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South Africa

The Cabinet of South Africa has adopted draft legislation that would increase the legal purchase age for beverage alcohol from 18 to 21 years old, introduce more stringent restrictions on alcohol advertising, and introduce civil liability for vendors and producers when intoxicated persons go on to commit crimes or cause road traffic crashes. Minister of Trade and Industry Rob Davies said that the draft "Liquor Amendment Bill" and a draft liquor policy paper were now available for public input, stating that the bill cited evidence that increasing the legal purchase age could curb harmful drinking and had also been shown to reduce road traffic crashes in other countries.

India

A high court has ruled that a ban on the sale and consumption of alcohol in India's northern state of Bihar is "illegal, impractical and unconstitutional". The ban, which was imposed in April, was introduced by Chief Minister Nitish Kumar as a way of creating "social change" in Bihar. It was supported by women in particular because they link drinking by men with domestic violence, harassment and poverty. But it's critics described the ban as draconian with punishments for even family members of anybody caught consuming or possessing liquor. Around 13,000 people have been arrested in Bihar for defying the ban since 5 April.

Ireland

In future, Learner drivers will have to answer new questions on drink-driving in a measure designed to tackle the "worrying" number of alcohol-related deaths on Ireland's roads. The Road Safety Authority has said that new questions on topics such as blood alcohol limits, penalties and how drinking affects driving ability will be introduced to the Driver Theory Test from October 10.

Australia

The South Australian government has announced it will move to ban alcohol advertising from buses, trains and trams from 2017. This follows a ban on alcohol advertising on public transport by the ACT Government in 2015. Content standards for contracts on Adelaide Metro vehicles will be amended to prevent primary product alcohol advertising. The ban will not extend to indirect advertising such as sponsorship logos on sporting uniforms or the promotion of tourism events such as food and wine festivals.

Vietnam

In Vietnam at a meeting of the National Traffic Safety Committee in Hanoi, the country's high national crash rate was attributed to drink driving. 4,000 of the 8,700 road traffic crash fatalities last year were alcohol-related. The latest survey on non communicable disease (NCD) risk factors found that in Vietnam 77% of adult males and 11% of women said that they had consumed at least six units of alcohol in the past 30 days and more than 44% of men and 1.2% of women said that they had engaged in heavy episodic drinking.

Moderate alcohol consumption and chronic disease: The case for a long-term trial

Drinking within recommended limits is highly prevalent in much of the world, and strong epidemiological associations exist between moderate alcohol consumption and reduced risk of several major chronic diseases, including coronary heart disease and diabetes with an elevated risk for breast cancer. In many cases, plausible biological mediators for these associations have been identified in randomised trials, but gold standard evidence that moderate drinking causes or prevents any chronic disease remains elusive and important concerns about available evidence have been raised. A review published in *Alcoholism, Clinical and Experimental Research* argues that a long-term trial of moderate drinking is no longer beyond consideration. The authors present potential lessons learned for such a trial and discuss key features to maximise its feasibility and value.

The review considers how clinical investigators have now successfully completed randomised trials of complex nutritional interventions in a variety of settings. For example, The Lyon Heart Study, where participants were educated to modify their diet to increase their intake of bread, green and root vegetables and fish and fruit and replace red meat with poultry and use a modified margarine and the PREDIMED trial, which required participants to adopt either a Mediterranean diet or a low fat diet. In addition, trials of alcohol consumption itself of up to 2 years duration study have been conducted by Israeli researchers among diabetic adults.

The authors suggest that previous trials of both alcohol consumption and other nutritional interventions offer specific, practical lessons for the design and conduct of a trial. They highlight that complex trials over many years can and should be carried out. Previous trials suggest that a long-

term trial of alcohol consumption is feasible when those beverages trialled are those most culturally acceptable to the study population and where participants are asked to consume quantities not widely different from their normal pattern of drinking. Most of the successful trials have provided participants with more support than just advice. The authors also note that the successful long term dietary and alcohol trials have recruited individuals at an above average risk for the end point under investigation, which requires smaller sample sizes and might also recruit participants with a greater personal investment in the trial's success.

Finally, existing clinical trials and epidemiological evidence provides useful insight into the end points that a clinical trial of moderate drinking might be best poised to tackle; High density lipoprotein cholesterol (HDL-C) has served as a marker for adherence in nearly all feeding studies of alcohol consumption and differences between abstainers and alcohol consumers become observable within a few week.

The authors argue that "Epidemiological studies also suggest that coronary heart disease and diabetes represent the most plausible improved end points for a trial of moderate drinking, with somewhat weaker evidence for ischemic (but not haemorrhagic stroke); a composite outcome of major cardiovascular events similar to that used in pharmaceutical trials appears sensible. Safety signals to be studied should include hypertension, injury and breast cancer."

Source: Moderate alcohol consumption and chronic disease: The Case for a Long-Term Trial. Kenneth J. Mukamal, Catherine M. Clowry, Margaret M. Murray, Henk F.J. Hendriks, Eric B. Rimm, Kaycee M. Sink, Clement A. Adebamowo, Lars O. Dragsted, P. Scott Lapinski, Mariana Lazo, and John H. Krystal. *Alcoholism: Clinical and Experimental Research*, published early online 30 September 2016.

Red wine polyphenols and their potential to target brain pathology in Alzheimer's and Parkinson's disease

In the August edition of *Frontiers in Nutrition*, a review summarises the current knowledge about the major classes of red wine polyphenols and places into perspective their potential to be considered as nutraceuticals to target neuropathology in Alzheimer's disease and Parkinson's disease.

Led by Mario Caruana of the Centre for Molecular Medicine and Biobanking at the University of Malta, the study report was part of a series called 'Health-promoting effects of traditional Mediterranean Diets.'

The authors state that *"Alzheimer's disease (AD) and Parkinson's disease (PD) are the most common age-related neurodegenerative disorders. Although AD and PD have different clinical and pathological features the causal mechanisms at the molecular level appear to overlap considerably. Among the various lifestyle factors that may prevent or slow age-related neurodegenerative diseases, epidemiological studies on moderate consumption of red wine, especially as part of a holistic Mediterranean diet, have attracted increasing interest"*.

Epidemiological studies have found that a high adherence to the mediterranean diet is associated with a reduced risk of developing mild cognitive impairment (MCU) and AD and a reduced risk of progressing from MCU to AD. Other research suggest that light to moderate drinking (1-3 drinks a day) is significantly associated with a lower risk of any dementia and vascular dementia in individuals over 55. A further study found that the lowest odds for dementia were among older adults whose weekly consumption of alcohol was between 1 and 6 drinks, irrespective of beverage type. Specifically examining the role of red wine, a cohort study, the Copenhagen City Heart Study found that monthly or weekly wine intake among over 65s was associated with a lower risk of dementia, that was not found for other alcoholic drinks. Despite the overall positive association between red wine and cognitive health, it is still debatable as to whether people should start drinking or increase wine consumption to avoid dementia. More prospective cohort studies are needed to strengthen the evidence, the authors argue.

For risk of PD, a 2012 study found that a habitual dietary intake of flavonoids was protective. Males in the highest percentile of total flavonoid intake had a 40% lower risk of PD and intakes of anthocyanins from flavonoid-rich foods, including red wine were

especially associated with a lower PD risk. However, most epidemiological studies do not support an association between alcohol or wine consumption and risk of PD.

Red wine is particularly rich in specific polyphenolic compounds that appear to affect the biological processes of AD and PD, including flavonoids such as quercetin, myricetin, catechins, tannins, anthocyanidins, resveratrol, and ferulic acid.

There is now a consistent body of in vitro and in vivo data on the neuroprotective effects of red wine polyphenols (RWP) showing that they do not merely possess antioxidant properties, but may additionally act upon, in a multi-target manner, the underlying key mechanisms featuring in both AD and PD. These molecular mechanisms include (i) anti-inflammatory activities and antioxidant capacity, including free radical scavenging and metal chelation (ii) modulation of cell signalling pathways and (iii) anti-amyloid action through direct binding with specific amyloidogenic proteins. *"This wide range of actions highlights a key aspects that have repeatedly emerged from studies on natural polyphenols, including wine polyphenols: a remarkable ability to simultaneously and synergistically modulate multiple molecular targets, suggesting a greater potential for therapeutic efficacy in the complex pathogenesis of AD and PD,"* the authors write.

The review explores the issue of red wine polyphenol bioaccessibility and bioavailability and conclude: *"We have to be cautious in extrapolating findings from in vitro studies to in vivo situation, since much of existing in vitro data have utilised non-physiological concentrations of red wine polyphenols and used the original molecule instead of the in vivo metabolites produced upon digestion and of metabolic processing. Indeed, much of the recent data have consistently shown that the biological activities of metabolites may differ from the parent compound."*

More convincing large-scale clinical trials utilising red wine polyphenols are needed together with suitable biomarkers to objectively assess a risk reduction of AD and PD. Clinical intervention trials must be prioritised to support evidence derived from in vitro and in vivo studies, the authors state.

Source: Putative Role of Red Wine Polyphenols against Brain Pathology in Alzheimer's and Parkinson's Disease. Mario Caruana, Ruben Cauchi and Neville Vassallo. *Front. Nutr.*, 12 August 2016. open access.

Effects of alcohol similar to rapid antidepressants

In a study published in the current issue of the journal *Nature Communications*, researchers found that alcohol produces the same neural and molecular changes as drugs that have proven to be rapidly effective antidepressants.

"Because of the high comorbidity between major depressive disorder and alcoholism there is the widely recognised self-medication hypothesis, suggesting that depressed individuals may turn to drinking as a means to treat their depression," said the study's principal investigator, Kimberly Raab-Graham, associate professor of physiology and pharmacology at Wake Forest School of Medicine, part of Wake Forest Baptist Medical Center. *"We now have biochemical and behavioural data to support that hypothesis."*

In their study using an animal model, Raab-Graham and her colleagues found that a single dose of an intoxicating level of alcohol, which has been shown to block NMDA receptors (proteins associated with learning and memory), worked in conjunction with the autism-related protein FMRP to transform an acid called GABA from an inhibitor to a stimulator of neural activity. In addition, the research team found that these biochemical changes resulted in non-

depressive behaviour lasting at least 24 hours.

This study demonstrated that alcohol followed the same biochemical pathway as rapid antidepressants in the animals, while producing behavioural effects comparable to those observed in people. In recent years, single doses of rapid antidepressants such as Ketamine have proven capable of relieving depressive symptoms within hours and lasting for up to two weeks, even in individuals who are resistant to traditional antidepressants.

"Additional research is needed in this area, but our findings do provide a biological basis for the natural human instinct to self-medicate," Raab-Graham said. *"They also define a molecular mechanism that may be a critical contributor to the comorbidity that occurs with alcohol use disorder and major depressive disorder."*

The researchers stress that they are not suggesting that alcohol can be regarded as an effective treatment for depression.

Source: FMRP regulates an ethanol-dependent shift in GABABR function and expression with rapid antidepressant properties SA Wolfe, ER Workman, CF Heaney, F Niere, S Namjoshi, LP Cacheaux, SP Farris, MR Drew, BV Zemelman, RA Harris & KF Raab-Graham. *Nature Communications* 7, Article number: 12867, open access.

Effects of initiating moderate wine intake on abdominal adipose tissue in adults with type 2 diabetes

A study from the Ben-Gurion University of the Negev, Israel investigated the effect of wine consumption on weight gain and abdominal fat accumulation and distribution in patients with type 2 diabetes.

In the 2-year randomised controlled trial, patients who were alcohol-abstaining adults with well-controlled type 2 diabetes, following a Mediterranean diet were randomly assigned to drink 150 ml of mineral water, white wine or red wine with dinner for 2 years. Visceral adiposity and abdominal fat distribution were measured in a subgroup of sixty-five participants, using abdominal MRI.

There were 48 participants who completed a second MRI measurement were included in the 2-year analysis. 27 consumed red wine, and 21 consumed mineral water. Throughout the 2 year period, no changes in antidiabetic medication and no substantial changes in energy intake were recorded. A similar level of

weight loss (sd) was observed in both groups: (red wine 1.3 (3.9) kg and water 1.0 (4.2) kg. Changes (95 % CI) in abdominal adipose-tissue distribution were also similar: for red wine, visceral adipose tissue (VAT) -3.0%, deep subcutaneous adipose tissue (DSAT) +5.2%, superficial subcutaneous adipose tissue (SSAT) -1.9%; and for water, VAT -3.2%, DSAT +2.9%, SSAT -0.15%. A 2-year decrease in glycated haemoglobin ($\beta=0.28$, $P=0.05$) was associated with a decrease in VAT.

The study suggests that moderate wine consumption, as part of a Mediterranean diet, in persons with controlled diabetes did not promote weight gain or abdominal adiposity.

Source: Effects of initiating moderate wine intake on abdominal adipose tissue in adults with type 2 diabetes: a 2-year randomized controlled trial. Golan R et al. *Public Health Nutr.* 2016 Oct 3:1-7.

Timing and type of alcohol consumption and the metabolic syndrome

The prevalence of the metabolic syndrome is rising worldwide. Its association with alcohol intake, a major lifestyle factor, is unclear, particularly with respect to the influence of drinking with as opposed to outside of meals. Researchers investigated the associations of different aspects of alcohol consumption with the metabolic syndrome and its components.

In cross-sectional analyses of 14,375 active or retired civil servants (aged 35-74 years) participating in the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil), logistic regression models were employed to investigate interactions between the quantity of alcohol, the timing of its consumption with respect to meals, and the predominant beverage type in the association of alcohol consumption with the metabolic syndrome. In analyses adjusted for age, sex, educational level, income, socioeconomic status, ethnicity, smoking, body mass index, and physical activity, light consumption of alcoholic beverages with meals was inversely associated with the metabolic syndrome (< / = 4 drinks/week: OR = 0.85, 95% CI 0.74-0.97; 4 to 7 drinks/week: and OR = 0.75, 95% CI 0.61-0.92), compared to abstention/occasional drinking.

However, greater consumption of alcohol consumed outside of meals was significantly associated with the metabolic syndrome (7 to 14 drinks/week: OR = 1.32, 95% CI 1.11-1.57; and \geq 14 drinks/week: OR = 1.60, 95% CI 1.29-1.98). Drinking predominantly wine, which occurred mostly with meals, was significantly related to a lower syndrome prevalence; drinking predominantly beer, most notably when outside of meals and in larger quantity, was frequently associated with a greater prevalence.

The alcohol-metabolic syndrome association differs markedly depending on the relationship of intake to meals. Beverage preference - wine or beer - appears to underlie at least part of this difference, the authors state. Notably, most alcohol was consumed in metabolically unfavorable type and timing. The authors suggest that if further investigations extend these findings to clinically relevant endpoints, public policies should recommend that alcohol, when taken, should be preferably consumed with meals.

Source: Timing and type of alcohol consumption and the metabolic syndrome - ELSA-Brasil Vieira BA; Luft VC; Schmidt MI; Chambless LE; Chor D; Barreto SM; Duncan BB PLoS One Vol 11, No 9, 2016, Art No e0163044, 17pp.

Short- and medium-term effects of light to moderate alcohol intake on glycaemic control in diabetes mellitus

A study assessed the effects of alcohol consumption on glycaemic control in people with diabetes mellitus and whether drinking alcohol increased their risk of hypoglycaemia.

Medline, EMBASE and the Cochrane library databases were searched in 2015 to identify randomised trials that compared alcohol consumption with no alcohol use, reporting glycaemic control in people with diabetes. Data on blood glucose, HbA1c and numbers of hypoglycaemic episodes were pooled using random effects meta-analysis.

Pooled data from nine short-term studies showed no difference in blood glucose concentrations between those who drank alcohol in doses of 16-80 g (median 20g, 2.5 units) compared with those who did not drink alcohol at 0.5, 2, 4 and 24 h after alcohol consumption. Pooled data from five medium-term studies showed that there was no difference in blood glucose or HbA1c concentrations at the end of the study between those who drank 11-18 g alcohol/

day (median 13g/day, 1.5 units/day) for 4-104 weeks and those who did not. The researchers found no evidence of a difference in number of hypoglycaemic episodes or in withdrawal rates between randomised groups.

The researchers conclude that studies to date have not provided evidence that drinking light to moderate amounts of alcohol, with or without a meal, affects any measure of glycaemic control in people with Type 2 diabetes. These results suggest that current advice that people with diabetes do not need to refrain from drinking moderate quantities of alcohol does not need to be changed.

Source: Short- and medium-term effects of light to moderate alcohol intake on glycaemic control in diabetes mellitus: a systematic review and meta-analysis of randomised trials. Hirst JA; Aronson JK; Feakins BG; Ma C; Farmer AJ; Stevens RJ Diabetic Medicine, published early online 2 September 2016.

Red wine prevents the acute negative vascular effects of smoking

Moderate consumption of red wine is associated with fewer cardiovascular events. A study investigated whether red wine consumption counteracts the adverse vascular effects of cigarette smoking.

Two groups of participants smoked three cigarettes, the first group didn't consume wine, the second group smoked after drinking a titrated volume of red wine. Clinical chemistry, blood counts, plasma cytokine ELISAs, immuno-magnetic separation of CD14+ monocytes for gene expression analysis, fluorescence-activated cell sorting for microparticles, isolation of circulating mononuclear cells to measure telomerase activity were performed and urine cotinine levels were quantified.

Compared to baseline, leukocytosis ($p=0.019$), neutrophilia ($p<0.001$), lymphopenia ($p<0.001$) and eosinopenia ($p=0.008$) were observed after only smoking. Endothelial as well as platelet-, monocyte- and leukocyte-derived microparticles ($p<0.001$ each) were elevated. In monocytes, mRNA expression of

interleukin-6 (2.6 ± 0.57 -fold), tumor necrosis factor alpha (2.2 ± 0.62 -fold), and interleukin-1b (2.3 ± 0.44 -fold) were up-regulated as was interleukin-6 (1.2 ± 0.12 -fold) protein concentration in plasma. Smoking acutely inhibited mononuclear cell telomerase activity. Markers of endothelial damage, inflammation and cellular ageing were completely attenuated by red wine consumption.

Cigarette smoke results in acute endothelial damage, vascular as well as systemic inflammation and indicators of cellular ageing processes in otherwise healthy non-smokers. Pre-treatment with red wine was preventive. The findings underscore the magnitude of acute damage exerted by cigarette smoking in "occasional lifestyle smokers" and demonstrate the potential of red wine as a protective strategy to avert markers of vascular injury.

Source: Red wine prevents the acute negative vascular effects of smoking. Schwarz V, Bachelier K, Schirmer SH, Werner C, Laufs U, Böhm M *Am J Med.* 2016 Sep 12. pii: S0002-9343(16)30912-3.

Alcohol consumption and mortality after breast cancer diagnosis

A study published in the journal *Breast Disease* investigated the association of prediagnostic alcohol consumption with long-term mortality from breast cancer and other causes in a cohort of women with breast cancer.

The research used data from a Michigan-based cohort of 939 women aged 40-84 years, who provided complete information about the type, amount and intensity of prediagnostic alcohol consumption. Associations of alcohol consumption, based on weekly volume of alcohol consumption during the year prior to breast cancer diagnosis, with mortality were evaluated in Cox proportional hazards models, with adjustment for sociodemographic factors, body mass index, smoking, comorbidity, tumor characteristics, and treatment.

During a median follow-up of 11 years, 724 deaths occurred overall, with 303 from breast cancer. 55% of the women were categorised as drinkers with volume of alcohol consumption ranging from 0.75 to 36.00 drinks/week. In multivariable models, a decreased risk of other-cause mortality was associated with low alcohol drinking (0.75-3.75 drinks/week; HR = 0.61, 95% CI = 0.47-0.78), moderate volume alcohol

drinking (4.00-9.75 drinks/week; HR = 0.57, 95% CI = 0.39-0.85) and low frequency (0.75-3.75 drinks/week) beer and wine intake (HR = 0.69, 95% CI = 0.50-0.96 and HR = 0.68, 95% CI = 0.52-0.88 respectively). Although the risk of breast cancer-specific mortality was not statistically significantly associated with moderate (4.00-9.75 drinks/week) and high volume (10.00-36.00 drinks/week) alcohol drinking in the overall cohort (HR = 1.43, 95% CI = 0.97-2.12 and HR = 1.53, 95% CI = 0.87-2.70 respectively), there was a positive association of alcohol consumption with breast cancer-specific mortality among current smokers (HR = 1.92, 95% CI = 1.03-3.57; P interaction = 0.04).

In this study, regular consumption of 0.75-36.00 alcoholic drinks per week during the year prior to breast cancer diagnosis was associated with a reduction in other-cause mortality and with an increase in breast cancer-specific mortality among current smokers, after taking into account clinical and sociodemographic factors.

Source: Alcohol consumption and mortality after breast cancer diagnosis: the Health and Functioning in Women study. Din N; Allen IE; Satariano WA; Demb J; Braithwaite D. *Breast Disease* Vol 36, No 2-3, 2016, pp77-89.

Does physical activity moderate the association between alcohol drinking and all-cause, cancer and cardiovascular diseases mortality

A study led by Karine Perreault, of the School of Public Health of the Université de Montréal has found that drinkers who exercise for at least 150 minutes a week reduce their chances of dying due to any alcohol-related illnesses.

The study published in the British Journal of Sports Medicine analysed data from eight nationally representative health surveys carried out in the United Kingdom from 1994 to 2006: Health Survey for England (1994, 1998, 1999, 2003, 2004 and 2006) and Scottish Health Survey (1998 and 2003). 36,370 men and women aged 40 years and over were included with a corresponding 5,735 deaths and a mean of 353,049 person-years of follow-up. Drinking levels were defined as: Never drinkers, Ex-drinkers, Moderate drinkers = up to 17 standard drinks (10g) per week for men, up to 11 for women, Hazardous drinkers = between 17-39 standard drinks per week for men and between 11-29 for women and Harmful drinkers = over 39 standard drinks per week for men, and over 28 standard drinks per week for women. Almost a quarter of respondents said they did no physical activity, and about 40% did a moderate amount of exercise. Less than a quarter met the higher, vigorous target.

The impact of alcohol consumption on risk of dying from cancer (physically active and inactive

participants combined) for moderate drinkers was an increase of 38%, for hazardous drinkers was 40% and for harmful drinkers were 74%.

The research found a direct association between alcohol consumption and cancer mortality risk starting from drinking within guidelines (HR (95% CI) hazardous drinking: 1.40 (1.11 to 1.78)). Compared with never having been a drinker, drinking an average of 2.4 standard drinks per day for men and 1.6 drinks per day for women) was associated with a 36% greater risk of death from cancer as well as a 13% greater risk of death from any cause. But this risk was substantially lessened or offset among those who were physically active at the basic recommended level (equivalent to at least 150 minutes per week of moderate intensity activity such as brisk walking) or at the upper recommended level (equivalent to at least 300 minutes of moderate intensity activity per week). In the physically active groups, only harmful levels of drinking were associated with increased risk of cancer death and death from any cause. However, the study didn't assess drinking patterns such as binge drinking or dietary factors that could influence the findings further.

Source: Exercise can offset the risks associated with alcohol intake. K Perreault, A Bauman, N Johnson, A Britton, V Rangul, E Stamatakis, *Nursing Standard*. 31, 5, 16-16.

Fibre intake modulates the association of alcohol intake with breast cancer

Alcohol intake has been related to an increased risk of breast cancer (BC) while dietary fibre intake has been inversely associated to BC risk. A beneficial effect of fibre on ethanol carcinogenesis through their impact on estrogen levels is still controversial. A study investigated the role of dietary fibre as a modifying factor of the association of alcohol and breast cancer using data from the European Prospective Investigation into Cancer and Nutrition (EPIC).

The study included 334,850 women aged 35-70 years at baseline enrolled in the ten countries of the EPIC study and followed up for 11.0 years on average. Information on fibre and alcohol intake at baseline and average lifetime alcohol intake were calculated from country-specific dietary and lifestyle questionnaires. Hazard ratios (HR) of developing

invasive breast cancer according to different levels of alcohol and fiber intake were computed. During 3,670,439 person-years, 11,576 incident breast cancer cases were diagnosed.

For subjects with low intake of fibre (< 18.5 g/day), the risk of BC per 10g/day of alcohol intake was 1.06 (1.03-1.08) while among subjects with high intake of fibre (>24.2 g/day) the risk of BC was 1.02 (0.99-1.05) (test for interaction $p=0.011$). This modulating effect was stronger for fibre from vegetables. The study results suggest that fibre intake may modulate the positive association of alcohol intake and BC.

Source: Fiber intake modulates the association of alcohol intake with breast cancer Romieu I; Ferrari P; Chajes V; de Batlle J; Biessy C; Scoccianti C; Dossus L; et al *International Journal of Cancer*, published online 6 September 2016.

Alcohol consumption and fecundability: prospective Danish cohort study

A prospective cohort study in Denmark investigated to what extent alcohol consumption affects female fecundability.

6,120 female Danish residents, aged 21-45 years, in a stable relationship with a male partner, who were trying to conceive and not receiving fertility treatment were included in the study.

Alcohol consumption was self reported and categorised in standard servings per week (none, 1-3, 4-7, 8-13, and ≥ 14). A proportional probability regression model was used to estimate fecundability ratios (cycle specific probability of conception among exposed women divided by that among unexposed women).

69% participants achieved a pregnancy during follow-up. Median alcohol intake was 2.0 (interquartile range 0-3.5) servings per week. Compared with no alcohol consumption, the adjusted fecundability ratios for alcohol consumption of 1-3, 4-7, 8-13, and 14 or more servings per week were 0.97 (95% confidence interval

0.91 to 1.03), 1.01 (0.93 to 1.10), 1.01 (0.87 to 1.16) and 0.82 (0.60 to 1.12), respectively. Compared with no alcohol intake, the adjusted fecundability ratios for women who consumed only wine (≥ 3 servings), beer (≥ 3 servings), or spirits (≥ 2 servings) were 1.05 (0.91 to 1.21), 0.92 (0.65 to 1.29), and 0.85 (0.61 to 1.17), respectively. The authors state that the data did not distinguish between regular and binge drinking, which may be important if large amounts of alcohol are consumed during the fertile window.

Consumption of less than 14 servings of alcohol per week seemed to have no discernible effect on fertility, the authors conclude. No appreciable difference in fecundability was observed by level of consumption of beer and wine.

Source: Alcohol consumption and fecundability: prospective Danish cohort study Mikkelsen EM; Riis AH; Wise LA; Hatch EE; Rothman KJ; Cueto HT; Toft Sorensen H British Medical Journal Vol 354, Art No i4262, 2016, 7pp.

Deconstructing the Alcohol Harm Paradox

The Alcohol Harm Paradox refers to observations that lower socioeconomic status groups consume less alcohol but experience more alcohol-related problems. Socioeconomic status is however a complex concept and its observed relationship to social problems often depends on how it is measured and the demographic groups studied. This study assessed socioeconomic patterning of alcohol consumption and related harm using multiple measures of socioeconomic status and examined moderation of this patterning by gender and age.

Data were used from the Alcohol Toolkit Study between March and September 2015 on 31,878 adults (16+) living in England. Participants completed the AUDIT test modules on alcohol consumption, harm and dependence. Socioeconomic status was measured via qualifications, employment, home and car ownership, income and social-grade, plus a composite of these measures. The composite score was coded such that higher scores reflected greater social-disadvantage.

For the composite socioeconomic status measure, the researchers observed the Alcohol Harm Paradox, with a linear negative relationship between socioeconomic status and AUDIT-Consumption scores and a positive relationship between lower socioeconomic status and AUDIT-Harm and

AUDIT-Dependence scores. Individual measures of socioeconomic status displayed different, and non-linear, relationships with AUDIT modules. Social-grade and income had a u-shaped relationship with AUDIT-Consumption scores while education had an inverse u-shaped relationship. Almost all measures displayed an exponential relationship with AUDIT-Dependence and AUDIT-Harm scores.

The researchers identified moderating effects from age and gender, with AUDIT-Dependence scores increasing more steeply with lower socioeconomic status in men and both AUDIT-Harm and AUDIT-Dependence scores increasing more steeply with lower socioeconomic status in younger age groups. Different socioeconomic status measures appear to influence whether the Alcohol Harm Paradox is observed as a linear trend across socioeconomic status groups or a phenomenon associated particularly with the most disadvantaged, the authors conclude. The paradox also appears more concentrated in men and younger age groups.

Source: Deconstructing the Alcohol Harm Paradox: A Population Based Survey of Adults in England. Emma Beard, Jamie Brown, Robert West, Colin Angus, Alan Brennan, John Holmes, Eileen Kaner, Petra Meier, Susan Michie PLoS One published: September 28, 2016.

[dx.doi.org/10.1371/journal.pone.0160666](https://doi.org/10.1371/journal.pone.0160666).

Parent–child connectedness and communication in relation to alcohol, tobacco and drug use in adolescence

Previous reviews have highlighted parent–child connectedness and communication as important protective factors against adolescent substance use. However, these reviews focus on single substances such as alcohol. An integrative review of the literature was conducted to examine which elements of parent–child connectedness and substance-use specific communication are effective across adolescent alcohol, tobacco and drug use.

Forty-two English language, peer reviewed articles were reviewed. Open communication occurs within the context of high connectedness between parents and their children. The study found that conversations about health risks are associated with lower levels of substance use while more frequent conversations, those about parents' own use, permissive messages and consequences of use are associated with higher levels of use. There are disparities regarding conversations about use

of each substance: alcohol and tobacco are easier topics of conversation while drug use is rarely discussed. Parental alcohol and tobacco use can influence the credibility of their communication with their child.

Parents should be encouraged to have open, constructive, credible, two-sided conversations with their adolescents about substance use. Interventions to improve parents' communication skills around substance use, particularly drug use, should include the types of approaches and messages highlighted in this review, and, where possible, these interventions should include all family members, the authors conclude.

Source: Parent–child connectedness and communication in relation to alcohol, tobacco and drug use in adolescence: An integrative review of the literature. H Carver, L Elliott, C Kennedy & J Hanley. *Drugs: Education, Prevention and Policy*. Published online: 26 Sep 2016.

Changes in alcohol use following the transition to motherhood

Little is known about the impact of motherhood on alcohol use beyond the acute reductions observed in pregnancy. A study characterised changes in alcohol use for women who did and did not become mothers over three years.

Data was drawn from the US National Epidemiologic Survey of Alcohol and Related Conditions (NESARC). Participants were female respondents aged 18-44 years who did not have children and were not pregnant at wave 1, and who reported having at least one drink in the year prior to wave 1 (n = 2118). Women were classified as mothers (n = 325) if they reported having a child between waves 1 and 2, and non-mothers if they did not (n = 1793). At each wave, participants provided information on past-year frequency of alcohol use and heavy episodic drinking, and usual number of alcoholic beverages consumed per occasion.

At baseline, women who did and did not become mothers reported similar levels of alcohol use. Women who became mothers reported significant reductions in alcohol use indicators from wave 1 to wave 2 (i.e., 22 fewer drinking days, 15 fewer heavy drinking days, 1 less drink per occasion), whereas women who did not become mothers showed a modest increase in alcohol use frequency (i.e., 7 more drinking days). Motherhood remained significantly associated with reductions in alcohol use after adjusting for sociodemographic variables and baseline alcohol use.

The study confirms that the transition to motherhood is associated with marked reductions in alcohol consumption.

Source: *Changes in alcohol use following the transition to motherhood: findings from the National Epidemiologic Survey on Alcohol and Related Conditions*. Matusiewicz AK; Ilgen MA; Bohnert KM. *Drug and Alcohol Dependence* published online, 5 September 2016.

Beverage-specific patterns of 5 + alcoholic drink consumption by young adults in the US

A study examined binge drinking prevalence (i.e., 5 + drinks in a row in the past two weeks) among young adults aged 19/20 in the US, identifying prevalence for specific beverages. Data from the national Monitoring the Future study were collected one or two years after high school from 2004 to 2014 (n = 2004).

Logistic regression was used to examine associations between beverage-specific 5 + drinking and gender, race/ethnicity, parent education, college status, and cohort year. Overall 5 + drinking in the past two weeks was reported by 31.4% of young adults. Beverage-specific 5 + drinking was most common with liquor (22.6%) and beer (22.4%), followed by wine (4.5%) and wine coolers (3.0%). Men were more likely than women to engage in 5 + drinking with beer and liquor; women were more likely than men to do so with wine and wine coolers. Beverage-

specific patterns differed by college attendance. Compared to four-year college students, two-year college/votech students were less likely to have 5 + drinks of liquor or wine, and more likely to have 5 + wine coolers; those not in college were less likely to have 5 + drinks of liquor and more likely to 5 + wine coolers.

Differences in beverage-specific 5 + drinking by gender and college enrollment suggest that intervention efforts should focus on the beverages that are most commonly consumed at high levels within specific early young adult populations, the authors conclude.

Source: *Beverage-specific patterns of 5 + alcoholic drink consumption by young adults in the U.S.* Stern SA; Terry McElrath YM; Patrick ME. *Addictive Behaviors*, published early online 23 September 2016.

How people judge their levels of drunkenness whilst intoxicated

A study, published in the journal BMC Public Health, claims to be the first to look at how people judge their own drunkenness and the health consequences of alcohol whilst out for a drink as opposed to relying on their own memories of being drunk after the event away from drinking environments.

A rank based social norms model predicts that drinkers' judgements about their drinking will be based on the rank of their breath alcohol level amongst that of others in the immediate environment, rather than their actual breath alcohol level, with lower relative rank associated with greater feelings of safety. This study tested this hypothesis and examined how people judge their levels of drunkenness and the health consequences of their drinking whilst they are intoxicated in social drinking environments.

For the study, researchers breathalysed 1,862 participants with an average age of 27 who were out in 4 pubs and bars on Friday and Saturday evenings. Gender and location were used to divide the people into eight reference groups, one group for each gender in each location – the assumption being that drinkers would compare themselves to others of the same gender in the same location. Individual breath alcohol concentration (BrAC) levels were then ranked within each reference group. Participants then had to answer a series of questions about how drunk they felt and the potential health consequences. The researchers regressed perceptions of drunkenness and the health consequences of drinking based on: (a) breath alcohol level, (b) the rank of the breath

alcohol level amongst that of others in the same environment, and (c) covariates.

Only rank of breath alcohol level predicted perceptions: How drunk they felt (b 3.78, 95 % CI 1.69 5.87), how extreme they regarded their drinking that night (b 3.7, 95 % CI 1.3 6.20), how at risk their long-term health was due to their current level of drinking (b 4.1, 95 % CI 0.2 8.0) and how likely they felt they would experience liver cirrhosis (b 4.8, 95 % CI 0.7 8.8). People were more influenced by more sober others than by more drunk others.

Whilst intoxicated and in drinking environments, people base judgements regarding their drinking on how their level of intoxication ranks relative to that of others of the same gender around them, not on their actual levels of intoxication. Thus, when in the company of others who are intoxicated, drinkers were found to be more likely to underestimate their own level of drinking, drunkenness and associated risks, the study found.

Prof Simon Moore from Cardiff University commented "This has very important implications for how we might work to reduce excessive alcohol consumption. We could either work to reduce the number of very drunk people in a drinking environment, or we could increase the number of people who are sober. Our theory predicts the latter approach would have greatest impact."

Source: A rank based social norms model of how people judge their levels of drunkenness whilst intoxicated. Simon C. Moore, Alex M. Wood, Laurence Moore, Jonathan Shepherd, Simon Murphy and Gordon D. A. Brown. BMC Public Health BMC series. Published: 13 September 2016.

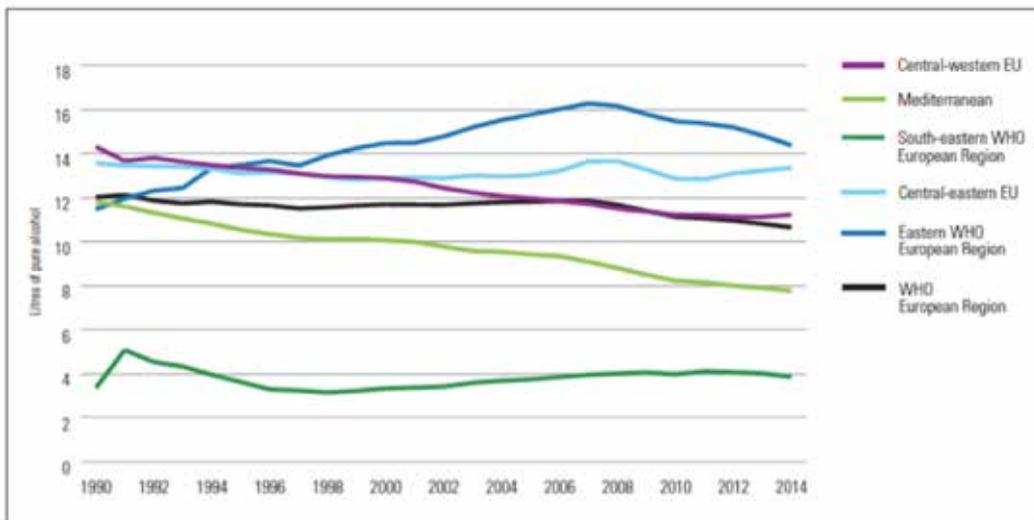
Alcohol consumption and attributable mortality in the WHO European Region, 1990–2014

The WHO Regional Office for Europe (WHO/Europe) has published a new report "Public health successes and missed opportunities". The report describes the trends in alcohol consumption and attributable mortality for the time period 1990–2014 for all countries of the Region and for the Region as a whole. The overall standardised rate for alcohol-attributable mortality in the Region rose between 1990 and 2014. Researchers report that there is considerable variability in both alcohol consumption and related harm between Member States and note that the overall trend in Europe concealed progress in some

countries, where reductions in consumption have been accompanied by lowered mortality.

Over the past 25 years, a decrease in alcohol consumption was seen in the richest countries in the central-western European Union (EU) and Mediterranean parts of the Region. Drinking levels in central-eastern EU remained stable, and drinking levels in the eastern WHO European Region, and in the south-eastern part of the WHO European Region increased. The Russian Federation and surrounding countries with similar drinking patterns (Belarus, the

Fig. A. Trends in adult per capita alcohol consumption in the WHO European Region and selected subregions, 1990–2014*



- the effect of episodic and chronic heavy drinking on cardiovascular mortality and injury; and
- the overall increased adult mortality rate and low life expectancy in some parts of the WHO European Region, in particular, the eastern WHO European Region.

www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/news/news/2016/09/public-health-successes-and-missed-opportunities-new-report-on-alcohol-attributable-deaths

Republic of Moldova and Ukraine) have decreased their consumption levels in recent years, contributing to the overall decrease in the Region.

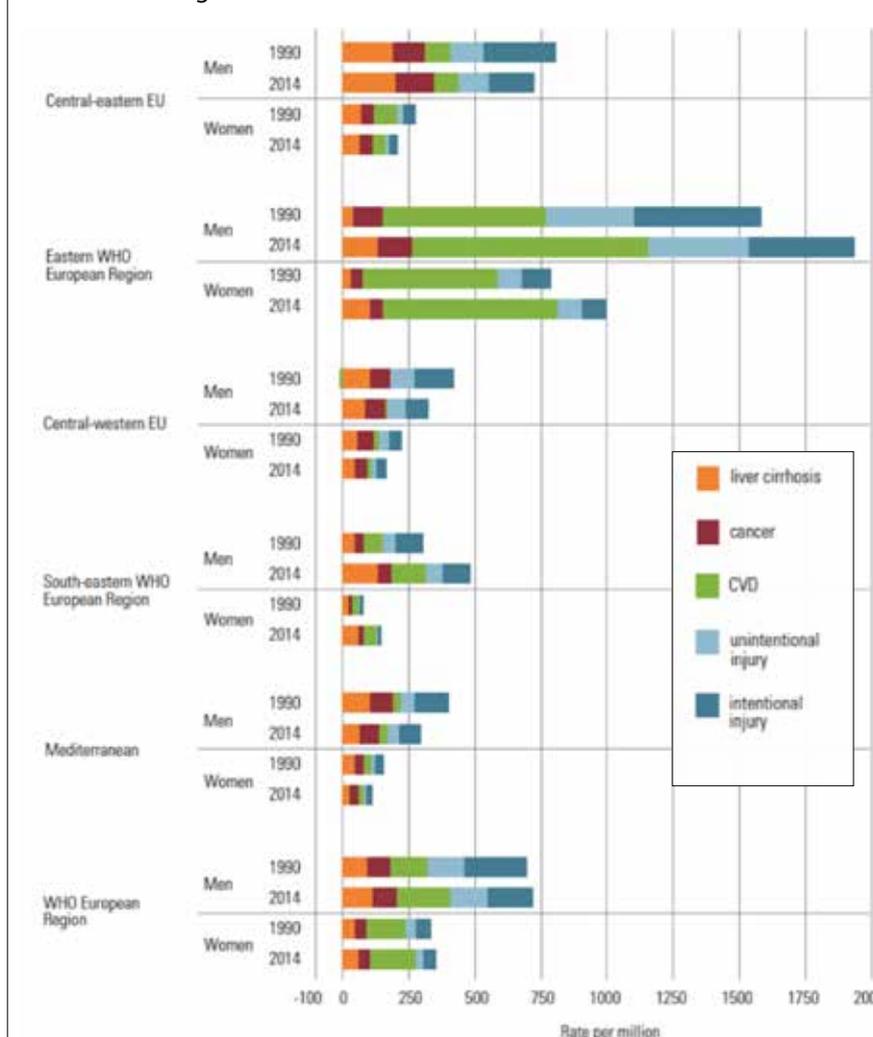
While alcohol attributable deaths in general followed the trends in average level of alcohol consumption, the overall standardised rate for alcohol-attributable mortality increased in the WHO European Region over the time period between 1990 and 2014 (+4%), with increases in alcohol-attributable mortality in the eastern WHO European Region +22% in 2014 compared to 1990) and in the south-eastern part (+65%). Some regions within the decreased their burden of alcohol-attributable mortality, such as Mediterranean (-27%) and the central-western EU regions (-25%) and the central-eastern EU region (-15%).

The report attributes the increase in the burden of alcohol-attributable mortality in the WHO European Region, despite a small decrease in overall consumption to:

- the exponential increase in mortality risk with increasing levels of average consumption, which led to a substantial increase in alcohol-attributable mortality, especially in the regions where already high consumption levels further increased (such as in the eastern WHO European Region);

[and-missed-opportunities-new-report-on-alcohol-attributable-deaths](http://www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/news/news/2016/09/public-health-successes-and-missed-opportunities-new-report-on-alcohol-attributable-deaths)

Comparisons of age-standardise alcohol-attributable mortality for major causes of death, 1990 vs 2014, by sex in the WHO European Region and selected sub-regions



Alcohol could improve social cognition and empathy

Social cognition influences social interactions and alcohol is widely thought to facilitate social interactions. However, the acute effects of alcohol on social cognition are relatively poorly studied.

The findings of a study investigating the effects of alcoholic or non-alcoholic beer on emotion recognition, empathy, and sexual arousal were presented here at the 29th European Congress of Neuropsychopharmacology (ECNP) Congress and published online September 19 in *Psychopharmacology*.

In the study researchers randomly allocated 60 healthy social drinkers (mean age, 24 years) to consume either alcoholic beer or nonalcoholic beer. For those who drank alcoholic beer, the target blood alcohol concentration was 0.4 g/L. Half of the participants were women, and all were white.

The study had a double-blind, random-order, cross-over design. Participants completed the dynamic Face Emotion Recognition Task, the Multifaceted Empathy Test, and the Sexual Arousal Task, as well as a series of visual analogue scales (VAS) on subjective effects. Plasma levels of oxytocin, which is believed to mediate aspects of social cognition and is involved in bonding, were also measured.

The results showed that alcohol was associated with significant increases in VAS ratings of "any effect" and with ratings of feeling stimulated, happy, talkative, open, and wanting to be with others. Alcohol was also associated with a significant decrease in the VAS rating of wanting to be alone.

These effects took place between 30 minutes and 90 minutes after the administration of alcoholic or nonalcoholic beer.

Maximal responses to alcoholic beer were significantly correlated with trait inhibition ratings for "any effect" and feeling open, talkative, stimulated and happy, such that individuals who were more inhibited experienced a greater subjective effect with alcohol. There was a trend for significantly greater inhibition for women than men ($P = .056$).

Consumption of alcoholic beer was also associated with significantly shorter recognition times for happy faces than consumption of nonalcoholic beer ($P < .001$), but there was no difference for nonhappy faces. Alcohol also significantly increased explicit emotional empathy ratings for positive stimuli ($P < .05$), but had no effect on all or negative stimuli.

Following consumption of nonalcoholic beer, pictures of explicit sexual content were rated as less pleasant than neutral images, an effect that was not seen following consumption of alcoholic beer. Explicit sexual pictures were more likely to be rated as pleasant after consuming alcoholic beer ($P < .001$), particularly by women ($P = .04$). However, explicit sexual pictures were considered less arousing than implicit sexual pictures following consumption of both nonalcoholic and alcoholic beer.

Interestingly, plasma oxytocin levels did not differ following alcoholic or nonalcoholic beer consumption, at 7.5 ± 3.8 pg/mL and 7.7 ± 4.2 pg/mL, respectively ($P = .7$), and did not differ between the sexes.

Commenting on the findings, Wim van den Brink, MD, PhD, professor of psychiatry and addiction at the Academic Medical Center, University of Amsterdam, the Netherlands, and past chair of the ECNP Scientific Program Committee, noted that the study confirms the "conventional wisdom that alcohol is a social lubricant. Moderate use of alcohol makes people happier, more social, and less inhibited when it comes to sexual engagement."

"The sex differences in the findings can either be explained by differences in blood alcohol concentration between males and females with the same alcohol intake, by differences in tolerance due to differences in previous levels of alcohol consumption, or by sociocultural factors," he concluded.

Source: Alcohol acutely enhances decoding of positive emotions and emotional concern for positive stimuli and facilitates the viewing of sexual images. PC Dolder, F Holze, E Liakoni et al. *Psychopharmacology* (2016). doi:10.1007/s00213-016-4431-6

29th European College of Neuropsychopharmacology (ECNP) Congress. Abstract P.6.b.008. Presented September 20, 2016.

New ESPAD results: teenage drinking down

The objective of the European School Survey Project on Alcohol and Other Drugs (ESPAD) is to collect comparable data on substance use among 15- to 16-year-old students in order to monitor trends within as well as between countries. The 2016 survey marks the 20th anniversary of ESPAD data collection (1995-2015) and is based on the information provided by 96,043 students from 35 European countries, 24 of them being Member States of the European Union.

Alcohol use among adolescents in Europe remains high, but time trends since 1995 show some positive developments. Lifetime use of alcohol decreased from 89% to 81% between 1995 and 2015 and last-30-day use from 56% to 47%, with a marked decrease seen in both after a peak in 2003.

The prevalence of 'heavy episodic drinking' has remained unchanged over the 20 years, with values in 2015 similar to those in 1995. However, after progressive increases from 1995, the prevalence values decreased clearly from 2011 to 2015 (for boys 44% to 37%; for girls 38% to 33%) in some countries. Less positively, 35% of students reported heavy episodic drinking in the past month in this survey and 78% reported having relatively easy access to alcohol.

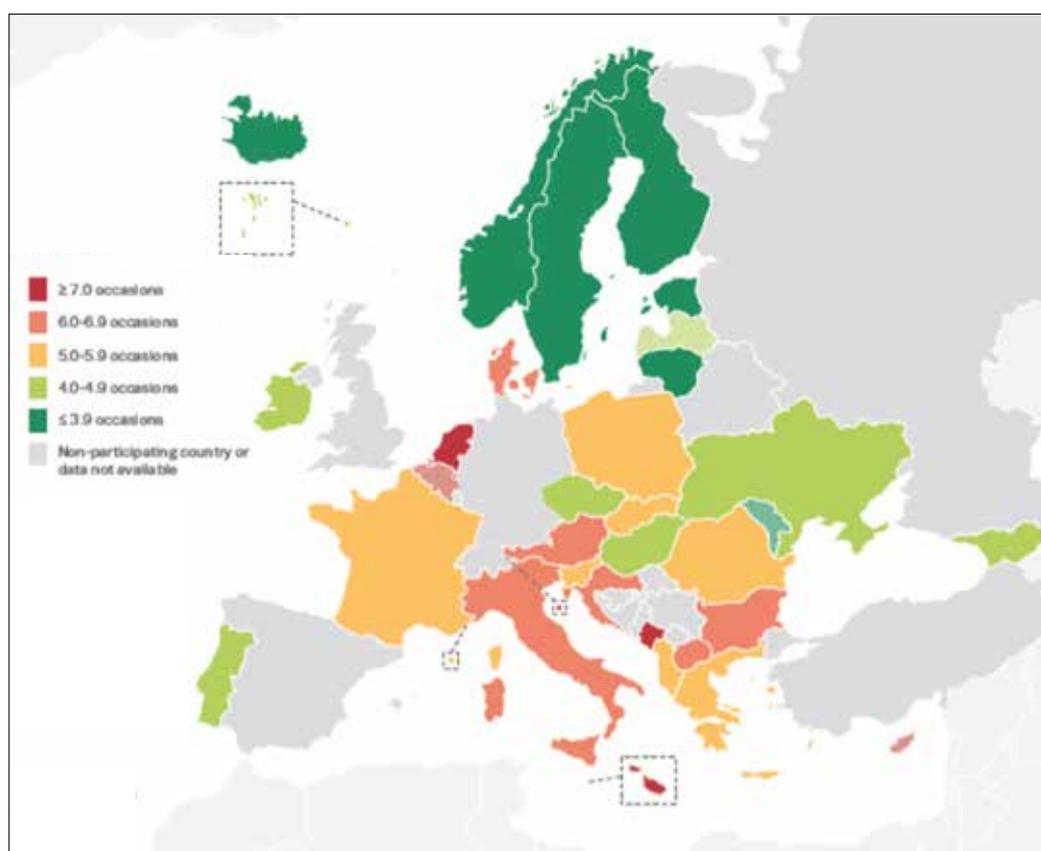
47% of students reported alcohol use at the age of 13 or younger. The highest proportions were found in Georgia (72%), the Czech Republic (68%) and Cyprus (66%). The countries with the lowest rates were Iceland (14%) and Norway (19%). Boys were more likely than girls to have used alcohol at an early age. One in twelve students had experienced intoxication at the age of 13 or younger. The proportion of students reporting intoxication at an early age varied quite substantially across countries: Georgia (22%) and Estonia (15%) were at the high end of the scale, and Iceland (2%) and Belgium (Flanders) (3%) were at the low end. Higher

rates were more likely to be found in the eastern part of Europe.

In all ESPAD countries, 50% or more of the students have drunk alcohol at least once during their lifetime, with the exception of Iceland (35%). The ESPAD average was 80% (range: 35-96%). The highest rates of lifetime alcohol prevalence (93% or more) were found in the Czech Republic, Greece and Hungary. In addition to Iceland, countries with relatively low rates (60% or less) were Albania, the former Yugoslav Republic of Macedonia and Norway. A total of 13% of the students reported having been intoxicated during the last 30 days. Denmark scored highest, with almost one third of the students (32%). Countries with levels of 10% or less were Albania, Estonia, the Faroes, the former Yugoslav Republic of Macedonia, Georgia, Greece, Iceland, Moldova, Montenegro, Norway, Portugal, Sweden and Ukraine. On average, slightly more boys (13%) than girls (12%) reported that they had been intoxicated during the last 30 days.

Students who reported alcohol use in the last 30 days drank alcohol on an average of 5.4 occasions. Students from Cyprus and Liechtenstein consumed alcohol on 8.2 and 9.1 occasions, respectively, and

Figure 2a Frequency of alcohol intake in the last 30 days (mean number of occasions among users)



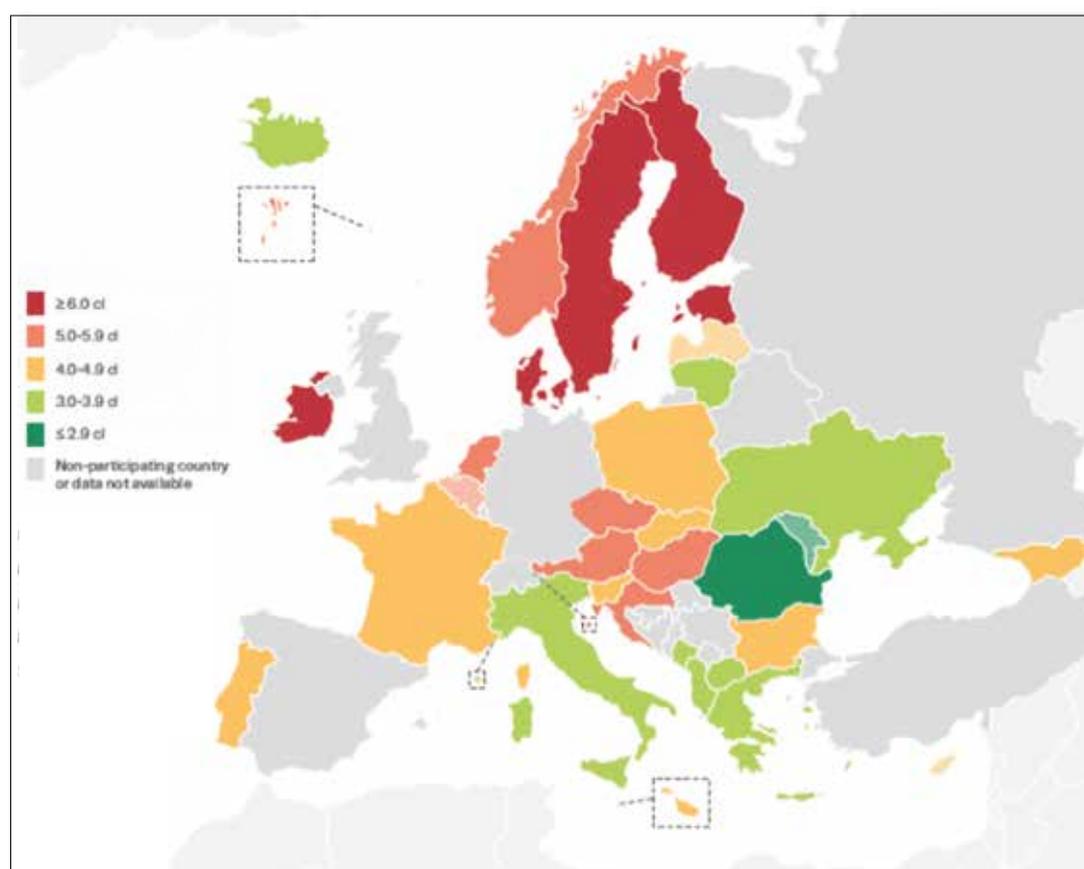
students from Estonia, Finland, Iceland, Lithuania, Moldova, Norway and Sweden drank alcohol on four or fewer occasions on average. In most countries, boys who drank did so more frequently than girls, with a difference of up to three occasions or more in the last 30 days in Bulgaria and the former Yugoslav Republic of Macedonia. Every third student (35%) reported heavy episodic drinking in the past month. This drinking pattern was found more often in Austria, Cyprus and Denmark, where it was reported by about every second student. The lowest figures were found in Norway (19%) and Iceland (8%). The difference between boys and girls was about 5 percentage points on average, with generally higher percentages for boys. Students drank an average of 4.7 centilitres of ethanol on the last drinking day. Drinking volume was highest in Denmark (9.3 centilitres), Estonia (6.2 centilitres), Sweden (6.1 centilitres), Finland and Ireland (6.0 centilitres each), and lowest in Moldova (2.1 centilitres) and Romania (2.8 centilitres). Boys reported higher volumes than girls, with significant differences in most countries. On average, beer (35%) and spirits (34%) were the preferred alcoholic beverages. In Albania (68%), Belgium (Flanders) (58%), the former Yugoslav Republic of Macedonia (54%), Romania (52%) and Poland (52%), more than half of the students preferred beer. Spirits were preferred in Malta (60%), Portugal (53%), Slovakia (53%), France (48%) and Monaco (48%). A preference for wine was found in Ukraine (44%), Moldova (41%) and Georgia (39%), and for alcopops in Liechtenstein (36%). In Denmark, Estonia, the Faroes, Ireland, Norway and Sweden, cider accounted for approximately one quarter or more of total alcohol consumption. In these countries, cider was the second preferred alcoholic beverage next to beer or spirits.

Despite the continued high rates of alcohol use, in particular of heavy alcohol use, temporal trends over the past two decades indicate a positive development, with an overall decrease in lifetime and last-30-day use of alcohol between 1995 and 2015 from 89% to 81% and from 56% to 47%, respectively. Most interestingly, both lifetime and last-30-day prevalence decreased markedly after a peak in 2003. Unfortunately, changes in heavy episodic drinking were less pronounced and only observed among boys, with overall rates declining from 36% to 35% over the past 20 years.

Alcoholic beverages were perceived to be easily available in most countries. More than three in four students (78%) stated that alcoholic beverages would be easy to obtain if they wanted to. In the Czech Republic, Denmark and Greece, more than 90% of the students reported easy access. The lowest proportions were found in Moldova (52%), the former Yugoslav Republic of Macedonia (53%) and Romania (60%). In most countries, perceptions of availability among boys and girls were rather similar.

www.espad.org/sites/espad.org/files/ESPAD_report_2015.pdf

Figure 3a Average alcohol intake on the last drinking day in centiles of ethanol users



Key Substance Use and Mental Health Indicators in the United States

The National Survey on Drug Use and Health (NSDUH) is the primary source for statistical information on illicit drug use, alcohol use, substance use disorders (SUDs), and mental health issues for the civilian, noninstitutionalised population of the United States. Information on mental health and substance use allows the Substance Abuse and Mental Health Services Administration (SAMHSA) and other policymakers to gauge progress toward improving the health of the nation. The report 'Key Substance Use and Mental Health Indicators in the United States' contains one of the first sets of findings from the 2015 NSDUH for key substance use and mental health indicators in the United States.

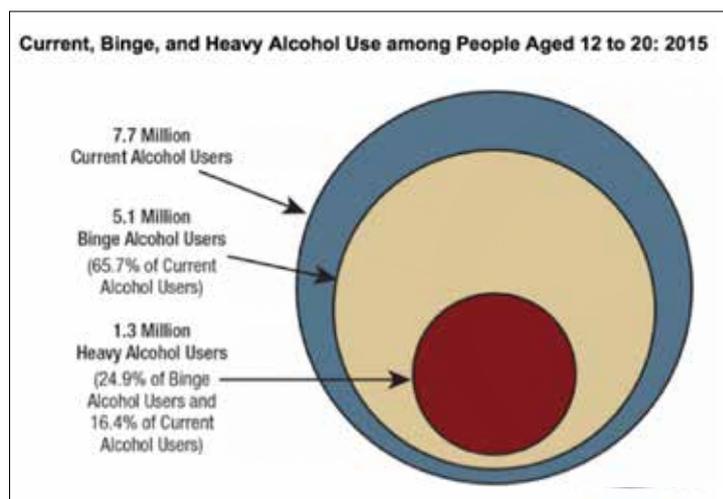
NSDUH collects information on past month alcohol use, binge alcohol use, and heavy alcohol use. For men, binge alcohol use is defined in NSDUH as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days and for women as drinking four or more drinks on the same occasion on at least 1 day in the past 30 days. Heavy alcohol use is defined as binge drinking on 5 or more days in the past 30 days.

All 50 states and the District of Columbia currently prohibit possession of alcoholic beverages by individuals younger than 21, and most prohibit underage consumption (i.e. consumption of alcoholic beverages prior to the age of 21). In 2015, there were 138.3 million Americans aged 12 or older who reported current use of alcohol, including 66.7 million who reported binge alcohol use in the past

month and 17.3 million who reported heavy alcohol use in the past month. Past month binge drinkers and heavy alcohol users represented 24.9% and 6.5% of people aged 12 or older, respectively.

Underage alcohol use (i.e., among people aged 12 to 20) and binge and heavy use among young adults aged 18 to 25 remain a concern. In 2015, about 7.7 million people aged 12 to 20 reported drinking alcohol in the past month, including 5.1 million who reported binge alcohol use and 1.3 million who reported heavy alcohol use. Among all people aged 12 to 20 in 2015, 13.4% were binge drinkers, and 3.3% were heavy drinkers. About 2 out of 5 young adults aged 18 to 25 were current binge alcohol users, and 1 out of every 10 young adults were heavy alcohol users.

www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.



South-East Asian countries pledge against non-communicable diseases

The governments of the 11 WHO South-East Asia Region Group member countries have adopted the Colombo Declaration, which calls for a strengthening of primary health care services for the prevention and treatment of noncommunicable diseases. Health ministers and senior health ministry officials from Bangladesh, Bhutan, North Korea, India, Indonesia, the Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste were present at the adoption of the declaration, which took place on the opening day of the 69th WHO Regional Committee meeting.

Health ministers pledged to increase health guidance and counseling programmes to encourage general improvements to public health, which would be funded by increased taxation on alcohol beverages, tobacco products, and unhealthy foods and beverages. WHO South-East Asia Regional Director Poonam Khetrpal Singh stated that the adoption of the declaration was a "critical moment for health systems and the people they serve across the South-East Asia Region," as noncommunicable diseases "are already taking an unacceptable toll on populations, with the burden projected to rise in coming years".

Youth Drinking in Transition

A report from DEMOS explores the drinking habits of young adults in Great Britain and presents evidence to explain some of the shifting trends as reported in the official statistics – including the decline in binge drinking and rise in teetotalism. Three major case studies look in particular at the drinking habits of students, those in work, and those not in education, employment or training (NEETs).

The report presents the findings of a major quantitative and qualitative research process, including new analysis of the Understanding Society Survey, Demos-led youth focus groups, Westminster policy-roundtables, and two new surveys of students and young workers.

Key findings of the report include:

- Despite an overall declining trend in youth alcohol consumption, harmful drinking exists at high levels in both offices and campuses.
- manual jobs (construction and manufacturing) were found to have the strongest excessive

drinking cultures, followed by services (law, finance and communications). The lowest rates of binge drinking were found in public services (police, education and health).

- Manual workers and young professionals are up to twice as likely to binge drink than public sector employees. A quarter of young workers cited 'stress relief' as a reason for their drinking.
- Young people using social media were also found to be more likely to be heavier drinkers.

Despite growing awareness of health risks and progress from Government and industry alike, enduring peer pressure and social norms mean many young people continue to see binge drinking as a 'rite of passage' at university, and a critical part of working life, the report states. The new Demos analysis also suggests that Government statistics could be underestimating the number of 16-24 year-olds drinking to excess by as much as 600,000 (10pp).

www.demos.co.uk/wp-content/uploads/2016/09/Youth-drinking-web.pdf

Figure 7 Weekly drinking habits of different occupations in the UK (all 16+)

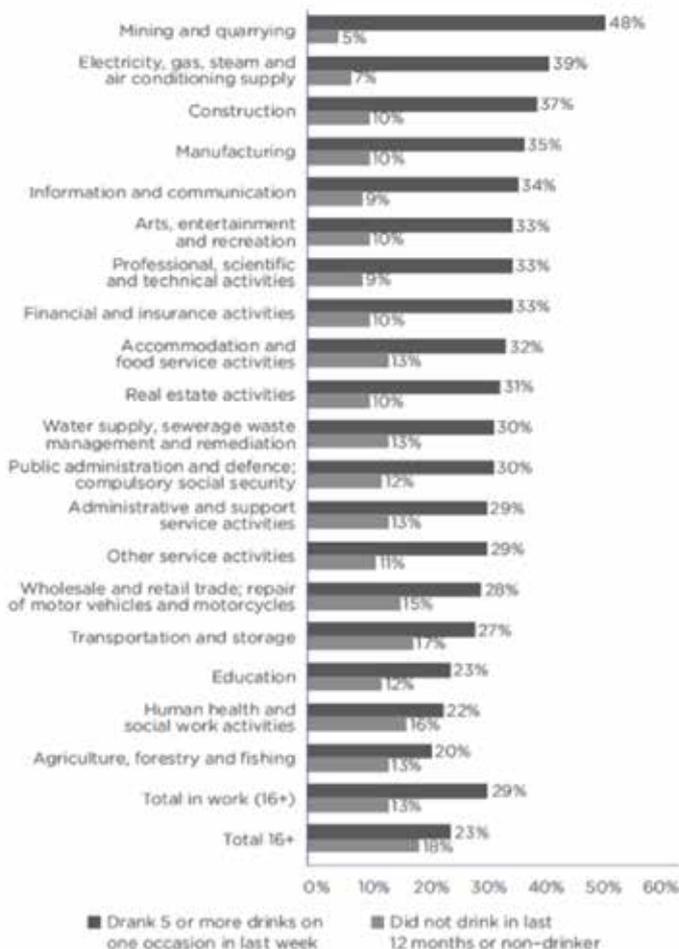
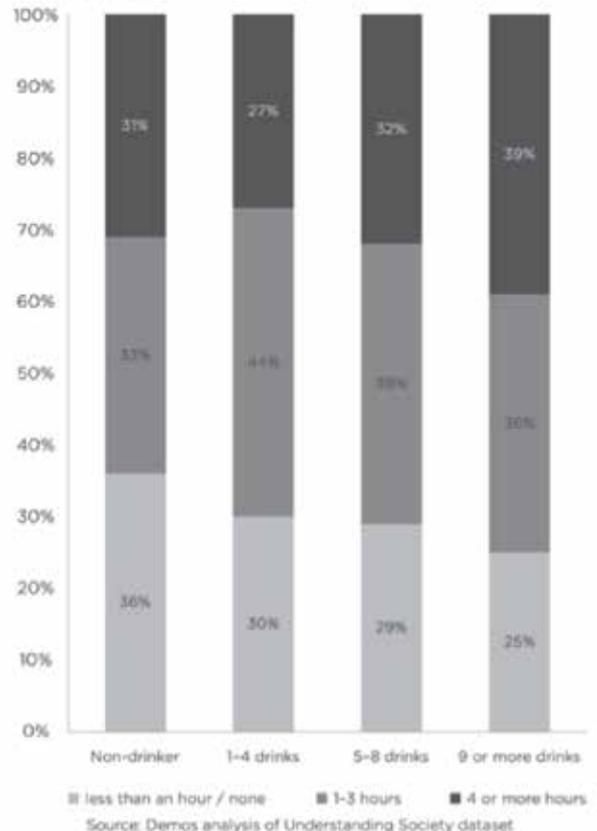


Figure 6 Hours spent on social media on a typical weekday by number of alcoholic drinks consumed on heaviest drinking day in the previous week (16-21-year-olds in the UK)



Alcohol and late night refreshment licensing England and Wales

The Home Office published the National Statistics publication 'Alcohol and late night refreshment licensing, England and Wales, year ending 31 March 2016' on September 29. The headline figures as at 31 March 2016 show that compared with 31 March 2014 there were:

- 210,000 premises licences, which represents a 3% increase (up 5,500)
- 14,700 club premises certificates, which represents a 5% decrease (down 700)
- 646,500 personal licences, which represents an 11% increase (up 63,000)
- 86,500 premises licences with late night refreshment, which represents a 0.1% decrease (down 100)
- 8,300 premises with 24-hour alcohol licences, which represents a 1% increase (up 100).

www.gov.uk/government/statistics/alcohol-and-late-night-refreshment-licensing-england-and-wales-31-march-2016

Drinkaware poll finds harassment on a night out common for female students

In a poll of 2,000 university students aged 18-24, by charity DrinkAware, 54% of women said they had experienced inappropriate sexual touching, comments or abuse. 51% said this was something that happened every time they went out to nightclubs, bars and pubs. Only 14% of those questioned said they would be 'shocked' to be sexually harassed on a night out.

www.drinkaware.co.uk/press/sexual-harassment-tops-list-of-risks-for-female-students-on-nights-out/

Alcohol minimum pricing block for Wales

The House of Commons has rejected an amendment to the "Wales Bill" which would have devolved powers to set minimum unit pricing (MUP) for alcohol beverages to the Welsh Government. A government spokesperson stated that alcohol legislation would remain under its jurisdiction as it is closely linked to policing, which it controls at a national level. The Welsh Government had proposed a MUP of GBP £0.50, which it anticipated would save £900 million over 20 years and lead to 50 fewer deaths a year.

Launch of Alcohol Information Partnership

Eight of the UK's largest alcohol producers, including Diageo, Brown-Forman and Pernod Ricard, have launched a new independent non-profit organisation to promote their work in addressing alcohol misuse.

The role of the Alcohol Information Partnership (AIP) will be to ensure that the conversation around alcohol and alcohol abuse 'remains balanced'. The AIP will also promote the current partnership approaches between Government, industry, Local Authorities and NGOs that focus on education, enforcement and targeted initiatives.

Synthetic alcohol developed in the UK

Professor David Nutt from Imperial College, London, has developed a new type of alcohol - Alcosynth - which he claims is a healthier option to give drinkers a sociable buzz without damage to the liver or a hangover.

Previously reported formulas of alcosynth listed a derivative of benzodiazepine as its active ingredient. However, Professor Nutt claims that his formula does not contain the drug. His formula is 'a closely guarded, patented secret'. Nutt is quoted as saying that he believes alcosynth will revolutionise public health, and that by 2050, it will have completely replaced conventional alcohol.

UK Alcohol Awareness Week

The UK Alcohol Awareness Week 2016 will take place from the 14th to the 20th November, with a theme of "Knowing the Risks".

The aim of UK Alcohol Awareness Week is 'to get people thinking about alcohol – how it affects us as individuals, families, communities and society as a whole', and is often used by organisations or services to reach out to service users, the public or launch new findings. Social media has also played an increasing role, with #AAW2016 as the Twitter 'hashtag'.

Findings from the 2015 British Social Attitudes survey

A paper published by NatCen presents new findings on attitudes to alcohol in Great Britain. The research gathered opinions on the introduction of a minimum price, alcohol advertising and sponsorship, drink-driving laws and also assessed public knowledge of the UK government low risk drinking guidelines. Relatively strong public support exists for tighter government regulation of alcohol in some areas including the introduction of a minimum price and a strengthening drink-driving laws, the research found.

52% of the public support the principle of MUP, while 25% are against the idea. Men are more likely than women to oppose or strongly oppose the principle. (29% and 13% for men versus 22% and 7% for women). Those who drink the most are also less likely to support MUP; 32% of these 'increasing risk drinkers' were opposed the idea, compared to 25% of 'lower-risk drinkers'. Income and age are not significantly linked to support for MUP.

Women (82%) are more likely than men (72%) to think that the drink-driving limit should be reduced. 'Increasing-risk drinkers' are slightly less likely (71%) to think that the drink-drive limit should be reduced than 'lower-risk drinkers' (76%) and non drinkers (85%). There is little variation among different age groups, though the youngest are slightly less likely to be in favour of a reduction in the limit. (77% of 18-25 year olds, compared with 78% of over 65s). Against expectations, there was no significant difference in support for a reduced drink drive limit between those who live in rural areas and those who live in towns and cities.

bsa.natcen.ac.uk/latest-report/british-social-attitudes-33/alcohol.aspx



BBPA relaunches campaign to help licensees and customers understand laws around serving drunks

The British Beer & Pub Association (BBPA) has relaunched a poster campaign to help raise awareness and understanding of the law around serving intoxicated customers.

Partnering with Drinkaware and National Pubwatch, the poster campaign is accompanied by a suite of infographics, designed to be shared across social media. The relaunch follows new YouGov survey data commissioned by the BBPA that shows 27% of people believe the statement 'It is against the law in the UK to knowingly sell alcohol to someone who is drunk' to be false, whilst 40% of people don't know that it is against the law to buy alcohol for someone who is drunk.

The reissued posters clearly state it is illegal to serve alcohol to a drunk person, or to buy alcohol on behalf of someone who is drunk, as per licensing law. The BBPA is working with National Pubwatch to produce a film around the issues raised in the posters, to be released later in the Autumn.

Brigid Simmonds, Chief Executive, BBPA, commented:

"These posters are designed to help licensees, who can be put in a very difficult position and risk breaking the law if pressured to serve drunk customers. We need to make sure that the public fully understands that these are offences, and our poster campaign, along with the new infographics, should help to raise awareness."

www.beerandpub.com/



Slovenia and Serbia launch a consumer information website to promote responsible drinking

Spirits producers have come together in Serbia and in Slovenia to develop national responsible drinking websites. The websites give key messages how to drink enjoyably and sociably by pacing yourself. There is also advice on when alcohol consumption is inappropriate and advice for parents on teenagers and alcohol consumption.

www.konzumirajteodgovorno.si

www.konzumirajteodgovorno.rs



Finland: Alcohol Act to be circulated for comments in coming weeks

On Thursday 29 September, Minister of Family Affairs and Social Services Juha Rehula gave a progress report on the reform of the Alcohol Act to the Ministerial working group for wellbeing and health. Amendments to the Act have been prepared during the summer and autumn in collaboration with different stakeholders.

The draft proposal with its impact assessments is in its final stages, and it will be circulated for comments for a period of eight weeks in October-November. In parallel, a notification procedure for the Alcohol Act will be initiated, in which the European Commission and other Member States will assess whether the proposed legislation is compatible with EU law. As a result of the proposed changes, small breweries could be given the right to sell the products they produce that exceed the strength of alcoholic beverages sold in grocery stores and, thus, be given an exception to Alko's monopoly.

It is thought that the legislation will come into force following parliamentary approval within 6 months.

French campaign advises zero consumption in pregnancy

A new prevention campaign in France emphasises "the need for women to commit to zero alcohol consumption during pregnancy". Public Health France (SPF) and the Inter ministerial Mission for Combating Drugs and Addictive Behaviours (MILDECA) have launched a joint two-month campaign. A leaflet answering the most common questions on the subject and posters with the warning 'You drink a little, he drinks a lot' will be disseminated from September to November by health professionals, and 'Zero alcohol during pregnancy' announcements will also be inserted in family magazines and targeted blogs about motherhood.

Only a quarter of French believe that any alcohol consumption during pregnancy poses a risk to the newborn, according to a survey published a year ago by the National Institute of Prevention and Education for Health (INPE).

inpes.santepubliquefrance.fr/CFESBases/catalogue/detaildoc.asp?numfiche=1743



Report on parental attitudes in Denmark

Health and safety NGOs the Tryg Foundation and the Cancer Society have published a report on parental attitudes to underage drinking as part of a joint underage drinking prevention campaign. Approximately 89% of respondents with children between 13 and 16 years old said that they are responsible for how much alcohol their children consume, while 90% said that they have an influence on their children's consumption habits, and 74% said they intended to stop or reduce their child's consumption. A spokesperson for the "Full of Life" campaign said that the organisations "are pleased to see that parents take their influence on young people's drinking habits seriously, because they can talk about it and make agreements on how much they can drink."

Switzerland to drop blood tests for some drink drive convictions

In Switzerland, The Federal Roads Office has announced the introduction of new evidential breath testing devices, which will remove the legal requirement for a blood test in drink driving prosecutions. The devices are able to measure a driver's breath alcohol concentration (BrAC) level with sufficient accuracy for their readings to be regarded as reliable evidence by the courts. Drink driving suspects will be subject to two separate tests by traffic officers. The devices are to be rolled out to the country's 26 Cantonal Police forces.

Europe's brewers renew their pledge with #BeerWisdom

As part of the second Global Beer Responsibility Day, The Brewers of Europe launched a website www.beerwisdom.eu that showcases results from the 2016 GfK Consumer Insights Study and reports on the European Beer Pledge.

The Consumer Insights Study found that 86% of consumers wanted nutritional values and a list of ingredients to be provided on alcoholic drinks, as is the case for other food and drink products.

The European Beer Pledge is a voluntary initiative by brewers, partnering with governments and civil society across the EU region to use events, media campaigns, server training and digital tools in initiatives to promote responsible consumption and to provide consumers with the facts they need to make more informed drinking choices.

www.beerwisdom.eu/



Global Beer Responsibility Day

On September 16, brewers, governments, NGOs and retailers in 76 countries around the world participated in the second annual Global Beer Responsibility Day.

Global Beer Responsibility Day 2016, initiated by Anheuser-Busch InBev, Carlsberg and Heineken, together with local brewers and beer associations, aimed to engage tens of thousands of brewer employees, more than a hundred governmental and non-governmental organisations (NGOs) and half a million retail accounts to reduce the harmful use of alcohol by promoting the responsible consumption of beer.

Brewers, retailers and their partners aimed to directly engage more than 700,000 consumers and reach more than 200,000,000 consumers with responsible drinking messages and activities to combat drink driving and underage consumption, bartender and server trainings and consumer education.

In Mexico, Anheuser-Busch InBev and Heineken, along with other local brewers through the Mexican Beer Chamber, partnered with municipal and state authorities from 32 federal entities to communicate a single responsible consumption message to retailers and consumers across Mexico. In Russia, Carlsberg and more than 2,000 employees from the members of the Russian Beer Union promoted responsible sales practices to retailers across the country.

"Global Beer Responsibility Day embodies the notion that we are stronger together," said Simon Spillane, Chairman of the Worldwide Brewing Alliance. *"United through local brewers associations across the world, brewers large and small are working together with NGOs and government partners to support and roll out innovative, effective campaigns that both promote responsible beer consumption and support the fight against alcohol misuse."*

gsri.worldwidebrewingalliance.org/php/home.php

Poland: No matter the occasion – drink responsibly!

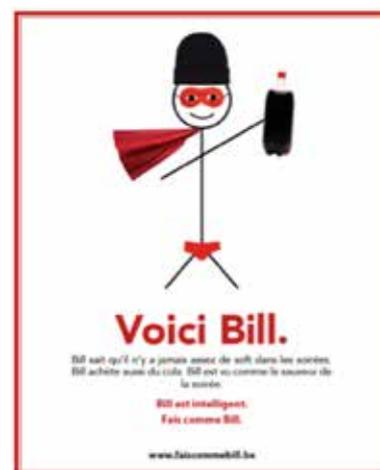
The Polish Spirit Producers association have been running a broad campaign 'Alcohol. Always responsibly' since June 2016. The campaign was developed on the basis of social research which showed that drinking alcohol in Poland is strictly connected with occasions and that Poles do not always know how much pure alcohol they drink. The lack of knowledge about alcohol content and equivalence was one of the key findings. Therefore, the key visual refers to most popular occasions (meeting with friends, house parties, football matches) and alcohol measurements (10g of ethanol). Billboards with the key message "No matter the occasion – drink responsibly" were shown in cities across Poland in August and reached approximately 840,000 people in Warsaw and 420,000 outside the capital city.

Key stakeholders have joined the campaign to support the message including the National Chamber of Commerce, the Polish association of Trade and Distribution, the Polish Chamber of Trade, the Warsaw Medical University and the national daily, Polska Times.

Bill campaign in Belgium targets young high risk drinkers

In Belgium, the Bill campaign focuses on minors and young adults with risky drinking behaviours. The campaign is aimed and reaching target groups that are cool, but are more inclined to listen to their friends and relatives than be influenced by authority. The campaign is built around a character named Bill who speaks to teenagers and young adults using their language. He does not say what to do or give orders; rather he advises.

According to the campaign literature, "Bill is a cool guy; he is unconventional and does not follow the 'effets de modes'. Bill has a hipster side, and is a trendy guy who developed his own style which his friends are ready to take as example. Bill is frank and funny and when he has something to say, he does not hesitate."



degusteravecsagesse.be/campagnes/fais-comme-bill/

Industry expresses concern over upcoming report on substance use, addiction and health in the US

The US Surgeon General is due to release a report this autumn on substance use, addiction and health. It will be the first such report since US surgeons began issuing them in 1964. The report will cover topics including prescription drug use, as well as the use of alcohol and other substances.

Figures from the US drinks industry have signed a letter to the US Surgeon General Vice Admiral Murthy about the upcoming report. In the letter, the signatories who include Robert Koch, president of California's Wine Institute, and Kraig Naasz, President/CEO of the Distilled Spirits Council write "We appreciate your care in ensuring that you base any conclusions and recommendations on widely-accepted evidence endorsed by the scientific community with expertise in prevention and treatment. You have great resources in NIAAA

and SAMHSA, which lead this country's research efforts on evidence-based ways to prevent and treat alcohol abuse. We hope you will look to those agencies for meaningful guidance and reject calls for the inclusion of unproven population-based policy recommendations aimed at consumers in general rather than abusive drinkers. Recommendations that penalise responsible consumers of alcohol have no place in a report of this nature".

The letter asks the Surgeon General "to consider offering the public an opportunity to comment on the report prior to its final release. This will help ensure that the report provides targeted guidance to the American people that will be both helpful in terms of encouraging treatment and recovery and well-respected in terms of its scientific underpinnings".

Michigan campaign warns against buying alcohol for minors

The Government of Michigan has launched an underage drinking prevention campaign to raise awareness of the consequences of purchasing alcohol beverages for underage youth. Secretary of State of Michigan Ruth Johnson launched the '21 to Buy, Not Supply' campaign, stating that there is "too much risk" for 21-year-old students who are asked to buy alcohol on behalf of friends who are younger than the legal purchase age.

Providing alcohol to underage youth can result in a custodial sentences and fines of USD \$5,000 or more. Student offenders can also face forfeited scholarships and expulsion. The campaign will last for one year, and campaign materials will appear in Secretary of State offices, grocery stores, and other public places.

www.21tobuynotsupply.com/



Heineken's Formula 1 campaigns

In September, Heineken launched two new campaigns to coincide with the Formula 1 Grand Prix in Italy, the brand's first as official F1 Event Title Partner. The 'When You Drive, Never Drink' and 'More than a Race' campaigns will be rolled out across multiple markets on TV and digital platforms this year and throughout 2017.

'When You Drive, Never Drink' continues Heineken's commitment to encouraging responsible drinking. A TV commercial, featuring Sir Jackie Stewart communicates a powerful anti-drink driving message. www.youtube.com/watch?v=tV6gygNPetU

The second campaign 'More than a race' features David Courthald and centres on the insight that F1 is not just a two hour race. An F1 race weekend is a 72 hour spectacle of glamour and excitement, taking place in some of the world's greatest cities.



DrinkSense campaign, Alberta

Alberta Gaming and Liquor Commission (AGLC) has started a long-term, multi-faceted campaign, called DrinkSense, to educate citizens of all ages on the dangers related to alcohol. The campaign launched in September with a DrinkSense website, digital advertising through social media, and promotional materials at more than 130 Best Bar None venues across Alberta.

Bill Robinson, president and CEO of the AGLC said "It's really an opportunity to start the conversation with a variety of groups and a variety of topics around the responsible use of alcohol... We've got some really hard-hitting pieces, TV ads, social media initiatives, really trying to get the point across that responsible drinking is everyone's responsibility."

The campaign amalgamates a number of alcohol safety awareness programmes that the AGLC has run in the past and the use of digital platforms is intended to reach millennial audiences.

The DrinkSense website will have a tool to enable users to profile their alcohol use and determine whether they need to rethink their drinking habits.

DrinkSenseAB.ca



AIM – Alcohol in Moderation was founded in 1991 as an independent not for profit organisation whose role is to communicate “The Responsible Drinking Message” and to summarise and log relevant research, legislation, policy and campaigns regarding alcohol, health, social and policy issues.

AIM Mission Statement

- To work internationally to disseminate accurate social, scientific and medical research concerning responsible and moderate drinking
- To strive to ensure that alcohol is consumed responsibly and in moderation
- To encourage informed and balanced debate on alcohol, health and social issues
- To communicate and publicise relevant medical and scientific research in a clear and concise format, contributed to by AIM’s Council of 20 Professors and Specialists
- To publish information via www.alcoholinmoderation.com on moderate drinking and health, social and policy issues – comprehensively indexed and fully searchable without charge
- To educate consumers on responsible drinking and related health issues via www.drinkingandyou.com and publications, based on national government guidelines enabling consumers to make informed choices regarding drinking
- To inform and educate those working in the beverage alcohol industry regarding the responsible production, marketing, sale and promotion of alcohol
- To distribute AIM Digest Online without charge to policy makers, legislators and researchers involved in alcohol issues
- To direct enquiries towards full, peer reviewed or referenced sources of information and statistics where possible
- To work with organisations, charities, companies and associations to create programmes, materials and policies built around the responsible consumption of alcohol.

AIM SOCIAL, SCIENTIFIC AND MEDICAL COUNCIL

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