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# Bradford Suicide Audit

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*Interim report  
April 2017*

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Deaths by suicide in  
Bradford District  
2013-2015

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## Introduction and background

Suicide is a tragic event which, though rare, affects a large number of people each time it occurs, sending ripples through family and community life. As part of the **Bradford District Mental Wellbeing Strategy 2016-2021**, there is a commitment to support the development and implementation of a District-wide suicide prevention plan, sitting under the 'Our Wellbeing' aspiration of the strategy. This plan is in its final stages of development, and is based on the premise that **many suicides are preventable**, and if early support or crisis intervention is offered a different outcome can be perhaps seen in people's lives. Responsibility for coordinating actions to prevent suicide in local areas rests with the Director of Public Health, and is a partnership effort involving the NHS, Local Authority, Police and wider partners.

The collection of **data on deaths by suicide in a local area is fundamental** to prevention efforts. Public Health England recommends the carrying out of an audit of suicides in each local area, collecting data about suicides that have occurred from sources such as coroners and health records in order to build an understanding of local factors, such as high risk demographic groups (PHE 2016) and common location of suicides. This enables partners to target suicide prevention measures towards those at highest risk in their populations.

Whilst summary information is available on suicide rates nationally from the Office for National Statistics, **coroner files provide a more detailed source of information which can be used to analyse local trends and patterns**. This document presents the findings from an audit of the Bradford coroner's files conducted in February 2017. Files were viewed which contained information of those who Her Majesty's Coroner concluded took their own lives between 2013 and 2015 in the Bradford District.

This report, written as a summary immediately following the audit, presents **interim findings**. Key statistics are presented with little comment and no thematic analysis of narrative notes taken from the audit; it is anticipated a fuller version will follow with further commentary. Where necessary, small numbers of cases have been suppressed within the narrative to avoid disclosure of personally identifiable information.

## Acknowledgments

Real human lives lie behind the numbers and statistics presented in this report, and the primary acknowledgement is to offer condolences and sympathy to the families and friends of those who have lost their lives in this most tragic of ways. This piece of work has been conducted in the hope that it will play some part in preventing future deaths by suicide in the Bradford District. Additionally, thanks is given to HM Coroner, Mr Martin Fleming, for permission and support to conduct the audit, to Linda Cahill, Senior Administration Officer in the Coroner's office, for facilitating the work and providing space for it to proceed, and to Becky Harrop, Public Health Information Analyst, for assistance in conducting the audit.

## Executive Summary

The files which were audited showed that between 2013 and 2015 there were **76 deaths** in the District for which conclusions of suicide were recorded. Of the cases:

- 78% of those who took their own life were male, and 22% were female. The mean age at death was 45 for males and 50 for females (47 overall), with the highest number of deaths (30) in the 40-49 age bracket
- Fewer people who killed themselves were from a South Asian background than might be expected given the ethnicity structure of the population of the District, and more people who killed themselves were from a Central Eastern European background; this conclusion should however be interpreted with caution due to the low numbers involved
- 61% of all deaths were by hanging or strangulation and 17% were by self poisoning; other methods included falling from a height, jumping under a train, and cutting/stabbing
- 78% of deaths occurred in the deceased's own home, with 22% in a more public place or workplace. A suicide note was left in 45% of cases
- 39% of people who died lived alone, and 65% were not in a long term relationship of any sort. 43% of cases had a long term physical health problem.
- More than half (57%) of those who took their own lives had at least one diagnosed mental illness, and of those who did not, 61% had anecdotal reference to suspected or historical mental health problems.
- 28% of cases had been in contact with secondary mental health services (for instance the community mental health team) in the 12 months prior to death; none were inpatients at the time of death. Nearly three quarters of those who killed themselves (71%) had seen their GP in the 6 months before death
- At post mortem, drugs and/or high levels of alcohol were found in the system of the deceased in 50% of cases, suggesting that half of all cases were under the influence of drugs/alcohol at the moment they took their own life
- Adverse life events experienced by those who took their own life prior to death included: family difficulties or break up, debt or financial worries, bereavement, loneliness/isolation, unemployment, suffering from abuse (sexual, emotional, physical, or neglect), a sense of shame, being affected by the suicide of a close contact, having benefits recently stopped or being sanctioned, and problems at work

## Audit process and case definitions

The audit was conducted in February 2017 on site at the coroner’s office. Paper records of all inquest files are kept by the coroner, and using an electronic database of conclusions, the coroner’s assistant obtained the record numbers of all files with a conclusion of ‘suicide’. Files were then manually extracted from storage and made available to the authors; only completed and closed inquests were viewed, meaning that it is possible a small number of cases still open more than a year after commencement were excluded. Files reviewed related exclusively to coroner’s inquest conclusions of suicide and so did not include deaths by ‘accident or poisoning of undetermined intent’ which are included in the wider definition of suicide by the Office of National Statistics.

A proforma was designed based on other recent regional suicide audits (North Yorkshire, Leeds). The process for auditing individual files was as follows:

- File records were obtained
- The audit team read through the files and extracted the relevant information in order to complete the proforma
- Unclear data elements were discussed between team members and agreement reached on how to record details in a standard way
- Data was collected in electronic format and stored on encrypted files using the council’s servers.

## Suicide cases and rates

In total 76 cases were reviewed between 2013 and 2015, 17 female and 59 male. Table 1 presents the number of cases in each year of the audit, together with the number of cases recorded in this period by the ONS (148). As can be seen, the audit included around half the number of deaths estimated and published by the ONS as official suicide figures, which is a comparable fraction to other local audits. This is because data from the ONS counts deaths coded as ‘undetermined intent’ as well as suicide verdicts, in an attempt to correct underestimation of the true number of suicides.<sup>1</sup> In England and Wales, it has therefore been customary to assume that most injuries and poisonings of undetermined intent are cases where the harm was self-inflicted but there was insufficient evidence to prove that the deceased deliberately intended to kill themselves; this convention has been adopted across the UK (ONS 2012). Files reviewed in this audit related exclusively to coroner’s inquest conclusions of suicide.

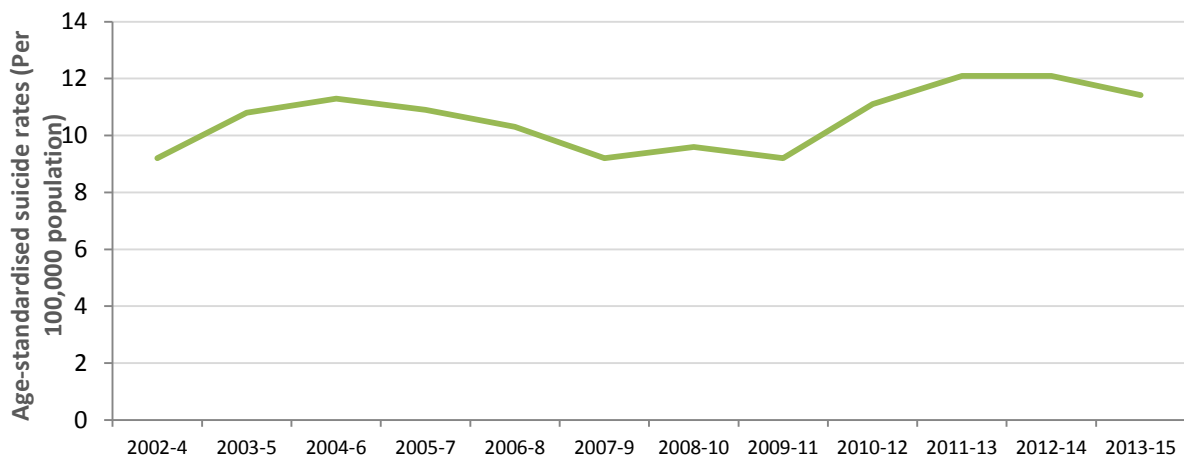
**Table 1: cases of suicide included in the audit and ONS figures**

	2013	2014	2015	Total
<b>Cases included in the audit</b>	24	29	23	<b>76</b>
<b>ONS estimation of suicide cases</b>	58	46	44	<b>148</b>

<sup>1</sup> Published figures about death by suicide are calculated from two groups of ICD 10 codes: Intentional self-harm (X60-X84) – Conclusion of suicide, and Event of undetermined intent (Y10-Y34) – Open conclusion

Figure 2 presents the rates of suicide as published by the ONS for Bradford over the last 13 years, taken in three year rolling rates in order to adjust for the effects of the relatively small number of suicides. A decline in the rate starting in 2005 reversed in 2010, and has risen since then, with a slight fall in the most recent 3 year rate to 11.4 per 100,000 population (2013-2015). This means that the District sees around 40-50 suicides every year, or on average one each week.

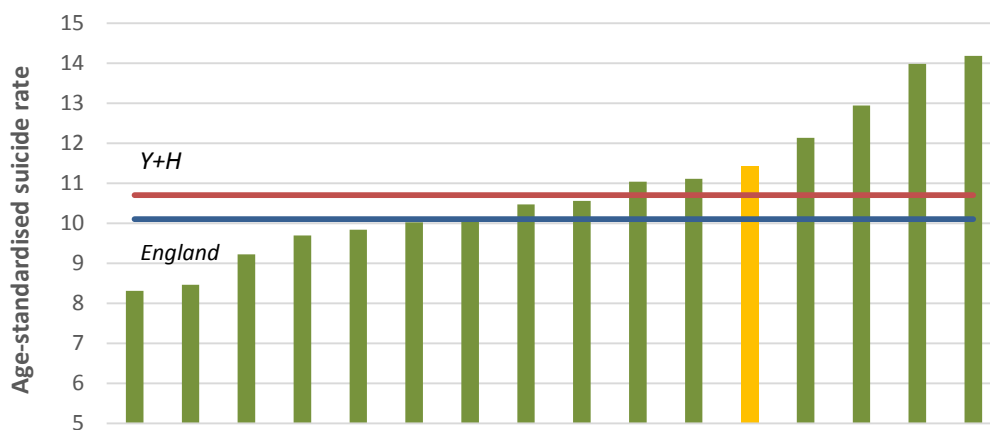
**Fig. 2: Age Standardised suicide rates in Bradford, 3 year aggregates, 2002-2015**



Source: ONS

Bradford has the 5th highest age-standardised suicide rate in Yorkshire and Humber (figure 3); this rate is not statistically significantly above the national average.

**Fig. 3: Age Standardised suicide rates in Yorkshire and Humber, 2013-15**



Source: ONS

## Demographics of audit cases

Within the audit, more than three quarters of those who took their own lives were male (78%). This is similar to the national gender breakdown of suicides in 2014 where 76.1% of suicides were male. (ONS 2014)

**Fig. 4: Proportion of suicides by Gender (2013-15)**

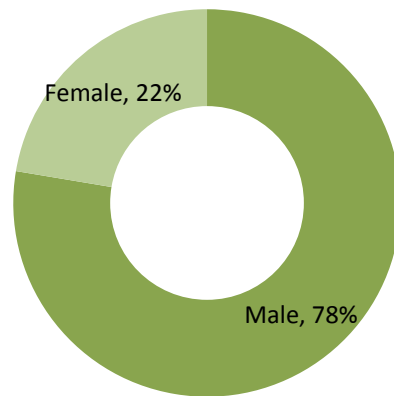
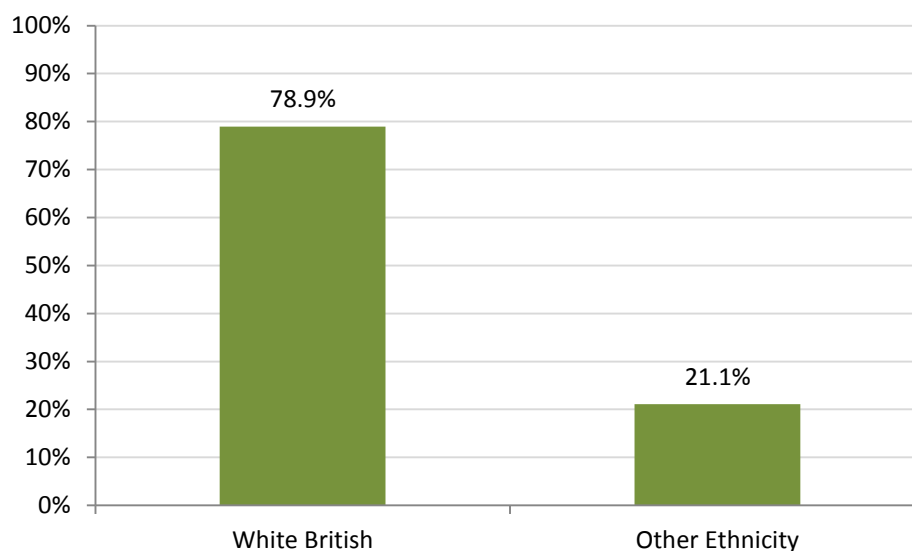


Figure 5 presents an ethnic breakdown of the cases audited. Ethnicity was not universally recorded, but was usually provided within the post mortem report on each death. Data on non-white British deaths has not been separated into categories as the small numbers involved would risk identification of cases.

**Fig. 5: Proportion of Suicides by Ethnic group (2013-15)**

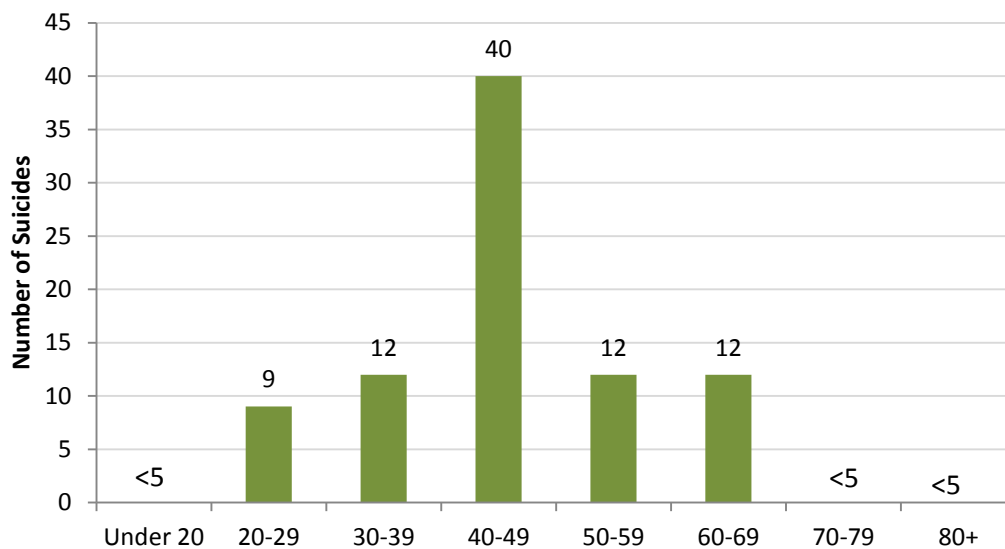


Aside from white British residents, the largest ethnic group in Bradford is Asian/British Asian (Pakistani). The percentage of cases in this category was 8%, lower than 2011 census estimates of the size of this community in Bradford (20.4%, ONS 2011). 9% of cases were from 'any other white background' and the majority were people with a Central Eastern European (CEE) background. Census 2011 data records 3% of the Bradford population as 'white other'. Although caution should be exercised in interpreting these figures, the higher

than proportionate number of suicides in the CEE community and lower number than proportionate in those of Asian/British Pakistani ethnicity is of interest.

Figure 6 shows the number of suicides separated into 10 year age bands. Male cases rose for each band and peak between the ages of 40 and 49, before reducing. The same age band (40-49) sees the peak number of female suicides; overall, with 40 suicides occurring in this age range, these years seem to be the most risky for people in Bradford to take their own life, at least across this audit period.

**Fig. 6: Number of Suicides by age and Gender**



For 24% of the cases no sexual orientation could be evidenced from the records. If someone in the audit was recorded as in a long term relationship with somebody of the opposite sex (e.g. marriage), it was assumed their sexual orientation was heterosexual. Fewer than five cases were recorded as being homosexual. The assumptions which have had to be made in this area may mean these figures may be misleading, as details of sexuality may have not been relevant for the purposes of the coroner’s investigations.

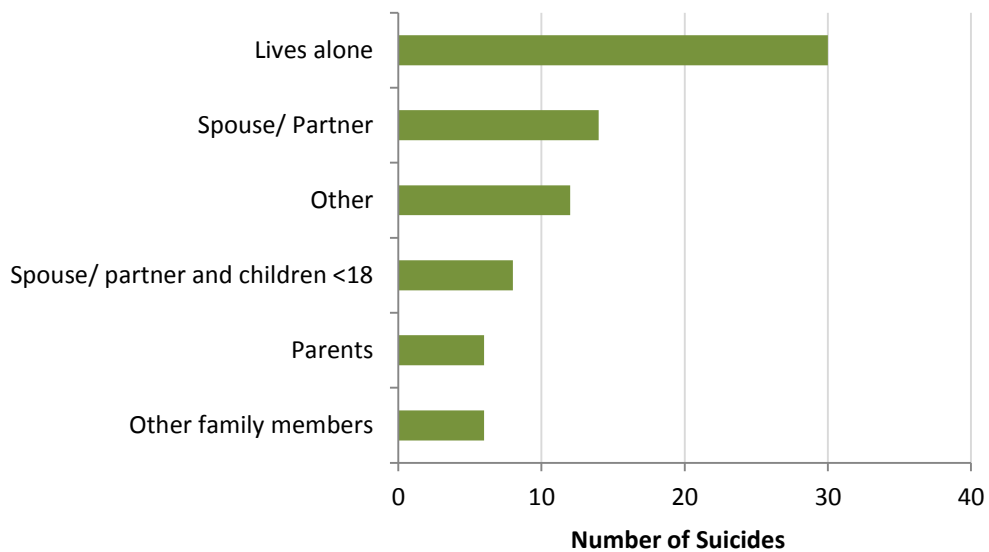
Within the audit, fewer than 5 people had a learning disability, and 5 people had a physical disability.

More than 80% of people who died by suicide lived in a home they either owned or privately rented (files did not distinguish between the two). Fewer than 5 cases lived in council accommodation, and fewer than 5 cases were homeless or of no fixed abode (none were rough sleeping).

38% of suicide cases lived alone at the time of death (figure 7), which is substantially higher than the national rate seen in the 2011 census where 13% of the usually resident population of England and Wales were living alone. This fits with established research linking loneliness and social isolation with higher degree of suicidal thoughts (although it is important to point out that living alone does not necessarily imply loneliness).

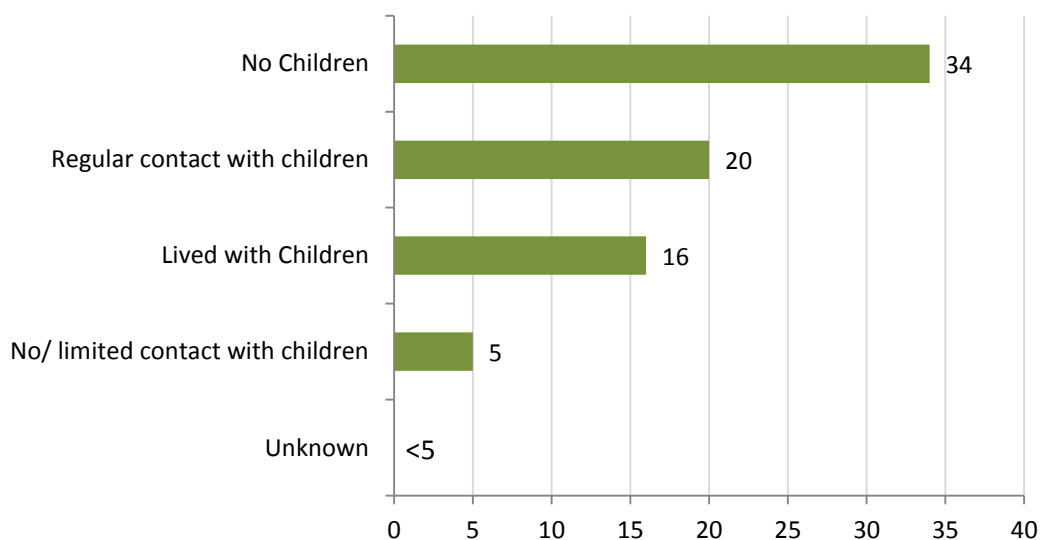


**Fig. 7: Other house occupants at time of death**

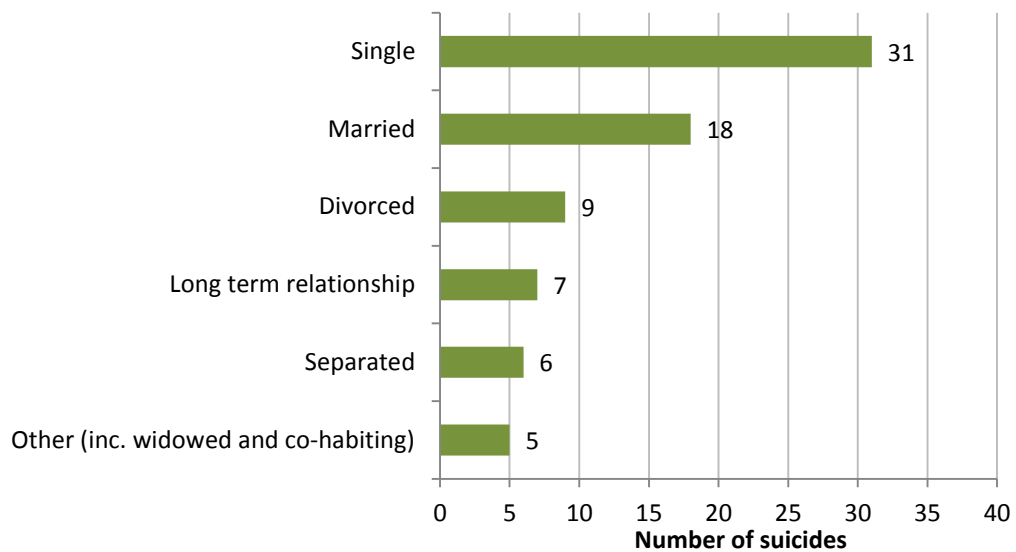


41% of people in the audit were single at the time of death, with 12% of people divorced, 8% separated, and 4% widowed (figure 8). 24% were married, 9% were in a long term relationship and 3% were cohabiting. This is in contrast to the national figures which show that the majority of people in England and Wales in 2014 (51.5%) were married or civil partnered. The proportion of those who took their own life who had no children was 45%; an additional 7% had no/limited contact with their children, and 47% either lived with or had regular contact with children (figure 9). Taken together, these findings reinforce the comments above linking suicide risk to lack of social connection, as it means a large number of people who died by suicide in the audit had no close familial connections surrounding them in their daily life.

**Fig. 8: Children of the deceased**

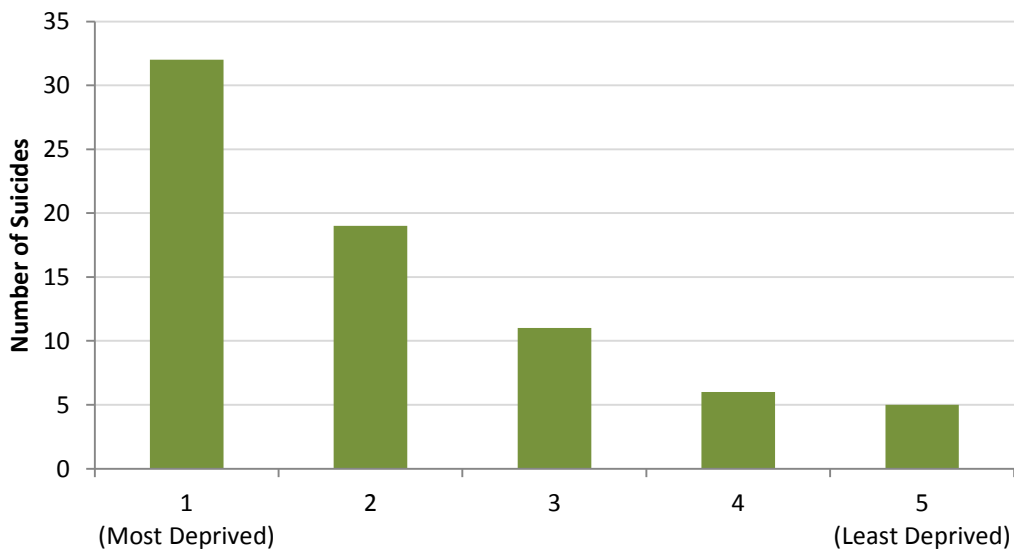


**Fig. 9: Relationship status at time of death**



In terms of the income and deprivation profile of those who took their own life in this audit, figure 10 shows the number of suicide cases with the postcode of each home address matched to Index of Multiple Deprivation (an index which measures multiple aspects of deprivation including income, housing and education) categories stratified into quintiles. As can be seen, there is a sharp social gradient in the suicide cases reviewed here, with the largest number of people in the most deprived quintile of IMD, and a reducing number of people in each quintile towards the least deprived.

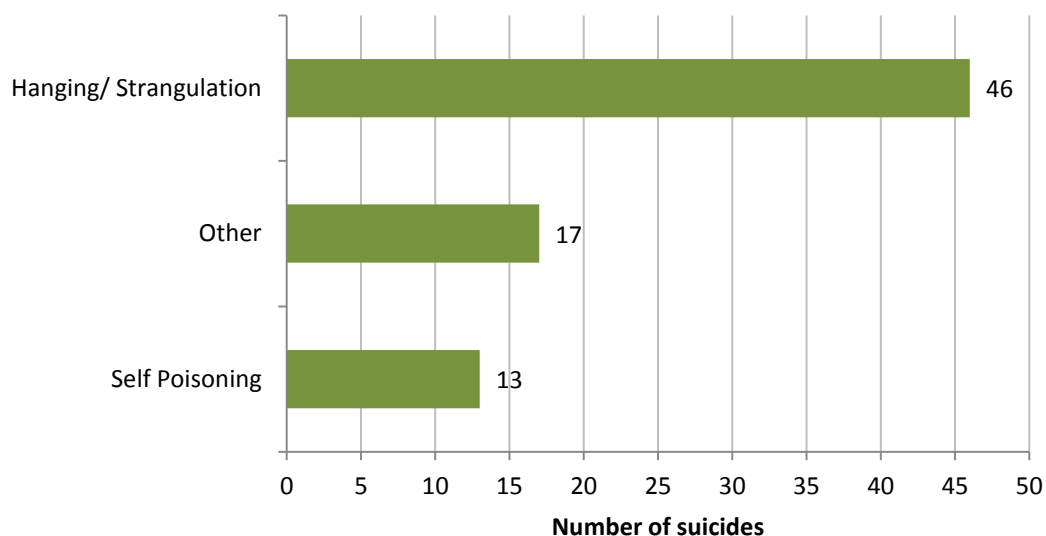
**Fig. 10: Number of suicide cases in each IMD quintile**



## Circumstances of death

The most common method of suicide – 46 of the cases reviewed – was hanging or strangulation – these represented 61% of cases, slightly more than the national average, where in 2014 hanging or strangulation accounted for 55% of male suicides and 42% of female suicides. Less common methods included cutting and stabbing, suffocation cases involving helium (a rising trend nationally), carbon monoxide poisoning, jumping from a height, jumping under a train, and self-immolation.

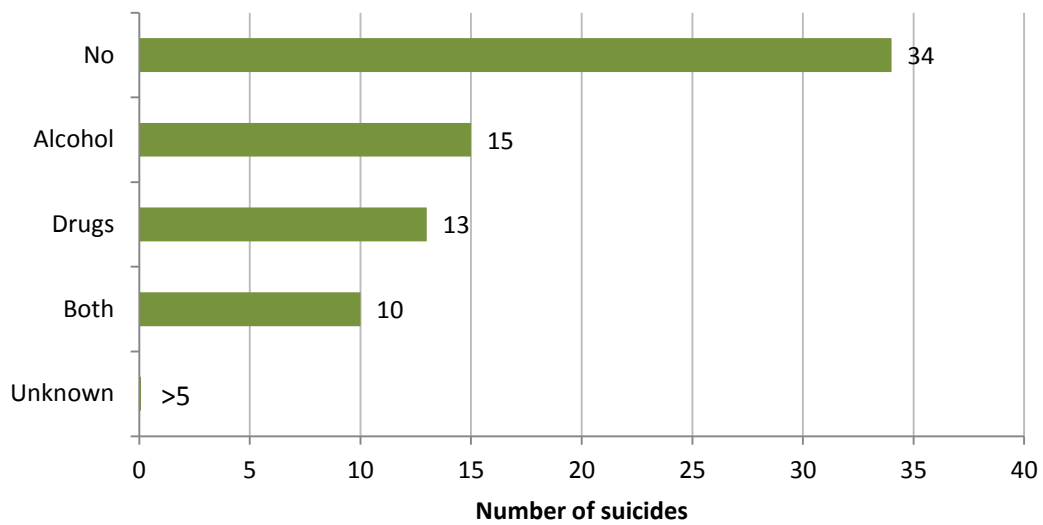
**Fig. 11: Method of suicide**



There were 13 cases of self-poisoning. Six of these incidents involved drugs sourced from prescription medication prescribed by the GP or by specialist mental health services, including medication for mental health issues (SSRIs such as citalopram and fluoxetine), or medicine for physical health conditions (e.g. gabapentin). None of the incidents was a paracetamol or other over-the-counter overdose. Other cases involved sourcing the self-poisoning substance as an illicit drug, or through medication ordered online and medication taken from a healthcare setting.

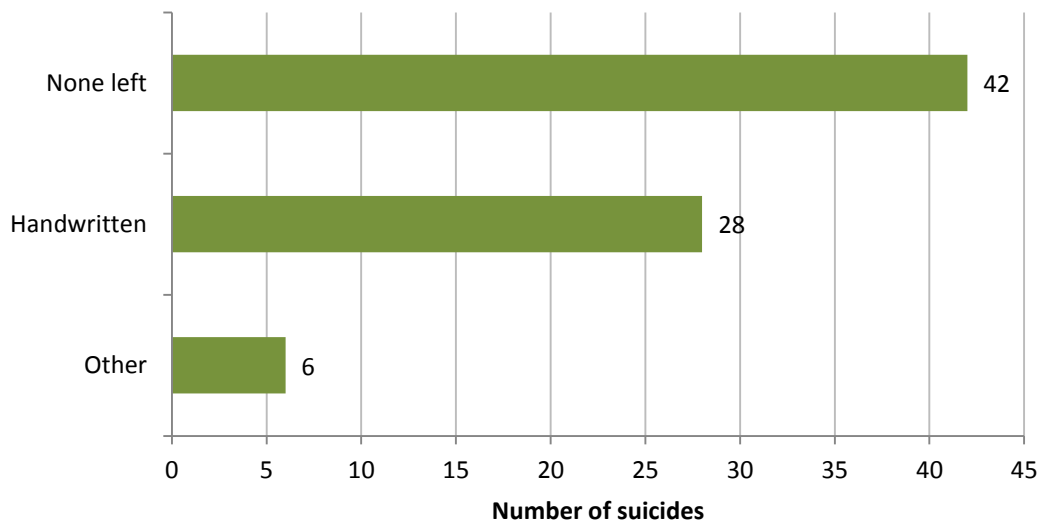
Post mortem reports give a toxicological summary of substances found in the system of all the deceased after death; this information should be treated with caution, as substances metabolise and/or pass out of the body at different rates before and after death, with time between death and discovery of the body playing a part in this. However a fairly accurate picture of illicit drug use and high levels of alcohol can be painted, and figure x shows that half of all people whose cases were reviewed died under the influence of drugs or alcohol at time of death – 13% with both drugs and alcohol, 20% with solely alcohol, and 17% with solely drugs. The disinhibitive effects of alcohol and drugs in relation to suicide completion is supported by national research, which also shows people under the influence are likely to choose more lethal methods of attempting to take their own life.

**Fig. 12: Use of alcohol or drugs at the time of death**



Fewer than half of all suicides left what could be considered a suicide ‘note’; of those that did, 28 (82%) left a handwritten note. The leaving of a note could indicate a more planned suicide with a longer-term determination to end life; this suggests that some suicides in Bradford were less planned and were impulsive.

**Fig. 13: Suicide note by type**

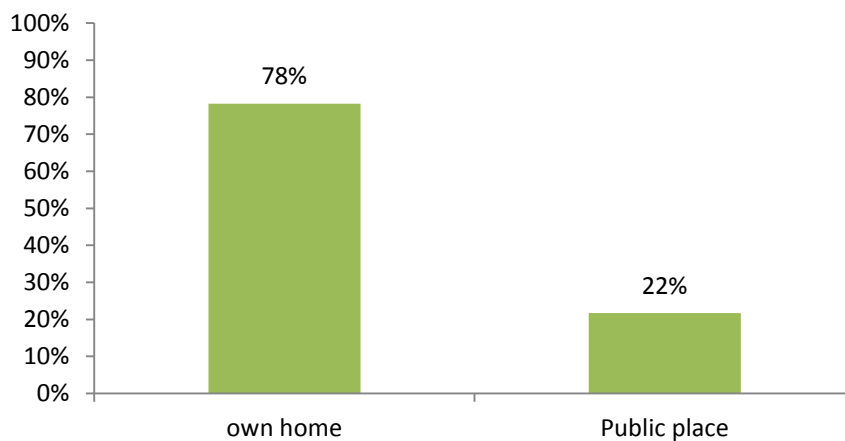


In addition to this data, evidence of a website or social media being used to discuss or research suicide in the weeks prior to death was seen in some cases.

## Geographical location

In line with national trends, most suicides in this audit occurred in the person’s own home (figure 14). Of those which did not, there were rail track suicides, suicides in public places due to jumping from a height, and a number of hangings in parkland, open land or in the deceased’s own workplace. Of the 22% of suicides which occurred in a public place, all of the deceased were Bradford residents. The distance travelled from own home to place of death ranged from 500 metres to 12.75km, representing a range of travel circumstances to death including walking and driving.

**Fig. 14: Location of Suicide**



The following table shows the 5 area committees in Bradford (on the same geographies as parliamentary constituencies) with the number of suicides in each area. Each area committee contains a roughly similar size population, and as can be seen there are a very similar number of suicides in each area, although a slightly lower number in Shipley Area.

**Table 2: Suicides in Bradford by area committee**

Area Committee	Number of suicides
Bradford East	15
Bradford South	15
Bradford West	16
Keighley	16
Shipley	11
Unknown	3

## Mental illness

More than half (57%) of those who took their own lives reviewed in the audit had at least one diagnosed mental illness, and more than half (51%) had depression – in some cases alongside other mental illnesses (figure 15)<sup>2</sup>.

**Fig. 15: Diagnosed mental illness in cases of suicide**



In addition to this, 20 of those who didn't have a diagnosed mental illness had anecdotal reference to a suspected or historical mental health problem which was not currently being treated. This means having a mental illness was a significant risk factor for suicide risk in this group of cases.

Of the mental illness medications – for instance antidepressants, mood stabilisers and anti-psychotics – which had been prescribed for some of those who took their own life, the most common were citalopram (29%) and fluoxetine (18%). Eleven other types of chemicals were mentioned in the prescription history of the cases audited, often in combination with one another. Since Citalopram and Fluoxetine are two of the most common SSRIs (anti-depressants), their prominence is not necessarily unexpected.

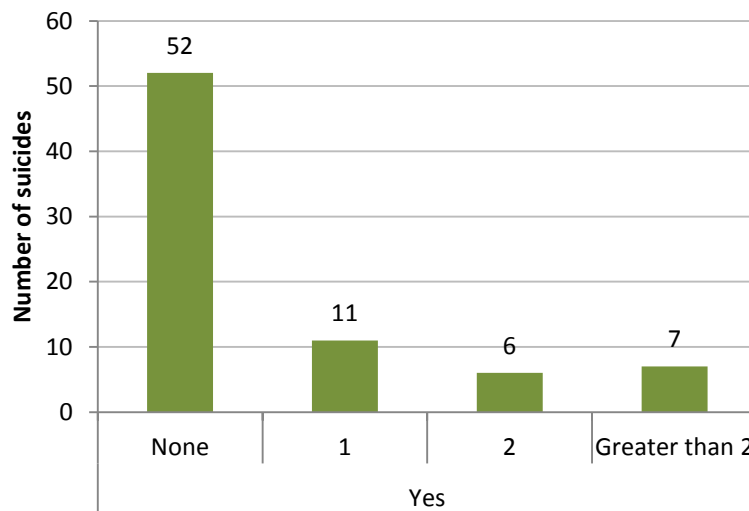
There was evidence of non-adherence to medication (e.g. failure to take drugs in the days leading up to the death) in 24% of people who were on medication for their mental health. It is likely that non-adherence to medication at points close to suicide may make somebody with a diagnosed mental health condition less mentally stable and inhibit decision making processes.

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<sup>2</sup> 'Other' includes Borderline Personality Disorder, Paranoia/Psychosis, PTSD, Bi Polar disorder, Schizophrenia, and Mental health and Behavioural Issues due to alcohol/substance misuse. Many of these conditions overlapped in the analysis and are presented in the above each time they were mentioned in the cases' inquest record.

Figure 16 shows data on previous suicide attempts of cases reviewed. 52 cases of those who took their own lives had never attempted suicide previously; 11 had done so once, 6 twice, and 7 more than twice. ‘Attempting’ suicide was sometimes hard to delineate from serious self-harm in the records, so numbers should be interpreted with caution. 9 of the cases reviewed (12%) had a history of self-harm. Larger proportions of the individuals who took their own lives disclosed thoughts of suicide beforehand: 58% disclosed these thoughts to somebody at some point in the past, 49% had disclosed them in the days prior to death, and 63% had ever disclosed them. This may represent a window of opportunity for preventative measures to be taken.

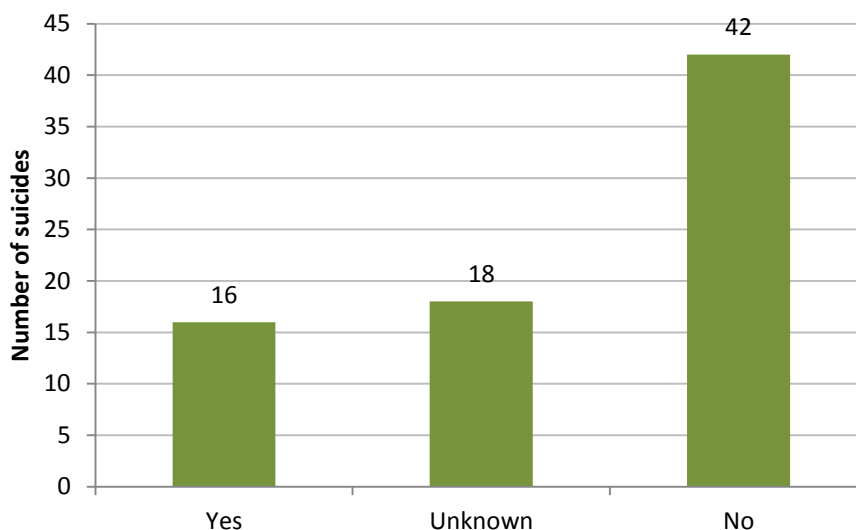
**Fig. 16: Previous suicides attempts, by number of attempts**



### Health service contacts

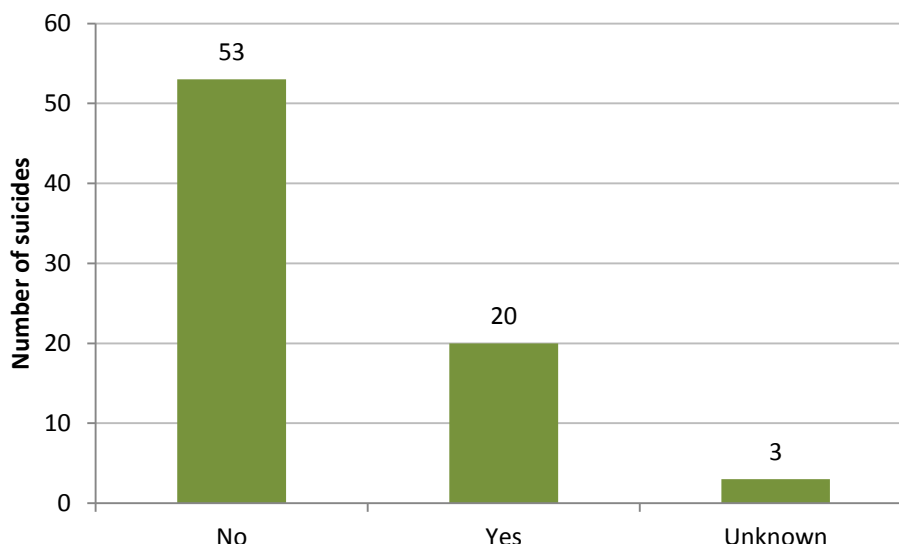
A number of people who took their own lives in the audit had a history of alcohol and/or substance misuse, with a variety of past and current treatment histories. Figure 17 shows that 21% of cases (16) were currently misusing drugs or had done in the past.

**Fig. 17: Number of suicides with a history of drug misuse**



Common drugs of abuse included heroin, cannabis and cocaine. In 5 cases, death was brought about through self-poisoning using illicit drugs; the coroner concluded these were deaths with suicidal intent, perhaps because of the presence of a suicide note. Figure 18 shows the number of suicides (22%) with a history of alcohol misuse.

**Fig. 18: Number of suicides with a history of alcohol misuse**



28% of people who took their own life had been seen by specialist secondary mental health services in the 12 months prior to death – this includes CMHT, psychiatric and crisis services, but excludes services based in primary care e.g. IAPT. Nobody was an inpatient at the time of death but a small number (fewer than 5 cases) had been discharged a short time before. 88% of the cases who had been seen by specialist secondary mental health services in the 12 months prior to death had been seen in the month before death; a small number of cases (fewer than 5) had been seen more than a year before death, or date of last contact was not recorded.

In terms of primary care contact, 41% of individuals who took their own lives had contact in the month before death, 30% between 1 and 5 months prior to death, and 8% between 6 months and a year before death. These contacts were mainly with GPs, but include contacts with other professionals e.g. primary care mental health workers or practice nurses. Table 3 shows a breakdown of these cases into the time period prior to death they were last seen in primary care.

**Table 3: Primary care contacts**

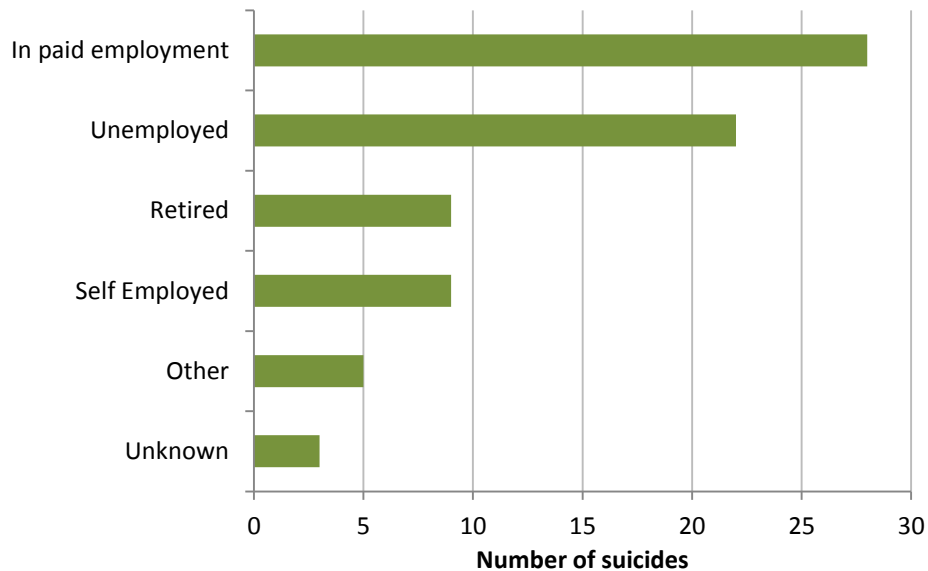
Last Primary care contact	Number of cases
Less than 1 month	31
Between 1 and 5 months	23
6 months to 1 year	6
more than a year	14
unknown	2



## Social circumstances

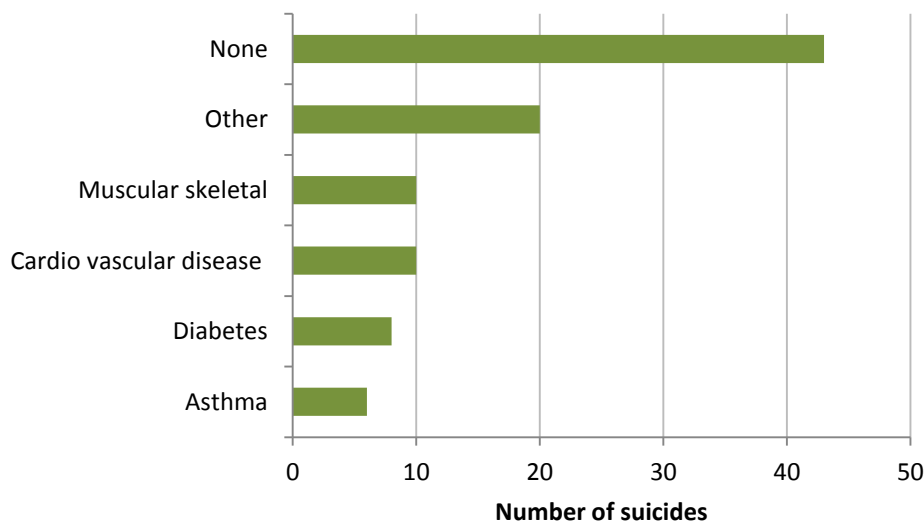
The employment status of those who took their own life in the audit is shown at Figure 19. 29% of cases were unemployed, which is higher than the unemployment rate of 6.1% in the general population at the midpoint of this audit period (May-July 2014).

**Fig. 19: Employment status of suicide cases**



A large number of people who took their own life in the audit (33) had a long term physical health condition (figure 20). Common problems are shown below as proportions of all suicides reviewed; given the distribution of these health conditions in the population, it is not clear if the proportion of these health conditions is higher than would be expected.

**Fig. 20: Proportion of suicide cases with a physical health condition<sup>3</sup>**

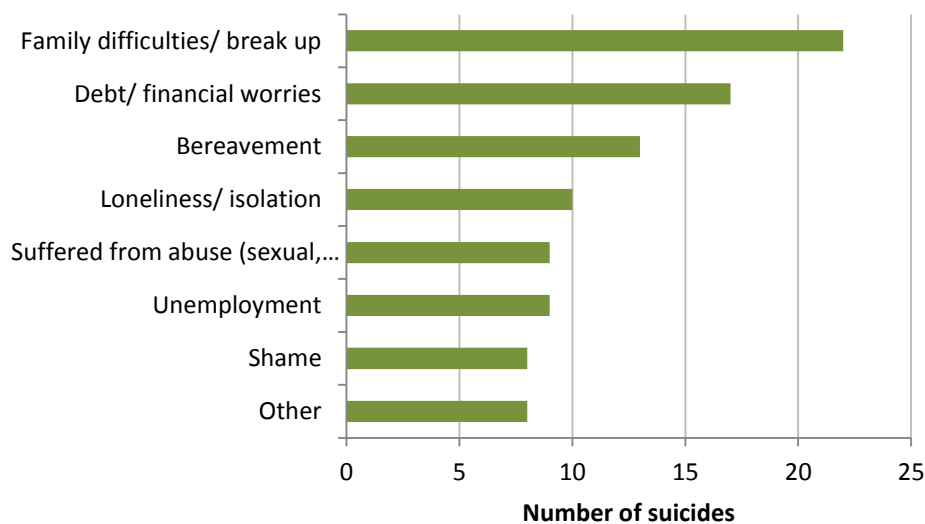


<sup>3</sup> 'Other' includes CKD, Sarcoidosis, Sinus problems, neurological problems, genito-urinary problems, other respiratory conditions, pancreatitis, and skin conditions.

9 of the suicide cases had been in contact with the criminal justice system, a number of these more than 12 months prior to death. No cases reviewed were of people on probation. This data is hampered by the fact that much contact with the police or criminal justice system would not have been material to the circumstances of death, so may not have come to light in the inquest process. A number of other agencies were involved in the lives of those who killed themselves prior to death; these agencies included accommodation services, employment services, occupational health departments, social services, voluntary sector services, alcohol services, faith communities, the probation service/ youth justice, and substance misuse services.

59 (78%) individuals were known to have at least one adverse life event in their recent past which could have contributed to their suicide. Figure 21 shows the proportion of people who had suffered these events. It is important to recognise that many of these events did not come in isolation; those who took their own life often had multiple life stresses, mental health conditions and/or physical health conditions.

**Fig. 21: Adverse life events experienced by those who took their own life prior to death<sup>4</sup>**



## Conclusion

In conclusion, this report has laid out some of the key statistics relating to suicide in the Bradford District between 2013 and 2015. It shows a clear link between suicide and deprivation, age, gender, employment status, mental health conditions and adverse life events. Data has been presented with little comment and no thematic analysis of narrative notes taken from the audit; it is anticipated a fuller version will follow with further commentary.

<sup>4</sup> Other includes being affected by the suicide of a close contact, having benefits stopped, and problems at work.

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