



**Herefordshire
Council**

SUICIDE

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Herefordshire Council Strategic Intelligence Team

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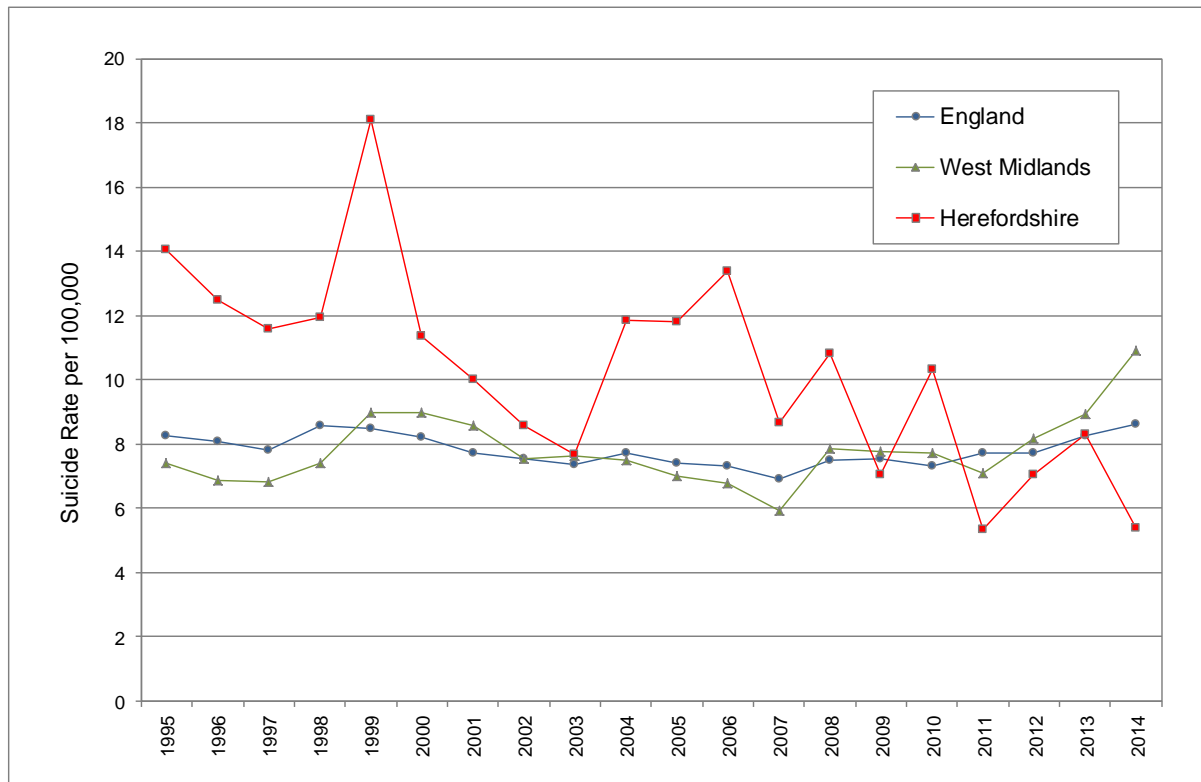
Headlines

- Between 1995 and 2014 the Herefordshire suicide rate shows a general downward trend; similar patterns are not observed nationwide.
- Between 2012 and 2014 the Herefordshire suicide rate was 6.9 per 100,000 population which corresponds to a count of 33 individual suicides over this period.
- The recent Herefordshire suicide rate is lower than national and regional figures.
- In Herefordshire the male suicide rate is higher than that for females – a pattern observed throughout the country.
- The downward trend in the Herefordshire suicide rate is driven by the male suicide rate – the local female suicide rate shows no distinct temporal pattern.
- The suicide rate in the 35-64 age group in Herefordshire is higher than those observed in older and younger age groups; this pattern is also observed nationally and regionally.
- Residents of the most deprived areas of Herefordshire are approximately a third more likely to die as a result of suicide than in less deprived areas of the county.
- The overall number of years lost to life specific to suicide in Herefordshire is lower than those recorded nationally and regionally.
- The most common method of suicide is by hanging/asphyxiation.

Temporal Trends

Between 1995 and 2014 the overall annual suicide rate in Herefordshire has shown considerable variation from a maximum of 18.1 per 100,000 population in 1999 to a minimum of 5.3 per 100,000 population in 2011 (Figure 1). Generally, there has been a downward trend in the Herefordshire rate, although, while this trend can be considered to be moderately strong ($r^2 = 0.49$), the significance may be questionable due to the level of variability and also the relatively low numbers of suicides recorded annually (range = 8 – 26 suicides per year). Over this 20 year period both the national and regional rates have remained relatively constant. For the majority of this period the Herefordshire suicide rate was higher than both the national and regional rates, although since 2011 the local rate has been either below or close to these two rates.

Figure 1: Directly age-standardised suicide rates for Herefordshire, England and West Midlands populations aged 15+, 1995 – 2014.

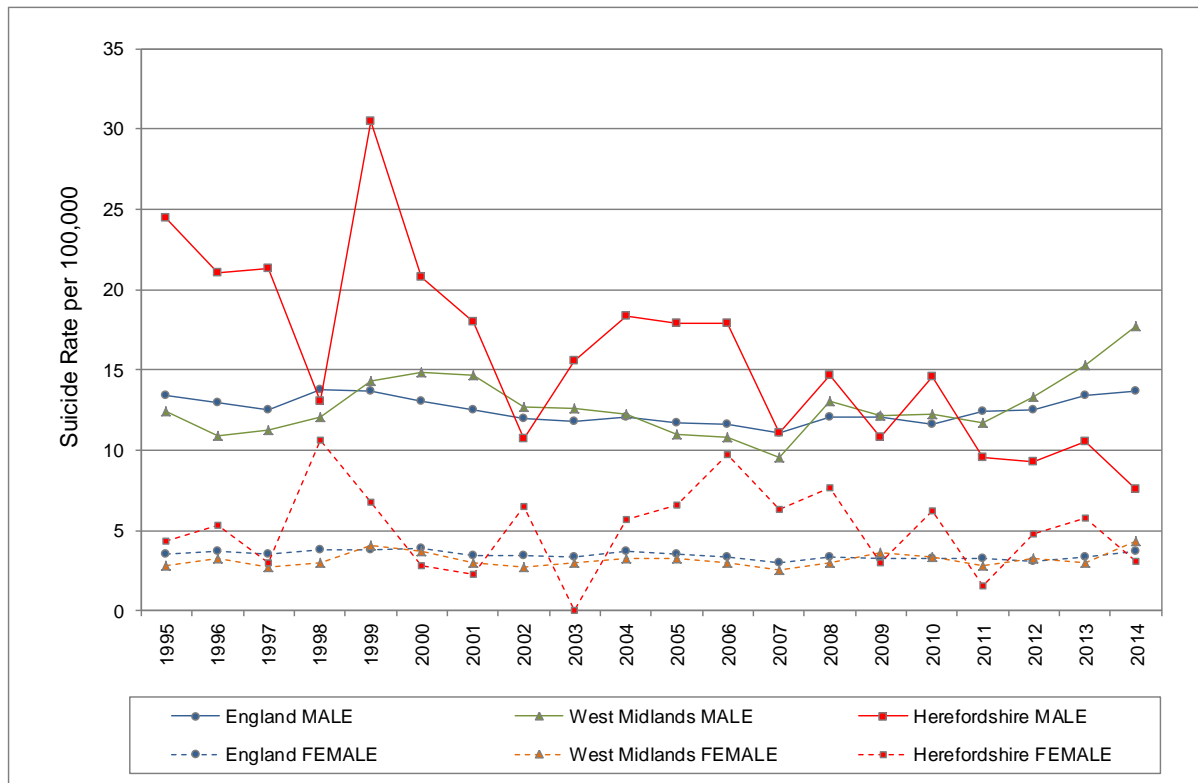


Source: NHS Digital Indicator Portal

Gender Differences

Between 1995 and 2014 the difference between male and female suicide rates in Herefordshire is evident with the male rate being consistently higher. The male pattern correlates closely with the population pattern ($r = 0.90$) with a general downward trend evident; when looking at the female rate for the county there is no correlation with the population rate. The national and regional temporal patterns are similar to Herefordshire in that the female suicides rates are consistently lower than the male rates, although the male rates also remain relatively consistent (Figure 3).

Figure 2: Directly age-standardised suicide rates for Herefordshire, England and West Midlands males and females aged 15+, 1995 – 2014.



Source: NHS Digital Indicator Portal

The gender patterns described above are also reflected in the most recent mortality data (2012-14) with data adjusted to take account of the age structure of different populations and permit meaningful comparison of rates in different areas (Table 1). Over this period the Herefordshire male, female and population age standardised mortality rates were not significantly different from those reported nationally and regionally.

Recent Patterns

Between 2012 and 2014 the directly standardised suicide rate for those aged 15 and over was 6.9 per 100,000 population which corresponds to a count of 33 individual suicides over this period (Table 1). The Herefordshire standardised figure is lower than those recorded both nationally and also regionally for the West Midlands which were 8.2 and 9.3 per 100,000 respectively. When broken down by gender the Herefordshire suicide rate for males was higher than that for females, a pattern which was observed nationally and regionally. As with the population rate the Herefordshire figure for males is lower than the national and regional rates, although where these differences are concerned the only significant difference was between Herefordshire and the West Midlands rate. The female suicide rate in Herefordshire was higher than those reported both nationally and regionally, although these differences were not significant.

Table 1: Directly age-standardised suicide rates (per 100,000 population) and observed number of suicides, 2012-2014 (pooled data).

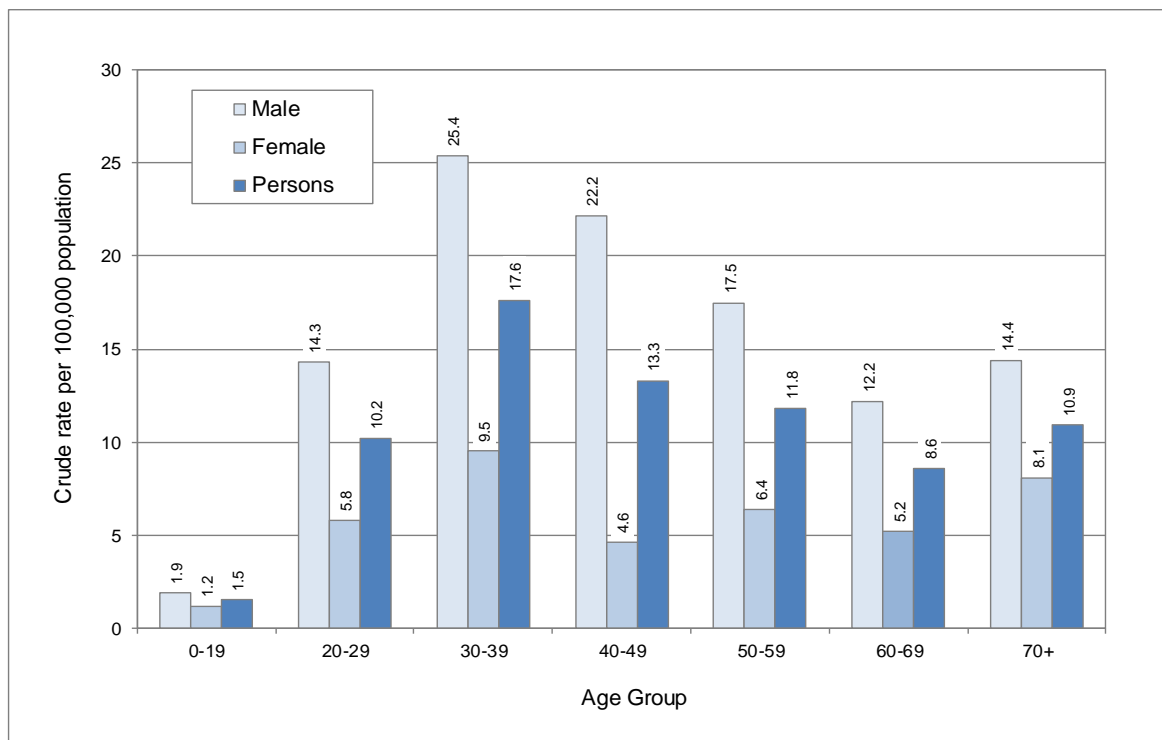
		Herefordshire	West Midlands	England
Male	Rate (DSR)	9.13	15.46	13.23
	95% CI (LL – UL)	5.63 – 13.99	14.53 – 16.44	12.95 – 13.52
	Number of Deaths	21	1,043	8,553
Female	Rate (DSR)	4.55	3.50	3.39
	95% CI (LL – UL)	2.32 – 8.00	3.08 – 3.97	3.25 – 3.53
	Number of Deaths	12	246	2,289
Persons	Rate (DSR)	6.94	9.34	8.18
	95% CI (LL – UL)	4.76 – 9.77	8.84 – 9.87	8.03 – 8.34
	Number of Deaths	33	1,289	10,842

Source: NHS Digital Indicator Portal

Age Differences

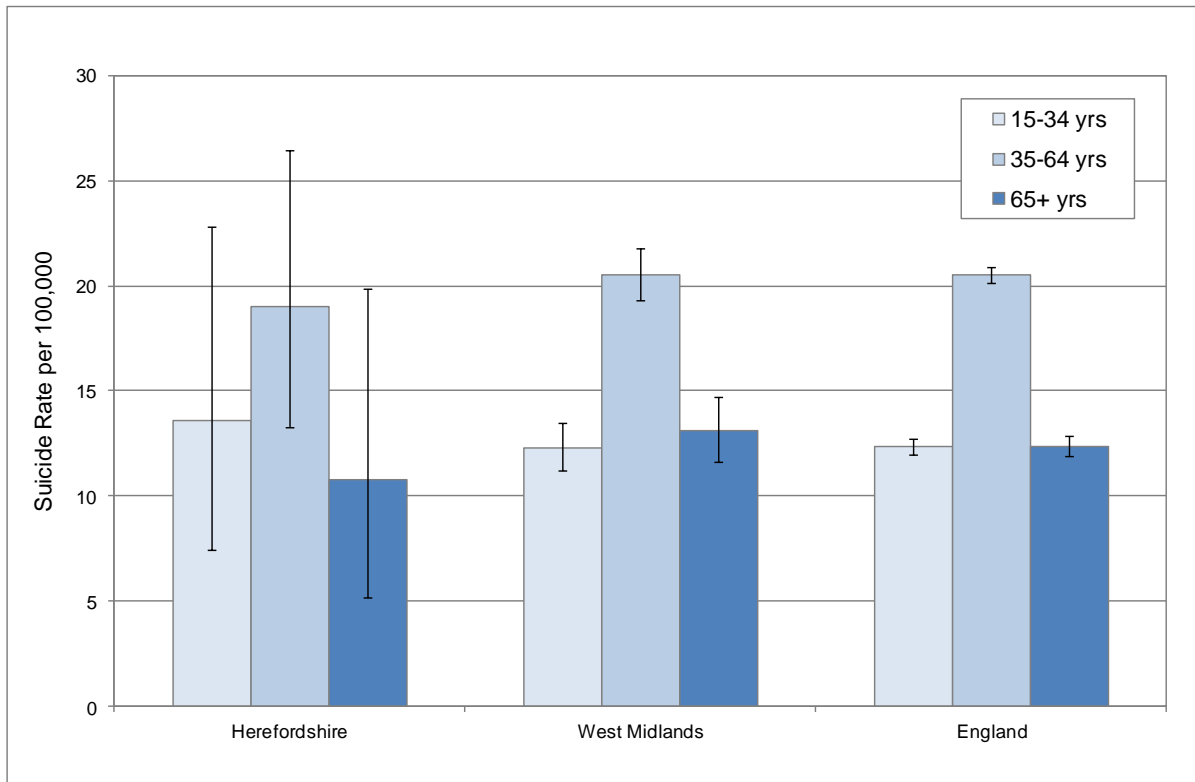
In relation to suicide in different age groups for 2001 to 2014 pooled data, the all person rate rises from less than 2 deaths per 100,000 population in those less than 20 years to over 17 per 100,000 population in the 30 – 39 year old cohort (Figure 3). Subsequently, the suicide rate decreases with age with a slight rise in the 70+ cohort. This pattern is also evident in both genders, although, as discussed above, the male rate is higher than that for females, a pattern evident in all age groups. Similar patterns are evident in 2010 to 2014 pooled national and regional data, which indicate that the suicide rate is higher in those aged between 35 and 64 compared to younger and older cohorts (Figure 4).

Figure 3: Crude suicide rates for different age groups in Herefordshire, 2001-2014 (pooled data).



Source: Strategic Intelligence Team, Herefordshire Council

Figure 4: Directly age-standardised suicide rates for different age groups in Herefordshire, England and West Midlands, 2010-2014.



Source: PHE Suicide Prevention Profile

Deprivation

Suicide rates in Herefordshire were examined against deprivation levels, with number of suicides within each deprivation quartile between 2001 and 2014 determined. Information on deprivation comes from the 2015 English Indices of Deprivation. This uses an overall index of multiple deprivation which reflects different aspects¹ of deprivation experienced by individuals living in an area. This allows users to compare whether one area is more deprived relative to another. The level of deprivation was based on postcode of residence of the deceased. The highest suicide rate was evident in the most deprived quartile of the county with a ratio of 1.4:1 when compared to the mean suicide rate in the other quartiles. However, this difference between the most deprived quartile and other areas is not statistically significant.

Years Lost to Life

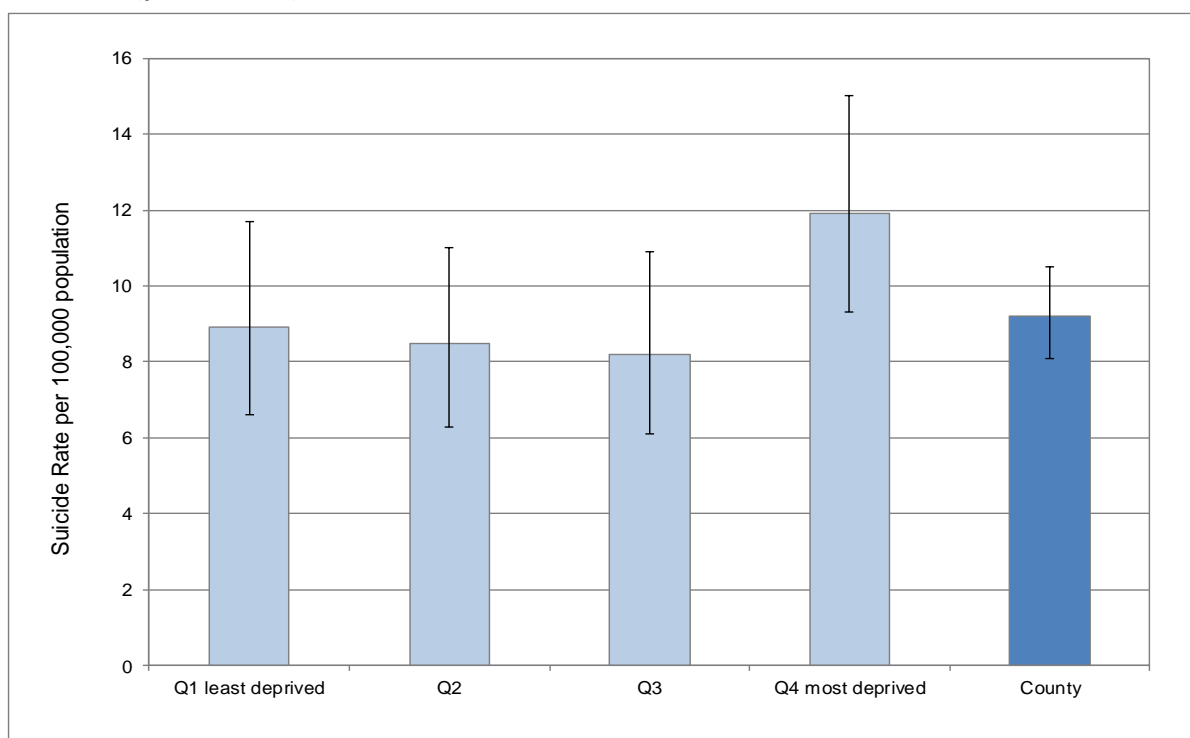
Years of life lost (YLL) is a measure of premature mortality. Its primary purpose is to compare the relative importance of different causes of premature death within a particular population and it can therefore be used by health planners to define priorities for the prevention of such deaths. It can also be used to compare the premature mortality experience of different populations for a particular cause of death. The concept of years of life lost is to estimate the length of time a person would have lived had they not died prematurely which incorporates a notional average life expectancy of 75 years. By inherently including the age at which the death occurs, rather than just the fact of its occurrence, the calculation is an attempt to better quantify the burden, or impact, on society from the specified cause of mortality.

In 2012-14 the overall number of suicide specific YLL in Herefordshire was 772 which corresponded to a directly standardised rate of 19.2 per 10,000 population (Table 2). This local standardised rate is

¹The overall index of multiple deprivation incorporates the domains of (i) income; (ii) employment; (iii) education, skills & training; (iv) health & disability; (v) crime; (vi) barriers to housing and services and (vii) living environment.

lower than those reported both nationally and regionally, although the differences are not statistically significant. Similarly, the female standardised rate for Herefordshire is lower than the rates for both England and the West Midlands, although again the differences are not statistically significant. However, for males the Herefordshire rate is again lower than the national and regional figures, with the local rate being significantly lower than the West Midlands rate. When looking at the YLL per suicide the overall figure for Herefordshire was lower than both the national and regional figures. When examining genders the YLL per suicide for females were again less than both the England and West Midland figures, although the local male figure was higher than the regional figure but lower than that for England.

Figure 5: Directly age-standardised suicide rates (per 100,000 population) by deprivation quartile, 2001-2014 (pooled data).



Source: Strategic Intelligence Team, Herefordshire Council

Table 2: Directly age-standardised years lost to life (YLL – per 10,000 population) and estimated number of YLL related to suicide in Herefordshire, 2012-2014 (pooled data).

		Herefordshire	West Midlands	England
Male	YLL (DSR)	28.80	46.90	38.96
	95% CI (LL – UL)	14.82 – 42.78	43.71 – 50.08	38.03 – 39.88
	Estimated YLL	575	26,653	238,823
	YLL per death	28.8	27.3	30.0
Female	YLL (DSR)	9.45	9.79	9.62
	95% CI (LL – UL)	1.50 – 17.39	8.37 – 11.21	9.16 – 10.08
	Estimated YLL	197	6,271	59,193
	YLL per death	21.9	27.9	27.3

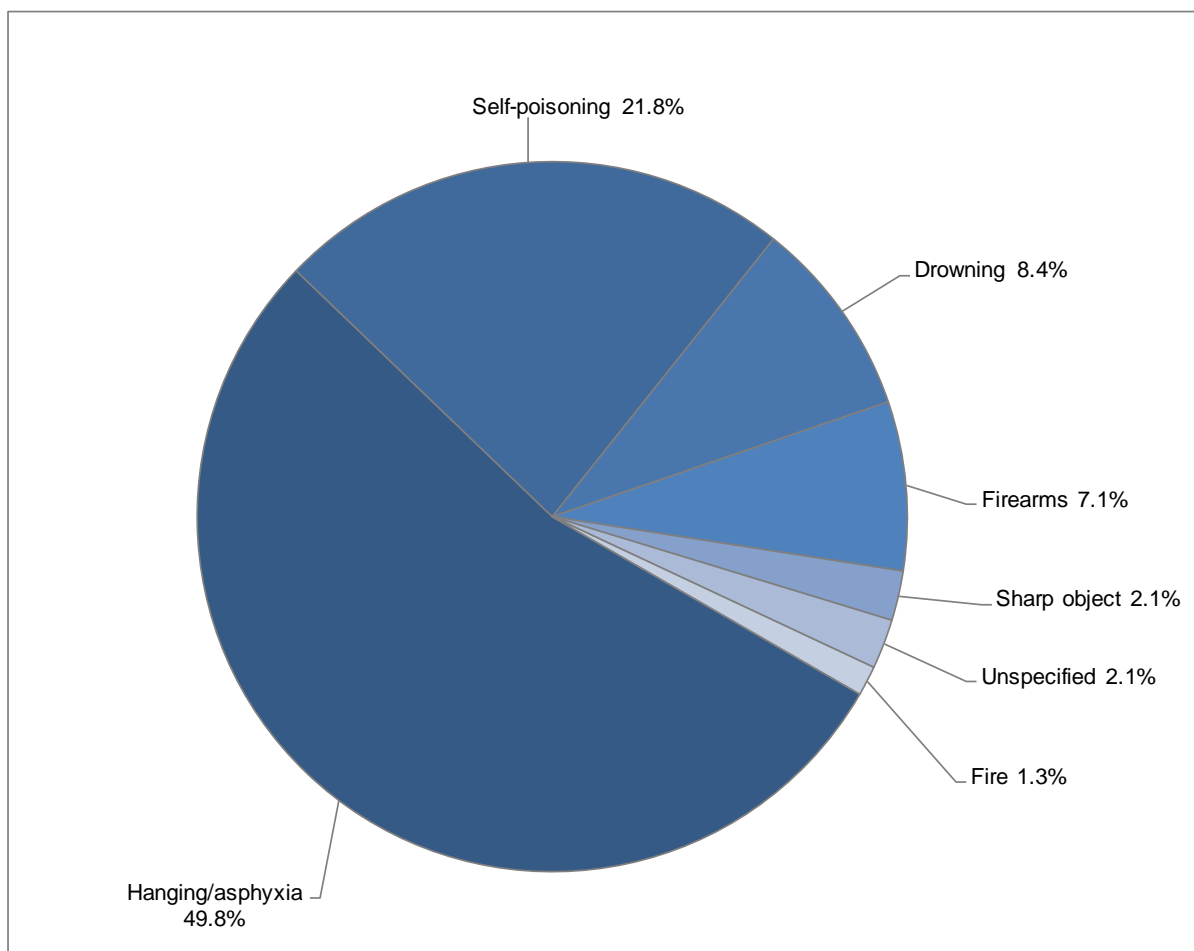
Persons	YLL (DSR)	19.16	28.33	24.24
	95% CI (LL – UL)	11.09 – 27.24	26.59 – 30.08	23.72 – 24.75
	Estimated YLL	772	35,924	298,016
	YLL per death	26.6	29.9	28.8

Source: NHS Digital Indicator Portal / Strategic Intelligence Team, Herefordshire Council

Method of Suicide

Between 2001 and 2014 close to half of all suicides in Herefordshire involved hanging/asphyxiation, while just over one fifth involved self-poisoning (Figure 6). Other important methods were drowning and the use of firearms.

Figure 5: Proportion of suicide mortalities associated with different methods of suicide, 2001-2014.



Source: Strategic Intelligence Team, Herefordshire Council