SOLIHULL SUICIDE DATA ANALYSIS 2017/18

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Suicide has major consequential impact on the families and loved ones of those who take their own life. This report aims to collate data to inform prevention activity to help Solihull become a safer suicide place.

INTRODUCTION

Suicide is defined as a deliberate act that intentionally ends one's life. Globally in 2012, it was estimated that there were 803,900 completed suicides, equating to an age-standardised mortality rate (ASMR) of 11.4 per 100,000 population[1]. This represents more deaths worldwide, than those through violence (504,587) and war (119,463) combined[2].

On a national level, 5,965 deaths from suicide were registered in the UK in 2016, representing an ASMR of 10.4 deaths per 100,000 people[3]. This signifies a 3.6% decrease in the suicide rate from the 6,188 registered deaths in 2015; the largest decline in 20 years. England experienced a significant fall in registered suicides, compared to modest decreases in Wales and Northern Ireland and a small rise in Scotland. For every person who dies at least 10 people are affected[4], with estimates ranging from 6 to 60 affected people[5].

Suicide is considered a major issue for society and a leading cause of years of life lost (YLL). Indeed, in Solihull between 2014-16 suicide and undetermined injury accounted for in excess of 1,000 years of life lost, with only Coronary Heart Disease (CHD) and lung cancer individually accounting for more years of life lost.

Suicide also has a huge consequential cost both socially, through the emotional pain, grief and life-long impact on the families and loved ones of those who take their own life and financially. The Centre for Mental Health has estimated the economic impact of each complete suicide in working age to be around £1.67m[6]. This cost comprises the lost years of productivity and earnings of the deceased, the productivity losses of those directly impacted by the death, the direct costs to acute secondary care and emergency services such as the Police and the legal costs of the coronial investigation. Furthermore, there are also additional costs attributed to suicides that are attempted but not completed regarding medical care, social support and benefits provision.

In response, in 2012 the Government developed the 'Preventing Suicide in England' strategy[7], which recognised suicide as the end point of a complex history of risk factors and distressing events that requires communities, individuals and society as a whole to help prevent suicides. NHS England has set an ambition to reduce suicides by 10% by 2020 and tasked all areas to have a multi-agency suicide prevention plan in place by 2017. Further to this, Public Health Solihull MBC has developed the Solihull Suicide Prevention Strategy 2017-2021and accompanying Solihull Suicide Prevention Action Plan to coordinate collective multi-disciplinary action to make Solihull a suicide safer place.

This baseline report has been compiled to review the available national and local data to gain an understanding on Solihull's position around suicide, identify groups at particularly high risk and inform future suicide prevention strategic work streams and commissioning activities.

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[1] World Health Organization (2014) *Preventing suicide: A Global Imperative.* Geneva: WHO.
[2] World Health Organization (2014) *Global Health Estimates.* Geneva: WHO.
[3] Emyr J (2017) *Suicides in the UK: 2016 Registrations.* Office for National Statistics.
[4] World Health Organization, Department of Mental Health and Substance Misuse (2008) *Preventing suicide: How to start a survivors' group.* Geneva: WHO.
[5] Berman A (2011) Estimating the population of survivors of suicide: seeking an evidence base. *Suicide Life Threat Behav* **41**(1):110-116.
[6] Moulin L (2005) *Zero suicides* Centre for Mental Health
[7] Department of Health (2012) *Preventing Suicide in England*.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/430720/Preventing-Suicide-.pdf

SUMMARY

There are a number of population groups that are at higher risk of suicide ideation or behaviour. Locally, data illustrates that:

- Solihull has an ageing population, with an increased risk of social isolation and poor mental health.

- The prevalence of diagnosed severe mental illness is lower in Solihull than England. Locally, people living with a mental health condition are more likely to be in contact with mental health services and one in four have a crisis plan. However, fewer people living with a mental health condition receive social services care than nationally, perhaps indicating a higher eligibility threshold.

- The rate of looked after children is higher in Solihull than nationally.

- Solihull has a lower rate of hospital admissions for self-harm than England.

- The local rate of homeless people not in priority need is three times higher than nationally, reflecting the inclusion of people who live in insecure tenancies or sofa surfing within the criteria.

- White ethnicity is associated with a higher risk of suicide. A greater proportion of the Solihull population describe their ethnicity as white than England as a whole.

- There is a higher number of domestic violence incidents in Solihull than nationally, perhaps illustrating a greater willingness of victims to report such events to the police.

- Fewer young people aged 10-17 years enter the youth justice system locally in Solihull than England overall. There are currently 647 adult offenders from Solihull registered with the National Probation Service.

- Alcohol related hospital admissions in Solihull are increasing, particularly for females, and are now similar to England. A greater number of individuals are receiving specialist alcohol treatment locally than nationally. This could reflect a higher local level of problem drinkers or greater service access.

- Locally, there is a lower prevalence of opiate and cocaine use, and in turn, use of specialist drug services. Those attending services are more likely to successfully complete treatment than nationally.

- Solihull has a higher proportion of residents living with a long-term chronic condition or disability than England overall, in line with the older and ageing population.

- In 2016, there were 13 suicides in Solihull. Suicide cases are more likely to be unemployed or retired, white heterosexual males aged over 25, living alone and not in a relationship. They are likely to have a diagnosed mental health illness and a 60% chance of being in contact with primary and/or secondary healthcare services.

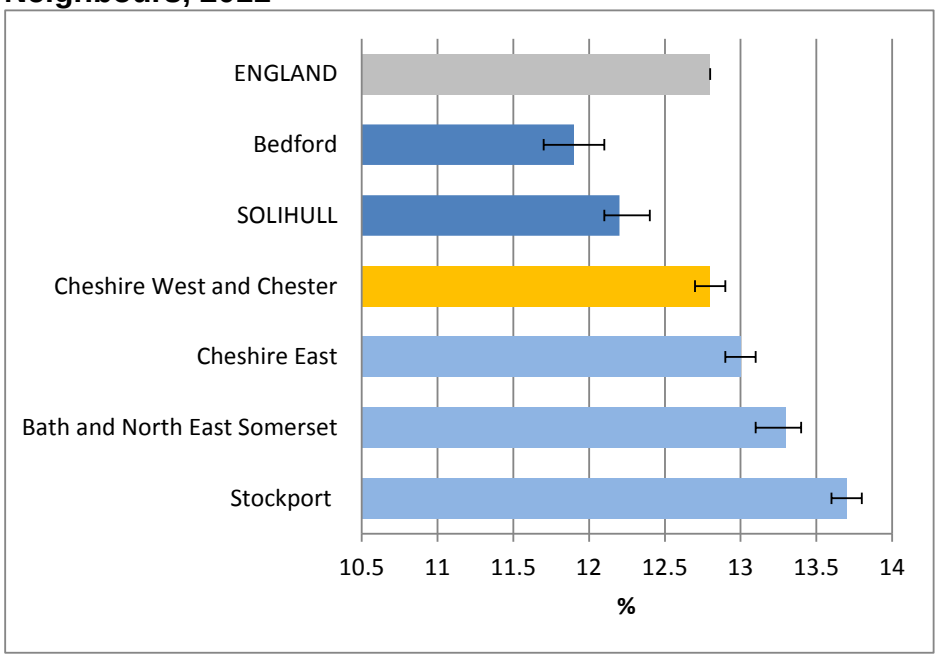
GROUPS AT HIGHER RISK OF SUICIDE

There are a number of communities or population groups that are at higher risk of suicide behaviour or ideation[8]:

Men

Men are over three times more likely than women to die by suicide and it is now the biggest killer of men under the age of 50. Nationally, men aged 55 to 74 are the group with the highest rate of suicide. Factors associated with suicide in men include depression, especially if untreated or undiagnosed, alcohol or drug misuse, family and relationship problems, low self-esteem and social isolation[9]. As figure 1 illustrates, in terms of social isolation, the proportion of single person households is lower in Solihull compared to England and four out of five CIPFA neighbours. This may be a consequence of the higher housing costs in the area.

Figure 1: Proportion of Solihull Single Person Households Compared to CIPFA Neighbours, 2011

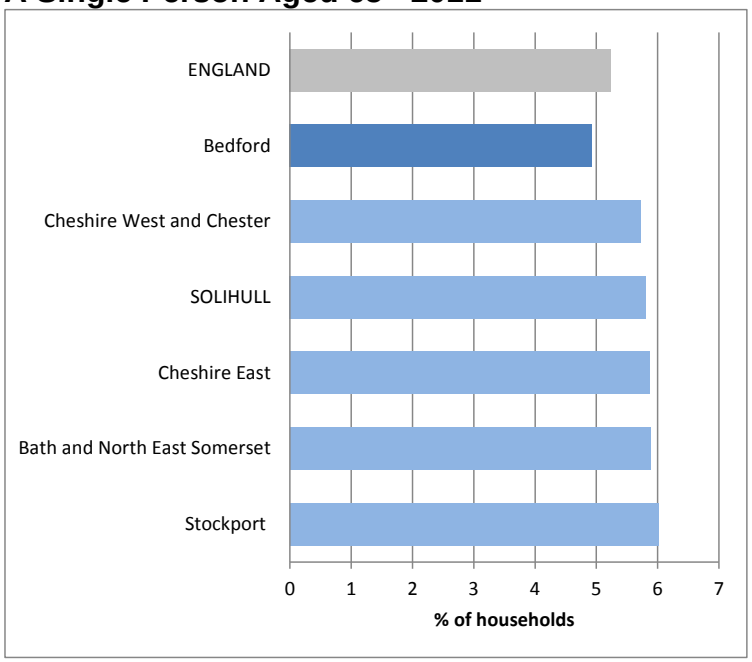


Data source: ONS, Census 2011 via Fingertips (PHE)

However, Solihull has a statistically significantly higher percentage of people aged 65 and over who live alone when compared to England (Figure 2). All Solihull's CIPFA neighbours except Bedford also have statistically significantly higher levels of single occupancy in this age group. As Solihull has an older population that is increasing, this issue is likely to get worse[10].

[8] HM Government (2015) *Preventing Suicide in England: Two years on.*
[9] Public Health England. *Local suicide prevention planning. A practical resource.* London: PHE; October 2016.
[10] POPPI, http://www.poppi.org.uk/

Figure 2: Percentage of All Households Occupied by A Single Person Aged 65+ 2011

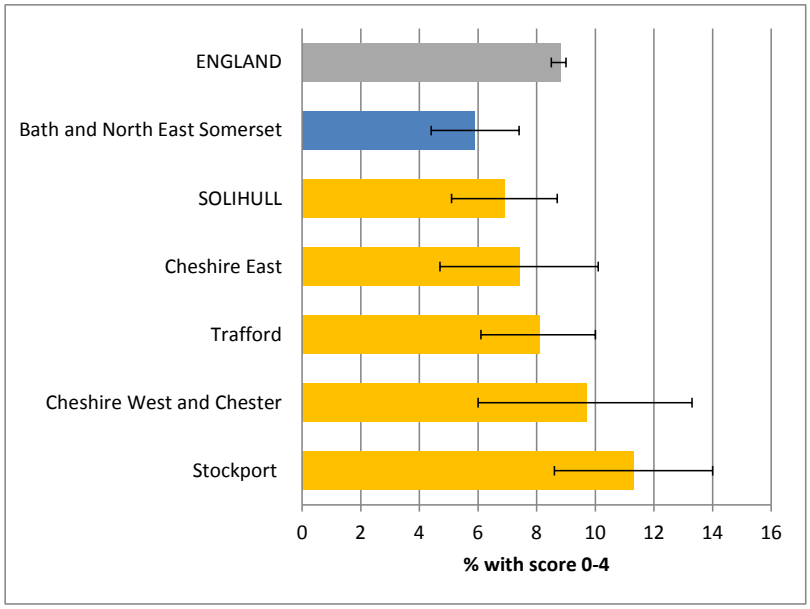


Date source: ONS Census 2011 via Fingertips (PHE)

People with a Mental Health Diagnosis

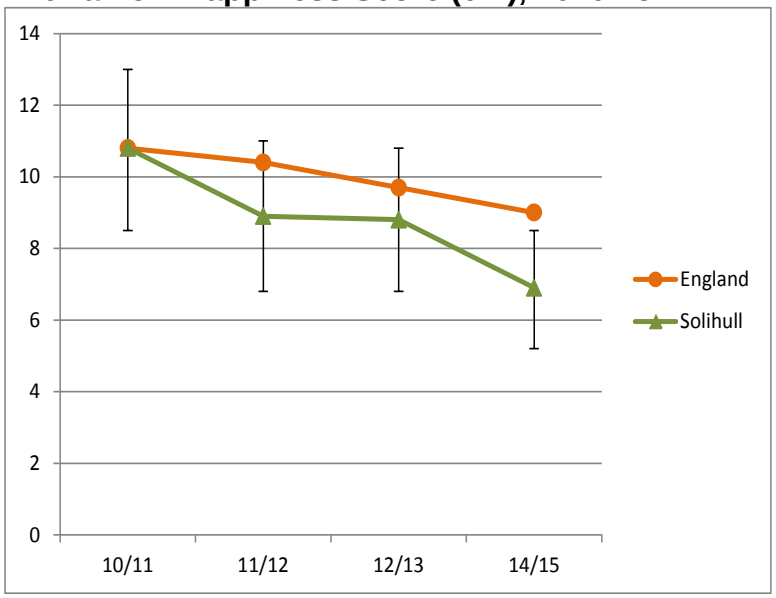
The Government 's 'Preventing Suicide in England' strategy[7] highlights that psychological characteristics such as low self-esteem or feeling worthless are linked to depression and suicide risk. As Figure 3 illustrates, only a small proportion of the Solihull population reported not feeling happy the day before they were surveyed (illustrated by a low happiness score of 0-4). This proportion was also lower compared to that for England and four out of five CIPFA neighbours. The number of people who were unhappy at the time of the survey (low happiness score 0-4) has also reduced over time (Figure 4). The other aspects of the same survey (low satisfaction, low worthwhile and high anxiety) had similar proportions to England.

Figure 3: Self Reported Wellbeing: Percentage of People with a Low Happiness Score (0-4) Compared to CIPFA Neighbours, 2015/16



Data source: Annual Population Survey, ONS via Fingertips (PHE)

Figure 4: Self Reported Wellbeing: Percentage of People With a Low Happiness Score (0-4), 2010-15



Data source: Annual Population Survey, ONS via Fingertips (PHE)

The majority (90%) of people who die by suicide have evidence of a mental illness prior to death. A quarter (25%) have been in contact with secondary statutory mental health services in the preceding 12 months,[11] nearly half (45%) are managed in the community[12] and have seen their GP in the month before death[13].

People with severe mental illness are at high risk of suicide. Those that are particularly vulnerable are in-patients, people recently discharged from hospital and those who disengage from or refuse treatment[9]. Table 1 demonstrates the estimated proportion and number of people resident in Solihull, living with a diagnosed mental health condition. These highlight that the majority of local rates are below the England average, with the exception of new psychosis cases.

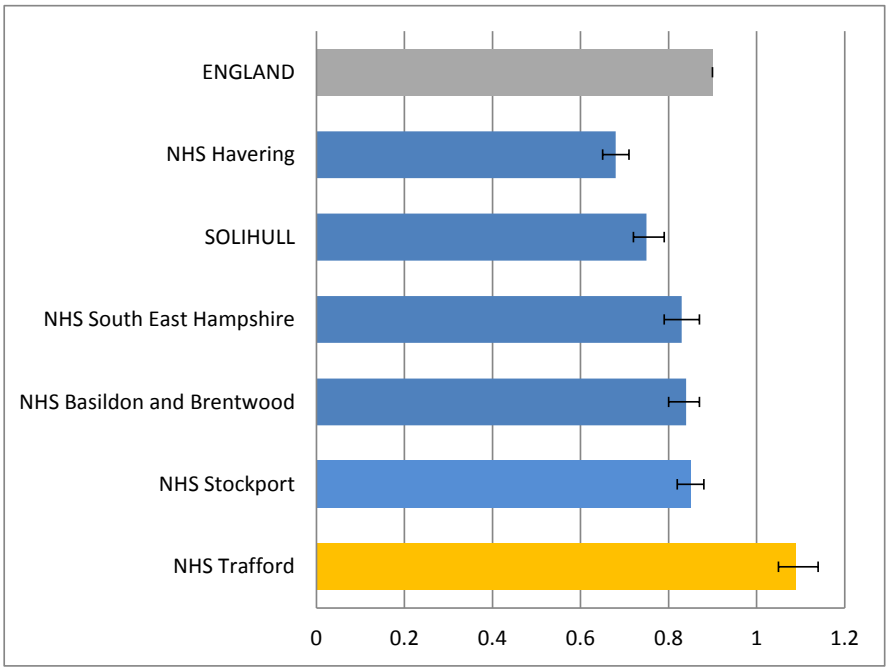
Table 1: People with a Mental Health Diagnosis

Condition	Solihull	England	Data Period	Data Source
Estimated prevalence of common mental health problem (16-74 years)	14.6% (n= 21,645)	15.6%	2014-15	Fingertips PHE: • Common mental health disorders profile • Severe Mental Illness profile • Mental health and well-being JSNA
Long term mental health problem (18+ years)	5.4% (n=171)	5.7%	2016-17	
Depression and anxiety prevalence	12% (n=402)	14.2%	2016-17	
New psychosis	22.1 per 100,000 population (n=31)	27.4 per 100,000 population	2011	
Estimated psychosis (16+ years)	0.42% (n=700)	0.40%	2012	
ESA claimants for mental health and behavioural disorders (working age)	22.5 per 1000 population (n=2840)	27.5 per 1000 population	2016	

[11] Appleby L, Cooper J, Amos T, Faragher B. Psychological autopsy study of suicides by people aged under 35. *The British Journal of Psychiatry* 1999;175(2):168-174.
[12] Sanderson P. *Aiming for Zero: An Epidemiological Study of Suicide Prevention Needs in the West Midlands Combined Authority.* December 2017.
[13] Luoma J, Martin C, Pearson J. Contact with mental health and primary care providers before suicide: a review of the evidence. *American Journal of Psychiatry* 2002;159(6):909-916.

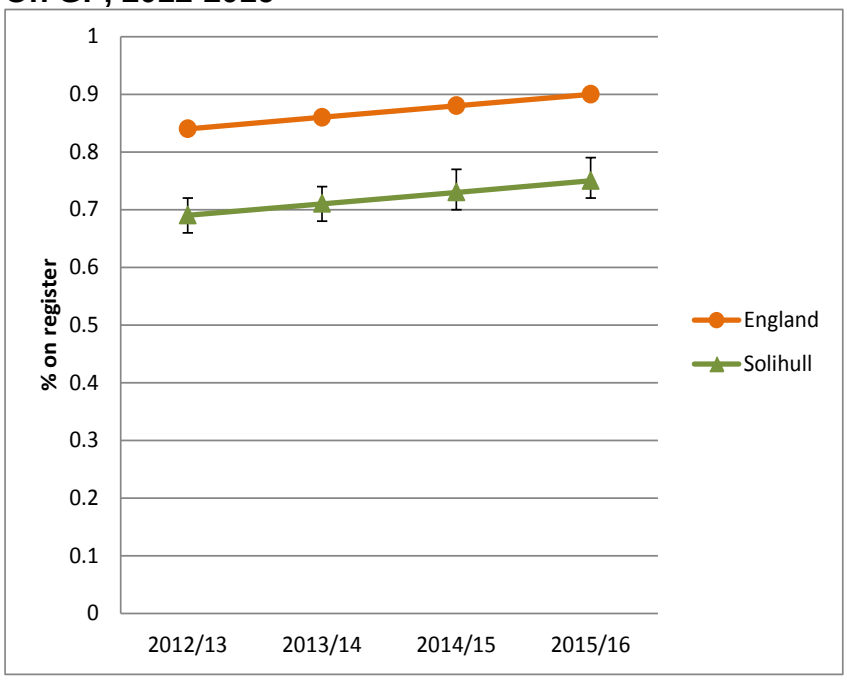
Figures 5 and 6 also illustrate that Solihull, along with four out of it's five nearest Clinical Commissioning Group (CCG) neighbours, have a lower prevalence of patients with severe mental illness registered on GP practice lists when compared to England overall. The consistency across CIPFA neighbours is indicative that this low prevalence is likely to be genuine and not a lower detection rate.

Figure 5: Prevalence of People with Severe Mental Illness on GP Practice Lists Compared to Nearest Clinical Commissioning Group



Data source: QOF, HSCIC % on register

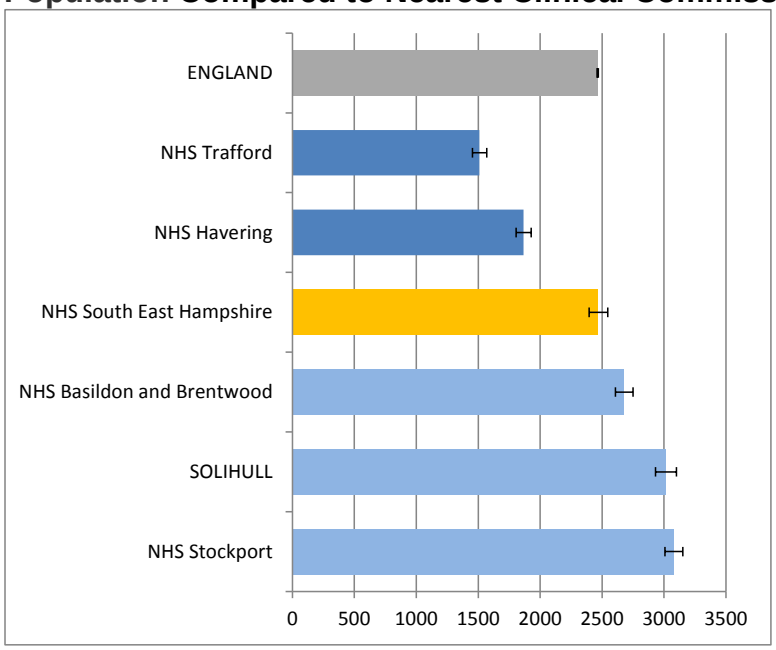
Figure 6: Prevalence of People with Severe Mental Illness On GP, 2012-2016



Data source: QOF, HSCIC

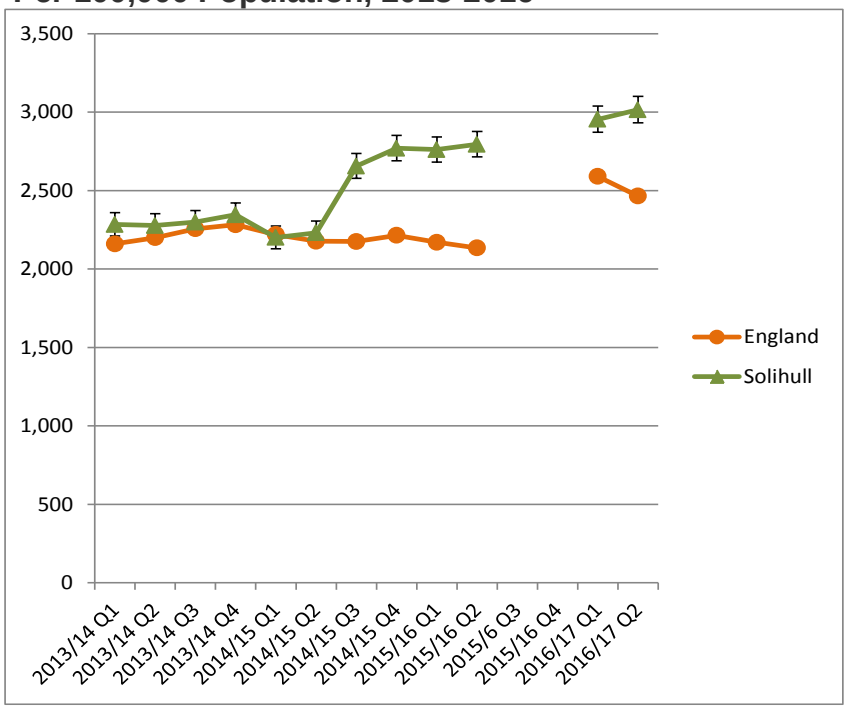
However, Solihull along with two out of the five nearest CCG's have a higher rate of people in contact with specialist Mental Health Services per 100,000 population when compared to England overall (Figures 7 and 8). This could illustrate a genuine higher service access rate by people living with mental health illnesses in the area.

Figure 7: People in Contact with Mental Health Services per 100,000 Population Compared to Nearest Clinical Commissioning Group, 2016/17



Data source: HSCIC

Figure 8: People in Contact with Mental Health Services Per 100,000 Population, 2013-2016



Data source: HSCIC

One in four (26%) of the mental health service users in Solihull have a crisis plan. This is significantly greater than the percentage in England overall (Figure 9) and four of our five nearest CCG's (Figure 10).

Figure 9: Percentage of Mental Health Service Users with Crisis Plans, 2014-2016

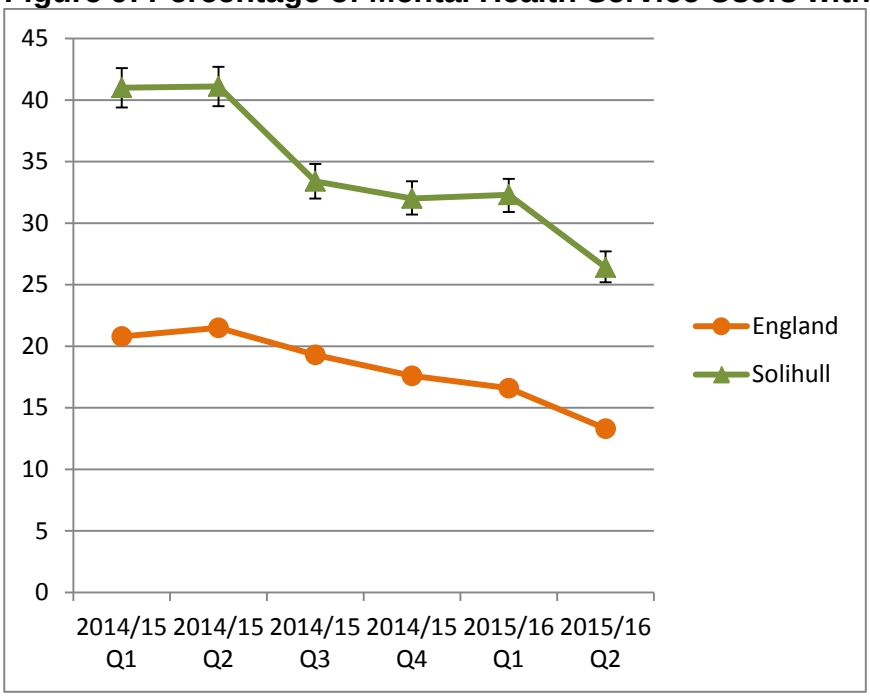
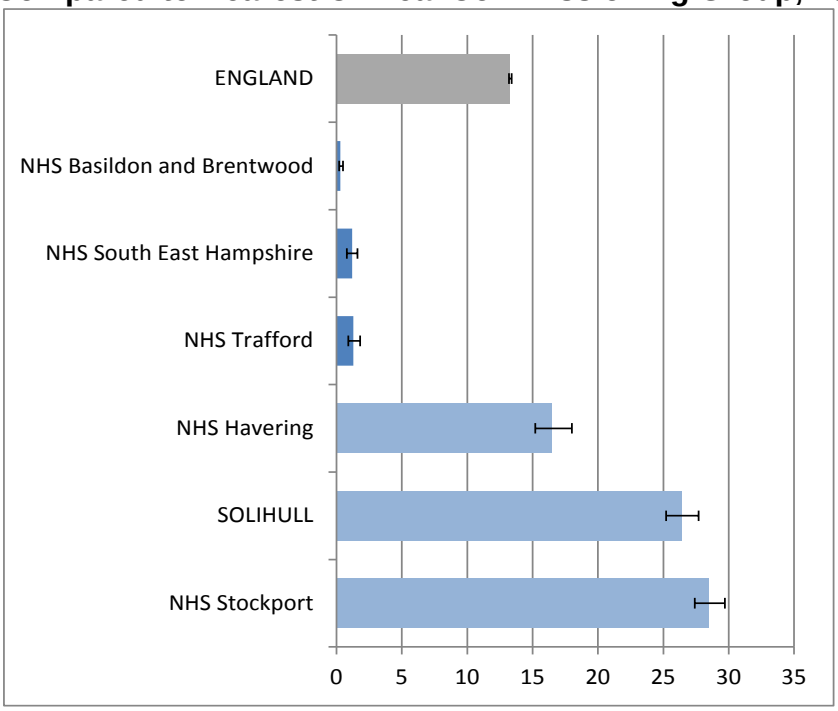
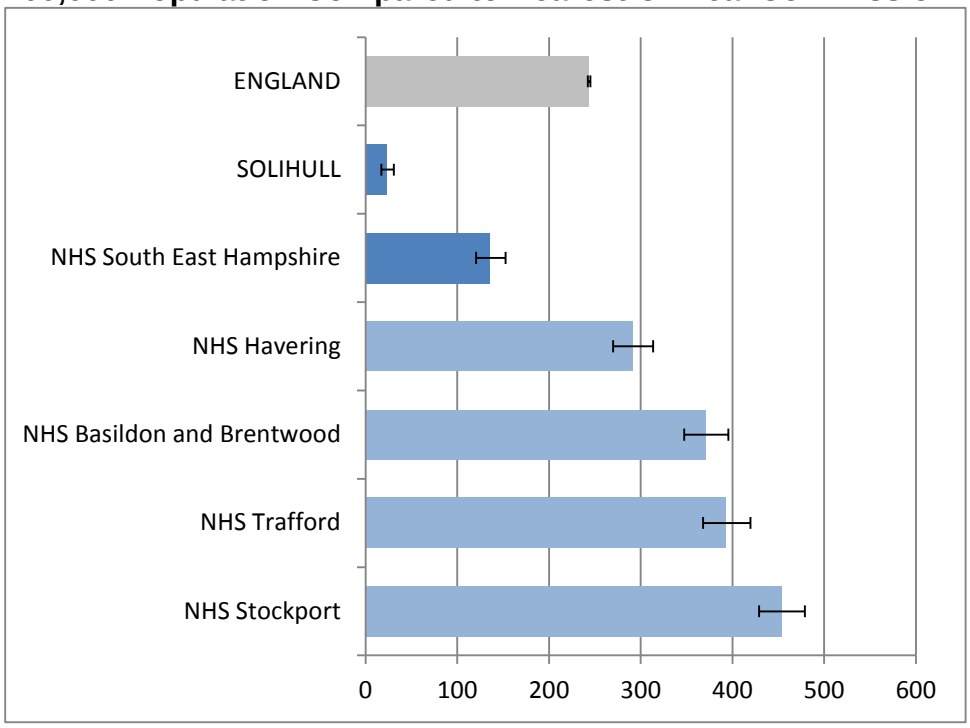


Figure 10: Percentage of Mental Health Service Users with Crisis Plans Compared to Nearest Clinical Commissioning Group, 2015/16



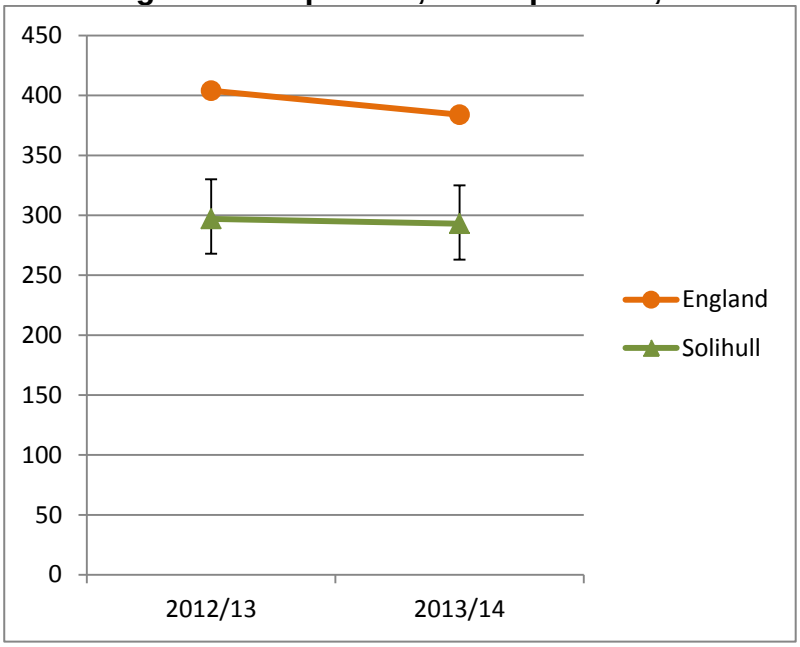
Solihull also has a significantly lower rate of attendance to Accident and Emergency Departments for psychiatric disorders compared to England and the lowest rate compared to the five nearest CCG's (Figure 11). This may indicate a genuine lower rate aligned with the provision of the Street Triage Team and higher rate of contact with specialist Mental Health services (Figure 7), or alternatively a lower detection rate in Accident and Emergency Departments.

Figure 11: Attendances at Accident and Emergency for Psychiatris Disorder per 100,000 Population Compared to Nearest Clinical Commissioning Group, 2012/13



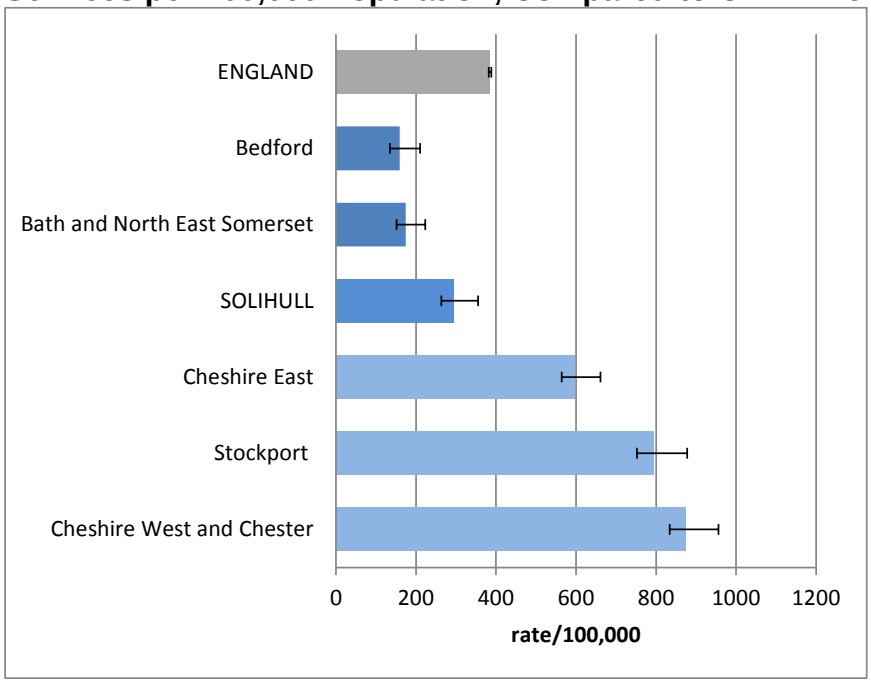
Conversely, Solihull has a statistically significant lower rate of mental health clients that are receiving social care compared to England (Figure 12) and three of its five CIPFA neighbours (Figure 13). As the denominator for this indicator is the number of mental health social care clients aged 18-64 years and not the total population aged 18-64 years, this may indicate a higher eligibility threshold for social care in the borough. Solihull and Birmingham use the same mental health service provider and Birmingham's rate is similar to that for Solihull (252 per 100,000 population, compared to 293 per 100,000 population, respectively).

Figure 12: Solihull Social Care Mental Health Clients Receiving Services per 100,000 Population, 2012-2014



Data source: RAP via Fingertips (PHE)

Figure 13: Solihull Social Care Mental Health Clients Receiving Services per 100,000 Population, Compared to CIPFA Neighbours, 2013/14



Data source: RAP via Fingertips (PHE)

Deprivation

People living in the most deprived areas are at ten times greater risk of suicide compared to those living in the most affluent areas; equating to an additional 1,466 male deaths and 262 female deaths from suicide in England annually[14]. As table 2 illustrates, Solihull has a greater proportion of affluent people and a larger difference between the most and least deprived communities than England as a whole (31% vs 10% respectively).

Table 2: Level of Deprivation, 2015

Index of Multiple Deprivation Decile*	Solihull		England		Data Source
	Percentage	Number	Percentage	Number	
1	11	24,115	10	5,348,482	Ministry of Housing, Communities and Local Government: English indices of deprivation 2015[15]
2	4	8,926	10	5,437,847	
3	6	12,462	10	5,455,024	
4	3	5,798	10	5,423,269	
5	5	10,935	10	5,355,008	
6	12	24,512	10	5,349,089	
7	9	18,348	10	5,308,160	
8	10	22,572	10	5,274,430	
9	9	19,179	10	5,273,852	
10	31	64,916	10	5,207,398	
Total	100	211,763	100	53,432,559	

*1 = most deprived, 10 + most affluent10

[14] Public Health England. *Public health outcomes framework.* Available from: http://www.phoutcomes.info/
[15] Ministry of Housing, Communities and Local Government. *English Indices of Deprivation 2015.* Available at: https://www.gov.uk/government/collections/english-indices-of-deprivation

Women Presenting with Post-Partum Psychosis

Suicide is the second most common cause of death among pregnant women and those who have given birth in the previous year[9]. A PHE mental health in pregnancy report highlighted that five out of a total of 2,283 Solihull women giving birth in 2015 presented with post-partum psychosis (0.22%)[16]. This is in line with delivery data for Birmingham and Solihull, which identified 36 vulnerable admissions for psychosocial support out of a total of 18,000 women (0.2%)[17].

Young People, Especially Those Who are Looked After

Suicide is the leading cause of death for young people aged 20 to 34 in the UK and is at the highest level in the past ten years. In 2015, 1,659 young people under the age of 35 took their own lives in the UK and nearly 1 in 10 has attempted suicide at some point in their lives[18].

Risk factors associated with suicides in young people aged under 25 years include: personal or family mental illness; abuse and neglect; experience of bereavement and suicide; bullying; academic pressure, particularly exams; social isolation; physical illness; substance misuse; and suicide-related internet use[19].

Looked after children are five times more likely to have a mental disorder than those in private households[20] and those experiencing maltreatment are twice as prone to suicide ideation compared to those who have not been subjected to abuse[21]. Table 3 demonstrates that the rate of looked after children per 10,000 population in Solihull is significantly higher than nationally.

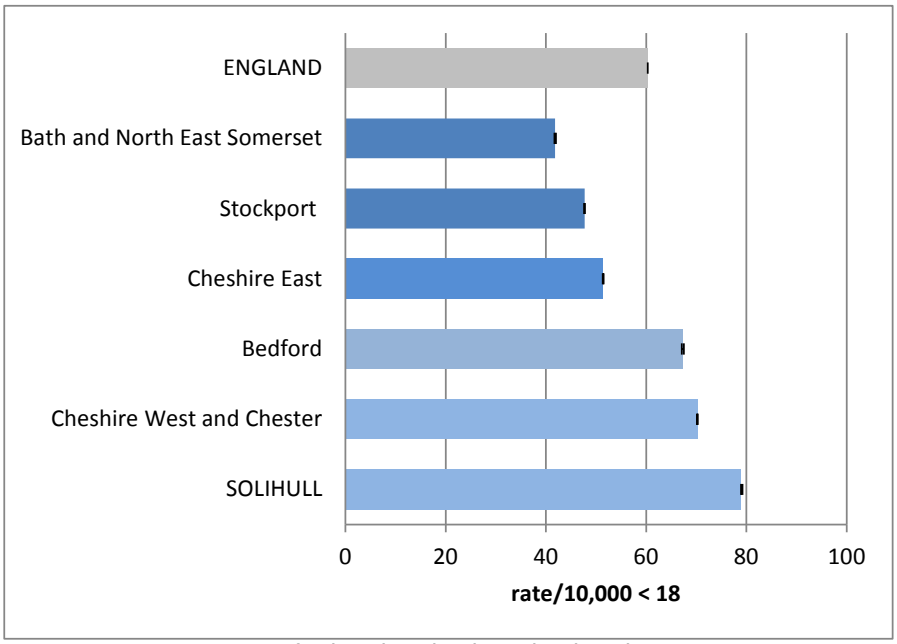
Table 3: Looked After Children

Condition	Solihull	England	Data Period	Data Source
Looked after children aged under 18 years	83 per 10,000 population (n=385)	62 per 10,000 population	2017	Fingertips PHE: • Young people profile • Overview of child health
Looked after children aged under 5 years	52.3 per 10,000 population (n=65)	36.9 per 10,000 population	2016-17	

Solihull also has a statistically significant higher rate of looked after children than its top five CIPFA neighbours (Figure 14), which has important implications for suicide prevention. As Figure 15 demonstrates, the rate has been consistently higher than that for England over a number of years.

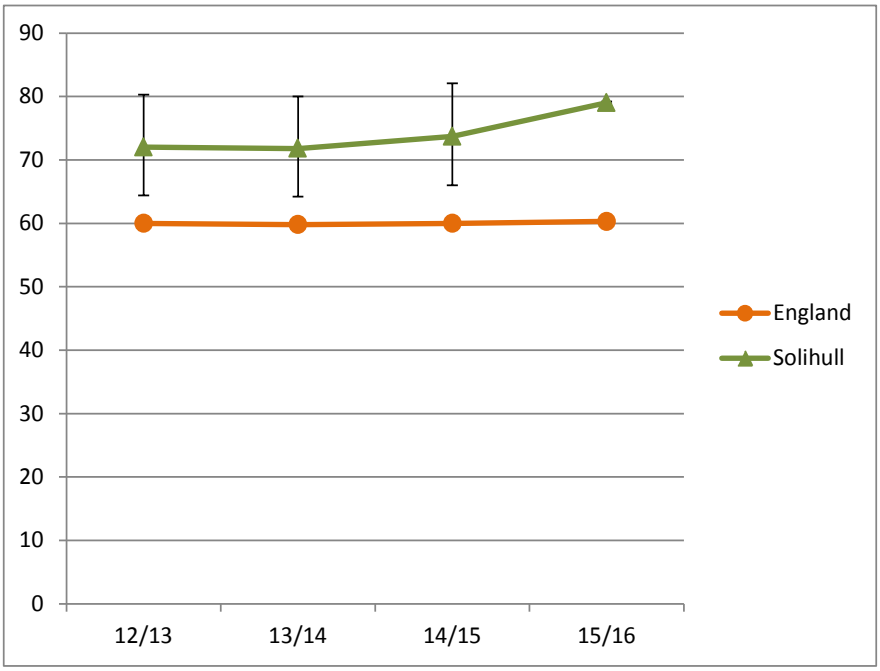
[16] https://fingertips.phe.org.uk/profile-group/child-health/profile/child-health-pregnancy/data#page/13/gid/1938132993/pat/6/par/E12000005/ati/102/are/E08000029
[17] Carrick-Sen D. *BUMP Perinatal Mental Health in Birmingham and Solihull Presentation to BUMP Clinical Group*. 19 December 2017.
[18] PAPYRUS Prevention of Young Suicide. *Building Suicide-Safer Schools and Colleges: A guide for teachers and staff; 2017.*
[19] National Confidential Inquiry into Suicide and homicide by People with Mental Illness (NCISH). *Suicide in children and young people.* Manchester: University of Manchester; 2016.
[20] Lardner M. *Solihull MBC Mental Health Needs Assessment;* 2015.
[21] Reconstruct. *Self harm and suicide in children and young people*; 2017.

Figure 14: Looked After Children Rate per 10,000 Population Compared to CIPFA Neighbours, 2015/16



Data source: Department of Education via Fingertips (PHE)

Figure 15: Looked After Children Rate per 10,000 Population, 2012-2016



Data source: Department of Education via Fingertips (PHE)

In line with this, Solihull has a significantly higher rate of children leaving care per 100,000 population compared to England and four out of five of its top five CIPFA neighbours (Figure 16). The exception is Bedford. Figure 17 illustrates that there has been a recent reduction in care leavers following high levels in 2012/13 so Solihull is now closer to the England average.

Figure 16: Children Leaving Care per 100,000 Population Compared to CIPFA Neighbours, 2015/16

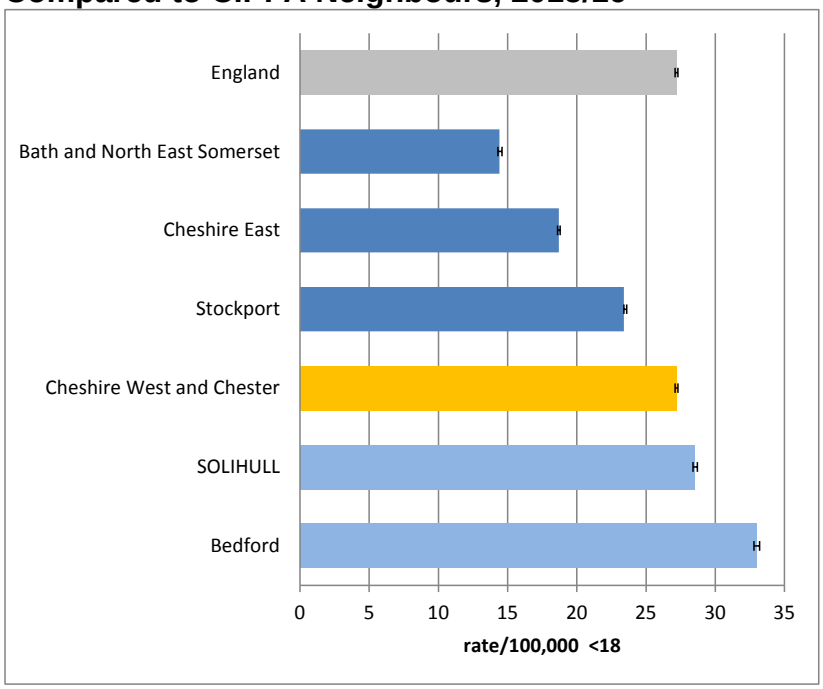
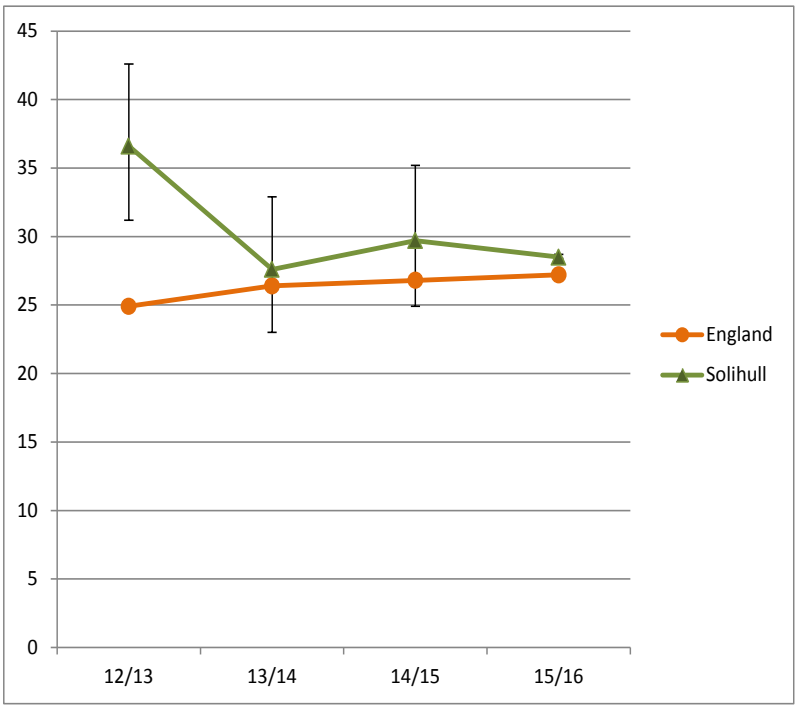


Figure 17: Children Leaving Care per 100,000 Population, 2012-2016



People with a History of Self-harm

The strongest predictor of suicide is previous episodes of self-harm[22]. The UK has one of the highest rates of self-harm in Europe, at 400 per 100,000 population[23]. Self-harm is more common among females and is associated with anxiety disorders[19]. By the age of 16, 7-14% of young people will have self-harmed at least once in their life. The proportion

[22] Hawton K, Bergen H, Cooper J et al. Suicide following self-harm: findings from the multicentre study of self-harm in England: 2000-2012. *J Affect Disord* 2015;175:147-151.
[23] http://www.mentalhealth.org.uk/help-information/mental-health-statistics/self-harm/

of adults reporting self-harm rose from 2.4% in 2000 to 6.4% in 2014, with increase experienced across both genders and all age-groups[24].

Research has demonstrated more than a fifty-fold increased risk of suicide among self-harmers in the year following GP presentation[25]. Around one in a hundred people who self-harm die by suicide within a year, with those who repeatedly self-harm and those who use violent or dangerous methods at the highest risk. At least half of people who take their own life have a history of self-harm and one in four have been treated in hospital for self-harm in the preceding year.

In 2015/16, the directly standardised rate of hospital admissions as a result of self-harm in young people aged 10-24 years in Solihull was 341.7 per 100,000 population, which is lower than the England average of 430.5 per 100,000 population. This equates to 122 annual admissions[26].

Homeless People

Homelessness elevates the risk of suicide by over nine times[27]. As table 4 demonstrates the rate of homeless people not in priority need is three-times higher in Solihull compared to England, whilst the rate of households in temporary accommodation is three-times lower.

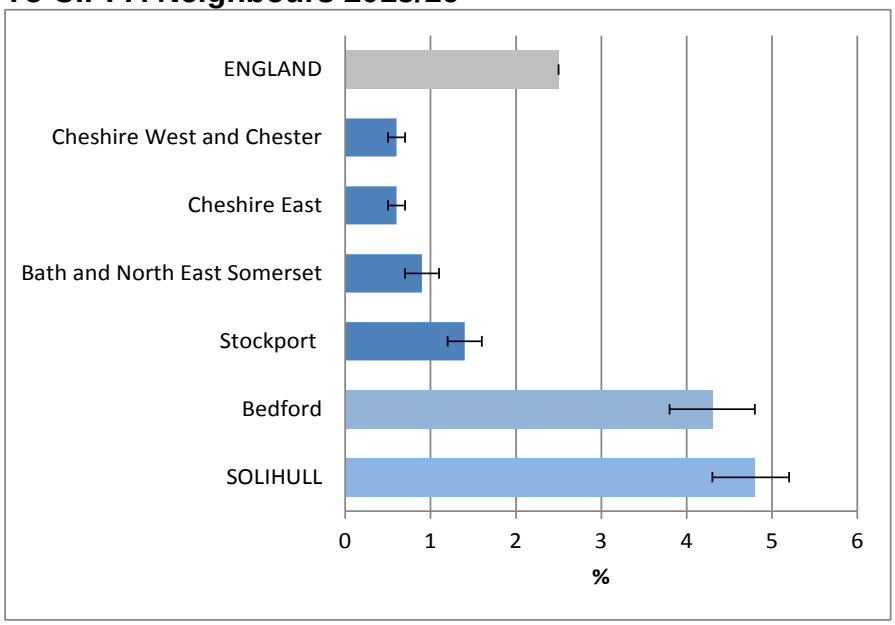
Table 4: People Who Are Homeless

Condition	Solihull	England	Data Period	Data Source
Statutory homelessness – Eligible homeless people not in priority need	2.4 per 1,000 households (n=216)	0.8 per 1,000 households	2016/17	Public Health Outcomes Framework: Wider determinants of health 1.15
Statutory homelessness – households in temporary accommodation	1.1 per 1,000 households (n=101)	3.3 per 1,000 households		
Rough sleepers	6 individuals		Autumn 2016	DCLG Homelessness statistics

Solihull has a higher percentage of statutory homelessness than its CIPFA neighbours (Figure 18). As Figure 19 demonstrates this percentage steadily increased between 2008/09 and 2014/15 at a time when the England rate was fairly steady at 2.4%. The reason for this high rate is because Solihull records people who are “sofa surfing”, squatting or living in insecure tenancies[28] thereby increasing the reported numbers. In 2016 there were six rough sleepers in the borough; five were male and two were from EU countries.

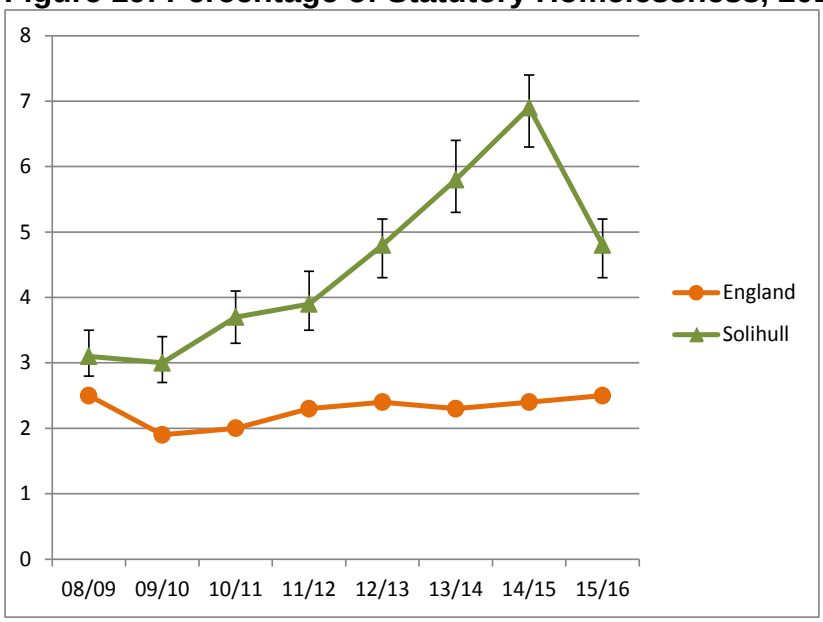
[24] McManus S, Hassiotis A, Jenkins R et al. *Suicidal thoughts, suicide attempts, and self-harm. Adult Psychiatric Morbidity Survey 2014* . NHS Digital; 2014.
[25] Carr MJ, Ashcroft DM, Kontopantelis E et al. Premature death among primary care patients with a history of self-harm. *Annals of Family Medicine* 2017;15(3):246-254.
[26] Young people profile – Fingertips https://fingertips.phe.org.uk/
[27] Crisis. *Homelessness: A silent killer;* 2011
[28] Service specification: Rough sleeper outreach service Solihull.

Figure 18: Percentage of Statutory Homelessness Compared To CIPFA Neighbours 2015/16



Data source: Department of Communities and Local Government via Fingertips (PHE)

Figure 19: Percentage of Statutory Homelessness, 2012-2016



Data source: Department of Communities and Local Government via Fingertips (PHE)

Lesbian, Gay, Bisexual and Transgender (LGBT) People

LGBT men and women are at higher risk of drug or alcohol misuse, self-harm, mental health disorders such as depression and anxiety, suicidal ideation and attempts compared to those identifying as heterosexual[29] [30] [31]. In Solihull it is estimated that 0.9% of adults aged 16 years and above in Solihull are gay/lesbian (n=1,540), 0.7% are bisexual (n=1,198) and 0.5% are classified as 'other' (n=856)[32].

[29] Fergusson D, Hopwood J, Beautrais A. Is sexual orientation related to mental health problems and suicidality in young people? *Arch Gen Psychiatry* 1999;56:876-880.
[30] De Graaf R, Sandfort T, ten Have M. Suicidality and Sexual Orientation: Differences between men and women in a general population-based sample from the Netherlands. *Archives of Sexual Behaviour* 2006;35:253-262.
[31] Herrell R, Goldberg J, True WR et al. Sexual orientation and suicidality: A co-twin control study in adult men. *Arch Gen Psychiatry* 1999;56:867-874.
[32] https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/sexuality/datasets/sexualidentityuk

Black Asian and Ethnic Minority (BAME) Groups

Ethnicity is not routinely collected by the Coroner's Office, although research has shown that suicidal ideation and rates vary by ethnicity. As table 5 highlights, white men and women are more likely to have suicidal thoughts, whilst suicide attempts are higher in Black men and women[33]. The highest suicide rates are among white men across all age groups[34]. Nationally, men of South Asian origin have lower suicide rates, whilst South Asian women have higher rates compared to the general population[35].

Table 6 demonstrates the ethnicity breakdown of the Solihull population. Locally, there are more residents describing their ethnic origin as White British, associated with higher suicide risk, than nationally, and lower numbers of ethnic minority groups compared to England (10.9% vs. 14.3% respectively), particularly Black, African, Caribbean or Black British residents (1.6% vs. 3.6% respectively).

Table 5: Suicidal Ideation and Attempts by Ethnic Group[17]

		Ethnic Group			
		White	**South Asian**	**Black**	**Other**
Male	Suicidal Ideation (%)	15.0	6.1	7.1	7.3
	Suicide Attempts (%)	4.4	0.6	4.6	4.0
Female	Suicidal Ideation (%)	20.0	7.7	11.4	12.3
	Suicide Attempts (%)	7.1	1.5	7.8	3.3

Table 6: BAME Groups

Ethnic Group	Solihull	England	Data Source
White	89.1% (n=184,244)	85.7%	Census 2011[36]
Asian/Asian British	6.6% (n=13,561)	7.6%	
Black/African/Caribbean/Black British	1.6% (n=3,239)	3.6%	
Mixed/multiple Ethnic Group	2.1% (n=4,404)	2.2%	
Other Ethnic Group	0.6% (n=1,226)	0.9%	
Total	206,674		

Survivors of Violence and Abuse

A history of violence and abuse including personal or maternal experience of intimate partner violence, non-partner physical violence and sexual abuse is a risk factor for suicide in women[37] [38].

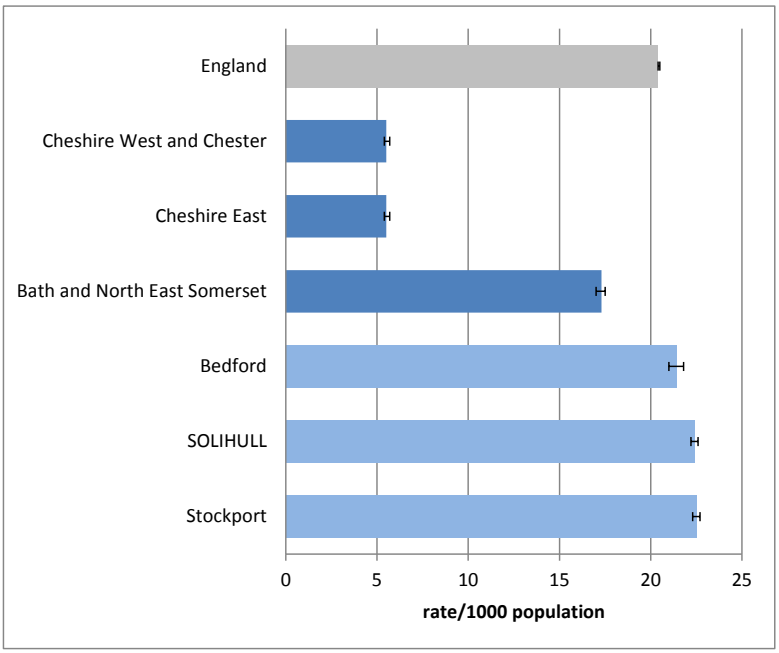
The rate of incidents of domestic violence per 1,000 women reported to the police is significantly higher for Solihull when compared to England and its CIPFA top five

[33] McManus S, Meltzer H, Brugha T et al. *Adult psychiatric morbidity in England, 2007: Results of a household survey .* NHS Information Centre for Health and Social Care; 2007.
[34] Dunstan S. *General Lifestyle Survey.* Office for National Statistics; 2009.
[35] McKenzie K, Bhui K, Nanchahal K, Blizard B. Suicide rates in people of South Asian origin in England and Wales. *The British Journal of Psychiatry* 2008;193:406-409.
[36] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/2011censuspopulationandhouseholdestimatesforenglandandwales/2012-07-16
[37] Devries KM, Watts C, Yoshihama M et al. Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. *Social Science and Medicine* 2011;73(1):79-86.
[38] Devries KM, Mak JY, Bacchus LJ et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PloS Medicine* 2013;10(5):e1001439.

neighbours (Figure 20). Only Stockport has a similar rate. Reported incidents are also increasing both locally and at a national level (Figure 21).

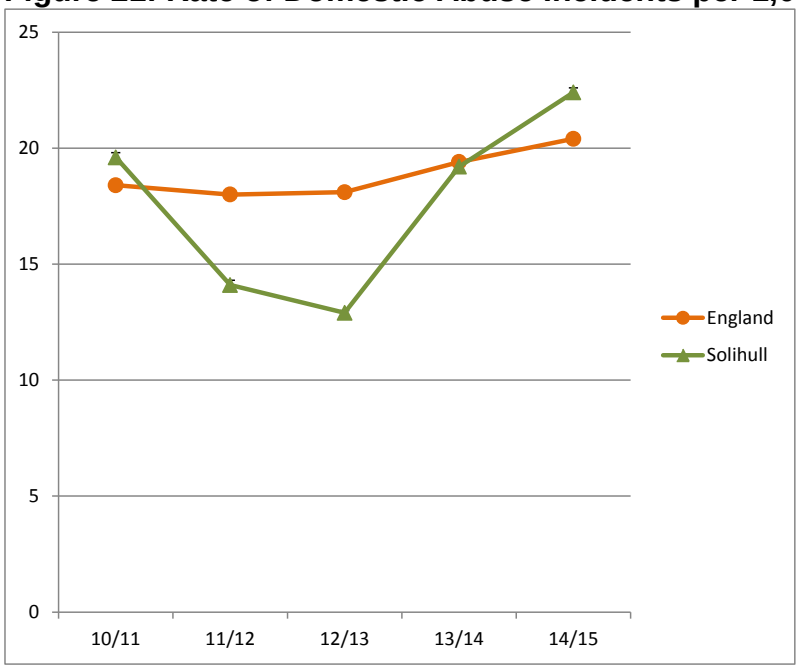
In 2015-16, the rate of reported domestic abuse incidents was 23.5 per 1,000 women, which was higher than the national average of 22.1 per 1,000 women. This equates to an annual total of 4,022 incidents[39]. This may not reflect higher incidents of domestic violence in Solihull than other areas but could illustrate an increase in willingness of victims to report such incidents.

Figure 20: Rate of Domestic Abuse Incidents per 1,000 Women Compared to CIPFA Neighbours, 2014/15



Data source: ONS via Fingertips (PHE)

Figure 21: Rate of Domestic Abuse Incidents per 1,000 Women, 2010-2015



Data source: ONS via Fingertips (PHE)

[39] PHOF – wider determinants 1.11.

People in Contact with the Criminal Justice System

People at all stages within the criminal justice system are at higher risk of suicide, including those in police custody, on remand, in prison or on probation. A criminal conviction has been associated with a two and three-fold increase in men and women respectively[40].

Research has also demonstrated a seven-fold elevated suicide risk in offenders following prison release compared to the general population[41]. The first month of imprisonment and the four weeks following release are the times of greatest risk,[42] [43] with the suicide rate in male offenders' four-times higher during the two-weeks post-release compared with after six-months[44].

Table 7 demonstrates the number of Solihull residents in contact with the criminal justice system. Locally, the rate of first time entrants to the youth justice system under 18 years of age is lower than the England average (204.7 vs. 327.1 per 100,000 population). Figure 22 also demonstrates that the rate of Solihull children entering the youth justice system is below that for England and for four out of five CIPFA neighbours. Over time Solihull's rate has been consistently below that for England but the gap was smaller in 2014/15 (Figure 23).

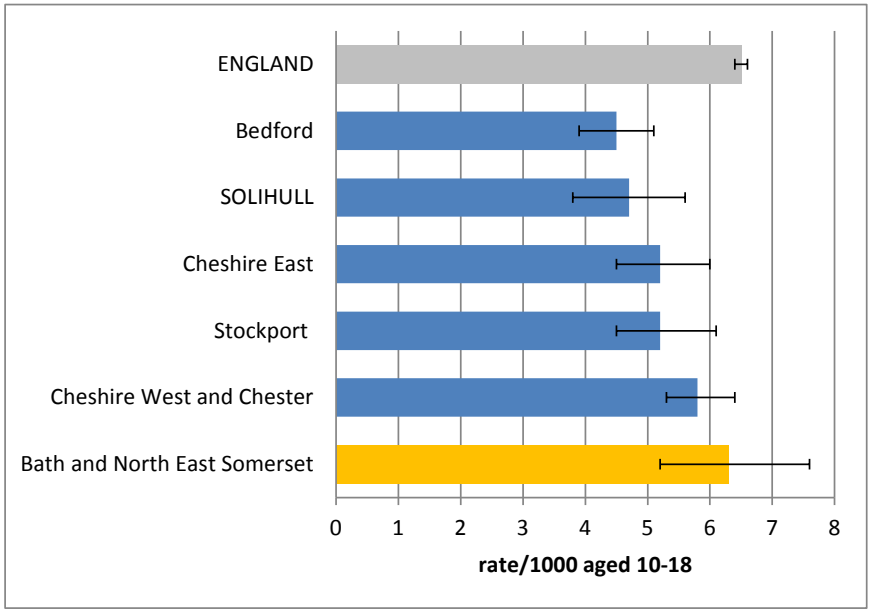
Table 7: People in Contact with the Criminal Justice System

Condition	Solihull	England	Data Period	Data Source
First time entrants to Youth Justice System aged 10-17 years	204.7 per 100,000 population (n=42)	327.1 per 100,000 population	2016	Young people profile - PHE Fingertips
Prison leavers	95 per annum 32% of leavers are homeless compared to 15% homeless prior to custody		2017	Prison population figures (HMP)[45]
Offenders on probation aged 15 years and above*	647		2016-17	National Probation Service - Midlands
Offenders on probation aged 15 years and above*	242		2016-17	Community Rehabilitation Company

* Individuals may be registered with both organisations

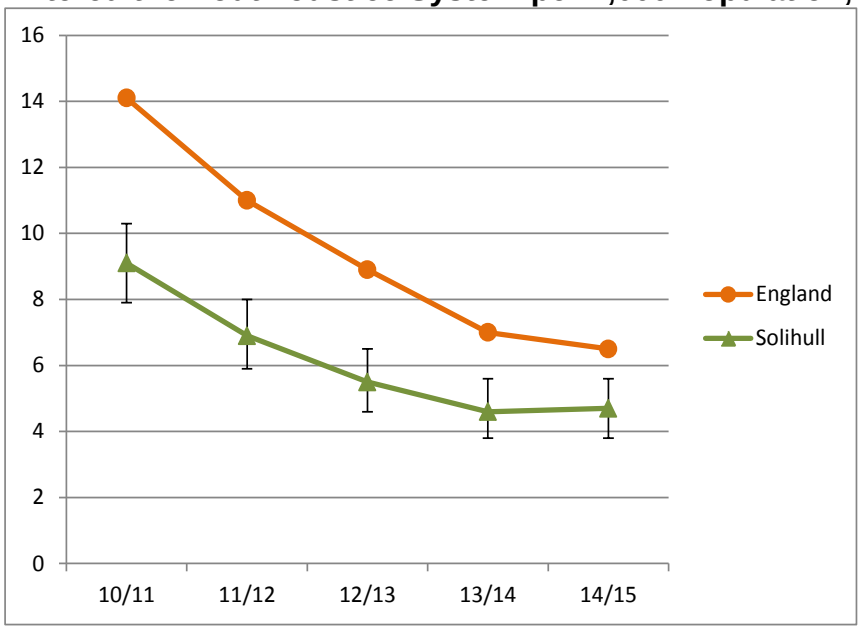
[40] Webb RT, Qin P, Stevens H. National study of suicide in all people with a criminal justice history. *Archives of General Psychiatry* 2011;68(6):591-599.
[41] Jones D, Maynard A. Suicide in recently released prisoners: a systematic review. *Mental Health Practice* 2013;17(3):20-27.
[42] Ministry of Justice. *Table 1.7 Deaths in prison custody 1978-2015.* Available from: https://www.gov.uk/government/statistics/safety-in-custody-quarterly-update-to-june-2016
[43] Pratt D, Piper M, Appleby L et al. Suicide in recently released prisoners: a population-based cohort study. *Lancet* 2006;368(9530):119-123.
[44] Kariminia A, Law M, Butter TG et al. Suicide risk among recently released prisoners in New South Wales, Australia. *Medical Journal of Australia* 2007;187(7):387-390.
[45] https://www.gov.uk/government/statistics/prison-population-figures-2017

Figure 22: Rate of Children and Young People Who Have Formally Entered the Youth Justice System per 1,000 Population Compared to CIPFA Neighbours, 2014/15



Data source: Youth Justice Statistics via Fingertips (PHE)

Figure 23: Children and Young People Who Have Formally Entered the Youth Justice System per 1,000 Population, 2010-2015



Data source: Youth Justice Statistics via Fingertips (PHE)

In 2017, 95 prisoners from Solihull left custody and notably one in three were homeless, which is twice the number homeless prior to custody.

In 2016-17, there were 647 Solihull offenders on probation registered with the National Probation Service; the majority of which were male (88.1%; n=570) and White British (67.9%; n=439). A total of 242 were also registered with the Community Rehabilitation Company (CRC) and a proportion of these may be registered with both organisations. Similarly, most of these were male (89.7%; n=217) and White (81.4%; n=197).

People with Alcohol and Substance Use Disorders

The misuse of alcohol and drugs is strongly associated with suicide, particularly in men, people who self-harm and those living with a mental health condition. Around half (54%) of suicides in mental health patients in 2003-2013 had a history of alcohol or drug use[46].

International research has demonstrated that suicide risk is ten times higher in people with alcohol dependence, whilst opiate and cocaine addiction is associated with a 17-fold and seven-fold elevated risk, respectively[47]. Table 8 illustrates that one in four adults in Solihull drink more than the recommended 14 units of alcohol per week and one in eight are binge-drinkers. The latter is lower than the national average.

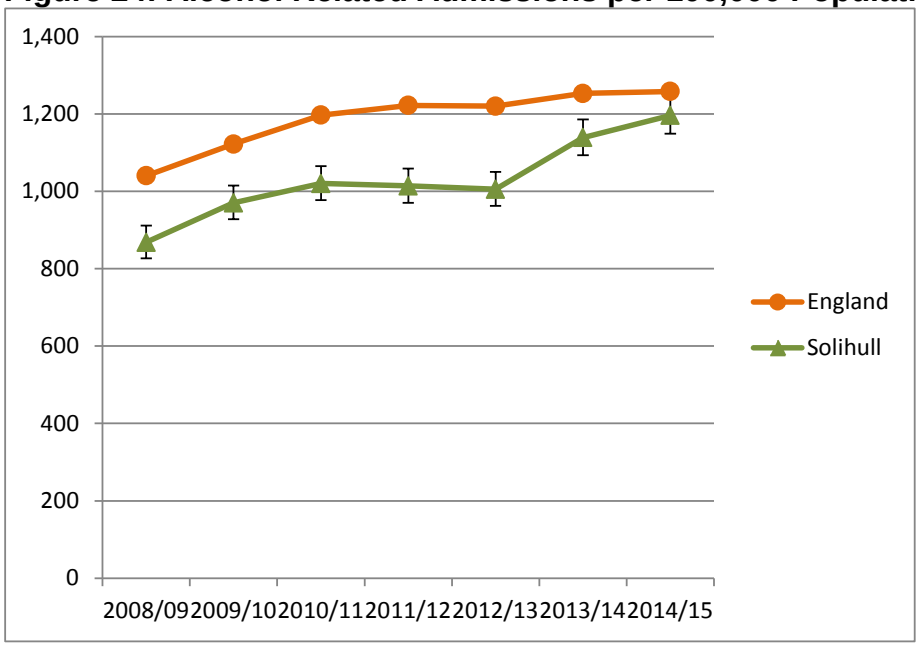
Table 8: Proportion of Adults with Alcohol Problems

Condition	Solihull	England	Data Period	Data Source
Adults who binge drink on heaviest drinking day	12.8% (n=10,822)	16.5%	2011-14	Fingertips PHE: Local Alcohol Profile (LAPE)
Adults who drink 14+ units a week	25.2% (n=21,306)	25.7%		

However, alcohol related hospital admissions per 100,000 population in Solihull have shown a steady increase since 2008/09 and in 2014/15 (Figure 24). They are now they just below the rate for England and comparative to four of the five CIPFA neighbours (Figure 25).

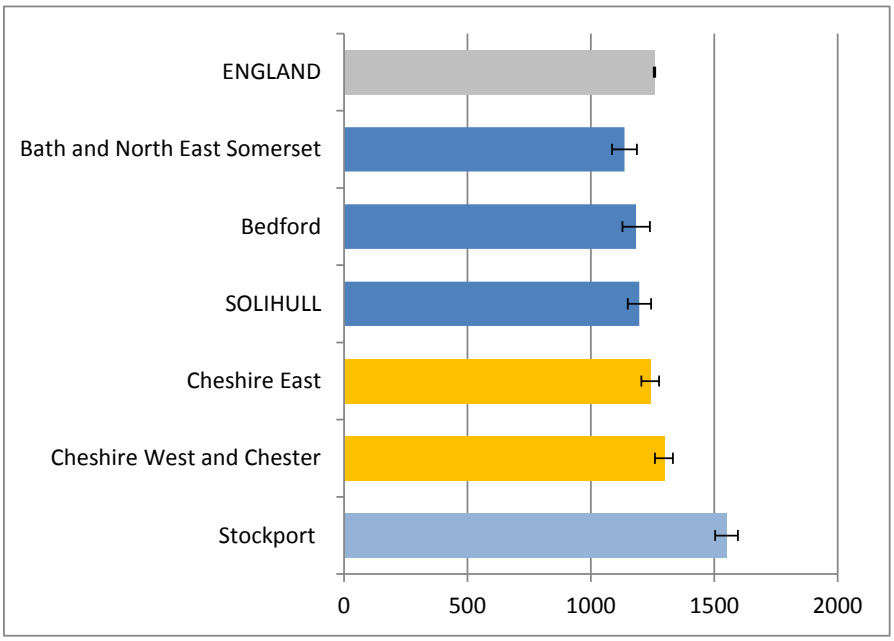
Both male and female admissions have increased. However, the rate of male admissions remains below that for England and the rate of female admissions are now similar to that seen in England. An equivalent trend in gender specific admissions is also apparent in Solihull's CIPFA group.

Figure 24: Alcohol Related Admissions per 100,000 Population, 2006-2015



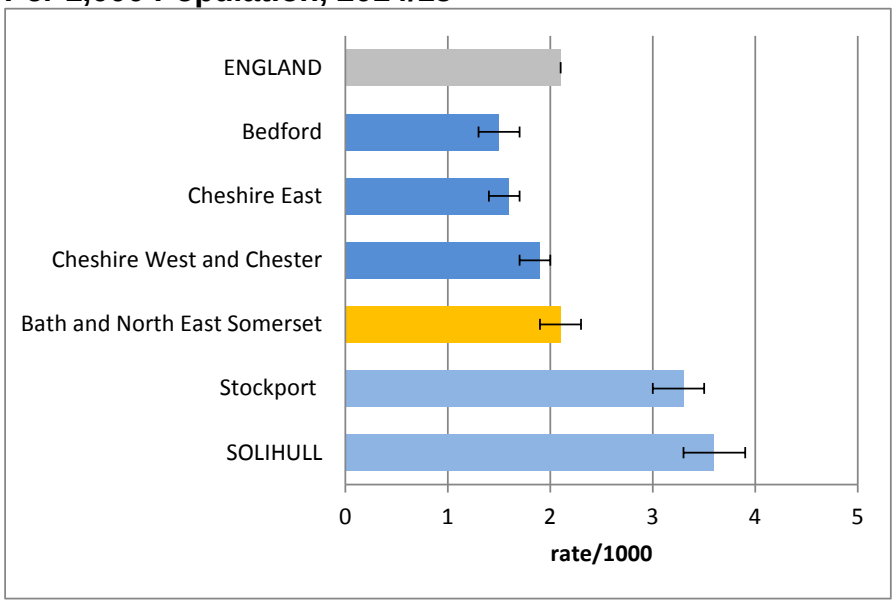
[46] National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH). *Annual Report 2015: England, Northern Ireland, Scotland and Wales.* Manchester: University of Manchester; 2015.
[47] Ferrari AJ, Norman RE, Freedman G et al. The burden attributable to mental and substance use disorders as risk factors for suicide: findings from the Global Burden of Disease Study 2010. *PloS one* 2014;9(4):e91936.

Figure 25: Alcohol Related Admissions per 100,000 Population Compared to CIPFA Neighbours 2014/15



As Figure 26 illustrates, Solihull has a statistically significant higher rate of individuals receiving specialist alcohol treatment compared to England and four out of five of its CIPFA neighbours. This could indicate that Solihull has more problem drinkers than elsewhere or it could equally illustrate a higher level of services available in the area and/or higher identification rates and service access.

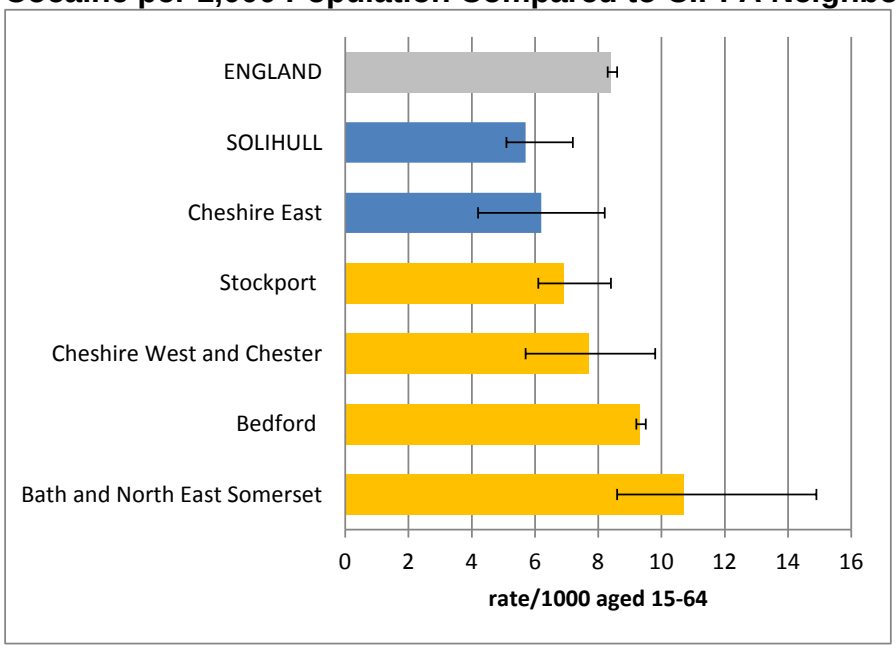
Figure 26: Individuals Receiving Specialist Alcohol Treatment Per 1,000 Population, 2014/15



Data source: NDTMS via Fingertips (PHE)

As Figure 27 demonstrates, Solihull is estimated to have a lower prevalence of opiate and/or crack users compared to England and two out of five of its top CIPFA neighbours. The remaining three CIPFA neighbours have similar prevalence rates to Solihull. This estimated prevalence is in line with the expected level for Solihull's demographic profile.

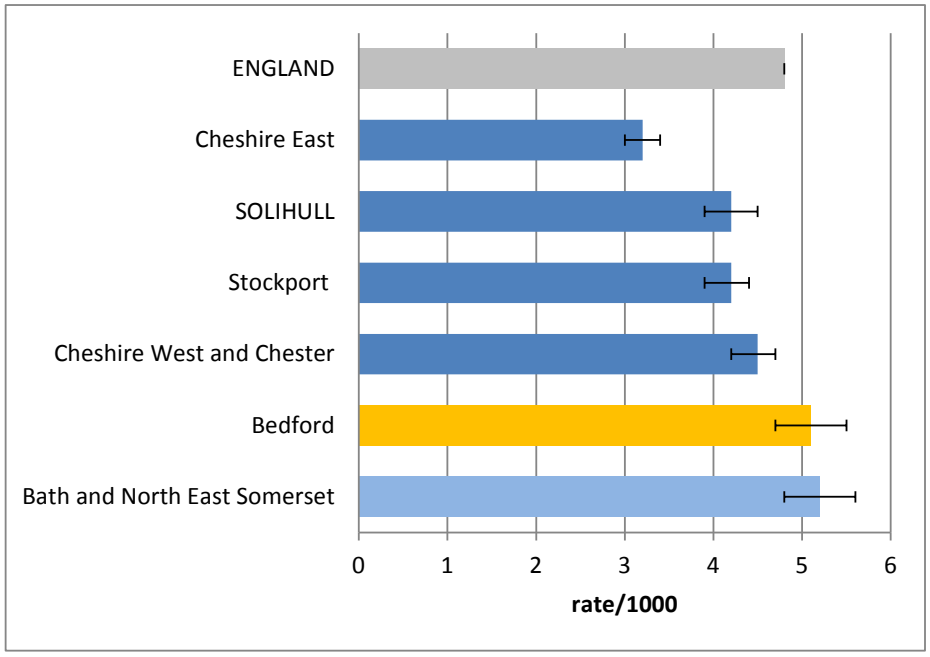
Figure 27: Estimated Prevalence of Opiate and/or Crack Cocaine per 1,000 Population Compared to CIPFA Neighbours, 2011/12



Data source: National Treatment agency via Fingertips (PHE)

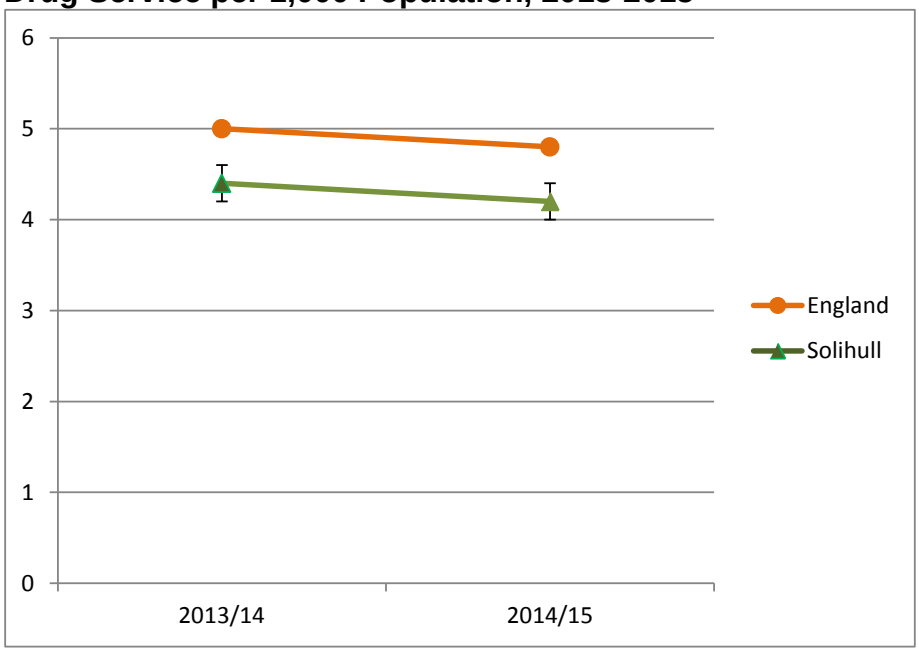
Figures 28 and 29 show that Solihull has a significantly lower rate per 1,000 population in receipt of specialist drug misuse services when compared to England and three of its five CIPFA neighbours. This may be linked to lower prevalence of opiate and crack/cocaine use (Figure 27; Solihull = 5.7 per 1,000 population and England = 8.4 per 1,000 population) or could also be a measure of the lower rates of service access or capacity in the area.

Figure 28: Individuals who received treatment in a Specialist Drug Service per 1,000 Population Compared to CIPFA Neighbours, 2014/15



Data source: NDTMS via Fingertips (PHE)

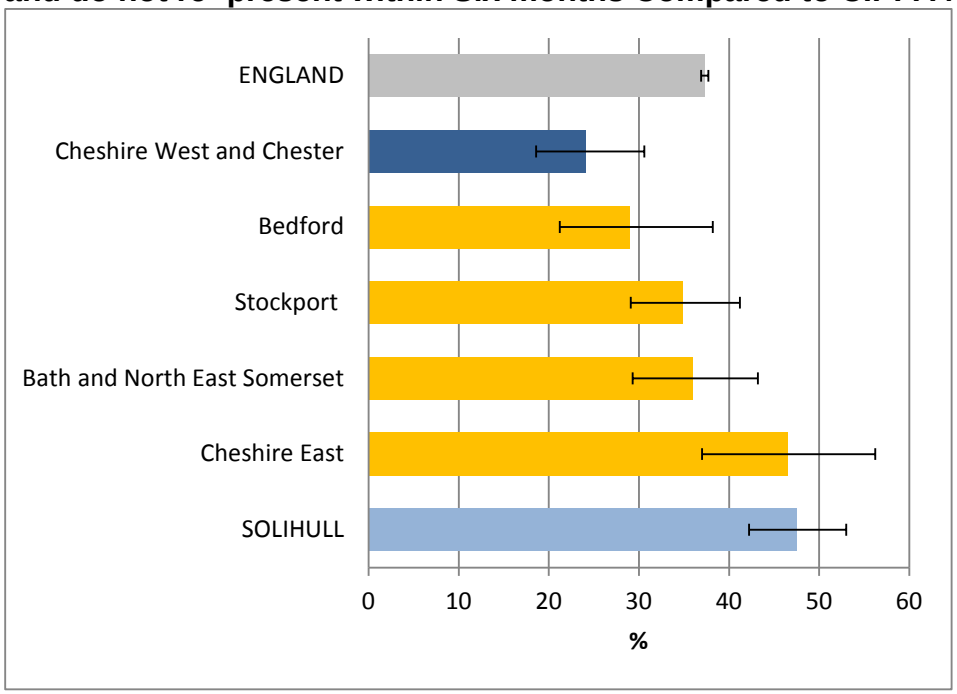
Figure 29: Individuals who Received Treatment in a Specialist Drug Service per 1,000 Population, 2013-2015



Data source: NDTMS via Fingertips (PHE)

Individuals achieving successful completion of treatment demonstrate a significant improvement in health and well-being in terms of improved physical and psychological health. Solihull has a statistically significantly lower percentage of non-opiate drug users who did not re-present after successful drug treatment within six months when compared to England. Therefore, Solihull had a high percentage that did successfully complete treatment (Figure 30). However, the percentage for the comparator authorities did not differ statistically from England.

Figure 30: Percentage of Non-opiate drug users who successfully leave treatment and do not re- present within Six months Compared to CIPFA Neighbours, 2015



Data source: NDTMS via Fingertips (PHE)

The Unemployed and Key Occupational Groups

Following the global recession in 2008, an additional 4,884 suicides were documented in 54 countries worldwide in 2009, mainly in men[48]. In England, regions with higher rates of unemployment during the recession had greater rises in suicide rates[49]. Every 1% increase in unemployment is associated with a 0.79% in suicide rates in the working population[50].

Those who are unemployed or on long term sickness, are at higher risk of suicide; increasing 2.5-fold within the first five years of unemployment[51]. There were 5,000 Solihull residents registered as unemployed during 2016/17.

Specific occupational groups, such as doctors, nurses, veterinary workers, farmers, agricultural workers and armed forces personnel also have higher rates of suicide, which may reflect in part their increased access to a means and knowledge of suicide methods[52] [53] [54]. Table 9 outlines that 9,696 people were employed in these occupations in Solihull in 2011.

Table 9: Occupational Groups

Condition	Solihull	Data Period	Data Source
Unemployed	5,000	2016-17	
Doctors and Vets	2,028	2011	NOMIS[55]
Nursing and midwifery	1,868		
Protective service occupations including armed forces	1,209		
Agricultural and related	695		

People Experiencing Bereavement, Including Those Bereaved by Suicide

Bereavement is a significant cause of stress; reducing levels of mental wellbeing and enhancing suicidal ideation and risk. This detrimental impact is further increased when bereavement is by suicide. The death of a partner or spouse has been shown to increase the risk of suicide by over three times in widowed men compared to their married counterparts, although this trend is not demonstrated in widowed women[56]. Parental bereavement can increase the risk of suicide attempts by around 70% in young people, increasing to nearly three-fold if the cause of death is suicide[57].

Similarly, men and women who lose their partner as a consequence of suicide have an elevated risk of suicide (46.2 and 15.8 respectively) compared to those bereaved by other

[48] Chang SS, Stuckler D, Yip P, Gunnell D. Impact of 2008 global economic crisis on suicide: time trend study in 54 countries. *British Medical Journal* 2013; 347(7925):13.
[49] Barr B, Taylor-Robinson D, Scott-Samuel A et al. Suicides associated with the 2008-10 economic recession in England: time trend analysis. *British Medical Journal* 2012;345:e5142.
[50] Stuckler D, Basu S, Suhrcke M et al. The public effect of economic crises and alternative policy responses in Europe: an empirical analysis. *The Lancet* 2009;374:315-323.
[51] Milner A, Page A, LaMontagne AD. Long-term unemployment and suicide: a systematic review and meta-analysis. *PloS one* 2013;8(1):e51333.
[52] Meltzer H, Griffiths C, Brock A et al. Patterns of suicide by occupation in England and Wales: 2001-2005. *The British Journal of Psychiatry* 2008;193:73-76.
[53] Mahon M, Tobin J, Cusack D et al. Suicide Among Regular-Duty Military Personnel: A retrospective case-control study of occupation-specific risk factors for workplace suicide. *American Journal of Psychiatry* 2005;162:1688-1696.
[54] Hawton K, Agerbo E, Simkins S et al. Risk of suicide in medical and related occupational groups: A national study based on Danish case population-based registers. *Journal of Affective Disorders* 2011;134(1-3):320-326.
[55] NOMIS https://www.nomisweb.co.uk/Default.asp
[56] Li G. The interaction effect of bereavement and sex on the risk of suicide in the elderly: An historical cohort study. *Social Science and Medicine 1995;40(6):825-828.*
[57] Jakobsen IS, Christiansen E. Young people's risk of suicide attempts in relation to parental death: A population-based register study. *Journal of Child Psychology and Psychiatry and Allied Disciplines* 2011;52(2):176-83.

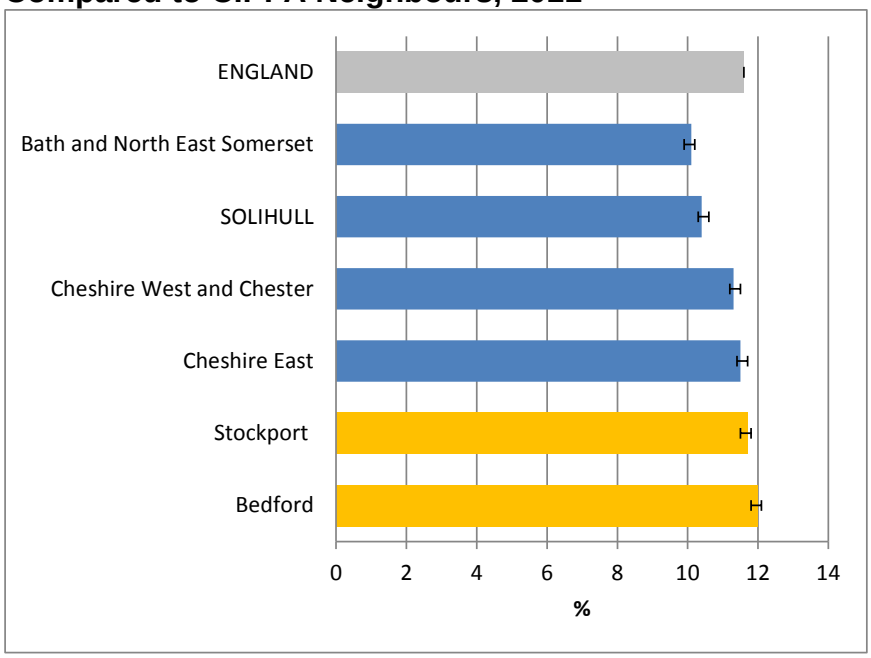
causes (10.1 and 3.3 respectively)[58]. This has been attributed in part to the unexpected nature of death, additional investigative processes, stigma, tensions and isolation[59].

For every person who dies as a result of suicide at least 10 people are affected[2], with estimates ranging from 6 to 60 affected people[60]. In 2016, there were 13 deaths by suicide in the Borough, equating to an average of 130 people bereaved by suicide, with a range of 78-780 people.

People Experiencing Relationship Breakdown

Relationship breakdown has been highlighted as an initiating factor in suicide and risk has been shown to be three and six times higher in divorced women and men respectively[61]. In 2011, one in ten adults in Solihull (10.4%; n=17,800) experienced a relationship breakdown compared to 11.6% nationally (Figure 31). This low rate is also seen for three out of five CIPFA neighbours.

Figure 31: Percentage of Adults who are Separated or Divorced Compared to CIPFA Neighbours, 2011



Data source: ONS, Census 2011 via Fingertips (PHE)

People Living with Long Terms Conditions

Groups living with long-term or degenerative physical health conditions, especially chronic diseases such as coronary heart disease and Chronic Obstructive Pulmonary Disease (COPD), are at risk of poor mental health, particularly depression and anxiety. Nearly one-third (30%) of people with a long-term physical health condition also have a mental health problem[62]. This, in turn, can increase suicide risk three-fold overall compared to people with no diagnosis[63].

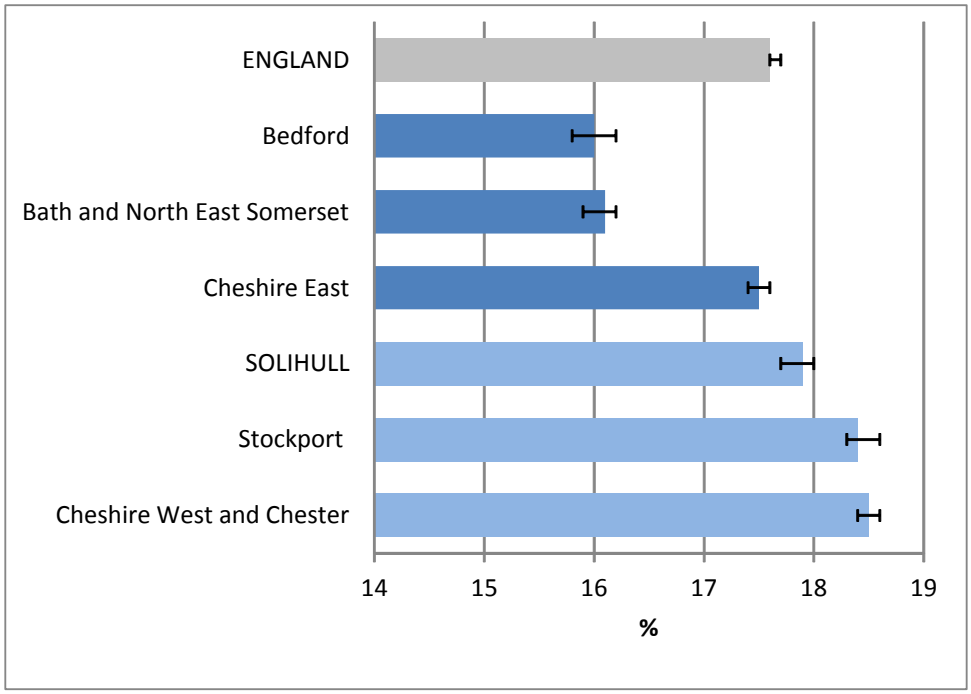
[58] Agerbo E. Midlife suicide risk, partner's psychiatric illness, spouse and child bereavement by suicide or other modes of death: a gender specific study. *J Epidemiol Community Health* 2005;59(5):407-412.
[59] Survivors of Bereavement by Suicide. *How suicide bereavement is different.* Available from: https://uk-sobs-org.uk/for-professionals/how-suicide-bereavement-is-different/
[60] Berman A (2011) Estimating the population of survivors of suicide: seeking an evidence base. *Suicide Life Threat Behav* **41**(1):110-116.
[61] Yamauchi T, Fujita T, Tachimori H et al. Age-adjusted relative suicide risk by marital and employment status over the past 25 years in Japan. *Journal of Public Health* 2013;35(1):49-56.
[62] http://www.fph.org.uk/relationship_with_physical_health_and_healthy_lifestyles
[63] Juurlink D, Herrmann N, Szalai JP et al. Medical illness and the risk of suicide in the elderly. *JAMA* 2004;164(11):1179-1184.

Research has demonstrated elevated odds of suicide of 50% in people with coronary heart disease or stroke; 80% in those with COPD; and 230% with osteoporosis[64]. Risk of suicide also increases around two-fold in the year following cancer diagnosis, particularly among females and those with a poorer prognosis[65].

In 2017, 21,836 people aged 65 and over in Solihull were living with a long-term condition[66]. As figure 32 demonstrates, Solihull has a statistically significantly higher percentage of residents who have long term health problems or a disability that limits their activities of daily living compared to England.

Solihull is in the middle of its CIPFA group: it has a percentage significantly higher than Bath and North East Somerset, Bedford and Cheshire East but is significantly lower than Stockport and Cheshire West and Chester. This indicator is difficult to monitor as it is measured as part of the ten year census but as Solihull's population is ageing the proportion of the population with long term limiting illness is likely to increase.

Figure 32: Percentage of People Living with Long Term Health Problems or Disability Compared to CIPFA Neighbours, 2011



Data source: ONS, Census 2011 via Fingertips (PHE)

[64] Webb RT, Kontopantelis E, Doran T et al. Suicide risk in primary care patients with major physical diseases: a case control study. *Archives of general psychiatry* 2012;69(3):256-264.
[65] Robinson D, Renshaw C, Okello C et al. Suicide in cancer patients in South East England from 1996 to 2005: a population-based study. *British Journal of Cancer* 2009;101(1):198-201.
[66] http://www.poppi.org.uk/index.php?pageNo=331&PHPSESSID=kfkebcho6lec6jrpvjpl6tuu56&sc=1&loc=8394&np=1

SUICIDE IN SOLIHULL

In 2016, there were 13 suicides in Solihull, with a cost to the annual economy of £21.7 million. However, it is important to note that the number of deaths classified as suicide does not give the full picture of those who take their own life. The Coroner only classifies deaths as suicide when it is shown, "beyond reasonable doubt" that the individual intended to take their own life, which was deliberate, that the act undertaken led to their death and other factors were not involved**.** Consequently, many deaths which are recorded as 'open', 'narrative' or due to 'alcohol and drugs' would be classified as suicide if a 'balance of probabilities' approach was used instead. As a result, the actual number of people who died by suicide could be double the reported figure. The following information includes part of a small audit of reported suicides occurring between 2010 and 2017.

Figures 33a and 33b: Suicide trend in Solihull and England, 2001-2015

Figure 33a

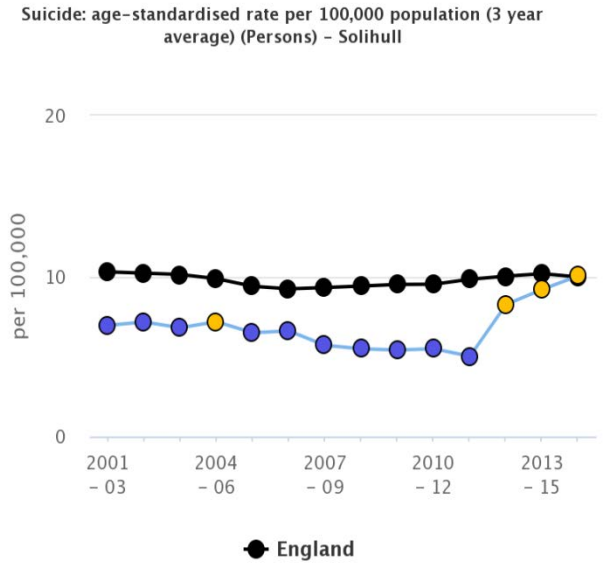
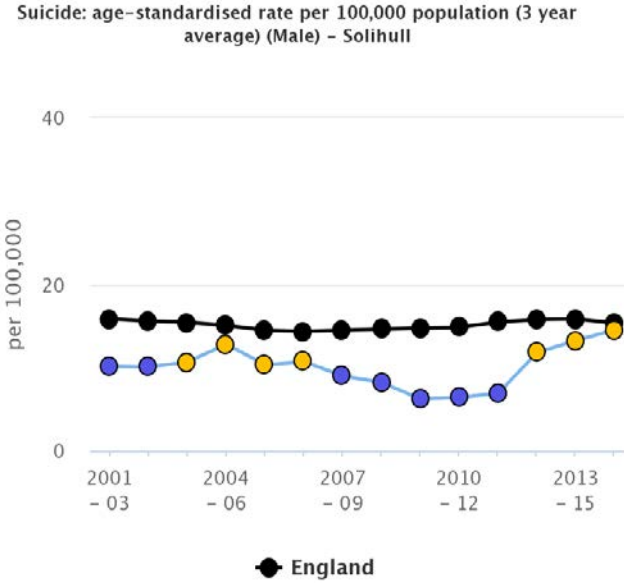
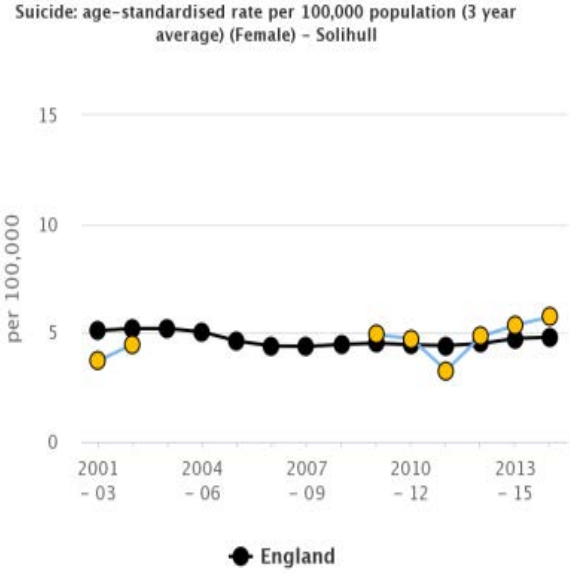


Figure 33b

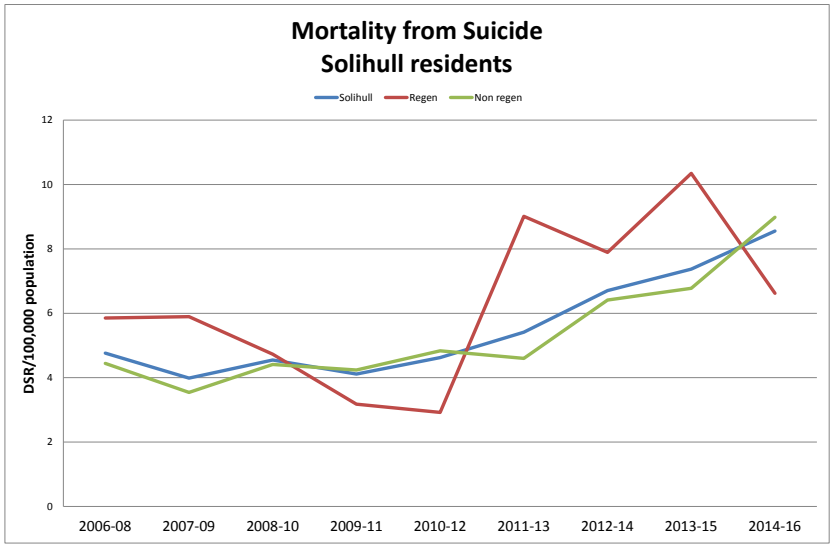




Data source: Suicide prevention profile Fingertips, PHE

Figures 33a and 33b outline the trend of mortality due to suicide by gender. Until 2011-13 the rate of male suicide per 100,000 population appeared to be generally falling compared to England but a sharp rise was noted in 2012-14 which continued in 2014-16. The above data is based *on date of registration* in any calendar year and further investigation of the data showed that during the period 2012-15 cases where verdicts were delivered in this year related to deaths in earlier years. However male suicides continued to rise in 2014-16. The rate of female suicides per 100,000 population, although below that for England, does show a small increase over time. Neither increase is significantly different from England.

Figure 34: Locality of Suicide



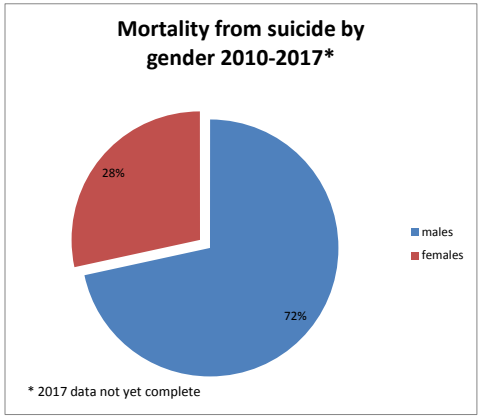
Data source: Local calculation using data from ONS and Open Exeter

Figure 34 shows Solihull deaths from suicide *by date of death*. For Solihull overall, suicides have generally increased since 2006-08 with slightly larger increases recorded since 2011. The suicide rate per 100,000 population for non regeneration areas is similar to that for Solihull as a whole but that for the regeneration area has been erratic and the rate for the current measurement period has shown a decrease.

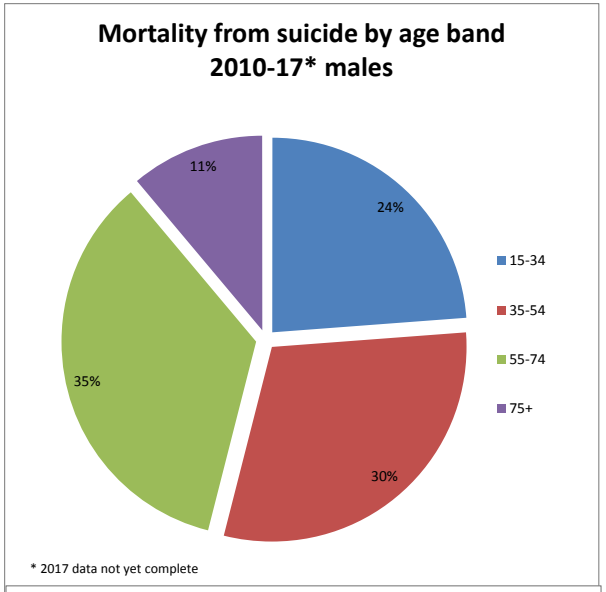
Figure 35: Suicide and Gender

Data source PCMD, Open Exeter

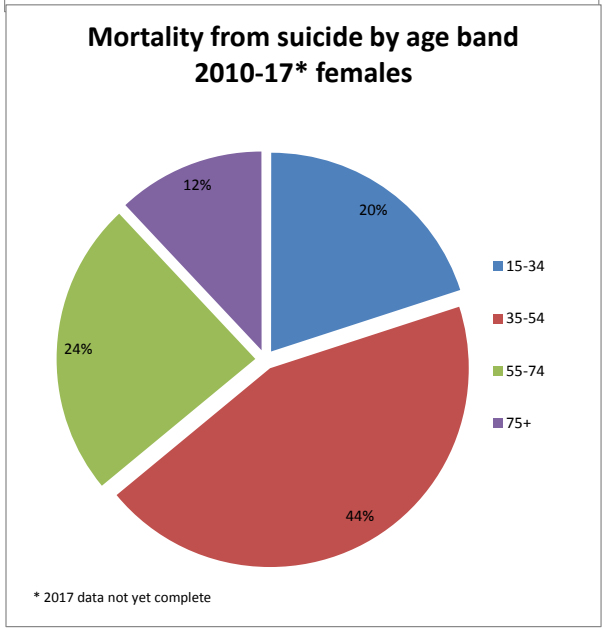
In line with England, three times as many men die by suicide than females in Solihull.



Figures 36a and 36b: Suicide by Age and Gender



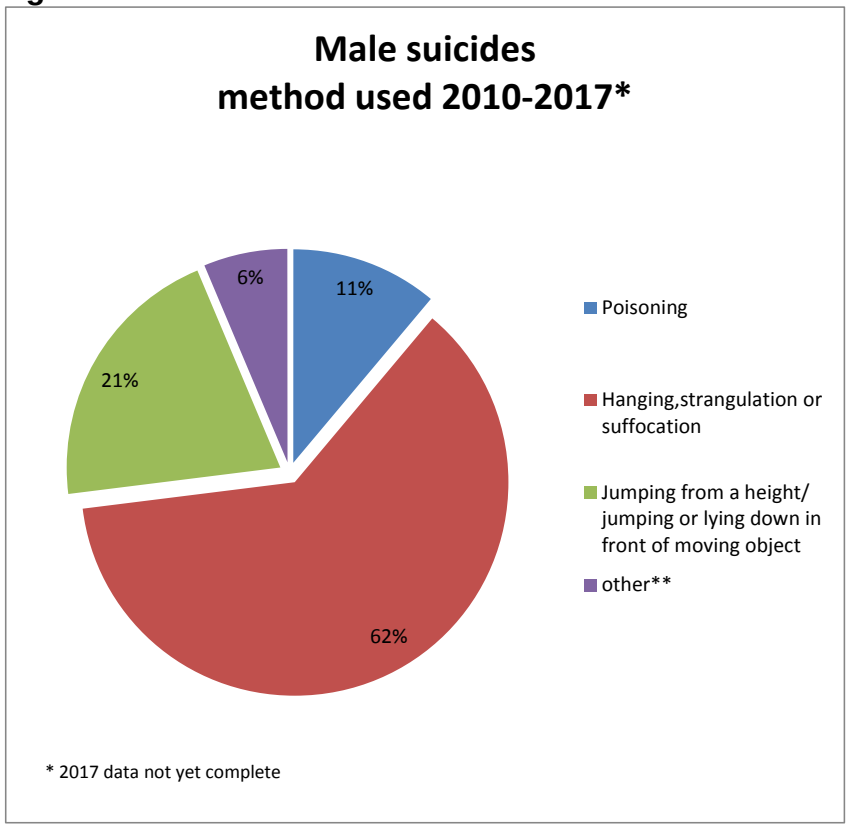
Since the last audit the proportion of male suicides aged 15-34 years has increased from 17% to 24%, whereas the proportion of male suicides aged 55-74 years has decreased from 43% to 35%.



The proportion of female suicides aged between 15 and 34 years has decreased since the last audit from 27% to 20%. However, the proportion in the 35- 54 age group has increased from 33% to 44%.

Figures 37a and 37b: Method of Suicide

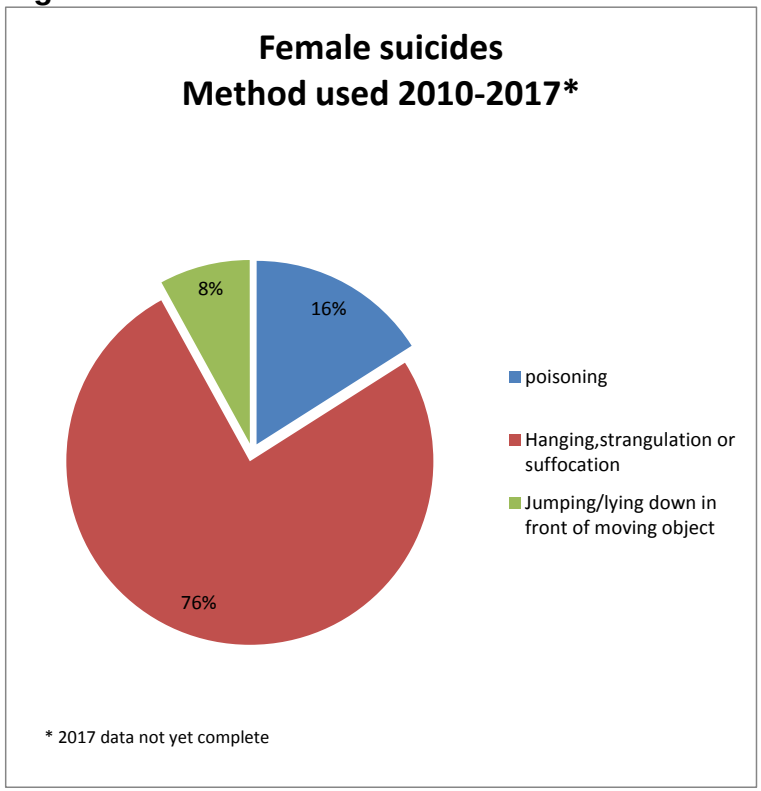
Figure 37a: Males



Data source: PCMD, Open Exeter

Hanging is the most common method of suicide for both genders. Male suicides from hanging/suffocation have increased from 57% to 62% whilst suicides from poisoning have decreased from 17% to 11%. Jumping from a height/jumping or lying in front of a moving object has increased from 14% to 21% since the last audit.

Figure 37b: Females

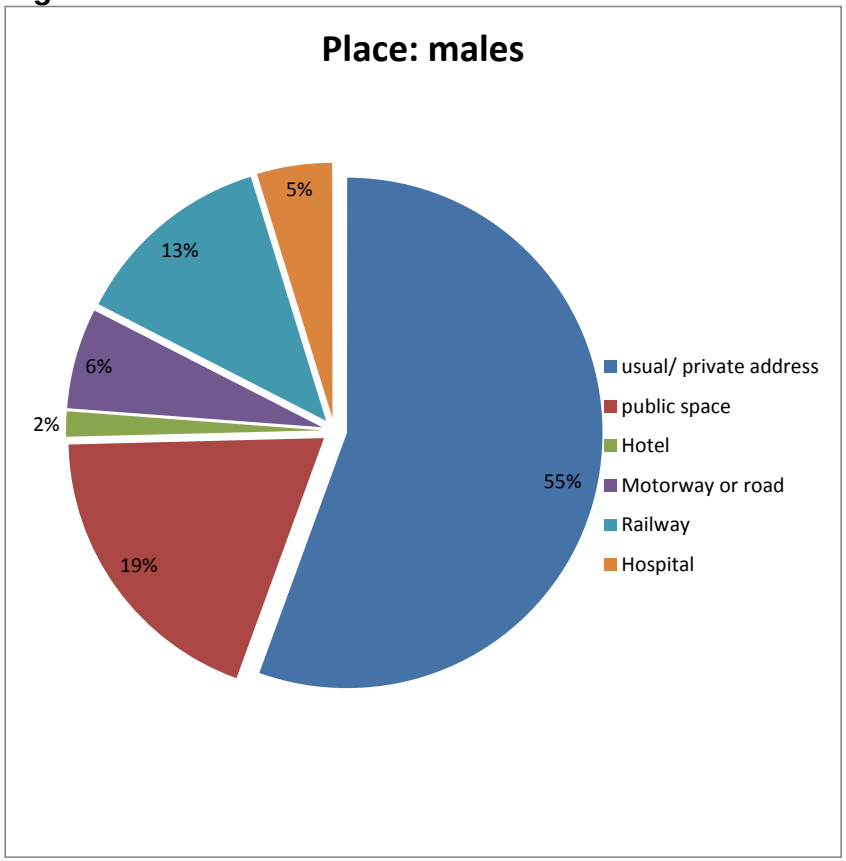


Data source: PCMD, Open Exeter

The proportion of female suicides from poisoning and hanging have increased slightly since the last audit. Consequently the proportion from jumping/lying in front of a moving onject has decreased by 5%. However overall numbers are small.

Figures 38a and 38b: Place of Suicide

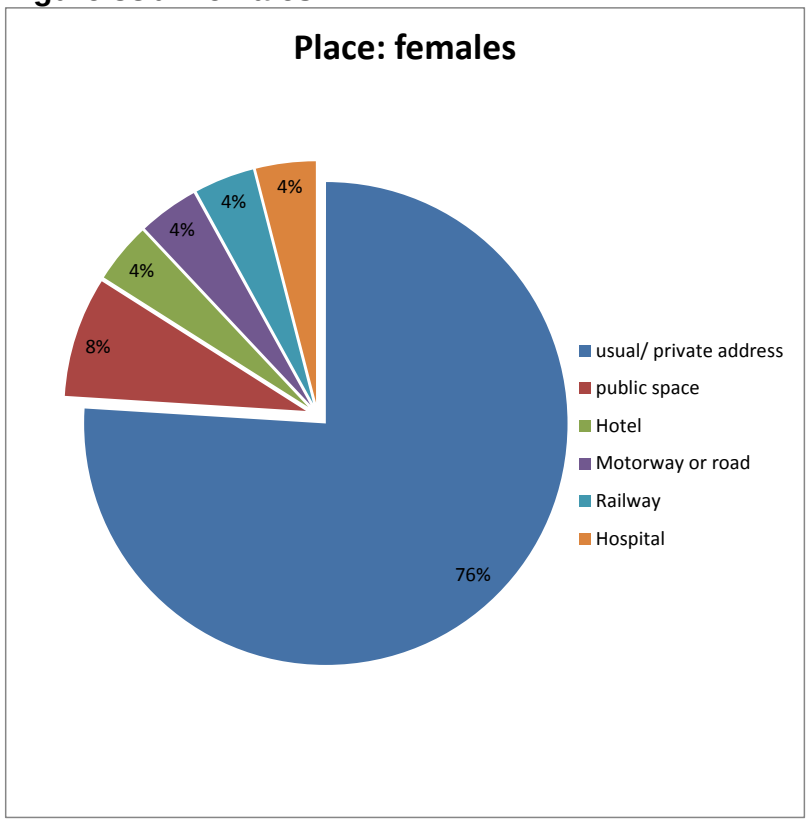
Figure 38a: Males



Data source: PCMD, Open Exeter

Most suicides occur at home (55% males;76% females). For males this is an increase from the previous audit but males are more likely than females to choose a place away from home. Fewer males are dying in hospital and slightly more are choosing to die in a public place but the proportions of the other categories are similar to the last audit.

Figure 38b: Females



Data source: PCMD, Open Exeter

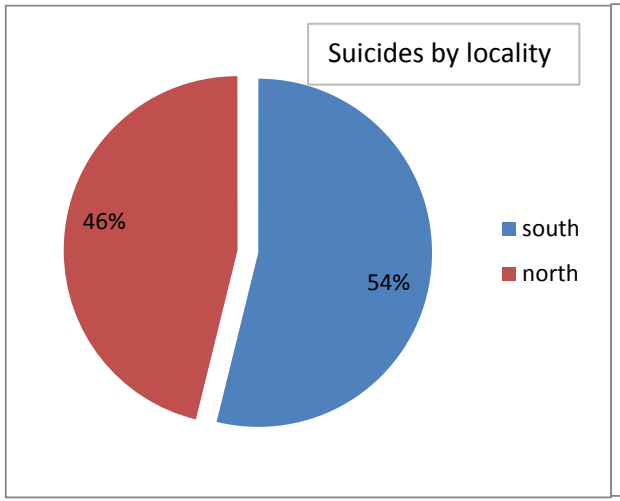
Overall there has been a 3% decrease in females dying at home and no females have died in hopsital. This results in small increases for deaths in public spaces, however the numbers are small.

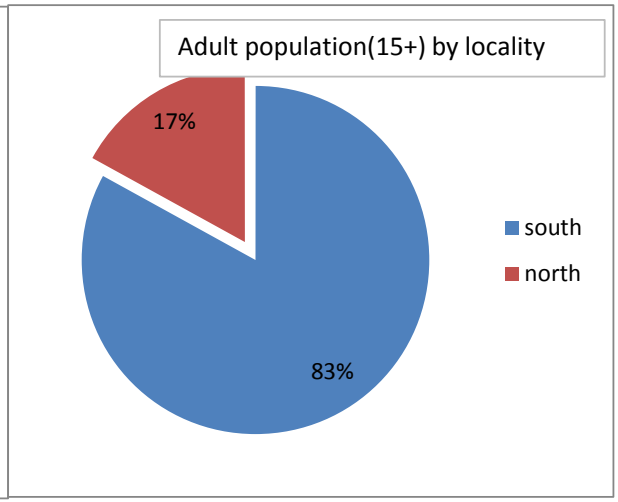
Analysis of the data for both males and feamles has not indicated any “hotspots”.

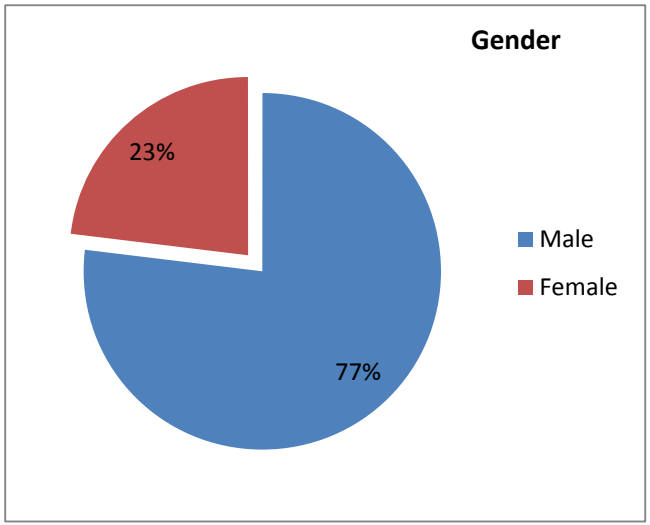
Figure 39: 2016 Suicides by Locality, Gender, Age Group and Ethnicity

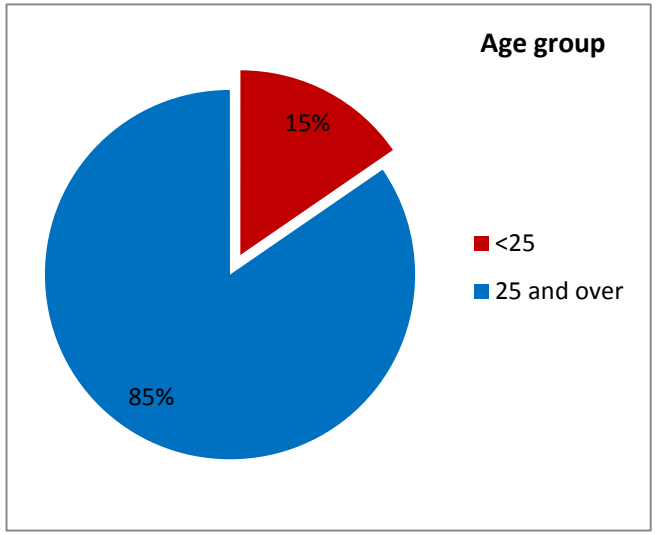
Data Source: Audit of Coroner's records for 2016 suicides, Solihull residents

In 2016, there were 13 suicides for Solihull residents. Figure 39 shows the proportion of North Solihull residents who took their own life in 2016 was higher than would be expected from the proportion of Solihull residents aged 15+ years resident in the area (46% suicides in 17% 15+ population). The proportion of residents aged 15+ years in the South of the borough is 83% of Solihull overall but only 54% of suicides. More men succeeded in taking their lives than women and the majority of suicides were in residents aged over 25 years and of White ethnicity.









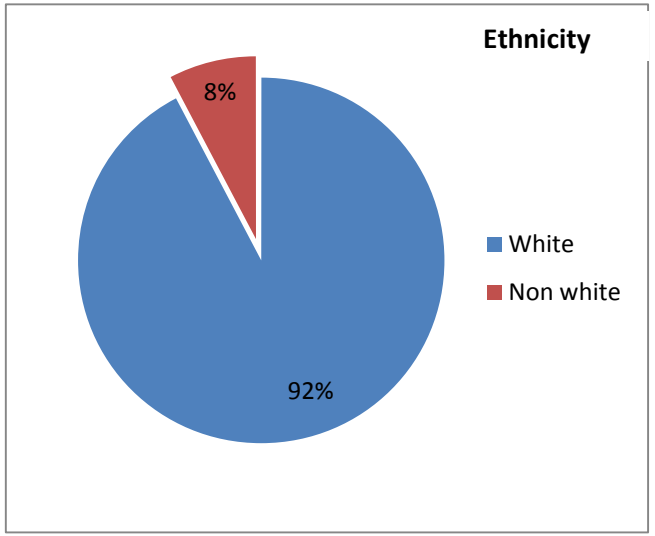
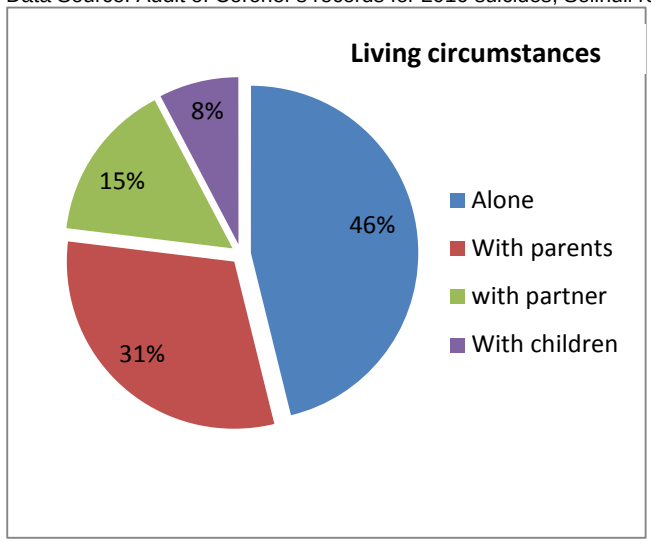
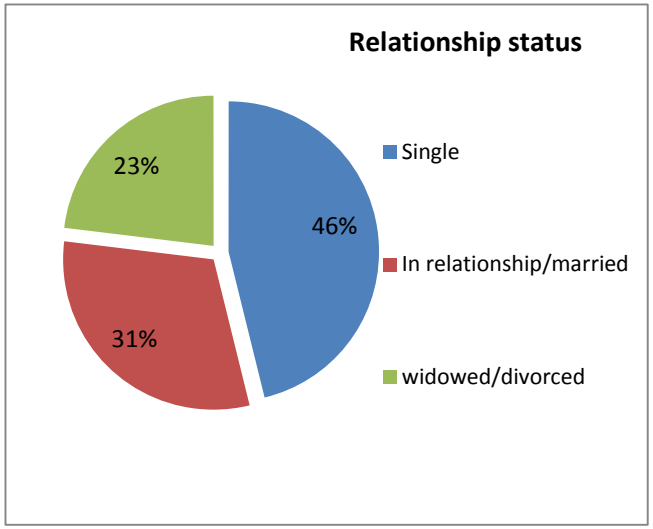
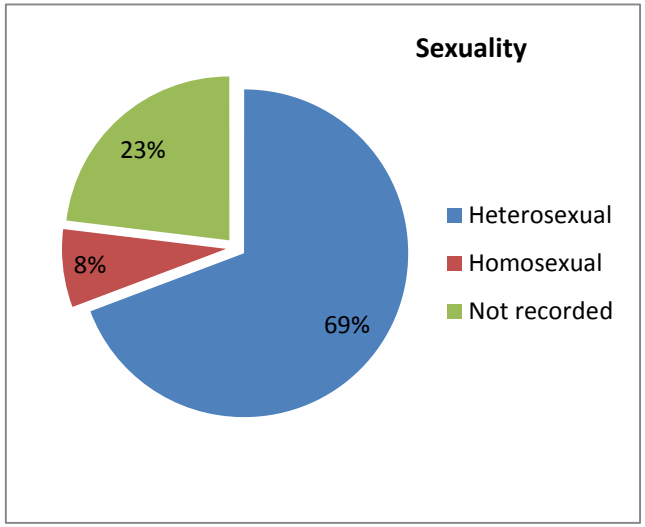


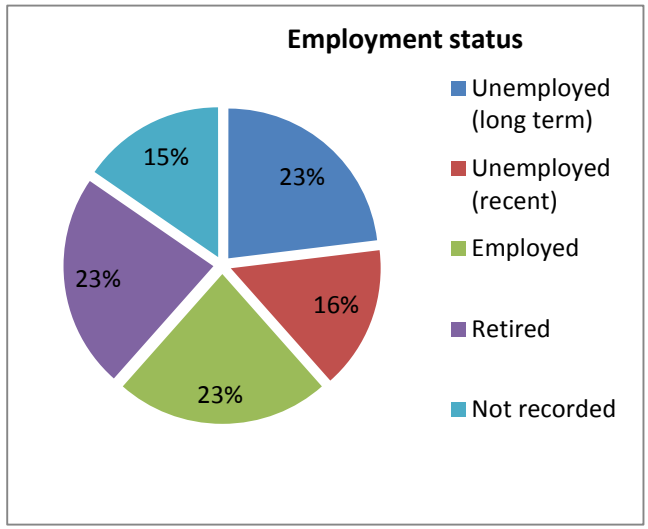
Figure 40: 2016 Suicides by Living Circumstances, Relationship Status, Sexuality and Employment

Data Source: Audit of Coroner's records for 2016 suicides, Solihull residents









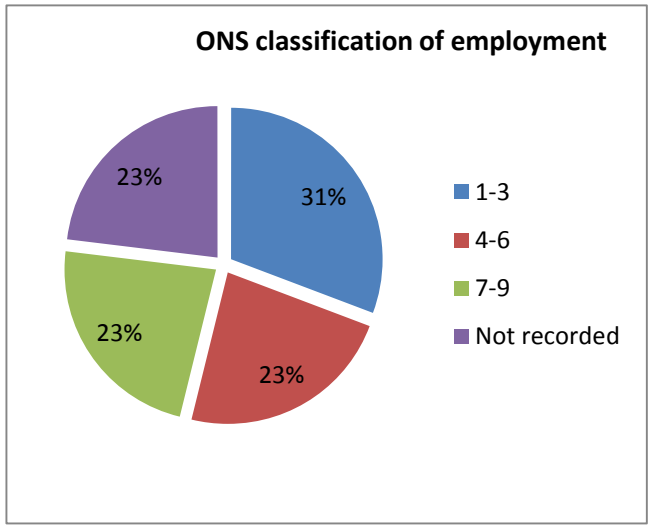
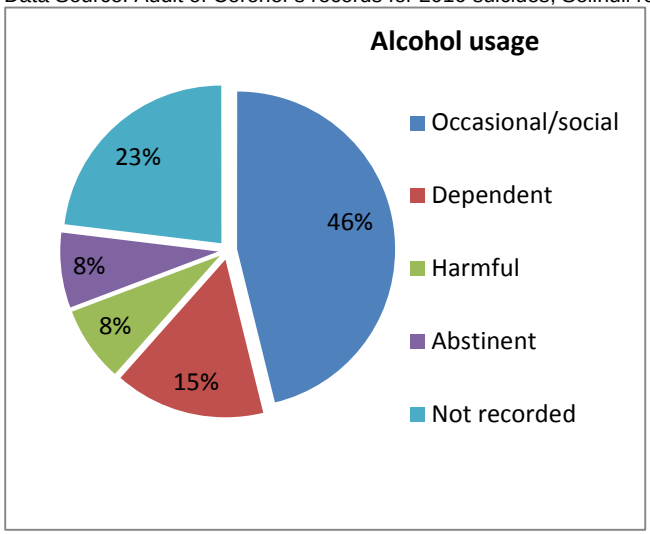


Figure 40 illustrates that just under half of people dying by suicide lived alone and three-quarters (77%) were single, widowed or divorced. The majority were heterosexual, although the number without sexuality documented was high. Over a third (39%) were unemployed (long and short-term) and only 23% were in current employment. Furthermore, the ONS classification of employment shows that occupations 7-9 are over-represented compared to Solihull overall, although the proportion with an unrecorded status is high (23%).

Figure 41: 2016 Suicides by Alcohol and Substance Use, Diagnosed Mental Health Illness and Service Use

Data Source: Audit of Coroner's records for 2016 suicides, Solihull residents



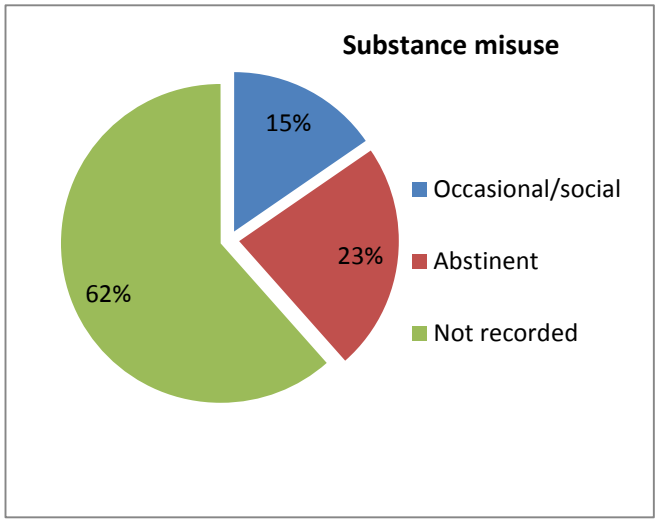
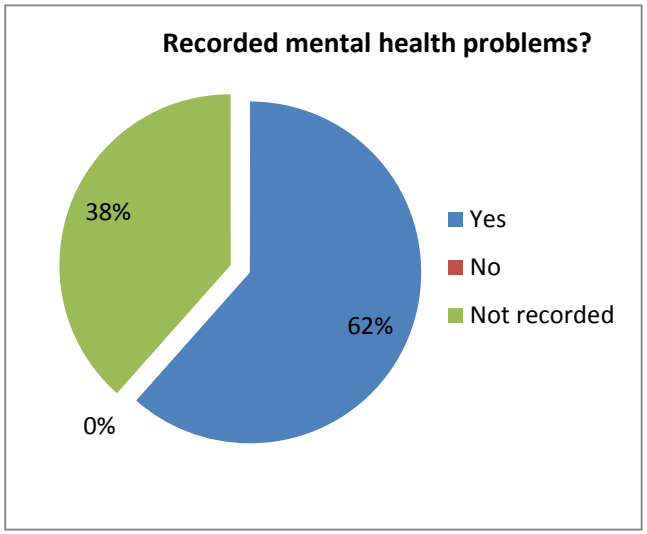
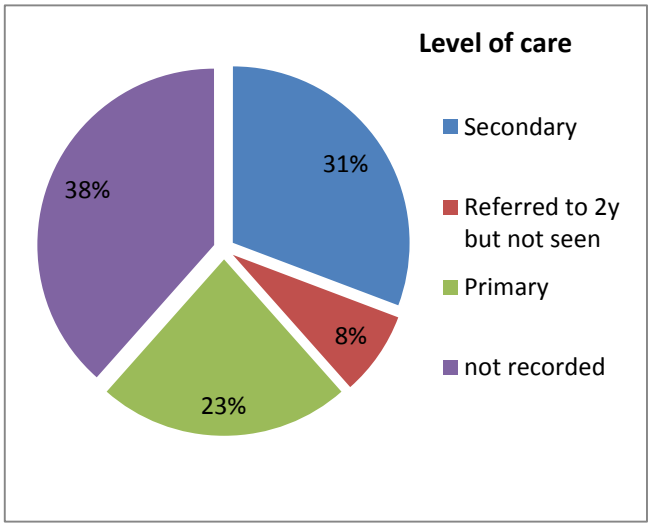


Figure 41 demonstrates that only 8% of people dying from suicide in 2016 abstained from alcohol, although alcohol use was not recorded in 23% of cases. Similarly, a large proportion of records did not have substance use recorded. Two-thirds had a diagnosed mental health illness and 62% of these cases had contact with health services in the 12 months prior to death. Although notably, a large proportion (38%) had nothing recorded.





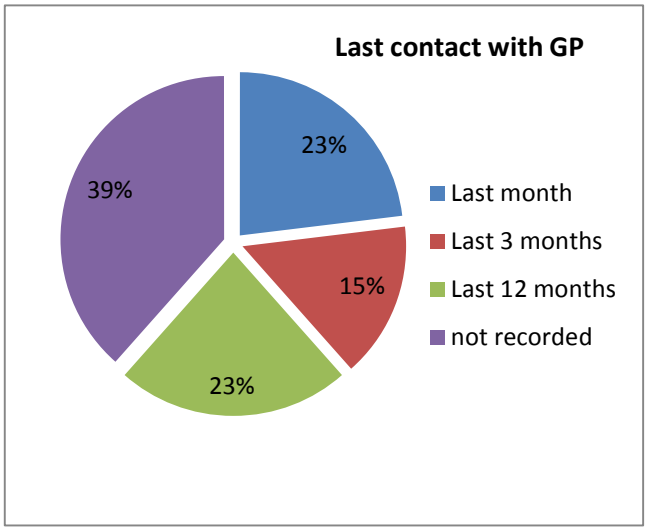
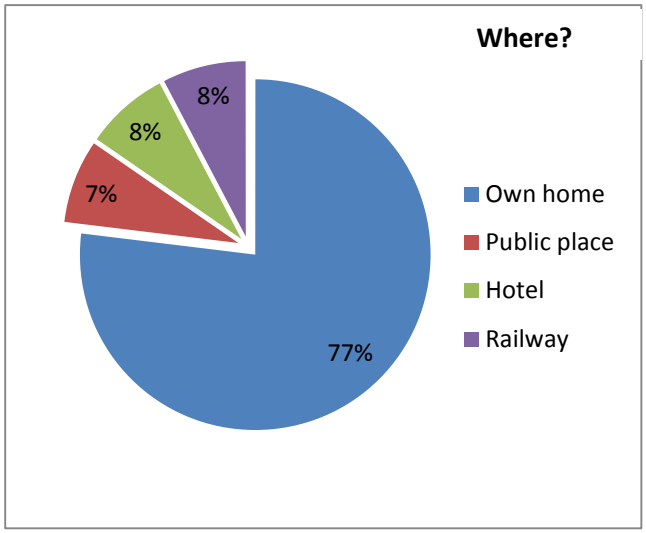
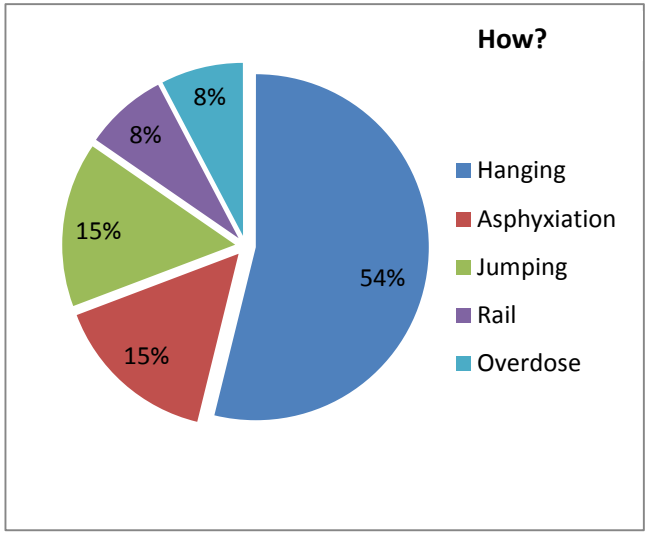


Figure 42: 2016 Suicides by Place and Method of Suicide and Previous Attempt
Data Source: Audit of Coroner's records for 2016 suicides, Solihull residents





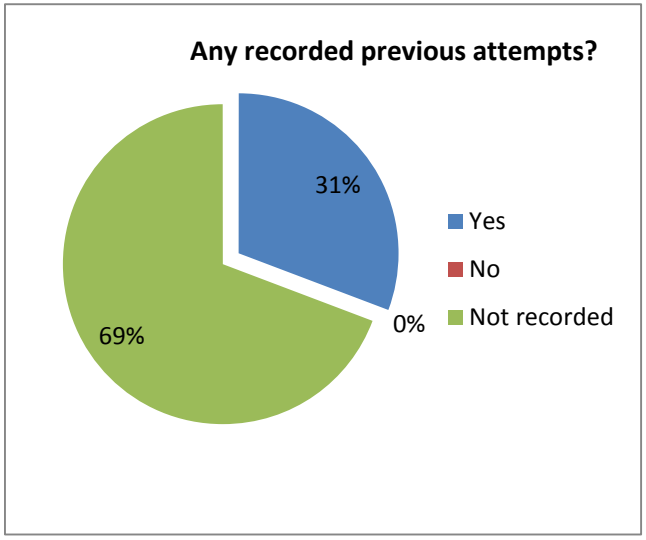


Figure 42 shows that majority of the suicides in Solihull in 2016 were undertaken in the person's own home and the most common method was from hanging and asphyxiation. Nearly one-third of suicide cases had attempted suicide before, although a large proportion did not have this recorded.