

Fact sheet on alcohol consumption, alcohol-attributable harm and alcohol policy responses in European Union Member States, Norway and Switzerland

Europe continues to have the highest levels of alcohol consumption in the world, resulting in the highest share of all deaths attributable to alcohol consumption. These indicators and alcohol policy responses in the 28 European Union (EU) Member States, Norway and Switzerland in 2016 were analysed and compared with the situation in 2010. Results show that there were no significant changes in the levels of alcohol per capita consumption (the main determinant of harm) since 2010, and highlight that Europe still faces an enormous challenge to reduce the burden that alcohol places on its citizens. Despite the overwhelming evidence on the role of alcohol in premature mortality and disability, nearly half of the male population continues to engage in heavy episodic drinking and more than 60% of adolescents (15–19) are current drinkers.

Every day, about 800 people in Europe die from alcohol-attributable causes. Most worryingly, a relatively high proportion of alcohol harm occurs early in the life-course, with one in every four deaths among young adults (aged 20–24) being caused by alcohol. Achievements in 10 key areas of alcohol policy show wide differences between countries and signal a need for improvement. Reductions in alcohol-attributable ill health and social harm have been verified in this period, but they are limited in nature; EU Member States, Norway and Switzerland therefore need to step up implementation of evidence-based policies aiming to decrease levels of consumption and harmful drinking patterns. This is critical to improving the health and well-being of European citizens and supporting the sustainability and productivity of the EU as a whole.



TEN AREAS FOR EVIDENCE-BASED POLICY OPTIONS AND INTERVENTIONS

Ten areas for evidence-based policy options and interventions are described in the *Global strategy to reduce the harmful use of alcohol* (WHO, 2010) (Table 1). The *European action plan to reduce the harmful use of alcohol 2012–2020* (EAPA) (WHO Regional Office for Europe, 2012)

is aligned seamlessly with the WHO global strategy and includes a recommended portfolio of evidence-based interventions aimed at restricting the supply of, and reducing the demand for, alcohol, grouped into the 10 action areas. The EAPA was adopted by all 53 Member States of the European Region in September 2011 (resolution EUR/RC61/R4).

Table 1. Ten areas for evidence-based policy options and interventions

Target areas	Options for policies and interventions
1. Leadership, awareness and commitment	Expressing political commitment through adequately funded, comprehensive and intersectoral national policies that are evidence-based and tailored to local circumstances
2. Health services' response	Providing preventive services and treatment to individuals and families at risk of, or affected by, alcohol-use disorders and associated conditions
3. Community and workplace action	Harnessing the local knowledge and expertise of communities to change collective behaviour
4. Drink-driving policies and countermeasures	Introducing measures to deter people from driving under the influence of alcohol; creating a safer driving environment to minimize the likelihood and severity of alcohol-influenced road traffic accidents
5. Availability of alcohol	Preventing easy access to alcohol for vulnerable and high-risk groups; reducing the social availability of alcohol so as to change social and cultural norms that promote the harmful use of alcohol
6. Marketing of alcoholic beverages	Protecting young people by regulating both the content of alcohol marketing and the amount of exposure to that marketing
7. Pricing policies	Increasing the prices of alcoholic beverages to reduce underage drinking, to halt progression towards drinking large volumes of alcohol and/or episodes of heavy drinking, and to influence consumers' preferences
8. Reduction of the negative consequences of drinking and alcohol intoxication	Reducing the harm from alcohol intoxication by managing the drinking environment and informing consumers
9. Reduction of the public health impact of illicit alcohol and informally produced alcohol	Reducing the negative consequences of informal or illicit alcohol through good market knowledge, an appropriate legislative framework and active enforcement of measures
10. Monitoring and surveillance	Developing surveillance systems to monitor the magnitude of and trends in alcohol-attributable harms, to strengthen advocacy, to formulate policies and to assess the impact of interventions

THE DEVELOPMENT OF ALCOHOL CONSUMPTION AND DRINKING PATTERNS IN EUROPEAN UNION MEMBER STATES, NORWAY AND SWITZERLAND

Average per capita consumption of alcohol (APC) among adults (age 15+ years) in European Union (EU) countries, Norway and Switzerland (referred to as the EU+) in 2016 was 11.3 litres of pure alcohol, comprising 9.9 litres recorded alcohol and 1.4 litres unrecorded alcohol.¹ This is equivalent to an average of more than 170 grams of alcohol per week. Men consumed on average 18.3 litres of pure alcohol and women 4.7 litres, meaning that the average level of drinking was nearly four-fold higher in men. The changes in adult APC at country level between 2010 and 2016 are illustrated in Fig. 1. Substantial variations in changes in per capita consumption of pure alcohol between 2010 and 2016 were observed across the EU+, with 17 countries reporting overall decreases and 13 overall increases. In general, alcohol consumption was lower in northernmost and southernmost countries, and higher in the middle band.

On average in the EU+, adult alcohol consumption did not change significantly between 2010 and 2016, and neither did the average intake per drinker, but differences between countries are large.

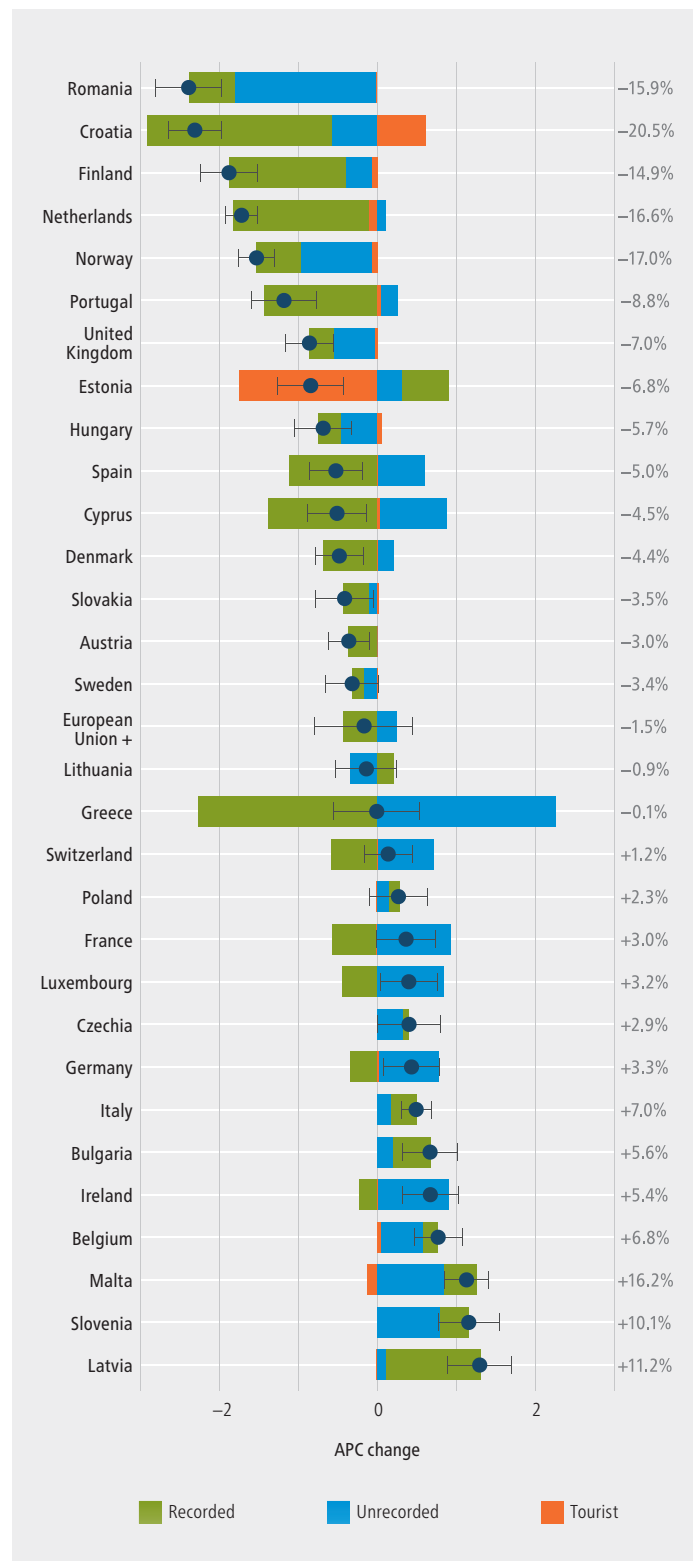
Similar patterns were found in the EU+ in heavy episodic drinking (HED), defined as 60 grams or more of alcohol on at least one occasion during the past 30 days. Among men, 47.4% engaged in HED in 2016, while prevalence among women was 14.4%. The average prevalence of HED decreased from 34.1% in 2010 to 30.4% in 2016, a statistically significant proportional drop of 10.7%. HED has become less prevalent in 29 of the 30 countries of the EU+ during the period.

HED declined by on average 10% in the EU+ between 2010 and 2016, yet nearly half (47%) of the EU+ population of adult men had at least 60 grams or more of alcohol on at least one occasion during the last 30 days, putting them at risk of short- and long-term health and social problems.

APC in 15–19-year-olds decreased from 7.2 litres to 7.0 litres of pure alcohol between 2010 and 2016, and the

percentage of current drinkers in this age group decreased from 64.9% to 61.4%. In 20–24-year-olds, APC decreased from 12.0 to 11.7 litres of pure alcohol. The percentage of current drinkers also decreased in this group, from 78.6% in 2010 to 75.9% in 2016.

Fig. 1. Adult APC between 2010 and 2016 by country and across all EU+ countries.



Note: round dots represent the change in total APC along with the confidence intervals (thin bars with whiskers to the left and right of the dot).

¹ Unrecorded alcohol is alcohol that is not accounted for in official statistics on alcohol taxation or sales as it is usually produced, distributed and sold outside the formal channels under governmental control.

BURDEN OF DEATHS AND DISABILITIES FROM ALCOHOL-ATTRIBUTABLE ILL HEALTH AND SOCIAL HARM

Compared to other major NCD risk factors such as tobacco use, a relatively high proportion of alcohol harm occurs early in the life-course (Fig. 2). Years of life lost (YLL) is a concept that gives more weight to deaths among younger people. Overall, alcohol use caused 8.3% of YLL in the EU+ in 2016, representing 7.6 million years lost prematurely because of alcohol consumption, or one in every 12th YLL. A similar concept is used to show years lived with disabilities (YLD). Two categories, injuries and alcohol-use disorders, make up 93% of all alcohol-attributable years lived with disabilities. Together, YLL and YLD add up to disability-adjusted life-years (DALYs), of which there were more than 10.3 million

years of alcohol-attributable DALYs in the EU+ in 2016 – 6.8% of all DALYs, and one in each 15th DALY, in the EU+.

In young adults, alcohol was responsible for close to one in every four deaths. The harm done by alcohol in young people results in lost productivity, but is also affecting the mental health and well-being of significant others (such as family and close friends).

Most alcohol-attributable deaths in the EU+ are not due to acute harm (such as injuries and poisonings), but stem from chronic diseases. Cancer, cardiovascular diseases (CVD) and diseases of the digestive system make up the largest part. The main cause of death due to alcohol in 2016 was cancer (29% of alcohol-attributable deaths), followed by liver cirrhosis (20%), CVD (19%) and injury (18%) (Table 2).

Fig. 2. Proportion of deaths caused by alcohol by age and sex in the EU+, 2016



Note: the coloured area represents the confidence intervals.

Table 2. Distribution of alcohol-attributable mortality (number of deaths), by cause of death and sex

Cause of death	Women		Men		Total	
	Number	%	Number	%	Number	%
Communicable disease	3 452	4.6	11 965	5.5	15 416	5.3
Noncommunicable disease	63 030^a	83.7	159 396^a	73.8	222 426^a	76.4
<i>Cancer</i>	22 493	29.9	62 986	29.2	85 479	29.4
<i>Alcohol-use disorders</i>	4 387	5.8	16 717	7.7	21 104	7.2
<i>CVD</i>	26 155	34.8	29 704	13.8	55 860	19.2
<i>Liver cirrhosis</i>	16 329	21.7	41 465	19.2	57 794	19.9
Injury	8 784	11.7	44 478	20.6	53 261	18.3
<i>Unintentional injury</i>	6 616	8.8	28 517	13.2	35 133	12.1
<i>Intentional injury</i>	2 168	2.9	15 961	7.4	18 129	6.2
<i>Harm to others – traffic</i>	1 830	2.4	3 217	1.5	5 048	1.7
All alcohol-attributable causes	75 265	100.0	215 838	100.0	291 103	100.0

Note: disease and injury categories in italics are subcategories (for instance, cancer is a subcategory of noncommunicable disease, unintentional injury is a subcategory of injury). "Harm to others – traffic" is a special subcategory that is also part of unintentional injury, both within the broader category of injury. ^aThe sum of deaths of subcategories of noncommunicable disease may exceed the number of deaths for main category due to the beneficial effects of alcohol use on diabetes leading to deaths avoided.

The largest category of alcohol-attributable deaths in the EU+ is cancer. Assessed conservatively, 6.1% of all cancer deaths in the EU+ are caused by alcohol (8% in men, 3.6% in women). In absolute numbers, this means over 85 000 alcohol-attributable cancer deaths per year. While for men cancer represents the largest category of alcohol-attributable deaths (63 000 deaths per year), the largest category of alcohol-attributable deaths for women is linked to CVD, representing about 26 000 deaths per year due to alcohol.

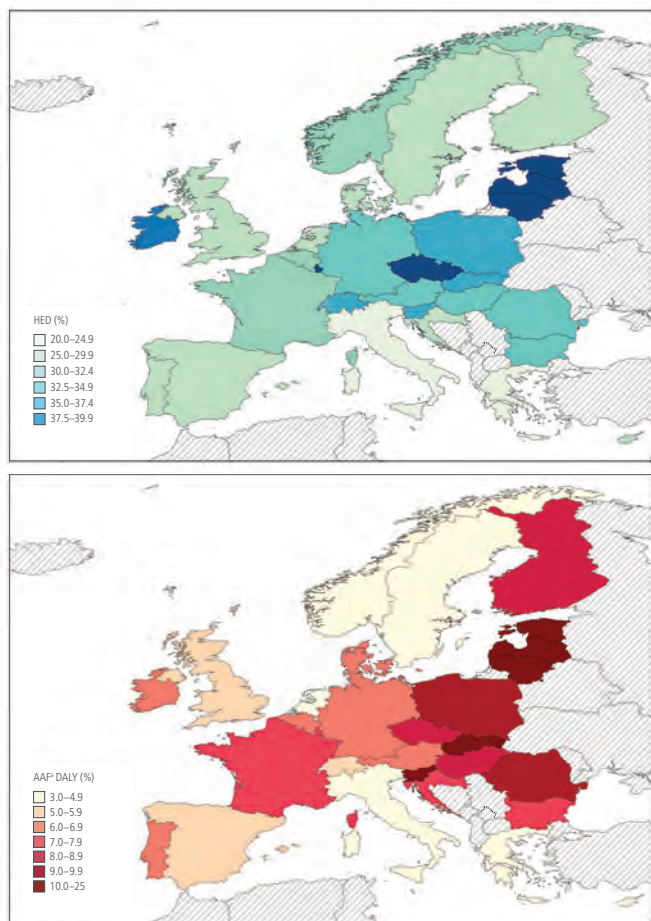
Young people are affected disproportionately by alcohol compared to older age groups. While 5.5% of all deaths in the population as a whole in 2016 were alcohol-attributable, 19.0%, or every fifth death, in the 15–19 age group was alcohol-attributable. The proportion in the 20–24 age group was 23.3% (every fourth death). Death rates declined between 2010 and 2016 by 31.2% among 15–19-year-olds and 29.1% for 20–24-year-olds.

Alcohol-attributable deaths among adolescents and young adults declined by almost one third between 2010 and 2016, but alcohol continues to be a significant cause of death for these groups.

The absolute number of alcohol-attributable deaths in the EU+ decreased by 3% between 2010 and 2016, from 300 900 to 291 100. The age-standardized alcohol-attributable death rate decreased from 35.5/100 000 to 30.5/100 000, a proportional 14.1% reduction. In 2016, an average of 800 adults per day died from an alcohol-attributable cause. There was wide variability in changes in alcohol-attributable harm by country, with no clear pattern.

Significant variations can be observed between EU+ countries in the prevalence of HED and in alcohol-attributable disease burden, expressed in DALYs (Fig. 3). This is likely to reflect the complexity in the causes behind alcohol mortality. Additional factors other than alcohol, such

Fig. 3. Prevalence of HED (upper panel) and alcohol-attributable DALYs as a proportion of overall DALYs (lower panel) in the EU+, 2016



*AAF = alcohol-attributable fraction.

as all-cause mortality, design and function of the health-care system, prevalence levels of other noncommunicable disease risk factors, social inequality and poverty, and other economic conditions, are likely to play a role in a country's alcohol-attributable mortality. The overall observed pattern was: the higher the level of alcohol consumption in litres of pure alcohol per capita, the higher the prevalence of heavy drinking and the higher the level of all-cause mortality; and the lower the wealth (in gross domestic product at purchasing power parity (GDP-PPP)) in a particular country, the higher the age-adjusted alcohol-attributable DALY rates.

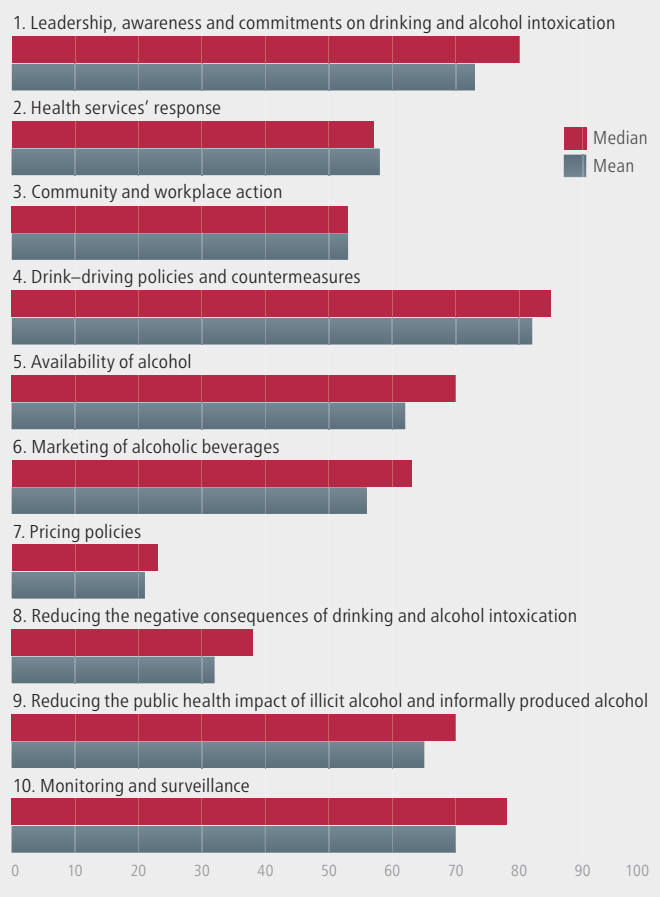
Overall in 2016, 5.5% of all deaths in the EU+ were caused by alcohol: in absolute numbers, this amounted to almost 291 000 people. Alcohol-attributable deaths have decreased since 2010, yet 23% of all injury deaths and 42% of all traffic deaths in 2016 were due to alcohol. On average in the EU+, about 800 adults die from alcohol every day.

PROGRESS TOWARDS IMPLEMENTATION OF EVIDENCE-BASED MEASURES TO REDUCE ALCOHOL HARM

The implementation of alcohol policies in EU+ countries was assessed by using the WHO EAPA composite scores, a tool developed by WHO to measure the presence and comprehensiveness of alcohol policy. The updated aggregated scores for the EU+ are presented in Fig. 4. Results should be interpreted with caution, as they stem from self-reports with no external validity checks. The tool does not account for level of enforcement, and data sets for some countries have missing data. The observed distributions per action area nevertheless provide important hints.

There was vast variability across countries in all 10 policy areas. The EU+ as a whole scored more than two thirds of the total possible policy score (based on the mean) in three areas: Leadership, awareness and commitment (area 1); Drink-driving policies and countermeasures (area 4); and

Fig. 4. Levels of alcohol policy implementation in the EU+ in 2016, assessed with the EAPA scores



Note: a score of 100 is equal to full implementation. See Table 1 for a definition of the action areas and back-cover text for references to methodology.

Monitoring and surveillance (area 10). In two areas, the EU+ as a whole scored less than one third of the total possible policy score (based on the mean): Pricing policies (area 7); and Reducing the negative consequences of drinking and alcohol intoxication (area 8) (Fig. 4).

For Availability (area 5), the range in scores was wide, with no country scoring in the top decile and three in the bottom decile. Scores for Marketing (area 6) ranged across all 10 deciles, with few countries employing a complete ban across all media. The area of Pricing policies (area 7) was the worst performer: only five countries adjusted the price of beer and spirits for inflation, and only three adjusted the price of wine.

MAIN CONCLUSIONS AND IMPLICATIONS FOR PUBLIC HEALTH

Europe still faces an enormous challenge to reduce the burden alcohol places on its citizens, and more action is needed. Despite the well-established relationship between alcohol and premature mortality and morbidity, alcohol consumption in the EU+ has not changed significantly between 2010 and 2016. Overall in 2016, 5.5% of all deaths in the EU+ were caused by alcohol, but the alcohol-attributable proportion was four times higher for adolescents and young adults. As 91.3% of all alcohol-attributable mortality in adolescents and young adults was due to injury, stricter policies that protect these groups from alcohol-attributable acute harm are needed.

Although overall reductions in alcohol-attributable ill health and social harm have been observed between 2010 and 2016, changes in alcohol-attributable harm by country varied widely, with no clear pattern. There are signs that the positive overall developments in alcohol-attributable mortality may not continue in the future. Reductions of heavy drinking patterns and drinking among young people seem to be levelling off, and there is a flattening of gains

in all-cause mortality with an associated flattening of life expectancy. In addition, socioeconomic inequalities, which are associated with alcohol harm, do not seem to be decreasing.

Every day in EU+ countries, about 800 people die from alcohol-attributable causes. This calls for more efforts to decrease alcohol consumption and HED. Any EU+ country can increase its likelihood of reducing alcohol-attributable harm and move towards achieving the United Nations Sustainable Development Goals (SDGs) by implementing a number of well-proven alcohol policy measures – the set of interventions described in the WHO EAPA – for which evidence of effectiveness with accumulated experience at country level is available.

Analysis on progress towards the implementation of such measures has shown that more investment is needed in the following action areas: the health services' response, through scaling up implementation of screening and brief interventions in primary care; community and workplace action, by addressing not only harm to the drinker, but also harm to others, through community programmes and other measures of changing collective behaviour; and reducing the negative consequences of drinking and alcohol intoxication, where discouraging heavy drinking and introducing warning or information labels would be two key elements to consider. Adequate pricing policies seem to be the most urgently needed policy measure: countries scored lowest in this action area, achieving only 17 points (median and average) out of a possible 100. Progress in policy implementation should be supported by strong monitoring systems and be guided by the public health interest, protecting from industry interference and commercial interests.

Tackling harmful use of alcohol remains a public health priority for the EU+. Achieving the commitments of the United Nations 2030 Agenda requires that more progress be made.

This fact sheet is based on the comprehensive WHO alcohol status report 2018, *Alcohol consumption, harm and policy responses in 30 European countries* (WHO, in press). The report and fact sheet have been funded by the European Commission, CHAFAE Project Grant Nr. 20145102 (WHO MOPAC) and by funds from the Government of the Russian Federation within the context of the WHO Office for the Prevention and Control of Noncommunicable Diseases. The methodology used for assessments of consumption and harms is similar to that used in the *Global status report on alcohol and health 2018* (WHO, 2018), the last survey of which was conducted in 2016 in collaboration with all six WHO regional offices and the European Commission (for European Union countries). The methodology on policy monitoring is described in detail in *Policy in action – a tool for measuring policy implementation* (WHO Regional Office for Europe, 2017). The basis for the methodology is the 10 areas for evidence-based policy options outlined in the *European plan to reduce harmful use of alcohol 2012–2020* (WHO Regional Office for Europe, 2012), for which responses were provided by Member States through survey questions in the WHO 2016 Global Survey on Alcohol and Health and from the WHO 2014 Atlas on Substance Abuse questionnaire.

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