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STAD in Europe
communities preventing alcohol related harm

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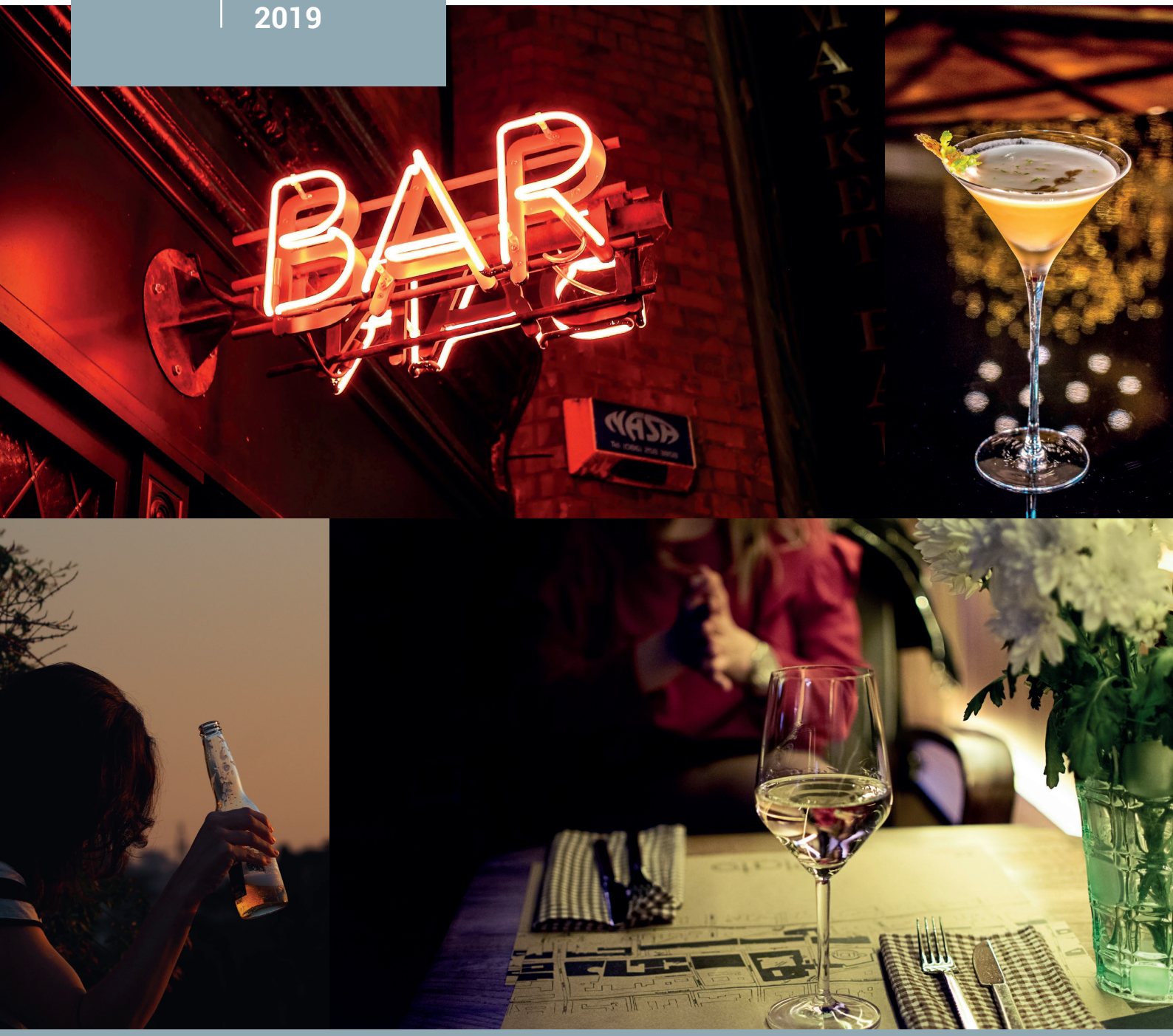

STAD in Europe (Evaluation Report)

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For further information see: http://stadineurope.eu/ or contact Zara Quigg at the Public Health Institute, Liverpool John Moores University (z.a.quigg@ljmu.ac.uk).

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Evaluation of the STAD in Europe (SiE) pilot interventions - summary

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The STAD (Stockholm Prevents Alcohol and Drug Problems) model is a community-based programme that has been associated with significant reductions in the overservice of alcohol, underage drinking and violence across Swedish nightlife settings (and surrounding communities). STAD combines three core components: community mobilisation, bar staff training in responsible beverage service (RBS) and stricter law enforcement.

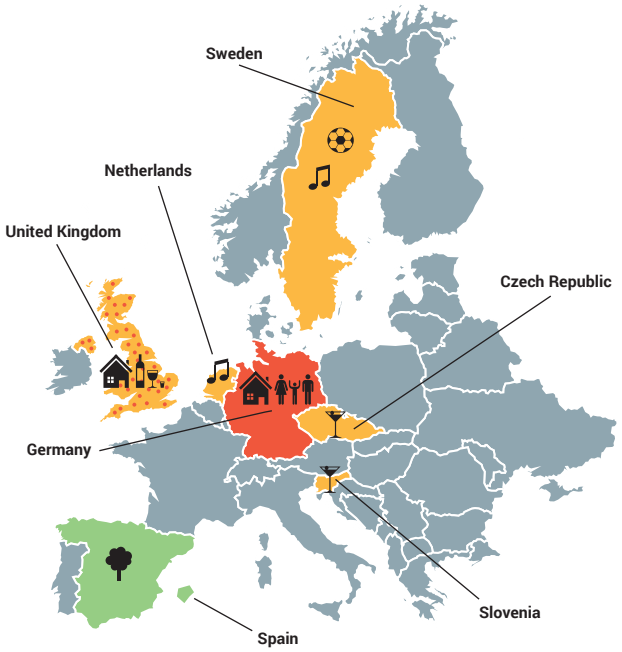
The SiE project (http://stadineurope.eu/) aims to gather knowledge about the best way to develop and implement STAD-based interventions across European drinking settings. During 2017-2018, partners across seven European countries developed, piloted and evaluated (processes and outcomes) locally-tailored STAD-based interventions, with the aim of addressing harmful alcohol consumption amongst young people across various drinking settings.

Implementation of locally-tailored STAD-based interventions across SiE pilot sites

The evaluation of the SiE pilot interventions suggests that the STAD model has the potential to be transferred across European drinking settings.

- All pilot sites developed and piloted an intervention that included, to some extent, the core components of the STAD model.
- However, levels of implementation varied, and the training and enforcement components in particular had to be adapted to accommodate differences across pilot sites, e.g. drinking setting type, alcohol culture and legislation.

The feasibility of implementing locally-tailored STAD-based interventions appeared to differ across drinking settings. Thus, whilst enforcement within nightlife, festivals and sports settings included both formal (i.e. legislative) and informal (social) control measures, in home settings enforcement tended to rely on informal control measures. Some settings presented unique challenges requiring partners to primarily focus on community mobilisation, and/or overcome implementation logistics and develop programme resources.



Drinking setting:

Private | Licensed | Public | Home drinking (preloading) | Home drinking (children) | Street, parks and beaches | Nightlife | Festivals | Sports events

Short-term impacts of the SiE pilot interventions

Production of new knowledge on alcohol across Europe, including the extent of alcohol over service (to underage and intoxicated patrons) and consumption, and social norms.

Mobilisation of communities and/or development of partnerships to address alcohol availability, consumption and related harms, and capacity building through training key stakeholders about the extent of the issue, and ways to reduce harm.

Some evidence of reductions in factors that support harmful alcohol consumption, such as over service of alcohol to underage and intoxicated patrons, across a number of drinking settings.

Implementation and evaluation of STAD suggests that such interventions need to be implemented, adapted and evaluated over a long time period to enable (and evidence) changes in alcohol availability, harmful use and related harms. Six of the seven pilot sites indicated that they would aim to continue to develop and implement their intervention post piloting.

Conclusion

The evaluation of the SiE pilot interventions suggests that the STAD model has the potential to be transferred across different alcohol drinking settings in Europe, particularly across commercial drinking settings. The presence of supporting alcohol legislation, cultures that are supportive of preventing harmful alcohol use and related harms, and multi-agency working can facilitate the development, implementation and potential success of a locally-tailored STAD-based intervention. Even without these factors, components of the model, particularly community mobilisation, can be developed to support future intervention development and implementation. However, piloting across home drinking settings suggests that the STAD model may not be directly transferrable to these settings, particularly relating to enforcement. The SiE project and associated pilot interventions have elicited new knowledge on alcohol across Europe, mobilised communities and raised capacity to address the issue, and for some pilot sites have appeared to start to address factors that promote the harmful use of alcohol. Further implementation and robust evaluation of the pilot SiE interventions is required however to determine the sustainability and the long-term impacts of such interventions across European drinking settings.

Future considerations for the implementation of locally-tailored STAD-based interventions across Europe

Community mobilisation

- Community mobilisation is a critical factor for intervention development and implementation. Preparatory work may be required to mobilise the community, including obtaining and sharing evidence on the breadth and extent of the issue and ways to address it (including provision of existing evidence on the STAD model), and exploring local priorities and potential facilitating and impeding factors.
- Challenges to intervention development and implementation may exist at a political (e.g. legislation), societal (e.g. alcohol culture), organisational (e.g. resources) and relationship (e.g. between intervention implementers and target group) level. Partners need to be aware of such challenges and be prepared to be flexible to changing needs and/or opportunities.
- The development of a collaborative multi-agency partnership with shared goals and ownership can aide intervention development, implementation and sustainability.
- Key stakeholders who require mobilisation can include: 1) higher level supporters (e.g. policy makers, intervention funders/developers); 2) the intervention group (including those who deliver and/or receive some intervention such as bar servers); and, 3) the target group (e.g. drinkers).
- Media advocacy is important. Consideration needs to be given to the nature and timing of messages to different stakeholders.
- Developing community mobilisation requires sufficient resource, which may be facilitated via the collaborative multi-agency partnership. Dedicated human and financial resources are required, from a range of stakeholders, particularly in the early stages of the intervention.
- Coproduction where key stakeholders are involved in the development of intervention strategies and implementation phases is an important factor, facilitating for instance a sense of ownership among stakeholders.

Training

- Training needs may vary and be required at different levels (e.g. information provision only; provision of practical tools/methods to reduce alcohol access), for various stakeholders (e.g. public, professionals, servers), and in a number formats (e.g. face-to-face; web-based).

Enforcement

- Enforcement approaches may be formal (e.g. legislative) and/or informal (social) and need to be tailored based on the drinking setting, existing alcohol policy, culture/social norms and resources.

Ongoing implementation, research and networking

- Where applicable, partners should continue to develop and implement their SiE interventions. This should be accompanied by robust evaluation, to determine longer-term processes of implementation, programme sustainability and impacts on alcohol availability, consumption and related harms (and other health, social and economic factors).
- Learning from the SiE project, and future implementation and evaluation of SiE interventions, should be shared in various formats across a range of stakeholders in Europe and beyond.

1. Introduction

Over the past two decades the proportion of current drinkers (aged 15+ years) across the WHO[1] European region has declined (from 70.1% in 2000 to 59.9% in 2016) [1]. Despite this decline, the region has the highest level of alcohol consumers, and some of the highest levels of consumption across the globe. In 2016, an estimated 26.4% of the European population (42.6% of drinkers), and 24.1% of young people (aged 15-19 years) engaged in heavy episodic drinking (HED)[2] [1]. Worryingly, the ESPAD[3] survey suggests that HED is common amongst European adolescents (aged 15-16 years). Further, levels of HED amongst adolescents increased from 36% in 1995 to 42% in 2007; data from the most recent survey (2015) however suggest a decline, with 35% of adolescents reporting HED [2]. These drinking patterns are reflected in the burden of alcohol-related harm observed in young Europeans. The proportion of alcohol-related deaths, mainly due to accidents, violence and suicide, is disproportionate amongst young people, with 25% of male mortality and 10% of female mortality in the 15-29 year age group associated with harmful alcohol consumption [3]. The more immediate health and social consequences of alcohol use are also far more common amongst young people [4, 5]. Binge drinking amongst young people is associated with an increased risk of injury, including road traffic accidents, drowning, self-harm, and violence, as well as increased risk-taking behaviours such as unsafe sex, sexual coercion and drink driving and harms to others [6, 7, 8, 9, 10]. Further, the developing brain of adolescents and young adults make them more vulnerable to the effects of alcohol both in the short-term in terms of tolerance and in the longer-term impacting neuropsychological development [11].

Previous research has found that the contextual setting in which alcohol consumption takes place is an important factor in the quantity of alcohol young people consume [12, 13]. One of the most popular settings for alcohol consumption is alcohol-focused nightlife environments, which young people frequent to socialise and relax [14, 15]. Studies of nightlife users across European countries have identified high levels of alcohol consumption, with the majority of individuals reporting consumption equivalent to the level of binge drinking[4] [16]. Critically, evidence suggests that many young people perceive alcohol as integral to a good night out and heavy alcohol use as normative in nightlife environments [14]. Whilst alcohol-focused nightlife environments are one of the most popular settings that young people frequent to consume alcohol, other licensed settings, such as music festivals and sports events, are also associated with high levels of alcohol consumption and alcohol-related harms [17, 18, 19, 20]. In addition, alcohol consumption outside of commercial establishments, in private residences or open areas such as parks or beaches, is a frequent occurrence amongst young people, particularly underage minors [21, 22]. In Spain, the *botellón* is a popular drinking setting

[1] World Health Organization.
[2] Heavy episodic drinking (HED) is an indicator of the pattern of alcohol consumption (defined as 60 or more grams of pure alcohol on at least one single occasion at least once per month) [1].
[3] The European School Survey Project on Alcohol and Other Drugs [2].
[4] Binge drinking refers to a pattern of drinking alcohol that brings alcohol blood concentration (BAC) to 0.08 gram percent or above. For the typical adult, this pattern corresponds to consuming five or more drinks (male), or four or more drinks (female), in about two hours or on a single occasion [93, 94].

amongst adolescents and young adults, with evidence of the phenomenon in most regions of Spain and increasingly in other countries [23]. The *botellón* is a gathering of a large group of young people in public spaces like parks, with the aim of drinking alcohol before or instead of visiting pubs and clubs [24]. Legal age restrictions for accessing alcohol in typical nightlife settings also displace alcohol consumption amongst young people to private environments such as the home. Differences across European countries in policy regarding legal age for alcohol consumption and licensing and pricing legislation can influence consumption patterns and behaviours in private environments. In Germany for instance, alcohol consumption is permitted amongst adolescents under the age of 16 years whilst in the company of a parent. Such policy may influence the social norms and acceptability of such behaviour, with common practice in Germany being to allow adolescents to 'practice' consuming alcohol from a young age in the home environment under parental supervision. Further, a trend observed across many European countries is the increasing disparity between on and off-licensed alcohol sales, suggesting a shift toward home drinking [25]. One important motive for this may be the price disparity between on and off-licence alcohol, with research indicating that low off-licence prices lead to increases in total alcohol consumption and binge drinking, particularly amongst lower income adolescents and young adults [26, 27, 28].

A single binge-drinking occasion may also include several drinking environments [29]. For example, the home drinking behaviour known as preloading (consuming alcohol at home or a friend's home before a night out) significantly contributes to high levels of drunkenness in nightlife environments [30]. A study of young nightlife users in four European cities found that between 35% (Slovenia) and 61% (United Kingdom) had preloaded on the night they were surveyed [16]. *Botellón* is also a common setting for preloading behaviour amongst young adults, with one study finding that 34% of participants had participated in *botellón* prior to visiting nightlife venues in Spain [16]. Further, preloading in tent areas of festivals prior to entering the arena or at bars prior to entering sports stadiums are also common practices amongst young people [31, 32, 33]. Critically, research has shown that the prevalence of binge drinking is significantly higher amongst *botellón* drinkers and preloaders than amongst young people who do not engage in this type of drinking [29, 34, 35].

One of the major challenges for EU member states is to change the current binge drinking culture amongst young people in such environments. Studies indicate that restriction of the availability of alcohol is one of the most effective preventative measures to reduce binge drinking [10]. Across European countries however, alcohol is perceived as relatively easy to access amongst adolescents. Over three quarters of students from the 2015 ESPAD study stated they would find it easy to acquire alcohol if they wanted to [2]. Changing such availability is crucial to reducing binge drinking amongst young people. Availability of alcohol is distinguishable in two forms, commercial availability and social availability, and these are relevant to different drinking environments. The propensity of servers in licensed premises to serve alcohol to intoxicated patrons or underage minors falls under commercial availability and can be regulated under formal control measures such as minimum age laws or rules that prevent over-serving of alcoholic beverages, in combination with strict enforcement of legislation. Social availability refers to young people obtaining alcohol through social sources such as parents and relatives, friends, and strangers who purchase it as a favour or for a fee [36, 37]. This form of availability may be best regulated through informal controls which address social norms and behaviour of 'servers' and other social sources of alcohol (relatives and older friends), supporting them not to supply alcohol [38]. The most suitable form of control differs across settings. In licenced drink-

environments, where alcohol laws apply, both formal and informal controls are important. In situations in which the alcohol law cannot be enforced (private settings) informal control is the most important way to restrict availability. As binge drinking is linked to a diverse set of consumption environments, it is pivotal to obtain and implement measures restricting alcohol availability tailored to a specific drinking environment.

One of the most successful and cost-effective strategies restricting alcohol availability and reducing binge drinking is the Stockholm Prevents Alcohol and Drug Problems (STAD) programme [39]. The STAD programme combines three core components: community mobilisation, bar staff training in responsible beverage service (RBS) and stricter law enforcement (see Box 1). STAD is one of few community-based prevention programmes that have shown significant benefits in reducing the overservice of alcohol, underage drinking and violence in nightlife settings [40, 41, 42]. Whilst the STAD model has been successful in licenced premises in nightlife settings, to date no models exist which are tailored to the range of drinking environments in which binge drinking occurs. Thus, as part of the European Union's Health Programme, the STAD in Europe (SiE) project was established. The aim of the SiE project was to reduce binge drinking and its negative consequences by developing locally tailored STAD-based interventions designed to tackle binge drinking and its negative consequences in different drinking environments. The project focused on three drinking environments: licensed drinking environments (nightlife, festivals and sports events[5]); private drinking environments (home drinking); and public drinking environments (e.g. streets, parks and beaches).Locally-tailored STAD-based pilot interventions were developed and implemented in seven pilot areas in: the Czech Republic, Germany, the Netherlands, Slovenia, Spain, Sweden and the United Kingdom (UK). Learning from the development and piloting of the interventions across European countries is critical to developing understanding of how to prevent heavy alcohol consumption and related harms across European drinking environments. This report documents a process and outcome evaluation of the development and piloting of the interventions across each of the seven countries. The overall aim of the SiE project is to:

Gather knowledge about the best way to develop and implement STAD-based interventions in any EU member state.

The evaluation has two core objectives:

1. To document and describe the development and piloting of the seven interventions (process evaluation).

2. To identify if STAD-based interventions can be developed and piloted across different drinking environments in seven European countries, and the potential impacts of the interventions (outcome evaluation).

[5] Added as an additional setting during the project development.

Box 1: The STAD (Stockholm Prevents Alcohol and Drug Problems) programme components

Community mobilisation: the creation of a committee to raise awareness and increase knowledge around alcohol-related harms in the community. The committee is comprised of key stakeholders from the community such as police, council, licensing board, owners/managers of licensed establishments, health authorities and trade unions for licensed premises and their staff. The committee acts as an advisory group who meet regularly to discuss alcohol-related issues, and inform and support the development of policy and practice that aims to prevent alcohol-related harms.

Responsible beverage service (RBS) training: the implementation of RBS programmes. Training for service staff regarding alcohol-related harms and how to identify and refuse alcohol to intoxicated and/or underage patrons. Involvement in the intervention is enhanced through a written agreement between licensed premises and intervention implementers, and supported by the police who receive similar training (e.g. identifying and dealing with drunk behaviour). Such co-operation creates a common ground on preventing and dealing with binge drinking.

Enforcement: Enforcement efforts are intensified and a joint collaboration between the licensing board and police is set up to meet and discuss methods to better regulate and enforce established laws and RBS training. As part of the STAD programme, a licensing board distributes letters to licensed establishments informing them of any reported (primarily police recorded) occurrences of over-serving of alcohol to patrons within their establishment.

2. Methodology

To inform the overall SiE evaluation, each pilot site conducted their own local process and outcome evaluation. An overview of the research methods used in these individual site evaluations is provided in Appendix 1. Full details, including research objectives, methods and tools, are available in each sites' local report [43, 44, 45, 46, 47, 48, 49, 50]. To meet the research objectives of the overall project evaluation, a range of methods were implemented.

2.1 Methods

2.1.1 Review of project documentation

Documentation, materials and correspondence produced throughout the development and piloting of the interventions were collated and reviewed. This included each country's needs assessment[6], intervention planning documents, research proposals and reports, and external and public communication (including media content of awareness raising campaigns and partner website content). In addition, the research team learned about the development and piloting of each intervention through SiE project meetings held throughout the course of the project. Information collected through such review and observations is used throughout the findings to complement data collected by other methods.

2.1.2 Surveys

Two process surveys per pilot site were completed by a SiE project lead at two stages of the project, pre-intervention (September 2017) and post-intervention (May-August 2018). Survey questions were based on a suite of core process evaluation questions and included: information on the intervention (planned and implemented); resources needed; dose and reach; target group; fidelity to planned intervention; issues encountered and if, and how these were overcome; future changes to the intervention; stakeholder engagement and perception of the intervention. One outcome survey was completed by each pilot site, with the exception of Spain[7], post-intervention piloting. Survey questions were based on a suite of core outcome evaluation questions and included: expected outcomes; achieved outcomes; evidence to demonstrate outcomes; reasons for not achieving outcomes; unexpected outcomes; future outcomes; stakeholder reaction to outcomes; wider impact; and, dissemination and response to outcomes.

2.1.3 Semi-structured interviews

Qualitative semi-structured interviews were carried out with SiE project leads in each pilot site. Interviews were conducted at two stages: pre (September/October 2017; n=6) and post-intervention

[6] As part of the development of the SiE project, a needs assessment was conducted to: identify the target group for the intervention; understand alcohol consumption and associated problems amongst the target group in the pilot setting; gather information on existing social norms, enforcement and training and identify what could be changed; and, identify relevant legislation, resources needed to implement the intervention, potential facilitators and barriers to implementation and relevant stakeholders and their potential role in the intervention.
[7] Due to the delay in implementing the pilot intervention in Spain, no outcome data had been collected or measured, thus the outcome survey could not be completed in time for inclusion in this report.

piloting (May-September 2018; n=6). Interviews were carried out face-to-face via Skype video calls. All interviews were audio recorded and transcribed. Interview questions focused on how the pilot area designed and implemented the intervention, issues that were encountered during the roll out of the intervention, the transferability of the STAD model to the local context and setting, and perceptions of how successful the intervention had been. Interviews also further explored and clarified the information collected in the surveys and research reports.

2.2 Data analysis

Information from the above methods was collated, reviewed and summarised to document an individual case study of each pilot site. Each case study includes: background to the intervention and relevant data to the identified alcohol issue and setting; an overview of the pilot site area; intervention aims; the planned[8] and/or implemented components of the intervention; dose and reach; facilitators and barriers to intervention implementation; selected outcomes (or baseline measures where outcomes measures were not available); and a conclusion which considers the transferability of the STAD model to the local context and drinking setting.

All information and findings from the measures were then triangulated using thematic analysis [51] to identify common themes related to intervention design and implementation; resources; barriers and facilitators to implementation; and, outcomes. The analysis is presented with illustrative quotes where appropriate to highlight key findings.

2.3 Ethical approval

Ethical approval for the overall project research evaluation was obtained from Liverpool John Moores University (REC no. 17/PBH/028), and the study adhered to the Declaration of Helsinki.

[8] Where the implemented intervention differed significantly from the planned intervention (e.g. Germany and Sweden) both are included in the case studies.

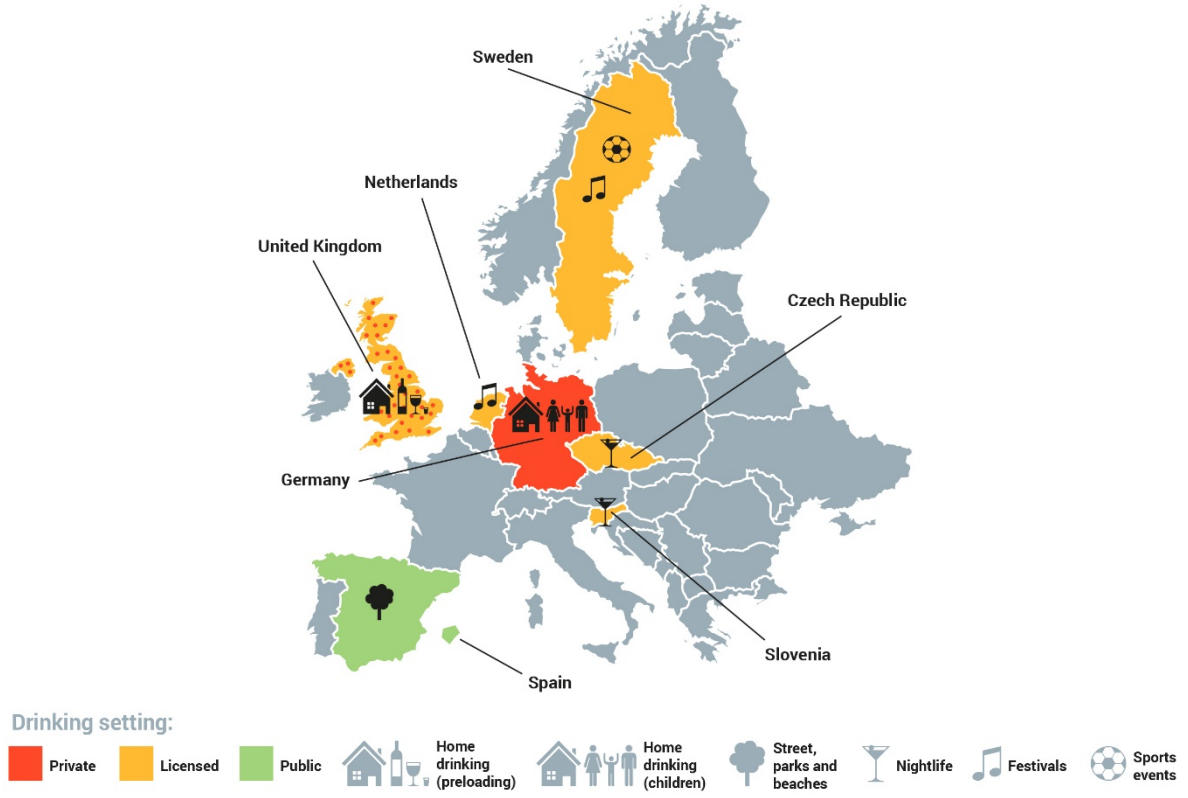
3. Implementation of SiE pilot interventions – case studies

The following case studies provide an overview of the development and implementation, and where applicable outcomes of the SiE pilot interventions across eight[9] European drinking settings (Figure 1):

- Licensed drinking environments
  - Nightlife settings (Czech Republic and Slovenia)
  - Festivals (the Netherlands and Sweden)
  - Sports events (Sweden)
- Private drinking environments: home drinking – children (Germany)
- Licensed/private drinking environments: preloading (i.e. drinking at home prior to visiting nightlife) (UK)
- Public drinking environments: streets, parks and beaches (Spain).

Each section provides background information on the alcohol problem and pilot site, the intervention aim, core components, dose and reach, factors that facilitated or impeded the development and implementation of the intervention, and any intervention outcomes. Case studies are based upon information collected in pilot site needs assessments and research reports, interviews/surveys with SiE project partners, and other referenced data sources. Table 1 provides a summary of alcohol consumption, legislation and interventions for each country based on the World Health Organization Global Status report on Alcohol and Health (2018) [1].

Figure 1: Implementation of SiE pilot interventions across European drinking settings



[9] One additional case study is included (Sports events, Sweden), not directly funded via the SiE project.

Table 1: Alcohol consumption, legislation and interventions across SiE pilot intervention countries

Country	United Kingdom	Sweden	Spain	Slovenia	Netherlands	Germany	Czech Republic
Alcohol per capita (15+) consumption (in litres of pure alcohol), 2015-2017 average	11.4	9.2	10	12.6	8.7	13.4	14.4
Prevalence of heavy episodic drinking (%), 2016, drinkers only (15+ years)	40.6	38.3	37.3	52.6	38.1	43.1	55.9
Prevalence of heavy episodic drinking (%), 2016, drinkers only (15-19 years)	52.4	50.4	49.5	65.2	50	56.3	68.2
National legal minimum age for off-premise sales of alcoholic beverages (beer / wine / spirits)	18/18/18	18/20/20	18/18/18	18/18/ 18	18/18/ 18	16/16/18	18/18/18
National legal minimum age for on premise sales of alcoholic beverages (beer / wine / spirits)	18/18/18	18/18/18	18/18/18	18/18/ 18	18/18/ 18	16/16/18	18/18/18
Legislation restricting sales of alcohol to intoxicated patrons	Yes	Yes	No	Yes	Yes	Yes	Yes
Restrictions for on-/off-premise sales of alcoholic beverages (any): Hours, days / places, density	Sub-national	Yes, Yes/Yes, Yes	Yes, No/Yes, No	Yes, No/Yes, No	No, No/Yes, No	No, No/No, No	No, No/Yes, No
Restrictions for on-/off-premise sales of alcoholic beverages (any): Specific events / intoxicated persons / petrol stations	Sub-national	Yes/Yes/Yes	Yes/No/No	Yes/Yes/No	Yes/Yes/Yes	No/Yes/No	Yes/Yes/No
National government support for community action (any)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
National monitoring system(s) (any)	Yes	Yes	Yes	Yes	Yes	Yes	No

Adapted from World Health Organization Global Status report on Alcohol and Health (2018) [1].

3.1 Nightlife settings - Valmez, Czech Republic

Intervention aim: Reduce alcohol consumption and alcohol-related harms amongst minors through increasing the likelihood of licensed premises to check ID and educating the community about the health effects of alcohol.

3.1.1 Background

According to OECD (Organisation for Economic Co-operation and Development) data, levels of alcohol consumption in the Czech Republic are above the OECD average and it is amongst the top ten countries for alcohol consumption per capita (age 15+ years) [52]. Further, the numbers of adolescents who report consuming alcohol and heavy episodic drinking has been increasing over the past 20 years, whilst initiation into alcohol consumption is occurring at increasingly earlier ages [53]. Whilst there has been a decrease in alcohol consumption amongst students in many European countries in the past 20 years, the proportion of 15 year olds in the Czech Republic who have ever consumed alcohol has remained unchanged (approximately 90%) [54]. The Czech Republic enforces a wide range of policies to restrict the promotion of alcohol but regulation of on- and off-license sales (e.g. time restrictions and sales in petrol stations) is limited [54]. However, Czech legislation does prohibit the sale of alcohol to individuals under 18 years of age. Despite this, alcohol availability amongst minors (aged 15-16 years) in the Czech Republic seems relatively widespread, with approximately half of students in the ESPAD study reporting having purchased alcohol in an off-license premise in the past 30 days and two thirds reporting having consumed alcohol in an on-licensed premise [55]. Further, 92% of the 2015 ESPAD study cohort reported that it was 'fairly easy' or 'very easy' to obtain alcohol [2]. This suggests that legislation in the Czech Republic prohibiting the sale of alcohol to underage minors is neither adhered to nor enforced.

3.1.2 Pilot site area

A middle-sized town Valasske Mezirici (Valmez), which has approximately 25,000-30,000 residents and 50 bars and restaurants in its night-time economy.

3.1.3 Pilot intervention

The intervention was modelled on the core components of the STAD programme, and following the development of the intervention[10], was implemented over a six-month period (November 2017-April 2018). The intervention and accompanying research was implemented by partners from the National Institute for Public Health (NIPH) and the National Network for Health Promotion (NNHP), supported by intervention steering group members.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from the: NNHP (intervention coordinators); local authority (including social workers and media); Healthy

[10] The development stage includes an element of community mobilisation.

Cities Network; police (particularly those responsible for prevention); hospitality industry; and, NIPH SiE project team.

- Implementation of an **awareness raising campaign,** including a leaflet on alcohol and children, distributed to schools for parents of 9th grade students containing information on alcohol and recommendations on how to protect children from underage and excessive alcohol consumption. Information was also shared via social (e.g. Facebook), local press and partner websites (e.g. local authority; NNHP).

Training

- Delivery of **responsible beverage service (RBS) training** by the SiE project team (and colleagues) to hospitality students, operators and employees of restaurants, bars, and shops, and representatives from the local police. Based on Swedish and Canadian materials, the training covered legislation/sanctions, safe alcohol consumption, and alcohol policy and conflict resolution tactics in nightlife settings.

Enforcement

- **Police supported the intervention** and some attended the RBS training. Routine police visits to restaurants and bars were conducted as part of existing work.

3.1.4 Intervention dose and reach

- Three steering group meetings held over a period of six months.
- 1,000 leaflets distributed to all schools in the city.
- One article published in the local press.
- Four RBS training workshops conducted with 72 hospitality students, owners and employees of restaurants, bars and shops and six members of the local police.

3.1.5 Facilitating factors to intervention development and piloting

- The **relatively small pilot site area** (~50 licensed premises).
- Providing the **RBS training to hospitality students** overcame resource issues when trying to engage and train staff already working in nightlife who required compensation for time to attend training.
- The appointment of **a local intervention coordinator** who had a history of working with local stakeholders.

3.1.6 Barriers to intervention development and piloting

- **Competing priorities and other initiatives**. Around the same time the pilot intervention was implemented, a smoking ban was introduced to licensed premises and other public places across the Czech Republic. This was a key barrier to gaining support from licensed premises owners who were opposed to having further restrictions placed on their potential patrons, and the municipality who were focusing their resources and attention on the smoking legislation. Further, local community elections delayed the initiation of the intervention.
- Prior to the implementation of the pilot intervention, there were **few instances of multi-agency partnerships** and this created initial delays in the design and implementation of the

intervention, and necessitated additional time and resources allocated to establishing the multi-agency steering group.

- Nightlife venues were initially reluctant to engage in the intervention and send staff to RBS training as they were **confident they were adhering to relevant legislation**.
- **Limited resources** meant incentives to attend RBS training could not be offered, limiting the uptake of the training.

3.1.7 Intervention outcomes

- Implementation of alcohol test purchases found that the propensity of restaurant servers to ask for age verification from patrons (aged 18 + years but deemed as looking under 18 years by the research team) before serving alcohol was higher in restaurants/bars whose staff had participated in RBS training (48.0%) compared to restaurants whose staff had not (14.7%) (Figure 2).
- Findings from a pre and post-intervention student (aged 16-17 years) survey (Figure 3) shows an increase in the proportion of participants reporting being asked for ID (pre, 22.8%; post 39.5%: $p<0.001$) or refused alcohol (pre, 24.8%; post 38.4%: $p<0.01$) in a supermarket in the post-intervention survey compared to the pre. The proportion of participants reporting being asked for ID (pre, 24.9%; post 30.2%) or refused alcohol (pre, 24.8%; post 33.3%) in a restaurant/bar was higher in the post-intervention survey; however this difference was not significant.

Figure 2: Restaurant/bar server propensity to check age ID before serving alcohol to patrons (aged 18+), alcohol test purchases in venues with and without RBS training, Czech Republic SiE nightlife intervention, 2018

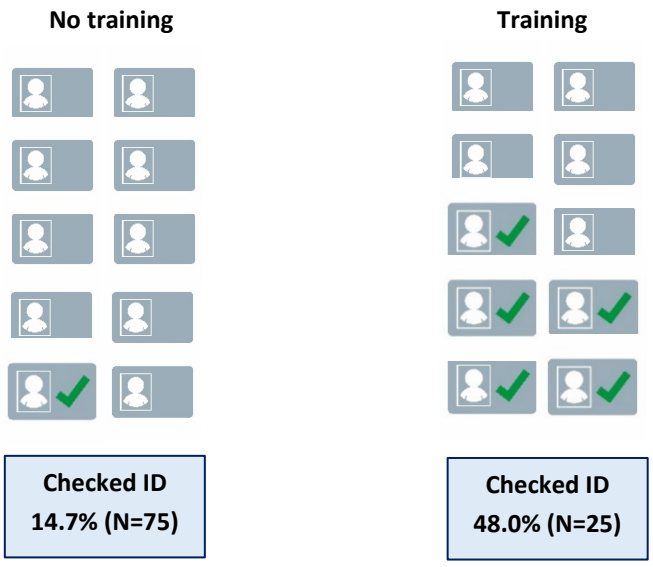
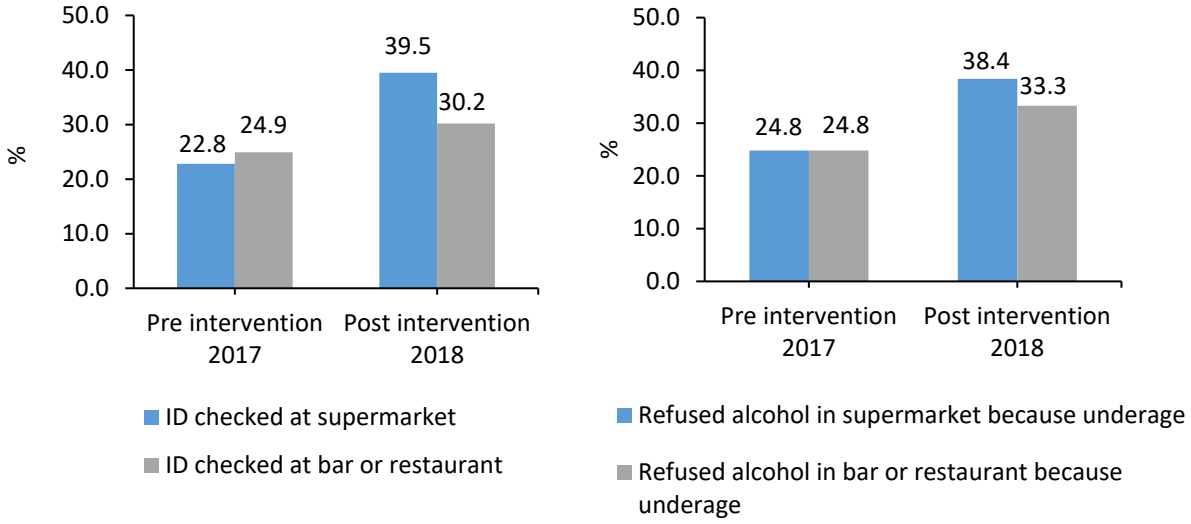


Figure 3: Alcohol purchasing outcomes amongst students (aged 16-17 years), pre (2017) and post-intervention (2018) school survey, Czech Republic SiE nightlife intervention



3.1.8 Conclusion

Overall, local partners were able to develop and implement the majority of the components of the STAD model in their local area; however, difficulties were observed in developing and implementing some components. Both the community mobilisation component and the RBS training were successfully implemented, albeit with some change from the original STAD model. Prior to the implementation of the intervention there were few incidences of multi-agency working however, by appointing a local coordinator who had established working relationships with key stakeholders (including police) an easier formation of the multi-agency steering group was facilitated. RBS training was carried out by the local coordinator/SiE project team and based on Swedish and Canadian training programmes. Whilst some licensed premise staff did attend the training, a lack of resources to compensate staff for their time meant that uptake was low. Further, support from licensed premises and local authority partners for the pilot intervention was also difficult to secure due to competing legislation banning smoking in public places, which was introduced around the same time. To overcome these issues and facilitate a forward thinking preventative approach, awareness raising activity focused on schools and parents, and the RBS training was provided to hospitality students who had the time needed to attend the training as part of their broader learning and who would be working in the industry in the future. The evaluation of the pilot intervention suggests some initial positive changes including an increase in age verification checks (and thus a potential reduction in access to alcohol to underage patrons) and refusal of alcohol sales to minors within supermarkets and restaurant/bars. Further, new multi-agency working practices (novel in the Czech Republic) have been established, and knowledge on alcohol has been acquired, which will be used for future advocacy activity and further development and implementation of the intervention.

3.2 Nightlife setting - Kranj, Slovenia

Intervention aim: Reduce alcohol consumption and availability, and alcohol-related harms amongst minors and intoxicated individuals, through improving compliance with associated legislation.

3.2.1 Background

In Slovenia, alcohol consumption amongst minors (aged <18 years) is common, with one third of 15 year olds reporting having engaged in binge drinking at least twice in their life [56]. Further, the number of hospitalisations due to acute alcohol intoxication amongst Slovenian adolescents has increased in recent years [57, 58, 59]. Whilst serving alcohol to under-age individuals is prohibited, the 2011 ESPAD survey found that in the last month, approximately one third of students (aged 15-16 years) in Slovenia had purchased alcohol in an off-licenced premise, and approximately one sixth reported consuming alcohol in on-licensed premises [55]. Further, 85% of the 2015 ESPAD study cohort reported that it was 'fairly easy' or 'very easy' to obtain alcohol [2]. A study examining off-licensed staff propensity to serve alcohol to under-age individuals found that 96% of test purchases in the City of Kranj resulted in the sale of alcohol [60]. In addition to legislation restricting the sale of alcohol to individuals aged <18 years, legislation also prohibits the sale of alcohol to intoxicated individuals. However, high levels of drunkenness and related harms amongst young people in nightlife settings indicate that this legislation is neither adhered to nor enforced [61].

3.2.2 The pilot site area

The City of Kranj, the fourth largest city in Slovenia with a population of ~37,000, including a nightlife setting (locally referred to as "Kransterdam" in reference to its busy nightlife).

3.2.3 The pilot intervention

The intervention was modelled on the core components of the STAD programme, and following the development of the intervention[11], was implemented over a two-month period (November-December 2017). The intervention was implemented by partners from UTRIP, supported by the intervention steering group (see below). Accompanying research was implemented by UTRIP.

Community mobilisation

- Establishment of a **multi-agency steering group** (i.e. existing Local Action Group [LAG]), including representatives from the City of Kranj, health and social services, police, schools, NGOs (e.g. Red Cross) and the UTRIP SiE project team.
- Implementation of a **media awareness raising campaign**, including an information card, for staff in licensed premises, which visually displayed levels and signs of intoxication (based on STAD materials). Information about the pilot intervention disseminated via email, websites, local press and social media.

Training

- **RBS training** (three hours) held in a licensed premise and delivered to bar staff by the UTRIP SiE project team. The content of the training was based on existing work[12] and covered:

[11] The development stage includes an element of community mobilisation.
[12] STAD RBS training and a previous Club Health project www.club-health.eu.

characteristics of nightlife; problems and challenges in nightlife settings; communication; conflict management and prevention strategies; management of the environment; first aid; responsible service of alcohol; and, associated legislation.

Enforcement

- **Premise visits and engagement with licensed premises** via email and social media were made by representatives of the City of Kranj and the LAG. No police involvement.

3.2.4 Intervention dose and reach

- Four steering group meetings held over a period of eight months.
- Five hundred leaflets distributed to all eight intervention on-licensed premises.
- One article published in the local press.
- Two articles published on the City of Kranj website.
- One RBS training session conducted with 12 staff from eight premises.
- Social media campaign implemented to address prevailing views across premises that alcohol legislation was being adhered to (post-piloting).

3.2.5 Facilitating factors to intervention development and piloting

- **Established working relationships** between stakeholders via the pre-established LAG facilitated an easier formation of the steering group.
- **Additional funding** made available from the national Ministry of Health facilitated production of intervention materials (e.g. leaflets).
- **Social media campaign,** which highlighted the extent of alcohol overservice (post-piloting).

3.2.6 Barriers to intervention development and piloting

- The **withdrawal of support from the police**. Police refused to visit intervention venues and stated their role is not prevention activity. Police representatives were concerned about the use and ethics of alcohol test purchases by minors.
- Despite supporting the intervention, **very few stakeholders were involved in its implementation**. The voluntary nature of involvement in the SiE steering group (and LAG) meant that individuals' membership was in addition to their other duties.
- The **voluntary nature of the RBS training** made it difficult to ensure all staff completed it.

3.2.7 Intervention outcomes

Implementation of alcohol test purchases (n=150) using underage and pseudo-intoxicated actors at four times points (pre-intervention, and at around one, three and five weeks post RBS training) found no change in service of alcohol, in venues that had received the full intervention (n=4; RBS training, provision of awareness raising materials), partial intervention (n=4; RBS training only) or no intervention (n=4). Overall, 96.7% of all test purchases implemented by an underage or pseudo-intoxicated actor resulted in the sale of alcohol.

3.2.8 Conclusion

Overall, whilst local partners developed and implemented all components of the STAD model in their pilot site area, various difficulties were encountered and subsequently some components of the model were adapted beyond the original STAD model. Community mobilisation was facilitated by

existing good working relationships between key stakeholders engaged in the LAG, who become the SiE project steering group. Both the community mobilisation component and the RBS training were implemented during the pilot intervention period, with little change from the original STAD model. The media awareness campaign (post-piloting) was important in dispelling public belief that sales of alcohol to intoxicated individuals and minors was not an issue. Whilst a STAD-based model of police enforcement of associated legislation regarding sale of alcohol to minors and intoxicated patrons was planned during the intervention design, intervention implementers were unable to implement this fully due to the withdrawal of police support for the intervention. Police representatives reported that they did not consider preventative work as part of their core responsibilities and so would not visit licensed premises unless a specific incident had been reported. They also refused to support the use of alcohol test purchases to monitor sales of alcohol to intoxicated or underage individuals, as it was perceived as unethical. Despite the withdrawal of police support, the intervention did include an enforcement component in the form of premise visits and engagement by city officials and members of the LAG. The study found little change in the propensity of staff to sell alcohol to pseudo-intoxicated patrons or underage minors. However, this data adds to the limited knowledge on alcohol overservice in Slovenia and can be used in future implementations of the intervention to evidence the extent of the issue and encourage stakeholders, including police, that this is a problem which needs to be addressed (something which the SiE project team commenced following the pilot). The pilot intervention ran over a two-month period, but was considered a valuable piece of work and discussions are being held about continuing the project across other nightlife settings in Slovenia.

3.3 Festival settings - Hoek van Holland, the Netherlands

Intervention aim: Reduce underage drinking, public drunkenness and alcohol-related harms amongst festival attendees, by decreasing the availability of alcohol to intoxicated or underage individuals through increasing festival user awareness of, and bar server compliance with, national legislation that prohibits the sale of alcohol to intoxicated individuals or those aged <18 years.

3.3.1 Background

Local partners report that heavy alcohol consumption is a social norm amongst young people, especially at festivals. Anecdotal evidence suggests that compliance with legislation that prohibits the sale of alcohol to intoxicated individuals or those aged under 18 years is not adhered to, in venues within and surrounding the festival. Findings from the 2015 ESPAD study suggested that the majority (78%) of students (aged 15-16 years) in the Netherlands found that it was 'fairly easy' or 'very easy' to obtain alcohol [2]. While festival users' safety is a key concern for stakeholders involved in the festival, the prevention of excessive alcohol consumption is not always prioritised. This is despite reports of issues relating to alcohol and illicit drug use, including drunkenness and underage drinking at the festival.

3.3.2 The pilot site

The pilot site, the Opening of the Beach Season Festival at Hoek van Holland, is one of the largest annual festivals in the city. The festival consists of the main area which is open to the whole public, four smaller festival areas at beach clubs which are only open to those aged 18+ and which have security staff checking the entrance, and regular bars. The festival partly resembles a STAD nightlife setting as it had a mixture of festival areas and regular bars. Most visitors to the festival are from the surrounding municipality of Westland, rather than the city of Rotterdam.

3.3.3 The pilot intervention

The intervention was modelled on the core components of the STAD programme, and following the development of the intervention[13], was implemented over predominately a three-month period (March-May 2018). The intervention was implemented by partners from the city Department of Health and Department of Safety. Accompanying research was implemented by Trimbos Institute supported by prevention workers from the Local Centre for Addiction Care.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from the: Municipality of Rotterdam (Department of Safety, Department of Youth, Department of Events, Department of Supervision and Enforcement); police, YOUZ (local addiction prevention centre); the regional organisation for medical assistance; and, the Trimbos SiE project team.
- **Community engagement** with the festival organiser and bar owners via two representatives to update them on steering group discussions, and obtain bar owner feedback.

[13] The development stage includes an element of community mobilisation - community mobilisation commenced in July 2017.

- **Communication of festival policy** during the festival, including house rules on prohibition of alcohol to intoxicated or underage individuals, through large signs at the festival entrance and posters at the entrance and counter of all beach bars.

Training

- **RBS training** provided for experienced and more permanent bar staff on the risks of underage and binge drinking, and their responsibility for the wellbeing of patrons. These 'RBS ambassador' staff were then responsible for training temporary festival staff members on how to recognise and manage intoxicated patrons and how to verify patrons' age.
- **Training for law enforcement officers** in a half-day session facilitated by the Trimbos SiE project team and a Swedish police officer involved with STAD. The training included information on alcohol harms, supervising the compliance with the age limit and the ban on over serving, nightlife visits and practical exercises.

Enforcement

- **Development of a STAD-based pro-active and supportive law enforcement strategy** by the Trimbos Institute SiE project team, police, law enforcement officers[14] and the Department of Safety and Department of Law Enforcement. All enforcement officers and relevant police officers were informed about the strategy.

3.3.4 Intervention dose and reach

- Seven steering group meetings held over a one and a half year period.
- Two initial meetings with the festival organiser, followed by one meeting held with all bar owners, and one subsequent meeting with a representative who provided bar owner feedback.
- Signs with festival rules at all entrances to the festival and almost all beach bars displayed posters at the entrance and counter.
- One training session provided to 28 experienced bar staff.
- All eight municipal alcohol law enforcement officers and two representatives from the police participated in a half-day training session.
- All enforcement officers and relevant police officers informed about the pro-active and supportive STAD-based law enforcement strategy.

3.3.5 Facilitating factors to intervention development and piloting

- **Established working relationships** between stakeholders in the context of both the festival but also the broader nightlife setting in Hoek van Holland facilitated an easier formation of the steering group.
- **Use of the needs assessment** to explore stakeholders' proposed aims and implementation methods for the pilot intervention provided a means to identify shared common objectives and goals.
- **Evidencing the extent of the problem** of overservice of alcohol to intoxicated and underage individuals through the baseline alcohol test purchases to bar owners to gain their support for the intervention.

[14] Based within the municipality.

- **Taking a supportive rather than punitive approach to enforcement** when working with venues was viewed positively by law enforcement officers and bar owners who felt it created a positive atmosphere allowing for communication, support and feedback. It was perceived to help increase bar staff compliance and thus reduced enforcement officers' workload.
- By conducting RBS training using a **train-the-trainer model,** training the more experienced long-term bar staff and asking them to cascade the knowledge down to the temporary festival staff, this overcame issues regarding resources for stakeholders to train new temporary festival staff on an annual basis.
- **Training of bar staff from different bars in the same session** facilitated contact between staff and established shared social norms, knowledge and experiences around alcohol serving practices.

3.3.6 Barriers to intervention development and piloting

- **Limited staff resources** meant that some planned elements, such as engagement with municipal health services and youth work were not carried out.
- While there were benefits to the **tiered RBS training model**, stakeholders were unable to ascertain whether the training had been cascaded down to all temporary staff.
- There were **varying levels of involvement** in the RBS training; although planned, the festival organiser, bar owners and security staff did not attend.
- While a multi-agency steering group was formed there was **no involvement from bar owners** due to a lack of time. However, one initial meeting was organised with bar owners who agreed on a mutual understanding regarding the intervention. The SiE project team also arranged meetings with a representative of the bar owners to get their input and provide updates.
- **No broader media awareness raising prior to, or outside the festival area**, as partners felt that it may increase the likelihood of preloading prior to festival attendance.
- Bar staff/owners suggested that the **RBS training should be less theoretical, and include more practical examples** that trainees could practice.

3.3.7 Intervention outcomes

Bar staff RBS trainees (n=28) were asked how much they agreed with a number of statements on a scale of 1-7 (with seven indicating the highest level of agreement), prior to and following training. There was a decrease in the mean level of agreement amongst participants that it would be difficult to refuse intoxicated patrons or check ID by themselves, experienced staff or temporary staff from pre to post-training (Figure 4). There was an increase in the mean level of agreement amongst participants that their premise and other premises would stop serving alcohol to intoxicated guests (Figure 5). Further, there was a decrease in the proportion of test purchase attempts that resulted in the sale of alcohol to pseudo-intoxicated actors and to the underage minors from pre to post-intervention (Figure 6).

Figure 4: Self-efficacy around the service of alcohol to drunks and checking of ID amongst festival bar staff, pre and post-RBS training survey (2018), the Netherlands SiE festival intervention

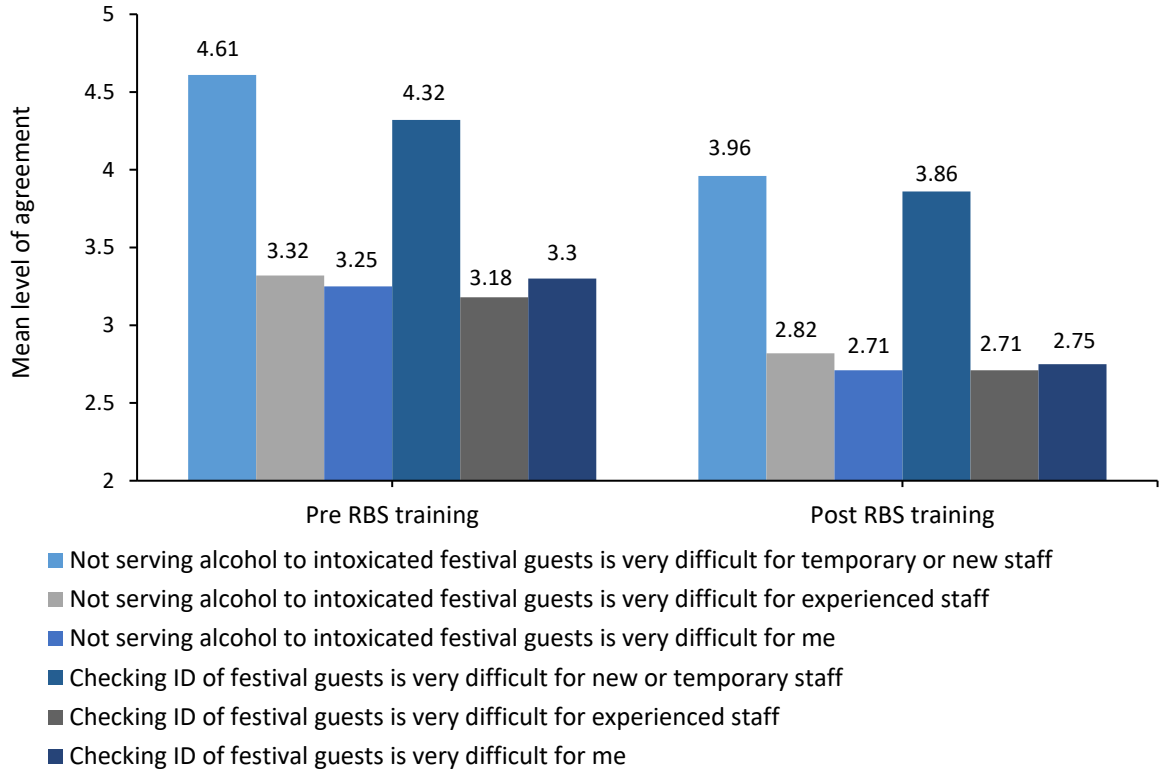


Figure 5: Behaviour and social norms around the service of alcohol to drunks amongst festival bar staff, pre and post-RBS training survey (2018), the Netherlands SiE festival intervention

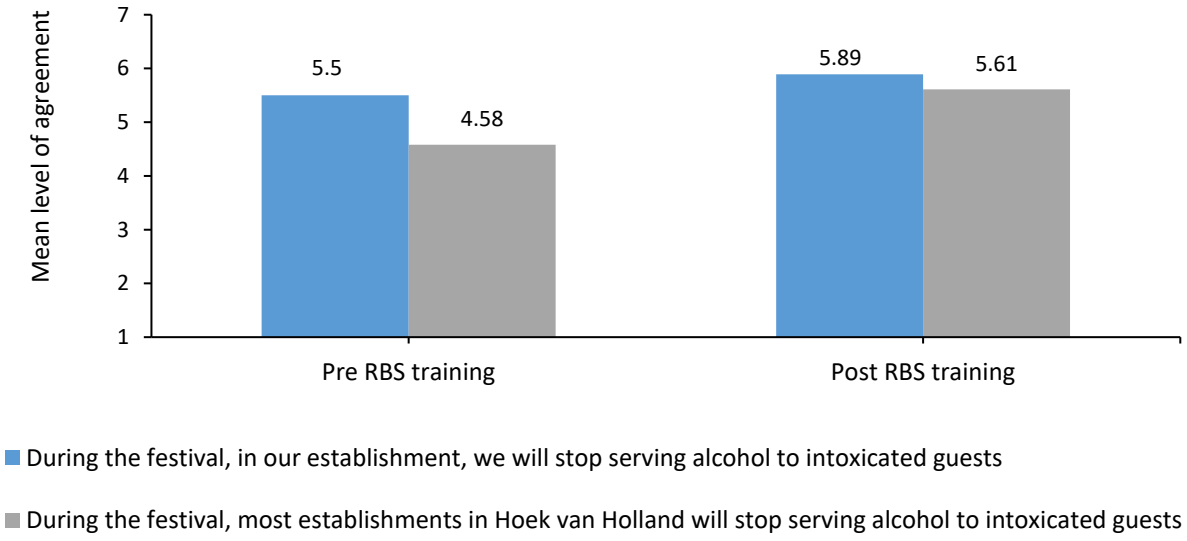
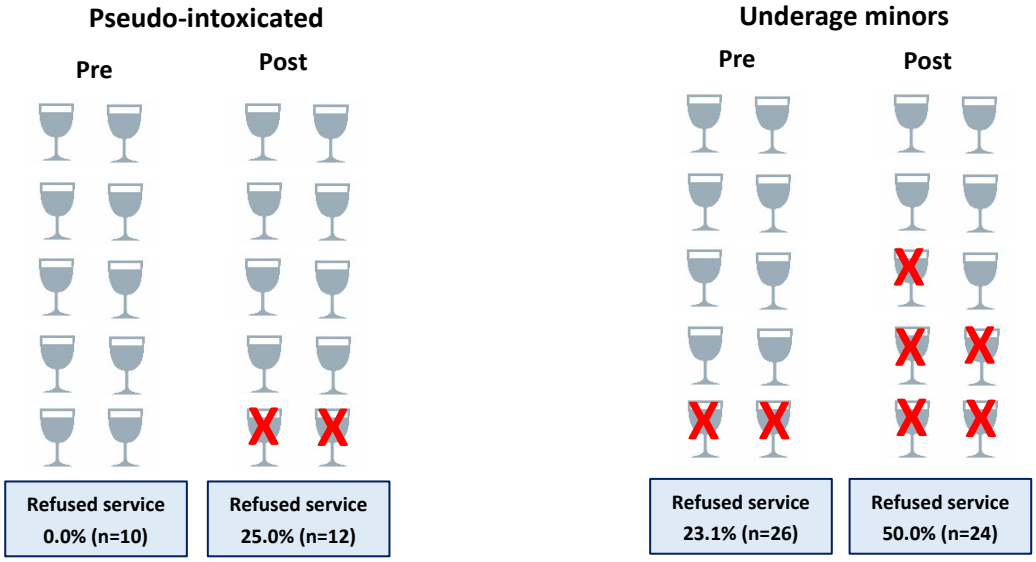


Figure 6: Festival bar servers' propensity to refuse alcohol to pseudo-intoxicated actors and underage minors, pre (2017) and post (2018) alcohol test purchases, the Netherlands SiE festival intervention



3.3.8 Conclusion

Overall, partners succeeded in developing and piloting a STAD-based intervention in a festival setting. The original STAD model needed little changes and most of it was directly transferable to the festival setting, particularly as this festival contained a mix of festival areas and regular bars. The enforcement component of the original STAD model was implemented with little change and was even undertaken in conjunction with a Swedish STAD police representative to garner support for that mode of working. Practical difficulties arose regarding the RBS training as due to the nature of the festival setting, the majority of staff are employed on a temporary basis. Therefore, to train all staff within the short period of the pilot intervention was not feasible for the intervention implementers or the bars to release staff. This was overcome by using a train-the-trainer model, where experienced and more permanent bar staff were trained and expected to cascade that training to temporary and new members of staff. While this meant that there was uncertainty regarding the quality and quantity of training with temporary staff which was conducted, it was also more sustainable as those experienced staff had the skills to train temporary staff for the festival who are recruited on an annual basis. While posters communicating rules were displayed throughout festivals areas, there was no broader media advocacy to festival goers prior to the festival or to the broader public about the intervention. This was a result of the perception that such media advocacy many encourage preloading amongst underage visitors. The evaluation suggested that the pilot intervention was associated with improvements in bar staff self-efficacy and social norms regarding serving to intoxicated or underage individuals. Further, it found reductions in the overservice of alcohol by bar staff to pseudo-intoxicated actors and underage minors. The pilot intervention was considered a valuable piece of work by partners and the results will be used to convince other stakeholders in different municipalities and drinking settings, of the value of the STAD-based approach to addressing drunkenness, underage alcohol consumption and related harms.

3.4 Festival setting - Norrköping, Sweden

Intervention aim: Reduce alcohol-related harms and overall alcohol intoxication levels amongst festival visitors.

3.4.1 Background

Partners report that alcohol availability at the festival is high as alcohol can be purchased at several serving areas inside the festival. Outside the festival area, alcohol is normally purchased at the Swedish Alcohol Retailing Monopoly (e.g. in Norrköping there are three different outlets). Preloading is common outside the festival area, in particular at camping sites adjacent to the festival where approximately 75% of all visitors reside. Visitors are not allowed to bring alcohol into the festival. Within the festival, heavy alcohol consumption amongst young people is the norm. During recent years, festivals in Sweden have been associated with a range of alcohol-related harms, including high levels of intoxicated visitors, reports of sexual harassment, and visitors urinating, vomiting or sleeping inside the festival area.

3.4.2 The pilot site area

The Bråvalla four-day music festival is the largest festival in Sweden hosting approximately 50,000 visitors, with adjacent visitor camping sites. The age limit for festival entry is 15 or more years; only those aged 18+ can purchase alcohol at the festival. The festival has two entrances (one for day-pass visitors and one for the camping site visitors) manned by security staff that check entrance tickets/bracelets and visitor intoxication levels (those who are highly intoxicated can be refused entry in accordance to Swedish alcohol law). The festival is cash free with money loaded onto festival bracelets, which are colour coded to differentiate visitors under or above the legal drinking age in Sweden (i.e., 18 years). At the festival there are several different licensed premises where alcohol beverages can be purchased between 12:00 and 03:00 (visitors can buy up to four units of alcohol per purchase). Around 40 alcohol inspectors monitor alcohol service within the festival. In addition, there are uniformed police officers and licensed security staff within close reach of some entrances and also circulating inside the festival area.

3.4.3 The pilot intervention

The original plan for the implementation of SiE in Sweden was to focus on the festival setting. However, following the 2017 festival (when baseline data was collected by partners from STAD) there were concerns about several aspects of the festival including safety of visitors after a number of high profile incidents, bad press and financial issues. It was announced several months later that the festival would not take place again. Thus, the SiE project team were unable to continue to implement the intervention or to monitor outcomes. At this point the SiE project team, as part of another funded project, were working to transfer and implement the STAD model to sports stadium settings and it was agreed that they would share learnings from this as part of the SiE project (see case study 3.5). A brief description is provided below on what elements were implemented up to the point the festival was cancelled and what elements had been planned if the festival had took place. The research conducted at a festival was implemented by partners from STAD.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from: the Bråvalla festival organiser (i.e. FKP Scorpio), bar owners and security; the municipality of Norrköping (including the licensing board); the county administration and council of Östergötland; police; and, the STAD SiE project team.
- Several initial meetings between key stakeholders and the STAD SiE project team, including **presentation of the baseline results** of alcohol intoxication levels and overservice of alcohol to pseudo-intoxicated actors at the 2017 festival.
- Planned/not implemented: media advocacy campaign to communicate the baseline results on the high levels of intoxication and low levels of denied entry and alcohol service to festival visitors, to gain support for the intervention from the public.

Training

- A two hour condensed **RBS training** tailored to festivals was provided for managerial staff on medical effects of alcohol, associated legislation, conflict management, alcohol inspections, and alcohol and violence.
- Planned/not implemented: Web-based training targeted at all temporary staff including alcohol servers, entry and security staff.

Enforcement

- Planned/not implemented: Development and implementation of an action plan to strengthen compliance with the alcohol legislation.

3.4.4 Intervention dose and reach

- Four steering group meetings were held.
- One training session was provided to ≈ 30 managerial staff.

3.4.5 Facilitating factors to intervention development and piloting

- The **collection of baseline data** on the problem (e.g. BAC levels of festival visitors, sales of alcohol to pseudo-intoxicated actors) raised awareness of excessive alcohol consumption and adherence to alcohol laws. Data collected led to key stakeholders supporting the development and implementation of the SiE pilot intervention.
- It was believed that by **training managerial staff** with the full (two hour) RBS programme they would encourage security and serving staff working temporarily at the festival to implement RBS practices.

3.4.6 Barriers to intervention development and piloting

- Cancellation of the festival.

3.4.7 Intervention outcomes

As the festival was cancelled and no intervention could take place, there is no outcome data. However, baseline data collected during the 2017 Bråvalla festival, using a research team of 16 persons during two days, identified BAC (blood alcohol concentration) levels of festival visitors and alcohol serving practices within the festival:

- The median BAC level of visitors entering the festival was 0.068% (n=1,410). The BAC level amongst those having a BAC >0% was 0.082%. The proportion of visitors who recorded a BAC level of >0.1% (i.e. level for gross drunk driving in Sweden) was 31% [50].
- The pseudo-intoxicated actors were served alcohol in 26.9% of test purchase attempts.

3.4.8 Conclusion

While not all elements of the planned intervention took place, the STAD team were able to begin to mobilise stakeholders to address levels of intoxication and alcohol-related harms at the Bråvalla festival. The fact that STAD had previous experience collaborating with several stakeholders such as the municipality of Norrköping and the county administration of Östergötland was a facilitating factor in the mobilisation process. A key means of generating interest amongst stakeholders in the development and implementation of an intervention for the following year's festival was by presenting the baseline data collected during the 2017 festival. While some RBS training was also carried out amongst managerial festival staff, intervention implementers did not get the opportunity to do training with any of the temporary festival staff, as they wouldn't have been hired until closer to the event the following year. However, they planned to do a web-based version of RBS training to overcome the limited period that such staff would be available. There were initial concerns, however, that a web-based programme may be too expensive to implement. It was also believed that by training managerial staff with the full (two hour) RBS programme they would encourage other security and serving staff working temporarily at the festival to implement RBS. While ultimately, the full intervention could not be implemented nor outcomes measured due to the cancellation of the festival, the development led to crucial lessons relevant to other settings where staff are temporary, but also importantly, where events may be temporary and thus can be cancelled resulting in wasted resources.

3.5 Sports arena setting - Stockholm, Sweden

Intervention aim: Reduce alcohol-related harms amongst football spectators, by reducing the level of intoxication at football matches in Stockholm, through decreasing the level of entry and overserving of alcohol to intoxicated spectators.

3.5.1 Background

In Sweden, the issue of alcohol intoxication and related problems at sports events has been extensively reported in the media, with corroborating reports from police and football clubs. Alcohol consumption is often a focal point at football matches and increases the propensity for alcohol-related harms [32]. Previous studies have shown that staff in sports stadiums demonstrate a high level of alcohol overservice to intoxicated individuals [62, 63]. In Sweden it is illegal to serve alcohol to patrons who are obviously intoxicated in all settings including football arenas [39]. In order to reduce the risk of alcohol-related problems in football arenas, the Swedish Elite Football Association does not schedule matches on Friday or Saturday nights, only on weekdays or during the daytime at the weekend [64].

3.5.2 The pilot site area

Two arenas hosting Swedish Premier Football League (SPFL) matches in Stockholm were selected as the pilot site. Inside the stadiums, alcohol can be purchased at different licensed premises, including kiosks, bars and pubs. The number of licensed premises varies across arenas and by arena capacity but there can be up to 26 kiosks, bars and pubs in total [50]. The arenas have a maximum capacity of 50,000 spectators [50].

3.5.3 The pilot intervention

The intervention (Fotboll utan Fylla [Football without Binging]) was modelled on the core components of the STAD programme and commenced in June 2016. The intervention was implemented by partners from STAD and other stakeholders such as three football clubs in Stockholm; the arena corporations; restaurateurs; Police authority and IQ (a subsidiary to the Swedish Alcohol Retailing Monopoly), supported by the intervention steering group. Accompanying research was implemented by partners from STAD.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from: the three SPFL football clubs; the municipality of Stockholm (including the licensing board); the county administration; County Council health care provision; police; IQ (organisation with PR expertise); and, the STAD team[15].
- Implementation of a **media advocacy campaign** to communicate the baseline results on the high levels of intoxication [50] and low levels of denied entry and alcohol service to intoxicated spectators [65] and gain support for the intervention [66]. Media activities included press

[15] Including the SiE project team.

releases, meetings, and advertisements in both local and national media such as TV, newspaper, radio and social media. A website on the project was also launched (www.fotbollutanfylla.se).

Training

- A two-day **RBS training** tailored to sporting events for managerial staff on the medical effects of alcohol, associated legislation, conflict management, alcohol inspections, and, alcohol and violence.
- A **web-based training** about alcohol, and declining entry to the event and alcohol service to intoxicated visitors, for temporary staff working at the events including alcohol service staff, entry staff, security staff, and Supporter Liaison Officers.
- A 3-hour **kick-off training** took place before the start of the football season and targeted all those involved in the sport event. The aim was for staff to meet and discuss issues like responsibilities concerning alcohol at sporting events.

Enforcement

- Review of existing policies and the **development of an alcohol policy**.
- **Alcohol inspections** at arena licensed premises by the licensing board.
- **Increased focus on alcohol intoxication by police** at the football matches in addition to other duties (e.g. preventing violence).

3.5.4 Intervention dose and reach

- Regular (six per year) steering group meetings were held over a two year period.
- Strategic press releases and opinion editorials across national and local TV, newspapers and radio generating more than 300 articles.
- Two TV adverts disseminated through national TV, the big TV monitors at the football arenas during matches, and social media.
- Two RBS training sessions during Spring 2016 with 60 managers of licensed premises in the football arenas.
- Web-based training completed by 1300 individuals (Summer 2016-April 2018).
- Two kick-off training sessions (Spring 2017 and 2018) with 300 participants.

3.5.5 Facilitating factors to intervention development

- One of the key facilitating factors in engaging a wide range of stakeholders in the intervention was the **familiarity that some key stakeholders had with the original STAD model**. A few key individuals at the football clubs had previously worked with security staff in nightlife settings and had received the RBS training. These individuals served as ambassadors for the STAD approach and served to convince other key individuals such as CEOs and communication teams of the value of the STAD approach.
- Similarly, using **evidence from the implementation of the original STAD model** in nightlife settings and **the experience and reputation of the STAD team** was key in gaining wider support for the project.
- **Inclusion of key stadium stakeholders in the community mobilisation and media advocacy** was crucial to the success of the intervention as it gave them ownership over the implementation of the intervention and the positive outcomes.

- **Co-production involving key stakeholders in development of intervention strategies.** Stakeholder representatives were included in working groups responsible for communication and the training.
- **Support from the football clubs meant fewer resources were needed.** Football clubs paid a small fee for their staff to participate in training and provided the use of their premises for meetings with the press, training sessions and other meetings.
- **The inclusion of a PR organisation to support the media advocacy campaign** was a key facilitating factor. The organisation IQ is a freestanding subsidiary to the Swedish Alcohol Retailing Monopoly with expertise in PR related to alcohol prevention and they developed and funded the TV adverts.
- A **web-based brief training programme** allowed a greater reach and a more sustainable approach to training temporary staff than the full two-day RBS training.

3.5.6 Barriers to intervention development and implementation

- One of the key barriers to implementation of the intervention was the **non-mandatory nature of RBS training**, thus a lot of effort and meetings were required to convince stakeholders of the value of the training.
- While there were benefits to the **web-based nature of the RBS training** for temporary staff, the model was also a barrier as the link to the training was distributed via email. This caused several problems such as emails going to spam folders, necessity of reminder emails, uncertainty of level of communication from managers to staff about the emails etc. Further, clubs had to send email addresses of new staff on a continuous basis due to the high turnover of these positions.
- **Limited higher-level support** from the arena corporations who own the stadiums (and several other stadiums around the world) was an initial barrier. The arena corporations initially blocked the dissemination of the baseline results in the media as they did not want the bad press. This was overcome however following the implementation of the intervention and the positive outcome results.

3.5.7 Intervention outcomes

Following intervention implementation, there was a significant decrease in both the proportion of spectators with a BAC level of >0% and the proportion with a BAC level of ≥0.1% from pre-intervention 2015 to follow-up (2016; 2017; $p<0.001$; Figure 7). There was a significant ($p<0.001$) increase in the proportion of test purchase attempts in licensed premises inside the arena, which resulted in the refusal of the sale of alcohol to the pseudo-intoxicated actor, and a non-significant increase in refusals in licensed premises outside the arena (Figure 8). Further, there was a significant increase in the proportion of pseudo-intoxicated actors that were refused entry to the stadium from pre-intervention to follow-up (2017; $p<0.001$; Figure 9).

Figure 7: BAC levels amongst spectators at football arenas, Stockholm, pre-intervention (2015), follow-up (2016 and 2017) spectator breathalyser tests

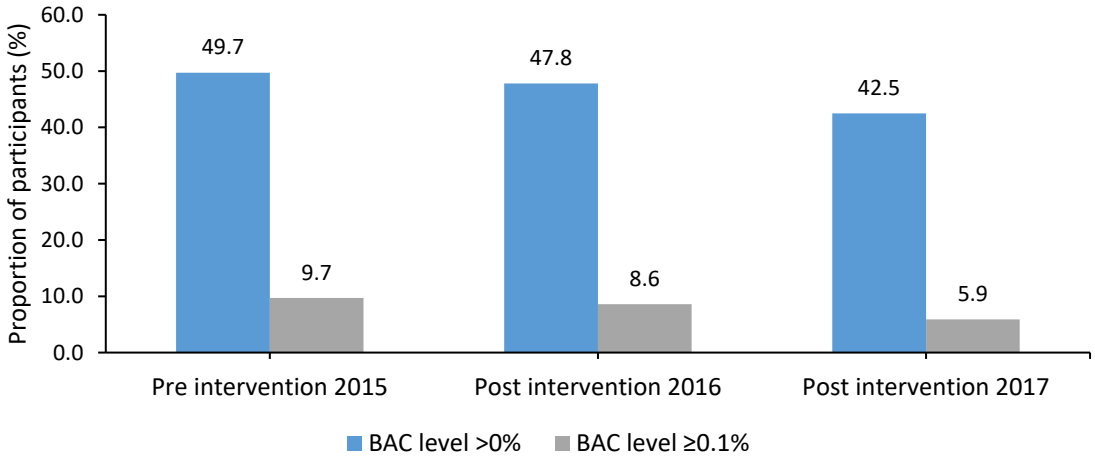


Figure 8: Bar server propensity to refuse alcohol to pseudo-intoxicated actors at licensed premises inside and outside football arenas, Stockholm, pre-intervention (2015) and follow-up (2017) alcohol test purchases

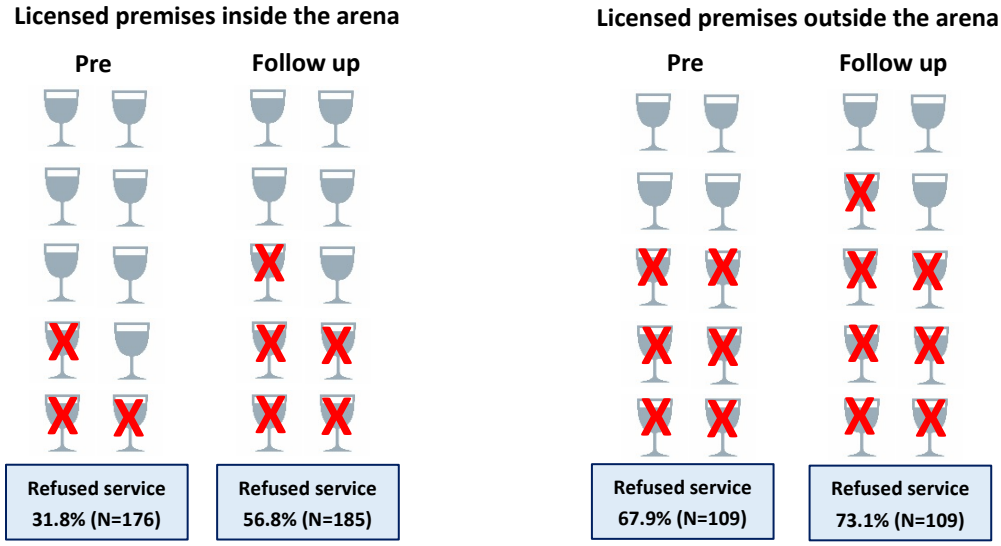
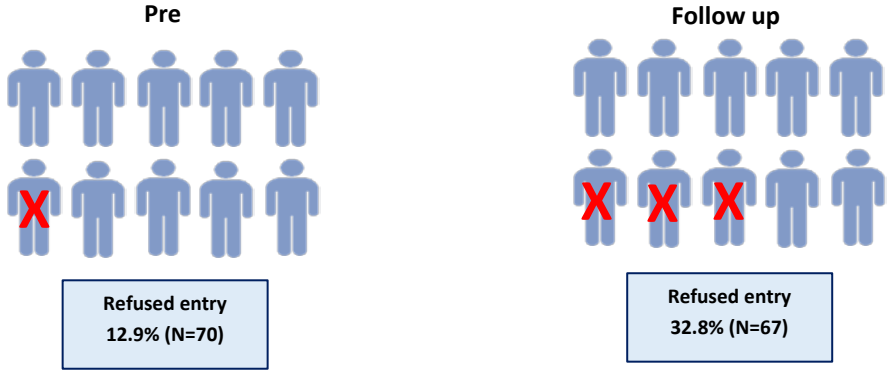


Figure 9: Level of refused entry of pseudo-intoxicated actors to the football arenas, Stockholm, pre-intervention (2015) and follow-up (2017)



3.5.8 Conclusion

The piloting of the intervention at SPFL football arena matches in Stockholm, suggests that a STAD-based intervention can be implemented in sports stadiums, and tailored towards preventing excessive alcohol consumption and drunkenness amongst football spectators. The implemented intervention contained all the core components of the original STAD model including: establishment of a multi-agency steering group and a media advocacy campaign; RBS training for managerial staff and temporary sports event staff; and, development of an alcohol policy, alcohol inspections and increased focus on alcohol intoxication by police. To address intoxication and alcohol-related harms amongst football spectators, the STAD team implemented a very similar approach to the original STAD model. Community mobilisation and support for the intervention from stakeholders and the public were garnered through the already established reputation and awareness of the STAD-based approach in nightlife settings and the involvement of football clubs in media advocacy activities. Whilst there was initial higher-level resistance to the intervention from the arena corporations due to fears regarding bad press from the baseline results showing high levels of drunkenness, these were alleviated once the positive outcomes from the intervention were presented. Practical difficulties arose regarding the implementation of RBS training to such a large number of temporary staff. To overcome this a full two day RBS training was provided to managers of licensed premises in and around football arenas only, whilst a shorter web-based training was developed and distributed amongst temporary staff. Providing the link to this training via email allowed the uptake and completion of the training to be monitored; however it also created other challenges such as requiring clubs to continuously send email addresses of new staff and distribution of several reminder emails. Research suggests that the intervention was associated with a significant decrease in the number of pseudo-intoxicated actors being served alcohol or permitted entry to the stadium from pre to follow up periods. Further, measurements of BAC levels amongst spectators suggested a significant decrease in the proportion of spectators with a BAC level of ≥0.1 (considered a level of high intoxication) [67]. All stakeholders considered the intervention a valuable piece of work and while there were positive results they are keen to build on these further. The positive outcomes from the intervention have gained both national and international attention. For instance, other football clubs in Sweden have contacted the STAD team and expressed interest in the intervention. The intervention is ongoing in Stockholm and the plan is to disseminate the intervention to other football clubs across Sweden, starting in 2019. There are also plans to roll out the intervention in other sports settings in Sweden such as ice hockey, whilst internationally, organisers of the Qatar World Cup 2022 have expressed interested in the intervention.

3.6 Home settings (children) - Kiel, Germany

Intervention aim: Reduce the availability and provision of alcohol to minors in the home, through educating and encouraging parents to be stricter law enforcers regarding provision of alcohol in the home environment.

3.6.1 Background

Globally, Germany is ranked as a high alcohol consumption country [1]. Germany has high levels of alcohol consumption amongst its youth population with one study estimating that almost 70% of 12-17 year olds had consumed alcohol in their lifetime [68]. Further, the pattern of alcohol consumption amongst young people in Germany is a cause for concern, with approximately one in four adolescents having consumed four or more drinks on one occasion in the past 30 days and 14.1% reporting binge drinking in that time [68]. Such findings are further supported by the 2011 ESPAD study which found that 89% of students (aged 15-16 years) had drank alcohol in the past 12 months and approximately half reported being drunk on at least one occasion over the same period [55]. The majority of German adolescents' first alcohol use usually takes place at home often under parental supervision. A recent representative survey amongst German parents with children aged 12-17 years revealed that the majority of households do not have alcohol-specific rules at home and about half of the parents believed it was appropriate to serve alcohol to children below the age of 15 under parental supervision. Further, two thirds of the parents judged it to be very easy or easy for their children to access alcohol at home [69]. This is reflected in the 2011 ESPAD study of students in which the majority (92%) reported that it was 'fairly easy' or 'very easy' to obtain alcohol [55]. Such attitudes represent a social and cultural acceptance of alcohol use amongst young people, which is reinforced by the lack of legislation prohibiting the sale of alcohol to individuals aged 16-17 years and allowing the provision of alcohol to younger children whilst under the supervision of a parent (common practice in Germany).

3.6.2 The pilot site area

Following consultation with a youth welfare officer, schools in the City of Kiel were chosen as the intervention setting, specifically parent evenings. Five pilot schools across varying levels of socio-economic status took part; one elementary school, one community school and three gymnasium schools.

3.6.3 The pilot intervention

The initial planned intervention for piloting the STAD model in home settings in Germany focused on drinking at home before going on a night out (i.e. preloading) amongst young adults and adolescents. The aim was to reduce the availability of alcohol for minors using stricter enforcement of the Youth Protection Law regarding sales of alcohol to minors and training of door staff to refuse entry to licensed premises to intoxicated patrons. However, after several initial meetings with licensed premises owners' and City of Kiel officials it was apparent there was no support for such an intervention. The lack of legislation around the sale of alcohol to intoxicated patrons in Germany proved a barrier, as license premise owners cited fears over losing customers by refusing entry and arguing they were not responsible for preloading which, by definition, takes place outside their venues.

While the implemented pilot intervention (Kinder und Jugendschutz: Auch zu Hause' [Youth Protection Law: Also at Home]) was modelled on the core components of the STAD, two of the three components differed substantially to allow the model to be adapted to the home setting and intervention target group (parents and children). Following the development of the intervention[16], the pilot intervention was implemented over a five-month period (February-June 2018). The intervention was implemented by partners from IFT Nord, supported by intervention steering group members. Accompanying research was implemented by IFT Nord.

Community mobilisation

- No formal multi-agency steering group was established. Instead throughout the development of the intervention **several meetings were held with different stakeholders** to design and implement the pilot intervention including representatives from: the City of Kiel, the Child Protection Agency, the Paediatric Department of the University Hospital, teachers and parents from pilot schools, Centre for Prevention at Institut für Qualitätsentwicklung an Schulen Schleswig-Holstein, Institute for Interdisciplinary Addiction Research, and the IFT-Nord SiE project team.
- **An awareness raising campaign** targeted toward parents including brochures and leaflets was conducted primarily through the educational system of Kiel. Articles on parental and child alcohol consumption at home were published in the local newspaper.

Parental training

- A **parental workshop** was delivered on parent evenings in pilot schools by two trainers, one SiE project team member and a paediatrician. The first part of the workshop provided information on alcohol use in the family including: general information on alcohol such as dose and frequency of use, alcoholic content and societal role; alcohol impact on child brain development and child alcohol dependence; parental alcohol use and role as role models, parenting skills and style; and, alcohol and the home environment, considering factors such as availability and visibility in the home and general attitudes.

Enforcement

- **Development of an alcohol policy and parental rules in the home** was the focus of the second part of the parental workshop. Parents were provided with a specific set of rules to follow regarding alcohol use in the home, including:
    - No alcohol, including sipping, for children under 16 years of age.
    - No parental binge drinking when children are around.
    - No-to-low availability of alcohol for minors at home.
    - No-to-low visibility of alcohol at home.
    - Parental overview of number of alcoholic beverages in the home.

3.6.4 Intervention dose and reach

- Steering group meetings were held over the course of designing the implemented intervention.
- Two articles were published in the local newspaper and all 60 schools in the municipality of Kiel were provided with the leaflets.

[16] The development stage includes an element of community mobilisation.

- 12 thirty-minute parental workshops were held with 223 parents in five pilot schools. This resulted in a mean attendance of 18 parents per session, which corresponded to a reach of 72% (assuming a mean of 25 students per class).

3.6.5 Facilitating factors to intervention development and piloting

- One of the key facilitating factors in engaging parents in the intervention was the concept that **rules and enforcement focused on parent responsible serving rather than child responsible drinking**. Parents generally felt they could not enforce rules regarding alcohol use on their children outside the home but could control their own behaviour regarding the provision of alcohol to children in the home.
- **Involvement of a paediatrician** from the local hospital in delivering the training was a key facilitating factor. Their involvement meant that the workshop could be framed as an information evening on adolescent alcohol use and it was felt that parents are generally more willing to accept medical compared to parenting advice.
- **Inclusion of the workshop in general parent evenings** increased likelihood of parents attending and saved school resources.
- **Targeting parents of 6th grade children (approx. 11 years old)** for the pilot intervention was a facilitating factor as this afforded a preventative approach where the concept of sipping had not yet been introduced.

3.6.6 Barriers to intervention development and piloting

- The biggest barrier to implementing the pilot intervention was the **lack of legislation** regarding alcohol consumption by children under 18 years of age. The intervention approach relied on parental self-regulation and there were no actual formal enforceable sanctions for rule violations.
- There was also **a lack of higher-level support** from the City of Kiel. Whilst they were initially happy to support the intervention, they later changed their mind and removed their endorsement from the leaflet distributed to schools.
- **Recruitment of schools** was one of the major initial barriers. The initial plan was to use a train-the-trainer model whereby teachers would deliver the intervention; however, teachers were reluctant to be seen to be telling parents what they should do in their own home and regarding their own alcohol use. Further, other agendas competed for teacher resources and capacity such as bullying and social media safety.

3.6.7 Intervention outcomes

The outcome measures focused on the feasibility and acceptability of the rules amongst parents and measures of behavioural change. The evaluation found that parents were generally very positive about the intervention. Overall the majority of parents (n=223) found the rules acceptable and feasible (Figure 10). Further, the proportion of parents (n=144) who reported following each of the three rules increased following the intervention (Figure 11).

Figure 10: Feasibility and acceptability of rules amongst parents, post-parental workshop survey 2018, Germany SiE home drinking intervention

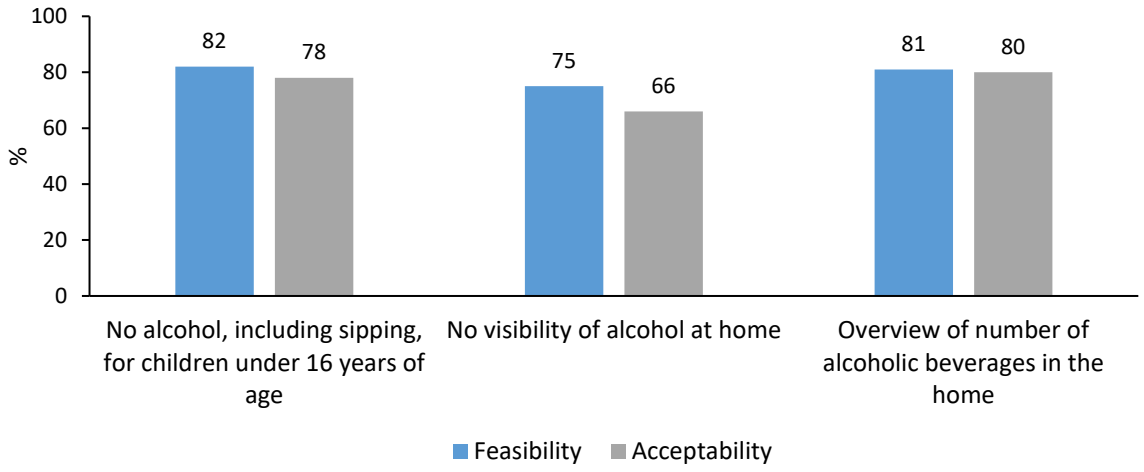
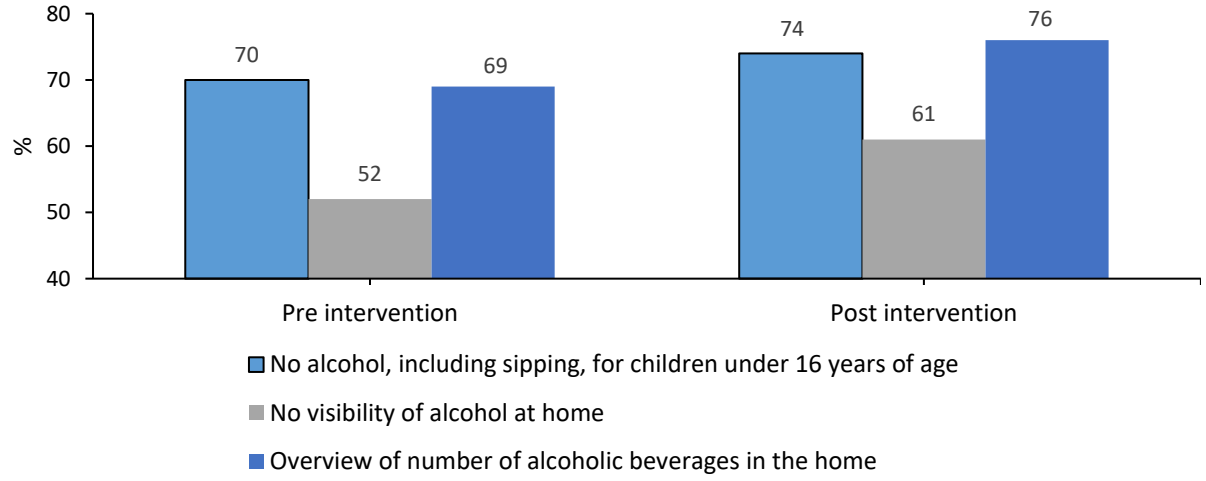


Figure 11: Proportion of parents reporting following the alcohol rules, post-parental workshop survey and follow-up survey 2018, Germany SiE home drinking intervention



3.6.8 Conclusion

The planned intervention in Kiel, Germany focusing on reducing the level of alcohol consumption in the home prior to going to nightlife settings (i.e. preloading) through restricting the sale of alcohol to minors and training of door staff to deny access to intoxicated patrons failed to achieve the required support to make implementation possible. The lack of legislation prohibiting the sale of alcohol to individuals over 16 years was a barrier in gaining support from licensed premises to engage in the intervention either through training of staff or enforcing self-regulation policies to refuse entry to underage patrons. In terms of the implemented intervention, the principal components of the STAD model were implemented but required significant changes to make it transferable to reducing alcohol consumption and availability to young people in the home setting. Whilst no formal multi-agency steering group was formed, several meetings were held with key stakeholders during the design phase of the intervention. Community mobilisation was primarily implemented through an awareness raising campaign, which was conducted through the educational system in order to reach parents, unlike the original STAD model which includes a broader general public media campaign. Changes to

the concept of RBS training also had to be made to make it relevant to the target group – parents. For example there was no real focus on legislation; instead the workshop included a paediatrician who spoke about the health effects of alcohol for young children as a means to engage parents in the intervention. Similar to the STAD model, parents were encouraged to be 'responsible servers of alcohol' to children in their home. The most significant departure of the pilot intervention from the original STAD model was for the enforcement component. There is no legislation in Germany that covers adolescent alcohol consumption in the home under parental supervision. Further, the private nature of the home setting makes it difficult to implement such legislation even if it existed. Thus enforcement in the pilot intervention was conceptualised as 'self-regulatory', whereby parents would enforce 'rules' on their own behaviour regarding the availability and service of alcohol to their children in the home, despite the fact that this was not illegal. Whilst it was expected that parents would be reluctant to follow such rules, feedback about the intervention suggested that parents were unsure about how to address alcohol use in their children and they responded well to clear guidance about best practice. Overall, the evaluation found that the parents involved in the intervention found the rules both acceptable and feasible, and some initial outcome data suggested an increase in the number of parents implementing rules around the availability of alcohol in their home. Whilst the pilot intervention per se was not a policy or legislative based intervention, it was perceived as a valuable piece of work and a first step in changing attitudes which may eventually lead to changes in alcohol legislation.

3.7 Home setting (preloading) - Wrexham, United Kingdom

Intervention aim: Reduce preloading, excessive drunkenness and related harms amongst nightlife users, by reducing the acceptability of drunkenness in Wrexham's nightlife through increasing nightlife user and bar server awareness of, and adherence to, UK legislation which prohibits the sale, and purchasing of alcohol for intoxicated individuals.

3.7.1 Background

In the UK, binge drinking and drunkenness in young people is common [70], particularly in alcohol-focused nightlife environments. Crucially, the home drinking behaviour referred to as preloading (consuming alcohol at home or a friend's house before a night out) significantly contributes to the high levels of drunkenness and related harms in nightlife environments and appears to be common practice particularly amongst young people [30, 35, 71, 72]. Contributing to the issue of preloading, is the propensity of bar servers to serve alcohol to already intoxicated patrons. In the UK, it is illegal to knowingly sell alcohol to, or purchase alcohol for, intoxicated individuals [73]; however, studies with nightlife users across the UK have shown relatively low levels of public awareness of this legislation [74, 75]. Further, studies examining bar server propensity to serve alcohol to drunks have found high levels of service of alcohol to pseudo-intoxicated actors (e.g. 71%-90%), suggesting that it is common practice [72, 76, 77]. If such legislation was adhered to, individuals would not be able to acquire more alcohol in nightlife venues and this may both reduce levels of drunkenness in nightlife environments and deter patrons from consuming excessive amounts while preloading (and thus entering nightlife settings drunk).

3.7.2 The pilot site area

The pilot site area, Wrexham Town Centre, is the largest night-time economy in North Wales [78] and draws large numbers to the town centre, particularly at weekends, from both the immediate vicinity and other local areas. Wrexham's nightlife has 26 pubs, bars and nightclubs and four off-licensed venues (e.g. shops) where alcohol can be obtained.

3.7.3 The pilot intervention

The intervention (Drink Less Enjoy More [DLEM]) was modelled on the previous adaptation of the STAD model to nightlife settings across England and Wales [75, 79], and following the development of the intervention [17], was implemented over a six-week period (November-December 2017). The intervention was implemented by partners from Wrexham County Borough Council; North Wales Police; Public Health Wales; and local youth services. Accompanying research was implemented by Liverpool John Moores University.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from: Wrexham County Borough Council (Trading Standards, Licensing, Community Safety and

[17] The development stage includes an element of community mobilisation.

Communications); North Wales Police; Public Health Wales; youth services; education; and, the Liverpool John Moores University (LJMU) SiE project team.

- **Community engagement** with licensees, door security personnel and young people at local educational establishments.
- Implementation of an **awareness raising campaign** on legislation around the sale and purchase of alcohol for drunks and vulnerability associated with preloading and intoxication, through email, blogs, posters, local and national press and social media.

Training

- **RBS training** provided to licensees and heads of door security on alcohol legislation and vulnerability associated with drunkenness.
- **Training on alcohol and vulnerability** with captains of university clubs and societies.

Enforcement

- **Police engagement with the licensing trade** to cultivate self-policing practices, prevent the sale of alcohol to drunks and increase awareness of vulnerability associated with drunkenness; and, re-enforcement by officers policing nightlife.

3.7.4 Intervention dose and reach

- Six steering group meetings were held over a 12-month period.
- As part of the awareness raising campaign; six blog articles were published with views of over 13,000; one email was sent out to over 13,000 subscribers of Wrexham County Council mailing list, with a 21% open rate and 56 link clicks to the council blog; 48 tweets were posted with one tweet reaching over 136,000 users; 14 Facebook posts (including pay-per-click advertising) had a total reach of over 13,000 users; and six media outlets covered the intervention.
- 33.3% (n=47) of nightlife user survey participants were aware of the intervention.
- One training session was provided to licensees from all 26 on-licensed premises and one session to all 26 heads of door security in Wrexham Town Centre.
- Two training sessions were conducted with all university captains of clubs/societies.
- A police licensing officer and the project coordinator visited each of the 26 licensees and provided them with a framed intervention poster and a reminder of their duties with regard to the law around the service of alcohol to drunks.

3.7.5 Facilitating factors to intervention development and piloting

- A key factor in designing the pilot intervention was using **learning and evidence from the original STAD model** [80], in addition to knowledge from the implementation of the STAD model implemented in the English and Welsh contexts (i.e. DLEM [71, 72]). Being part of a wider EU project and the inclusion of a process and outcome evaluation of the pilot intervention also helped gain local support for the intervention.
- **Established working relationships** between stakeholders, including licensed premises facilitated an easier formation of the steering group and engagement with licensees.
- The **relatively small pilot site** (26 licensed premises) was perceived to be advantageous as repeated in-person contact could be made by police licensing to encourage engagement with the intervention.

- By conducting RBS training using a **train-the-trainer model** whereby licensees and heads of door security were trained by stakeholders, and then asked to train their own staff, this freed up resources and was anticipated to make the programme more sustainable as other staff could be trained by their licensee or head of security.
- Intervention messages were framed within a **vulnerability context**, establishing the link between alcohol consumption and harms. Feedback from licensees, door security and young people suggested that all groups were highly engaged in the vulnerability aspect of intoxication and by association the need to reduce service to drunks and excessive and risky alcohol consumption. Further, such messages around vulnerability support national and local conversations and priorities, particularly sexual violence and alcohol consumption, further increasing likelihood of engagement.
- **Small incentives** were included to encourage engagement with the intervention. For instance, to encourage uptake of the RBS training by licensees, counter-terrorism training was included in the session, as licensees had previously requested this.

3.7.6 Barriers to intervention development and piloting

- **Limited resources** in terms of finances and staff time meant that some planned elements, such as engagement with taxi drivers were not carried out.
- **Limited higher-level (e.g. national) support** was perceived to be a barrier to obtaining further resources and delivering DLEM messages, particularly via social media.
- While there were many benefits to the **tiered training model** used to implement the RBS training component, it was also a potential barrier to successful implementation. Stakeholders were unable to ascertain whether the training had been cascaded down to all door and bar staff from their heads of door security and licensees.
- While a multi-agency steering group was formed, there was **varying levels of involvement across steering group members** and the organisations they represented. An operational sub group consisting of three core stakeholders implemented the majority of the intervention.

3.7.7 Intervention outcomes

Following the implementation of the pilot, there was an increase in knowledge of legislation around the sale of alcohol to and purchase of alcohol for drunks amongst post-intervention nightlife user survey participants (n=147) compared to pre-intervention participants (n=162) (Figure 12). Further, there was a decrease in the proportion of test purchase attempts that resulted in the sale of alcohol to the pseudo-intoxicated actor (Figure 13).

Figure 12: Knowledge of the law around the service of alcohol to, and the purchase of alcohol for drunks, pre (2017) and post-intervention (2018) nightlife user survey, UK SiE home drinking (preloading) intervention

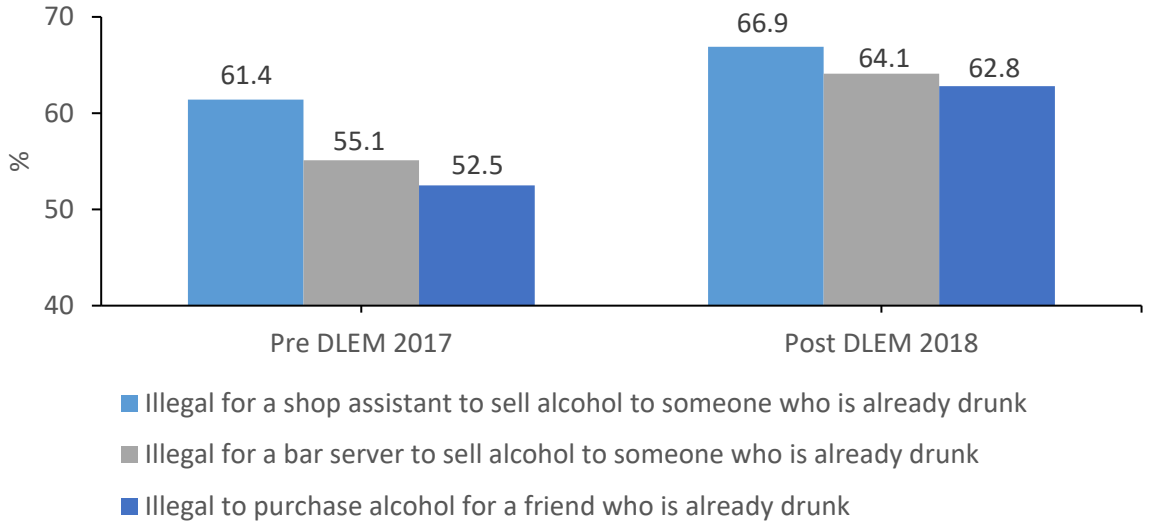
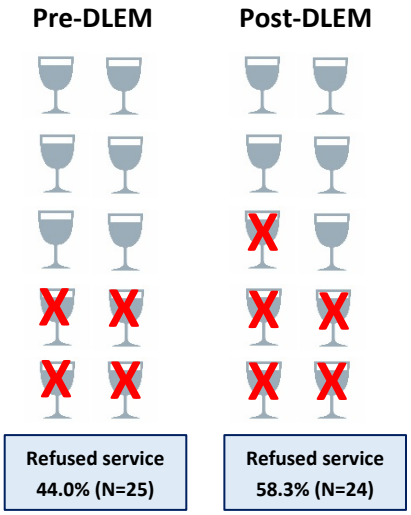


Figure 13: Bar server propensity to refuse alcohol to pseudo-intoxicated actors, pre (2017) and post-intervention (2018) alcohol test purchases, UK SiE home drinking (preloading) intervention



3.7.8 Conclusion

The piloting of the DLEM intervention in Wrexham, North Wales, has suggested that a STAD-based intervention can be implemented in the UK, and tailored towards preventing preloaded alcohol consumption, drunkenness and related harms amongst nightlife users. The implemented intervention contained all the core components of the original STAD model including: establishment of a multi-agency steering group, community engagement and awareness raising; RBS training for licensees and heads of door security; and, police engagement with the licensing trade. To address binge drinking while preloading in home settings, local partners across Wrexham tailored the messages and approaches of the original STAD model to specifically discourage preloading. Whilst there is no specific legislation around preloading, policies and legislation regarding licensed premises have relevance to preloading behaviour and such policies afford the opportunity to deter individuals from preloading excessive amounts of alcohol in the home prior to entering the night-time economy. If legislation

which restricted intoxicated individuals' access to licensed premises or further alcohol were routinely enforced, individuals would not be able to start or continue their night out, or acquire more alcohol if they enter nightlife already intoxicated. The pilot intervention also included engagement with the target group primarily through awareness raising campaigns. It was felt by intervention implementers that young people rarely engaged with overtly negative messages (e.g. do not drink to excess) or messages that focus on associated health risks and long-term consequences of heavy alcohol use [81]. Thus, the key concept used to engage young people was to frame heavy episodic drinking within the context of associated vulnerabilities, which research from elsewhere has shown to be effective [82]. Feedback from young people suggested they responded well to the messages and identified with the associated vulnerabilities while intoxicated. While resources were limited, partners were able to overcome this to some extent by using freely available and already designed materials from elsewhere (e.g. [83]). Existing working relationships facilitated an easier formation of the steering group; however, in practice a core operational subgroup undertook the majority of the activities. Good working relationships between police, licensing, licensees, and door security facilitated licensee and door security engagement with the intervention and participation in RBS training. The evaluation suggests that the pilot intervention was associated with improvements in awareness and adherence to UK alcohol legislation that prohibits the sale and purchasing of alcohol to drunk people. Such improvements are anticipated to be one of a number of factors that may deter preloading behaviour amongst Wrexham nightlife users. The pilot intervention ran for six weeks and was perceived by partners as a valuable piece of work that they are continuing to implement during key periods since the pilot.

3.8 Public drinking setting (*botellón*) - Palma, Spain

Intervention aim: Reduce alcohol access to minors, and heavy episodic drinking amongst minors and young people in public environments (i.e. streets, parks and beaches).

3.8.1 Background

In Spain, there are high rates of alcohol consumption amongst adolescents, with around six in ten students (aged 15-16 years) reporting having consumed alcohol in the past month [2]. Further, binge drinking is a common pattern of alcohol consumption with approximately 30% of students reporting binge drinking in the past month [2]. A popular setting for binge drinking amongst young people and adolescents in Spain is the *botellón.* The *botellón* is a gathering of a large group of young people in public spaces like parks, with the aim of drinking alcohol before or instead of visiting pubs and clubs [24]. The *botellón* is one of the primary settings for consumption of alcohol amongst 15-17 year olds, with one study finding that one quarter of all alcohol consumed by this age group is in a public place [34]. The 2014 ESTUDES study found that almost half of alcohol purchased by adolescents aged 14-17 years was bought in supermarkets or convenience stores [34]. Currently, there is no licensing system in Spain for alcohol and thus any establishment can sell it, including restaurants, fast food chains, souvenir and beach shops, convenience stores, and petrol stations, in addition to supermarkets and bars. In Palma, in 2017, there were over 5,000 alcohol outlets where the intervention target group could try to attain alcohol. In 2014 legislation was introduced which prohibited the sale of alcohol to those aged under 18 years. Further, regulations were introduced in 2010 that aimed to regulate spaces where *botellóns* took place. This included fines for violations covering alcohol and drug use amongst other acts such as vandalism and disturbance of the peace. While such legislation represented a positive step, it is now considered out of date, as it does not cover all the areas where *botellón* takes place. Over an 8-month period in 2016, the municipality received 113 calls reporting incidents of *botellón*, suggesting it is an ongoing issue. It is also unknown to what extent legislation prohibiting the sale of alcohol to underage individuals is being adhered to.

3.8.2 The pilot site area

The population of Palma is approximately 400,000 residents, 10% of whom are aged 10-19 years [84]. *Botellón* by definition takes place in outdoor spaces, however, the spaces where *botellón* takes place are numerous and change frequently depending on factors such as weather or events. Thus, the pilot intervention was not targeted to a specific *botellón* area but was widened to include the whole harbour area within the city to allow for *botellón* changing areas.

3.8.3 The pilot intervention

The intervention (A Palma, Menors 0.0') was modelled on the core components of the STAD model and following the development of the intervention[18], was implemented over a four-month period (June-September 2018). The intervention was coordinated by the Council of Social Rights and Wellbeing, supported by intervention steering group members and IREFREA Spain. Accompanying research was implemented by IREFREA Spain and the University of the Balearic Islands.

[18] The development stage includes an element of community mobilisation.

Community mobilisation

- Establishment of a **multi-agency steering group**, including representatives from: Welfare and Social Rights; Citizenship participation and Territorial Coordination; Youth, Equality and Social Civic Rights; Citizenship security; Tourism, Commerce and Labour; Consumers and Health; Education and Sport; and, the IREFREA SiE project team.
- **Separate meetings** were held with the newly appointed **Chief of Police**.
- Implementation of a **sensitisation campaign** which was publically launched by the Mayor and supported by the steering group. Pilot intervention messages were disseminated via advertisements in bus stops, on buses, and posters that were distributed to civil society organisations. The intervention logo, slogan and other information was also disseminated to the broader public through the civil society organisations who dealt with social organisations (including neighbourhood, parents and youth organisations) and business or trade organisations.
- **Linking in with other relevant projects and forums** such as the Platform for a Quality Nightlife in the Balearic Islands (POQIB) and the EPOPS_FERYA project[19].

Training

- **Training for youth services staff including NGOs and education organisations** by the IREFREA SiE project team provided information on: the intervention; alcohol consumption and harms; analysis of alcohol promotions and advertisements; and, practical ideas about prevention activity with the target group.
- **Training for civil society organisation[20] representatives** to promote the intervention and its messages, and RBS training.
- **RBS training for neighbourhood organisations holding events that serve alcohol in public spaces** including guidance and municipal rules on alcohol service.

Enforcement

- **Enforcement of existing legislation related to alcohol consumption in public spaces,** including a police operation to randomly check for alcohol consumption in public spaces, and monitoring the sale of alcohol from midnight to 8am.
- Contribution to the **development of a new ordinance regulating drinking in public spaces**. The ordinance was a collaboration between the Mayor, the Citizens Security Council and the local police. As part of the ordinance, sanctions for drinking in public places increased from €1,500 to €3,000 and police operations were increased. Further, attention was paid to seven identified areas in the city where *botellón* took place.
- **Alcohol test purchases were conducted by underage adolescents** to provide baseline data and information on alcohol overservice.

[19] The POQIB is work undertaken at municipality level and which has extensive participation from organisations relevant to the pilot site project including local and regional level such as civil society organisations and representation from the industry (i.e. bars, clubs and hotels). The EPOPS-FREYA project includes parent organisations and professionals from young people sectors including health, education, children's rights, social work and community prevention. Topics such as parental empowerment, youth alcohol and drug use and community and environmental prevention are discussed and addressed as part of this project.

[20] Who develop events and festivals on the street within their neighbourhood.

3.8.4 Intervention dose and reach

- 14 individuals attended four steering group meetings held over a 16 month period from project initiation and set up to the launch of the pilot intervention (January 2017-April 2018).
- Intervention posters and materials were placed on three bus routes in addition to numerous other forums ranging from posters and banners to civil society organisations.
- Two four-hour training workshops held for NGOs and education organisations during which 17 individuals were trained. These organisations have a reach of over 750 young people who use their services. Further, these organisations are also involved in a summer festival at the end of the school year during which 650 young people attend.
- Five one-hour training workshops held which included 127 civil society organisations.
- Two two-hour RBS workshops held including 18 neighbourhood associations.
- 107 police officers participated in the operation to control *botellón*.
- 12 police officers participated in the operation to control the sale of alcohol between the hours of midnight and 8am, investigating a total of 24 stores.

3.8.5 Facilitating factors for intervention implementation

- One of the key facilitating factors was using **learning and evidence from the original STAD model** [80]. Being part of a wider EU project and sharing learning and support from other partner countries also facilitated intervention implementation.
- **Established working forums** (e.g. POQIB) between the IREFREA SiE project team and key stakeholders including social organisations and industry representation facilitated the formation of the steering group and engagement with key stakeholders.
- **Licensed premises were supportive of the pilot**, particularly as they felt that reducing alcohol consumption in public spaces would encourage individuals to come into bars.
- **Public support** particularly from parents was high and was considered an important facilitating factor in increasing awareness amongst the public of the issues around *botellón* and the need to report issues to the police.

3.8.6 Barriers to intervention implementation

- **Changes in political and key personnel** during the project set-up delayed the development of the multi-agency steering group and pilot intervention.
- **Competing priorities** (e.g. police corruption) across partners slowed initial progress with intervention implementation.
- The **lack of alcohol regulation** meant widespread availability of alcohol increased the difficulty of monitoring and enforcing legislation prohibiting sales to minors.
- The **temporary and transient nature of *botellón*** meant that it was difficult to identify where and when it would happen and difficult to monitor or enforce sanctions.
- **A lack of data** or monitoring of sales of alcohol to minors by shops and supermarkets in the initial phases of the intervention made it difficult to gain their support for the intervention as they argued that they followed the legislation.
- **Disagreements arose over the intervention target group**, and it was decided that it would focus solely on minors drinking in public spaces rather than all young people.

3.8.7 Intervention outcomes

Due to the initial difficulties in intervention set-up and implementation, outcome data is yet to be collected. However, as part of the pilot, baseline measures of the sale of alcohol to minors and checking of ID in stores (n=73), along with BAC levels of individuals attending *botellón* (n=634), were taken (Figure 14, 15).

Figure 14: Supermarket staff propensity to check ID or refuse alcohol to minors, pre-intervention (2018) alcohol test purchases, SiE Spain public drinking intervention

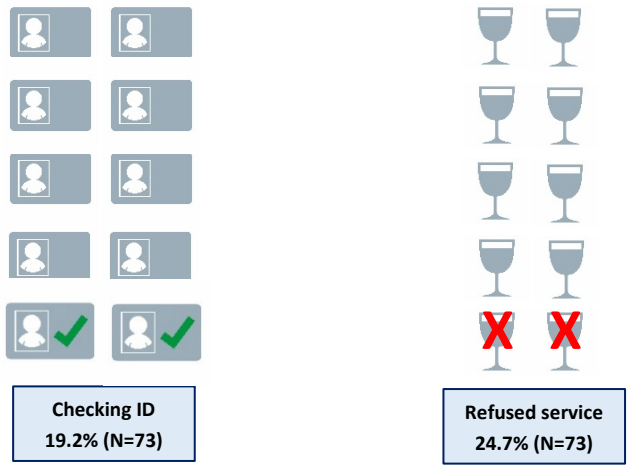
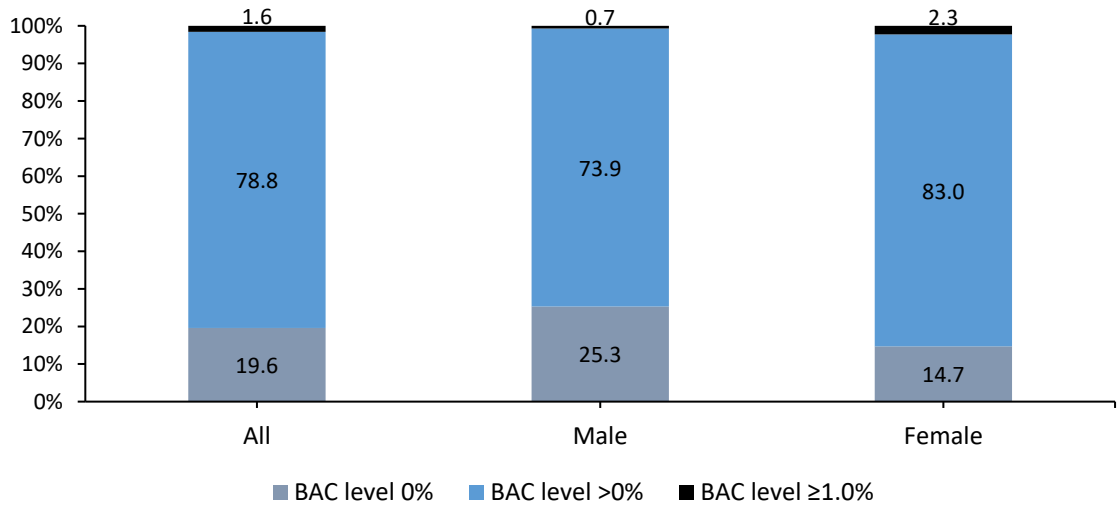


Figure 15: BAC levels amongst *botellón* attendees, pre-intervention (2017/18) breathalyser tests, SiE Spain public drinking intervention



3.8.9 Conclusion

Despite initial delays in the development of the intervention, the pilot was implemented between June and September 2018. The piloting of the intervention suggested that a STAD-based intervention can be implemented in Spain and tailored towards reducing alcohol consumption amongst young people attending *botellón*. The implemented intervention contained all of the core components of the original STAD model including: establishment of a multi-agency steering group, an awareness raising campaign; RBS training for neighbourhood organisations involved in outdoor events, and youth and civil society organisations; and, strengthened law enforcement enforcing the new ordinance and implementing targeted *botellón* police operations, in addition to alcohol test purchases by minors. Whilst there were initial difficulties setting up the multi-agency steering group due to changes in higher-level personnel, the community mobilisation component was implemented with little change from the original STAD model. Further, established working forums between the IREFREA SiE project team and key stakeholders facilitated an easier formation of the steering group and support for the intervention. The temporary and transient nature of *botellón* was initially perceived as a barrier to implementing the enforcement component of the intervention. However, the development of a new ordinance during the intervention development meant that there were increased sanctions for drinking in public spaces and several areas where *botellón* regularly took place were included in the regulations. Whilst the development of this ordinance was not a direct outcome of the SiE project, SiE partners worked with key stakeholders to influence its development. While no outcome data was collected, the baseline measures will provide a vital source to evidence the extent of the issue, encourage stakeholders that legislation is not being adhered to and training is needed, and advocate for more regulation of alcohol, such as a licensing system. The pilot was considered a valuable piece of work and will continue to be implemented.

4. Implementation of SiE pilot interventions – combined process and outcome findings

The overall aim of the process and outcome evaluation was to collate knowledge about if and how the STAD model could be developed and implemented in various drinking settings across Europe, and where applicable the outcomes (and potential outcomes) of the SiE pilot interventions. The following sections outline the common themes from the data that was collected for the process and outcome evaluation.

4.1 Selecting a drinking setting and pilot site

Key finding: Develop and target the intervention based on needs, evidence and resources. Be aware of competing priorities, and flexible to changing needs and/or opportunities.

All of the SiE project partners had identified an alcohol related problem that they felt could be addressed using the STAD model. The alcohol related problems that were identified were generally supported by anecdotal evidence, such as observations by the SiE project teams and relevant stakeholders, as well as more robust evidence, for example police and hospital admission data sets and data from wider European studies such as ESPAD [2]. SiE project partners also collected their own pre-intervention data to inform the pilot interventions.

> *"In order to get them [stakeholders] on board we used police data, first aid data and anecdotal evidence to get them on board… We knew we needed more data to get the commercial stakeholders on board which is why we did the baseline measurement and confronted them with data on compliance with the legal age limit for selling alcohol and compliance with the ban on over serving." (SiE project partner, Netherlands)*

SiE project partners identified a number of factors that can affect the general planning and implementation of a STAD-based intervention. Some stakeholders identified the size of the pilot site area as an important factor. For example, Germany felt that the site may be too big for the initial pilot and reflected that they could not engage with the whole target group during the short pilot intervention period, and instead had to select a smaller area within the city. Conversely, partners in the Czech Republic and UK cited the relatively small size of their pilot site as a facilitating factor in increasing the reach of the intervention to the target group.

For some pilot areas, the planned intervention was not implemented or was restricted in both its breadth and/or timing. Partners in Germany initially planned to focus on young adults and adolescents drinking at home before going on a night out, i.e. preloading. However, after several initial meetings with licensed premise owners and City of Kiel officials it was apparent there was no support for such an intervention. The music festival that Sweden collected their pre-intervention data at was cancelled and, as a result of this, they were unable to continue with their original intervention. Competing local priorities in some countries (Czech Republic, Spain) restricted the implementation of the intervention. For example, Spain initially struggled to identify key stakeholders relevant to the pilot intervention as

a corruption scandal meant there were changes and gaps in the police and amongst municipal senior leadership. In the Czech Republic, the introduction of legislation banning smoking in public places was a major priority for the authority and created increased reluctance amongst licensed premises to engage in an intervention which they perceived as placing further restrictions on their patrons. The timing of the intervention was a crucial factor across a number of pilot sites. In the UK, for example, the pilot site had a large student population. As preloading is of particular concern within this population it was important that the intervention was carried out during term time. Furthermore, as the Netherlands and Sweden were targeting particular events they were restricted in the timeframe of the intervention. Germany were also restricted in terms of when their intervention could take place as they had to take into consideration school term times and when they would be able to access parents at parent/teacher meetings.

4.2 Community mobilisation and stakeholder engagement

Key finding: Effective multi-agency partnerships are key to establishing a STAD-based intervention, particularly if they have ownership of the intervention. Developing community mobilisation requires sufficient resource, which may be facilitated via existing partnerships.

Generally, stakeholders included those who worked in public health, local councils, health services, police, licensing and enforcement. Germany and the Czech Republic had local schools as additional stakeholders as these played a key part in their intervention. Some SiE project partners also included venue owners and managers in their initial community mobilisation phase. What became clear throughout the process evaluation was the fact that the different SiE project partners started their interventions with varying levels of existing community mobilisation in place. For some partners (Slovenia, Sweden, Netherlands, UK) existing relationships with key stakeholders including the municipalities were beneficial in the set up and implementation of the intervention. The Netherlands in particular highlighted how all key stakeholders engaged with their pilot study and that this was important for its success. Furthermore, whilst the UK SiE project team had not worked with the stakeholders before, there is more of a culture of multi-agency partnerships addressing issues within nightlife settings, which helped to facilitate the community mobilisation phase. Similarly, in Kranj, Slovenia there is already a pre-existing local action group which is focused on addiction prevention and incorporated many of the key stakeholders needed for a STAD-based intervention. For other SiE project partners (Czech Republic, Germany and Spain) there were fewer instances of multi-agency partnerships and as a result, the community mobilisation took longer to facilitate and created some barriers in the implementation of the interventions. This is an important consideration for other EU member states that may wish to implement a STAD-based model; previous experience of working with stakeholders and existing multi-agency partnerships would reduce the initial resources and time needed in the initial stages of the community mobilisation phase.

"The project coordinator already had good working relationships with relevant stakeholders for alcohol control and alcohol-related harm prevention activities" (local pilot site report, UK)

"As an advantage in the project, the City of Kranj has already long-term established multi-agency steering group, so-called Local Action Group (LAG) in the field of addiction prevention (including local authorities, health and social services, police, schools/kindergartens, NGOs etc.). At the beginning it was very important because it was much easier for us to make contact, and get approval from the municipality to join this project, so this was the crucial. The contacts were made much easier because of the previous relationship" (SiE project partner, Slovenia)

Key finding: Evidence may be needed to raise awareness of the issue and mobilise stakeholders. Partners need to consider how and when information is shared to mobilise stakeholders effectively.

Changes in senior leadership and the police made the initial stages of community mobilisation and intervention implementation difficult in Spain. However, once these had been resolved partners were successful in creating a multi-agency steering group. The identification of a local coordinator based within the municipality appeared to be critical to this. Some partners whose interventions included nightlife venues also experienced reluctance in terms of their engagement with the interventions (UK, Slovenia, Czech Republic). This was partly because they were concerned that if they operated stricter enforcement of alcohol legislation then they may risk losing sales. Other countries reported that nightlife venues were generally/initially reluctant to engage with the intervention because they were confident that they were already enforcing relevant legislation (Czech Republic, UK). However, Spain had very different experiences and found that the nightlife venues were keen for the intervention to go ahead, particularly in terms of enforcement, because they thought it may help to increase their profits if drinking in public was restricted. In turn, Spain anticipated that supermarkets and shops may be difficult to engage in their intended intervention as previous experience had indicated that they are often reluctant to incorporate new practices unless they are regulated by law. The countries who experienced more co-operation from nightlife venues generally reported better engagement with the RBS. Hence, the extent to which nightlife venues are willing to engage with RBS and community mobilisation are further factors that would need to be taken into consideration by EU member states who wished to implement a STAD-based model.

"Older [nightlife] workers had a feeling that they know already everything about their business and do not need any new training" (SiE project partner, Czech Republic)

The majority of pilot interventions included the broad dissemination of the alcohol-related issue and intervention aims through an awareness raising campaign to the general public. The Netherlands did not implement a broader awareness campaign beyond the festival area, as they were conscious that such media advocacy prior to the festival may displace the alcohol problem and encourage festival goers to preload. The framing of the message was also considered important by some partners. Partners in the UK aimed to encourage identification and peer-to-peer sharing of intervention messages around intoxication and associated vulnerability. In Germany, parent training was framed in a health perspective rather than a behavioural intervention. In Sweden and the UK, baseline data was not publically shared until after the intervention was implemented, allowing earlier findings to be framed in a more positive way (e.g. interventions implemented to address the problem).

SiE project partners highlighted the importance of community mobilisation that includes the involvement of all relevant stakeholders in the intervention design. For example, the Netherlands

discussed how more engagement with bar owners could be beneficial. They cited the example of coasters that had been designed for the intervention but went unused because of the practicalities associated with using them in a festival setting. If bar owners had been more involved in the design of intervention promotion materials then this would have been discussed earlier and alternative promotional materials that were more appropriate for a festival setting could have been produced.

"I think, although this might be difficult at least one bar owner from the working group [should be included in steering group]. To get them even more involved than we did now. This would be helpful especially in developing the interventions and implementing the intervention. This is currently done mostly by the public stakeholders and not so much by the bar owners themselves" (SiE project partner, Netherlands)

"A lot of people have wondered how we have got the results from the RBS programme I think the main reason is the community mobilisation. The effort and time we have put into the stakeholder and getting them engaged we meet them frequently and they are part of the working group" (SiE project partner, Sweden)

4.3 Training

Generally, training involved educating the target group on alcohol consumption and alcohol-related harms amongst young people. For countries which had legislation relevant to the pilot interventions' aims and drinking environment (Czech Republic, Netherlands, Slovenia, Spain, Sweden, UK), the training also included coverage of this legislation as well as any associated sanctions for violation of the law.

Key finding: Training needs may vary and be required at different levels (e.g. information provision only; provision of practical tools/methods to reduce alcohol access); for various stakeholders (e.g. public, professionals, servers); and in a number formats (e.g. face-to-face; web-based).

The main target group for training by all pilot sites was the 'servers' of alcohol to young people. These servers differed depending on the drinking environment which was the focus of the pilot intervention, and included both commercial and social servers. For some interventions (UK, Czech Republic, Slovenia, Sweden, Netherlands), the target group for training was individuals involved in the commercial availability of alcohol, including on and off-licensed premises' staff and owners. Other countries focused on the social availability of alcohol. For example, in Germany parents were trained to be responsible 'servers' to their children, whilst in Spain neighbourhood organisations which hold events that serve alcohol in public places were provided with training on refusing alcohol service to minors.

In some pilot interventions, the concept of training was broadened to include a wider audience and to educate key groups on the issue as well as the aims and messages of the pilot intervention. In Spain, this included training civil society organisation representatives and youth services staff from NGOs and education organisations. In the UK, intervention implementers trained ambassadors at local educational establishments on the impact of excess alcohol consumption on vulnerability to associated harms. In the Czech Republic police also took part in training. In the Netherlands, police

and municipal enforcement officers took part in training focusing on enforcement which was provided by a Swedish Police Officer and Trimbos Institute.

> *"The main thing for us was to involve the municipality to train people who work in the municipality and the sensitisation process. We could not address the community if we first of all did not sensitise the different agents at municipal level…" (SiE project partner, Spain)*

Engaging the target group in training was a common barrier across pilot interventions. For all intervention settings, training was not mandatory for the target group to attend as part of their profession or role. This meant for some pilot sites there was reluctance by premise owners to release their staff for training. Partners used different means of overcoming this issue, for example UK partners used a tiered training model where they trained licensed premise owners and expected them to train their own staff, whilst the Czech Republic trained hospitality students in a forward thinking preventative approach (in addition to some licensed premise staff). Other pilot sites (Netherlands, Sweden) experienced difficulties accessing their target group due to the temporary nature of their employment. Partners overcame this by taking a tiered approach to training, in a similar way to the UK by training senior staff who were expected to cascade training and, in Sweden's case by developing a web-based training which temporary staff could access remotely. Further, knowledge or experience of existing STAD RBS training was reported as facilitating engagement in the RBS training within sports arenas in Sweden.

> *"One successful factor was that a couple of the people from the football clubs had earlier been working with the security in the nightlife setting and had been trained before in the STAD Responsible Beverage Training. They had seen the effects of training staff and they encouraged and convinced the rest of the people such as the CEO and the communications people" (SiE project partner, Sweden)*

4.4 Enforcement

Key finding: Enforcement approaches need to be tailored based on existing legislation and partner capacity and support.

Across most pilot sites, implementation of the enforcement aspect was the component least consistent with the original STAD model. Enforcement in the original STAD model involves a joint collaboration between the licensing board and police to better regulate and enforce laws and RBS training. Only one pilot site (Sweden) was able to implement this component fully and consistently with the original model including alcohol inspections by the licensing board at football arenas' licensed premises and increased focus on alcohol intoxication amongst spectators by police. For Spain, a police operation to regulate alcohol consumption in public places was undertaken however, there was no enforcement or regulation of commercial sales of alcohol to minors by shops, supermarkets or other vendors. For some countries (e.g. Netherlands, Slovenia, UK) police were involved in community mobilisation and/or RBS training but did not directly implement any enforcement activities such as monitoring, enforcement or sanctioning for violating the law. In Germany, the issue of enforcement was even more complex and the police enforcement model did not translate to the home setting and alcohol consumption amongst minors. Enforcement in Germany's pilot intervention was conceptualised as 'self-regulatory', whereby parents would

enforce 'rules' on their own behaviour regarding the availability and service of alcohol to their children in the home.

Barriers to implementation of an enforcement component which was consistent with the original STAD model, differed across pilot sites. For some countries (Germany, Spain, UK) a lack of national legislation relevant to the drinking setting and aims of the intervention complicated the conceptualisation and implementation of enforcement. In Spain, municipal ordinances regulate consumption of alcohol in specific public places. However, the temporary and transient nature of *botellón* means that spaces in which these activities take place change frequently preventing police from successfully enforcing regulations. Further, there is no licensing system in Spain controlling the sale of alcohol, making it difficult and resource intensive to monitor sales to minors or enforce sanctions for violating legislation. There is no relevant legislation which prevents minors consuming alcohol in private environments or adults consuming excessive amounts of alcohol in Germany and the UK respectively. Cultural differences in the remit of the local police also impeded police support for the intervention. In Slovenia, police did not think that prevention and monitoring of sales of alcohol to drunks and/or minors fell under their remit. Similarly, in the Netherlands, this was an initial barrier to gaining support from the police however, an experienced Swedish police officer attended the police training and facilitated gaining their support to adopt a preventative approach.

4.5 Resources

Key finding: Dedicated human and financial resources are required, from a range of stakeholders, particularly in the early stages of the intervention.

SiE project partners found it difficult to quantify the amount of time that staff had spent working on the pilot interventions. Furthermore, as some SiE project partners had never worked with the municipality and/or other key stakeholders before, they had to dedicate more time to the earlier stages of setting up the pilot interventions. SiE project partners from the Netherlands also highlighted costs associated with travelling to their pilot site, which were not accrued by those whose sites were more local.

Financing the interventions was discussed in relation to the resources needed to implement a STAD-based intervention. The SiE project provided each of the SiE project partners with funding for intervention evaluation and alcohol test purchases, as well as a small amount for them to produce communication materials. Some SiE project partners were also able to secure small amounts from other sources. The UK received some additional funding that was used to pay for intervention materials, whilst the Czech Republic and Slovenia secured some additional funding which was used to further facilitate fieldwork. It was noted by some SiE project leads that additional funding/resources may have helped to improve their intervention. For example, SiE project leads from Sweden, the Netherlands and the UK noted how it can be difficult to engage bar servers with RBS training and that expecting senior bar staff/owners to cascade training can be unreliable. However, as RBS is costly and not always possible with seasonal/temporary staff (such as those involved in the interventions in Sweden and the Netherlands), such an approach was necessary. Additional resource to compensate staff for their time may have improved training uptake.

"One of the challenges when looking at the RBS training was that we only got to train the core bar staff. They were like the ambassadors who had to relay the message to the others. We don't know how they did it" (SiE project partner, Netherlands)

Some SiE project partners discussed the importance of sharing resources across the different SiE project teams, for example, the UK and Swedish teams shared the research protocol and tools for carrying out the pseudo-intoxicated actors study, which could also be adapted for the underage mystery shopping activity within Spain, Slovenia and the Czech Republic. The Netherlands also shared materials relating to the training of parents to the SiE project team in Germany. Further, many pilot sites utilised information or products produced as part of others projects or interventions (e.g. RBS training implemented in Sweden/Canada; awareness raising materials used in the UK).

"Great support from the LJMU team and the Wrexham team. They facilitated the compilation of mystery shopping protocols and provided advice along the process" (SiE project partner, Spain)

"The Dutch sent us the materials that they used and this was the starting point" (SiE project partner, Germany)

Additionally, the way in which workloads and resources were shared amongst local partners was another key consideration within the process evaluation. According to the STAD model, where possible, resources and workloads should be shared across local partners; however, this was not always the case. The SiE project team from the UK found that the wider intervention team did share the workload, although it was a minority of local SiE project partners that implemented the majority of the intervention activities. Further, the SiE project partner from Slovenia reported doing the majority of the work for their intervention, despite that fact that it was supposed to be a multi-partner approach. This highlights why those considering implementing a STAD-based model should ensure that all project partners commit time and resources to the intervention and that this is set out and agreed from the start. Further, for all of the pilot interventions with the exception of the UK, some intervention components were delivered by the SiE project team. In the UK, the SiE project team sat on the steering group and offered advice for the intervention, but were not involved in its delivery (expect for the alcohol test purchases, which were used as an outcome measure only). The role that SiE project partners have in the delivery of the interventions needs to be considered in terms of sustainability, if they are to be continued. By having the SiE project partners offer advice but remain separate from the intervention, it is hoped the steering group from the UK will be able to continue with the intervention now that the pilot has finished and the direct involvement of the SiE project team has ended.

"Future delivery of the intervention should be mapped against partner strengths and resources and, where possible and appropriate, incorporated into already established work programmes to increase sustainability" (local pilot site report, UK)

"All stakeholders seemed very committed and interested in positive results of the intervention, but the intervention itself shows that those commitments were only on paper" (SiE project partner, Slovenia)

4.6 Barriers and facilitating factors

Changes in municipality governance/priorities

Changes in the governance of the municipalities was cited by the majority of the SiE project partners as being a barrier or potential barrier to the implementation of the interventions. Local elections took place in some of the countries during the SiE project period, which created barriers in terms of intervention set up (e.g. Spain). Other partners (Germany, Czech Republic) also found that the priorities of the municipalities changed during the pilot studies. For Germany, the municipality was initially supportive, however this changed during the early stages of the pilot and they distanced themselves from the intervention. The Czech Republic found that, as their pilot intervention progressed, the municipality focused resources and attention on the new legislation that prohibited smoking in nightlife venues. This new legislation also appeared to affect how the SiE pilot intervention was received by venues as it appeared to be placing further restrictions on their workplaces.

Key finding: Partners will experience various challenges throughout the development and implementation of the intervention, however with time and persistence these may often be overcome through multi-agency working.

Barriers can be diverse and multiple and may persist at a political or societal (e.g. alcohol culture), organisational (e.g. resources) or relationship (e.g. between intervention implementers and target group) level.

Facilitating factors may include sharing evidence on the problem and how to address it (including evidence on the STAD model), multi-agency leadership, and tailored messaging and media advocacy.

"One stakeholder was the City of Kiel, which agreed to be the chosen as the pilot region and to support the project team whenever possible. However, after reviewing the content of the leaflet for parents, they were no longer willing to provide their logo and basically pulled out of the project. The reasons for that could not be clarified" (SiE project partner, Germany)

"In the same time the new anti-smoking law (for smoking in restaurants) was implemented, and people in hospitality industry considered this as another form of restriction on their business" (SiE project partner, Czech Republic)

Alcohol legislation

Other barriers faced by SiE project partners related to the current alcohol legislation. For the Czech Republic, UK and Slovenia, current alcohol legislation supported the interventions that were being carried out, however this legislation was often not enforced. In the UK, this was due to a lack of punitive action by the police, which was a result of limited resources. Germany also faced barriers caused by legislation as under current German alcohol legislation it is acceptable for parents to allow their children to drink alcohol within the home setting, which contradicts their intervention's messages and aims. Spain's intervention also lacked support from local alcohol legislation.

"Basically when you turn 16 you can legally buy beer, wine or champagne from a store and you can drink it but liqueur you need to be 18. There is an exception from this when you are 14-16

you can drink alcohol when your parents are at the same place. Our message has been forget this 14 and keep to the 16 so that is the precipice" (SiE project partner, Germany)

Alcohol culture

Local alcohol culture was another issue reported by all of the SiE project partners. Those whose interventions included nightlife settings discussed how intoxication was common and expected by nightlife patrons. Similarly, Spain reported a similar culture relating to drinking in public spaces. The Netherlands and Sweden, whose interventions focused on seasonal events, also highlighted how people often associated these types of events with high levels of intoxication. Therefore, a key aspect of the community mobilisation phase for all of these SiE project partners included educating the public about the relevant legislation and alcohol-related harms. SiE project partners from Germany also discussed how alcohol culture in Germany could have been a potential issue for their intervention, as it is common for young people to be allowed to try alcohol at home. They found that, whilst schools were unsure of the intervention as it included suggesting to parents how they restrict alcohol within the home, parents were generally willing to take on board the message of their intervention, possibly because this information was disseminated by a health professional. Their intervention included a paediatrician delivering information to parents about the harms and risks associated with children and young people drinking alcohol. They found that by having the paediatrician deliver this information, the parents appeared to be more engaged and ready to accept the key messages. This demonstrates the importance of taking into consideration local alcohol culture when designing a STAD-based intervention, as well as considering who is best placed to deliver information.

"Parental alcohol education is a private issue and many parents do not necessarily want to be told how to act at home. An important solution to the recruitment problem was the involvement of a paediatrician from the University Hospital in Kiel. The invitation of schools and parents could be framed as an information evening on adolescent alcohol use and parents are generally more willing to accept medical compared to pedagogical advice" (SiE project partner, Germany)

Mystery shopping (alcohol test purchases)

Some SiE project partners (UK, Czech Republic, Slovenia) who used test purchases with either pseudo-intoxicated actors and/or underage actors had problems with stakeholders questioning the use of these methods. For the UK, pre-intervention some licensees of local venues did not think these methods were needed (as they perceived themselves to be following the relevant legislation relating to the service of alcohol to intoxicated patrons) and the other SiE project partners were reluctant to use them as they were concerned about potentially offending the licensees. The Czech Republic found that local SiE project partners were concerned about the ethics of test purchases and the SiE project partner in Slovenia also reported that the local police did not value the test purchase method. These SiE project teams had to explain the benefits and legalities of test purchases to stakeholders.

"At the beginning the mystery shopping wasn't accepted so some people including teachers, told us it wasn't ethical, so we hired an independent social research agency and they did the fieldwork for us" (SiE project partner, Czech Republic)

STAD model

Several SiE project partners emphasised how the current evidence on the STAD model was key in gaining support from the wider stakeholders in the early stages of community mobilisation. Further, the initial stages of the pilot intervention, which included conducting initial needs assessments and collecting pre-intervention data was useful in demonstrating the importance of the planned intervention. The importance of having relevant data is a key consideration for those wishing to implement a STAD-based intervention in the future.

> *"I think the best thing about the STAD model is that when you present the STAD model and when you tell them that it has been implemented for 20 years and it's got this good result in a way it helps to validate the system" (SiE project partner, Spain)*

Some of the SiE project partners also discussed how media coverage proved to be a facilitating factor for their intervention. The UK, Germany and Czech Republic engaged with the media early on in their interventions to help raise awareness about the alcohol related problems that they were attempting to address. For these countries, this formed a key part of their community mobilisation. Further, other SiE project partners (Slovenia and Sweden) discussed media engagement following the pilot intervention. This helped to demonstrate the importance of STAD-based interventions and helped them to secure future funding for similar projects. However, SiE project partners from Sweden did discuss how, initially, some of the sports areas owners were reluctant to engage in media activities when they were discussing the initial baseline data that had been collected because of competing priorities and concerns about losing potential business.

> *"Media activities and media advocacy are also related to mobilising both stakeholders and the public… we had the impression from the arena corporations and restaurateurs that they have sometimes been somewhat reluctant with regards to media activities where data from the baseline measurement were presented." (SiE project partner, Sweden)*

4.7 Outcomes

A number of outcomes were identified across the different intervention sites (see Table 17). When considering the outcomes, it is important to note that the various SiE project partners started their interventions from different positions in terms of existing partnership working, legislation relating to alcohol consumption and sales of alcohol, and local alcohol and drinking culture. All of the SiE project partners carried out some elements of their pilot interventions, although the extent to which the intended interventions were implemented varied across research sites.

Key finding: Outcomes are influenced by the position pilot sites start from, and can include developing processes to support the development and implementation of the intervention (e.g. increasing knowledge), altering factors that may contribute to or reduce the problem (e.g. adherence to alcohol legislation), and the problem being addressed (i.e. alcohol consumption).

For some SiE project partners, outcomes were achieved that were not necessarily related to the interventions themselves but did relate to the STAD model. For example, despite not successfully implementing their intervention within the SiE timeframe, the SiE project partners in Spain found that,

as a result of their eventual discussions around the pilot, partners within the municipality were now more willing to work together. Their pilot had also increased awareness within the municipality about the issues associated with the sale of alcohol to minors and consequently they have been able to influence policy. This demonstrates how the development of the STAD model can have positive outcomes on the development of alcohol legislation and enforcement, as well as encouraging multi-agency partnership working. Similarly, the SiE project partners from the Czech Republic also reported that the pilot study had led to different partners working together.

The UK, Netherlands and Sweden all found that there were reduced levels of service to underage and/or pseudo-intoxicated actors in their pilot sites. Additionally, the UK and Czech Republic found that there were changes in nightlife users perceptions of alcohol availability in the pilot sites, and in the UK also changes of opinion about the acceptability of drunkenness in nightlife spaces. Further, the Netherlands reported a reduction in the number of health incidents that are often associated with alcohol and police data indicated a reduction in alcohol-related incidents. SiE project partners in Germany found that an increasing number of parents were enforcing rules about alcohol within their homes. Some SiE project partners did not find differences in their pre and post-intervention data, but did report that the pilot study had raised issues relating to alcohol consumption and the service of alcohol at local and national levels (Slovenia). Overall, new knowledge on alcohol was acquired across all SiE pilot sites.

> *"Concerning alcohol prevention at football arenas, the outcomes have been achieved" (SiE project partner, Sweden)*

Many of the SiE project partners highlighted how it was difficult to know the exact numbers that had received the intervention. Whilst the numbers who attended specific RBS training sessions could be monitored, the UK, Sweden and the Netherlands all relied on managers and senior bar staff to cascade the training and therefore do not have accurate numbers on the total number of staff trained. The SiE project partners in Slovenia and Czech Republic were also unsure of the impact that the intervention had on bar staff. Additionally, many of the interventions included dissemination of information to the public, for example, the UK intervention included a media campaign which focused on educating nightlife users about alcohol legislation relating to the service of alcohol to those who are overly intoxicated and Spain's intervention included a media campaign aimed at parents. It can be difficult to measure the reach of these types of campaign, however, the UK did find increased knowledge amongst nightlife users about alcohol legislation relating to the sale of alcohol to those that are overly intoxicated.

> *"There was an increase in knowledge of associated legislation around the sale and purchase of alcohol for drunks amongst post-intervention nightlife survey participants (n=147) compared to pre-intervention participants (n=162)" (local pilot site report, UK)*

Table 2: Reported intervention implementation and associated outcomes of the SiE pilot interventions

	Drinking environment type	Licensed					Public	Private (home)	
	Setting type	Nightlife		Festival		Sports	Outdoor	Children	Preloading
	Pilot site	Czech Republic	Slovenia	The Netherlands	Sweden	Sweden	Spain	Germany	United Kingdom
Elements	Community mobilisation	√	√	√	√	√	√	√	√
	Awareness raising campaign	√	√	√	NA	√	√	√	√
	Training	√	√	√	√	√	√	√	√
	Enforcement	√	√	√	NA	√	√	√	√
Outcomes	Reduced alcohol access (underage patrons)*	√	X	√	NA	NA	NM^	√	NA
	Reduced alcohol access (intoxicated patrons)*	NA	X	√	NA^	√	NA	NA	√
	Reduced alcohol consumption	NA	NM	√	NA^	√	NM^	NM	NM^
	Reduced alcohol related harms	NM	NM	√	NA	NM	NM	NM	NM^
	Altered social norms	NA	NA	√	NA	NA	-	√	√
	Increased implementation of legislation/practice (e.g. ID checks)	√	X	√	NA^	√	NM^	√	√
	Increased awareness of legislation	NA	NA	NA	NA	NA	NA	NA	√
	Development of new/existing multi-agency working practices	√	√~	√	√	√	√	√	√~
	Acquisition of new knowledge on alcohol	√	√	√	√	√	√	√	√
	(Potential) Continuation of pilot post SiE project	√	√	√	√	√	√	?	√

Symbols: √ Component implemented to some degree / Data suggests positive change in outcome measure. X Data suggests no change/negative change. NA Not a core aim of intervention/not implemented. NM Intervention aim, change not measured during piloting. ^ Baseline measurements collected. * Proxy measures, e.g. alcohol test purchases (underage and pseudo-intoxicated); perceptions of access. ~ Multi-agency working to prevent alcohol-related harms already established.

5. Summary and conclusion

Across Europe, preventing the harmful use of alcohol and related harms is a public health priority [1]. Research suggests that multi-component community-based programmes may be an effective prevention measure [41, 85]. In Europe, the most well established and successful of such interventions is the Stockholm Prevents Alcohol and Drug Problems (STAD) programme. The STAD model includes multi-agency planning, community mobilisation, strengthened law enforcement and responsible beverage service (RBS) training [39]. Evaluation of STAD has shown significant reductions in alcohol access, consumption and harms across nightlife settings [39, 41]. Further, positive impacts have been observed across communities surrounding the nightlife setting (e.g. crime reduction), suggesting that those who are less intoxicated in the nightlife area, are also less likely to be involved in alcohol-related harms as they return home [42]. STAD was subsequently rolled out across Sweden with positive results observed, suggesting that the intervention was both scalable and translatable across nightlife settings. More recently, STAD-based interventions have been implemented across other Nordic countries [86] and England and Wales [75, 87]. However, evidence of their effectiveness is mixed, potentially due to intervention fidelity and/or variations in cultural or structural factors between settings [87]. Developing understanding of the transferability of STAD across Europe, and the potential impacts, is crucial for informing future prevention efforts to address the harmful use of alcohol across European drinking environments.

The SiE project aims to gather knowledge about the best way to develop and implement STAD-based interventions across Europe. During 2017-2018, partners from seven EU countries developed and piloted a locally-tailored STAD-based intervention, with the aim of addressing harmful alcohol consumption across a range of drinking settings (nightlife, festivals, home and public spaces). A process and outcome evaluation was conducted: to identify if a STAD-based intervention can be developed and piloted across each pilot site; and, to document and describe the development and piloting of the SiE interventions, and, explore their outcomes. This report provides a case study for each of the SiE pilot interventions (and an additional case study on the STAD model in sports stadiums) (Section 3), along with a summary of common themes from the process and outcome evaluation (Section 4). This section provides a brief summary of the implementation of the locally-tailored STAD-based models and the transferability of the STAD model across the SiE pilot site areas, and associated outcomes, and presents considerations for further implementation across Europe.

5.1 Implementation of locally-tailored STAD-based interventions across SiE pilot sites

SiE project partners were tasked with developing and implementing a locally-tailored STAD-based intervention in their designated drinking setting. Information on the STAD model was provided directly from members of STAD (Karolinska Institute, Sweden) during SiE project meetings and ad hoc discussions. The STAD team produced provisional logic models to inform the development of pilot site interventions (see Appendix 2). Information provided by the STAD team was not intended to be prescriptive, but rather to be used to assist SiE project partners in developing and piloting a locally-tailored STAD-based intervention. Critically however, all pilot sites were requested to follow the STAD

model, tailoring components (community mobilisation, training and enforcement) to the local drinking setting where relevant.

The SiE project suggests that the STAD model has the potential to be transferred across different drinking settings in Europe, but particularly commercial drinking settings. All pilot sites were able to develop and pilot an intervention that included, to some extent, the three core components of the STAD-model. However, overall, levels of implementation varied, and the training and enforcement components in particular had to be adapted to accommodation differences across pilot sites, such as drinking setting type, alcohol culture and legislation, and structural factors including levels of pre-existing multi-agency partnerships. Often, the existence of supportive alcohol legislation and pre-existing multi-agency partnerships helped to facilitate the development and implementation of interventions, especially in the initial community mobilisation phases. Countries that did not have these elements in place, particularly supporting legislation were still able to implement some aspects of the model (i.e. community mobilisation and training). However, this often required more time and resources to mobilise communities and led to additional barriers being faced. Germany and Spain, in particularly had to adapt the model as their intervention was not fully supported by alcohol legislation or licensing systems. Other SiE project partners (Slovenia, Czech Republic) demonstrated how having supportive alcohol legislation does not always guarantee appropriate enforcement as local alcohol culture and competing priorities can often counteract legislation.

The feasibility of implementing the locally-tailored STAD-based interventions appeared to differ across drinking settings. Thus, whilst enforcement within nightlife, festivals and sports settings included both formal (i.e. legislative) and informal (social) control measures, in home settings enforcement tended to rely on informal control measures, deviating somewhat from the STAD-model. Informal control measures address social norms and behaviour of 'servers' and other social sources of alcohol (relatives and older friends) supporting them not to supply alcohol [38]. Two pilot sites however (Spain, *Botellón*; UK, preloading) recognised that formal control measures implemented in commercial drinking settings may influence social drinking, and thus as part of their intervention promoted the development and adherence to alcohol legislation targeted towards commercial (and social, e.g. Spain) settings. Some settings also presented unique challenges requiring partners to primarily focus on community mobilisation, and/or overcome implementation logistics and develop programme resources. For instance, whilst the STAD model appears to be transferable to festival settings, the infrequent nature of festivals presents additional considerations particularly in relation to RBS training. Generally however, across commercial settings, due to time and resources, no pilot sites implemented the two day RBS training programme included in the original STAD model, but rather implemented a shorter training session delivered in different ways (e.g. web-based, face-to-face) and to varying groups (e.g. venue managers only; bar servers). Further, training across private or public drinking settings primarily aimed to address social norms that support the harmful use of alcohol consumption.

5.2 Impact of the SiE pilot interventions

The SiE project and associated interventions have elicited new knowledge on alcohol across Europe, including the breadth and extent of alcohol overservice (to underage and intoxicated patrons) and consumption, and social norms. Further, it has supported the mobilisation of communities and/or

development of partnerships to address alcohol availability, consumption and related harms, and raised capacity through training key stakeholders about the extent of the issue, and ways to reduce harm (e.g. police, bar servers). Across a number of countries, local evaluation suggests that the pilot interventions have been associated with altering factors that support harmful alcohol consumption, such as overservice of alcohol to underage and intoxicated patrons, across a number of drinking settings (see Table 2). However, implementation and evaluation of STAD suggests that such interventions need to be implemented, adapted and evaluated over a long time period to enable, sustain and evidence changes in alcohol availability, harmful use and related harms. The SiE interventions have been implemented and evaluated over a very short time period, and sustained changes in alcohol access, use and related harms are only likely to be achieved if interventions are implemented as part of a longer-term programme of work, similar to the STAD programme (to date implemented over a 22 year period). Continuing the work that has been initiated in the different SiE pilot sites would potentially allow for sustainable and larger effects of the interventions. Six of the seven pilot sites indicated that they would aim to continue to develop and implement their intervention post piloting. The varying levels of outcomes experienced by the different pilot sites however demonstrate how the success of the locally-tailored STAD-based interventions can only be measured when the wider picture (e.g. existence of supporting alcohol legislation, existing multi-agency partnerships, commitment from stakeholders including the municipality, local alcohol culture, etc.) are taken into account.

5.3 Conclusion

Our study suggests that the STAD model has the potential to be transferred across different alcohol drinking settings in Europe, particularly across commercial drinking settings. The presence of supporting alcohol legislation, cultures that are supportive of preventing harmful alcohol use and related harms, and multi-agency working can facilitate the development, implementation and potential success of a STAD-based intervention. Even without these factors, components of the model, particularly community mobilisation, can be developed to support future intervention development and implementation. The piloting of a STAD-based model across home drinking settings suggests that it is not directly transferrable to these settings, particularly relating to enforcement. The SiE project and associated interventions have elicited new knowledge on alcohol across Europe. Further, it has supported the mobilisation of communities to address the issue and raised capacity through training key stakeholders. Across a number of countries, local evaluation suggests that the implementation of the pilot interventions is associated with addressing factors that promote the harmful use of alcohol. Further implementation and robust evaluation of the pilot SiE interventions is required however to determine the sustainability and the long-term impacts of such interventions across European drinking settings. Box 3 provides a list of considerations for the future implementation of STAD-based interventions across Europe.

Box 3: Future considerations for the implementation of locally-tailored STAD-based interventions across Europe

Community mobilisation

- Community mobilisation is a critical factor for intervention development and implementation. Preparatory work may be required to mobilise the community, including obtaining and sharing evidence on the breadth and extent of the issue and ways to address it (including provision of existing evidence on the STAD model), and exploring local priorities and potential facilitating and impeding factors.
- Challenges to intervention development and implementation may exist at a political (e.g. legislation), societal (e.g. alcohol culture), organisational (e.g. resources) and relationship (e.g. between intervention implementers and target group) level. Partners need to be aware of such challenges and prepared to be flexible to changing needs and/or opportunities.
- The development of a collaborative multi-agency partnership with shared goals and ownership can aid intervention development, implementation and sustainability.
- Key stakeholders who require mobilisation can include: 1) higher level supporters (e.g. policy makers, intervention funders/developers), 2) the intervention group (including those who deliver and/or receive some intervention such as bar servers), and 3) the target group (e.g. drinkers).
- Media advocacy is important. Consideration needs to be given to the nature and timings of messages to different stakeholders.
- Developing community mobilisation requires sufficient resource, which may be facilitated via the collaborative multi-agency partnership. Dedicated human and financial resources are required, from a range of stakeholders, particularly in the early stages of the intervention.
- Coproduction where key stakeholders are involved in the development of intervention strategies and implementation phases is an important factor, facilitating for instance a sense of ownership among stakeholders.

Training

- Training needs may vary and be required at different levels (e.g. information provision only; provision of practical tools/methods to reduce alcohol access), for various stakeholders (e.g. public, professions, servers), and in a number of formats (e.g. face-to-face; web-based).

Enforcement

- Enforcement approaches may be formal (e.g. legislative) and/or informal (social) and need to be tailored based on the drinking settings, existing alcohol policy, culture and resources.

Ongoing implementation, research and networking

- Where applicable, partners should continue to develop and implement their SiE interventions. This should be accompanied by robust evaluation, to determine longer term processes of implementation, programme sustainability and impacts on alcohol access, consumption and related harms (and other health, social and economic factors).
- Learning from the SiE project, and future implementation and evaluation of SiE interventions, should be shared in various formats across a range of stakeholders in Europe and beyond.

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7. Appendices

Appendix 1: Pilot intervention research methods used across pilot sites

Table A1: Summary of methods used in pilot intervention process and outcome evaluations

Method	Spain	Sweden	Slovenia	Germany	Czech Republic	Netherlands	United Kingdom
Test Purchases (under age)	Yes	NA	Yes			Yes	NA
Test Purchases (drunk)	NA	Yes	Yes		Yes	Yes	Yes
Target group surveys	Yes [1]	Yes [2]			Yes [3,6]	Yes [2]	Yes [3]
Stakeholder interviews / focus groups	Yes		Yes			Yes	Yes
Breathalyser tests	Yes [1]	Yes [2]				Yes [2]	
Routine data sources	Yes [4]		Yes [4]			Yes	Yes [4]
Observations	NA	Yes[2]	Yes [5]		Yes [4]	Yes [4]	Yes [5]
Intervention group survey				Yes (Parents)		Yes (training)	
Research log						Yes	

[1] public spaces, [2] Festival users/sporting event, [3] Nightlife users, [4] Baseline data, [5] Test purchases [6] School children

Alcohol test purchases (underage and pseudo-intoxicated): Alcohol test purchases were made in selected premises (e.g. bars, pubs, supermarkets) by underage and pseudo-intoxicated patrons following existing methodologies (e.g. [88, 89, 90, 91, 76]). In some pilot site areas server propensity to check ID or allow entry to the premise was also measured during these attempts:

- **Czech Republic:** 100 post-intervention underage alcohol test purchases were made in 20 restaurants, five of which had received RBS training.
- **Slovenia:** Underage and pseudo-intoxicated alcohol test purchases were made in 12 on-licensed premises (Friday and/or Saturday night from 8pm to 2.00am).
- **Netherlands:** Pre (n=26) and post-intervention (n=24) underage and pre (n=10) and post-intervention (n=12) pseudo-intoxicated actor alcohol test purchases were made across festival venues.
- **Sweden (festivals):** 52 pre-intervention pseudo-intoxicated actor test purchases were made in festival venues across two nights.

- **Sweden (sports arena):** Pre (n=70) and post-intervention (n=67) pseudo-intoxicated entry attempts to the arena were made; pre (n=176) and post-intervention (n=185) pseudo-intoxicated actor alcohol test purchases were made inside the arenas; and, pre (n=109) and post-intervention (n=104) pseudo-intoxicated actor alcohol test purchases were made at licensed premises outside the arenas.
- **United Kingdom:** Pre (n=25) and post-intervention (n=24) pseudo-intoxicated actor alcohol test purchases were made at licensed premises in the night-time economy were conducted (Friday and Saturday nights from 8pm-2am). Alcohol test purchases by pseudo-intoxicated actors were also conducted in two off-license venues (pre and post).
- **Spain:** 73 baseline underage alcohol test purchases were made by 10 adolescents (aged 14-17 years) in 21 stores (Friday nights 6pm-8pm and Saturday afternoons 12pm-2pm).

Target group surveys: Surveys were conducted in several pilot site areas and included participants from their particular target group. Surveys were administered to a range of participants including schoolchildren, users of the night-time economy and festival goers. Surveys generally covered the following areas: general demographics, alcohol consumption, drinking patterns, purchasing of alcohol, knowledge of the law and parental control.

- **Czech Republic:** Pre (n=207) and post-intervention (n=172) school surveys were conducted with students (aged 16-17 years) from six high schools. 80 surveys about drunkenness and alcohol consumption were conducted with visitors of restaurants (16-25 years).
- **Netherlands:** Pre (n=120) and post-intervention (n=115) surveys were conducted with festival goers. Questions included alcohol use and attitudes on drunkenness and underage drinking.
- **Sweden (festivals):** 1410 pre-intervention surveys were conducted with festival goers. Questions included demographics, festival experiences and alcohol use (AUDIT-C).
- **United Kingdom:** Pre (n=162) and post-intervention (n=147) surveys were conducted with nightlife users (aged 18+ years) on Friday and Saturday nights (9pm-2am). Questions included alcohol consumption and harms, nightlife usage, and awareness of the intervention (post survey only). A web-based population preloading survey with 244 Welsh adults (aged 18+) who live in and/or visit nightlife environments in Wales was also conducted. Questions included alcohol use (including preloading) and harms, and nightlife experiences.
- **Spain:** 290 pre-intervention surveys were conducted with adolescents and young people attending *botellón*. Questions included demographics and alcohol use.

Stakeholder interviews/ focus groups: Qualitative semi-structured interviews/focus groups were carried with stakeholders who had a key role in the design and/or implementation of the intervention.

- **Netherlands:** Semi-structured interviews, pre (n=10) and post (n=10).
- **Czech Republic:** Focus groups (n=3) during intervention design. Semi-structured interviews, pre and post-intervention.
- **Slovenia:** Semi-structured interviews, pre (n=15) and post-intervention (n=15).
- **United Kingdom:** Semi-structured interviews, pre (n=3) and post-intervention (n=5).
- **Spain:** Semi-structured interviews, pre-intervention (n=5).

Breathalyser tests: Blood alcohol content tests (BAC) using breathalysers were conducted to assess the levels of intoxication among participants in several intervention settings.

- **Netherlands:** Pre (n=120) and post (n=115) BAC tests with festival goers (15-40 years) entering or leaving the festival area.
- **Sweden (festival setting):** 1410 pre-intervention BAC tests with festival goers entering and exiting the festival area.
- **Sweden (sports arena):** Pre (n=3351), follow-up (n=1449 / n=2514) BAC tests with spectators outside the sports arena prior to the event.
- **Spain:** 634 pre-intervention BAC tests were conducted using breathalysers with adolescents and young people attending botellón.

Routine data sources:

- **Slovenia, Netherlands, Spain:** Data was collected from local health (e.g., emergency department, ambulance, admissions due to alcohol intoxication) and/or police statistics and covered the relevant time periods covering the pre- and post-intervention phases.
- **Slovenia:** Health and market inspectorates (e.g. registered cases of alcohol purchases by minors and intoxicated young people).
- **United Kingdom:** Collated and reviewed documents including a needs assessment, intervention planning documents, meeting notes, and external and public communication (including media and social media content).

Observations: Researchers carried out observations across a range of settings including restaurants, nightlife venues and festivals examining a range of environmental and staffing factors. Observations were generally conducted during test purchase attempts. Observations were carried out by several countries including Sweden, Slovenia, Czech Republic, Netherlands and the United Kingdom.

Intervention group survey: Surveys were carried out in some pilot sites with the target group who received the training component of the intervention. These surveys generally gathered perceptions of the training and potential impact on behaviour.

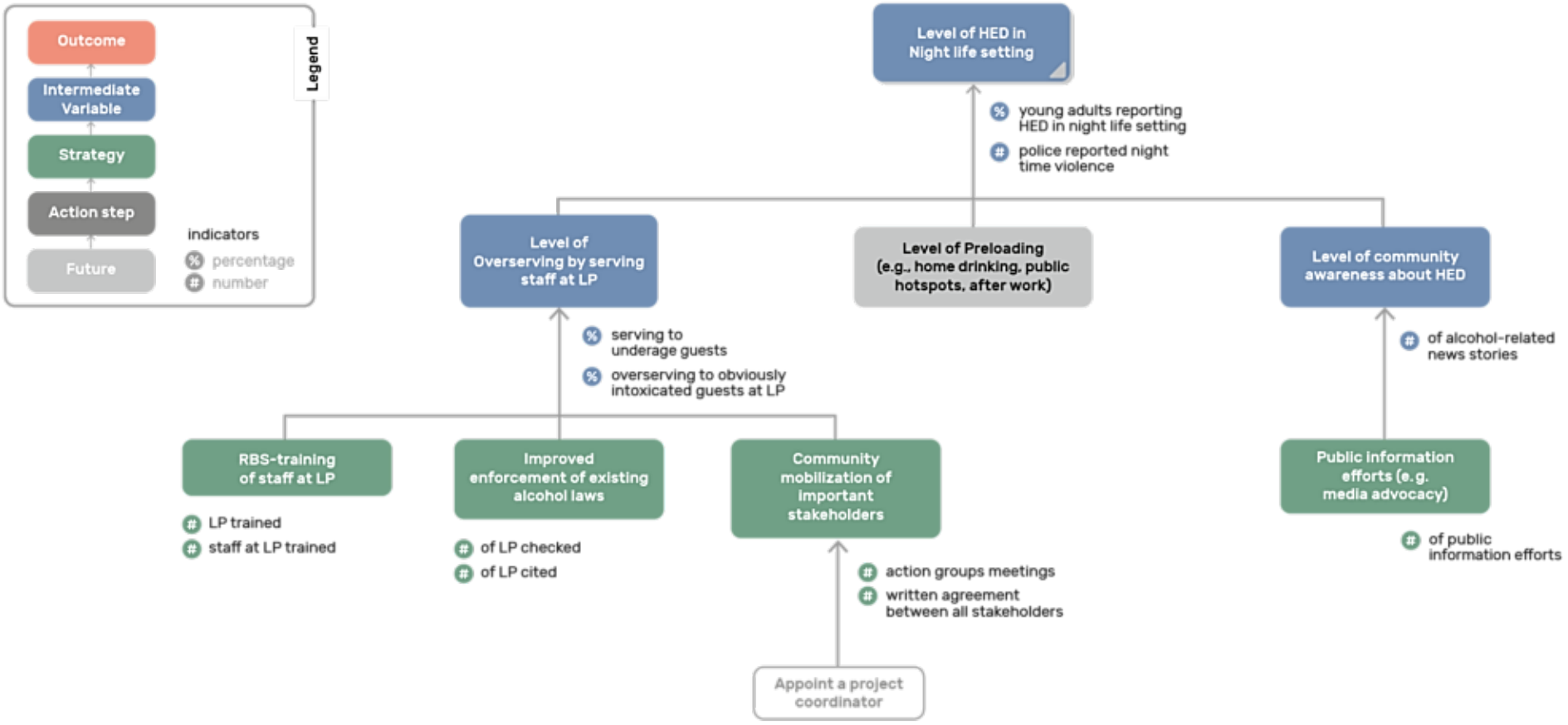
- **Netherlands:** Pre (n=28) and post (n=28) surveys were completed by bar servers attending RBS training. Questions included perceptions of the training and potential behavioural change as a result of the training regarding serving intoxicated guests and ID checking.
- **Germany:** 223 post surveys were completed by parents attending the training. Questions focused on the feasibility and acceptability of the alcohol rules. 223 follow-up surveys were completed by parents. Questions included behavioural change and whether the rules had been implemented.

Research log

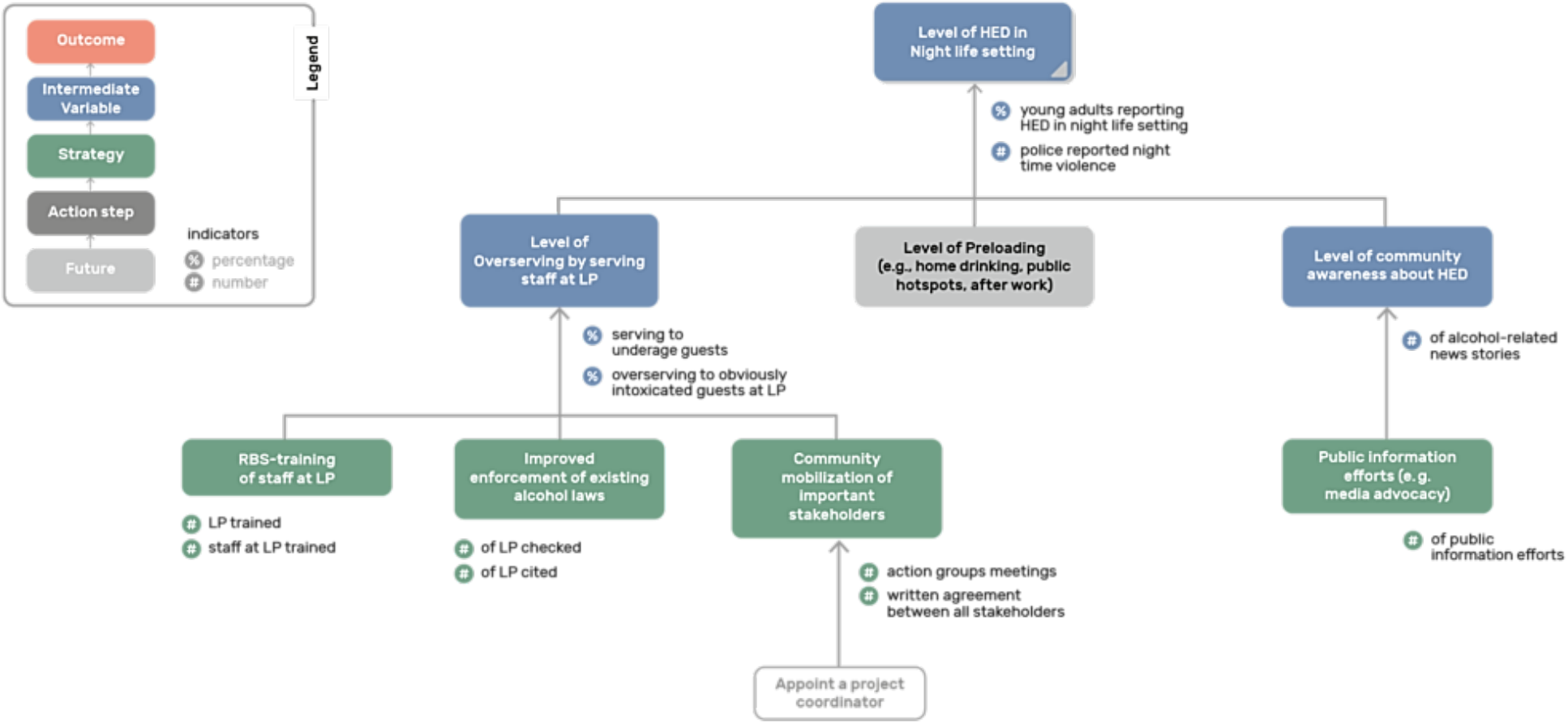
- **Netherlands:** The mobilisation process was registered in a research log. This included data about the involvement of stakeholders, the facilitation of the development and implementation, and the obstructions in the process of developing the intervention. This log was used to inform the process and outcome evaluation.

Appendix 2: Pilot intervention logic models

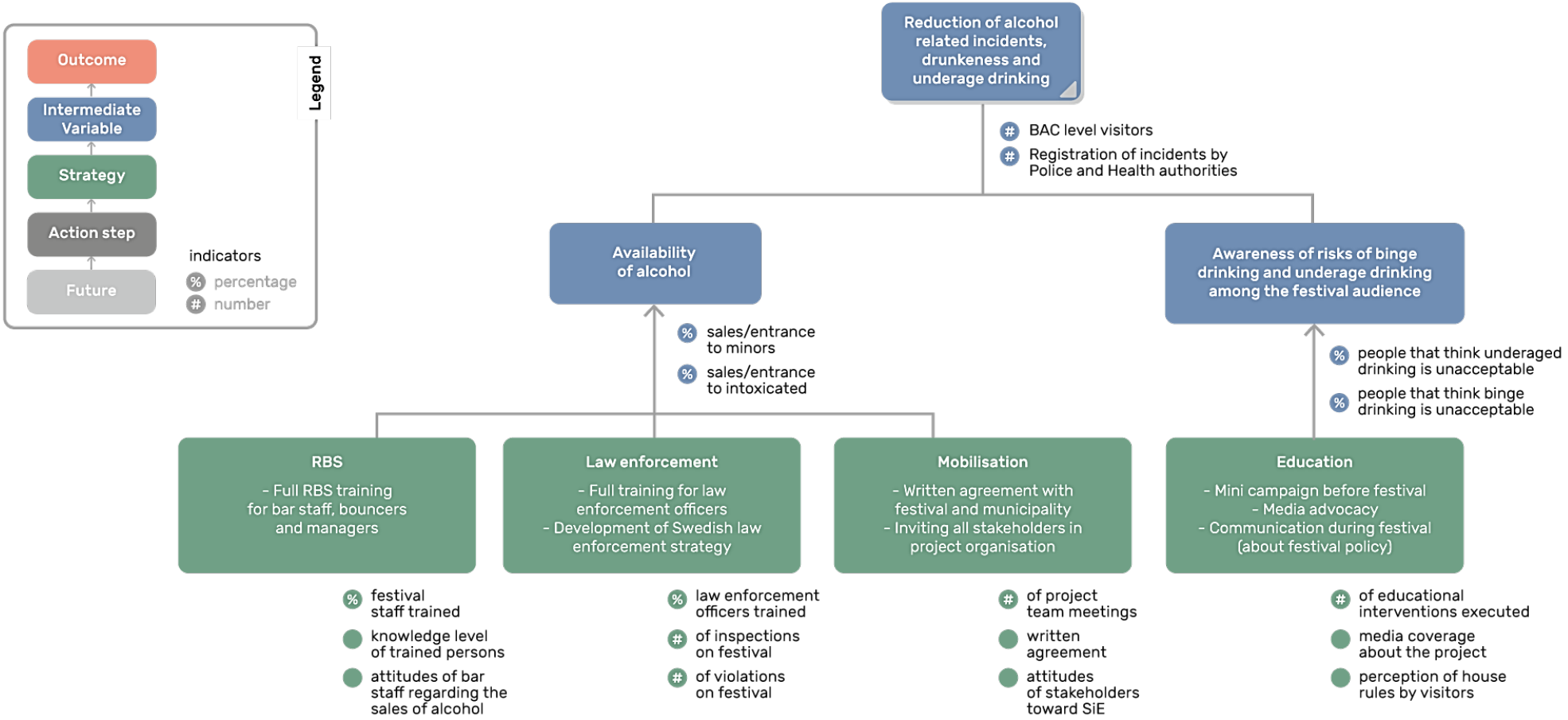
A2.1 Nightlife setting – Valmez, Czech Republic, pilot intervention logic model



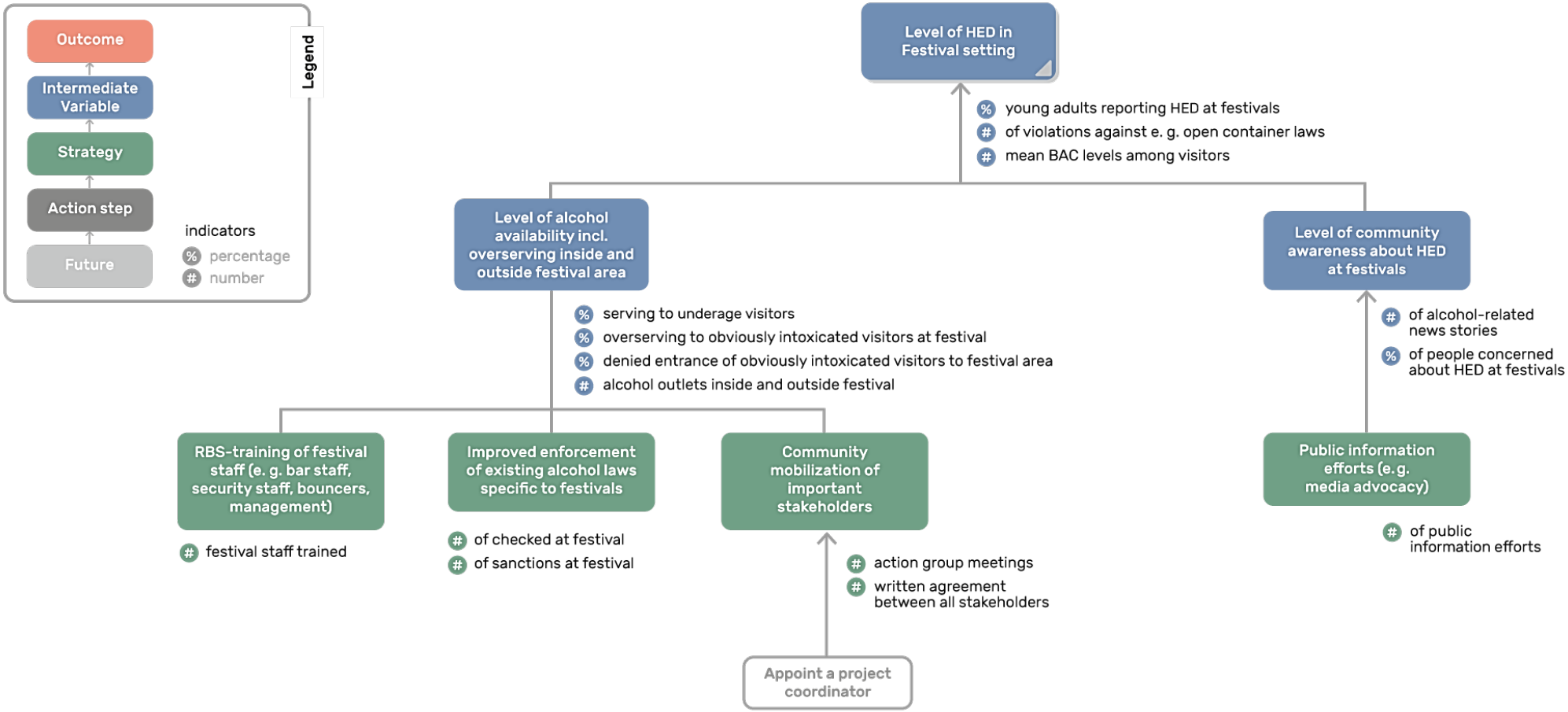
A2.2 Nightlife setting – Kranj, Slovenia, pilot intervention logic model



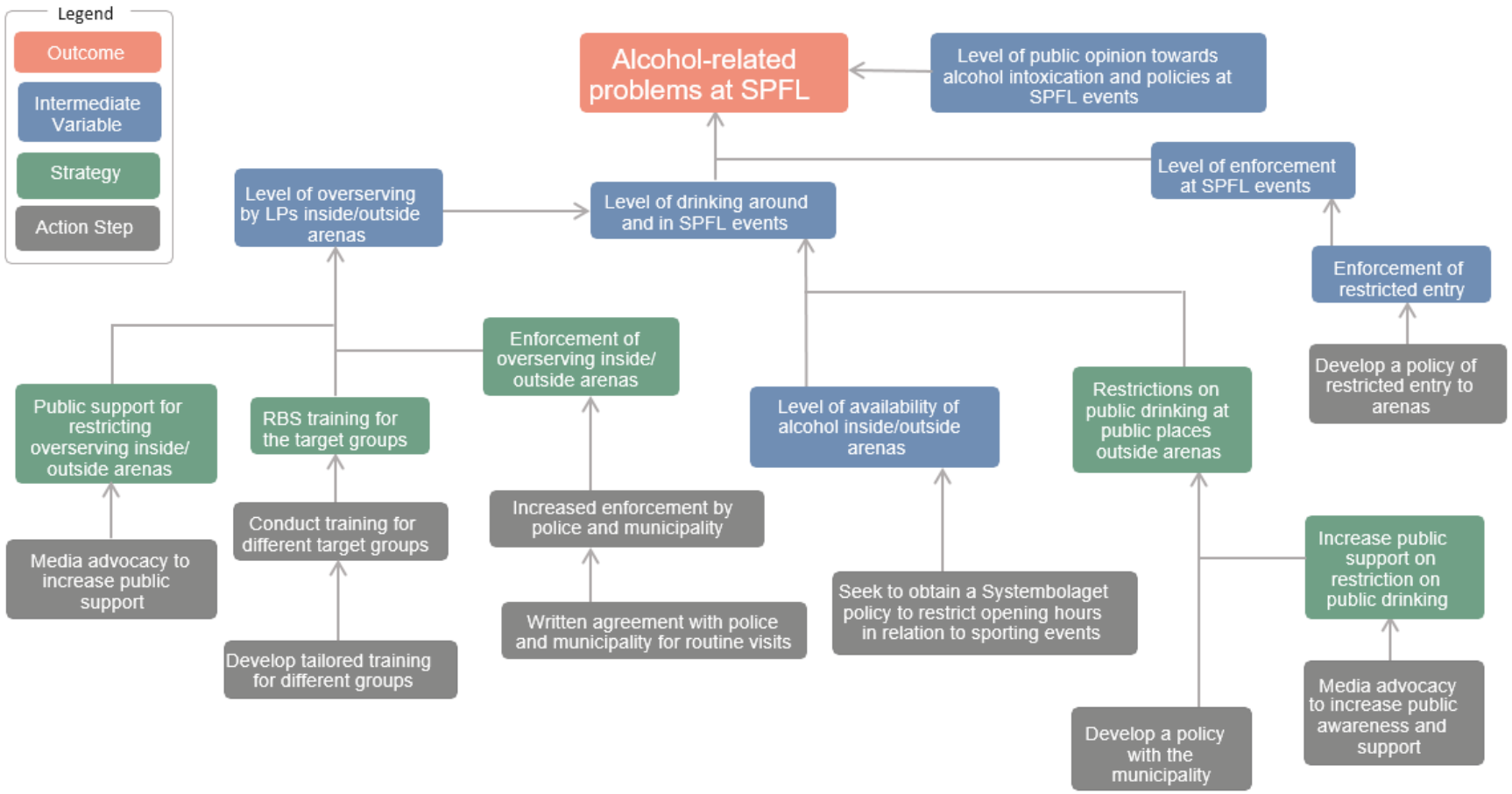
A2.3 Festival setting – Hoek van Holland, the Netherlands, pilot intervention logic model



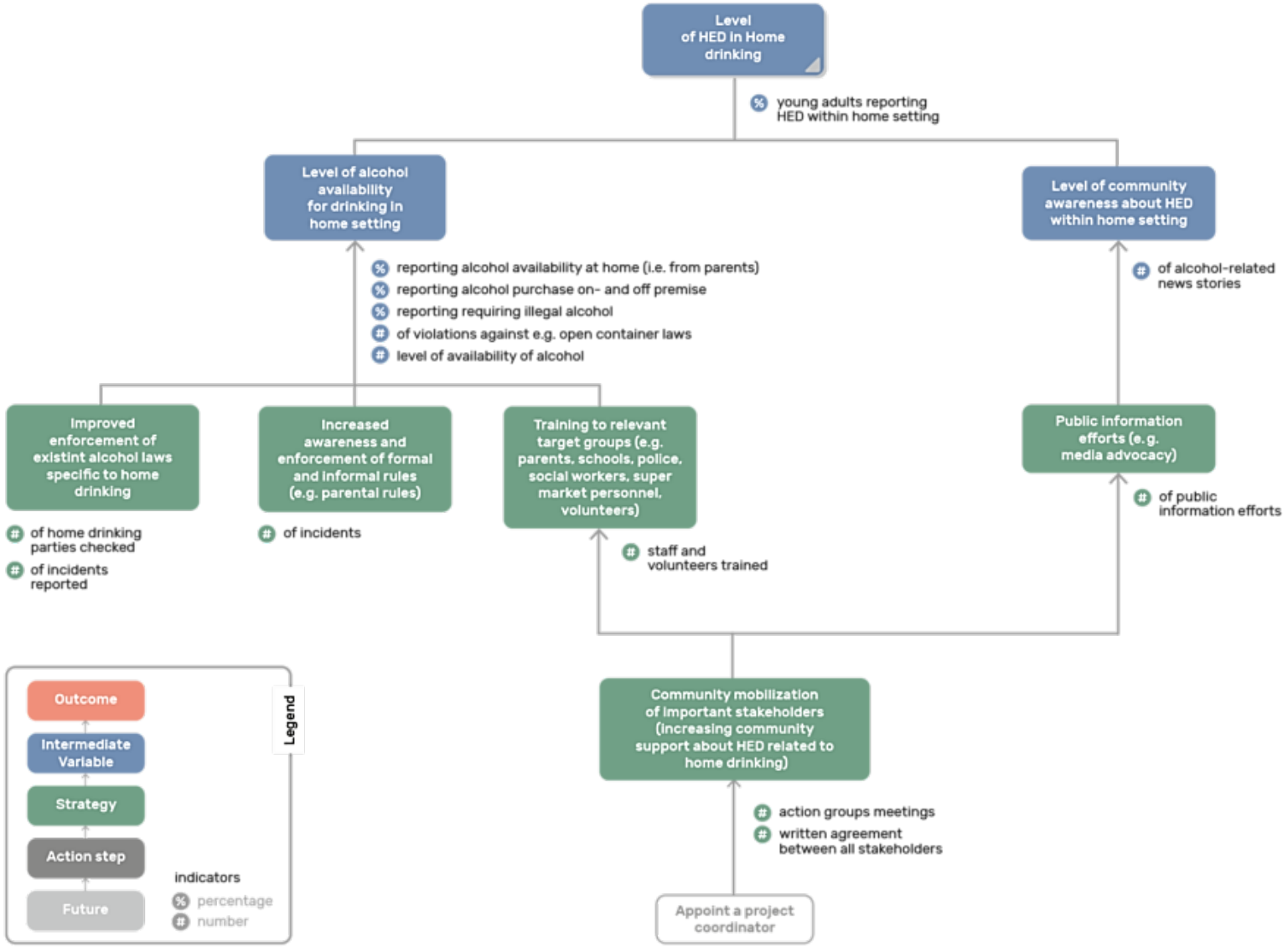
A2.4 Festival setting – Norrköping, Sweden, pilot intervention logic model



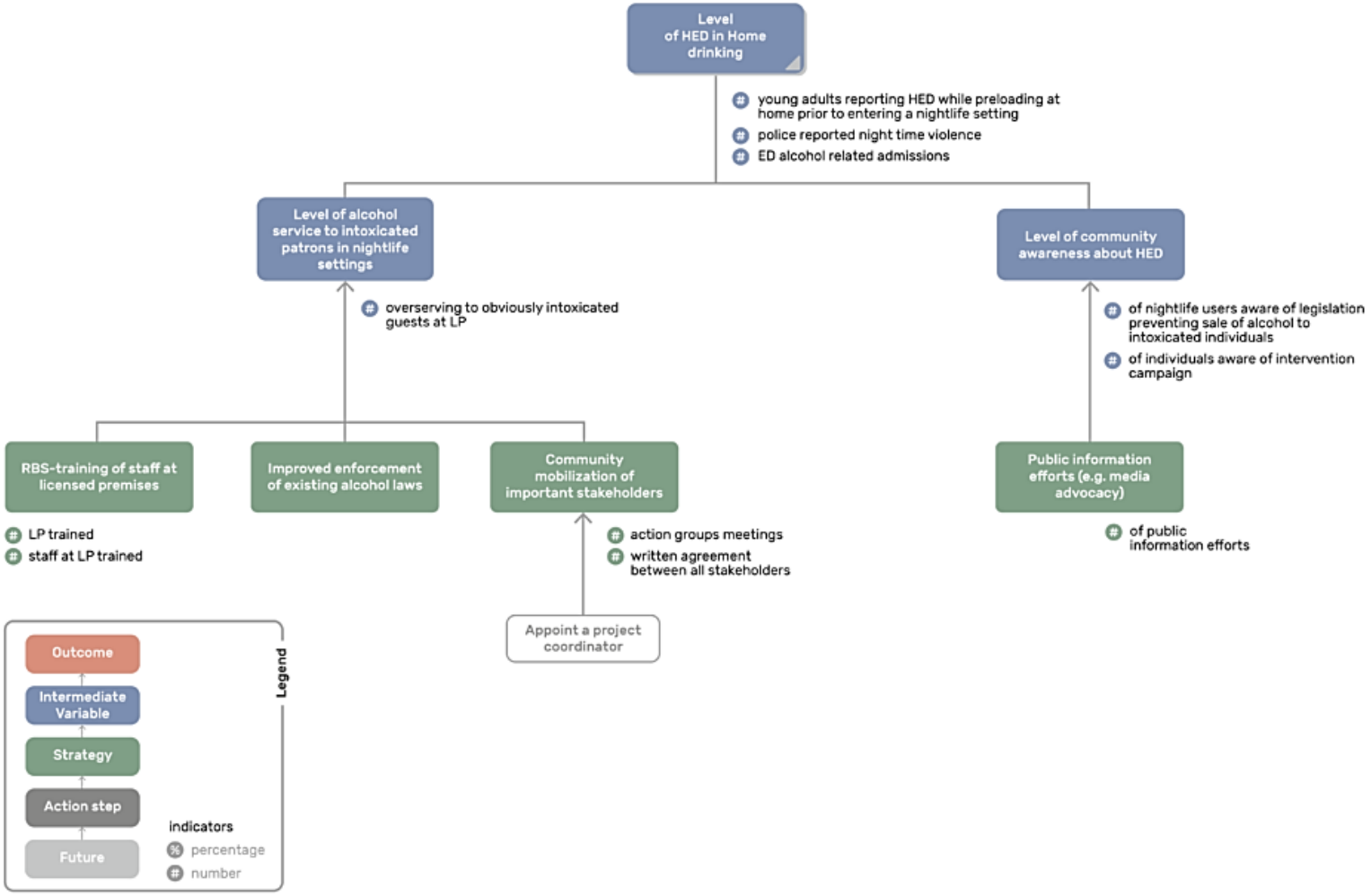
A2.5 Sports arena setting – Stockholm, Sweden, pilot intervention logic model



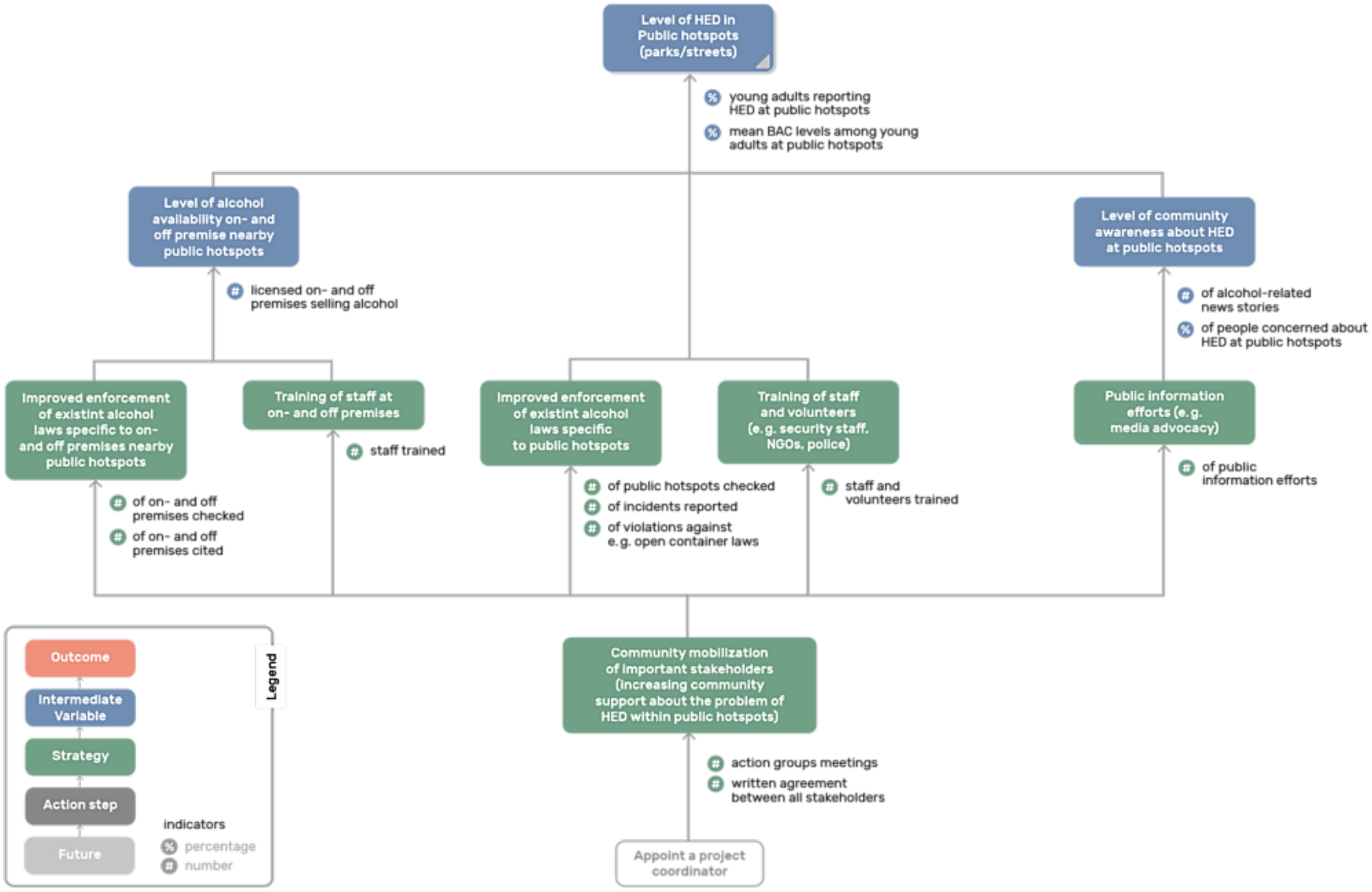
A2.6 Home setting (children) – Kiel, Germany pilot intervention logic model



A2.7 Home setting (preloading) – Wrexham, United Kingdom pilot intervention logic model



A2.8 Public drinking setting (Botellon) – Palma, Spain pilot intervention logic model



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