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**Supplementary File 3. Data extraction of included studies regarding the at-the-party stage**

## 1) Individual-centered interventions

Intervention (ref)	Year/ duration (country)	Target group(s)	Sample size	Target substance	Setting	Outcomes	Results	Characteristics of intervention	Reporting STROBE / AMSTAR (Four-star Rating [1])
<b>Primary studies</b>									
Awareness of the 2009 Australian alcohol guideline (plain-language summaries of the guideline with recommendations for the public, including young people) [2]	2010 (Australia, Melbourne)	Participants (16–29 years) of a 1-day music festival in Melbourne	1,381	alcohol	paper-based questionnaire at the music festival for self-completion	<ul style="list-style-type: none"> <li>• Awareness of the 2009 guideline</li> <li>• Accurate understanding of a safe number of drinks to avoid longterm harm from alcohol</li> <li>• Accurate understanding of a “safe” number of drinks to avoid alcohol-related injury</li> </ul>	<ul style="list-style-type: none"> <li>• 32% of participants reported being aware of the 2009 guideline</li> <li>• 74% had an accurate understanding of a safe number of drinks to avoid longterm harm from alcohol</li> <li>• 71% had an accurate understanding of a safe number of drinks to avoid alcohol-related injury</li> <li>• but: despite high awareness of alcohol related harms many young people reported risky alcohol consumption</li> </ul>	Cross-sectional study: Trained researchers recruited participants. Eligibility was determined by age, non-intoxication and sufficient English language skills. Incentives: Giveaways (e.g. lollipops, condoms) and a small prize.	22/22 (**)
Dietary restraints and accuracy of estimating levels of intoxication [3]	2012 (USA)	Undergraduate women	37	alcohol	bar district in a Midwestern college town between 10 pm and 2:30 am, interview, self-completed paper-based questionnaire and breath test	relationship between dietary restraints and accuracy in estimating level of intoxication	<ul style="list-style-type: none"> <li>• women higher in dietary restraint overestimated their intoxication levels</li> <li>• Restrained women overestimate intoxication if they intended to eat more before drinking</li> <li>• No difference in accuracy of intoxication if they intended to eat less before drinking</li> </ul>	Recruitment by trained research assistants for an “alcohol research” study or volunteering at research station. Incentives: water, slice of pizza.	18/22 (**)
Blood alcohol level tests (BAC) [4]	04/2011-05/2011 (Spain: Oviedo, Palma, Santiago de Compostela)	Residents of the cities, <30 years (6,5% < 18 yrs)	537	alcohol	interviews between 12 am and 6 am in most popular nocturnal recreational area	Blood alcohol level tests in nightlife recreational settings as a preventive tool	After BrAC test communication of results: 15% would stop drinking during the rest of the night, 6.6% would drink less than initially intended, 21.5% would drink more than foreseen, 56.7% remained unaffected	Interviews of randomly chosen young partygoers, conducted by specially trained psychologists. Interviews included questionnaires (26 items) and alcoholmeter test. Participants were informed about BAC results and responded the three posteriori questionnaire items.	17/22 (**)

Intervention (ref)	Year/ duration (country)	Target group(s)	Sample size	Target substance	Setting	Outcomes	Results	Characteristics of the intervention	Reporting STROBE / AMSTAR (Four-star Rating [1])
Primary studies (continued)									
Interview as intervention [5]	05/2006-12/2008 (USA: Miami)	young adults with multidrug use	444 with 274 complete data sets	club drugs (powder cocaine, ecstasy, GHB, ketamine, LSD), non-medical prescription drugs	Computer-assisted personal interviews in the club scene	<ul style="list-style-type: none"> <li>• days cocaine, ecstasy, benzodiazepine and opioid use</li> <li>• substance addiction symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• decrease in drug use frequencies and symptoms of addiction</li> <li>• decrease most relevant after first assesement</li> </ul> <p>=&gt; Study assessment interviews served as risk reduction tools by increasing participants' self-awareness and self-monitoring</p>	18-month natural history study. Participants were recruited through respondent-driven sampling. Computer-assisted personal interviews (1-2h) at 0-6-12-18 month. Follow-ups included measures of substance use and addiction. Participants received HIV education literature, condoms and USD 50 stipend upon completing each assessment. Following completion of the survey, eight focus groups, were conducted in order to understand the changes of the observed patterns of substance use.	22/22 (**)
Effect of responsible drinking messages (RDM), taken from a national campaign to reduce alcohol-related harm) [6]	2013 (UK)	Non-problem drinking undergraduate students (AUDIT score), aged 18-25 years	205 (in four different experiment)	alcohol	Taste preference task (TPT) in a simulated bar or lab context	total amount of non-alcoholic beer/ wine and cola (millilitres) consumed	<ul style="list-style-type: none"> <li>• Drinking in a simulated bar was significantly greater than in a lab</li> <li>• Display of posters with RDM led to increased consumption</li> <li>• Brief RDM reduced the negative impact of the posters.</li> <li>• Omnibus effect of intervention did not decrease consumption compared to the control group.</li> <li>• Visual engagement with RDM was low</li> </ul>	Participants believed to participate in TPT for beer/wine/coke and that beverages were alcoholic (de facto all were non-alcoholic). In four different experiments effects of context (simulated bar vs lab context) and context plus RDM on the total amount of different beverages consumed were tested.  Incentive: Participation in return for course credit.	18/22 (****)
Peer-led interventions providing health information [7]	11/2006-05/2007 (Australia: Sydney, Adelaide, Canberra)	patrons 18-29 years, having used ecstasy at least once during past 12 months	Exp. group: 278, control group: 383	ecstasy	Brief intervention at nightlife events (festival/ club/ dance events)	<ul style="list-style-type: none"> <li>• Recall of the health messages delivered by peer educator</li> <li>• Changes in patterns of drug use</li> </ul>	<ul style="list-style-type: none"> <li>• unique ecstasy-related message was recalled immediately post-intervention (64%) and after three months (46%)</li> <li>• 55% of participants referred to the information later and shared it (68%).</li> <li>• aspects of drug involvement decreased at three month follow-up among the experimental and control group</li> </ul>	Quasi-experimental study. 9 event and control sites matched in relation to event size, music style and age range of attendees. Trained peer educators and 1-2 supervising researchers attended each event. Intervention: ecstasy-related health information, control: usual drug-related information. Face-to-face post-intervention interview; 3-month follow-up telephone interview. Incentive: draw to win a personal music player.	21/22 (***)

Intervention Stakeholder (refs)	Year/ duration (country)	Target group(s)	Setting	Target	Sample size	Characteristics of intervention	Costs	Evaluation measures
Grey literature								
Nuit blanche Professional attendance in the nightlife setting [8, 9] www.nuit- blanche.ch/	since 2005 (Switzerland: Lausanne)	Recreational drug users	Present in clubs/bars/fes- tivals, social media, website, poster campaign	Enhance health literacy (safer use), harm reduction	> 2,000 people in 2015, >1,200 per day at large events (e.g. Lake Parade)	Information desk at party events, chill out areas, brief interventions, hand-outs, distribution of condoms, earplugs, water, drug checking, informational website , poster campaigns	approx. 225 000 USD/year	Annual reports, regular evaluations by the Institute of Preventive and Social Medicine, University of Lausanne, Lausanne, Switzerland
Jugendberatung Streetwork Zurich (saferparty.ch) City of Zurich, Switzerland  [10-13] www.saferparty.ch	since 1995, drug checking since 2001	Recreational drug users up to age 28	Nightlife establish- ments, social media	Enhance health literacy (safer drug use), harm reduction, recognize trends in drug use/ hazardous substances to ameliorate prevention efforts	2001-2010: 7,622 consultations at DIZ and mobile drug checking at 84 events with 2,055 substance analyses; average of 218 website users/day and 18 online consultations per month	Present in clubs/bars/festivals, Social media, website, networking, consultations at Drug information Center Zurich, Switzerland (DIZ), trainings	Mobile drug checking: approx. 5100 USD per day of service	Trends in website users and consultations; no. of appointments may indicate effect of drug checking  Systematic evaluation of questionnaires regarding consumer behaviour and risk groups filled in during consultations or mobile drug checking. Evaluation by the City of Zurich in 2003, University of Zurich, Department of Psychiatry 2005 and the Swiss Research Institute for Public Health and/Infodrug 2010
CONTACT foundation for support of addicted people , in collaboration with "Aware Dance Culture" and "Rave it save"	since 2002 (Switzerland: Berne, Biel)	Recreational drug users at techno parties, aged 18-30 years	Nightlife establish- ments, social media, cultural and sporting events	Enhance health literacy (safer use), harm reduction	No data available	information desk at party events, chill out areas, brief interventions, hands out condoms, earplugs, water, twice per year mobile drug checking, consultations at Drug information Center, Berne, Switzerland (dib), online consultations, website, poster campaigns, trainings	No data available	Supply and demand of Aware Dance Culture: random sample survey at seven techno party events in Biel, Bern, Solothurn, 2006

Non profit organisation in cooperation with health department  BEST staff training  <a href="http://best-clubbing.fixpunkt.org/schulungsprogramm/">http://best-clubbing.fixpunkt.org/schulungsprogramm/</a>	since 08/2014	Staff in Nightlife Settings (bar staff, security staff etc.)	clubs, bars	Enhance health and drug knowledge of staff, ameliorate general conditions (Best Clubbing concept)	During trial period from 08/2014-03/2015: 140 training participants in 5 clubs, 2 security agencies, 1 event management agency Staff training	5 different training modules for 120 min., information desk and presence of trainer during breaks, participants receive certificate, are integrated in "BEST network" and receive a starter pack for health promotion	Trial period: 39 106 Euro  No further data available	Evaluation:  Project evaluation during trial period (questionnaire survey of participants and trainers): 99/127 respondents considered trainings "very important", 53/127 wished more regular trainings
Non profit organisation Eve and Rave	since 1996  Switzerland (all Cantons), association with Eve and Rave Germany	Recreational drug users	Present in clubs/bars/festivals, website with forum, networking, social media, trainings, brochures, leaflets	Enhance health literacy (safer use), promote a healthy party culture, drug checking	2013: 18 799 registered users in internet forum, approx. 213 247 unique visitors per month (largest german speaking internet forum concerning drugs)	information desk at party events, chill out areas, brief interventions, hand-out of condoms, earplugs, water, magnesium etc., (international) networking, online consultations, website, drug checking in collaboration with partners, brochures, leaflets, trainings, workshops, media relations	No data available	No data available

Intervention (ref)	Year/ duration (country)	Target group(s)	Sample size	Target substance	Setting	Outcomes	Results	Characteristics of the intervention	Reporting STROBE / AMSTAR (Four-star Rating [1])	
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2) Environmental interventions									
Intervention (ref)	Year/ duration (country)	Target group(s)	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of the intervention	Reporting STROBE/ AMSTAR (Four-star rating)
Primary studies									
off- and on-premise alcohol outlet density  (Astudillo M, Kuendig H, Centeno-Gil A, Wicki M, Gmel G. Regional abundance of on-premise outlets and drinking patterns among Swiss young men: district level analyses and geographic adjustments. <i>Drug Alcohol Rev.</i> <b>2014</b> ;33(5):526-533)	08/2010-11/2011  (CH)	Swiss young men from three military recruitment centres (Lausanne, Windisch, Mels), age 19,5 +/- 1,3 years	5519	alcohol	online questionnaire	<ul style="list-style-type: none"> <li>· alcohol consumption (drinking level and heavy episodic drinking HED)</li> <li>· drinking consequences</li> </ul>	<ul style="list-style-type: none"> <li>· drinking level and HED associated positively with on-premise outlet density (bars, clubs, restaurants)</li> <li>· no associations between drinking consequences and outlet density</li> </ul>	Data on alcohol use and its consequences based on first wave of a longitudinal study (Cohort Study on Substance Use Risk Factors: C-SURF), alcohol outlet data from 2008 Swiss National Company Census, data on districts' characteristics from Swiss Federal Statistical Office	22/22 (**)
Club management practices and patrons' alcohol/ drug use  (Byrnes HF, Miller BA, Johnson MB, Voas RB. Indicators of club management practices and biological measurements of patrons' drug and alcohol use. <i>Subst Use Misuse.</i> <b>2014</b> ;49(14):1878-1887)	2010-2012  (USA (CA))	young patrons (mean age 27, SD 7.8) at EMDE	738 patrons, 25 events and observations in 6 clubs	alcohol/drug use	Friday and Saturday nights (10pm till closing) in venues featuring Electronic Music Dance Events (EMDE)	relation of club management practices (security, bar crowding, safety signage, over-serving, isolation) and biological assessments of alcohol (BAC) and drug use (THC, cocaine, amphetamines/MDMA)	<ul style="list-style-type: none"> <li>· over-serving was related to exit levels of alcohol and drug use</li> <li>· only significant at a trend level, clubs with a greater number of posted safety signs had lower levels of cocaine use</li> <li>· other club management practices (i.e., security practices, bar crowding) were related to drug and alcohol use at the bivariate level, but not in multivariate analyses</li> </ul>	Repeated, systematic observations by two independent raters (male+female) at nightclubs. Anonymous assessments of patrons' alcohol and drug use upon entry and exit to the club. (Participants provided oral fluid and breath samples and completed a brief interview and self-administered survey). Respondents were randomly approached and offered \$30 as incentive.	19/22 (**)
Kosmicare intervention model  (Carvalho MC, de Sousa MP, Frango P, et al. Crisis intervention related to the use of psychoactive substances in recreational settings- evaluating the Kosmicare Project at Boom Festival. <i>Curr Drug Abuse Rev.</i> <b>2014</b> ;7(2):81-100)	2010+2012 (Intervention first implemented in 2002)  (P)	Attendents of Boom Festival (most attendents aged 19-39 years)	122 situations attended in KC in 2010, immediate feedback from 58 attendants and 36 team members. Follow-up feedback via email from 5 team members (1 month after implementation), 7 attendants (18 month after implementation) and 11 attendants of 2012 festival (6 months after implementation)	psychoactive substances, particularly psychedelics	Data collection at Boom Festival, follow up via questionnaire sent via email.	<ul style="list-style-type: none"> <li>· Visitor's mental state and symptoms upon admission and discharge</li> <li>· Visitors satisfaction at discharge and follow-up</li> <li>· Team satisfaction with project implementation</li> </ul>	<ul style="list-style-type: none"> <li>· Team satisfaction with project implementation was positive</li> <li>· Team considered intervention to be of high quality and very positively accepted by targets</li> <li>· mental state exam symptoms significantly reduced after intervention</li> <li>· according to qualitative data, 76% of crisis episodes obtained resolution</li> <li>· 80% of KC visitors were satisfied when leaving intervention site</li> <li>· all visitors followed-up reported long-lasting intervention effects</li> </ul>	Natural setting intervention offering a safe, supportive and comfortable care space in crisis situations related to use of psychedelics. Multiple therapeutic intervention strategies (talk therapie, massaging, homeopathy etc). offered by experienced, specially trained volunteers, including psychologists and medical staff. Intervention intends to reduce risk for mental disorders related to PAS use.	16/22 (**)

Intervention (ref)	Year/ duration of intervention (country)	Target group(s)	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of intervention	Reporting STROBE/AMSTAR (Four-star rating)
<b>Primary Studies (continued)</b>									
Regulatory vs. voluntary licensing conditions  (Miller P, Curtis A, Palmer D, et al. Changes in injury-related hospital emergency department presentations associated with the imposition of regulatory versus voluntary licensing conditions on licensed venues in two cities. <i>Drug Alcohol Rev.</i> 2014;33(3):314-322)	01/2005-06/2011  Australia (Cities of Newcastle and Geelong)	night-time injury-related hospital emergency department presentations (no further specification)	around 77 observations/mth	alcohol	Aggregation of injury-related HAH admissions in a large hospital in Geelong and Newcastle	night-time injury-related hospital emergency department presentations (midnight-6 am Sat. and Sun. mornings) as indicator of alcohol-related harm	Only mandatory interventions based on trading hours restrictions were associated with reduced emergency department injury presentations in high-alcohol hours	Aim of the paper was to examine concurrent changes in the number of alcohol-related presentations to hospital emergency departments in two Australian cities that implemented either a collaborative voluntary approach to reducing harms associated with licensed premises (Geelong) or a regulatory approach (Newcastle). Geelong initiatives (1990-2010) were conceptualised and implemented via collaboration between police, licensees, city officials etc. For all interventions, compliance was voluntary. In Newcastle the Liquor Act (focusing on restricted trading hours) was imposed in 2008.	19/20 (***)
Medical health care organization at Roskilde festival  (Stagelund S, Jans Ø, Nielsen K, Jans H, Wildgaard K. Medical care and organisation at the 2012 Roskilde Music Festival: a prospective observational study. <i>Acta Anaesthesiol Scand.</i> 2014;58(9):1086-1092)	june/july 2012 (10 days)  (Dk)	Attendants of Roskilde Festival including guests, performers and volunteers (approx. 130 000)	10 630	injuries/medical conditions	12 first-aid stations and treatment areas throughout festival area (music and camping area)	illness, injury patterns and structure of the MHCO	<ul style="list-style-type: none"> <li>6919 patients could be handled by first-aid volunteers</li> <li>3473 patients required further health-care (prescriptions, medications, suturing)</li> <li>238 patients were triaged to a designated observation area</li> <li>260 patients were referred to a local hospital, general practitioner or dentist</li> <li>most common minor illnesses/injuries: wounds, need for bandages and sprains</li> <li>illnesses/injuries: infections, pain and deeper wounds</li> </ul>	24h medical assistance at Roskilde Festival by nurses, doctors, first-aid trained volunteers and staff for "stretcher teams" at first-aid towers, first-aid stations, treatment areas behind the stages and observation area.	20/21 (**)
Alcohol establishment density and non-violent crime  (Toomey TL, Erickson DJ, Carlin BP, et al. Is the density of alcohol establishments related to nonviolent crime? <i>J Stud Alcohol Drugs.</i> 2012;73(1):21-25)	2009  (USA (Minneapolis))	Minneapolis neighborhoods (no age specification)	83 Minneapolis neighbourhoods, ranging in population size from 128 to 15,247	alcohol	literature/data search	Association of alcohol establishment density (and 5 categories of nonviolent crime: vandalism, nuisance crime, public alcohol consumption, driving while intoxicated, underage alcohol possession/consumption)	<ul style="list-style-type: none"> <li>statistically significant positive associations between density of total alcohol establishments and each of the 5 crime outcomes</li> <li>approx. 3.3%–10.9% increase across crime categories resulting from a 20% increase in the alcohol density in neighborhoods with average density</li> <li>Strength of associations between off-premise density of alcohol establishments and crime lower compared to on-premise establishment density</li> </ul>	Cross-sectional design. Data from Minneapolis Department of Regulatory Services (licensed alcohol establishments), Minneapolis Police Department (crime data) and literature research (neighborhood characteristics etc)	18/18 (**)



Intervention (ref)	Country/type of included studies	Target group(s)	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of intervention/Review Limitations	Reporting AMSTAR
<b>Reviews</b>									
<p>Environmental factors in drinking venues</p> <p>(Hughes K, Quigg Z, Eckley L, et al. Environmental factors in drinking venues and alcohol-related harm: The evidence base for European intervention. <i>Addiction</i>. 2011;106(Suppl 1):37-46)</p>	<p>USA: 12 AUS: 8 UK: 5 Canada: 3 France: 2 Bulgaria: 1 Netherlands: 1 Spain: 1 Sweden:1</p> <p>all study designs (mostly observational research techniques, often in combination with other research methods including qualitative interviews, secondary data analyses etc.)</p>	management staff of drinking venues	<p>No data available</p> <p>no overview of included studies provided</p>	alcohol	naturalistic observational research in nightclubs, in some studies patron breath alcohol tests and alcohol purchase attempts	<ul style="list-style-type: none"> <li>• associations between environ- mental factors in drinking venues and alcohol consumption, alcohol access and alcohol-related problems</li> </ul>	<ul style="list-style-type: none"> <li>• range of physical factors (e.g. poor ventilation, poor cleanliness, crowding, noise, low lighting, high temperature, shabby decor, low maintenance) and social factors (e.g. permissive environment, drinks promotions, focus on music and dancing) have been associated with increased aggression, higher levels of alcohol use or intoxication in drinking venues in various countries</li> <li>• in Europe, loud music volume has been linked to faster drinking speed and alcohol consumption</li> <li>• no European studies were identified that linked staffing factors to levels and patterns of alcohol use</li> </ul>	<p>Limitations:</p> <ul style="list-style-type: none"> <li>• majority of existing literature on drinking environments stemmed from non-European countries</li> <li>• majority of non-European studies had taken place more than a decade prior to review</li> </ul>	3/10
<p>Interventions in alcohol server setting</p> <p>(Ker K, Chinnock P. Interventions in the alcohol server setting for preventing injuries. <i>Cochrane Database Syst Rev</i>. 2006;(2):CD005244)</p>	<p>USA: 10 AUS: 5 Canada: 2 Sweden: 2 UK:1</p> <p>Randomised controlled trials (RCTs) and non-randomised controlled studies (e.g. controlled before-and-after design)</p>	<ul style="list-style-type: none"> <li>• Workers in licensed alcohol serving premises (e.g. bar staff, shop workers)</li> <li>• Owners and managers of alcohol serving premises</li> <li>• Patrons in licensed alcohol serving premises</li> <li>• Licensed alcohol serving outlets including 'off-licences'</li> <li>• Areas of multiple licensed alcohol serving outlets (e.g. towns)</li> </ul>	<p>No data available</p>	alcohol	server training health promotion initiatives drink driving service interventions targeting the server setting environment policy interventions	<ul style="list-style-type: none"> <li>• alcohol-related injuries (fatal and non-fatal):5</li> <li>• Behaviour change (e.g. change in amount of alcohol consumed): 14</li> <li>• Knowledge change: 6</li> </ul>	<ul style="list-style-type: none"> <li>• there is no reliable evidence that interventions in the alcohol server setting are effective in preventing injuries.</li> <li>• effectiveness of the interventions on patron alcohol consumption is inconclusive.</li> <li>• There is some indication of improved server behaviour but it is difficult to predict what effect this might have on injury risk</li> <li>• Compliance with interventions appears to be a problem</li> </ul>	<p>Limitations:</p> <ul style="list-style-type: none"> <li>• for a small number of studies, post hoc decisions were taken about what measurements to report</li> <li>• findings of the review are limited by the overall poor methodological quality of the included studies</li> <li>• several studies were conducted over a decade ago (relevance and generalisability to the present situation?)</li> </ul>	9/10

Intervention (ref)	Country/ type of included studies	Target group(s)	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of theintervention	Reporting AMSTAR	
Reviews (continued)										
Interventions in alcohol server setting  (Akbar T, Baldacchino A, Cecil J, Riglietta M, Sommer B, Humphris G. Poly-substance use and related harms: a systematic review of harm reduction strategies implemented in recreational settings. <i>Neurosci Biobehav Rev.</i> 2011;35(5):1186-1202)	USA: 4 AUS: 4 UK: 2 Sweden: 3 Finland: 1	serving staff, management staff, door staff, patrons, designated drivers, nightclub medics	No data available	alcohol: 9 alcohol+drugs: 2 drugs: 3	<ul style="list-style-type: none"><li>• Training interventions (e.g. Responsible Beverage Service RBS): 12</li><li>• Law enforcement: 4</li><li>• Patron education 3</li></ul>	no common outcome	not reported	<ul style="list-style-type: none"><li>• Many of the studies retrieved, had originated outside Europe (62%)</li><li>• Few of the studies referred to evaluations related to drug prevention</li><li>• heterogeneous efficacy measures reported makes study comparisons difficult</li><li>• absence of a 'grey literature' search</li></ul>	3/10	
Sponsorship/ coordination of intervention	Intervention title	Year/ duration (country)	Target group(s)	No. of participants	Target	Setting	Characteristics of intervention	Costs	Evaluation data	References
Grey Literature										
The London Drug and Alcohol Policy Forum	Amnesty Boxes/Drug boxes	ongoing, (UK)	Recreational drug users, security stuff	2014: Throughout the four day Bestival festival recently held in the Isle of Wight, over £25,000 (\$40,656) worth of drugs were seized	Reduce posession, trade and consume of illegal substances at festivals	Nightclubs, Festivals	Placement of specially secured "amnesty boxes" at festivals to depose illegal drugs seized by security stuff or by festival visitors themselves (free of persecution).	No data available	No data available	1. Russell W, Jackson P. <i>Drugs at the Door: Guidance for Venues and Staff on Handling Drugs.</i> ; 2011. 2. DMNW Team. New Amnesty Box Proves To Be A Massive Success At Bestival. <a href="http://dancemusicnw.com/bestival-amnesty-box-proves-success/">http://dancemusicnw.com/bestival-amnesty-box-proves-success/</a> . Published 2014. Accessed January 30, 2017. 3. Webster R. Safer Clubbing Guidance for Licensing Authorities, Club Managers and Promoters. Published.; 2004. <a href="https://www.nwleics.gov.uk/files/documents/safer_clubbing_guide/Safer Clubbing Guide.pdf">https://www.nwleics.gov.uk/files/documents/safer_clubbing_guide/Safer Clubbing Guide.pdf</a> .
Addiction valais	Label Fiesta	since 2004  CH (Wallis)	Event organizer, club manager	2014: Labelling of 73 regional festive events, 3 concert halls , 1 club (and 213 general events) 2013: Labelling of 144 events (total of 500 000 visitors)	Rise awareness for risky consume of alcohol/illegal substances, improve risk management at large events	Clubs, concers, festivals, party events, radio spots, poster campaigns	Certified events respect label conditions (e.g. no alcohol serving to minors, chill out zone, free tap water etc) and profit of special offers for sponsoring, advertisement etc.	No data available	85% of participating events are controlled by Label coordination for respect of conditions	1. Addiction valais. <i>Rapport D ' Activité 2014 Secteur Prévention.</i> ; 2014. <a href="http://cms.addiction-valais.ch/Upload/addiction-valais/News/Rapport activite prevention 2014.pdf">http://cms.addiction-valais.ch/Upload/addiction-valais/News/Rapport activite prevention 2014.pdf</a> . 2. Schalbetter P, Mitarbeiterin W. Label Fiesta : Bericht Über Die 10 Jahre Tätigkeit Und Die Zufriedenheitsumfrage.; 2014. <a href="http://cms.addiction-">http://cms.addiction-</a>

										<a href="http://valais.ch/Upload/addiction-valais/News/Synthese rapport Fiesta D.pdf..">valais.ch/Upload/addiction-valais/News/Synthese rapport Fiesta D.pdf..</a> 3. Groupement Romande. Prévention en milieu festif. Zoom à Propos Toxicom en région lausannoise. 2009;32(20):5. <a href="https://www.radix.ch/files/83RZJJQ/resume_enquete_organisateurs_valide_17609.pdf">https://www.radix.ch/files/83RZJJQ/resume_enquete_organisateurs_valide_17609.pdf</a> . <a href="http://labelfiesta.ch/?page=label">http://labelfiesta.ch/?page=label</a>
Blue cross Sitzerland	blue cocktail bar	since 1998  CH (German speaking part)	Users of nightlife economy	2015: 154 events with 226 094 visitors in total, approx. 26 205 engagements at Blue Cocktal bar with serving of 26 878 non-alcoholic drinks	Rise awareness for risky consume of alcohol, support partying without alcohol	Presence at festive events, Workshops, Homepage	Leasing of mobile "blue cocktail bar" including bar tenders for private and public events, workshops, Homepage with non-alcoholic cocktail receipts,	No data available	Evaluation by "Hochschule Luzern für Soziale Arbeit" 2015 (literature research, questionnaire, interviews, observation)	1. Hafen M, Lischer S, Sattler S. Evaluation Blue Cocktail Bar. Schlussbericht Zuhanden Des Blauen Kreuzes Bern.; 2015. 2. Öffentliche Zahlen der Statistik 2015 per Mail über Geschäftsstelle Blaues Kreuz Schweiz, Bern, Frau K. Leuenberger <a href="http://www.bluecocktailbar.ch/index.php?id=3">http://www.bluecocktailbar.ch/index.php?id=3</a>
Non profit organisation Safer Clubbing	Safer Clubbing  (Member of European Network for Safer Party Labels Party+)	since 2004  CH ( e.g. Bern, St. Gallen, Winterthur, Zürich, Kanton Aargau, Luzern)	Managers of bars, clubs. Eventlocations. Local and regional networks	Until end of 2012 association of 100 nightclubs. In 2012 10 roundtables of different nightlife stakeholders, trainings of 114 staff members (in nightclubs)	Optimise quality standards in clubs, bars, eventlocations. Empowerment of organizers, motivation to respect certain conditions. National and international networking. Advocate clubs and bars.	Clubs, bars, event locations, round tables, poster campaigns, cinema advertising, leaflets, networking , media relations	Associates profite from specialised know-how and networking, as well as round tables and campagnes.	15 000 Euro/year for different projects, 400 Euro/year and club for leaflets, website, accounting etc.	No data available	1. Menzi P, Bücheli SNSA. <i>Reporting Safer Nighlife Schweiz (SNS) 2013</i> ; 2013. 2. Drogenprävention and Partys. laut leise. 2004;(3). <a href="http://www.suchtpraevention-zh.ch/fileadmin/user_upload/magazin_laut_leise/pdf/lautleise2004_3.pdf">http://www.suchtpraevention-zh.ch/fileadmin/user_upload/magazin_laut_leise/pdf/lautleise2004_3.pdf</a> . 3. Safer Nightlife Arbeitskreis 2005-2007 (Leitung: Energy Control). Safer Nightlife Projects.; 2007. <a href="http://www.saferclubbing.ch/">http://www.saferclubbing.ch/</a>

3) Structural interventions											
Publication	Name of intervention	Year/ duration	Country	Target group(s)	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of intervention	Reporting STROBE/ AMSTAR (Four-star rating)
Primary studies											
Corazza O, Assi S, Simonato P, et al. Promoting innovation and excellence to face the rapid diffusion of novel psychoactive substances in the EU: The outcomes of the ReDNet project. Hum Psychopharmacol Clin Exp. 2013;28(4):317-323. doi:10.1002/hup.2299.	Recreational Drugs European Network project ReDNet	2010-2012	EU	· Young people (secondary schools/college/universities) · health professionals	By 06/2012: project website visited by 16 567 people, with 998 people having registered on mailing list. 400 'likes' of project page on facebook	Novel psychoactive substances (NPS)	· testing activities on NPS products · informative website, presence in social media, diffusion of multimedia tools · web monitoring and online survey	establishment of first EU-wide ICT-based preventative programme for NPS	· >650 substances identified · Development of a secured ReDNet online database, a SMS-Email information service and various multimedia tools · production of 183 NPS technical reports (access restricted to project partners only) · 11 technical reports and 30 factsheets for public access	multi-site project with 10 research centres across the EU funded by European Commission to develop accurate information on NPS, pilot ICTs to disseminate this information and inform future research in e-Health, selective prevention and harm reduction	13/13 (*)
Ramstedt M, Leifman H, Müller D, Sundin E, Norström T. Reducing youth violence related to student parties: Findings from a community intervention project in Stockholm. Drug Alcohol Rev. 2013;32(6):561-565. doi:10.1111/dar.12069.	multi-component community intervention project to reduce youth violence related to student parties ("Student08-10")	2008-2010 (weekday nights april/may each year)	Sweden (Stockholm city)	High-school students, their parents, restaurant owners, guards/door men, event companies	not stated	alcohol	brochures, poster, guidebook, training and information website about restaurant regulations. Restaurant visits and inspection during student graduation parties. Close cooperation between police/restaurants (direct contact number, meetings etc)	violence-related emergency room visits by young people aged 18–20 years during weekday nights (10pm-6am)	violence level was markedly lower in the experiment group during intervention period (23%)	Quasi-experimental design (weekday vs weekend nights). Intervention consisted of three key components: cooperation (restaurants, police, event companies, schools); information/education (students, parents) and increased enforcement. Outcome data from 5 major hospitals in Stockholm from 2005 (preinterventional) to 2010.	15/19 (***)
Publication	Name of intervention	Publication year	Country/ type of included studies	Target group(s) of intervention	No. of participants	Target substance	Setting	Outcomes	Results	Characteristics of intervention/Review Limitations	Reporting AMSTAR
Reviews											
Droste N, Miller P, Baker T. Review article: Emergency department data sharing to reduce alcohol-related violence: a systematic review of the feasibility and effectiveness of community-level interventions. Emerg Med Australas EMA. 2014;26(4):326-335. doi:10.1111/1742-6723.12247.	Emergency department data sharing	2013	GB: 7 AUS: 1  all study designs (mainly cross-sectional studies)	Emergency department (ED) clinicians	No data	alcohol	Emergency departments	• reduction of alcohol-related injury and assault • validity of using ED data to identify high-risk venues	• easy to implement into modern ED triage systems, with minimal cost, staff workload burden, impact to patient safety, service and anonymity, or risk of harm displacement, or increase to length of patient stay • all but one study reported substantial reductions of assaults and ED attendances post-intervention • Negative feasibility concerns were minimal (e.g. harm displacement effect) • cross-referencing with alternate	• heterogeneous nature of interventions between studies does not allow for a definitive statement of effect • absence of a 'grey literature' search  several studies were dependent on the use of less reliable police assault data as a measure of intervention outcome	2/10

									data sources compared favourably in terms of violence detection rate and the rank order of risk- allocated venues		
Sponsorship/ coordination of Intervention (ref)	Name of intervention	Year/Duration of intervention	Country of intervention	Target group(s) of intervention	Number of participants	Target	Setting	Characteristics of intervention	Costs	Evaluation data	
Grey Literature											
<p>Local NGOs and stakeholders in Nightlife setting out of Europe, sponsored by European Union</p> <p>1. Leclercq D, Noijen J, Charlois T, et al. Safer Nightlife: Labels and Charters: Good Practice Standards (NEWIP).; 2012. <a href="http://www.emcdda.europa.eu/attachements.cfm/att_231073_EN_INT14_NEWIP_Labels_standards-final_20.12-A4.pdf">http://www.emcdda.europa.eu/attachements.cfm/att_231073_EN_INT14_NEWIP_Labels_standards-final_20.12-A4.pdf</a>.</p> <p>2. Menzi P, Bücheli SNSA. Reporting Safer Nighliffe Schweiz (SNS) 2013.; 2013. <a href="http://newip.safernightlife.org/">http://newip.safernightlife.org/</a> <a href="http://www.safernightlife.org">http://www.safernightlife.org</a></p>	<p>Nightlife Empowerment &amp; Well-being Implementation Project NEWIP</p> <p>and</p> <p>Nightlife, Empowerment &amp; Well-being Network NEW-NET</p>	<p>NEWIP Implementation Project 2011-2013</p> <p>now: Nightlife, Empowerment &amp; Well-being Network NEW-NET</p>	Europe	All actors in Nightlife setting, secondary nightlife economy users	No data available	Enhance knowledge exchange and networking, Empowerment of local actors, implement standards and best practice guidelines	Conferences, trainings, newsletter, guidelines, standards, website, presence at festive events	Conferences, trainings, newsletter, guidelines, standards, website, presence at festive events with information desks, brief interventions, chill out areas, drug checking, serious gaming	No data available	Evaluation of different NEWIP activities by SPORA SINERGIES (Barcelona Autonomous University, Research Park). No more available.	
<p>Association of European partylabels (5 labels from Belgium, France, Spain, Switzerland)</p> <p>1. Leclercq D, Noijen J, Charlois T, et al. Safer Nightlife: Labels and Charters: Good Practice Standards (NEWIP).; 2012. <a href="http://www.emcdda.europa.eu/attachements.cfm/att_231073_EN_INT14_NEWIP_Labels_standards-final_20.12-A4.pdf">http://www.emcdda.europa.eu/attachements.cfm/att_231073_EN_INT14_NEWIP_Labels_standards-final_20.12-A4.pdf</a>. <a href="http://www.partyplus.eu/">http://www.partyplus.eu/</a></p>	Party Plus+ European Network of saver party labels	since 2011	Europe	Experts in european countries, regions and cities	2011-2013: 370 participants from 16 european countries at info sessions, 95 participants from 20 countries at three trainings. Built up 4 new partylabels and charters since 2011. More than 7 Mio. visitors of Party plus certified locations/year.	umbrella brand of european party labels, support implementation of new labels	trainings, guidelines, standards, website, networking, accounceling	support planning and implementation of new labels, knowledge exchange	No data available	No data available	

<p>Association of national stakeholders in the nightlife setting (e.g. Police, Federal Office of Public Health, local authorities, specialist addiction centers etc.)</p> <p>1. Menzi P, Bücheli SNSA. Reporting Safer Nightlife Schweiz (SNS) 2013.; 2013. 2. Stutz MWTDRT. Externe Situationsanalyse: Netzwerk Safer Nightlife Schweiz. Schlussbericht zuhanden des Bundesamtes für Gesundheit. 2015;41(September):72. Widmer_DeRocchi_Stutz_Schlussbericht-Situationsanalyse-Netzwerk-Safer-Nightlife-Schweiz_de_20150930. <a href="http://www.infodrog.ch/nightlife-aktivitaeten.html">http://www.infodrog.ch/nightlife-aktivitaeten.html</a></p>	Safer Nightlife Schweiz (SNS)	since 2011	CH	All national actors in Nightlife setting,	No data available	Enhance knowledge exchange and networking, Empowerment of local actors, implement standards and best practice guidelines, data processing	trainings, website, networking, counseling, round tables, reports, information materials,	support planning and implementation of new preventive interventions, knowledge exchange, trainings, guidelines, standards, website, leaflets, information materials	No data available	Evaluation on behalf of Federal Office of Public Health in 2015 by Institute for Political Science, University Zuerich	
<p>Non profit organisation Safer Dance</p> <p><a href="http://saferdanceswiss.ch">http://saferdanceswiss.ch</a></p>	Safer Dance Suisse	since 2014	CH	All actors in Nightlife setting, secondary nightlife economy users	No data available	information transfer, harm reduction in connection with psychoactive substances, enhance individual responsibility	trainings, website, presence at festive events, networking	presence at festive events with information desks, brief interventions, chill out areas, drug checking. Networking, trainings, public relations	No data available	No data available	
<p>Citysafe Partnership, Liverpool City Council Public Health, Liverpool Clinical Commissioning Group</p> <p>1. Quigg Z, Ford K, Butler N, Hardcastle K, Hughes K. Evaluation of the South Wales Know the Score Intervention. Vol 0.; 2015. <a href="http://www.cph.org.uk/wp-content/uploads/2015/07/Know-the-Score-pilot-evaluation-FINAL-REPORT-July-2015.pdf">http://www.cph.org.uk/wp-content/uploads/2015/07/Know-the-Score-pilot-evaluation-FINAL-REPORT-July-2015.pdf</a>. 2. Quigg Z, Ford K, McGee C, Grey H, Hardcastle K,</p>	Know the Score # Drink Less Enjoy more	since 2015, pilot project "say no to drunks" since 2003	GB (Liverpool)	users of nightlife economy, bar staff	No data available	Reduce service of alcohol to drunk people	media campaign, police enforcement, staff trainings	Rise awareness of local law by media campaign, information material, presence in local media, website. Police enforcement. Bar staff trainings.	No data available	Evaluations by Centre of Public Health Liverpool John Moores University 2014 and 2015 (questionnaires, test purchases)	

<p>Hughes K. Evaluation of the Liverpool Drink Less Enjoy More Intervention. Vol 3.; 2016.  <a href="http://www.cph.org.uk/wp-content/uploads/2016/03/Liverpool-Drink-Less-Enjoy-More-intervention-evaluation-report-March-2016.pdf">http://www.cph.org.uk/wp-content/uploads/2016/03/Liverpool-Drink-Less-Enjoy-More-intervention-evaluation-report-March-2016.pdf</a>.</p> <p><a href="http://drinklessenjoymore.co.uk/">http://drinklessenjoymore.co.uk/</a></p>										
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## References

1. Khan KS, Kunz R, Kleijnen J, Antes G. Systematische Übersichten und Meta-Analysen. Ein Handbuch für Ärzte in Klinik und Praxis sowie Experten im Gesundheitswesen. Berlin Heidelberg New York: Springer Verlag; 2004. p. 71.
2. Bowring AL, Gold J, Dietze P, Gouillou M, van Gemert C, Hellard ME. Know your limits: awareness of the 2009 Australian alcohol guidelines among young people. *Drug And Alcohol Review*. 2012;31(2):213-23. doi: 10.1111/j.1465-3362.2011.00409.x.
3. Buchholz LJ, Crowther JH, Olds RS, Smith KE, Ridolfi DR. Are restrained eaters accurate monitors of their intoxication? Results from a field experiment. *Addictive Behaviors*. 2013;38(4):1966-9. doi: 10.1016/j.addbeh.2012.12.008.
4. Calafat A, Fernández-Hermida JR, Becoña E, Juan M, Duch M, Fernández del Rio E, et al. Blood alcohol level tests in nightlife recreational settings as a preventive tool. *Actas Españolas De Psiquiatría*. 2013;41(1):10-6.
5. Kurtz SP, Surratt HL, Buttram ME, Levi-Minzi MA, Chen M. Interview as intervention: the case of young adult multidrug users in the club scene. *Journal Of Substance Abuse Treatment*. 2013;44(3):301-8. doi: 10.1016/j.jsat.2012.08.004.
6. Moss AC, Albery IP, Dyer KR, Frings D, Humphreys K, Inkelaar T, et al. The effects of responsible drinking messages on attentional allocation and drinking behaviour. *Addictive Behaviors*. 2015;44:94-101. doi: 10.1016/j.addbeh.2014.11.035.
7. Silins E, Bleeker AM, Simpson M, Dillon P, Copeland J. 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*. 2013;1(3):1-8. doi: 10.13188/2330-2178.1000010.
8. Arnaud S, Zobel F. Evaluation of the project "Nuit blanche" in Geneva, Switzerland (in French). Lausanne, Switzerland: 2006.
9. Carrasco S, Gervasoni J, Dubois-Arber F. Pilot project for prevention and harm reduction in nightlife (in French). *Zoom*. 2014;41:1-4.
10. Bücheli A. Harm reduction in nightlife in Switzerland (in German). *Suchtmagazin*. 2014;16.
11. Bücheli A, Hungerbühler I, Schaub M. Evaluation of the drug checking service in Zurich, Switzerland (in German). *Suchtmagazin*. 2010;5:41-7.
12. Maier L, Bücheli A, Bachmann A. Consumption of stimulants in nightlife (in German). *Suchtmagazin*. 2013;21(3):15-20.
13. Hungerbühler I, Bücheli A, Schaub M. A prevention measure for a heterogeneous group with high consumption frequency and polydrug use – evaluation of Zurich's drug checking services. *Harm Reduct J*. 2011;8(1):8-16.

