Annual Report of Suicide and Undetermined Death in Bristol 2015

Produced on behalf of:
The Bristol Suicide Prevention and Audit Group

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Authors and acknowledgements:

Magdalena Szapiel
Public Health Practitioner – Epidemiology
Bristol City Council

Clive Gray
Public Health Principal – Public Mental Health and Inclusion
Bristol City Council

With thanks to David Gunnell, Professor of Epidemiology,
School of Social and Community Medicine,
University of Bristol, for his advice and suggestions

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Summary

- Bristol's average mortality rate from suicide and undetermined death for the period of 2011-2013 was above the national average rate (Bristol: 11.96; England & Wales: 10.62 per 100,000 population).

- Men in their mid-life years have the highest rates of suicide in Bristol, which mirrors the national picture.

- The incidence of suicide and undetermined death is highest amongst the most socially disadvantaged.

- Death by hanging is the most frequent method of suicide in Bristol, with self-poisoning being the second. The most common location for suicide is the home.

- The number of deaths from suicide within HMP Bristol remained consistent between 2003 and 2014, at just over 1 death per year. The most recent 3 year period (2012-2014) has seen 1 self-inflicted death in the Prison.

- The average annual number of suicides among individuals in contact with mental health services over the 14-year period of 2001-2014 was approximately 14.5 deaths per year. This represents 37 per cent of all suicides in Bristol during that period.

- The Bristol Self-harm Surveillance Register recorded 1539 presentations for self-harm to the BRI's Emergency Department in 2014, (a similar figure to 2013). Those 1,539 attendances were made by 1,066 individuals, suggesting that roughly one in three attendances were repeat episodes. The total number of presentations over time at the BRI did not appear to vary considerably by gender or age group from 2013, but the number of presentations by females was approximately 50% higher than those by males. Females were on average younger than male patients (mean age male vs. female: 35.7 vs. 33.0). There is also a suggestion that the number of self-harm presentations by people aged <25 and >54 years increased somewhat in the last 6 months of 2014.

1. Introduction

In September 2012 we were pleased to welcome the publication of a new National Strategy for Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives[a]. This new strategy built on the successes of the 2002 Suicide Prevention Strategy and focused on six key areas for action:

- reducing the risk of suicide among high risk groups;
- tailoring approaches to improve mental health among specific groups;
- reducing access to the means of suicide;
- providing better information and support to those bereaved or affected by suicide;
- supporting the media to practise sensitive approaches to reporting;
- supporting research, data collection and monitoring.

The new National Suicide Prevention Strategy was complemented by a new National Mental Health Strategy '*No Health without Mental Health'* which is of direct relevance to suicide prevention, particularly in relation to the aims of ensuring that more people will have good mental health, and that fewer people will suffer avoidable harm. The new Public Health Outcomes Framework includes public mental health and the health of vulnerable groups as key areas for public health action.

During 2011 – 2012, following concerns about an increase in suicides across the South West, the South West Public Health Observatory produced a report on suicide and self-harm in the region[b]. This showed that the Bristol suicide rate had increased slightly (from a 9.2 baseline in 1995-1997 to 9.5 per 100,000 during 2007-2009); rather than decreased to meet the target of 7.4 per 100,000. This increase may have been related to the economic instability, prevalent in the UK over that period.

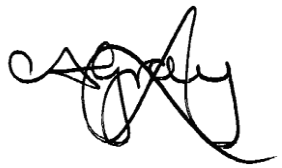
Suicide Prevention work in Bristol is led by a multi-agency partnership of individuals and organisations with the expertise and commitment to address risk factors (section 11). This Partnership, the Bristol Suicide Prevention Group, is supported by Bristol Public Health, a function which transferred with them from the NHS to the local authority in April 2013.

The work of the Suicide Prevention and Audit Group is informed by the annual audit of trends and additional audits, undertaken from time to time, which look at particular issues. This year, the work of the Group has focused on extending the scope of the local self-harm register at Bristol Royal Infirmary, investing in support for individuals bereaved by suicide, developing work around men's health and well-being, improving access to training for General Practitioners, working with contiguous local authorities to fund regular collection of data from the Coroner and targeting support for individuals among high risk groups. It is the intention of the Partnership that this work, reported more fully in section 10, will continue to be delivered in future years.

[a] http://www.dh.gov.uk/health/2012/09/suicide-prevention/

[b] Suicide and Self Harm in the South West (2011) NHS South West

Once again, our thanks go to members of the Bristol Suicide Prevention and Audit Group (see section 9) for their dedication and tireless commitment throughout the year to preventing deaths by suicide in Bristol through substantial action.



Clive Gray

Public Health Principal, Bristol Public Health

Chair, Bristol Suicide Prevention and Audit Group

2. Action on suicide prevention in Bristol

The Bristol Suicide Prevention and Audit Group leads on both audit and action. Our priorities for action are set out in the Bristol Suicide Prevention Strategy 2013-16. These priorities reflect guidance, evidence and best practice as identified in the National Strategy and also address issues identified from the local audit, the experience of partners and other evidence. This year, the Suicide Prevention and Audit Group have continued to make progress in all priority areas.

Monitoring the impact of the media

We have continued our relationship with the Bristol Evening Post. The paper ensures that it adheres to best practice guidelines when reporting suicide and also includes at the bottom of all articles, a paragraph about warning signs for the friends and family of those who may be at risk; along with the telephone number of the Samaritans. The number of reports about each suicide in the press has also been reduced. However, reminders have proved useful, through periodic meetings with editorial staff. The Commissioning Support Unit has recently agreed to monitor local press activity and notify the suicide prevention lead of all coverage.

Actions at local hot spots

As part of ongoing partnership work with those responsible for the Clifton Suspension Bridge, members of the Group meet annually with the Bridge Master to discuss support for staff, liaison with the police and the possible installation of further safety barriers. The Samaritans have also worked with bridge staff to support them over their experiences of dealing with suicides and attempted suicides, and have provided them with training.

Work undertaken by the Samaritans, commissioned by Network Rail, continues both locally and nationally. This includes signage on the platforms of selected stations and training for staff.

The Samaritans have provided suicide awareness training for a significant proportion of Bristol City Council's car parks staff and displayed their posters at the entrance of Trenchard Street car park. However, possible changes in the running of these facilities (such as going fully automated) could impact negatively on the use of these car parks for suicide attempts. The other major supplier, NCP, has been offered free awareness training sessions for their staff, but has not taken them up.

British Transport Police

British Transport Police have sent representatives to Prevention Group meetings to discuss rail hot-spots and been linked up in turn to the wider geographical area covered by the Avon and Wiltshire Mental Health Partnership. This year, all BTP supervisors were instructed to target disruption on the rail network with the main focus being on reducing the number of fatalities. On 1st June 2015, a nationwide policing operation *"Operation Avert 5"* commenced; aimed at tackling railway suicides and injurious attempts. This ran until 31st August 2015. The focus of that operation was for BTP Officers to conduct a high-visibility presence at locations that have been identified as hotspots for completed suicides and suicide threats across the country. Officers from Bristol were largely

focusing on the line between Bristol Temple Meads and Bath (including Keynsham & Oldfield Park) and the line to Taunton (including Worle, W-S-M, Highbridge and Bridgwater). The only location in the greater Bristol region receiving focus was Yate; where there was a fatality in June 2015.

Other activities include an operation to focus on fatalities at railway level crossings, occupational crossings and foot crossings. Patrols were conducted with Network Rail Level Crossing Managers, Samaritans. Network Rail literature and memorabilia were handed out to motorists and pedestrians, highlighting the dangers of misusing crossings and raising awareness of support groups. Bristol has very few crossings, so the activity was largely conducted outside the city. These patrols fell under the guise of *"Operation Look".*

Actions on medicines
The Medicines Management Team of the Bristol Clinical Commissioning Group is an active partner in the Suicide Prevention and Audit Group. Their expertise helps the Group to obtain information about patterns of prescribing and advice about different medications. The Medicines Management Team led on the development of a leaflet aimed at those prescribed medication for depression for the first time by their GP. This resource is now available and includes a description of possible reactions and a number of helplines such as the Samaritans. They have also, in partnership with colleagues in Liaison Psychiatry, produced information for clinicians about the risks of medicines and self-poisoning, work that has been informed by Bristol's Self-Harm Surveillance Register.

Targeted work with vulnerable / at risk groups

Individuals who self-harm
Individuals who self-harm, particularly men who self-harm repeatedly and/or use high-lethality methods, are at greater risk of dying by suicide. After many years of work, a system was established to audit self-harm attendances at the A&E Department of the Bristol Royal Infirmary, towards the end of 2010. The audit process identifies numbers and patterns of attendance, and the type and quality of care provided. This information drives service improvements within the hospital and is helping to inform other services. This audit is now being replicated across other trusts as an example of good practice. The STITCH project has also developed an information guide with signposting for patients attending A&E for self-harm treatment. For more information see section 8 of this report. In addition, the Samaritans are operating the Call Back Project, a referral scheme set up with local hospitals. A health care professional can contact the Samaritans and refer a patient in distress (any kind of emotional difficulty- not just suicidal thoughts). The referrer leaves the patient's contact details and the Samaritans then phone the individual.

Self-injury Support (formerly Bristol Crisis Service for Women) began the piloting of a Women's Self Injury Helpline from August 2014. The service is confidential and anonymous and staffed by trained female volunteers. The service received over 300 calls in its first year and has expanded from a four hour a week service to twelve hours over four sessions; 45% of callers express suicidal thoughts and feelings. Self-

injury support has also developed a good practice and information sharing network for self-harm resources. So far this has involved a national conference of grassroots self-harm support groups, collection of good practice case studies and practice resources and the development of an online hub with a range of multimedia resources.

Their UK-wide women's self-injury helpline was expanded in 2015 to provide a service Mondays to Fridays, 7-10pm and Thursday 3-6pm, where non-judgemental, emotional support and listening services are available to women affected by self-injury and those who care about them. The helpline also signposts to other relevant services and sends out self-help information on request.

Men

Following concerns about the number of men dying by suicide, a Men's Health Forum was established. This year, the Forum's work has focused on involving men in health campaigns, and trying to fund a dedicated men's health promotion officer. Further work is underway to pilot a course aimed at young men who are about to be first time fathers, preparing them for the responsibilities of their new role; men who would otherwise be missed by support services. The redesign of Bristol Public Health will incorporate a dedicated function for advancing men's health.

Lesbian, Gay, Bisexual and Transgender (LGBT) people

Evidence suggests that LGBT people can be at higher risk of self-harm and suicide.[25,26] There are also particular issues for young people going through sensitive identity development, when social norms can have a significant impact. Freedom Youth operates a service for people aged 13-25 and Off the Record provides LGBT counsellors.

Bristol Public Health has funded a mental health support group for LGBT people with mental health concerns and assisted with a survey into the experiences of LGBT health service users at Bristol Pride 2015.

Bereavement

Bereavement was given additional emphasis in the new National Strategy. In Bristol we have continued to focus on support for bereavement by suicide, since it can lead to increased risk for close family and friends. In 2012 Public Health commissioned CRUSE to run a one-to-one support programme for individuals bereaved by suicide, and in October 2013 this was complemented by a group support service; the need for which had been identified for some time. The group fills the gap that organisations like SOBS (Survivors of Bereavement by Suicide) provide in other areas. These groups are run on a fortnightly basis; facilitated by volunteers; and are available for clients to drop-in to, as long as feels necessary for them.

People in contact with Mental Health Services

Avon and Wiltshire Mental Health Partnership Trust (AWP) lead on this work within the Suicide Prevention and Audit Group. In addition to their own suicide prevention strategy and action plan, AWP has undertaken a review to better understand patterns within the deaths by suicide among those known to their service. A number of key actions have emerged from

this work and these are included in both the AWP's and the Group's Suicide Prevention Action Plans. These actions include additional training for staff, action on prescribing, and improved data analysis and data share.

3. Understanding Suicide Statistics

Official suicide statistics in England are based upon Coroners' verdicts. In the case of a suspected suicide, an inquest will be held, and the deceased's intention to die by suicide must be proven beyond reasonable doubt, before a verdict of suicide will be given. If not proven, such deaths are most likely to receive open verdicts and be classified in national statistics as deaths of undetermined intent. The term 'committed suicide' is a legacy of the time (pre1961 in the UK) when suicide was illegal. There are calls to move to verdicts based on the balance of probabilities (for example by Papyrus). Medical research indicates that over three-quarters of deaths given open verdicts by Coroners are likely to be suicides. Therefore, in an attempt to provide a more accurate estimate of the true levels of suicide, the data reported in this analysis presents figures for both suicide and undetermined intent deaths. Furthermore, a significant number of deaths, felt by clinicians to be probable suicides, receive 'death by misadventure'/'accidental death' narrative verdicts and so will not appear in official suicide statistics. Differences between Coroners in their use of narrative verdicts made comparison of suicide statistics between areas less reliable between years 2000 – 2010. Changes introduced by ONS in 2011 though, have corrected this effect for subsequent years. However, differences between Coroners in their use of accidental verdicts for some probable suicides mean differences in rates between cities must still be interpreted cautiously.

Due to the relatively low number of deaths by suicide within a local area, numbers can fluctuate from year to year, making it difficult to see a trend. For this reason we present some of our analysis of trends in three year periods. It is important to look at the time period when comparing data, as an analysis of different year groupings will produce slightly different rates.

Following the national statistics definition, the data in this report are presented by the date of registration of death. The Coroner's inquest may take over a year to arrive at a verdict; contributing to the delay in reporting. The official national statistics figures, obtained from the Health and Social Care Information Centre (HSCIC) Indicator Portal, are available with up to 2 years delay. For this reason, this report includes descriptions of trends in mortality from suicide and undetermined death in Bristol and England from 1993 to 2013 (sections 4 – 5). Some additional data for the years 2003-2014 have been obtained through the Primary Care Mortality Database files and ONS mortality files (sections 6 – 7).

Public Health Outcomes Framework Suicide Rate Indicator

In January 2012 a new indicator measuring suicide rate was introduced in the Public Health Outcomes Framework (PHOF): indicator 4.10 – suicide rate (an age-standardised mortality rate from suicide and injury of undetermined intent per 100,000 population). The definition for this indicator is different to the one used by the Health and Social Care Information Centre presented. The difference is in the population used to calculate the indicator. The Health and Social Care Information Centre uses population 15+ while the PHOF includes the whole population of

Bristol in their calculations. The numbers of deaths by suicide would be the same, currently (since there were no recorded deaths for children under fifteen in 2013 or 2014) but the rate per 100,000 figures would be different.

4. Suicide and undetermined death rates for Bristol: an overview

The analysis draws on data from a variety of different sources including Primary Care Mortality Database, Health and Social Care Information Centre Indicator Portal (previously Compendium of Clinical and Health Indicators), Avon and Wiltshire Mental Health Partnership Trust, HMP Bristol, the Office for National Statistics, as well as local research. Findings are presented by age, sex, method of suicide, and place of death.

Suicide deaths are defined as deaths from suicide and undetermined intent, classified by underlying cause of death, using International Classification of Diseases (ICD-10) codes X60-X84, Y10-Y34; ages 15 and over.

In general, over the last 21 years, the annual trend in mortality from suicides and undetermined intent death in Bristol has remained relatively stable at approximately 37 deaths per year (an average rate of 11.4 deaths per 100,000 population: 15 years old and over). However, the average 3 years pooled directly age standardised rate of mortality from suicides and undetermined intent death in Bristol has increased from 8.1 in the 2004-2006 period to 11.9 in 2011-2013 (see table 1). Bristol's average rates have remained above the England and Wales average rates since the 2007-2009 period (see table 2).

Annual rates for suicide and undetermined injury can fluctuate widely from year to year, and whilst fluctuations may appear pronounced (see figure 2 overleaf) these can be explained by the comparatively small numbers of suicides observed (see figures 1 and 2).

Table 1. Directly standardised rate per 100,000 (95% confidence intervals) and numbers: mortality from suicide and undetermined intent death in the Bristol Unitary Authority Area

Year	2001-2003	2004-2006	2007-2009	2010-2012	*2011-2013*
Rate	7.04 (5.52-8.55)	8.14 (6.53-9.74)	9.49 (7.75-11.23)	11.95 (9.88-14.31)	*11.96 (9.9-14.3)*
Number	87	103	121	126	*129*

Source: HSCIC, Indicator Portal 2015

Table 2. Directly standardised rate per 100,000 (95% confidence intervals) and numbers: mortality from suicide and undetermined intent death in England and Wales

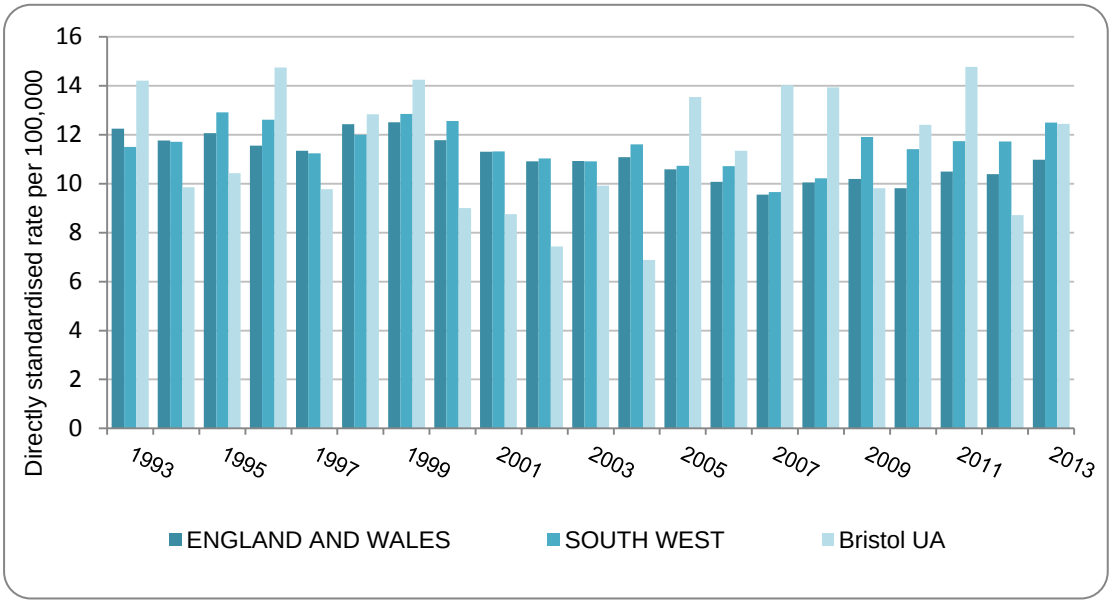
Year	2001-2003	2004-2006	2007-2009	2010-2012	*2011-2013*
Rate	8.77 (8.62-8.91)	8.35 (8.21-8.49)	7.90 (7.76-8.03)	10.23 (10.07-10.41)	*10.62 (10.45-10.8)*
Number	14,341	13,961	13,478	14,179	*14,806*

Source: HSCIC, Indicator Portal 2015

The baseline suicide mortality rate in Bristol for 1998-2000 was 8.14 (per 100,000 population, 3-year average). The 3-year average rate for 2010-2012 for Bristol was 11.95 - an increase compared to the average rate of 9.49

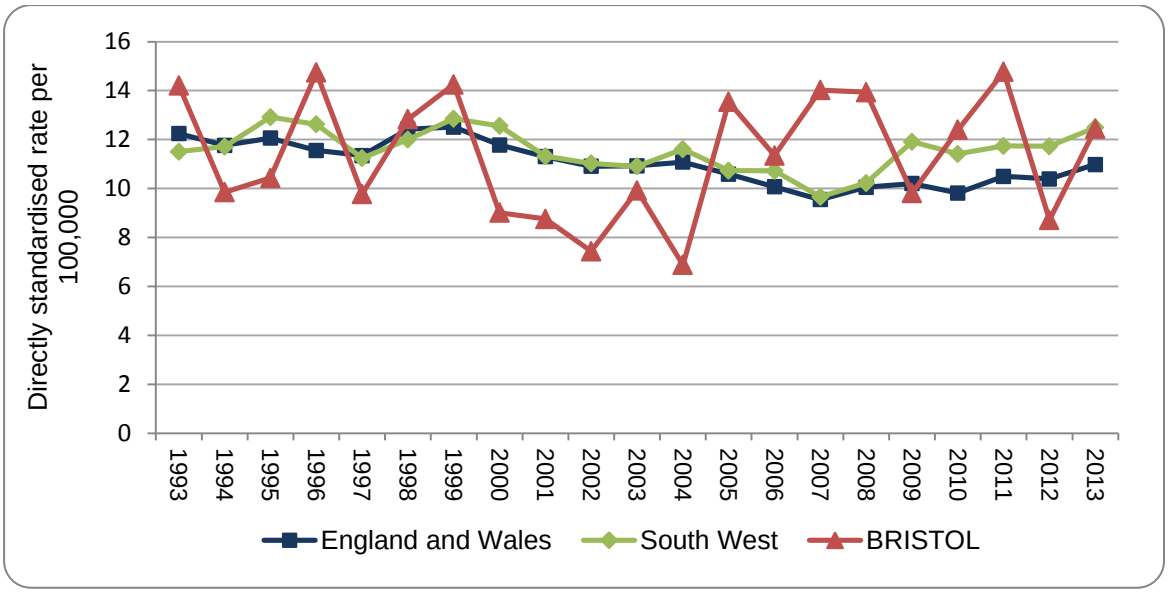
reported for the period 2007-2009. The 2011-13 rate was slightly higher at 11.96 deaths per 100,000 of the population over 15.

Figure 1. Trends in mortality from suicide and undetermined intent death in the Bristol Unitary Authority Area in comparison to national and regional trends 1993-2014



Source: HSCIC, Indicator Portal 2015

Figure 2. Trends in mortality from suicide and undetermined death in the Bristol Unitary Authority Area in comparison to national and regional trends 1993-2013



Source: HSCIC, Indicator Portal 2015

Core City Comparison

Table 3 shows that Bristol had an incidence of suicide that was somewhat above the average within the Core Cities group for the 2010-2012 period. In the last 3 years however, Bristol has moved from having the highest rate among those cities, to 4th place among Core Cities, behind Manchester, Newcastle and Nottingham (see figure 3). In-line with the other cities in this group, the average Bristol rate shows slight increases over time from the 3-year average for 2001-2003. Alongside Leeds, Liverpool, Manchester, Newcastle and Nottingham, Bristol appears to have a relatively higher mortality rate for suicide and undetermined death for the period 2011-13 than the other cities compared.

However, it should be noted that this comparison of Core Cities is potentially biased by variations in the use of narrative verdicts by the Coroners serving those different cities. Of note, the Coroners for Birmingham and Liverpool (the two cities that have apparently experienced large falls in suicide up to 2007-09) are amongst the greatest users of narrative verdicts nationally; whereas the Bristol Coroner makes relatively little use of such verdicts[c]. However, ONS amended their approach to coding narrative verdicts in 2011 and so data for the Core Cities should be more comparable in future years.

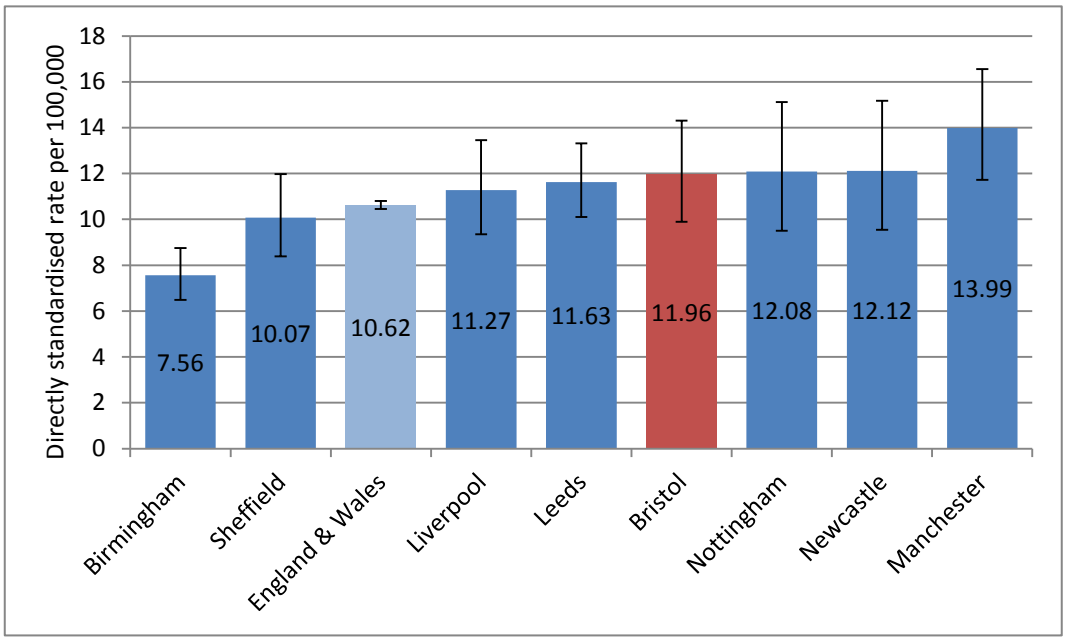
Table 3. Trends in mortality rates (95% confidence interval) from suicide and undetermined death (per 100,000): All persons Core City comparison

Year	2001-2003 (95%CI)	2004-2006 (95%CI)	2007-2009 (95%CI)	2010-2012 (95%CI)	*2011-2013 (95%CI)**
Bristol	7.04 (5.5-8.5)	8.14 (6.5-9.7)	9.49 (7.7-11.2)	11.95 (9.9-14.3)	*11.96 (9.9-14.3)*
Birmingham	9.17 (8.1-10.3)	7.62 (6.6-8.6)	6.73 (5.8-7.7)	7.10 (6.1-8.3)	*7.56 (6.5-8.7)*
Leeds	7.91 (6.7-9.1)	8.22 (7.0-9.4)	7.99 (6.8-9.1)	10.97 (9.5-12.6)	*11.63 (10.1-13.3)*
Liverpool	9.98 (8.3-11.7)	10.26 (8.5-12.0)	6.38 (5.0-7.8)	9.40 (7.7-11.4)	*11.27 (9.3-13.5)*
Manchester	11.95 (9.9-13.9)	11.56 (9.6-13.5)	10.20 (8.4-12.0)	17.20 (14.6-20.1)	*13.99 (11.7-16.5)*
Newcastle	12.55 (10.1-15.0)	9.76 (7.6-11.9)	6.86 (4.9-8.7)	10.14 (7.8-12.9)	*12.12 (9.5-15.2)*
Nottingham	10.26 (7.5-12.4)	13.03 (10.5-15.6)	9.95 (7.7-12.2)	8.91 (6.7-11.5)	*12.08 (9.5-15.1)*
Sheffield	7.35 (5.9-8.7)	7.03 (5.7-8.3)	7.39 (6.1-8.7)	7.48 (6.0-9.2)	*10.07 (8.4-11.9)*
England & Wales	8.77 (8.6-8.9)	8.35 (8.2-8.5)	7.90 (7.7-8.0)	10.23 (10.1-10.4)	*10.62 (10.4-10.8)*

Source: HSCIC, Indicator Portal 2015

[c] Carroll R, Hawton K, Kapur N, Bennewith O, Gunnell D Impact of the growing use of narrative verdicts by coroners on geographic variations in suicide: analysis of coroners' inquest data. J Public Health 2012;34:447-453)

Figure 3. Suicide and undetermined death directly standardised mortality rates per 100,000 population 15 and over (95% confidence intervals), Core cities and England & Wales 2011-2013



Source: HSCIC, Indicator Portal 2015

5. Socio-demographic differences in suicide and undetermined death rates

Sex, age and suicide

Historically, national suicide trends for men and women have followed the same pattern. However, from the early 1980s the number of suicides for women fell continuously, such that by 1996, suicide amongst women in the UK accounted for just one-quarter of all suicides.[4] In keeping with the national picture, the mortality rates of suicides and undetermined deaths for women in Bristol are on average, substantially lower than those for men. The 3-year average rate for 2011-2013 for women is approximately one-third of the rate for men (Table 4).

Both males and females rates have increased since the mid-2000s, with those years since 2010 being the highest. The average 3-years mortality rates for suicide and undetermined intent deaths amongst males in Bristol have been increasing since the 2001-2003 period, however the 2011-2013 rate (17.6 deaths per 100,000) has fallen slightly, comparing to 2010-2012 (table 4). The average rate amongst women has increased in the latest 3 years period to 6.2.

Table 4. Directly standardised mortality rate per 100,000 (95% confidence interval) and numbers for suicide and undetermined death by sex

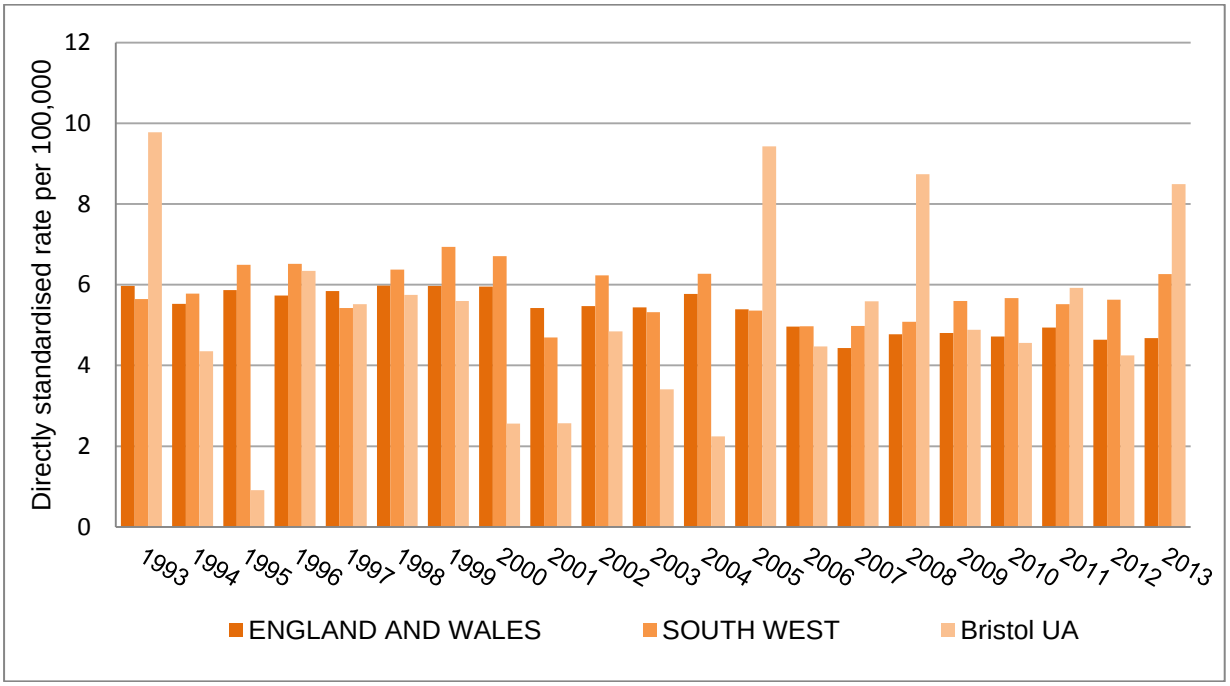
		1998-2000	*2001-2003*	*2004-2006*	*2007-2009*	*2010-2012*	*2011-2013*
Males	**Rate**	14.65 (11.57-17.74)	11.34 (8.62-14.07)	12.34 (9.55-15.14)	14.23 (11.24-17.22)	19.30 (15.49-23.73)	17.64 (14.14-21.73)
	Number	91	69	78	92	100	97
Females	**Rate**	3.56 (2.07-5.05)	2.88 (1.51-4.25)	3.95 (2.36-5.53)	4.75 (2.97-6.65)	4.90 (3.13-7.27)	6.2 (4.17-8.85)
	Number	24	18	25	29	26	32
Total	**Rate**	8.14 (6.53-9.74)	7.04 (5.52-8.55)	8.14 (6.53-9.74)	9.49 (7.75-11.23)	11.95 (9.88-14.31)	11.96 (9.9-14.3)
	Number	103	87	103	121	126	129

Source: HSCIC, Indicator Portal 2014-2015

Figure 4. Directly standardised mortality rate (per 100,000) for suicide and undetermined death in males 1993-2013

Source: HSCIC, Indicator Portal 2015

Figure 5. Directly standardised mortality rate (per 100,000) for suicide and undetermined death in females 1993-2013



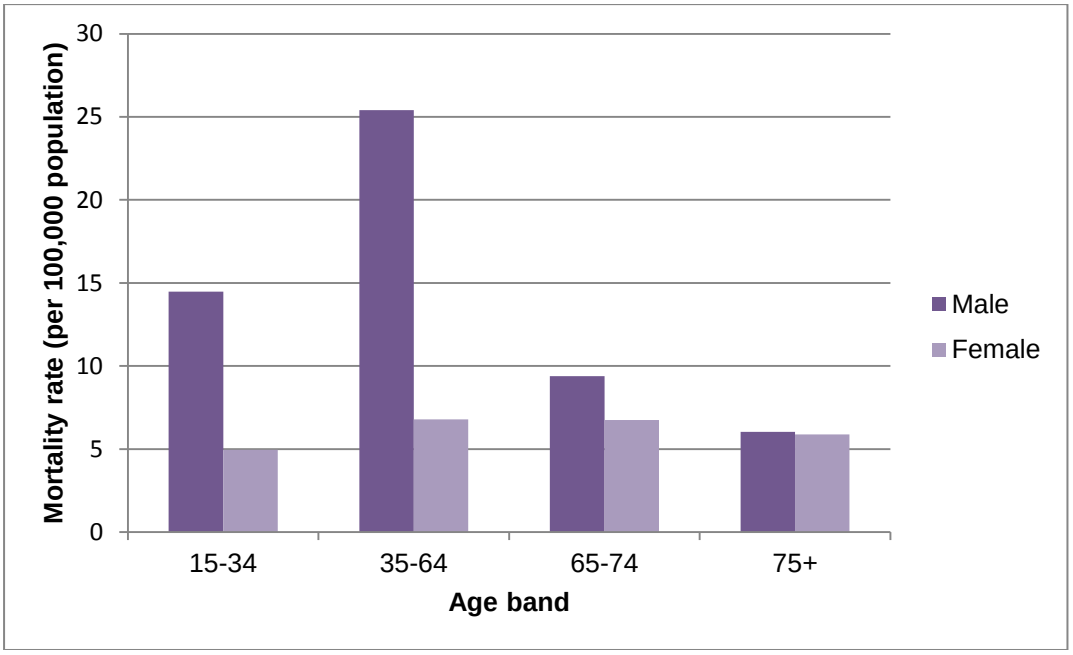
Source: HSCIC, Indicator Portal 2015

Sex differences in the methods of suicide may contribute to the marked differentials in suicide rates between men and women. Men are more likely than women to adopt high lethality methods. For example, whereas women have been more likely to attempt suicide by taking an overdose of medications, men have tended to adopt more violent methods such as hanging, shooting and jumping. Furthermore, it has been suggested that

the drugs commonly used for overdose have become less toxic.[5] Death by hanging has increased and accounts for the largest proportion of suicides in Bristol. In males it is the most frequently used method and in women its use has increased to a similar level as that for overdose. A second important reason for male/female differences is that men are considerably less likely than women, to seek help from professionals for their mental health problems or to discuss them with friends and family.[7]

Men are at a higher risk of suicide if they are single, recently separated, divorced or widowed. It has also been noted that men in unskilled employment are twice as likely to take their own lives, compared to men in the general population.[6] Precipitating life events, for women who attempt suicide, tend to be losses or crises in significant social or family relationships. As with men, suicide is more common among women who are single, recently separated, divorced or widowed, or those who have experienced domestic abuse. However, women are more likely than men to have stronger social support networks; feel that their relationships are deterrents to taking their lives by suicide; and seek psychiatric and other medical interventions.[7]

Figure 6. Age and sex specific mortality rate (per 100,000) for suicide and undetermined death in Bristol UA, 2010-2013 (pooled)



Source: Compendium of Clinical and Health Indicators, 2015

During the 2011-2013 period, a total of 14,806 suicide and undetermined intent deaths, among people aged 15 and over, were registered in England and Wales (an age standardised mortality rate of 10.62 deaths per 100,000 population). Over 77% of those deaths (11,426) were among men. The highest rate per age group was for men aged 35 to 64: 21.3 deaths per 100,000 population.

Table 5. Age and sex specific mortality rate (per 100,000) for suicide and undetermined death Bristol vs England & Wales, 2011-2013 (pooled)

	Bristol		England & Wales	
Age band	***Male***	***Female***	***Male***	***Female***
15-34	14.5	5.0	12.8	3.3
35-64	25.4	6.8	21.3	5.9
65-74	9.4	6.8	11.2	3.8
75+	6.0	5.9	14.0	4.7

Source: HSCIC, Indicator Portal 2015

In Bristol, 56.6% of all suicide and undetermined intent deaths in the 2011-2013 period occurred in people in their mid-life years (aged 35-64 years). Among men alone, 59.8% of suicides occurred in 35-64 age group and 34.0% in the15 to 34 age group. Nationally (England and Wales) 60.2% of all deaths due to suicide and undetermined intent in the same 3 years period (2011-2013) occurred in people aged 35-64 years, while among men, 25.2% of deaths occurred in young men 15 to 34 years of age and 60.8% among the 35-64 age group.

Suicide deaths are comparatively rare among young people under 18. In the last 9 years (2006-2014) fewer than 5 suicide and undetermined intent deaths occurred in Bristol in the 15 - 17 age group. Among 18 to 24 year-olds, there were 27 deaths in the 3 year period from 2012-2014 (a rate of 15.3 deaths per 100,000 population 18-24, not statistically significantly different to the Bristol 15+ rate). Although the rates of suicide and undetermined intent deaths have been increasing in this age group since 2006, because of the relatively small numbers, this increase is not statistically significant.

Table 6. Directly standardised mortality rate per 100,000 (95% confidence interval) and numbers of deaths for suicide and undetermined death among 18-24 year-olds; Bristol 2006-2014.

	2006 - 2008	***2009 - 2011***	***2012 - 2014***
Rate	8.9 (5-14.7)	11.2 (6.7-17.5)	15.3 (10.1-22.3)
Number	15	19	27

Source: Primary Care Mortality Database, 2015

The rates for women are similar in all age groups (figure 6) and have declined steadily since the 1990s.

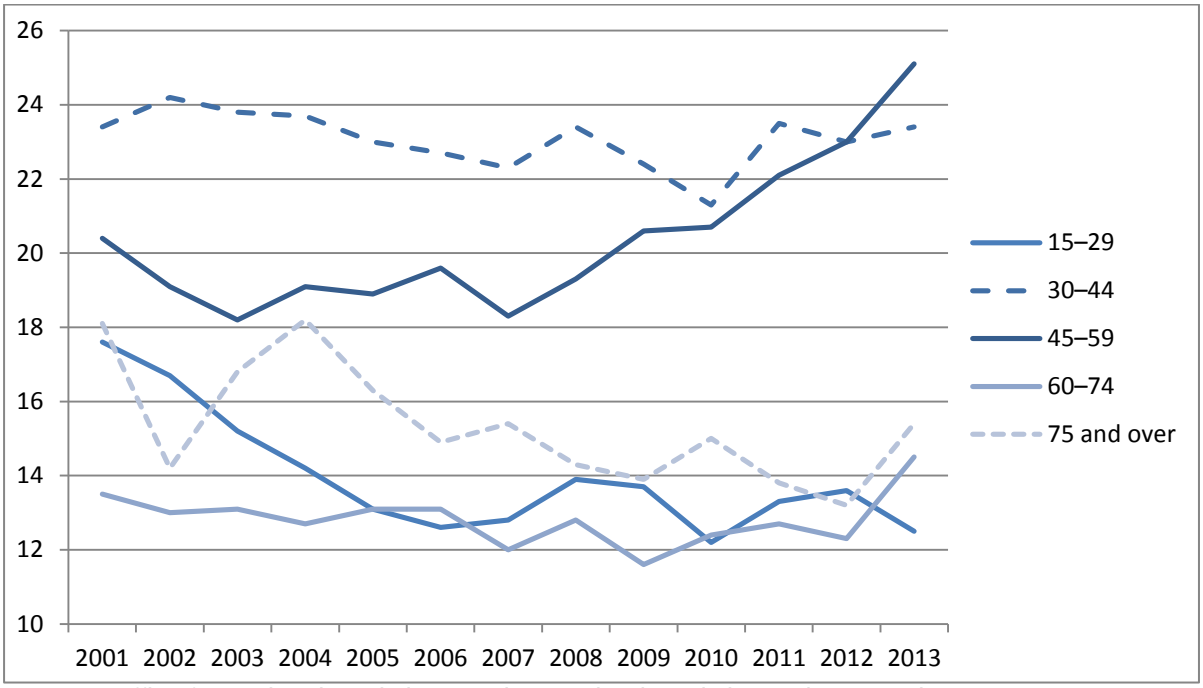
As mentioned above, most of the suicide deaths occur among men in their mid-life years. In the whole of the United Kingdom, in 2013, men aged between 45 and 59 had the highest suicide rate out of any age

group[d] (25.1 deaths per 100,000 population, see figure 7) having risen since 2007. The rate for 60-74 year old men also increased significantly in 2013 to 14.5 per 100,000.

In Bristol the number and the rate of suicide and undetermined intent deaths among men aged 45 to 59 increased between 2013 and 2014. In 2013 there were10 deaths (rate of 25.6 per 100,000) while in 2014, this rose to 20 deaths (rate of 53.7 per 100,000).

In contrast to the national trend, the rates of suicide deaths among younger men (15-29 years old) in Bristol increased slightly in 2013 and 2014 (13.9 and 16.9 per 100,000 population respectively). However, annual numbers of deaths are relatively small and may therefore appear to fluctuate widely from year to year.

Figure 7. Age-specific suicide rate, males, deaths registered in each year from 2002 to 2013



Source: Office for National Statistics, Northern Ireland Statistics and Research Agency, National Records of Scotland

Notes for Figure 7:

1. The National Statistics definition of suicide is given in the section 'Suicide definition'.
2. Figures are for males aged 15 years and over.
3. Age-specific suicide rates per 100,000 population.
4. Deaths of non-residents are included in figures for the UK.
5. Figures are for deaths registered in each calendar year.

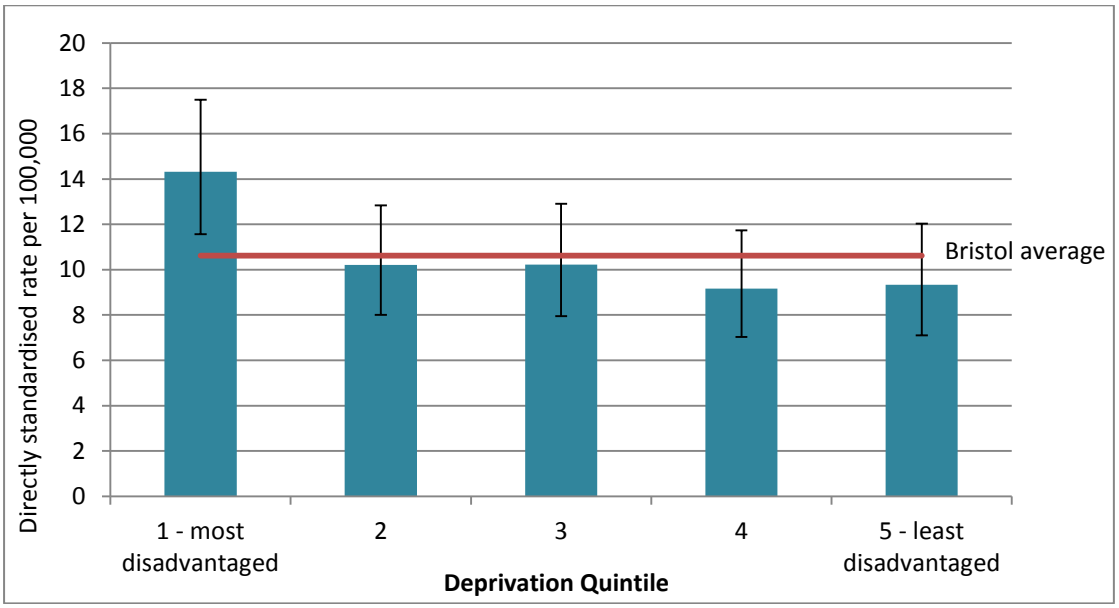
Social disadvantage and suicide

The ecological association between suicide rates with indices of deprivation has been well documented.[9-11] Approximately 15 per cent of the Bristol population live in wards that rank in the 10 per cent most deprived in the

[d] Office for National Statistics 'Suicides in the United Kingdom, 2013 registrations' Statistical Bulletin, http://www.ons.gov.uk/ons/dcp171778_395145.pdf

country. This is a larger proportion than in areas bordering Bristol (North Somerset 9%; Bath and North East Somerset 0%; South Gloucestershire 0%). Figure 8 clearly shows the relationship between mortality rates from suicide and undetermined death in Bristol and deprivation, with suicide rates highest in the most deprived quintile. Suicidal behaviour, particularly deliberate self-harm, has been shown to be much higher in manual occupational social groups and the unemployed, and is most strongly associated with socio-economic deprivation.[8] The effect seen in quintiles 4 and 5, the least disadvantaged, may be an effect of recession, work stress or relationship breakdown. There is increasing evidence that debt as well as job loss are key contributory risk factors for suicidal behaviour. [22]

Figure 8. Mortality from suicide and undetermined death in Bristol by deprivation quintile 2006-2014, 95% CI

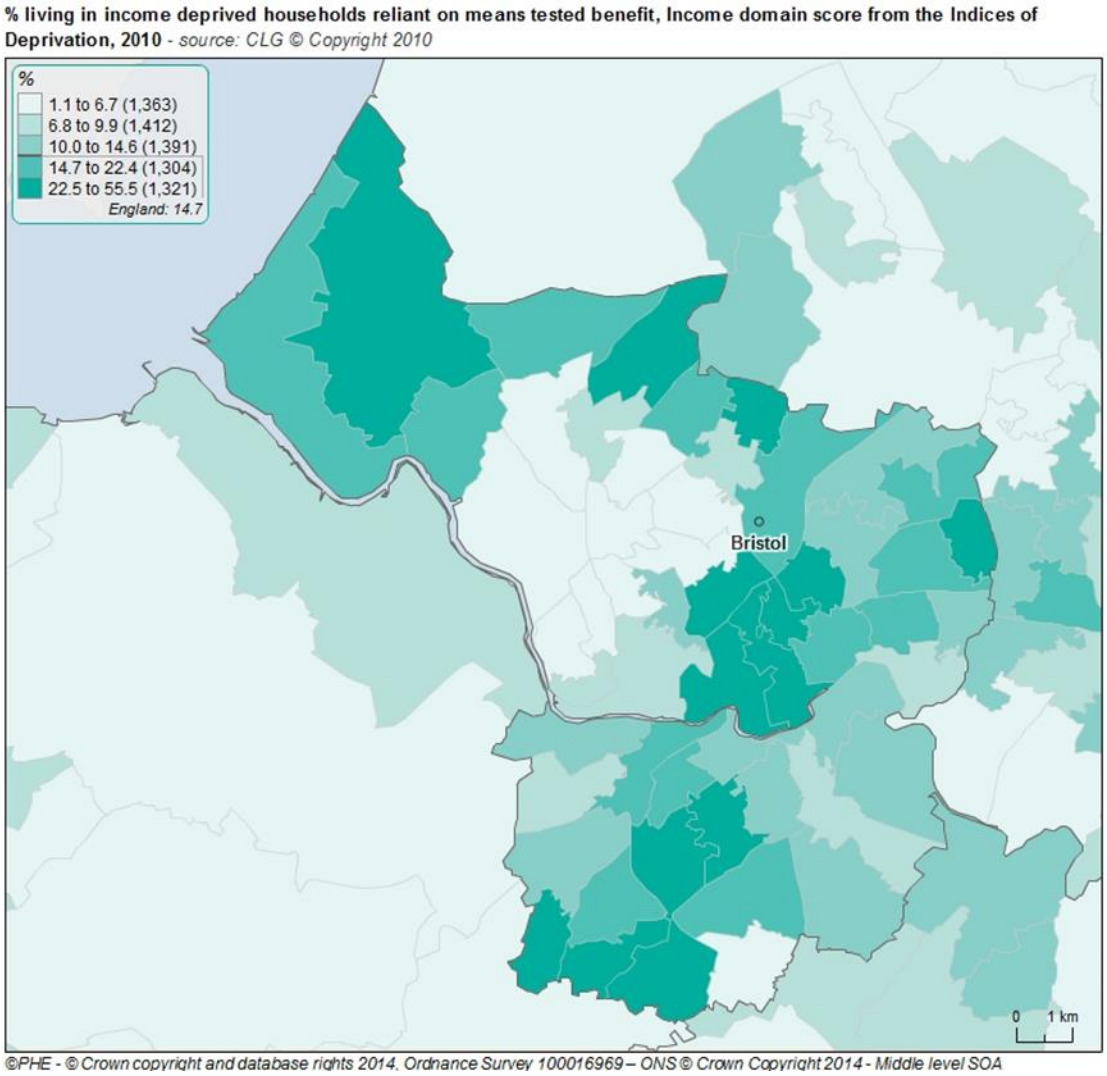


Source: Primary Care Mortality Database, 2015

Initiatives which aim to tackle inequalities and regenerate deprived communities, for example Community Strategies, Neighbourhood Renewal and Community Safety Partnerships, are potentially important as they can contribute to reducing mortality rates from suicide through mitigating those factors associated with risk - such as social fragmentation. It can also be argued that at the local authority level, the 'hot spots' index of deprivation may represent the same level of magnitude in predicting the rates of suicide as unemployment or the numbers of income-deprived people.

However, in Bristol, areas with the highest income deprivation do not exactly match the areas with the highest rates of suicide mortality (see Figures 9 and 10).

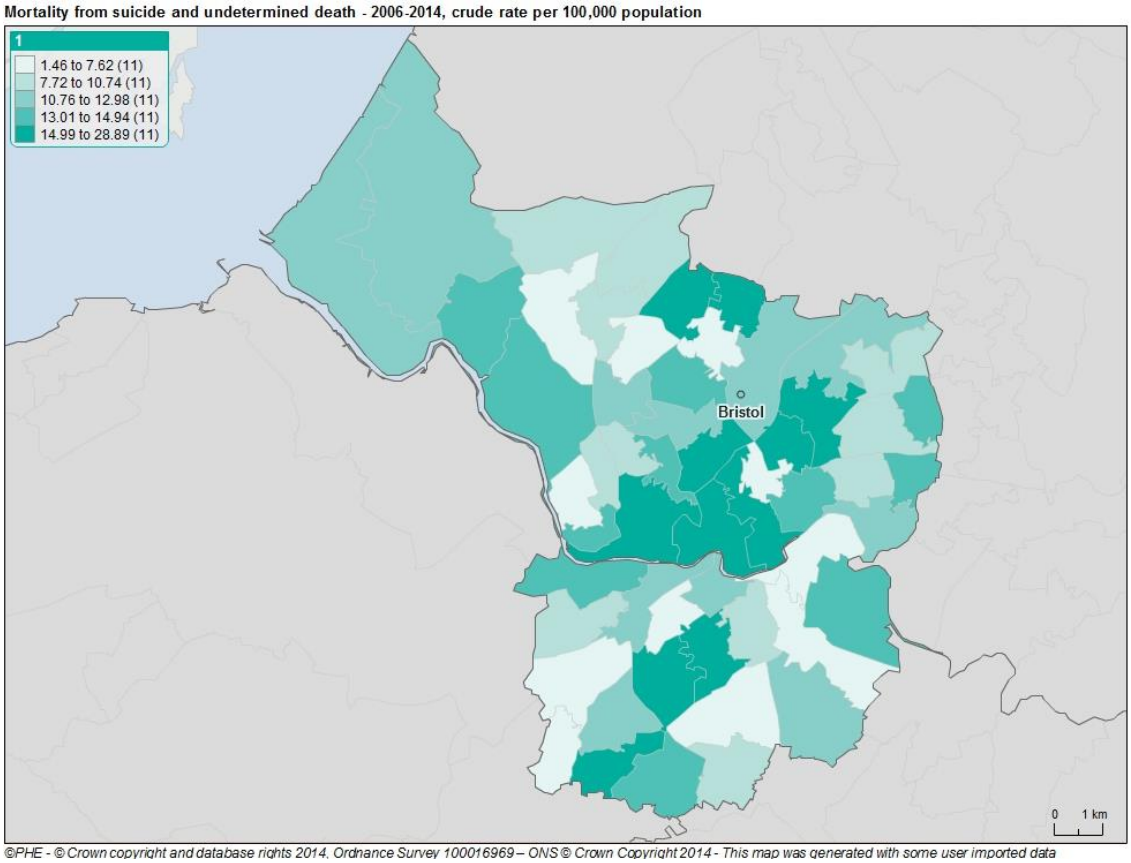
Figure 9. Index of income deprivation in Bristol by Middle Layer Super Output Area[e] 2010



Source: Public Health England Local Health portal: www.localhealth.org.uk

[e] A Middle Layer Super Output Area (MSOA) is a geographic area. Middle Layer Super Output Areas are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. MSOAs are built from groups of contiguous Lower Layer Super Output Areas. The minimum population is 5000 and the mean is 7200.

Figure 10. Mortality from suicide and undetermined death – crude rate per 100,000 population 15 years old and over in Bristol, by Middle Layer Super Output Area, 2006-2014



Source: Primary Care Mortality Database 2015 and Public Health England Local Health portal (www.localhealth.org.uk)

Ethnicity and suicide

Research indicates the influence of culture[12] and patterns of migration[13] upon differential trends in suicidal ideation and suicide attempts amongst ethnic minority groups in the UK. The Centre for Health Improvement and Minority Ethnic Services (CHIMES) BME Suicide Prevention Project highlighted both the consultation exercise for the National Suicide Prevention Strategy and the consultation for Delivering Race Equality an Action Plan for Services, as having considered suicide in different ethnic groups living in the UK as a cause for concern.[14] However one of the latest analyses of suicide tendencies among the South Asian diaspora, show that contrary to previously reported high rates of suicide deaths among young Asian women, older women of South Asian origin are at higher risk of suicide. The suicide rate for South Asian men was lower than other men in England and Wales. [23]

The suicide data currently available does not record ethnicity or country of birth. A comprehensive means of monitoring such differences would help to build the evidence needed to facilitate timely action to prevent suicidal ideation and suicide attempts and improve access to effective and culturally appropriate services for those in most need.

The Bristol Self-harm Register does however capture ethnicity data and the table below shows patterns for self-harm presentations to the Bristol Royal Infirmary in 2014 (see table 7). Reassuringly, there is no evidence of increased self-harm risk among the Bristol BME population.

Table 7. Ethnicity data for patients attending the Bristol Royal Infirmary for self-harm presentations during 2014* (based on first episode of self-harm)

Ethnicity n (%)	Male	Female	Total	Bristol (*2011 Census*)
White	372 (93.5)	548 (89.3)	920 (90.9)	359,592 (84)
Mixed	10 (2.5)	28 (4.6)	38 (3.8)	15,438 (3.6)
Asian	4 (1.0)	6 (1.0)	10 (1.0)	23,655 (5.5)
Black	6 (1.5)	18 (2.9)	24 (2.4)	25,734 (6.0)
Other (eg Chinese)	6 (1.5)	14 (2.3)	20 (2.0)	3,815 (0.9)

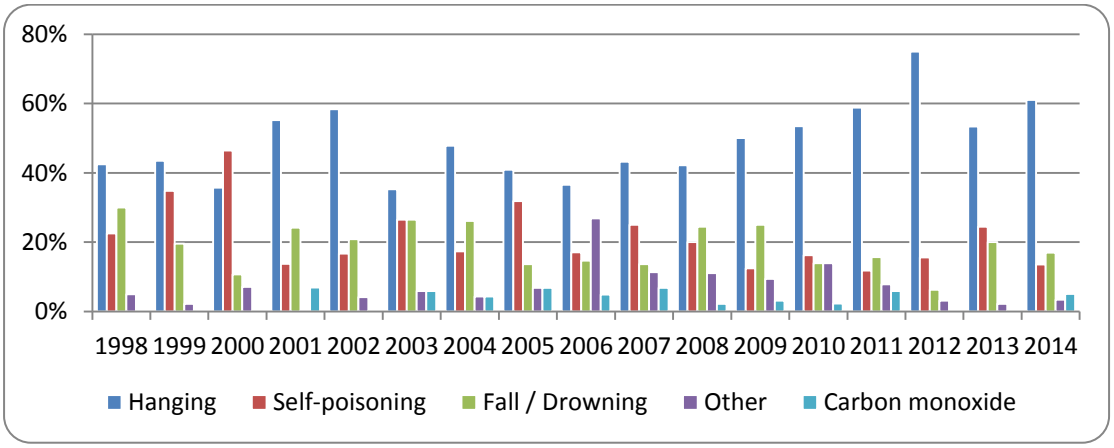
*Unknown data: 9 patients had no information on gender, 45 patients had no information on ethnicity.
Source: Bristol Self-Harm Surveillance Register Annual Report - 2014

6. Method of suicide and undetermined death

The likelihood of a suicide attempt proving fatal depends to some extent on the ease of access to and knowledge of, effective means. In line with national figures, deaths by hanging and self-poisoning have been the most common methods of suicide and undetermined death in Bristol (see figures 11 and 12). Between the years 2006 and 2014, 57.3% of deaths from suicide and undetermined death amongst men were caused by hanging and 13.0% by self-poisoning. Amongst women hanging accounted for 37% and self-poisoning for 31.5% of suicide deaths (see figures 11 and 13).

Deaths from falling/drowning have shown a decrease over recent years; which may be attributable to the safety barriers placed on the Clifton Suspension Bridge. Erecting physical barriers to prevent mortality from suicide, was a recommendation from Bristol's Suicide Prevention Strategy 2004-2007.[15] The prevention group are strongly encouraging the Bridge's trustees to investigate additional approaches to prevent the 3 or so deaths which still occur annually from the bridge. Other measures have been identified from a site visit by SPAG members and others to the area around the Observatory and between Peregrine Watch and Ladies Mile. It was considered that where the existing hedge is at its highest (minimum 4ft) and has significant depth (min 0.5m) and is supported by intact metal fencing, an adequate barrier is provided; which most people would find difficult to climb. This lends force to an argument to maintain existing hedging at this height, rather than at their current variable (lower) heights. Where sections of fencing were found to be broken, providing relatively easy access, repairs to fencing and planting to infill hedging were recommended. Several of these measures, however, were found to be at variance with conservation objectives (and to some extent access requirements for climbers). Investment in a different form of barrier (such as that employed at Gap Park in Australia[24]) which would not clash with conservation interests, while also allowing the possibility of one way access from the cliff face for climbers, was another alternative discussed– subject to cost.

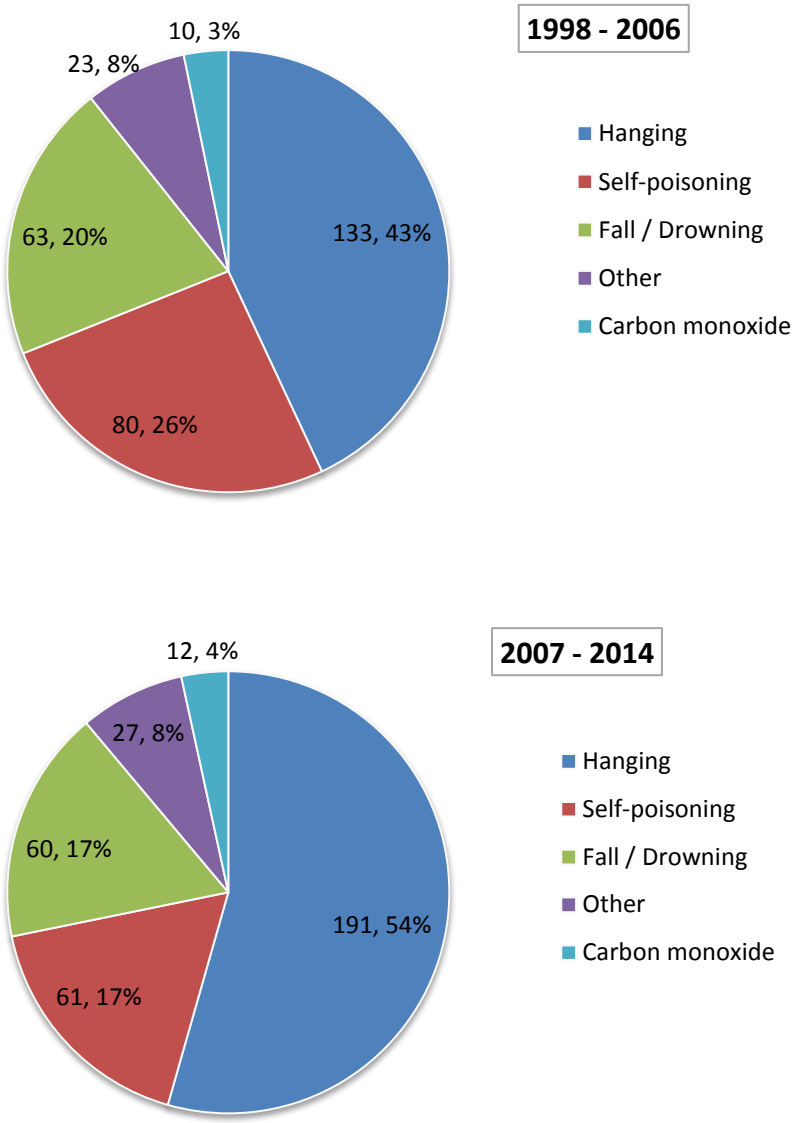
Figure 11. Bristol mortality from suicide and undetermined death by cause 1998-2014 - percentage contribution of each cause



Source: Primary Care Mortality Database, 2015

Death from carbon monoxide poisoning has become a much less adopted method of suicide and undetermined death, despite 3 observed cases in 2014. The general decrease in this method may reflect the growing proportion of cars fitted with catalytic converters along with the increased prevalence of diesel engines; which emit lower levels of carbon monoxide.

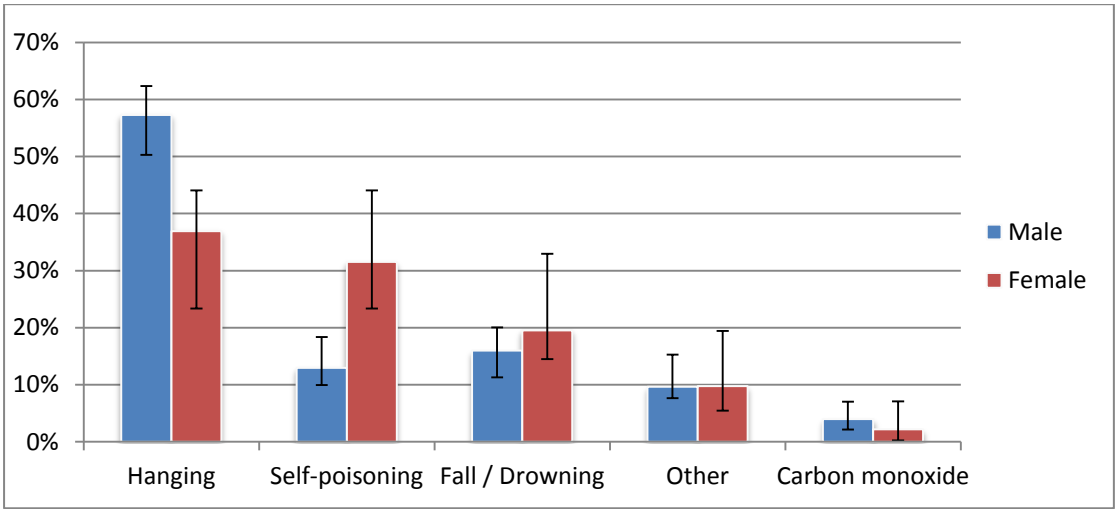
Figure 12. Bristol mortality from suicide and undetermined death by cause 1998-2005 vs 2006-2014, numbers and percentage of deaths



Source: Primary Care Mortality Database, 2015

The proportion of deaths due to hanging increased from 43% in the 1998-2006 period to 54% in the last 8 years (2007-2014). During the same periods the proportion of self-poisoning deaths decreased from 26% to 17%.

Figure 13. Bristol mortality from suicide and undetermined death by cause and sex – percentage contribution, 2006-2014, 95% CI



Source: Primary Care Mortality Database, 2014

In recent years (2012-2014), mixed drugs and opioids were the most frequent to be taken in fatal overdoses. In 2014 there were 11 fatal overdoses in the Bristol Unitary Authority Area.

Evidence from the Bristol Self-harm Surveillance Report (2014)[f] suggests that Paracetamol was taken in over a third of all episodes of self-poisoning. The Surveillance Report identified 63 cases of patients self-poisoning with tricyclic antidepressants (TCA) commonly amitriptyline, with around 20% of these cases requiring admission to ITU.

Table 8. Classification of substances taken in fatal poisonings in the Bristol Unitary Authority Area between 2012 and 2014 – percentage contribution

Drug classification	%
Mixed drugs	29.63%
Opioids	25.93%
Toxic gases	18.52%
Tricyclic / tetracyclic antidepressants	11.11%
Helium	7.41%
Methadone	3.70%
Other unspecified drugs	3.70%

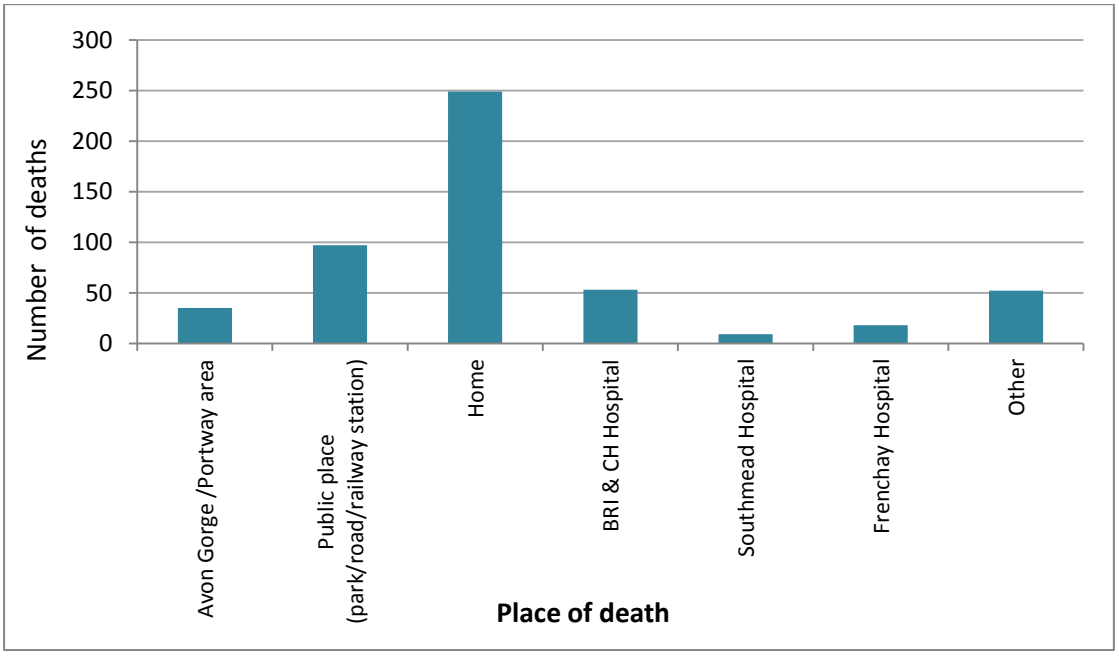
Source: Primary Care Mortality Database, 2015

[f] Bristol Self Harm Surveillance Report; Annual Report (2014) Carroll R. and Gunnell D. and University Hospitals Bristol NHS Foundation Trust, University of Bristol, Avon and Wiltshire Mental Health Trust, North Bristol NHS Trust, Bristol City Council

7. Place of death

Between 2003 and 2014, 35 deaths occurred in and around the Avon Gorge area of Bristol. It is not entirely clear from this data whether these individuals jumped from the Clifton Suspension Bridge, or nearby. Nevertheless, since the barriers on the Clifton Suspension Bridge were erected in 1998, the number of people using the bridge to take their lives has halved. Approximately 8 people a year jumped from the bridge prior to the barriers, whereas from 2003 to 2014 there have been on average 3 deaths each year. These reductions are statistically significant. However, due to the lack of statistical power, it is not possible to determine whether the reduction in the number of people jumping from the Suspension Bridge resulted in an overall reduction in suicides in Bristol.[16] Some places of death may have been masked as they are recorded as occurring within the Bristol Royal Infirmary, Southmead and Frenchay hospitals, even if the suicide or undetermined injury incident itself occurred elsewhere. The majority of deaths by suicide did in fact occur in the home (figure 14); 48.5 percent of suicides and undetermined deaths within the last 12 years (2003-2014) occurred in the home and 18.9 percent in a public place.

Figure 14. Bristol mortality from suicide and undetermined death by place of death 2003-2014



Source: Primary Care Mortality Database, 2015

HMP Bristol has a population of approximately 620 prisoners. The establishment receives male prisoners and a limited number of young offenders, both convicted and on remand, from all local Courts as well as being a Category B facility for the West of England.

ACCT now to prevent self-harm and suicide

On 1 April 2012, the 'Safer Custody' Prison Service Instruction 64/2011 (hereafter 'PSI') came into force. The PSI replaces several key Prison Service Orders ('PSO'), namely: PSO 2700 Suicide and Self-Harm, PSO 2750 Violence Reduction and PSO 2710 Follow up to Deaths in Custody.

This development is important to all organisations that are connected with offender health. A particularly significant development from the previous regime is the new Assessment, Care in Custody and Teamwork ('ACCT') version 5. Those who manage offender health must adhere to the requirements of ACCT in order to manage individuals at risk of self-harm and suicide. The Corporate Manslaughter and Corporate Homicide Act 2007 specifically applies to those detained, thus PSI 64/2011 should become a fundamental aspect of the provision of healthcare to offenders.

ACCT is a prisoner-centred flexible care-planning system which is designed to reduce the risk of suicide and self-harm. A list of roles and responsibilities are specified that must be carried out within an hour of an ACCT being opened.[20]

There is also a 'listeners' scheme supported by the Samaritans for prisoners who may be at risk from suicide or self-harm. However, there was a significant rise in suicides in prisons in England and Wales during 2013/14 which may be attributable to the fact that a growing proportion of those now detained suffer from one or more mental health disorders and there is rising despair among prisoners. Such issues may be exacerbated by shortages in staff and budget cuts. [21]

The number of deaths from suicide within HMP Bristol remained consistent between 2003 and 2011, at just over 1 death per year. The most recent 3 year period (2012-2014) has seen a reduction to 1 self-inflicted death in the Prison, which may be related to the prevention activities outlined above; although the numbers are too small to draw definite conclusions from.

Table 9. Self-inflicted deaths in HMP Bristol

Years	2003 - 2005	2006 – 2008	2009 – 2011	2012-2014
No. of deaths	5 (55.6% of all deaths in prison)	3 (37.5% of all deaths in prison)	5 (71.4% of all deaths in prison)	1 (33% of all deaths in prison)

Source: Safety in Custody statistics: Deaths in prison custody, 1978-2014, https://www.gov.uk/government/publications/safety-in-custody

Self-harm incidents within HMP Bristol increased between 2009 and 2011, but decreased in 2012, to reach a stable number of 84 per year in 2013 and 2014. The average annual number of self-harm incidents in HMP Bristol in the 6-year period of 2009 and 2014 was 95 (see Table 10).

Table 10. Self-Harm Incidents in HMP Bristol

Years	2009	2010	2011	2012	2013	2014	6-year Average
No. of self-harm incidents	79	131	111	87	84	84	95

Source: Safety in Custody statistics: Self-harm annual tables, 2004 - 2014, https://www.gov.uk/government/publications/safety-in-custody

8. Self-harm and the STITCH project

The Services and Trusts Integrating to Transform Care in Self-harm (STITCH) Project aims to improve care for people who self-harm: it represents collaboration between NHS Trusts, Bristol University, Bristol City Council and the voluntary sector, to provide good quality care and reduce suicide. Self-harm is the strongest risk factor for completed suicide, about 2,500 people present to hospital following self-harm in Bristol every year. The Bristol Self-harm Surveillance Register has been collecting detailed information about all people who self-harm and present to hospital since 2010. In 2014 the Register went Bristol-wide and is now collecting information from Bristol Royal Infirmary, Southmead and the Bristol Children's Hospital.

The Register forms the bedrock of STITCH's work. It has led to published research and recently partnership work has begun with CLAHRCwest (Collaboration for Leadership in Applied Health Research and Care) to develop patient-centred outcomes: this research will focus on what patients who self-harm would see as successful, supportive care, good care outcomes and the areas they feel are important to research. The register is also involved in three research projects relating to suicide prevention: i) the role of the internet in suicide; ii) the impact of the recession on self-harm; and iii) a study of risk assessment tools. Publications are in development about the creation and impact of the Register and a user-led review of the Emergency Department at the Bristol Royal Infirmary.

In the Emergency Departments, STITCH work continues to improve the quality of care for patients who self-harm. Following the user-led review of services a number of improvements have been implemented including clear signage advising of triage and privacy options, standardisation of all self-harm assessment documentation across Bristol sites, the development of a user-led resource leaflet which outlines the Emergency Department processes and provides signposting information, experience-led training for Emergency Department staff and electronic personal support plans for patients who attend regularly. These innovations will also be rolled out at Southmead Hospital in the coming year. Training about self-harm was delivered to a range of health care professionals including GPs and paramedics and continues to be developed. STITCH also contacted all Bristol MPs regarding the dispensing of prescription medication for self-harm patients; highlighting the risk issues. This issue is now being debated by both medical and pharmacy bodies to explore the possibility of instalment prescribing at no extra cost to the patient. STITCH will also be doing some focused work with GP surgeries which have higher prescribing rates of potentially lethal medications.

9. Contact with mental health services

As highlighted in this report thus far, high suicide rates have been associated with numerous factors and circumstances. Prior research indicates a particular relationship with acute episodes of illness[17] and discharge from psychiatric hospitals.[18]

The numbers of deaths with 'suicide', 'narrative' or 'open inquest' verdicts for patients in contact with Bristol Mental Health Services at the time of death, or in the previous 12 month period, are shown in Table 11 (below). The average annual number of suicides among individuals in contact with mental health services over the 14-year period of 2001-2014 was approximately 14.5 deaths per year.

Table 11. Bristol Unitary Authority Area and AWPT deaths with suicide, open or narrative verdicts, 2001-2014

Year	PCT/LA Deaths	AWPT Deaths	AWPT % of PCT/LA deaths	3 year average %
2001	29	8	28%	-
2002	24	11	46%	-
2003	34	7	21%	30%
2004	23	13	57%	38%
2005	44	16	36%	36%
2006	41	18	44%	44%
2007	44	20	45%	42%
2008	45	15	33%	41%
2009	32	13	41%	40%
2010	43	14	33%	35%
2011	51	21	41%	38%
2012	32	17	53%	41%
2013	46	13	28%	40%
2014	59	17	29%	34%
14-year Average	*39.1*	*14.5*	*37%*	**-**

Source: Avon & Wiltshire Mental Health Partnership NHS Trust, 2015

Table 11 also shows that 37% of those who died by suicide in Bristol, over the same 12 year period, were in contact with mental health services.

10. Priorities for 2015

Key priorities for the coming year will be to:

- maintain and develop the expert and active Bristol Partnership for Suicide Prevention, and continue to undertake the annual audit of trends in suicide;
- continue surveillance of the impact of economic recession, of local patterns of suicide and partnership working with relevant local agencies;
- continue to work with local prescribers to reduce the number of suicides from ingestion of antidepressants, and work to achieve a situation nationally where medications can be prescribed under a single prescription that can be supplied in smaller amounts (installments) to avoid, for example, situations where a patient who has self-harmed can be prescribed an appropriate medication (such as an antidepressant) which can be fatal in large doses. Providing several individual prescriptions for smaller amounts could cause the patient to be liable for additional prescription charges and might act as a disincentive to taking the medication;
- continue to liaise with the Bristol Suspension Bridge staff to monitor deaths and media coverage of those deaths and advance partnership work to try to improve safety measures in the surrounding area;
- monitor the emergence of possible new hotspots;
- continue to support Bristol's Self-harm Surveillance Register, and develop closer integration of knowledge derived from this and the local suicide audit;
- engage with the local Coroner, and collaborate with contiguous local authorities to commission the collection of greater details about cases of suicide, in order to make the most efficient use of local resources/knowledge – e.g. SH Surveillance Register/Avon Coroner/research going on at UoB/overlap with AWP catchment area;
- develop and extend targeted programmes for high risk groups and link this work with public mental health programmes;
- develop and extend awareness raising mental health and suicide prevention training programmes;
- continue to work with the local media to ensure best practice in the reporting of suicide;
- work more closely with British Transport Police to share information and work cooperatively on prevention.

11. Bristol Suicide Prevention and Audit Partnership 2014- 2015

Aileen Edwards: Second-step
Anthony Harrison: Avon and Wiltshire Mental Health Trust
Barbara Compitus: GP
Bernie Chinnock: North Bristol Trust
Blanka Robertson: Public Health Principal
Catherine Wevill: Bristol CCG
Charlotte Balf: Fairbridge
Chris Ellis: Avon and Wiltshire Mental Health Trust
Clive Gray: Public Health Principal
David Gunnell: University of Bristol
Fiona and Mel from TESS
Glenn Townsend: Bristol CCG Service User Monitoring and commissioning support
Hannah Russell C&YP Bristol City Council
Hilary Lindsay – Bristol Crisis Service for Women
Jo Orchard: North Bristol Trust
Jody Clark: Safer Bristol
John: Bristol Samaritans
John Lovelock: North Bristol Trust Liaison Psychiatry
Jonathan Potokar UH Bristol Hospital Trust Liaison Psychiatry
Emma Bartlett: Network Rail
Magda Szapiel: Public Health Practitioner – Epidemiology
Maggie: Bristol Samaritans
Margaret Price: Rethink
Martyn Baxter: Bristol Samaritans
Naomi Salisbury: Bristol Crisis Service for Women
Nicola Hughes: North Bristol Trust
Pat Cummings Bristol City Council
Paul Richards: British Transport Police
Pommy Harmar: Next Link
Rowena Hastings: Avon and Wiltshire Mental Health Trust
Salena Williams: Liaison Psychiatry UB Hospital Trust
Sara Oke: Avon and Wiltshire Mental Health Trust
Jon Hayhurst CCG Medicines Management
Sue Topalian: Children and Young Peoples Services NHS Bristol
Suzanne Pearson: Bristol Mind

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