

ISDUP and EUPC on prevention of substance abuse at entertainment venues

A foundation document

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Introduction

This document reviews the scientific evidence for efficacy or effectiveness of interventions aiming to prevent/reduce the use of alcohol and illicit drugs at entertainment venues (bars, clubs and restaurants as well as outdoor or special settings) as described in UNODC's International [Standards of Drug Use Prevention \(ISDUP\) updated 2nd edition](#) (UNODC & WHO, 2018) and in EMCDDA's/EUDA's [European Prevention Curriculum \(EUPC\)](#) (EMCDDA, 2019). As these reports are important guidelines for evidence-based prevention work to reduce alcohol and drug related harms, it is essential that the referenced evidence base is accurate and reliable. Preferably, the referenced literature should also be updated and cover the extant literature adequately. All scientific evidence was evaluated in relation to ISDUP's own definitions and conclusions concerning a given intervention.

This document serves as a reference document (or foundation document) for a shorter and less detailed version in Norwegian (Rossow & Bye, 2026). This document is produced as part of project, involving collaboration between the Norwegian Directorate of Health and the Norwegian Public Health Institute (NIPH). In addition to examining the evidence base for effective prevention of alcohol and drug at entertainment venues, which is the focus of the present document, the collaborative project will include also an assessment of suitability for implementation of effective interventions in a Norwegian context. Detailed description of the employed evaluation method is provided in several accompanying deliverables (e.g. Andreas, 2026).

Evidence from the International Standards on Drug Use Prevention (ISDUP)

Definition of “Entertainment venues” and types of interventions

In [ISDUP 2nd ed.](#), entertainment venues and prevention programs are described as follows (page 34):

“Entertainment venues include bars, clubs and restaurants as well as outdoor or special settings where large-scale events may take place. These venues can have either a positive or negative impact on the health and well-being of citizens, as they provide social meeting spaces and support the local economy, but at the same time they are identified as high-risk settings for many risky behaviours, such as alcohol and drug use, drugged driving and aggression.

Most prevention programmes focusing on entertainment venues have multiple components, including different combinations of the following [our numbering]:

- 1. training of staff and managers and the managing of intoxicated patrons;*
- 2. changes in laws and policies, e.g., with regard to serving alcohol to minors or to intoxicated persons, or with regard to driving under the influence of alcohol and/or drugs;*
- 3. high-visibility enforcement of existing laws and policies;*
- 4. communication to raise awareness and acceptance of the programme and to change attitudes and norms;*
- 5. and offering treatment to managers and staff.”*

This definition suggests substantial overlap between interventions in entertainment venues and multi-component community interventions (CMCI), as many nightlife interventions combine multiple coordinated strategies that are characteristic for CMCI.

In [ISDUP 1st ed.](#), the part including entertainment venue is described with an almost identical text compared to the 2nd ed. In Table 1 (ISDUP 1st ed., p. 10), entertainment venues are described as an indicated intervention in the community, and prevention programs related to entertainment venues are referred to as universal (strategy appropriate for the population at large), relevant for the target groups adolescence and adulthood.

Review of the referenced studies on Entertainment Venues

In [ISDUP 1st ed.](#), there is reference to 2 reviews regarding efficacy of prevention programmes for entertainment venues (Bolier et al., 2011; Brennan et al., 2011), and one additional review is added in [ISDUP 2nd ed.](#) (Kingsland et al., 2016). In an appendix to the [ISDUP 1st ed.](#) ([Appendix II, Annex V](#)) an overview of the findings from Bolier et al. (2011) and Brennan et al. (2011) are listed. In addition, this appendix also provides an assessment of study quality. Both Bolier et al. (2011) and Brennan et al. (2011) reviews were rated as “acceptable quality” reviews. There is no such appendix for the added reviews in ISDUP 2nd. and thus, not for the Kingsland et al. (2016) review.

These three reviews are assessed in the following, focusing mainly on intervention characteristics and intervention effects on behaviours and/or harms (other, intermediate, outcomes including knowledge and attitudes, are not of interest in our context.)

Bolier et al. (2011):

Bolier, L., Voorham, L., Monshouwer, K., van Hasselt, N., & Bellis, M. (2011). Alcohol and drug prevention in nightlife settings: a review of experimental studies. *Subst Use Misuse*, 46(13), 1569-1591. <https://doi.org/10.3109/10826084.2011.606868>

This is a systematic literature review published in the journal Substance Use & Misuse. The aim of the review was to “Describe the overall effects of preventive alcohol and drug interventions in the nightlife environment”. More specifically, studies included should investigate the effectiveness or efficacy of an intervention in nightlife settings/licensed premises (or at least a part of the intervention should be located in a licensed premise or nightlife area) and the intervention should be aimed at the prevention of harmful alcohol and/or drug use (directly or indirectly by, e.g., changing policy).

A total of 21 articles published between 1991-2009 were identified, and 17 primary studies (15 alcohol related and 2 drug-related) were reviewed. The primary studies were 4 RCTs, 5 studies with pretest-posttest and matched control group design, 4 studies employing time series quasi experimental designs, and 4 studies with no control group. Four criteria’s taken from Cochrane were assessed for rating the quality of included studies, and two studies received four stars and three studies the lowest score/one star.

The studies were mainly from USA (10 studies), and the rest from Europe (3 studies), Australia (3 studies) and Canada (one study). Follow-up periods ranged from immediate posttests to 3 months and up to 3- or 4-years, and the different types of interventions are shown in Table 1.

Table 1. Overview of the interventions and their content in Bolier et al. (2011).

Intervention	Key intervention components	Shared pattern
Community Interventions 4 studies	Community mobilization/ involvement. Staff training /RBS Policy/ practice change Enforcement. Availability /environmental change.	The studies share a multicomponent approach. Staff training is explicit in all four program descriptions, while community involvement, policy/ environmental change, and enforcement recur across several programs.
Alcohol server Interventions 6 studies	Server/manager training	Individual-level educational content. Information about substance-related risk.
Policy Interventions 5 studies	Policy / practice change. Training / consultation. Enforcement checks.	The descriptions commonly target establishment-level policy or practice through management-focused training, consultation, materials, feedback, communication, or enforcement.
Educational Interventions 2 studies	Individual-level educational content. Information about substance-related risk.	Both studies are individual-level educational approaches that communicate substance-related risk, but their delivery differs substantially: written harm-reduction materials versus assessment-based personalized feedback.

The primary studies in Bolier et al. (2011) included various kinds of interventions; nine studies reported on interventions that corresponded to the ISDUP description of *multiple components*, including different combinations of a set of specific interventions (i.e. community interventions and policy interventions). Among the 13 controlled studies included in the review, 11 reported a statistically significant intervention effect on one or several outcomes. Findings were synthesized descriptively due to heterogeneity in interventions and outcomes, i.e. magnitude of effects was reported in several individual studies through percentage changes, effect estimates, and/or reductions in alcohol-related harms.

The review did not systematically quantify effect sizes across studies and did not conduct a meta-analysis and consequently, conclusions regarding the magnitude of effects are based on narrative comparison of individual study findings rather than pooled estimates. Table 2 gives a more specific overview of the different study designs and findings on evidence of efficacy.

Table 2. Overview of study design and evidence of efficacy in Bolier et al. (2011).

Intervention	Studies/design¹	Evidence of efficacy²
Community Interventions	1 RCT's, 2 Q-E timeseries, 1 non-control group	Positive effects were reported in 3 studies: reduced high-risk alcohol consumption and alcohol-related injuries (Holder et al., 2000), increased refusals of alcohol service to pseudo-intoxicated patrons (Wallin et al., 2005), reduced police-recorded violent crime (Wallin et al., 2003); and reduced access to alcohol among underage youth (Wagenaar et al., 2000).
Alcohol server interventions	4 pre-post matched, 1 Q-E timeseries, 1 non-control group	Effects in 3 studies: improved observed server behaviour (Gliksman et al., 1993), reduced single-vehicle nighttime injury collisions (Holder & Wagenaar, 1994). Non-control study: improved self-reported responsible serving practices in the non-controlled study (Buka & Birdthistle, 1999). Overall, findings were mixed, with limited or inconsistent effects on several objective alcohol-related outcomes.
Policy interventions	1 RCT, 1 Q-E timeseries, 2 pre-post matched, 1 non-control group	Positive effects were reported in 2 studies: increased refusals of service to pseudo-intoxicated patrons (McKnight & Streff, 1994), reduced sales to underage patrons following enforcement checks, although effects decayed over time (Wagenaar et al., 2005). Toomey et al. (2001) reported no significant effects on alcohol sales practices, while Toomey et al. (2008) found no significant effects on sales to obviously intoxicated patrons.
Educational interventions	1 RCT, 1 non-control group	No clear effects on most outcomes in the randomized study (Whittingham et al., 2009). The non-controlled study reported reductions in alcohol consumption and binge drinking (Van Beurden et al., 2000).

¹ RCT=randomized controlled trials, Q-E timeseries= quasi-experimental timeseries, Pre-post matched=pretest posttest with matched control group, non-control= no control groups in the pretest-posttest design.

²Please note: we here report only on reported effects on relevant outcomes in our context, including server behaviours/sales, intoxication/consumption, or injuries/other harms.

Bolier et al. (2011) summarized their findings for multi-component interventions as follows: *“community interventions seem to have potential to reduce substance-related harm”, and “policy interventions can be effective across a number of outcomes. [] In total, studies were of mixed quality and results. Some positive effects are found on alcohol serving. However, the study of Toomey et al. (2008) with the highest quality rating found no significant effect.”*

For server training interventions, the results were mixed and for educational interventions, small effects on attitudes and behaviour were reported two studies of low quality. Overall, the authors concluded that: *“both server training interventions and policy interventions could have an effect on alcohol-use-related problems in nightlife settings. In particular, community interventions in which these interventions are combined seem recommendable. Furthermore, the chances of these types of interventions being effective appear to increase when interventions are combined with enforcement.”*

Brennan et al. (2011)

Brennan, I., Moore, S. C., Byrne, E., & Murphy, S. (2011). Interventions for disorder and severe intoxication in and around licensed premises, 1989–2009. *Addiction*, 106(4), 706–713.

<https://doi.org/https://doi.org/10.1111/j.1360-0443.2010.03297.x>

This is a systematic review published in *Addiction* with the following aim: “To systematically review rigorous evaluation studies into the effectiveness of interventions in and around licensed premises that aimed to reduce severe intoxication and disorder.” In this review, the included intervention studies were required to have been conducted in or around licensed premises (e.g. bars, pubs and nightclubs) and specifically assessed alcohol-related disorder, violence or intoxication as a quantitatively defined outcome. Based on these criteria, the review systematically summarized a total of 15 primary studies published between 1991-2004: 5 RCTs and 10 non-randomized quasi-experimental evaluations. The outcomes measured in the studies were a) intoxication, b) disorder and c) intoxication and disorder. Moreover, the authors applied the five-point Maryland Scale of Scientific Methods (Sherman et al., 1997) for quality ranging.

The studies were conducted in North America (5), Australia (5), Sweden (3) and Canada (2) and follow-up periods ranged from 2 weeks to 6 years. The different types of interventions included one or more combinations of interventions and are shown in Table 3.

Brennan et al. (2011) categorized interventions into two groups: 1) premises-level interventions, which included various server/management training programs (i.e. responsible beverage service training or violence prevention training for servers), and 2) community-level interventions, which included involvement of enforcement, and/or multi-level or multi-agency interventions.

Table 3. Overview of the interventions and their content in Brennan et al. (2011).

Intervention	Key intervention components	Shared pattern
Responsible beverage service training	Staff/server training; manager involvement.	All interventions focused on improving staff capacity to recognize and manage intoxication. Most combined server training with responsible service practices; some also included manager training and venue-policy elements.
Server violence prevention training	Premises risk assessment; manager and staff training.	The intervention combined venue risk assessment with staff and manager training to identify and address risks for aggression and violence proactively.
Enhanced enforcement of licensing regulations	Police visits and inspections; compliance monitoring; enforcement of licensing conditions.	The interventions increased external oversight of licensed premises through police attention, monitoring of service practices and licence conditions, and escalating responses to violations.
Multi-level interventions	Community mobilisation; responsible beverage service; enhanced enforcement; licensee accords; media advocacy; alcohol-policy measures; restrictions on alcohol availability or promotions.	The interventions combined venue-level and community-level strategies. Enforcement was common, while RBS, community mobilisation, licensee agreements, and policy/environmental measures were combined in different ways.

Among the 14 primary studies included in the review, 9 reported at least one statistically significant intervention effect. Significant findings most commonly related to reductions in disorder, including aggression, assaults, and alcohol-related injuries, whereas evidence for reductions in intoxication was less consistent. Premise-level interventions, particularly responsible beverage service (RBS) training, were the most frequently evaluated intervention type and showed some potential for reducing disorder. In addition, community-level interventions reported significant reductions in alcohol-related violence, assaults, and injury outcomes.

Findings were synthesized narratively due to heterogeneity in intervention types, study designs, and outcome measures. Intervention effects were reported through changes in alcohol service practices, levels of intoxication, violence, assaults, and alcohol-related injuries. The review did not conduct a meta-analysis and did not systematically compare or pool effect sizes across studies. Consequently, conclusions regarding intervention effectiveness were based on the direction and statistical significance of findings reported in individual studies rather than on pooled effect estimates. Among the 14 primary studies included in the review, 9 reported at least one statistically significant intervention effect. Table 4 gives a more specific overview of the different study designs and studies found to give evidence of efficacy.

Table 4. Overview of study design and evidence of efficacy in Brennan et al. (2011).

Intervention	Studies/design	Evidence of Efficacy
Responsible beverage service training	3 RCT 2 quasi-experimental methods	Effects in 4 of 5 studies: Reduced rowdy premises (Johnsson & Berglund, 2003), fewer extremely intoxicated patrons (Lang et al., 1998), improved server behaviour toward intoxicated patrons after 2 weeks (Gliksman et al., 1993), and an increase in customer BrAC at 1-month follow-up (Krass & Flaherty, 1994).
Server violence prevention training	1 RCT	Effect in 1 study: Reduced ratings (by research staff) of “severe physical aggression” among patrons (Graham et al., 2004).
Enhanced enforcement of licensing regulations	1 RCT 1 quasi-experimental methods	Effects in 2 studies: Increased refusals of service to pseudo-intoxicated patrons at 3 months, but not at 6 months (McKnight & Streff, 1994), and increased recorded offences and assault-related arrests (Burns & Coumarelos, 1993).
Multi-level interventions	1 RCT 5 quasi-experimental methods	Effects in 2 of 6 studies: reduced hospital admissions for assault-related injury (Holder et al., 2000) and reduced police-recorded assaults (Wallin et al., 2003). The remaining multi-level intervention studies reported no significant effects.

Brennan and colleagues (2011) concluded overall that *“The evidence that interventions in the NTE [i.e. night time economy] can reduce intoxication and disorder is limited. A significant impediment to a more robust statement on effectiveness stems from the considerable variability across studies in respect of intervention type, outcome measures and methods.”*

The authors also pointed out that the limited quality of evaluations (e.g. inappropriate control groups) reflects the considerable difficulties involved with implementing and evaluating interventions in and around licensed premises and that this might also be due to the likely post-hoc involvement of evaluation teams.

There was some overlap in inclusion of primary studies in these two reviews by Brennan et al. (2011) and Bolier et al. (2011); altogether 8 primary studies were included in both. One reason for this may be that Brennan and colleagues (2011) included only studies that specifically and quantitatively defined alcohol-related public disorder, violence or intoxication as an outcome, whereas Bolier and colleagues (2011) included all types of studies including prevention of harmful alcohol and/or drug use. Another difference between these two reviews is that Brennan and colleagues discussed several challenges with the prevention programmes and the evaluation of these. Even though e.g. different prevention programs proved an effect on public disorder or intoxication, the intervention content varied considerably regarding intervention, considerable variation in outcome measures was observed and the follow-up periods varied substantially (from 2 weeks to 6 years).

Bolier et al. (2011) were cautious in their conclusion when stating that “*community interventions seem to have potential to reduce substance-related harm*”, and “*policy interventions can be effective across a number of outcomes*” (our high lighting). In their conclusions section, Brennan and colleagues (2011) may seem more reserved than Bolier et al (2011) by stating that the evidence is limited due to significant heterogeneity in intervention type, outcomes and method quality, without any further mentioning of intervention effects.

Kingsland et al. (2016)

Kingsland, M., Wiggers, J. H., Vashum, K. P., Hodder, R. K., & Wolfenden, L. (2016). Interventions in sports settings to reduce risky alcohol consumption and alcohol-related harm: a systematic review. *Syst Rev*, 5, 12. <https://doi.org/10.1186/s13643-016-0183-y>

This is a systematic review published in the journal Systematic Reviews, aiming to “...determine if interventions implemented in sports settings decreased alcohol consumption and related harms”. Studies eligible for review should include implemented interventions in a sporting setting aiming to modify alcohol consumption behaviour and/or alcohol-related intoxication and/or or alcohol-related violence or injury.

Sports settings were defined as “settings (e.g. arenas, stadiums, grounds, complexes or ovals) where an organized sporting event or activity occurred either at a professional (elite) or non-professional (amateur/community) level, including competition games, training sessions or other club or team events”. The review summarized a total of 3 RCT studies published between 1992-2015 from USA, Ireland and Australia. Two of the primary studies were PhD theses (Carr, 1992; O'Farrell, 2010) and the third a study published in Journal of Epidemiology and Community Health (Kingsland et al., 2015). The three primary studies included different intervention programs, as described in Table 5.

Table 5. Overview of interventions, setting, target population and intervention content in Kingsland et al. (2016).

Intervention	Setting	Target population	Key intervention components
Athlete-focused behavioural and educational intervention	Olympic Training Center (residential elite-sport training facility in Colorado Springs, USA)	53 resident elite athletes from eight teams: archery, gymnastics, shooting, table tennis, and handball; mean age 21.3 years; 59% male and 41% female.	An individual-level programme targeting athletes' knowledge, decision making, coping skills, and social skills related to substance use.
Community sports-club alcohol management intervention	Non-elite community football clubs in New South Wales, Australia, across rugby league, rugby union, soccer/association football, and Australian rules football.	Adult club members aged 18 years or older, including players, members/supporters, and club officials; participating clubs had more than 40 members and sold alcohol.	Multi-level program combining player and coach education, club-policy training, and community-level communication. Responsible service training.
Community mobilisation and club-based education intervention	Amateur Gaelic Athletic Association clubs in two counties in the Republic of Ireland, covering hurling, Gaelic football, and handball.	Male club players aged 16 years or older, with intervention components also directed to coaches, club managers, and the wider club environment.	Alcohol education for players and coaches; alcohol-policy training for managers and coaches; alcohol-information media campaign; health-promotion support.

The overall conclusion by the authors was that two of the included studies (Kingsland et al., 2015 and Carr, 1992) reported a positive effect on one or more alcohol consumption or alcohol-related harm outcome either within the sports setting or overall. The authors also concluded that, due to limited number of studies conducted, it is difficult to determine the extent to which such effects are generalisable.

In our context, it is questionable whether the Kingsland et al. review is relevant. ISDUP describes entertainment venues as including “also outdoor or special settings where large scale events may take place”. Implicitly, the target population for the interventions in entertainment venues is the customers, whether in bars, pubs, clubs or restaurants or at large scale events. Thus, interventions aimed at preventing substance use or related harms among the audience at large sports events could fit the ISDUP description. However, the interventions included in the Kingsland et al. review targeted athletes or/and sports club members, and it is unclear whether the latter are audience at large scale sports events. In particular, two of the primary studies included in the review by Kingsland and colleagues (2016) fall outside ISDUP’s description of entertainment venues interventions. The primary study (PhD thesis) by Carr (1992) evaluated a multimodal substance abuse program based on a cognitive-behavioural model aimed at individual athletes residing at an Olympic Training Centre. The primary study study (PhD thesis) by O’Farell (2010) evaluate alcohol education for players and coaches, and alcohol policy training for club managers, in forty one hurling, Gaelic football and handball clubs. The outcome measure was overall excessive alcohol consumption in any setting, and thus not specifically related to entertainment venues as defined in ISUDP, and the prevention programs do not correspond with the various interventions and context for interventions listed in ISUDP. Given the limited evidence and unclear relevance of the Kingsland (2016) review, we have in the following, not paid any further attention to this part of the referenced literature.

Consistency in ISDUP statements on efficacy and the referenced literature

The evidence for effectiveness of prevention programs related to entertainment venues were rated as “adequate” in ISDUP 1st ed. (i.e., 2 out of 5 stars evidence for efficacy in preventing substance abuse, Table 1, p. 10: ★ limited/ ★★ adequate/ ★★★ good/ ★★★★★ very good/ ★★★★★★ excellent).

ISDUP 2nd edition states under the heading “Available evidence”: *“Three reviews reported results with regard to interventions of this kind (Bolier et al., 2011; Brennan et al., 2011; Kingsland et al., 2016), one of which is from the new overview. With regard to primary outcomes, according to these studies, training of staff, policy interventions and enforcement reported some indication of effects on intoxication, risky alcohol consumption and alcohol-related harm, including in the context of sport events. All evidence originates in North America, Europe and Australia”*.

The ISDUP claim of ‘some indication of effects’ seems cautious and fairly consistent with the referenced evidence in Bolier et al. (2011) and Brennan et al. (2011). However, the inclusion of ‘context of sport events’ in the sentence, may suggest that this claim applies to sports events in general or/and to large scale sports events, which is not supported by the referenced review by Kingsland et al. (2016). Nevertheless, it is worth noting that all the studies were conducted over 25-30 years ago, the time between intervention and follow-up varied substantially across studies and that all studies with significant results were conducted in parts of the USA, except for one study from a Swedish city (Stockholm).

Overall, the ISDUP statement that these interventions show “some indication of effects” appears broadly consistent with the conclusions of Bolier et al. (2011) and Brennan et al. (2011), both of which reported some evidence of beneficial effects while emphasising limitations related to study quality, heterogeneity, and the limited evidence base. However, the inclusion of “sport events” is less well supported by the referenced literature.

Evidence from The European Prevention Curriculum (EUPC)

In EUPC, programs related to entertainment venues are addressed as part of Chapter 7 – Environmental prevention. In this section, “Strategies in entertainment venues” (p. 121), it is stated that “In general, most prevention interventions in these settings use multiple components, including the training of staff and the management of intoxicated clients, and changes in laws and policies related to serving alcohol to minors or intoxicated persons or related to drinking and driving, etc.” Mobilisation of key stakeholder is also considered important, although challenging. Thus, from this description, strategies in entertainment venues seem similar to multi-component community-based prevention, only exclusively devoted to entertainment venues. For example, one of the community-based programmes mentioned specifically in EUPC, is multi-component community-based approach for nightlife environment, STAD. This approach was originally implemented in Sweden and is later adopted for other European countries with differing nightlife conditions, including festivals (EUPC, p. 139.).

EUPC refers to key points in a publication by Miller et al. (2009) on environmental strategies for prevention of drug use and risks in clubs with electronic music dance events. However, this publication provides rationales for *why* and *how* various environmental strategies in such settings are potentially efficacious and we have not assessed this publication further.

EUPC refers readers to the [Healthy Nightlife Toolbox](#) for more information about specific evidence-based interventions in nightlife settings (HNT). This is an international initiative that focuses on the reduction of harm from alcohol and drug use among young people and EUDA is responsible for hosting and maintaining the HNT website. HNT provides details of evaluated interventions (as per August 2026 a total of 53 specific interventions) and provides a list of literature on relevant evaluation studies (as per August 2026 over 270 publications, mainly primary studies). In this context, we are primarily interested in assessment of efficacy of intervention categories and preferably systematic reviews thereof. The interventions and the evaluation literature listed in HNT were therefore not considered further as part of our assessment of EUPC.

In contrast to chapters/sections on family-based prevention and school-based prevention, EUPC does not provide examples of effective interventions in entertainment venues in the text. However, such interventions can be identified from the Evidence base portal, along with the given evidence rating for each intervention. Altogether 16 interventions were identified through searches, see Table 6.

Table 6. Overview of referenced literature for prevention interventions at entertainment venues in Best Practice Portal (Evidence base) and assessment of relevance.

Intervention	Evidence rating ¹	Literature
Police interventions in nightlife settings to reduce crime	Likely to be beneficial	Ker and Chinnock (2008)
Police interventions in uniform in nightlife settings to reduce public disorders	Likely to be beneficial	Calafat et al. (2009) Jones et al. (2011) ¹ EMCDDA. (2012)
Police and law enforcement measures to increase responsible serving behaviours	Likely to be beneficial	Bolier et al. (2011)
Combined enforcement checks and management training to reduce under-age serving	Likely to be beneficial	Bolier et al. (2011)
Educational interventions in recreational settings to influence attitudes and drinking behaviour	Ineffective	Bolier et al. (2011)
Electronic Age Verification (EAV) devices to increase the frequency of age verification at recreational premises	Ineffective	Calafat et al. (2009)
Information provision to prevent drug- and alcohol-related problems	Ineffective	EMCDDA. (2012)
Mass media campaigns to reduce alcohol-related traffic accidents	Beneficial	Calafat (2010); Calafat et al. (2009); Faggiano and Vigna-Taglianti (2008); Tay (2005)
Multicomponent programme based on community mobilisation to reduce night time traffic injuries	Beneficial	Calafat (2010); Calafat et al. (2009)
Multicomponent programmes combining community mobilisation, Responsible Beverage Service (RBS) training, house policies and stricter enforcement of licensing laws to reduce accidents and alcohol consumption	Beneficial	Bolier et al. (2011); EMCDDA. (2012); Jones et al. (2011)
Multicomponent programmes to control alcohol sales	Unknown effectiveness	EMCDDA. (2012); Jones et al. (2011)
Police and law enforcement measures to reduce alcohol sales	Unknown effectiveness	Bolier et al. (2011); EMCDDA. (2012); Jones et al. (2011)
Promotion of sensible alcohol consumption to reduce traffic accident	Beneficial	Ker and Chinnock (2008) Calafat et al. (2009)
Pub-watching schemes to reduce alcohol-related property crime	Unknown effectiveness	Calafat et al. (2009)
Restricting opening hours to reduce alcohol-related injuries	Unknown effectiveness	Calafat et al. (2009)
Training for alcohol servers to reduce the level of patrons' intoxication	Likely to be beneficial	Calafat et al. (2009); Bolier et al. (2011); Jones et al. (2011)

¹Evidence rating in Best practice portal:

Beneficial: Interventions for which precise measures of the effects in favour of the intervention were found in the systematic reviews of randomised controlled trials (RCTs), and that were recommended in guidelines with reliable methods for assessing evidence (such as GRADE²). An intervention ranked as 'beneficial' is suitable for most contexts.

Likely to be beneficial: Interventions that were shown to have limited measures of effect, that are likely to be effective but for which evidence is limited, and/or those that are recommended with some caution in guidelines with reliable methods for assessing evidence (such as GRADE). An intervention ranked as 'likely to be beneficial' is suitable for most contexts, with some discretion.

Trade-off between benefits and harms: Interventions that obtained measures of effects in favour of harm reduction and/or are recommended in guidelines with reliable methods for assessing evidence (such as GRADE), but that showed some limitations or unintended effects that need to be assessed before providing them.

Unknown effectiveness: Interventions for which there are not enough studies or where available studies are of low quality (with few patients or with uncertain methodological rigour), making it difficult to assess if they are effective or not. Interventions for which more research should be undertaken are also grouped in this category.

Evidence of ineffectiveness: Interventions that gave negative results if compared with a standard intervention, for example.

¹ Note: In Evidence Base Portal, this reference is reported as published in 2010, the correct publication year is 2011.

For each of the 16 interventions, one or several references are given to publications, which are mainly reviews (see Table 6). The referenced reviews are of various quality and rigor. Bolier et al. (2011) provides a systematic overview of 17 experimental studies of interventions in nightlife settings. Calafat et al. (2009) is a narrative review of interventions in nightlife settings and other interventions more or less related to nightlife settings. Calafat (2010) resembles by and large the previous publication (Calafat et al., 2009). EMCDDA (2012) is a brief report providing a quick overview of interventions in recreational settings and only some references to reviews and primary studies. Faggiano & Vigna-Taglianti (2008) is a narrative review of a broad range of prevention strategies pertaining to alcohol, tobacco and illicit drugs and across various domains, for example mass media campaigns, price and availability regulations, school-based prevention and community interventions. Jones et al. (2011) is a systematic review of interventions in bars, nightclubs etc and their surroundings. Ker & Chinnock (2008) is a Cochrane systematic review of interventions in alcohol server settings for preventing injuries. Tay (2005) is an abstracted review of a previous systematic review published by other authors (Elder et al., 2004).

For each of these 16 specific interventions identified in the Evidence Base Portal, we have examined the referenced literature (as described above) and assessed how many and which primary studies in these reviews that provide evidence of efficacy and main study findings (according to referenced studies). An overview of the results hereof is presented in Table 7.

Table 7. Overview of referenced literature for prevention interventions at entertainment venues in Evidence Base Portal and assessment of relevance.

Intervention	Reference	Main findings for this specific intervention
Police interventions in nightlife settings to reduce crime.	Ker & Chinnock, 2008.	Primary study could be Felson et al. (1997): A police led set of policy provisions including cover charges, no free drinks, no extended happy hours, seizing faked ID cards, etc. (termed Server setting policy intervention in Ker & Chinnock, 2008). Findings: serious assault rate reduced. In Jones et al., 2011 this study was assessed as weak quality study and not considered further due to unclear validity of analyses.
Police interventions in uniform in nightlife settings to reduce public disorders.	Calafat et al., 2009.	Primary study Jeffs and Saunders (1983): intervention pub visits 2-3 x/week. 20 % reduction in recorded public disorders offenses in intervention area.
	Jones et al., 2011.	Probably no primary studies. No mentioning of 'uniform' or 'public disorder', the study by Jeffs & Saunders is not included.
	EMCDDA, 2012.	Probably no primary studies. No mentioning of 'uniform' or 'public disorder', the study by Jeffs & Saunders is not included.

Police and law enforcement measures to increase responsible serving behaviours.	Bolier et al., 2011.	Primary study: Probably McKnight & Streff, 1994. Enforcement checks by plainclothes officers. More responsible service after regular enforcement visits. No other primary study in Bolier 2011 seems to match.
Combined enforcement checks and management training to reduce under-age serving.	Bolier et al., 2011.	Primary study: Wagenaar et al., 2005. Effective in reducing service to underage patrons. Other studies in Bolier, 2011 reported no effects of management training in absence of enforcement checks.
Educational interventions in recreational settings to influence attitudes and drinking behaviour.	Bolier et al., 2011.	Two primary studies: Whittingham 2009; Van Beurden 2000. Bolier 2011 concluded: "small effects of educational interventions on negative attitudes and drinking behavior were found. Moreover, studies are generally scarce and of low quality."
Electronic Age Verification (EAV) devices to increase the frequency of age verification at recreational premises.	Calafat et al., 2009.	Primary study: Krevor et al. (2003). EAV did not increase frequency of age verification.
Information provision to prevent drug- and alcohol-related problems .	EMCDDA, 2012.	No reference to any primary study. A general statement: "Overall, however, research has not found information provision to be an effective measure to reduce drug- and alcohol-related problems."
Mass media campaigns to reduce alcohol-related traffic accidents.	Calafat, 2010.	No primary studies, 2 reviews: Faggiano & Vigna-Taglianti, 2008; Tay, 2005 (see below).
	Calafat, 2009.	No primary studies, 2 reviews as above: 1) Faggiano & Vigna-Taglianti 2008; Tay 2005.
	Faggiano & Vigna-Taglianti, 2008 .	This is a broad review of various primary prevention strategies and states that these interventions "are sometimes very effective, especially when implemented with community actions". Also referenced in Calafat, 2010; 2009.
	Tay, 2005.	Brief abstracted report of a previous review (Elder et al., 2004), states that "drink driving campaigns reduce accidents by 10 %." Please note, the original Elder et al., 2004 review concluded that the mass media campaigns were generally implemented in conjunction with other prevention activities, such as high visibility enforcement. Also referenced in Calafat, 2010; 2009.
Multicomponent programme based on community mobilisation to reduce night time traffic injuries.	Calafat, 2010.	Four evaluated community and multi-component projects are mentioned, not clear whether these are necessarily based on community mobilisation. For one of these projects (Geelong Accord) a reference is given, for another (STAD) a non-working web site link is provided.
	Calafat, 2009.	Four evaluated community and multi-component projects are mentioned, not clear whether these are necessarily based on community mobilisation.

		References are provided for all four projects (Community Trials Project, Surfer's Paradise Project, STAD, Geelong Accord). The latter 3 include entertainment venue interventions, the former presumably does so. For only one of these projects (Community Trials Project), reduction of nighttime traffic injuries are mentioned. "The intervention was successful in reducing the rate of nighttime traffic injuries and the number of admissions to hospitals due to traffic accidents"
Multicomponent programmes combining community mobilisation, Responsible Beverage Service (RBS) training, house policies and stricter enforcement of licensing laws to reduce accidents and alcohol consumption.	Jones et al., 2011.	Seven primary studies (trials), three of which were well-designed and implemented (i.e. Communities mobilising for change on alcohol, Community Trials Project and STAD.) "Overall, these multicomponent programmes combining community mobilisation, RBS training, house policies and stricter enforcement of licensing laws provided the clearest indication of effectiveness. []there was evidence that these types of programmes were effective in reducing assaults, traffic crashes, and underage sales."
	Bolier et al., 2011.	The review includes a section on community interventions (4 primary studies), which all included community involvement, staff training and law enforcement. The projects included in Jones 2010 are also included in Bolier (inferred from references). Bolier et al. reported: "In total, community interventions seem to have potential to reduce substance-related harm."
	EMCDDA, 2012.	This brief report covers various interventions in recreational settings and for this intervention the report refers to one review: "In general, multi-component interventions appear to be effective in reducing violence, problem drinking and street accidents (Jones et al., 2011)". In addition, a primary study from the Finish PAKKA project is briefly described, noting reduction in refusal of service to (apparently) intoxicated customers.
Multicomponent programmes to control alcohol sales.	Jones et al., 2011.	Two primary studies examined alcohol sales as outcome: 1) Toomey 2001: the intervention was consultation sessions for owners/managers of bars, weak study, no significant effect on sales. 2) Wagenaar 2005: server training and police enforcement checks, strong study, significant short term impact on underage sales, no impact of training.
	EMCDDA, 2012.	One primary study (Warpenius et al., 2010) reported significant increase in refusal of service to (apparently) intoxicated customers.

Police and law enforcement measures to reduce alcohol sales.	Jones et al., 2011.	One primary study: Wagenaar 2005: server training and police enforcement checks, strong study, significant short term impact on underage sales, no impact of training.
	Bolier et al., 2011.	Could be: 1) McKnight & Streff, 1994: enforcement checks by police, effective in reducing service to intoxicated patrons 2) Wallin (2004; 2005; 2003): enforcement of alcohol laws: community interventions included several measures, effective in reducing service to intoxicated patrons.
	EMCDDA, 2012.	“Problems such as underage drinking, violence within or outside nightlife venues and drink driving are often best addressed by means of policing and law enforcement. Measures may include police visits to high-risk nightlife venues, age verification checks to ensure that venues are not serving underage drinkers, and the use of sanctions (including revocation of operating licences) to enforce licensing legislation. While these measures have been shown to be effective in connection with alcohol and related problems, studies also suggest that the positive effects of policing and law enforcement can rapidly diminish if they are not carried out on a regular basis and linked to real deterrents (Babor, 2010; Jones et al., 2011).»
Promotion of sensible alcohol consumption to reduce traffic accident.	Ker & Chinnock, 2008.	McLean 1994: advertising sensible drinking advice: no effect on BAC or intention to drive among patrons w/BAC >.05%, but less self-reported alcohol consumption.
	Calafat et al., 2009.	“Ker & Chinnock, 2008 [] concluded that there is no reliable evidence that interventions in the alcohol server setting are effective in preventing injuries. The effective-ness of the interventions on patron alcohol consumption was found to be inconclusive.”
Pub-watching schemes to reduce alcohol-related crime against property.	Calafat et al., 2009.	“On the whole there is evidence to suggest that these schemes (pub watch and club watch) have a significant desirable effect on crime reduction, though such reduction may be rather small across all crimes. Evidence suggests that CCTV [i.e. Closed Circuit Television] is more effective in reducing crimes against property than crimes against the person (Brown et al., 1995).” The report by Brown et al., 1995 is the only primary study.
Restricting opening hours to reduce alcohol-related injuries.	Calafat et al., 2009.	“In general terms, according to Graham (2000), there is no strong evidence that adjusting hours of operation is an effective policy intervention for reducing bar-related problems. But, a more recent review (Stockwell & Chikritzhs, 2009) of 49 studies (14 included baseline and

		control measures) suggests that extended late-night trading hours lead to increased consumption and related harms.”
Training for alcohol servers to reduce the level of patron’s intoxication.	Calafat et al., 2009.	“The review [Shults et al. (2001)] concluded that ‘there is sufficient evidence that face to face server training, when accompanied by strong and active management support, is effective in reducing the level of intoxication in patrons’.” “However, other findings are not so positive. According to Graham (2000) or Homel (2001), server training has no effect, or the effects are quite limited. The results, according to these authors, do not show that RBS training alone has produced effects on alcohol intake. Clearly, enforcement was better.» “A Cochrane review (Ker & Chinnock, 2008) [] concluded that there is no reliable evidence that interventions in the alcohol server setting are effective in preventing injuries. The effectiveness of the interventions on patron alcohol consumption was found to be inconclusive. There is some indication of improved server behaviour, but it is difficult to predict what effect this might have on actual injury risk.

Overall, the referenced reviews provide evidence of efficacy for a range of interventions, which mainly are related to entertainment venues (e.g. bars, pubs). Two interventions do not seem to fit in here. Specifically, judging from description in the referenced literature and the original Elder et al., 2004 review, “Mass media campaigns to prevent traffic injuries’ do not seem to be related to bars, pubs, or the like”. Correspondingly, “Information provision to prevent drug- and alcohol related problems” is described as information material, such as brochures and pamphlets on intoxication and related harm’, but it is not clear from the referenced review (EMCDDA, 2012) whether or how such information material is relevant in the context of entertainment venues. Probably, these two interventions do not belong to interventions in entertainment venues.

The listed interventions are in some cases sub-categories of one intervention. For example, multi component community interventions (CMCI) are specified for various outcomes: - nighttime traffic crashes, - accidents and alcohol consumption, and – alcohol sales. While the intervention as such is the same, it may perhaps be useful to make a distinction based on evaluated outcomes. This seems relevant regarding the evidence rating, which for an intervention may differ across outcomes. For instance, the evidence rating for an intervention may be ‘beneficial’ for one specific outcome and ‘ineffective’ for another. Correspondingly, and judging merely from the labelling of the intervention, it may seem like police interventions in night life settings are specified for two outcomes: - crime and – public disorders. However, when looking into the referenced literature for these two interventions,

the former seems to be a police-led set of policy provisions including cover charges, no free drinks, no extended happy hours, seizing faked ID cards, etc. and this intervention was termed ‘Server setting policy’ in the referenced literature. The latter police intervention was, when judging from the referenced literature, pub visits by police officers 2-3 x/week. Therefore, it seems that the two police interventions in night life settings are quite different, and not – as implied by the intervention labelling – the same intervention, only categorized differently by evaluated outcomes. Instead, they differ clearly in intervention content and range of measures. Thus, the list of 16 interventions in entertainment venues seems somewhat misleading in terms of labelling and number of distinct relevant interventions.

The selection, relevance and quality of the referenced literature to support claims of evidence rating for the various interventions needs to be commented upon. First, the referenced literature in the Evidence base portal is dated, as it comprises reviews published mainly 15 – 20 years ago, and the primary studies are thus older. Quick searches in Google Scholar (search terms: prevention alcohol entertainment venues review) obtained several recent systematic reviews (e.g. Eassey et al., 2024; Taylor et al., 2018), suggesting that there is updated literature available that could have been included in the evidence base. Second, some referenced publications seem superfluous. For instance, two reviews by Calafat (first or sole author) are fairly similar. For one intervention (Police interventions in uniform in nightlife settings to reduce public disorder), two (Jones et al., 2011; EMCDDA, 2012) of the three referenced publications do not seem to cover this intervention, and for another intervention (mass media campaigns to reduce alcohol-related traffic accidents), three of the referenced publications seem relevant only by referring to the fourth referenced publication (Tay, 2005). Third, a majority of the reviews are narrative reviews (Calafat, 2009; 2010; EMCDDA, 2012; Faggiano, 2008) or an abstracted review (Tay, 2005) of a previous review, which leaves three publications in the referenced literature that are systematic reviews (Bolier et al., 2011; Jones et al., 2011; Ker & Chinnock, 2008). Finally, for many of the interventions, the referenced literature provides evidence from only one or two primary studies. At first glance, a reference to a review may give an unjustified impression that the evidence is broader than one or two primary studies. In sum, the referenced literature seems of limited value for assessment of evidence of intervention effects: it is dated, in part irrelevant and in part of inferior quality.

Further, for each of the 16 interventions, we have assessed whether, or to what extent, the information provided in Table 7 above is in line with the evidence rating given in Evidence Base Portal as reported in Table 6. In other words, is the evidence rating justified by the referenced literature? This assessment is provided in Table 8.

Table 8. Assessment of the evidence rating in the Evidence Base Portal related to the referenced literature.

Intervention	Evidence rating	Assessment of evidence rating
Police interventions in nightlife settings to reduce crime	Likely to be beneficial	Overly optimistic, not well justified. Probably one primary study in the referenced review that addresses this intervention (Felson, 1997); a weak study not further considered in another referenced review (Jones, 2011).
Police interventions in uniform in nightlife settings to reduce public disorders	Likely to be beneficial	Overly optimistic, not well justified. Only one primary study (published 1983) in one of the referenced reviews reported beneficial effect. Two other referenced reviews did not mention this specific intervention.
Police and law enforcement measures to increase responsible serving behaviours	Likely to be beneficial	Overly optimistic, not well justified. Only one primary study in the referenced review addressed this intervention and reported beneficial effect on responsible service.
Combined enforcement checks and management training to reduce under-age serving	Likely to be beneficial	Overly optimistic, not well justified. Only one primary study in the referenced review reported effectiveness in reducing service to under-aged patrons.
Educational interventions in recreational settings to influence attitudes and drinking behaviour	Ineffective	Seems justified. Two primary studies of low quality reported no effect of intervention.
Electronic Age Verification (EAV) devices to increase the frequency of age verification at recreational premises	Ineffective	Seems justified. One primary study reported no effect on frequency of age verification.
Information provision to prevent drug- and alcohol-related problems	Ineffective	Not justified, based on referenced literature. The brief review does not provide information about studies examining this intervention.
Mass media campaigns to reduce alcohol-related traffic accidents	Beneficial	Probably overly optimistic, not well justified. One referenced review (Tay, 2005) abstracted Elder et al. (2004) and while a beneficial effect was reported, Elder et al noted that the mass media campaigns were generally implemented in conjunction with other prevention activities, including enforcement. Thus, it is not clear from the referenced literature whether mass media campaigns per se were effective.

Multicomponent programme based on community mobilisation to reduce nighttime traffic injuries	Beneficial	Overly optimistic, not well justified. The referenced reviews include only one primary study with nighttime crashes as outcome, and this study reported beneficial effects on nighttime traffic injuries.
Multicomponent programmes combining community mobilisation, Responsible Beverage Service (RBS) training, house policies and stricter enforcement of licensing laws to reduce accidents and alcohol consumption	Beneficial	Probably optimistic, not entirely justified. One review stated that these types of programmes are effective, the other review concluded more cautiously that these interventions seem to have potential to reduce harm.
Multicomponent programmes to control alcohol sales	Unknown effectiveness	Not justified. One referenced review included two primary studies: one weak study reported no effect and one strong study reported significant short-term effect. The other referenced review mentioned one primary study reporting significant effect.
Police and law enforcement measures to reduce alcohol sales	Unknown effectiveness	Not justified. Two referenced reviews included three relevant primary studies, all of which reported beneficial effects on alcohol sales. A third referenced review states the same, referring to two reviews (including one of the above two referenced reviews).
Promotion of sensible alcohol consumption to reduce traffic accident	Beneficial	Not justified. One referenced review included one primary study reporting no effect on relevant outcomes. This review was noted in the other referenced review, which stated that the evidence is inconclusive.
Pub-watching schemes to reduce alcohol-related crime against property	Unknown effectiveness	Seems justified. Although the referenced review states there is evidence suggesting beneficial effect, only one primary study (from 1995) is included.
Restricting opening hours to reduce alcohol related injuries	Unknown effectiveness	Not justified. The referenced review reported conclusions from two literature reviews, one stating no strong evidence of effectiveness, the other, more recent review, included 14 controlled studies suggesting effectiveness (i.e. extended hours led to increased consumption/harms).
Training for alcohol servers to reduce the level of patron's intoxication	Likely to be beneficial	Not justified. The referenced review referred to four reviews, none of these gave evidence of effectiveness of server training alone.

Among the 16 listed interventions, 14 seem relevant in the context of entertainment venues and are considered further. Three of these 14 interventions (two multi-component interventions and promoting sensible alcohol consumption) were rated as ‘Beneficial’ in the evidence base portal, however the rating was either optimistic and not entirely justified by the referenced literature or not justified at all. Five interventions were rated as ‘Likely to be beneficial’, for 4 of these interventions this rating seems overly optimistic and not well justified by the referenced literature, and for one intervention, this rating was not justified at all. Four interventions were rated as ‘Unknown effectiveness’. For three of these interventions, this rating was not justified by the referenced literature, and for one intervention the rating seems justified. Finally, two interventions were rated as ‘Ineffective’, which seems justified by the referenced literature. To sum up: the rating of interventions as ‘Beneficial’ or ‘Likely to be beneficial’ was overly optimistic and not well justified by the referenced literature. Moreover, ratings of ‘Unknown effectiveness’ were given for three interventions for which there was evidence of beneficial effects in the referenced literature. Overall, the evidence ratings do not provide a good reflection of evidence in the referenced literature: ratings of beneficial or likely beneficial evidence seem too favourable, whereas evidence of beneficial effects for other interventions is overseen by rating the evidence as ‘unknown effectiveness’.

Summary of findings from the EUPC

The EUPC describes interventions in entertainment venues primarily as multi-component environmental prevention strategies, often combining responsible beverage service (RBS) training, policy measures, enforcement, and stakeholder mobilisation. These descriptions largely correspond with the intervention approaches identified in the reviews cited by ISDUP, particularly multi-component community interventions. Unlike ISDUP, EUPC does not present a direct synthesis of the evidence for effectiveness of entertainment venue interventions in the main text. Instead, relevant interventions and associated evidence ratings are available through the Evidence Base Portal. Our assessment indicates that many of the referenced reviews are dated (15–20 years old), several are narrative rather than systematic reviews, and some references are only indirectly relevant to the specific interventions for which evidence ratings are provided.

For a number of interventions, the evidence ratings in the Evidence Base Portal appeared more favourable than warranted by the referenced literature. In particular, ratings of “beneficial” or “likely to be beneficial” were sometimes based on a very limited number of primary studies or on evidence

that was more equivocal than suggested by the rating. Conversely, some interventions rated as having “unknown effectiveness” were supported by studies reporting beneficial effects. Overall, the evidence ratings did not consistently reflect the strength and direction of evidence presented in the referenced reviews.

Overall conclusion

Both ISDUP and EUPC identify entertainment venue interventions as potentially important approaches for reducing alcohol-related harm. Across the referenced reviews, the most promising evidence relates to multi-component interventions combining responsible beverage service training, policy measures, enforcement, and broader community mobilisation. However, the evidence base is limited by heterogeneity in intervention content, outcome measures, study quality, and follow-up periods. Most primary studies were conducted several decades ago and predominantly in North America, Australia, and a few European settings.

With regard to ISDUP, the conclusion that there is “some indication of effects” appears broadly consistent with the findings of the main referenced reviews. However, the inclusion of evidence from sports settings is less convincing, as the intervention studies included in Kingsland et al. (2016) only partly correspond to ISDUP’s definition of entertainment venue interventions.

In contrast, the evidence ratings provided in the EUPC Evidence Base Portal appear less well aligned with the referenced literature. Several ratings seem overly optimistic, while others underestimate the available evidence. Moreover, much of the referenced literature is dated and of varying methodological quality. Taken together, both frameworks identify potentially effective intervention approaches, particularly multi-component community-based strategies. However, the supporting evidence should be interpreted with caution owing to the age of the literature, methodological limitations of many evaluations, and inconsistencies between some of the stated evidence ratings and the underlying evidence base.

References

- Andreas, J. B. (2026). ISDUP and EUPC on Prevention of Alcohol and Illicit Drugs Use among Youth via School Policies on Substance Use. Folkehelseinstituttet.
<https://www.helsedirektoratet.no/om-oss/forsoksordninger-og-prosjekter/nasjonalt-program-for-rusforebyggende-arbeid-blant-barn-og-unge/>
- Babor, T. (2010). *Alcohol: No Ordinary Commodity: Research and Public Policy*. OUP Oxford.
- Bolier, L., Voorham, L., Monshouwer, K., Hasselt, N. v., & Bellis, M. (2011). Alcohol and Drug Prevention in Nightlife Settings: A Review of Experimental Studies. *Substance Use & Misuse*, 46(13), 1569–1591. <https://doi.org/10.3109/10826084.2011.606868>
- Brennan, I., Moore, S. C., Byrne, E., & Murphy, S. (2011). Interventions for disorder and severe intoxication in and around licensed premises, 1989–2009. *Addiction*, 106(4), 706–713. <https://doi.org/https://doi.org/10.1111/j.1360-0443.2010.03297.x>
- Brown, B., Department, G. B. P., & Group, G. B. P. R. (1995). *CCTV in Town Centres: Three Case Studies*. Police Research Group. [CCTV in Town Centres: Three Case Studies](https://www.homeoffice.gov.uk/research/cctv-in-town-centres-three-case-studies)
- Buka, S. L., & Birdthistle, I. J. (1999). Long-term effects of a community-wide alcohol server training intervention. *J Stud Alcohol*, 60(1), 27–36. <https://doi.org/10.15288/jsa.1999.60.27>
- Burns, L., & Coumarelos, C. (1993). *Policing pubs: evaluation of a licensing enforcement strategy*. NSW Bureau of Crime Statistics and Research Sydney. [Policing pubs: Evaluation of a licensing enforcement strategy | BOCSAR](https://www.bocsar.nsw.gov.au/research-and-publications/policing-pubs-evaluation-of-a-licensing-enforcement-strategy)
- Calafat, A. (2010). Prevention Interventions in Recreational Settings. Council of Europe. [Prevention Interventions in Recreational Settings | www.hntinfo.eu](https://www.hntinfo.eu/prevention-interventions-in-recreational-settings)
- Calafat, A., Juan, M., & Duch, M. A. (2009). Preventive interventions in nightlife: a review. *Adicciones*, 21(4), 387–413. <https://doi.org/10.20882/adicciones.226>
- Carr, C. M. (1992). *Substance abuse education with elite athletes*. Ann Arbor: Ball State University.
- Eassey, C., Hughes, C. E., Wadds, P., de Andrade, D., & Barratt, M. J. (2024). A systematic review of interventions that impact alcohol and other drug-related harms in licensed entertainment settings and outdoor music festivals. *Harm Reduct J*, 21(1), 47. <https://doi.org/10.1186/s12954-024-00949-4>
- Elder, R. W., Shults, R. A., Sleet, D. A., Nichols, J. L., Thompson, R. S., & Rajab, W. (2004). Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: A systematic review. *American journal of preventive medicine*, 27(1), 57–65. <https://doi.org/https://doi.org/10.1016/j.amepre.2004.03.002>
- EMCDDA (2012). Responding to drug use and related problems in recreational settings, EMCDDA Thematic papers. European Monitoring Centre for Drugs and Drug Addiction, Lisbon. [Responding to drug use and related problems in recreational settings | The European Union Drugs Agency \(EUDA\)](https://www.emcdda.europa.eu/publications/thematic-papers/responding-to-drug-use-and-related-problems-in-recreational-settings)
- EMCDDA (2019). European Prevention Curriculum: a handbook for decision-makers, opinion-makers and policy-makers in science-based prevention of substance use. Publications Office of the European Union, Luxembourg. https://www.emcdda.europa.eu/publications/manuals/european-prevention-curriculum_en
- Faggiano, F., & Vigna-Taglianti, F. (2008). Drugs, Illicit – Primary Prevention Strategies. In H. K. Heggenhougen (Ed.), *International Encyclopedia of Public Health* (pp. 249–265). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-012373960-5.00357-9>
- Felson, M., Berends, R., Richardson, B., & Veno, A. (1997). Reducing pub hopping and related crime. In *Policies for Prevention: Reducing Crime, Public Intoxication and Injury* (pp. 115–132). Criminal Justice Press.
- Gliksman, L., McKenzie, D., Single, E., Douglas, R., Brunet, S., & Moffatt, K. (1993). The role of alcohol providers in prevention: an evaluation of a server intervention programme. *Addiction*, 88(9), 1195–1203. <https://doi.org/10.1111/j.1360-0443.1993.tb02142.x>

- Graham, K. (2000). Preventive Interventions for On-Premise Drinking: A Promising but Underresearched Area of Prevention. *Contemporary Drug Problems*, 27(3), 593–668. <https://doi.org/10.1177/009145090002700307>
- Graham, K., Osgood, D. W., Zibrowski, E., Purcell, J., Gliksman, L., Leonard, K., Pernanen, K., Saltz, R. F., & Toomey, T. L. (2004). The effect of the Safer Bars programme on physical aggression in bars: results of a randomized controlled trial. *Drug Alcohol Rev*, 23(1), 31–41. <https://doi.org/10.1080/09595230410001645538>
- Holder, H. D., Gruenewald, P. J., Ponicki, W. R., Treno, A. J., Grube, J. W., Saltz, R. F., Voas, R. B., Reynolds, R., Davis, J., Sanchez, L., Gaumont, G., & Roeper, P. (2000). Effect of Community-Based Interventions on High-Risk Drinking and Alcohol-Related Injuries. *JAMA*, 284(18), 2341–2347. <https://doi.org/10.1001/jama.284.18.2341>
- Holder, H. D., & Wagenaar, A. C. (1994). Mandated server training and reduced alcohol-involved traffic crashes: a time series analysis of the Oregon experience. *Accid Anal Prev*, 26(1), 89–97. [https://doi.org/10.1016/0001-4575\(94\)90071-x](https://doi.org/10.1016/0001-4575(94)90071-x)
- Homel, R., McIlwain, G., & Carvolth, R. (2001). Creating Safer Drinking Environments.
- Jeffs, B. W., & Saunders, W. M. (1983). Minimizing Alcohol Related Offences by Enforcement of the Existing Licensing Legislation. *British Journal of Addiction*, 78(1), 67–77. <https://doi.org/https://doi.org/10.1111/j.1360-0443.1983.tb02482.x>
- Johnsson, K. O., & Berglund, M. (2003). Education of key personnel in student pubs leads to a decrease in alcohol consumption among the patrons: a randomized controlled trial. *Addiction*, 98(5), 627–633. <https://doi.org/10.1046/j.1360-0443.2003.00383.x>
- Jones, L., Hughes, K., Atkinson, A. M., & Bellis, M. A. (2011). Reducing harm in drinking environments: A systematic review of effective approaches. *Health & Place*, 17(2), 508–518. <https://doi.org/https://doi.org/10.1016/j.healthplace.2010.12.006>
- Ker, K., & Chinnock, P. (2008). Interventions in the alcohol server setting for preventing injuries. *Cochrane Database Syst Rev*, 2008(3), Cd005244. <https://doi.org/10.1002/14651858.CD005244.pub3>
- Kingsland, M., Wiggers, J. H., Vashum, K. P., Hodder, R. K., & Wolfenden, L. (2016). Interventions in sports settings to reduce risky alcohol consumption and alcohol-related harm: a systematic review. *Systematic Reviews*, 5(1), 12. <https://doi.org/10.1186/s13643-016-0183-y>
- Kingsland, M., Wolfenden, L., Tindall, J., Rowland, B. C., Lecathelinais, C., Gillham, K. E., Dodds, P., Sidey, M. N., Rogerson, J. C., McElduff, P., Crundall, I., & Wiggers, J. H. (2015). Tackling risky alcohol consumption in sport: a cluster randomised controlled trial of an alcohol management intervention with community football clubs. *J Epidemiol Community Health*, 69(10), 993–999. <https://doi.org/10.1136/jech-2014-204984>
- Krass, I., & Flaherty, B. (1994). The impact of a responsible service training on patron and server behavior: a trial in Waverley (Sydney). *Health Promotion Journal of Australia*, 4(2), 51–58.
- Krevor, B., Capitman, J. A., Oblak, L., Cannon, J. B., & Ruwe, M. (2003). Preventing Illegal Tobacco and Alcohol Sales to Minors through Electronic Age-Verification Devices: A Field Effectiveness Study. *Journal of Public Health Policy*, 24(3), 251–268. <https://doi.org/10.2307/3343372>
- Lang, E., Stockwell, T., Rydon, P., & Beel, A. (1998). Can training bar staff in responsible serving practices reduce alcohol-related harm? *Drug Alcohol Rev*, 17(1), 39–50. <https://doi.org/10.1080/09595239800187581>
- McKnight, A. J., & Streff, F. M. (1994). The effect of enforcement upon service of alcohol to intoxicated patrons of bars and restaurants. *Accid Anal Prev*, 26(1), 79–88. [https://doi.org/10.1016/0001-4575\(94\)90070-1](https://doi.org/10.1016/0001-4575(94)90070-1)
- Miller, B. A., Holder, H. D., & Voas, R. B. (2009). Environmental Strategies for Prevention of Drug Use and Risks in Clubs. *J Subst Use*, 14(1), 19–38. <https://doi.org/10.1080/14659890802305887>
- O'Farrell, A. (2010). *Alcohol Intervention Programme in a Sporting Setting: A Cluster Randomised Trial to Evaluate a Setting-based Alcohol Intervention Programme in the GAA Trinity College Dublin*. <http://hdl.handle.net/2262/79290>

- Rossow, I., & Bye, E. K. (2026). Strategier i utelivsbransjen: Evidens for effekt i ISDUP og EUPC og vurderinger av overføringsverdi og gjennomførbarhet i norsk kontekst. Folkehelseinstituttet. <https://www.helsedirektoratet.no/om-oss/forsoksordninger-og-prosjekter/nasjonalt-program-for-rusforebyggende-arbeid-blant-barn-og-unge>
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuter, P., & S., B. (1997). *Preventing Crime: What Works, What Doesn't, What's Promising*. National Institute of Justice. [Preventing Crime: What Works, What Doesn't, What's Promising: A Report To the United States Congress | National Institute of Justice](https://www.ojp.gov/pdffiles1/nij/PreventingCrime.pdf)
- Shults, R. A., Elder, R. W., Sleet, D. A., Nichols, J. L., Alao, M. O., Carande-Kulis, V. G., Zaza, S., Sosin, D. M., & Thompson, R. S. (2001). Reviews of evidence regarding interventions to reduce alcohol-impaired driving. *Am J Prev Med*, 21(4 Suppl), 66–88. [https://doi.org/10.1016/s0749-3797\(01\)00381-6](https://doi.org/10.1016/s0749-3797(01)00381-6)
- Stockwell, T., & Chikritzhs, T. (2009). Do relaxed trading hours for bars and clubs mean more relaxed drinking? A review of international research on the impacts of changes to permitted hours of drinking. *Crime Prevention and Community Safety*, 11(3), 153–170. <https://doi.org/10.1057/cpcs.2009.11>
- Tay, R. (2005). Mass media campaigns reduce the incidence of drinking and driving. *Evidence-based Healthcare and Public Health*, 9(1), 26–29. <https://doi.org/10.1016/j.ehbc.2004.11.013>
- Taylor, N., Miller, P., Coomber, K., Mayshak, R., Zahnow, R., Patafio, B., Burn, M., & Ferris, J. (2018). A mapping review of evaluations of alcohol policy restrictions targeting alcohol-related harm in night-time entertainment precincts. *International Journal of Drug Policy*, 62, 1–13. <https://doi.org/10.1016/j.drugpo.2018.09.012>
- Toomey, T. L., Erickson, D. J., Lenk, K. M., Kilian, G. R., Perry, C. L., & Wagenaar, A. C. (2008). A randomized trial to evaluate a management training program to prevent illegal alcohol sales. *Addiction*, 103(3), 405–413; discussion 414–405. <https://doi.org/10.1111/j.1360-0443.2007.02077.x>
- Toomey, T. L., Wagenaar, A. C., Gehan, J. P., Kilian, G., Murray, D. M., & Perry, C. L. (2001). Project ARM: alcohol risk management to prevent sales to underage and intoxicated patrons. *Health Educ Behav*, 28(2), 186–199. <https://doi.org/10.1177/109019810102800205>
- UNODC (2015). *International standards on drug use prevention*. United Nations Office on Drugs and Crime, Vienna. [International Standards on Drug Use Prevention](https://www.unodc.org/documents/prevention/UNODC-WHO_2018_prevention_standards_E.pdf)
- UNODC & WHO. (2018). *International Standards on Drug Use Prevention. Second updated edition*. United Nations Office on Drugs and Crime and the World Health Organization, Vienna https://www.unodc.org/documents/prevention/UNODC-WHO_2018_prevention_standards_E.pdf
- Van Beurden, E., Reilly, D., Dight, R., Mitchell, E., & Beard, J. (2000). Alcohol brief intervention in bars and taverns: a 12-month follow-up study of Operation Drinksafe in Australia. *Health Promotion International*, 15(4), 293–302. <https://doi.org/10.1093/heapro/15.4.293>
- Wagenaar, A. C., Murray, D. M., Gehan, J. P., Wolfson, M., Forster, J. L., Toomey, T. L., Perry, C. L., & Jones-Webb, R. (2000). Communities mobilizing for change on alcohol: outcomes from a randomized community trial. *J Stud Alcohol*, 61(1), 85–94. <https://doi.org/10.15288/jsa.2000.61.85>
- Wagenaar, A. C., Toomey, T. L., & Erickson, D. J. (2005). Preventing youth access to alcohol: outcomes from a multi-community time-series trial*. *Addiction*, 100(3), 335–345. <https://doi.org/10.1111/j.1360-0443.2005.00973.x>
- Wallin, E., & Andreasson, S. (2004). Can I have a beer, please? A study of alcohol service to young adults on licensed premises in Stockholm. *Prev Sci*, 5(4), 221–229. <https://doi.org/10.1023/b:prev.0000045356.37507.86>

- Wallin, E. and Andréasson, S. (2005). Effects of a Community Action Program on Problems Related to Alcohol Consumption at Licensed Premises. In Preventing Harmful Substance Use (eds T. Stockwell, P.J. Gruenewald, J.W. Toumbourou and W. Loxley).
<https://doi.org/10.1002/9780470713624.ch17>
- Wallin, E., Gripenberg, J., & Andréasson, S. (2005). Overserving at licensed premises in Stockholm: effects of a community action program. *Journal of studies on alcohol*, 66(6), 806–814.
[Overserving at licensed premises in Stockholm: effects of a community action program.: Journal of Studies on Alcohol: Vol 66, No 6](#)
- Wallin, E., Norstrom, T., & Andreasson, S. (2003). Alcohol prevention targeting licensed premises: a study of effects on violence. *J Stud Alcohol*, 64(2), 270–277.
<https://doi.org/10.15288/jsa.2003.64.270>
- Warpenius, K., Holmila, M., & Mustonen, H. (2010). Effects of a community intervention to reduce the serving of alcohol to intoxicated patrons. *Addiction*, 105(6), 1032–1040.
<https://doi.org/https://doi.org/10.1111/j.1360-0443.2009.02873.x>
- Whittingham, J. R., Ruiter, R. A., Bolier, L., Lemmers, L., Van Hasselt, N., & Kok, G. (2009). Avoiding counterproductive results: an experimental pretest of a harm reduction intervention on attitude toward party drugs among users and nonusers. *Subst Use Misuse*, 44(4), 532–547.
<https://doi.org/10.1080/10826080802347685>