September 2020

Hertfordshire Suicide Audit 2017-19

Hertfordshire Public Health
Evidence & Intelligence

NHS
Hertfordshire
Partnership University
NHS Foundation Trust

Hertfordshire

Summary

- This suicide audit for Hertfordshire is the first to include three years of data.
- It provides an overview of suicides in Hertfordshire given a Coroner's conclusion at inquests held between 1st of January 2017 and the 31st of December 2019.
- The audit uses information from files held by the coroner service and has been carried out to a robust and repeatable methodology introduced in 2017.
- 270 deaths are included in the audit, with most deaths occurring in 2016 (20.7%), 2017 (26.3%),2018 (37.4%) and 2019 (13.7%).
- Although each of the 270 deaths included represents a personal tragedy with potentially devastating consequences for others, statistically speaking these are small numbers.
- The 2016-2018 age standardised suicide rate in Hertfordshire is significantly lower than the rate for England and has remained lower over time. There has been no significant change in the rate for Hertfordshire over the last ten years.

Key findings

- Men accounted for three quarters of all suicides.
- 42.2% of all people who died by suicide were aged 30-49.
- Mental health issues were the most common risk factor.
- Over a quarter of people were:
  - Known to a mental health service at the time of death
  - Known to have discussed mental health issues with a member of their GP practice in the four weeks leading up to their death
- Over a third of people who died by suicide were known to have made a previous suicide attempt.
- Over half (57.8%) of suicides were by hanging, strangulation or suffocation.
- Most suicides took place at the individual's home (61.5%).
- One in ten suicides took place on the railway.
- The number of suicides recorded by Hertfordshire coroners increased each year, however the rate of suicides has not statistically significantly changed.

Key Recommendation

- A suicide audit should continue to be carried out every year for Hertfordshire as part of Hertfordshire's commitment to suicide prevention.
- The findings of this audit and future audits will be shared with the suicide prevention network to inform the development of the suicide prevention strategy, which will support partnership working.

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Background

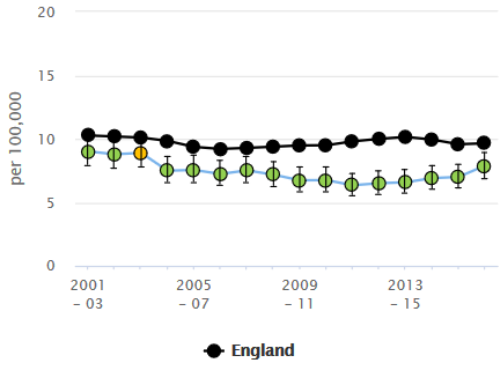
The death of someone by suicide can have a devastating effect on families, friends, colleagues, first responders, staff, the wider community and beyond. It has been estimated that around 135 people may be affected by each person dying by suicide.[1] There is also a considerable economic cost- estimated at around £1.7 million per death.[2]

There has been a downward trend in suicide rates within England (and East of England), albeit with several statistically significant peaks including one in 2018[3]. However, there is no room for complacency: between 2016-18 there were 14,047 suicides registered in England, an age-standardised rate of 9.6 deaths per 100,000 population.

Over the latest three-year period (2016-18) 243 suicides were registered in Hertfordshire, an age-standardised rate of 7.9 per 100,000 (Figure 1). The suicide rate in Hertfordshire has been statistically significantly lower than the rate for England from 2004-06 onwards and has remained statistically similar over time (Figure 1). As local authority level rates are based on relatively small numbers, changes can often be a result of random fluctuation. The annual number of suicides registered in Hertfordshire has fluctuated between 52 and 103 over a 17-year period (2002 to 2018)[4].

Compared with benchmark: Better | Similar | Worse

Suicide: age-standardised rate per 100,000 population (3 year average) (Persons) Hertfordshire Directly standardised rate - per 100,000



Recent trend: –

Period		Hertfordshire Count	Value	Lower CI	Upper CI	East of England region	England
2001 - 03		240	9.0	7.9	10.2	9.6	10.3
2002 - 04		235	8.8	7.7	10.0	9.6	10.2
2003 - 05		240	8.9	7.8	10.1	9.3	10.1
2004 - 06		202	7.5	6.5	8.6	9.1	9.8
2005 - 07		206	7.5	6.5	8.7	8.8	9.4
2006 - 08		200	7.2	6.3	8.3	9.0	9.2
2007 - 09		213	7.5	6.5	8.6	8.9	9.3
2008 - 10		206	7.2	6.2	8.2	8.9	9.4
2009 - 11		196	6.7	5.8	7.8	8.8	9.5
2010 - 12		197	6.7	5.8	7.8	8.9	9.5
2011 - 13		187	6.3	5.5	7.3	8.9	9.8
2012 - 14		194	6.5	5.6	7.5	9.0	10.0
2013 - 15		197	6.6	5.7	7.6	9.3	10.1
2014 - 16		209	6.9	6.0	7.9	9.7	9.9
2015 - 17		214	7.0	6.1	8.0	9.3	9.6
2016 - 18		243	7.9	6.9	8.9	10.0	9.6

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

Figure 1: Suicide rates, Hertfordshire and England, 2001-03 to 2016-18, Public Health England, Suicide Prevention Profile[5]

[1] Cerel, J. et al. (2018). *How Many People are Exposed to Suicide? Not Six.* Suicide and Life-Threatening Behaviour https://onlinelibrary.wiley.com/doi/full/10.1111/sltb.12450

[2] Forward for life (2016). *Suicide and Suicide Prevention*. https://hgs.uhb.nhs.uk/wp-content/uploads/Suicide-and-Suicide-Prevention_SandB_Handout.pdf

[3] Office for National Statistics (2019). *Suicides in the UK: 2018 registrations.* www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2017registrations

[4] Office of National Statistics (2019). Suicdies in England and Wales by local authotiy. www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/suicidesbylocalauthority

[5] Public Health England (2019). *Suicide Prevention Profile*. https://fingertips.phe.org.uk/profile-group/mental-health/profile/suicide

National guidance[6] recommends that every local authority carries out an annual suicide audit (though they are no longer a statutory requirement), develops a suicide prevention action plan, and establishes a multi-agency group to co-ordinate effective action within the local area.

Work was carried out by a multi-agency group, consisting of representatives from Hertfordshire County Council (Public Health, Coroner Service, Integrated Health and Care Commissioning Team), Hertfordshire Partnership University NHS Foundation Trust, Hertfordshire Police Constabulary and British Transport Police. The group agreed what information to capture from the coroner's files on each individual, and a more robust, consistent and objective process was developed. The aim was to ensure the integrity of the audit results irrespective of who carried it out and ensure the comparability of results from audits in subsequent years. This audit, covering suicides with a coroners conclusions reached in the calendar years from 2017-2019, is the first audit report to include three years of data.

Apart from providing a more detailed insight into suicides within Hertfordshire, the key value of suicide audits is to identify trends and any areas where additional focus or emphasis is required locally, versus the national picture. This intelligence is used to inform the local strategy. Data for the 2017-19 suicide audit was collected in 2017, 2018 and 2019, and allows three years' worth of directly comparable, consistent data to be used to inform the current revision of the Hertfordshire Suicide Prevention Strategy 2020-2025.

The report includes some recommendations for improving the process but does not include recommendations for action as there is a danger in drawing conclusions based on this data alone. Other data sources such as ONS death registrations, police, NHS and other service data are also considered by multi-agency working to reduce and prevent suicide. This audit is just one source of information and data.

[6] Department of Health and Social Care (2012). *Suicide prevention strategy for England.* www.gov.uk/government/publications/suicide-prevention-strategy-for-england

Introduction

This audit uses the National Statistics definition of suicide, also used by Public Health England; this includes all deaths from intentional self-harm for persons aged 10 years and over (where a coroner has given a suicide conclusion), and deaths from injury or poisoning where the intent was undetermined for those aged 15 years and over (mainly deaths where a coroner has given an open conclusion).[7] This is a commonly used method.

270 deaths by suicide with a Hertfordshire Coroner Service inquest concluding in 2017, 2018 or 2019 were identified for the audit. 264 deaths were recorded as suicide (intentional self-harm) and six as an injury or poisoning of undetermined intent.

The 270 inquests concluding from 2017-19 included deaths occurring between June 2015 and August 2019 with 20.7% occurring in 2016, 26.3% in 2017, 37.4%% in 2018 and 13.7% in 2019. The median length of days between the date of death and inquest conclusion was 197.5 (225.5 in 2017, 196.0 in 2018 and 170.0 in 2019) or approximately 28 weeks. For comparison, ONS recorded a median registration delay of 159 days (approximately 26 weeks) in England in 2018.[8] Registration of a death typically occurs within a few days or weeks of the inquest conclusion.

Hertfordshire Coroner Service is responsible, in the main, for investigating deaths that occur in Hertfordshire. This means this audit, and future audits:

- may not include all Hertfordshire residents as some will have died outside of Hertfordshire and been investigated by another coroner's office
- may include people whose usual place of residence was not Hertfordshire
- use a different cohort to the annually published ONS and Public Health England figures, as these are based on local authority of residence and the calendar year of the date the death was registered

As coroners can pass cases to each other, this may include deaths of Hertfordshire residents where the death took place outside the county, and vice versa.

[7] Office for National Statistics (2018). *Suicides in the UK: 2017 registrations*. www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2017registrations

[8] Office for National Statistics (2019). *Suicides in England and Wales by local authority*. www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/suicidesbylocalauthority

Methodology

Collection of the data involved staff visiting the coroner's office to review records in detail. Significant time was required to sift through the paper files to pull out the items of interest. A standardised electronic questionnaire was developed in Microsoft Excel to collect the data from each record using a combination of free text and dropdowns wherever possible (see Appendix 1). This included:

- coroner's conclusion
- post-mortem and toxicology
- General Practitioner (GP) records
- reports from hospital doctors or other specialists including Mental Health Services
- police reports (including witness statements)

The questionnaire ensured that reporting was targeted to pertinent areas of the coroners' records and that data were collected consistently by staff. The records were reviewed by local authority public health and Hertfordshire Partnership University NHS Foundation Trust staff on-site at the coroner's office on a number of occasions during 2017 to 2019. This data was then collated into one dataset.

To support the 3 years of trend data within the audit, the 2017 suicide locations were added into the audit as these were not part of the data collection in 2017. With this information added into the audit there is now comparisons of location for the whole 3 years.

Statistical analysis

Despite using three years of data numbers of suicides are small and many variables have incomplete data available. Due to rounding, numbers presented throughout this report may not add up precisely to the totals indicated and percentages may not precisely reflect the absolute figures for the same reason. All findings reported are indicative. Due to the smaller number of women who died by suicide, breakdowns by sex may not always be provided.

Lower and upper confidence limits are shown on figures to highlight the range of uncertainty (caused by sample size and random variation) around values. They appear as whiskers extending above and below the value. If the confidence interval around a figure overlaps with the interval around another, we cannot say with certainty that there is more than a chance difference between the two figures. Calculations based on small numbers of events are often subject to random fluctuations.

Summary of the audit findings

The summary below is based on the 270 suicides with a Hertfordshire Coroner Service inquest concluding from 1st January 2017 to 31st December 2019.

Demographics

- Three-quarters (74.8%) of the 270 suicides included in the audit were by men.
- 42.2% of people who died by suicide were aged 30 to 49 years old.
- There were 6 (2.2%) suicides by people aged under 18, and 24 (8.9%) by people aged 80 years or over.
- 11.5% of the people included in the audit lived outside of Hertfordshire.
- 81.1% were born in the UK (25.9% in Hertfordshire).
- Around a third (32.6%) of people dying by suicide were married while 24.4% where widowed or divorced.
- 41.1% were employed, whilst 19.6% were unemployed and 20.4% were retired.

Circumstances of death

- Over half (57.8%) of suicides were by hanging, strangulation or suffocation. The second most common method of suicide was self-poisoning (17.8%), followed by deaths on the railway (10.0%).
- Most suicides took place at the individual's home (61.5%). The next most common location was woodland or park (13.7%), followed by the railway (9.6%).
- Just under half (46.3%) left a suicide message.

Contact with primary care

- 67.4% of people who died by suicide had a mental health issue or condition recorded by their GP practice.
- A quarter (25.2%) of people who died by suicide discussed mental health issues with a member of their GP practice in the four weeks leading up to their death.
- Over one in ten (13.0%) were known to have contacted their GP practice in relation to their physical or mental health in the week prior to their death.

Contact with mental health services

- 34.1% of people who died by suicide were known to a mental health service at the time of death.
- 41.3% (38 suicides) of those in contact with a mental health service had contact during the week leading up to their death, and 69.6% (64 suicides) were in touch within the four weeks prior to death.

Contact with alcohol and drug services

- 14.4% of people who died by suicide were known to drug and alcohol services at the time of death.

Accident and Emergency attendance

- 15.6% of people who died by suicide had attended A&E due to self-harm, suicidal thoughts or suicide attempts in the 12 months prior to death.

Other risk factors

- Mental ill health issues were the most commonly reported risk factor (80.7%).
- 38.5% of people who died by suicide were reported to have made a previous suicide attempt and 17.8% had a recorded history of self-harm.
- A fifth (22.2%) of people who died by suicide were known to have been involved with the criminal justice system.

Demographics

Age and sex

Of the 270 suicides, 74.8% (202) were men and 25.2% (68) were women. This is in line with national findings where males make up three-quarters of suicides, a proportion which has been mostly consistent since the mid-1990s.[9] The proportion of suicides that were male remained statistically similar across the three audit years (79.7% in 2017, 75.8% in 2018, and 70.3% in 2019) (Figure 2). While the proportion of females has increased it has not done so significantly.

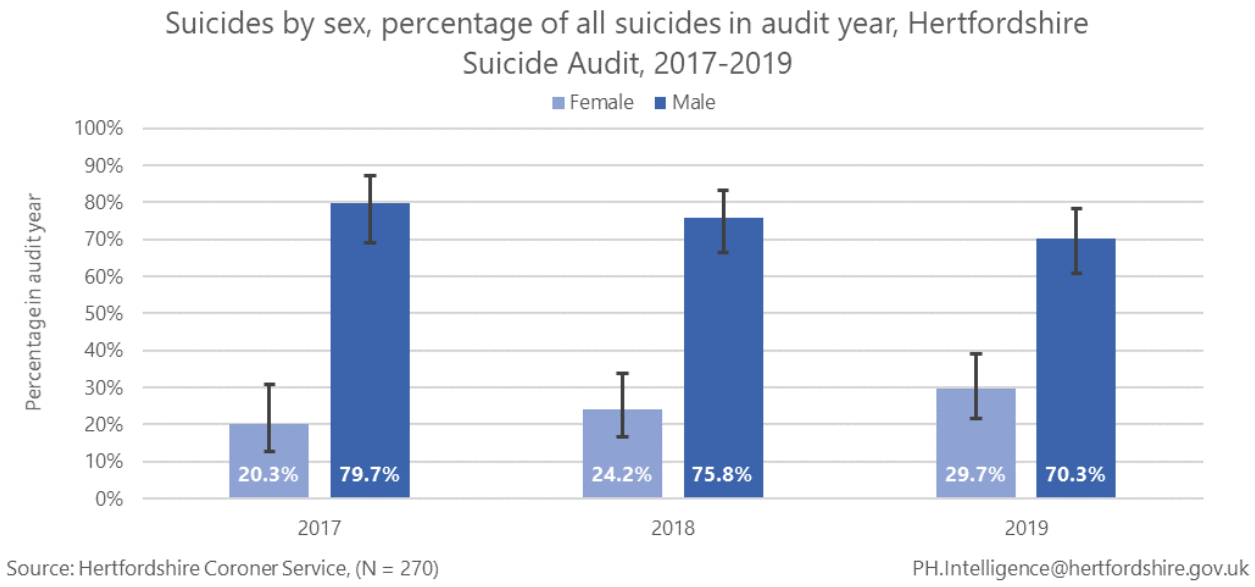
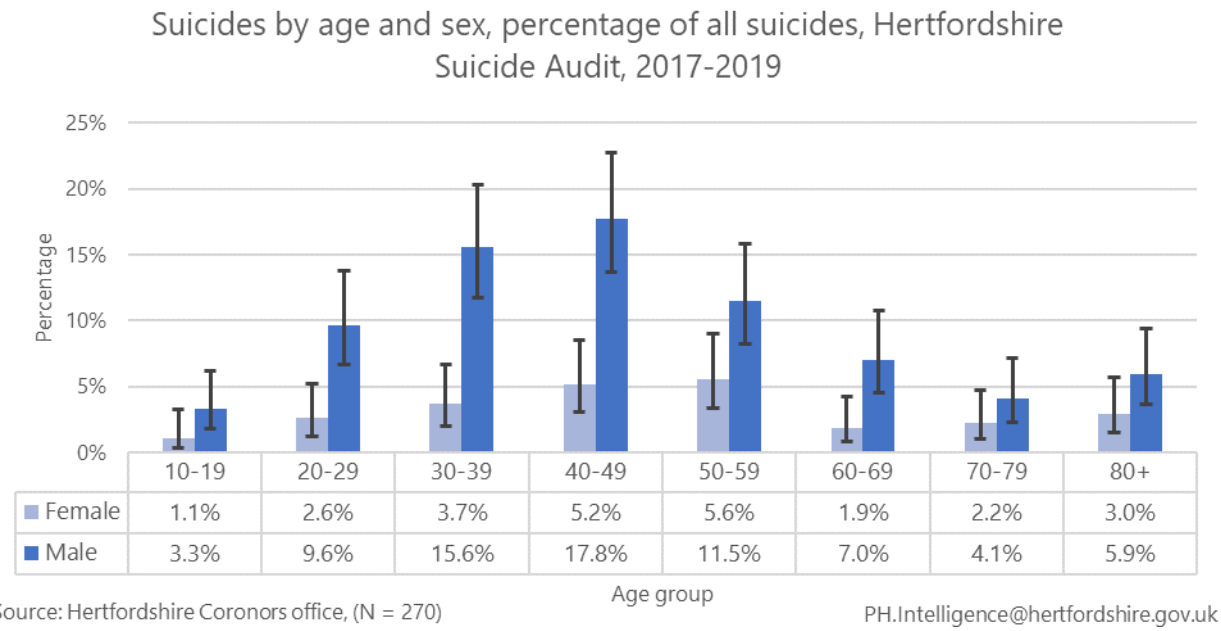


Figure 2: Sex breakdown of suicides

[9] Office for National Statistics (2018). *Suicides in the UK: 2017 registrations*. www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2017registrations



	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Female	1.1%	2.6%	3.7%	5.2%	5.6%	1.9%	2.2%	3.0%
Male	3.3%	9.6%	15.6%	17.8%	11.5%	7.0%	4.1%	5.9%

Figure 3: Age and sex breakdown of suicides

The percentage of suicides by 10-year age band peaked at 40-49 where 23.0% of suicides occurred. 42.2% of people dying by suicide were aged 30 to 49 years old. A third (33.3%) of suicides were men aged 30-49 (Figure 3).

There were no significant changes in the proportion of suicides in each age band between the three audit years. While there was variation in the 10-year age band with the highest percentage of suicides, the majority of suicides occurred in the 30-59-year age bands in all three audit years.

The average age of people who died by suicide over the audit period was 48.0 (47.0 for men and 50.7 for women). The average age was similar across the three audit years (50.9 in 2017, 47.1 in 2018 and 46.6 in 2019). There were six suicides by young people aged under 18 and 24 suicides by people aged 80 or over.

A more in-depth analysis of suicides in children (under 18) and young persons (18-25) has been completed, due to the small numbers it has not been included in this audit.

Marital status

42.2% of individuals were recorded as single, with 32.6% married, 16.7% divorced and 7.8% widowed (note 'single' includes people who are in a relationship, but not married).

Employment status

41.1% of individuals were identified as in employment, with 19.6% unemployed, 20.4% retired and 3.3% unable to work due to illness or disability. The remainder were either full-time students (5.9%), homemakers (3.3%) or missing employment status (6.3%).

Place of birth

81.1% of people in the audit were born in the UK (25.9% Hertfordshire, 28.9% London, 26.3% rest of the UK) and 18.1% were born outside of the UK. Two records (0.7%) were missing place of birth. For comparison purposes the 2011 Census recorded 13% of people (all ages) living in Hertfordshire as being born outside of the UK.[10]

Place of residence

Hertfordshire addresses were recorded as the usual place of residence for 238 (88.1%) of the 270 suicides. Thirty-one addresses (11.5%) were linked to a postcode outside of Hertfordshire and one suicide (0.4%) was recorded as no fixed abode.

Of the identified Hertfordshire residents (238), those living in the least deprived areas of Hertfordshire based on local quintiles (fifths) of deprivation had the fewest suicides (11.3%). Whilst those living in the second most deprived areas of Hertfordshire had the highest proportion of suicides (26.9%) (Figure 4). The difference in proportion of suicides between the least and second most deprived areas of Hertfordshire was statistically significant. In all three audit years the lowest proportion of suicides occurred amongst people living in the least deprived areas of Hertfordshire (10.9% in 2017, 12.9% in 2018 and 10.1% in 2019), whilst the highest proportion of suicides occurred amounst people living in the second most deprived areas (29.7% in 2017, 25.9% in 2018 and 20.2% in 2019).

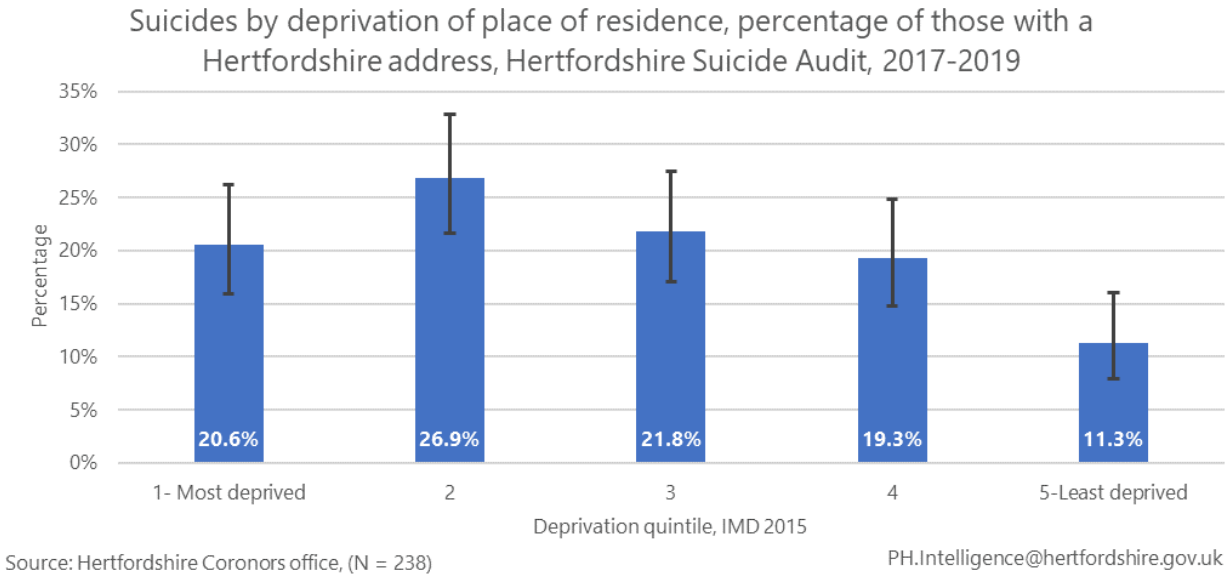


Figure 4: Suicides by local deprivation quintiles

Rates of suicide, based on the usual place of residence, were calculated for Hertfordshire districts and Clinical Commissioning Groups (CCG). The rate of suicides in the 10 Hertfordshire districts ranged from 5.7 per 100,000 in East Hertfordshire to 11.9 per 100,000 in Hertsmere. However, there was no statistically significant difference between any of the districts or between the districts and Hertfordshire (7.7 per 100,000 population).

There were 103 suicides over the audit period with a postcode in NHS East and North Hertfordshire CCG boundary, a crude rate of 6.9 per 100,000 registered patients, and 129 in NHS Herts Valleys CCG boundary, a crude rate of 8.4

[10] Herts Insight (2019). *People and place profile*. www.hertfordshire.gov.uk/microsites/herts-insight/topics/population.aspx

per 100,000 registered patients. The CCG rates were not statistically significantly different to each other or the rate for Hertfordshire (Figure 5). Nationally, rates for local authorities and CCGs are presented by aggregating three years of data and standardising for age (where numbers allow) for more meaningful comparisons.[11] [12] In the most recent national rates (2016-18) the suicide rate was 7.9 per 100,000 in Hertfordshire, 6.6 per 100,000 in NHS East and North Hertfordshire CCG, and 7.3 per 100,000 in NHS Herts Valley CCG.

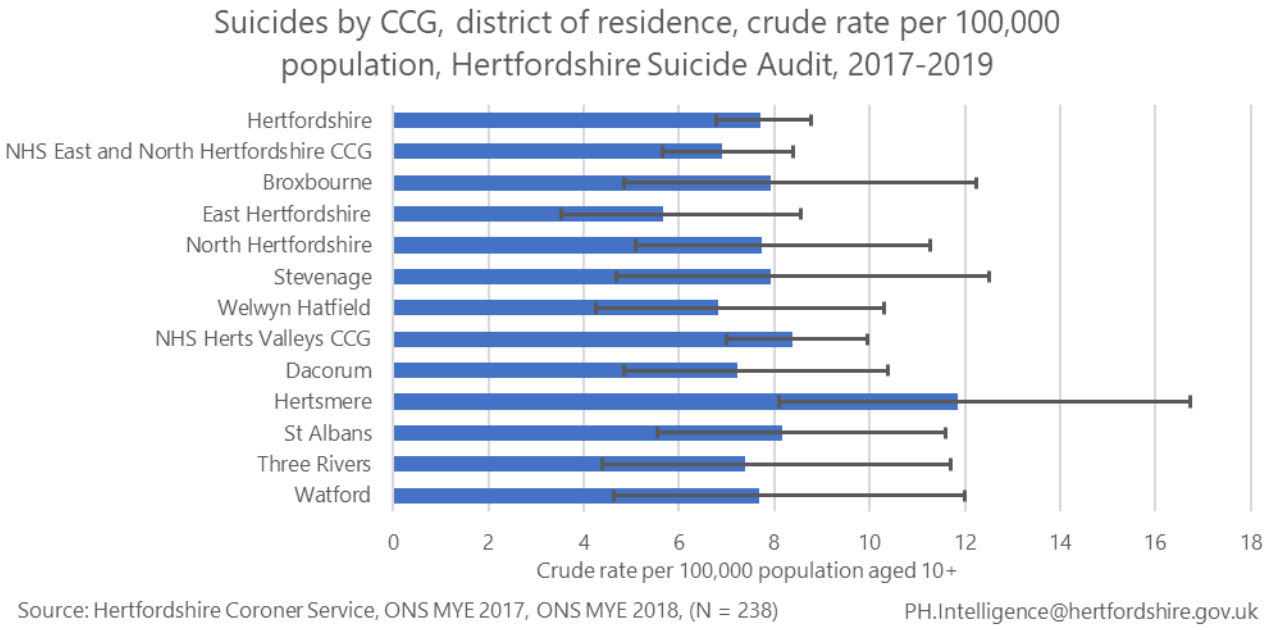


Figure 5: Suicide rates by Clinical Commissioning Group (CCG) and district

Rates of suicide for Hertfordshire districts varied over the three years, however due to the small numbers at district level (an average of less than 8 per district per audit year), the confidence intervals are wide, and there were no statistically significant changes.

Similarly, there were no statistically significant changes within the CCGs or Hertfordshire.

[11] Office for National Statistics (2018). *Suicides in England and Wales by local authority.* www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/suicidesbylocalauthority
[12] Public Health England (2019). *Suicide Prevention Profile*. https://fingertips.phe.org.uk/profile-group/mental-health/profile/suicide

Equality data

All files were checked for details of ethnicity, religion, sexual orientation, gender identity, disability and caring responsibilities.

Sexual orientation was only recorded if explicitly stated in the coroners file (it was not assumed from marital or relationship status).

Disability was only recorded if there was evidence of a registered disability.

The Carers Trust definition was used to identify carers: "A carer is anyone who cares, unpaid, for a friend or family member who due to illness, disability, a mental health problem, or an addiction cannot cope without their support."[13]

These equality characteristics were not routinely recorded and were missing from most files. Table 1 lists the percentage of suicides where this data was available. Less than 15% of suicides had sexual orientation or religion recorded. Although ethnicity was recorded in 48.9% of suicides, they could not always be matched to 2011 Census categories[14] (e.g. 'Caucasian' or 'British' could not be mapped to Census categories), resulting in availability in only 39.3% of files. As these equality characteristics are unavailable for most suicides, breakdowns are not provided.

Equality characteristic	Data availability as percentage of all suicides
Ethnicity (2011 census categories)	39.3%
Religion	12.2%
Sexual orientation	11.9%
Gender identity (reassignment or intent)	2.6%
Disability	32.2%
Carer	37.8%

Table 1: Data completeness, percentage, of equality characteristics, Hertfordshire Suicide Audit, 2017-19
Source: Hertfordshire Coroner Service (N = 270 suicides)

[13] Carers Trust (2019). *About carers*. https://carers.org/what-carer
[14] Cabinet Office (2019). Ethnicity categories and the 2011 census. www.ethnicity-facts-figures.service.gov.uk/ethnicity-in-the-uk/ethnic-groups-and-data-collected

Circumstances of death

Method of suicide

The most common method of suicide was hanging, strangulation or suffocation, accounting for 57.8% (156) of suicides included in this audit (55.4% in 2017, 51.6% in 2018, and 65.3% in 2019). Nationally hanging, strangulation or suffocation was the most common method used by both men and women in the UK (59.4% and 45.0% respectively)[15]. Within this audit it was also the most common method for men (61.9%, 125 suicides) and for women (45.6%, 31 suicides) (Figure 6). Of the six suicides in under 18-year olds hanging, strangulation or suffocation was the most common method (83.3% of all suicides).

The second most common method of suicide was self-poisoning, accounting for 17.8% of suicides (48 suicides), it was the second most common method in all three audit years (20.3% in 2017, 18.9% in 2018 and 14.9% in 2018). Nationally this was the second most common method used by both men and women in the UK (17.9% and 36.2% respectively)[15]. Within this audit it was the second most common method for men (10.9%, 22 suicides) and women (38.2%, 26 suicides).

Of the 48 suicides by poisoning, the following substances were identified as contributing to the death:

- prescription drugs (36 suicides, at least 18 involved drugs prescribed for the person who died by suicide)
- carbon monoxide (7 suicides)
- alcohol and/or recreational drugs (8 suicides)
- over the counter medication (3 suicides)
- morphine was the most common drug listed as contributing to death involved in 9 deaths

A post mortem is 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. For a small number of suicides there was no toxicology report as toxicology was either not possible or inappropriate.

Suicides on the railway was the third most common method accounting for 10.0% of suicides (27 suicides). Within this audit it was the third most common method for men (10.4%, 21 suicides) and women (8.8%, 6 suicides). The suicides took place at, or near, eleven railway stations in Hertfordshire. Nationally, it is reported around 4.5% of suicides in the UK take place on the railway.[16]

There was no statistically significant difference in the method of suicide between the three audit years.

[15] Office for National Statistics (2019). *Suicides in the UK: 2018 registrations.* www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2018registrations

[16] Network Rail (2019). *Fatalities*. www.networkrail.co.uk/running-the-railway/looking-after-the-railway/delays-explained/fatalities

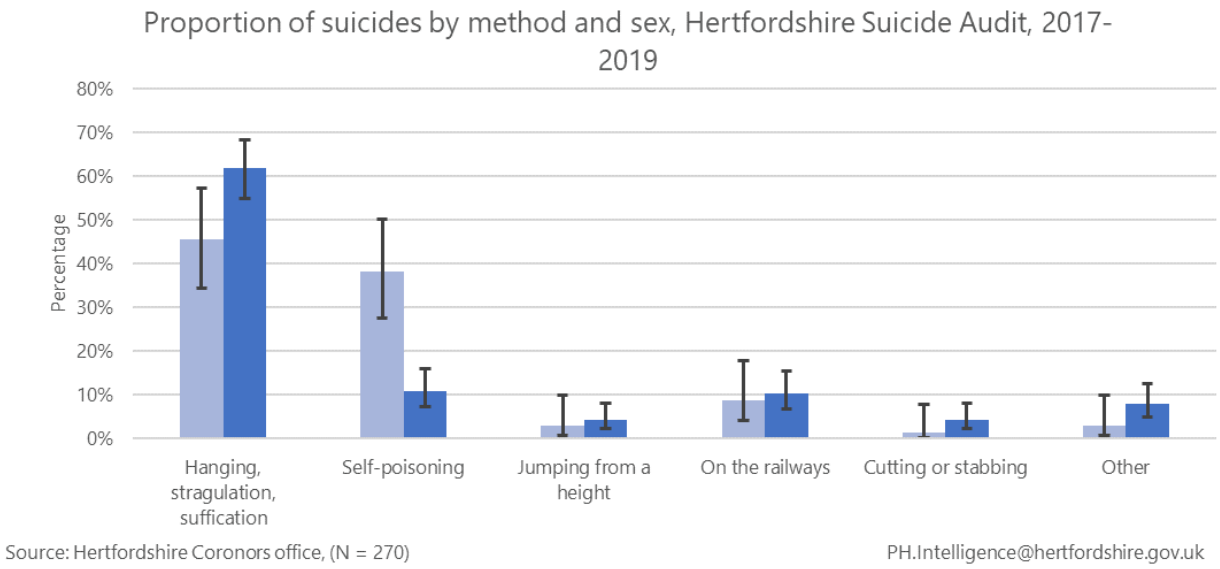


Figure 6: Suicides by method and sex

Location of suicide

Over half (61.5%) of people who died by suicide took their own life at home (56.4% of men and 76.5% of women). The next most common location was woodland or park (13.7%) followed by the railway (9.6%).

Suicide message

There was evidence of a suicide message left by the deceased (using a variety of media such as a note or text) in just under half (46.3%) of all suicides (52.9% of women and 44.1% of men).

Alcohol and drug use at time of death

Alcohol, of varying levels of concentration, was recorded in 38.9% of suicides. Several toxicology reports suggested low levels of alcohol may be as a result of post-mortem changes rather than ingestion of alcohol prior to death.

Drugs listed in the toxicology results were grouped according to the Sheffield Teaching Hospitals NHS Foundation Trust Forensic Toxicology Test screening groups (Appendix 2).

- Opiates were recorded in the toxicology reports of 18.5% of suicides (50 suicides). Opiates include pain killers such as codeine and morphine, as well as heroin and methadone.
- Stimulants were recorded in 11.9% of suicides (32 suicides). Stimulants include amphetamine, cocaine, MDMA (ecstasy), etc.
- Cannabis was recorded in 3.3% of suicides (9 suicides).

Contact with health care services

Primary care

94.4% of people who died by suicide were registered with a GP practice (81.1% with a GP practice in Hertfordshire). Eleven people (4.1%) were not registered with a practice and registration status was unknown for four people (1.5%).

Date of last contact with GP practice was missing for 34 (12.6%) of the 270 suicides. As shown in Figure 7, of the 270 suicides, it was known that:

- Three-quarters contacted their practice within the 12 months prior to their death (75.9%, 205 suicides)
- Over a third contacted their practice within the four weeks prior to their death (35.9%, 97 suicides)
- Over one in ten contacted their practice within the week prior to their death (13.0%, 35 suicides)

There was no statistically significant difference across the audit period in the timing of last contact with GP and dying by suicide.

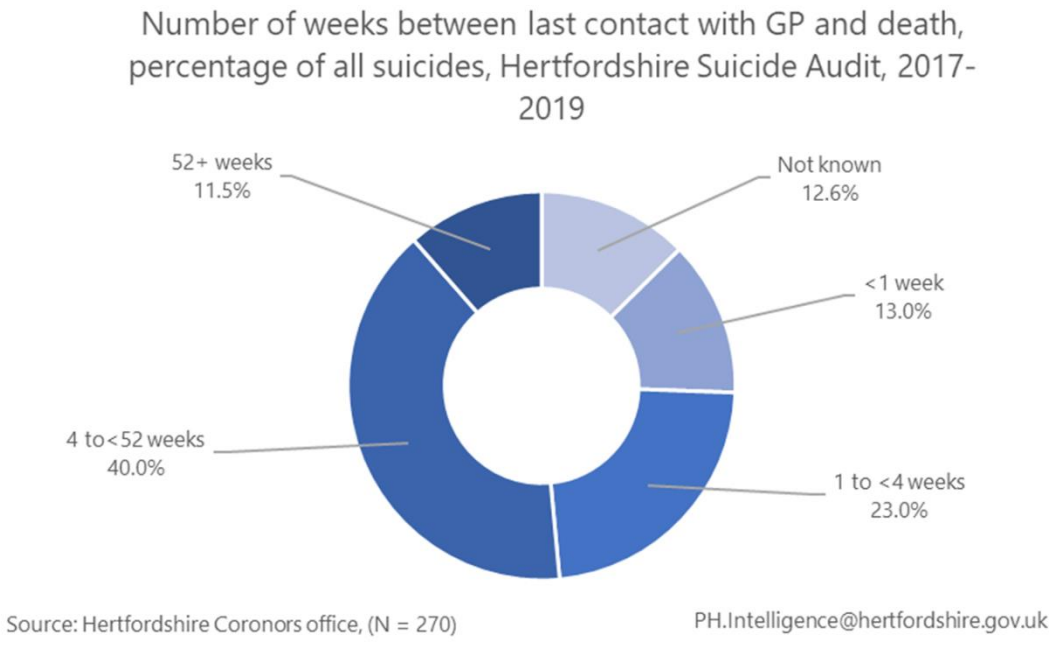


Figure 7: Number of weeks between last contact with GP practice and suicide

Just under half (44.1%, 119 suicides) of all people who died by suicide last contacted their GP for mental health issues; 45.0% (91 suicides) for men and 41.2% (28 suicides) for women. Details of the reason for last contact with the primary care team was missing for 27 suicides (10.0%).

For the 119 people whose last contact with their GP was related to mental health issues 18.5% (17.9% of females and 18.7% of males) had contact within the week prior to their death and 57.1% (64.3% of females and 54.9% of males) within the four weeks prior to their death.

GP recorded mental health issues and conditions

The GP had recorded mental health issues or conditions for 67.4% (182 suicides) of people who died by suicide, 79.4% (54 suicides) for women and 63.4% (128 suicides) for men. Of these, 70.9% (129 suicides) had a treatment plan in place through primary care (61.1% for women and 75.0% for men). The most commonly recorded mental health issues and conditions were depression, anxiety, psychotic disorders and stress.

One quarter (25.2%, 68 suicides) of all people who died by suicide were known to have discussed mental health issues with a member of the primary care team within the four weeks leading up to their death (26.5% of women and 24.8% of men).

Twenty-two people (8.1%) had discussed mental health issues with their primary care team in the week leading up to their death.

Mental health services

Mental health services include the local NHS Trust (Hertfordshire Partnership University NHS Foundation Trust), out of area NHS trusts and private mental health services. All information in this section was provided by the relevant mental health service in response to a request from the coroner.

Over a third (34.1%, 92 suicides) of people who died by suicide were known to a mental health service at the time of death, with more women (45.6%) than men (30.2%) known to mental health services.

The percentage of people known to mental health services at time of death varied across the three audit years (40.5% in 2017, 28.4% in 2018 and 34.7% in 2019). Of the 62 suicides in the 2018 and 2019 audit years, 51 (82.3%) were known to Hertfordshire Partnership University NHS Foundation Trust (data not available for 2017).

As shown in Figure 8, of the 92 people known to a mental health service at the time of death:

- The majority had been in contact within the 12 months prior to their death (88.0%, 81 suicides)
- 69.6% had been in contact in the 4 weeks prior to their death (64 suicides)
- Almost half were in contact with services, in the week leading up to their death (41.3%, 38 suicides)
- The date of last contact with a mental health service was not recorded for 10.9% (10 suicides)

There was no statistically significant difference across the audit period for the number of weeks since last contact with mental health services and suicide.

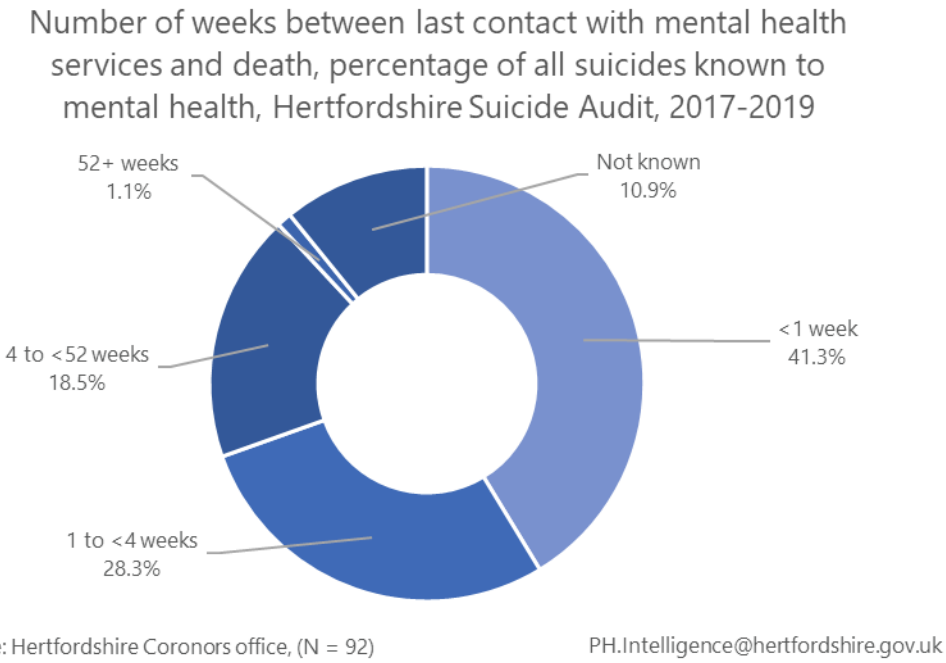


Figure 8: Number of weeks between last contact with mental health service and suicide, known to a mental health service at the time of death

129 people (47.8%) who died by suicide had a history of contact with mental health services, with a higher proportion among women (61.8%, 42 suicides) than men (43.1%, 87 suicides). 153 people (56.7%) were identified as having been known to a mental health service at some point in their life (either before or at time of death). It is

possible for people to have been known to mental health services at some point in their life but not have a mental health history if, for example, they had been referred shortly before their death but had not yet been seen.

22.6% of people (23.5% of females and 22.3% of males) who died by suicide had been previously known to mental health services but were not known at the time of their death.

107 (69.9%) of the 153 people who died by suicide and who had contact with a mental health service had details of one or more diagnosis (by a Mental Health Professional) recorded in the coroner files. Of these, 69 (45.1%) had two or more diagnoses recorded and 27 (17.6%) had three or more diagnoses.

The most common mental health diagnoses or working diagnoses recorded by a mental health professional, either before or at time of death were:

- depression (48.4%, 74 suicides)
- anxiety (30.7%, 47 suicides)
- schizophrenia and/or personality disorder (16.3%, 25 suicides)

Alcohol and drug services

14.4% (39 suicides) of people who died by suicide were known to a drug or alcohol service (females 14.7% and males 14.4%). 11.7% (23 suicides) of suicides in the 2018 and 2019 audit years, were known to the Hertfordshire commissioned drug and alcohol service (data not available for 2017).

Accident and Emergency attendances

There were 42 people (15.6%) who died by suicide who had attended Accident and Emergency due to self-harm, suicidal thoughts or suicide attempts in the 12 months prior to death. The proportion was higher in women (29.4%, 20 suicides) than men (10.9%, 22 suicides).

Other risk factors

The factors that contribute to why people take their own lives can be complex and multi-faceted and, consequently, it can be difficult to establish from the coroners file. Recording of risk factors differed in 2017 to 2018 and 2019 resulting in some risk factors not being recorded in the 2017 audit.

The risk factors most frequently mentioned in the coroners' files are listed in Figure 9. Mental ill health was the most commonly cited (80.7%, 218 suicides), followed by family/relationship problems (50.0%, 98 suicides) and drug or alcohol problems (37.4%, 101 suicides). Although mental ill health is the most frequently mentioned risk factor, mental health issues may also be caused by life events such as bereavement or physical health problems, as well as being linked to employment and financial issues.

Mental ill health was the most common risk factor mentioned in all three audit years. The only statistically significant change in risk factors between audit years was for bereavement which increased from 9.5% in 2017 to 33.7% in 2019, although this could have been impacted by differences in the categories.

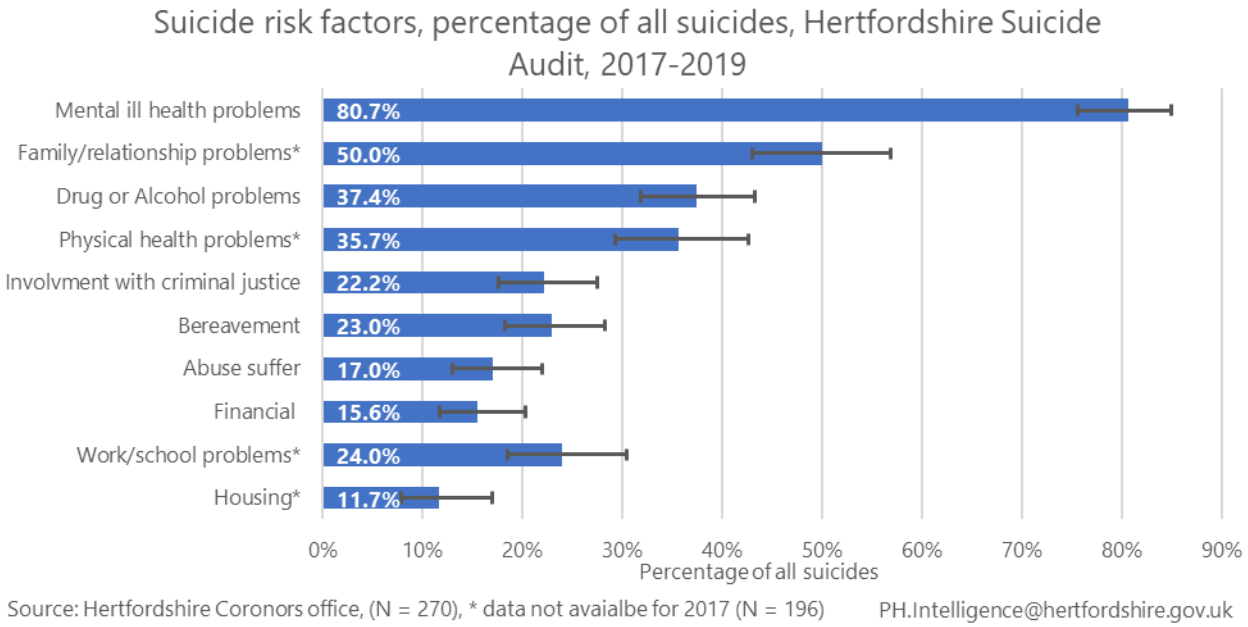


Figure 9: Risk factors

Differences between risk factors for men and women are shown in Figure 10. They are most pronounced for drug or alcohol problems (27.9% of women, 40.6% of men), mental ill health problems (89.7% of women, 77.7% of men) and involvement with the criminal justice system (10.3% of women, 26.2% of men).

The smaller number of women means their proportions are more prone to fluctuations, making conclusions hard to reach.

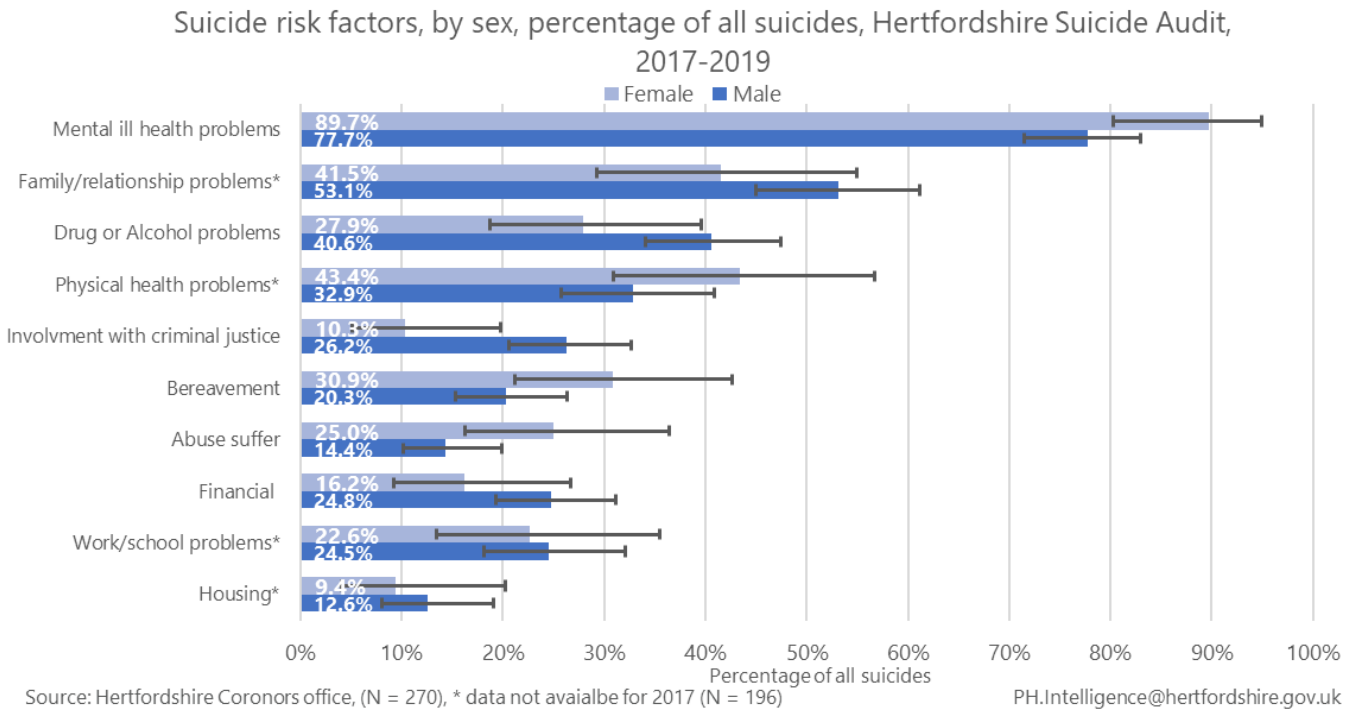


Figure 10: Risk factors, by sex

Over a fifth (22.2%, 60 suicides) of people who died by suicide were known to have been involved with the **criminal justice system** (this includes a history of prison, remand, arrest or chargeable offences). 11.2% of suicides in the 2018 and 2019 audit years (data not available 2017) were in contact with the criminal justice system at the time of their death.

There was evidence of either a history or current emotional, sexual, physical, financial or other type of **abuse** in 17.0% (46 suicides) of people who died by suicide. Of these, the largest proportion was physical abuse (9.3%, 25 suicides) followed by emotional (5.9%, 16 suicides), sexual (5.2%, 14 suicides) and financial (0.7%, 2 suicides) abuse. Some people experienced more than one type of abuse.

Files were checked to determine whether people who died by suicide were working for, or had a history of working for, the **armed forces**. This was not routinely recorded, and the numbers are too small to report.

Over a third (38.5%, 104 suicides) of people who died by suicide had a record of a **previous suicide attempt**. 55.9% (38 suicides) for women and 32.7% (66 suicides) for men. Of these, close to half (46.2%, 55 suicides) had evidence of attempting suicide more than once (58.1%, 25 suicides, for women, 39.5%, 30 suicides, for men).

Close to one fifth (17.8%, 48 suicides) of people who died by suicide had a history of **self-harm** recorded; 32.4% (22 suicides) for women and 12.9% (26 suicides) for men. Of those who self-harmed, over half (58.3%, 28 suicides) had reportedly done so on more than one occasion.

Conclusion & Recommendations

Each of the 270 deaths included within this audit represents a personal tragedy with potentially devastating effects on families, friends, colleagues, first responders, staff, the wider community and beyond.

It should be noted that, statistically speaking, these are small numbers. Because of this there is a danger in drawing too many, or too definitive, conclusions on the basis of this data alone. In isolation this audit is, at best, indicative. As such the audit is intended to inform continued action on suicide prevention and, alongside the use of ONS data, data from agencies such as Police, services and other agencies, is one source of information which should be taken into account by agencies working to reduce and prevent suicide.

This audit is the first using three years of data since the development in 2017 of a new methodology designed to be robust, repeatable, and as objective as possible. This new methodology has resulted in data which is directly comparable and consistent allowing trends to be identified. Data relating to suicides where the inquest was concluded in 2017, 2018 and 2019 have been collected using this methodology and included in this report. Continuing to apply this more rigorous process to future years' data will allow further trends to be identified and more meaningful conclusions to be reached that will inform the work of the Hertfordshire suicide prevention programme.

Appendix 1: Data collection template

Version 2.0
Year of Inquest*

Hertfordshire Suicide Audit, Coroners Data Collection Record for:*

*Name, Inquest Yr, DoD all auto-complete

Details of person completing form:

Name		Date completed	

Section 1: Demographics of deceased

First Name		Surname		Place of birth	
DateOfBirth		DateOfDeath		Inquest date	
Sex		Sex at birth		Postcode of usual address	
				Age at Death (automatically calculated)	
Marital status				Sexual orientation	
Ethnicity				Religion	
Carer				Registered disabled?	
				Evidence of gender reassignment?	
Employment				Evidence of intent to reassign gender?	
Occupation				Nature of evidence of intent to reassign gender	
Armed forces					

Additional Notes:

Section 2: Suicide details

Conclusion		Suicide location: Type	
Suicide note		Suicide location: Postcode	
Suicide method		Suicide location: Place	

Additional Notes:

If method of death was self-poisoning specify substance(s)- tick all that apply and complete adjacent columns. Only include if contributed to death.

Substance	Source of self-poisoning substance	Further details
☐ Alcohol		
☐ Over the counter medication		
☐ Prescription medication		
☐ Recreational drugs (inc. heroin)		
☐ Other poison*		
☐ Other poison*		
☐ Not known		

** eg weed killer, etc. - specify in further details*

Additional Notes:

Is toxicology report present in the file?

If yes, detail substances listed- see 'Toxicology' tab for details of drugs included under each heading

☐ None listed	☐ Alcohol	☐ Barbituates	☐ Benzodiazepines	☐ Cannabinoids
☐ Stimulants	☐ Opiates/ opoids	☐ Phenethylamines	☐ Analgesics	☐ Antidepressants/ mood stabilisers
☐ Antiepileptics	☐ Antipsychotics	☐ Other therapeutic drugs		

Additional Notes:

Appendix 1: Data collection template (cont.)

Section 3: Contact with Primary Care

Registered with General Practitioner (GP)?

Type any part of practice code, name, address or postcode in box below to select from list of Hertfordshire practices, or click arrow to scroll through

To change or delete a selected practice: select/ highlight all text > delete > start typing/ use scroll bar

If practice does not appear in dropdown above then type details manually below

Code		**Practice name**	
Postcode		**Practice address**	

Date of last contact with GP/ primary care team before death: ☐ **Tick if date not known**

Reason for last contact with GP/ primary care team before death:

Additional Notes:

Had GP recorded mental health conditions?

If yes, provide brief details

If yes, was treatment plan in place through Primary Care?

Section 4: Psychiatric history (see mental health trust records if available)

HPFT= Hertfordshire Partnership University NHS Foundation Trust (local mental health trust)

Known to mental health services at time of death?

If yes, what type of service(s)? - tick all that apply

- ☐ Single Point of Access triage
- ☐ Initial assessment with a team
- ☐ Ongoing treatment in community service
- ☐ Specialist community team*
- ☐ Inpatient
- ☐ RAID
- ☐ Crisis team/ service (CAT, C-CAT, etc)
- ☐ 136 assessment
- ☐ Street/ police triage
- ☐ Other (give details below)

** (eg eating disorder, first episode psychosis)*

Other (details)

Previous history of contact with mental health services?

If yes, what type of service(s)? - tick all that apply

- ☐ Single Point of Access triage
- ☐ Initial assessment with a team
- ☐ Ongoing treatment in community service
- ☐ Specialist community team*
- ☐ Inpatient
- ☐ RAID
- ☐ Crisis team/ service (CAT, C-CAT, etc)
- ☐ 136 assessment
- ☐ Street/ police triage
- ☐ Other (give details below)

** (eg eating disorder, first episode psychosis)*

Other (details)

If known to mental health services, date of last contact: ☐ **Tick if date not known**

Current/ historic psychiatric/ learning disability diagnoses RECORDED BY MENTAL HEALTH SERVICES ONLY- tick all that apply and provide further details below

- ☐ None
- ☐ Not known
- ☐ Schizophrenia & other delusional disorders
- ☐ Bipolar affective disorder
- ☐ Depressive illness
- ☐ Anxiety/ phobia/ panic disorder/ OCD
- ☐ Eating disorder
- ☐ Dementia
- ☐ Alcohol misuse
- ☐ Drug misuse
- ☐ Personality disorder
- ☐ Adjustment disorder/ reaction
- ☐ Learning disability
- ☐ Autistic spectrum
- ☐ Head injury
- ☐ First episode psychosis
- ☐ Other (specify below)

Full details of diagnosis (include ICD-10 code and description where available)

Please also list any ICD-10 codes (3 or 4 digit) given in notes below (e.g. F10, F43.2)

ICD-10 code: 1	ICD-10 code: 2	ICD-10 code: 3	ICD-10 code: 4	ICD-10 code: 5	ICD-10 code: 6	ICD-10 code: 7	ICD-10 code: 8	ICD-10 code: 9	ICD-10 code: 10

Appendix 1: Data collection template (cont.)

Section 5: Contact with secondary care (A&E)

Had the deceased attended A&E in 12 months prior to death due to self harm, suicidal thoughts or suicide attempt?

Additional Notes:

Section 6: Other history

Had the deceased self-harmed?
If yes, on more than one occasion?
Had the deceased previously attempted suicide?
If yes, on more than one occasion?

Additional Notes:

Evidence of history of violence or abuse to the deceased?
If yes, tick all that apply below

Type of abuse	Perpetrator	Brief details
☐ Emotional abuse		
☐ Sexual abuse		
☐ Physical abuse		
☐ Financial abuse		
☐ Other (provide details)		

Additional Notes:

Were they known to drug and alcohol services?

Additional Notes:

Evidence of criminal justice contact?

If yes, tick all that apply below	Brief details
☐ In prison at time of death	
☐ Under arrest/awaiting court case/sentencing/ on probation at time of death	
☐ History of being in prison	
☐ History of offences/ convictions/ probation	
☐ History of cautions/ warnings	
☐ Other (specify under brief details)	

Additional Notes:

Section 7: Risk factors

hover over cells below for comments

Evidence of: *(tick all that apply)*	Brief details
☐ Mental health problems	
☐ Physical health problems	
☐ Drug/alcohol use	
☐ Work/school problems	
☐ Family/ relationship problems	
☐ Financial problems	
☐ Involvement with criminal justice system	
☐ Housing problems	
☐ History of self-harm/suicide attempt	
☐ Abuse sufferer	
☐ Experience of bereavement/other loss	
☐ Significant anniversary	
☐ Other (specify under brief details)	
☐ Other (specify under brief details)	

Section 8: Any other notes relevant to analysis or for attention of Public Health Evidence and Intelligence team

Additional Notes:

Appendix 2: Forensic toxicology groupings

Sheffield Teaching Hospitals NHS
NHS Foundation Trust

Forensic Toxicology Tests

Screening Group 1 – Immunoassay

Type of drug	Screening cutoff (limit of detection)	
Barbiturates	200 µg/L	
Benzodiazepines	200 µg/L	
Cannabinoids	50 µg/L	
Cocaine metabolites	300 µg/L	← Record under stimulants
Methadone	300 µg/L	← Record under opiates
Opiates	300 µg/L	
Phenethylamines	300 µg/L	

Screening Group 2 - Gas chromatography-mass spectrometry

Screening 'cut-off' (limit of detection'): 25 to 100 µg/L depending on the analyte

Analgesics
Diclofenac
Ibuprofen
Lidocaine
Naproxen
Nefopam
Paracetamol

Antidepressants
Amltriptyline
Citalopram
Desipramine
Dothiepin
Fluoxetine
Imipramine
Mirtazapine
Nortriptyline
Paroxetine
Sertraline
Venlafaxine
Lithium

Antiepilectics
Carbamazepine
Lamotrigine
Phenytoin
Topiramate

Antipsychotics
Amisulpride
Clozapine
Olanzapine
Procyclidine
Quetiapine
Trazodone

Stimulants
Amphetamine
BZP
Caffeine
Cathine
Cocaine
Ephedrine
Ketamine
MDA
MDEA
MDMA
Mephedrone
Methamphetamine
Methiopropamine
Methylphenidate
Nicotine
Pseudoephedrine
TFMPP

Opiates/opioids
Codeine
Dempropoxyphene
Dihydrocodelne
Methadone
Morphine
Oxycodone
Petildlne
Tramadol

Other therapeutlc drugs
Alverine
Atracurium
Atropine
Chlorphenamine
Clomethiazole
Cyclizine
Diltiazem
Diphenhydramine
Promethazine
Propofol
Propranolol
Zolpidem
Zoplclone

Benzodiazepines
Chlordiazepoxide
Diazepam
Nordazepam