CO4.3: Alcohol and cannabis consumption by young people, by gender

Definitions and methodology

This indicator uses data from the Health Behaviour in School-aged Children (HBSC) survey 2013/14 to provide information on the consumption of alcohol and cannabis by children aged 11, 13 and 15. Data are presented through two main measures:

- The proportion (%) of 11-, 13- and 15-year-olds who have been drunk at least twice, by gender, that is, the proportion of children who, when asked whether they had ever had so much alcohol that they were really drunk, responded with twice or more than twice. Data are presented separately for 11-, 13- and 15-year-olds and, within each age group, for boys and girls.

- The proportion (%) of 15-year-olds who have used cannabis in the last 30 days, by gender, that is, the proportion of children who, when asked how often they had used cannabis in the 30 days before being survey, responded with at least once. Data are available for 15-year-olds only, and again are presented separately for boys and girls.

To highlight differences in the use of alcohol and cannabis across socio-economic groups, this indicator also presents information on differences in the two measures between children whose families score ‘high’ and ‘low’ on the HBSC’s ‘Family Affluence Scale’ (FAS). The FAS is a composite measure calculated for each surveyed student based on their response to questions about various household possessions. Children with ‘low’ and ‘high’ scores on the FAS are those who score in the bottom and top 20% for their country, respectively, with those in the middle 60% classified as ‘medium’ affluence (see Inchley et al. (2016) for more information).

Key findings

In many OECD countries, the share of school-age children that have experienced being drunk at least twice increases considerably with age (Chart CO4.3.A). On average across OECD countries with available data, only 1.1% of 11-year-olds boys and 0.4% of 11-year-old girls report that they have ever been drunk at least twice (Chart CO4.3.A, Panel A), but these averages increase to 4.6% and 3.6% respectively for 13-year-olds (Chart CO4.3.A, Panel B), and to 23.3% and 20.8% respectively for 15-year-olds (Chart CO4.3.A, Panel C). Increases with age are particularly large in Hungary – where the share of 15-year-old boys that report they have been drunk at least twice is 39 percentage points higher than the share for 11-year-old boys – and especially Denmark, where the proportion of both boys and girls that report they have ever been drunk at least twice increases by almost 40 percentage points between the ages of 11 and 15.

Other relevant indicators: CO1.6: Disease-based indicators: prevalence of diabetes and asthma among children; and CO1.8: Regular smokers at ages 11, 13 and 15, by gender.
Chart CO4.3.A. Experience of being drunk at ages 11, 13 and 15 by gender, 2013/14
Proportion (%) of 11-, 13- and 15-year-olds who have been drunk at least twice, by gender

Note: In countries marked with an *, differences between groups are statistically significant at p<0.05. 0 mean less than +/-0.5.
a) The Eurozone average excludes Belgium, and the OECD-25 and EU averages exclude Belgium and the United Kingdom
b) 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.
Sources: Health Behaviour in School-aged Children (HBSC) study 2013/14, accessed through the European Health Information Gateway

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Gender differences in the share of school-age children that have experienced being drunk at least twice are relatively limited in most OECD countries (Chart CO4.3.A). Nine OECD countries or regions (the French-speaking areas of Belgium, the Czech Republic, France, Greece, Iceland, Israel, Latvia, Poland and Portugal) see significant gender differences among 11-year-olds, and six (Finland, Italy, Latvia, Slovenia, Switzerland and Wales) see significant gender differences among 13-year-olds, but in both cases these differences are generally small. For example, the largest gender gap for 13-year-olds, in Latvia, is only four percentage points (Chart CO4.3.A, Panel B). Eight OECD countries or regions (Austria, the French-speaking areas of Belgium, Hungary, Israel, Italy, Latvia, Switzerland and England) see significant gender differences in the share of 15-year-olds that have been drunk at least twice. Notably, these significant gender gaps do not always run in the same direction. In Israel, for example, 15-year-old boys are about 10 percentage points more likely to report having been drunk at least twice than 15-year-old girls, but in England the opposite is true – 15-year-old girls are about 6 percentage points more likely to report having been drunk at least twice than 15-year-old boys. The share of 15-year-olds that are regular cannabis users differs considerably across the OECD (Chart CO4.3.B). On average across OECD countries with available data, about 9.3% of 15-year-old boys and 6.3% of 15-year-old girls report having used cannabis in the past 30 days, but this varies from as high as 16.0% for boys and 14.0% for girls in France to as low as 2.0% for both boys and girls in Sweden.

Chart CO4.3.B. Cannabis use at age 15 by gender, 2013/14
Proportion (%) of 15-year-olds who have used cannabis in the last 30 days, by gender

Note: In countries marked with an *, differences between groups are statistically significant at p<0.05. 0 mean less than +/-0.5.
a) The Eurozone average excludes Belgium, and the OECD-23 and EU averages exclude Belgium and the United Kingdom
b) 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.
Sources: Health Behaviour in School-aged Children (HBSC) study 2013/14, accessed through the European Health Information Gateway

In a number of OECD countries, 15-year-olds boys are more likely to be regular cannabis users than 15-year-old girls. 15 OECD countries or regions (Austria, Denmark, Estonia, Finland, Iceland, Israel, Italy, Latvia, Luxembourg, Poland, Portugal, the Slovak Republic, Switzerland and Scotland) see significant gender differences in the proportion of 15-year-olds that have used cannabis in the last 30 days, with in all cases boys being more likely to have used cannabis than girls. The largest gaps are in Israel, Italy, Switzerland and Scotland, where boys are six percentage points more likely to report having used cannabis in the last 30 days than girls.
In some OECD countries, school-aged children from relatively affluent families are more likely to have experienced being drunk at least twice than children from less affluent families (Chart CO4.3.C). For boys, five OECD countries or regions see statistically significant linear trends across the HBSC’s family affluence groups in the share ever having been drunk at least twice (the French-speaking areas of Belgium, Denmark, Luxembourg, Portugal, and Sweden), while eight countries or regions see a significant trend for girls (Austria, the French-speaking areas of Belgium, Denmark, France, Iceland, Italy, Luxembourg, and Norway). In almost all of these cases, those with a high FAS score are more likely to report having been drunk at least twice than those with a low FAS score. In Denmark, for instance, boys and girls with high FAS scores are, respectively, eleven and seven percentage points more likely to report having ever been drunk at least twice than boys and girls with low FAS scores. The only exception among OECD countries is Iceland, where girls with low FAS scores are two percentage points more likely to report having been drunk at least twice than girls with high FAS scores.

**Chart CO4.3.C. Experience of being drunk at ages 11-to-15 by gender and family affluence, 2013/14**

Percentage point difference between high and low family affluence groups in the proportion (%) of 11-to-15-year-olds who have been drunk at least twice, by gender

Note: Shaded markers represent statistically significant linear trends across family affluence groups ('low', 'medium' and 'high') at p<0.05. Non-shaded markers represent no statistically significant linear trend across family affluence groups at p<0.05. 0 mean less than +/-0.5.

a) The Eurozone average excludes Belgium, and the OECD-23 and EU averages exclude Belgium and the United Kingdom
b) 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.

Sources: Health Behaviour in School-aged Children (HBSC) study 2013/14, accessed through the European Health Information Gateway

Differences in the use of cannabis across socio-economic groups are a little more mixed (Chart CO4.3.D). Six OECD countries or regions see statistically significant linear trends across family affluence groups for boys (Austria, Canada, Denmark, Estonia, Switzerland, and Scotland), and three see significant trends for girls (Canada, France, and Israel), but the direction of the trend varies from country to country. In Austria, Denmark, Estonia, and Switzerland, for instance, boys with a high FAS score are more likely to report having used cannabis in the last 30 days. In Canada and Scotland, the opposite is true. Similarly, in France, girls with a high FAS score are more likely to be regular cannabis users, but in both Canada and Israel it is girls with a low FAS score that are more likely to report having used cannabis in the past 30 days.
Chart CO4.3.D. Cannabis use at age 15 by gender and family affluence, 2013/14
Percentage point difference between high and low family affluence groups in the proportion (%) of 15-year-olds who have used cannabis in the last 30 days, by gender

Note: Shaded markers represent statistically significant linear trends across family affluence groups (‘low’, ‘medium’ and ‘high’) at p<0.05. Non-shaded markers represent no statistically significant linear trend across family affluence groups at p<0.05. 0 mean less than +/-0.5.
a) The Eurozone average excludes Belgium, and the OECD-23 and EU averages exclude Belgium and the United Kingdom
b) 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.

Sources: Health Behaviour in School-aged Children (HBSC) study 2013/14, accessed through the European Health Information Gateway

Comparability and data issues

Self-reported data on having ever been drunk and cannabis use are taken from the Health Behaviour in School-aged Children survey (HBSC) 2013/14. The last data collection included all OECD countries except Australia, Chile, Japan, Korea, Mexico, New Zealand, Turkey and the United States, although data for Belgium and the United Kingdom are published only after disaggregation by region – for Belgium, data are published separately for Flanders and for the French-speaking regions (Wallonia and Brussels), while for the United Kingdom data are published separately for England, Scotland and Wales (data for Northern Ireland are not included). Sample sizes do vary across countries (the smallest among the OECD countries is in Norway, where the total number of respondents is 3072, and the largest is in Canada, with 12931) but in most OECD countries the sample totals somewhere between 4000 and 6000 respondents.

The HBSC survey is a confidential survey of young people, and data may be subject to response bias. Sample selection methods differ across countries, and because sample sizes are generally reasonably similar across countries and population sizes differ markedly, the potential for error in sample-representativeness is much larger in, for example, Germany than in the Netherlands.