

# Policy Brief

## Tackling Harmful Alcohol Use Economics and Public Health Policy

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Directorate for  
Employment,  
Labour and Social  
Affairs



OECD's new flagship report examines the economic and public health dimensions of harmful alcohol use, today the fifth leading cause of death and disability worldwide.

Despite a slight decline, on average, in the past 20 years, alcohol consumption in OECD countries remains well above the world average. Heavy drinking is alarmingly on the rise among young people and women in many countries. An increasing proportion of children experience alcohol and drunkenness at early ages. Girls have caught up with boys in the past ten years.

Heavy drinking is associated with a weaker probability of employment, more absence from work, as well as lower productivity and wages. The overall value of production lost to harmful alcohol use is estimated in the region of 1% of GDP in high- and middle-income countries.

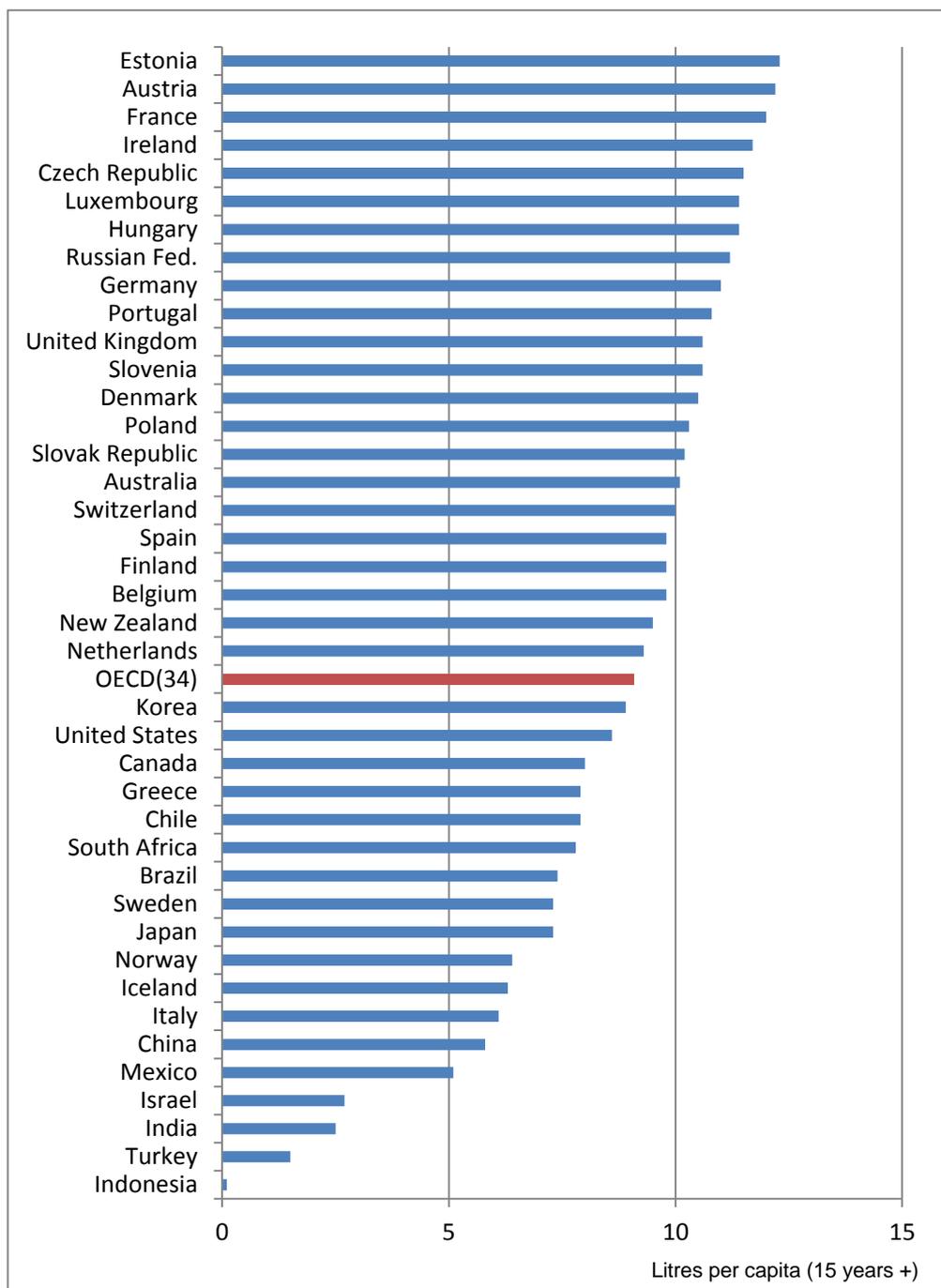
This report provides a detailed examination of trends and social disparities in alcohol consumption in OECD countries and beyond. It offers a wide-ranging assessment of the health, social and economic impacts of key policies for tackling alcohol-related harms in Canada, the Czech Republic and Germany, extracting relevant policy messages for a broader set of countries.

Harmful alcohol use is a leading cause of death and disability worldwide, especially in people of working age. Drinking can harm not just drinkers themselves, but also others who fall victim, for instance, to drunk driving, domestic violence and anti-social behaviour. The public health consequences of harmful drinking are a major concern for governments worldwide.

What is drunk, how much is drunk, by whom and where have been strongly influenced by factors such as culture, economics and social norms. Many OECD countries rank at the top of the alcohol consumption league table. Average consumption in the OECD is the equivalent of over 9 litres of pure alcohol per year (Figure 1). And this is without counting that approximately one in ten drinks in those countries is not even recorded in official statistics, because home brewed or illegally traded. All of this amounts to drinking over 100 bottles of wine, or 200 litres of beer, in a year.

Most alcohol is drunk by the heaviest-drinking 20% of the population (Figure 2). However, approximately four in five drinkers in the countries examined in the OECD report would reduce their risk of death from any causes if they cut their alcohol intake by one unit per week, that is the equivalent of a small glass of wine. There is hence wide scope for improving the health and welfare of drinkers and society as a whole, and evidence of the magnitude of the risks associated with harmful alcohol use, and of the effectiveness of many policy options to address those harms, has never been so abundant and detailed as it is today.

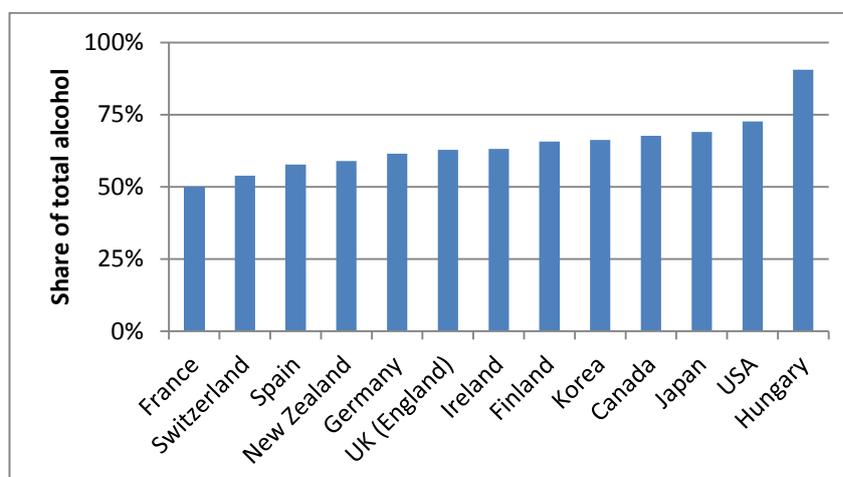
**Figure 1. Alcohol consumption among adults, 2012 (or nearest year), litres of pure alcohol**



*Note:* The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

*Source:* OECD Health Statistics 2014.

**Figure 2. Share of total alcohol consumed by the 20% of the population who drink the most**



Source: OECD estimates based on national surveys, latest available year.

### Alcohol consumption slightly declining, on average, but risky drinking on the rise

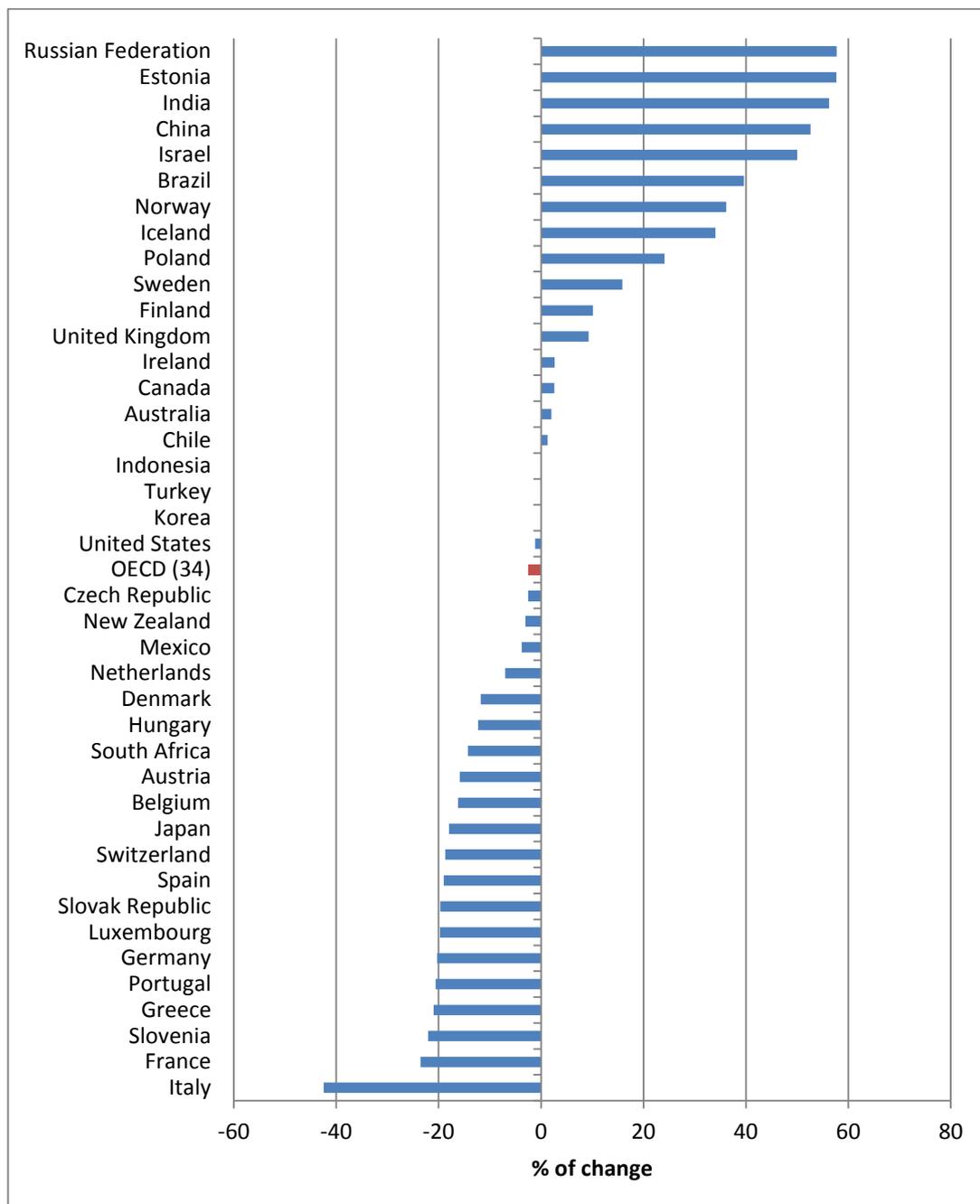
In the period covered by the OECD report (1992-2002), per-capita alcohol consumption in OECD countries has slightly declined overall, by about 2.5%, but within this broad trend, countries have experienced different trends (Figure 3). Several southern and central European countries, where consumption had traditionally been very high, have experienced dramatic falls in average alcohol consumption (e.g. Italy, France and Germany). On the other hand, consumption has increased significantly in several northern European countries (e.g. Estonia, Norway and Poland). Emerging economies such as India, China and Brazil have also seen a major relative increase in alcohol consumption, albeit starting from lower levels.

What is most alarming, however, is that many countries have experienced a significant increase in some risky drinking behaviours (such as binge drinking), particularly among young people and women. The number of children who have drunk alcohol and experienced drunkenness has increased substantially in recent years. More than two in three children have drunk alcohol by age 15 in OECD countries (Figure 4), and two in five have been drunk at least once. Girls have caught up with boys in the past ten years.

These trends are especially worrying because heavy drinking in young age not only has detrimental effects on drinkers themselves, but often affects other people who become involved, for instance, in traffic accidents and violence. This represents an important component of the burden of disease related to harmful alcohol use. Heavy drinking at a young age is associated with an increased risk of acute and chronic conditions. It is also associated with problem drinking later on in life, and people who would otherwise be successful in the labour market may see their long-term career prospects jeopardised.

People with more education and higher socioeconomic status (SES) are more likely to drink alcohol, but heavy drinking is polarised at the two ends of the social spectrum. Less educated and lower SES men, as well as more educated and higher SES women, are more likely to indulge in risky drinking. Heavy drinking affects employment, productivity and wages. Productivity losses associated with harmful alcohol use are estimated in the region of 1% of GDP in most countries.

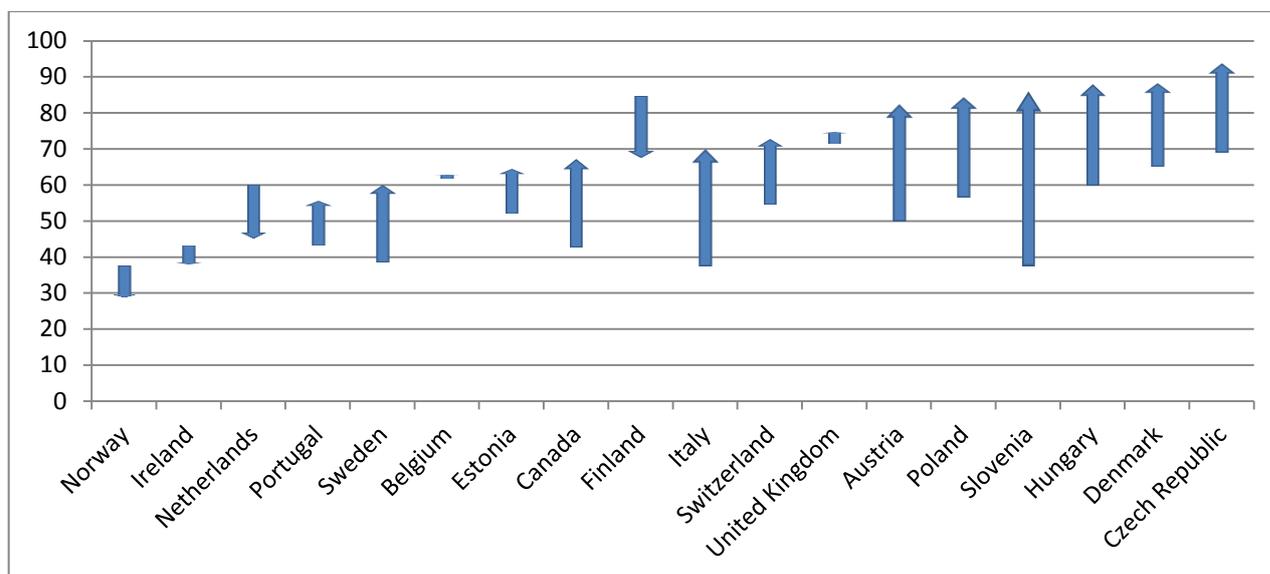
**Figure 3. Change in alcohol consumption among adults, 1992-2012 (or nearest year)**



*Note:* The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

*Source:* OECD Health Statistics 2014.

**Figure 4. Change in proportion of 15-year-olds who have drunk alcohol, 2002-2010**



Source: Health Behaviours in School-aged Children survey, 2001-02 and 2009-10.

### A strong rationale for government action

Alcohol has an impact on over 200 diseases and types of injuries. In most cases the impact is detrimental, in some cases it is beneficial. In a minority of drinkers, mostly older men who drink lightly, health benefits are larger. At the population level, detrimental health effects overwhelmingly prevail in all countries worldwide.

Alcohol can be addictive, and those who become dependent on it bear a significant portion of the burden of ill health associated with alcohol. For others, drinking, and harmful drinking as well, is the result of a personal choice, but with important social consequences.

The harms caused to people other than drinkers themselves, including the victims of traffic accidents and violence, but also children born with foetal alcohol spectrum disorders, are the most visible face of those social consequences. Health care and crime costs, and lost productivity, are further important dimensions. These provide a strong rationale for governments to take action against harmful alcohol use.

### A wide range of policy options for governments

A wide range of policies to address harmful use of alcohol are available, some targeting heavy drinkers alone, others more broadly based. Selecting an appropriate mix of measures in any given context requires policy judgements that individual governments are best placed to make, taking into account the social, cultural and epidemiological characteristics of their respective countries. The WHO Global Strategy to reduce the harmful use of alcohol, endorsed by the World Health Assembly in 2010, provides a menu of policy options based on international consensus, which OECD used as a starting point to identify a set of policies to be assessed in an economic analysis.

Based on a simulation model, OECD analyses show that several alcohol policies have the potential to reduce rates of heavy drinking, regular or episodic, and alcohol dependence, in three countries, by

5% to 10%. This would take those countries a long way towards achieving the voluntary target of reducing harmful alcohol use by 10% by 2025, a target adopted by the World Health Assembly in 2013 as part of the Global Monitoring Framework on non-communicable diseases. The OECD analysis found that governments' ability to design and implement wide-ranging prevention strategies, combining the strengths of different policy approaches, is critical to success. These may include initiatives promoted by business stakeholders, although more evidence of the impacts of such actions is needed.

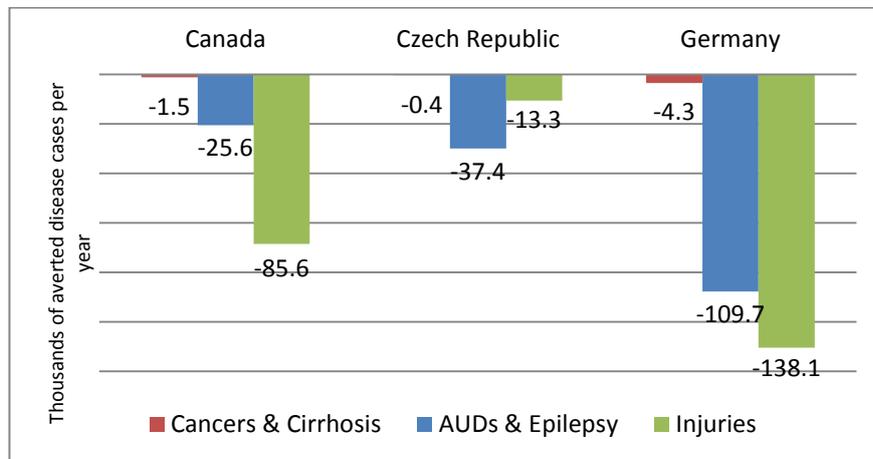
Alcohol policies should target heavy drinkers first, but there are few approaches available to do this effectively. OECD's economic analysis focusing on Canada, the Czech Republic and Germany, shows that primary care physicians can play an important role in addressing heavy drinking, while police enforcement of existing regulations against drinking-and-driving is key to cutting traffic casualties. However, broader policy approaches may be required to complement those solely aimed at heavy drinkers. Raising alcohol prices can improve population health, and doing so in the cheaper segment of the market may be more effective in tackling harmful drinking. Regulating the promotion of alcoholic beverages may provide additional benefits.

A package of fiscal and regulatory measures, one of health care interventions, and one combining regulatory and health care measures would each achieve annual gains of around 37 000 life years in good health in Canada (roughly one per thousand population); 23-29 000 in the Czech Republic (roughly 2.6 per thousand), and 119-137 000 in Germany (roughly 1.6 per thousand). This is roughly 10% of the entire burden of disease associated with harmful alcohol use. Combining medical and regulatory actions would lead to over 80,000 fewer injuries in Canada, almost 40,000 fewer cases of mental health conditions attributable to alcohol in Czech Republic, and 4,300 fewer cases of cancer in Germany, every year, just to provide a few examples (Figure 5). Implementing this package of measures costs the equivalent of between USD 5 and USD 9 in the three countries, and has the potential to generate important savings in health care expenditure (Figure 6). A similar package of measures is very cost-effective by internationally recognised standards in public health and health care, as shown in Figure 7.

### **The main policies in place in OECD countries**

OECD governments have adopted a wide range of policies to tackle harmful alcohol use. Virtually every country applies taxes to alcoholic beverages. Northern European countries, Australia and the United Kingdom have the highest alcohol taxes, while southern and central European countries have lower levels of taxation. Alcohol sales regulations and maximum levels of blood alcohol concentration (BAC) for drivers are also universally enforced, but with large variations across countries. The minimum age for purchasing alcohol often differs across products (products with lower levels of alcohol can be sold to people as young as 16). European countries tend to enforce lower limits (usually between age 16 and 18), with the exceptions of some northern European countries for certain beverages. Higher minimum ages (up to 21) are also applied in the United States, Japan, Korea and Indonesia. Conversely, other sales restrictions (e.g. in terms of time or place) are more haphazard. For instance, only about half of OECD countries restrict sales of alcohol in petrol stations. The vast majority of countries enforces a BAC level of 0.05 or lower and, in many cases, countries set lower limits for professional and young drivers. Central and northern European countries generally have the lowest BAC levels. The majority of countries regulate the advertising of alcohol products, but other forms of promotion (e.g. sponsorships and product placement) are much less regulated. Countries are making major efforts to improve health care approaches to tackling harmful drinking but, too often, only a minority of the people who would benefit from this intervention is treated (roughly 10% across the OECD area).

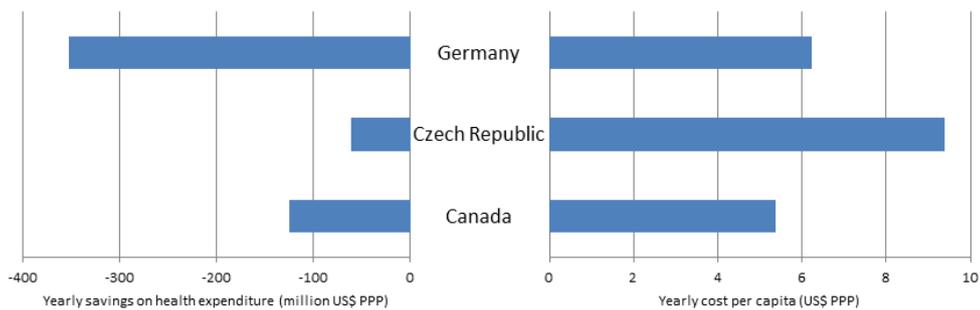
**Figure 5. Expected decrease in diseases and injuries from a package of measures\* to tackle harmful alcohol use, average per year**



\* The package includes a tax hike leading to a 10% increase in alcohol beverage prices, regulation of on-trade outlet opening hours and regulation of alcohol marketing and advertising.

Source: OECD analysis based on CDP-Alcohol model.

**Figure 6. Impact on health expenditure and implementation cost of a package of measures\* to tackle harmful alcohol use, average per year**



\* The package includes a tax hike leading to a 10% increase in alcohol beverage prices, regulation of on-trade outlet opening hours and regulation of alcohol marketing and advertising.

Source: OECD analysis based on CDP-Alcohol model

**Figure 7. Cost-effectiveness of a package of measures to tackle harmful alcohol use**



\* The package includes a tax hike leading to a 10% increase in alcohol beverage prices, regulation of on-trade outlet opening hours and regulation of alcohol marketing and advertising

Note: A DALY is a disability-adjusted life year. The 50,000 USD/DALY threshold is an internationally recognised standard to identify cost-effective health care programmes. The main policies in place in OECD Countries

Source: OECD analysis based on CDP-Alcohol model.

## Key findings

- Average (recorded) annual consumption in OECD countries is 9.1 litres of pure alcohol per capita, the equivalent of over 100 bottles of wine, or over 200 litres of average strength beer. Adding an estimate of unrecorded consumption brings the total to 10.3 litres, well above the world average of 6.2 litres.
- The majority of alcohol is drunk by the heaviest-drinking 20% of the population in all of 13 countries examined. However, approximately four in five drinkers would decrease their risk of death by cutting their alcohol intake by one unit per week. Harmful consumption of alcohol is the fifth leading cause of death and disability worldwide.
- In OECD countries, consumption has decreased slightly during the past 20 years, but heavy drinking, regular or episodic, has increased among young people and women, in many countries. In 2010, 43% of boys and 41% of girls had experienced drunkenness, up from 30% and 26%, respectively, in 2002.
- Alcohol policy should target heavy drinkers first, but approaches to do this are few and relatively expensive. Primary care physicians are important in addressing heavy drinking, and police enforcement is key to cutting traffic casualties due to drinking-and-driving (e.g. 54 000 traffic injuries could be prevented in Germany every year, and 41 000 in Canada).
- Broader policy approaches may be required to complement those solely aimed at heavy drinkers. Raising prices can improve population health, and doing so for cheaper alcohol may better target harmful drinking. Regulating the promotion of alcoholic beverages may provide additional benefits.
- A package of fiscal and regulatory measures, one of health care interventions, and a strategy combining health care and regulatory measures would each achieve annual gains of around 37 000 life years in good health in Canada; 23-29 000 in the Czech Republic, and 119-137 000 in Germany. This is roughly 10% of the entire burden of disease associated with harmful alcohol use.
- Many alcohol policies will pay for themselves simply through reduced health care expenditures, but even the most expensive alcohol policies have very favourable cost-effectiveness profiles in health terms, in the three countries examined.

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### Useful links

Read the report online, access the press release, country notes, data viz and a video at:

<http://www.oecd.org/health/health-systems/tackling-harmful-alcohol-use-9789264181069-en.htm>

OECD Economics of Prevention project:

<http://www.oecd.org/health/economics-of-prevention.htm>

OECD Health: [www.oecd.org/health](http://www.oecd.org/health)