CO1.8: Regular smokers at ages 11, 13 and 15 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 prevalence of smoking among school-age children in OECD and EU member countries. Regular smokers are defined here as children who, when asked how often they smoke tobacco, report that they smoke at least once a week. Data are presented separately for 11-, 13- and 15-year-olds and, within each age group, for boys and girls.

To highlight differences in smoking across socio-economic groups, this indicator also presents information on differences in the prevalence of smoking 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).

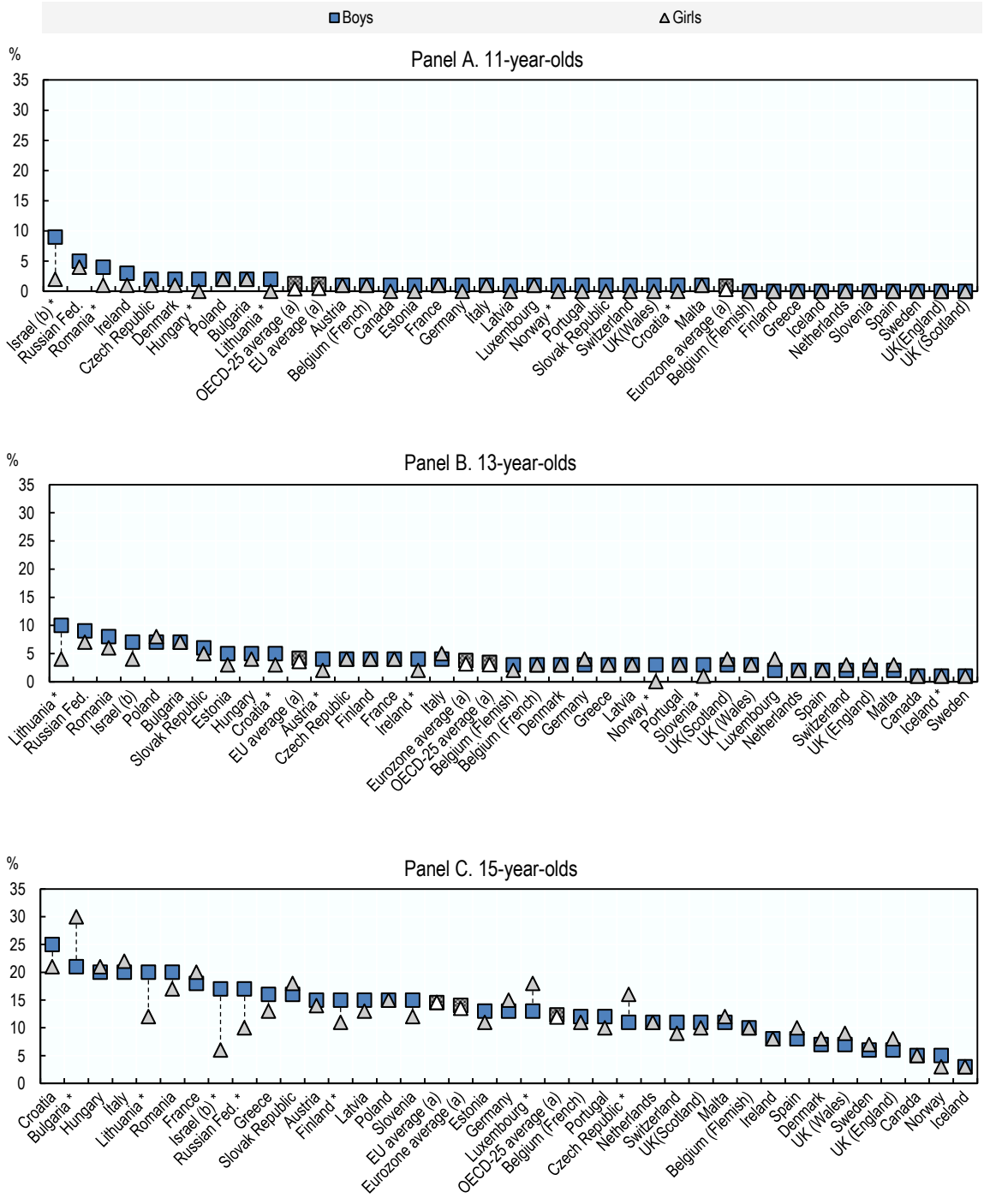
Key findings

In many OECD countries, the prevalence of regular smoking among school-age children increases considerably with age (Chart CO1.8.A). On average across OECD countries with available data, only 1.3% of 11-year-olds boys and 0.4% of 11-year-old girls report that they smoke at least once a week (Chart CO1.8.A, Panel A), but these averages increase to 3.4% and 3.0% respectively for 13-year-olds (Chart CO1.8.A, Panel B), and 12.3% and 12.0% respectively for 15-year-olds (Chart CO1.8.A, Panel C). Increases with age are large at around 15 percentage points or more for both boys and girls in France and the Slovak Republic, but are largest in Hungary and Italy, where the proportion of both boys and girls that report they smoke at least once a week increases by around 20 percentage points between the ages of 11 and 15.

Gender differences in the prevalence of regular smoking among school-age children are limited in most OECD countries (Chart CO1.8.A). Only 3 of the OECD countries with available data see significant gender differences in regular smoking among 11-year-olds (Hungary, Israel and Norway), as do only 5 countries for 13-year-olds (Austria, Iceland, Ireland, Norway and Slovenia), and for both age groups any significant gender differences are generally only very small. The largest gender difference for 11-year-olds is in Israel, where 9% of 11-year-old boys report that they are regular smokers, compared to 2% of 11-year-old girls. For 13-year-olds, the largest gap is in Norway, where boys are 3 percentage points more likely to be regular smokers than girls. Only four OECD countries see significant gender differences among 15-year-olds (the Czech Republic, Finland, Israel and Luxembourg) but, where significant, the size of the difference does tend to be slightly larger (Chart CO1.8.A, Panel C). In the Czech Republic and Luxembourg, 15-year-old girls are about 5 percentage points more likely to be regular smokers than boys, while in Israel 15-year-old boys are 11 percentage points more likely to smoke at least once a week than 15-year-old girls.

Other relevant indicators: CO1.6: Disease-based indicators: prevalence of diabetes and asthma among children; and CO4.3: Alcohol and cannabis consumption by young people, by gender

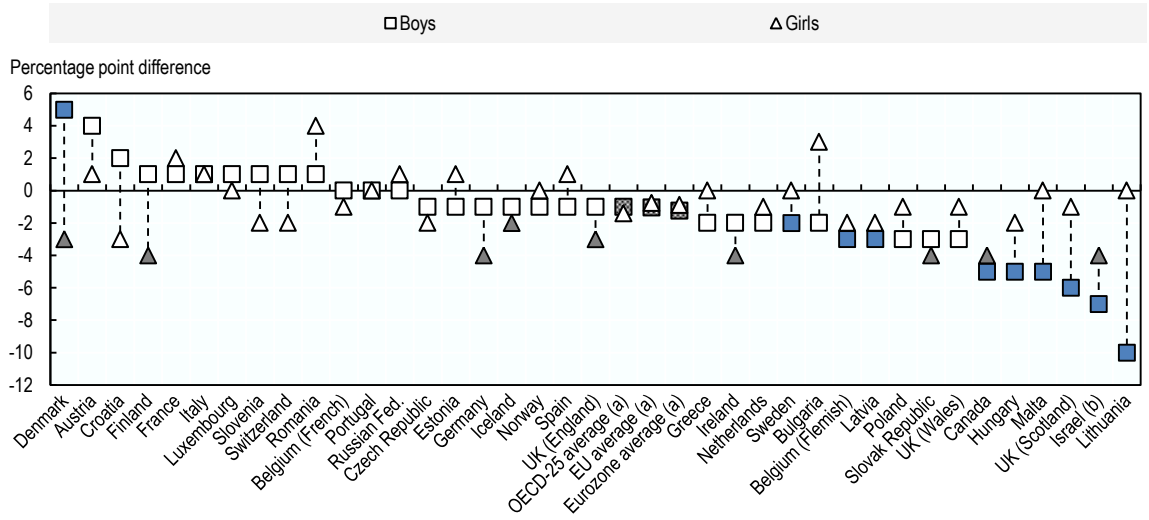
Chart CO1.8.A. Regular smokers at ages 11, 13 and 15 by gender, 2013/14
Proportion (%) of 11-, 13- and 15-year-olds who smoke at least once a week, by gender



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

Differences across socio-economic groups in regular smoking are also fairly limited in many OECD countries (Chart CO1.8.B). For boys, only eight OECD countries or regions see statically significant linear trends in the prevalence of smoking across the HBSC's family affluence groups. In most of these, boys with low FAS scores are more likely to be regular smokers than boys with high FAS scores, but in Denmark the relationship is reversed – boys with a high FAS score are five percentage points more likely to report than they smoke at least once a week. Nine OECD countries or regions see significant trends for girls, with in all cases those with a low FAS score more likely to report that they are a regular smoker than those with a high FAS score.

Chart CO1.8.B. Regular smokers at ages 11-to-15 by gender and family affluence, 2013/14
Percentage point difference in the proportion (%) of 11-to-15-year-olds who smoke at least once a week between high and low family affluence groups, 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-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

Comparability and data issues

Self-reported data on smoking 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.

Sources and further reading: Inchley, J. *et al.* (2013). Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the, 2014. World Health Organization Regional Office for Europe, Copenhagen.