



Science and Technology Select Committee

Inquiry on alcohol guidelines

Royal College of Physicians' written evidence

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About the Royal College of Physicians

1. The Royal College of Physicians (RCP) has been at the forefront of improving healthcare and public health since its formation in 1518. The RCP plays a leading role in the delivery of high quality patient care by setting standards of medical practice and promoting clinical excellence. As an independent body representing over 25,000 fellows and members worldwide, we advise and work with government, the public, patients and other professions to improve health and healthcare.
2. The RCP has played a crucial role in the debate surrounding government alcohol policy since its first comments on the gin epidemic in 1725, more recently publishing a series of seminal reports on the topic including: *'The medical consequences of alcohol abuse; a great and growing evil'* (1987)¹, *'Alcohol and the heart in perspective; sensible limits reaffirmed'* (1995).² The first of these reports recommended sensible limits of drinking for men and women and was quickly adopted by government.
3. The RCP continues to play a leadership and advocacy role in relation to alcohol policy. The RCP coordinates the Alcohol Health Alliance UK (AHA), which was launched in November 2007 and is chaired by the RCP's former president, and RCP special advisor on alcohol, Professor Sir Ian Gilmore. The AHA brings together medical bodies, patient representatives, charities and alcohol health campaigners to work together to:
 - Highlight the rising levels of alcohol health harm
 - Propose evidence-based solutions to reduce this harm
 - Influence decision makers to take positive action to address the damage caused by alcohol misuse.

Introduction

4. The future viability of the National Health Service (NHS) depends on an effective approach to public health, nationally and locally. Only through long-term strategies, investment and integrated action across all three domains of public health (health improvement, health protection and healthcare) can we reduce the burden of disease, disability and dependence in an ageing population. Tackling alcohol misuse is a key part of this challenge.
5. The evidence suggests that policy measures to tackle the price, availability and promotion of alcoholic drinks are the most effective way of dealing with alcohol misuse³. However, the RCP believes that government advice on sensible drinking limits can play an important role, as doctors, patients and the public need advice that is easily understood and reasonable. It is essential that this government advice is evidence based and regularly reviewed.
6. The RCP welcomes the opportunity to submit evidence to the Science and Technology Select Committee on this important issue.

¹ Royal College of Physicians. *The medical consequences of alcohol abuse, a great and growing evil*, Tavistock Publications Ltd, 1987

² Royal College of Physicians, Royal College of General Practitioners, Royal College of Psychiatrists. *Alcohol and the heart in perspective, sensible limits reaffirmed*. Oxford: Oxpriint, 1995

³ Babor, Thomas et al. *Alcohol, no ordinary commodity; research and public policy*, 2nd edn, Oxford: Oxford University Press. 2010: 243-246



Summary of the RCP's written evidence

What evidence are government guidelines on alcohol intake based on and how regularly is the evidence base reviewed?

- The government's original guidelines on alcohol consumption were based on the 1987 RCP report *'The medical consequences of alcohol abuse; a great and growing evil'*.
- The current guidelines are predominantly based on the report *'Sensible Drinking; The Report of an Inter-Departmental Working Group'*, which was published in 1995.
- Since 1995 government guidelines have been slightly altered but there has not been a systematic review of the evidence by government to which interested parties have been invited to give their views.

Could the evidence base and sources of scientific advice to government on alcohol be improved?

- The RCP believes that the government's guidelines on alcohol consumption could be improved to better reflect the evidence base in a number of areas:
 - (i) overall levels of consumption that are 'safe' or within 'sensible limits'
 - (ii) frequency of alcohol consumption
 - (iii) the physiological effects of ageing
 - (iv) the balance of the health benefits of alcohol consumption for coronary heart disease against wider alcohol-related health harms

How well does the government communicate its guidelines and the risks of alcohol intake to the public?

- The RCP believes that there needs to be clear, independent evaluation of any communications strategy.

How do the UK government's guidelines compare to those provided in other countries?

- Comparisons with guidelines in other countries are not straightforward, as there are differences in the size of standard drinks and units.
- Recent analysis by the Australian government found that 12 countries recommended lower limits than the UK for women and 15 for men, whereas six countries recommended higher limits for women and six for men.
- Though a comparison of the guidelines with other countries can provide useful insights, the RCP believes that it is important that the UK government guidelines are a considered and expert judgement on the risks of alcohol consumption, based on the scientific and medical evidence.



What evidence are government guidelines on alcohol intake based on and how regularly is the evidence base reviewed?

7. **1987 sensible drinking guidelines**

The government's original guidelines for sensible drinking were based on the findings of the seminal RCP report *'The medical consequences of alcohol abuse; a great and growing evil'*, which was published in 1987.

8. This report was the culmination of an RCP working party, which considered the available evidence on the effect of alcohol consumption on the nervous system, the liver, the gastro-intestinal system and pancreas, nutrition, the heart, blood pressure, the respiratory system, endocrine function, and on the incidence and severity of injuries.
9. The report shows that the evidence on the risks of alcohol consumption is complex. Most systems in the body can be damaged by alcohol consumption, but the rate at which harm increases in relation to the amount of alcohol consumed varies. For example liver disease has an exponential relationship with alcohol consumption, whereas the risk of cancers shows a dose dependent relationship. The risk to which an individual is exposed to is also related to a number of factors, including both the amount and the frequency of drinking, but also genetics, and age.
10. Therefore the report concluded that advising on 'safe' levels of alcohol consumption is difficult and that there was 'insufficient evidence to make completely confident statements about how much alcohol is 'safe''. However, the report argued that it is essential that this was not used as an excuse for inaction as doctors and the public need guidance which is both easily understood and reasonable.
11. Given this need for guidance the report made a recommendation for 'sensible limits of drinking' which represented the expert judgement of leading doctors based on the available evidence.
12. All alcohol consumption carries a level of risk, but given the fact that alcohol consumption is widespread and enjoyed by many, this was a judgement about what an acceptable level of risk was. These guidelines were not 'plucked out of thin air', but were the result of this very difficult judgement.

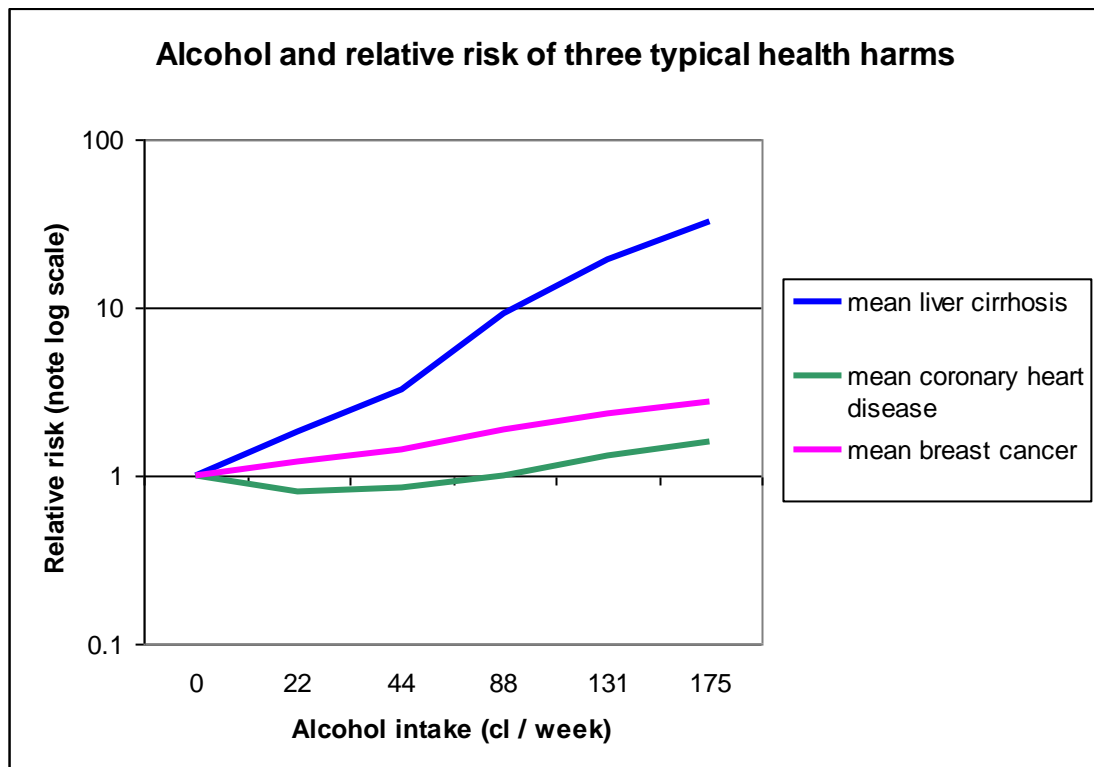


Figure 1 Relative risk of various health problems with different levels of alcohol consumption⁴.

13. There is no such thing as a 'safe level' and the RCP weekly guidelines of 1987 were the result of a balanced judgement of health experts taking into account two of the key parameters of risk: frequency of consumption and amount consumed on drinking occasion.
14. The report recommended 'sensible limits of drinking' of not more than 21 units a week for men, and not more than 14 units a week for women, including two or three days without any alcohol, and provided that the total amount was not drunk in one or two bouts. These sensible limits of drinking were quickly adopted by the government and remained the government's guidance until 1995.
15. **1995 review of the alcohol guidelines**
In 1995 the governments guidelines on sensible drinking were reviewed following the publication of evidence which indicated that drinking alcohol might give protection from coronary heart disease. An interdepartmental group, comprising predominantly of civil servants from across Government, was established to review the evidence base and to make recommendations. This culminated in the publication of the report, 'Sensible Drinking, The Report of an Inter-Departmental Working Group', in December 1995.⁵
16. This committee made two extremely significant changes to the RCP guidelines, firstly they substituted the weekly limit with a daily guideline. This in affect appeared to sanction daily or near daily drinking, one of the key risk factors for alcohol-related harm and dependency. Second if the daily limit of four units was drunk with no drink free days this would be the equivalent of 28 units per week, a 30% increase on the RCP's guidelines.

⁴ Corrao G, Bagnardi V, Zambon A, La VC, *A meta-analysis of alcohol consumption and the risk of 15 diseases*. *Prev Med*, 2004 38(5):613-9.

⁵ Department of Health, *Sensible Drinking - The Report of an Inter-Departmental Working Group*. Department of Health, 1995.

17. These revised guidelines were not supported by a review of the evidence carried out by the Royal College of Physicians, Royal College of General Practitioners and Royal College of Psychiatrists, published in June 1995. This is covered in more detail later in this submission in the section on coronary heart disease. The review of the guidelines was received with concern by the wider alcohol health community, and Griffith Edwards, a leading world expert in the field of alcohol dependency addressed this in a BMJ editorial.⁶

18. Government guidelines since 1995

The government’s advice on sensible drinking has remained broadly similar since 1995 and there has not been a similar examination of the evidence to which interested parties have been invited to submit their views. However the Department of Health has publicly stated that it does keep the issue under regular review.⁷

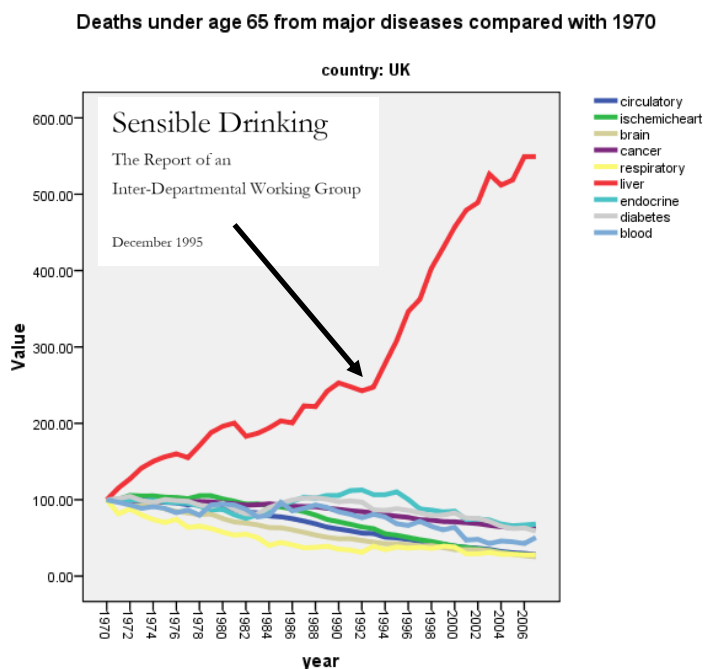


Figure 2 Deaths under age 65 from major diseases compared with 1970

19. Government guidance has altered slightly to define ‘regular’, as ‘drinking every day or most days of the week.’⁸ The RCP disputes the claim that drinking every day will not accrue a significant health risk, as frequency of alcohol consumption is an important risk factor for the development of alcohol dependency and alcoholic liver disease. This is covered in more detail later in this submission. In addition the government changed the terminology it uses from ‘safe’, ‘hazardous’ and ‘harmful’ to ‘low risk’, ‘increasing risk’ and ‘high risk’. The medical profession, in standard tests to identify individuals at risk of alcohol-related harms, including the gold standard World Health Organization Alcohol Use Disorders Identification Test (AUDIT), uses the ‘safe’ ‘hazardous’ and ‘harmful’ terminology. Consistency in the use of terminology would help to communicate clearly with the public.

⁶ BMJ 1996, 312 : 1

⁷ Tamara Cohen, *Cheers... an extra glass of wine is fine as the daily allowance could be raised*, The Daily Mail, 26 July, 2011.

⁸ Department of Health. *Units and You*. Department of Health, 2008. [online] available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_085427.pdf




Could the evidence base and sources of scientific advice to government on alcohol be improved?

20. The RCP believes the government's alcohol guidelines could be improved in a number of areas:
- overall levels
 - frequency of alcohol consumption
 - age
- 21. Overall levels**
- The Department of Health guidelines currently state that regular consumption of between two and three units a day for women and three or four units a day for men will not accrue any significant health risk, with regular consumption defined as drinking every day or most days. This equates to weekly guidelines for sensible drinking of 28 units a week for men or 21 units a week for women.
22. The RCP recommends that in order for individuals to keep their alcohol consumption within 'safe limits' that they should consume between 0 - 21 units a week for men and 0 - 14 units a week for women. At such levels, most individuals are unlikely to come to harm, provided the total amount is not drunk in one or two bouts and that there are two to three alcohol free days a week.
23. Consuming between 21 - 49 units a week for men and 14 – 35 units a week for women, is 'hazardous' and would put them at an 'increasing risk' and consuming above 49 units a week is 'harmful'. Above the 'safe limit' of consumption, the risk of mortality from all causes increases as alcohol consumption increases.
24. It is important to note that these recommendations are a best judgement in light of the evidence, and were reached having taken into account a number of areas of uncertainty and inaccuracy.
- 25. The frequency of alcohol consumption**
- Current Department of Health sensible drinking guidelines state that regular consumption of between three and four units a day for men, and between two and three units a day by women will not accrue significant health risk. Regular is defined as 'drinking every day or most days of the week.
26. This suggestion that daily drinking is low risk runs against evidence which suggests that frequency of drinking is a significant risk factor for the development of alcohol dependency, and the development of alcoholic liver disease.⁹
27. The World Health Organisation's (WHO) gold standard tool to identify individuals at risk of alcohol-related harm, the Alcohol Use Disorders Identification Test (AUDIT)¹⁰ can be simplified into the AUDIT-C test, which retains the majority of its discriminatory value. This test consists of

⁹ Sheron, Nick, and Brandish, Emma. *Drinking patterns and the risk of serious liver disease*. Expert Rev. Gastroenterol. Hepatol, 2010. 4(3), xxx–xxx.

¹⁰ Babor, T. et al. *The Alcohol Use Disorders Identification Test, guidelines for use in primary care*. World Health Organisation, 2001.



just three questions, the first of which is how often do you have a drink containing alcohol? Someone drinking four units each day, within the current guidelines, would be classed as a hazardous or higher risk drinker.

28. Although the mechanisms for alcohol related liver damage are not fully delineated, further studies have shown an increased risk of cirrhosis for those who drink daily or near daily compared with those who drink periodically or intermittently.¹¹ A Japanese study showed that heavy drinkers had higher rates of all-cause mortality when alcohol was consumed over 5 to 7 days compared with one to four days.¹²
29. A study published in 2009 concluded that increases in UK liver deaths are the result of daily or near-daily heavy drinking, not episodic or binge drinking, and that this regular drinking pattern is often discernable at an early age.¹³
30. It should also be noted that the majority of young people confine their drinking to binges once or twice each week. These are associated with health harms including accidents, violence, self harm and suicide and as a result alcohol is the leading cause of death in the 16-24 age group¹⁴. However a very significant minority of young people drink heavily on a regular basis. As a result very large numbers of young people develop alcohol dependency, on track to develop physical health complications as they move into their 30s and 40s (Figure 3).

¹¹ Ibid

¹² Marugame, T. et al. *Patterns of drinking and all-cause mortality: results from a large-scale population-based cohort study in Japan*, Am J Epidemiol. 2007: 1, 1039-46.

¹³ Burton, Andrew et al. *Drinking patterns, dependency and life-time drinking history in alcohol-related liver disease*. Addiction. 2009: 104, 587.

¹⁴ Jones, L, Bellis, M. A., Dedman, D., Sumnall, H, and Tocque, K. *Alcohol attributable fractions for England; alcohol attributable mortality and hospital admissions*. North-West Public Health Observatory and Department of Health, 2008.

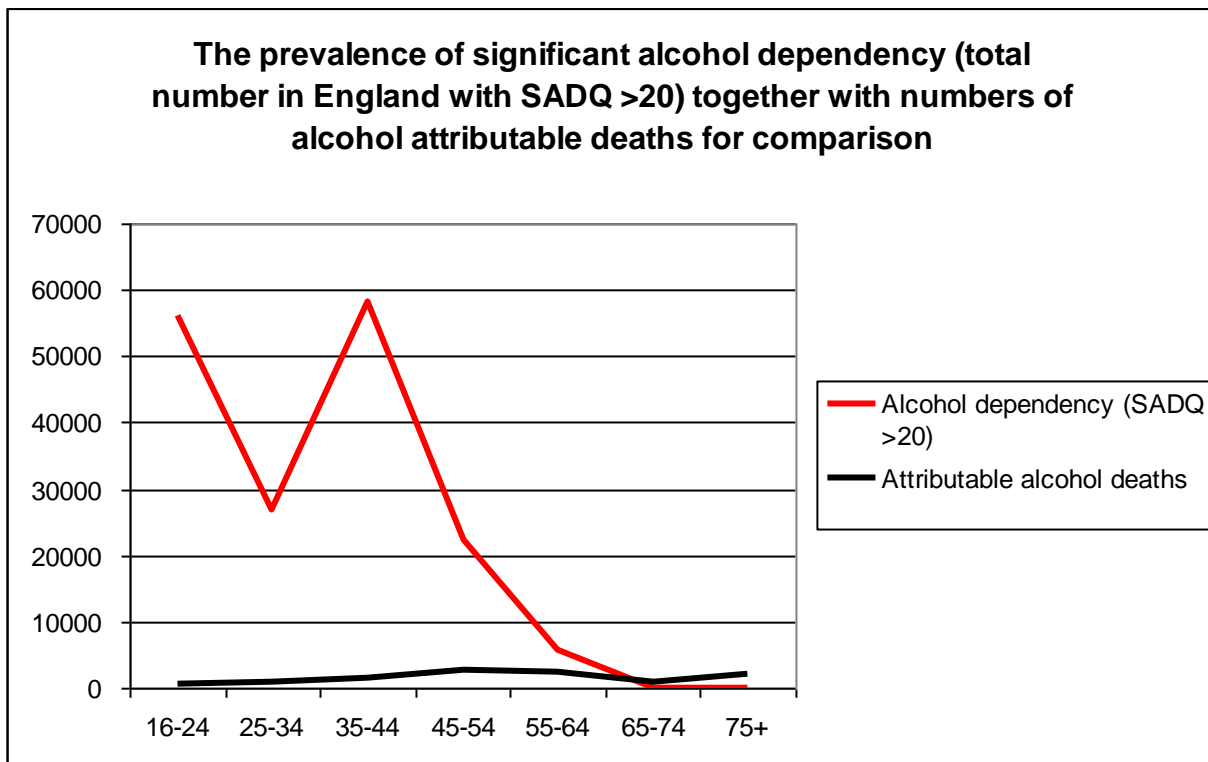



Figure 3 Numbers of individuals with significant alcohol dependency in England calculated from the prevalence data in the Survey of Psychiatric morbidity 2000¹⁵, total number of alcohol attributable deaths are included for comparison¹⁶.


31. There are relatively few older individuals with significant alcohol dependency: some stop drinking and it is unknown how many die of non-alcohol recorded causes but it is likely to be a significant number.
32. The government guidelines should recognise that hazardous drinking has two components: frequency of drinking and amount of drinking. To ignore either of these components is scientifically unjustified. A very simple addition would remedy this problem namely a recommendation that to remain within safe limits of alcohol consumption that people have three alcohol-free days a week.
33. **Coronary heart disease**
Following the publication of evidence which indicated that drinking alcohol might give some protection from coronary heart disease the Royal College of Physicians, together with the Royal College Psychiatrists and Royal College of General Practitioners published a report in June 1995 entitled 'Alcohol and the heart in perspective; sensible limits reaffirmed', which reviewed the evidence on the relationship between alcohol consumption and cardiovascular disease, including coronary heart disease. It considered this evidence alongside data on all-cause mortality, psychosocial risks, and on the possibility that recommendations that led to an overall increase in alcohol consumption would also increase the number of heavy drinkers.

¹⁵ Singleton, N, Bumpstead, R, O'Brien, M, Lee, A, and Meltzer, H. *Psychiatric morbidity among adults living in private households 2000*, London: ONS, 2011.

¹⁶ Jones, L, Bellis, M. A., Dedman, D., Sumnall, H, and Tocque, K. *Alcohol attributable fractions for England; alcohol attributable mortality and hospital admissions*, North-West Public Health Observatory and Department of Health. 2008.

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34. The report concluded that although the evidence showed that low to moderate drinking of alcohol is associated with a lower risk of coronary heart disease than in non drinkers, that to increase the upper limit of the sensible drinking guidelines would benefit neither individuals nor the population as a whole and therefore recommended no change in the health education advice. This directly conflicted with the changes made to the Department of Health guidelines to increase the upper limit of the sensible drinking guidelines in 1995.
35. Effect on individual risk
Based on this analysis of the net benefit to the individual the RCP came to the conclusion not to recommend an increase in the guidelines. The net benefit to the individual balanced not only the potential health benefits but also the other risks related to increased alcohol consumption:
- For **young men**, a major cause of death is accidents and violent deaths, of which a large proportion are alcohol-related, as such any increase in alcohol consumption in this section of the population would have adverse consequences.
 - For **premenopausal women**, breast cancer is a more significant cause of death than coronary heart disease, though there may be a narrow window of benefit before a protective effect against coronary heart disease is balanced by a deleterious effect on breast cancer.
 - For **men aged above 55 to 60** coronary heart disease is a major cause of death and although one to three units per day reduces the risk of heart attack, at a population level alcohol harms still outweigh the health benefits.
36. Population effects
In addition, the RCP's report concluded that 'there would be an adverse effect on the public health from any recommendation that increased the overall level of consumption in the population. If the mean increases, the proportion of people drinking in higher risk categories is likely to increase, with consequent increased risk of alcohol associated harm.'
37. Further evidence since 1995
Following the Department of Health's review of alcohol guidelines in 1995, further studies have found that the protective effect of alcohol from coronary heart disease can be obtained at below 21 units per week for men and 14 units a week for women, and that the majority of the health benefit for men aged over 40 and post menopausal women can be reached through drinking as little as one unit of alcohol every other day¹⁷.
38. There are also other ways to protect those at risk from coronary heart disease, including changing lifestyle factors such as diet and exercise, as well as the use of statins.
39. **Older people**
Older people are particularly vulnerable to harm from the various effects of alcohol due to physiological changes associated with ageing, even at relatively modest levels of intake. As a whole, older people have higher blood alcohol levels than younger people on drinking the same amount of alcohol due to lower body mass to water ratio, reduced hepatic blood flow and less efficient hepatic metabolism. Alcohol use in older people is also associated with depression, dementia, falls and physical illness. However moderate alcohol intake is also associated with cardiovascular benefits.

¹⁷ Tolstrup et al. *Prospective study of alcohol drinking patterns and coronary heart disease in women and men*, BMJ. 2006;10.1136/bmj.38831.503113.7C

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40. The current guidelines are based predominantly on evidence for younger age groups and there is concern that current guidelines are not appropriate for older people. The recent report 'Our invisible addicts' published by the Royal College of Psychiatrists in 2011, suggests that a 'safe limit' for older people is 11 units per week for men, or seven units per week for women.¹⁸
 41. However, defining the barrier between moderate and hazardous or harmful drinking is not clear cut, and there is no arbitrary age when drinking patterns should be advised to change. Individual factors also contribute to the risks of alcohol consumption, including factors such as medication use, co-morbidity and frailty, as well as the physiological changes associated with ageing.
 42. Recommended limits for safe drinking by older people in the UK require further consideration, especially considering the ageing UK population alongside changing drinking patterns, which are expected to increase alcohol-related morbidity and mortality. A consensus on information for healthcare professionals and the public on recommended drinking limits for older people would help to address this.


How well does the government communicate its guidelines and the risks of alcohol intake to the public?

43. We have no robust evidence that enables us to answer this question but all government public health messages should be clearly expressed and easy to understand and there should be clear, independent evaluation of any communications strategy. People have the right to the clear concise and widespread provision of public information of the health risks of alcohol consumption.
44. Government messages need to be consistent and also need to be tailored to key groups. Given that people of different ages have markedly different drinking patterns and very different health and other risks, it would seem sensible to have public health messages which reflect these risks and lifestyles. Recommending to young people who drink to oblivion one night per week that they should substitute this with a pattern of two to four units daily drinking has two dangers. First the advice is so inappropriate to their lifestyles that it is effectively ignored. Second, the implied sanctioning of a pattern of regular daily drinking is potentially extremely dangerous given that alcohol dependence is effectively a disease of the young.

How do the UK government's guidelines compare to those provided in other countries?

45. Comparisons with guidelines in other countries are not straightforward, as there are differences in the size of standard drinks and units. Guidelines which may appear to be significantly different may not actually be so when standardised into a measure so as to be directly comparable.
46. When the Australian government reviewed its alcohol guidelines in 2009 it provided an analysis and summary of alcohol guidelines in OECD countries. It found that:
 - For women 12 countries had lower guidelines than the UK, and six countries had higher guidelines.

¹⁸ Royal College of Psychiatrists. *Our invisible addicts*. Royal College of Psychiatrists, 2011.

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- For men 15 countries had lower guidelines than the UK and six countries had higher guidelines¹⁹
47. Though a comparison of guidelines with other countries can provide useful insights, the RCP believes that it is important that the UK government guidelines are a considered and expert judgement of the risks of alcohol consumption, based on the scientific and medical evidence.

¹⁹ National Health and Medical Research Council, Australian Government. *Australian Guidelines to reduce health risks from drinking alcohol*. National Health and Medical Research Council, 2009. [online] available at: http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/ds10-alcohol.pdf