



**Title:** Effective and Cost-Effective Measures to Reduce Alcohol Misuse in Scotland: A Literature Review

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<http://www.scotland.gov.uk/Publications/2005/01/20542/50228> (accessed July 20th 2010)

**SCS topic headings:** Personal Safety, Safety in Public Spaces (ASB), Home Safety

**This document is a LITERATURE REVIEW of effective intervention approaches.**

### **Summary of the intervention's aim**

This report reviews [international] evidence about the effectiveness and cost-effectiveness of interventions aimed at reducing alcohol misuse. The aim of the study was to update a previous review of evidence on the effectiveness and cost-effectiveness of interventions aimed at reducing alcohol misuse (published in 2001) and to identify any new findings in this literature.

This update of the literature review follows the publication of the original report, 'Effective and cost-effective measures to reduce alcohol misuse in Scotland: a literature review' (2001). This report is available at the following web address: <http://www.scotland.gov.uk/health/alcoholproblems/docs/lire-00.asp> (accessed July 20th 2010)

### **Outcomes**

- NB. The main findings of the review of more recent literature are reported by type of intervention in sections 3-9. (Definitions of the intervention categories are given in Ludbrook et al 2002 p10.) The main findings relating to interventions that are supported by the evidence base are summarised in table 11.1. Interventions that do not appear in table 11.1 are not necessarily ineffective but no strong evidence to support them has been found in the review.
- Section 10 of the report presents further results from reviews that dealt with particular population groups. Section 11 summarises the main findings and makes recommendations.

In terms of the **effectiveness review** there is a strong and relevant evidence base to show that:

- the use of price increases, via taxation, and brief interventions will reduce the number of problem drinkers
- effective screening tools to detect problem drinkers are available (CAGE and AUDIT)
- detoxification services and relapse prevention, through appropriate psychosocial and pharmacological treatments, are effective.

The authors conclude the review with reference to specific studies as illustrative examples: There is evidence that legislative interventions to reduce permitted blood alcohol levels for drivers, to raise the legal drinking age and to control outlet density have been effective but this evidence relates mainly to the US. There is no certainty that the results would transfer to the UK, where there is a different cultural attitude towards alcohol. Evidence from the US and Australia supports the effectiveness of random breath testing of drivers but similar arguments may apply. There is no clear evidence of effectiveness relating to prevention of alcohol misuse, mainly because of the weaknesses of the research carried out. Some effects on knowledge and attitudes have been found but none relating to drinking behaviour. There is some evidence that community action may reduce drink related problems.

The **cost-effectiveness review** found evidence to support the cost-effectiveness of:

- brief interventions
- home and outpatient detoxification
- outpatient treatment for relapse prevention
- the use of psychosocial interventions and Acamprosate as an adjunct treatment in relapse prevention.

The volume of **cost-effectiveness literature** is much smaller and is strongest in the areas of brief interventions and relapse prevention. A weakness of this area is that most studies have not been conducted alongside effectiveness studies but have modelled results based on values obtained from the literature. Few studies have addressed the health benefits of interventions with the result that outcomes in terms of cost per life year are rarely produced in the literature.

### Summary of evaluation conclusions

The size and strength of the evidence base is very variable but it is apparent that interventions are required across all areas. The different types of intervention are not substitutes for each other but tackle different aspects of the alcohol misuse problem. There is much less evidence about cost-effectiveness than effectiveness.

This update of the 2001 review identified a reasonable number of additional studies but the majority of these have confirmed previous findings rather than presenting new information. The extent and quality of the research continues to vary between types of intervention. Treatment interventions have been subject to the most

rigorous evaluations and the literature contains a number of meta-analyses of well-conducted randomised controlled trials. There is a large volume of research in the area of prevention but the study designs and the resulting evidence are weak. Policy interventions and the effects of legislation and enforcement have been less well researched.

[At the time of writing] There remains a particular lack of sound evidence, applicable to the UK, in the area of policy, legislation and enforcement. More attention requires to be given to evaluating alcohol initiatives in the UK and these evaluations should be planned at an early stage in the development of an initiative. Despite a plethora of research, the evidence relating to prevention is weak and better research designs are required. In screening and treatment, there is a sound basis of evidence for a number of interventions but additional research would be beneficial. In all areas, there is a need for better economic studies.

The [2001] report argued that the results of the evidence review should be interpreted alongside information about interventions that are already taking place. Both the impact which interventions will have upon strategic targets and the resources required to implement interventions will depend upon the extent to which they have already been deployed. It should also be noted that the effectiveness of these interventions has been demonstrated in research settings and requires to be confirmed in routine practice. Arrangements for auditing or monitoring the effectiveness of interventions will need to be put in place.

#### **How the evaluation gathered information for findings and conclusions**

This literature review is based on reviews of effectiveness and individual economic evaluation studies. This reflects the relative size of the two types of literature. The search strategies and databases used replicated the searches carried out for the original review. (See Ludbrook et al 2002, pp11-12 and pp15-16). Databases were searched from 2000 in order to overlap the period of the previous review.

The 'quality' of the effectiveness reviews and the economic evaluation studies was assessed using the same criteria as the original review (see Ludbrook et al, p12 and p16). All economic evaluations have been included, even if they are incomplete in their coverage of costs or benefits. The authors note, as with the 2001 review, there are very few good quality economic evaluations.

**Further details about the SCS evaluation of this report are available on request.  
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