



healthy nightlife toolbox

tools for creating safer nightlife settings

Info sheet

Responding to drug and alcohol use and related problems in nightlife settings

1.

Introduction

The Healthy Nightlife Toolbox collects and provides information on evidence-based interventions targeted at drug and alcohol use and related problems in nightlife settings.

The web based Toolbox (hntinfo.eu) is a comprehensive European data base aimed at supporting local, regional and national policymakers, as well as prevention workers, to identify and implement effective interventions. This accompanying info sheet summarises the available knowledge on effective alcohol and drug prevention in nightlife settings¹.

The evidence regarding the effectiveness of interventions specifically targeting illicit drug use in recreational settings is increasing, yet the number of interventions being subject to robust evaluation is still low. Research on reducing the use of alcohol and related harm in nightlife settings is much more substantial. Some of the insights from alcohol research may be useful in preventing drug problems in nightlife.

To improve the dissemination and implementation of available evidence-based interventions in nightlife settings the European Commission funded a project to develop The Healthy Nightlife Toolbox website in 2008-2010. In 2016 the Toolbox was updated with financial support from the Dutch government, under its EU Presidency. The Trimbos Institute in the Netherlands coordinated the update, in cooperation with Liverpool John Moores University (UK) and the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). From January 2017 onwards, the EMCDDA will host and maintain the website.

1. This info sheet is based on a thorough search of the literature but not on a systematic review.

2.

Drugs and alcohol use in nightlife settings

Bars, nightclubs, discotheques and other recreational venues provide young Europeans with opportunities to socialise and dance, often offering entertainment such as concerts and dance parties. In addition, large music festivals that are organised mostly during the summer months attract thousands of visitors. Such recreational settings are common locations for alcohol and drug use and levels of substance use tend to be significantly higher among young people who regularly visit them, compared to the general population (EMCDDA, 2015a).

Analysis of European data from the Global Drug Survey by the EMCDDA found that *last year prevalence* of drug use among regular nightclub goers was between 4 and 25 times higher than in the same age group in the general population (EMCDDA, 2015a). The most common drugs used by regular nightclub goers were cannabis (55%), ecstasy (37%), cocaine (22%) and amphetamines (19%), with the use of other drugs like ketamine (11%), mephedrone (3%), synthetic cannabinoids (3%) and GHB (2%) also reported².

Patterns of drug use vary between European countries. To give an impression of these differences, table 1 shows the use of ecstasy and amphetamine in the general population in nine European countries (van Laar & van Ooyen-Houben, 2016).

The last year prevalence (recent use) of ecstasy in the age group 15-34 in these countries lies between 5,6% (the Netherlands) and 0,6% (Portugal). In the larger age group 15-64 years these percentages are between 2,5% (the Netherlands) and 0,3% (Portugal).

In 13 'new' EU member states, figures of last year ecstasy, cocaine and amphetamine use in the 15-64 year age group vary between 0,0 and 1,2%. Cannabis use is higher: between 0,3 and 9,2% (van Laar & van Ooyen-Houben, 2016).

Over the past few years concerns about increased availability of new psychoactive substances (NPS) in nightlife have been raised. The few studies providing data on their actual use in nightlife settings show consumption still seems to be low,

Table 1

Ecstasy and amphetamine consumption among the general population in some member states of the EU-15 and Norway. Age groups 15-64 years and 15-34 years.

Country	Year	15-64 years				15-34 years			
		Ecstasy		Amphetamine		Ecstasy		Amphetamine	
		Ever (%)	Recent (%)						
The Netherlands	2014	7.6	2.5	4.6	1.3	12.5	5.6	7.0	2.9
Ireland	2011	6.9	0.5	4.5	0.4	10.9	0.9	6.4	0.8
Spain	2013	4.3	0.7	3.8	0.6	6.2	1.5	4.9	1.2
France	2014	4.2	0.9	2.2	0.3	6.9	2.3	2.9	0.7
Norway	2013	2.3	0.4	3.7	0.6	4.6	1.0	6.4	1.1
Austria	2008	2.3	0.5	2.5	0.5	3.3	1.0	3.1	0.9
Sweden	2008	2.1	0.1	5.0	0.8	-	-	-	-
Finland	2010	1.8	0.4	2.3	0.8	3.9	1.1	4.3	1.6
Portugal	2012	1.3	0.3	0.5	<0.1	2.3	0.6	0.5	0.1

Differences in year of survey, research design and survey samples hamper an exact comparison between the countries. Percentages: users ever in their life and recently (last year) (van Laar & van Ooyen-Houben, 2016).

2. Countries involved: Belgium, Germany, Ireland, Spain, France, Hungary, Netherlands, Austria, Portugal, United Kingdom. Amphetamines: minus Belgium and Netherlands. Ecstasy: minus Netherlands. Note that in surveys on nightlife drug use due to selection bias the samples are not representative.

but increasing (Brunt et al., 2016; TNS Political & Social, 2014; González et al., 2013). NPS are substances designed in laboratories to imitate the psychoactive effects of illicit drugs. Points of concern related to NPS are the speed at which they appear on the market, their open sale via head shops and the Internet and the lack of information on effects and related harm (EMCDDA, 2015b). Another emerging trend is the use of nitrous oxide (better known as 'laughing gas'). Although among partygoers experimenting with this substance is not uncommon, the prevalence of serious acute harm appears to be low (Kaar et al., 2016).

Alcohol use is widespread in recreational settings and often associated with illicit drug use. Drinking habits start at high school age: school surveys from 26 European countries revealed, that 56 % of 15- to 16-year-old students drank alcohol in the last month; 38% drank more than five glasses on one occasion and 36% were drunk once or more (Hibell & Guttormsson, 2013). Measurements in four European cities during nightlife showed high levels of preloading and alcohol use (Hughes et al., 2011). Another study, assessing drug and alcohol use among nightlife users in nine European cities, found that over three-quarters of respondents had been drunk at least once in the past four weeks (Bellis et al., 2008).

While studies on substance use in nightlife environments often focus on young people in their own countries, nightlife tourism is a booming business. Millions of young Europeans travel abroad each year to party in nightlife-focused holiday resorts, festivals or on city breaks. Levels of drug and alcohol use and associated risk taking behaviours are often increased during these holiday periods (Hughes et al., 2011).

Problems related to drug and alcohol use in nightlife settings

Drug and alcohol use in recreational settings is linked to a range of health and social problems. These include acute health problems, such

as unconsciousness and unintentional injury, aggressive behaviour and violence, unsafe and unwanted sex, and driving under the influence of alcohol and drugs. The consequences of long-term alcohol use are various. Harmful alcohol use is linked to more than 200 health conditions, including cancers (WHO, 2015). Other consequences of longer-term use are brain damage and addiction. Finally, adverse social consequences such as drug dealing and public nuisance are also of concern.

In some countries, such as the Netherlands, there is a worrying tendency to 'normalisation' of drug use among clubbers and partygoers. Within this group the use of party drugs, especially ecstasy, seems to have increased in recent years. Risks related to the use of party drugs are underestimated by the users; being intoxicated is not seen as a problem and they are not reluctant to share information about their drug use. The growing impact of the internet and social media and the growing number of dance events and music festivals, may have contributed to this trend (Goossens & van Hasselt, 2015).

Responding to problems related to drug and alcohol use in European nightlife

The increased mobility of young people and globalisation of the entertainment industry make it necessary to address these problems, on national levels as well as on a European level. In the 2013–2020 EU Drugs Strategy and its action plan (EU Council, 2013a; EU Council, 2013b; EMCDDA, 2015c) the European Union addressed several important themes regarding drug use in recreational settings, including:

- responding to the growth of new psychoactive substances (NPS)
- reduction of the health and social risks and harms caused by drugs
- supporting evidence based decision making

The aim of this info sheet is to summarise knowledge on the prevention and reduction of health and social risks associated with the use of illicit drugs (including NPS) and alcohol in recreational settings.

3.

Interventions

Scientific evidence and expert opinion suggest that, in order to tackle the drug and alcohol related health and social problems associated with recreational nightlife, a balanced approach between prevention, harm reduction and law enforcement is needed. This may include prevention at the user level, training of staff, environmental strategies, cooperation with relevant stakeholders, policing and law enforcement measures. This approach corresponds with the EU Drugs Strategy 2013–2020 that recommends an integrated, multidisciplinary and evidence-based approach, as well as promoting and safeguarding coherence between health, social and justice policies (EU Council, 2013a).

The current chapter presents an overview of different types of interventions that can be used to implement this strategy. While a wide range of interventions and policies are equally targeted at alcohol and drug use, most evidence comes from their use in alcohol prevention.

3.1 - Education for nightlife users

Educational programmes such as school programmes and media campaigns generally aim to encourage young people to make a healthy choice and abstain from alcohol and drug use and/or delay the age of onset of use. However, in many European member states, educational programmes specifically targeted at nightlife settings focus on the reduction of drug and alcohol related harm rather than abstinence. Abstinence is considered an unrealistic message to communicate to people in nightlife who choose to take drugs and drink. It is assumed though, that they are interested in information concerning the reduction of the negative consequences they might experience from substance use. Information materials, such as brochures and pamphlets about intoxication and consequences are distributed at parties, drug test services and medical services and are often supported through websites, containing information on drugs, alcohol and related harms and providing advice about limiting the negative (harmful) side-effects. Information about diminishing or quitting drug or alcohol use is also provided. Despite the wide application of this harm reduction approach, there has been little research on its effectiveness.

For alcohol education targeted at student drinkers, protective behavioural strategies have been found to reduce the negative consequences of alcohol use, although the available evidence is not very strong (Pearson, 2013). Similarly interventions like 'Know your limit' which let users estimate their own alcohol level with cards, show rather negative results. Some evidence even suggests that 'Know your limit' cards undermine the effect of the initial warning purpose (Johnson & Clapp, 2011).

Peer education

Peer educators are often used to disseminate information on harms and harm reduction to young people in recreational settings. However, little research has been conducted regarding the effectiveness of this type of intervention. One small study reported that the drug information distributed by peers at a music festival was able to be recalled three months later. A decrease in drug use was reported as well, but other factors causing this could not be ruled out (Silins et al., 2013).

Brief interventions

Brief interventions such as screening and motivational feedback aim to reduce the use of alcohol and drugs or to prevent reoccurrence of overconsumption of alcohol and/or drugs. These interventions can be face-to-face or web-based and, for young people, increasingly provide feedback via text messages. Most studies have focused on alcohol interventions. There have been few studies looking at brief interventions to reduce illicit drug use in party settings.

Brief web-based or face-to-face interventions targeting alcohol use have been shown to influence knowledge, attitudes, norms and intentions to drink among student drinkers. Personalised normative feedback, elements of motivational interviewing and moderation strategies seem to be the key components. Though face-to-face interventions are more effective, web based interventions can have an impact thanks to their cost-effectiveness, larger reach and low threshold to engage in the intervention (Samson & Tanner-Smith, 2015; Voogt et al., 2014; Carey 2012, 2009, 2007; Fachini 2012). These interventions are often implemented at Universities in freshmen years, by student counsellors or student health services.

Most reviewed brief interventions relating to nightlife settings are implemented in emergency departments. They aim to engage young people that have suffered alcohol related problems on a night out (Croes et al., 2015; Suffoletto, 2012). They often involve text

messaging interventions which are sent to young adults after their discharge from the emergency department and collect information on their alcohol use, give feedback on their drinking habits and give advice on changing these habits. The effectiveness of brief alcohol or drug interventions in this setting is not conclusive (Croes et al., 2015), albeit some studies report a small reduction in drinking (Suffoletto et al., 2014; Suffoletto et al., 2012).

3.2 - Drug testing

Several European countries offer drug testing services which can be either on-site (e.g. Austria, Luxembourg, Portugal, Spain and Switzerland) or at an 'off-site' stationary testing location (e.g. Belgium, France and the Netherlands). Drug test services provide the opportunity for users of party drugs to have their drugs tested and learn more about the content of their drugs. Test services additionally provide information on the risks of drug taking and how to prevent these risks and related harm.

It is not yet clear to what extent consumers change their behaviour if they are informed about the contents of the pills or powders (Bolier et al., 2011; Calafat et al., 2010)

Besides contacting recreational drug users and providing harm reduction information, drug test services provide the opportunity to detect drugs that can cause particular harm, like adulterated substances, or drugs of extreme purity or with extreme high dosage of the active ingredient. Detecting these risky drug samples at an early stage enables the authorities to respond with information campaigns and trace the source of supply. In 2014 for example the drug test service in the Netherlands recognized at an early stage the occurrence of a 'Superman' pill containing a toxic substance (PMMA), and procedures were put in place to protect the public. In countries, where no such service exist, the same dangerous drug caused several deaths (King, 2015).

Finally, test services provide an important opportunity to monitor the drug market. Testing and monitoring systems provide qualitative information on new drugs and trends in drug use over the years (Brunt et al., 2016; Brunt & Niesink, 2011). Such information can be used to adapt prevention policies.

Within the EU, drug testing is still a controversial intervention as some consider it inconsistent to provide this service for an illegal product. Also a false impression may arise that drug use is accepted and safe after testing.

3.3 - Drunk/intoxicated driving interventions

Research suggests that interventions concerning nightlife transport should address young male drivers particularly, considering their overrepresentation in crashes during weekend nights. Besides being young and male another important risk factor is driving with high Blood Alcohol Content (BAC) levels (Houwing & Twisk, 2015).

Campaigns

Information campaigns addressing drunk driving or designated driver campaigns are nearly always carried out in combination with other measures. This is why their direct effect on behaviour associated with drink-driving cannot be proven. However, campaigns can contribute to maintaining desired behaviour which is supported likewise through legislative measures (Elder et al., 2004). Cueing about the risks of drunk driving results in significantly lower BACs (relative to control) for people who intend to drive home (Johnson & Clapp, 2011).

Breath testing is considered an important strategy for reducing drink driving and alcohol-related crashes, especially when the results of such testing campaigns are presented to the public through media advocacy programs (Voas, 2002).

BAC-related interventions

Interventions which help drivers to estimate their blood-alcohol level (BAC) seem to have a

contradictory effect. Providing such information has not been found to reduce BACs, and, in fact, some evidence suggests that it undermined the effect of warning about drunk driving (Johnson & Clapp, 2011).

Combination of strategies

A study examining the impact of policy measures in Colombia (US) found that policy measures addressing the cost of alcohol and alcohol outlet density were highly relevant to the amount of alcohol teens consume and therefore to teens' impaired driving. Policies such as those regulating the age of bartenders, sellers, or servers, social host civil liability laws, dram shop laws, internal possession of alcohol laws, and fake identification laws did not appear to have the same impact on teens' alcohol-related crash ratios as other types of policies such as those regulating alcohol consumption or alcohol outlet density (Romano et al., 2015).

Another study found that sobriety checkpoints, saturation patrols, and enforcement of open container laws were associated with a lower prevalence of alcohol-impaired driving but, more importantly, a combination of enforcement-related strategies was associated with a greater decrease in alcohol-impaired driving than any individual enforcement-related activity. In addition, alcohol-impaired driving enforcement-related strategies were associated with decreased alcohol-impaired driving above and beyond their association with decreased binge drinking. Results suggest law enforcement agencies should give greater priority to using a combination of strategies rather than relying on any one individual enforcement activity (Sanem et al., 2015).

3.4 - Environmental strategies

Alcohol and drug related problems are strongly influenced by the physical and social environment within venues. Therefore drinking environments are seen as key to the prevention of alcohol intoxication and alcohol related problems. For example, a permissive environment, discounted drinks, poor cleanliness, predominance of male patrons, crowding,

loud music and poor staff practice can contribute to higher levels of alcohol intoxication, drug use and related problems such as violence (Hughes et al., 2011; Hughes et al., 2012; Miller et al., 2009).

Physical environment

Environmental strategies targeting the physical context include, for example, interventions to create safer spaces and venues that are less conducive to nightlife problems. Such environmental measures may include crowd management, cool-down or chill-out rooms, serving food within venues, display of clear and visible house rules addressing behavioural standards, first aid services, responsible beverage service and preventing access to clubs by minors.

For example, providing access to free drinking water at venues where drugs, such as ecstasy, are used, can help to prevent dehydration (caused by drug use combined with excessive perspiration while dancing). However, ecstasy use and drinking fluids is accompanied by an increased risk for hyponatraemia ('water overdose') (van Dijken et al., 2013). Therefore visitors should be informed about limiting their water intake to one glass of water per hour while being under the influence of ecstasy.

Other measures include redesigning the entertainment area (e.g. relocation of bus and taxi stands or limiting outlet density) and providing safe late night transport, better lighting and activities to reduce noise (Toomey, 2012; Morrison, 2015).

Social environment

Besides the physical environment, social context seems influential. A friendly atmosphere and absence of intoxicated nightlife visitors, for example, reduces the risk of alcohol related problems in drinking contexts. Also intoxicated bartenders pose a risk to safety (Tutenges, 2013). Behavioural standards for customers may play a role in de-escalating potential harms (Quigg, 2014).

Although parents regard their influence negligible as soon as their children reach the age of 17 or 18,

it appears beneficial that parents do discuss norms and rules for alcohol and drug use and other night time behaviour, particularly in times of transition. Parents should additionally be aware of their own set of norms and neither implicitly approve drunkenness, nor be permissive about drinking. Young people, whose parents guide them to responsible alcohol use, tend to drink less and experience less negative consequences from substance use (Turrissi & Ray 2010; Fairlie et al., 2011).

Although little is known about drug education for older adolescents it seems that parents can still have impact on their children's drug use by setting age specific and drug specific rules. Literature suggests that in addition to general parenting practices, restrictive cannabis-specific rules result in lower adolescent cannabis and other illicit drug use (Vermeulen-Smit, 2014).

3.5 - Training of staff

Training programmes for bar servers, door supervisors and other staff in recreational venues generally combine information provision with skills building. They can cover topics such as alcohol legislation, the psychoactive effects of alcohol and drug use, the links between alcohol and violence, first aid, alcohol service refusal, conflict management and reacting to drug dealing on the premises.

Evidence for the effectiveness of staff training in preventing alcohol related harm, however, is still inconclusive. Studies have shown that staff training has only minimal effects on patrons' drinking behaviour, but effects increase when training is mandatory, management is involved, staff turnover is limited and substantial support for the implementation is provided (Chinman et al., 2014; Trollidal et al., 2013). Most of the research shows little effects of staff training on its own, and studies of multi-component programmes tend to identify that the staff training element has no individual contribution. Therefore it seems important to back

up this intervention by enforcement and embed it in a multi-component strategy (Jones et al., 2011; Warpenius et al., 2010) (see Section 3.9).

Other studies in Nordic countries have found small effects for staff training regarding drugs. Drug training for doormen can increase their competence in terms of intervening when patrons are obviously drug-intoxicated. As with alcohol-focused training programmes however, the training program should be embedded in a community program including community mobilization, training of other bar staff, policy work, increased enforcement, environmental changes and media advocacy and public relations work (Gripenberg, 2011b).

3.6 - Medical and first aid services

In a harm reduction oriented policy, an adequate medical first aid service is vital. Such services can decrease transfers to hospital emergency departments and although the amount of severe intoxications tends to be relatively small, early intervention in the case of health problems caused by alcohol and drugs can be lifesaving (Wood et al., 2008).

A well-equipped and balanced first aid team should be present at both dance venues and music festivals or event sites (Hutton et al., 2015; Krul et al., 2012; Arbon, 2005). Besides medical requirements and standards, other aspects need to be considered as well. It is important that first aid staff are familiar with the effects and harm caused by drugs and alcohol and have an open minded, non-judgemental attitude towards intoxicated visitors. The first aid service should be easily accessible but not close to the music; sign posts should direct visitors to the service. Other staff members should be briefed on relevant (local) drug trends, be aware of indications of intoxication and consider it their task to guide sick people to the first aid service. Security officers however should not be present at the service, since this would put people off seeking medical help.

Guidelines

Guidelines may contribute to quality-improvement of medical services. Guidelines for medical services at mass-gatherings include advices on team structure of medical staff, event specific training, health education, interventions for psychological distress, protocols for treatment and registration (Krul et al., 2012).

Guidelines are also recommended to improve the pre-hospital care of recreational drug users in clubs. The development and implementation of such guidelines can be successful when all stakeholders are involved and trained (Wood et al., 2008).

Sometimes guidelines are drawn up for very specific medical complications. Examples of such guidelines are the Amsterdam Excited Delirium Syndrome protocol (GGD Amsterdam, 2013) and the Kosmicare Intervention Model for crisis intervention related to psychoactive substances (Carvalho, 2014).

Follow up

Since experiencing health problems and visiting a medical service during a night out or a music festival is an imposing experience for most young people, it offers a window of opportunity for reflexion on one's alcohol and/or drug use (EMCDDA, 2016), for example with the help of brief interventions (see also section 3.1).

3.7 - Legislative measures

Alcohol research provides evidence for the effectiveness of legal measures that reduce the affordability and availability of alcohol. Measures such as stricter enforcement of age limits, licensing, and alcohol marketing regulation for example are effective in preventing alcohol sales to young people under the legal alcohol purchase age (Babor et al., 2010).

Legislative restrictions for nightlife concerning substance use vary widely between European countries. For example, most countries have age

limits for selling and consuming alcohol, but these age limits vary and there are big differences in the extent to which they are enforced (Mulder & de Greeff, 2013).

Licensing

Venues in nightlife settings that sell alcohol can require a license to legally offer alcohol. This license can have a range of conditions attached to it. For instance in case of breaking the law or failing to comply with the conditions of the license, the latter can be removed.

Through licensing policies the nightlife industry can be restricted in promoting alcohol, offering happy hours and 'drinking all night for one flat rate', and can be obligated to use minimum drink prices and refuse serving alcohol to intoxicated people. In some countries councils can enforce bar staff training through licensing. In Germany, the so-called 'Apple Juice law' states furthermore that in the on-premise trade, at least one alcohol-free beverage must be cheaper than the cheapest alcoholic beverage available (Rabinovich et al., 2009).

Another example is The Quality Nights Charter, a health promotion label in recreational settings, and is part of a European network of safer party labels (partyplus.eu). It aims to improve the health and safety of people attending festivals, parties, and music events by certifying that the organisers and operators of events have complied with specific health and welfare standards. To date the effect of such labels has not been demonstrated in research.

Density of nightlife venues

In most EU member states the number of licensed premises is growing (Mulder & de Greeff, 2013). However, limiting the physical availability of alcohol will commonly be one of the most effective approaches to reduce excessive drinking. One approach to realise this is to regulate alcohol outlet density. A wealth of research has shown that greater concentrations of bars and nightclubs are associated with

greater levels of problems such as violence (Campbell et al., 2009; CAMY). As closing bars and nightclubs is often not a politically-viable measure to reduce outlet density, strategies to limit the number of new licenses permitted in given areas are important in preventing alcohol-related problems.

Restricting opening hours

Several studies have examined the impact of restricting pub opening hours on alcohol-related problems, particularly violent behaviour; typically showing significant reductions in violence associated with shorter opening hours (Kypri et al., 2011; Stockwell & Chikritzhs, 2009). Two studies from Norway and the Netherlands found that each 1-hour change in opening hours changed rates of violent crime in city centres on weekend nights up to 35%; reduced opening hours led to reduced violence and increased opening hours to increased violence (Rossow & Norström, 2012; de Goeij et al., 2015). To date, the impact of opening hours on drug use and drug related violence has not been examined.

Compliance with legislation

An important factor in determining the effectiveness of alcohol legislation is compliance. For example, in most European countries it is illegal for individuals who are already drunk to be served more alcohol, yet studies suggest that sales of alcohol to drunks are common. A UK study using pseudo-intoxicated actors found that 84% of alcohol purchase attempts in bars and nightclubs resulted in the sale of alcohol (Hughes et al., 2014). Based on this finding, local authorities developed a multi-component intervention comprising staff training, increased enforcement activity, and community awareness raising. A follow up study again using actors found significant reductions in the propensity of bar servers to sell alcohol to drunks (Quigg et al., 2016). Similar reductions have been reported in Sweden and Finland through multi-component interventions (see Section 3.9).

3.8 - Policing and enforcement

Enforcement measures are needed to increase compliance and have proved to be a vital part of most approaches to preventing alcohol-related harm in nightlife. Alcohol related problems in nightlife should be addressed through combining preventive measures with policing and law enforcement. Measures may include police visits to high-risk nightlife venues, age verification checks to ensure that venues are not serving underage drinkers, and the use of sanctions (including revocation of operating licences) to enforce licensing legislation. Countries, such as Germany and the UK legally regulate age checks and apply sanctions in case of non-compliance (Mulder & de Greeff, 2013). The positive effects of policing and law enforcement can rapidly diminish if actions are not carried out on a regular basis and/or linked to real deterrents (Babor, 2010; Jones et al., 2011).

A review of studies regarding the effectiveness of policing interventions showed that targeted policing strategies were more effective than 'low-level' policing. Targeting policing hereby led to a reduction of alcohol-related incidents (Jones et al., 2011).

Research on the impact of policing and enforcement of drug laws in nightlife however is limited and inconclusive. One of the few studies concerns the project "Club against drugs" from Sweden, which will be described in the next section.

A problem in countries with a low-developed night-time economy and/or general economic issues is that legislation is often not adequately adhered by the night-time industry due to fear of loss of income (Calafat et al., 2012).

3.9 - Community/multi component interventions

Research indicates that community-based programmes that deliver a range of coordinated interventions through a multi-agency partnership are more effective than single interventions and thus show to be the most effective interventions in nightlife settings.

Partnerships may include municipalities, police, health authorities and club owners, who work together to plan and implement prevention activity, regulation and law enforcement. Measures also often incorporate community mobilisation such as awareness campaigns, creating support amongst stakeholders and the general public (Jones et al., 2011). The complexity of multi-component interventions makes it difficult to isolate and analyse the contribution of single components to the improved results (Trolldal et al., 2013).

In general, multi-component interventions appear to be effective in reducing violence, problem drinking and street accidents (Jones et al., 2011). Leadership, continuity of interventions and funding have been identified as critical aspects of such interventions (Norrgård et al., 2014).

Two examples of successful, and extensively reviewed, multi component programmes are STAD and 'Club against Drugs' (see info box for more information below), both from Sweden (Gripenberg et al., 2011a). A similar programme to STAD was developed in Finland. The findings confirm the effectiveness of a combination of law enforcement, house policies and training on the prevention of over-serving alcohol at least in Nordic countries (Warpenius et al., 2010).

A more general insight is that a multi-component approach in nightlife settings may benefit from a broader alcohol and drugs approach, not only targeting youth or nightlife, but focussing on the reduction of the whole-of-community's alcohol and drug consumption (Miller et al., 2011; Room, 2012).



The STAD (Stockholm Prevents Alcohol and Drug Problems) project in Sweden was a ten-year multicomponent intervention initiated in 1996 to reduce alcohol-related violence and injuries in Stockholm. A major part of the project focused on licensed premises.

In 2001 STAD got extended by the programme 'Club against drugs'. Both programmes aim to reduce alcohol and illicit drug use both among guests and staff at licensed premises. Components of the program include community mobilisation, policy work, increased enforcement, alcohol/drug-training, changes in the physical environment at licensed premises, and media advocacy and public relations work.

The effectiveness of both projects has been proven by several studies, reporting a significant reduction in alcohol and drug related harms. STAD showed to be highly cost-effective as well (Mansdotter et al., 2007) with a cost-effectiveness ratio of 1:29.

4.

Conclusions



Alcohol use and illicit drug use is a widespread concern in recreational settings and raises the need for effective preventive measures. As this info sheet has highlighted, evidence-based interventions addressing alcohol and drug in the night-time industry can have a positive impact on the reduction of harm caused by these substances, such as acute health problems, violence, unintentional injury and driving under the influence.

While evidence is available on preventing alcohol intoxication and its related adverse consequences, the field of drug prevention and harm reduction in nightlife settings needs more foundation. Nevertheless it is clear that a balanced mix of prevention, harm reduction and law enforcement is needed. This requires a combination of legislative measures, enforcement, environmental strategies, stakeholder involvement and educational interventions.

The Healthy Nightlife Toolbox collects and presents the available evidence as well as good practices, and aims to bring prevention of alcohol and drug related problems in nightlife settings to a next level.

The background features a stylized, teal-toned illustration of a city street. On the left, a tall building with a grid of windows is visible. In the center, a street sign on a pole points towards the viewer. To the right, another building with a grid of windows is shown. The overall style is clean and modern, with a monochromatic teal color palette.

References

Arbon, P. (2005). Planning Medical Coverage for Mass Gatherings in Australia. What we currently know. *Journal Of Emergency Nursing*, 31(4). DOI: 10.1016/j.jen.2005.03.002

Babor, T. et al. (2010). *Alcohol: no ordinary commodity: research and public policy*. Oxford University Press, Oxford. ISBN: 978-0-19-955114-9

Bellis, M., Hughes, K., Calafat, A., Juan, M., Ramon, A., Rodrigues (2008). Sexual uses of alcohol and drugs and the associated health risks: a cross sectional study of young people in nine European cities. *BMC Public Health*, 8(1), p. 155. DOI: 10.1186/1471-2458-8-155

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

Brunt, T., Nagy, C., Bücheli, A., Martins, D., Ugarte, M., Beduwe, C., Ventura Vilamala, M. (2016). Drug testing in Europe: monitoring results of the Trans European Drug Information (TEDI) project. *Drug Testing and Analyses*, 17. DOI: 10.1002/dta.1954

Brunt, T., and Niesink, R.(2011). The Drug Information and Monitoring System (DIMS) in the Netherlands: implementation, results, and international comparison. *Drug Testing and Analysis*, 3(9), p. 621–634. DOI: 10.1002/dta.323

Campbell, C. Hahn, R., Elder, R., Brewer, R., Chattopadhyaya, S., Fielding, J., Naimi, T., Toomey, T., Lawrence, B., Middleton, J. (2012). The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *American Journal of Preventive Medicine*, 37(6), p. 556-559. DOI:10.1016/j.amepre.2009.09.028

Center on Alcohol Marketing and Youth (CAMY). *Strategizer 55: regulating alcohol outlet density: an action guide*. Developed by Community Anti-Drug Coalitions of America (CADCA) and the Center on

Alcohol Marketing and Youth (CAMY) at the Johns Hopkins Bloomberg School of Public Health. http://www.camy.org/action/Outlet_Density/index.html

Calafat, A. (2010). *Prevention interventions in recreational settings*. Strasbourg: Council of Europe. Pompidou Group.

Calafat, A., Duch, M., Montse, J., Leckenby, N. (2012). Health and safety European standards for nightlife venues. *Adicciones*, 24(4).

Carey, K., Scott-Sheldon, L., Elliott, J., Bolles, J., Carey, M. (2009). Computer-delivered interventions to reduce college student drinking: a meta-analysis. *Addiction*, 1049(11), p.1807-1819.

Carey, K., Scott-Sheldon, L., Carey, M., DeMartini, K. (2007). Individual-level interventions to reduce college student drinking: a meta-analytic review. *Addiction Behavior*, 32(11), p. 2469-2494.

Carey, K., Scott-Sheldon, L., Elliott, J., Garey, L., Carey, M. (2012). Face-to-face versus computer-delivered alcohol interventions for college drinkers: a meta-analytic review, 1998 to 2010. *Clinical Psychological Review*, 32(8), p. 690-703. DOI:10.1016/j.cpr.2012.08.001

Carvalho, E., Pinto de Sousa, M., Frango, P., Dias, P., Carvalho, J., Rodrigues, M., Rodrigues, T. (2014). Crisis intervention related to the use of psychoactive substances in recreational settings - evaluating the Kosmicare Project at Boom Festival. *Current Drug Abuse Reviews*, 7(2), p. 81-100.

Chinman, M., Ebener, P., Burkhart, Q., Osilla, K., Imm, P., Paddock, S., Wright, P. (2014). Evaluating the impact of getting to outcomes-underage drinking on prevention capacity and alcohol merchant attitudes and selling behaviors. *Addiction* 15(4), p. 485-96. DOI: 10.1007/s11121-013-0389-3.

Council of the European Union (2013a). *European Union Drugs Strategy 2013-2020*. Brussels: General Secretariat of the Council, Belgium.

Council of the European Union (2013b). EU Action Plan on Drugs 2013-2016. Official Journal of the European Union C351/01.

Croes, E., Voorham, L., Wolt, K. (2015). De SEH als plaats voor een kortdurende interventie voor drugs en alcohol? Trimbos Institute: Utrecht, the Netherlands.

Dijken, G. van, Blom, R., Hené, R., Boer, W. (2013). High incidence of mild hyponatraemia in females using ecstasy at a rave party. *Nephrology Dialysis Transplantation*, 28, p. 2277-2283. DOI:10.1093/ndt/gft023

GGD Amsterdam, Politie, Spoedeisende psychiatrie Amsterdam, Ambulance Amsterdam, Event Medical Service (2013). – Richtlijn excited delirium syndroom. GGD Amsterdam: Amsterdam.

Elder, R., Shults, R., Sleet, D., Nichols, J., Thompson, R., Rajab, W. (2004). Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: A systematic review. *American Journal of Preventive Medicine*, 27(1), p.57-65. DOI:10.1016/j.amepre.2004.03.002

EMCDDA - European Monitoring Centre for Drugs and Drug Addiction (2016). Emergency department-based brief interventions for individuals with substance-related problems: a review of effectiveness. EMCDDA papers: Lisbon, Portugal.

EMCDDA - European Monitoring Centre for Drugs and Drug Addiction (2015a). European Drug Report 2015: Trends and developments. EMCDDA: Lisbon, Portugal.

EMCDDA - European Monitoring Centre for Drugs and Drug Addiction (2015b). New psychoactive substances in Europe. An update from the EU Early Warning System. EMCDDA: Lisbon, Portugal.

EMCDDA - European Monitoring Centre for Drugs and Drug Addiction (2015c). The EU drugs strategy (2013-20) and its action plan (2013-16). EMCDDA: Lisbon, Portugal.

Fachini, A., Aliane, P., Martinez, E., Furtado, E. (2012). Efficacy of brief alcohol screening intervention for college students (BASICS): a meta-analysis of randomized controlled trials. *Substance Abuse Treatment Prevention Policy*, 7(40). DOI: 10.1186/1747-597X-7-40

Fairlie, A., Wood, M., Laird R. (2011). Prospective protective effect of parents on peer influences and college alcohol involvement. *Psychology of Addictive Behaviors*. DOI: 10.1037/a0023879

Goeij, M. de, Veldhuizen, M., Buster, M., Kunst, A. (2015). The impact of extended closing times of alcohol outlets on alcohol-related injuries in the nightlife areas of Amsterdam: a controlled before-and-after evaluation. *Addiction*, 110(6), p. 955-64. DOI: 10.1111/add.12886

Goossens, F.& van Hasselt, N. (2015). Strategische verkenning uitgaansdrugs. Denkrichtingen voor de preventie van (gezondheidsschade door) het gebruik van uitgaansdrugs onder jongeren en jongvolwassenen. Trimbos Institute, Utrecht, the Netherlands.

González, D., Ventura, M., Caudevilla, F., Torrens, M., & Farre, M. (2013). Consumption of new psychoactive substances in a Spanish sample of research chemical users. *Human Psychopharmacology*, 28, p. 332-340. DOI:10.1002/hup.2323

Gripenberg Abdon, J., Wallin, E., Andréasson, S. (2011a) Long-term effects of a community-based intervention: 5-year follow-up of 'Clubs against Drugs'. *Addiction*, 106 (11), p. 1997-2004. DOI: 10.1111/j.1360-0443.2011.03573.x

Gripenberg Abdon, J., Wallin, E., Andréasson, S. (2011b). The 'Clubs against Drugs' program in Stockholm, Sweden: two cross-sectional surveys examining drug use among staff at licensed premises. *Substance Abuse Treatment, Prevention, And Policy*, 6(1), p. 1. DOI: 10.1186/1747-597X-6-2

Hibell, B. & Guttormsson, U. (2013). A supplement to the 2011 ESPAD Report. Additional data from Bosnia and Herzegovina (Federation of Bosnia and Herzegovina), Kosovo (under UNSCR 1244) and the Netherlands. CAN | EMCDDA | Pompidou Group: Sweden.

Houwing, S. & Twisk, D. (2015). Nothing good ever happens after midnight: Observed exposure and alcohol use during weekend nights among young male drivers carrying passengers in a late licensing country. *Accident Analysis and Prevention*, 75, p. 61-68. DOI: <http://dx.doi.org/10.1016/j.aap.2014.11.014>.

Hughes, K., Bellis, M., Calafat, A., Blay, N., Kokkevi, A., Boyiadji, A., Mendes, M., Bajcàrova, L. (2011). Substance use, violence and unintentional injury in young holidaymakers visiting Mediterranean destinations. *Journal of Travel Medicine* 2011; 18, p. 80-89. DOI: [10.1111/j.1708-8305.2010.00489.x](https://doi.org/10.1111/j.1708-8305.2010.00489.x)

Hughes, K., Quigg, Z., Eckley, L., Bellis, M., Jones, L., Calafat, A., Kosir, M., Hasselt, N. van. (2011). Environmental factors in drinking venues and alcohol-related harm: the evidence base for European intervention. *Addiction* 106(1), p. 37-46. DOI: [10.1111/j.1360-0443.2010.03316.x](https://doi.org/10.1111/j.1360-0443.2010.03316.x)

Hughes, K., Quigg, Z., Bellis, M. A., Calafat, A., Hasselt, N. van, Kosir, M. et al. (2012). Drunk and disorganised: relationships between bar characteristics and customer intoxication in European drinking environments. *International Journal of Environmental Research and Public Health*, 9(11), p.4068-4082. DOI: [10.3390/ijerph9114068](https://doi.org/10.3390/ijerph9114068)

Hughes, K., Bellis, M. A., Leckenby, N., Quigg, Z., Hardcastle, K., Sharples, O., Llewellyn, D. (2014). Does legislation to prevent alcohol sales to drunk individuals work? Measuring the propensity for night-time sales to drunks in a UK city. *Journal of Epidemiology and Community Health*, 2013. DOI: [10.1136/jech-2013-203287](https://doi.org/10.1136/jech-2013-203287)

Hutton, A., Savage, C., Ranse, J., Kub, J. (2015). The use of Haddon's Matrix to plan for injury and illness prevention at outdoor music festivals. *Prehospital and Disaster Medicine*. DOI: [10.1017/S1049023X15000187](https://doi.org/10.1017/S1049023X15000187)

Johnson, M. & Clapp, J. (2011). Impact of providing drinkers 'With Know Your Limit', information on drinking and driving: A Field Experiment. *Journal of Studies on Alcohol and Drugs*, 72(1), p. 79-85. DOI: <http://dx.doi.org/10.15288/jsad.2011.72.79>

Jones, L., Hughes, K., Atkinson, A.M., Bellis, M.A. (2011). Reducing harm in drinking environments: A systematic review of effective approaches. *Health Place*, 17(2) p. 508-518. DOI: [10.1016/j.healthplace.2010.12.006](https://doi.org/10.1016/j.healthplace.2010.12.006)

Kaar, S., Ferris, J., Waldron, J., Devaney, M., Ramsey, J., Winstock, A. (2016). Up: The rise of nitrous oxide abuse. An international survey of contemporary nitrous oxide use. *Journal of Psychopharmacology*, 30(4), p. 395-401. DOI: [10.1177/0269881116632375](https://doi.org/10.1177/0269881116632375)

King, L. (2015). Facilitate recreational drug testing to help save lives. *The Pharmaceutical Journal*, 294(7849). DOI: [10.1211/PJ.2015.20067848](https://doi.org/10.1211/PJ.2015.20067848)

Krul, J. Sanou, B., Swarta, E., Girbes, A. (2012). Medical care at mass gatherings. Emergency medical services at large-scale rave events emergencies. Amsterdam: Vrije Universiteit PhD thesis. DOI: <http://dx.doi.org/10.1017/S1049023X12000271>

Kypri, K., Jones, C., McElduff, P., Barker, D. (2011). Effects of restricting pub closing times on night-time assaults in an Australian city. *Addiction*, 106(2), p. 303-310. DOI: [10.1111/j.1360-0443.2010.03125.x](https://doi.org/10.1111/j.1360-0443.2010.03125.x)

Laar, M. van & Ooyen-Houben, M. van (2016). *Nationale Drugs Monitor Jaarbericht*. Utrecht: Trimbos Institute, the Netherlands. ISBN/EAN 978-90-5253-763-4

Mansdotter, A.M., Rydberg, M.K., Wallin, E. et al. (2007). A cost-effectiveness analysis of alcohol prevention targeting licensed premises. *European Journal of Public Health*, 17, p. 618-623. DOI: <http://dx.doi.org/10.1093/eurpub/ckm017>

Mulder, J. & de Greeff MSc, J. (2013). Eyes on ages. A research on alcohol age limit policies in European member states. Legislation, enforcement and research. Utrecht: Dutch Institute for Alcohol Policy (STAP).

- Miller, P., Sønderlund, A., Coomber, K., Palmer, D., Gillham, K., Tindall, J. et al. (2011). Do community interventions targeting licensed venues reduce alcohol-related emergency department presentations? *Drug and Alcohol Review*, 30(5), p. 546-553. DOI: 10.1111/j.1465-3362.2011.00337.x
- Miller, B. A., Holder, H. D., & Voas, R. B. (2009). Environmental Strategies for Prevention of Drug Use and Risks in Clubs. *Journal of Substance Use*, 14(1), p. 19–38. DOI:10.1080/14659890802305887
- Morrison, C., Mair, C., Lee, M., Gruenewald, P. (2015). Are barroom and neighbourhood characteristics independently related to local-area assaults? *Alcoholism: Clinical and Experimental Research*, 39(12), p. 2463-2470. DOI:10.1111/acer.12910
- Norrgård, E., Wikström, E., Pickering, C., Gripenberg, J., Spak, F. (2014). Environmental and capacity requirements are critical for implementing and sustaining a drug prevention program: A multiple case study of 'clubs against drugs'. *Substance Abuse Treatment, Prevention, and Policy*, 9(6). DOI: 10.1186/1747-597X-9-6
- Party+ The European Network for Safer Parties(2016). NEWIP. <http://www.partyplus.eu/>
- Pearson, M. (2013). Use of alcohol protective behavioral strategies among college students: A critical review. *Clinical Psychology Review*, 33(8), p. 1025-1040. DOI:10.1016/j.cpr.2013.08.006
- Quigg, Z., Hughes, K., Bellis, M., Hasselt, N. van, Calafat, A., Košir, M., Duch, M., Juan, M., Voorham, L., Goossens, F. (2014). Incidents of harm in European drinking environments and relationships with venue and customer characteristics. *International Journal of Alcohol and Drugs Research*, 3(04), p.269-275. DOI:<http://dx.doi.org/10.7895/ijadr.v3i4.180>
- Quigg, Z., Ford, K., McGee, C., Grey, H., Hardcastle, K., Hughes, K. (2016). Evaluation of the Liverpool Drink Less Enjoy More intervention. Liverpool: Centre for Public Health, Liverpool John Moores University. ISBN: 978-1-910725-44-3 (web)
- Rabinovich, L., Brutscher, P., Vries, H. de, Tiessen, J., Clift, J., Reding, A. (2009). The affordability of alcoholic beverages in the European Union. Understanding the link between alcohol affordability, consumption and harms. RAND Europe.
- Romano, E., Scherer, M., Fell, J., & Taylor, E. (2015). A comprehensive examination of U.S. laws enacted to reduce alcohol-related crashes among underage drivers. *Journal of Safety Research*, 55, p. 213-221. DOI:10.1016/j.jsr.2015.08.001
- Room, R. (2012). Preventing youthful substance use and harm-Between effectiveness and political wishfulness. *Substance Use & Misuse*, 47(8-9), p. 936-943. DOI:10.3109/10826084.2012.663297
- Rossow, I., & Norström, T. (2012). The impact of small changes in bar closing hours on violence. The Norwegian experience from 18 cities. *Addiction*, 107(3), p. 530-537. DOI: 10.1111/j.1360-0443.2011.03643.x
- Samson, J., Tanner-Smith, E. (2015). Single-Session Alcohol Interventions for Heavy Drinking College Students: A Systematic Review and Meta-Analysis. *Journal of Studies on Alcohol and Drugs*, 76(4), p. 530–543. DOI: <http://dx.doi.org/10.15288/jsad.2015.76.530>
- Sanem, J. R., Erickson, D. J., Rutledge, P. C., Lenk, K. M., Nelson, T. F., Jones-Webb, R. et al. (2015). Association between alcohol-impaired driving enforcement-related strategies and alcohol-impaired driving. *Accident Analysis and Prevention*, 78, p. 104-109. DOI:10.1016/j.aap.2015.02.018
- Silins, E., Bleeker, A. M., Simpson, M., Dillon, P., & Copeland, J. (2013). Does peer-delivered information at music events reduce ecstasy and methamphetamine use at three month follow-up? Findings from a quasi-experiment across three study sites. *Journal of Addiction Prevention*, 1(3), p. 1-8. ISSN: 2330-2178
- Stockwell T. & Chikritzhs T. (2009). Do relaxed trading hours for bars and clubs mean more relaxed drinking? A review of international research on the impacts of

changes to permitted hours of drinking. *Crime Prevention & Community Safety*, 11 (3), p.153-171. DOI:10.1057/cpcs.2009.11 o

Suffoletto, B., Kristan, J., Callawa, C., Kim K., Chung, T., Monti, P., Clark, D. (2014). A text message alcohol intervention for young adult emergency department patients: a randomized clinical trial. *American College of Emergency Physicians*. Elsevier Inc., 64(6), p. 664-672. DOI: <http://dx.doi.org/10.1016/j.annemergmed.2014.06.010>

Suffoletto, B., Callaway, C., Kristan, J., Kraemer, L., Clark, D. (2012). Text-Message-Based Drinking Assessments and Brief Interventions for Young Adults Discharged from the Emergency Department. *Alcoholism: Clinical and Experimental Research*, 36 (3), p. 552–560. DOI: 10.1111/j.1530-0277.2011.01646.x

TNS Political & Social (2014). Flash Euro Barometer 401. Young people and drugs. Report. Brussels: European Commission.

Toomey T., Erickson, D., Carlin, B., Lenk, K., Quick, H., Jones, A., Harwood, E. (2012). The association between density of alcohol establishments and violent crime within urban neighbourhoods. *Alcoholism: Clinical and Experimental Research*, 36(8), p.1468-1473. DOI: 10.1111/j.1530-0277.2012.01753.x

Trollidal, B., Brännström, L., Paschall, M. J., & Leifman, H. (2013). Effects of a multi-component responsible beverage service programme on violent assaults in Sweden. *Addiction*, 108(1), p.89-96. DOI: 10.1111/j.1360-0443.2012.04004.x

Turrisi, R. & Ray, A. (2010). Sustained parenting and college drinking in First-Year Students. *Developmental Psychobiology*, 52., p. 286-294.

Tutenges, S., Bøgkjær, T., Witte, M., Hesse, M. (2013). Drunken environments: a survey of bartenders working in pubs, bars and nightclubs. *Int. J. Environ. Res. Public Health* 2013, 10(10), p. 4896-4906. DOI:10.3390/ijerph10104896

Vermeulen-Smit, E., Verdurmen, J., Engels, R., Vollebergh, W. (2014). The role of general parenting and cannabis-specific parenting practices in adolescent cannabis and other illicit drug use. *Drug and Alcohol Dependence*. DOI: 10.1016/j.drugalcdep.2014.11.014

Voas, R., Scott Tippetts, A., Johnson, M., Lange, J., Baker, J. (2002). Operation safe crossing: using science within a community intervention. *Addiction*, 97, p. 1205–1214.

Voogt, C.V. (2014). The effectiveness of the web-based brief alcohol intervention entitled ‘What do you Drink’ in reducing alcohol use among heavy drinking adolescents and young adults. Dissertation. Nijmegen: Radboud University. ISBN: 9789462593299

Warpenius, K., Holmila, M. and Mustonen, H. (2010). ‘Effects of a community intervention to reduce the serving of alcohol to intoxicated patrons’, *Addiction*, 105(6), p. 1032–1040. DOI: 10.1111/j.1360-0443.2009.02873.x

WHO World Health organization (2015). Alcohol Factsheet. Website WHO / Media centre, Switzerland.

Wood, D., Greene, S., Alldus, G., Huggett, D., Nicolaou, M., Chapman K., Moore F., Heather, K., Drake, N., Dargan, P. (2008). Improvement in the pre-hospital care of recreational drug users through the development of club specific ambulance referral guidelines. *Substance Abuse Treatment, Prevention, and Policy* 3 (14). DOI: 10.1186/1747-597X-3-1

Acknowledgements

This info sheet is an updated version of the EMCDDA Thematic paper *Responding to alcohol and drugs and related problems in recreational settings* (2010). The update is financially supported by the Ministry of Health, Sports and Welfare, the Netherlands.

Authors

Aukje Sannen, Trimbos Institute, the Netherlands

Lena Krusche, Trimbos Institute, the Netherlands

Karen Hughes, Liverpool John Moores University, United Kingdom

Gregor Burkhardt, EMCDDA, Portugal

Ninette van Hasselt, Trimbos Institute, the Netherlands

Contributors

Ministry of Health, Sports and Welfare, the Netherlands

Charlotte Bigland, Liverpool John Moores University, United Kingdom

Roland Simon, EMCDDA, Portugal

Stefanie Helmer, EMCDDA, Portugal

Special thanks go to The Healthy Nightlife Toolbox team 2008-2010.

Design and production

Maarten de Vries, Canon Nederland NV

Liverpool John Moores University, United Kingdom

Print

1st edition, April 2016

The info sheet (PFG91315) is freely accessible at www.hntinfo.eu

Copyrights Trimbos Institute

All rights reserved. No part of this publication may be reproduced and/or published by means of print, photocopy, microfilm or any other medium, without written permission of the Trimbos Institute.