

An illustration on a teal background with green wavy lines. It depicts various negative impacts of alcohol: a baby in a bassinet, a family of three, a small house with a black cat, a person with a head injury holding their head, a car crash with smoke, and a person at a bar with several glasses of alcohol.

# **Alcohol's harm to others**

**An Institute of Alcohol Studies report**

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# Alcohol's Harm to Others

## **A report for the Institute of Alcohol Studies produced by the University of Sheffield School of Health and Related Research (ScHARR).**

### **About the Institute of Alcohol Studies**

The core aim of the Institute is to serve the public interest on public policy issues linked to alcohol, by advocating for the use of scientific evidence in policy-making to reduce alcohol-related harm. The IAS is a company limited by guarantee, No 05661538 and registered charity, No 1112671. For more information visit [www.ias.org.uk](http://www.ias.org.uk).

### **About ScHARR**

Formed in 1992, ScHARR is one of the largest and most dynamic Schools of health research within the UK. The School is based in the Faculty of Medicine, Dentistry and Health at the University of Sheffield, employs over 300 members of staff and has access to some of the best research and teaching facilities in the UK. ScHARR's work is linked by a focus on enhancing the health of communities through the effective use of evidence, whether this is at the local level, the national or the international level.

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## 1. Executive Summary

### 1.1. Background

Alcohol consumption can have a range of negative impacts on people other than the drinker, for example physical violence, road traffic accidents, relationship problems, financial difficulties, feeling scared in public places, or reporting negative impacts on children due to another person's drinking. Known as alcohol's harm to others, there is an increasing level of awareness of and research into the role of alcohol in negative health and social outcomes for the family, friends, co-workers, strangers and wider society. To date there has been relatively little research on alcohol's harm to others in the UK and this research is a first step in filling this evidence gap.

### 1.2. Research questions

The research reported here aimed to answer two questions:

- 1) Who experiences harm from others' drinking?
- 2) How do different types of harm from others' drinking cluster?

### 1.3. Methods

The following data was used to answer the research questions:

- A survey of 1,020 people aged 18 years and older living in the North West of England.
- A survey of 1,007 people aged 16 years and older living in Scotland.

Analysis comprised brief descriptive statistics to understand the prevalence of different types of harm to others and chi square tests to examine socio-demographic variations in the experience of each type of harm. We conducted factor analysis to examine how different types of harm cluster.

### 1.4. Key messages

Analysis of data on alcohol's harm to others from Scotland and North West England suggests that:

- 1) The prevalence of harm from another person's drinking is high, with 51.4% of respondents in Scotland reporting at least one of 16 harms, and 78.7% of respondents in North West England reporting at least one of 20 harms in the past 12 months. Commonly reported harms include being harassed, afraid or insulted in a public place, being annoyed by vomiting, urinating or littering on the streets, and being kept awake at night.
- 2) Socio-demographic variations (gender, age and social class) in the prevalence of individual harms were identified in both Scotland and North West England, although there were some differences between the countries in variation by gender and social class. Age was more consistently associated with the prevalence of harm, with older

age groups significantly less likely to report having experienced a number of harms than younger age groups.

- 3) The majority of respondents who experienced any harm from someone else's drinking reported two or more different harms: 67.7% of respondents in North West England and 35.6% in Scotland.
- 4) No significant difference in the experience of individual harms was identified by the respondent's own drinking behaviour in either country.
- 5) There is evidence for clustering of some types of harms. Analysis reveals two clusters within each dataset, although there are some differences in the harms included within each cluster by country. The first cluster centres on being harassed, threatened or feeling afraid in public spaces in both Scotland and North West England. Household financial difficulties feature in the second cluster, co-occurring with relationship problems in North West England and being kept awake at night in Scotland.

## 2. Introduction

Alcohol consumption is often constructed as a problem that affects individual drinkers rather than other people (3) and the health and social consequences of alcohol consumption for heavy drinkers has long been established (4). However, alcohol consumption can have a range of negative consequences for people around the drinker. There is an increasing level of awareness of and research into the role of alcohol in negative health and social outcomes for the family, friends, co-workers, strangers and wider society. Known as 'passive harm' or 'harm to others', this report provides an overview of international evidence on alcohol's harm to others and presents findings on the socio-demographic variations in and clustering of harms in North West England and Scotland. Finally, it summarises UK and EU policies to address alcohol's harm to others and suggest possible directions for future research in this field.

### 2.1. What do we mean by alcohol's harm to others?

Alcohol's harm to others can be defined as the adverse effects of someone's drinking on people in a range of different relationships to the drinker (5). A road-traffic accident caused by a driver who had been drinking may result in the injury or death of passengers, those travelling in other vehicles, or pedestrians. A family may experience financial problems because money for household expenses is used to buy alcohol. A partner or child may be subject to violent assault by a drunken family member. A friend may be dragged into a drunken fight. A couple may find their house or car damaged as a result of the alcohol fuelled behaviour of strangers. A child might miss an activity because their parents are drunk or hungover. A worker may be forced to cover the workload of a colleague who often calls in sick after a night out. Workplace absenteeism generates lost productivity with knock-on effects for the wider economy. Healthcare expenditure on treating both the drinker and those harmed by the drinking of others comes from a finite government budget – if we were able to reduce such harms then the government could make this expenditure available for other purposes. These few examples highlight the range of direct and indirect harm to others from alcohol consumption.





## 2.2. Overview of nature and scale of alcohol's harm to others: what do we know so far?

### Key Points

- Surveys conducted across Western countries have identified that the prevalence of harm from another person's drinking is high (e.g. 70% in Australia and 53% in the USA).
- Understanding of the harm caused by drinkers is better developed in some fields (e.g. child welfare, domestic violence and foetal alcohol spectrum disorders) than others.
- Socio-demographic variations in harm are reported across the international literature. For example, younger age groups are significantly more likely to experience harm across most outcomes in Australia and Ireland.
- Few studies have quantified the costs of harm to people other than the drinker, but in the UK the total cost was estimated at up to £15.4 billion in 2004, excluding the costs to family and social networks.

The nature and scale of alcohol's harm to others is less well understood than harm to the drinker for a number of reasons. There is a more established research tradition around the health implications of heavy consumption for the drinker, reflecting higher levels of investment in health research compared with other areas (such as criminology) (6). There are also specific challenges in researching alcohol's harm to others. For example, health records focus on the characteristics of the patient and rarely include information on other people. Survey research is often focused on isolated individuals (e.g. population surveys typically interview one person per household) and does not always pay attention to factors in the individual's social environment (6). However, some types of harm to others are better understood because they are either more easily captured by routine data (e.g. police reports often record details of perpetrators of crime) (6) or because they have been the focus of concerted research efforts (e.g. foetal alcohol syndrome (7)). Nevertheless, knowledge of who is most effected by alcohol's harm to others, how, in which contexts, and the prevalence of different harms is still lacking.

### *Prevalence of alcohol's harm to others*

National surveys of alcohol's harm to others have documented the nature and scale of different harmful effects. In Australia, a random sample of 2,649 adults identified that 70% of respondents experienced one or more of 18 harms due to a stranger's drinking (e.g. through nuisance, fear or abuse) whilst 30% were negatively affected by the drinking of someone they knew (5). Similarly in New Zealand, in a random sample of 3,068 adults, 71% reported experiencing at least one of 24 different harms because of the drinking of a stranger, whilst 28% reported knowing at least one heavy drinker and 85% of those who know a heavy drinker had experienced harm as a result of that person's drinking (8). In the USA, in a sample of 6,957 adults asked about their experience of six types of harm from others'

drinking, 53% reported one or more of the following: been a passenger in a car with a driver who had too much to drink, been in a motor vehicle accident, had property vandalised, been punched, hit or assaulted, had family problems or marriage difficulties, or had financial problems (9). Finally, among 2,011 adults in Ireland asked about their experience of five negative consequences (family problems, passenger with a drunk driver, physical assault, money problems and property vandalised) from someone else's drinking, 28% reported one or more harms (10). Although the prevalence rates are not directly comparable because of the number and types of harm included within each survey varied, these studies demonstrate the scale of alcohol's harm to others internationally.

Whilst studies to measure the prevalence of different types of alcohol's harm to others have been developed in recent years, specific subsections of the harm to others field have a longer research tradition. In particular, child welfare, domestic violence and foetal alcohol spectrum disorders. In a cross-European study of domestic abuse experienced by young people living in families with alcohol problems, children described a range of stressful implications of living with a parent in treatment for alcohol problems. These included: being afraid of either their father (57%) or mother (32%), witnessing extreme violence between their parents (37% reported severe physical assault by the father against the mother and 22% the reverse), and physical violence or aggression towards themselves (the young person), including hitting, burning or scalding, and choking, with 12% reporting extreme physical assault by the father and 9% by the mother (11). In a US longitudinal study, the risk of any adverse childhood experiences (such as abuse, parental separation or witnessing domestic violence) was significantly greater among those who reported parental alcohol abuse (91%) compared with those reporting no parental history of alcohol abuse (53%). Those who reported more adverse experiences in childhood, independent of parental alcohol abuse, were more likely to develop alcoholism or depression in adulthood (12). Further to harm from known drinkers, recent research has explored harms to children because of others' drinking in the general population. In Australia, 22% of adults who lived with or had a parental/carer role for children reported knowing a child who had been affected because of another persons' drinking in the past year, including verbal abuse (9%), witnessing serious violence in the home (3%) and being left in an unsupervised or unsafe situation (3%) (13).

In a meta-analytic review of the risk factors for intimate partner violence (IPV), physical abuse was associated with alcohol use for both male and female offenders (14). The prevalence of alcohol consumption prior to physical assault by a partner varies between countries, for example estimated at 32% in England and Wales, 36% in Australia and 55% in the USA (15). A meta-analytic review of the role of different measures of alcohol use in IPV identified that binge drinking was more associated with aggression than frequency of consumption, and alcohol abuse/dependence had a stronger association with aggression than drinking frequency, quantity or binge drinking (16). Further, treatment studies have found that reductions in drinking after alcohol treatment were associated with reductions in intimate partner violence (17).



Finally, foetal alcohol spectrum disorder (FASD) has received much research interest in recent decades, as a spectrum of effects on the developing brain resulting from prenatal alcohol exposure (7). Among countries that measure the incidence of FASD, there is wide variation, for example 10/1,000 live births in Canada and 20-40/1,000 births in Italy. The populations at greatest risk are those experiencing high levels of deprivation and poverty, as well as indigenous populations (18). There is an absence of reliable evidence of the incidence of FASD in the UK. Foetal alcohol syndrome (FAS) is a condition towards the extreme end of FASD that includes facial anomalies and growth retardation, and therefore rates are lower (e.g. in the US rates of FASD are 3 times higher than rates of FAS (19). FAS was recorded in 1 in every 5000 live births in England and Scotland in 2004 (18).

*Socio-demographic variations in the prevalence of harm*

Socio-demographic variations in harm are also reported within the international literature. In Australia, women reported being more affected by heavy drinkers within the family whilst men were more affected by friends, co-workers or strangers. Young adults were also more likely to experience harm across most outcomes (5). In New Zealand, there were no gender differences in the proportion of respondents who experienced at least one harm from a known drinker or a stranger, although women were more likely to report emotional harm or neglect, as well as feeling threatened or scared, than men, whilst men were more likely to report verbal abuse or being annoyed by vomiting or littering (8). In Ireland, women were significantly more likely to experience family problems or money problems but less likely to experience physical assault. Adults aged over 50 years of age and those who were married rather than single were significantly less likely to experience most forms of harm. Finally, respondents in social class DE (the lower social classes) were significantly more likely to experience family problems as a result of someone else's drinking (10).

*The cost of alcohol's harm to others*

Each of the direct harms identified above has associated with it a cost to wider society, including healthcare, crime and public disorder, workplace and family or social network costs. A 2011 review of the international evidence on the costs of harm from alcohol identified few studies that quantify the costs of harm to people other than the drinker and suggests that the costs of alcohol consumption across countries is likely underestimated (20). In the UK, the cost of alcohol's harm to others was estimated in 2004 at up to £15.4 billion including £1.4-1.7 billion to the health service, up to £7.3 billion in crime and public disorder costs and up to £6.4 billion in workplace related costs (21). Further, there are costs to family and social networks that cannot be quantified using available data, for example the cost to children affected by parental alcohol problems. More recent figures calculated for the European Union place the societal costs of alcohol consumption in 2010 at €155.8 billion (£115.4 billion). In Australia, the tangible costs per year resulting from other's alcohol consumption are estimated at AUS \$14.2 billion (£7.2 billion) and the intangible costs at AUS \$6.4 billion (£3.3 billion) (22). Given limited government resources, this alcohol-related spending reflects a large opportunity cost in terms of other areas of healthcare or government spending sacrificed.



### 3. Alcohol's harm to others in the UK

#### Key Points

- Half of respondents in Scotland and three-quarters in North West England had experienced harm from another person's drinking in the past 12 months. The majority of respondents who experienced any harm reported two or more different harms.
- Older age groups were significantly less likely to report having experienced harm than younger age groups.
- Two different clusters of harm were identified. One centres on being harassed, threatened or feeling afraid in public spaces and the other on household financial difficulties, which co-occurs with relationship problems in North West England and being kept awake at night in Scotland.

As evidenced from the international literature, the nature of alcohol's harm to others is broad. Using data collected in North West England and Scotland, here we present recent findings on who experiences harm from others drinking and how different harms cluster. First we present a brief overview of the methods used and prevalence of alcohol's harm to others within the two surveys.

#### 3.1. Methods

In 2014, 1,020 adults aged 18 years and older living in the North West of England (population 7.1 million) participated in a survey of alcohol's harm to others. Respondents were recruited through Research Now's proprietary consumer panel ([www.valuedopinions.co.uk](http://www.valuedopinions.co.uk)). Data was collected by a self-completion survey administered online. A quota for each demographic group was used to ensure a heterogeneous sample population (see Table 1 for a summary of participant characteristics). Data collection was commissioned and funded by Drink Wise as part of their *Let's Look Again at Alcohol Campaign* ([www.drinkwisenorthwest.org](http://www.drinkwisenorthwest.org)).

In 2012, 1,007 adults aged 16 years and older living in Scotland (population 5.3 million) participated in a survey of alcohol's harm to others. A quota sampling method was used to select respondents who were representative of the general population demographic. A market research company collected data using face-to-face interviews conducted in the home (see Table 1 for a summary of participant characteristics). Data collection was commissioned and funded by Alcohol Focus Scotland (<http://www.alcohol-focus-scotland.org.uk/>) with support for costs from the Scottish Government.

**Table 1: Participant Characteristics**

		<b>Scotland</b>	<b>North West England</b>
		<b>n (%)</b>	<b>n (%)</b>
<b>Total</b>		1,007	1,020
<b>Gender</b>	Male	526 (52.2%)	510 (50.0%)
	Female	481 (47.8%)	510 (50.0%)
<b>Age</b>	16-24	143 (14.2%)	100 (9.8%)
	25-34	151 (15.0%)	225 (22.1%)
	35-44	181 (18.0%)	235 (23.0%)
	45-54	180 (17.9%)	213 (20.9%)
	55-64	153 (15.2%)	198 (19.4%)
	65+	198 (19.7%)	149 (14.6%)
<b>Social Class</b>	ABC1	473 (47.0%)	570 (55.9%)
	C2DE	534 (53.0%)	450 (44.1%)
<b>Respondent's Drinking Status</b>	Abstainer	229 (22.9%)	83 (8.4%)
	Drinker	772 (77.1%)	937 (91.6%)
	Risky Single Occasion Drinking*	232 (23.0%)	-
	Increasing or Higher Risk Drinker	-	300 (29.4%)

\* defined as consuming 8+ units of alcohol per occasion, 1+ times per month (baseline = drinkers)

The questionnaires were developed using pre-existing surveys and expert recommendations for a relatively brief assessment measure of harm to others from drinking, including:

- Respondent experience of a range of harms that can arise from someone else's drinking (20 in England and 16 in Scotland) (see Table 2 for the types of harm included in each survey);
- Whether the respondent knows anyone who they consider to be a heavy drinker;
- Whether known heavy drinkers have had a negative effect on the respondent (Scotland only);
- Whose drinking they have been affected by (England only);
- Knowledge of children affected by someone else's drinking (England only);
- Respondent's own current drinking;
- Life satisfaction; and
- Socio-demographic information including gender, age and social class (based on the occupation of the chief household income earner).

Analysis comprised brief descriptive statistics to understand the prevalence of different types of harm to others and chi square tests to examine socio-demographic variations in the experience of each type of harm. Given that multiple significance tests were conducted using these datasets, a Bonferroni correction was calculated to adjust the critical significance level (to  $p < 0.001$ ) to account for the increased likelihood of encountering a type I error with multiple testing (23).

To examine how different harms cluster, we conducted factor analysis using a tetrachoric correlation matrix. The tetrachoric correlation matrix is used where the model includes

variables that are dichotomous, as in the different types of harm measured in the North West England survey. For the Scottish dataset all sixteen ordinal scaled harm questions; Yes 1-2 times, Yes 3 or more times, and No – were converted into dichotomous variables of either affirming or negating experiencing harm.

### 3.2. Results



In North West England, 78.7% of participants reported experiencing at least one form of harm from another person's drinking in the past year. The majority of respondents had experienced two or more harms (67.7% total population), whilst 69 respondents (6.8%) reported experiencing 10 or more harms from another person's drinking. The proportion of respondents reporting each type of harm is presented in Table 2. There was no significant gender or social class difference in reporting any harm to others, but older participants (aged 65+ years) were significantly less likely to report having experienced harm from another person's drinking than participants aged 64 years or younger ( $\chi^2=25.951$ ,  $p<0.001$ ). There was no significant difference in the proportion of respondents who experienced one or more harms by participant level of drinking (i.e. abstention, special occasion, moderate, increasing risk or high risk drinking).

In Scotland, 51.4% of participants reported experiencing at least one form of harm from another person's drinking in the past 12 months (24). The majority of respondents who had experienced any harm reported two or more harms (35.6% total population) and 13 respondents (1.3%) reported experiencing 10 or more harms from another person's drinking. The proportion of respondents reporting each type of harm is illustrated in Table 2. There was no significant gender or social class difference in reporting any harm to others, but older participants (aged 65+ years) were significantly less likely to report having experienced harm from another person's drinking than participants aged 64 years or younger ( $\chi^2=89.632$ ,  $p<0.001$ ). Participants who reported more frequent risky single occasion drinking (RSOD) were significantly more likely than those with less frequent RSOD to report experiencing one or more harm from another person's alcohol consumption ( $\chi^2=18.921$ ,  $p<0.001$ ).



### 3.2.1 *Who experiences harm from others' drinking?*

Using the Scottish data, we examined socio-demographic variations in 16 types of harm experienced as a result of someone else's drinking. Significant findings were:

- Men were more likely than women to be a passenger in a car with a driver who had too much to drink (5.8% vs 1.1%,  $\chi^2=16.825$ ,  $p<0.001$ ).
- People in social classes C2DE were more likely than those in ABC1 to:
  - Be harmed physically (7.1% vs 2.3%,  $\chi^2=12.435$ ,  $p<0.001$ ).
  - Have family problems or marriage difficulties (8.1% vs 2.8%,  $\chi^2=13.379$ ,  $p<0.001$ ).
  - Report problems with friends and neighbours (16.1% vs 7.0%,  $\chi^2=20.056$ ,  $p<0.001$ ).
- Younger age groups (16-24 and 25-34 year olds) were more likely than older age groups (35-44, 45-54, 55-64 and 65+ year olds) to experience eight of 16 types of harm (see Table 3):
  - Having a house, car or other property damaged.
  - Being harassed on the street or in a private setting.
  - Having felt afraid on the street, in a public place or a private setting.
  - Being insulted or called names.
  - Being kept awake at night by drunken noise.
- No significant differences in the experience of the 16 separate harms were identified by frequency of risky single occasion drinking (never, less often, and more often).

**Table 2: Complete list of harms recorded and percentage of participants reporting each harm in Scotland (24) and North West England**

Scotland		North West England	
Harm	n (%)	Harm	n (%)
Has someone who has been drinking harassed or bothered you on the street or another public place?	203 (20.1%)	I have been harassed, insulted or humiliated in the street, a pub or nightclub, or in another public place.	232 (22.7%)
Has someone who has been drinking made you afraid when you encountered them on the street?	165 (16.4%)	I have felt threatened, afraid or unsafe in the street, a pub or nightclub, or in some other public place.	365 (35.8%)
Have you felt unsafe in a public place because of someone else's drinking?	193 (19.2%)		
Have you felt threatened or afraid because of someone's drinking at home or another private setting?	82 (8.1%)	I have felt threatened, afraid or unsafe in my home or the home of friends or family.	98 (9.6%)
Have you been harassed or bothered at a party or some other private setting due to someone else's drinking?	119 (11.9%)	I have been harassed, insulted or humiliated at a private party or in some other private setting.	115 (11.3%)
Has someone who has been drinking harmed you physically?	49 (4.9%)	I have been harmed physically.	79 (7.7%)
Has someone who has been drinking been responsible for a traffic accident you were involved in?	12 (1.2%)	I have been involved in a traffic accident.	52 (5.1%)
Have you been kept awake at night by drunken noise?	304 (30.2%)	I have been kept awake at night by drunken noise.	504 (49.4%)
Was your house, car or property damaged because of someone else's drinking?	70 (6.9%)	I have had my house, vehicle or other property damaged or broken.	124 (12.2%)
Have you had family problems or marriage difficulties due to someone else's drinking?	56 (5.6%)	I have experienced marital problems or had a relationship breakdown.	110 (10.8%)
Have you had financial troubles because of someone else's drinking?	15 (1.5%)	I have had not enough money for household expenses or experienced other financial problems.	103 (10.1%)
Was a child you are responsible for negatively affected by someone else's drinking?	36 (3.6%)	A child I am responsible for has been negatively affected by someone's drinking.	46 (4.5%)
Have you been a passenger in a car with a driver who had too much to drink?	35 (3.5%)	I have been a passenger in a car with a driver who had too much to drink.	104 (10.2%)
Have you had problems with someone you worked with or a boss due to their drinking?	36 (3.6%)	I have had to take on extra jobs or responsibilities or had other work problems due to a co-worker or boss's alcohol consumption.	48 (4.7%)
Have you had problems with a friend or neighbour due to their drinking?	119 (11.9%)		
Has someone who has been drinking called you names or otherwise insulted you?	190 (18.8%)		
		I have had to take on extra household or caring responsibilities to cover for a drinking family member.	56 (5.5%)
		I have felt emotionally hurt or neglected by a friend or family member.	227 (22.3%)
		I have been annoyed by people vomiting or urinating when they have been drinking.	439 (43.0%)
		I have been annoyed by people littering the street when they have been drinking.	554 (54.3%)
		I have been annoyed by people rough sleeping when they have been drinking.	224 (22.0%)
		I have had a serious argument or quarrel.	242 (23.7%)
		I have had unwanted sexual attention or someone behaved in a sexually inappropriate way.	155 (15.2%)

Table 3: Age group differences in the experience of harm from another person's drinking in Scotland

	16-24	25-34	35-44	45-54	55-64	65+	$\chi^2$
<b>Has someone who has been drinking harmed you physically?</b>							
Yes	7.7%	8.6%	5.0%	6.1%	2.6%	0.5%	17.439
No	92.3%	91.4%	95.0%	93.9%	97.4%	99.5%	
<b>Has someone who has been drinking been responsible for a traffic accident you were involved in?</b>							
Yes	1.4%	1.3%	1.1%	0.0%	2.6%	0.5%	6.094
No	98.6%	98.7%	98.9%	100.0%	97.4%	99.5%	
<b>Was your house, car or property damaged because of someone else's drinking?</b>							
Yes	11.9%	13.2%	6.0%	7.7%	4.6%	1.0%	26.837*
No	88.1%	86.8%	94.0%	92.3%	95.4%	99.0%	
<b>Was a child you are responsible for negatively affected by someone else's drinking?</b>							
Yes	2.8%	5.3%	4.9%	4.4%	2.6%	1.5%	5.820
No	97.2%	94.7%	95.1%	95.6%	97.4%	98.5%	
<b>Have you had family problems or marriage difficulties due to someone else's drinking?</b>							
Yes	7.0%	6.0%	7.7%	8.8%	3.9%	1.0%	14.304
No	93.0%	94.0%	92.3%	91.2%	96.1%	99.0%	
<b>Have you had financial troubles because of someone else's drinking?</b>							
Yes	2.1%	3.3%	1.1%	1.1%	1.3%	0.5%	5.502
No	97.9%	96.7%	98.9%	98.9%	98.7%	99.5%	
<b>Have you been a passenger in a car with a driver who had too much to drink?</b>							
Yes	8.4%	3.3%	2.2%	3.9%	3.9%	1.0%	14.587
No	91.6%	96.7%	97.8%	96.1%	96.1%	99.0%	
<b>Has someone who has been drinking harassed or bothered you on the street or another public place?</b>							
Yes	31.5%	29.8%	17.6%	28.2%	13.1%	5.5%	59.178*
No	68.5%	70.2%	82.4%	71.8%	86.9%	94.5%	
<b>Have you been harassed or bothered at a party or some other private setting due to someone else's drinking?</b>							
Yes	15.4%	21.9%	12.7%	12.8%	9.2%	2.0%	35.891*
No	84.6%	78.1%	87.3%	87.2%	90.8%	98.0%	
<b>Has someone who has been drinking made you afraid when you encountered them on the street?</b>							
Yes	23.8%	25.8%	14.4%	23.3%	9.2%	5.0%	47.001*
No	76.2%	74.2%	85.6%	76.6%	90.8%	95.0%	
<b>Have you felt unsafe in a public place because of someone else's drinking?</b>							
Yes	22.4%	30.5%	14.3%	26.5%	17.0%	7.6%	40.173*
No	77.6%	69.5%	85.7%	73.5%	83.0%	92.4%	
<b>Have you felt threatened or afraid because of someone's drinking at home or another private setting?</b>							
Yes	16.1%	12.6%	5.5%	11.7%	2.6%	2.0%	37.227*
No	83.9%	87.4%	94.5%	88.3%	97.4%	98.0%	
<b>Have you had problems with someone you worked with or a boss due to their drinking?</b>							
Yes	2.1%	3.3%	8.3%	4.4%	3.3%	0.0%	20.353
No	97.9%	96.7%	91.7%	95.6%	96.7%	100.0%	
<b>Have you had problems with a friend or neighbour due to their drinking?</b>							
Yes	14.0%	17.2%	9.4%	15.6%	9.8%	6.6%	14.131
No	86.0%	82.8%	90.6%	84.4%	90.2%	93.4%	
<b>Has someone who has been drinking called you names or otherwise insulted you?</b>							
Yes	31.5%	30.5%	23.6%	17.8%	12.4%	2.5%	69.631*
No	68.5%	69.5%	76.4%	82.2%	87.6%	97.5%	
<b>Have you been kept awake at night by drunken noise?</b>							
Yes	36.4%	37.1%	31.5%	35.0%	28.8%	15.6%	28.473*
No	63.6%	62.9%	68.5%	65.0%	71.2%	84.4%	
* p<0.001							

\* p&lt;0.001

We undertook the same type of analysis in England to identify which population subgroups are most likely to experience harm from other's drinking, and then compared these results with the Scottish findings. Significant findings in relation to the 20 harms examined in England were:

- Women were more likely than men to experience:
  - Unwanted sexual attention (22% versus 8% respectively,  $\chi^2=38.350$ ,  $p<0.001$ ).
  - Emotional hurt or neglect by a friend or family member (27.6% versus 16.9% respectively,  $\chi^2=17.141$ ,  $p<0.001$ ).
- People in social classes ABC1 were more likely than those in C2DE to experience:
  - Being annoyed by vomiting or urinating in the street (48.2% versus 36.4% respectively,  $\chi^2=14.286$ ,  $p<0.001$ )
- Younger age groups (16-24 and 25-34 year olds) were more likely than older age groups (35-44, 45-54, 55-64 and 65+ year olds) to experience 11 of 20 types of harm (see Table 4):
  - Physical harm and unwanted sexual attention.
  - Marital problems or relationship breakdown and financial problems.
  - Emotional hurt or neglect.
  - Being harassed, insulted or humiliated in a public or private space.
  - Feeling threatened, afraid or unsafe in a public or private place.
  - A serious argument or quarrel.
  - Being annoyed by someone vomiting or urinating when they are drunk.
- No significant differences in the experience of 20 separate harms were identified by respondent drinking level (never, special occasions, moderate, increasing risk, high risk).



Table 4: Age group differences in the experience of harm from another person's drinking in NW England

	16-24	25-34	35-44	45-54	55-64	65+	$\chi^2$
<b>I have been harmed physically.</b>							
Yes	16.0%	11.1%	10.4%	5.6%	4.0%	2.7%	24.879*
No	84.0%	88.9%	89.6%	94.4%	96.0%	97.3%	
<b>I have been involved in a traffic accident.</b>							
Yes	8.0%	7.6%	5.2%	3.8%	3.5%	3.4%	7.279
No	92.0%	92.4%	94.8%	96.2%	96.5%	96.6%	
<b>I have had unwanted sexual attention or someone behaved in a sexually inappropriate way.</b>							
Yes	31.0%	24.9%	17.8%	11.7%	7.6%	2.7%	65.482*
No	69.0%	75.1%	82.2%	88.3%	92.4%	97.3%	
<b>I have had my house, vehicle or other property damaged or broken.</b>							
Yes	16.0%	17.3%	12.6%	12.2%	9.1%	5.4%	15.225
No	84.0%	82.7%	87.4%	87.8%	90.9%	94.6%	
<b>A child I am responsible for has been negatively affected by someone else's drinking.</b>							
Yes	8.0%	7.6%	3.0%	5.2%	1.5%	2.0%	14.917
No	92.0%	92.4%	97.0%	94.8%	98.5%	98.0%	
<b>I have experienced marital problems or had a relationship breakdown.</b>							
Yes	15.0%	17.3%	8.9%	12.2%	6.6%	3.4%	25.038*
No	85.0%	82.7%	91.1%	87.8%	93.4%	96.6%	
<b>I have had not enough money for household expenses or experienced other financial problems.</b>							
Yes	11.0%	16.9%	10.4%	10.3%	7.1%	2.7%	22.562*
No	89.0%	83.1%	89.6%	89.7%	92.9%	97.3%	
<b>I have had to take on extra household or caring responsibilities to cover for a drinking family member.</b>							
Yes	11.0%	8.0%	5.9%	2.3%	5.6%	2.0%	16.159
No	89.0%	92.0%	94.1%	97.7%	94.4%	98.0%	
<b>I have felt emotionally hurt or neglected by a friend or family member.</b>							
Yes	32.0%	31.1%	20.7%	20.7%	18.2%	11.4%	28.209*
No	68.0%	68.9%	79.3%	79.3%	81.8%	88.6%	
<b>I have been a passenger in a car with a driver who had too much to drink.</b>							
Yes	19.0%	10.2%	11.1%	8.9%	8.1%	8.1%	10.682
No	81.0%	89.8%	88.9%	91.1%	91.9%	91.9%	
<b>I have been harassed, insulted or humiliated in the street, a pub or nightclub, or in another public place.</b>							
Yes	40.0%	34.2%	24.4%	20.2%	12.1%	10.1%	61.173*
No	60.0%	65.8%	75.6%	79.8%	87.9%	89.9%	
<b>I have been harassed, insulted or humiliated at a private party or in some other private setting.</b>							
Yes	25.0%	19.1%	11.9%	7.5%	4.5%	4.0%	52.492*
No	75.0%	80.9%	88.1%	92.5%	95.5%	96.0%	
<b>I have felt threatened, afraid or unsafe in the street, a pub or nightclub, or in some other public place.</b>							
Yes	48.0%	44.9%	37.0%	31.9%	33.8%	20.8%	30.958*
No	52.0%	55.1%	63.0%	68.1%	66.2%	79.2%	
<b>I have felt threatened, afraid or unsafe in my home or the home of friends or family.</b>							
Yes	15.0%	14.7%	14.1%	6.6%	7.6%	1.3%	28.001*
No	85.0%	85.3%	85.9%	93.4%	92.4%	98.7%	
<b>I have had a serious argument or quarrel.</b>							
Yes	34.0%	32.9%	26.7%	18.3%	19.2%	14.1%	30.258*
No	66.0%	67.1%	73.3%	81.7%	80.8%	85.9%	

	16-24	25-34	35-44	45-54	55-64	65+	$\chi^2$
<b>I have had to take on extra jobs or responsibilities or had other work problems due to a co-worker's drinking.</b>							
Yes	11.0%	7.6%	3.0%	2.8%	4.5%	.7%	20.938
No	89.0%	92.4%	97.0%	97.2%	95.5%	99.3%	
<b>I have been kept awake at night by drunken noise.</b>							
Yes	57.0%	56.0%	50.4%	49.3%	48.5%	34.9%	18.886
No	43.0%	44.0%	49.6%	50.7%	51.5%	65.1%	
<b>I have been annoyed by people vomiting and/or urinating when they have been drinking.</b>							
Yes	58.0%	51.6%	43.0%	36.6%	43.4%	28.9%	31.601*
No	42.0%	48.4%	57.0%	63.4%	56.6%	71.1%	
<b>I have been annoyed by people littering the street when they have been drinking.</b>							
Yes	51.0%	52.4%	53.3%	53.5%	65.2%	47.0%	13.468
No	49.0%	47.6%	46.7%	46.5%	34.8%	53.0%	
<b>I have been annoyed by people rough sleeping when they have been drinking.</b>							
Yes	24.0%	24.4%	18.5%	20.7%	22.7%	20.8%	2.381
No	76.0%	75.6%	81.5%	79.3%	77.3%	79.2%	
* p<0.001							

Comparing results across England and Scotland, there are socio-demographic variations in the people more likely to experience different types of harm from another person's drinking. In part, this variation arises as a result of differences in the types of harm measured by the two surveys (see Table 2, for the complete list of harms surveyed). Whilst 13 harms are comparable across the studies, two questions relating to problems with a friend or neighbour due to their drinking and being called names or otherwise insulted were asked in Scotland but not England, whilst 7 questions were asked in England but not Scotland (e.g. emotional hurt or neglect, unwanted sexual attention).

Where individual harms were comparable across countries, differences in socio-demographic variations remained. In Scotland but not North West England, men were significantly more likely than women to be a passenger in a car with a driver who had too much to drink. Also in Scotland but not North West England, respondents in social class C2DE were significantly more likely than respondents in ABC1 to report physical harm or family problems or marriage difficulties.

The prevalence of each type of harm in different age groups varied between countries. Younger age groups in both Scotland and North West England were significantly more likely than older age groups to report being harassed in a public or private setting or to feel threatened or afraid in a public or private place. However, for other age group variations the two countries diverged. In Scotland, but not North West England, younger age groups were significantly more likely than older age groups to report having their house, car or other property damaged and being kept awake at night by drunken noise, although in North West England age group variations in the prevalence of these two harms approached significance. In North West England, but not Scotland, younger age groups were significantly more likely than older age groups to report physical harm, marital problems or relationship breakdown, and not having enough money for household expenses or other financial problems. In



Scotland, age group differences in the prevalence of physical harm from another person's drinking approached significance.

In summary, there are socio-demographic variations in the prevalence of different types of harm, although significant relationships vary between the two countries. The exception is for harassment or feeling afraid in a public or private space, which is consistently more prevalent among younger than older age groups in both Scotland and North West England.

### 3.2.2 How do harms cluster?

In addition to examining socio-demographic variations in individual harms, factor analysis was used to explore how different harms cluster together. The groups identified here are clusters of variables (individual harms) that have large correlation coefficients, i.e. there is a high level of co-occurrence between the two or more harms in the cluster (factor loadings of 0.7 or more in absolute terms). Figure 1 illustrates the clustering of harms, which fall into two groups in both the North West England and Scotland data.

**Figure 1: Clusters of individual harms within the North West England and Scotland data**

<p><b>Cluster 1 – North West England</b></p> <p>I have been harassed, insulted or humiliated in the street, a pub or nightclub, or in some other public place.</p> <p>I have felt threatened, afraid or unsafe in the street, a pub or nightclub, or in some other public place.</p>	<p><b>Cluster 1 - Scotland</b></p> <p>Has someone who has been drinking harassed or bothered on the street or in some other public place?</p> <p>Has someone who has been drinking made you afraid when you encountered them on the street?</p> <p>Have you felt unsafe in a public place because of someone else's drinking?</p>
<p><b>Cluster 2 – North West England</b></p> <p>I have experienced marital problems or had a relationship breakdown.</p> <p>I have had not enough money for household expenses or experienced other financial problems.</p>	<p><b>Cluster 2 - Scotland</b></p> <p>Have you been kept awake at night by drunken noise?</p> <p>Have you had financial troubles because of someone else's drinking?</p>

Cluster 1 is characterised by being harassed, or feeling threatened or afraid in a public place, such as a pub or nightclub, or on the street. In North West England this cluster includes two harms: being harassed, insulted or humiliated in the street, a pub or nightclub, or in some other public place, and feeling threatened, afraid or unsafe in the street, a pub or nightclub, or in some other public place. The prevalence of this cluster of harms is 30% (n=177, 17.3% of total sample), meaning that almost a third of respondents who report one of these harms experienced both harms in the past 12 months. In Scotland this cluster includes very similar variables to North West England including: being harassed or bothered on the street or in some other public place, feeling afraid when you encounter someone who has been drinking on the street, and feeling unsafe in a public place because of someone

else's drinking. The prevalence of this cluster of three harms is 15% (n=74, 7.3% of total sample), meaning that one in seven participants who reported one of these harms experienced all three harms in the past 12 months. The similarity of variables between these two clusters across the datasets may suggest that this cluster of alcohol's harm to others could have congruence across wider populations.

In North West England, Cluster 2 is broadly characterised by harms that occur within the family or household, including experiencing marital problems or relationship breakdown and not having enough money for household expenses or experiencing other financial problems. The prevalence of this cluster of harms is 25% (n=53, 5.2% of total sample), meaning that a quarter of respondents who report one of these harms have experienced both harms in the past 12 months. In Scotland the second cluster of harms is different to North West England, including experiencing financial troubles because of someone else's drinking and being kept awake by drunken noise. The prevalence of this cluster is 6%, with every respondent who reported financial problems (n=14, 1.3% of total sample) also having been kept awake at night by drunken noise. Whilst there are differences in the clustering of harms between North West England and Scotland in relation to marital or relationship difficulties and being kept awake at night, these findings may suggest that harm clusters in individuals who experience financial problems as a result of another person's drinking.

## 4. Key findings

Whilst the data is not directly comparable between Scotland and North West England, some key findings on alcohol's harm to others in parts of the UK can be drawn from this analysis:

- 1) The prevalence of harm from another person's drinking is high, with over half of respondents in Scotland reporting at least one of 16 harms, and over three-quarters of respondents in North West England reporting at least one of 20 harms. These harms included experiencing physical violence, road accidents, relationship problems, financial difficulties, feeling scared in public places, or reporting negative impacts on children due to another person's drinking.
- 2) Harm from another person's drinking was associated with age of respondent; older respondents were significantly less likely to report having experienced harm than younger adults.
- 3) The majority of respondents who experienced any harm from the alcohol consumption of someone else reported two or more different harms.
- 4) Socio-demographic variations in the prevalence of individual harms were identified in both Scotland and North West England. Some of these socio-demographic variations differed between the countries, in part due to different harms measured by the two surveys. In both countries younger age groups were significantly more likely to experience a range of alcohol's harm to others than older age groups.
- 5) No significant difference in the experience of individual harms was identified by frequency of risky single occasion drinking (in Scotland) or respondent drinking level (in North West England).
- 6) There is evidence for clustering of some of individual harms. Analysis supports the presence of two clusters within each dataset, although there are some differences in the harms included within each cluster by country. The first cluster centres on being harassed, threatened or feeling afraid in public spaces and the second cluster on household financial difficulties, which co-occurs with relationship problems in North West England and being kept awake at night in Scotland.

Whilst the prevalence of different types of harm varied between England and Scotland, it is evident from this data that a substantial proportion of both populations have experienced harm as a result of another person's drinking in the past year. Findings on the prevalence of any harm concur with research conducted on alcohol's harm to others in other Western countries such as Australia and New Zealand (5, 8). Analysis of the clustering of alcohol's harm to others is a novel approach to understanding alcohol's harm to others, and this work supports that this approach may further our understanding of how harms occur and co-occur. However, given that a large proportion of participants reported multiple harms but only two clusters were identified in the data, this may mean that harms are experienced in multiple different forms and that we cannot expect that tackling one harm would impact on other harms. In practice, the best way to tackle all harms simultaneously is by reducing levels of increasing and high risk drinking in the population.

## 5. UK and EU policies to address alcohol's harm to others

### Key Points

- Policy to address alcohol's harm to others is less well developed than policy that seeks to address harm to the drinker himself or herself. Exceptions include crime and violence and harm to the unborn foetus, which are included in the UK Government's Alcohol Strategy.
- The EU Alcohol Strategy 2006-2012 addressed aspects of harm to others, for example harm to the unborn foetus and injuries from road traffic accidents. However, the strategy ended in 2012 and has not been replaced. The WHO European Action Plan also highlights a range of issues related to alcohol's harm to others, including drink driving, workplace absenteeism and low productivity, crime, public disturbance and foetal alcohol syndrome.
- National policies that focus on specific aspects of alcohol's harm to others include: alcohol advice during pregnancy, NICE public health guidance to increase awareness of alcohol's harm to others among health care professionals, drink driving legislation, and licensing measures designed to tackle harm in the night-time economy.
- In addition to policies and guidance targeted specifically towards reducing alcohol's harm to others, any effective policy targeted to reduce alcohol *consumption* could also be expected to reduce harm to others, including in front line services such as the police and hospitals. To date however, the impact of broader changes in alcohol consumption on harms to those other than the drinker has not been widely studied. It is therefore important to test the validity of expectations that general reductions of alcohol consumption will impact on alcohol's harm to others (1).
- The scale of alcohol's harm to others provides an imperative to ensure effective population level policies are implemented (and evaluated) alongside policies that emphasise personal responsibility or focus exclusively on the individual, to reduce alcohol-related harms for the whole population (2).

Perhaps unsurprisingly given the relative infancy of much research on alcohol's harm to others, UK and European policy specifically focused on alcohol's harm to others has a relatively narrow focus. In the UK, the Government's Alcohol Strategy, published in 2012, identifies the challenge of crime and disorder in the night time economy and also touches on three other aspects of alcohol's harm to others: drinking during pregnancy and FASD, family problems related to alcohol consumption, and domestic violence (25). The strategy recognises, as previously discussed, the lack of good information about the incidence of FASD and the need to raise awareness among the population to reduce the risks associated with drinking during pregnancy. However, certain aspects of alcohol's harm to others which are identified as prevalent in this research, such as feeling afraid, threatened or harassed in private spaces and unwanted sexual attention, are not explicitly addressed. Further, the latest Chief Medical Officer's (CMO) report, which presents in some detail various aspects of

harm from alcohol, is almost exclusively focused on harm to the drinker (26). This is in contrast to the 2008 report in which the former CMO highlighted the extent of alcohol's harm to others in the UK (27). Given that estimates suggest that alcohol's harm to others is likely to double the social costs of drinking (28), discussion of how alcohol's harm to others can be minimised should be a priority.

At the supranational level, part of the focus of the European Union (EU) Alcohol Strategy 2006-2012 was on alcohol's harm to others, including young people, children and the unborn child, reducing injuries and deaths from alcohol-related road accidents, and reducing the negative impact on the workplace (29). Examples of different policies aimed at reducing alcohol's harm to others include:

- Increased levels of awareness-raising activities in Member States (MS) on the risks to the unborn child of maternal alcohol use during pregnancy. Such activities have been conducted by different actors in various EU member states (e.g. health services, health NGOs and alcohol producers in the context of responsibility deals (30)). Whilst warnings labels to alert pregnant women to the risks of alcohol consumption have high levels of popular support (31), evaluation of the effectiveness of such awareness-raising activities for changing behaviour is scarce. In the UK, the UK Chief Medical Officers advise women to avoid alcohol during pregnancy and, through the Public Health Responsibility Deal, a number of alcohol companies committed to providing more consumer information about drinking during pregnancy on product labels (32).
- Wider implementation of a 0.5g/l or lower maximum BAC level for driving in some Member States, increased use of random breath testing and awareness-raising activities on the risks of driving under the influence of alcohol. Between 2006 and 2009 the number of MS reporting awareness-raising campaigns almost doubled, although a Eurobarometer survey in 2006 found that almost half of respondents were unaware of BAC limits in their country (30). In 2006 Cyprus and 2007 Luxembourg lowered the maximum BAC level to 0.5g/l and in 2007 Germany and Luxembourg joined other MS in setting a lower still BAC limit of 0.2g/l for inexperienced drivers and certain groups of professional drivers (30). In the UK, Scotland reduced the drink-driving limit from 8g to 5g/l in December 2014, making the limit lower in Scotland than other countries of the UK (although in line with most other European countries). Evidence supports that introducing or lowering drink-driving limits improves alcohol-related traffic safety, for example through reducing fatal or injury causing collisions (33).
- A range of policies to reduce the negative impact of alcohol on the workplace. After the launch of the Alcohol Strategy in 2006, the Commission also introduced a strategy on health and safety at work, which provides the policy framework for actions related to addressing alcohol-related issues in the workplace. The Commission is financing a number of projects that progress the need to reduce the impact of alcohol related harm on the workplace, for example the 'Top on Job' programme (<https://osha.europa.eu/data/case-studies/top-on-job/Top-on-job.pdf>) and 'Battle Against Alcohol Abuse & Tobacco Smoking' Campaign (<https://osha.europa.eu/data/case-studies/sports-and-nature-against-alcohol-abuse-and-tobacco-smoking-campaign/view>). The focus of these programmes is on reducing harm to the individual drinker, although the latter campaign did also highlight wider benefits including

increased communication and teamwork capabilities. Robust evaluation of the effectiveness of such interventions for reducing the harm to others caused by alcohol is missing.

The EU Alcohol Strategy also identified protecting children and young people as a focus for action. Specific actions included preventing underage alcohol sales and protecting young people from commercial pressure to drink, but did not include protecting children and young people from the plethora of potential negative impacts they may experience as a result of known heavy drinkers (e.g. family) or strangers. Thus overall the focus of the strategy remained relatively narrow, given the range of people who may be negatively influenced by the alcohol consumption of others, such as children, partners, colleagues, neighbours, victims of crime and society at large which bears the public cost of alcohol-related harm. A commissioned evaluation of the whole EU Alcohol Strategy perceived the strategy to have provided EU members with a common approach and supported some Member States in their actions to reduce alcohol related harm (34). However, there have also been criticisms of how effective the EU Strategy was and its apparent reliance on alcohol industry voluntary commitments (35). The strategy ended in 2012 and has not been replaced.

Reflecting on the EU and individual Member State responses to alcohol consumption in Europe, the WHO European Action Plan to reduce the harmful use of alcohol highlights that European alcohol policies do not reflect the gravity of health, social and economic harm from alcohol use and that there is a lack of cohesion across policies that should adopt a joined-up approach to tackling alcohol use (28). Albeit relatively briefly, the WHO action plan highlights a range of issues relating to alcohol's harm to others, including drink-driving, workplace absenteeism and low productivity, crime, public disturbance, accidents and foetal alcohol syndrome.

In the UK, in addition to policies related to drinking during pregnancy and drink-driving, a range of licensing measures are being used with the intention of tackling alcohol-related crime and social disorder, particularly linked to the night-time economy; for example the late night levy and voluntary bans on high strength drinks (see IAS Factsheet on 'Licensing legislation and alcohol availability' for more information (36)). However, the implementation of such licensing measures varies between cities: for example, the late night levy was first introduced in Newcastle in November 2013 and has only been introduced in six other cities since then (37). Further, we have identified no evaluation of the effectiveness of such policies for reducing alcohol-related harm.

In addition to policies and guidance targeted specifically towards reducing alcohol's harm to others, any effective policy to reduce alcohol consumption should also reduce the level of alcohol's harm to others. Evidence supports seven broad areas of alcohol policy approach for reducing alcohol consumption and alcohol-related harm: taxes and other price controls, regulating physical availability, altering drinking context, drink-driving countermeasures, regulating alcohol marketing and conducting screening and brief interventions (38). Examples of how such general policies could work to reduce alcohol's harm to others are:



- Regulating physical availability: a systematic review on the relationship between the availability of alcohol and three main outcome variables (consumption, drinking patterns and damage from alcohol) identified that alcohol outlet density is significantly and positively associated with crimes known to be alcohol-related (i.e. when outlet density increases, so does alcohol-related crime and violence) (39). Thus, restricting outlet density may reduce rates of alcohol-related violence and crime.
- Taxation and pricing policies: a rapid evidence review of the impact of pricing and taxation policies on alcohol-related crime outcomes identified that alcohol tax and price increases were associated with reductions in overall crime, violent crime, sexual assault and criminal damage/property offences (40). Further, although based on older data from the USA, research suggests that increasing tax on beer may be an effective policy in reducing violence towards children (41) and that a 1% increase in the price of 1 ounce of pure alcohol decreased the probability of intimate partner violence by 5% (42). Thus, policies to increase the cost of alcohol through taxation or pricing policies may reduce the prevalence of harm to others.
- Drink driving countermeasures: many road traffic injuries are experienced as a result of the alcohol consumption of someone other than the injured party (e.g. estimated at over 40% alcohol-related crash injuries in New Zealand (43)). Establishing or lowering blood-alcohol concentration limits has a deterrent impact on drink driving, with enduring effects on drink driving fatalities (44). Other measures, such as graduated driver licenses and selective and random breath tests, have also been identified to reduce drink-driving fatalities (e.g. in Ireland, where random breath testing was introduced in 2006). An international meta-analysis identified that sobriety checkpoints were associated with a 20-26% reduction in fatal crashes and a 20% reduction in total crashes (45).
- Screening and brief interventions: screening and brief intervention is used to identify people with hazardous or harmful alcohol consumption and motivate those individuals with problematic drinking to modify their behaviour. Individual motivations are diverse and may in part be based on capacity to fulfil role functions e.g. worker, partner, parent, etc. so social relationships and therefore harm to others may be highly relevant. Systematic review evidence supports that brief interventions can reduce alcohol consumption in men, with continued benefit at a year after intervention, although the benefit is not proven in women for whom there is less research (46).

To date however, the impact of broader changes in consumption on harms to those other than the drinker has not been widely studied and it is important to test the validity of expectations that general reductions of alcohol consumption will impact on alcohol's harm to others (1). Despite this limitation, it is plausible that using a blend of these approaches to reduce both population level consumption and address individual problem drinking could reduce rates of harm to both the drinker and other people. The scale of alcohol's harm to others provides an imperative to ensure effective population level policies are implemented (and evaluated) alongside policies that focus on the individual change through effective alcohol treatment, to reduce alcohol-related harms for the whole population (2).

## 6. Future directions in alcohol's harm to others

The evidence base for understanding the extent of alcohol's harm to others in the UK and internationally is varied. In England and Wales, no large, nationally representative surveys have examined the scale of harm caused by others' drinking. Other countries are leading the way in developing a comparable evidence base for harms across countries. For example, the Australian and New Zealand harm to others survey reported above (5, 8) has been adapted for use in seven other countries (22), leading to the generation of more comparable harms data across countries to explore how universal harm to others from alcohol consumption may be. Systematic measurement of alcohol's harm to others through existing surveillance mechanisms, such as hospital episode statistics (which are already used to measure harm to drinkers), could improve estimations of the burden on health and welfare of alcohol's harm to others (2). At present, even evidence on the prevalence of alcohol's harm to others for conditions that are higher in the public consciousness, such as FASD, is scarce (18). Without evidence documenting the extent of harm to others, encouraging policy makers and practitioners to prioritise tackling the issue is challenging.

In addition to developing a better understanding of the prevalence of alcohol's harm to others, better reporting of the costs associated with alcohol's harm to others is required. Alcohol-related problems in the family cause ill health and other stressors, and the public sector and personal costs are likely to be high (47). However, costs of harm to people other than the drinker are rarely reported, making estimations of the economic burden of alcohol's harm to others challenging (20). Understanding the true economic cost would provide support for policy makers to implement effective measures to reduce or prevent alcohol-related harm.

## 7. Conclusion

This report has summarised the scale of and socio-demographic variations in alcohol's harm to others in North West England and Scotland, briefly comparing the findings to other Western countries, and has also explored how individual harms cluster. The prevalence of harm from another person's drinking is high, with half of Scottish respondents reporting one or more of 16 harms, and over three-quarters of English respondents reporting one or more of 20 harms. Most respondents who reported any harm from another's drinking had experienced multiple types of harm. Two clusters of harm were identified in both North West England and Scotland. Despite the high prevalence of harm, UK and European policy to address alcohol-related harm remains focused on harm to the individual drinker, except for a few specific harms including drink-driving, FASD and domestic violence. Evidence on the economic burden of alcohol's harm to others is limited. Future research should focus on developing a better understanding of the scale of alcohol's harm to others in the UK, and on measuring the economic and social costs associated with such harms.

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