Hertfordshire Suicide Audit 2015/16

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February 2017(v8) (PC)

Contents

Summary

Suicide is an important public health issue. Over 4,800 people took their own life in England in 2014.[1] After a period of falling rates of suicides in England since the early 1980s there has been a small increase in the suicide rate in England since 2007-09. In Hertfordshire the data on suicide rates has been available since 2001 and has been significantly lower than the England suicide rate since this period and since 2004-06, the gap between the suicide rate in England and Hertfordshire has been widening. Hertfordshire has the lowest suicide rate for males and females compared with our 10 nearest statistical neighbours.[2]

In 2015 the All Party Parliamentary Group on Suicide and Self Harm Prevention recommended the reintroduction of a statutory obligation to carry out a locally based suicide audit[3]. Hertfordshire County Council and PCT (until 2013) carried out local suicide audits in 2011 and 2012.

This audit includes all people who died in Hertfordshire where the coroner's verdict was either suicide or open verdict (i.e. died at their own hand but the intention was unclear), and where the inquest took place between 1st April 2015 and 31st March 2016. The findings from this audit will inform the Hertfordshire Suicide Prevention Strategy.

Summary of Main Findings

Demographics:

- A total of 56 deaths by suicide were identified over the time period
- 45 were in males (80%) and 11 were in females (20%)
- The average age of males was 47 years and the average age of females was 44 years

Risk Factors

- 55% of males and 45% of females were employed at their time of death
- 72% of males and 55% of females were not in a relationship at the time of their death
- 27% of males and 9% of females had some previous involvement in the criminal justice system, (meaning they were either were in prison, on bail or had previously been in prison or on bail at the time of their death)
- The main method of death for both male and females was hanging
- 67% died in their own home or in their place of residence
- 23% of males and 54% of females made previous attempts at suicide
- For males, the leading risk factor was found to be relationship breakdown and was found in 22% of cases and financial issues were a factor in a further 13% of cases
- For females the leading risk factor was found to be family issues (such as previous abuse and domestic violence) was found to be a factor in 45% of cases
- 7% of all persons who died by suicide had no identifiable risk factor

[1] http://fingertips.phe.org.uk/profile-group/mental-health/profile/suicide/data#page/4/gid/1938132828/pat/103/par/E45000002/ati/102/are/E10000015/iid/41001/age/285/sex/4

[2] https://fingertips.phe.org.uk/profile-group/mental-health/profile/suicide/data#page/3/gid/1938132828/pat/6/par/nn-1-E10000015/ati/102/are/E10000015/iid/41001/age/285/sex/2/nn/nn-1-E10000015

[3] The All-Party Parliamentary Group (APPG) on Suicide and Self-Harm Prevention Inquiry into Local Suicide Prevention Plans in England January 2015

Contact with Health Services

- 11% of males and 9% of females visited their GP in the week before death. All of these appointments included a discussion of mental health issues
- 22% of males and 9% of females had not discussed mental health with their GP before their death
- 41% of people who died by suicide were known to mental health services at time of death

Discussion

- For a number of risk factors where national data is available Hertfordshire follows national trends, for example:
  - Method of suicide
  - Proportion of males compared to females who die by suicide

- Some factors, including people involved in the criminal justice system and males not in relationships are noted as risk factors in the national suicide prevention strategy[4]; however there are no datasets to compare national rates with the local data. The results of this audit found that these groups were at greater risk of suicide.

- The specific occupational groups such as health professionals and agricultural workers identified in the national suicide prevention strategy as 'at-risk' were not seen in males locally, where no-one in these occupations were represented. However, two of the females in the audit were in identified high risk occupational groups (one was a nurse and another was a veterinary student).

Recommendations

1. The time period 1st April 2015 to 31st March 2016 was used for this audit as it ensured the most up to date data was reviewed. Since national data on suicide is reported in calendar years, we recommend that it would make for better comparison if the local audit used calendar years as its time period in the future.

2. The coroner's service does not routinely collect information on the individual's ethnicity, race or sexuality. If this information was collected it would enable local analysis and would support our understanding of the needs of BME and LGBTQ groups.

3. The audit data showed that Hertfordshire has higher rates of suicides in males in the 20-29 year age band than the older age band of 35-50, which is the age group with the highest suicides rates in males in England. This peak in the 20-29 year olds age

[4] Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives. Department of Health 2012

band was also seen in the 2012 Hertfordshire audit. We recommend that local awareness is raised to ensure the particular needs of this group are addressed in any campaigns or training.

4. 27% of males who died by suicide had some level of involvement in the criminal justice system. We recommend that the local suicide prevention strategy is co-produced with the police, probation and other criminal justice organisations to raise awareness of risk factors and support those at risk of suicide.

5. Although analysis of the data from one area of the Welwyn Hatfield district did not reveal any similarities between individuals who died by suicide, continued monitoring of the trends in suicide rates at the district level should continue to ensure that any local work developed to address suicide are evidence based.

6. General Practices are the first point of contact for the majority of people in the audit data. 82% of people included in the audit discussed their mental health issues with their GP in the months before their death, however there were some cases where a referral to a mental health service may have supported the individual and there is no record of the referral being made. The vital role of GPs has been acknowledged locally and there is current delivery of 'Spot the Signs' training for local GPs around identifying people at risk of suicide and taking appropriate steps, which must continue to be rolled out across Hertfordshire and evaluated for effectiveness.

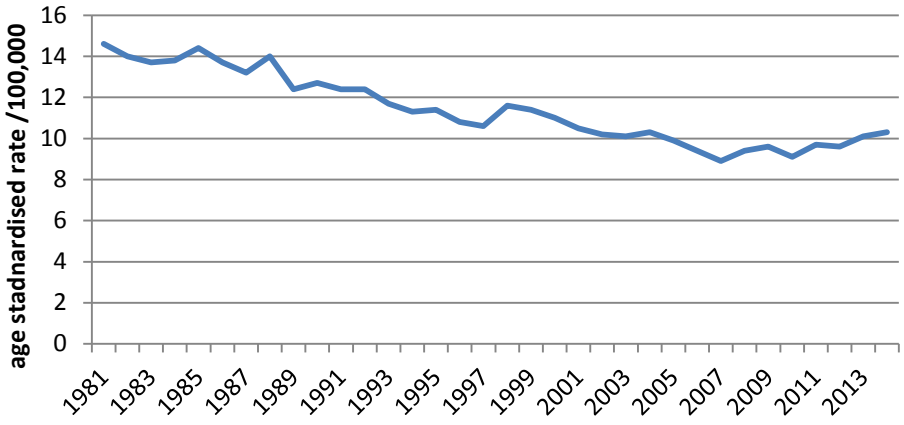
7. The Confidential Inquiry into Suicide by People with Mental Illness across England[5] showed that between 2004 and 2014, 28% of people who died by suicide had been in contact with mental health services over the last 12 months. In this audit the figure was 41%. This is statistically significant (95% confidence interval of 29% to 54%). This could be the result of effective referral procedures from primary care to mental health services and we recommend further work with mental health services providers to interpret this data. In addition, there is no previous comparable local data available on trends, whereas nationally the rate may be increasing. This issue requires further monitoring in Hertfordshire, and caution is needed in interpreting this single year's data.

[5] The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Making Mental Health Care Safer: Annual Report and 20-year Review. October 2016. University of Manchester.

Introduction

- Suicide is a major issue for society and an important public health problem. In England in 2014 over 4,800 people took their own life[6].
- The suicide rate in England was falling from the early 1980's until 2007, when it fell from 14.6/100,000 to 8.9/100,000 (a reduction of 40%). See figure 1. Since then the rate has increased slightly, and the most up to date yearly data for 2014 was 10.3/100,000, a rate last seen in 2003.

Figure 1: Age Standardised suicide rate in England death registered 1981-2014

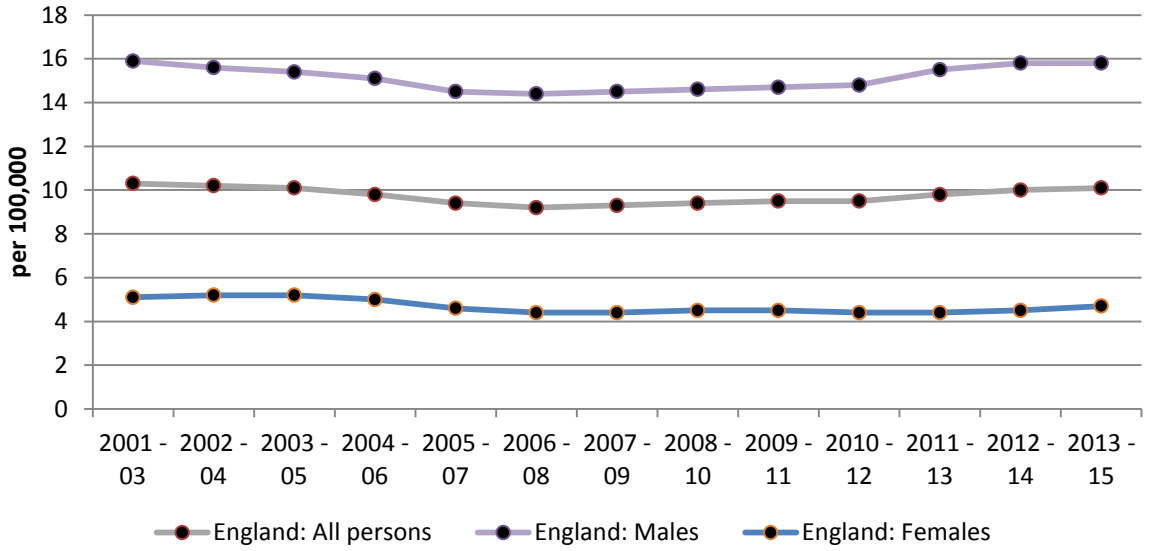


Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency

- Figure 2 shows the rates of death by suicide in males and female and all persons in England between 2001 and 2015 in three year averages.
- The rate for all persons fell between 2001-03 and 2006-08, from 10.3 per 100,000 to 9.2 per 100,000 when it began to rise slowly up till the most recent year of 2013-15 where it reached 10.1 per 100,000.
- The suicide rate in females remained fairly stable between 2001-03 and 2013-15 at between 4.4 per 100,000 and 5.2 per 100,000.
- The suicide rate in males fell between 2001-03 and 2005-07. Following this, it rose very slowly for number of years till it started to rise more steeply between 2010-2012 and 2012-14, and has levelled off in 2013-15.

[6] http://fingertips.phe.org.uk/profile-group/mental health/profile/suicide/data#page/4/gid/1938132828/pat/103/par/E45000002/ati/102/are/E10000015/iid/41001/age/285/sex/4

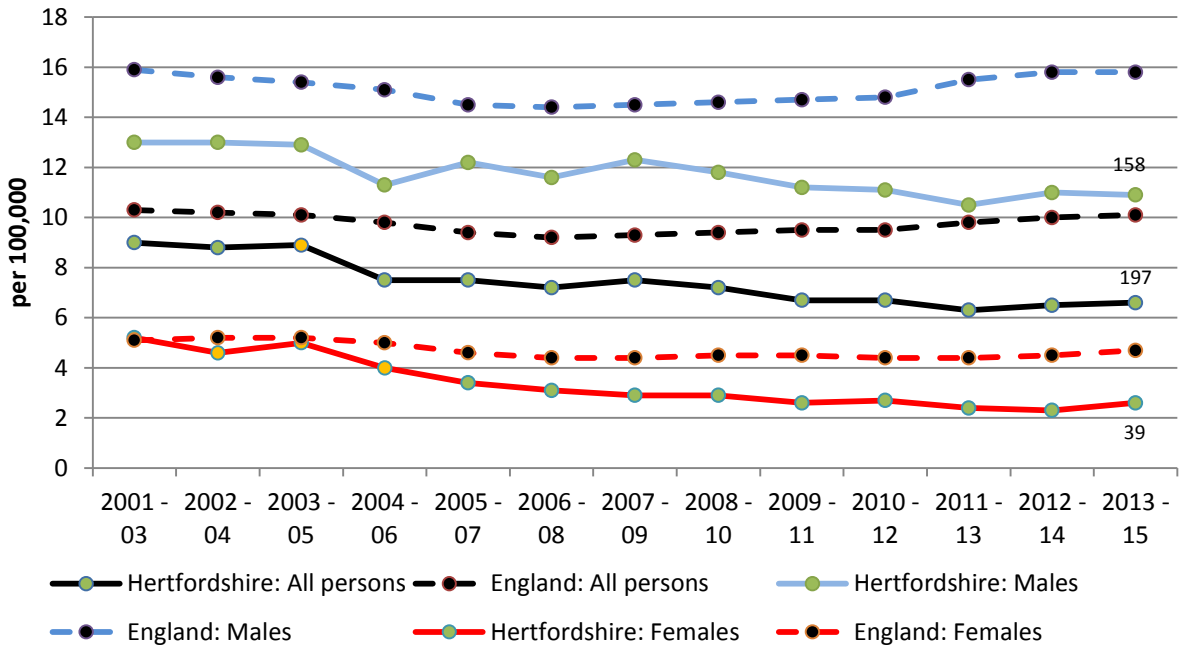
Figure 2 England Suicide age-standardised rate: per 100,000 (3 year average) (Persons, Males and Females) (2001-2015)



Source: Public Health England (based on ONS source data)

- The suicide rate for all persons in Hertfordshire has been statistically lower than the rate in England since 2004-06, as can be seen in Figure 3. Suicide rates had been falling steadily between 2001-03 and 2011-13, however there was a small rise in 2012-14 which continued in 2013-15 where the rate for all persons was 6.6/100,000 or 197 individuals compared to 10.1/100,000 for England.
- The suicide rate for males has been statistically lower than for England since 2001-03, and although the national trend has shown a small increase since 2007-09, the rate Hertfordshire males continued to fall steadily until 2011-13 when the rate was 10.5 per 100,00. There was a rise in 2012-14 till 11.0/100,000 which then fell again very slightly in 2013-15 to 10.9/100,000.
- The suicide rate for females was statistically similar to the England average until 2005-07 when it fell and became statistically lower than the England rate. It has continued to be lower than the England rate since this time. The rate fell from 5.0/100,000 in 2003-05 to 2.3/100,000 in 2012-14. There was a rise in 2013-15 to 2.6 per 100,000 but it is still significantly below the England rate of 4.7 per 100,000.

Figure 3 England and Hertfordshire Suicide age-standardised rate: per 100,000 (3 year average) (Persons, Males and Females) 92001-2015)



● *not significantly different to England rate* ● *significantly better than England rate*

Source: Public Health England (based on ONS source data)

- Table 1 below compares the suicide rate for all persons in Hertfordshire to the rates in the East of England region. This shows that Hertfordshire has one of the lowest suicide rates in the region, second only to Central Bedfordshire and had a significantly lower rate compared to the East of England regional average of 9.3/100,000.
- In addition, compared to our CIPFA neighbours[7] Hertfordshire has the lowest 3-year suicide rate in 2013-2015 for both males and females.

Table 1: Suicide rates in the East of England 2013-2015

Area	Value	Lower CI	Upper CI
England	10.1	10.0	10.3
East of England region	9.3	8.8	9.8
Norfolk	12.4	11.0	14.0
Southend-on-Sea	11.3	8.5	14.8
Thurrock	11.3	8.3	15.1
Essex	10.4	9.4	11.5
Suffolk	9.3	8.0	10.8
Cambridgeshire	9.1	7.7	10.6
Peterborough	8.4	6.0	11.5
Luton	7.7	5.4	10.6
Bedford	7.5	5.1	10.6
Hertfordshire	6.6	5.7	7.6
Central Bedfordshire	5.6	4.0	7.6

Source: Public Health England (based on ONS source data)

[7] The Chartered Institute of Public Finance and Accountancy (CIPFA) have created a model which seeks to measure similarity between Local Authorities Hertfordshire nearest CIPFA neighbours can be found here: https://fingertips.phe.org.uk/search/suicide#page/4/gid/1/pat/6/par/E12000006/ati/102/are/E10000015/iid/41001/age/285/sex/4/nn/nn-1-E10000015

National Policy on Suicide Prevention

In 2012 the Government issued a National Suicide Prevention Strategy[8]. It's overarching objectives are:

1. Reduce the suicide rate in the general population in England
2. Provide better support for those bereaved or affected by suicide

There are six key areas for action to support delivery of these objectives:

1. Reduce the risk of suicide in key high-risk groups
2. Tailor approaches to improve mental health in specific groups
3. Reduce access to the means of suicide
4. Provide better information and support to those bereaved or affected by suicide
5. Support the media in delivering sensitive approaches to suicide and suicidal behaviour
6. Support research, data collection and monitoring.

The following groups have been identified as at higher risk of suicide and therefore are a priority for prevention:

1. Young and middle-aged men
2. People in the care of mental health services, including in-patients
3. People with a history of self-harm
4. People in contact with the criminal justice system
5. Specific occupational groups, such as doctors, nurses, veterinary workers, farmers and agricultural workers.

Stressful life events can also play a part. These include:

- the loss of a job
- debt
- living alone, becoming socially excluded or isolated
- bereavement
- family breakdown and conflict including divorce and family mental health problems
- imprisonment

For many people, it is the combination of factors which is important rather than one single factor. Stigma, prejudice, harassment and bullying can all contribute to increasing an individual's vulnerability to suicide.

In January 2015 the All Party Parliamentary Group on Suicide and Self Harm Prevention recommended the reintroduction of a statutory obligation to carry out a locally based suicide audit[9]. This was in place between 2002 and 2005, but since then has not been a statutory requirement. It is

[8] Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives. Department of Health 2012

[9] The All-Party Parliamentary Group (APPG) on Suicide and Self-Harm Prevention Inquiry into Local Suicide Prevention Plans in England January 2015

anticipated that local suicide audits provide an evidence-based approach to understanding local needs and trends to ensure an effective local suicide prevention strategy.[10]

Previous suicide audits have been carried out in Hertfordshire. The most recent covered the deaths certified in 2012. The current audit identified all deaths where the coroner's verdict on the death was suicide or open verdict, meaning 'died by their own hands but their intention was unclear' where the inquest took place between April 2015 and March 2016. It has been possible to compare this suicide audit data with the Hertfordshire 2012 suicide audit data to identify any trends where similar datasets were collected.

Suicide prevention in Hertfordshire is led by a multi-agency group chaired jointly by Hertfordshire Foundation Partnership Trust who provide local mental health services and Hertfordshire County Council. The group reports to the Hertfordshire Health and Well-Being Board. They are currently developing a Countywide Suicide Prevention Strategy which will be completed by mid 2017 and is being informed by the findings of this audit. The Strategy will be considered by the Hertfordshire Health and Well-Being Board.

The National Confidential Inquiry into Suicides and Homicides by People with Mental Illness was published in October 2016 and highlighted a range of findings into the nature of people with mental illness who died by suicide between 2004 and 2014. Some of the information reported in this inquiry is comparable to the data in this audit and therefore is used as a comparison between local and national data when available.

The data in this audit was accessed from the Hertfordshire Coroner's Office. The Hertfordshire coroner's service is responsible for investigating and determining the cause of death in any unexplained death that occurs in Hertfordshire. It is not responsible for investigating the death of those people who lived in Hertfordshire but who died in other areas. In the cases where the cause of death is unknown or where suicide is suspected the coroner uses all available evidence to ascertain the cause of death. Other outcomes that are possible are open verdict (when the intention of the individual is not known) or a narrative verdict, where at the end of the inquest the coroner records a factual record of how and in what circumstances the death occurred. As well as narrative conclusions, this category includes short non-standard conclusions which a coroner or jury might return when the circumstances do not easily fit any of the standard conclusions.[11]

[10] i*bid*

[11] https://www.gov.uk/government/statistics/coroners-statistics-2015

Method

Evidence that is generally available from the Coroner's inquest reports includes:

- Death certificate, which includes dates of birth and death, occupation and place of residence
- Post Mortem and toxicology reports
- Police and other emergency services records of the event
- GP records of the patient
- Mental health services records
- Internal reviews from the Mental health service
- Correspondence between the family of the deceased and the coroner's office
- Narratives from family and friends regarding the individual
- Statements from family and friends to police and the coroner
- Suicide notes
- Any legal/solicitors correspondence with the coroner's office
- The individual's mobile phone and computer information

The records were searched to find information regarding the circumstances around their death, risk factors and their involvement in mental health and primary care services.

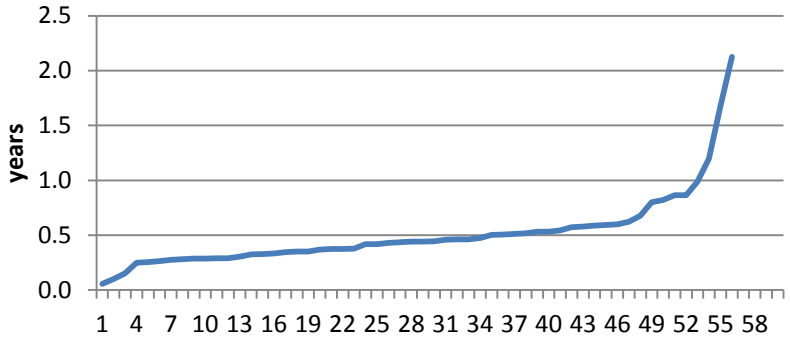
In order to assist in the gathering of the information, a validated questionnaire developed by the NIMHE in 2006 and further developed by Bedfordshire PCT was used. Additional fields were included in this audit to include other relevant information. A copy of the questionnaire can be found in Appendix I. Data was collected between the 29th July 2016 and 6th September 2016. 56 deaths where there was a finding of suicide or open verdict were identified.

The inquests that took place between 01/04/15 and 31/03/16 included deaths that occurred between 14th May 2013 and 26th October 2015.

The data is not directly comparable to the national data published by the ONS on the www.fingertips.gov.uk website as the ONS published data on suicide in calendar years. These numbers cannot be directly compared with this audit data as they cover different dates. The booking of inquests is based on a number of factors including availability of the witnesses and availability of the evidence and therefore do not always occur on a regular basis.

- The average number of days between death and the coroner's inquest was 187 days and ranged from 20 days to 776 days
- 50% of inquests took place between 118 and 211 days. See Figure 4 below

Figure 4 Time between death from suicide and open verdict and coroner's inquest (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

At national level, the most up to date available data for the length of time between death and inquest is for 2014. The average number of days delay between death and inquest for cases of suicides or open verdicts in England was 150 days. Of the 4,822 suicides in England registered in 2014, 49% occurred before 2014. In England, the average registration delay gradually increased until 2008; since then the delay has been fairly stable[12]

Note on statistical significance:

As the dataset for this audit is small, statistical analysis will be unlikely to reveal statistical significance, particularly when comparing males and females, as there were only 11 females in the dataset. Although statistical analysis or conclusions of statistical significance are generally not presented in the results it is still possible to draw conclusions from the data and gain a greater understanding of the local picture around suicide.

[12] http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2014registrations#suicide-rates-by-country

Results of Demographic Data

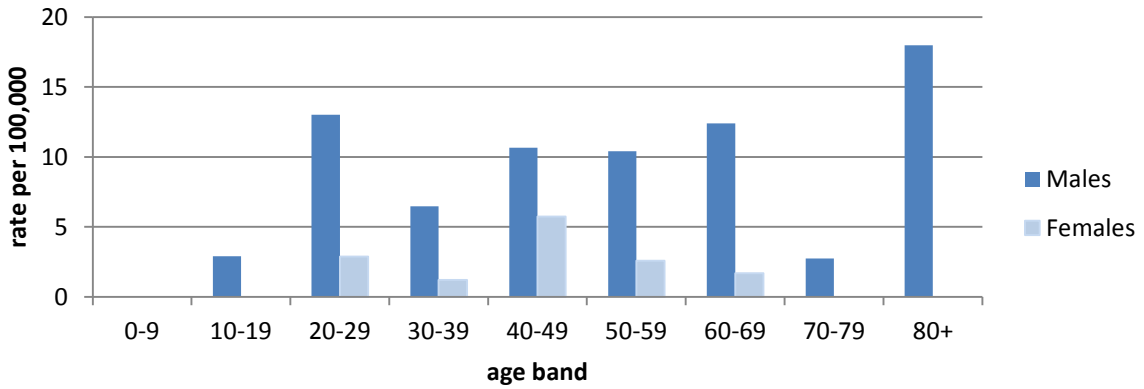
Gender of cases

- Of the 56 cases where the inquest was held between 1st April 2015 and 31 March 2016, 11 were female (20%) and 45 were male (80%)

Age of cases

- The age range of people who died by suicide was between 12 and 88 years, (males 12-88 years and females 24-66 years). See Figure 5 below
- The average age of males who died by suicide was 47, for females it was 44
- The highest rate in females was in the 40-49 year age band.
- The highest rate in males was in the 80+ age band, followed by the 20-29 year old age band.

Figure 5 Suicides rate in Hertfordshire in 2015/16

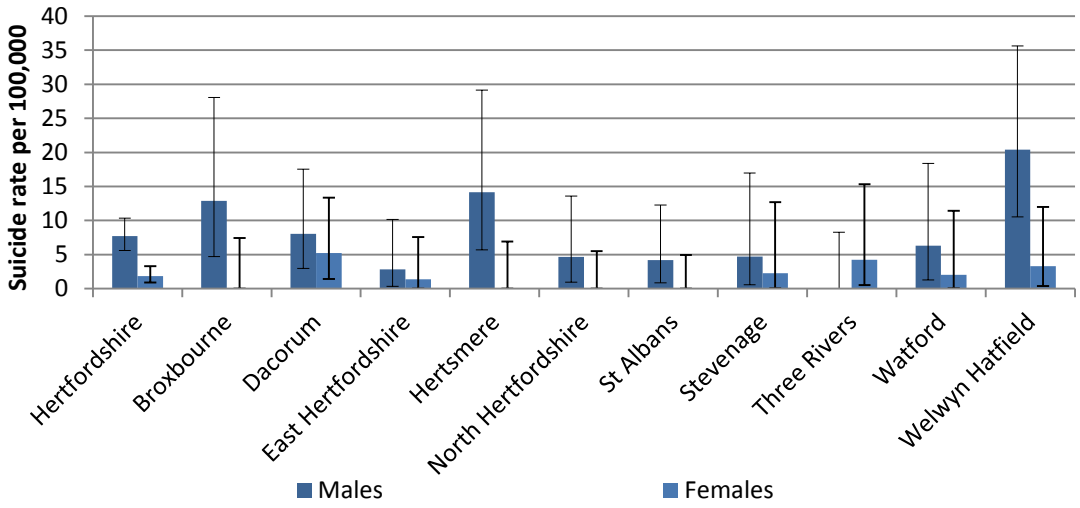


Source: Hertfordshire Coroner's Service 2015/16

Place of residence at time of death

- Postcode of residence was available for 55 out of the 56 cases
- The highest suicide rate for males was seen in Welwyn Hatfield (20.4/100,000), and is significantly higher than the Hertfordshire rate of 7.7/100,000.
- The highest rate for females was seen in Dacorum (5.2/100,000). See Figure 6 for more details

Figure 6 Suicide Rate, Hertfordshire districts, 2015/16

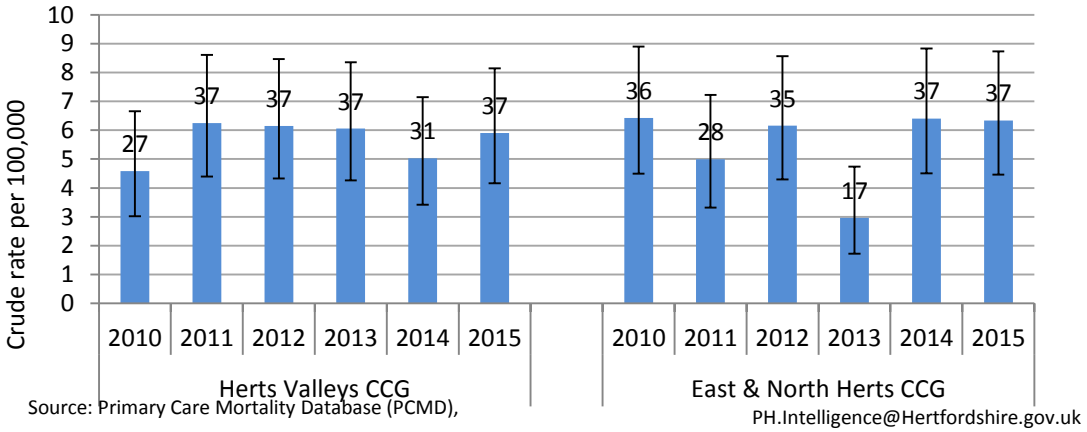


Source: Hertfordshire Coroner's Service 2015/16 PH.Intelligence@hertfordshire.gov.uk

There are two Clinical Commissioning Groups (CCG) areas in Hertfordshire; East and North Hertfordshire CCG and Herts Valley CCG. The rates of suicide can be seen in these two areas from 2010 to 2015 using nationally collated data (not the audit data) in Figure 7 below.

- The suicide rate for each CCG fluctuates year to year between the dates presented below, but is not statistically significant
- Rates in 2015 for each CCG are similar

Figure 7 Suicide rate per 100,000 registered population in Hertfordshire CCGs, 2010-2015 (actual numbers above bars)



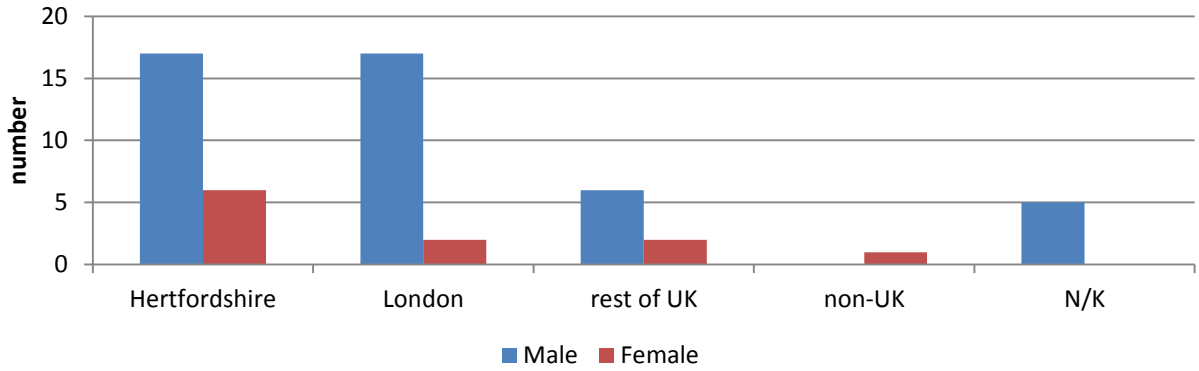
Source: Primary Care Mortality Database (PCMD), PH.Intelligence@Hertfordshire.gov.uk

Place of birth

- 55% of females and 37% of the males who died by suicide were born in Hertfordshire, see figure 12 below.

- The majority of the men who were born outside Hertfordshire were born in London (39% of all men and 62% of all men born outside Hertfordshire). See Figure 8.

Figure 8 Hertfordshire suicides – numbers by place of birth and sex (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

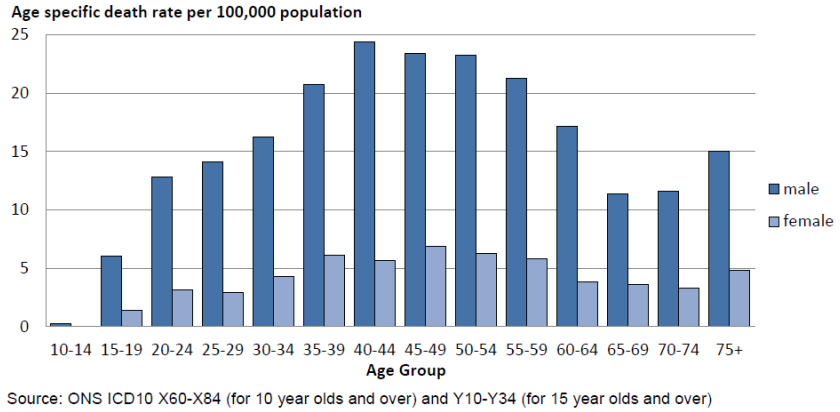
Discussion of Demographic Data

Age of people who died by suicide

The age profile of deaths by suicide in Hertfordshire has changed little since the 2012 audit data, with a peak in numbers of male suicides in the 20-29 year age band seen in both datasets. The highest rate is seen in males aged 80+. However the national suicide prevention strategy[13] identified young and middle aged men aged 35-49 as the groups at high risk from suicide as well as men aged over 75 as having higher rates of suicide. The age profile seen in the 2013 national data in Figure 9 below, which is most up to date data to include single year and sex, shows an increase in suicide rate in each 5 year age band in males up to the 40-44 age group, and then a decrease in the rate as age increases, till 65-69 where there is another rise in the rate for males aged 75+.

For females, there is also an increase in the suicide rate till age 45-49, and then a decrease till 75+ when there is a small increase. In the Hertfordshire data, the highest rate is seen in females in the 40-49 year old age band. The small increase in the suicide rate in older females in the national data is not seen in the local data.

Figure 9 National suicide rates by age and sex 2013.[14]



Source: ONS ICD10 X60-X84 (for 10 year olds and over) and Y10-Y34 (for 15 year olds and over)

Place of residence

Almost all of the people who died by suicide were residents of Hertfordshire. There is no evidence of individuals who lived outside Hertfordshire travelling to the county to die by suicide. It is not known if any Hertfordshire residents died by suicide outside of the county as this will have been investigated by the coroner's office in the area where the suicide occurred.

Data from the ONS presented in Table 2 below shows the standardised suicide rate per 100,000 for a three-year average (2013-2015) across all districts in the East of England. This shows the district in the county with the highest rate of suicide is Welwyn Hatfield which had a rate of 10.0/100,000, followed by Dacorum with a rate of 8.2/100,000 and St Albans with a rate of 7.0/100,000. The rates

[13] Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives. Department of Health 2012

[14] http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2014registrations

in the remaining districts in Hertfordshire were supressed due to small numbers (less than 25 individuals).

Table 2 Suicide age –standardised rate: per 100,000 3 year average 2013-2015[15]

4.10 - Suicide rate (Persons) 2013 - 15 — Directly standardised rate - per 100,000

Area	Count	Value	95% Lower CI	95% Upper CI
England	14,429	10.1	10.0	10.3
Hertfordshire	197	6.6	5.7	7.6
Welwyn Hatfield	26	9.2	5.9	13.5
Dacorum	31	8.0	5.4	11.4
St Albans	26	7.0	4.5	10.3
Stevenage	7	*	-	-
East Hertfordshire	21	*	-	-
Watford	17	*	-	-
Three Rivers	15	*	-	-
North Hertfordshire	20	*	-	-
Hertsmere	16	*	-	-
Broxbourne	18	*	-	-

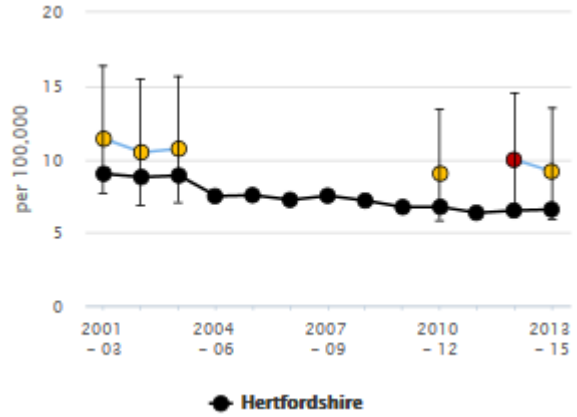
Source: Public Health England (based on ONS source data)

*Rate too low to show.

Suicide rate in Welwyn Hatfield district

The trend in the rate of suicide in Welwyn Hatfield district between 2001 and 2015 can be seen in Figure 10 below. For the years where the numbers of suicide are high enough to avoid suppression due to small numbers (less than 25 individuals), the suicide rate in Welwyn Hatfield district was similar to the rate in Hertfordshire in all years except 2012-14, when it was significantly worse than the Hertfordshire rate. However since then, the suicide rate in Welwyn Hatfield has fallen and moved closer to the Hertfordshire rate. Due to the numbers of data-points suppressed due to low numbers it is not possible to see a continuous trend over time, however by looking at the rates in the other districts in Hertfordshire[16] it is possible to conclude that Welwyn Hatfield has one of the highest rates of suicide in the county over this time period.

Figure 10 Suicide rates in Welwyn/Hatfield District 2001-2015(3 year average).



● *Similar compared to Hertfordshire rate.* ● *Worse compared to Hertfordshire rate*

Source: fingertips.gov.uk *The absence of a point means number is too low to present.*

[15] https://fingertips.phe.org.uk/profile-group/mental-health/profile/suicide

[16] https://fingertips.phe.org.uk/search/suicide#page/4/gid/1/pat/102/par/E10000015/ati/101/are/E07000241/iid/41001/age/285/sex/4

Note: suppression of the data due to low numbers does not mean you can conclude the suicide rate in that area is low, as this depends on the population of the district.

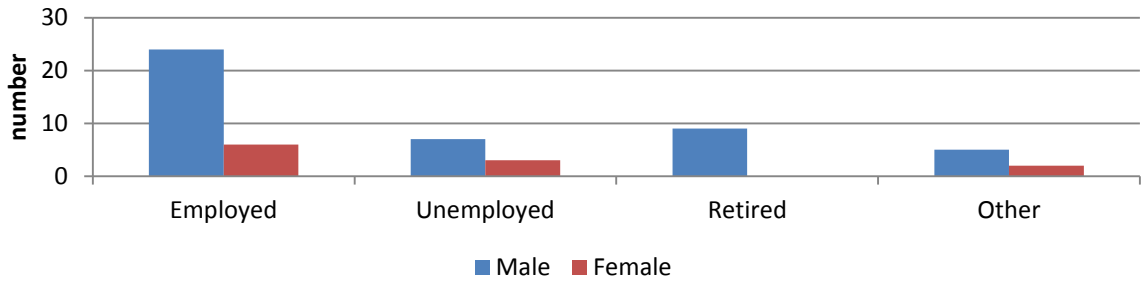
The explanation for the suicide rate in Welwyn Hatfield is unknown and analysis was undertaken of all the people who died by suicide who lived in Welwyn Garden City to eliminate the presence of any type of clustering between the individuals. This analysis can be found in appendix II. It revealed that there were no similarities between any of these individuals in regard to a range of variables including, age, sex, method of suicide, factors leading to suicide, employment status, relationship status, and number of previous attempts at suicide. Therefore although the suicide rate in Welwyn Hatfield is higher than other districts in Hertfordshire there are no concerns from the audit data that there are any similarities between these individuals and they are not connected to one another.

Results of risk factors associated with suicide

Employment Status

- 52% of males were employed full time at their time of their death, 20% were retired and 13% were unemployed
- 45% of females were employed full time at their time of their death, 18% were unemployed and the remainder were split either between working part time, housewife or student, as can be seen in Figure 11

Figure 11 Number of suicides in Hertfordshire by employment status and sex (2015/16)

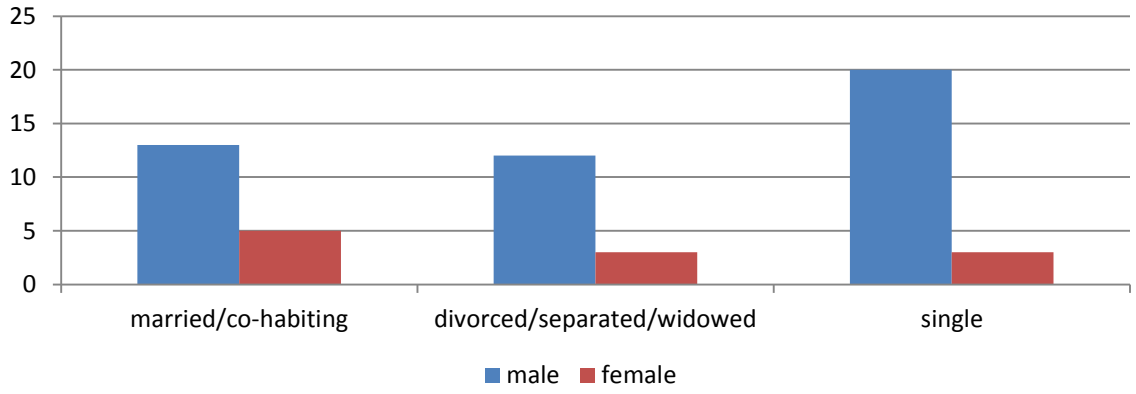


Source: Hertfordshire Coroner's Service 2015/16

Marital Status

- Most common marital status for females was married (36%) followed by single and divorced (27% each).
- Most common marital status for males was single (46%) followed by married (20%) see Figure 12).

Figure 12 Number of suicides in Hertfordshire by sex and marital status (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

- 72% of males were not in a relationship at the time of their death compared to 55% of females.

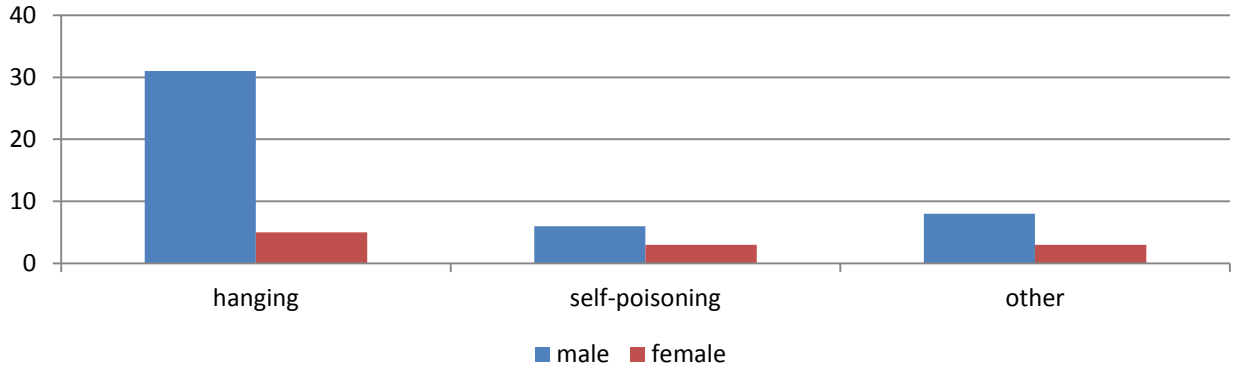
Involvement in Criminal Justice System

- 27% of males and 9% of females had some previous involvement in the criminal justice system.

Method of suicide

- The most common method of suicide for males was hanging (70%) followed by self-poisoning (13%).
- The most common method of suicide for females was hanging (45%) followed by self-poisoning (27%). See Figure 13.

Figure 13 Number of suicides by sex and method of suicide (2015/16)



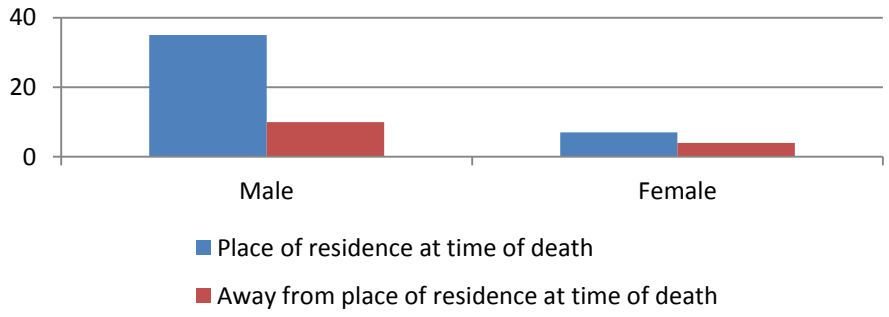
Source: Hertfordshire Coroner's Service 2015/16

- Nine cases used self-poisoning as the means of suicide. Seven of these used a drug that had been prescribed to them by a health professional.

Place of death

- The most common place of death was at home, with 67% of males and 64% of females dying by suicide in their own home
- A small number died by suicided at a relative's home (where they were residing at the time of death)
- The remainder were in other places including as in a cell in prison, woodland, a street near home and a hotel near home, see Figure 14

Figure 14: Number of suicides in Hertfordshire by sex and place of death (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

Drugs and alcohol use at time of death

A post mortem is always conducted in a case of suspected suicide. This includes a toxicology report, to identify any substances present in the body that may have caused the death.

- At the time of death 36% of females had alcohol in their body, compared to 19% of males.
- 18% of females had cocaine in their system compared to 9% of males.

History of suicidal behaviour

- 54% of females and 23% of males had a record of suicidal behaviour. See Figure 15.
- Five females had a history of attempted suicide and two had more than one attempt
- 14 males made previous attempts and eight had made more than one attempt

Suicide message

- 45% of females and 43% of males left a suicide note before their death

Main Factor Leading to Suicide

Identifying the factors leading to suicide is based on the information provided to the coroner. This includes GP and mental health team information; information provided by the family, suicide notes when made and police statements. For each individual a main factor was identified, however in a number of cases there was more than one factor, but using evidence found in the coroners files it was possible to deduce which was most likely to be the main factor (for example if a reason was stated in the suicide note, or the proximity of a major event, such as a bereavement close to the time of the suicide). The accuracy of the data is limited to the data that was available in the coroner's files.

- The leading factor in males who died by suicide was relationship breakdown (22%) followed by family issues (18%) (Including family bereavement, previous abuse and estrangement from parents), involvement in criminal justice system (16%), (including currently incarcerated, on bail and recently released from prison), financial issues (13%) and health issues (13%). See Figure 16
- For females the leading factor was family issues (45%), (including as losing role as carer for elderly parent, domestic violence and estrangement from children). Other factors for women included financial issues (9%) and work/study stress (9%)
- Four cases had no identifiable factor
- The leading factors for all the elderly males (80+) were related to ill health or recent bereavement

Discussion of risk factors associated with suicide

Employment Status

The percentage of the total population of Hertfordshire who are employed full time is 42%,[17] whereas the percentage of people who died by suicide who were employed full time was 50%. In contrast, 3.5% of the whole population of Hertfordshire is unemployed compared to 14% of those who died by suicide during the audit period. In the audit, 16% of people who died by suicide were retired compared to 26%[18] (defined as economically inactive) of the whole population of Hertfordshire. Those who die by suicide are more highly represented in the full-time-employed group and unemployed compared to Hertfordshire as a whole, but less are retired.

The National Suicide Prevention Strategy identified doctors, nurses, veterinary workers and agricultural workers as having an increased risk of suicide[19]. Within the audit there were a wide range of occupations represented but none of the males were in any of these occupations, and there were no other occupations with more than two cases. For females in the audit, two were in the 'at risk 'occupations (one was a nurse and another was a veterinary student) and three were carers. One worked in customer services and the other was self-employed. This information was not presented in the 2012 audit, so it is not possible to look at trends in occupations.

Marital status

Compared with the 2012 Hertfordshire audit, there were less people identified as married or co-habiting (31% in 2015/16 compared to 37% in 2012) and less were divorced (10.5% in 2015/06 compared to 19% in 2012). A smaller proportion was widowed (5.3% in 2015/16 compared to 10% in 2012).

Involvement in the criminal justice system

The National Suicide Prevention Strategy highlights an increased risk of suicide in those with involvement in the criminal justice system. In the audit, involvement in criminal justice included being in prison at time of death or on bail at time of death (5 cases). In addition, 7 individuals had previously been in prison or had drunk-driving and/or drugs convictions. This seems to show an increase from the 2012 audit; although the meaning of the word 'involvement' might be interpreted differently in the 2012 audit referring to people in custody at the time of their death. Involvement in the criminal justice system is known to be a risk factor for suicide, particularly among people in prison.

Method of suicide

The most common method of suicide for males is hanging, and has remained similar to the 2012 local audit (70% (32 individuals) in 2015/16 compared to 62% (33 individuals) in 2012). However, the most common method for females has changed from self-poisoning (39%) (5 individuals) in 2012 to hanging (45%) (5 individuals) in 2015/16). These are similar to the results in the rest of the UK, the most common method of suicide in 2014 in the UK was hanging for both males and females and the second most common was self-poisoning. A majority of the self-poisoning cases used substances that were prescribed to them by a doctor and were generally associated with relieving pain, depression, anxiety or to aid sleep.

[17] http://atlas.hertslis.org/dataviews/report/fullpage?viewId=1362&reportId=506&geoReportId=7387

[18] *ibid*

[19] Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives. Department of Health 2012

The only other method with more than two incidences were jumping in front of or lying before a train, where 4 people died this way. International research has shown that jumping or lying in front of a train as method of suicide has mental health effects on the drivers of the trains.[20] These have been found to generally be short term effects lasting days and weeks, but a small number are recorded as suffering from PTSD.

Place of death

The data on place of death is very similar to the 2012 Hertfordshire audit. There were no locations outside of the home where more than one death occurred; therefore there are no concerns of specific locations where suicide may be more popular (such as specific railway lines or bridges).

Previous Suicide attempts

Subsequent to a suicide attempt, referral to mental health services was almost always made. However suicide did sometimes occur before the appointment was attended. A small number of cases made their final attempt within hours of being released from hospital after a previous suicide attempt.

Suicide notes

Within the audit data, there were no similarities between those who left suicide notes and those who did not, including their age, sex, place of residence, means of suicide or previous attempts. This is similar to published international evidence[21],[22],[23], which also showed that there are no epidemiological differences such as age, sex, or method of suicide between people who left suicide messages and those who did not.

Main Factor leading to suicide

As described above, identifying the factors that lead a person to die by suicide is complex. People living with mental ill-health face many challenges. Attempting to identify the leading cause is difficult and open to interpretation. For example a high number of cases were suffering from relationship breakdown prior to their death; however it is impossible to know if mental ill-health was a factor in the breakdown of the relationship or if the relationship breakdown was a factor for mental health to deteriorate. Bearing this in mind, there is still value in looking at the factors that preceded the death. This is to ensure professionals can be aware when individuals may be at greater risk.

For males, the most common factor for suicide was relationship breakdown (22% normally divorce or separation), whereas the most common factor for women was family issues (45%). In males over the age of 75, the most common triggers were either ill health or recent death of a spouse. In a small number of cases there were no identifiable factors and in some cases no-one was aware that the person was suffering from mental ill health till after their death.

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[20] Farmer R, Tranah T, O'Donnell I, Catalan J. Railway suicide: the psychological effects on drivers. Psychol Med. 1992 May;22(2):407-14.

[21] Carpenter B, Bond C, Tait G, Wilson M, White K. Who Leaves Suicide Notes? An Exploration of Victim Characteristics and Suicide Method of Completed Suicides in Queensland. Arch Suicide Res. 2016;20(2):176-90. Epub 2016 Jan 28.

[22] Callahan VJ[1], Davis MS. A comparison of suicide note writers with suicides who did not leave notes. Suicide Life Threat Behav. 2009 Oct;39(5):558-68.

[23] Eisenwort B[1], Berzlanovich A, Willinger U, Eisenwort G, Lindorfer S, Sonneck G. Suicide notes and their importance to suicide research. The representativeness of suicide note writers.

The national suicide prevention strategy notes that factors such as unemployment and debt are linked to mental ill health and both are risk factors for suicide.[24] The audit found that these were factors amongst males in particular. The percentage of suicides attributed to financial reasons in this audit was 12.5% (7 individuals). In 2012 the Hertfordshire audit identified 6.1% (4 individuals) had financial difficulties as a leading factor, whereas in the previous Hertfordshire audit in 2011, 19% (12 individuals) of suicides had financial difficulties as a leading factor.

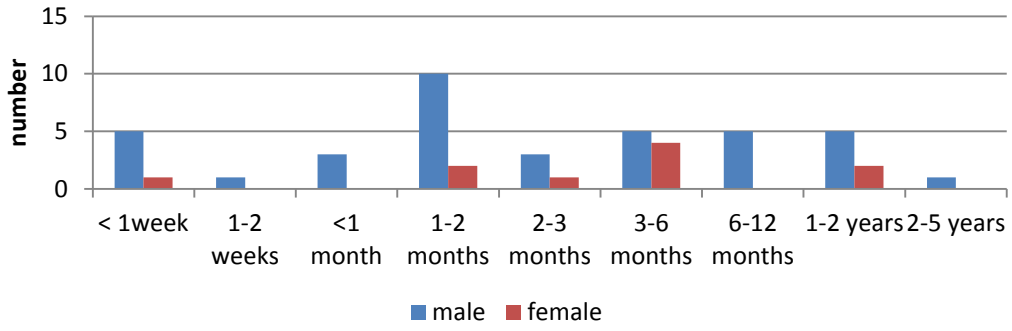
[24] Preventing Suicide in England: A Cross Government Outcomes Strategy to Save Lives. Department of Health 2012

Results of Contact with Health Care Services

Primary Care

- Almost all cases were registered with a GP
- 65% of men and 77% of women discussed their mental health with their GP during their last visit prior to their death.
- 82% of people discussed their mental health issues with their GP in the month before their death,
- 10 people, (all male) had no record of any discussion of their mental health with their GP
- Where available (48 cases), the time between last GP visit and death was calculated. See Figure 15

Figure 15 number of suicides by sex and time between last GP visit and death (2015/16)

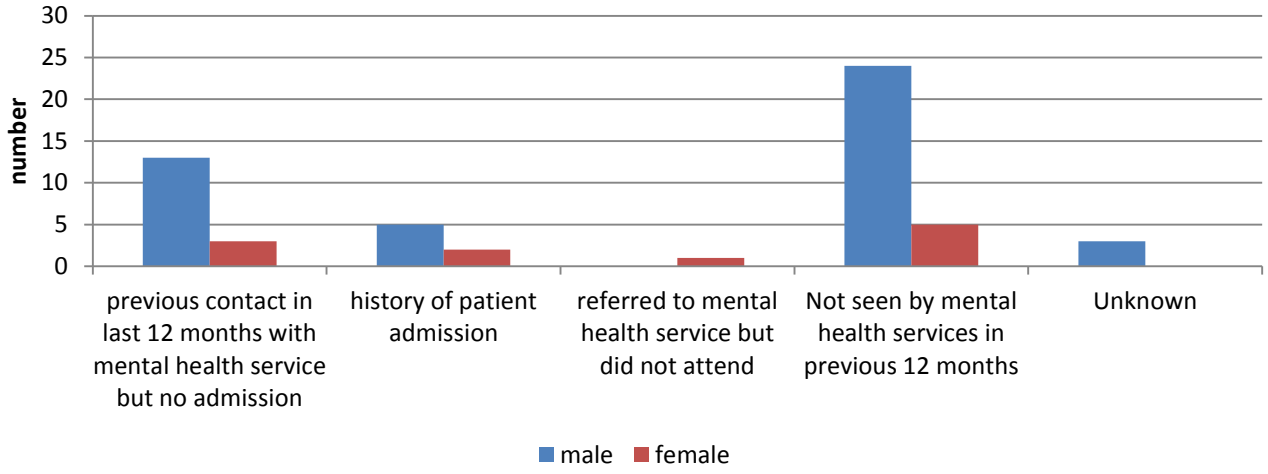


Source: Hertfordshire Coroner's Service 2015/16

Mental health services

- 23 cases (41%) were in contact with mental health services in the 12 months prior to their death
- 5 of these were female and 18 were male
- 40% of females and 28% of males who were known to mental health services had previously been in-patients in a mental health service. See Figure 16

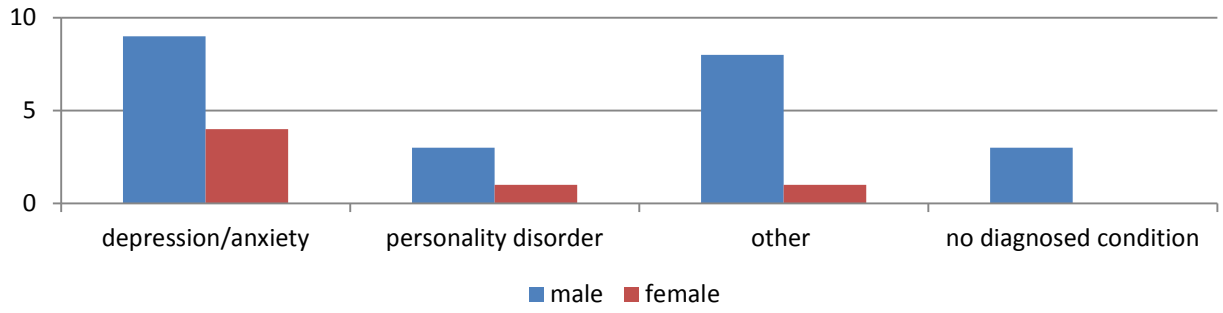
Figure 16 Number of suicides by sex and involvement in mental health services prior to death (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

- The most common psychiatric diagnosis for both males and females was 'depression/anxiety' followed by personality disorder. See Figure 17
- For females there were only three different diagnoses: anxiety/depression, personality disorder and post-traumatic stress disorder (PTSD)
- Males had a greater number of different diagnoses including the three seen in females as well as drug induced psychosis, obsessive compulsive disorder (OCD), body dysmorphic disorder (BDD) and schizophrenia

Figure 17 Number of suicides by sex and psychiatric diagnosis at time of death. Hertfordshire (2015/16)



Source: Hertfordshire Coroner's Service 2015/16

Characteristics of people in contact with Mental Health Services

- Out of the 56 people included in the audit, 23 had previous contact with mental health services in the last 12 months (41%)
- 7 of these had a recorded previous in-patient admission in the 12 months before they died

Of the 23 patients in contact with mental health services:

- Their average age was 47
- 2(9%) were aged under 25
- 18 (78%) were male
- 4 (17%)were unemployed
- 11 (48%) had a previous history of a suicide attempts
- 15 (65%) were seen by their GP in the last 2 months of their life
- 19 (83%) died before being discharged from the service

Attendance at A&E in 12 months before death

- 10 cases attended A&E in the 12 months prior to death.
- 7 of these attendances were directly related to mental health (suicide attempt or psychosis)
- 3 were physical health related.

Discussion of Contact with Health Care Services

Contact with Primary Care

The audit showed that the length of time between last visit to the GP by the person and their death by suicide varied from 1 day to over 5 years. However, the week prior to death was a time of increased visits to the GP for a number of people who went on to die by suicide. In all cases these visits were related to mental health issues, even if there were also physical health discussion related to mental health.

A majority of patients who died by suicide had discussed their mental health with their GP. Many of these patients were referred to a mental health service following this consultation. However, there were a number of patients whose GP was aware of their mental illness and no referral was made. Through the audit it was sometimes possible to ascertain the reason for this, such as the patient had not visited their GP when their mental health declined or were living with a terminal physical condition and the GP did not seek a referral. However in a small number of cases it is possible that a referral to a mental health service could have supported these individuals and it is possible that these cases could be seen as missed opportunities.

Contact with mental health services

The diagnoses of people who went on to die by suicide are similar to those found in the 2012 audit with the exception that there were no cases of bipolar disorder addiction or attention deficit and hyperactivity disorder in 2015/16 and no cases of obsessive compulsive disorder, body dysmorphic disorder or post-traumatic stress disorder in 2012. However, these comprise are only a small number of total cases in 2012 and in 2015/6.

Over the last 10 years a higher proportion of people who died by suicide had been in contact with mental health services in the last 12 months in Hertfordshire than in England[25]; 28% in England compared to 41% in Hertfordshire. It is difficult to interpret this number, which could be the result of effective referral procedures from primary care to mental health services. Further work needs to be undertaken to understand this more clearly and determine what actions if any may be needed.

There were no deaths in mental health in-patients in Hertfordshire during the audit period, compared to 9% of all mental health patient suicides in England.

[25] The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Making Mental Health Care Safer: Annual Report and 20-year Review. October 2016. University of Manchester.

Recommendations

1. The time period 1st April 2015 to 31st March 2016 was used for this audit as it ensured the most up to date data was reviewed. Since national data on suicide is reported in calendar years, we recommend that it would make for better comparison if the local audit used calendar years as its time period in the future.

2. The coroner's service does not routinely collect information on the individual's ethnicity, race or sexuality. If this information was collected it would enable local analysis and would support our understanding of the needs of BME and LGBTQ groups if they were overrepresented in the suicide rates.

3. The audit data showed that Hertfordshire has higher rates of suicides in males in the 20-29 year age band than the older age band of 35-50, which is the age group with the highest suicides rates in males in England. This peak in the 20-29 year olds age band was also seen in the 2012 Hertfordshire audit. We recommend that local awareness is raised to ensure the particular needs of this group are addressed in any campaigns or training.

4. 27% of males who died by suicide had some level of involvement in the criminal justice system. We recommend that the local suicide prevention strategy is co-produced with the police, probation and other criminal justice organisations to raise awareness of risk factors and support those at risk of suicide.

5. Although analysis of the data from one area of the Welwyn Hatfield district did not reveal any similarities between individuals who died by suicide, continued monitoring of the trends in suicide rates at the district level should continue to ensure that any local work developed to address suicide are evidence based.

6. General Practices are the first point of contact for the majority of people in the audit data. 82% of people included in the audit discussed their mental health issues with their GP in the week/month before their death, however there were some cases where a referral to a mental health service may have supported the individual and there is no record of the referral being made. The vital role of GPs has been acknowledged locally and there is current delivery of 'Spot the Signs' training for local GPs around identifying people at risk of suicide and taking appropriate steps, which must continue to be rolled out across Hertfordshire and evaluated for effectiveness.

7. The Confidential Inquiry into Suicide by People with Mental Illness across England[26]showed that between 2004 and 2014, 28% of people who died by suicide had been in contact with mental health services over the last 12 months. In this audit the figure was 41%. This is statistically significant (95% confidence interval of 29% to 54%). This could be the result of

[26] The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Making Mental Health Care Safer: Annual Report and 20-year Review. October 2016. University of Manchester.

effective referral procedures from primary care to mental health services and we recommend further work with mental health services providers to interpret this data. In addition, there is no previous comparable local data available on trends, whereas nationally the rate may be increasing. This issue requires further monitoring in Hertfordshire, and caution is needed in interpreting this single year's data.

Appendix I

Suicide audit in NHS Bedfordshire

Data collection Proforma

Section 1

Demographic details likely to be available from Coroner's Office or from GP

1.1 Date of birth DD MM YYYY

1.2 Date of death DD MM YYYY

1.3 Age at time of death

1.4 Sex

Female		Male	

1.5 Sexual Orientation

Heterosexual		**Homosexual**	
Bi-sexual		**Not Known**	

1.6 Resident's postcode (including prison/ secure setting) or no fixed abode

Post code									No fixed abode	

1.7 Ethnicity

White British		White Irish		Any other White background	
Mixed White and Black Caribbean		Mixed White and Black African		Mixed White and Asian	
Any other mixed background		Indian		Pakistani	
Bangladeshi		Any other Asian		Caribbean	
		background			
African		Any other Black background		Chinese	
Any other ethnic group		Not known			

1.8 Place of birth (if known)

1.9 Marital Status at time of death

Single		Married		Divorced	
Widowed		Separated		Co-habiting	
Civil partnership		Not known			
Other (specify)					

1.10 Employment status at time of death

Working full time		Working part-time		Sheltered Work	
Unemployed		Long-term sick or		Caring for home/ family	

		disabled			
Student (full-time)		Student (part-time)		Retired	
Housewife/ househusband		Not known			
Other (specify)					

1.11 Known to criminal justice system in 12 months prior to death

Section 2

Coroner related information

2.1 Was there a suicide message?

Yes		No		Not known	

2.2 Location of event

2.2 Method of death (if more than one, please give direct cause)

Self-poisoning		Carbon Monoxide poisoning		Hanging/ strangulation	
Drowning		Firearms		Cutting or stabbing	
Jumping from a height		Jumping/ lying before a train		Jumping/ lying before a road vehicle	
Suffocation		Burning		Electrocution	
Other (specify)				Not Known	

2.3 If self-poisoning, specify substance (if more than one substance, list all drugs or substances)

Method not self-poisoning		Anti-psychotic drug		Tricyclic anti-depressant	
SSRI/ SNRI anti depressant		Lithium/ other mood stabiliser		Benzodiazepine/ other hypnotic	
Paracetamol		Paracetamol/ opiate compound		Salicylate	
Opiate (heroin methadone etc)		Other poisons (e.g. weedkiller)		Not known	
Other drug (please specify)					

2.4 Where did the self-poisoning substance referred to above come from?

		Prescribed for the subject		Prescribed for someone else	
A combination of substances prescribed for more than		Not prescribed		Not known	

one person					

2.5 Was alcohol taken at time of death?

Yes		No		Not known	

2.6 Were other non-prescribed drugs taken at the time of death?

Yes		No		Not known	

2.7 Suicide or open verdict

Suicide verdict		Open verdict	

2.8 Brief description of incident

Section 3

Information relating to contact with Primary Care

3.1 Registered with a General Practitioner (GP)

Yes		No		Not known	

3.2 Date of last contact with GP or Primary Care team before death, (please state the primary care team and their role)

GP		Practice Nurse		District Nurse	
Health visitor		Midwife		Counsellor	
Psychologist		Primary care mental health professional (not secondary care)		Other (please specify)	
Not known					

3.3 Reason for contact with GP or Primary Care team before death

Mental Health		Physical Health		Drug/alcohol	
Not known					

Section 4

Information relating to psychiatric history likely to be available in Mental Health Trust records

4.1 Past psychiatric status (includes contact before the 12 months prior to death

No known previous contact with mental health service		One or more previous contacts with mental health services (community only services) within a psychiatric speciality but not subject to CPA	

DD	MM	YYYY

One or more previous contacts with mental health services (community only services within a psychiatric speciality and subject to CPA)		One or more previous contacts involving hospital in-patient service within a psychiatric speciality	
Not known			

4.2 Nature of last contact

No contact		Assessment, but not taken on caseload		Discharged from inpatient care	
Discharged from caseload		Contact while on caseload		Not known	

Additional comments associated with the psychiatric service contact

Any other comments/observations

4.3 Psychiatric and learning disability diagnosis (please indicate all that apply at the time of death)

Schizophrenia & other		Bipolar affective		Depressive illness	

delusional disorders		disorder			
Anxiety/ phobia/ panic disorder/ OCD		Eating disorder		Dementia	
Alcohol misuse		Drug misuse		Personality disorder	
Adjustment disorder/ reaction		Learning disability		No mental disorder	
Head injury		Not known			
Other (specify)					

Additional comments associated with diagnosis

4.4 History of self-harm

4.5 History of suicidal behaviour

4.6 History of violence to the deceased

Additional comments associated with diagnosis

Psychiatric care			
Past psychiatric status (in 12 months prior to death).	Date of last admission and discharge	Number of admissions in past 5 years	Date of last contact with specialist mental health services
	Ad:		
	Di:	Any learning disability:	
Nature of last contact			

Primary Care	Y/N	Details
Was there a diagnosis of mental health in the last 12 months in Primary Care?		
Was there a treatment plan in place through Primary Care?		
Was a risk management plan in place in Primary Care?		
Did patient adhere to any medication?		
Were other agencies involved?		

Risk factors	Y/N	Details
Recent bereavement		
Suicide in the family		
Life changing event		
Significant life event		
Financial		

Previous suicide attempts		
Are there any recorded previous suicide attempts	Y/N	
How many and dates		
Method(s)		
What plans were put in place subsequent to suicide attempt		
Previous information available of plans of intent	Y/N	
Any action taken after these		

Acute care			
Number of times patient seen in A&E in 12 months previous to suicide		Date of last discharge from hospital	
Reason for attendance		Was a psychological assessment carried out prior to discharge	

Appendix II

Analysis of individuals who lived in Welwyn Garden City (WGC) who died by suicide and whose coroner's inquest took place between April 2015 and March 2016

There were 8 individuals living in WGC who died in this time period. In order to exclude any linkages between the cases they were examined for a range of factors to identify if there were any themes common to this group, besides their geographical proximity.

They were analysed for:

1. Age
2. Sex
3. Marital status
4. Employment
5. If they were known to the criminal justice system
6. Whether they left a suicide message
7. Location of the event
8. Method of death
9. Whether alcohol or drugs were in their system at the time of death
10. If they were registered with a GP
11. Length of time between visit to GP and their death
12. Previous mental health history
13. Psychiatric diagnosis at time of death
14. Triggers around their suicide
15. Visits to A&E prior to suicide
16. Violence in their life
17. Previous suicide attempts

The 8 individuals were assessed against these 17 variables to identify if there were any similarities that may raise concerns.

In only one of these variables was there any similarity between the 8 individuals. In the other 16 there was more diversity in this group than was found in the whole dataset.

The only area where this group contained less diversity than the dataset as a whole was in the previous mental health history, where 7 out of 8 were previously known to mental health services (88%) compared to 41% of the whole dataset. However when analysing their diagnosis within the mental health service they had a range of diagnoses, with no one in particular raising any cause for concern.