# **Drinking environments**

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### Introduction

Pubs, bars and nightclubs are key locations for the consumption of alcohol, particularly among young people. These drinking venues can form a major part of individuals' social and recreational life, providing opportunities for fun, socializing, relaxation and physical exercise. They can also provide benefits to local economies including through employment, economic investment, regeneration and tourism. However, the congregation of large numbers of drinkers in drinking environments (defined here as public drinking venues and the areas surrounding them) means they are often associated with high levels of intoxication and alcohol-related harm, including violence, road traffic crashes, public disorder and unintentional injury (Bellis et al., 2010; Wahl, Kriston & Berner, 2010; Rowe et al., 2010). Alcohol-related problems typically cluster in areas with high numbers of pubs, bars and nightclubs and peak at weekend nights, along with alcohol-related emergency department attendances and crime (Gmel et al., 2005; Ricci et al., 2008; Livingston, Chikritzhs & Room, 2007; Grubesic & Pridemore, 2011). Further, studies show that a small number of drinking venues within an area often account for a large proportion of alcohol-related harm, suggesting that certain features of these premises can aggravate problem behaviour (Rowe et al., 2010; Hughes et al., 2011b). Key features of problematic venues include a permissive atmosphere, crowding, low levels of comfort, poorly trained staff and cheap drinks promotions (Hughes et al., 2011b; Graham et al., 2006; Graham & Homel, 2008). In addition to factors associated with drinking venues, the wider drinking environment surrounding pubs, bars and nightclubs can influence levels of harm (for example, the availability of public transport), as can cultural and societal factors, including drinking patterns. For example, recent studies show that many young Europeans consume alcohol at home or in streets and other public places before visiting pubs, bars and nightclubs (known as preloading or predrinking), with a general trend towards increasing purchases of alcohol offpremise<sup>1</sup> being seen across Europe.

The propensity for alcohol-related harm in drinking environments makes these settings key areas for interventions, which can seek to affect the way in which alcohol is served and the conditions in which it is consumed. Successful interventions can help to prevent risky behaviour, protect the health of individuals who socialize and work in drinking environments, and prevent the broader impacts on communities (such as vandalism) and society (such as work absenteeism) that can follow a night out.

A trend being observed in many European alcohol markets is a shift from the purchase of alcohol in on-premises (pubs, bars and nightclubs) to off-premises (such as supermarkets and liquor stores). Research by RAND Europe (Rabinovich et al., 2011) found that in four out of six countries studied (Finland, Germany, Ireland, Latvia, Slovenia and Spain), the proportion of alcohol consumption accounted for by off-premise purchases increased between 1997 and 2010 relative to the proportion accounted for by on-premise purchases. Changes were particularly pronounced in Ireland, where off-premise alcohol consumption increased by 72% over this

<sup>&</sup>lt;sup>1</sup> In this report, "on-premise" sales and/or drinking of alcohol refers to premises, licensed or not, where drinking is permitted in the same place as the sales are made. "Off-premise" refers to places where sales are permitted but drinking is not, such as supermarkets.

period and on-premise consumption decreased by 56% (a 32% decrease overall). The share of total alcohol consumption accounted for by off-premise purchases increased from just 18% in 1997 to 47% in 2010. Increasing ratios of off- to on-premises were also identified in Spain (where alcohol consumption in licensed premises is still dominant) and in Finland and Germany (where off-premise consumption has traditionally exceeded drinking in licensed establishments).

One of the main reasons for this shift from consumption from on- to off-premises is thought to be the cheaper price of alcohol in off-premises, particularly in supermarkets. Surveys suggest that alcohol prices in licensed premises are typically around three times higher than those in the off-premise trade (Rabinovich et al., 2009). A general movement towards off-premise consumption suggests that home drinking is increasing and that less alcohol is being consumed in pubs, bars and nightclubs. While this may suggest that fewer people are using drinking environments, a growing body of research among young people shows that many consume alcohol bought from off-premises prior to visiting pubs, bars and nightclubs (Bellis et al., 2010; Wahl, Kriston & Berner, 2010; Hughes et al., 2011a; Forsyth, 2010; Hughes et al., 2008). For example, a study of 16-30-year-olds in drinking environments in four European cities (in the Netherlands, Slovenia, Spain and the United Kingdom) found that between 35% (Slovenia) and 61% (United Kingdom) of respondents had preloaded on the night they were surveyed (Hughes et al., 2011a). In Spain, 26% of participants had consumed alcohol at home and a further 34% had participated in botellón (group drinking in streets and other public settings) prior to visiting bars and nightclubs. Preloading is likely to have important implications for the management of drinking environments. For example, individuals may already be intoxicated when they arrive in drinking environments, or unable to consume more than a few drinks before becoming intoxicated. Serving alcohol to intoxicated individuals is illegal in most European countries, although enforcement levels vary and prosecutions can be rare (Bellis & Hughes, 2011). Thus, preloading may lead to fewer legal sales in bars yet more intoxication and alcohol-related problems, with studies suggesting that it can be associated with higher overall alcohol consumption on a night out and greater involvement in violence (Wahl, Kriston & Berner, 2010; Hughes et al., 2008). Fewer alcohol sales may also lead to greater use of cheap alcohol promotions in licensed premises as bars compete for customers, and to reduced spending and vigilance elsewhere (on, for example, staff training and responsible beverage service). Thus, understanding trends in preloading will be an important consideration when intervening in drinking environments to prevent alcohol-related harm.

#### Summary of recent evidence

During the last two to three years, a series of reviews (Brennan et al., 2011; Jones et al., 2011; WHO Regional Office for Europe, 2009; Babor et al., 2010; Ker & Chinnock, 2008; Bolier et al., 2011) and new studies have examined evidence of the impacts of interventions in drinking environments. These are summarized in Table 1.

Studies of *responsible beverage service training* continue to show limited evidence of effectiveness. A systematic review (Ker & Chinnock, 2008) concluded that there was inconclusive evidence for the impacts of interventions in alcohol server settings on patrons' alcohol consumption, conflicting evidence for such impacts on servers' behaviour, and insufficient evidence to suggest that they reduced injury. Only one study in the review had been published since 2006 (Toomey et al., 2008). This found an initial decrease in sales to pseudo-intoxicated patrons following a training programme for owners/managers of licensed premises in the United States, although the effects had disappeared after three months. Similar results have since been found in a follow-up study of responsible beverage service training for staff in student

Table 1. Summar	y of evidence	published	since 2006
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Activity	Evidence
Responsible beverage service training	While responsible beverage service training can change servers' knowledge, there is insufficient evidence to support its effectiveness in changing their behaviour or reducing alcohol use and harm. New studies have shown that any initial benefits of RBS training effects can rapidly disappear.
Enforcement of on-premise regulations	Enforcement is critical to the success of interventions in drinking environments. New studies from Finland and the United Kingdom provide further support for the effectiveness of targeted enforcement activity in reducing irresponsible alcohol service and violence.
Server liability	A systematic review found strong evidence that server liability laws reduce alcohol-related harm. However, such laws are rare outside North America.
Safer drinking environments	Evidence suggests that interventions may reduce harm in drinking environments but do not address excessive alcohol use. In Australia, the use of security measures in drinking settings had no impact on alcohol-related injury.

bars in Sweden, where initial reductions in patrons' breath alcohol concentration (Johnsson & Berglund, 2003) were not sustained at five-month follow up (Johnsson & Berglund, 2009). In Finland, a study evaluating the PAKKA (Local Alcohol Policy) community intervention (Warpenius, Holmila & Mustonen, 2010) found that a responsible beverage service component had no independent effects on servers' practice, despite the overall programme having positive impacts on their behaviour (see below). In the United States, a responsible beverage service programme focusing on discouraging alcohol service to pregnant customers was used among staff from drinking premises in two states. An evaluation found that the refusal of service to pseudo-pregnant actors significantly increased following the training in one state, but that the programme had no impact in the other state (Dresser et al., 2011).

A 2006 report stressed that ongoing enforcement was critical to the success of responsible beverage service and other interventions in drinking environments (Anderson & Baumberg, 2006). New evidence supports this claim. In the evaluation of the PAKKA project in Finland (Warpenius, Holmila & Mustonen, 2010), improvements seen in refusal of service to pseudo-intoxicated actors were considered a result of a combination of increased surveillance and sanctions. In the United Kingdom, a study evaluating the use of combined police and emergency department data to target enforcement activity in drinking environments, including multi-agency enforcement in problem venues, found the intervention to be associated with reductions in hospital admissions for violence (Florence et al., 2011). Increases in less serious assaults recorded by police were also seen, and these were thought to be due to increased opportunities for reporting and detecting crimes. The strong evidence identified in 2006 for the effectiveness of *server liability* laws in reducing alcohol-related harm has been clarified though a new systematic review (Rammohan et al., 2011), although evidence remains limited to North America.

Some new evidence has been published regarding the impacts of *safer bar environments*, which aim to reduce harm without affecting alcohol consumption (Anderson & Baumberg, 2006). For example, studies of the use of safer drinking containers (polycarbonate glassware) in bars have found this to be feasible and have the potential to reduce injury (Anderson et al., 2009; Forsyth, 2008). Appraisals of broader safety and security measures in drinking environments have, however, been less positive. A study in Australia (Miller et al., 2011) found that a multicomponent intervention focusing on safety in drinking environments had no impact on alcohol-related emergency department attendances for injury. The programme included high-visibility policing, a safer drinking campaign and the use of closed circuit security cameras, a radio communication system linking security staff and police, and ID scanners in bars. Analyses

found injury attendances continued to increase during the programme. Associations were identified between the implementation of both ID scanners and the drinking campaign and increased injury attendances, although these were considered coincidental rather than causal. An appraisal of measures to improve safety in United Kingdom drinking environments stressed that these are resource-intensive and have little impact on intoxication (Bellis & Hughes, 2011). Both this and the Australian study suggested a broader focus was required that sought to affect alcohol consumption rather than just manage its harms.

## **Conclusions for policy and practice**

The evidence base assessing the effectiveness of interventions in drinking environments has grown since 2006. New studies of responsible beverage service training have continued to find it to have limited impact, with any initial benefits short-lived. The evidence supporting enforcement activity in drinking premises has, however, increased. Studies examining measures to create safer drinking environments show mixed results, with one study in Australia finding that the introduction of a variety of security-focused interventions had no benefits in reducing alcohol-related injuries. The types of intervention assessed in this study (for example, high-visibility policing, CCTV, radio communications systems, ID scanners) are rare in most European countries, and largely represent attempts to control violence and disorder in areas where intoxication and related harm in drinking environments is already a major problem. An appraisal of similar measures implemented in United Kingdom drinking environments suggested that without tackling the underlying causes of intoxication, such measures aim only to create drinking environments where it is "safe" for individuals to get drunk. Here, however, the concept of safety does not consider the risks associated with drunkenness once people have left managed drinking environments, and ignores long-term health damages relating to repeated drunkenness.

Much evidence on interventions to create safer drinking environments focuses on settings where drunkenness and antisocial behaviour are endemic. Consequently, research is urgently required to identify those aspects of policy and practice that prevent such cultures developing in the first place and to understand the transferability of interventions developed for intoxicated nightlife environments to settings still characterized by more moderate drinking behaviour. The current diversity in drinking and nightlife cultures in Europe presents a key opportunity for developing this evidence base.

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