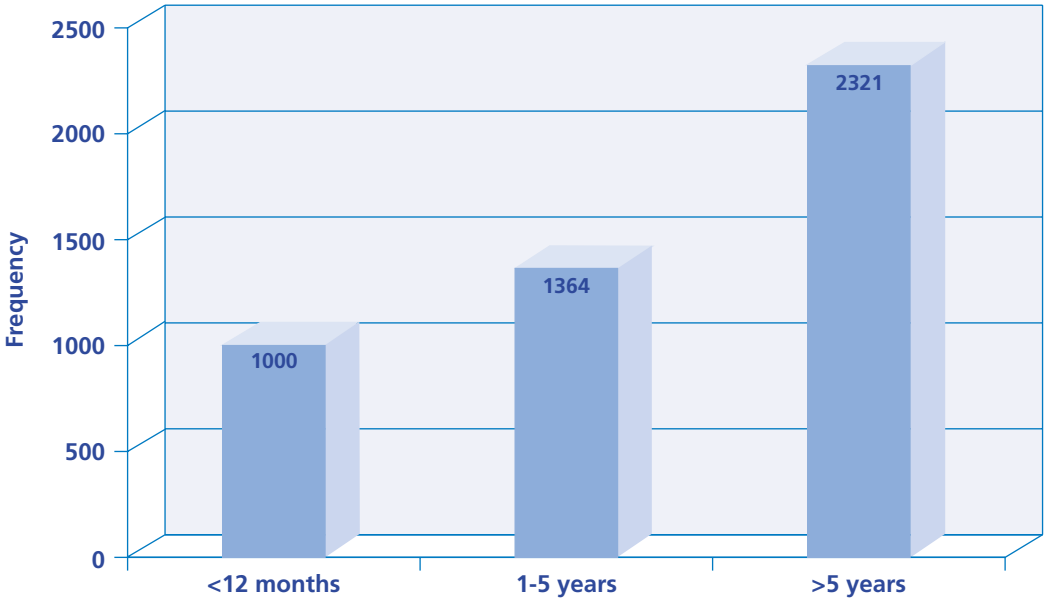


Figure 11: Duration of history (England and Wales Suicide Inquiry cases)

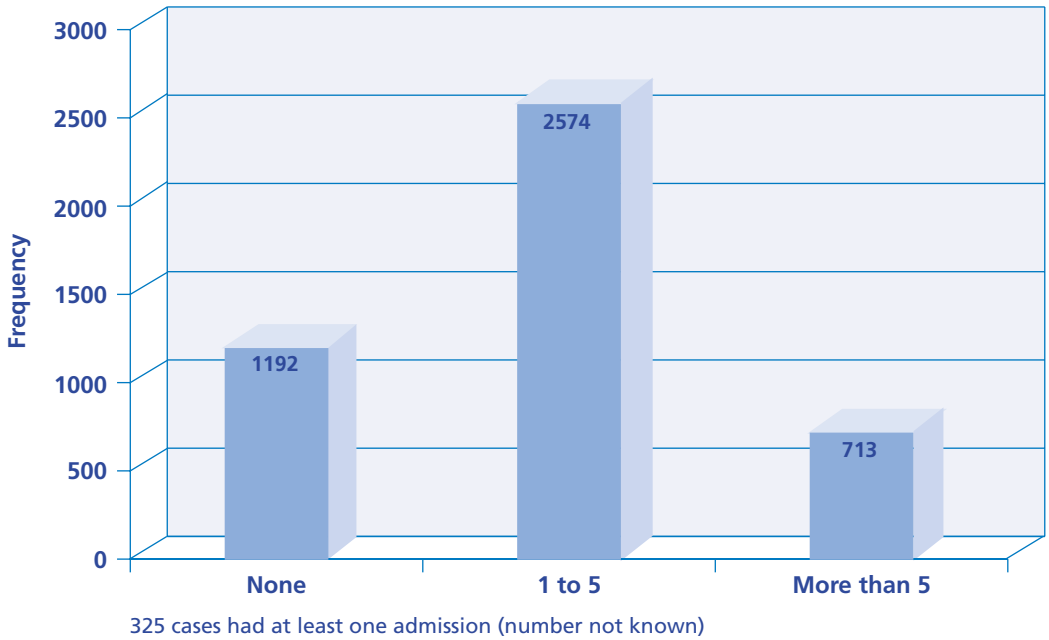


History of illness Suicides appeared to cluster in the first year after the onset of illness (fig. 11). Twenty-one per cent occurred at this time but this figure was higher in the under 25s and over 65s. Overall the majority of this "early mortality" group were suffering from affective disorder and they had low rates of previous self-harm, violence, alcohol misuse and drug misuse. In those with schizophrenia who died within a year of illness onset, 33% were not under the higher levels of the CPA.

Twenty-five per cent of cases had never had an in-patient admission, while 16% had had more than five previous admissions (fig. 12). This "multiple admission" group was larger in those aged 35-64 years. People with multiple previous admissions showed features of more severe illness and more frequent indicators of risk. Compared to other Inquiry cases, they had higher rates of schizophrenia and personality disorder. They were more likely to have a history of non-compliance, self-harm, violence, and drug misuse. They were more often single and living alone. They were more likely to be in-patients when the suicide occurred.

Duration of history and number of admissions were strongly associated. Only 7% of all cases had been ill for more than five years without being admitted.

Figure 12: Number of admissions (England and Wales Suicide Inquiry cases)



325 cases had at least one admission (number not known)

Circumstances of death

The most common methods of suicide were hanging and self-poisoning (fig. 4). This was true of all age groups but there were age-related differences in the pattern of suicide method (table 4). The younger groups were proportionally more likely to die by hanging or jumping, less likely to die by self-poisoning. The oldest groups had the highest proportion of people who died by drowning. Method of suicide also differed by diagnostic group (table 5), one of the most striking findings being the high rate of suicide by jumping in people with schizophrenia.

Those who died by self-poisoning were likely to use psychotropic drugs or analgesics other than opiates. The main psychotropic drugs used were tricyclic antidepressants. Psychotropic drug overdose was more likely to be the cause of death in patients who had already carried out an episode of self-harm. Four per cent of all suicides and 12% of overdoses used paracetamol.

In 58% of cases, the mental health team had had contact with the family of the deceased person following the death, usually face-to-face or by telephone (fig. 13). Fifty-nine per cent held a multidisciplinary review of the case. Twenty-eight per cent held neither.

Figure 13: Contact with relatives after death (England and Wales Suicide Inquiry cases)

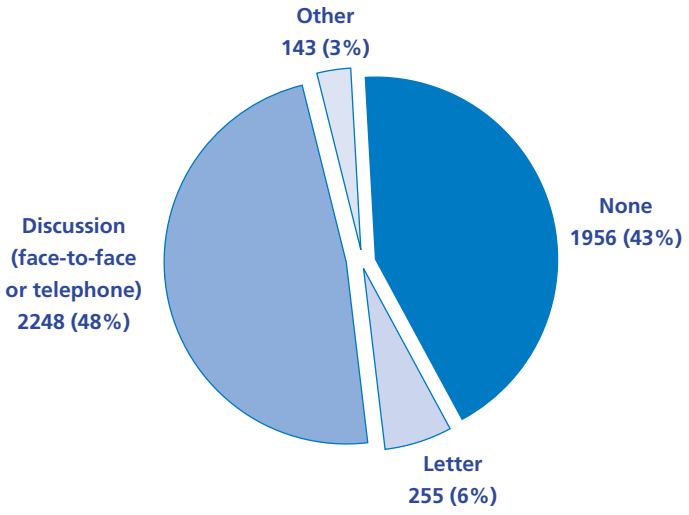


Table 4: Inquiry Suicides by method and age group (England and Wales)

Method	Age Group						
	< 25 n %	25-34 n%	35-44 n %	45-54 n %	55-64 n %	65-74 n %	75+ n %
Self-poisoning	129 (28%)	347 (30%)	376 (34%)	305 (34%)	154 (29%)	144 (39%)	55 (26%)
Carbon-monoxide poisoning	18 (4%)	100 (9%)	102 (9%)	71 (8%)	23 (4%)	15 (4%)	12 (6%)
Hanging	174 (38%)	426 (36%)	348 (32%)	283 (31%)	195 (37%)	107 (29%)	52 (25%)
Drowning	14 (3%)	38 (3%)	57 (5%)	66 (7%)	51 (10%)	40 (11%)	32 (15%)
Firearms	1 (0.2%)	7 (1%)	7 (1%)	11 (1%)	3 (1%)	3 (1%)	1 (1%)
Cutting or stabbing	6 (1%)	17 (1%)	13 (1%)	16 (2%)	16 (3%)	5 (1%)	6 (3%)
Jumping /Multiple injuries	93 (20%)	180 (15%)	130 (12%)	95 (12%)	61 (12%)	27 (7%)	18 (9%)
Suffocation	5 (1%)	14 (1%)	14 (1%)	24 (3%)	7 (1%)	14 (4%)	24 (11%)
Burning	2 (0.4%)	22 (2%)	26 (2%)	16 (2%)	5 (1%)	8 (2%)	2 (1%)
Electrocution	2 (0.4%)	3 (0.3%)	1 (0.1%)	5 (0.6%)	2 (0.4%)	2 (1%)	0
Other	12 (3%)	18 (2%)	18 (2%)	16 (2%)	9 (2%)	4 (1%)	7 (3%)

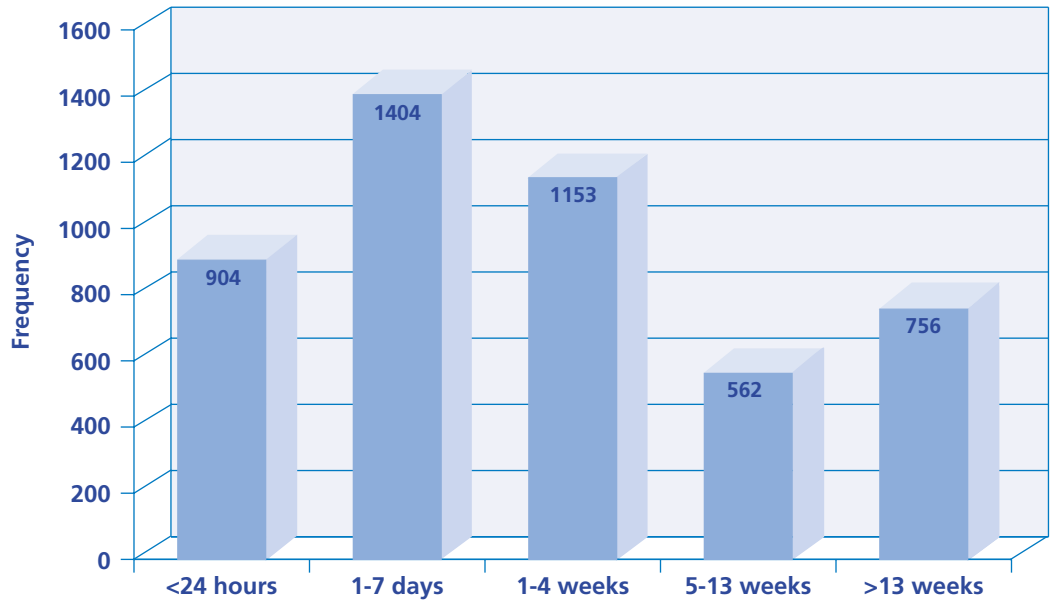
Table 5: Inquiry Suicides by diagnosis and age group (England and Wales)

	Diagnostic group				
	Schizophrenia n %	**Affective disorder n %**	**Alcohol dependence n %**	**Drug dependence n %**	**Personality disorder n %**
Self-poisoning	194 (21%)	650 (32%)	192 (47%)	101 (48%)	181 (37%)
Carbon-monoxide poisoning	24 (3%)	143 (7%)	23 (6%)	21 (10%)	45 (9%)
Hanging	280 (30%)	680 (34%)	114 (28%)	65 (31%)	179 (36%)
Drowning	81 (9%)	146 (7%)	31 (8%)	4 (2%)	11 (2%)
Firearms	2 (0.2%)	20 (1%)	6 (1%)	0	1 (0.2%)
Cutting or stabbing	21 (2%)	33 (2%)	8 (2%)	0	5 (1%)
Jumping /Multiple injuries	255 (27%)	231 (12%)	15 (4%)	14 (7%)	44 (9%)
Suffocation	25 (3%)	48 (2%)	5 (1%)	1 (0.5%)	10 (2%)
Burning	27 (3%)	27 (1%)	6 (1%)	3 (1%)	10 (2%)
Electrocution	6 (1%)	5 (0.2%)	1 (0.2%)	0	2 (0.4%)
Other	15 (2%)	18 (1%)	10 (2%)	3 (1%)	6 (1%)

Last contact

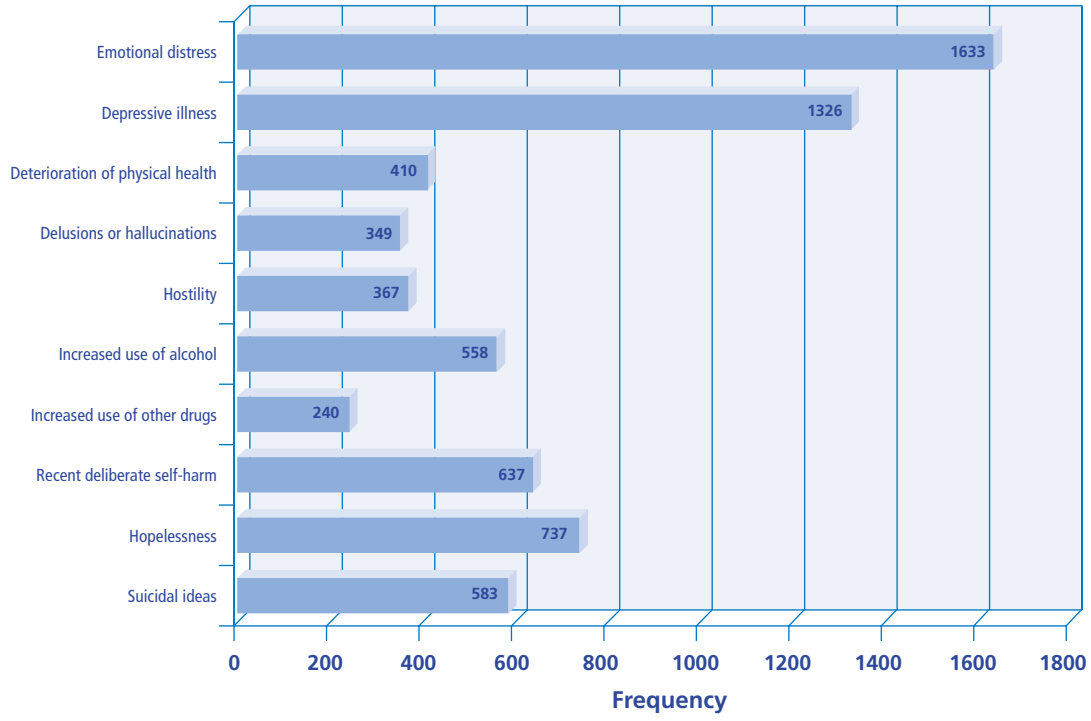
Nature of contact Nineteen per cent of suicides were in contact with services in the 24 hours before death, 48% in the week before death (fig. 14). In most cases (70%) the contact was routine rather than urgent – this was true even when the contact occurred within 24 hours of death. In nearly all (93%), this was a face-to-face contact, usually with a consultant or junior psychiatrist or mental health nurse. A key worker was present at the meeting in around half of the cases (51%). Most (87%) staff present at final contact had received training in risk assessment. Around half of these contacts (56%) took place at a hospital and almost a quarter (22%) in the patient's home.

Figure 14: Timing of last contact (England and Wales Suicide Inquiry cases)



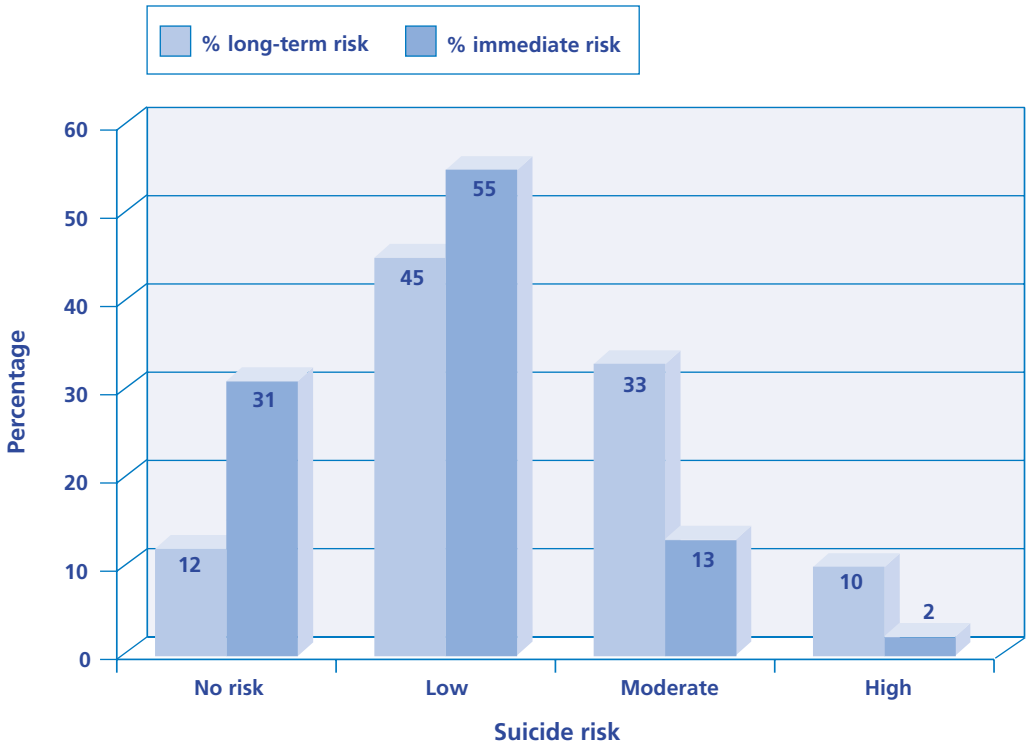
Mental state Assessment at the final contact revealed abnormalities of mental state or recent behaviour in 63% of cases (fig. 15). Most commonly this was emotional distress (35%) or depression (28%). Deterioration in physical health was associated with older age and was noted in 23% of suicides over 65.

Figure 15: Symptoms at last contact (England and Wales Suicide Inquiry cases)



Estimates of risk Immediate risk of suicide was estimated to be low or absent in 85%; high immediate risk was identified in only 2% (fig. 16). There was a strong association between timing of last contact before suicide and estimated risk: risk was more likely to be estimated as high when contact was recent. Respondents generally reported using a range of demographic and clinical risk factors to assess risk, but reported that most often it was current mental state (45%) and suicidal ideas (25%) that were most important. According to the clinical data provided in the questionnaire, those who were thought to be at high immediate risk were more likely to have a history of self-harm, non-compliance with treatment and personality disorder. When risk at final contact was judged to be moderate or high, this was usually discussed with other members of the mental health team, though this did not happen in 14% of cases.

Figure 16: Estimation of suicide risk at last contact (England and Wales Suicide Inquiry cases)



An estimate of long-term suicide risk was available for 1,423 Inquiry cases (this question was added in 1999). Long-term risk estimations followed a different pattern from estimations of immediate risk. Long-term risk was judged to be moderate or high in 43% (compared to 15% for short-term risk) (fig. 16). Most of those at high long-term risk were thought not to be at high short-term risk at final contact. Perceived high long-term risk was associated with deliberate self-harm and non-compliance (as was high short-term risk) but also long duration of illness and multiple hospital admissions. Perceived high risk was not related to demographic characteristics, primary diagnosis or previous or current detention under mental health legislation. Patients thought to be at high long-term risk were more often subject to the higher "levels" of the Care Programme Approach.

Clinical management In 79% of final contacts the care plan was unchanged, and in only 2% was the patient detained under the Mental Health Act (excluding those already detained). In 6% of final contacts the patient made a treatment request that could not be complied with. The most common request (16%) was for hospital admission and the most frequent reported reason for not complying was lack of beds. Fourteen per cent of requests were for increased or altered medication (usually for benzodiazepines) or for a non-pharmacological treatment.

In 428 cases, 12% of the total sample, the care plan was not altered because the patient's immediate problem was thought to be the result of alcohol, drugs or personality rather than illness although almost a quarter were suffering from affective disorder or schizophrenia. These patients were more likely to show symptoms of illness at the final contact and immediate risk was estimated to be higher than in other Inquiry cases. They were also characterised by higher rates of risk indicators such as non-compliance, previous self-harm and violence and they were more likely to be out of contact with services at the time of suicide.

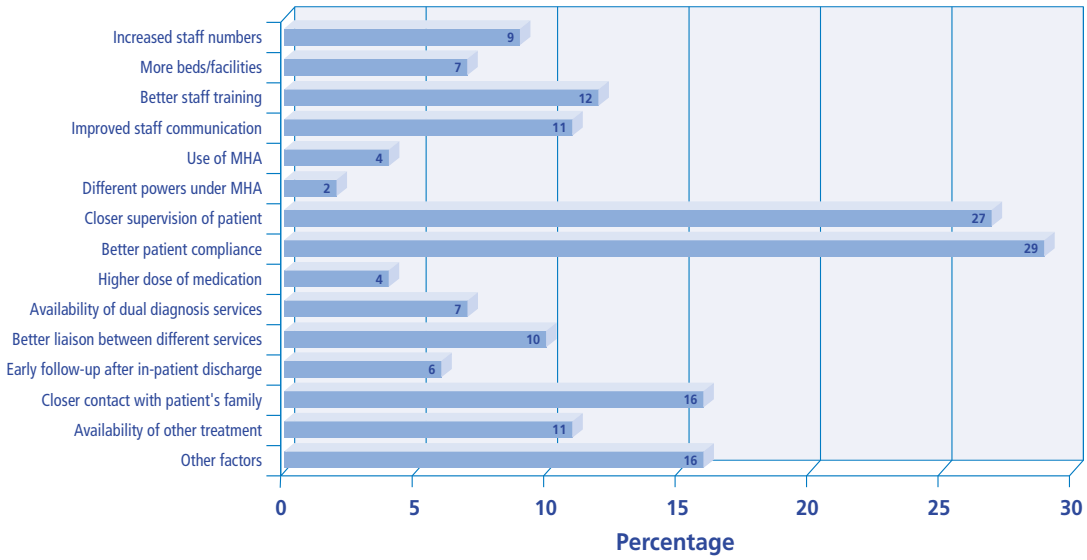
There was no relationship between age of the deceased and timing of last contact or estimations of risk. Recent contact was associated with severe illness. Moderate to high long-term risk was more often thought to be present in those with personality disorder.

Preventability

In 876 cases (21%), the respondent believed that the suicide could have been prevented. Suicides perceived as preventable were more likely to be suffering from affective disorder and less likely to have alcohol dependence or personality disorder. They were more likely to have been in-patients at the time of death but, whether they were in hospital or in the community, they were more likely to have detectable symptoms at final contact and more often thought to be at moderate or high risk at final contact. Suicides in different age groups were not seen as more or less preventable. Suicides by patients with severe mental illness were seen as more preventable, suicides by people with personality disorder as the least preventable.

In 87% of cases, respondents suggested factors that could have made the suicide less likely (fig 17). The most frequent suggestions were better patient compliance with treatment (29%), closer patient supervision (27%), closer contact with the patient's family (16%) and better staff training (12%). Better compliance was more often mentioned in relation to younger patients.

Figure 17: Prevention measures – prevention measures – respondent's views (England and Wales Suicide Inquiry cases)

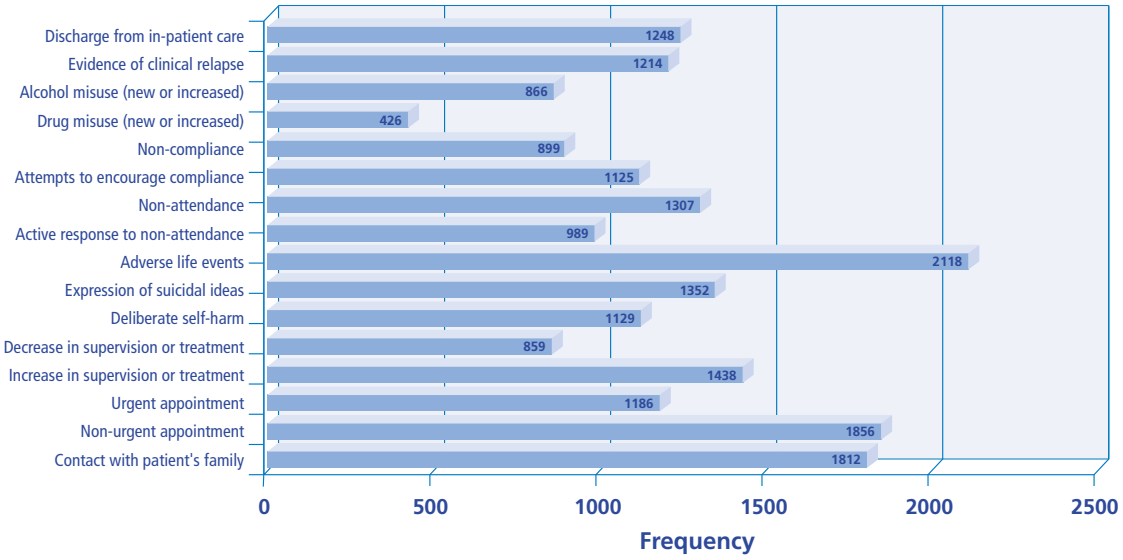


Antecedents of suicide

Respondents were asked to detail events in the three months leading up to suicide (fig. 18). Adverse life events, particularly problems in relationships, were common, occurring in half. Five per cent of suicides were preceded by bereavement. Non-fatal self-harm occurred in 25% and suicidal ideas in 29%. Non-compliance with drug treatment, non-attendance, and increased alcohol or drug misuse were each reported in around a quarter of cases. Forty per cent had routine appointments in this three month period while a quarter were seen urgently. In 40%, there was contact between services and the patient's family. In a third of cases (31%), treatment or supervision were increased, but in 19% they were decreased.

In the under 25s the most frequently reported life events were relationship break up (10%), family/childcare problems (8%) and accommodation problems (6%). In the over 65's the most frequently reported were a physical health problem in the patient (18%), bereavement or anniversary of bereavement (10%), health problems in someone else (6%) and family problems (6%).

Figure 18: Antecedents in last 3 months before suicide (England and Wales Suicide Inquiry cases)



Only around one quarter of patients (27%), were thought to have shown clear evidence of relapse of their illnesses in the three months before death. Almost half (49%) of those who did not have symptoms of relapse did show possible "proxy indicators" of risk, i.e. increased alcohol or drug misuse, self-harm, or non-compliance. However, these were much more a feature of young suicides – alcohol and drug misuse were uncommon indicators of risk in the over 65s who had no symptoms of relapse.

Ethnic minorities

The sample included 282 individuals from an ethnic minority, i.e. 6% of Inquiry cases. Their key characteristics are shown in table 6. Ethnic minority suicides as a whole were more likely to be unemployed but less likely to have been living alone at the time of death. There was a much higher proportion of people suffering from schizophrenia. Rates of previous violence were also higher.

Suicides in people from ethnic minorities were more likely to follow non-compliance with medication (28%). Twenty-four per cent were in contact with services within 24 hours of suicide, compared to 19% of the total sample. Although distressing side-effects of medication were more common, the reason for non-compliance was usually thought by staff to be lack of insight.

Table 6: Suicides in Ethnic minorities (England & Wales)

	Number 282	% (95% CI) 6%
Demographic features		
Age: median (range)	35 (16-88)	
Male	194	69% (63-74)
Not currently married	206	74% (69-79)
Unemployed/long-term sick	194	71% (65-76)
Living alone	102	37% (31-43)
Priority groups		
In-patients	53	19% (14-23)
Post-discharge patients	62	27% (21-33)
CPA	167	59% (53-65)
Missed contact	65	29% (23-35)
Non-compliance	72	28% (23-34)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	133	48% (42-54)
Affective disorder (bipolar & dep.)	92	33% (28-39)
Alcohol dependence	11	4% (2-6)
Drug dependence	8	3% (1-5)
Personality disorder	11	4% (2-6)
Any secondary diagnosis	133	48% (42-54)
Duration of history (under 12 months)	45	17% (12-21)
Over 5 previous admissions	48	19% (14-23)
Last admission was a re-admission	23	13% (8-18)
Behavioural features		
History of self-harm	145	52% (46-58)
History of violence	86	32% (26-37)
History of alcohol misuse	73	27% (21-32)
History of drug misuse	90	33% (27-38)
Contact with services		
Last contact within 7 days of death	151	54% (48-60)
Symptoms at last contact	163	58% (54-66)
Requested contact but not taken place	8	3% (1-6)
Estimate of immediate risk: low or none	233	82% (83-91)
Estimate of long-term risk: low or none	43	52% (51-74)
Out of contact	51	22% (17-28)
Suicide thought to be preventable	55	23% (17-27)

The numbers in the most numerous ethnic groups were: Indian subcontinental ("Asian") 95, black Caribbean 64, black African 35. Although the numbers are relatively small for comparison, differences between these groups were found. Black Caribbean suicides were generally younger (median age 30 years) and had a high rate of unemployment (85%). They were particularly likely to suffer from schizophrenia (74%) and they had high rates of violence (44%) and previous drug misuse (49%). These suicides were more often seen as preventable. Asian suicides were less likely to be living alone and respondents were more likely to say that closer contact with the patient's family would have reduced suicide risk.

Homeless people

There were 131 suicides among homeless people, 3% of the Inquiry sample. Their key characteristics are shown in table 7.

The homeless suicides were mainly young, single, unemployed males. They had a different diagnostic profile from Inquiry cases as a whole, the most common primary diagnoses being schizophrenia (24%), affective disorder (22%) and alcohol dependence (15%). Seventy-nine per cent had been ill for more than a year and 22% had had more than five admissions. Compared to all Inquiry cases, they had high rates of co-morbidity, alcohol and drug misuse and violence.

The most common method of suicide was hanging (44%), followed by self-poisoning (18%).

These suicides tended to cluster in particular around acute admission. A large proportion (49%) were in-patients at the time of suicide and 22% died within three months of hospital discharge. Fifty-one per cent were under the higher levels of the CPA.

More homeless suicides were judged to be at moderate or high long-term risk. In 30% suicide was thought to have been preventable. At last contact, homeless suicides were more likely to show hostility, evidence of depressive illness, increased use of alcohol or drugs or recent self-harm.

Homeless suicides were no more likely to be non-compliant with treatment in the three months before death but were more likely to miss their final appointment in the community. Sixty-two per cent of homeless community cases were out of contact at the time of suicide, in most cases due to patient-initiated discharge. Among the group who missed their final appointment, there had been a recent assertive attempt to re-engage the patient with services in 50% of cases. Among the homeless group who were non-compliant in the month before discharge, there was a face-to-face attempt to encourage compliance in 52% of cases.

Table 7: Suicides in homeless people (England & Wales)

	Number 131	% (95% CI) 3%
Demographic features		
Age: median (range)	35 (18-75)	
Male	109	83% (77-90)
Ethnic minority	9	7% (3-12)
Not currently married	119	93% (89-97)
Unemployed/long-term sick	112	86% (80-92)
Living alone	84	68% (60-77)
Priority groups		
In-patients	64	49% (41-58)
Post discharge patients	29	43% (31-55)
CPA	65	51% (42-60)
Missed contact	25	40% (28-52)
Non-compliance	29	26% (18-34)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	31	24% (16-31)
Affective disorder (bipolar & dep.)	29	22% (15-29)
Alcohol dependence	20	15% (9-21)
Drug dependence	14	11% (5-16)
Personality disorder	22	17% (10-23)
Any secondary diagnosis	79	63% (54-71)
Duration of history (under 12 months)	27	21% (14-28)
Over 5 previous admissions	24	22% (14-29)
Last admission was a re-admission	10	19% (8-29)
Behavioural features		
History of self-harm	87	70% (62-78)
History of violence	62	49% (40-58)
History of alcohol misuse	77	61% (53-70)
History of drug misuse	64	50% (41-58)
Contact with services		
Last contact within 7 days of death	79	62% (54-71)
Symptoms at last contact	81	64% (55-72)
Requested contact but not taken place	4	7% (0-13)
Estimate of immediate risk: low or none	97	80% (73-87)
Estimate of long-term risk: low or none	15	48% (31-66)
Out of contact	39	62% (50-74)
Suicide thought to be preventable	33	30% (21-39)

In-patient suicides

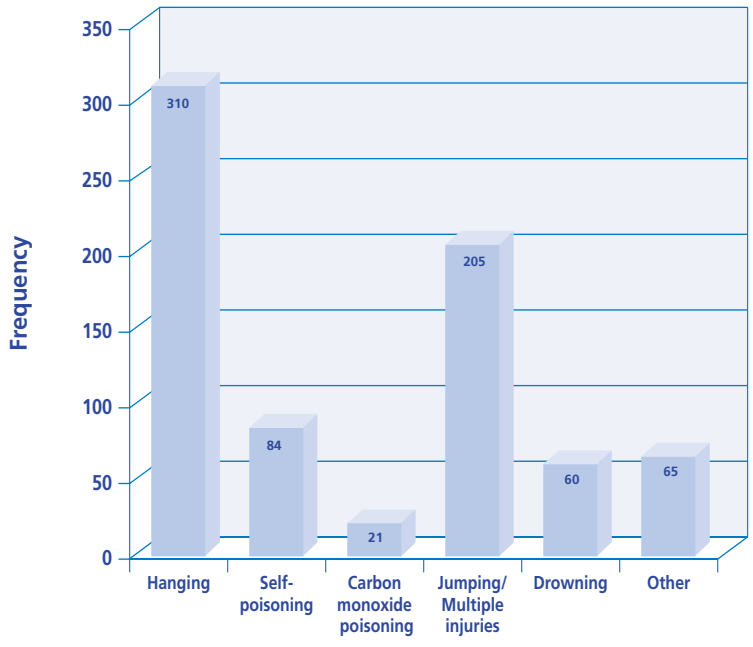
Seven hundred and fifty-four in-patient suicides were reported in the four years of data collection, 16% of Inquiry cases. The number of notifications of in-patient suicides declined steadily from late 1997. Their key characteristics are given in table 8.

Social characteristics In-patient suicides were similar to the Inquiry sample as a whole although they were more likely to be unemployed.

Clinical features In-patient suicides were a more morbid group than the sample as a whole. For example, 34% had schizophrenia and they had higher rates of previous self-harm, violence and multiple previous admissions.

Method The suicide methods used by in-patients were different from those of the Inquiry sample as a whole (fig. 19). By far the most common method was hanging (42%), followed by jumping from a height or in front of a moving vehicle (27%). Overdose was less frequent (11%). When hanging was the method, the most common ligature was a belt and the most common ligature point was a curtain rail. When overdose was the method, the type of substance taken was most commonly a psychotropic drug. Of those suicides that occurred on the ward itself, 74% were by hanging, while 9% were by self-poisoning and 6% were by suffocation. Jumping from a height or in front of a vehicle generally took place outside hospital grounds, usually distant from the hospital.

Figure 19: Cause of death (England and Wales In-patient suicides)



SELF POISONING	
Psychotropic drug	37
Paracetamol	21
Opiate	3
Other analgesic	7
Other prescribed compound	4
Other poisons	7
Other/Unknown	5
TOTAL	84

OTHER	
Burning	11
Cutting or stabbing	15
Suffocation	22
Firearms	4
Electrocution	4
Other specified	9
TOTAL	65

Timing Twenty-four per cent took place in the first week after admission; 41% occurred during the period when discharge was being planned. There was no characteristic time of the day or week when in-patient suicides occurred and overall there was no evidence of clustering "out of hours". However, suicides that occurred on the ward itself followed a different pattern from those that occurred elsewhere, being more common in the evening and night (51%).

Location Thirty-one per cent occurred on the ward itself, just over half (53%) took place at a distance from the hospital, while 14% occurred in or around the hospital (the remaining 2% occurred at an unspecified location). In suicides that occurred off the ward (69%), the majority (61%) of patients were on agreed leave or had left with staff agreement. Those who had left without staff permission had different characteristics and more closely resembled those who committed suicide on the ward; a similar proportion occurred early in the admission, were detained under the Mental Health Act, were under special observation, and were perceived to be at high or moderate risk.

Care The majority of subjects were under routine care at the time of the suicide, being voluntary patients, on an open ward and under routine observation. However, 28% were detained under the Mental Health Act and 9% were on a locked ward. Twenty-three per cent were under special (i.e. non-routine) observation, and 3% under high level (one-to-one) observation.

Almost all wards (95%) had a written observation policy at the time. However, 25% reported problems observing patients because of ward design. Eight per cent reported problems observing the patients because of the needs of other disturbed patients. Twenty-seven per cent reported nursing shortages at the time. In general, these problems were more frequent in suicides occurring during special observation.

Most patients (76%) had been in contact with a staff member, usually a ward nurse (88%), in the 24 hours before death. In 40% of cases, the key worker was involved in the final contact. This was generally a routine contact and it was unusual for suicidal ideas to be detected (15%). As in the sample as a whole, the majority of patients (80%) were thought to be at low or no risk at last contact.

Preventability In-patient suicides were more often seen as preventable (31%). Respondents most often (45%) suggested closer supervision as the factor that would have made suicide less likely. Better patient compliance was mentioned by 23%. However, staff factors were also mentioned frequently, i.e. increased staff numbers (20%), better staff training (20%) and better staff communication (18%). Closer contact with the patient's family was mentioned by 14%.

Non-routine observations Of the 174 suicides under special or constant observation, 52% occurred on the ward itself while 48% had left the ward at the time of suicide, including 11% who had left with staff agreement. In 28% there were problems observing patients on the ward because of ward design and in 14% because of the needs of other disturbed patients. Suicides under special observation were more often seen as preventable (51%) than in-patient

suicides in general and 61% of respondents thought risk would have been reduced by closer supervision. When these suicides occurred on the ward, they were usually by hanging (73%) while 6% were by cutting or stabbing, 4% by suffocation, 3% by self-poisoning and 2% by electrocution. Suicides under observation did not cluster "out of hours". Suicides under one-to-one observation were most often by hanging.

Table 8: In-patient suicides (England & Wales)

	Number 754	% (95% CI) 16%
Demographic features		
Age: median (range)	39 (17-89)	
Male	485	64% (61-68)
Ethnic minority	53	7% (5-9)
Not currently married	553	74% (71-77)
Unemployed/long-term sick	487	65% (62-69)
Living alone	290	39% (35-42)
Priority groups		
CPA	583	79% (76-82)
Non-compliance	186	26% (22-29)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	259	34% (31-38)
Affective disorder (bipolar & dep.)	341	45% (42-49)
Alcohol dependence	12	2% (1-2)
Drug dependence	10	1% (1-2)
Personality disorder	*67*	*9%* (7-11)
Any secondary diagnosis	393	53% (49-56)
Duration of history (under 12 months)	166	22% (19-25)
Over 5 previous admissions	198	31% (27-34)
Behavioural features		
History of self-harm	560	75% (72-78)
History of violence	202	27% (24-30)
History of alcohol misuse	244	33% (29-36)
History of drug misuse	224	30% (27-33)
Contact with services		
Symptoms at last contact	450	61% (57-64)
Last contact within 7 days of death	732	97% (96-99)
Estimate of immediate risk: low or none	590	80% (77-83)
Estimate of long-term risk: low or none	85	43% (36-49)
Suicide thought to be preventable	219	31% (27-34)

Suicides in the community

In total, 4,105 suicides (84%) occurred in patients living in the community. Their key characteristics are given in table 9.

Last admission Of these, 2,876 (71%) had been admitted at some time. Among these, 11% had been admitted under the Mental Health Act. In 17% the admission had been a re-admission within three months of a previous discharge from in-patient care. In 24% the final admission had lasted less than seven days. In 9%, the last admission was not to the local in-patient unit. In the majority (75%) discharge was planned but in the remainder discharge was initiated by the patient, usually by simple request (10%) or as self-discharge against medical advice (10%). In an additional 3% the patient was discharged because of a breach of ward rules, e.g. drinking alcohol or self-harm on the ward.

Most (88%) were regarded as being at least moderately recovered at the time of discharge. In 91% a follow-up appointment had been arranged. In almost a quarter (22%) of community suicides, an act of deliberate self-harm had occurred within three months of death.

Care arrangements Forty-one per cent of suicides in the community were subject to multidisciplinary review under the CPA, although in 65% a key worker had been allocated. In 46% a date had been set for the next case review. Thirty-nine patients (1% of community suicides) were under supervised discharge; sixty-five (2% of community suicides) were on the supervision register. In 4% there had been a request (from the patient, his/her family or his/her GP) for further contact that had not taken place.

Out of contact Twenty-nine per cent were currently out of contact with services, usually following "patient-initiated" discharge (see above). In the majority of self-discharges, the consultant had been informed but this was not the case in 27%. Twenty-eight per cent missed their final appointment with services and in this group, a recent assertive attempt to re-engage the patient had occurred in 55% of cases.

Treatments Most patients were receiving some form of pharmacotherapy but less than half were regarded as receiving any form of psychological intervention, including psychological support. Thirteen per cent were attending a day hospital and 14% were undergoing rehabilitation or regular occupational therapy. Seven per cent had complained of distressing drug side-effects, usually related to oral or parenteral anti-psychotic drugs. Twenty-two per cent were not compliant with their treatment plan in the previous month, the main reason – in the view of the mental health team – being lack of insight into illness. Non-compliance is discussed further in a later section. In the three months before suicide, decreases in drug dosage or supervision were reported in 18%.

Table 9: Suicides in the community (England & Wales)

	Number 4105	% (95% CI) 84%
Demographic features		
Age: median (range)	41 (13-95)	
Male	2713	66% (65-68)
Ethnic minority	229	6% (5-6)
Not currently married	2852	71% (69-72)
Unemployed/long-term sick	2278	58% (56-59)
Living alone	1716	43% (42-45)
Priority groups		
CPA	1660	41% (39-42)
Post-discharge	1100	27% (26-28)
Missed contact	1131	28% (27-30)
Non-compliance	743	22% (20-23)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	701	17% (16-19)
Affective disorder (bipolar & dep.)	1695	42% (40-43)
Alcohol dependence	427	11% (10-11)
Drug dependence	206	5% (4-6)
Personality disorder	438	11% (10-12)
Any secondary diagnosis	2067	52% (51-54)
Duration of history (under 12 months)	834	21% (20-22)
Over 5 previous admissions	514	13% (12-15)
Last admission was a re-admission	478	17% (15-18)
Behavioural features		
History of self-harm	2517	62% (61-64)
History of violence	718	18% (17-19)
History of alcohol misuse	1655	41% (39-43)
History of drug misuse	1124	28% (26-29)
Contact with services		
Last contact within 7 days of death	1576	39% (38-41)
Symptoms at last contact	2539	65% (63-66)
Requested contact but not taken place	161	4% (4-5)
Estimate of immediate risk: low or none	3360	86% (85-88)
Estimate of long-term risk: low or none	678	60% (57-63)
Out of contact	1154	29% (27-30)
Suicide thought to be preventable	657	19% (17-20)

Suicides within three months of hospital discharge

There were 1,100 suicides within three months of discharge from in-patient care, 23% of the Inquiry sample. Their key characteristics are given in table 10.

Post-discharge suicides were most frequent in the first two weeks after leaving hospital when 321 deaths occurred, 8% of all suicides by community patients. After the first two weeks the weekly number declined steadily (fig. 20). Within the first two weeks, the highest number of suicides was on the day after discharge (fig. 21).

Clinical and social features The clinical and demographic features of post-discharge suicides were similar to those of the Inquiry sample as a whole. However, they were more likely to have a history of self-harm (71%). Similarly, their suicide methods followed the pattern of the whole sample.

Final admission Eighty-five per cent of final admissions had been voluntary. In 30%, the final admission lasted less than seven days. Almost a quarter (23%) of final admissions were re-admissions within three months of a previous discharge. Re-admissions, short final admissions and self-discharge were more common in post-discharge suicides than in community suicides overall.

Figure 20: Number of suicides per week following discharge (England and Wales Suicide Inquiry cases)

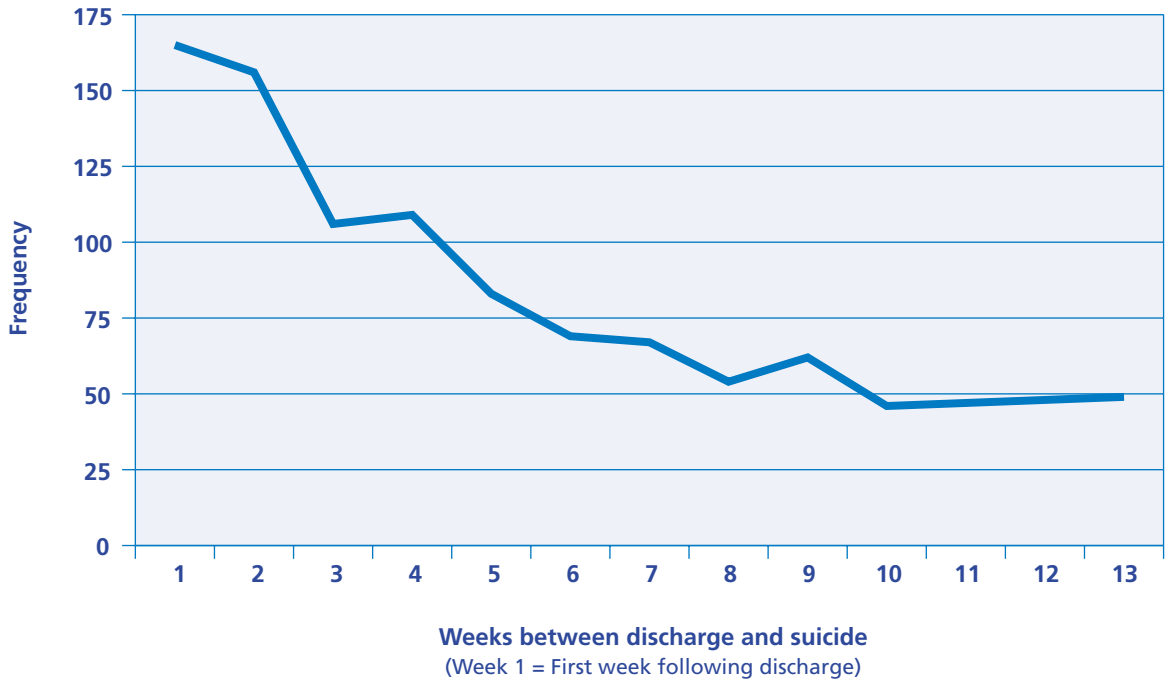
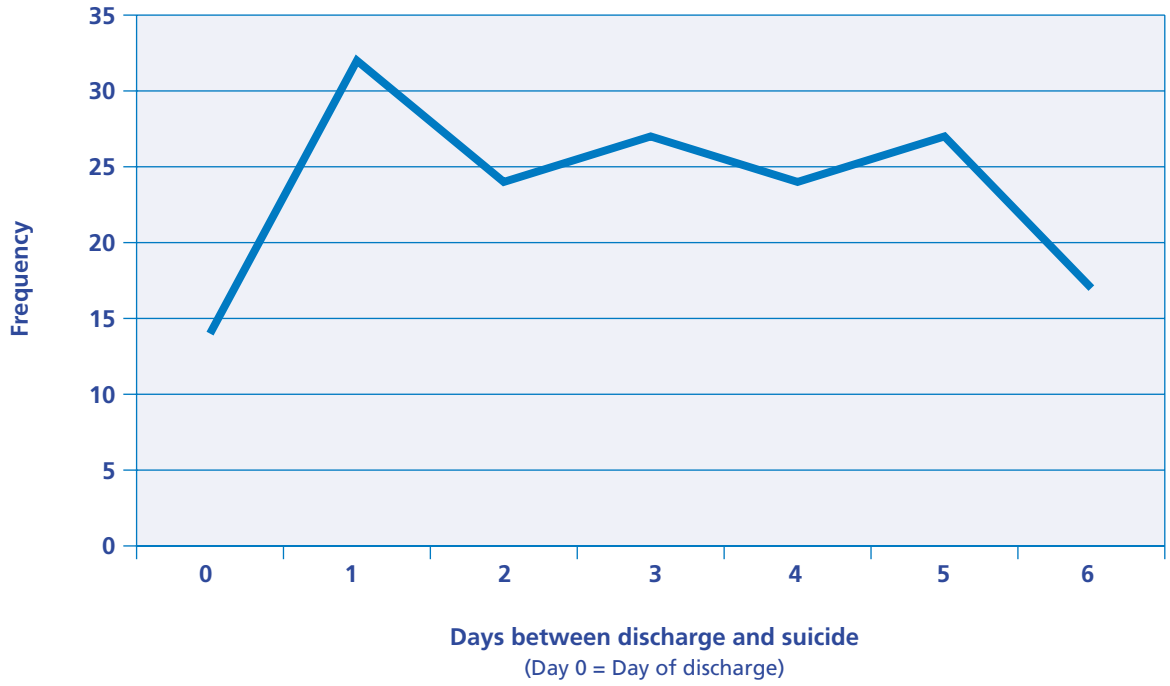


Figure 21: Number of suicides per day following discharge (England and Wales Suicide Inquiry cases)



Discharge from final admission was planned in 67% and patient-initiated in 32%. Eighty-seven per cent of patients were considered at least moderately improved on discharge whilst 13% were unchanged or worse. Most (92%) had a follow-up appointment arranged on discharge but in 40% suicide took place before first follow-up. Non-compliance with drug treatment was common (22%).

Contact with services The post-discharge suicides were more likely than other community suicides to have been in contact with services in the week before death and more likely to be under the higher levels of CPA (58%). Estimates of risk at final contact followed the pattern of the sample as a whole. A similar proportion were seen as preventable.

Three hundred and twenty-one people died within two weeks of leaving hospital. They were similar demographically and clinically to the post-discharge sample as a whole, but they were more likely to have discharged themselves. Eighty per cent of this group died before follow-up.

Patients who initiated their own discharge (either by self-discharge, request for discharge or discharge for breach of ward rules) made up one third of the post-discharge suicide group. Compared to those who committed suicide in the three months after planned discharge, they had higher rates of personality disorder, previous violence, alcohol misuse and drug misuse. When these patients were omitted from the sample, the pattern of timing of suicides following discharge was essentially the same.

Table 10: Suicides within three months of in-patient discharge (England & Wales)

	Number 1100	% (95% CI) 23%
Demographic features		
Age: median (range)	41 (16-92)	
Male	733	67% (64-69)
Ethnic minority	62	6% (4-7)
Not currently married	799	73% (70-76)
Unemployed/long-term sick	642	59% (56-62)
Living alone	484	45% (42-48)
Priority groups		
CPA	636	58% (55-61)
Missed contact	245	23% (20-25)
Non-compliance	222	22% (20-25)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	188	17% (15-19)
Affective disorder (bipolar & dep.)	455	42% (39-44)
Alcohol dependence	128	12% (10-14)
Drug dependence	41	4% (3-5)
Personality disorder	137	13% (11-14)
Any secondary diagnosis	592	55% (52-58)
Duration of history (under 12 months)	280	26% (24-29)
Over 5 previous admissions	199	22% (19-25)
Last admission was a re-admission	250	23% (20-26)
Behavioural features		
History of self-harm	779	71% (69-74)
History of violence	228	21% (19-24)
History of alcohol misuse	475	44% (41-47)
History of drug misuse	315	29% (26-32)
Contact with services		
Last contact within 7 days of death	625	58% (55-61)
Symptoms at last contact	623	59% (56-62)
Requested contact but not taken place	33	3% (2-4)
Estimate of immediate risk: low or none	885	85% (82-87)
Estimate of long-term risk: low or none	154	52% (46-58)
Out of contact	203	19% (16-21)
Suicide thought to be preventable	211	21% (18-24)

Care Programme Approach

There were 2,243 suicides who were subject to the Care Programme Approach at a level requiring multidisciplinary review (47% of the Inquiry sample). During most of the period of data collection, the "levels" of the CPA were not standardised nationally. However, the group under study here is roughly equivalent to those under what is now "enhanced CPA". The key characteristics of these "CPA suicides" are shown in table 11.

Social and clinical features These suicides had more severe illnesses and seemed more isolated than the Inquiry sample as a whole. They were more likely to be unmarried and unemployed. They were more likely to be suffering from schizophrenia (32%) and less likely to have a primary diagnosis of alcohol or drug misuse (6%). The majority had a secondary diagnosis (55%). In general they had been ill for longer and had had more admissions. They had a higher rate of self-harm.

Method CPA suicides died more often by violent methods, an indication of severe illness. Compared to the whole sample, they were more likely to commit suicide by jumping from a height (10%) or in front of a vehicle (8%), and less likely to die by self-poisoning (26%) or car exhaust asphyxiation (6%). The most common method of suicide was hanging (34%).

Care arrangements Twenty-six per cent of CPA suicides were in-patients at the time of suicide. Twenty-eight per cent had been discharged from in-patient care in the previous three months.

Of those CPA suicides who died in the community, 88% had been admitted at some time. Nineteen per cent had last been admitted under the Mental Health Act. The provisions of the CPA had been implemented in most, though not all, cases. At the time of discharge 94% had been allocated a key worker and in 76% a date had been set for next review. A follow-up appointment had been arranged in 97%. Despite the CPA, just over a quarter were non-compliant with drug treatment in the month before death, and a similar figure had missed their last service contact. The main reason for non-compliance was thought to be lack of insight into illness. Ten per cent complained of distressing side-effects.

Final contact The CPA suicides were more likely to have been seen by services in the week before death. Twenty-nine per cent were seen within 24 hours of death. The key worker was present at final contact in 62%. Estimates of risk at final contact were similar to those in the total sample, but long-term risk was less often rated as low or absent. CPA suicides were not seen as more or less preventable.

Absence of CPA Two hundred and twenty-nine suicides with schizophrenia (25% of suicides with this diagnosis) and 917 suicides with depression (56% of those with this diagnosis) were not under the higher levels of the CPA. Among those in this group who had schizophrenia, 48% lived alone, 62% had been ill

Table 11: Suicides by people under enhanced CPA (England & Wales)

	Number 2243	% (95% CI) 47%
Demographic features		
Age: median (range)	41 (13-94)	
Male	1411	63% (61-65)
Ethnic minority	167	7% (6-9)
Not currently married	1651	74% (72-76)
Unemployed/long-term sick	1430	64% (62-66)
Living alone	967	44% (42-46)
Priority groups		
In-patients	583	26% (24-28)
Post discharge patients	636	38% (36-40)
Missed contact	443	27% (25-29)
Non-compliance	561	27% (25-29)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	723	32% (30-34)
Affective disorder (bipolar & dep.)	973	44% (41-46)
Alcohol dependence	85	4% (3-5)
Drug dependence	46	2% (1-3)
Personality disorder	220	10% (9-11)
Any secondary diagnosis	1211	55% (52-57)
Duration of history (under 12 months)	381	17% (16-19)
Over 5 previous admissions	532	26% (24-28)
Last admission was a re-admission	301	21% (20-23)
Behavioural features		
History of self-harm	1526	69% (67-71)
History of violence	478	22% (20-23)
History of alcohol misuse	775	35% (33-37)
History of drug misuse	646	29% (27-31)
Contact with services		
Last contact within 7 days of death	1487	67% (65-69)
Symptoms at last contact	1343	62% (60-64)
Requested contact but not taken place	52	3% (2-4)
Estimate of immediate risk: low or none	1798	82% (81-84)
Estimate of long-term risk: low or none	316	47% (43-51)
Out of contact	209	13% (11-14)
Suicide thought to be preventable	454	22% (20-23)

for more than five years, 84% had had at least one admission to hospital, 49% had a history of deliberate self-harm and 29% were non-compliant with treatment in the month prior to death. Among the group with depression not under the CPA, 34% lived alone, 30% had been ill for more than five years and 58% had a lifetime history of deliberate self-harm.

Non-compliance

There were 929 cases in which the patient was known to be non-compliant with drug treatment in the month before suicide, 22% of the total sample. Their key characteristics are presented in table 12. Thirty-nine per cent of these had also missed their final appointment with services.

Social and clinical characteristics

Compared to the total sample, the non-compliant cases were more likely to be from an ethnic minority, single, unemployed and living alone. They were similar on many clinical variables, though they had a higher rate of schizophrenia, longer illness duration, more previous admissions and higher rates of drug misuse. Non-compliant cases were more likely to display co-morbidity, i.e. to have at least one secondary diagnosis. Eighteen per cent of the non-compliant group were people with schizophrenia who were also misusing alcohol or drugs. This group represents around a quarter of schizophrenic suicides who were non-compliant in the month before death.

Non-compliant suicides had higher rates (15%) of distressing side-effects of medication, although the most common reason for non-compliance was thought by staff to be lack of insight. In patients whose non-compliance was attributed to side-effects of medication, the most common type of medication being taken was anti-psychotic drugs, either orally or by injection. Most of those who were taking oral anti-psychotic drugs were taking "typical" drugs.

Service response to non-compliance Non-compliant cases were more likely to be subject to the higher levels of the CPA (61%). Previous detention under the Mental Health Act was more common. A face-to-face attempt to encourage compliance with medication in the three months before death took place in 62%. Contact between the mental health team and the patient's family in the three months before death was more frequent (51%).

In 9% of the non-compliant group, the patient made a treatment request to which services did not (or were unable to) respond.

In 73% of non-compliant patients with schizophrenia, a face-to-face attempt was made to encourage compliance with treatment in the three months before death. In 42% there was an increase in supervision or treatment within the same period and in 57% there was contact with the patient's family.

Table 12: Suicides in non-compliant patients (England & Wales)

	Number 929	% (95% CI) 22%
Demographic features		
Age: median (range)	38 (16-92)	
Male	629	68% (65-71)
Ethnic minority	72	8% (6-10)
Not currently married	700	76% (73-79)
Unemployed/long-term sick	623	67% (64-70)
Living alone	441	48% (45-51)
Priority groups		
In-patients	186	20% (17-23)
Post discharge patients	222	30% (27-33)
CPA	561	61% (58-64)
Missed contact	286	39% (35-42)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	270	29% (26-32)
Affective disorder (bipolar & dep.)	371	40% (37-43)
Alcohol dependence	67	7% (6-9)
Drug dependence	47	5% (4-6)
Personality disorder	92	10% (8-12)
Any secondary diagnosis	543	59% (56-62)
Duration of history (under 12 months)	165	20% (15-20)
Over 5 previous admissions	174	20% (17-23)
Last admission was a re-admission	122	21% (18-25)
Behavioural features		
History of self-harm	619	67% (64-70)
History of violence	222	24% (21-27)
History of alcohol misuse	409	44% (41-48)
History of drug misuse	336	37% (33-40)
Contact with services		
Last contact within 7 days of death	523	57% (54-60)
Symptoms at last contact	639	71% (68-74)
Requested contact but not taken place	41	6% (4-8)
Estimate of immediate risk: low or none	730	81% (78-83)
Estimate of long-term risk: low or none	126	45% (39-50)
Out of contact	172	23% (20-26)
Suicide thought to be preventable	219	25% (22-28)

Preventability Non-compliant suicides were more often seen as preventable (25%). Better compliance and closer supervision were thought to be the main ways in which suicide risk could have been reduced. In 7%, respondents thought that new legal powers would have made suicide less likely. Better liaison between different services was mentioned in 12%.

Missed contact

There were 1,131 suicides by people who missed their final service contact, 28% of the community sample. Their key characteristics are given in table 13.

There were small but significant differences from the sample as a whole. They had high rates of being unmarried, unemployed and living alone. Their clinical histories were similar but they were more likely to have a primary diagnosis of alcohol dependence and drug dependence and less likely to have affective disorder. Schizophrenia and affective disorder were nevertheless the most common diagnoses. They had higher rates of both alcohol and drug misuse and a higher rate of violence.

Service response to missed contact Forty-eight per cent of the "missed contact" group of Inquiry cases were seen by services as out of contact at the time of suicide. Only 6% were out of contact due to planned discharge; 75% due to patient-initiated discharge. In the patient-initiated group, no action was then taken by services in 27% of cases; in 45% of cases a further appointment was sent and in 8%, a professional home visit took place. The mental health team was less likely to have made contact with the patient's family in this group. Overall, services had made a recent assertive attempt to re-engage the patient in 55% of cases in the "missed contact" group.

Preventability Twenty per cent of the suicides in the missed contact group were thought by services to have been preventable. The factors that, according to respondents, could have reduced risk were most commonly closer supervision and better patient compliance.

Table 13: Suicides following missed contact (England & Wales)

	Number 1131	% (95% CI) 28%
Demographic features		
Age: median (range)	39 (15-92)	
Male	766	68% (65-70)
Ethnic minority	65	6% (4-7)
Not currently married	832	75% (72-78)
Unemployed/long-term sick	718	66% (63-69)
Living alone	529	49% (46-52)
Priority groups		
In-patients	2	0.2% (0-0.4)
Post discharge patients	245	22% (19-24)
CPA	443	39% (36-42)
Non-compliance	286	34% (31-37)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	187	17% (15-19)
Affective disorder (bipolar & dep.)	414	37% (34-40)
Alcohol dependence	145	13% (11-15)
Drug dependence	78	7% (5-8)
Personality disorder	131	12% (10-14)
Any secondary diagnosis	651	59% (57-62)
Duration of history (under 12 months)	223	20% (18-23)
Over 5 previous admissions	135	13% (11-15)
Last admission was re-admission	126	16% (14-19)
Behavioural features		
History of self-harm	694	62% (59-65)
History of violence	246	23% (20-25)
History of alcohol misuse	561	50% (48-53)
History of drug misuse	401	36% (33-39)
Contact with services		
Last contact within 7 days of death	238	21% (19-24)
Symptoms at last contact	718	66% (63-69)
Requested contact but not taken place	74	7% (5-8)
Estimate of immediate risk: low or none	932	87% (85-89)
Estimate of long-term risk: low or none	195	61% (55-66)
Out of contact	540	48% (45-51)
Suicide thought to be preventable	186	20% (17-22)

Scotland

General population suicides

The Inquiry was notified of 2,650 suicides and probable suicides in Scotland during the three years from April 1997. This included 1,753 cases in which the recorded cause of death was suicide and 897 deaths from an undetermined cause. The corresponding annual suicide rate is 17.3 per 100,000 people. For the remainder of this report these cases are referred to as suicides regardless of recorded cause of death.

Seventy-six per cent (2,017) were male, giving a male to female ratio of 3.2:1 (fig. 22). The ratio of males to females was highest in the younger age groups. Three methods of suicide together accounted for 72% of suicides (fig. 23): self-poisoning (mainly overdoses), hanging and drowning. Methods differed between the sexes: in males the commonest methods were hanging, self-poisoning by overdose, drowning and carbon monoxide poisoning; in females, overdose was by far the commonest method, followed by hanging and drowning. Violent or "active" methods, i.e. those involving physical injury such as hanging, jumping from a height or in front of a moving vehicle, were used in 57% of deaths overall, including 63% of male deaths and 40% of female deaths.

Inquiry cases

Of the total sample, 613 suicides, i.e. 23%, were known to be in contact with mental health services in the year before death.

Questionnaires were returned on 589 cases, a response rate of 96%. These are referred to in this report as Inquiry cases.

The Inquiry cases were predominantly male (69%) but there was a smaller male to female ratio, 2.2:1 (fig. 24), than in the general population suicides. The male to female ratio was generally lower in the younger age groups. Fifty per cent were aged thirty-nine or under. Twelve per cent were over sixty-five. Self-poisoning by overdose and hanging accounted for 68% of deaths (fig. 25). Violent or "active" methods were more common in female Inquiry cases (48%) than in female suicides in the general population but this was not found in males (60%).

Key social and clinical characteristics of Inquiry cases are presented in table 14.

Figure 22: Age and sex profile (Scotland – General population suicides)

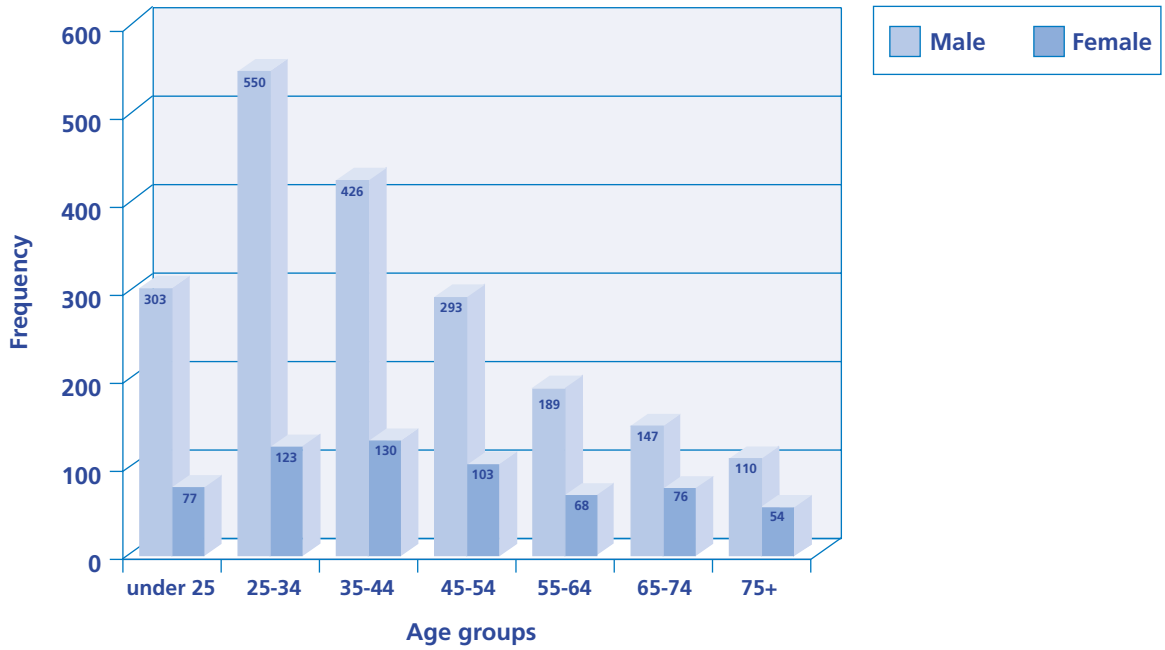
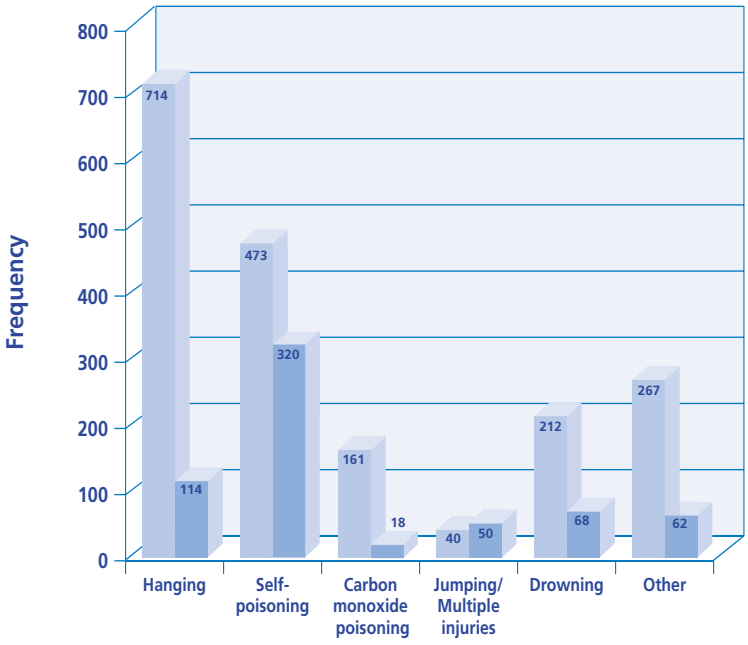


Figure 23: Cause of death (Scotland – General population suicides)



Male Female

OTHER	Male	Female
Burning	21	8
Cutting or stabbing	40	3
Suffocation	21	8
Firearms	56	3
Electrocution	8	1
Other	114	35
Unknown	7	4
TOTAL	267	62

Figure 24: Age and sex profile (Scotland Suicide Inquiry cases)

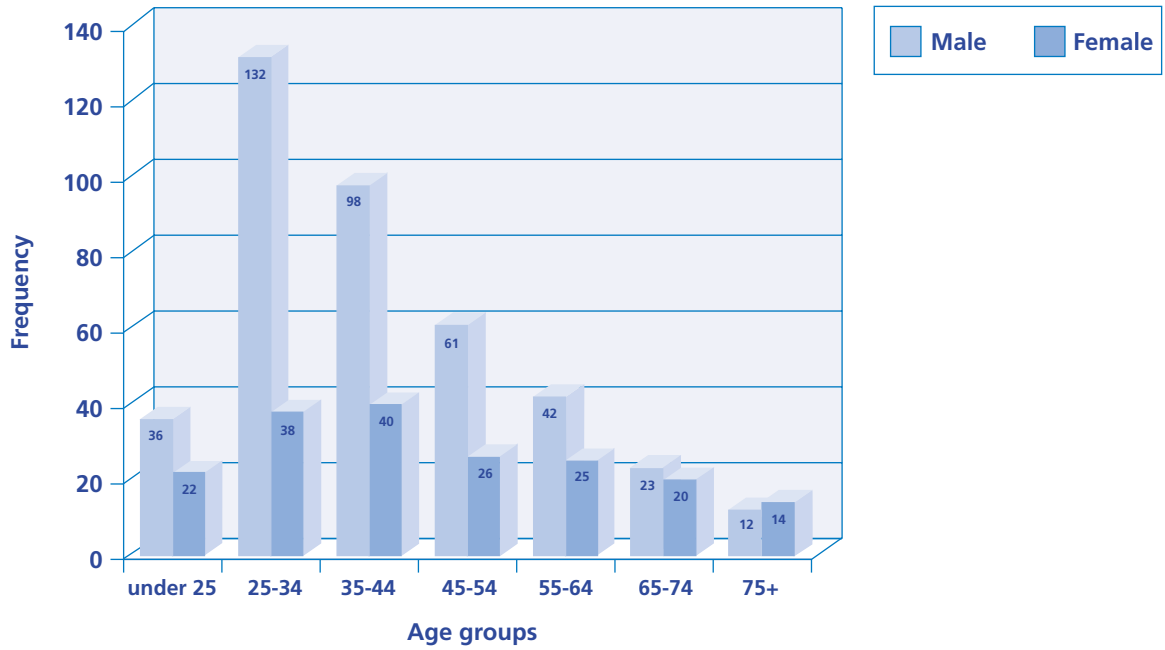
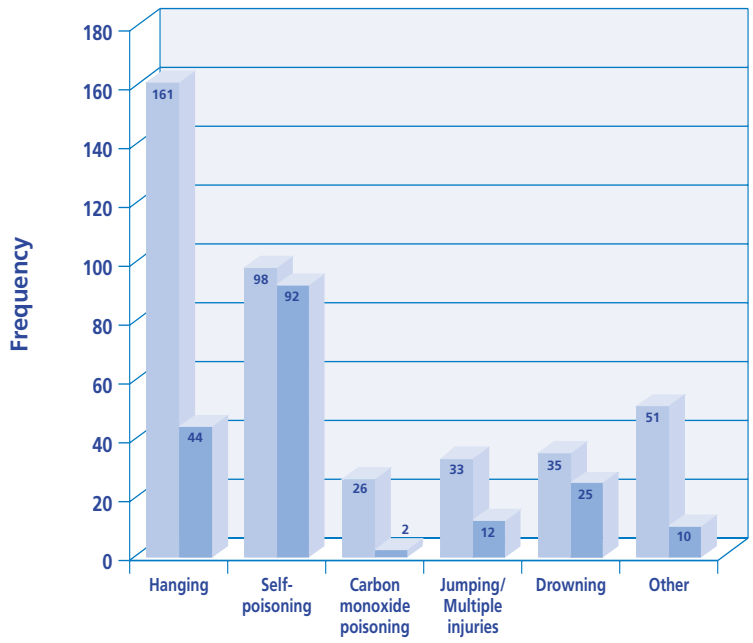


Figure 25: Cause of death (Scotland Suicide Inquiry cases)



Male Female

SELF-POISONING	Male	Female
Psychotropic drug	21	30
Paracetamol	3	15
Opiate	10	8
Other analgesic	2	6
Other/Unknown	62	43
TOTAL	98	92

OTHER	Male	Female
Burning	8	2
Cutting or stabbing	6	2
Suffocation	8	3
Firearms	10	0
Electrocution	1	0
Other specified	18	3
TOTAL	51	10

Table 14: Suicides in contact with services in the 12 months before death (Scotland)

	Total sample (n = 589) Number	% (95% CI)
Demographic features		
Age: median (range)	39 (16-86)	
Male	404	69% (65-72)
Ethnic minority	11	2% (1-3)
Not currently married	401	70% (66-74)
Unemployed/long-term sick	328	59% (55-64)
Living alone	231	41% (37-45)
Homeless	11	2% (1-3)
Priority groups		
In-patients	70	12% (9-15)
Post discharge patients	134	26% (22-30)
Missed contact	149	29% (25-33)
Non-compliance	82	17% (14-21)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	99	17% (14-20)
Affective disorder (bipolar & dep.)	194	33% (29-37)
Alcohol dependence	100	17% (14-20)
Drug dependence	54	9% (7-12)
Personality disorder	53	9% (7-11)
Any secondary diagnosis	271	48% (44-52)
Duration of history (under 12 months)	116	21% (18-25)
Over 5 previous admissions	79	14% (11-17)
Last admission was a re-admission	75	22% (18-27)
Behavioural features		
History of self-harm	359	62% (58-66)
History of violence	115	20% (17-24)
History of alcohol misuse	303	53% (49-57)
History of drug misuse	207	36% (32-40)
Contact with services		
Last contact within 7 days of death	247	43% (39-47)
Symptoms at last contact	374	66% (62-70)
Requested contact but not taken place	23	5% (3-7)
Estimate of immediate risk: low or none	496	88% (85-91)
Estimate of long-term risk: low or none	117	60% (53-67)
Out of contact	202	40% (35-44)
Suicide thought to be preventable	62	13% (10-15)

Social characteristics

The social characteristics of the Inquiry suicides suggested social adversity and isolation. Most were not currently married (fig. 26). The majority were either unemployed or long-term sick (fig. 27). Forty-one per cent lived alone (fig. 28). Six per cent were the lone carers of children. Two per cent were from an ethnic minority. Two per cent were homeless or of no fixed abode. Two per cent were current prisoners.

Figure 26: Marital status (Scotland Suicide Inquiry cases)

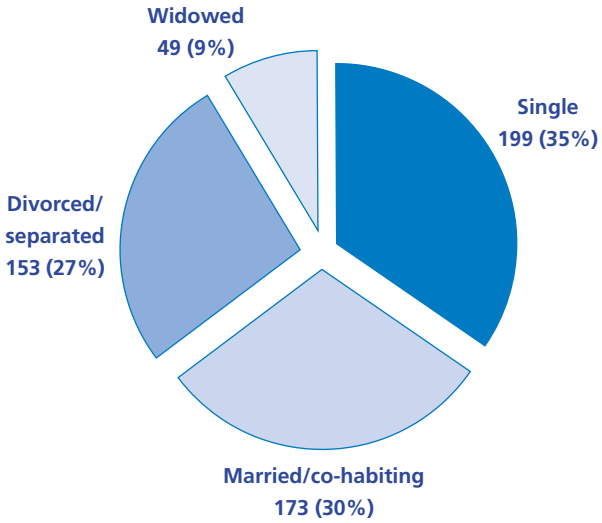


Figure 27: Employment status (Scotland Suicide Inquiry cases)

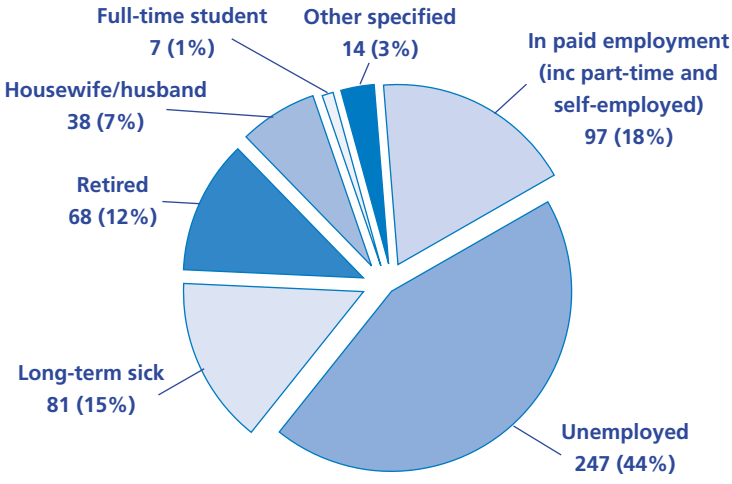
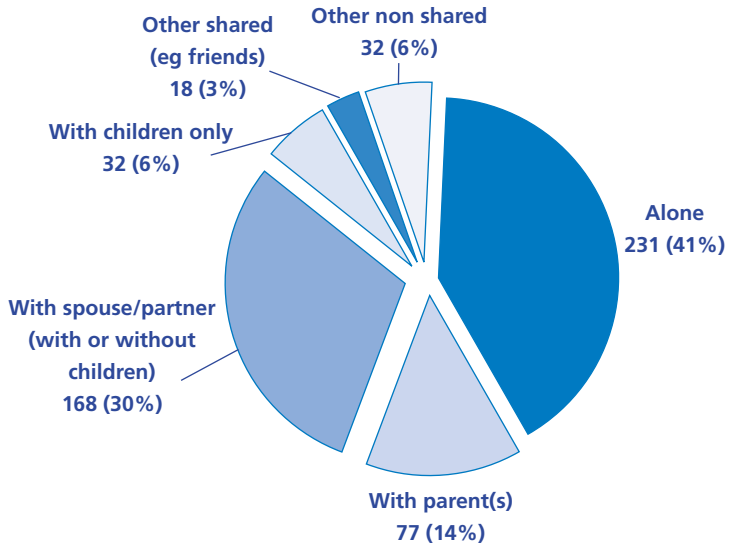


Figure 28: Living circumstances (Scotland Suicide Inquiry cases)



Clinical characteristics

Diagnosis A breakdown of primary diagnoses is given in figure 29. Major affective disorders accounted for 33% of cases, the other principal diagnoses being alcohol dependence and schizophrenia. Forty-eight per cent also had at least one secondary diagnosis (fig. 30). The most common secondary diagnoses were alcohol dependence, personality disorder, drug dependence and depressive illness.

Behaviour There were substantial rates of alcohol and drug misuse. Fifty-three per cent of the sample had a history of alcohol misuse and 36% had a history of drug misuse. The majority had a history of self-harm (62%) and one fifth had a history of violence.

Figure 29: Primary diagnosis (Scotland Suicide Inquiry cases)

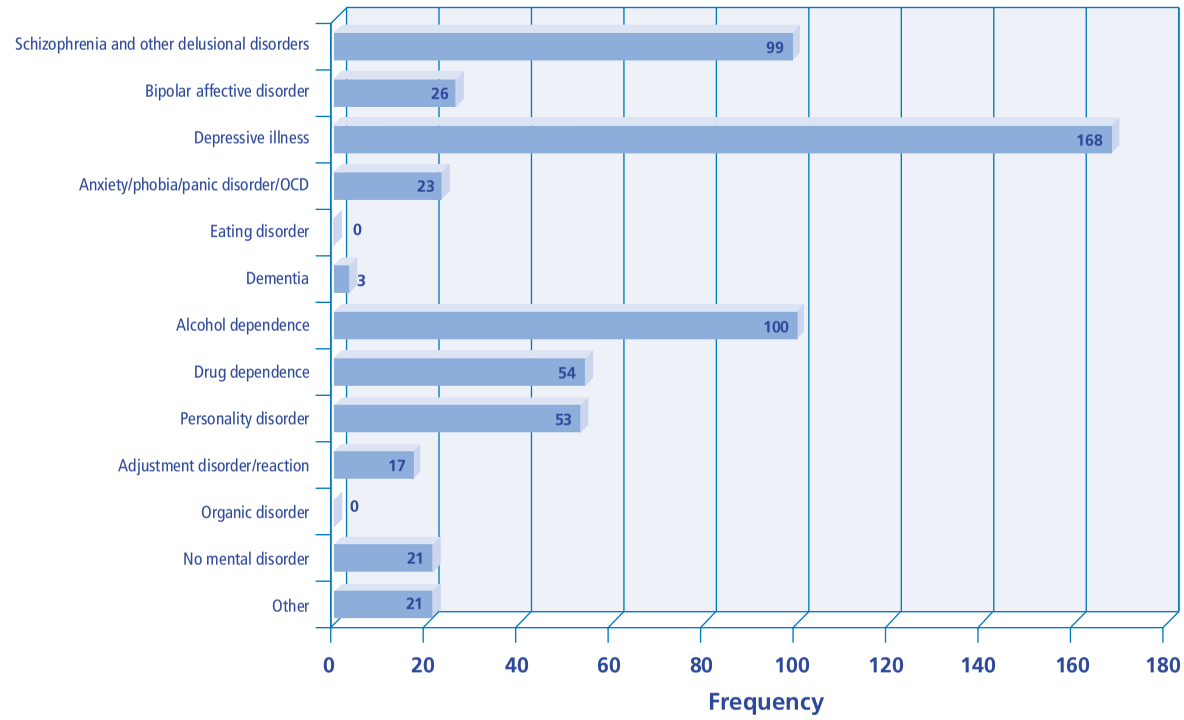
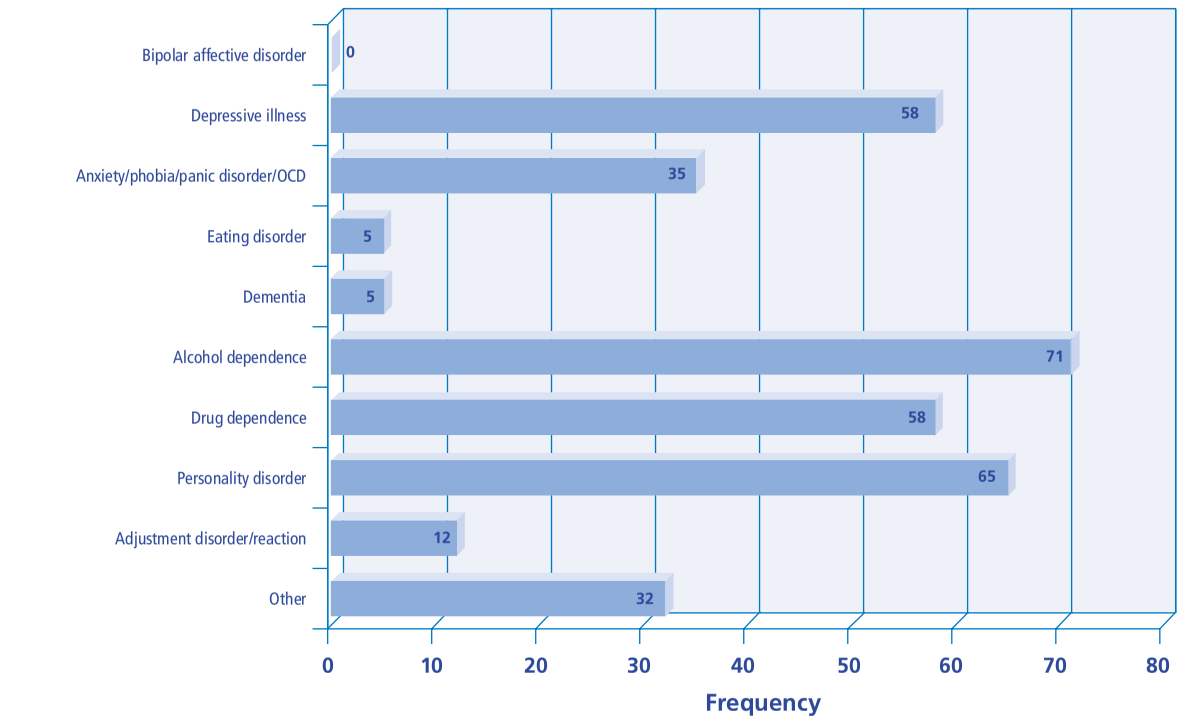


Figure 30: Secondary diagnoses (Scotland Suicide Inquiry cases)



History of illness Duration of illness and number of admissions are shown in figures 31 and 32.

Suicides clustered in the year after onset of illness when 21% occurred. These early suicides were not associated with age, ethnicity or gender. They were strongly associated with depression, this being the primary diagnosis in 62%, while only 10% were suffering from schizophrenia. They also had lower rates of some indicators of risk, namely alcohol and drug misuse, violence and past self-harm, compared to other Inquiry cases. However, *recent* self-harm was more likely to be detected at final service contact. Final contact with services was also more likely to be recent, i.e. within seven days of death.

Thirty-one per cent of cases had never had an in-patient admission, while 14% had had more than five previous admissions. This "multiple admission" group showed features of more severe illness and more frequent indicators of risk. Compared to other Inquiry cases, they had higher rates of schizophrenia. They were more likely to have a history of self-harm. They were more often female, unemployed and living alone. They were more likely to be in-patients when the suicide occurred.

Duration of history and number of admissions were strongly associated. Only 10% of cases had been ill for more than five years without being admitted.

Figure 31: Duration of history (Scotland suicide Inquiry cases)

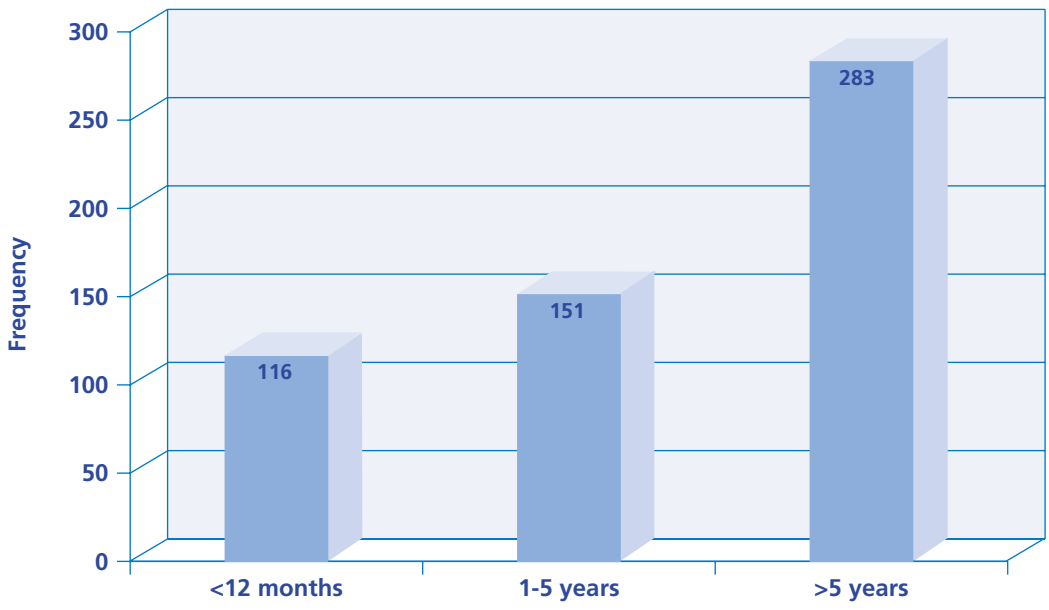
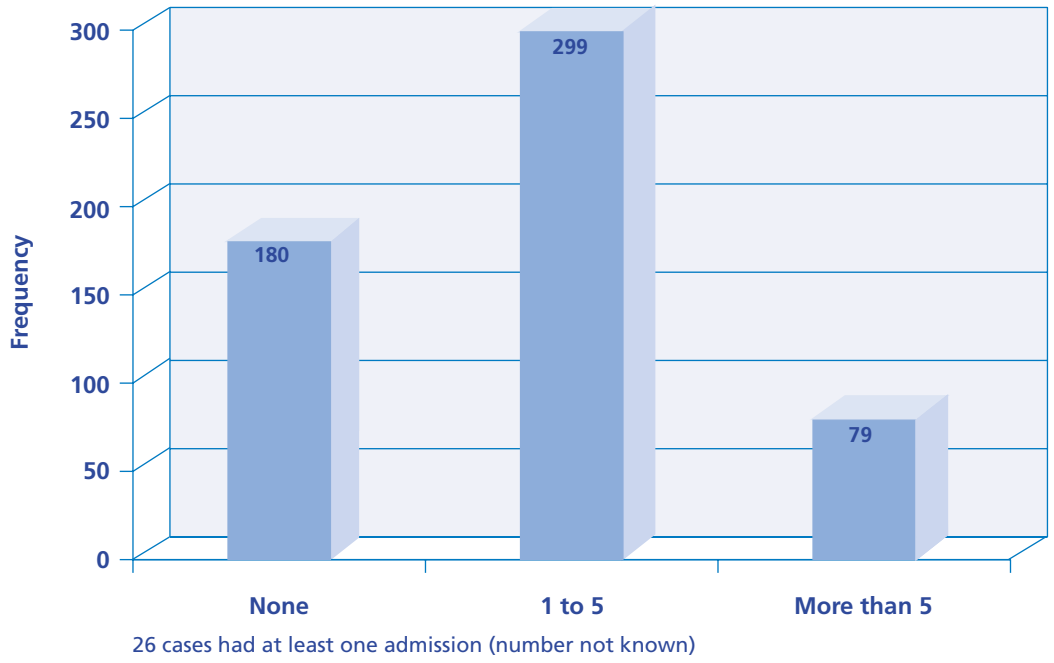


Figure 32: Number of admissions (Scotland Suicide Inquiry cases)



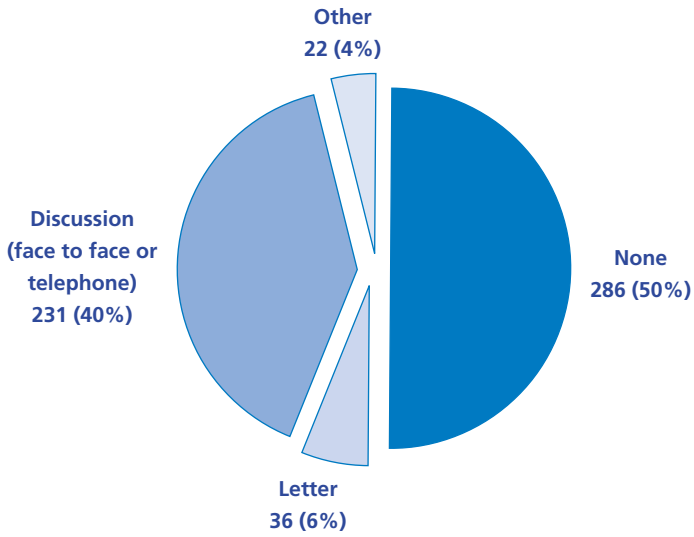
26 cases had at least one admission (number not known)

Circumstances of death

The most common methods of suicide were hanging (35%) and self-poisoning (33%) (fig. 25). Those who died by self-poisoning were likely to use psychotropic drugs or analgesics other than opiates. Paracetamol overdose was the cause of death in 11% of cases. Psychotropic drug overdose was more likely to be the cause of death in patients who had already carried out an episode of self-harm.

In 50% of cases, the mental health team had had contact with the family of the deceased person following the death (fig. 33). Fifty-two per cent held a multidisciplinary review of the case. Thirty-six per cent did neither.

Figure 33: Contact with relatives after death (Scotland Suicide Inquiry cases)



Last contact

The figures in this section refer to all Inquiry cases. Figures for in-patients and community patients are given separately in later sections.

Nature of contact Contact with services frequently occurred in the period leading up to suicide (fig. 34). In 43%, last contact took place within a week of death, in 17% within 24 hours. In most cases (68%) the contact was routine rather than urgent. In the majority of cases (95%), this was a face-to-face contact, usually with a consultant or junior psychiatrist or mental health nurse. The key worker was present at the meeting in just under half of the cases (49%). Most (89%) staff present at final contact had received training in risk assessment. Twenty-five per cent of these contacts took place on an in-patient ward, 25% at the mental health unit, 17% in the patient's home and 17% at a GP or other community clinic.

Mental state Assessment at the final contact revealed abnormalities of mental state or recent behaviour in 66% of cases (fig. 35). Most commonly this was emotional distress or depressive illness. Hopelessness and suicidal ideas, important predictors of suicide, were reported in only a minority. Deterioration in physical health was associated with older age and was noted in 25% of suicides over 65.

Figure 34: Timing of last contact (Scotland Suicide Inquiry cases)

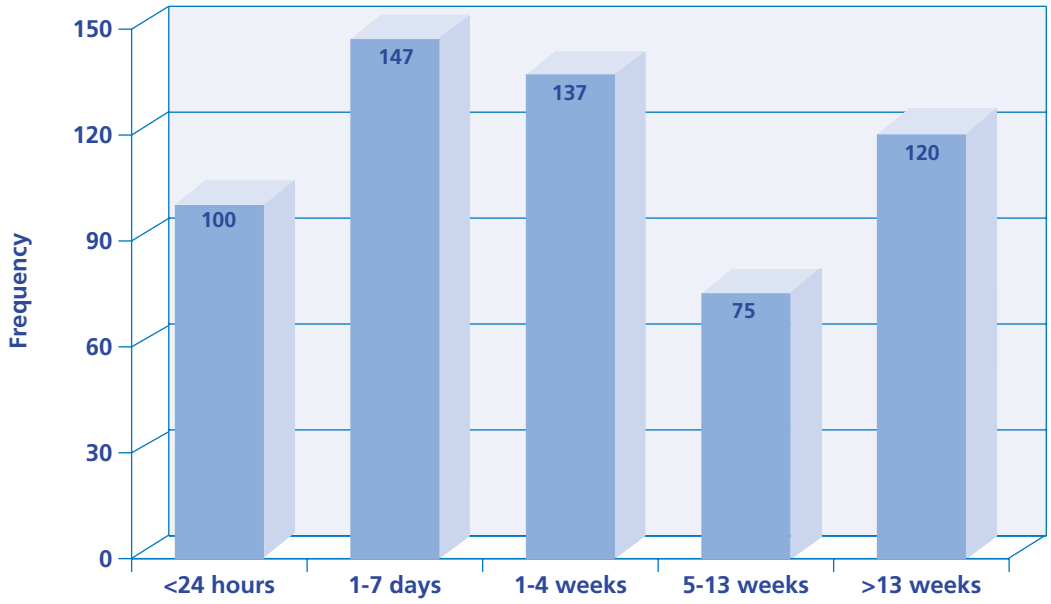
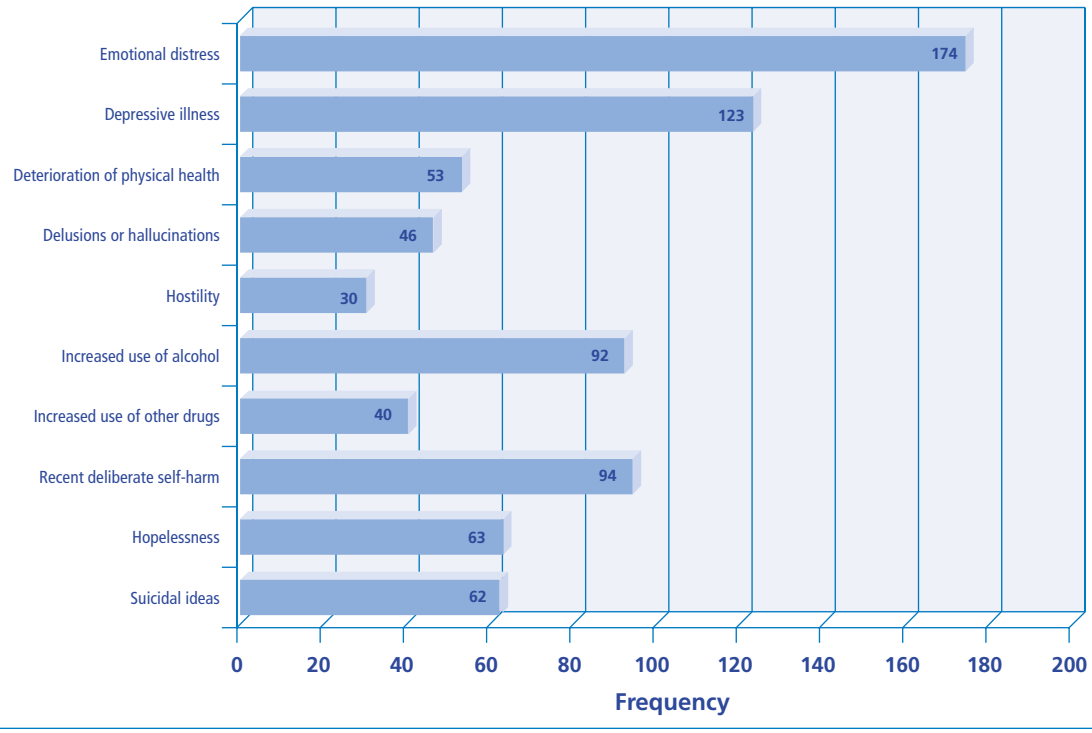
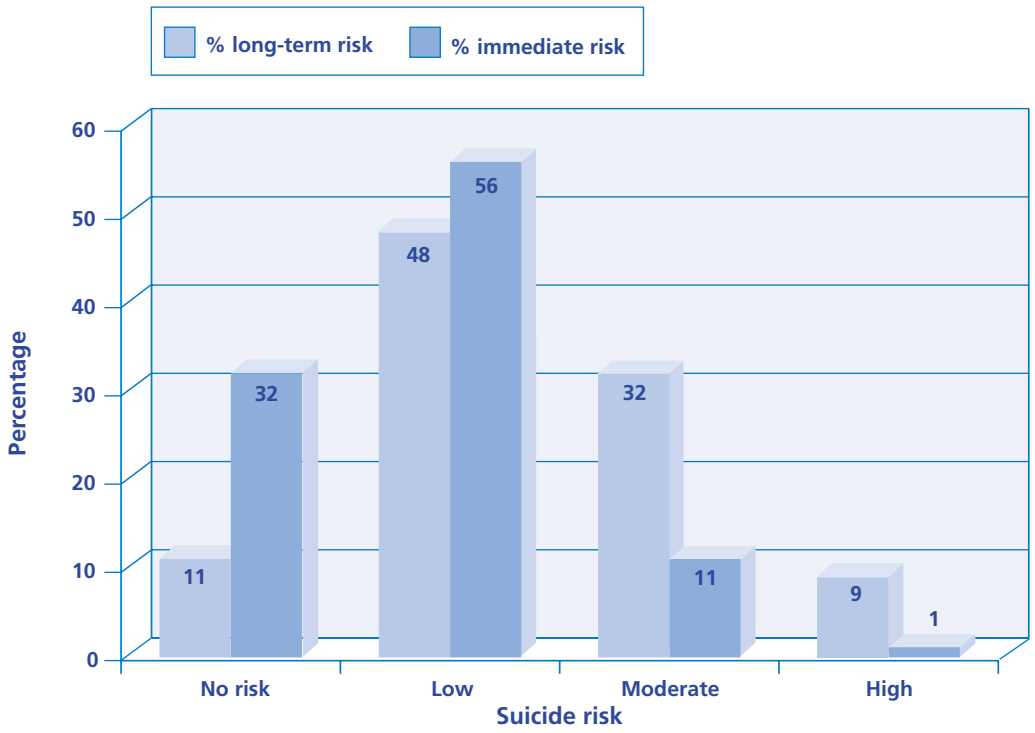


Figure 35: Symptoms at last contact (Scotland Suicide Inquiry cases)



Estimates of risk Immediate risk of suicide was estimated to be low or absent in 88%; high risk was identified in only 1% (fig. 36). When contact had been recent, perceived risk was higher. Respondents generally reported using a range of risk factors to assess risk, i.e. demographic and clinical risk factors, history of self-harm, current mental state and suicidal ideas or actions. The main factor was most likely to be current mental state (51%), although in fact this was found to be normal in over a third of cases. When risk at final contact was judged to be moderate or high, this was usually discussed with other members of the mental health team. Estimates of long-term risk were available for 196 cases. In 41% long-term risk was judged to be moderate or high at final contact.

Figure 36: Estimation of suicide risk at last contact (Scotland Suicide Inquiry cases)



Clinical management In 82% of final contacts the care plan was unchanged, generally because the patient was judged to be well. The Mental Health Act was rarely used (1%, excluding those already detained under the Act), usually because it was not thought to be indicated clinically. In 5% of final contacts the patient made a treatment request that could not be complied with.

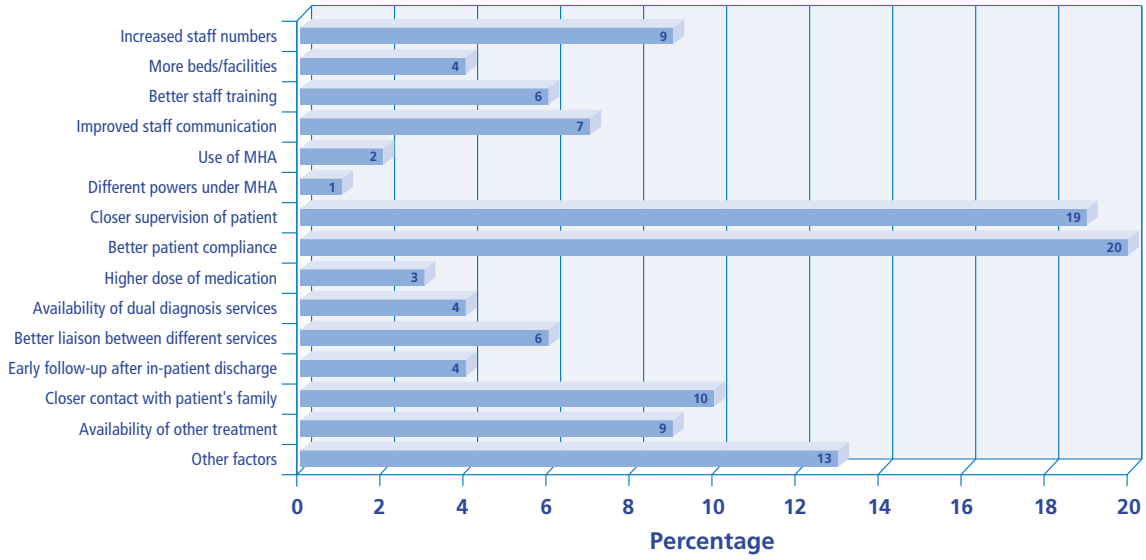
In 16% the care plan was not altered because the patient's immediate problem was thought to be the result of alcohol, drugs or personality rather than illness. Even so, this group was more likely to have symptoms of illness at the final contact compared to other Inquiry cases. These patients were also more likely to be out of contact with services at the time of suicide.

Preventability

In 62 cases (13%), the respondent believed that the suicide could have been prevented. Suicides viewed as preventable were more likely to have a diagnosis of affective disorder and to have been in-patients at the time of death. They were more likely to have detectable symptoms and more often thought to be at moderate or high immediate risk at final contact.

Seventy-three per cent of respondents identified factors that, in their view, would have reduced risk (fig. 37). The most frequent suggestions were closer supervision and better compliance with treatment.

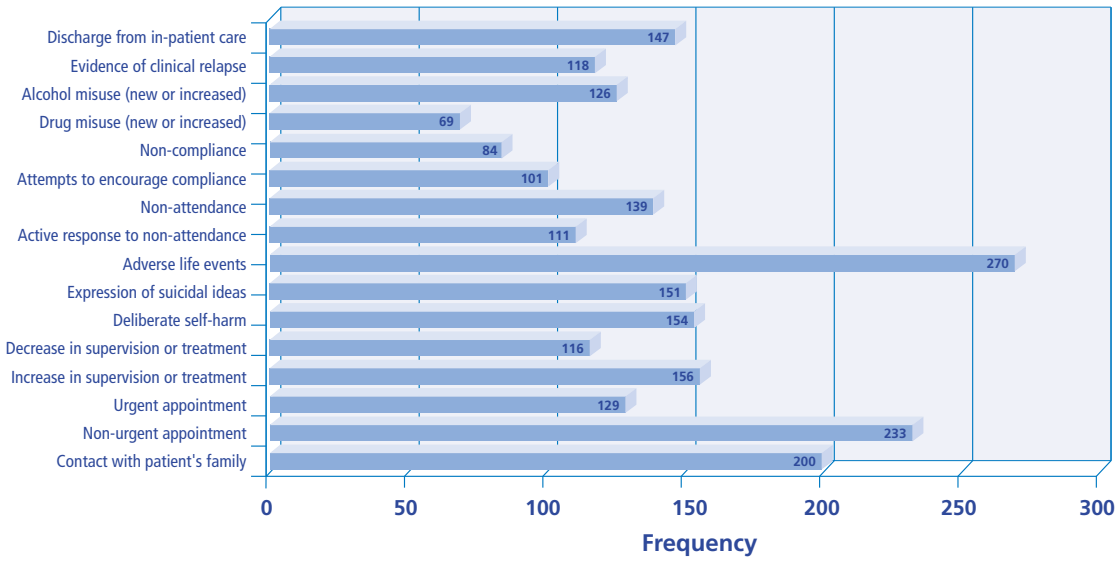
Figure 37: Prevention measures – respondent's views (Scotland Suicide Inquiry cases)



Antecedents of suicide

Respondents were asked to detail events in the three months leading up to suicide (fig. 38). Adverse life events, particularly problems in relationships, were common, occurring in over half (54%). Six per cent of suicides were preceded by bereavement. Non-fatal self-harm or suicidal ideas occurred in 42%, increased alcohol misuse in 25% and drug misuse in 13% of cases. Forty-two per cent had routine appointments in this three-month period while 23% were seen urgently. In 36% there was contact between services and the patient's family. In 28% of cases, treatment or supervision were increased, but in 21% they were decreased.

Figure 38: Antecedents in last 3 months before suicide (Scotland Suicide Inquiry cases)



Only 23% of patients were thought to have shown clear evidence of relapse of their illnesses in the three months before death. Of those who did not have symptoms of relapse, 24% showed increased alcohol misuse, 13% showed increased drug misuse, 28% showed increased self-harm, and 14% showed non-compliance. Sixty-one per cent showed at least one of these "proxy indicators" of risk.

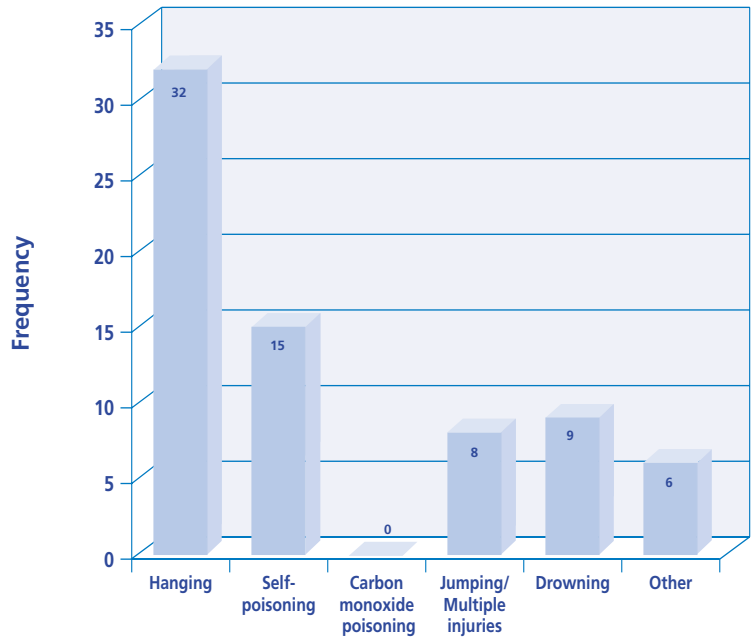
In-patient suicides

Seventy in-patient suicides were reported in the three years of data collection, 12% of Inquiry cases and 3% of all suicides in the population. Their key characteristics are given in table 15.

Clinical features As an in-patient sample, these cases showed evidence of more severe illness. Thirty-one per cent had schizophrenia. They had a higher rate of previous admission. In particular they had a high rate of multiple (> 5) previous admissions, and of those with multiple previous admissions who committed suicide, 19% did so while in-patients.

Method The rates of suicide methods were different from those of the sample as a whole (fig. 39). By far the most common method was hanging, followed by self-poisoning by overdose. Of those suicides that occurred on the ward itself, 68% were by hanging, while 14% were by self-poisoning and 9% were by suffocation. Jumping from a height or in front of a vehicle generally took place outside hospital grounds, usually distant from the hospital site.

Figure 39: Cause of death (Scotland In-patient suicides)



SELF-POISONING	
Psychotropic drug	3
Paracetamol	3
Opiate	1
Other analgesic	2
Other prescribed compound	1
Other poisons	2
Other/Unknown	3
TOTAL	15

OTHER	
Burning	1
Cutting or stabbing	1
Suffocation	2
Firearms	2
TOTAL	6

Timing Twenty-four per cent of in-patient suicides occurred in the first week after admission; 32% during the period when discharge was being planned. There was no characteristic time of the day or week when in-patient suicides occurred although 57% occurred between 6pm and 9am. Although depressive symptoms are often worse in early morning, in-patient suicides did not cluster at this time, either in all in-patients or in those with affective disorder.

Location Around a third occurred on the ward itself (32%), 48% took place at a distance from the hospital, while 17% occurred in or near to the hospital premises. In suicides that occurred off the ward, the majority of patients had left with staff agreement.

Care The majority of subjects were under routine care at the time of the suicide, being voluntary patients (73%) and on an open ward (80%). Most were under general observation (76%) but a substantial minority (20%) were under closer (constant or special) observation.

Almost all wards (97%) had a written observation policy at the time. However, 22% reported problems observing patients because of ward design. Four per cent reported problems observing the patients because of the needs of other disturbed patients. Fourteen per cent reported nursing shortages at the time.

Table 15: In-patient suicides (Scotland)

	Number 70	% (95% CI) 12%
Demographic features		
Age: median (range)	42 (18-75)	
Male	40	57% (46-69)
Ethnic minority	2	3% (0-7)
Not currently married	47	67% (56-78)
Unemployed/long-term sick	37	53% (41-65)
Living alone	19	27% (17-38)
Priority groups		
Non-compliance	11	16% (7-25)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	22	31% (21-42)
Affective disorder (bipolar & dep.)	38	54% (43-66)
Alcohol dependence	1	1% (0-4)
Drug dependence	3	4% (0-9)
Personality disorder	2	3% (0-7)
Any secondary diagnosis	25	36% (24-47)
Duration of history (under 12 months)	22	32% (21-43)
Over 5 previous admissions	15	25% (14-36)
Behavioural features		
History of self-harm	42	60% (49-71)
History of violence	11	16% (7-24)
History of alcohol misuse	18	26% (15-36)
History of drug misuse	21	30% (19-41)
Contact with services		
Symptoms at last contact	47	67% (56-78)
Last contact within 7 days of death	70	100%
Estimate of immediate risk: low or none	61	88% (81-96)
Estimate of long-term risk: low or none	11	41% (22-59)
Suicide thought to be preventable	14	20% (11-30)

All patients had been in contact with a staff member, usually a ward nurse, in the 24 hours before death. This was generally a routine contact and it was unusual for suicidal ideas to be detected (4%). As in the sample as a whole, the majority of patients (88%) were thought to be at low or no risk.

Preventability In-patient suicides were more likely to be seen as preventable (20%). Respondents most often (43%) suggested closer supervision as the factor that would have made suicide less likely. However, staff-related factors were also mentioned frequently, i.e. better staff training (13%), better staff communication (13%) and increased staff numbers (7%). Better patient compliance was mentioned by 12%.

Non-routine observations Ten suicides were under constant or special observation. These suicides were more likely to occur in the first week of admission and 90% occurred on the ward itself. In 38% there were problems observing patients on the ward because of ward design and in 11% there were problems because of other disturbed patients. Forty per cent of these suicides were seen as preventable and 60% of respondents thought risk would have been reduced by closer supervision. When these suicides occurred on the ward, they were usually by hanging (67%) while 22% were by self-poisoning and 11% by suffocation.

Suicides in the community

In total, 519 suicides (88%) occurred in patients living in the community. Their key characteristics are given in table 16.

Last admission Of these, 335 (65%) had been admitted at some time, and in 14% the last admission had been under the Mental Health Act. In 22% this had been a re-admission within three months of a previous discharge from in-patient care. Of those re-admitted within 3 months, discharge was planned in 79% and over half (56%) were viewed as moderately improved at the time of discharge. In 93% a follow-up appointment had been arranged, but in 23% the suicide occurred before the appointment took place. In the majority (71%) a key worker had been allocated, and 55% had a date for the next review meeting.

In 30% the final admission had lasted less than seven days. In the majority (76%) discharge was planned but in the remainder the patient initiated discharge, usually by simple request (10%) or as self-discharge against medical advice (9%). In an additional 3% the patient was discharged because of a breach of ward rules, e.g. self-harm on the ward.

Most (84%) were regarded as being at least moderately recovered at the time of discharge. In 84% a follow-up appointment had been arranged. Suicides who discharged themselves were almost three times more likely to be clinically unchanged or worse at the time of discharge and nearly twice as likely to have no follow-up arrangements.

Table 16: Suicides in the community (Scotland)

	Number 519	% (95% CI) 88%
Demographic features		
Age: median (range)	38 (16-86)	
Male	364	70% (66-74)
Ethnic minority	9	2% (1-3)
Not currently married	354	70% (66-74)
Unemployed/long-term sick	291	60% (56-65)
Living alone	212	43% (39-48)
Priority groups		
Post discharge patients	134	26% (22-30)
Missed contact	149	29% (25-33)
Non-compliance	71	18% (14-21)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	77	15% (12-18)
Affective disorder (bipolar & dep.)	156	30% (26-34)
Alcohol dependence	99	19% (16-23)
Drug dependence	51	10% (7-12)
Personality disorder	51	10% (7-12)
Any secondary diagnosis	246	49% (45-54)
Duration of history (under 12 months)	94	20% (16-23)
Over 5 previous admissions	64	13% (10-16)
Last admission was a re-admission	75	22% (18-27)
Behavioural features		
History of self-harm	317	62% (58-67)
History of violence	104	21% (17-25)
History of alcohol misuse	285	56% (52-61)
History of drug misuse	186	37% (32-41)
Contact with services		
Last contact within 7 days of death	177	35% (31-39)
Symptoms at last contact	327	66% (61-70)
Requested contact but not taken place	23	5% (3-7)
Estimate of immediate risk: low or none	435	88% (85-91)
Estimate of long-term risk: low or none	106	63% (56-70)
Out of contact	202	40% (35-44)
Suicide thought to be preventable	48	11% (8-14)

Care arrangements Twenty-four per cent of suicides in the community were subject to multidisciplinary review under the CPA, although in 47% a key worker had been allocated. In 31% a date had been set for the next case review.

Out of contact Forty per cent were currently out of contact with services, usually following "patient-initiated" discharge, i.e. unplanned discharge following a patient's request or actions. In the majority of self-discharges, the consultant had been informed. In 47%, no further action had been taken; when further action was taken, this was usually to offer an appointment by letter rather than a home visit. In 5% of the community sample (4% of self-discharges) there had been a request (from the patient, his/her family or his/her GP) for further contact which had not taken place.

Treatments Most patients were receiving some form of pharmacotherapy but only a quarter were regarded as receiving any form of psychological intervention, including psychological support. Ten per cent were taking benzodiazepines as anxiolytics. Four per cent had complained of distressing drug side-effects, usually related to oral or injectable anti-psychotic drugs. Eighteen per cent were not compliant with their treatment plan in the previous month, the main reason, according to the mental health team, being lack of insight into illness. In the three months before suicide, decreases in drug dosage or decreases in supervision were reported in 19%.

Suicides within three months of hospital discharge

There were 134 suicides within three months of discharge from in-patient care, 23% of the whole sample, and 26% of the community sample. Their key characteristics are given in table 17.

Post-discharge suicides were at a peak in the first week after leaving hospital (fig. 40). Within the first week, the highest number of suicides was on the third day after discharge (fig. 41), although numbers for each day are small.

Clinical and social features Overall post-discharge suicides were similar to the sample as a whole, both clinically and demographically. For example the distribution of diagnoses, rates of secondary diagnoses, previous self-harm and violence, and living circumstances were not significantly different. Three per cent were homeless, though they had only recently left hospital. Their suicide methods differed slightly from that of the whole sample, the most common method being hanging (38%) followed by self-poisoning (29%). Compared to other community suicides they also had shorter histories of illness, being more likely to have been ill for less than a year (27%).

Table 17: Suicides within three months of in-patient discharge (Scotland)

	Number 134	% (95% CI) 23%
Demographic features		
Age: median (range)	39 (17-85)	
Male	97	72% (65-80)
Ethnic minority	2	2% (0-4)
Not currently married	96	72% (65-80)
Unemployed/long-term sick	78	59% (50-67)
Living alone	59	45% (51-68)
Priority groups		
Missed contact	28	21% (14-28)
Non-compliance	20	17% (10-24)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	21	16% (10-22)
Affective disorder (bipolar & dep.)	44	33% (25-41)
Alcohol dependence	20	15% (9-21)
Drug dependence	10	8% (3-12)
Personality disorder	19	14% (8-20)
Any secondary diagnosis	68	53% (44-62)
Duration of history (under 12 months)	35	27% (20-35)
Over 5 previous admissions	30	25% (17-33)
Last admission was a re-admission	35	26% (19-34)
Behavioural features		
History of self-harm	93	69% (62-77)
History of violence	28	21% (14-28)
History of alcohol misuse	66	49% (41-58)
History of drug misuse	47	35% (27-43)
Contact with services		
Last contact within 7 days of death	77	58% (50-67)
Symptoms at last contact	79	60% (52-69)
Requested contact but not taken place	6	5% (1-8)
Estimate of immediate risk: low or none	110	86% (80-92)
Estimate of long-term risk: low or none	23	49% (35-63)
Out of contact	24	18% (12-25)
Suicide thought to be preventable	15	13% (7-18)

Figure 40: Number of suicides per week following discharge
(Scotland Suicide Inquiry cases)

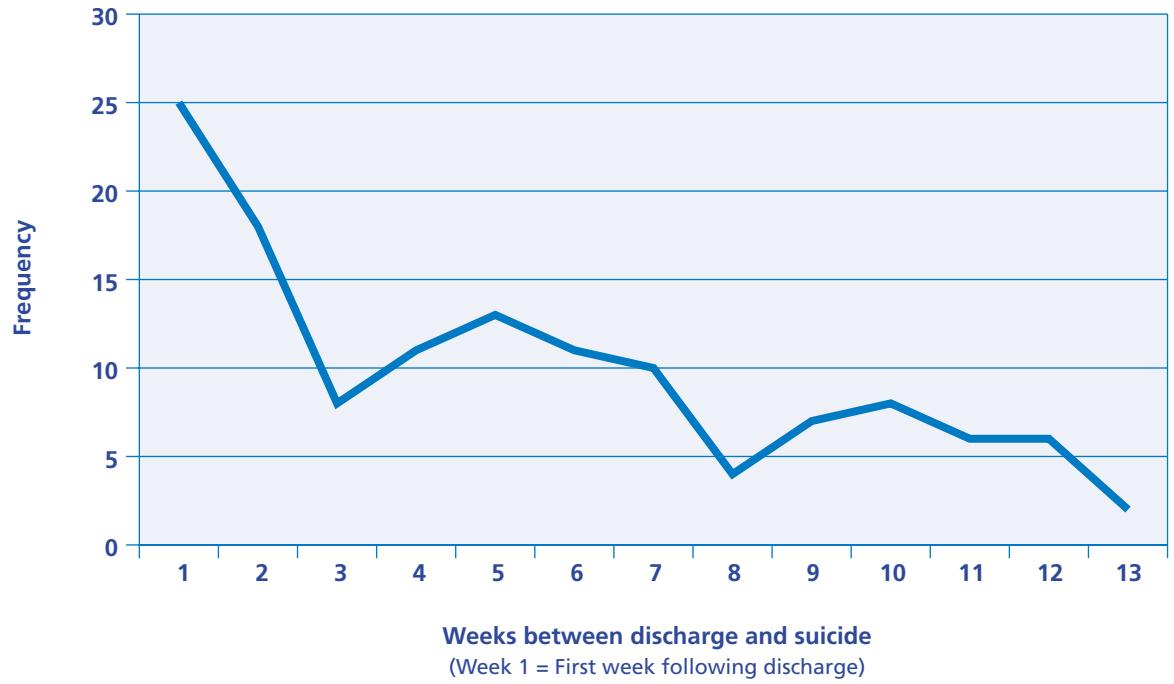
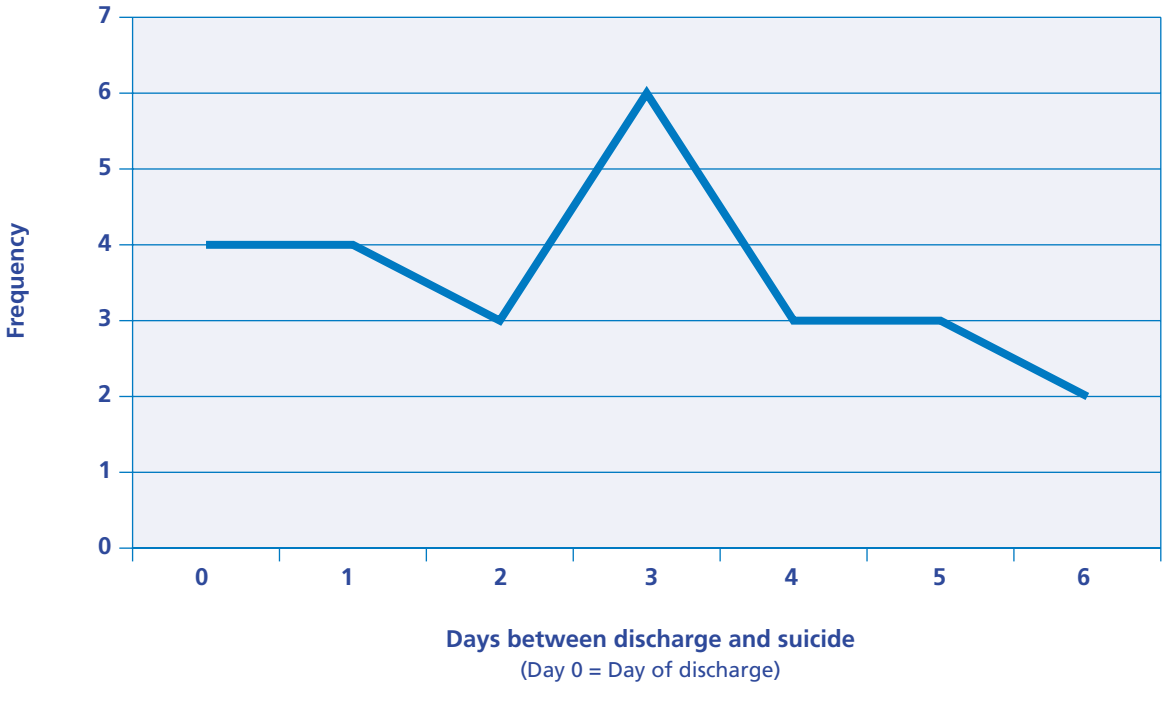


Figure 41: Number of suicides per day following discharge
(Scotland Suicide Inquiry cases)



Care arrangements There were few significant differences between post-discharge suicides and the community sample overall. However, their last admission was more likely to have ended in patient-initiated discharge. Most (88%) had a follow-up appointment arranged on discharge but in 35% suicide took place before this first follow-up. Non-compliance with drug treatment was common (17%) but not more so than in all community suicides.

Contact with services The post-discharge suicides were more likely than other community suicides to have been in contact with services in the week before death. They were not seen as more or less preventable.

The 25 suicides that occurred within the first week after discharge from hospital were generally similar to post-discharge suicides as a whole. Patient-initiated discharge was reported in 7 cases. Most (75%) died before their first follow-up appointment.

Non-compliance

There were 82 suicides by people who had been non-compliant with drug treatment in the previous month, 17% of the total sample. Their key characteristics are given in table 18.

The non-compliant cases were broadly similar to the total sample on social variables, although they were more likely to be unemployed. They were also similar on many clinical variables, but had longer illness duration and a higher rate of schizophrenia.

In non-compliant suicides 9% had distressing side-effects of medication most often related to oral anti-psychotic drugs, although the most common reason for non-compliance was thought by staff to be lack of insight.

The timing of final contact with services was similar to that in the total sample. Better compliance was thought to be the main way in which suicide risk could have been reduced.

In non-compliant cases, a face-to-face attempt to encourage compliance with medication was made in 44% of cases in the three months before death. There was contact between the mental health team and the patient's family in the three months before death in 47% of cases. In 5% of the non-compliant group, the patient made a treatment request to which services did not (or were unable to) respond.

Table 18: Suicides in non-compliant patients (Scotland)

	Number 82	% (95% CI) 17%
Demographic features		
Age: median (range)	35 (17-79)	
Male	54	66% (56-76)
Ethnic minority	2	2% (0-6)
Not currently married	60	73% (64-83)
Unemployed/long-term sick	59	73% (63-83)
Living alone	39	49% (38-60)
Priority groups		
In-patient	11	13% (6-21)
Post-discharge	20	28% (18-39)
Missed contact	25	35% (24-46)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	22	27% (17-36)
Affective disorder (bipolar & dep.)	27	33% (23-43)
Alcohol dependence	7	9% (2-15)
Drug dependence	9	11% (4-18)
Personality disorder	7	9% (2-15)
Any secondary diagnosis	38	48% (37-59)
Duration of history (under 12 months)	9	11% (4-18)
Over 5 previous admissions	13	16% (8-24)
Last admission was a re-admission	12	23% (12-35)
Behavioural features		
History of self-harm	48	59% (48-69)
History of violence	19	23% (14-32)
History of alcohol misuse	38	46% (36-57)
History of drug misuse	36	44% (33-55)
Contact with services		
Last contact within 7 days of death	43	53% (42-64)
Symptoms at last contact	52	67% (56-77)
Requested contact but not taken place	8	11% (4-19)
Estimate of immediate risk: low or none	66	83% (74-91)
Estimate of long-term risk: low or none	21	68% (51-84)
Out of contact	21	30% (19-40)
Suicide thought to be preventable	9	12% (5-20)

Missed contact

There were 149 suicides in the community in people who had missed their final contact with services, 29% of the community sample. Their key characteristics are given in table 19.

This group had a higher rate of unemployment and of alcohol and drug misuse. As with the whole sample, the most recent estimates of risk were generally low.

Fifty-eight per cent of the missed contact group of Inquiry cases were seen by services as out of contact at the time of suicide. Only 6% were out of contact due to planned discharge; 79% due to patient-initiated discharge. In the patient-initiated group, no action was then taken by services in 19% of cases; in 43% of cases a further appointment was sent and in 3% a professional home visit took place. The mental health team was less likely to have made contact with the patient's family in this group. Overall, services had made a recent assertive attempt to re-engage the patient in 74 cases (56%) of the "missed contact" group.

Ten per cent of the missed contact group were thought by services to have been preventable; the factors that respondents most often thought might have reduced risk were closer supervision and better patient compliance.

Table 19: Suicides following missed contact (Scotland)

	Number 149	% (95% CI) 29%
Demographic features		
Age: median (range)	37 (14-79)	
Male	102	68% (61-76)
Ethnic minority	0	0%
Not currently married	101	69% (62-77)
Unemployed/long-term sick	106	76% (69-83)
Living alone	71	50% (41-58)
Priority groups		
In-patient	0	0%
Post-discharge	28	19% (13-25)
Non-compliance	25	28% (18-37)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	16	11% (6-16)
Affective disorder (bipolar & dep.)	41	28% (20-35)
Alcohol dependence	38	26% (19-33)
Drug dependence	20	14% (8-19)
Personality disorder	16	11% (6-16)
Any secondary diagnosis	83	58% (50-66)
Duration of history (under 12 months)	22	15% (10-21)
Over 5 previous admissions	15	10% (5-16)
Last admission was a re-admission	22	23% (15-32)
Behavioural features		
History of self-harm	98	67% (60-75)
History of violence	35	24% (17-31)
History of alcohol misuse	102	69% (61-76)
History of drug misuse	63	43% (35-51)
Contact with services		
Last contact within 7 days of death	23	16% (10-22)
Symptoms at last contact	93	65% (57-72)
Requested contact but not taken place	8	6% (2-10)
Estimate of immediate risk: low or none	127	89% (84-94)
Estimate of long-term risk: low or none	19	50% (34-66)
Out of contact	84	58% (50-66)
Suicide thought to be preventable	12	10% (5-16)

Northern Ireland

General population suicides

The Inquiry was notified of 502 suicides and probable suicides in Northern Ireland in the three years from April 1997. This included 424 suicides and 78 deaths where the cause was undetermined. The corresponding annual suicide rate is 9.9 per 100,000 people.

Seventy-nine per cent (398 cases) were male, giving a male to female ratio of 3.8:1 (fig. 42). The ratio of males to females was highest in the younger age groups. Two methods of suicide together accounted for 67% of suicides (fig. 43): hanging and self-poisoning (mainly overdoses). Methods differed between the sexes: in males hanging was by far the commonest method, followed by self-poisoning by overdose and firearms; in females, overdose was by far the commonest method, followed by hanging and drowning. Violent or "active" methods, i.e. those involving physical injury such as hanging, jumping from a height or in front of a moving vehicle, were used in 70% of deaths overall, including 75% of male deaths and 52% of female deaths.

Figure 42: Age and sex profile (Northern Ireland – General population suicides)

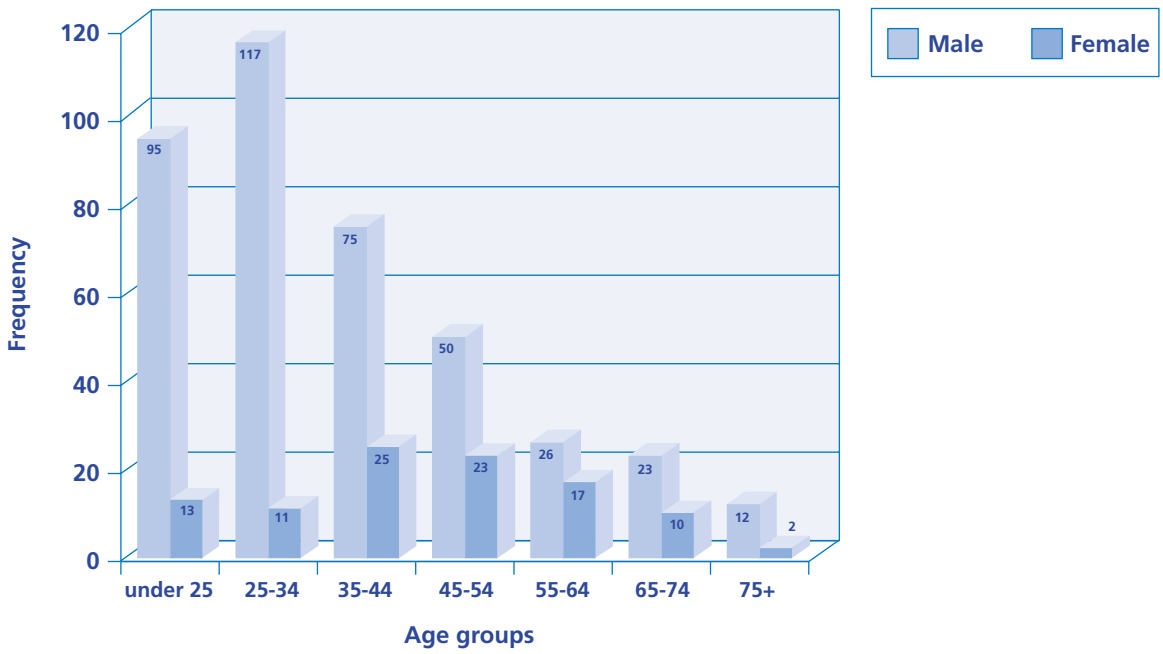
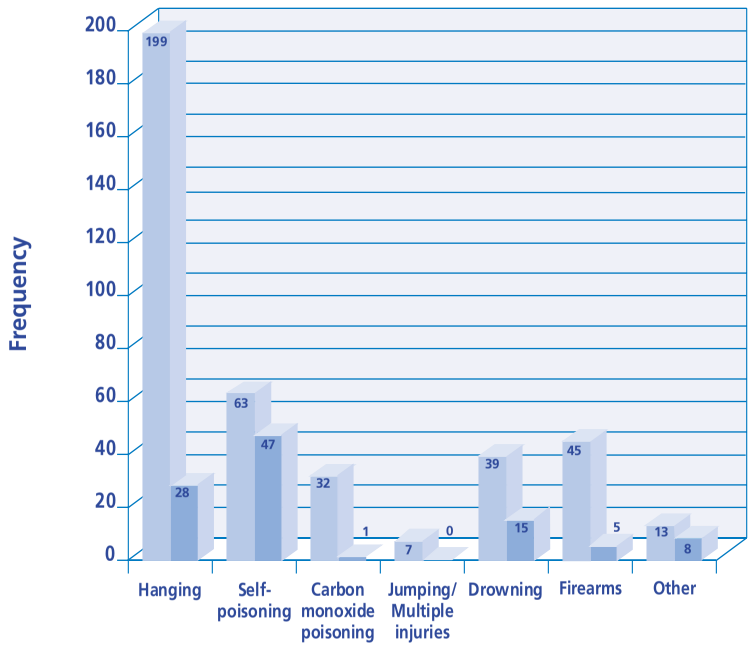


Figure 43: Cause of death (Northern Ireland – General population suicides)



Male Female

OTHER	Male	Female
Burning	2	3
Cutting or stabbing	1	1
Suffocation	4	2
Electrocution	2	0
Other	3	2
Unknown	1	0
TOTAL	13	8

Inquiry cases

Of the total sample, 140 suicides, i.e. 28%, were known to be in contact with mental health services in the year before death. This figure varied widely between districts, from 24% to 39%.

Questionnaires were returned on 134 cases, a response rate of 96%. These are referred to in this report as Inquiry cases.

The Inquiry cases were predominantly male (68%) but there was a smaller male to female ratio, 2:1 (fig. 44), than in the general population suicides. The male to female ratio was generally higher in the younger age groups. Fifty per cent were aged thirty-nine or under. Seven per cent were over sixty-five. Hanging and self-poisoning by overdose accounted for 72% of deaths (fig. 45). Violent or "active" methods accounted for 74% of deaths in men and 43% in women, 64% overall.

Key social and clinical characteristics of Inquiry cases are presented in table 20.

Figure 44: Age and sex profile (Northern Ireland Suicide Inquiry cases)

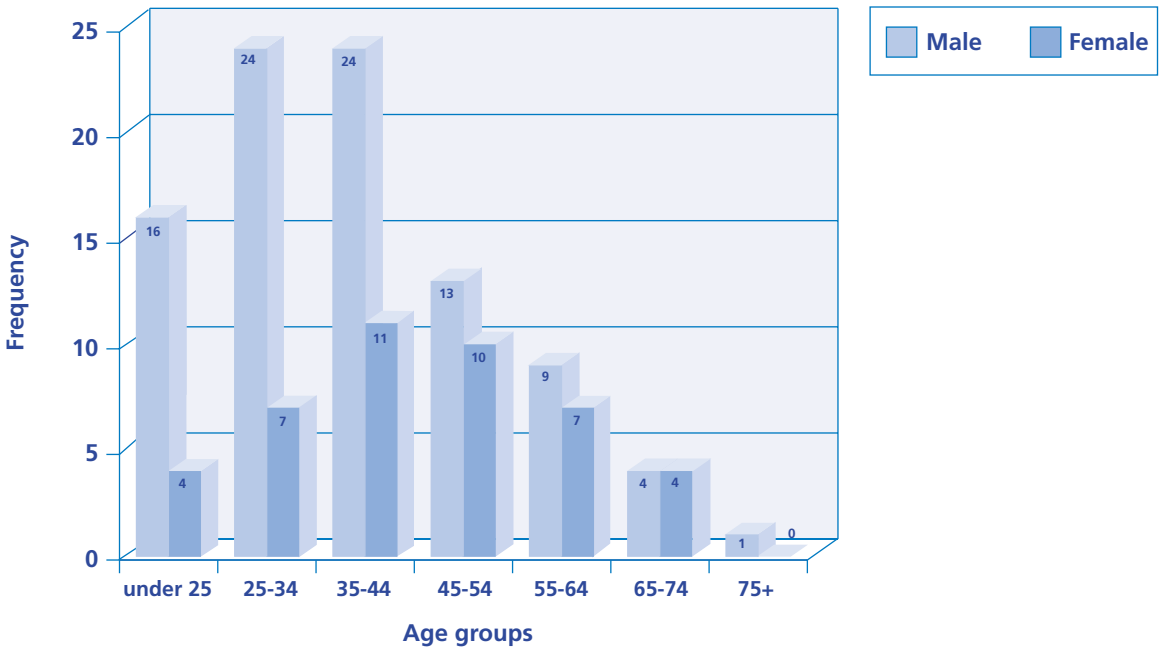


Figure 45: Cause of death (Northern Ireland Suicide Inquiry cases)

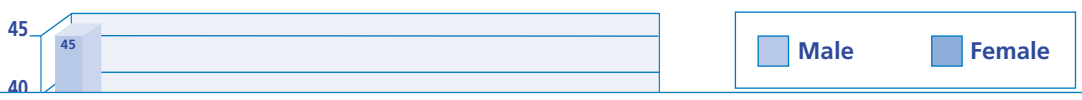


Table 20: Suicides in contact with services in the 12 months before death (Northern Ireland)

	Total sample (n=134) Number	% (95% CI)
Demographic features		
Age: median (range)	39 (16-81)	
Male	91	68% (60-76)
Ethnic minority	2	1% (0-4)
Not currently married	94	71% (63-79)
Unemployed/long-term sick	78	60% (51-68)
Living alone	44	34% (25-42)
Priority groups		
In-patients	13	10% (5-15)
Post-discharge	36	30% (13-25)
Disengaged	36	30% (22-39)
Non-compliance	24	21% (14-29)
Clinical features		
Primary diagnosis		
Schizophrenia & other delusional	18	14% (8-19)
Affective disorder (bipolar & dep.)	54	41% (33-49)
Alcohol dependence	30	23% (16-30)
Drug dependence	4	3% (0-6)
Personality disorder	12	9% (4-14)
Any secondary diagnosis	63	49% (40-57)
Duration of history (under 12 months)	24	19% (12-25)
Over 5 previous admissions	19	15% (9-21)
Last admission was a re-admission	15	16% (8-23)
Behavioural features		
History of self-harm	86	64% (56-72)
History of violence	23	18% (11-24)
History of alcohol misuse	83	62% (54-71)
History of drug misuse	45	34% (26-42)
Contact with services		
Last contact within 7 days of death	60	45% (36-53)
Symptoms at last contact	83	63% (55-71)
Requested contact but not taken place	4	4% (0-7)
Estimate of immediate risk: low or none	115	90% (85-95)
Estimate of long-term risk: low or none	21	40% (27-54)
Out of contact	34	29% (20-37)
Suicide thought to be preventable	22	19% (12-26)

Social characteristics

The social characteristics of the Inquiry suicides suggested social adversity and isolation. Most were not currently married (fig. 46). Sixty per cent were either unemployed or long-term sick (fig. 47). Thirty-four per cent lived alone (fig. 48). Eight per cent were the lone carers of children. One per cent were from an ethnic minority.

One per cent were homeless or of no fixed abode. One per cent were current prisoners.

Figure 46: Marital status (Northern Ireland Suicide Inquiry cases)

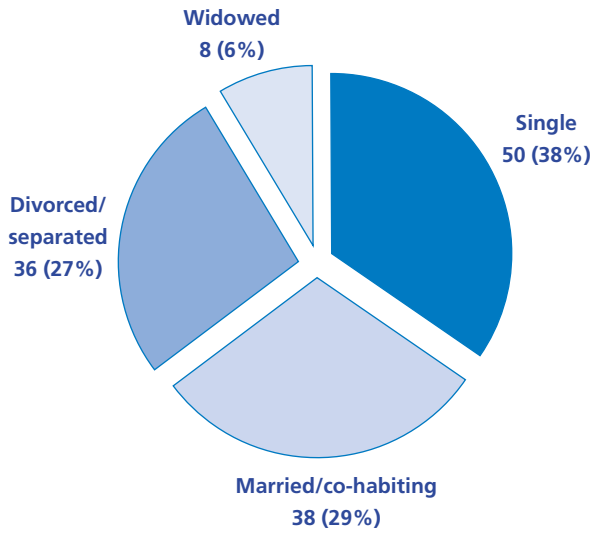


Figure 47: Employment status (Northern Ireland Suicide Inquiry cases)

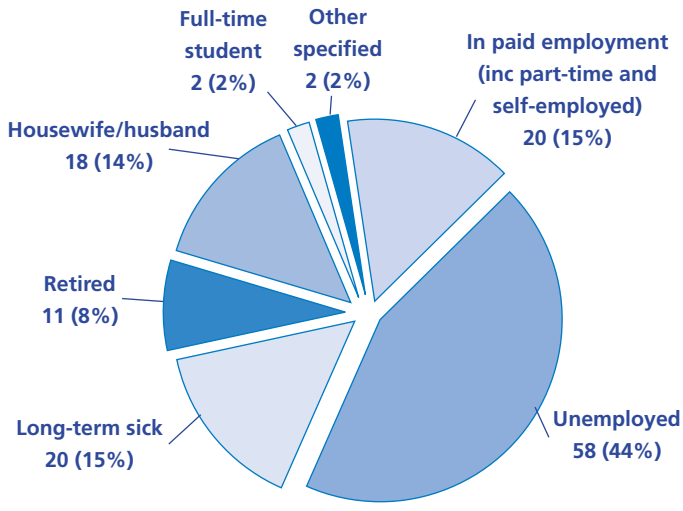
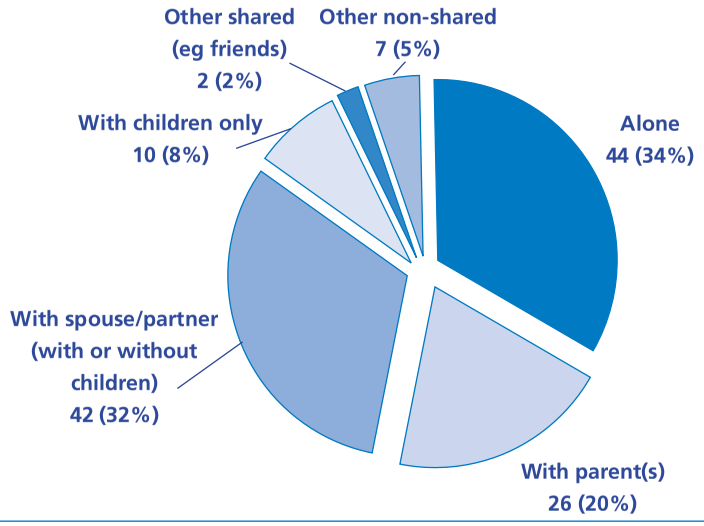


Figure 48: Living circumstances (Northern Ireland Suicide Inquiry case



Clinical characteristics

Diagnosis A breakdown of primary diagnoses is given in figure 49. Major affective disorders accounted for 41% of cases, the other principal diagnoses being alcohol dependence and schizophrenia. Forty-nine per cent also had at least one secondary diagnosis (fig. 50). The most common secondary diagnoses were personality disorder, alcohol dependence and depressive illness.

Figure 49: Primary diagnosis (Northern Ireland Suicide Inquiry cares)

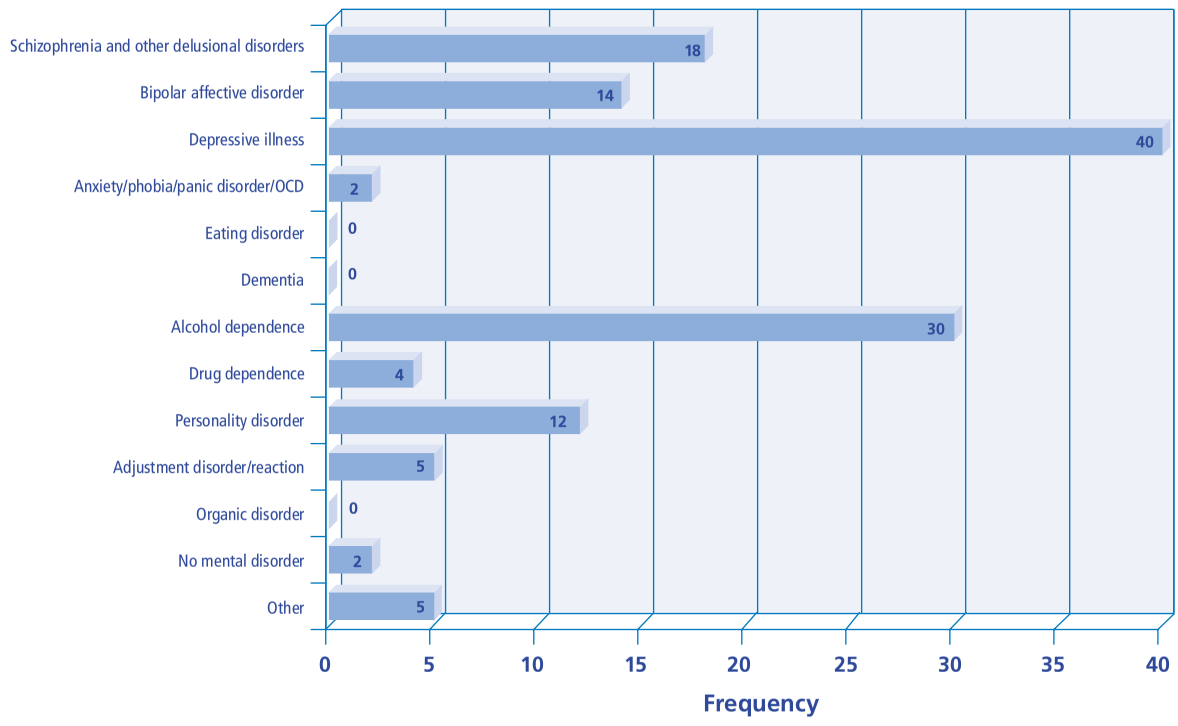
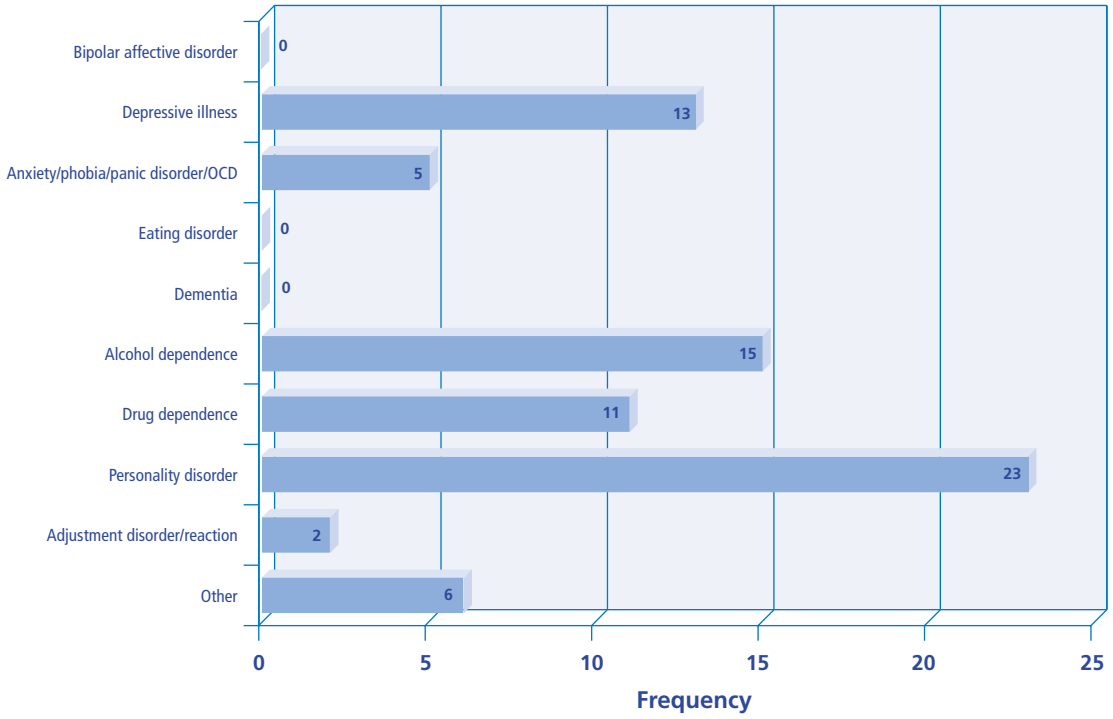


Figure 50: Secondary diagnoses (Northern Ireland Suicide Inquiry cases)



Behaviour There were substantial rates of alcohol and drug misuse. The majority had a history of self-harm and 18% had a history of violence.

History of illness Duration of illness and number of admissions are presented in figures 51 and 52. There was evidence of clustering of suicides in the year after onset of illness when 19% occurred. These early suicides were associated with being male but not with age. They were strongly associated with depression, this being the primary diagnosis in 70%, while none were suffering from schizophrenia. They had higher rates of self-harm but had lower rates of some other indicators of risk, namely alcohol and drug misuse and violence compared to other Inquiry cases. However, *recent* self-harm, emotional distress, depressive illness and hostility were more likely to be detected at final service contact. Final contact with services was also more likely to be recent, i.e. within seven days of death.

Seventeen per cent of cases had never had an in-patient admission, while 15% had had more than five previous admissions. This "multiple admission" group showed features of more severe illness and more frequent indicators of risk. Compared to other Inquiry cases, they had higher rates of schizophrenia and alcohol dependence. They were more likely to have a history of non-compliance, self-harm, violence, alcohol and drug misuse. They were more often single, unemployed and living alone. They were more likely to be in-patients when the suicide occurred.

Duration of history and number of admissions were strongly associated. Only 8% of cases had been ill for more than five years without being admitted.

Figure 51: Duration of history (Northern Ireland Suicide Inquiry cases)

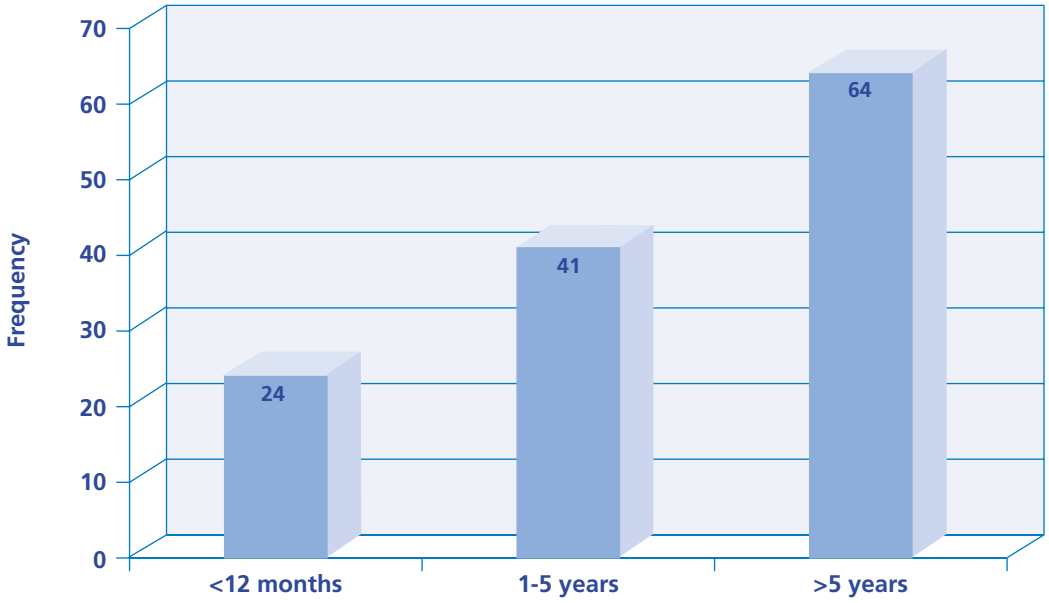
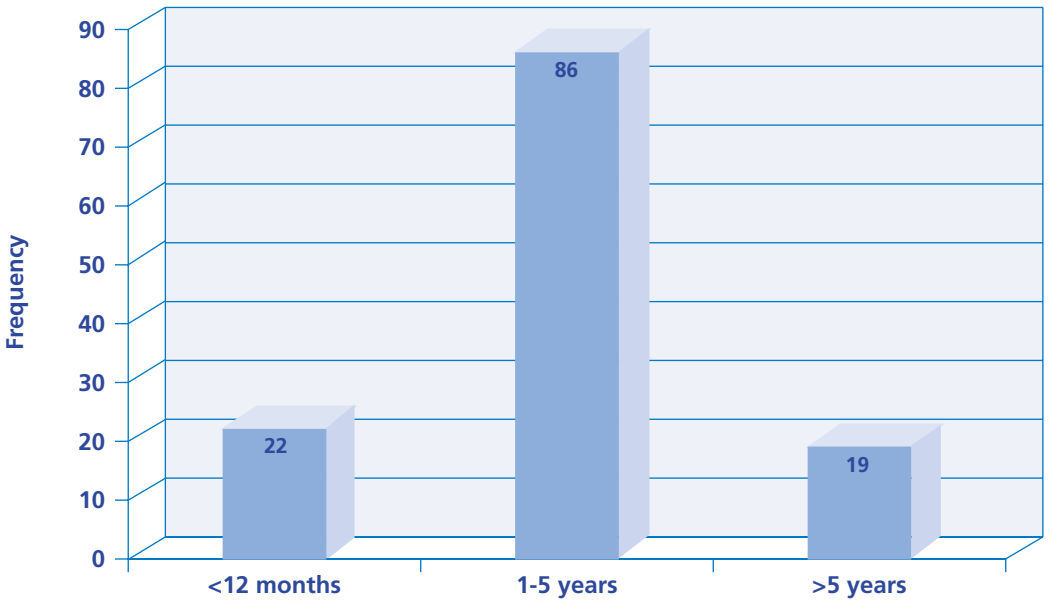


Figure 52: Number of admissions (Northern Ireland Suicide Inquiry cases)



6 cases had at least one admission (number not known)

Circumstances of death

The most common method of suicide was hanging (fig. 45). Those who died by self-poisoning were likely to use psychotropic drugs or analgesics other than opiates. Paracetamol overdose was the cause of death in 10% of cases.

In 61% of cases, the mental health team had had contact with the family of the deceased person following the death, and 63% held a multidisciplinary review of the case. Twenty-seven per cent did neither.

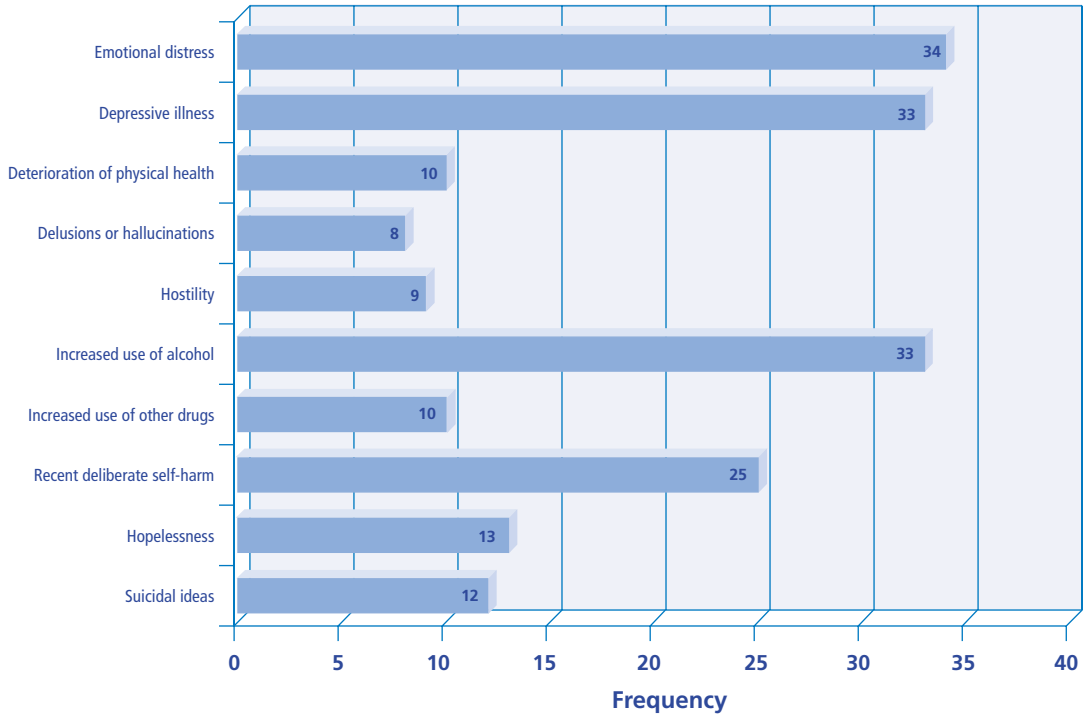
Last contact

Contact with services frequently occurred in the period leading up to suicide (fig. 53). In almost half, last contact took place within a week of death, in 11% within 24 hours. In most cases (63%) the contact was routine rather than urgent. In nearly all (93%), this was a face-to-face contact, usually with a consultant or junior psychiatrist or mental health/ward nurse. The key worker was present at the meeting in just under half of the cases (45%). Most (85%) staff present at final contact had received training in risk assessment. Twenty-eight per cent of these contacts took place on the ward, 27% at a mental health unit, 17% in the patient's home and a further 15% at the GP/community clinic.

Figure 53: Timing of last contact (Northern Ireland Suicide Inquiry cases)

Mental state Assessment at the final contact revealed abnormalities of mental state or recent behaviour in 61% of cases (fig. 54). Most commonly this was emotional distress, depressive illness or increased alcohol misuse. Hopelessness and suicidal ideas, important predictors of suicide, were reported in only a minority.

Figure 54: Symptoms at last contact (Northern Ireland Suicide Inquiry cases)

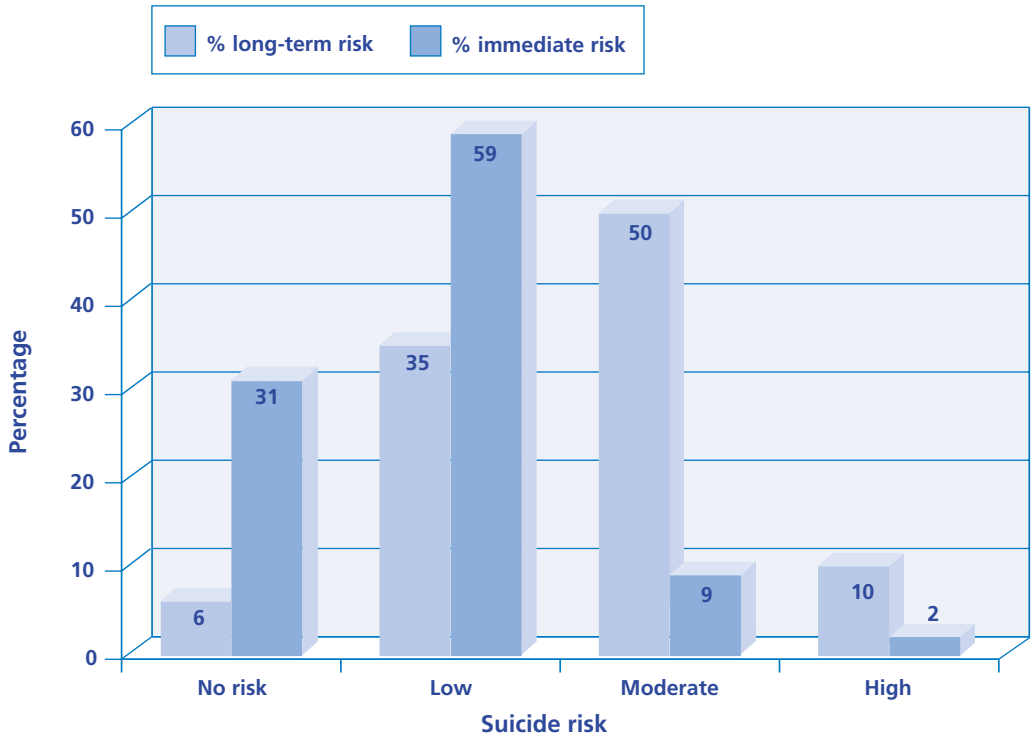


Estimates of risk Immediate risk of suicide was estimated to be low or absent in 90%; high risk was identified in only 2% (fig. 55). When contact was recent, perceived risk was generally higher. Respondents generally reported using a range of risk factors to assess risk, i.e. demographic and clinical risk factors, history of self-harm, current mental state and suicidal ideas or actions. The most important factor was likely to be current mental state (39%), although this was found to be normal in over a third of cases. When risk at final contact was judged to be moderate or high (13 cases), this was usually discussed with other members of the mental health team.

Clinical management In 78% of final contacts the care plan was unchanged, generally because it was not thought necessary. Similarly, the Mental Health Act was not used in any case, usually because it was not thought to be indicated clinically.

In 20% the care plan was not altered because the patient's immediate problem, was thought to be the result of alcohol, drugs or personality rather than illness. Even so, this group was more likely to be found to have symptoms of illness at the final contact (74%). These patients were also characterised by higher rates of risk indicators such as non-compliance, previous self-harm, violence, alcohol and drug misuse. They were also more likely to be out of contact with services at the time of suicide.

Figure 55: Estimation of suicide risk at last contact (Northern Ireland Suicide Inquiry cases)

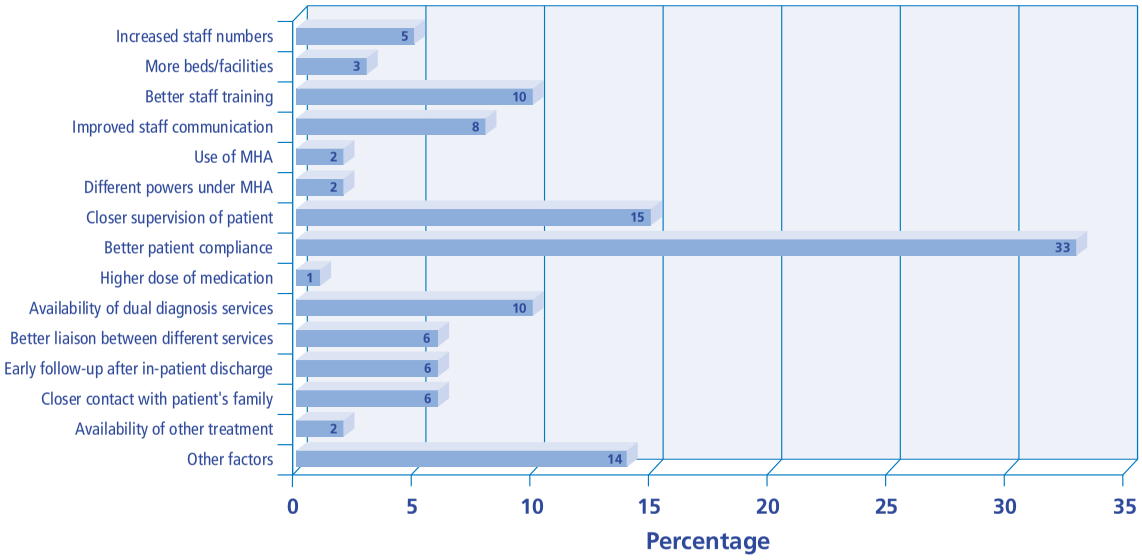


Preventability

In 19% the respondent believed that the suicide could have been prevented. However, suicides perceived as preventable were more likely to be suffering from alcohol dependence and less likely to have personality disorder as a primary diagnosis. They were more likely to have been in-patients at the time of death.

In 77% respondents were able to identify factors that could have reduced risk (fig. 56). The most frequent answer was better compliance with treatment (33%).

Figure 56: Prevention measures – respondents' views (Northern Ireland Suicide Inquiry cases)

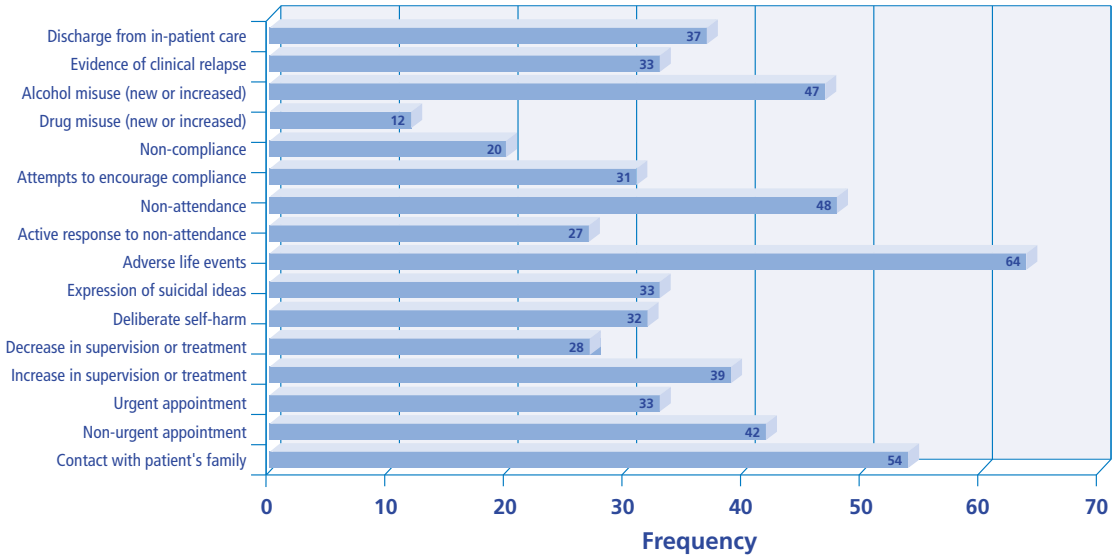


Antecedents of suicide

Respondents were asked to detail events in the three months leading up to suicide (fig. 57). Adverse life events, particularly problems in relationships, were common, occurring in half. Six per cent of suicides were preceded by a bereavement. Non-fatal self-harm or suicidal ideas occurred in 41%. Increased alcohol or drug misuse were reported in 42% of cases. Thirty-three per cent had routine appointments in this three-month period while 26% were seen urgently. In 43% there was contact between services and the patient's family. In just under a third of cases, treatment or supervision were increased, but in 22% they were decreased.

Twenty-seven per cent of patients were thought to have shown clear evidence of relapse of their illnesses in the three months before death. Almost half of those who did not have symptoms of relapse did show increased alcohol or drug misuse, and 36% showed an increase in self-harm or non-compliance. Overall 51% of those with no symptoms of relapse showed at least one of these "proxy indicators" of risk.

Figure 57: Antecedents in last 3 months before suicide (Northern Ireland Suicide Inquiry cases)



In-patient suicides

Thirteen in-patient suicides were reported in the three years of data collection, 10% of Inquiry cases and 3% of all suicides in the population.

The most common method of suicide was self-poisoning by overdose, followed by hanging and drowning. Only two suicides occurred on the ward itself while eight took place at a distance from the hospital, and two occurred in or near to the hospital premises.

Suicides in the community

In total, 121 suicides (90%) occurred in patients living in the community.

Last admission Of these, 97 (82%) had been admitted at some time. In 12% of these the last admission had been under the Mental Health Act. In 16% this had been a re-admission within three months of a previous discharge from in-patient care. In 36% the final admission had lasted less than seven days. In the majority (75%) discharge was planned but in the remainder discharge was initiated by the patient, usually by simple request (13%) or as self-discharge against medical advice (11%). In an additional 1% the patient was discharged because of a breach of ward rules, e.g. drinking or violence on the ward.

Most (90%) were regarded as being at least moderately recovered at the time of discharge. In 91% a follow-up appointment had been arranged. Suicides who discharged themselves were twice as likely to be clinically unchanged or worse at the time of discharge and nearly three times more likely to have no follow-up arrangements.

Care arrangements In 56% of cases a key worker had been allocated. In 35% a date had been set for the next case review.

Out of contact Twenty-nine per cent were currently out of contact with services, usually following "patient-initiated" discharge, i.e. unplanned discharge following a patient's request or actions. In the majority of self-discharges, the consultant had been informed. In 44%, no further action had been taken; when further action was taken, this was usually to offer an appointment by letter rather than a home visit. In 3% there had been a request (from the patient, his/her family or his/her GP) for further contact which had not taken place.

Treatments Most patients were receiving some form of pharmacotherapy but only 23% were regarded as receiving any form of psychological intervention, including psychological support. Three per cent had complained of distressing drug side-effects, usually related to oral anti-psychotic drugs. Twenty per cent were not compliant with their treatment plan in the previous month, the main reason, in the view of the mental health team, being lack of insight into illness.

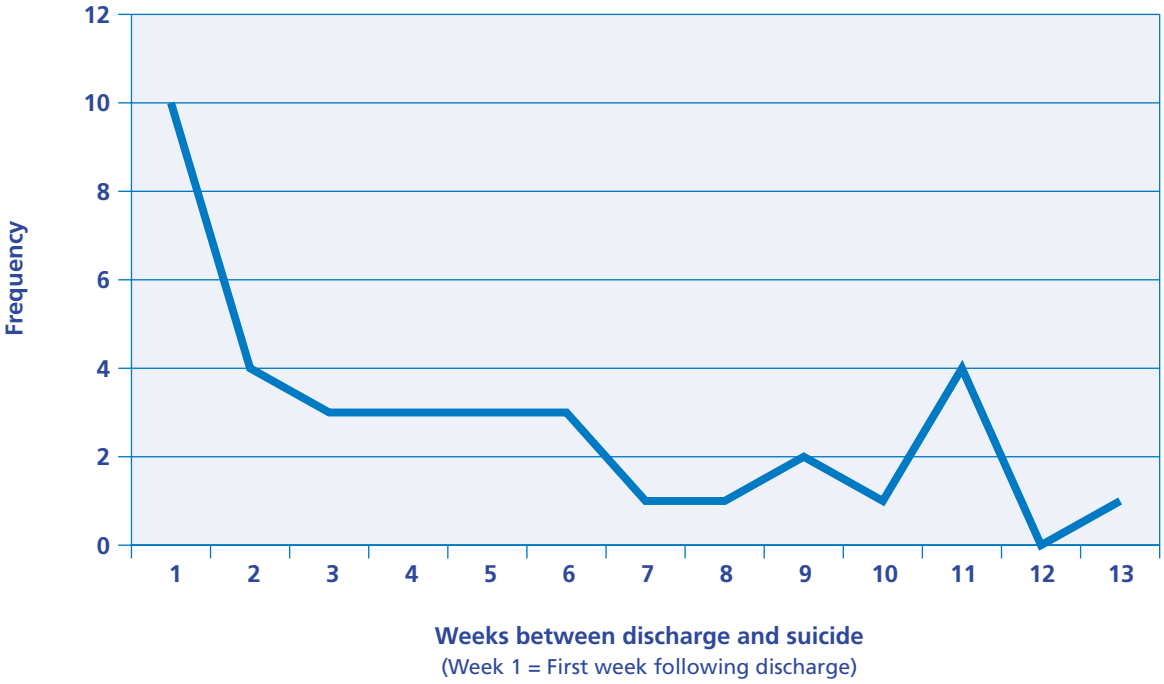
Suicides within three months of hospital discharge

There were 36 suicides within three months of discharge from in-patient care, 27% of the overall sample and 30% of the community sample.

Post-discharge suicides were at a peak in the first week after leaving hospital (fig. 58).

The main differences from all community suicides lay in the nature of their care. Their last admissions more often lasted less than seven days. Most (92%) had a follow-up appointment arranged on discharge but in 66% suicide took place before this first follow-up. Non-compliance with drug treatment was significantly more common (32%) than in all community suicides. However, numbers are small at this stage.

Figure 58: Number of suicides per week following discharge
(Northern Ireland Suicide Inquiry cases)



Non-compliance and missed contact

Twenty-four people were non-compliant with treatment in the month before suicide, 21% of the total sample. In non-compliant cases, a face-to-face attempt to encourage compliance with medication was made in 57% of cases in the three months before death. There was contact between the mental health team and the patient's family in the three months before death in 61% of cases.

Thirty-six people missed their last appointment with services, 30% of the community sample. Fifty-eight per cent of the missed contact group of Inquiry cases were seen by services as out of contact at the time of suicide. In 90% of cases, this was due to patient-initiated discharge. In this group, no action was then taken by services in 38% of cases; in 56% of cases a further appointment was sent and no professional home visits took place. The mental health team made contact with the patient's family in this group in 35% of cases. Overall, services had made a recent assertive attempt to re-engage the patient in 17 cases (52%) of the "missed contact" group.

Thirty-three per cent of suicides within the missed contact group were thought by services to have been preventable. Seventeen per cent of non-compliant suicides were thought by respondents to be preventable.

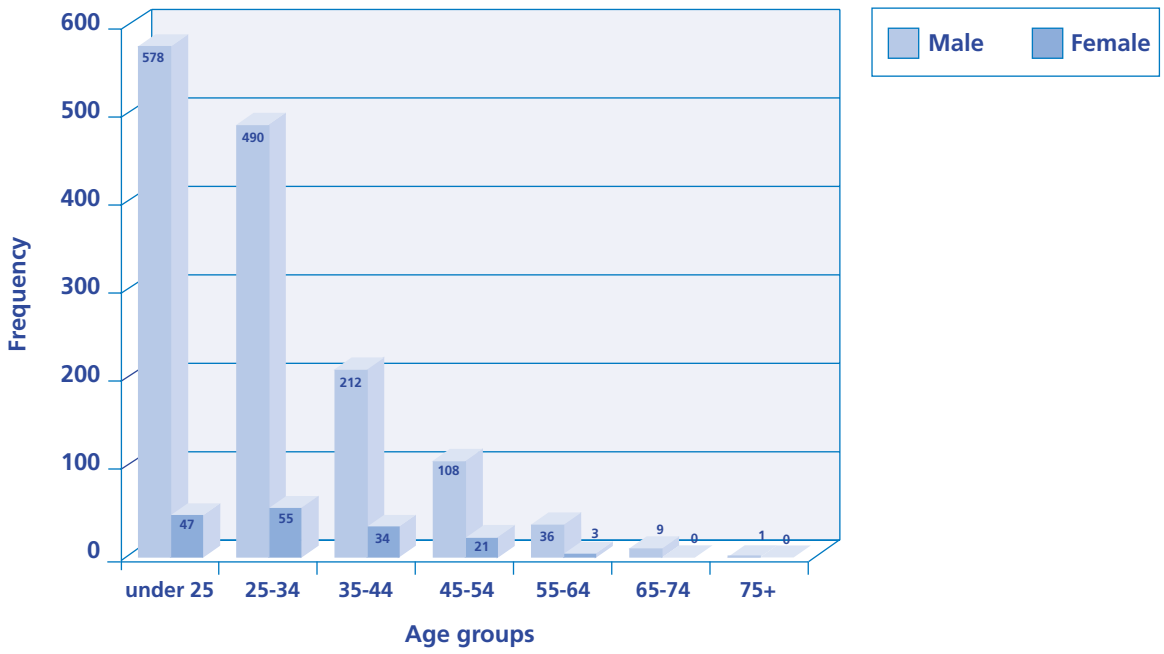
Homicide Findings

England and Wales

All homicides

The Inquiry was notified of 1,579 homicides in England and Wales during the three years from April 1996. There were 1,564 convictions which included 766 cases of murder, 801 of manslaughter and 12 of infanticide. In the remaining 15 cases notified to the Inquiry the defendant was found unfit to plead or not guilty by reason of insanity. One thousand four hundred and thirty-four (90%) perpetrators were male giving a male to female ratio of 9:1; in the under 25's the male to female ratio was highest at 12:1. Most were young, with a median age of 27 years (fig. 59).

Figure 59: Age and sex of perpetrators (England and Wales – General population homicides)



Victims

Most victims were also young men. Fifty-nine victims (4%) were aged under one, of whom 25 (42%) were killed by female perpetrators (fig. 60). Around a third of perpetrators killed a family member or a current or former spouse/partner, just over a third killed an acquaintance and a quarter killed a stranger. When women were the perpetrators, the victim was their own child in a quarter of cases and their spouse/partner in about a third of cases. When men were the perpetrators, the victim was a stranger in 353 (28%) of cases. There were nineteen perpetrators over the age of sixty; half of these killed their spouse (fig. 61). The commonest method of killing by both men and women was stabbing (fig. 62).

Figure 60: Age of victims by sex of perpetrators
(England and Wales – General population homicides)

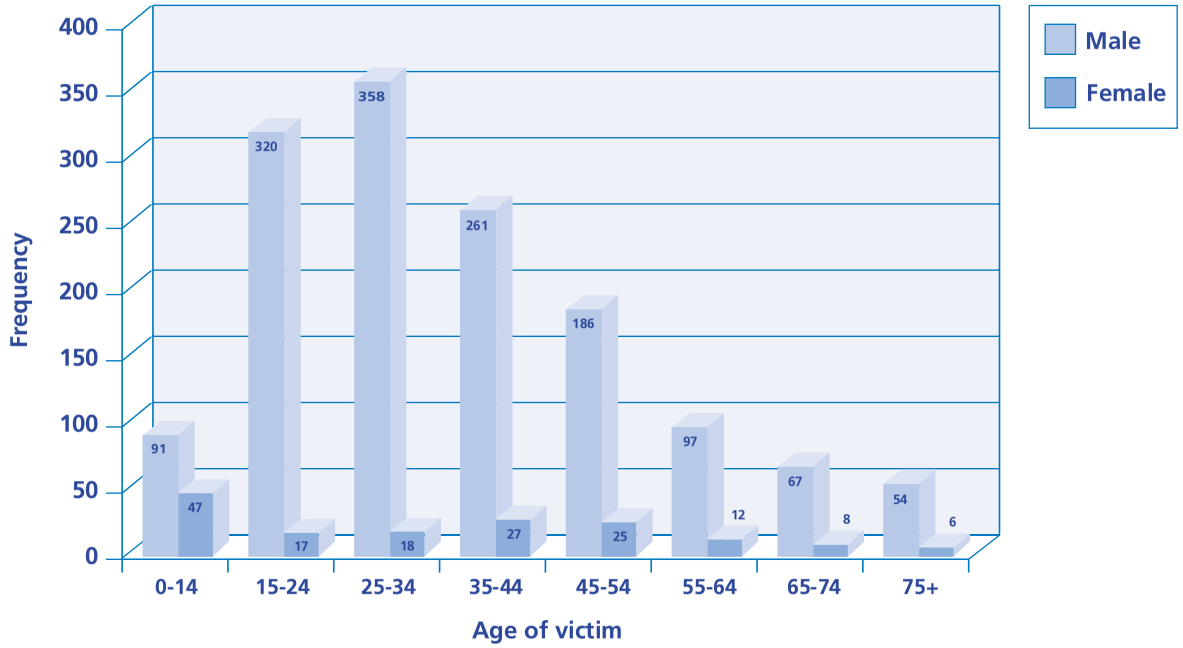


Figure 61: Relationship of victim to perpetrator by sex of perpetrator
(England and Wales – General population homicides)

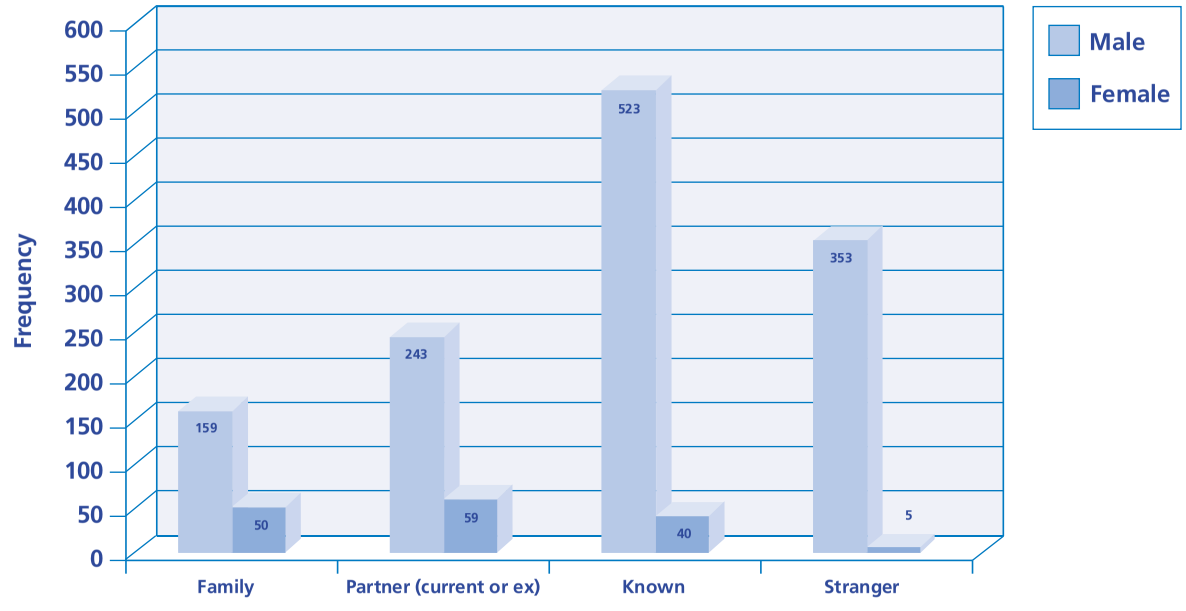
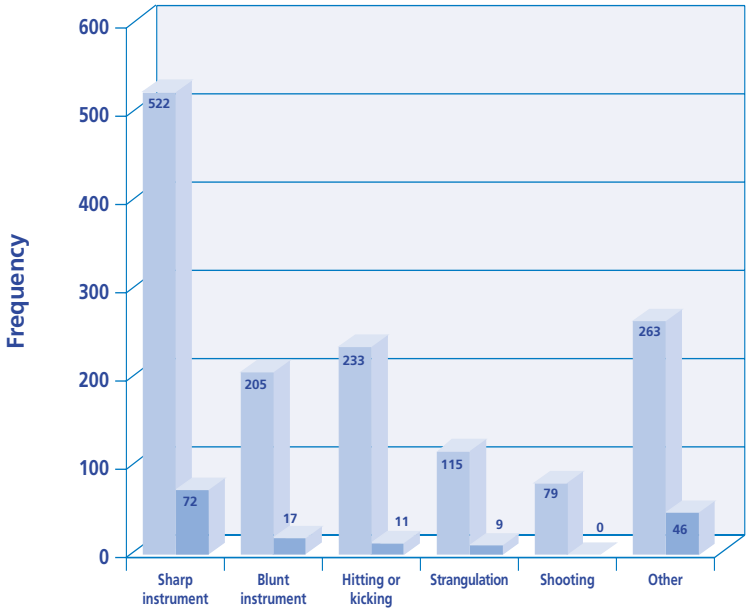


Figure 62: Method of homicide by sex of perpetrator
(England and Wales – General population homicides)



Male Female

OTHER	Male	Female
Suffocation	31	9
Poisoning	27	6
Drowning	9	2
Causing to fall	61	4
Burning or scalding	17	2
Struck by motor vehicle	17	0
Miscellaneous	101	23
TOTAL	263	46

Stranger Homicides

In 358 homicides (25% of the total sample), the victim was a stranger. The perpetrators and victims of these killings were more likely to be young men below the age of 25 – stranger homicides by women were rare (5 cases). The method of killing was more likely to be hitting or kicking and alcohol and drugs were more likely to be involved in the offence.

Perpetrators of stranger homicide were more likely to have previous violent convictions and less likely to have lifetime mental disorder, mental illness at the time of the offence and contact with mental health services.

Outcome in Court

Ten per cent of perpetrators were found guilty of manslaughter on grounds of diminished responsibility, or infanticide. Women received a diminished responsibility verdict in almost a fifth (19%) of cases. Over half of the men but only one fifth of the women were convicted of murder. Seven per cent of perpetrators were committed to psychiatric hospital; this outcome was more common in women (17%).

Previous Convictions

We obtained details of previous convictions (antecedents) in 1,564 cases (98%). Of these, 574 (37%) had a history of violence against the person, 250 (16%) of threats of violence, 257 (16%) of possession of offensive weapons,

62 (4%) of sexual offences and 487 (31%) of criminal damage. Previous convictions for violence against the person were more common in men (41% of men compared to 18% of women).

Psychiatric Reports

We obtained one or more reports prepared for the court in 1,168 cases, i.e. on 73% of the total sample. In 1,076 cases (68% of the total sample), at least one report was a psychiatric report prepared by a psychiatrist or other doctor. In a further 92 cases, a report from a psychologist, probation officer or other source was obtained. Table 21 shows a comparison between those with and without reports.

Table 21: Comparison of homicides with and without psychiatric reports (England & Wales)

	With report Number 1168	% (95% CI)	Without report Number 426	% (95% CI)	Total sample Number 1594	% (95% CI)
Offence variables						
Age of perpetrator: median (range)	28 (10-77)		26 (13-64)		27 (10-77)	
Male perpetrator	1033	88% (87-90)	401	94% (92-96)	1434	90% (88-91)
Age of victim: median (range)	35 (0-96)		29 (0-98)		33 (0-98)	
Male victim	794	68% (65-71)	336	79% (75-83)	1130	71% (69-73)
Victim was stranger	234	22% (20-25)	124	33% (28-38)	358	25% (23-27)
Sharp instrument used	470	41% (38-44)	124	29% (25-34)	594	38% (35-40)
Final outcome						
Murder	609	52% (49-55)	157	37% (32-41)	766	48% (46-50)
Manslaughter (diminished responsibility)	147	13% (11-15)	2	0.5% (0-1)	149	9% (8-11)
Manslaughter (other including provocation, self defence)	388	33% (30-36)	264	62% (58-67)	652	41% (39-43)
Infanticide	11	1% (0-2)	1	0.2% (0-1)	12	1% (0-1)
Disposal						
Prison	1004	86% (84-88)	414	97% (96-99)	1418	89% (87-91)
Hospital order (with or without restriction)	108	9% (8-11)	3	1% (0-2)	111	7% (6-8)
Other	56	5% (4-6)	9	2% (1-3)	65	4% (3-5)

Table 22: Social and clinical characteristics of homicides with reports (England & Wales)

	Male Number 1033	% (95% CI)	Female Number 135	(95% CI)	Total sample Number 1168	% (95% CI)
Demographic features						
Age of perpetrator: median (range)	28 (10-76)		30 (12-59)		28 (10-76)	
Ethnic minority	167	17% (15-19)	16	13% (7-18)	183	16% (14-19)
Not currently married	594	63% (60-66)	64	49% (41-58)	658	62% (59-65)
Unemployed/long-term sick	554	60% (51-57)	82	63% (54-71)	636	61% (58-64)
Living alone	148	18% (16-21)	7	6% (2-10)	155	17% (14-19)
Homeless	28	3% (2-4)	3	2% (0-5)	31	3% (2-4)
Clinical features						
Primary diagnosis (lifetime)						
Schizophrenia & other delusional	71	7% (5-80)	12	9% (4-14)	83	7% (6-9)
Affective disorder (bipolar & dep.)	96	10% (8-12)	26	20% (13-27)	122	11% (9-13)
Alcohol dependence	61	8% (6-9)	7	5% (2-10)	68	6% (6-9)
Drug dependence	49	6% (4-7)	8	6% (2-10)	57	5% (4-7)
Personality disorder	117	11% (9-13)	16	12% (6-17)	133	11% (10-13)
Other	35	4% (3-5)	11	9% (4-13)	46	4% (3-6)
Mental disorders in total	429	45% (40-46)	80	63% (51-68)	509	48% (42-48)
Symptoms of mental illness at time of homicide	129	13% (11-15)	34	26% (18-33)	163	15% (13-17)
Behavioural features						
History of alcohol misuse	370	42% (39-45)	41	33% (25-41)	411	41% (38-44)
Alcohol thought to have contributed to offence	371	46% (43-50)	45	37% (28-45)	416	45% (42-48)
History of drug misuse	376	42% (39-45)	30	24% (17-31)	405	40% (37-43)
Drugs thought to have contributed to offence	134	16% (13-18)	10	8% (3-13)	144	15% (13-17)
Contact with services						
Any contact (lifetime)	203	20% (17-22)	50	37% (29-45)	253	22% (19-24)
Contact in last year	99	10% (8-12)	28	21% (14-28)	131	11% (9-13)

Those on whom reports were obtained were more likely to have been convicted of manslaughter on grounds of diminished responsibility and to be given a hospital order, indicating a bias towards mental disorder in the sample. However, the differences between the total sample and the "report sample" were small.

Social and Clinical Characteristics

The main social and clinical characteristics, taken from the report group as a whole, are shown in table 22. Most were unmarried (62%), over half were unemployed (55%) and a further 6% were long-term sick. Forty-one per cent had a history of alcohol misuse, but in a larger proportion alcohol was thought to play a role in the offence. A similar number had a history of drug misuse but drugs were less likely to play a part in the offence. Cannabis (25%), amphetamines (7%), heroin and other opiates (7%) and benzodiazepines (4%) were the commonest drugs taken regularly in the year prior to the homicide.

Rates of mental disorder

There is no single definition of mental disorder and there are therefore several ways of estimating the rate of mental disorder in people convicted of homicide, based on:

- Lifetime diagnosis of mental disorder
- Mental illness at the time of the offence
- Manslaughter on the grounds of diminished responsibility
- Commitment to psychiatric hospital
- Contact with mental health services

The relationship between definitions of mental disorder is shown in tables 23 and 24.

Table 23: Rates of mental disorder in people convicted of homicide (England & Wales)

	Total	% of all homicides (95% CI) Number 1594	% of homicides with psychiatric report (95% CI) Number 1168
Abnormal mental state at time of offence	164	15% (13-17)	164 15% (13-17)
Mental disorder (lifetime)	545	34% (32-37)	545 47% (44-50)
Schizophrenia (lifetime)	85	5% (4-6)	85 7% (6-9)
Convicted of Section 2 manslaughter (diminished repsonsibility)	149	9% (8-11)	
Hospital order	111	7% (6-8)	
Contact with mental health services (lifetime)	282	18% (16-20)	
Contact with mental health services within 12 months of the offence	145	9% (8-11)	

Table 24: Different measures of mental disorder in psychotic and non-psychotic mentally ill homicides (England & Wales)

	Psychotic Number 76	95% CI	Non-Psychotic Number 88	95% CI	Total Number 164 (10%)	95% CI
Section 2 Manslaughter	54 71%	(61-81)	40 45%	(35-56)	94 57%	(50-65)
Hospital order	61 80%	(71-89)	17 19%	(11-28)	78 48%	(40-55)
Mental disorder (lifetime)	75 99%	(96-100)	88 100%		163 99%	(98-100)
Schizophrenia (lifetime)	53 70%	(59-80)	1 1%	(0-3)	54 33%	(26-40)

Lifetime diagnosis of mental disorder

In 545 cases (34% of the total homicide sample), a diagnosis of mental disorder was specified in the report or by services, based on life history. The majority had alcohol or drug dependence or personality disorder, rather than schizophrenia or affective disorder. Although this is a large number of people with a history of mental disorder, most did not have conditions usually regarded as severe mental illness, and relatively few (25%) were under the care of mental health services in the 12 months prior to the offence. The characteristics of those in contact with services are described later.

Mental illness at the time of offence

One hundred and sixty-four perpetrators (15%) had symptoms of mental illness at the time of the offence (referred to here as the mentally ill group).

The social characteristics of the mentally ill group were similar to those of the whole sample (table 25). Their methods of homicide were similar. However, their victims were more likely to be a family member or spouse/partner. They had a lower rate of previous convictions for violence against the person and drug misuse but the same rate of alcohol misuse. Alcohol and drugs were less likely to have played a part in the offence in the mentally ill group.

Table 25: Comparison of those with and without symptoms of mental illness at the time of the homicide (homicides with psychiatric reports) (England & Wales)

	Mental illness Number 164	% (95% CI)	No mental illness Number 946	% (95% CI)	Total Number 1110	% (95% CI)
Demographic features						
Age of perpetrator: median (range)	35 (15-76)		27 (12-70)		28 (12-76)	
Ethnic minority	32	20% (14-27)	144	16% (14-18)	176	17% (14-19)
Not currently married	101	62% (55-70)	535	61% (58-65)	636	62% (59-64)
Unemployed/long-term sick	101	63% (48-63)	511	60% (51-58)	612	60% (52-58)
Living alone	25	16% (10-21)	125	17% (14-19)	150	16% (14-19)
Homeless	2	1% (0-3)	27	3% (2-5)	29	3% (2-4)
Behavioural features						
History of alcohol misuse	53	34% (27-42)	346	42% (38-45)	399	41% (37-44)
Alcohol thought to have contributed to offence	30	19% (13-25)	377	50% (47-54)	407	45% (41-48)
History of drug misuse	51	33% (25-40)	345	41% (37-44)	496	40% (36-43)
Drugs thought to have contributed to offence	13	8% (4-12)	129	16% (11-19)	142	15% (13-17)
Previous convictions for violence	34	21% (15-27)	386	41% (38-44)	420	38% (35-41)
Contact with services						
Any contact (lifetime)	71	43% (30-51)	169	18% (15-20)	240	22% (19-24)
Contact in last year	46	28% (21-35)	76	8% (6-10)	122	11% (9-13)
Offence variables						
Age of victim: median (range)	39 (0-88)		34 (0-96)		35 (0-96)	
Male victim	66	40% (33-48)	694	73% (70-76)	760	68% (66-71)
Victim was stranger	14	9% (4-13)	211	25% (2-28)	225	22% (20-25)
Sharp instrument used	84	52% (44-60)	367	39% (36-42)	451	41% (38-44)
Final outcome						
Murder	20	12% (7-17)	552	58% (53-59)	572	51% (49-54)
Manslaughter (diminished responsibility)	94	57% (50-65)	54	6% (4-7)	148	13% (11-15)
Manslaughter (other including provocation, self defence)	37	23% (16-29)	331	35% (32-38)	368	33% (30-36)
Infanticide	7	4% (1-7)	4	0.4% (0-1)	11	1% (0-2)
Disposal						
Prison	67	41% (33-48)	886	94% (92-95)	953	86% (84-88)
Hospital order (with or without restriction)	78	48% (40-55)	27	3% (2-4)	105	9% (8-11)
Other	19	11% (7-16)	33	3% (2-5)	52	5% (3-6)

Among the mentally ill group, there were 54 perpetrators with a lifetime diagnosis of schizophrenia and 89 perpetrators with a lifetime diagnosis of affective disorder. Just over a quarter of the mentally ill group had been in contact with mental health services in the previous year. Seventy-six cases had delusions, hallucinations or both at the time of the offence, indicating psychotic illness; symptoms of depressive illness were present in 101 cases. Most of those with symptoms of depression had a lifetime diagnosis of affective disorder. In 125 cases, the mental state abnormalities were thought to play a major part in the offence and in 27 they were thought to play a minor part.

Symptoms of psychosis

According to reports, 70% of those with psychotic symptoms at the time of the killing had a lifetime diagnosis of schizophrenia, 20% had affective disorder, 5% substance dependence and 4% personality disorder. Forty-seven (62%) of the psychotic group had been in contact with psychiatric services at some time, 32 (43%) in the previous year. Most of the psychotic group were given a hospital disposal but 15 (20%) were sent to prison. Seven of these had been in contact with psychiatric services previously.

Manslaughter on the grounds of diminished responsibility

One hundred and forty-nine perpetrators were convicted of manslaughter on the grounds of diminished responsibility ("section 2 manslaughter"). One third had a diagnosis of schizophrenia, around one quarter (28%) affective disorder and 17% personality disorder. Almost half (48%) had had previous contact with psychiatric services and 64% were mentally ill at the time of the offence.

In over half of cases (56%) where the verdict was Section 2 manslaughter, the perpetrator was committed to hospital. In the remaining sixty-six cases, the disposal was prison in 85% and probation order in 12%.

Of the 23 perpetrators who were mentally ill at the time of offence, convicted of Section 2 manslaughter yet sent to prison, 87% were depressed at the time of the killing and 22% were psychotic. The majority (74%) had a lifetime diagnosis of affective disorder, 13% had a diagnosis of schizophrenia and the remainder had alcohol dependence or personality disorder.

Commitment to psychiatric hospital

Of the 111 perpetrators given a hospital order, virtually all (96%) had a lifetime history of mental disorder and 42% were in contact with psychiatric services in the 12 months prior to the offence. The primary diagnosis in those receiving a hospital order was schizophrenia in 69 (62%), affective disorder in 21 (19%) and personality disorder in 8 (7%). In just over a quarter of cases, the perpetrator was not mentally ill at the time of the offence. Seventy per cent of these had schizophrenia as a primary diagnosis.

Contact with mental health services (Inquiry cases)

Two hundred and eighty-two perpetrators (18%) were known to have been in contact with mental health services at some time. In 145 cases (9%) this contact was in the 12 months prior to the offence. In addition there were a further 98 cases in which mental health service contact was referred to in the psychiatric reports but not confirmed by extensive enquiry. In many of these cases contact was said to have occurred many years before the homicide, and was often with alcohol or drug services rather than general psychiatry services. In 17 cases the unconfirmed contact with adult services took place in the year before the homicide.

The figure of 282 represents a minimum figure and it is likely that some service contacts were not identified, particularly in those individuals who had been under services in one locality and who then made long-distance moves without making contact with services in their new place of residence. Some trust records may have been unable to identify contacts from many years ago.

We received completed questionnaires on 256 cases, a response rate of 91%, and the findings presented below and in table 26 are based on these cases. These are referred to below as Inquiry cases. We also examined separately the questionnaires returned on the 145 cases whose contact with mental health services occurred less than 12 months before the homicide. In general the findings were similar whether we analysed *all* Inquiry cases or the 145 with recent contact only. Where differences occurred, these will be described below. On some variables, e.g. those referring to details of final service contact, it is more relevant to focus on those cases with recent contact rather than all Inquiry cases.

In most of the Inquiry cases (71%), the responsible service was a general psychiatry service rather than a specialist service. Fourteen per cent had been under alcohol and drug services, 6% under child and adolescent and 5% under forensic psychiatry services.

Social and clinical characteristics

The social and clinical characteristics of the Inquiry cases, including those with recent (within 12 months of offence) contact, are shown in table 26.

Table 26: People convicted of homicide who had been in contact with mental health services at any time and in the 12 months prior to the offence (England & Wales)

	Any contact Number 256	% (95% CI)	Recent contact Number 145	% (95% CI)
Demographic features				
Age: median (range)	31 (14-63)		31 (14-63)	
Male	209	82% (77-86)	117	81% (74-87)
Ethnic minority	24	10% (6-13)	18	13% (7-18)
Not currently married	151	71% (65-77)	94	69% (61-76)
Unemployed/long-term sick	164	81% (75-86)	112	82% (75-88)
Living alone	70	37% (30-43)	41	31% (23-39)
Priority groups				
In-patients	4	2% (0-3)	4	3% (1-5)
Post discharge patients	23	9% (5-12)	23	16% (9-21)
CPA	53	22% (16-26)	49	35% (27-43)
Missed contact	106	45% (39-51)	63	46% (37-53)
Non-compliance	37	19% (13-24)	32	26% (18-33)
Clinical features				
Primary diagnosis				
Schizophrenia & other delusional	53	23% (16-26)	43	33% (22-37)
Affective disorder (bipolar & dep.)	38	17% (10-19)	24	18% (10-23)
Alcohol dependence	23	10% (8-16)	9	7% (5-15)
Drug dependence	21	9% (5-13)	13	10% (4-14)
Personality disorder	68	29% (23-35)	33	25% (18-32)
Any secondary diagnosis	123	49% (43-56)	75	52% (44-60)
Duration of history (under 12 months)	36	16% (10-19)	21	16% (8-20)
Over 5 previous admissions	21	9% (5-12)	14	10% (5-15)
Last admission was a re-admission	21	15% (9-21)	12	14% (6-21)
Behavioural features				
History of self-harm	134	57% (51-63)	82	59% (51-67)
History of alcohol misuse	148	64% (58-70)	91	66% (59-74)
History of drug misuse	141	62% (56-68)	88	65% (57-73)

Table 26: People convicted of homicide who had been in contact with mental health services at any time and in the 12 months prior to the offence (England & Wales) *(continued)*

	Any contact Number 256	% (95% CI)	Recent contact Number 145	% (95% CI)
Contact with services				
Last contact within 7 days of offence	26	10% (7-14)	26	18% (12-25)
Symptoms at last contact	117	49% (42-55)	65	47% (37-54)
Requested contact but not taken place	9	4% (1-7)	6	5% (1-8)
Estimate of immediate risk: low or none	177	89% (84-93)	108	87% (81-93)
Estimate of long-term risk: low or none	65	81% (73-90)	36	78% (66-90)
Homicide thought to be preventable	30	17% (12-23)	22	18% (11-25)

Social features As with homicides in the general population, most perpetrators were male, single and unemployed. Twelve of the sample were homeless or living in bed and breakfast accommodation. Six lived in supervised hostels.

Clinical features A breakdown of primary diagnoses is given in figure 63. The most common diagnosis was personality disorder, and less than half had severe mental illness by most definitions (39% had schizophrenia or affective disorder). Forty-nine per cent also had at least one secondary diagnosis (fig. 64), the most common being personality disorder, alcohol dependence and drug dependence. In 16% the onset of mental disorder had been in the previous year. In 63% it had been more than five years earlier, reflecting the long-term nature of the main primary diagnoses. Despite this, 41% had never been admitted to hospital, a further indication that most did not have severe mental illness in the conventional sense.

There were high rates of alcohol and drug misuse, and 45% of the sample were known to be misusing both alcohol and drugs. The rate of deliberate self-harm was similar to that of the Inquiry suicides.

Sixty-six cases (28%) mainly in the group with recent contact, had previously been in contact with another hospital. In 38 of these no written details about the patient were passed between hospitals. Of the 38, 14 were diagnosed as suffering from personality disorder, 10 schizophrenia and 8 an affective disorder.

Figure 63: Primary diagnosis (England and Wales Homicide Inquiry cases)

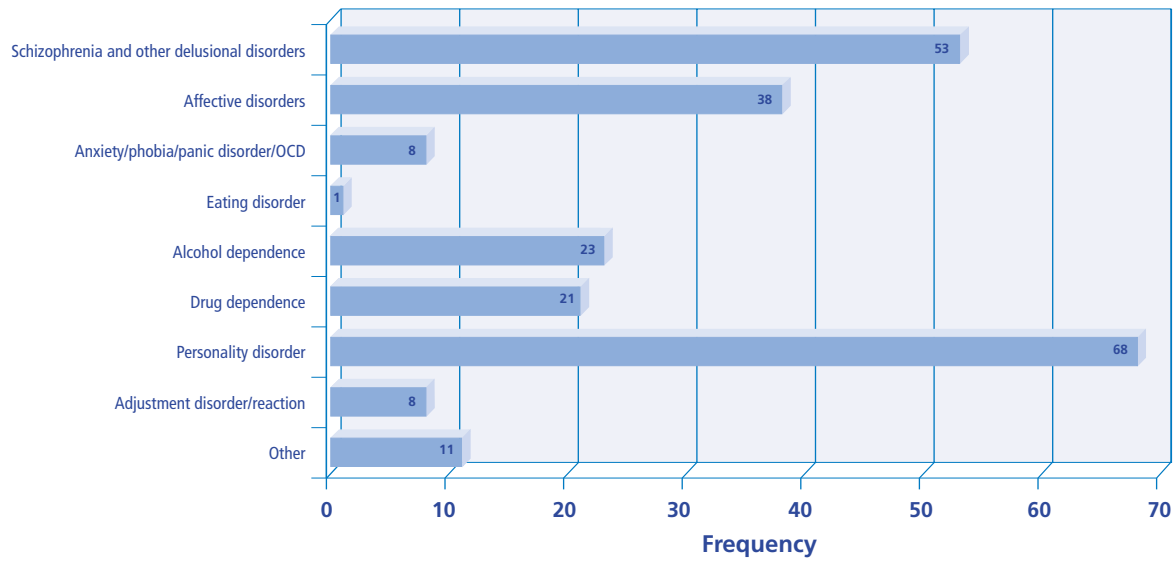
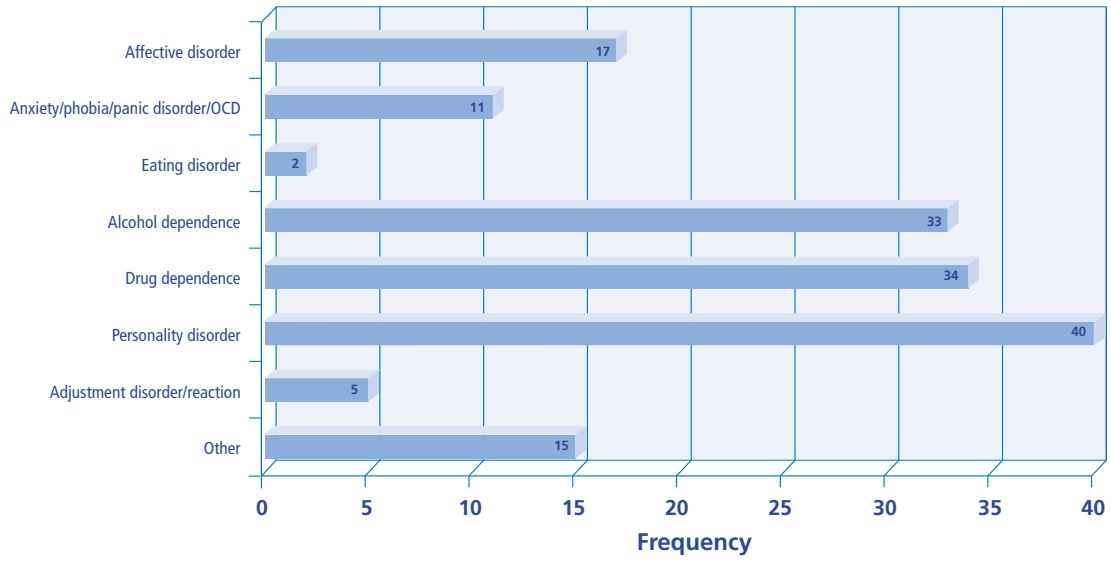


Figure 64: Secondary diagnoses (England and Wales Homicide Inquiry cases)



The group with recent contact appeared to have more severe illness. A higher percentage of patients in this group had schizophrenia but there was a similar proportion with personality disorder. The recent contact group had more previous admissions. Most of those admitted under the Mental Health Act (40 out of 51) were in this group.

History of violence Ninety-two Inquiry cases (39%) had a history of violence towards another person that was documented in the case notes. Seventy-two of these 92 were known to have previous convictions for violence against the person. There were a further 33 cases in which there were convictions for violence, but no documentation of this in the notes. Of the 33, 3 had a diagnosis of schizophrenia, 6 affective disorder, and 16 were either alcohol or drug dependent or had a personality disorder. Five of these were mentally ill at the time of the offence. Altogether therefore, 125 (49%) had a history of violence against the person that had led to conviction or had been documented in the case notes.

In the group with recent contact, the pattern was the same, 77 (53%) having either a history of violence towards another person documented in their case notes or a previous conviction. They also had a high rate of documented *recent* violence: 44 had committed at least one physical assault against another person in the year before the homicide and a further 8 patients (6%) were reported to have been verbally aggressive. Only 24 of the 44 incidents of assault were documented in the case notes. Staff action after previous physical assaults included altering medication in 2 cases, changing the supervision level in 3 and calling the police in 10 cases. No action was referred to in 29 cases. The victims in these 42 assaults were family members in 10 cases, strangers in 11 cases, acquaintances in 10 cases, and included 6 staff and 5 fellow patients. Those who assaulted a family member or a stranger were no more likely to kill a family member or a stranger subsequently.

Care arrangements Four Inquiry cases were in-patients at the time of the homicide (three on a general psychiatry open ward, 1 in a secure unit). Ten patients were attending day hospital. Among the in-patients, 3 had schizophrenia, and 1 had affective disorder. Two had previous convictions for violent offences, and both of these had documented incidents of violence in the case notes. One of the four in-patients was under observation on the ward; 2 were on agreed leave at the time of the homicide. All four homicides took place distant from the hospital. At last contact, immediate risk of violence was thought to be absent or low in 2 cases.

Care Programme Approach Only 53 patients (21%) were subject to multidisciplinary review under the CPA, and only 29 of these had a date set for next review. A further 45 had been allocated a key worker. The primary diagnoses of those recent contact cases under the CPA are shown in table 27. Four patients were on the supervision register. There were no cases of supervised discharge.

Table 27: Comparison of homicides who were and were not under enhanced CPA – recent contact group only (England & Wales)

	Under CPA Number 49	% (95% CI)	Not Under CPA Number 90	% (95% CI)
Demographic features				
Age: median (range)	30 (18-56)		32 (14-63)	
Male	37	76% (63-88)	76	84% (77-92)
Ethnic minority	10	20% (9-32)	6	7% (1-12)
Not currently married	42	88% (78-97)	50	61% (48-69)
Unemployed/long-term sick	41	85% (75-95)	68	74% (70-88)
Living alone	14	29% (16-42)	27	35% (22-43)
Priority groups				
In-patients	3	6% (0-13)	0	0%
Post discharge patients	9	20% (8-31)	14	16% (8-23)
Missed contact	20	44% (29-58)	40	46% (35-56)
Non-compliance	15	35% (21-49)	17	22% (13-31)
Clinical features				
Primary diagnosis				
Schizophrenia & other delusional	24	51% (37-65)	16	20% (11-29)
Affective disorder (bipolar & dep.)	5	11% (1-19)	19	24% (14-33)
Alcohol dependence	2	4% (0-11)	7	9% (3-15)
Drug dependence	3	6% (0-13)	9	11% (4-18)
Personality disorder	12	26% (13-38)	20	25% (15-34)
Any secondary diagnosis	28	57% (43-71)	45	51% (40-61)
Duration of history (under 12 months)	5	10% (1-19)	16	20% (11-28)
Over 5 previous admissions	8	17% (6-27)	4	5% (0-9)
Last admission was a re-admission	4	11% (0-20)	8	17% (6-27)
Behavioural features				
History of self-harm	26	54% (40-68)	54	61% (51-72)
History of alcohol misuse	31	65% (51-78)	56	66% (56-76)
History of drug misuse	35	75% (62-87)	49	58% (47-68)
Contact with services				
Last contact within 7 days of death	16	34% (20-48)	9	10% (4-16)
Symptoms at last contact	21	43% (27-55)	42	48% (38-59)
Requested contact but not taken place	3	7% (0-14)	3	4% (0-7)
Estimate of immediate risk: low or none	38	86% (76-97)	69	89% (81-96)
Estimate of long-term risk: low or none	12	86% (67-100)	23	77% (62-92)
Homicide thought to be preventable	13	30% (16-43)	9	12% (5-19)

Last admission One hundred and thirty-two cases (52%) had been admitted to hospital at some time. In 21 cases the admission was a re-admission within three months of discharge. In 29 cases the last admission had been under the Mental Health Act. In 76 cases, the discharge was patient-initiated, i.e. against medical advice or the result of the patient's behaviour on the ward. In 52 (38% of admitted cases) the final admission lasted less than 7 days. In 23 cases (17% of admitted cases) the homicide occurred within three months of discharge from hospital. The pattern of care around the final admission in the group with recent contact was similar to that of all Inquiry cases.

Loss of contact with services One hundred and sixty patients (70%) were out of contact with services at the time of the homicide. One hundred and three (67%) of these were out of contact following self-discharge or discharge as a result of patient's actions. In 77 cases further action was taken after loss of contact, such as sending a further appointment, informing the police or social services and informing individuals at risk, but in only 10 cases was this action a home visit. Although the recent contact group were more likely to be still in contact at the time of the homicide, just over half (53%) were out of contact, usually following patient-initiated discharge. Those who were out of contact were more likely to be misusing drugs and alcohol or have a diagnosis of personality disorder. Almost half had missed their final community contact prior to the offence. In this group, services had made a recent assertive attempt to re-engage the patient in 40% of cases.

Treatment and compliance Most patients (86%) were receiving some form of pharmacotherapy, but only 68 were regarded as receiving any form of psychological intervention, including psychological support. Almost a quarter were non-compliant with drug treatment in the month before the offence.

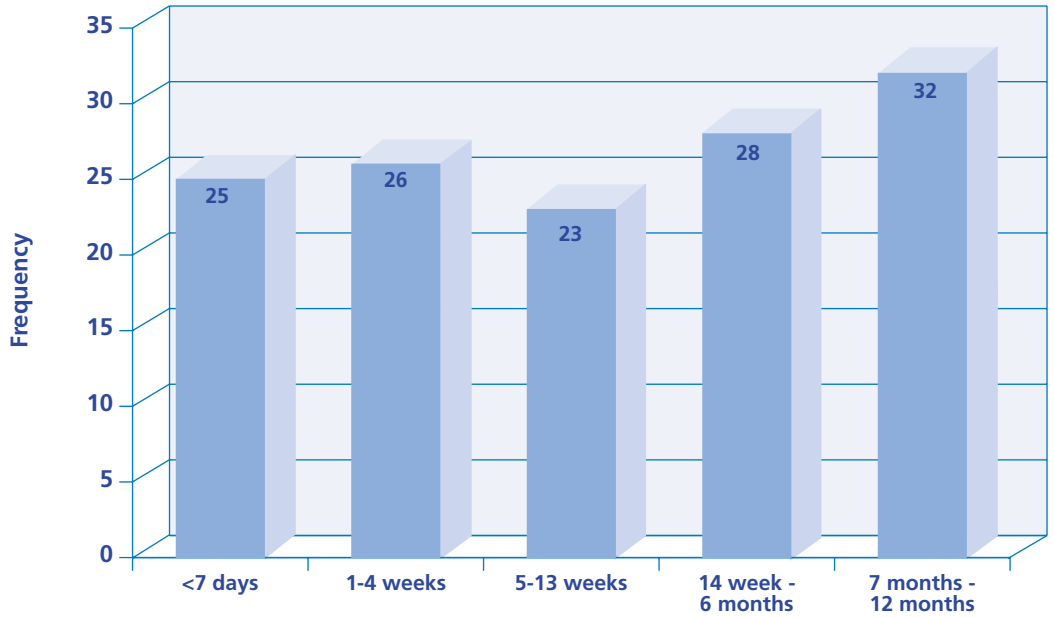
Last contact

The timing of last contact with mental health services before the homicide is shown in figure 65. (This figure, and the other data in this section, includes only those patients who had last been seen less than a year before the offence).

In 75 cases (52%) last contact occurred less than thirteen weeks before the homicide and in 26 (18%) cases this was within one week of the offence. In 91 cases this was a non-routine contact. In 134 cases it took place face-to-face, most often with a junior psychiatrist, consultant or ward nurse.

Assessment at final contact revealed abnormalities of mental state or recent behaviour in 65 cases (46%). The most common were emotional distress, hostility, increased use of alcohol or drugs and deliberate self-harm. Six of the 'recent contact group' showed evidence of delusions or hallucinations at last contact. Immediate risk of violence was thought to be low or absent in 87%.

Figure 65: Timing of last contact with mental health services
(excluding cases with contact more than 12 months earlier)
(England and Wales Homicide Inquiry cases)



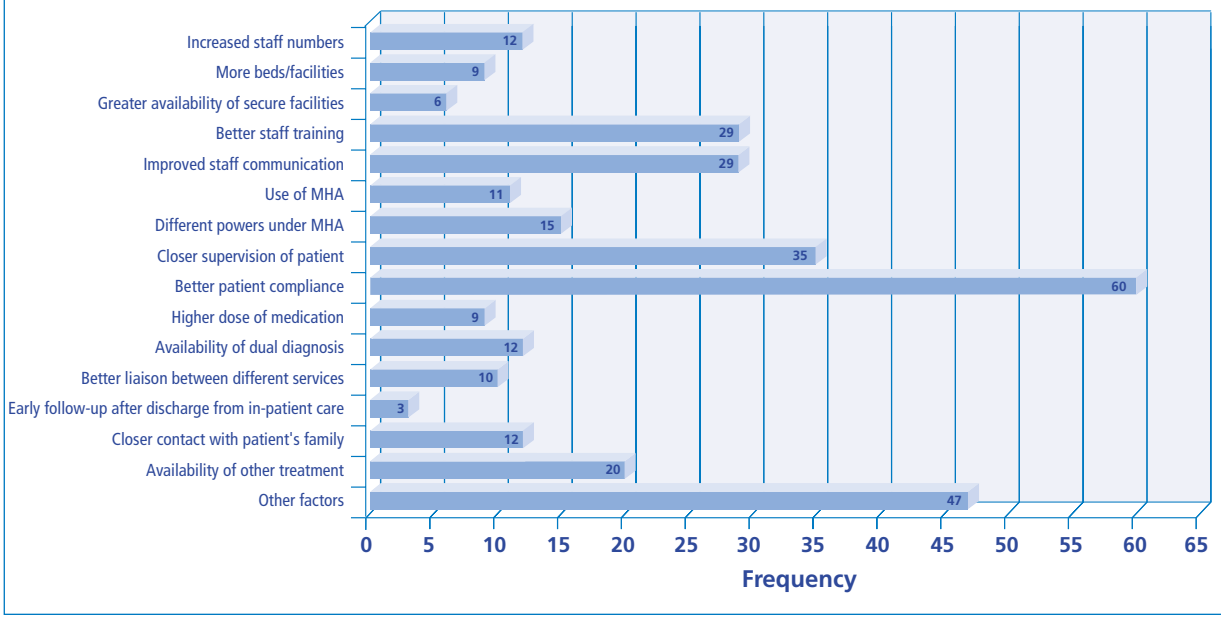
Respondents reported using a range of risk factors to assess risk including demographic and clinical factors, history of violence, current mental state and threats of violence. The most important factor was thought to be current mental state. At final service contact only 10 patients were estimated to be at moderate risk of committing a violent act. Seventy-two per cent of the professionals involved in the last contact had received training in risk assessment.

Preventability

In only 30 (17%) cases did the respondent believe that the homicide could have been prevented. However, most (59%) were able to identify factors that would have made the homicide less likely (fig. 66). The factors most frequently mentioned were better patient compliance, closer supervision and closer contact with the patient's family.

Perceived preventability was associated with schizophrenia, non-compliance, recent contact, higher estimations of risk at final contact and ethnic minorities.

Figure 66: Factors which could have made homicide less likely (England and Wales Homicide Inquiry cases)



Offence details

Of those with any lifetime contact with mental health services, 62 (24%) received a hospital disposal. Of the 145 perpetrators in contact in the last year 46 (38%) were also found to be mentally ill at the time of offence but only 32 (22%) of these received a hospital order. Of these 32, 69% had schizophrenia, 6% had personality disorder and 20% had affective disorder. Of the 11 perpetrators who received a prison disposal, 2 (18%) had personality disorder, 1 (9%) had substance dependence, 7 (64%) had affective disorder and 1 (9%) had schizophrenia.

Diagnostic groups

Lifetime Schizophrenia

In the whole homicide sample, 85 perpetrators had a lifetime history of schizophrenia (5% of the homicide sample). A diagnosis of schizophrenia was based on report diagnosis when there had been no service contact. Where there had been contact with mental health services and where there was a discrepancy between the report diagnosis and the service diagnosis, the reports and questionnaires were individually examined to determine the most likely diagnosis. The factors used to determine this were duration of history, degree of contact with services, timing of most recent assessment or contact, identification of psychotic symptoms and strength of agreement between report writers.

Table 28 summarises the characteristics of all subjects with schizophrenia. Sixty-one (72%) had been in contact with mental health services.

Table 28: People with schizophrenia who committed homicide (England & Wales)

	Number 85	% (95% CI)
Demographic features		
Age: median (range)	31 (16-68)	
Ethnic minority	28	35% (25-45)
Not currently married	62	78% (69-88)
Unemployed/long-term sick	53	68% (58-78)
Living alone	17	25% (14-35)
Homeless	0	0%
Behavioural features		
History of alcohol misuse	29	37% (26-48)
Alcohol thought to have contributed to offence	19	25% (15-35)
History of drug misuse	41	51% (40-62)
Drugs thought to have contributed to offence	6	8% (2-14)
Previous convictions for violence	27	32% (22-42)
Service contact		
Any contact (lifetime)	61	72% (62-81)
Contact in last year	43	51% (41-62)
Mentally ill at time of offence	54	68% (57-78)
Offence variables		
Age of victim: median (range)	45 (0-91)	
Male victim	51	61% (50-71)
Victim was a stranger	12	16% (8-24)
Sharp instrument used	46	55% (44-65)
Final outcome		
Murder	10	12% (5-19)
Manslaughter (diminished responsibility)	54	64% (54-75)
Manslaughter (other, including self defence)	14	17% (9-25)
Unfit to plead/found insane	6	7% (2-13)

People with schizophrenia with no previous service contact
Twenty-four perpetrators with schizophrenia had not had contact with services; their median age was 34. Thirty-six per cent were black and 9% Asian. Five had been in contact with their general practitioner because of psychological problems, but in only two cases had a referral to secondary mental health services taken place. Seventeen per cent had a history of alcohol misuse and 39% had a history of drug misuse. Eighty-three per cent had no previous convictions for violence. Thirty-three per cent had a secondary diagnosis, mainly drug or alcohol dependence. In one third, the illness had been present for less than 12 months, in a further 21% the illness had been present for more than five years. Eighteen were mentally ill at the time of the offence.

People with schizophrenia in contact with services
Sixty-one cases (72%) of homicides with schizophrenia had been in contact with mental health services at any time, 43 within the last year. Of this 43, 37 (86%) had been diagnosed as having schizophrenia by services. The service diagnoses of the remainder (so called disputed cases) were as follows: drug induced psychosis (two cases), personality disorder (two cases) and no specified diagnosis (two cases). The characteristics of all of the patients with schizophrenia in contact with services are shown in table 29.

Twenty-one patients had a secondary diagnosis, usually alcohol or drug dependence or personality disorder. Thirty-nine had a history of drug misuse, 27 of alcohol misuse and 15 of self-harm.

History of violence Twenty-eight cases (53%) had a history of violence against the person documented in the case notes. Twenty-four of the 28 were known to have previous convictions for violence against the person and these were all documented in the case notes. A further 16 cases had convictions for threatening behaviour, and these were not documented in the case notes.

In 12 cases there had been a known previous violent incident (actual or threatened) during an episode of psychosis. Eight of these were psychotic at the time of the homicide. Six were either non-compliant with treatment or out of contact with services at the time of the homicide, and only 8 were subject to the CPA.

Care arrangements Forty-three had previously been admitted to hospital, 16 under the Mental Health Act. Fourteen had previously been admitted to a type of secure facility: 3 to a High Secure Hospital, 3 to a Regional Secure Unit, and 8 to a general psychiatry intensive care ward. Three were in-patients at the time of the homicide.

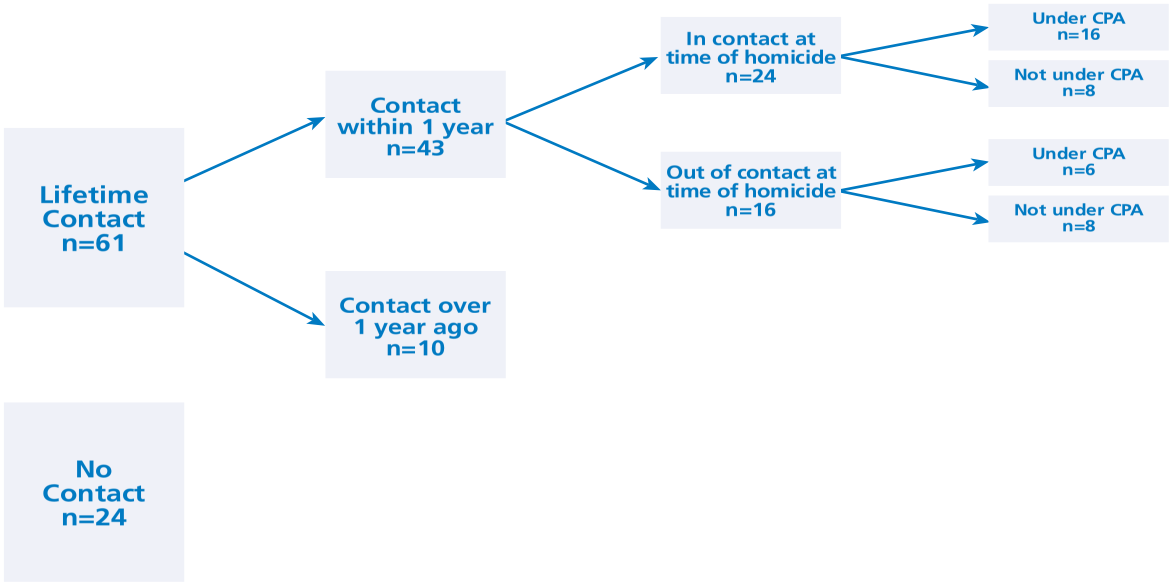
Table 29: Inquiry cases with schizophrenia (England & Wales)

	Number 53	% (95% CI)
Demographic features		
Age: median (range)	30 (19-56)	
Male	43	81% (71-92)
Ethnic minority	19	36% (23-49)
Not currently married	39	78% (66-89)
Unemployed/long-term sick	39	80% (68-91)
Living alone	15	31% (18-44)
Priority groups		
In-patients	3	6% (0-12)
Post-discharge patients	8	16% (6-27)
CPA	26	53% (39-67)
Missed contact	20	41% (27-55)
Non-compliance	16	36% (22-51)
Clinical features		
Any secondary diagnosis	21	40% (26-53)
Duration of history (under 12 months)	10	20% (9-31)
Over 5 previous admissions	8	15% (6-25)
Last admission was a re-admission	4	10% (1-20)
Behavioural features		
History of self-harm	15	31% (18-44)
History of alcohol misuse	27	54% (40-68)
History of drug misuse	39	75% (63-87)
Contact with services		
Last contact within 7 days of death	11	21% (10-32)
Symptoms at last contact	19	39% (25-52)
Requested contact but not taken place	2	4% (0-10)
Estimate of immediate risk: low or none	39	87% (77-97)
Estimate of long-term risk: low or none	12	75% (54-96)
Homicide thought to be preventable	14	31% (18-45)

Contact in last year

Of the 43 patients (81%) with schizophrenia who had been in contact with services in the year before the homicide, thirty-seven had had a previous admission to hospital, 15 under the Mental Health Act. Twenty-four were under the higher levels of supervision of the CPA, including 14 of those with previous convictions for violence. Altogether, 14 were non-compliant with treatment in the month before the homicide. Of those with a previous history of violence, 15 out of 21 were either out of contact with services or non-compliant with treatment at the time of the offence. The contact details of those with schizophrenia are shown diagrammatically below in figure 67.

Figure 67: Contact details of homicides with schizophrenia (England and Wales)



Last contact

Twenty-one patients were seen within one month of the homicide. In 11 this final contact was less than a week before the homicide. At last contact with services, 19 had symptoms of illness, mainly emotional distress and hostility, but in 15 of these cases there was thought to be no or low risk of violence.

Preventability

Fourteen (31%) of the homicides were thought to be preventable. Those homicides thought to be preventable were characterised by high rates of non-compliance with treatment (54%), drug and alcohol misuse (54%), and symptoms of psychosis at the time of the offence (60%). However, short-term risk, assessed at last contact was estimated as either low or absent, or not considered in 7 out of 14 in this group.

Offence details

Of the total sample with schizophrenia, whether in contact with services or not, the victim was a family member in 46 (61%) and a stranger in 12 (16%). Fifty-three perpetrators with schizophrenia were thought to have been psychotic at the time of the offence; 14 of these were in contact with services. Of the latter, only 9 (64%) were subject to the CPA and 8 (57%) were either non-compliant with treatment in the month prior to the homicide or missed their last appointment with services.

Disposal from court

Of the total sample of schizophrenics, whether in contact with services or not, 69 (81%) received a hospital disposal. We examined the characteristics of perpetrators who received a prison rather than a hospital disposal. This applied to 16 (19%) perpetrators. Ten were convicted of murder, 3 of manslaughter on grounds of diminished responsibility and three of manslaughter on other grounds.

The prison group were similar to the hospital group in terms of offence characteristics, social and clinical variables. They were less likely to have been mentally ill at the time of the offence although this difference was not statistically significant (53% compared to 71%), and there was little difference in the rate of contact with services (63% compared to 72%). The mental state phenomena were thought to have played a major role in the offence in five (38%) of the cases, less often than in the schizophrenics with a hospital disposal in whom mental state abnormalities played a major role in 72%.

Personality disorder

There were 143 perpetrators with personality disorder (9% of the total homicide sample) as a primary or secondary diagnosis in the absence of severe mental illness (i.e. schizophrenia or affective disorder). For those in whom there had been no previous service contact, personality disorder was diagnosed only if the report writer reached this diagnosis. In cases with service contact and in whom there was a diagnostic discrepancy between report writer and services, the reports and questionnaires were individually examined to look for positive evidence of personality disorder and the absence of severe psychiatric disorder. Overall, the figure of 143 is likely to be an under-estimation of the proportion of homicides by people with personality disorder. Table 30 summarises their social and clinical characteristics.

Seventy (49%) perpetrators with a diagnosis of personality disorder had no previous contact with psychiatric services. A further 73 perpetrators had had previous service contact, 33 in the year before the offence.

Table 30: People with personality disorder who committed homicide (England & Wales)

	Number 143	% (95% CI)
Demographic features		
Age: median (range)	29 (16-53)	
Ethnic minority	7	5% (1-9)
Not currently married	94	73% (66-81)
Unemployed/long-term sick	105	83% (76-89)
Living alone	24	21% (14-29)
Homeless	9	7% (3-12)
Behavioural features		
History of alcohol misuse	72	58% (50-67)
Alcohol thought to have contributed to offence	61	54% (45-64)
History of drug misuse	71	57% (48-65)
Drugs thought to have contributed to offence	27	23% (16-31)
Previous convictions for violence	94	67% (59-75)
Service contact		
Any contact (lifetime)	73	51% (43-59)
Contact in last year	33	24% (17-31)
Mentally ill at time of offence	9	7% (3-12)
Offence variables		
Age of victim: median (range)	37 (0-90)	
Male victim	93	65% (57-73)
Victim was a stranger	29	21% (14-28)
Sharp instrument used	59	42% (33-50)
Final outcome		
Murder	87	61% (53-69)
Manslaughter (diminished responsibility)	26	18% (12-25)
Manslaughter (other, including self defence)	29	20% (14-27)
Unfit to plead/found insane	1	1% (0-2)
Disposal		
Prison	132	92% (88-97)
Hospital order (with or without restriction)	8	6% (1-9)
Other (probation)	3	2% (0-4)

Personality disorder with no history of service contact
Ninety-six per cent of this group were male, 9% were from an ethnic minority. Twenty-seven per cent killed members of their own family, 24% killed strangers. Sixty-four per cent had previous violent convictions.

Personality disorder with history of service contact
Sixty-eight patients had a diagnosis of personality disorder in the absence of severe mental illness (table 31). Most were male, only 1 was from an ethnic minority. Forty-nine (73%) also had a secondary diagnosis, mainly alcohol and drug dependence. Fifty-six had a history of alcohol misuse and/or drug misuse and 44 had a history of self-harm. Forty-three had no violent convictions, of whom 19 had been in contact with mental health services.

History of violence Thirty-seven cases had a history of violence against the person documented in the case notes. Thirty-one of these were known to have previous convictions for violence against the person as were a further 14 cases in which there was no documentation in the notes. A further 21 had a conviction for threatening behaviour, which was not documented in the case notes.

Care arrangements Thirty-three (52%) had been in contact with services in the 12 months before the homicide. Only 12 of the 33 (38%) were under higher levels of the CPA. Eighteen of these 33 (55%) were out of contact at the time of the offence (14 due to patient-initiated discharge and 4 due to planned discharge) including all but one of those with a previous history of violence. At last contact there was thought to be no or low immediate risk of violence in 21 cases (72% valid), moderate risk in 3 (10%), and high risk in 5 (17%) cases.

Offence details
The commonest victim of perpetrators with personality disorder, whether in contact with services or not, was an acquaintance (44% of cases), but in 21% the victim was a stranger. Among the group with personality disorder twenty-six (18%) received a diminished responsibility verdict. One hundred and thirty-two (92%) were imprisoned, 8 (6%) received a hospital disposal and 3 (2%) were sentenced to probation (all 3 convicted of manslaughter having killed a family member).

Nine cases diagnosed by services as having a personality disorder were described as being mentally ill at the time of the offence by the report writers, including 5 with delusions and/or hallucinations. Of the 9, 2 were diagnosed with schizophrenia, 2 affective disorder, 1 as substance dependence and 4 personality disorder by the psychiatric report writer. Five of the 9 were given a hospital disposal.

Table 31: Inquiry cases with personality disorder (England & Wales)

	Number 68	% (95% CI)
Demographic features		
Age: median (range)	31.5 (18-58)	
Male	56	82% (73-91)
Ethnic minority	1	1% (0-4)
Not currently married	48	83% (73-92)
Unemployed/long-term sick	50	93% (86-100)
Living alone	25	51% (37-65)
Priority groups		
In-patients	0	0%
Post-discharge patients	5	8% (1-14)
CPA	14	22% (12-32)
Missed contact	28	43% (31-55)
Non-compliance	5	9% (2-17)
Clinical features		
Any secondary diagnosis	49	73% (63-84)
Duration of history (under 12 months)	4	6% (0-12)
Over 5 previous admissions	7	11% (3-18)
Last admission was a re-admission	8	20% (8-32)
Behavioural features		
History of self-harm	44	68% (56-79)
History of alcohol misuse	50	78% (68-88)
History of drug misuse	42	67% (55-78)
Contact with services		
Last contact within 7 days of death	5	8% (1-14)
Symptoms at last contact	34	53% (41-65)
Requested contact but not taken place	5	9% (0-16)
Estimate of immediate risk: low or none	43	78% (67-89)
Estimate of long-term risk: low or none	14	67% (47-87)
Homicide thought to be preventable	7	16% (5-27)

People unfit to plead or found not guilty by reason of insanity

There were 9 cases in which the defendant was found unfit to plead, and 6 verdicts of not guilty by reason of insanity in three years of data collection. These 15 subjects are considered together here. Their characteristics are shown in table 32.

Perpetrators

Although the number of cases was small there was less evidence of the preponderance of young males found in the whole sample. Eleven were males and 4 females, with a median age of 47.

Victims and method

Two perpetrators killed more than one victim. Eight were males with a median age of 50. Seven of the victims were family members and two were strangers. Six used a sharp instrument in the killing.

Psychiatric reports and antecedents

We received details of previous convictions in 14 cases, and psychiatric reports in 13. Three cases had previous convictions for violence and an additional case had a violent incident recorded in the casenotes. Six perpetrators had symptoms of mental illness at the time of the offence (all of these had psychotic symptoms). Alcohol and drugs did not play a part in any of the homicides.

Clinical features

Of the 8 found unfit to plead for whom we had a psychiatric report, 3 had schizophrenia, 1 depression, 1 dementia, 1 personality disorder and 2 learning disability. One was mentally ill at the time of the offence and 5 had previous contact with services.

Of the 5 found not guilty by reason of insanity for whom we had a psychiatric report, 4 had schizophrenia and 1 depression. Four were mentally ill at the time of the offence and 4 had previous service contact.

Inquiry cases

Nine had previous contact with mental health services. Five had been in contact in the year before the homicide.

Social and clinical characteristics

We received questionnaires on 7 of these of whom 6 were male and one was female. All were white, 4 were married, 4 were unemployed and 2 lived alone.

Four had schizophrenia and 3 depression. Four also had a secondary diagnosis. Four had a history of deliberate self-harm, 3 of alcohol misuse and 2 of substance misuse.

Care arrangements One case was an in-patient at the time of the homicide. Including this one, four had been in contact within a year and the other 3 cases had not been seen by services for over 3 years. Three were subject to the CPA, only 2 cases were in contact with services at the time of the offence and these 2 were non-compliant with treatment in the month before the homicide. At last contact, all cases were considered to have a low risk of short and long-term violence.

Table 32: People unfit to plead or found not guilty by reason of insanity (England & Wales)

	Number 15	%
Male perpetrator	11	73%
Age of perpetrator: median (range)	47 (16-62)	
Male victim	8	53%
Age of victim: median (range)	50 (5-84)	
Relationship to suspect		
Son/daughter	1	8%
Parent	4	31%
Spouse/partner	2	15%
Acquaintance	5	6%
Stranger	2	15%
Method		
Sharp instrument	6	40%
Blunt instrument	4	27%
Strangulation	1	7%
Burn or scald	1	7%
Suffocation	2	13%
Arson causing death	1	7%
Final outcome		
Unfit to plead	9	60%
Not guilty by reason of insanity	6	40%
Disposal		
Unfit to plead	8	53%
Not guilty by reason of insanity	6	40%
Restriction order	1	7%

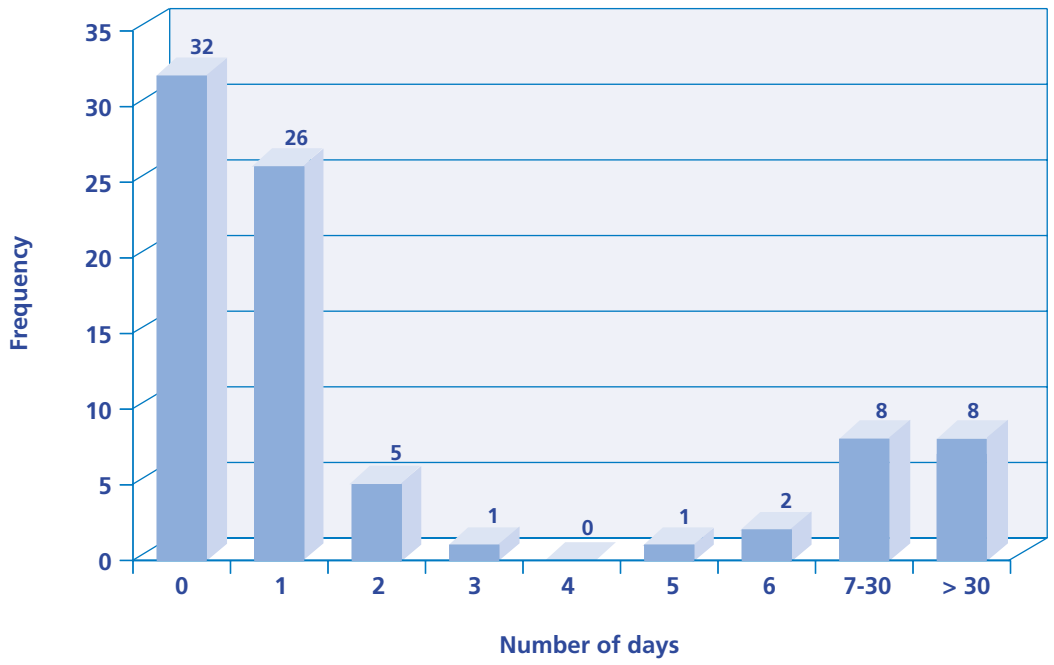
Homicide followed by suicide

We collected information on homicides followed by suicide before conviction. These were notified to us by the Homicide Index at the Home Office or by individual police forces, in which the date of homicide was from April 1996 to March 2000, and the death was notified to the suicide inquiry.

Timing of suicide

We were notified of 83 unconvicted homicide suspects who subsequently committed suicide. Sixty-four suspects committed suicide less than 3 days after the homicide; 19 three or more days later. Figure 68 shows the timing of the suicides after homicide.

Figure 68: Number of days between homicide and suicide (England and Wales)



Suspects

The social and demographic characteristics of the suspects and victims are shown in table 33. They were predominantly male with a median age of 41.

Victims

Sixty-one (74%) of the victims were female, with a median age of 34. Women were equally likely to have a male or female victim, whereas men were more likely to kill women. Fifty-three per cent of women killed a child compared to 14% of men. Sixty-seven per cent of men and 33% of women killed a spouse/partner. Women were more likely to have multiple victims.

Method of homicide
The method of homicide also differed between the sexes. Women mainly used poisoning (including car exhaust), while men tended to use more violent methods such as shooting, strangulation and stabbing.

Immediate compared to delayed suicide
A comparison between those committing suicide immediately and after 3 days is shown in table 34. The immediate group was more likely to have killed their child or spouse/partner. They were also more likely to have multiple victims.

Inquiry cases
Of the 83 cases of homicide followed by suicide in our sample, 6 (7%) had previous contact with psychiatric services. We received questionnaires on all of these Inquiry cases.

Social and clinical features
Four were male and 2 were female. The diagnoses of the Inquiry cases were anxiety disorder (2 cases) and one case each of depression, adjustment disorder, personality disorder and drug dependence.

Five had a secondary diagnosis, in three cases this was personality disorder. Three had a history of self-harm, 3 alcohol abuse and 1 drug misuse. Only one patient had a history of violence but had never been convicted of an offence.

Care arrangements
All six were community patients at the time of the homicide/suicide. Only one had previously been admitted to a psychiatric ward. Four were out of contact at the time of the homicide/suicide and two were non-compliant with their treatment.

Last contact
In two cases the last service contact had taken place within 7 days of the homicide/suicide. In the other 4 cases contact had taken place over 12 months before. None of the cases was considered to pose any risk of violence in the short-term. Three were considered to be at low risk of suicide in the short and long-term.

Offence
Three committed suicide on the same day as committing homicide; 2 died the following day and 1 died 6 days later. All of the suspects killed someone they knew. Three of the male perpetrators killed a woman and one killed a man, each killed only one victim. Each of the two female perpetrators had 2 victims. One killed her husband and son and the other killed her daughter and another person.

Methods of homicide and suicide

Four suspects used the same method to kill their victim as they used to kill themselves. In three cases the method used was carbon monoxide poisoning.

Table 33: Homicide followed by suicide (England & Wales)

	Number 83	%
Male suspect	72	87%
Age of suspect: median (range)	41 (18-81)	
Number of victims		
1	64	77%
2	13	16%
3	3	4%
4	3	4%
Male victim	22	27%
Age of victim: median (range)	34 (1-84)	
Relationship to suspect		
Son/daughter	17	20%
Spouse/partner	52	63%
Other family	5	9%
Acquaintance	5	6%

Table 34: Immediate and delayed suicide after homicide (England & Wales)

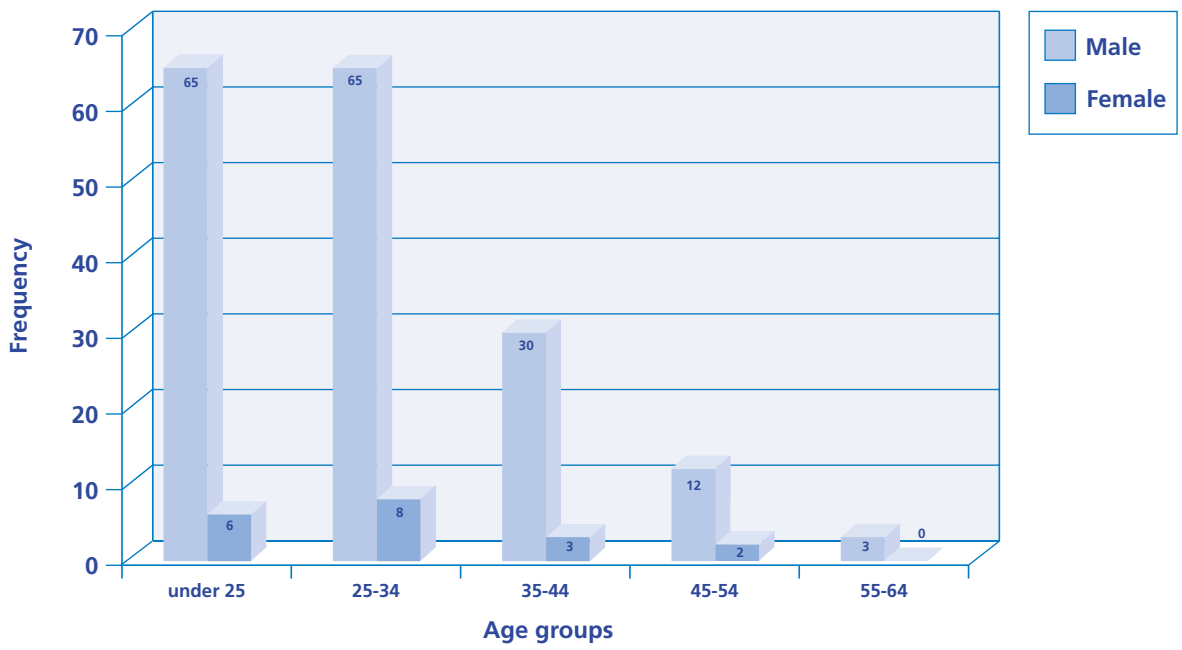
	Immediate Number **64**	%	Delayed Number **19**	%
Male suspect	56	88%	16	84%
Suspect age: median (range)	41 (18-81)		41 (18-81)	
Number of victims				
1	46	72%	18	95%
2	12	19%	1	5%
3	3	5%	0	0%
4	3	5%	0	0%
Male victim	15	23%	7	37%
Victim age: median (range)	34 (1-84)		34 (1-84)	
Relationship to suspect				
Son/daughter	15	19%	2	2%
Spouse/partner	44	54%	8	10%
Other family	3	4%	2	2%
Acquaintance	1	1%	6	7%
Method				
Sharp instrument	12	19%	5	28%
Blunt instrument	3	5%	3	17%
Strangulation	12	19%	3	17%
Exhaust fumes	7	11%	1	6%
Other poisoning	4	6%	2	11%
Shooting	13	20%	2	11%
Suffocation	4	6%	2	11%
Other	7	11%	0	0%

Scotland

All homicides

Over a 3-year period, the Inquiry was notified of 227 convictions for homicide which included 118 convictions for murder, 95 convictions for culpable homicide and 14 convictions in which the outcome was unspecified. Two hundred and seven (91%) of the perpetrators were male giving a male to female ratio of 10:1; in the under 25's the male to female ratio was highest at 11:1. Most were young, with a median age of 26 years (fig. 69).

Figure 69: Age and sex of perpetrators (Scotland – General population homicides)



Victims

Most victims were also young men. Four victims (2%) were aged under one, of whom three were killed by a male perpetrator (fig. 70). Around a fifth (21%) of perpetrators killed a family member or a current or former spouse/partner, half killed an acquaintance and about a quarter (28%) killed a stranger. When women were the perpetrators, the victim was a family member or their spouse/partner in around three-quarters of cases (fig. 71). When men were the perpetrators, the victim was a stranger in 31% and an acquaintance in 53% of cases. The commonest method of killing by both men and women was stabbing (fig. 72).

Figure 70: Age of victims by sex of perpetrators (Scotland – General population homicides)

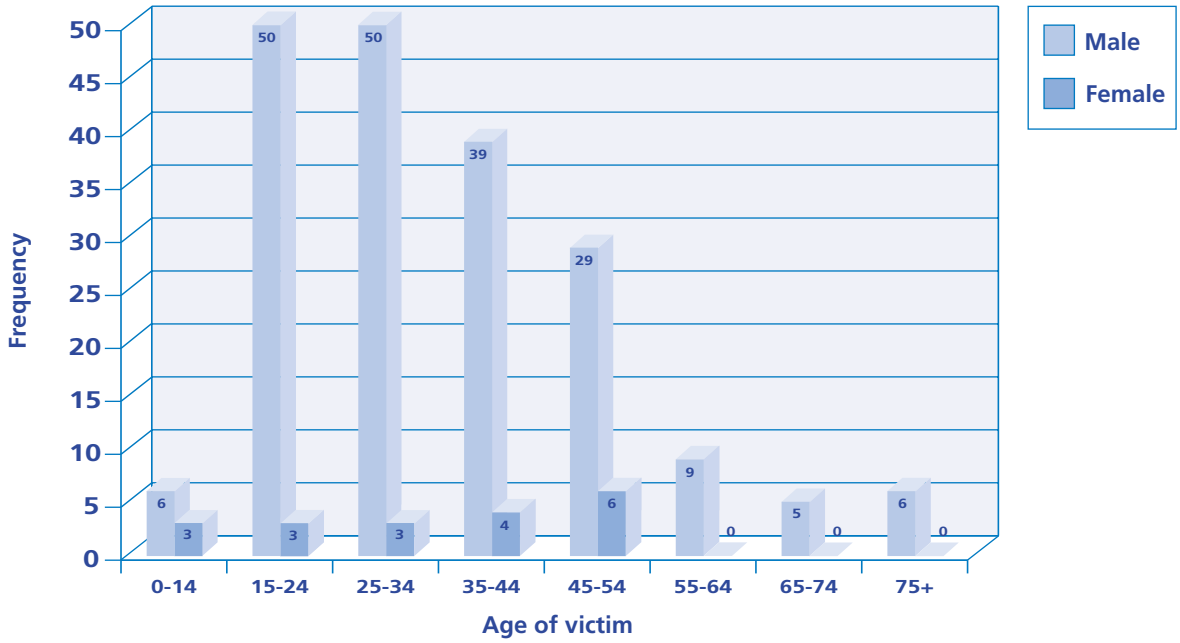


Figure 71: Relationship of victim to perpetrator by sex of perpetrator (Scotland – General population homicides)

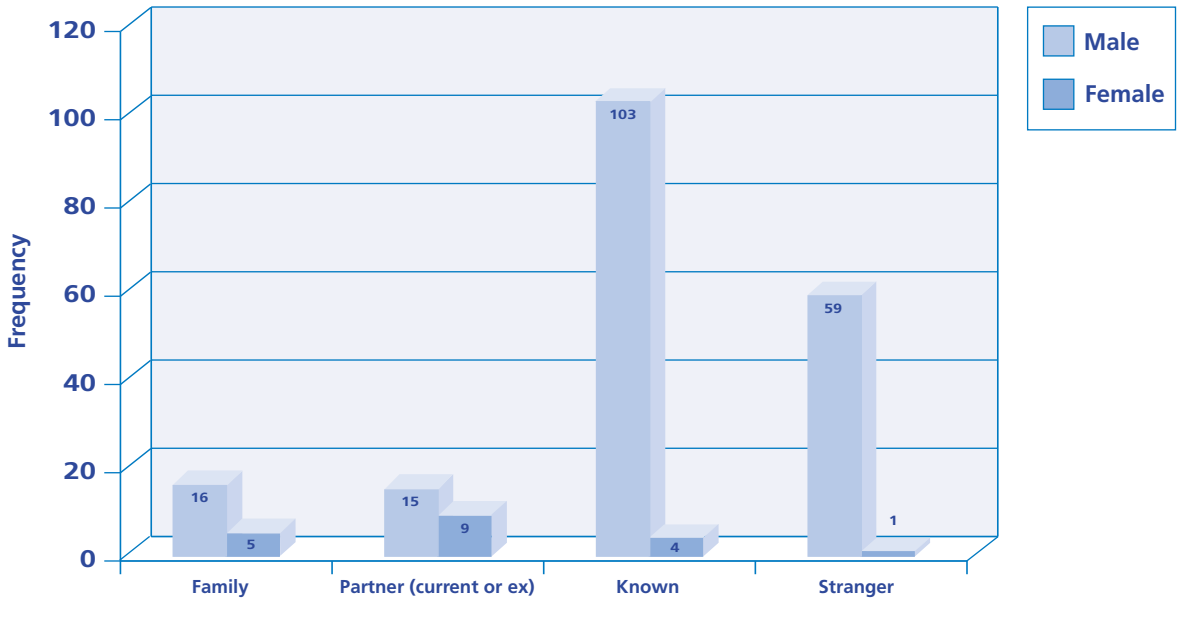
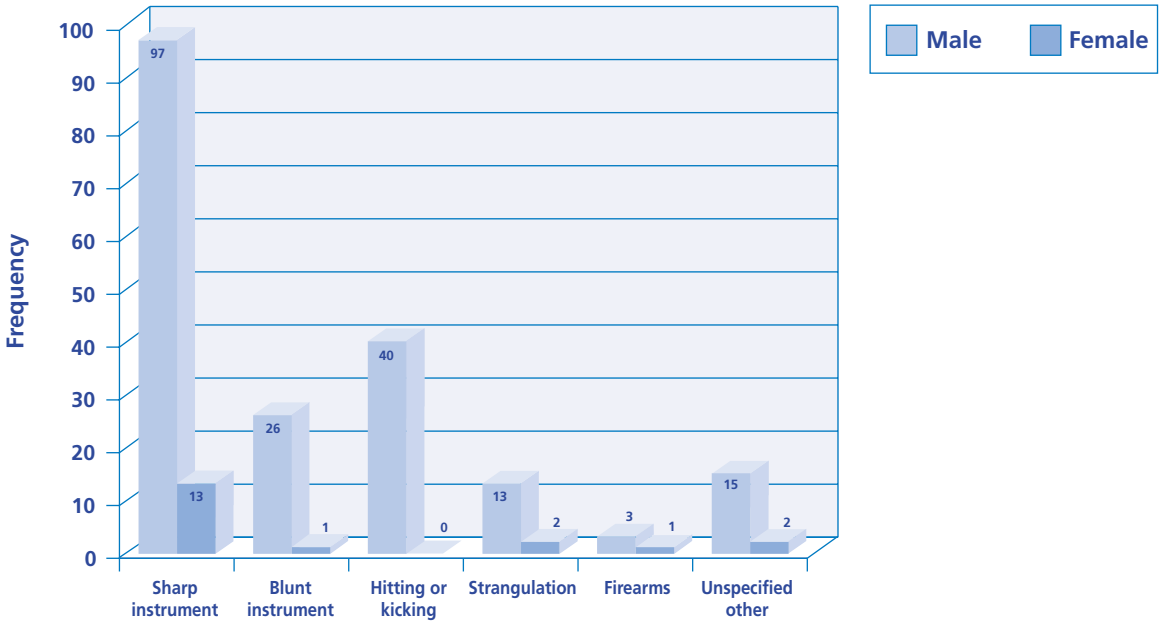


Figure 72: Method of homicide by sex of perpetrator
(Scotland – General population homicides)



Outcome in Court

Forty-five per cent of perpetrators were convicted of culpable homicide and 55% of murder. Women were convicted of culpable homicide in almost two thirds of cases (63%), men in 43% of cases. Of the 95 convicted of culpable homicide, 4% had a diagnosis of schizophrenia, 7% affective disorder and 6% personality disorder. Two thirds (64%) had no mental disorder identified by the report writer. A quarter (28%) had had previous contact with psychiatric services and only 7 (9%) were mentally ill at the time of the offence. In 80% of those convicted of culpable homicide, the perpetrator was imprisoned, including 22% sentenced to youth custody. In the remaining 19 cases, the disposal was to hospital in 8 cases and probation or community service order in 11 cases. Six per cent of perpetrators were committed to psychiatric hospital; this outcome was more common in women.

Previous Convictions

We obtained details of previous convictions (antecedents) in 193 cases (85%). Of these, 87 (45%) had a history of violence against the person, 1 (0.5%) of threats of violence, 19 (10%) of possession of offensive weapons, 4 (2%) of sexual offences and 17 (9%) of criminal damage. Previous convictions for violence against the person were more common in men (47% of men compared to 20% of women).

Psychiatric Reports

We obtained one or more reports prepared for the court by a psychiatrist in 196 cases, i.e. 86% of the total sample. Of the remaining 14%, 9% were at appeal and therefore the reports were inaccessible, and in 5% the report could not be located. Table 35 shows a comparison between those with and those without reports. Those without reports were more likely to be charged with murder and receive a prison disposal.

Table 35: Comparison of homicides with and without psychiatric reports (Scotland)

	With Report	%	Without Report	%	Total Sample	%
	Number 196	(95% CI)	Number 31	(95% CI)	Number 227	(95% CI)
Age of perpetrator: median (range)	26 (14-59)		26 (14-60)		26 (14-60)	
Male perpetrator	178	91% (87-95)	29	94% (85-100)	207	91% (88-95)
Age of victim: median (range)	33 (0-86)		40 (15-72)		33 (0-86)	
Male victim	149	81% (75-87)	25	86% (74-99)	174	82% (76-87)
Victim was stranger	52	28% (22-35)	8	28% (11-44)	60	28% (22-34)
Sharp instrument used	92	50% (43-57)	18	62% (44-80)	110	52% (45-58)
Final outcome						
Murder	99	54% (47-61)	19	66% (48-83)	118	55% (49-62)
Culpable homicide	85	46% (39-53)	10	34% (17-52)	95	45% (49-62)
Disposal						
Prison	162	88% (84-93)	28	97% (90-100)	190	89% (85-93)
Hospital	12	7% (3-10)	0	0%	12	6% (3-9)
Other	10	5% (2-9)	1	3% (0-10)	11	5% (2-8)

Social and Clinical Characteristics

The main social and clinical characteristics, taken from the report group as a whole, are shown in table 36.

Most were unmarried (69%), and unemployed or long-term sick (72%). Forty-two per cent had a history of alcohol misuse, but in a larger proportion alcohol was thought to play a role in the offence. A similar number had a history of drug misuse but unlike alcohol, drugs were less likely to play a part in the offence. Cannabis (23%), heroin and other opiates (9%), benzodiazepines (7%) and amphetamines (7%) were the commonest drugs taken regularly in the year prior to the homicide.

Women perpetrators were more likely to have symptoms of mental illness at the time of the offence, more likely to have been in contact with services in the last year and more likely to have a diagnosis of affective disorder.

Table 36: Social and clinical characteristics of homicides with reports (Scotland)

	Male Number 78	(95% CI)	Female Number 18	(95% CI)	Total Number 196	(95% CI)
Demographic features						
Age of perpetrator: median (range)	26 (14-59)		32 (16-50)		26 (14-59)	
Not currently married	126	72% (65-78)	8	47% (23-71)	134	69% (63-76)
Unemployed/long-term sick	128	72% (66-79)	10	63% (39-86)	138	72% (63-76)
Living alone	26	16% (10-21)	1	6% (0-17)	27	15% (10-20)
Homeless	6	4% (0-6)	0	0%	6	3% (0-6)
Clinical features						
Primary diagnosis (lifetime)						
Schizophrenia & other delusional	5	3% (0-6)	0	0%	5	3% (0-5)
Affective disorder (bipolar & dep.)	5	3% (0-6)	6	35% (13-58)	11	6% (2-9)
Alcohol dependence	23	14% (8-19)	0	0%	23	13% (7-17)
Drug dependence	14	8% (4-12)	0	0%	14	7% (3-10)
Personality disorder	11	6% (3-10)	0	0%	11	6% (2-9)
Other	7	4% (1-7)	0	0%	7	4% (1-6)
Mental disorders in total	65	38% (31-45)	6	35% (13-58)	71	39% (30-45)
Symptoms of mental illness at time of homicide	5	3% (0-5)	5	29% (8-51)	10	5% (2-9)
Behavioural features						
History of alcohol misuse	66	42% (34-50)	7	44% (19-68)	73	2% (35-50)
Alcohol thought to have contributed to offence	82	54% (46-61)	10	63% (39-86)	92	54% (47-62)
History of drug misuse	69	45% (37-52)	4	24% (3-44)	73	42% (35-50)
Drugs thought to have contributed to offence	27	17% (11-23)	4	22% (3-41)	31	18% (12-23)
Contact with services						
Any contact (lifetime)	48	27% (20-33)	9	50% (27-73)	57	29% (23-35)
Contact in last year	28	16% (11-21)	6	33% (12-55)	34	18% (12-23)

Rates of mental disorder

There are several ways of estimating the rate of mental disorder in people convicted of homicide (table 37) based on:

- Lifetime diagnosis of mental disorder
- Mental illness at the time of the offence
- Commitment to psychiatric hospital
- Contact with mental health services

Table 37: Rates of mental disorder in people convicted of homicide (Scotland)

	Total % of all homicides Number (95% CI) 227		% of homicides with psychiatric report Number (95% CI) 196	
Abnormal mental state at time of offence	10	5% (2-9)	10	5% (2-9)
Mental disorder (lifetime)	82	36% (30-42)	82	39% (32-46)
Schizophrenia (lifetime)	5	2% (0-4)	5	3% (0-5)
Hospital Order	12	6% (3-9)		
Contact with mental health services (lifetime)	63	28% (22-34)		
Contact with mental health services within 12 months of the offence	38	17% (12-22)		

Lifetime diagnosis of mental disorder

In 82 cases (36% of the total homicide sample), a diagnosis of mental disorder was specified by services or report writers, based on life histories. The majority had alcohol or drug dependence or personality disorder, rather than schizophrenia or affective disorder. Those with a lifetime history, 43% were under the care of mental health services in the 12 months prior to the offence. The characteristics of those in contact with services are described later.

Mental illness at the time of offence

Ten perpetrators (5%) had symptoms of mental illness at the time of the offence (referred to as the mentally ill group). The social characteristics of the mentally ill group were similar to those without symptoms. Their methods of homicide and relationship to victims were similar. The mentally ill group had a lower rate of previous convictions for violence against the person but the same rate of alcohol and drug misuse.

Among the mentally ill group, there were 2 perpetrators with a lifetime diagnosis of schizophrenia and 6 perpetrators with a lifetime diagnosis of affective disorder. Seven of the mentally ill group had been in contact with mental health services, six in the previous year. Four had delusions,

hallucinations or both at the time of the offence, indicating psychotic illness; symptoms of depressive illness were present in 6 cases. In 4 cases, the mental state abnormalities were thought to play a major part in the offence and in 4 they were thought to play a minor part.

Commitment to psychiatric hospital
Of the 12 perpetrators who received a hospital disposal, virtually all (92%) had a lifetime history of mental disorder and 50% were in contact with psychiatric services in the 12 months prior to the offence.

The primary diagnosis in those receiving a hospital disposal was schizophrenia in 5, affective disorder in 2 and personality disorder in 2. Half of the perpetrators receiving a hospital disposal were mentally ill at the time of the offence.

Contact with mental health services (Inquiry cases)
Sixty-five perpetrators, i.e. 29%, were known to have been in contact with mental health services at some time. In 38 cases (17%) this contact was in the 12 months prior to the offence.

We received completed questionnaires on 63 cases, a response rate of 97%, and the findings presented below and in table 38 are based on these cases. These are referred to as Inquiry cases. We also examined separately the questionnaires returned on the 38 cases in whom contact with mental health services occurred less than 12 months before the homicide. In general the findings were similar whether we analysed all Inquiry cases or the 38 with recent contact only. In most of the Inquiry cases, the responsible service was a general psychiatry service rather than a specialist service.

Social and clinical characteristics
The social and clinical characteristics of the Inquiry cases, including those with recent (within 12 months of offence) contact, are shown in table 38.

Social features As with homicides in the general population, most perpetrators were male, single and unemployed. Three were homeless.

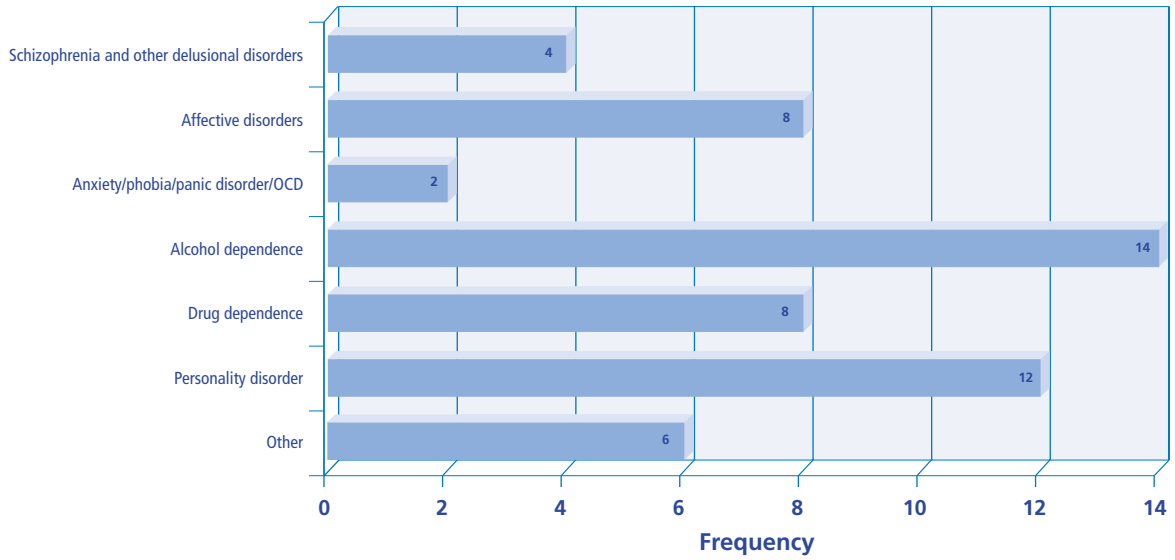
Table 38: People convicted of homicide who had been in contact with the mental health services at any time and in the 12 months prior to the offence (Scotland)

	Any contact Number 63	% (95%CI)	Recent contact Number 38	% (95%CI)
Demographic features				
Age: median (range)	31 (15-53)		31 (16-51)	
Male	54	86% (77-94)	32	84% (73-96)
Ethnic minority	2	3% (0-8)	2	5% (0-12)
Not currently married	38	76% (64-88)	24	73% (58-88)
Unemployed/long-term sick	39	78% (67-89)	27	84% (72-97)
Living alone	15	32% (19-45)	11	36% (19-52)
Priority groups				
In-patients	0	0%	0	0%
Post-discharge patients	4	7% (0-13)	4	11% (0-21)
CPA	0	0%	0	0%
Missed contact	21	34% (22-46)	13	35% (20-51)
Non-compliance	4	9% (0-17)	4	13% (1-25)
Clinical features				
Primary diagnosis				
Schizophrenia & other delusional	4	7% (0-14)	3	9% (0-18)
Affective disorder (bipolar & dep.)	8	15% (5-24)	6	18% (5-30)
Alcohol dependence	14	26% (14-38)	8	24% (9-38)
Drug dependence	8	15% (5-24)	5	15% (3-27)
Personality disorder	12	22% (11-33)	8	24% (9-38)
Any secondary diagnosis	28	45% (38-58)	20	53% (37-69)
Duration of history (under 12 months)	6	11% (3-19)	6	17% (4-29)
Over 5 previous admissions	4	7% (0-13)	4	11% (0-20)
Last admission was a re-admission	4	17% (2-33)	4	25% (4-46)
Behavioural features				
History of self-harm	28	49% (36-62)	18	49% (36-65)
History of alcohol misuse	45	75% (64-86)	28	74% (60-88)
History of drug misuse	43	74% (63-85)	28	76% (62-90)
Contact with services				
Last contact within 7 days of death	6	10% (2-17)	6	16% (4-28)
Symptoms at last contact	35	58% (46-71)	20	57% (41-74)
Requested contact but not taken place	3	6% (0-12)	3	9% (0-19)
Estimate of immediate risk: low or none	38	91% (82-99)	24	89% (77-100)
Estimate of long-term risk: low or none	12	75% (54-96)	9	75% (50-100)
Homicide thought to be preventable	2	5% (0-13)	0	0%

Clinical features The most common diagnosis was alcohol dependence (fig. 73), and only a minority had severe mental illness by most definitions. Forty-five per cent also had at least one secondary diagnosis (fig. 74), the most common being personality disorder, alcohol dependence and drug dependence.

In 11% the onset of mental disorder had been in the previous year. In 68% it had been more than five years earlier, reflecting the long-term nature of the main primary diagnoses. Despite this, 60% had never been admitted to hospital.

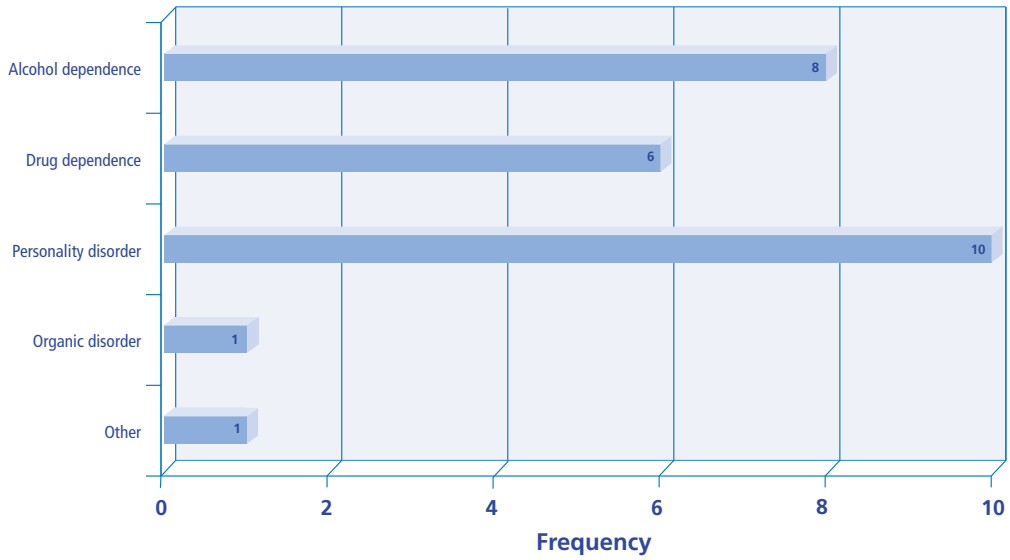
Figure 73: Primary diagnosis (Scotland Homicide Inquiry cases)



There were high rates of alcohol and drug misuse, and 58% of the sample were known to be misusing both alcohol and drugs. Forty-nine per cent had a history of deliberate self-harm.

The group with recent contact appeared to have more severe illness. A higher percentage of patients in this group had schizophrenia and there was a smaller proportion with personality disorder. The recent contact group had more previous admissions. Most of those admitted under the Mental Health Act (6 out of 8) were in this group.

Figure 74: Secondary diagnoses (Scotland Homicide Inquiry cases)



History of violence Twenty-one Inquiry cases (36%) had a history of violence towards another person that was documented in the case notes. Nineteen of the 21 were known to have previous convictions for violence against the person. There were a further 10 cases in which there were convictions for violence, but no documentation of this in the notes. In total, therefore, 31 (49%) had a history of violence against the person that had led to conviction or had been documented in the case notes. In the group with recent contact, the pattern was the same, 18 (47%) having either a history of violence towards another person documented in their case notes or a previous conviction.

Care arrangements All of the Inquiry cases were community patients at the time of the homicide. Three patients were attending day hospital.

Last admission Twenty-six cases had been admitted to hospital at some time. In four cases this was a re-admission within three months of a previous discharge. In 7 cases the last admission had been under the Mental Health Act. In 11 cases the final admission lasted less than 7 days. In 13 cases, the discharge was patient-initiated, i.e. against medical advice or the result of the patient's behaviour on the ward. In 4 cases the discharge occurred within three months of the homicide. The pattern of care around the final admission in the group with recent contact was similar to that of all Inquiry cases.

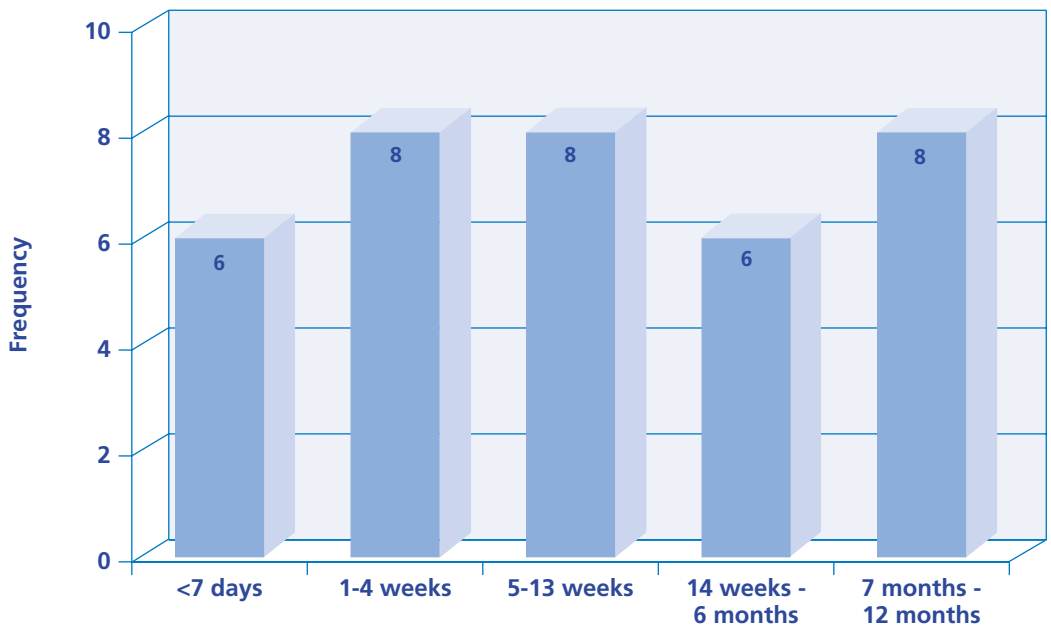
Loss of contact with services Forty-four patients (77%) were out of contact with services at the time of the homicide. Nearly half (19 cases, 49%) of these were out of contact following self-discharge or discharge as a result of patient's actions. In 15 cases further action was taken after loss of contact including sending a further appointment (61%) and informing the police/social services about the loss of contact (6%) but in only 2 cases was this action a home visit. Although the recent contact group were more likely to be still in contact at the time of the homicide, just over two thirds were out of contact, usually following patient-initiated discharge. Around a third missed their final contact with services in the community. In this group, services had made a recent assertive attempt to re-engage the patient in 22% of cases.

Treatments and compliance Most patients (64%) were receiving some form of pharmacotherapy, but only 8 (16%) were regarded as receiving any form of psychological intervention, including psychological support. Thirteen per cent of the recent contact group were non-compliant with drug treatment in the month before the offence.

Last contact

In 22 (60%) of the recent contact cases, the last contact occurred less than thirteen weeks before the homicide and in 6 cases this was within one week (fig. 75). In 5 cases this was a non-routine contact. In 19 cases it took place face-to-face, most often with a junior psychiatrist, community psychiatric nurse, consultant or ward nurse. Assessment at final contact revealed abnormalities of mental state or recent behaviour in 9 cases.

Figure 75: Timing of last contact with mental health services (excluding cases with contact more than 12 months earlier) (Scotland Homicide Inquiry cases)



Immediate risk of violence was thought to be low or absent in 89%. Respondents reported using a range of risk factors to assess risk including demographic and clinical factors, history of violence, current mental state and threats of violence. The most important group of factors was thought to be current mental state. At final service contact only 3 patients were estimated to be at moderate risk of committing a violent act. Sixty-eight per cent of the professionals involved in the last contact had received training in risk assessment.

Preventability

In only 2 (5%) of the cases did the respondent believe that the homicide could have been prevented. However, most were able to identify factors that would have made the homicide less likely. The factor most frequently mentioned was better patient compliance.

Offence details

Of those with any lifetime contact with mental health services, 8 (14%) received a hospital disposal. Of the 38 perpetrators in contact in the last year, 6 (19%) were mentally ill at the time of offence and 6 (17%) received a hospital disposal.

Northern Ireland

All homicides

Over a 3-year period, the Inquiry was notified of 47 convictions for homicide including 23 convictions for murder, 22 convictions for manslaughter and 2 convictions in which the outcome was unspecified. There were also an unascertainable number of terrorist killings, but information about these was not made available to the Inquiry. Forty-five (96%) of the perpetrators were male and only 2 (4%) were female, giving a male to female ratio of 23:1. The age range was 18-59, and the median age was 26, (fig. 76).

Victims

Most victims were also young men. Nine (35%) of the perpetrators killed a family member or a current or former spouse/partner, 16 (62%) killed an acquaintance and 1 killed a stranger. Data were unavailable on the remainder of the sample. The commonest method of killing was stabbing (44%), (fig. 77).

Outcome in Court

Just over half (51%) of the perpetrators were convicted of murder and 22 perpetrators (49%) received a verdict of manslaughter. Thirty-four (94%) perpetrators were sent to prison and two (6%) were given a probation order.

Previous Convictions

We obtained details of previous convictions (antecedents) in 46 cases (98%). Of these, 24 (53%) had a history of violence against the person, 1 (2%) of threats of violence, 11 (24%) of possession of offensive weapons, 2 (4%) of sexual offences, and 13 (30%) of criminal damage. Neither of the women had any previous convictions for violence against the person.

Psychiatric Reports

We obtained one or more reports prepared for the court by a psychiatrist or other source in 19 cases, i.e. on 40% of the total sample. None of the 19 cases were psychotic at the time of the offence. A further 10 reports were prepared by psychiatrists for the defence but were not in court records. Attempts to obtain these reports from the defendants solicitors were not successful. As far as we are aware, no other cases in the sample had psychiatric reports prepared for the court.

Contact with mental health services (Inquiry cases)

Five perpetrators, i.e. 11% were known to have been in contact with mental health services at some time. In 3 cases (60%) this contact was in the 12 months prior to the offence. We received completed questionnaires in all cases. None had a diagnosis of severe mental illness and none were psychotic at the time of the offence. At this stage this sample is too small for further analysis.

Figure 76: Age and sex of perpetrators (Northern Ireland – General population homicides)

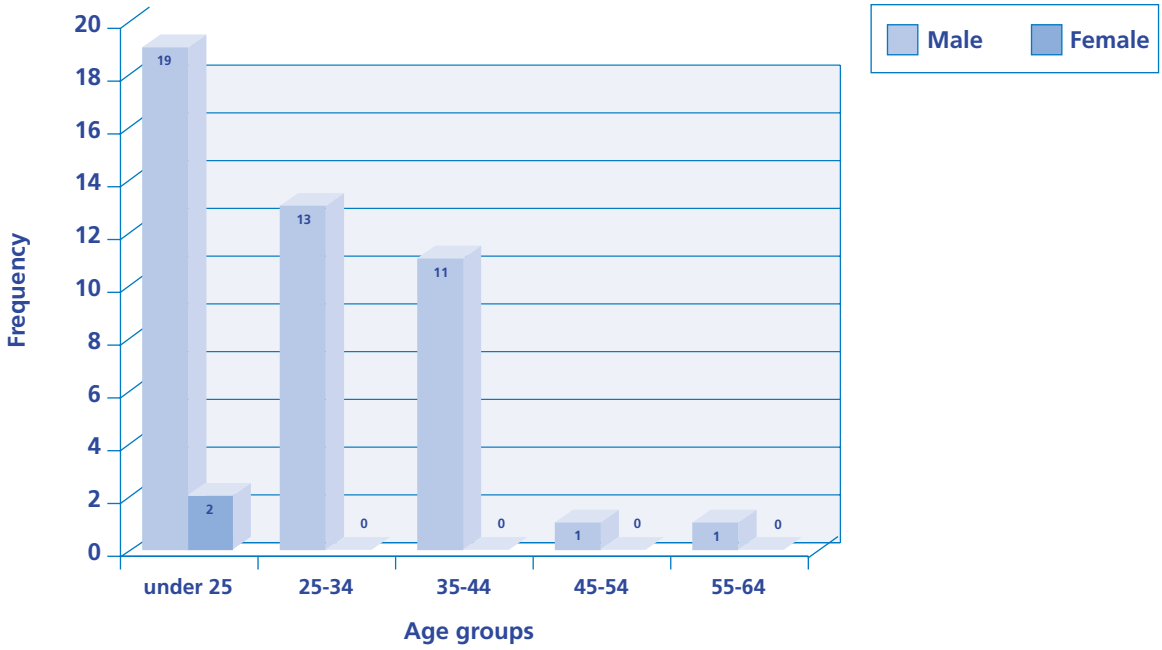
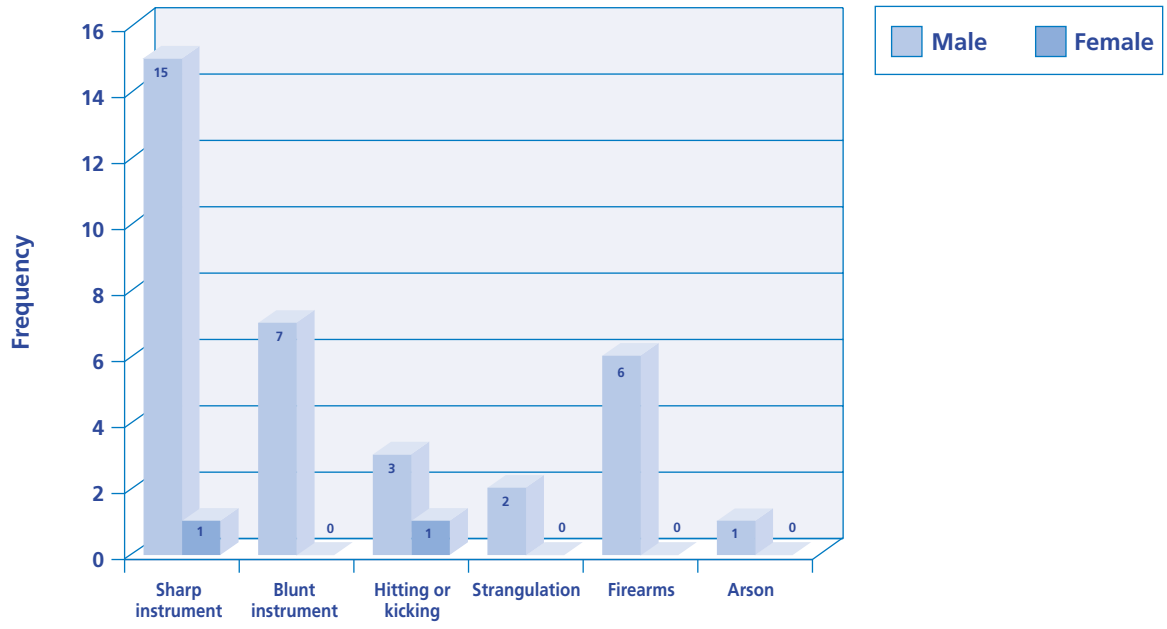


Figure 77: Method of homicide by sex of perpetrator
(Northern Ireland – General population homicides)



Conclusions: Safety First

In 1996 the National Confidential Inquiry set out to collect a comprehensive sample of suicides and homicides by people who had been in contact with mental health services in the year before the suicide or homicide (for homicides we have also collected data on those with earlier contacts, though these are likely to be less comprehensive). Our first objective was to estimate the number and proportion of general population suicides and homicides by people who had recently been under mental health care.

In addition to these overall figures we aimed to estimate the number and proportion of suicides (and homicides, where numbers allowed) in five clinical groups – in-patients, those recently discharged from hospital, those who were receiving care under the more intensive provision of the Care Programme Approach, and those who were non-compliant with drug treatment or who were losing contact with services prior to the incident – and two population sub-groups – ethnic minorities and homeless people. In *Safer Services* we reported initial findings on these groups, identified problem areas in clinical services and made general recommendations.

The findings in this report that come from England and Wales are based on periods of data collection twice as long as in *Safer Services*, four years for suicides and three years for homicides. We are also able to report data from Scotland and Northern Ireland for the first time. When findings from one country are confirmed in another, they can be viewed as more robust. When they differ, they highlight areas for more detailed comparative studies.

In this section we consider the findings in relation to the above objectives. We also hope that the findings in this report can be used as a resource for reference and research.

Rate of contact with services

Our findings show that around a quarter of suicides in the general population are committed by people who have recently been in contact with mental health services. In England and Wales the figure of 24% has been consistent throughout the period of data collection and in Scotland our estimate is 23%. In Northern Ireland the figure is 28%. However, there is a considerable amount of variation between local services. It should be emphasised that a high rate of contact does not mean an unsafe service – it could mean that the service is effective in making or maintaining contact with people at risk.

These figures translate into annual figures of around 1,250 suicides in England and Wales, 200 in Scotland and 45 in Northern Ireland. England has set a suicide prevention target of a 20% reduction from 1997 to 2010. Clearly, this cannot be achieved by mental health services alone, and a broader suicide prevention strategy is now needed. Suicide prevention has been a National Health Service priority since 1992 but no comprehensive strategy has been drawn up. In Scotland, where the general population suicide rate is much

higher, almost twice as high as in England, the Scottish Executive Health Department is preparing a Framework for Suicide Prevention.

The rate of contact with services among people convicted of homicide is much lower. In England and Wales 9% of perpetrators had been in contact in the previous 12 months and in 18% we were able to confirm service contact at some time. In Scotland, 18% of perpetrators had been in contact with services within a year of the offence and in 29%, service contact had occurred at some time. In Northern Ireland, 11% of perpetrators had had lifetime contact with mental health services. The figures for contact within 12 months translate into an annual total of 44 homicides in England and Wales, 9 in Scotland and 2 in Northern Ireland.

The suicide and homicide Inquiry samples were clinically different. The suicide cases were primarily people with severe mental illness – schizophrenia and, in particular, affective disorder. In the homicide cases, less than half had one of these diagnoses – most were suffering from personality disorder or dependence on alcohol or drugs. This is important to mental health services because most clinicians regard people with these conditions as more difficult to treat and would not expect to control their behaviour. Overall, therefore, the potential impact of services is greater for suicide than for homicide. Even so, there is in our findings evidence for possible prevention in both.

In-patients

The data show that in England and Wales there are over 180 suicides per year by people who are psychiatric in-patients. This is 4% of suicides in the general population and 16% of suicides among recent or current patients. In Scotland and Northern Ireland in-patient suicides form a smaller proportion of patient suicides and there are small differences in their general characteristics (see tables 8 and 15).

In-patient suicides can be divided into those that happen on and off the ward. Patients who commit suicide off the ward after absconding are more similar to those who commit suicide on the ward than they are to those who are off the ward after being given permission to leave. Most suicides on the ward occur by hanging and we believe that removing the means of hanging is the most important step towards prevention that services can take in this group. Two actions are required, directed at ligatures and at ligature points.

The Inquiry will continue to collect information on ligature points. The most frequently used – curtain rails around beds – are now being tackled as a national initiative in England (see below for update on previous Inquiry recommendations) and in 1998 a Safety Action Notice was issued on behalf of the NHS in Scotland referring to suicide risk from ligature points. However, there is still a need for all local services to review the safety of their wards.

Potential ligature points include coat-hooks, water pipes and window frames and these should be replaced or covered.

However, figures on hanging include a number of cases of self-strangulation and in these the ligature point can be virtually any fixed or heavy structure, suggesting the need to remove ligatures as well. Ligatures are often personal objects such as belts or shoelaces. It is obviously a delicate matter to remove someone's possessions and, if this is to be done, it should normally be with the consent of patients and their full understanding. However, clinical teams should be able to discuss sensitively with patients the need to agree such measures in the interests of their safety. We therefore believe that in-patient units should consult local service user representatives on how this should be carried out. Protocols should be agreed, by which high risk patients should be asked to wear (and, if necessary, be given) shoes that do not have laces and clothes that do not need belts. The outcome of discussion with patients about safety measures should be clearly recorded. The protocols should apply to anyone who is detained under the Mental Health Act or placed under non-routine observation because of suicide risk. Any actions should be within the terms of the Human Rights Act 2000.

There is in any case a problem with the way that non-routine observations are carried out if observed patients are able to abscond or commit suicide while on the ward. Intermittent observations, in particular, are of unproven benefit even when they are carried out properly but it seems likely that on many busy wards observations that are intended to take place every 15 minutes or so actually take place less often. In a few suicides under observation, patients have been allowed to leave the ward and have then committed suicide. Our findings highlight the need for new approaches to in-patient observation to replace the current practice of intermittent observation in which, for example, areas of the ward are under constant observation or the ward exit is continuously observed. Some patients who at the moment are placed under intermittent observation should be under continuous one-to-one observation.

However, most suicides off the ward have left the ward with staff agreement. Three clinical measures could contribute to reducing these deaths. Firstly, better assessment of risk, taking into account that apparent recovery on a ward may be reversed when a person returns home, particularly if they live alone. Secondly, greater caution in allowing leave soon after admission. Thirdly, better monitoring in the community during periods of leave.

There is a general need for mental health teams to review suicides under their care but this is particularly important in in-patient suicides – these are seen by staff as the most preventable.

Post-discharge patients

Around a quarter of the suicide sample in each country are patients who have left hospital in the previous three months. The figures are slightly higher in Northern Ireland than in Scotland or England and Wales. When these are combined, just under 40% of patient suicides in each country occur during or soon after hospital admission.

Suicides following planned discharge are similar to suicides by in-patients on agreed leave and similar preventive measures could be taken. Staff who are assessing risk should take into account the risk the person will face after discharge, when recent improvement in mental state may quickly be reversed. Caution is needed in discharging people too soon – post-discharge suicides are linked to short admissions.

A large proportion of post-discharge suicides, particularly in Northern Ireland, occur before first follow-up has occurred and we believe that early follow-up is the most important step in prevention in this group. Close integration of hospital and community services is needed and any organisational change that separates them could be dangerous. In this report we are modifying our previous recommendation to focus on follow-up within one week for people who have severe mental illness (schizophrenia or major affective disorder) or a recent history of self-harm. By "recent", we mean within the current episode of illness, or around three months. For some patients, e.g, those recently detained, follow-up should take place before one week.

Care Programme Approach

Our findings show that the provisions of the CPA are in place in most suicides in the community in England and Wales. A related (though different) system of case management has been developed in Scotland but not in Northern Ireland. The comments below therefore refer primarily to England and Wales.

Is it better to have more or fewer suicides in patients who are being treated under the higher levels of the CPA? The answer is neither, but there are two sources of concern in the findings. Firstly, there are people who commit suicide who are under the CPA but not receiving the kind of care that it should guarantee. Secondly, there are those who are not under the CPA but who self-evidently should be. In the first group are CPA patients who drift out of the service or become non-compliant without a determined response from staff to re-establish contact and treatment. In the second group are people with severe mental illness who have already harmed themselves or someone else.

In homicide cases, it is clear that there are people who should be subject to the most intensive follow-up – e.g. with a history of severe mental illness and violence – but who are not under the higher levels of CPA monitoring. A number of homicide perpetrators who are under the CPA do not have clear arrangements for review.

One way of ensuring that the provisions of the CPA are put in place is for local services to monitor their own activities. This should be a priority for clinical governance, and therefore monitored by the Commission for Health Improvement.

Recently, there have been moves to sharpen the focus of the CPA and to audit its use, and these should continue. However, what the CPA conspicuously lacks, is a universal set of specific guidelines to ensure that it reaches those who need it most. In a service that places safety first, this group should include people with severe mental illness who have a history of recent self-harm or violence. It should include most people with schizophrenia, including those who are in the early stages of illness. It should include people with severe mental illness who have pressing social needs, such as the lone carers of children, and homeless people who have been in-patients.

Non-compliance and loss of contact

Non-compliance with medication and missed service contacts remain common prior to suicide and homicide. Loss of contact with services is a particularly common antecedent of homicide. It would be unrealistic to expect services to respond assertively to every person under their care who refused treatment or did not attend an appointment. However, our findings show a number of cases in which, despite severe illness and previous evidence of risk, services relied on letters rather than direct contact to re-establish care, or did not attempt to re-establish compliance by face-to-face interview.

We found 126 suicides and 8 homicides which combined severe mental illness, non-compliance or missed contact, and detention under the Mental Health Act in the last admission (England and Wales). These are the cases that are potentially preventable by compulsory treatment in the community; the figures correspond to aaround 32 suicides and 3 homicides per year.

Which suicides and homicides should be prevented?

Although in examining individual cases retrospectively it is usually easy to identify actions that could have made a suicide or homicide less likely, the realities of clinical practice make this more difficult. Clinical teams are caring for a large number of people at risk and it is difficult to predict individual incidents. Our findings on estimation of risk at final contact (1-2% thought to be at high risk) could be taken to suggest that once high risk has been identified, prevention usually takes place.

Clinicians are therefore sceptical about prevention and in only a minority of our cases did respondents believe the suicide or homicide could have been prevented – the figures are particularly low in Scotland and Northern Ireland. Even so, they were able to specify an action that would have reduced risk in the majority of cases. Sometimes clinicians feel they can merely delay the inevitable in high risk patients but delay is worth achieving – in any case, prolonged delay ultimately becomes prevention.

Inquiry recommendations are intended to achieve three kinds of change in service activity:

- General improvements in care that should improve safety
- Increased focus on the patient groups and treatment settings in whom most suicides/homicides occur
- Specific actions targeting particular features of suicides/homicides

The findings on the priority groups show who should be the focus of preventive activity, based on clear evidence of risk (recent acute admission, detention under the Mental Health Act, recent self-harm, severe mental illness), close proximity to services (current or recent in-patient) and service omission in the use of the CPA. We can therefore calculate the size of a group in whom there were apparent lapses in services in the four-year England and Wales sample.

Among in-patients:

- patients who committed suicide while under non-routine observation (156 cases)
- patients detained under the Mental Health Act who committed suicide within 7 days of admission (25 cases)
- high-risk informal patients who committed suicide within 7 days of admission – high risk here means severe mental illness **or** recent (within 3 months) self-harm (155 cases)
- high-risk patients who were living alone and committed suicide later in their admission after being given home leave (76 cases)

In total, because these groups overlap, 333 cases, 44% of in-patient suicides.

Among the post-discharge patients:

- patients detained under the Mental Health Act in their last admission who committed suicide before their first community follow-up (56 cases)
- high-risk informal patients who committed suicide before their first community follow-up (250 cases)

In total, allowing for overlap, 306 cases, 28% of post-discharge suicides.

Among community patients (excluding the post-discharge cases):

- "CPA patients" (i.e. subject to multidisciplinary review) who were non-compliant in the month before suicide, with no assertive (face-to-face) attempt by services to encourage compliance (84 cases)

- CPA patients who missed an appointment, with no assertive (e.g. home visit) response by services (107 cases)

- Non-CPA patients who were detained under the Mental Health Act in their last admission, who were non-compliant or missed an appointment, with no assertive response by services (12 cases)

- Non-CPA high-risk patients (this time, in the absence of recent admission, a more restrictive definition of high risk – both severe mental illness **and** recent self-harm) who were non-compliant or missed an appointment, with no assertive response by services (20 cases)

In total, allowing for overlap, 210 cases, 7% of community suicides.

Putting all three groups together gives 849 cases, 212 per year, 17% of all patient suicides. The equivalent total for community homicides in England and Wales, is 13 cases, 4 per year, 9% of all homicides by people who have been in contact with services in the previous year.

The calculation of this "preventable fraction" is necessarily crude. General improvements in the safety of services could lead to the prevention of more cases. But they are the most obviously preventable group and can be seen as the prevention priority. The proportion of suicides and homicides that were said by clinicians to be preventable were similar to these figures.

Ethnic minorities

Our findings suggest that suicides among ethnic minority patients are more often preceded by non-compliance or missed contact. They add to the evidence that services need to develop ways of working with young black men in particular, especially those with severe mental illness and who face social problems such as unemployment. Good links with voluntary sector organisations for black men, routine collection of patient/service user views as part of clinical governance, staff training in cultural competence and recruitment of staff from ethnic minorities should contribute to this.

Homelessness

Almost half of the suicides among homeless people are in in-patients. The likely explanation for this is that homeless people are not in contact with community services and so are more severely ill and at risk when admitted. Another quarter of homeless suicides have recently left hospital. The findings

emphasise the need for admitted patients who are homeless to be given priority under the CPA and for the work of assertive outreach teams.

Dual diagnosis

The findings on both suicide and homicide highlight alcohol and drug misuse in high-risk patients. The combination of mental illness and substance misuse is probably the greatest clinical problem facing general adult mental health services. A co-ordinated approach to training, service planning and research is needed to improve the ability of the general service to address this problem.

Training

In *Safer Services* we recommended training in risk management every three years for frontline staff. Specific findings from this report should be included in training, covering in particular:

- The need to assess risk using longstanding clinical and social risk factors as well as current mental state. Suicidal or violent ideas and hopelessness are important predictors of risk but in our samples they are usually absent

- The recognition of "proxy indicators" of risk in the absence of clear evidence of relapse, particularly in young people

- Our findings show that services viewed suicides more often as at moderate or high long-term rather than short-term risk. "Long-term risk", however, may always suggest a point in the distant future, reassuring services about the immediate dangers; in fact, it often means that risk is constant

- The need, especially amongst in-patients, to recognise that risk will vary according to setting. A patient who seems well prior to home leave or discharge may deteriorate quickly at home, perhaps especially if he/she is living alone or unsupported

Homicide – sentence and disposal

One surprising finding is the limited overlap between the different clinical and legal definitions of mental disorder: symptoms of mental illness at time of offence, recent contact with mental health services, verdict of manslaughter on grounds of diminished responsibility and hospital "disposal". In particular it is clear that some people with a clear history of severe mental illness, including schizophrenia, are sent to prison after being found guilty of homicide, even when the verdict has recognised their diminished responsibility for the offence. Prison mental health services are undergoing a period of reform but until they can provide comprehensive and high quality care, people with severe long-term illnesses who have complex health and social needs or who are at high suicide risk cannot justifiably be sentenced there.

Stigma
One of the most distressing problems facing people with mental illness is the prejudice and discrimination they face from society at large. In particular, the assumption that they are likely to be violent is painful and destructive. The Department of Health, the Royal College of Psychiatrists and others have attempted to tackle these public perceptions and pejorative press reporting through campaigns that aim to give the facts about the risks presented by the mentally ill. Key findings in this report should be used in this way. For example, the killing of strangers by people with mental illness is rare; most stranger homicides are committed by young men without mental illness who are under the influence of alcohol or drugs. The public may fear the mentally ill but they are more at risk from heavy drinkers.

Comparison between countries

Suicide The suicide rate in Scotland was much higher than in England and Wales, and Northern Ireland. Rates of service contact were about the same, which means that suicide rates among patients in Scotland must also be much higher. In all countries the majority of suicides were men but in Northern Ireland the proportion of men was highest. Suicide methods varied, with drowning being more common in Scotland and Northern Ireland and firearms being used more often in Northern Ireland.

Among Inquiry cases, in-patient suicides were proportionately more common in England and Wales. A primary diagnosis of alcohol dependence was more common in Scotland and Northern Ireland than in England and Wales; a primary diagnosis of drug dependence was more common in Scotland. In Scotland, this was linked to fewer cases of depression; in Northern Ireland, to fewer cases of schizophrenia. Similarly, reported rates of alcohol and drug misuse were higher in Scotland and Northern Ireland.

Suicides in Scotland were preceded less often by non-compliance, but face-to-face responses to non-compliance were also less common. Post-discharge suicides in Northern Ireland more frequently occurred before first follow-up.

Homicide In Scotland the rate of homicide was much higher. In England and Wales and in Scotland the perpetrators of homicide were mainly young men. In Northern Ireland the male preponderance among perpetrators was even greater. The proportion receiving a conviction for murder was similar in the two samples as was the proportion given a hospital disposal.

From psychiatric reports, the proportion with any lifetime mental disorder was higher in England and Wales. In both samples, the commonest diagnoses were alcohol and drug dependence and personality disorder but the proportions with schizophrenia and affective disorder were higher in the England and Wales and the proportion with primary alcohol dependence higher in Scotland. Whilst the number with a history of alcohol misuse

was similar in the two samples, in Scotland, alcohol was more likely to have contributed to the offence.

A higher proportion in England and Wales were mentally ill at the time of the offence, but proportionately more perpetrators in Scotland had previous contact with services.

Among Inquiry cases, demographic features were similar. In the England and Wales sample, there were four in-patient homicides. All of the Scottish sample were community patients. There were proportionately more perpetrators with schizophrenia in the England and Wales sample whereas a primary diagnosis of alcohol dependence was more common in the Scottish sample.

RECOMMENDATIONS

Recommendations from *Safer Services*

Safer Services presented recommendations based upon the Inquiry findings at that time (1999). The findings in this report endorse the earlier recommendations. Before presenting further recommendations, we should report on changes in policy and services relevant to each item on the previous list. Findings in the last report, and the recommendations based on them, referred to England and Wales. However, the report was also circulated in Scotland and Northern Ireland, though no formal guidance was issued. Unless stated, the progress reported below refers to England or England and Wales.

Training

1. All staff in contact with patients at risk of suicide should receive training in the recognition, assessment and management of risk, of both suicide and violence, at intervals of no more than three years.

2. The content of training should reflect many of the points highlighted by this report: indicators of risk, high-risk periods, managing non-compliance and loss of contact, communication, the Mental Health Act.

   Progress – In the National Service Framework on Mental Health, under the standard on suicide prevention, it states that "training for staff in specialist mental health services and risk assessment management is a priority, and (should be) updated at least every three years."

Documentation/information

3. A new, simplified, universal system of documentation (patient passports) should be developed, to be used for three purposes:

   - Clinical risk assessment, by the recording of key indicators of risk
   - Allocation to care under the CPA according to evidence of risk, and subsequent monitoring
   - Transfer of information between services

4. Unified systems of case notes for all professional disciplines should be developed.

5. All patients with a history of violence in the context of mental illness should receive the highest level of care under the CPA.

6. Information on previous convictions for violent offences should be readily available to mental health services on request.

7. Risk-related information, e.g. rates of co-morbidity and staff training, should be collected and used in determining resources and monitoring performance.

   Progress – The White Paper *Reforming the Mental Health Act* states that "new mental health legislation will...introduce a new duty covering the disclosure of information about patients suffering from mental disorder between health and social services agencies and other agencies, for example housing agencies or criminal justice agencies." The development of the electronic patient record and electronic health record will address most of the points concerning the sharing of information between health and social care disciplines. The Clinical Standards Board for Scotland has issued standards for the care of people with schizophrenia, emphasising the role of the CPA in reducing risk.

Treatments and non-compliance

8. Modern drug treatments such as "atypical" anti-psychotic drugs and newer antidepressants should be offered to all patients with severe mental illness who are non-compliant with treatment because of side-effects.

9. Family and psychological interventions should be available to all high-risk patients with severe mental illness.

10. Trusts should have a written policy on non-compliance, based on these recommendations, which is made known to staff, patients and families.

    Progress – The use of atypical anti-psychotic drugs is increasing. Their place in the treatment of schizophrenia is being formally appraised by the National Institute for Clinical Excellence.

Disengaged patients

11. In all patients with severe mental illness who have a history of disengagement from services, a comprehensive social and clinical care plan should be devised which includes satisfactory housing and occupational activities.

12. Services should have the capacity for assertive outreach in response to loss of contact with patients with severe mental illness, including those who are homeless.

13. These recommendations should be part of a written policy on disengagement, which should be made known to staff, patients and families.

    Progress – From April 2002 it will be a requirement for all services to include occupational activities in their care plans for patients under

"enhanced" CPA. Assertive outreach services are being developed throughout England – the target is that 170 should be established by April 2001.

Co-morbidity

14. Services should make provision for patients with severe mental illness and alcohol or drug misuse as part of mainstream mental health services.

15. Training of staff in general psychiatry services should include the management of alcohol and drug misuse.

Progress – Dual diagnosis is a priority for nurse consultant posts in mental health – these are intended to lead local service development. Many of the patients who will be under the care of assertive outreach teams will have severe mental illness and substance misuse.

Families

16. "Points of access" to mental health teams should be provided for families who are concerned about a patient's risk.

Progress – The National Service Framework on Mental Health includes points of access for carers as a milestone for services in preventing suicide. By April 2001 all services are required to include information on how carers can contact services in an emergency in care plans for patients on enhanced CPA. The NHS plan introduced new "gateway" staff whose job will be to provide the constantly accessible single point of entry to specialist mental health services for patients and their families.

In-patient suicides

17. All services should review the physical structure of wards to identify (1) any obstructions to the observation of high-risk patients and (2) structures which could be used in suicide by hanging. Wards in which these cannot be removed should not be used for the admission of acutely ill patients.

18. Alternatives to intermediate level observations should be developed for patients at risk.

19. Services should increase and monitor the observation of patients in the evening and at night.

20. Risk assessment should always be carried out prior to granting leave to in-patients who are recovering from illness.

Progress – Following the publication of the Chief Medical Officers report *An Organisation with a Memory* in 2000, all services are required to remove

non-collapsible curtain rails from in-patient units by March 2002. In Scotland, a Safety Action Notice was issued on behalf of the NHS referring to suicide risk from ligature points on wards. The Scottish Executive Health Department is currently reviewing its previous guidance on the observation of acutely ill in-patients.

Post-discharge suicides

21. There should be follow-up within 48 hours for all patients who have been at high risk and who are discharged from in-patient care, and follow-up within one week for all discharges, including those who discharge themselves.

22. Health authorities and trusts should make provision to accommodate all acutely ill patients in local catchment area services, ending transfers to in-patient care in other districts.

23. Prior to discharge from in-patient care, in-patient and community teams should conduct a joint case review, including assessment of risk.

24. CPA documentation should include more intensive provisions for the first three months after discharge from in-patient care, and specific reference to the first post-discharge week.

    Progress – The National Service Framework on Mental Health included follow-up within one week of discharge for people with severe mental illness as a local milestone in service prevention.

Mental Health Act

25. Mental health legislation should allow the enforced treatment of high-risk patients with severe mental illness who become non-compliant with treatment or who show indications of increasing risk, even in the absence of clear signs of relapse.

    Progress – The White Paper *Reforming the Mental Health Act* says that under new mental health legislation there will be a care and treatment order allowing treatment under compulsion in the community. In Scotland the Millan committee has recently published its review of mental health legislation, proposing a Community Treatment Order.

Access to means of suicide

26. Patients at risk of suicide, including all patients with a recent history of self-harm, who are treated with psychotropic drugs should receive modern, less toxic drugs and/or supplies lasting no more than 2 weeks.

    Progress – Nothing to report.

Aftermath of suicide or homicide

27. Following a suicide or a homicide, mental health teams should hold a multidisciplinary review of the case.

28. Following a suicide or homicide, information on what happened should be provided promptly and openly to families.

Progress – Nothing to report.

Personality disorder

29. The Department of Health should disseminate clear policies on the clinical management of personality disorder.

Progress – *Reforming the Mental Health Act* summarised developments for severe personality disorder that will accompany new powers to treat patients with severe personality disorder who are dangerous. Pilot units have been established and are being evaluated.

Stigma

30. Information in this report should be used by the Royal College of Psychiatrists to inform the public on the risks posed by people with severe mental illness, both to themselves and others.

Progress – Figures from *Safer Services* are frequently used publicly by a variety of organisations and commentators.

Culture of blame

31. The Department of Health should assess the purpose and value of local inquiries into serious untoward incidents, and consider changes to the current requirement for full-scale inquiries in all cases.

Progress – The Chief Medical Officer's report *An Organisation with a Memory* will lead to new systems throughout the mental health service for monitoring and responding to such incidents.

New Recommendations

1. A broadly based suicide prevention strategy is needed in each country. This should set out what actions should be taken by mental health services, as well as other health and social care services.

2. Clinical services should place priority for suicide prevention and monitoring on:

   - In-patients under non-routine observations
   - In-patients who are assessed to be at high risk or who are detained and in the first seven days of admission
   - In-patients who are at high risk and who are sufficiently recovered to allow home leave but whose home circumstances lack support (particularly those who live alone)
   - Recently discharged patients who are at high risk or who were recently detained (in Scotland this should include those who are allowed to leave hospital under Leave of Absence)
   - Patients who become non-compliant or who miss service contact while under enhanced CPA (or its equivalent in Scotland, Wales and Northern Ireland)

In-patients and Post-discharge follow-up

3. In-patient units should remove (or make inaccessible) all likely ligature points.

4. In-patient teams should, in consultation with local service user representatives, develop protocols that allow the removal of potential ligatures from patients who are at high risk.

5. In-patients going on leave should have close community follow-up.

6. Patients under non-routine observations (special observation in Scotland) should not normally be allowed time off the ward or leave.

7. In-patient services should ensure that there are no gaps, however brief, in one-to one observation.

8. All discharged in-patients who have severe mental illness or a recent (less than three months) history of deliberate self-harm should be followed up within one week (in Scotland this should include patients on Leave of Absence).

Care Programme Approach
(These recommendations refer to England and Wales though most are also applicable to care planning processes in Scotland and Northern Ireland)

9. There should be a major overhaul of the operation of the Care Programme Approach and equivalent systems, with the establishment of national criteria for enhanced CPA – these criteria should emphasise the importance of risk.

10. All care plans for enhanced CPA should include explicit plans for responding to non-compliance and missed contact.

11. Enhanced CPA should normally apply to patients with schizophrenia (exceptions should be explained in case notes), all those with a combination of severe mental illness and self-harm or violence, all homeless patients who have been admitted and all patients with severe mental illness who are lone parents.

12. Monitoring of these aspects of the CPA should be a priority for local clinical governance and the Commission for Health Improvement (in Scotland, the Mental Welfare Commission and the Clinical Standards Board).

Training

13. NHS and social care training organisations should have a system of approving training courses, and staff should attend only approved training. Approval should be based on the evidence that training leads to benefits.

14. Courses on risk management should cover aspects of risk presented in this report (see page 151).

Substance misuse

15. Local services should have a strategy for the comprehensive care of patients with dual diagnosis, to include liaison between mental health and substance misuse services, statutory and voluntary agencies, staff training and the appointment of key staff who will lead clinical developments.

Ethnic minorities

16. Local services should have a strategy for providing care for ethnic minorities to include staff training, staff recruitment, and links with the voluntary sector.

Criminal Justice System

17. People with schizophrenia who have complex needs for health and social care should, if convicted of an offence, be sent to hospital rather than prison, unless there are exceptional and explicit circumstances.

Stigma

18. Anti-stigma campaigns, including those run by or in association with the Department of Health and the Royal College of Psychiatrists, should emphasise the low risk to strangers posed by people with mental illness.

Twelve points to a Safer Service

In this report and in *Safer Services* we have presented a series of recommendations that address policy and practice in mental health. Below we list what we consider to be the most important clinical recommendations from both reports. This is intended as a checklist for local services.

- Staff training in the management of risk – both suicide and violence – every 3 years
- All patients with severe mental illness and a history of self-harm or violence to receive the most intensive level of care
- Individual care plans to specify action to be taken if patient is non-compliant or fails to attend
- Prompt access to services for people in crisis and for their families
- Assertive outreach teams to prevent loss of contact with vulnerable and high-risk patients
- Atypical anti-psychotic medication to be available for all patients with severe mental illness who are non-compliant with "typical" drugs because of side-effects
- Strategy for dual diagnosis covering training on the management of substance misuse, joint working with substance misuse services, and staff with specific responsibility to develop the local service
- In-patient wards to remove or cover all likely ligature points, including all non-collapsible curtain rails
- Follow-up within 7 days of discharge from hospital for everyone with severe mental illness or a history of self-harm in the previous 3 months
- Patients with a history of self-harm in the last 3 months to receive supplies of medication covering no more than 2 weeks
- Local arrangements for information-sharing with criminal justice agencies
- Policy ensuring post-incident multidisciplinary case review and information to be given to families of involved patients.

Glossary of Terms

The following list defines key terms as used in this report:

Alcohol/drug/substance misuse/dependence The term "drugs" includes heroin and other opiates, amphetamines, ecstasy, cocaine, crack cocaine, hallucinogens, cannabis, and (when used without prescription) benzodiazepines. When alcohol is included, the term "substance" is used. Misuse is an imprecise term referring to excessive consumption that could cause social, physical or legal problems. Dependence equals addiction, suggesting severe misuse.

Care Programme Approach (CPA) Department of Health guidelines for the care of the most needy patients with mental illness – main elements are a key worker, a written care plan, and at the "higher level(s)", regular reviews by the multidisciplinary health team. Similar guidelines exist for Wales. In this report, CPA refers to both England and Wales. In Scotland a CPA system has been developed but it is significantly different in practice. In Northern Ireland there is no CPA. In this report, the term "being under the CPA" refers to a level of supervision that requires regular multi-disciplinary case review. This is now known as "enhanced CPA", though this term was not in use when data collection began.

Cognitive therapy A form of psychological treatment used mostly in non-psychotic disorders such as depression but increasingly shown to be a useful component of treatment in schizophrenia.

Co-morbidity The simultaneous presence of two or more disorders (often refers to severe mental illness and substance misuse).

Drugs:
Psychotropic drugs Any drugs used in the treatment of individuals with mental disorder.

Anti-psychotic drugs Drugs used to treat psychosis, particularly schizophrenia.

Atypical anti-psychotic drugs Newer (and therefore more expensive) anti-psychotic drugs which do not have some of the side-effects of older drugs, especially abnormal movements.

Antidepressants Drugs used to treat depression (and other disorders). Two main subgroups: (1) Tricyclic antidepressants, used for many years, cheap but can be more dangerous in overdose. (2) Selective serotonin reuptake inhibitors (SSRIs), newer and more expensive but generally have fewer side-effects and are safer in overdose.

GRO General Register Office (Scotland and Northern Ireland).

Homicides Convictions for murder, manslaughter or infanticide in England and Wales, murder or culpable homicide in Scotland and murder or manslaughter in Northern Ireland:

Murder Unlawful killing where the offender is of sound mind and discretion and had malice aforethought (i.e. intent to cause death or grievous bodily harm).

Manslaughter Homicide where there is an absence of intent to kill or there are mitigating factors such as immediate severe provocation, or there is an abnormality of mind of such severity that his/her responsibility was substantially impaired ("diminished responsibility").

Infanticide Killing by a mother of her own child under the age of 12 months.

Culpable homicide Homicide in Scotland where there is an absence of intent to kill or there are mitigating factors such as immediate severe provocation.

Inquiry case A person on whom the Inquiry obtained questionnaire data. The Inquiry requested information on all persons in contact with mental health services in the year before suicide or at any time before homicide.

Mental illness Clinically significant mental disorder other than "behavioural" disorders such as alcohol or drug misuse and personality disorder. Mainly refers to schizophrenia and affective disorders. When "severe" is added, this signifies that the illness is of a severity that would usually lead to contact with mental health services rather than primary care alone.

Mental disorder Any clinically significant mental or behavioural disorder, including alcohol or drug dependence (but not misuse) and personality disorder.

(Non-)compliance Refers to (non-)receipt of proposed treatment. Unsatisfactory terms because they carry the implication that the patient should always follow medical instruction. Being superseded by (non-)concordance as both a concept and an expression, but retained here because they are still in general use.

ONS Office for National Statistics.

Patient-initiated discharge Self-discharge or discharge as a result of patient's actions, i.e. breach of patient contract or ward rules, e.g. drinking, violence.

Secure Units:
RSU Regional Secure Units – medium secure units for individuals who are thought to pose special risks, particularly of violence to others.

High Secure Hospital Three units in England and Wales (Ashworth, Broadmoor, Rampton) which care for those who require high security.

State Hospital Carstairs Hospital in Scotland, the equivalent of the High Secure Hospitals in England.

Suicides Deaths that at coroner's inquest received a verdict of suicide or an open verdict, excluding open verdicts in which suicide was clearly not considered. Therefore includes suicides and probable suicides but excludes suicides receiving any other verdict such as misadventure. In Scotland the Procurator Fiscal investigates sudden unexplained deaths and there is no inquest.

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