Public Health England

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Data intelligence summary: Alcohol consumption and harm among under 18 year olds

Main findings

This report examines the available data on alcohol use and harm among those aged under 18 years of age to investigate trends and highlight any areas for public health action.

Key findings are:

- there is an ongoing downward trend in alcohol consumption among those aged under 16. However, by the age of 17, half of all girls and almost two-thirds of boys report drinking alcohol every week
- young White populations are much more likely to drink than those from a Black and Minority Ethnic group background.
- young people in the least deprived areas are more likely to drink and more likely to drink regularly at the age of 15
- hospital admissions for alcohol-specific conditions, particularly intoxication, are declining among the under 18s
- girls are more likely to be admitted to hospital for alcohol-specific reasons than boys, and are admitted at younger ages
- the number of young people accessing specialist substance misuse services for alcohol problems is at its lowest level, following a peak in 2008-09. However these young people have a range of related risk factors and vulnerabilities that should be addressed in tandem with their substance misuse
- there is some evidence that the alcohol-harm paradox[a] seen among adults is also present for young people living in the most deprived areas.
  there is a strong relationship between smoking and drinking, with current smokers much more likely to drink alcohol frequently than non-smokers

[a] The alcohol-harm paradox is the term used to describe the observation that deprived populations that apparently consume the same, or a lower level of alcohol, suffer greater alcohol-related harm than more affluent populations.

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Background

Evidence from multiple sources shows that risk taking behaviour among young people is declining at a population level.[1,2] Teenagers are less likely to take drugs, to smoke, to drink alcohol or to become pregnant than the generation before them.[1]
However levels of alcohol consumption among United Kingdom (UK) youth are higher than the European average[3] and there are groups of young people who are taking risks and experiencing harm.[4] A recent UK study suggests that pre-teen drinking behaviours are particularly important; while many 11 year old children are yet to explore alcohol, examining the situations in which children drink (how they obtain alcohol, who they drink with, where, when, what they drink) could help inform effective policy and alcohol harm prevention strategies to alleviate the risk associated with drinking in youth.[5] Furthermore, drinking before the age of 15 has a strong association with future problematic drinking and drug use.[6]

This report looks at alcohol use and harm among those aged under 18 in order to highlight where problems may still exist. This information will be useful to local authorities and their partners in assessing local need and commissioning interventions to reduce alcohol harm among young people.

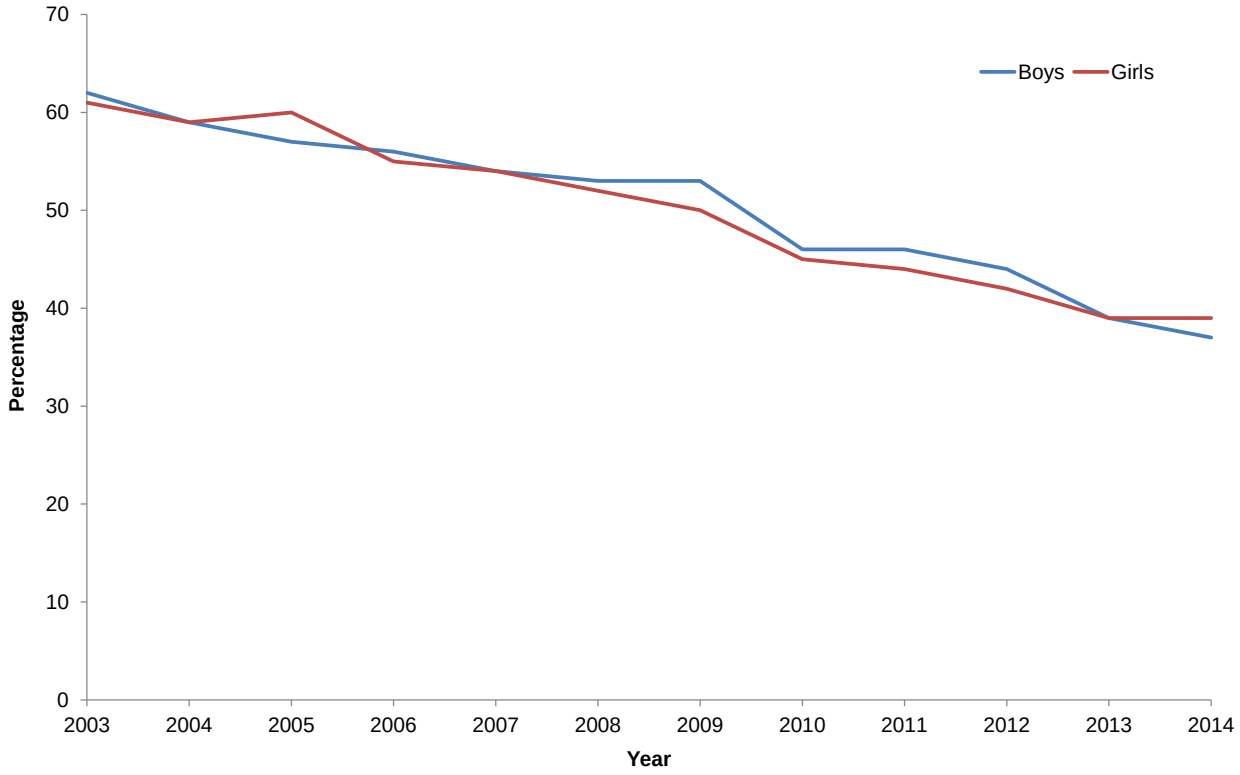
Methodology

The analyses draw on data from the Health Survey for England (HSE), Hospital Episode Statistics, the National Drug Treatment Monitoring System (NDTMS), the Smoking, Drinking and Drug Use among Young People survey (SDD) and the What About YOUth? (WAY) Survey. Survey data were accessed from the UK Data Archive and analyses were undertaken using SPSS version 22. Survey weights were applied where appropriate to ensure that results are representative of the national population.

Alcohol consumption by children (under 18 years)

The Smoking, Drinking and Drug Use among Young People in England (SDD) survey is the primary source of data on alcohol consumption among young people.[1] This survey is conducted in secondary schools with pupils aged between 11 and 15 year via self-completion questionnaire. Over the past decade, there has been a strong downward trend in drinking behaviour among 11 to 15 year old boys and girls, however the most recent years data suggests that, for girls, this decline may be starting to level off (see Figure 1).

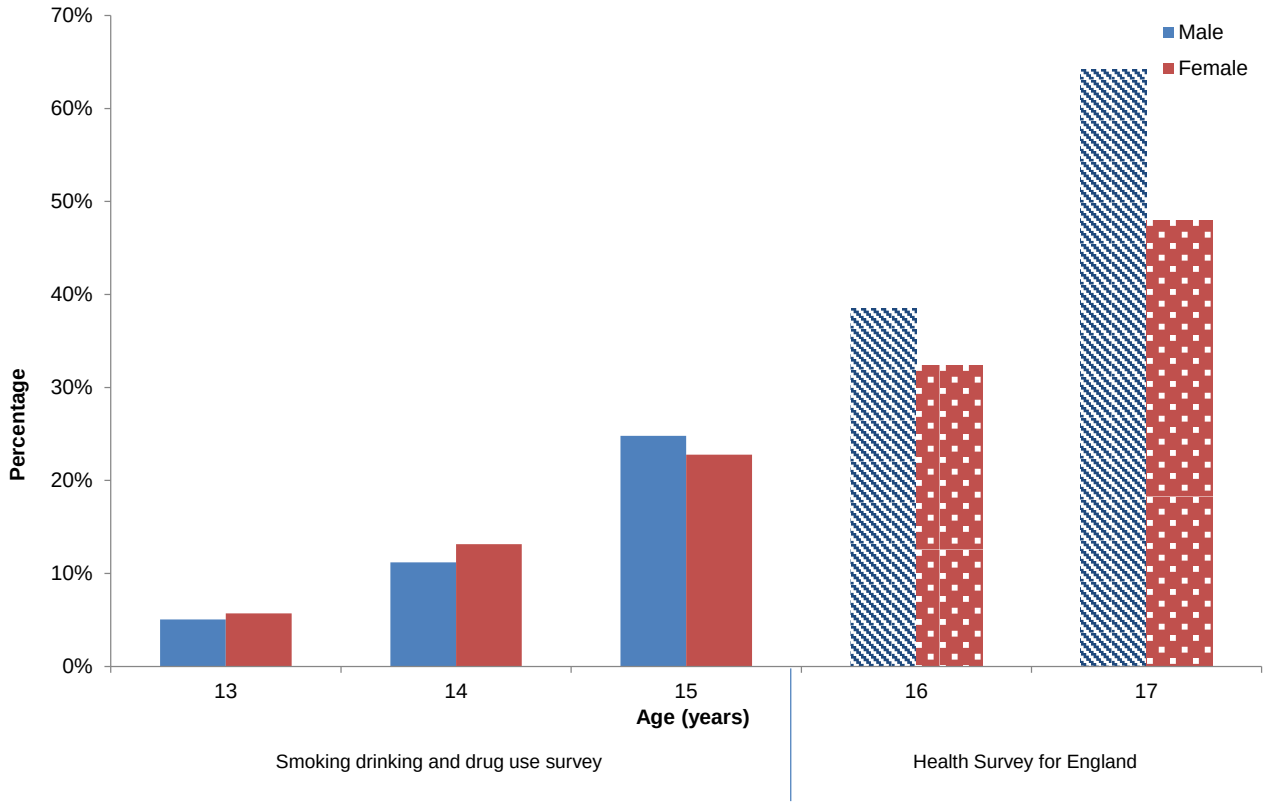
Figure 1. Proportion of pupils aged 11 to 15 years who have ever had an alcoholic drink.



Source: Smoking, Drinking and Drug Use among Young People in England, 2014

The SDD data for 2011 to 2014 shows that very few children under the age of 13 were drinking alcohol, but that consumption rates increased steadily throughout the teenage years. Although SDD data is only available for children up to the age of 15, the Health Survey for England (HSE)[7] provides data regarding drinking behaviours for 16 and 17 year olds. Figure 2 shows the proportion of children aged 13 to 17 who said that they had drunk alcohol in the last week in either the SDD survey or the HSE. By the age of 17, almost two-thirds of boys (64%) and half of girls (48%) were drinking weekly.

Figure 2. Percentage of children who drank alcohol in the past week by age, 2011-2014.



Source: Smoking, Drinking and Drug Use among Young People in England, 2014 (data for 13-15 year olds), Health Survey for England (data for 16-17 year olds).

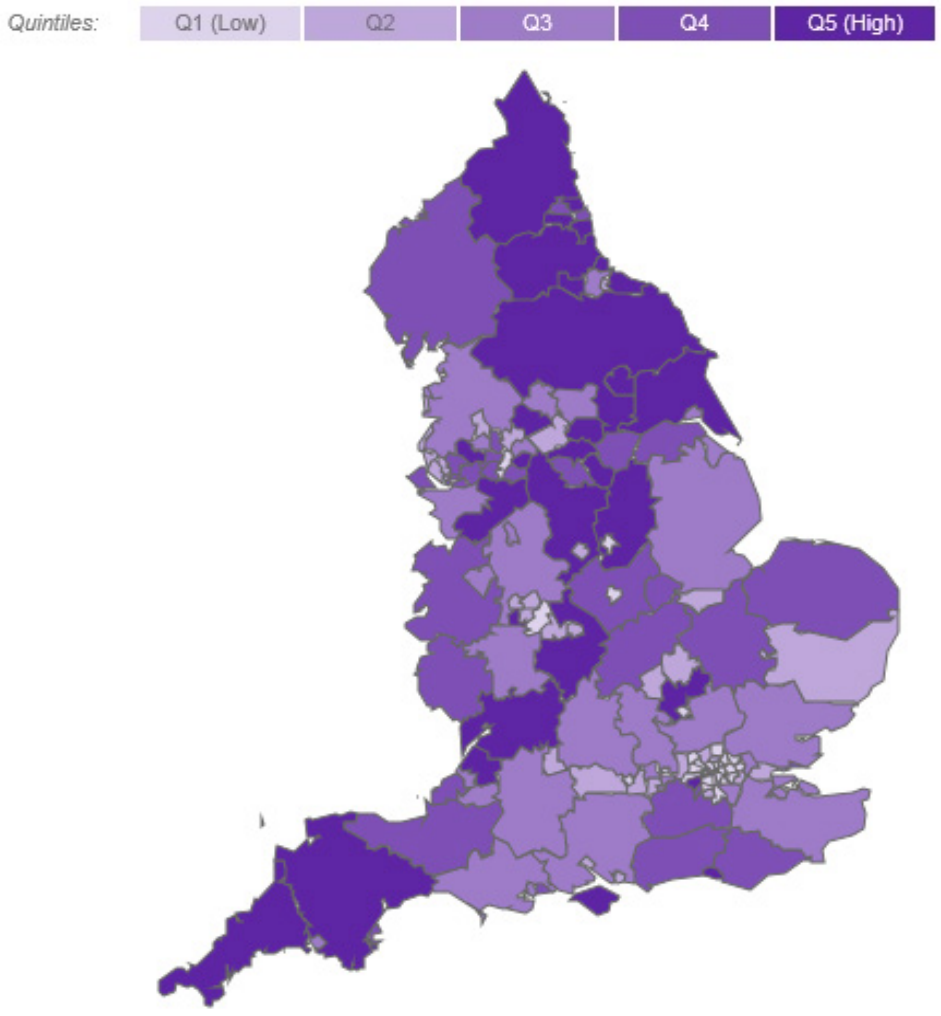
In 2014 a survey of 15 year olds was undertaken in England. The What About YOUth Survey (WAY)[8] provides further insight into drinking behaviour among teenagers and, unlike the SDD survey, can provide a robust sub-national breakdown (local authority level) as well as further demographic breakdowns (eg by age, gender and deprivation level).

Results of the WAY 2014 survey[8] revealed that 62% of respondents had drunk an alcoholic drink, with 6% being classified as regular (weekly) drinkers. Fifteen percent of respondents said that they had been drunk in the previous four weeks. Girls were more likely than boys to have had a drink (65% and 60% respectively) and to have been drunk in the past month (girls 18%; boys 12%) but were slightly less likely to be regular drinkers (girls 7%; boys 6%). Young White people were much more likely to have had an alcoholic drink than those from a Black and Minority Ethnic group background (72% compared with 27%).

Patterns of drinking also varied by deprivation group with young people in the least deprived areas being more likely to have had an alcoholic drink (66%) and to be regular drinkers (8%) than those in the most deprived areas (44% and 4% respectively). This is similar to the pattern observed for adult drinkers.

Examining the WAY 2014 data at local authority level reveals wide variation in drinking prevalence, for example, 78% of 15 year olds in Barnsley had ever had an alcoholic drink compared with 15% in Tower Hamlets. Darlington was the local authority with the highest proportion of regular weekly drinkers (12.3%). In boroughs with high proportions of Black and Minority Ethnic group populations, such as parts of London and Leicester, prevalence of regular drinking among 15 year olds was below 1%. Figures for all local authorities are available through the Public Health England fingertips tools (http://fingertips.phe.org.uk/profile/what-about-youth). Figure 3 shows rates of regular drinking broken down into quintiles[b] across local authorities. The highest rates were seen in the North East and the South West.

Figure 3. Percentage of young people who were regular drinkers, England 2014.



Source: What About YOUth? Survey 2014

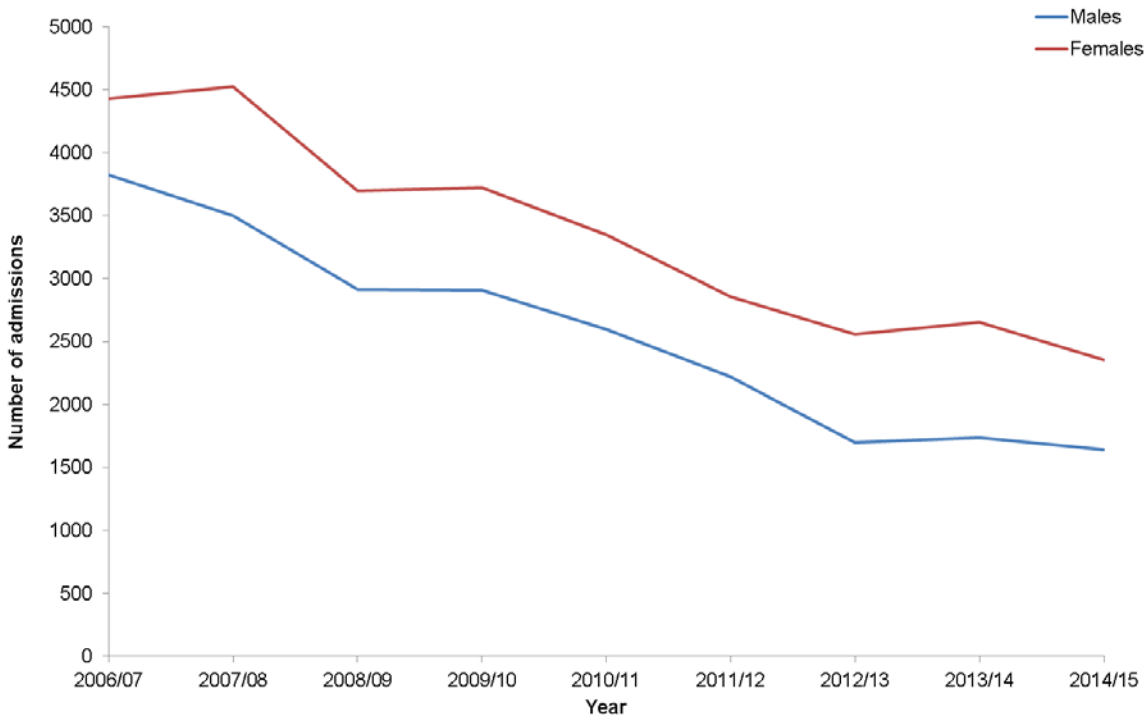
[b] Local authorities have been divided according to their Index of Multiple Deprivation (IMD) rank into five equal groups (quintiles).

Alcohol harms and the under 18s

Hospital admissions

PHE publishes data on alcohol-specific hospital admissions[c] among under 18 year olds in the Local Alcohol Profiles for England.[d] At a local authority level, this data is only available as three-year averages and for both genders combined. At an England level, data is available by gender and single year. Figure 4 shows the trend in the number of admissions from 2006/07 to 2014/15. Overall, the numbers have halved in less than a decade – there is downward trend across both sexes although the most recent years of data suggest some levelling off. Unlike all adult alcohol indicators, the number and rate of admissions is higher for girls than it is for boys.

Figure 4. Alcohol-specific hospital admissions, under 18 year olds, England.



Source: Hospital Episode Statistics

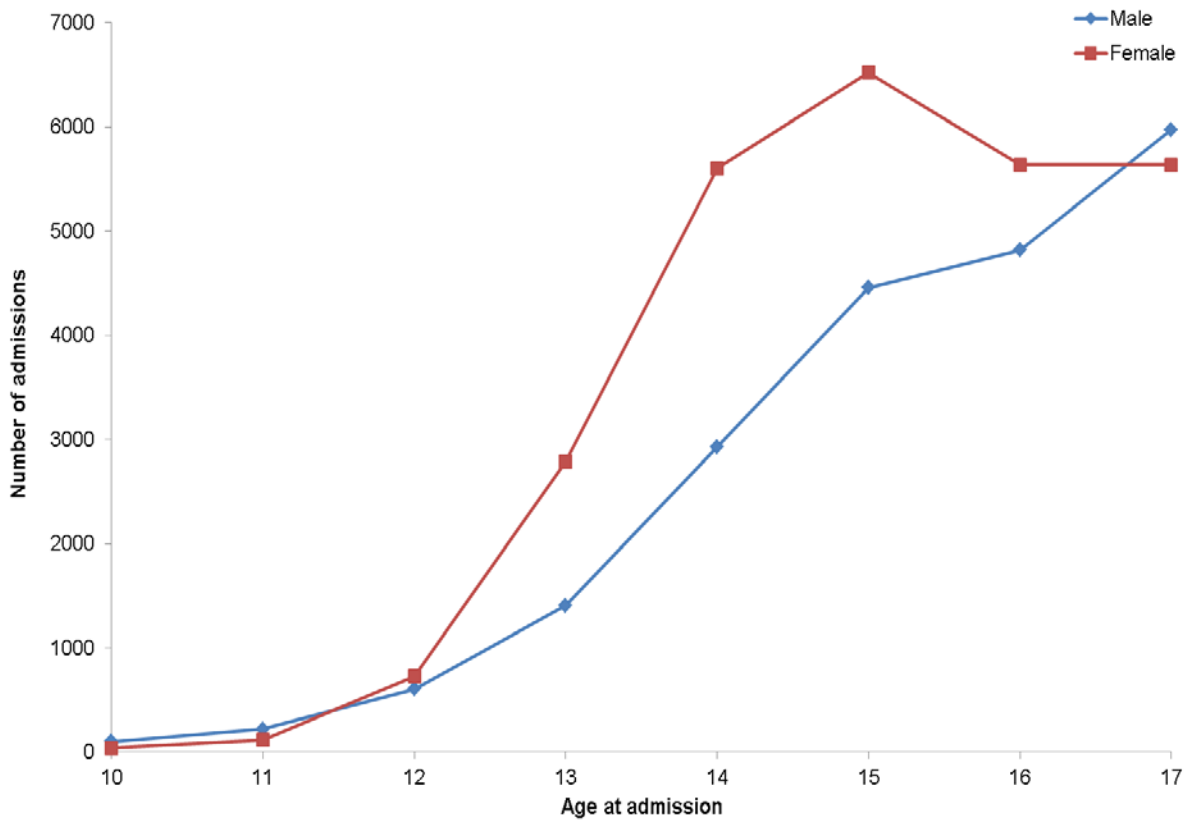
For girls, hospital admissions rise sharply from the age of 13 and seem to peak at age 15, whereas for boys they continue to rise throughout the teenage years. Early onset studies

[c] Alcohol-specific conditions include those conditions where alcohol is causally implicated in all cases of the condition; for example, alcohol-induced behavioural disorders and alcohol-related liver cirrhosis.

[d] Local Alcohol Profiles for England (LAPE) available at: http://fingertips.phe.org.uk/profile/local-alcohol-profiles

suggest that the age of alcohol initiation is the single biggest predictor of future alcohol problems.[6]

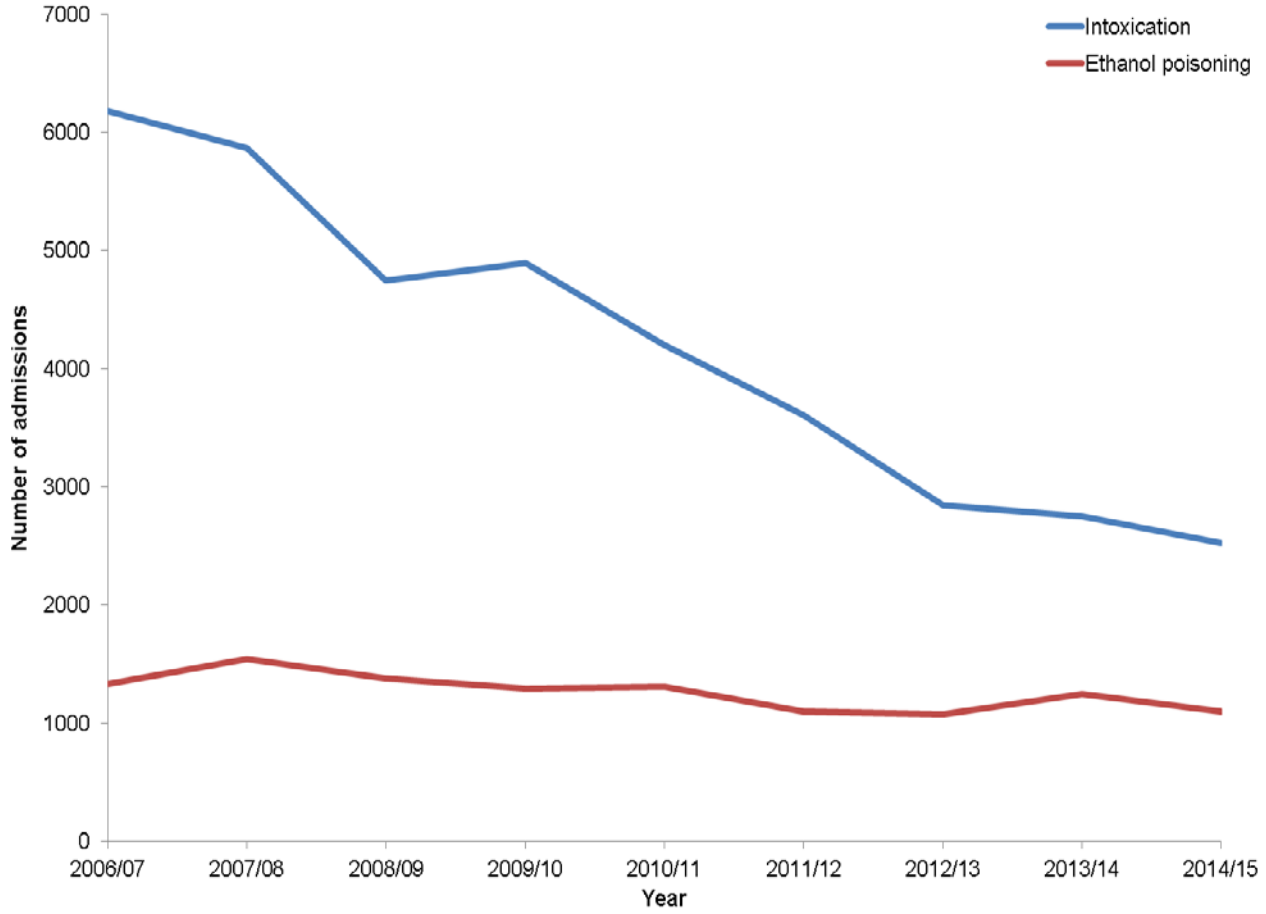
Figure 5. Alcohol-specific admissions by age at admission, England 2006/07 to 2014/15.



Source: Hospital Episode Statistics

The majority of hospital admissions for alcohol-specific conditions among the under 18s were for intoxication and this is the admission cause which has seen a sharp decline over the past 10 years (Figure 6). Admissions for alcohol poisoning (ethanol poisoning) have remained largely flat over the same time period which could suggest that the numbers who are engaged in the most harmful drinking behaviour has not reduced.

Figure 6. Hospital admissions by selected reason for admission, under 18's. England, 2006/07 to 2014/15.



Source: Hospital Episode Statistics

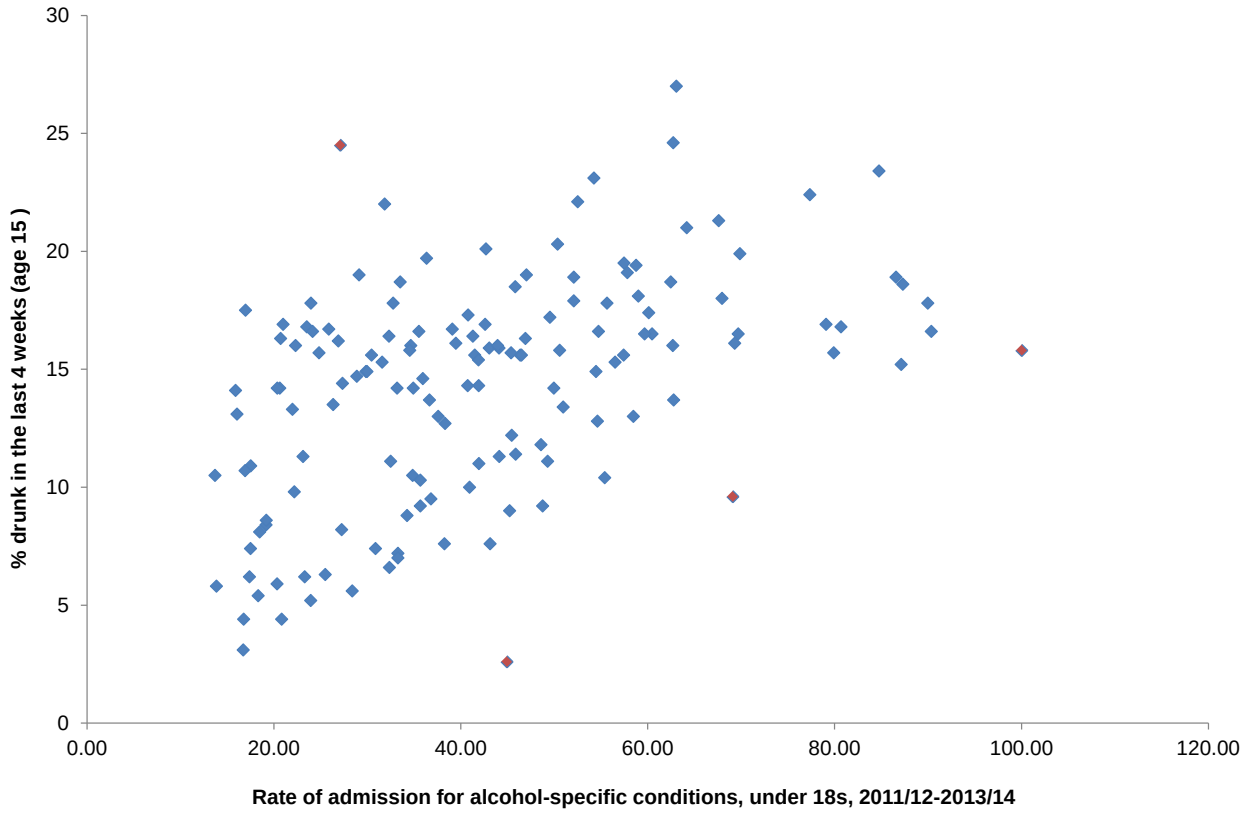
Relationship between alcohol-related admissions and alcohol consumption

The availability of consumption data at local authority level from the WAY 2014 survey provides a mechanism to compare consumption and harm. It might be expected that areas with a high prevalence of 15 year olds who say they have been drunk in the past month would be linked with areas with a high rate of hospital admissions among under 18s. The scatter chart below (Figure 7) compares consumption from the WAY survey with the rate of hospital admissions over the three year period from 2011/12 to 2013/14.

Whilst there is a clear association, there are also a number of areas that do not conform to this pattern (these 'outliers' are highlighted in red, Figure 7). The outliers below the main bulk of data are areas with higher harm than you might expect given prevalence of consumption.

These are all local authorities in the most deprived IMD decile.[e] Conversely, the outlier at the top of the chart, where harm is less than you might expect, is Richmond which is in the least deprived IMD decile. This is a pattern which has also been observed in adult alcohol data, whereby the harm experienced by those in the most deprived areas is higher than you would expect given consumption patterns alone.[9]

Figure 7. Correlation of rate of admission for alcohol specific conditions (under 18's) 2011/12 to 2013/14 with percentage of 15 year olds who were drunk in the last week.



Source: What About YOUth? Survey 2014 and Hospital Episode Statistics

Treatment for alcohol misuse

Information on the number of young people (aged under 18) in treatment for alcohol and drug misuse is available from the National Drug Treatment Monitoring System (NDTMS) and is published annually.[10]

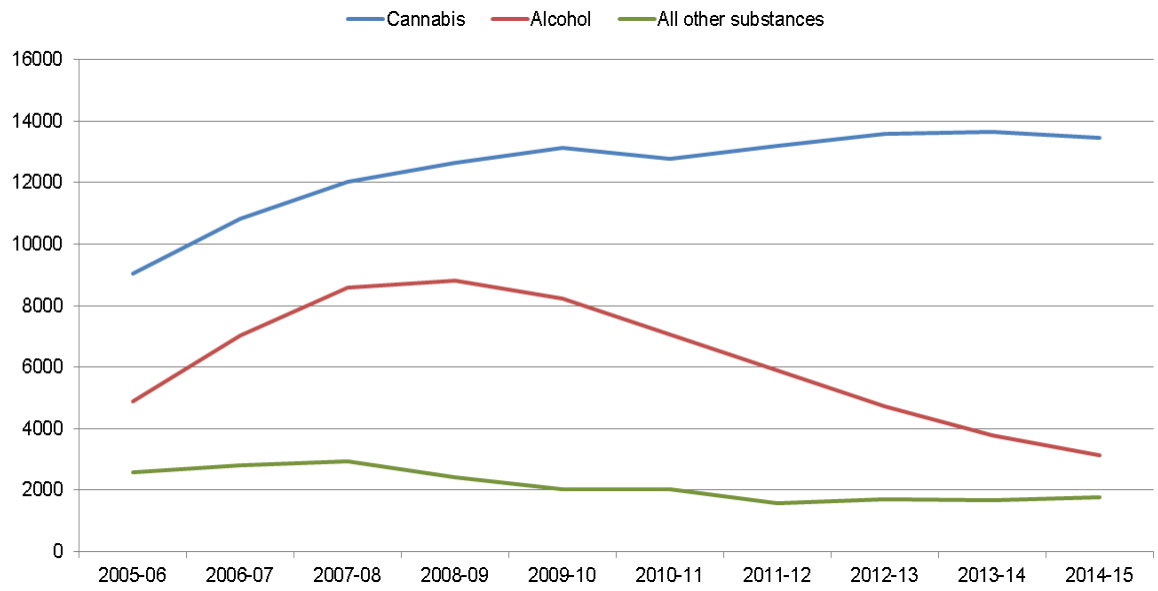
Alcohol is the second biggest problem substance, after cannabis that young people present to specialist substance misuse services for help with. Just over half of the young people in treatment in 2014/15 (51%) were seeking help for alcohol misuse

[e] Local authorities have been divided according to their Index of Multiple Deprivation (IMD) rank into 10 equal groups (deciles).

with 3,133 young people citing alcohol as the primary substance they needed treatment for.

The numbers of young people in treatment for alcohol problems have been declining steadily in recent years, from a peak in 2008/09 (Figure 8). However, those young people who do seek treatment for their substance misuse have a range of related problems, risks and vulnerabilities that are likely to have an impact on their substance use, such as self-harming, offending, domestic abuse or sexual exploitation and abuse. It is therefore important that specialist services are working with a range of other agencies to ensure that all a young person's needs are met.

Figure 8. Number of young people in treatment by primary substance 2005-08 to 2014-15.



Source: National Drug Treatment Monitoring System

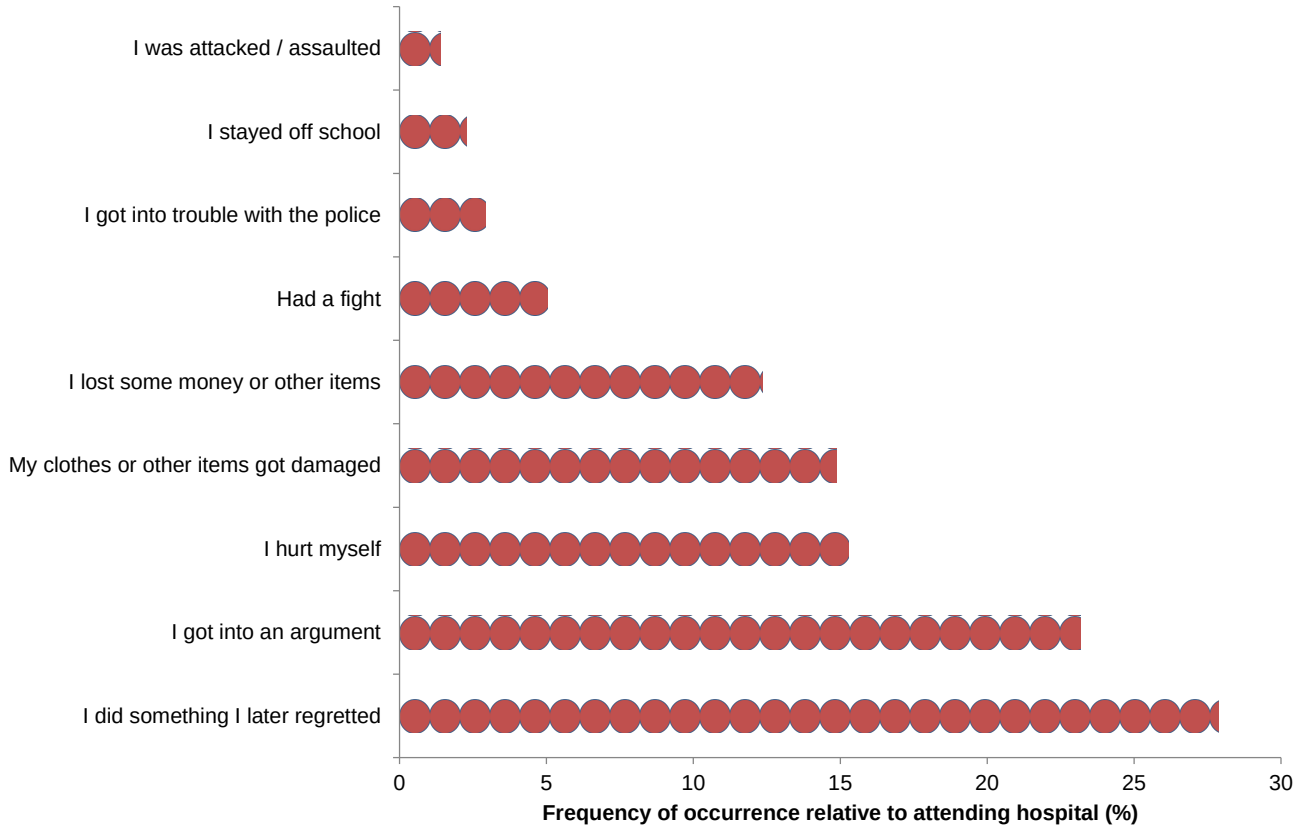
Consequences of alcohol consumption

While hospital admissions related to alcohol are on the decline for young people, there are many other harmful consequences from drinking alcohol. In the WAY 2014 survey, respondents who said that they had been drunk in the past four weeks were asked a series of questions about the consequences from their drinking over that period. The most commonly reported consequence was having done something which they later regretted as a result of alcohol (15.7%). Needing to go to hospital was the least reported consequence (0.6%) with "I got into trouble with the police"

reported 3 times more often (1.7%), “I got into a fight” reported 5 times more often (2.8%) and “I hurt myself” reported 14 times more often (8.6%).

Figure 9 shows the frequency of different reported consequences relative to the number who reported that they had to go to hospital.[f] For example, there are five circles for “Had a fight” to illustrate that this is five times more likely than going to hospital. It is useful to consider the data in this way as hospital admissions is the primary indicator we use to measure alcohol harms to young people because it is readily available. However, this is actually much less likely to occur than other forms of harm. Alcohol consumption is associated with increased risk of having sex at a younger age, unprotected sex, teenage pregnancy and the risk of developing a sexually transmitted disease.[11]

Figure 9. Consequences of alcohol consumption relative to frequency of hospital attendance, 15 year olds who were drunk in the last 4 weeks.



Source: What About YOUth? Survey 2014

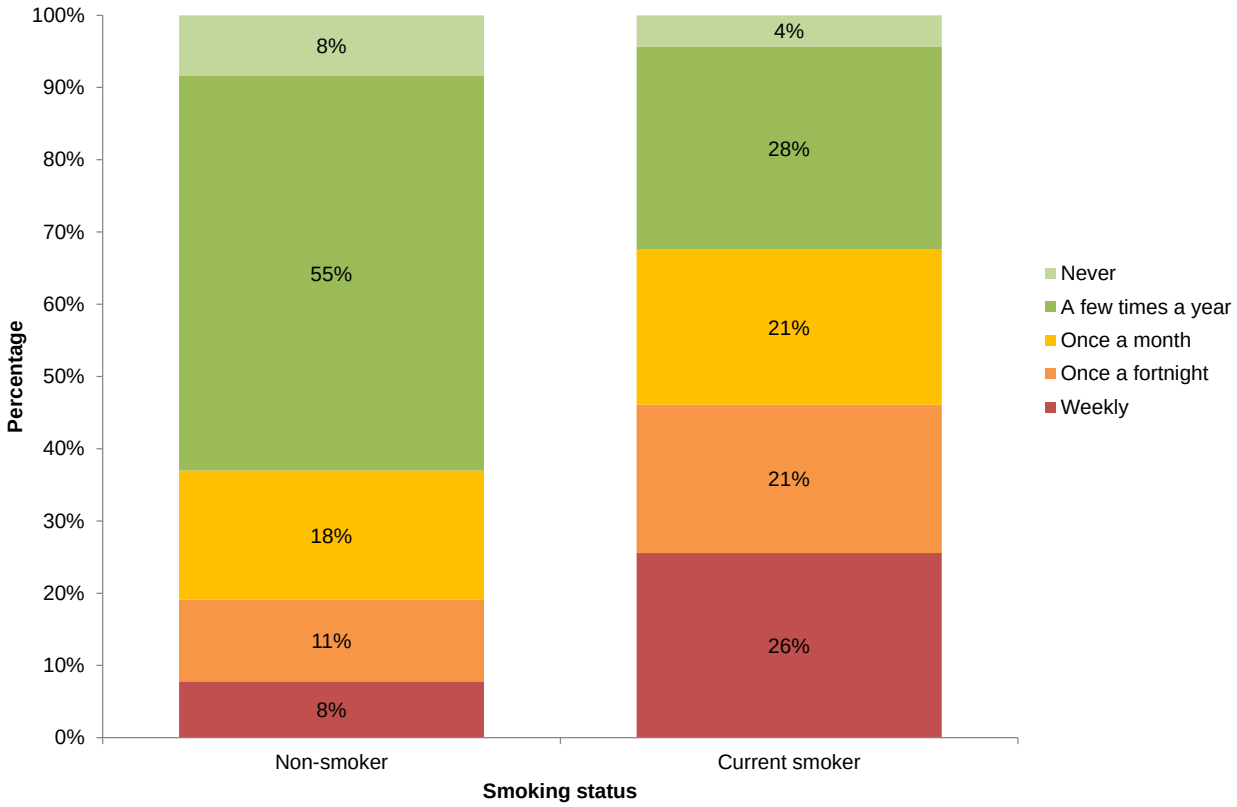
[f] Number of positive responses to each of the nine ‘consequences’ questions divided by the number of positive responses to the ‘I was taken to hospital’ question.

Interaction between smoking and drinking

Among adults there is a strong relationship between the likelihood of being a heavy drinker and smoking status. Both current and former smokers are more likely to drink at levels which present a risk to their health than non-smokers.[7]

The WAY 2014 survey allows drinking and smoking behaviour among young people to be examined together. This showed a strong relationship between frequency of alcohol consumption and smoking status (Figure 10), with those who smoke being much more likely to drink frequently. For example, 26% of current smokers drank weekly, compared to 8% of non-smokers.

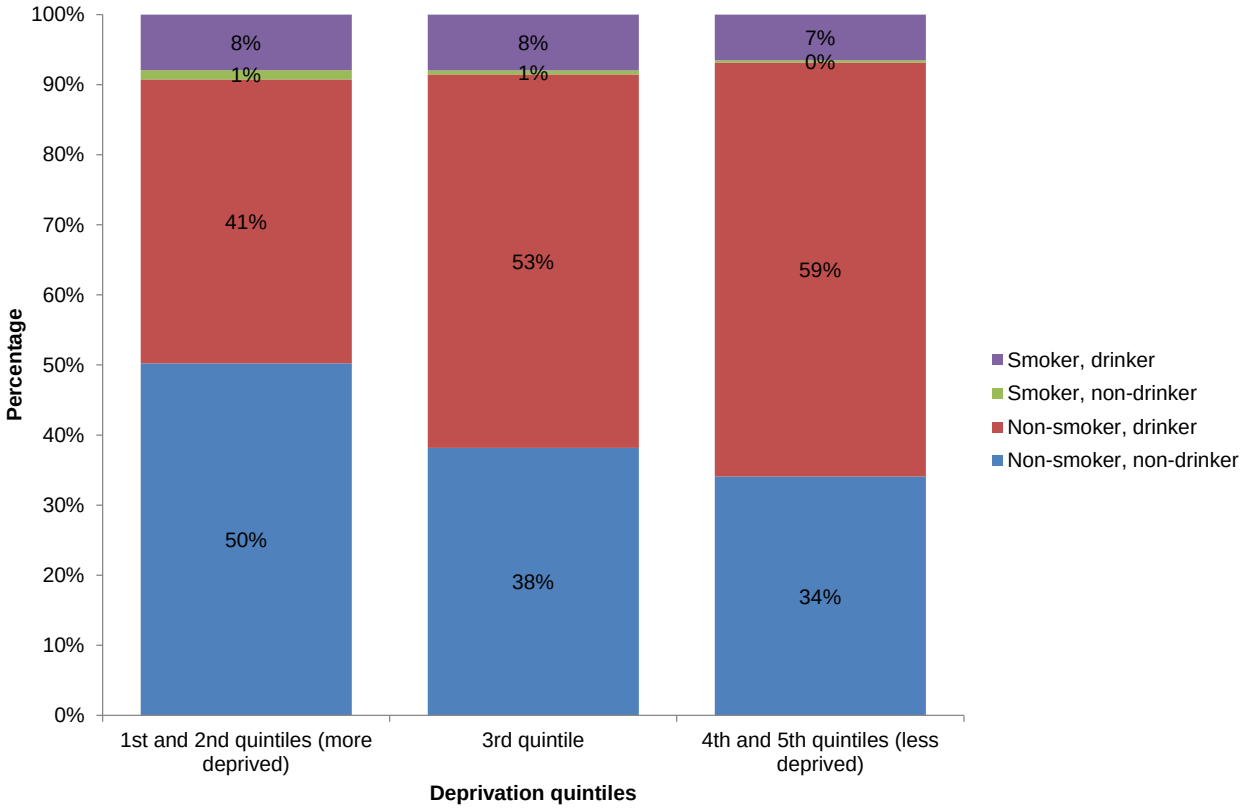
Figure 10. Frequency of alcohol consumption by smoking status, 15 year olds. England, 2014.



Source: What About YOUth? Survey 2014

Deprivation appears to affect the relationship between smoking and drinking (Figure 11). Those in the more deprived areas are more likely to abstain from both alcohol and tobacco (50% compared to 34% in least deprived areas). However, amongst those who do drink, 16% were also smokers in the least deprived areas, compared with 10% in the more affluent areas.

Figure 11. Current drinking and smoking status of 15 year olds by deprivation group. England, 2014.



Source: What About YOUth? Survey 2014

Conclusions and implications of this analysis

The evidence suggests that fewer young people are drinking alcohol than they did in the past and fewer are suffering serious health implications needing attendance at hospital. However, despite recent declines, the proportion of children in the UK drinking alcohol remains well above the European average and the majority of 17 year olds do drink alcohol.[3] The UK continues to rank among the countries with the highest levels of consumption among those who do drink, and British children are more likely to binge drink or get drunk compared to children in most other European countries. Furthermore, other consequences of alcohol consumption such as regretted sexual activity, arguments, involvement in crime and violence are more prevalent than hospital attendance.

The availability of the WAY 2014 data at local authority level enables local authorities to identify the size and characteristics of their at-risk population and to tailor appropriate interventions. For example, both the consumption and harm data suggest there may be a need to intervene with girls slightly earlier than with boys.

Alcohol use can be linked to other risk taking behaviour therefore young people are likely to benefit from integrated wellbeing services. The strong interaction with smoking also suggests that joint action tackling both behaviours would be beneficial. This may also help to reduce health inequalities as alcohol harms and smoking prevalence are more likely to occur in more deprived areas.

Professionals from health, education, social care and youth justice agencies need to be able to identify, assess and, where necessary, appropriately refer young people experiencing alcohol-related problems.[11]

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