Preventing Suicide in Bristol Annual Report

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Acknowledgements

To members of the Suicide Prevention Group, the Avon Suicide Prevention Audit Group and all those who work with to make Bristol a safer and more compassionate city.

1.0 Introduction

Suicide is preventable. Suicide can have a lasting and devastating effect on individuals, their friends, families, colleagues, and communities. Every single life lost to suicide is one too many.

In England one person will die every 2 hours by suicide and many more will attempt suicide.

Around 44 lives are lost to suicide among Bristol residents each year.

The current 3-year average suicide rate in Bristol is 11.7 per 100,000, similar to the England average of 10.3 per 100,000 population. The suicide rate for females is 8.0 per 100,000 population and for males 15.7 per 100,000 population, almost twice the female rate. Notably the suicide rate in Bristol females has risen sharply since the last report, albeit the numbers are small. The overall trend has remained fairly stable with each 3-year rate since 2005-07 reporting as being between 10.2 and 12.5 per 100,000 which equates to between 119 and 148 preventable deaths per 3-year period.

The reasons leading to an individual taking their own life can be complex. There are many social, economic, psychological, and cultural factors that can all interact and have an impact.

There are also many protective factors that can help to reduce suicide. These include being in full-time employment, having a strong and supportive network of friends and family and the ability to access effective mental health support.

In September 2023 the Department of Health & Social Care launched the Suicide prevention strategy for England: 2023 to 2028 – comprising Suicide prevention in England: 5-year cross-sector strategy and the accompanying Suicide prevention strategy: action plan. This updated the previous "Preventing Suicide in England – a cross governmental strategy to save lives" launched in 2012 under the coalition government. This strategy sets out key actions at national and local level. Mental ill health is also one of the four main health conditions included in the government's Major Conditions Strategy that was announced in August 2023. It is likely that there will be implications for the suicide prevention local action workstream when this is published in detail, however the key objectives are set out in the 5-year strategy and action plan linked above.

In Bristol we continue to take a systems approach, through City, Integrated Care System and Avon wide partnerships to develop and deliver preventative work. The Bristol ambition is to become a Zero suicide city.

2.0 Analysis of trends in suicide in Bristol

The analysis draws on data from a variety of different sources including Primary care Mortality Database, Office for National Statistics, Ministry of Justice and National Offender Management Service and Public Health Outcomes Framework.

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

Due to the small numbers of suicides in any one year, analysis is conducted over multiple years to ensure statistical significance. Rates are calculated using a three-year rolling average.

2.1 Suicides in Bristol from 2006 to 2022

The number of suicides in Bristol fluctuates from year to year; on average 44 Bristol residents die by suicide annually.

Bristol has seen an increase in the number of deaths registered as suicide in 2018-2020 which is consistent with the pattern for England. There are some potential reasons for this increase. This may be down to a change in the coroner's law. Before 2018, for a Coroner to return a verdict of suicide in an inquest, the fact that the deceased deliberately took his/her own life must be established beyond reasonable doubt (criminal standard of proof). This was changed to the civil standard of proof i.e., the balance of probabilities following *Maughan, R (On the Application Of) v Senior Coroner for Oxfordshire* [2018] EWHC 1955 (Admin) case.

Table 1 Number of deaths from suicide and injury of undetermined intent in Bristol registered between 2006 and 2022.*

Year of registration	Male	Female	Total
2010	35	8	43
2011	41	10	51
2012	24	8	32
2013	32	14	46
2014	43	16	59
2015	27	15	42
2016	27	12	39
2017	29	9	38
2018	34	14	48
2019	43	9	52
2020	31	11	42
2021	30	16	46
2022	35	25	60

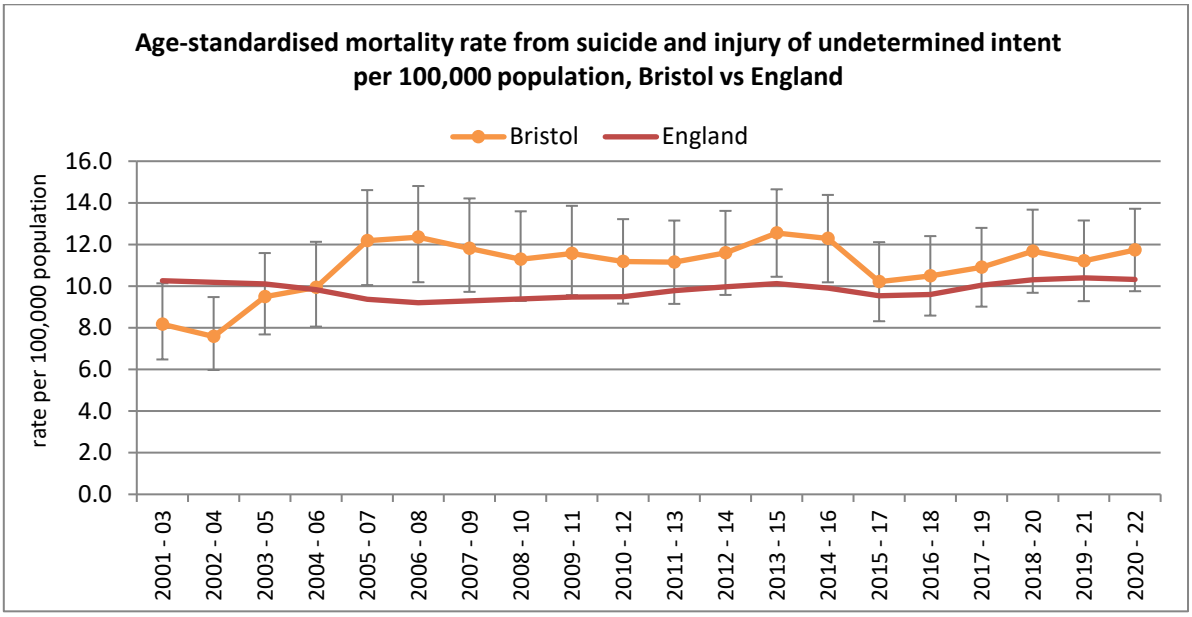
Source: Primary Care Mortality Database via NHS digital

The increase in suicide registrations in 2022 has also been influenced by the *delay in the coroner's inquests* during the Covid-19 pandemic. Some of the deaths which have occurred in 2020 and 2021 have been registered in the following years. Reassigning these to the actual year of death is not possible without performing a specific case audit task.

Figure 1 below shows the age standardised mortality rate from suicide and injury of undetermined intent from 2001-2003 to 2020-2022. Although the rate has increased this rise is not statistically significant (as indicated by the confidence intervals of the Bristol rate overlapping the England rate) and between 2015-2017 and 2020-2022, the last 6 reporting periods, although rates are higher than England these are not statistically different to the national average.

Put simply, this means that the rate of death by suicide in Bristol has remained relatively stable since 2005.

Figure 1: Age-standardised mortality rate from suicide and injury of undetermined intent per 100,000 population, Bristol vs England.



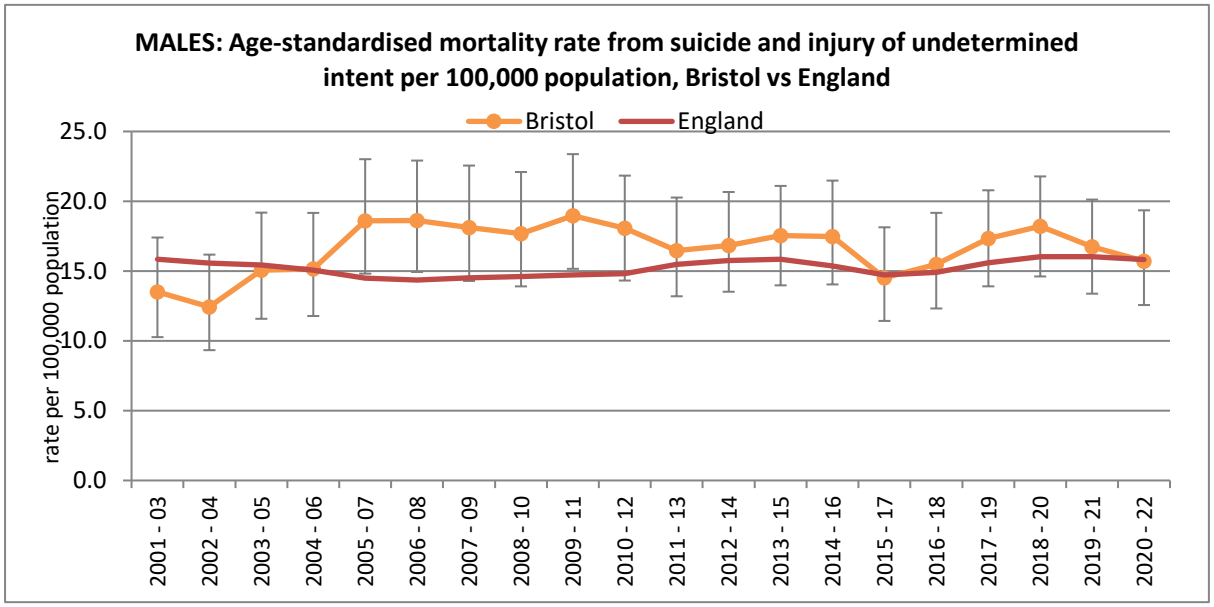
Source: OHID, Public Health Outcomes framework

2.2 Gender and age

Historically, both in England and locally, the rate of male suicides has been consistently higher than for females, although the ratio of male to female suicide rates has changed over time. The female rates peaked in the 1960s (Thomas and Gunnell, 2010).

During the period 2020-2022 65% of suicides and undetermined death in Bristol were males. (Public Health Outcomes Framework, OHID); this represents a change in ratio from 3:1 (Male:Female) to 2:1 (Male:Female). There are outstanding questions regarding whether the issues that affected date of registration of suicide or undetermined death applied equally to both males and females.

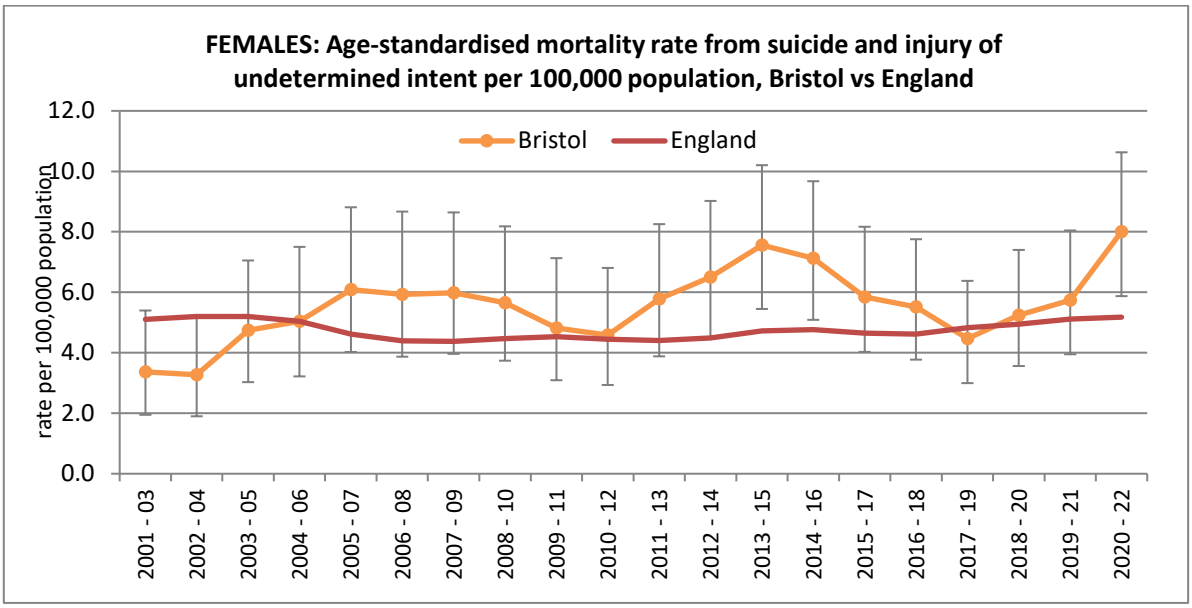
Figure 2: MALES: Age-standardised mortality rate from suicide and injury of undetermined intent per 100,000 population, Bristol vs England.



Source: OHID, Public Health Outcomes Framework

Figure 2 shows the age-standardised mortality rate from suicide and injury of undetermined intent between 2001-2003 and 2020-2022 for males. The rate of suicide among men has not significantly changed over time. Between 2010 and 2022 the rate of suicide among men is not statistically significant from the England average.

Figure 3: FEMALES: Age-standardised mortality rate from suicide and injury of undetermined intent per 100,000 population, Bristol vs England.



Source: OHID, Public Health Outcomes framework

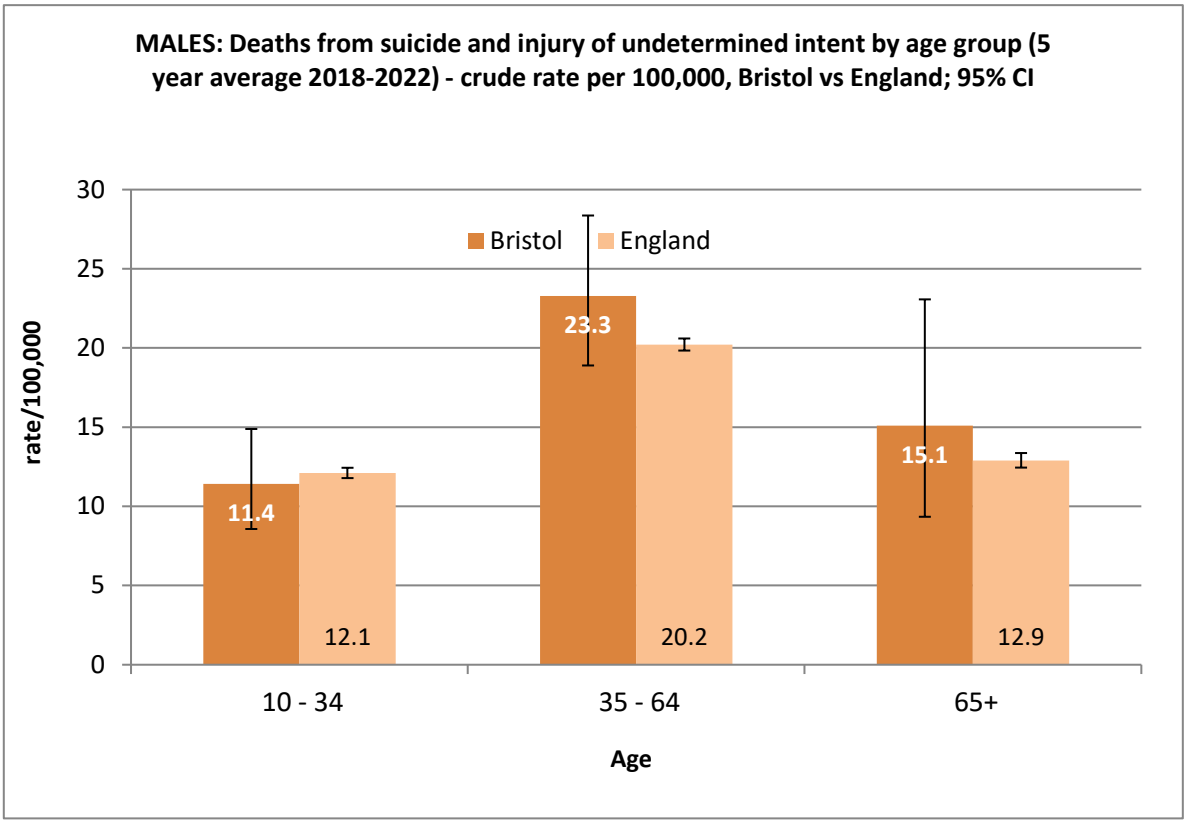
Figure 3 illustrates the age standardised mortality rate for suicide and injury of undetermined intent among females from 2001-2003 to 2020-2022. The number of female suicides rose between 2011 and 2015 and again after 2018. In the 3-year period of 2020-2022 the Bristol rate is statistically significantly higher than England average. Whilst the actual numbers of suicides will be relatively small, this difference in rate is a clear concern.

Table 2: Deaths from suicide and injury of undetermined intent by age group (5-year averages; 2018-2022) – crude rate per 100,000

	Bristol		England	
Age band	*Male*	*Female*	*Male*	*Female*
10 - 34	11.4	5.7	12.1	4.1
35 - 64	23.3	8.7	20.2	6.4
65+	15.1	4.9	12.9	4.0

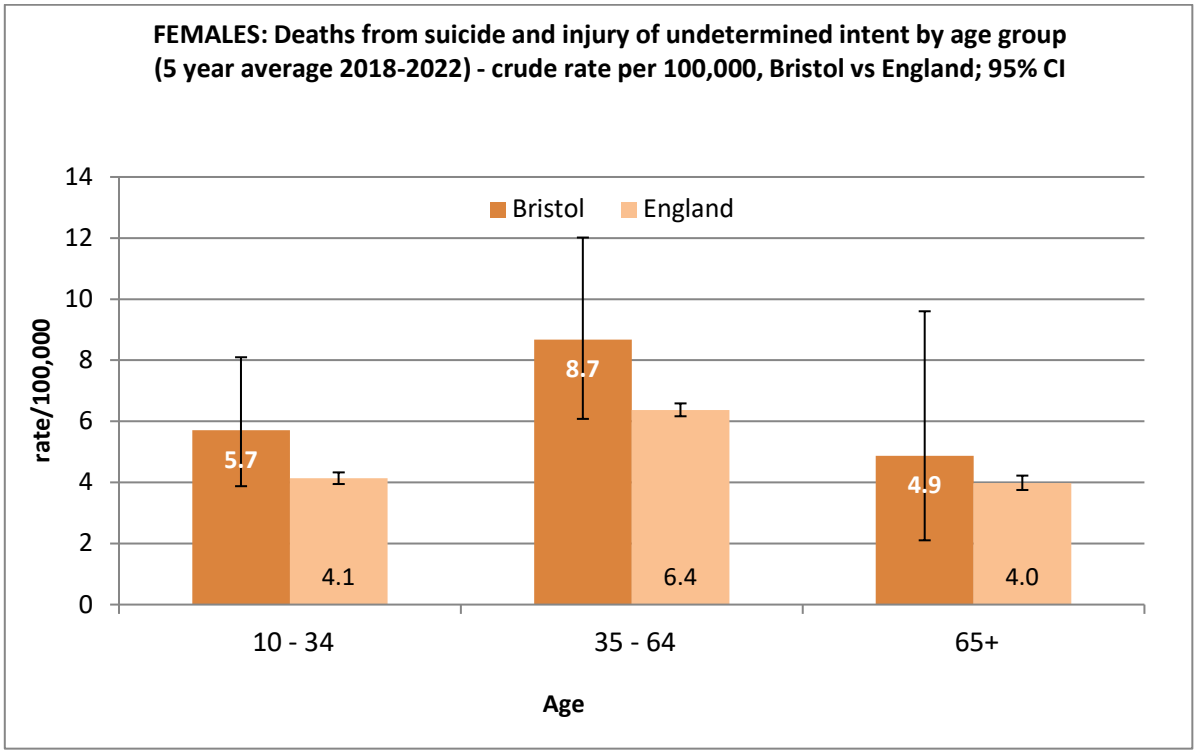
Source: Primary Care Mortality Database 2023 via NHS Digital & ONS population estimates for Bristol values and ONS Suicides in England and Wales, 1981 to 2022

Figure 4: MALES: Deaths from suicide and injury of undetermined intent by age group (5-year averages, 2018-2022) – crude rate per 100,000.



Source: Primary Care Mortality Database 2023 via NHS Digital & ONS population estimates for Bristol values and ONS Suicides in England and Wales, 1981 to 2022

Figure 5: FEMALES: Deaths from suicide and injury of undetermined intent by age group (5-year averages; 2018-2022) – crude rate per 100,000.



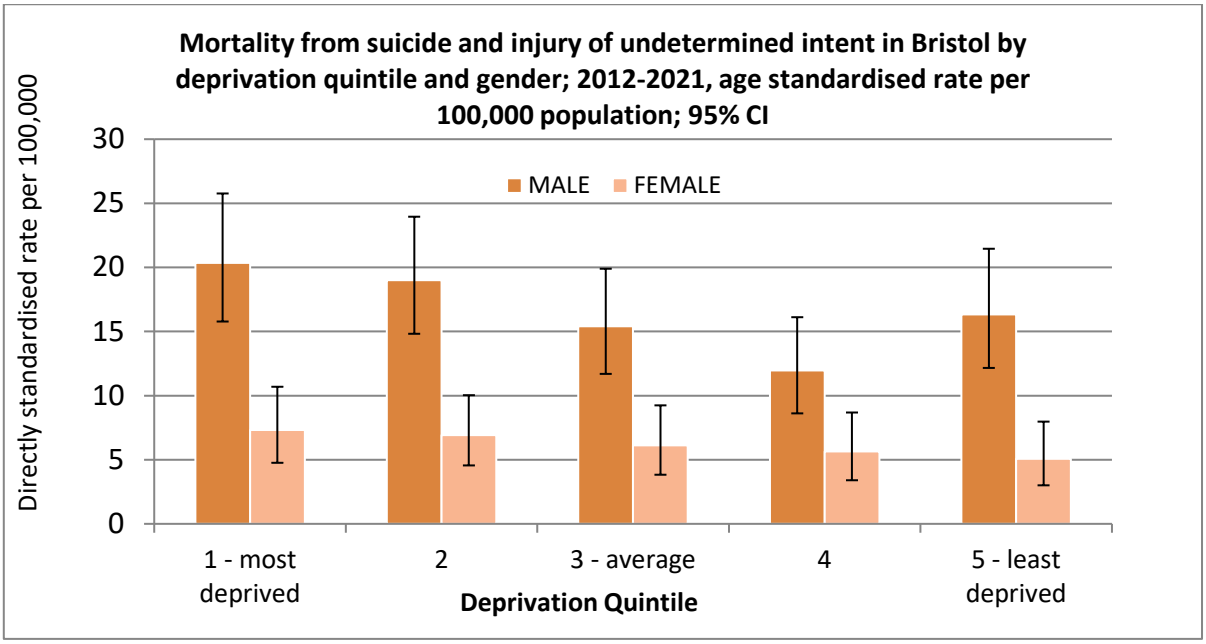
Source: Primary Care Mortality Database 2023 via NHS Digital & ONS population estimates for Bristol values and ONS Suicides in England and Wales, 1981 to 2022

Table 2 and figures 4 and 5 provide a breakdown of suicide death by age group for males and females. This shows that the rate of suicide is slightly above England rates, in both men and women aged 35 and over. The peak risk being seen in the 36-64 age groups of both genders. Male suicides in the 10-34 years age group are a slightly lower rate in Bristol than England average. None of the age group by gender data is statistically significant compared to England rates; Bristol is not an outlier to England.

2.3 Socio-economic factors

The literature suggests a strong association between area level deprivation and suicide and suicidal behaviour (and Science, 2017). Nationally, people among the most deprived 10% of society are more than twice as likely to die by suicide than the least deprived.

Figure 6: Mortality from suicide and injury of undetermined intent in Bristol by deprivation quintile and gender; 2012-2021[1], age standardised rate per 100,000 population.



Source: Primary Care Mortality Database 2021 via NHS Digital, ONS population estimates, English Indices of Deprivation 2019 - Department for Communities and Local Government

Table 3: Mortality from suicide and injury of undetermined intent in Bristol by deprivation quintile 2012-2021, age standardised rate per 100,000 population. Deprivation quintiles based on IMD 2019 deprivation scores.

Deprivation quintile	*Number of deaths*	*ASR**	*LL**	*UL**
1 - most disadvantaged	102	13.7	11.1	16.8
2	106	13.0	10.5	15.8
3	87	10.8	8.6	13.4
4	74	9.0	6.9	11.5
5 - least disadvantaged	75	10.5	8.1	13.2
Bristol	444	11.5	10.4	12.7

**ASR age standardised rate; LL lower limit; UL upper limit*

Figure 6 and Table 3 provides the breakdown of suicide death by deprivation in Bristol. Although there is an apparent trend linked to deprivation within Bristol, this is not statistically significant, meaning that this difference could be due to chance variation, and the observed slope is less marked for women.

[1] This is the latest available data. Due to delays in publication of ONS population estimates for small areas the calculation of rates of suicide deaths by deprivation quintile has been suspended.

The rate for the least disadvantaged (quintile 5) having an observed age-standardised rate higher than the category higher (quintile 4) is interesting, however the quintile 5 rate of 10.5 has a range between 8.1 and 13.2, which overlaps with the quintile 4 range of 6.9 to 11.5. The higher rate in this data for quintile 5 is likely related to chance, although may reflect underlying experiences of those in Bristol with high socioeconomic status at a time of relative financial insecurity and pressure.

2.4 Method of death

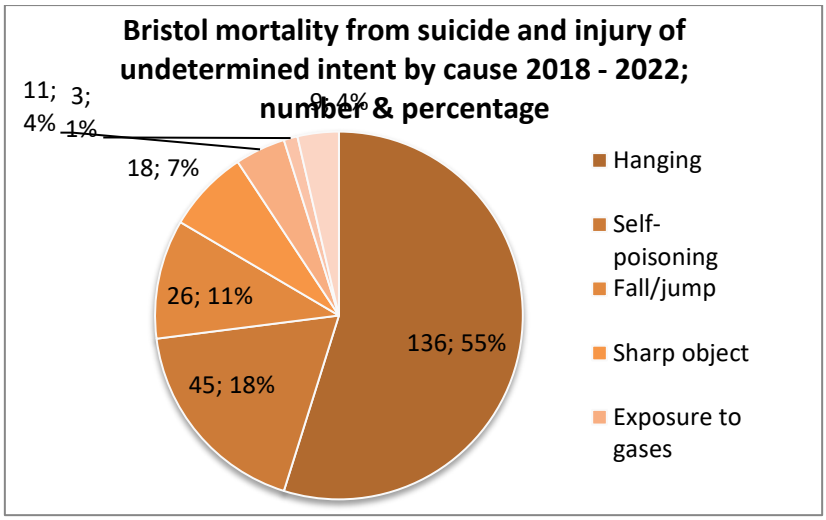
Hanging was the most common cause of mortality from suicide and undetermined death between 2018 and 2022 for both men and women, this is similar to the rest of England. This was followed by self-poisoning. There is a relatively high proportion of deaths from falling or jumping compared to the England average (over a half of deaths due to a fall/jump have occurred in the vicinity of Avon Gorge and Clifton Suspension Bridge).There are different observed patterns for males and females, and Table 4 and Figure 7 provides summaries of the methods.

Table 4: Method of suicide by gender and cause 2018-2022.

Cause of death	*Male (number)*	*%*	*Female (number)*	*%*
Hanging	98	56.6%	38	50.7%
Self-poisoning	18	10.4%	27	36.0%
Fall/jump	22	12.7%	<5	5.3%
Sharp object	16	9.2%	<5	2.7%
Exposure to gases	9	5.2%	<5	2.7%
Drowning	<5	1.2%	<5	1.3%
Other	8	4.6%	<5	1.3%
Total	173		75	

Source: Primary Care Mortality Database 2023 via NHS Digital

Figure 7: Mortality from suicide and injury of undetermined intent by cause, Bristol 2016-2020.



Source: Primary Care Mortality Database 2021 via NHS Digital

Hanging is the most common method for both genders, although self-poisoning is used in over a third of female suicides. Jumping/falling or use of a sharp object are both methods used considerably more by males compared to females.

2.5 Place of death

In common with the rest of England, most suicides and deaths of undetermined intent took place at the person's home; in Bristol, 59% of these deaths took place at home between 2018 and 2022.

In Bristol, 19% of suicides and undetermined intent deaths took place in a public place such as a park or railway. Six percent of deaths took place in the Avon Gorge/Portway area.

2.6 Safety in custody statistics

The number of apparent self-inflicted deaths and self-harm incidents recorded in Bristol prison up to year 2023 are presented in tables 5 and 6 below.

Table 5. Deaths in Bristol Prison between 2012 and 2023.

Bristol Prison	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21	2020-22	2021-23
Apparent self-inflicted deaths:	<5	<5	8	9	8	<5	<5	<5	<5	8
Apparent natural cause deaths:	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total deaths*:	<5	6	12	14	13	7	7	5	7	11

** These data include a small number of cases where the causes of death are unknown*

Source: Ministry of Justice and National Offender Management Service, Safety in Custody Statistics: Safety in Custody summary tables to December 2023

Table 5 shows the number of apparent self-inflicted deaths within Bristol Prison peaked at 9 in period 2015-2017 but has since reduced to less than 5 in the following 3 years period (2020-2022). Data for 2023 shows that self-inflicted deaths has risen sharply again to 8.

Table 6. Self-harm incidents in Bristol Prison between 2010 and 2023.

Year	Self-harm incidents
2010	131
2011	111
2012	87
2013	84
2014	80
2015	246
2016	256
2017	427
2018	426
2019	957
2020	878
2021	514
2022	472
2023	940

Source: Ministry of Justice and National Offender Management Service, Safety in Custody Statistics: Safety in Custody summary tables to December 2023

Table 6 shows the rate of self-harm incidents has increased significantly between 2015 and 2023. The highest number of self-harm incidents in the prison (957) were reported in 2019, while in 2022 there were 472. The lowest annual count of incidents was 80 in 2014. Following a large drop in self-harm incidents in 2021, and stable in 2022, the count of incidents nearly doubled in 2023 to 940 – almost the highest to date. It is unclear why the number of incidents has risen so much.

3.0 Self-harm

In 2021-22 in Bristol there were 1,430 emergency admissions to hospital due to intentional self-harm (the rate of 269 per 100,000 population, significantly higher than England average of 164 per 100,000). This was, however, a 17% decrease compared to 2020-21. Seventy percent of the admissions were female. The rates of intentional self-harm were over 2 times higher among women than men. In 2021-22, there were 1,000 female admissions in Bristol, a rate of 366.5 per 100,000. The number of male admissions was significantly lower at 425 – a rate of 170.3 per 100,000 (Suicide Prevention Profile - OHID (phe.org.uk)). However, since the majority of self-harm does not warrant hospital admission the numbers above are considered only the 'tip of the iceberg'.

According to recent UK-wide research, 64% of patients over 10 years old who die by suicide have a history of self-harm (NCISH | Annual report 2023: UK patient and general population data 2010-2020 (manchester.ac.uk)) The risk of suicide is heightened within the first year after self-

harm (Suicide following presentation to hospital for non-fatal self-harm in the Multicentre Study of Self-harm: a long-term follow-up study — Nuffield Department of Primary Care Health Sciences, University of Oxford)

The Bristol self-harm register recorded detailed information on those presenting to emergency department in Bristol Royal Infirmary up until 2018. This information has not been collected after this time, so there is no update available however the 2018 data showed the following:

- 7% cited debt, money, finance or gambling as precipitating factors for self-harm
- 7.7% were indicated to be in patients who had experienced domestic violence. This excludes those who have experienced historic child abuse.

4.0 Progress from 2022-23 Action plan

Support for those bereaved by suicide

Staff at coroner and mortuary provide information to bereaved families about the processes involved, and support available at a Coroner Inquiry to family members. The Beside suicide bereavement support service continues to provide a responsive service to Bristol residents, and we are working with University of Bristol and BNSSG ICB to deliver a service evaluation.

Reduce the risk in key high-risk groups

The new Community Mental Health Framework is implemented with a stronger focus on anxiety and depression, supporting GPs and locality partners to have an improved understanding of the impact of tackling this on preventing suicide. Men's mental health has been a focus area during 2022-23. The three Locality Partnerships have been actively engaged in prevention activities regarding mental health. Mental Wellbeing awareness training is delivered through Thrive at Work West of England (e-learning – targeting SMEs) and Thrive at Night (face-to-face targeting hospitality – bars, pubs, restaurants, etc.). Work has also targeted those in poverty or housing insecurity, including a programme to address the impact of the cost-of-living crisis including food and fuel poverty, and debt. Zero Suicide Alliance training was promoted through the BNSSG suicide prevention network including via ICB to GP practice staff.

Tailor approaches to improve mental health in specific groups including children and young people and users of drugs and alcohol

Mental Health is core to the Bristol Healthy Schools programme: schools can choose to complete the Essential Award, which takes a whole-school approach to mental health, nutrition, and physical activity; and/or they can specialise in mental health with the Mental Health and Wellbeing Specialist award. The Healthy Schools Programme is continuing to see a gradual increase in new engagement from schools following the disrupted Covid period. Additionally working with i-Thrive model to plan and deliver support for mental health in Bristol schools (universal plus CCHP commissioned services). Healthy Schools programme supports schools to implement a whole-school approach to mental wellbeing using a stepped approach. Educational Psychology services offer access to 'Suicide prevention Pack' and 'self-harm prevention toolkit' to all schools and other educational settings.

Universities deliver student Mental Health liaison programme in partnership with NHS, and have delivered a rolling programme of ZSA suicide prevention and MH awareness training for staff and students at both University of Bristol and UWE.

Drug/alcohol-related deaths occurring in Bristol/affecting Bristol residents are now included within the Avon real time surveillance system as part of integrated monitoring for improve rapid response.

Reduce access to means

Avon Gorge Working group continues to meet. Signage is being renewed at Cliff edge subject to budget/agreement BCC and Downs Committee. Fence along gorge continues to be maintained by Parks Department. On Clifton Suspension Bridge, Bridge attendants have had refresher Negotiation training by Police. Samaritans ensure frontline staff (bridge workers, network rail staff, car park attendants and prison workers) are trained on identifying and engaging people who may be considering suicide and that they are supported after traumatic events.

Work with our local news media to ensure responsible reporting of suicide and suicidal behaviour

Samaritans nationally and locally have engaged with the Avonwide Suicide Prevention Group to implement national guidance around media reporting of suspected suicide, also working with journalism students and BCC is monitoring what local media are doing.

Support research data collection and monitoring

The Real-Time Surveillance System includes possible suicides, drug and alcohol related deaths, and flags homelessness as a risk factor if present. A suicide audit is produced and annual suicide prevention report for Bristol routinely each year. We are also closely monitoring rates of self-harm in the city as a precursor to suicide.

Reduce rates of self-harm as a key indicator of suicide

National and regional resources have been made available to focus on self-harm and ICB leads are working with the Self-Harm Health Integrated Team to explore clinical situation with a view to bring intelligence to the strategic group as part of the mental health improvement landscape.

5.0 Summary and Recommendation

This annual report highlights several important factors.

Of most importance is the rise in female suicides reported in Bristol for the 3 years 2020-2022. This rise means the Bristol rate for females is significantly higher than the England average.

Our picture of suicides across Bristol is currently heavily reliant on older data from ONS that is confirmed and defined by the coroner's verdict. Whilst caution needs to be taken when using real time surveillance data, this can have real value when formulating a timely local response. Data on self-harm, which may include those attending hospital who had attempted suicide, is now very out-of-date.

Building resilience will centre around public mental health action, helping develop social capital, community engagement, and working to increase the quality and quantity of employment. The partnership will work across different agendas to ameliorate risk factors such as the cost-of-living crisis, problem gambling, loneliness, and substance misuse. There will be a necessary focus on early identification and safety planning: working with primary care, AWP, and other frontline services. This will also build into the work Bristol is doing to continue our COVID-19 recovery including as a strategic priority. This report makes the following recommendations.

Recommendation 1: a specific detailed suicide audit should be carried out to look at female suicides in Bristol over the period in question There are no specific risks highlighted when age factors are examined, so there may be other factors behind the observed increase that might come to light with examination of either sudden deaths data collected via local software or through coroner files associated with the cases.

Recommendation 2: produce a data development plan as part of Bristol's action plan to accompany an interim 2024-25 suicide prevention strategy, to work on improving the quantity, quality, and timeliness of possible suicide data from custody, hospital (e.g., self-harmers dying in hospital, self-harm presentations to A&E), and ambulance service.

Recommendation 3: in partnership with Avon & Somerset Police, North Somerset Council, South Gloucestershire Council and Bath & Northeast Somerset Council, continue to develop the Avon-wide Real-Time Surveillance System to increase its usefulness through appropriate links to drug and/or alcohol related death monitoring, delivering 'postvention' by making timely referrals to the local suicide bereavement service.

Recommendation 4: build the sudden deaths work in Bristol, using Avon real-time surveillance system to integrate the monitoring and review of homeless deaths, drug and alcohol related deaths, and suspected suicides ('HADS') through weekly rapid review and quarterly multi-agency conference to discern learning and change practice.

Recommendation 5: developing actions to monitor, reduce and improve follow-up offer following attempted suicides. Working through the appropriate first responders and mental health and social care services and developing strategies to use the RTSS to capture data relating to suicide attempts and non-fatal overdoses.

Recommendation 6: review the new national strategy and action plan, identifying immediate actions to feed into a refreshed local strategy and action plan to move forward with local partners including a reactivated BNSSG suicide prevention group.

Recommendation 7: developing the prevention action as part of the refreshed local strategy to build resilience, ameliorate risk factors, and improve early identification and safety planning.

Terminology

Suicide the National Statistics definition includes all deaths from intentional self-harm for persons ages 10 and over, and deaths where the intent was undetermined for those aged 15 and over.

Suicide attempt is used to mean any non-fatal suicidal behaviour and refers to intentional self-inflicted poisoning, injury or self-harm which may or may not have a fatal intent or outcome. (World Health Organization, 2014)

This definition is complicated as it includes non-fatal self-harm without suicidal intent.

Suicidal behaviour refs to a range of behaviours that include thinking about suicide (or ideation), planning for suicide, attempting suicide and suicide itself. (World Health Organization, 2014)

Suicidal ideation active Thoughts about taking action to end one's life including identifying a method, having a plan, or having intent to act (McHugh *et al*, 2019)

Suicidal ideation passive Thoughts about death or wanting to be dead without any plan or intent (McHugh *et al*, 2019)

Self-harm The Royal College of Psychiatrists defines self-harm to an intentional act of self-poisoning or self-injury carried out by a person, irrespective of the type of motivation or degree of suicidal intent. (Royal College of Psychiatrist, 2010)

Non-suicidal self-injury self-injurious behaviour with no intent to die

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