Institute of Alcohol Studies response to Science & Technology Select Committee inquiry on alcohol guidelines

Summary of main points

- **There is no evidence to support raising the current recommended guidelines for alcohol consumption**
- **There is some evidence to suggest the recommended guidelines should be lowered**
- **Recent research indicates that alcohol poses a greater risk, both to the health of the individual drinker (especially cancer) and the population at large (e.g. crime and social disorder) than was known at the time of establishing the current drinking guidelines**
- **Given the lack of a proven threshold for risk, the widespread publicity of 'safe', 'sensible' or 'responsible' drinking guidelines has to be seriously questioned**
- **The evidence for the effectiveness of drinking guidelines is inconclusive**
- **A full review of the evidence base for drinking guidelines, which takes into consideration the health and social impact of drinking, with international comparisons is needed**

1) Upon what evidence are the government's guidelines on alcohol intake based and how regularly is this evidence reviewed?

The current recommended drinking guidelines were originally based on evidence submitted in a report by the Royal College of Physicians to the UK government in 1987. This report acknowledged that there was "insufficient evidence to make completely confident statements about how much alcohol is safe"[i]. However, making the judgement that the public needed to be informed about the risks associated with drinking, it suggested the following guidelines for 'sensible limits of drinking':

- Men – no more than 21 units per week
- Women – no more than 14 units per week
- Both men and women should have two or three alcohol-free days
- The total number of weekly units should not be drunk in one or two bouts

These guidelines were based on the underlying assumption that they did not apply to children and adolescents, to adults who had particular health problems or a family history of alcohol problems or to women during pregnancy.

In 1995 these guidelines were reviewed by an inter-departmental government working group, following the publication of evidence that alcohol may provide a protective factor against coronary heart disease. Evidence was submitted to the inter-departmental working group by leading health experts, including the BMA[ii], and the Royal Colleges of Physicians, Psychiatrists and GPs, stating that the original 1987 guidelines were still the most appropriate means of communicating to the public the risks associated with drinking[iii]. There was no valid evidence to suggest increasing the guidelines.

However, the inter-departmental working group amended the original guidelines, to advise on daily drinking limits, stating that "men should not regularly drink more than 3–4 units of alcohol a day and women should not regularly drink more than 2–3 units a day"[iv]. This effectively increased the weekly limit for men by 33% and women 50%, exceeding the recommended threshold for low risk drinking as presented by the medical profession. These changes were met with concern by the health community, as

they contradicted the evidence base and seemingly recommended 'safe' levels of drinking that were in fact over and above what was deemed a 'low risk' threshold[v]. This will be discussed in the following section about 'improving the evidence base'.

The current drinking guidelines for men and women used by the government have largely remained the same since this amendment. There was an addition in 2009 of the advice from the Chief Medical Officer that no children under the age of 15 years should consume alcohol, after evidence indicated that drinking before this age increased the risk of alcohol dependency in later life and also affected cognitive development[vi].

2) Could the evidence base and sources of scientific advice to Government on alcohol be improved?

The IAS is a strong advocate for evidence-based policy and therefore considers that the Government needs to assess all the available evidence on alcohol consumption when developing public health messages about drinking. To date, the evidence on the effectiveness of drinking guidelines as a means to reduce harmful alcohol consumption is inconclusive. Since the 1995 guidelines were established there have been changes in alcohol consumption trends and developments in the field of alcohol research. These developments need to be taken into account by the Government when using appropriate advice in the future.

A full review of the evidence base for drinking guidelines, which takes into consideration the health and social impact of drinking, with international comparisons is needed.

The IAS suggests that the Government establish a working group, with representation of health experts, to regularly review the evidence base and provide scientific advice for public health messaging on alcohol. This working group could report to the Health Select Committee and have representation from the Royal Colleges of Physicians, Psychiatrists and GPs amongst other public health interest groups.

Regular drinking and its associated risks:
Importantly, the recommendation that 'regular drinking', defined as 'drinking every day or most days of the week' does not pose a significant health risk is a direct contradiction to the evidence base on the health harms associated with alcohol. Daily and frequent drinking is associated with a greater risk of developing dependency problems with alcohol and alcoholic liver disease and cannot therefore be considered a 'safe' or 'low risk' practice. Furthermore, the guideline for men to drink up to 4 alcoholic drinks per day on a regular basis would be classified as "hazardous" drinking under the WHO standards for assessing risky alcohol consumption (the Alcohol Use Disorder Identification Test, AUDIT).

The IAS recommends that both volume and frequency of alcohol consumption are accounted for in any drinking guidelines.

Scope of guidelines – alcohol harm to the individual and society
The current guidelines are limited in their scope to the risk to the individual drinker of developing chronic health problems. The risks posed by alcohol both to the individual and society are much broader than this and need to be taken into consideration when developing any form of guidance with the objective of reducing alcohol related harm.

A wider perspective provided by the WHO Global Burden of Disease calculations for Disability and Quality Adjusted Life Years (DALYs and QALYs) would provide a better

indicator of alcohol-related harm to individuals in respect to biological, psychological and social issues. In other words chronic risk should be seen from the perspective of number of years of disability caused by drinking behaviour. These types of studies have been undertaken in Sweden and Canada. Acute health and social harms, such as the increased risk of accidents, should be addressed alongside chronic conditions. Guidance can be taken from the Australian model of alcohol public health messaging, which is discussed in section 4 of this document.

Effectiveness of guidelines as a major policy to reduce alcohol harm

There is much debate both in the UK and internationally about the efficacy of drinking guidelines as a policy to reduce alcohol harm. Many health experts have raised concerns about the prioritisation of drinking guidelines and public health education programmes over and above more proven effective policies such as regulation of price, availability and promotion[vii]. Given that the UK Government has placed a large emphasis on drinking guidelines as a means to 'foster a culture of responsible drinking'[viii], it is important to note here that whilst guidelines have a role to play in educating the public and increasing knowledge about the risks of alcohol, they have not been proven to be effective at changing behaviour. The pharmacological properties of alcohol, which include loss of inhibitions in the short term and dependence in the long term, make it impractical to rely on a 'nudge' framework of 'rational man making informed decisions' about drinking alcohol to effect behaviour change.

Evidence to change the guidelines

There is no evidence to support raising the current unit guidelines. Despite media coverage that suggests the review by the Science & Technology Committee may increase the 'healthy alcohol limit'[ix], no research has been published to date that suggests any health benefit will be achieved by regular consumption above the current unit guidelines.

There has been some evidence published to support lowering the current drinking limits recommended by Government.

A recent report by the Harvard School of Public Health found that post-menopausal women (average age 58) who were registered nurses from European backgrounds experienced improved health outcomes in older age if they consumed very modest amounts of alcohol[x]. The authors of this study warned against regular consumption of more that 15g per day amongst women of this demographic, due to the increased risk of developing breast cancer. This study therefore indicates that the current drinking guidelines of up to 3 units per day for women (3 x 8g = 24g) may increase the risk of breast cancer and should therefore be reduced to less than 2 units.

A report published by the Royal College of Psychiatrists in 2011, suggests that older men and women should be issued with lower drinking guidelines due to a range of physiological changes associated with ageing, including reduced liver function and also the association of alcohol with dementia, depression and an increased risk of falls. The report recommended the revised limits for older people of 11 units per week for men and 7 units per week for women[xi].

A further study in the UK found that any protective factor from drinking alcohol against coronary heart disease can be reached through drinking as little as one unit of alcohol every other day for men over 40 years and post-menopausal women.

However, the evidence to suggest thresholds for 'low risk' drinking is inconclusive and there is no proof that any level of alcohol consumption is completely safe.

With regard to chronic consumption of alcohol there is not a threshold at which harm occurs. There is a curvilinear relationship between harm and alcohol consumption, there being different risk curves for different outcomes. For example the pattern of chronic diseases such as cirrhosis will be different from the risk data for other internal organs, including brain damage.

Furthermore, there is a significant difference in these risk curves between different populations, people of different ages, social class, health status, ethnicity and gender. It is therefore extremely difficult to produce a universal public health message about 'safe' levels of drinking.

Change in consumption trends and the rise of alcohol harm
There have been significant changes in patterns of alcohol consumption and associated harms since the establishment of the current drinking guidelines.

Liver deaths have increased markedly in the UK since 1995[xii]. Studies have shown that this increase is the result of an increase in levels of daily and near daily heavy drinking.

The overall affordability of alcohol has increased in the past 20 years by 44% and by around 130% in the off trade sector, where approximately 70% of alcohol is now purchased[xiii].

The link between alcohol and cancer has been explored in more detail, with a recent study indicating that alcohol may be associated with up to 13,000 new cases of cancer in the UK each year[xiv].

Alcohol is the single largest cause of mortality amongst 15-24 year olds, with almost a quarter of all deaths in this age group associated with alcohol[xv].

There has been a marked rise in crime and social problems due to alcohol. Approximately half (50%) of all violent incidents recorded are alcohol related with figures suggesting alcohol may contribute to up to one million assaults each year.

According to the latest report from the NHS Information Centre on Alcohol Statistics in England**,** almost one quarter (24%) of all adults in England were classified as hazardous drinkers in 2007.

3. How well does the Government communicate its guidelines and the risks of alcohol intake to the public?

As stated above, there is limited evidence to show that drinking guidelines are effective at changing behaviour with regards to alcohol consumption. Rather, the available evidence suggests that guidelines can be used to increase knowledge and awareness about the risks associated with drinking.

There is available data to show that public awareness of drinking guidelines has increased since 1997. Omnibus surveys carried out by the Office of National Statistics show that 90% of respondents had heard of measuring alcohol in units in 2009, which was a significant increase from 79% 1997. This increase in awareness was reported equally amongst men and women, however there were significant differences between levels of awareness amongst respondents from different age groups and socioeconomic status.

Those aged 65 and over were less likely to have heard of alcohol units: 80% had done so, compared with 96% of those aged 45 to 64 and 88% of the youngest age group (16 to 24). Given the increased vulnerability of older people to the harmful effects of alcohol (as outlined above) this data would suggest that the Government should seek to increase knowledge on the risks associated with drinking amongst this group.

Those in managerial and professional occupational groupings were the most likely to have heard of measuring alcohol in units (96%), and those in routine and manual occupations the least likely to have done so (87%). The harms caused by alcohol are disproportionately felt amongst lower socioeconomic groups: Men and women in routine and manual jobs are at a greater risk (3.5 and 5.7 times respectively) of dying from an alcohol related disease than those in higher managerial and professional jobs[xvi]. Heavy drinking has also been shown to have a negative effect on educational achievement and subsequent occupational status[xvii]. This evidence suggests that the Government should make the reduction of health inequalities a priority in any public health policy for alcohol.

The IAS suggests that in order to ensure the highest levels of credibility for public health messaging around alcohol, any guidance should originate from the Chief Medical Officer (as opposed to 'Government' guidelines).

4. How do the UK Government's guidelines compare to those provided in other countries?

International examples can be used as a guide to how the latest research developments have impacted upon recommended guidelines. The most recent comprehensive review of drinking guidelines was conducted in Australia, which concluded that the guideline for low risk drinking is that neither men nor women should exceed 20g of pure alcohol per day, which is equivalent to 2.5 standard UK units. The Australians define 'low risk' as the level of alcohol intake that, for healthy adults, will reduce the lifetime risk of death from an alcohol-related injury or disease to less than 1 in 100 (that is, one death for every 100 people who drink at that level).

The review of the Australian drinking guidelines found that of all the OECD countries, only 6 had higher recommended unit guidelines for men and women. In comparison, for women 12 countries had lower guidelines than the UK and for men 15 countries had lower guidelines than the UK.

In conclusion

There are many problems in establishing drinking guidelines due to the considerable variability of individuals in specific populations. There is limited evidence to suggest that use of drinking guidelines can affect behaviour change in order to reduce levels of alcohol harm. In view of the curvilinear relationship between consumption and alcohol health harms, and the lack of a proven threshold for risk, the widespread publicity of 'safe', 'sensible' or 'responsible' has to be seriously questioned.

A full review of the evidence base for drinking guidelines, which takes into consideration the health and social impact of drinking, with international comparisons is needed.

A short-term solution:
The IAS understands the desire for the Government to publicise guidance to the population on the risks associated with drinking alcohol. Given the available evidence, the IAS recommends the Government consider adopting the following measures on a short-term basis, whilst in the long-term conducting a thorough review of the efficacy of guidelines:

- *That the messaging around any guidelines avoids using language that may be perceived as 'targets' or encourage drinking. Phrases such as 'recommended', 'responsible' and 'sensible' should be avoided and the term 'low risk drinking' used*
- *Any guidelines should be explicit about their role as guidance only, and it should be made clear that no universal limits exist that apply to the whole population due to age, ethnic background, health status and other variables*
- *Guidelines should emphasise the CMO's advice that no children under the age of 15 should drink alcohol*
- *Guidelines should stipulate that pregnant women should avoid alcohol, that there is no evidence to suggest any level of 'risk free' drinking whilst pregnant*
- *Guidelines should be specific and measurable, not open to ambiguity, for example '1-2 units a day' should be replaced with 'maximum of 2 units in any one day'*
- *The term 'daily' and 'regular' drinking should be avoided as this implies that drinkers should drink regularly, which increases the risk of developing dependency*
- *Guidelines should link to nutritional advice, highlighting the impact of eating certain foods whilst drinking and the risks of drinking outside of mealtimes*
- *The link to alcohol and a variety of non-communicable diseases should be highlighted in health warnings, especially the increased risk of cancer*
- *The risks associated with regular and daily drinking should be highlighted, with a recommendation that people do not drink every day and have at least 3 alcohol free days each week*
- *An emphasis should be placed on the fact that no alcohol consumption is risk free*

Institute of Alcohol Studies
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