

# RISK BEHAVIOURS

TOBACCO USE  
ALCOHOL USE  
CANNABIS USE  
SEXUAL BEHAVIOUR  
FIGHTING  
BULLYING

"I think  
cyberbullying  
is a problem  
because it  
means anyone  
can bully  
anyone."



## QUOTES FROM YOUNG PEOPLE ON RISK BEHAVIOURS

*"Bullying is hard to deal with."*

*"If you are being cyberbullied and you don't know who by, then it is awful because it could be anybody around you. That is a big problem and so I think people should be trying to come up with ways to stop people from cyberbullying each other."*

*"There are too many taboos about this issue [sexuality] and that should not happen. Young people have to feel comfortable talking about sexuality to be able to control their future and assure a safer future."*

## TOBACCO USE

Tobacco use is the most common preventable cause of premature loss of health worldwide, accounting for almost 6 million deaths annually (including more than 600 000 due to environmental tobacco smoke) (1). Tobacco use, particularly cigarette smoking, is the largest cause of health inequalities based on socioeconomic differences (2): in adolescence, smoking initiation seems to be higher among those from disadvantaged backgrounds (3).

Adolescence is a crucial age for initiation and development of tobacco use, so exact epidemiological data are necessary to support evidence-based preventive interventions (4).

Active cigarette smoking by adolescents has immediate adverse health consequences, including addiction, reduced lung function and impaired lung growth, and asthma (4).

### MEASURES

#### **Tobacco initiation**

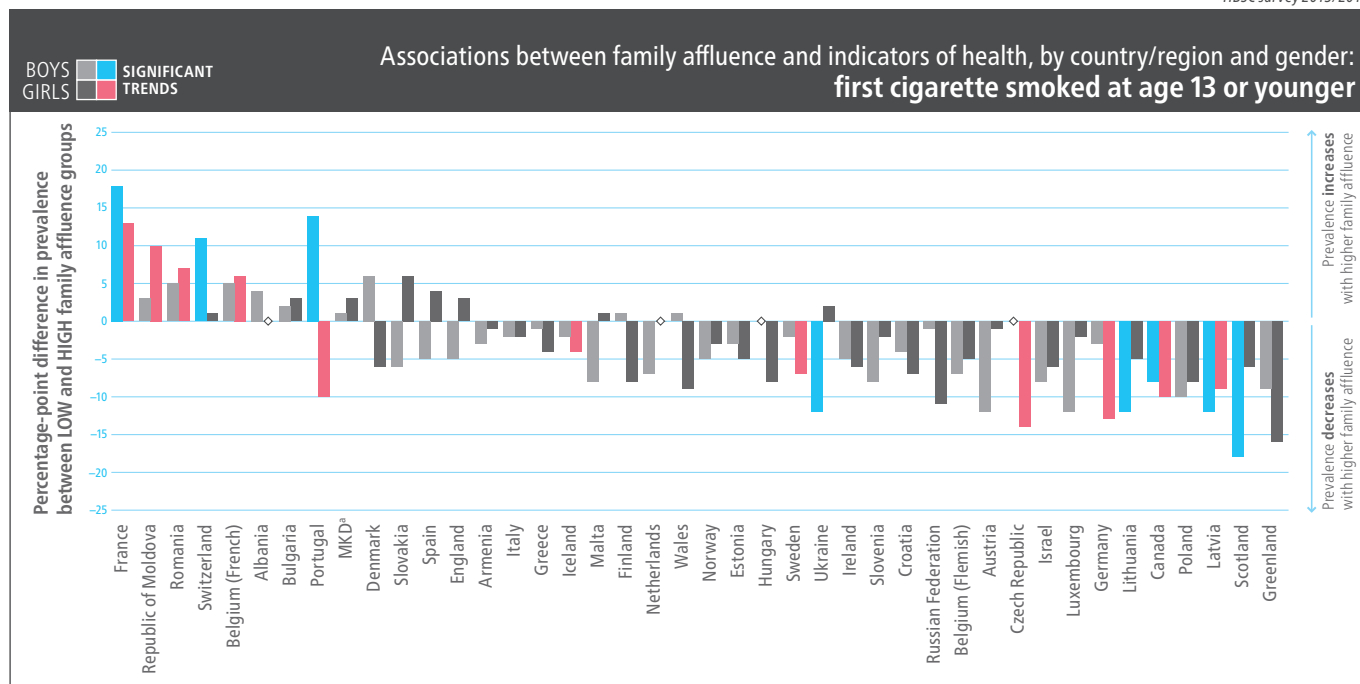
Young people were asked at what age they first smoked a cigarette, defined as more than a puff.

#### **Weekly smoking**

Young people were asked how often they smoke tobacco. Response options ranged from never to every day.

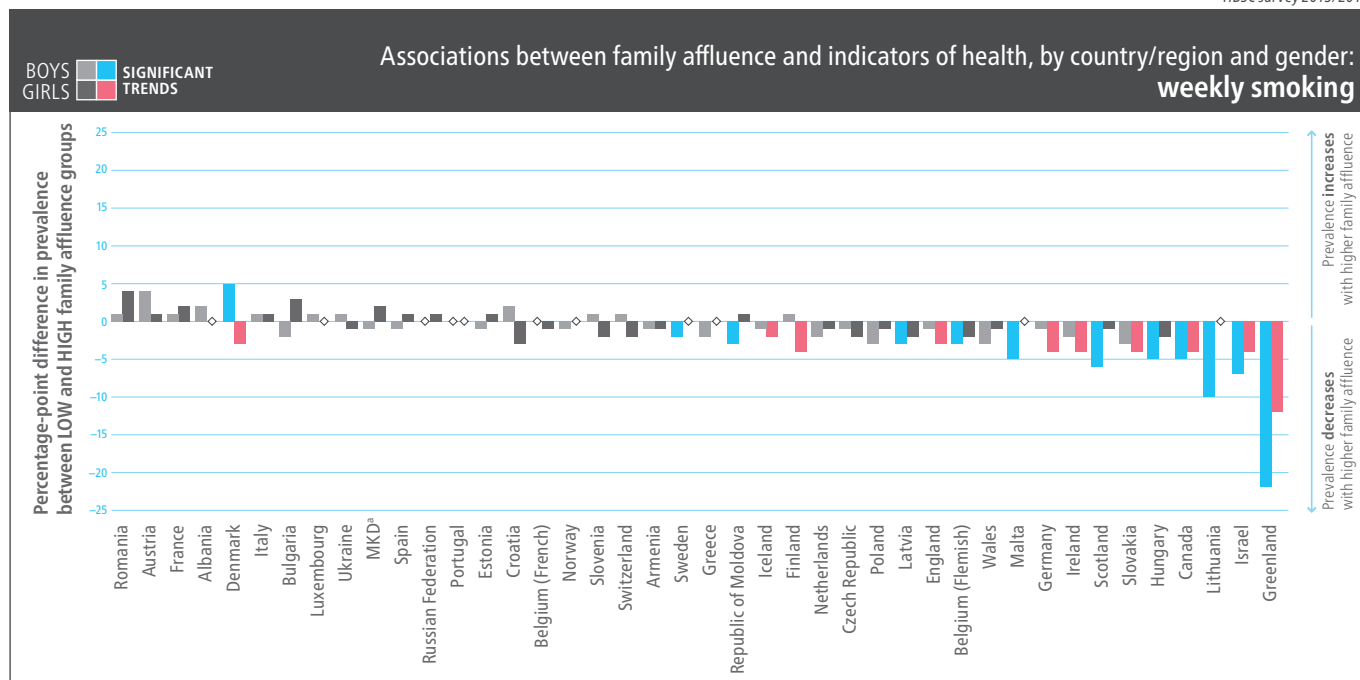
Supplementary data on daily smoking and having ever smoked are provided in the Annex.

HBSC survey 2013/2014



<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than +/−0.5%.

HBSC survey 2013/2014



<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than +/−0.5%.



HBSC survey 2013/2014

## RESULTS

### Tobacco initiation

Findings presented here show the proportions who reported first smoking a cigarette at age 13 or younger.

### Age

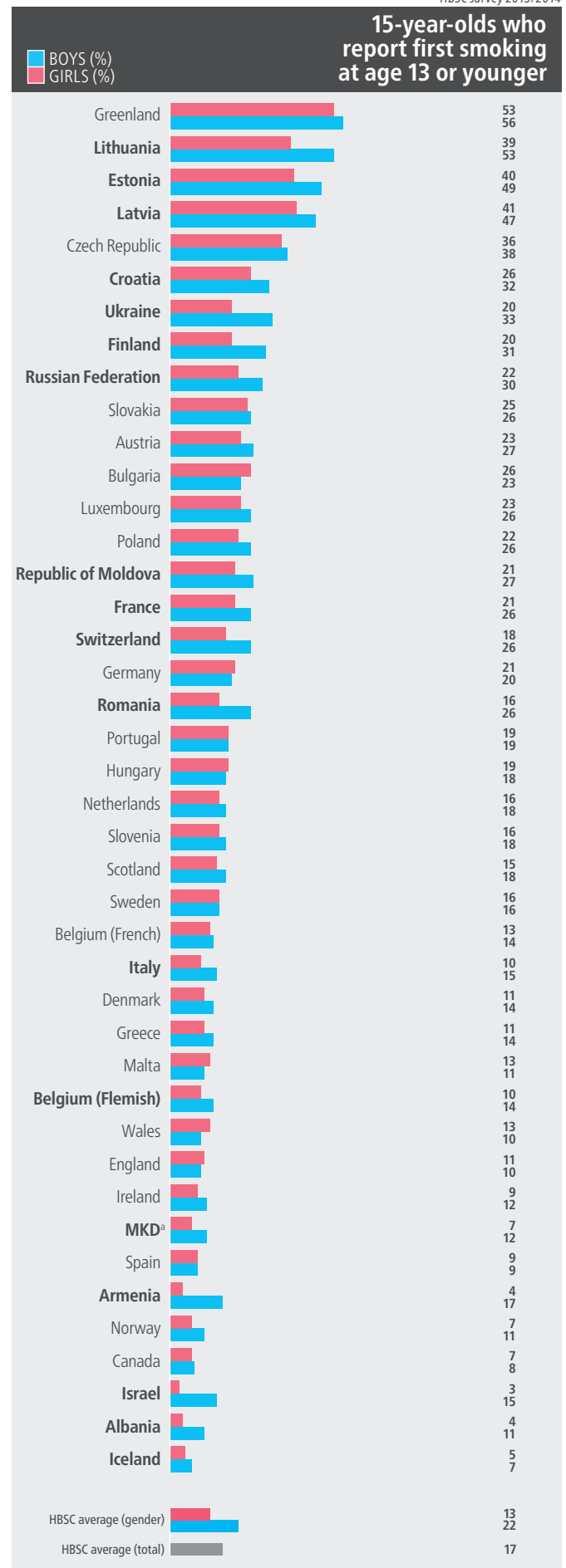
Only data for 15-year-olds are reported.

### Gender

No gender difference in early onset was observed in more than half of countries and regions. It was more prevalent in boys in the 18 countries in which a significant gender difference was observed.

### Family affluence

Family affluence was not significantly related to early onset in most countries and regions, but a significant association was observed for boys in eight: it was more prevalent in low-affluence groups in five and high-affluence in three. For girls, a significant association was found in 11, with higher prevalence among high-affluence girls in four and low-affluence in seven.



\* The former Yugoslav Republic of Macedonia. Note: **indicates** significant gender difference (at  $p < 0.05$ ).  
This question was asked only of a subset of 15-year-olds in Belgium (French).

## RESULTS

### Weekly smoking

Findings presented here show the proportions who reported smoking at least once a week.

### Age

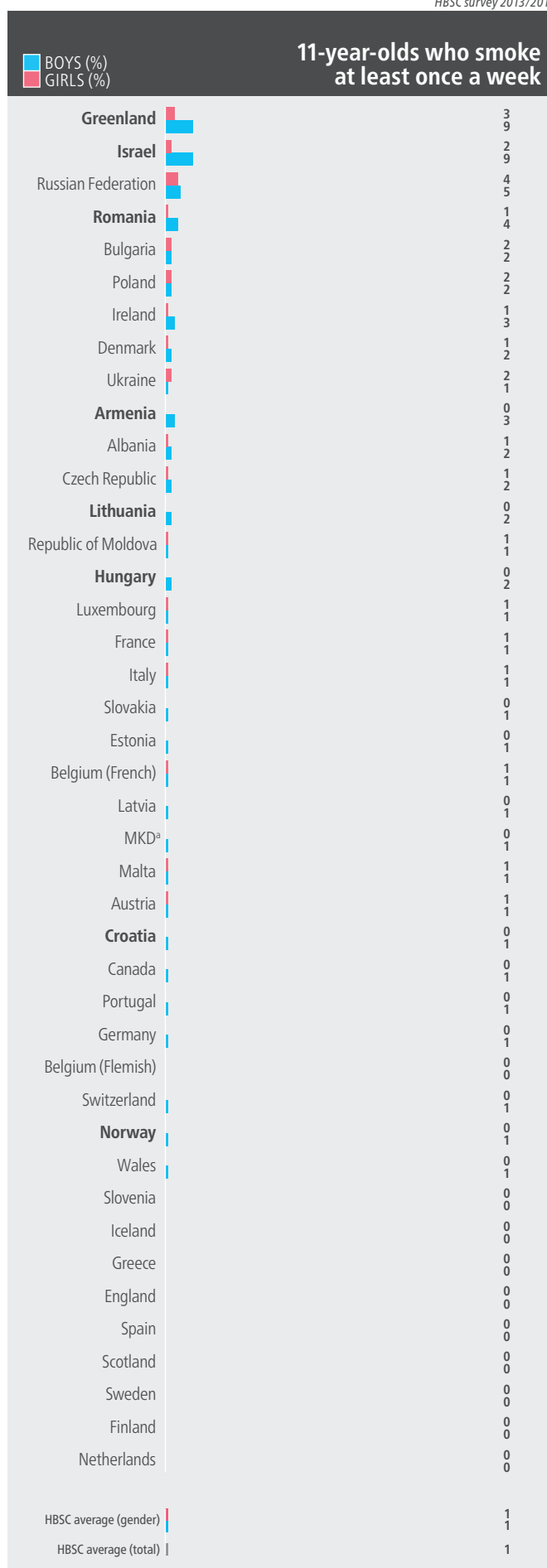
Prevalence of weekly smoking increased significantly by age in all countries and regions except in one for boys (Armenia) and three for girls (Albania, Armenia and Norway). The absolute difference in prevalence between 11- and 15-year-olds was 15 percentage points or higher in eight (about one fifth). Prevalence of less than 5% in 15-year-olds was found in five countries (two of which were among girls only).

### Gender

Gender differences were observed in a quarter to a fifth of countries and regions across all age groups (eight for 11-year-olds, 11 at age 13 and 10 at age 15), with boys having higher prevalence in most cases. More girls smoked weekly in only one country at age 13 and in three when 15.

### Family affluence

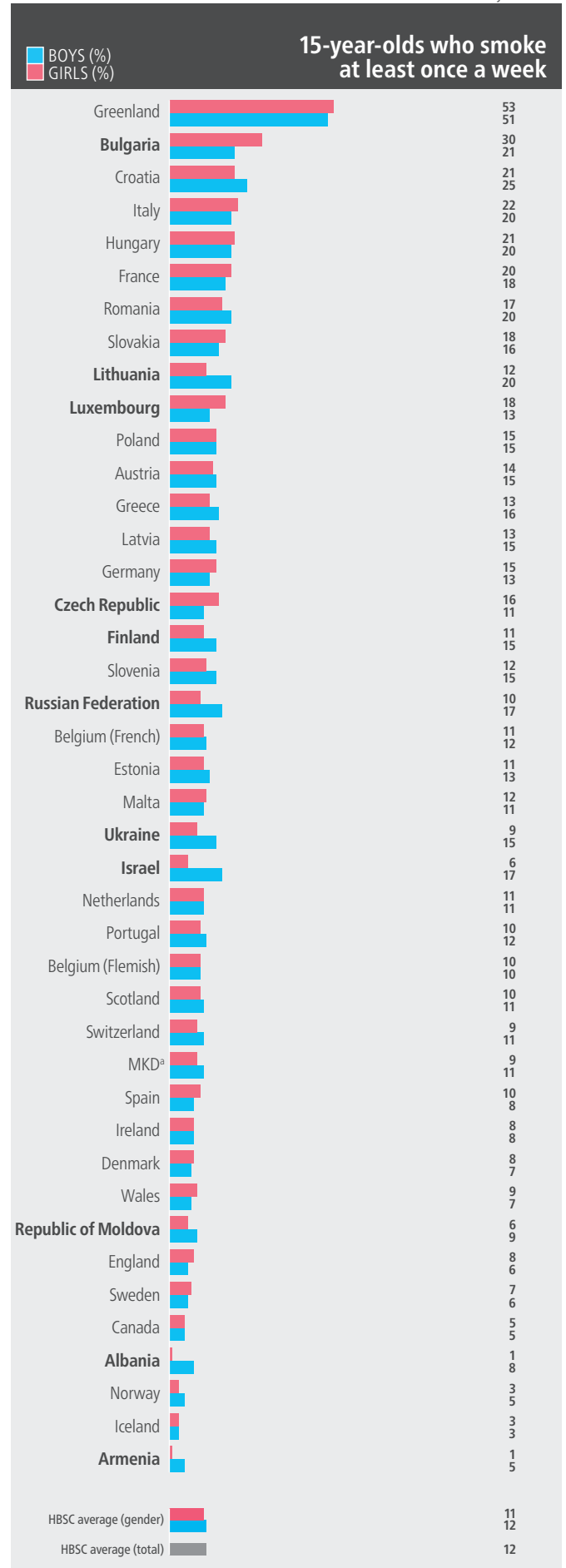
Lower family affluence was significantly associated with weekly smoking in boys in a quarter of countries and regions, but an opposite relationship was observed in one country (Denmark). A significant relationship among girls was found in 10, all of which showed higher prevalence among low-affluence groups.



<sup>a</sup> The former Yugoslav Republic of Macedonia.

HBSC survey 2013/2014

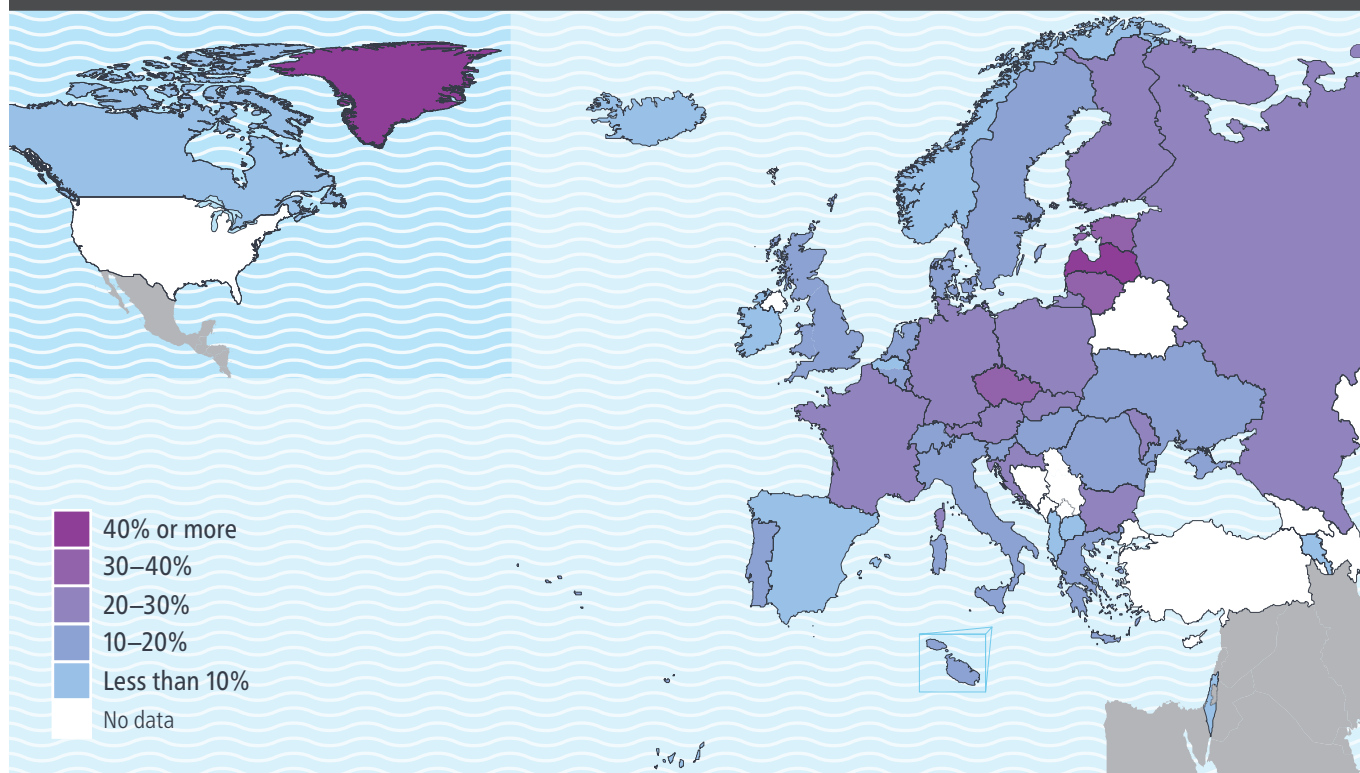
HBSC survey 2013/2014



Note: indicates significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ .

HBSC survey 2013/2014

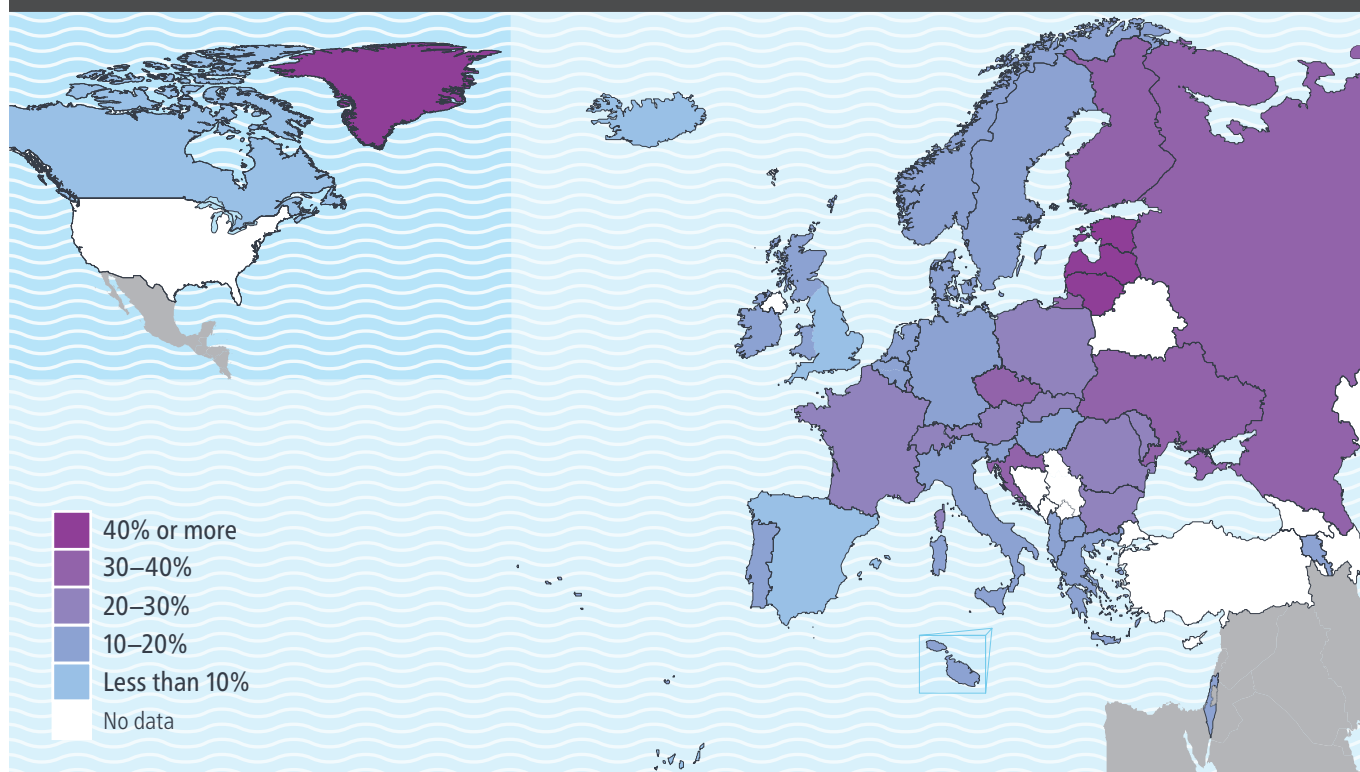
### 15-year-old girls who report first smoking at age 13 or younger



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

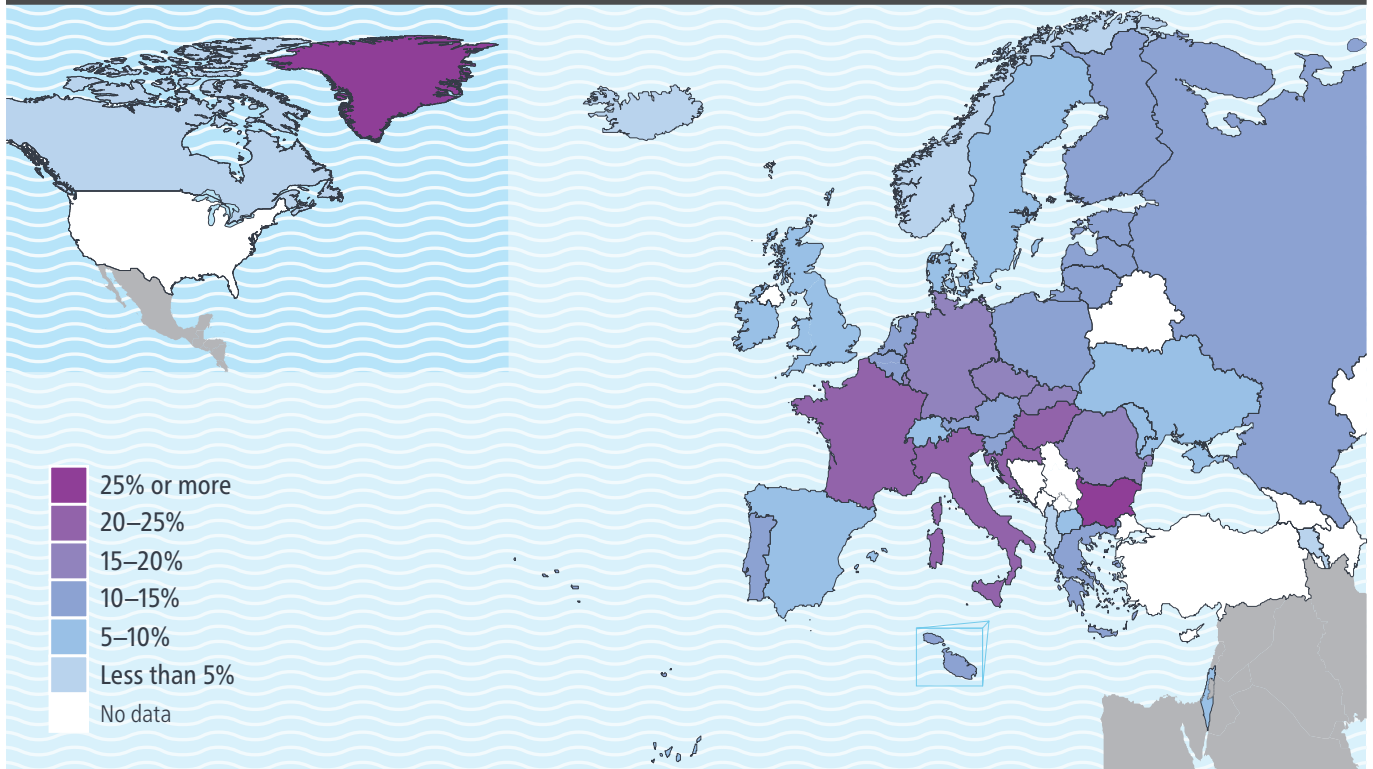
### 15-year-old boys who report first smoking at age 13 or younger



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

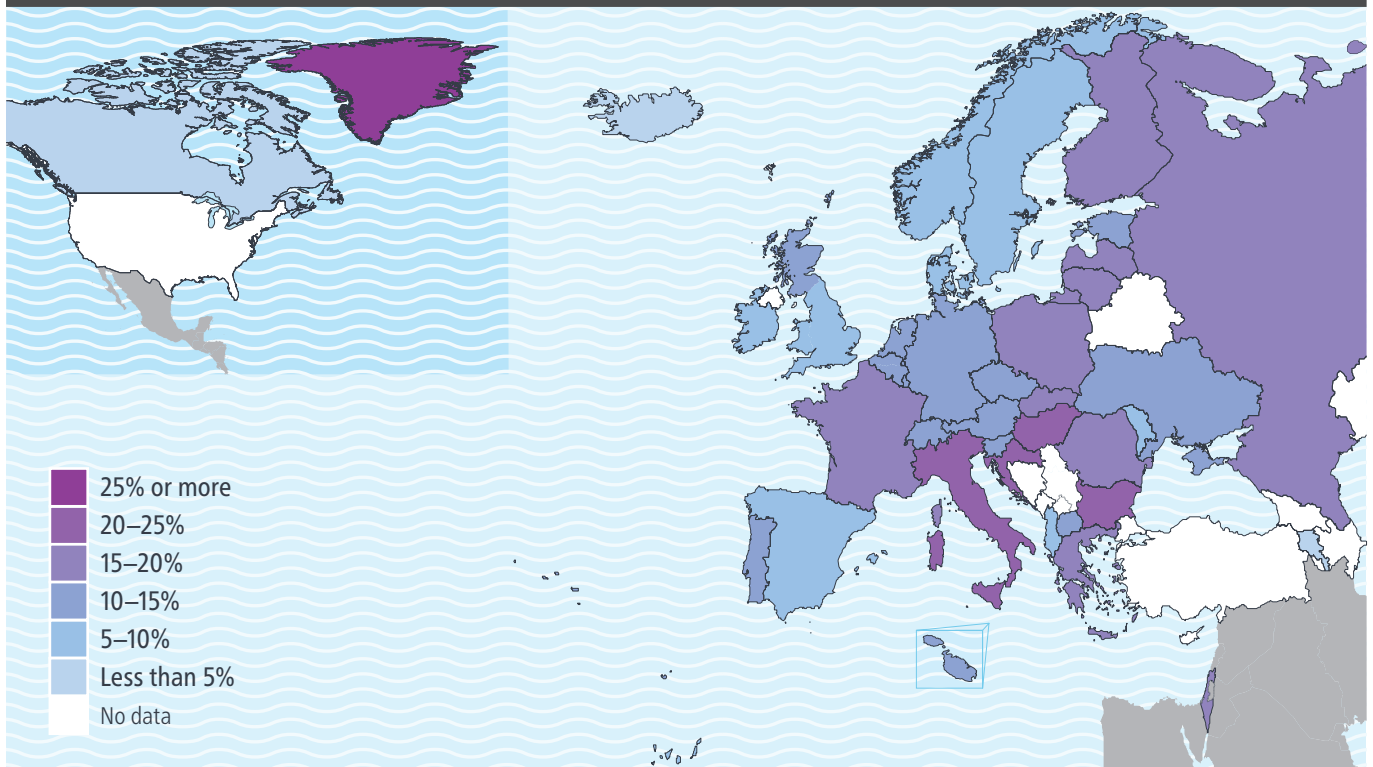
## 15-year-old girls who smoke at least once a week



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

## 15-year-old boys who smoke at least once a week



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.



## TOBACCO USE: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

Large variations in tobacco initiation and weekly smoking are observed between countries and regions, but no gender differences can be seen in most. Where gender differences are present, more boys tend to report early onset and weekly smoking.

Smoking remains high in some countries and regions, but weekly smoking has declined in comparison to the previous HBSC survey in almost all (5). It should be noted, however, that the measures used in the survey do not distinguish between in-school and out-of-school smoking: research indicates that adolescents who use substances at school have higher risks of adopting other health-risk behaviours (6).

The link between SES and smoking among adolescents is not uniform, unlike the situation in the general population, for whom SES plays a more important role (2,7). It seems that initiation and development of tobacco use during adolescence are only partially determined by SES.

### POLICY REFLECTIONS

The combined effect of public awareness-raising interventions and stricter tobacco-control strategies implemented in many countries and regions (including tax and price increases, public smoking bans, and restrictions on advertising and selling sites) seem to be having an effect on adolescent smoking. The data show, however, that weekly smoking increases with age, especially in boys, who also start earlier. The challenge is to scale-up interventions that focus on preventing experimentation among young people and experimenters becoming weekly smokers as well as to develop policies to restrict their access to tobacco products through commercial sources (8). The WHO Framework Convention on Tobacco Control (9) addresses the issue of tobacco sales to and by minors.

Interventions should be comprehensive (integrated), flexible and have sufficient reach (all young people), frequency (throughout the school curriculum, for example) and duration (sustainable over time). The challenge is to promote the creation of as many tobacco-free youth environments as possible by, for instance, introducing policies on tobacco-free schools. Given that adolescents spend much of their time in school settings in which they are exposed to all kinds of risk factors associated with smoking, it is important that policies are introduced to create tobacco-free social environments in schools. The same applies to family environments, with some countries having introduced measures such as banning smoking in cars in which children are passengers.

Effective interventions are those that are clearly communicated, provide unequivocal rules and penalties for those violating them, and are applicable to all involved in young people's social environments – they do not, for instance, promote designated smoking areas for adults and teachers. Lack of integrated policies may lead to negative consequences: creation of tobacco-free school environments, for instance, may be successful in curbing smoking at school but will have little effect if not supported by similar policies in other environments.

Policies should aim to reach at-risk groups with attention-grabbing messages presented in the most efficient and effective way. HBSC and other studies show that young people increasingly use electronic social media to interact and access information, so innovative interventions that make use of new communication technologies should be designed to disseminate tobacco countermarketing (the use of commercial marketing tactics to produce attitudinal and behavioural changes). Measurement and evaluation of interventions that make use of new communication technologies are critical to building an evidence base.

There is some evidence from research in the United States involving young people and adults that interventions have differential effects by SES. Mass-media anti-tobacco campaigns, for instance, have higher impacts among people of low SES.

The equalizing of traditional gender differences in tobacco use through increased prevalence of smoking among girls in some countries and regions, particularly in central and eastern Europe and Greenland, raises cause for concern. Specific issues relating to women's smoking should be reflected in preventive measures, including smoking's effects on appearance and fertility and

the risk of thromboembolic complications when practised concurrently with taking hormonal contraceptives (10,11).

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## ALCOHOL USE

Adolescence is a period of discovery and experimentation during which many young people start to explore what they perceive as adult behaviours, such as drinking alcohol. This may be interpreted as a natural, perhaps even healthy, curiosity about transitioning to adult life in which alcohol is used, but not misused. A combination of factors that include not understanding the limits for safe alcohol consumption and requiring less alcohol to experience drunkenness means that for some adolescents, experimentation can turn into excessive rates of use, with the physical, mental and social risks this brings.

Alcohol is one of the most widely available and most commonly used drugs for adolescents (1,2). Young people may use alcohol to fulfil social and personal needs, intensify contacts with peers and initiate new relationships (3). Adolescent alcohol use nevertheless constitutes a major public health concern in many European and North American countries and regions. Risky drinking, including early and frequent drinking and drunkenness, is associated with adverse psychological, social and physical health consequences, including academic failure, violence, accidents, injury, use of other substances and unprotected sexual intercourse (4). It has also been suggested that drinking alcohol during adolescence may negatively affect brain development and functioning, although research on this topic is still in a preliminary phase (5).

### MEASURES

#### Weekly drinking

Young people were asked how often they drink any alcoholic beverage and were given a list of drinks: beer, wine, spirits, alcopops or any other drink that contains alcohol. Response options ranged from never to every day.

#### Drunkenness initiation

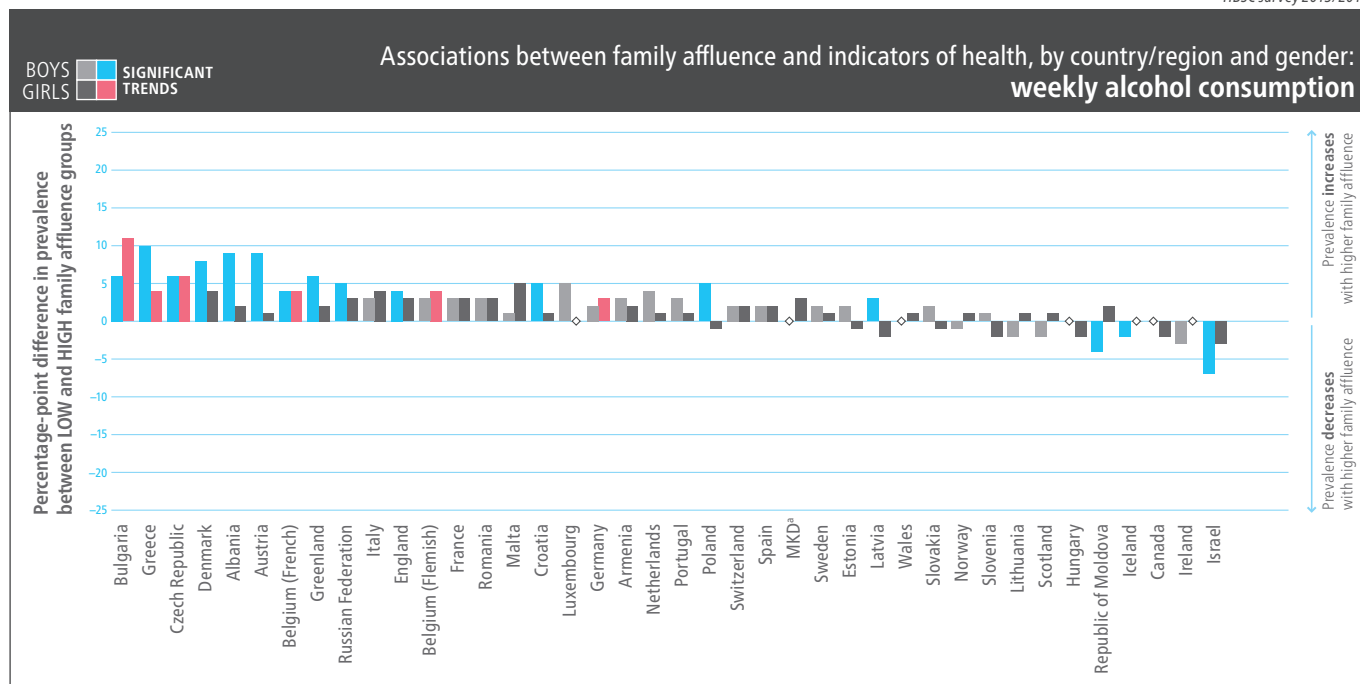
Young people were asked at what age they first got drunk.

#### Drunkenness

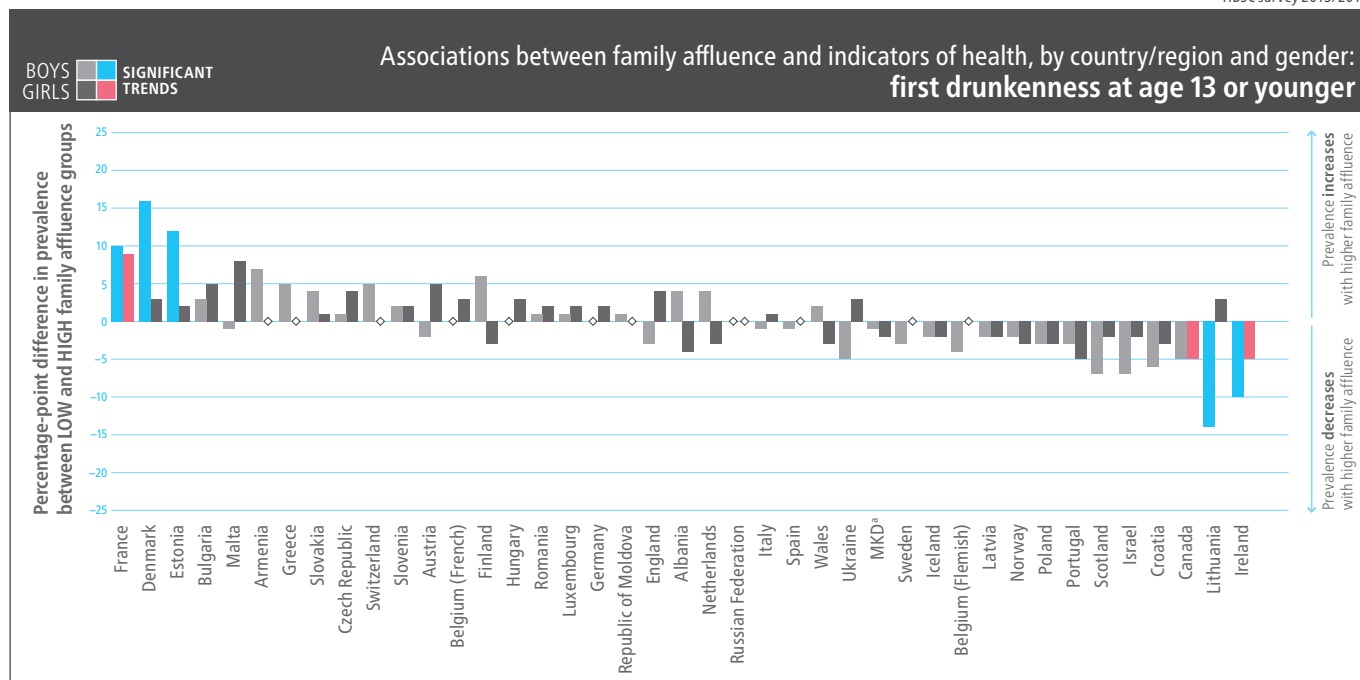
Young people were asked whether they had ever had so much alcohol that they were really drunk. Response options ranged from never to more than 10 times.

Supplementary data on first alcohol use at age 13 or younger and drinking beer, alcopops, wine or spirits at least once a week are provided in the Annex.

HBSC survey 2013/2014

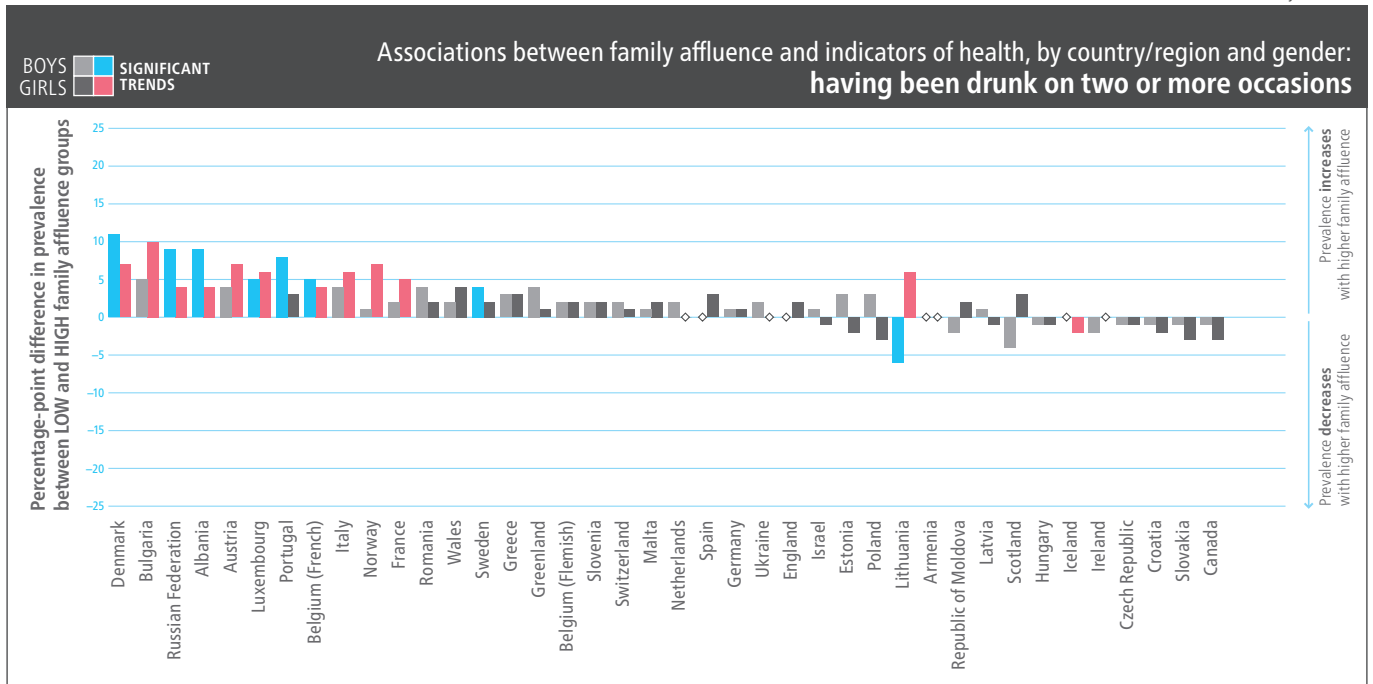


HBSC survey 2013/2014





HBSC survey 2013/2014



Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than  $\pm 0.5\%$ .  
No data were received from Finland and the former Yugoslav Republic of Macedonia.

## RESULTS

### Weekly drinking

Findings presented here show the proportions who reported drinking any alcoholic beverage at least every week.

**Age** Prevalence increased significantly between ages 11 and 15 in almost all countries and regions for boys and girls. Increases were particularly large between ages 13 and 15.

**Gender** Overall, weekly drinking was more common among boys. The gender difference increased with age: at age 15, the difference was greater than 10 percentage points in 12 countries and regions.

**Family affluence** Family affluence was associated with weekly drinking in 16 countries and regions for boys and six for girls. It was higher among high-affluence groups in most, but three countries and regions showed the opposite relationship among boys.

### Drunkenness initiation

Findings presented here show the proportions who reported first getting drunk at age 13 or younger.

**Age** Data are presented for 15-year-olds only.

**Gender** Boys were more likely to report first drunkenness at or before age 13 in less than half of countries and regions. Gender differences of 10 percentage points or more were found in three (Croatia, Lithuania and Romania).

**Family affluence** No significant association was found with family affluence in most countries and regions. In those that showed an association, no clear overall pattern emerged.

### Drunkenness

Findings presented here show the proportions who reported having been drunk on two or more occasions.

**Age** Prevalence increased significantly and substantially between ages 11 and 15 for boys and girls in all countries and regions, with the exception of girls in Armenia.

**Gender** A significant gender difference was found in less than half of countries and regions, with boys more likely to report it. Girls reported it more often in Greenland (11-year-olds), Scotland (13-year-olds) and England (15-year-olds).

**Family affluence** An association was found in eight countries and regions for boys and 12 for girls. Drunkenness was more prevalent among high-affluence groups in most, but the opposite relationship was evident in Lithuania for boys and Iceland for girls.

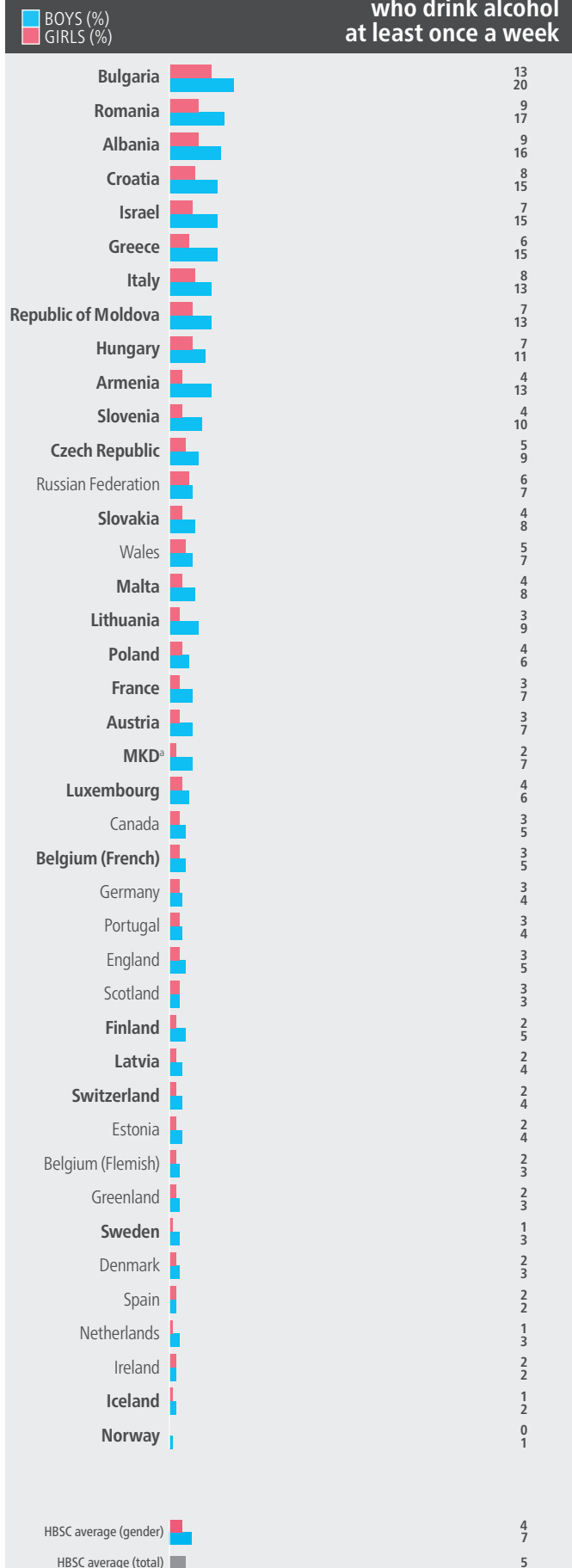
HBSC survey 2013/2014



\* The former Yugoslav Republic of Macedonia.

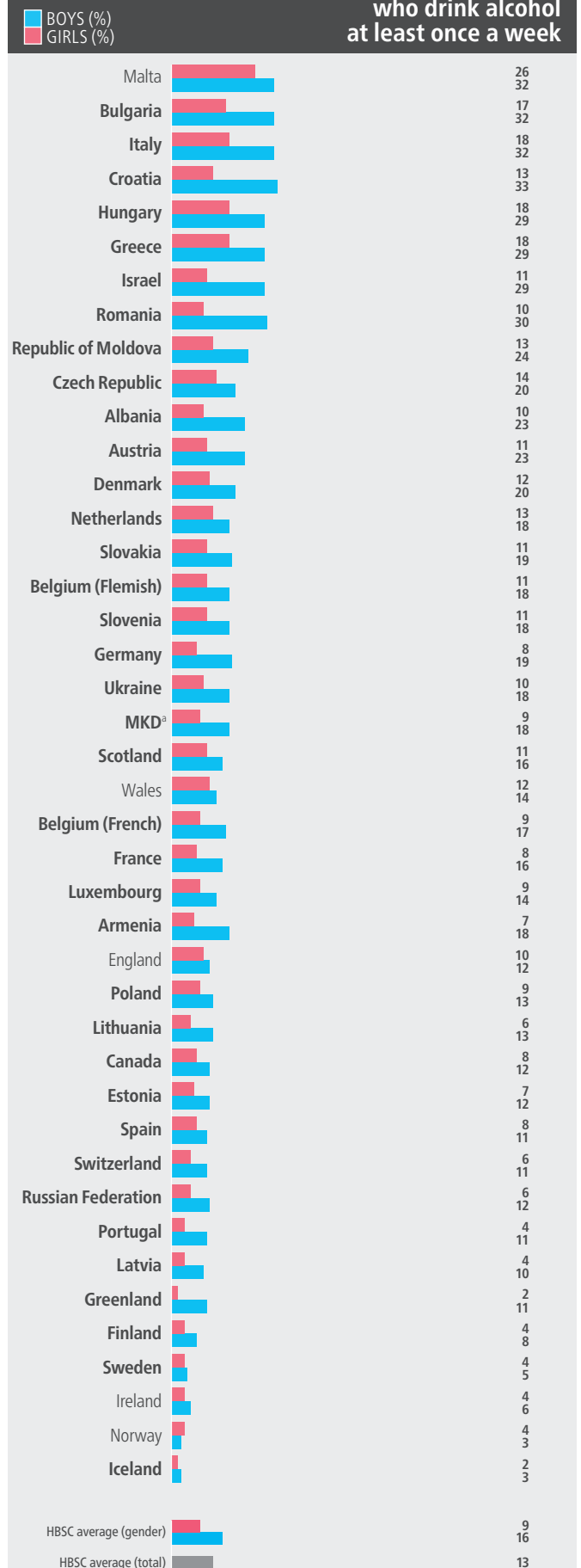
HBSC survey 2013/2014

### 13-year-olds who drink alcohol at least once a week



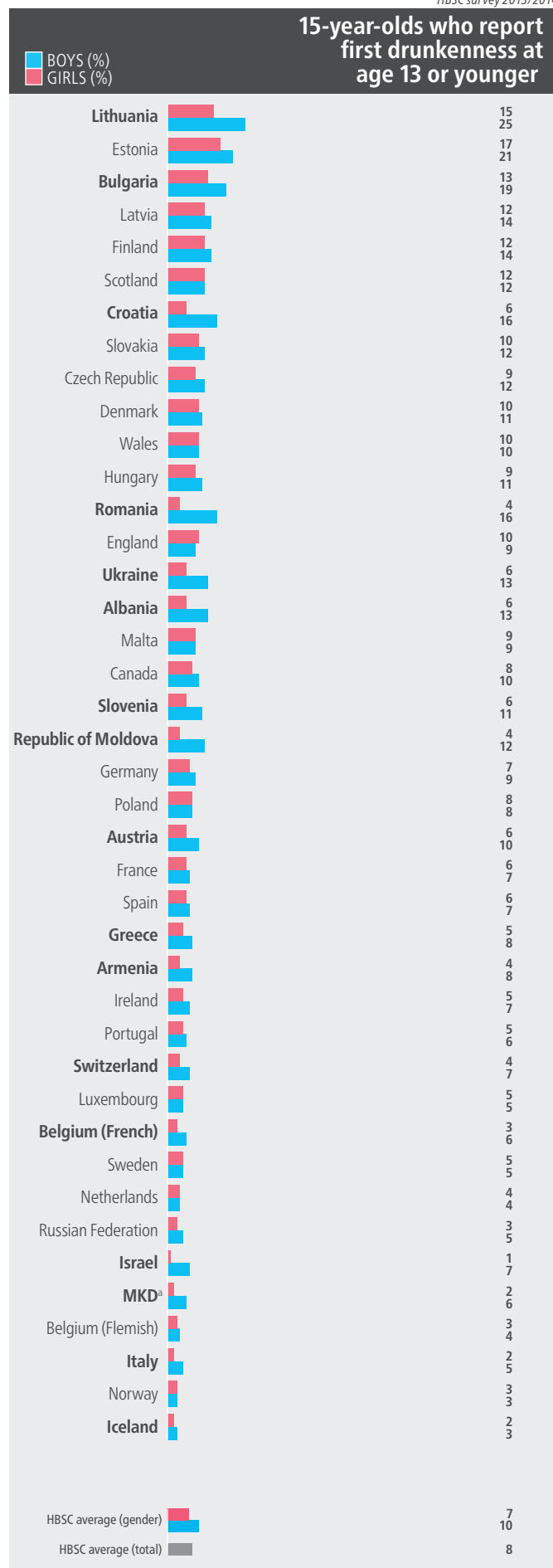
HBSC survey 2013/2014

### 15-year-olds who drink alcohol at least once a week



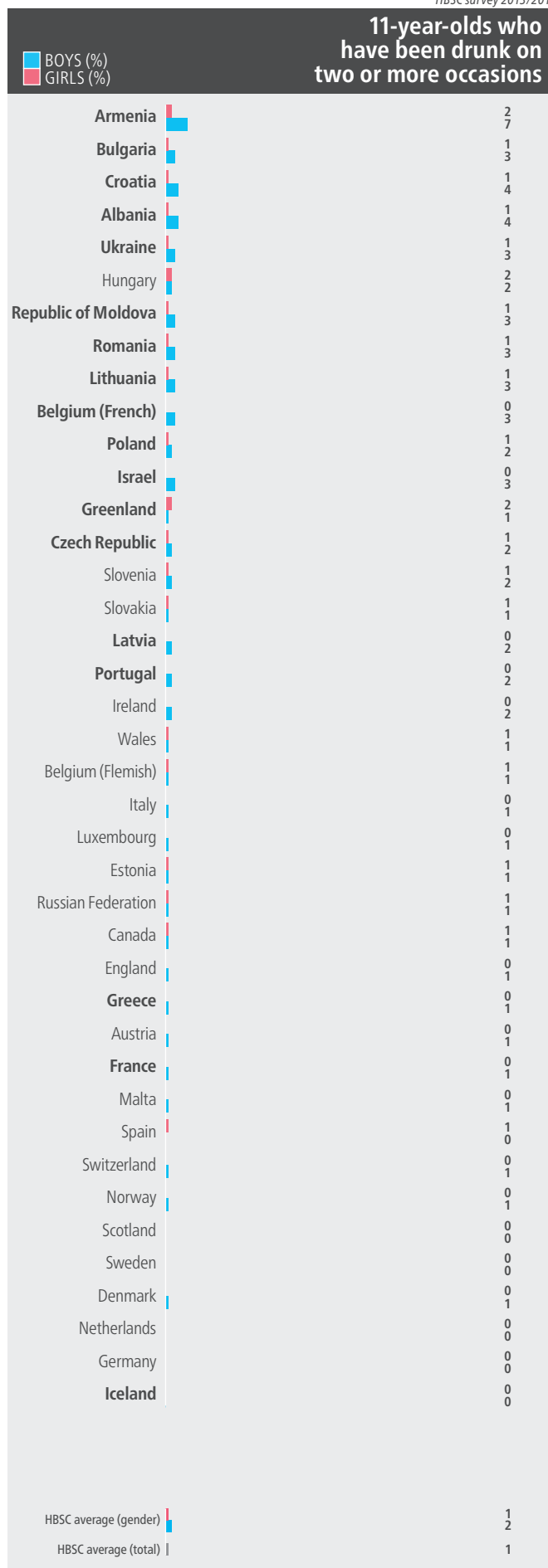
Note: **indicates** significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ .  
No data were received from Finland (11-year-olds) and Ukraine (11- and 13-year-olds).

HBSC survey 2013/2014

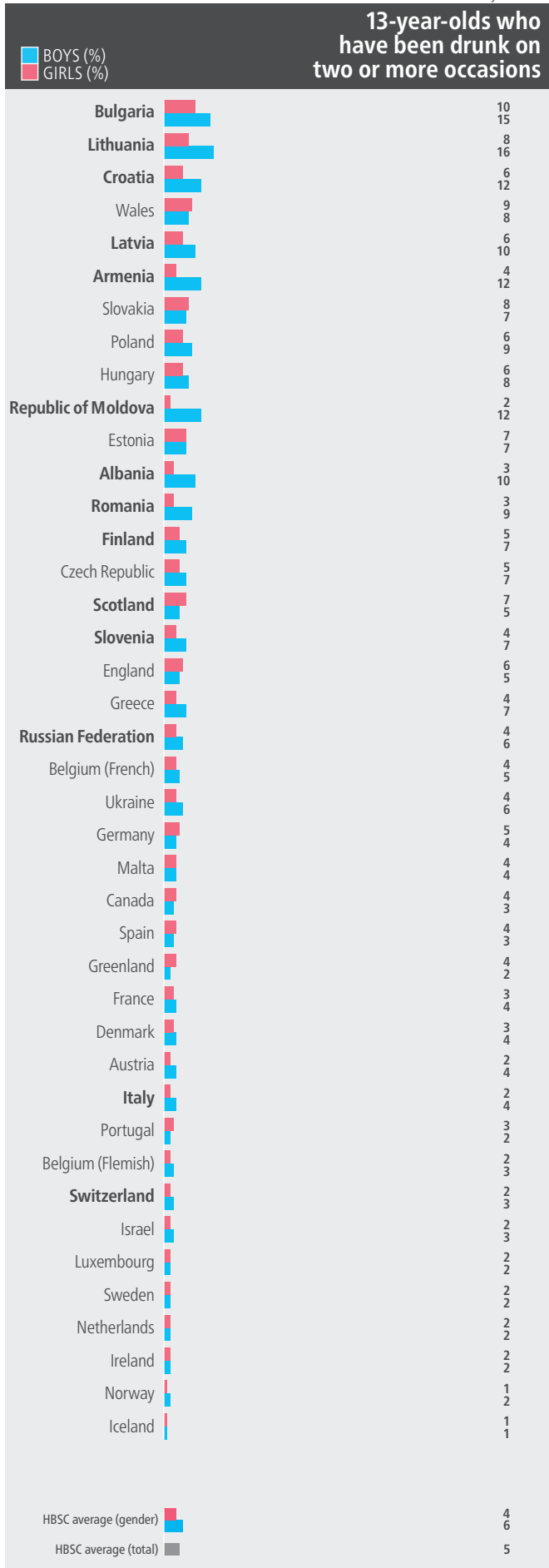


\* The former Yugoslav Republic of Macedonia. No data were received from Greenland.

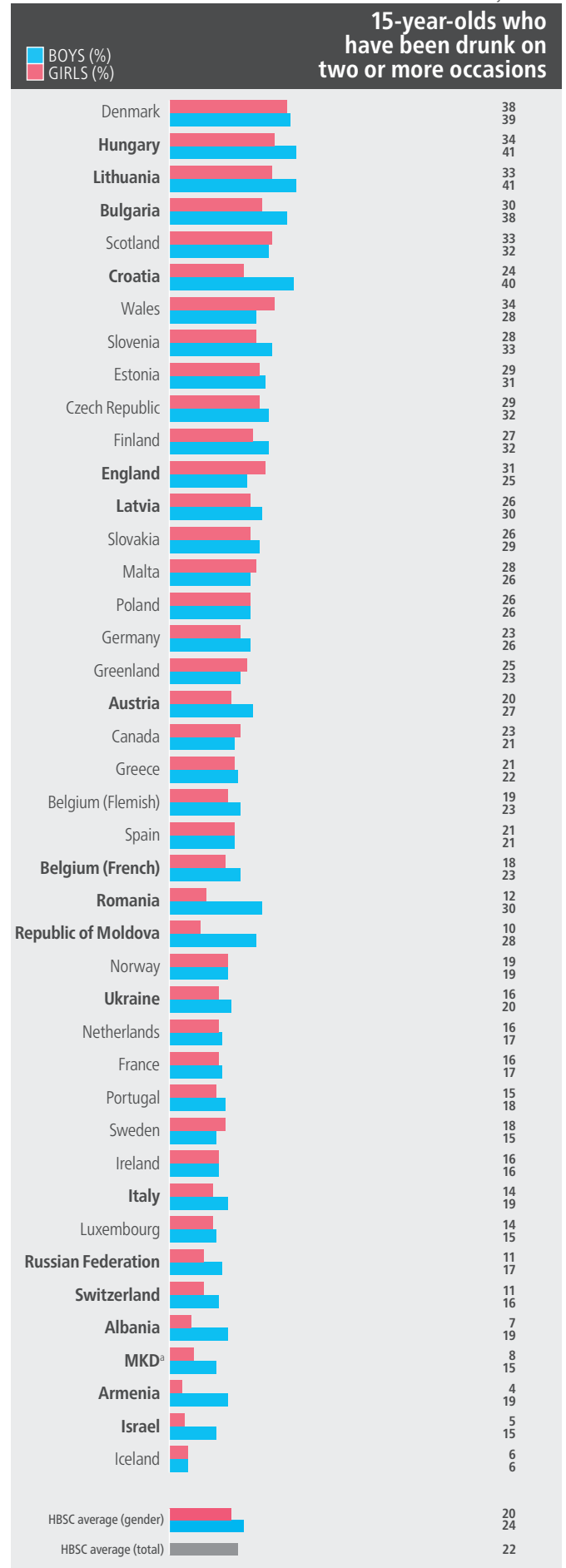
HBSC survey 2013/2014



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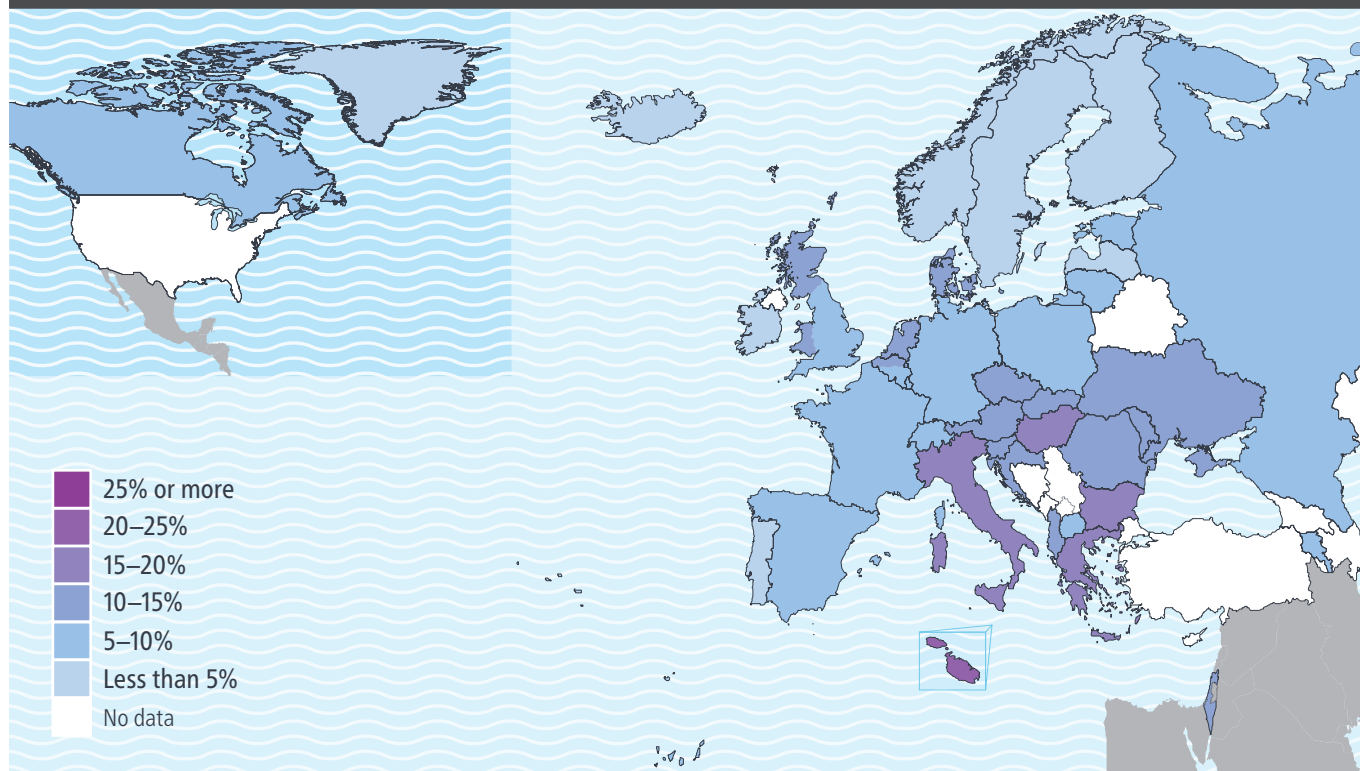


Note: **indicates** significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ . No data were received from Finland (11-year-olds) and the former Yugoslav Republic of Macedonia (11- and 13-year-olds).



HBSC survey 2013/2014

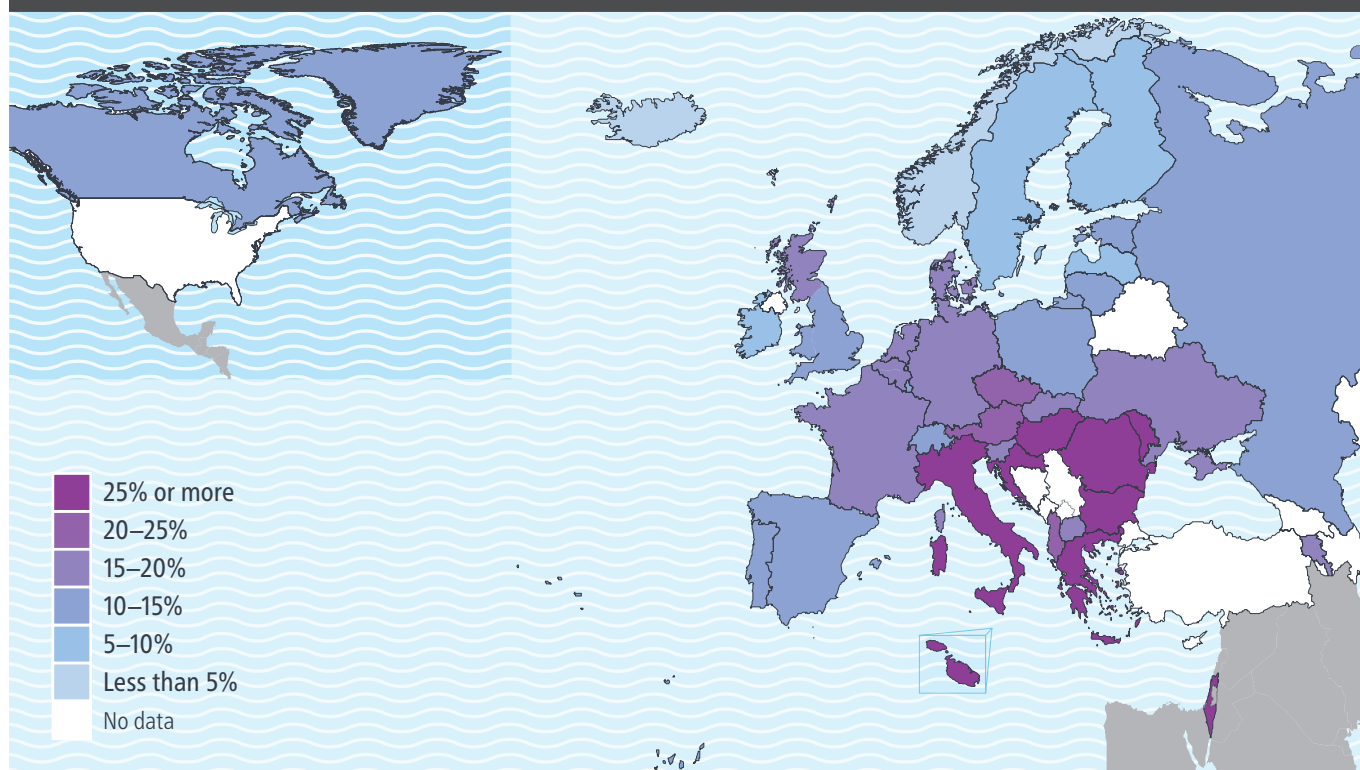
### 15-year-old girls who drink alcohol at least once a week



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

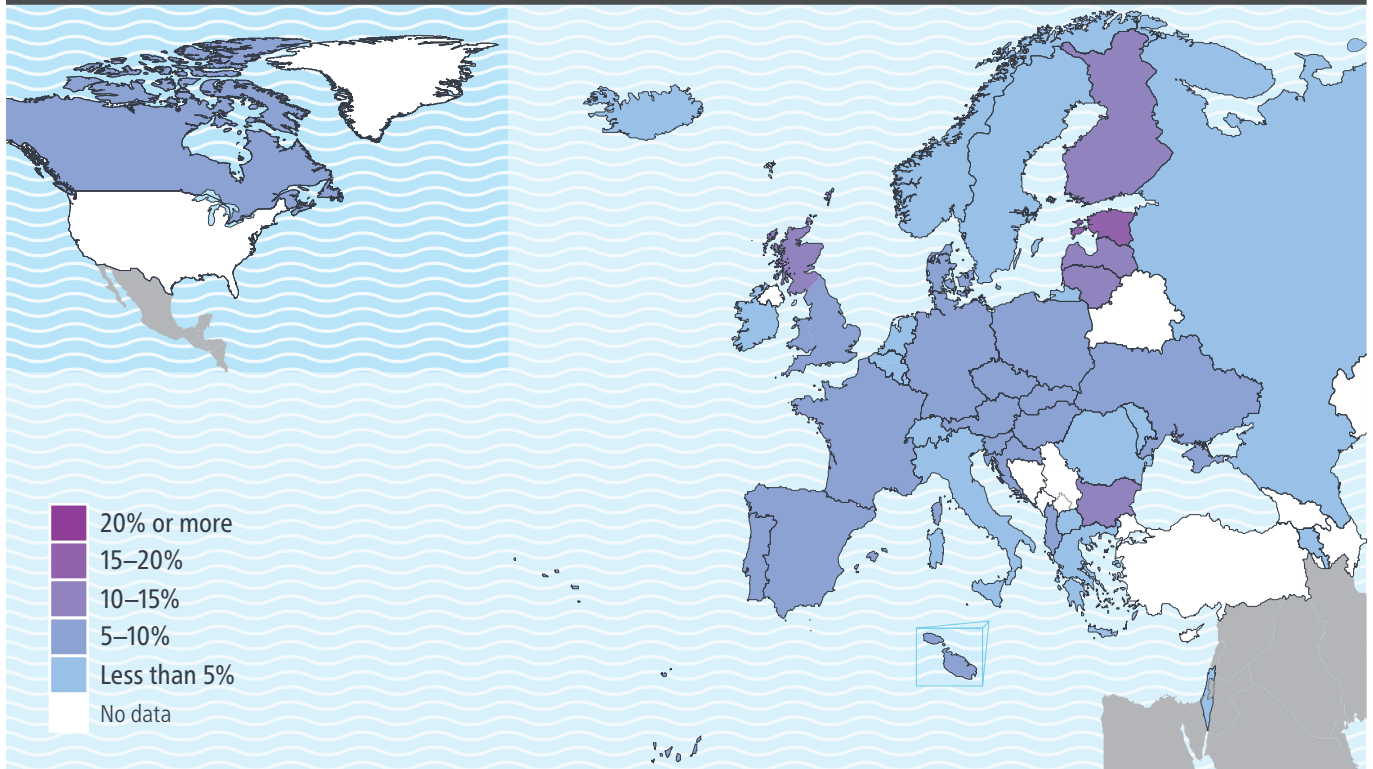
### 15-year-old boys who drink alcohol at least once a week



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

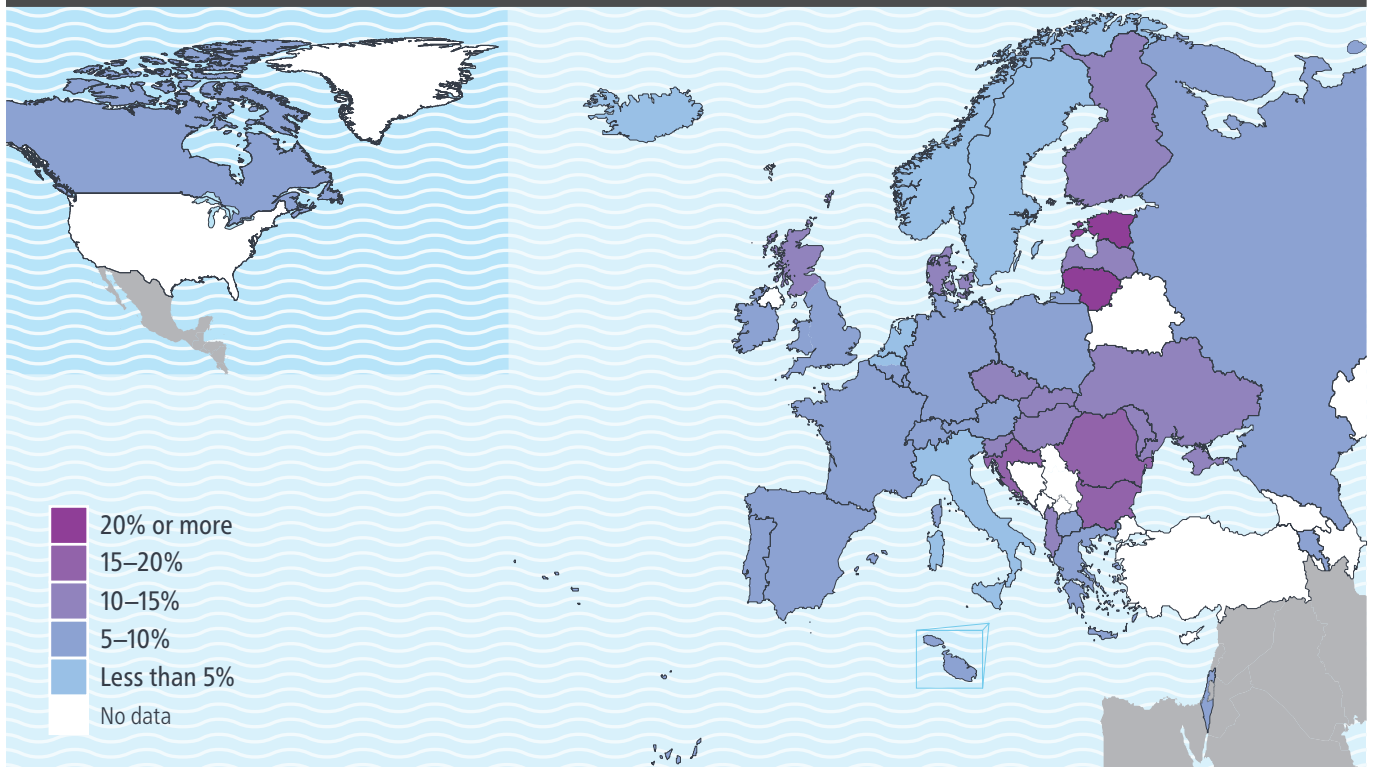
### 15-year-old girls who report first drunkenness at age 13 or younger



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

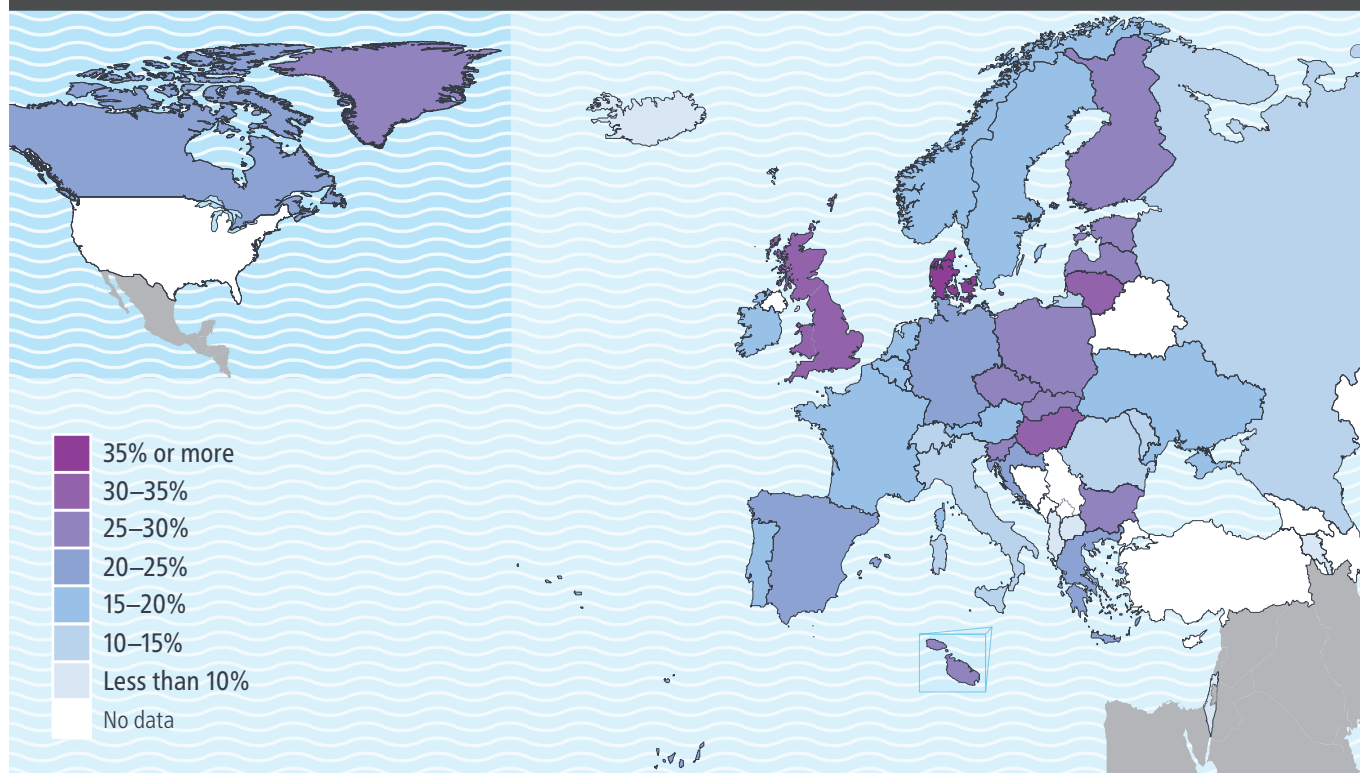
### 15-year-old boys who report first drunkenness at age 13 or younger



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

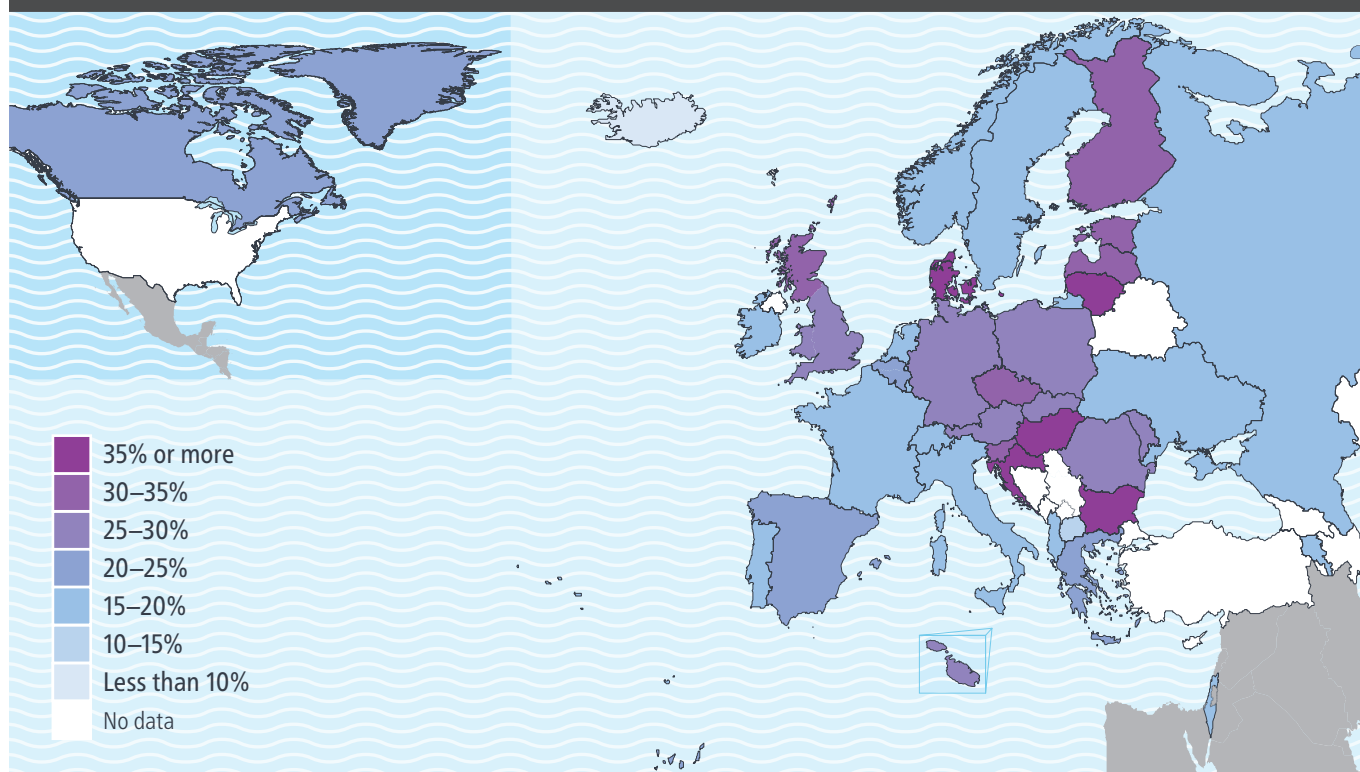
## 15-year-old girls who have been drunk on two or more occasions



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

## 15-year-old boys who have been drunk on two or more occasions



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

## ALCOHOL USE: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

Adolescent alcohol use has decreased in most European and North American countries and regions since the beginning of the 21st century (6). The findings indicate that the decrease is ongoing in all age groups and among boys as well as girls.

The findings confirm previous HBSC data showing that prevalence rates of weekly alcohol use and (early) drunkenness increase substantially with age (especially between 13 and 15) for boys and girls in all countries and regions. It still tends to be more common among boys, but gender differences appear to be decreasing, particularly in relation to weekly drinking and drunkenness on more than one occasion. This finding is consistent with a pattern of gender convergence that has been observed since the beginning of the century (7,8): evidence has even emerged of girls in some northern European countries and regions reporting more alcohol use than boys.

Overall, family affluence is not found to have a large effect on adolescent use, a finding that is consistent with the literature (9). Parenting behaviours, such as providing support and monitoring adolescents' behaviour, and social position among peers may be more important than family SES in predicting adolescent alcohol use (10).

### POLICY REFLECTIONS

A range of factors, including changes in disposable income, marketing, prevention approaches, changes in adult drinking behaviours and shifts in teen culture, may have influenced the general decrease in adolescent weekly drinking (6,8,11). Policies are in place in many countries and regions to limit underage access and restrict use among those of all ages (11,12), and stricter prevention policies are emerging (13). Changes in social norms, such as stronger societal disapproval of adolescent drinking, may also have contributed to the observed trends (6). More stringent policies and changing social norms may be related to greater insight into the potentially harmful effects of alcohol on adolescent brain development. Evidence suggests the need for more effort to address the increase in alcohol consumption between ages 13 and 15 that is evident across all countries and regions.

Evidence to support particular policies that contribute to reductions in adolescent use is growing. At country level, the absence of a minimum purchasing age and weak restrictions on alcohol availability and advertising are associated with adolescent use (11). Research on the effectiveness of school-based interventions is mixed (14), but programmes that target not only adolescents, but also their parents, can have considerable effects (15). Some generic psychosocial and developmental prevention programmes on life skills and healthy lifestyle may also be effective and can be considered as policy and practice options (16). Family interventions are effective in delaying alcohol initiation and reducing frequency of consumption among adolescents (16). Family treatments focused on change in maladaptive behaviours, multidimensional family therapy and group-administered cognitive behavioural therapies have received considerable empirical support (17).

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## CANNABIS USE

Cannabis is the most frequently used drug in Europe, with 14.6 million young adults using it in 2014 (1). It was also the most commonly reported substance related to new admissions to drug treatment facilities across Europe in 2014 (37% cannabis, 28% heroin and 21% cocaine) (1).

Cannabis, regarded as a so-called gateway drug (2), is the illicit substance used most frequently by schoolchildren across Europe and North America, with a 12-month prevalence ranging from about 27% in Canada to around 3% in the former Yugoslav Republic of Macedonia. The HBSC median is in the region of 10% (3–5). Adolescents use the drug for a variety of reasons, including experimentation, mood enhancement, social enhancement and peer conformity (6).

Scientific evidence proves that cannabis is a dangerous and harmful substance, especially for children and young people who use it regularly (7). Cannabis use is a risk factor for mental disorders and may trigger psychosis (particularly among those who are prone) (8). Early onset and heavy and accelerating use are related to problems such as impairment in brain development, low height and weight, anxiety attacks, short-term memory loss and other cognitive disorders (9), deteriorating school performance and dropout (10), risk-taking, aggression and delinquency (11), depression and anxiety (11), and the development of the so-called lack-of-motivation syndrome (12).

Young people in their teenage years are more likely to use cannabis if they have friends or older siblings who do so (13–15) and if they experience either low parental involvement and reinforcement or high levels of coercive discipline (16).

Many countries have introduced new regulatory approaches and policies to enable the prescription of cannabis for medical purposes and public debate on legalization for recreational (non-medical) use is growing. Five states of the United States and two countries (the Netherlands and Uruguay) have implemented policies that legalize cannabis for recreational use for people over the age of 21 (17). Population surveys show that the perception of cannabis-associated risk has declined significantly as a result of the ongoing debate, with some countries seeing an increase in use among adolescents and young adults (18).

### MEASURES

#### Lifetime use

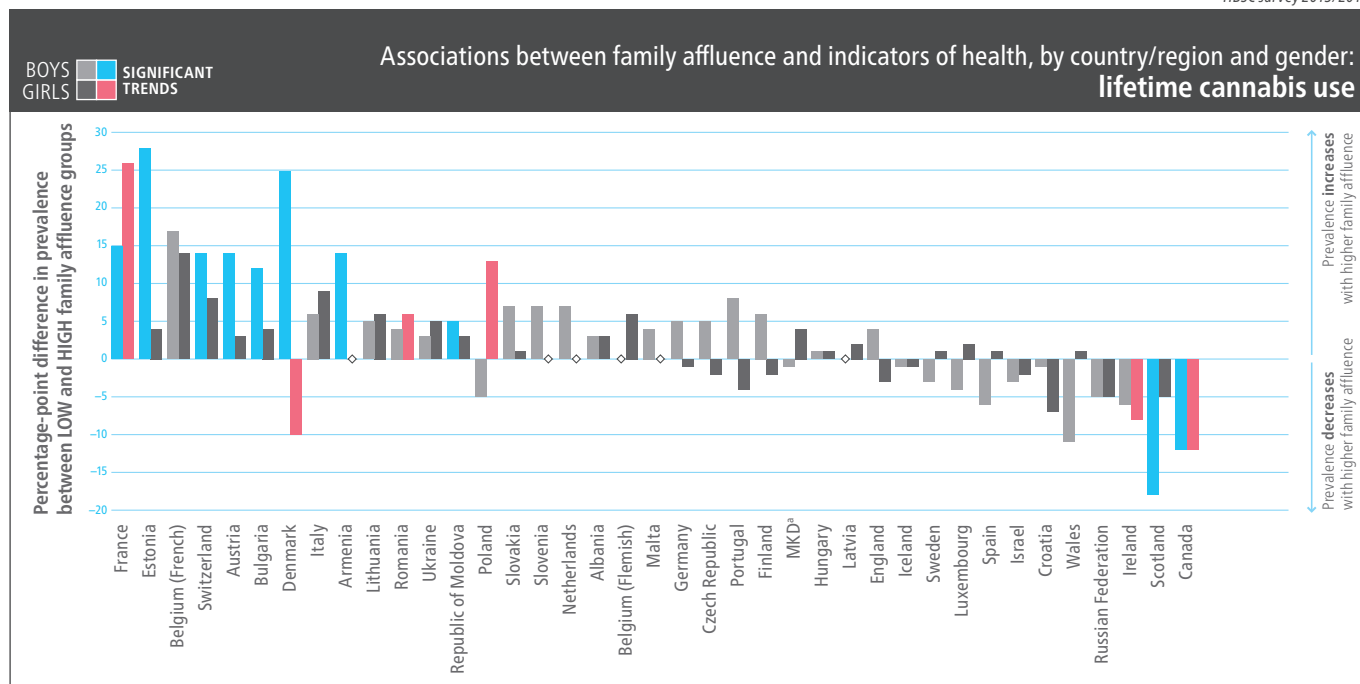
Young people (15-year-olds only) were asked how often they had used cannabis in their lifetime.

#### Use in last 30 days

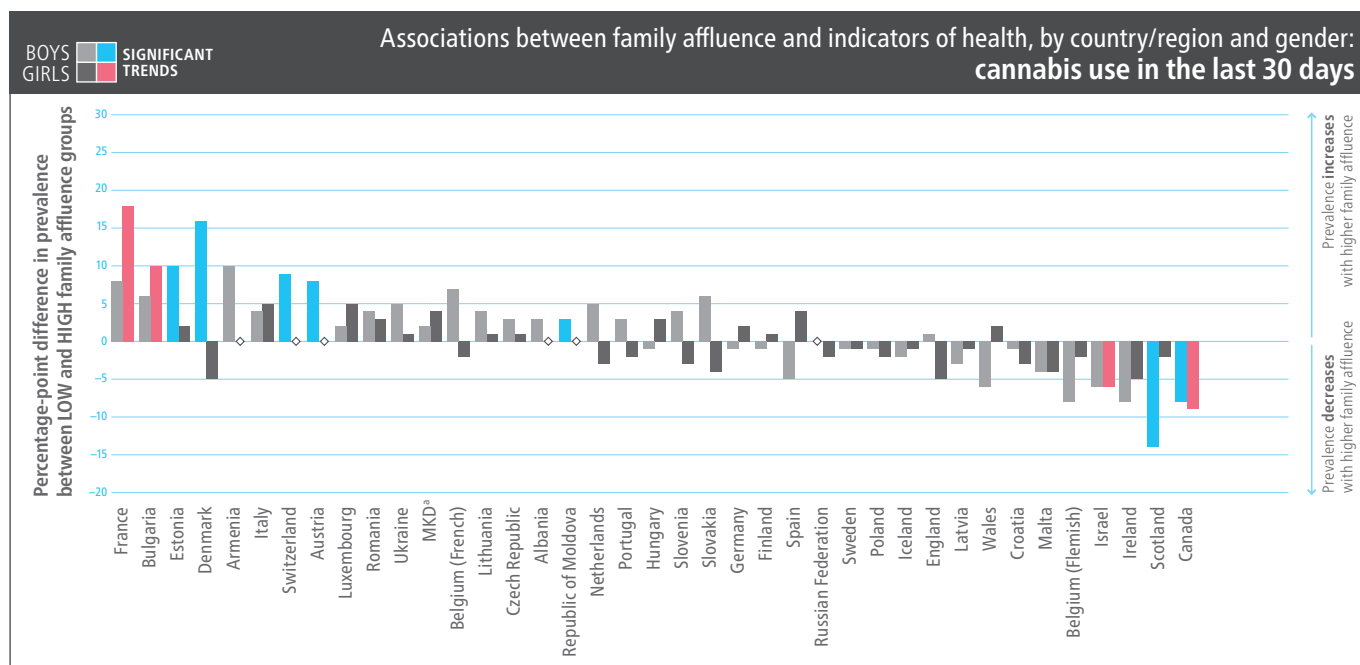
Young people (15-year-olds only) were asked how often they had used cannabis in the last 30 days.

#### Cannabis initiation

Young people (15-year-olds only) were asked how old they were when they used cannabis for the first time.

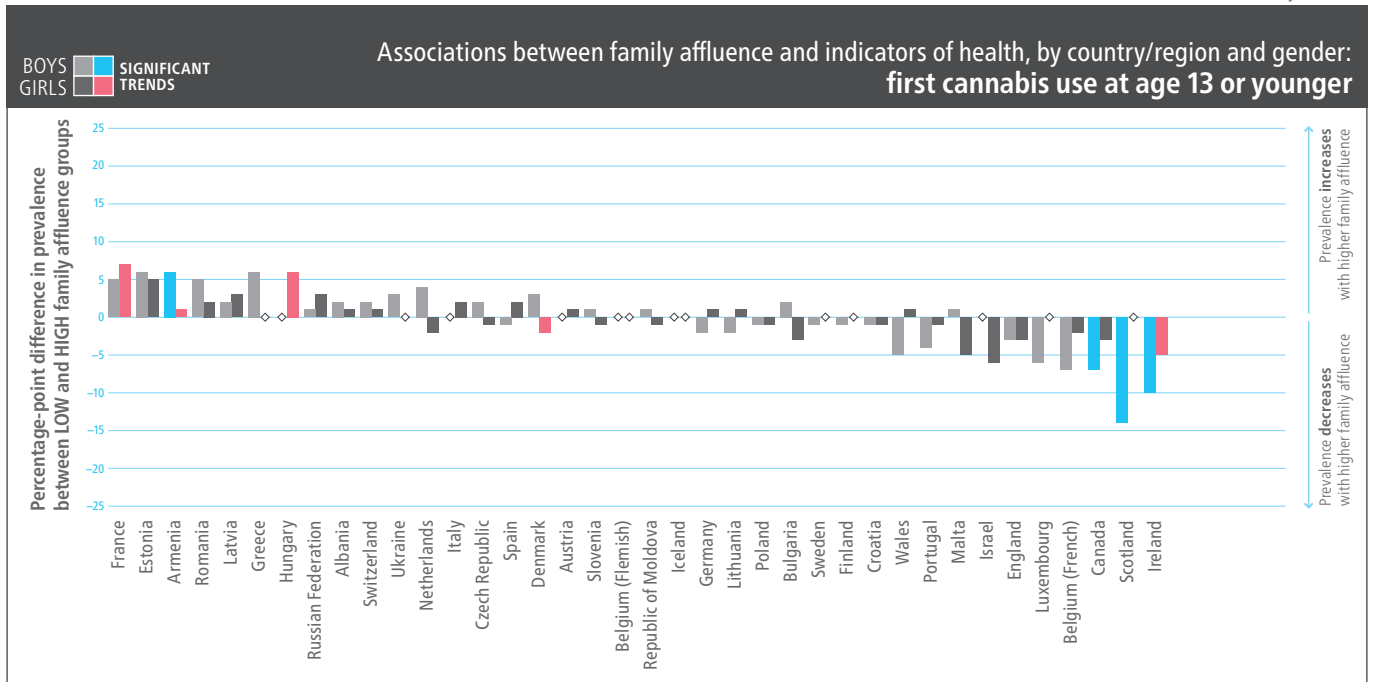


\* The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than  $\pm 0.5\%$ . No data were received from Greece, Greenland and Norway.



\* The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than  $\pm 0.5\%$ . No data were received from Greece, Greenland and Norway.

HBSC survey 2013/2014



## RESULTS

### Lifetime use

Findings presented here show the proportion of young people who had used cannabis at least once (lifetime use).

**Age** Data are presented for 15-year-olds only.

**Gender** Boys used cannabis more commonly in around half of countries and regions. A difference of 10 percentage points was seen in three (Estonia, Italy and Switzerland).

**Family affluence** No clear pattern was seen for boys and girls. Only a few countries and regions showed a significant relationship, but this was not uniform: higher prevalence was linked to high affluence in some and low affluence in others. Lifetime use was associated with high affluence in eight countries and regions for boys and three for girls. Prevalence was higher with low family affluence in four: Canada (boys and girls), Denmark (girls only), Ireland (girls only) and Scotland (boys only).

### Use in last 30 days

Findings presented here show the proportion of young people using cannabis at least once during the last 30 days (recent use).

**Age** Data are presented for 15-year-olds only.

**Gender** Recent use was higher among boys in half of countries and regions. The largest difference between girls and boys was 6 percentage points.

**Family affluence** No clear association was found between recent cannabis use and family affluence in most countries and regions.

### Cannabis initiation

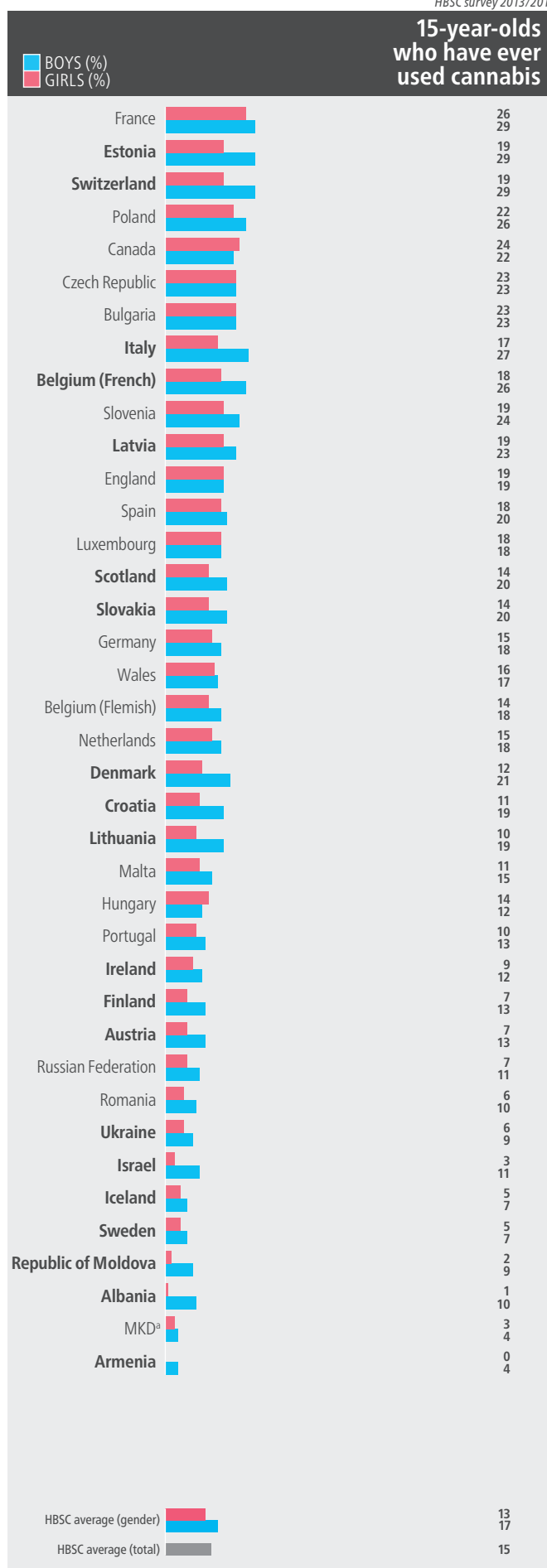
Findings presented here show the proportion of young people who used cannabis for the first time when they were 13 years or younger (early age of initiation).

**Age** Data are presented for 15-year-olds only.

**Gender** The percentage of early initiators ranged from 1% to 8% in boys and 0% to 7% in girls. Prevalence was higher among boys in 17 countries and regions, although gender differences were small.

**Family affluence** No clear association with family affluence was found in most countries and regions. In those that had a significant association, the direction varied. The largest differences between high- and low-affluence groups were among boys in Ireland and Scotland, where early initiation was associated with lower affluence.

HBSC survey 2013/2014

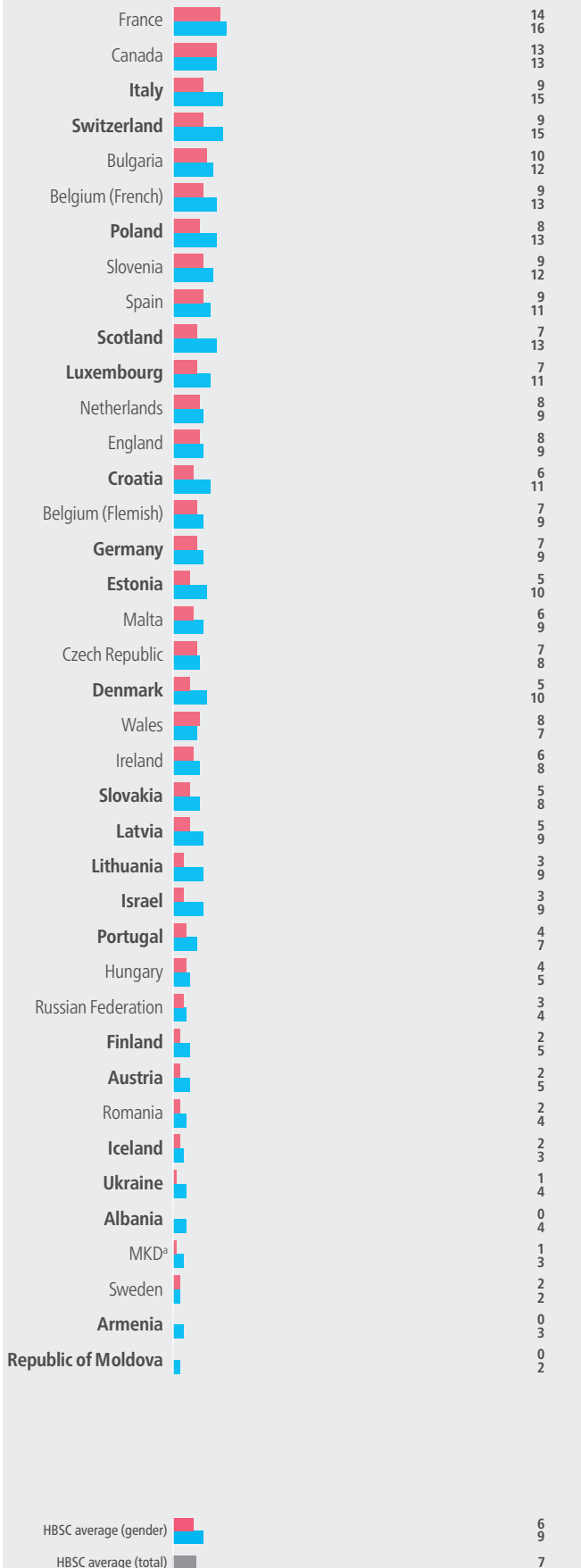


<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: 0 means less than  $\pm 0.5\%$ . No data were received from Greece, Greenland and Norway. The question was asked only of a subset of 15-year-olds in Belgium (French).

HBSC survey 2013/2014

### 15-year-olds who have used cannabis in the last 30 days

BOYS (%)  
GIRLS (%)

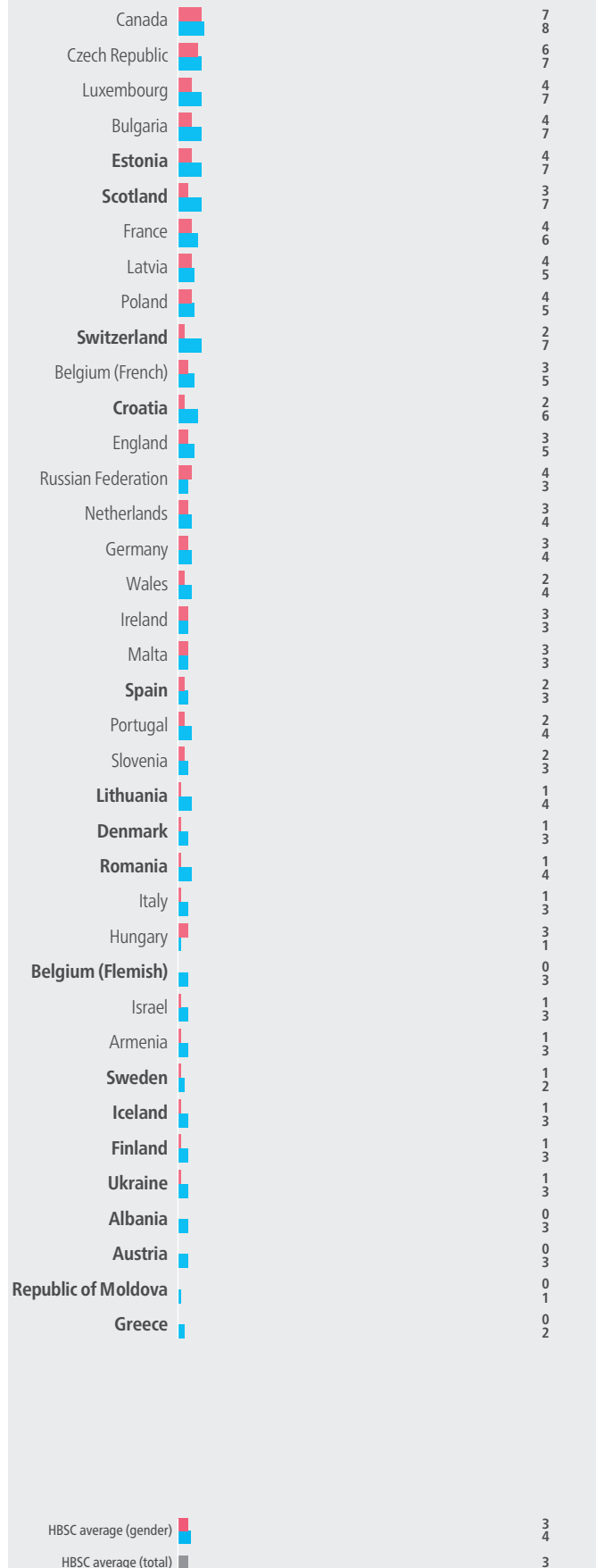


Note: 0 means less than +/-0.5%. No data were received from Greece, Greenland and Norway. The question was asked only of a subset of 15-year-olds in Belgium (French).

HBSC survey 2013/2014

### 15-year-olds who report first cannabis use at age 13 or younger

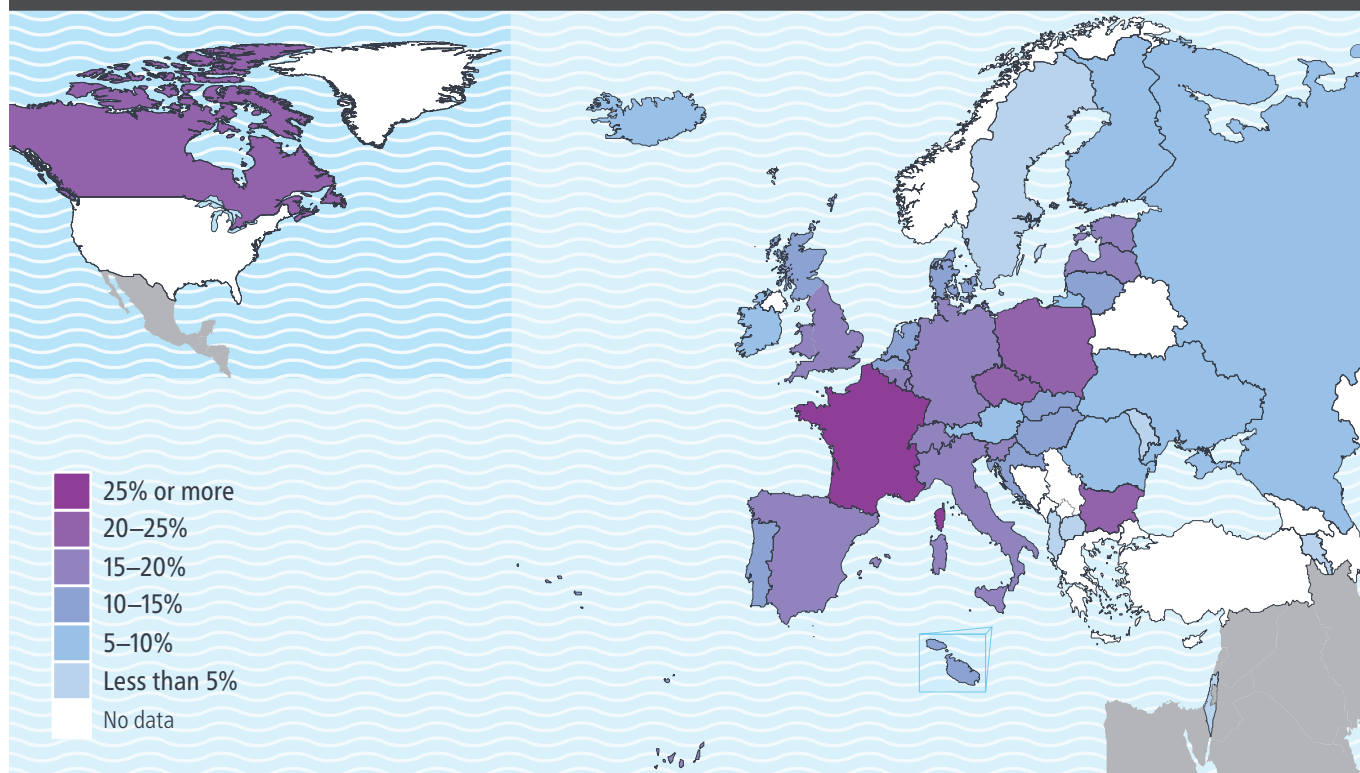
BOYS (%)  
GIRLS (%)



Note: indicates significant gender difference (at  $p < 0.05$ ). 0 means less than +/-0.5%. No data were received from Greenland, Norway, Slovakia and the former Yugoslav Republic of Macedonia. The question was asked only of a subset of 15-year-olds in Belgium (French).

HBSC survey 2013/2014

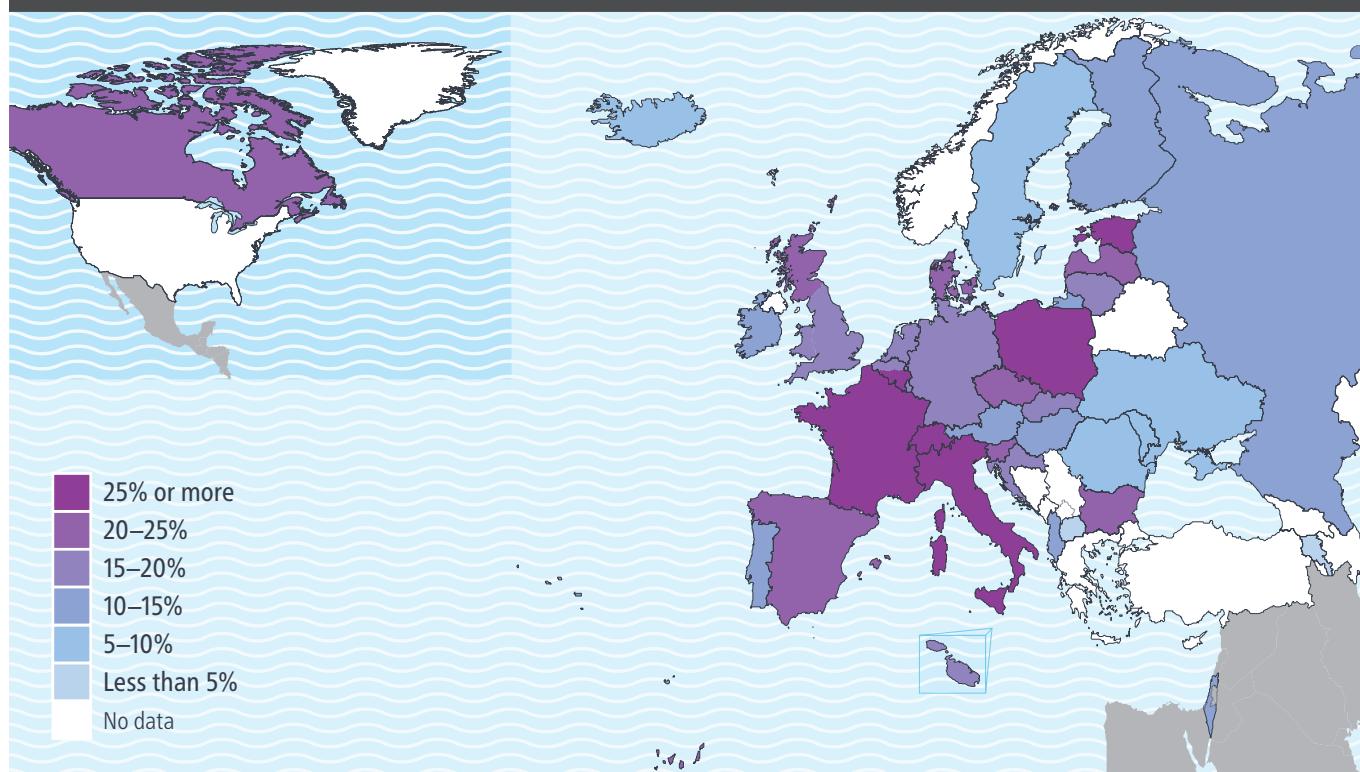
### 15-year-old girls who have ever used cannabis



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

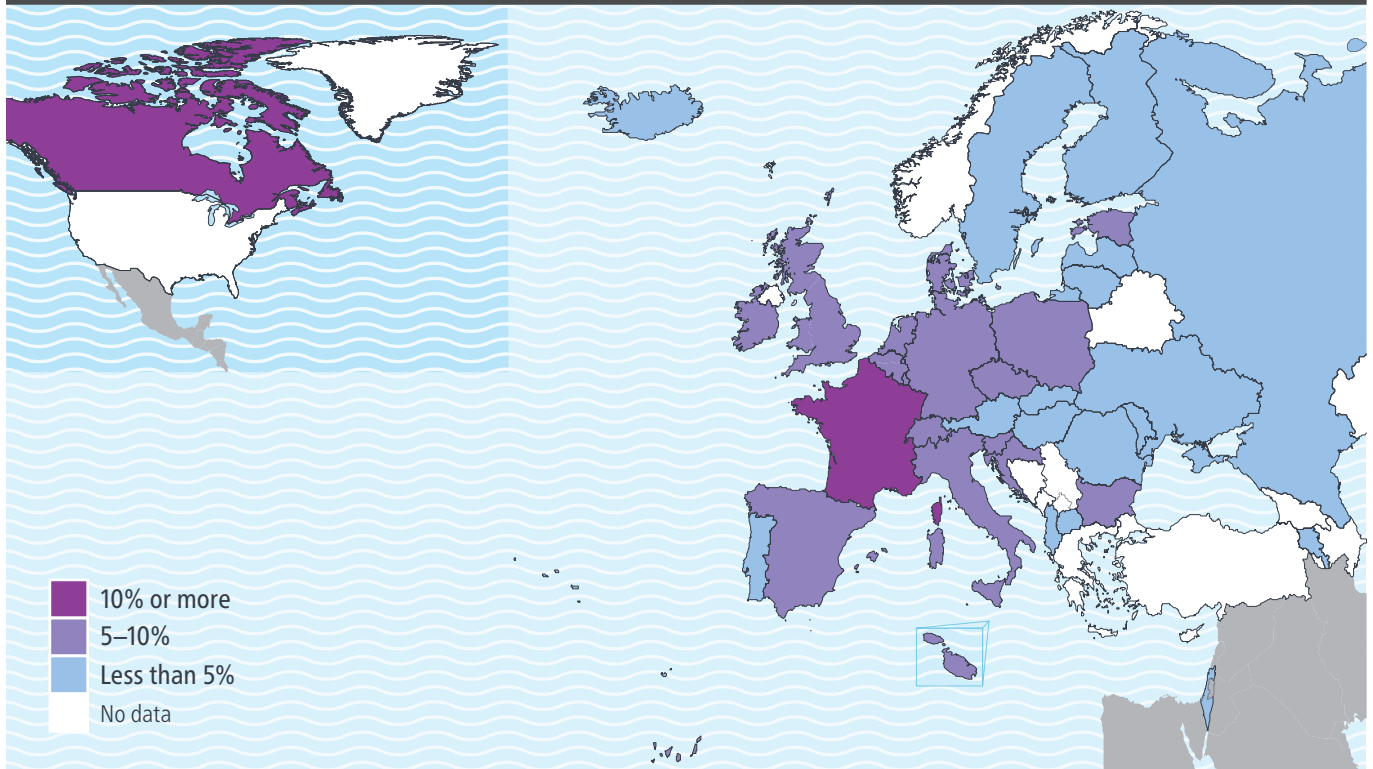
### 15-year-old boys who have ever used cannabis



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

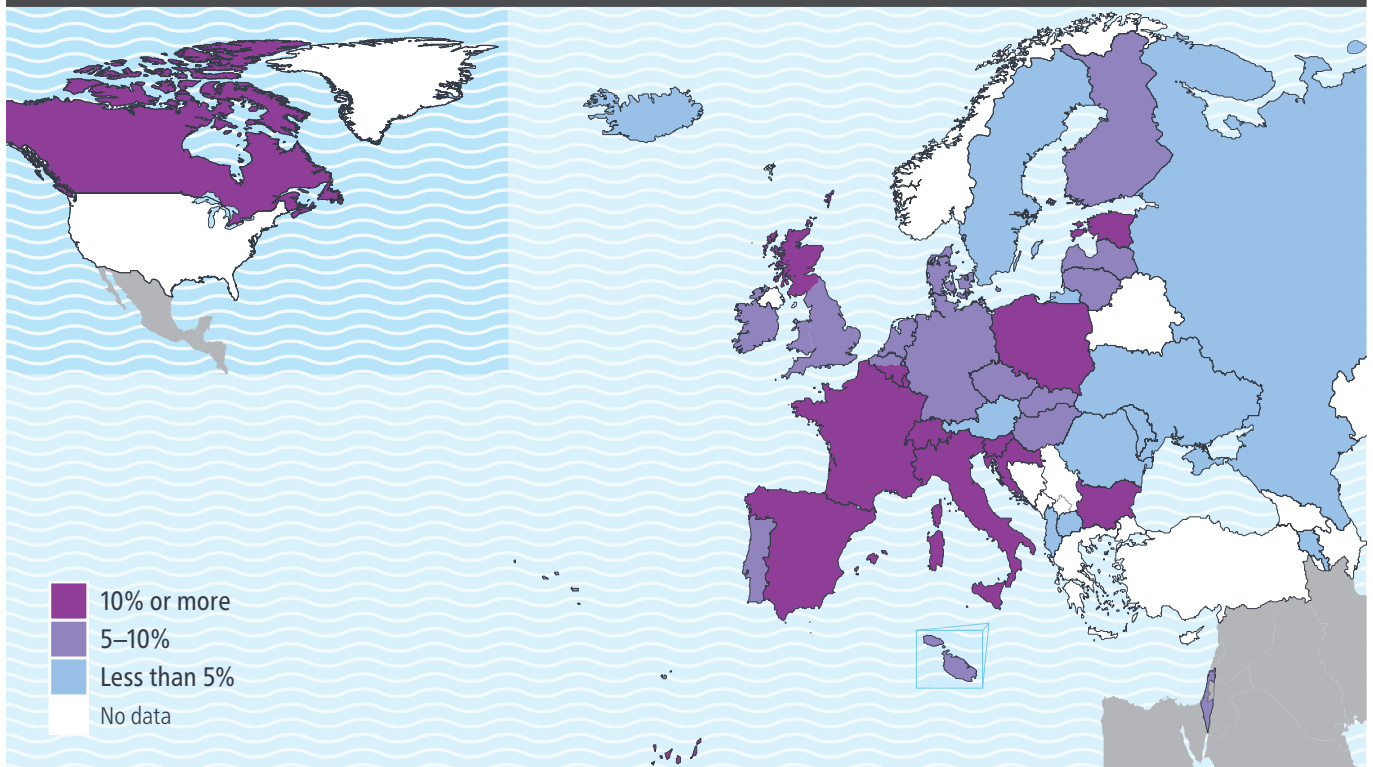
### 15-year-old girls who have used cannabis in the last 30 days



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

### 15-year-old boys who have used cannabis in the last 30 days



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.



## CANNABIS USE: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

The findings show that the prevalence of cannabis use varies substantially between countries and regions. Recent use in some, such as the Republic of Moldova and Sweden, is less than 2%, while it exceeds 13% in others (Canada and France). Some cross-national variations might be related to wealth, availability, perceived risk from cannabis or different peer cultures (15,18–20).

Findings also confirm that cannabis use is generally greater among boys. Early age of initiation is higher for boys in around a third of countries and regions, but findings on the association between use and family affluence are not consistent.

It is suggested that ongoing public debates and changes in national and state policies and regulations might explain future variations in trends across countries and regions as they affect perceptions of risk and availability and may encourage experimentation (18,21). More research into cross-national differences and trends in young people's cannabis use is needed to enable understanding of the mechanisms involved.

Debates on legalization may continue to exert a normalization effect on perceived risk and elevation rates that in turn might change the clustering effect of cannabis use with other risk behaviours.

### POLICY REFLECTIONS

Recent debate and public pressure around cannabis has led to the introduction of decriminalization policies in most European countries that aim to focus enforcement efforts on drug dealers and allow recreational users to receive only a warning or symbolic penalty. It is still too early to determine whether this approach is effective, and the efficacy of various decriminalization models remains unsubstantiated.

Public debate and cannabis policy and regulation developments seem likely to intensify in coming years, so it is vital to continue to monitor and study changes in patterns of cannabis use among European and North American schoolchildren and investigate their effects on perceptions of risk and use. It is also important to study protective factors that might serve as buffers to prevent increases in cannabis use consequent to policy changes.

Adolescents who initiate substance use early and are frequent users are more likely to experience adverse consequences (11,13,14) and therefore warrant particular attention from policy-makers.

School, community and family-based interventions should be adapted to current policies and embrace a focus on increasing knowledge about the dangers and risks associated with cannabis, enhancing decision-making skills, promoting self-esteem and encouraging resistance to peer pressure. Evidence has shown that these intervention strategies can reduce cannabis use effectively (19,22).

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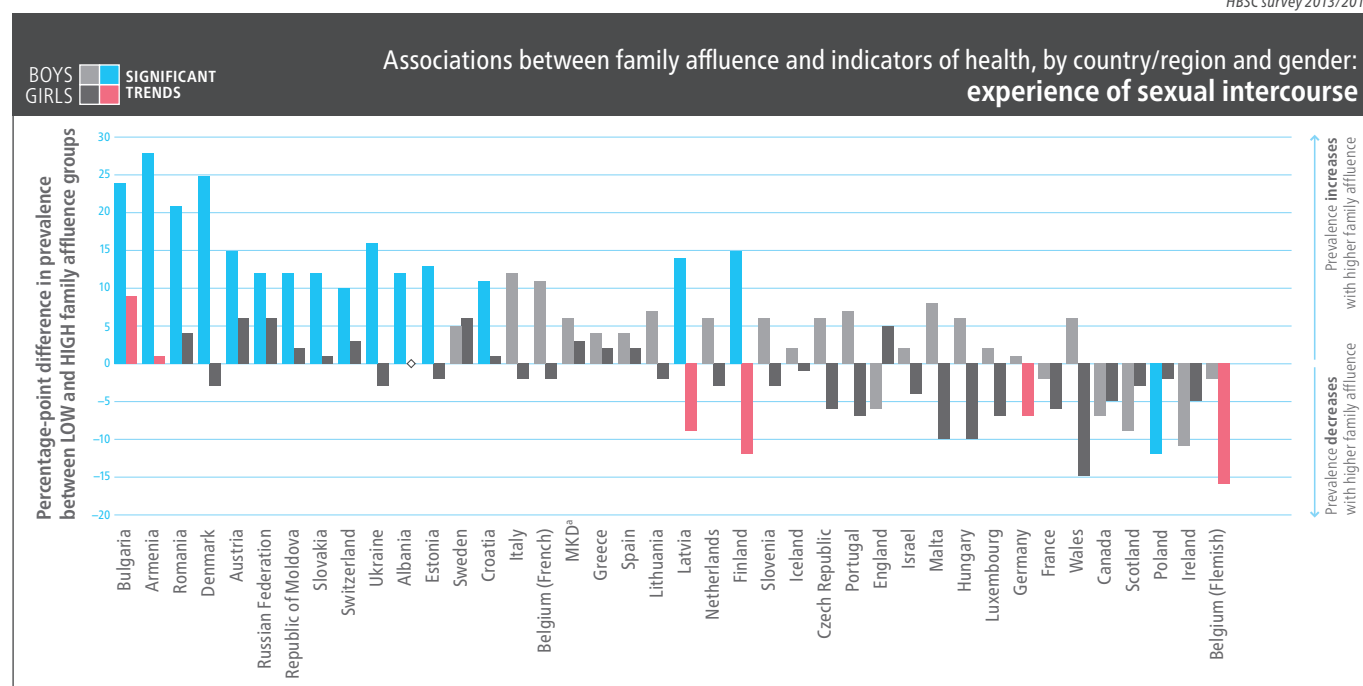
## SEXUAL BEHAVIOUR: EXPERIENCE OF SEXUAL INTERCOURSE

The emergence of romantic relationships is an important developmental marker of adolescence, and first intercourse often occurs at this time (1). It is known that early sex has implications for self-perception, well-being, social status and future health behaviours, including sexual behaviours (2,3). Early sexual initiation can be seen as part of broader risk-behaviour clusters that include substance use and unprotected sex (4–7), with general genetic and environmental factors possibly being important mediators (8).

Many young people rate their first sexual experience positively, but negative experiences are associated with first intercourse occurring outside of an established relationship or under pressure from the partner (9). Having effective communication skills around sexual behaviour is therefore paramount at time of first intercourse.

Attitudes and expectations regarding adolescent sexuality and premarital sex in many countries and regions mean that young people may not receive adequate sex and relationships education prior to engaging in activity.

HBSC survey 2013/2014



### MEASURES

Fifteen-year-olds only were asked whether they had ever had sexual intercourse. The question was presented using colloquial terminology (such as having sex or going all the way) to ensure respondents understood it was about full penetrative intercourse.

## RESULTS

Findings presented here show the proportions who responded yes to having had sexual intercourse.

### Age

Data are presented for 15-year-olds only.

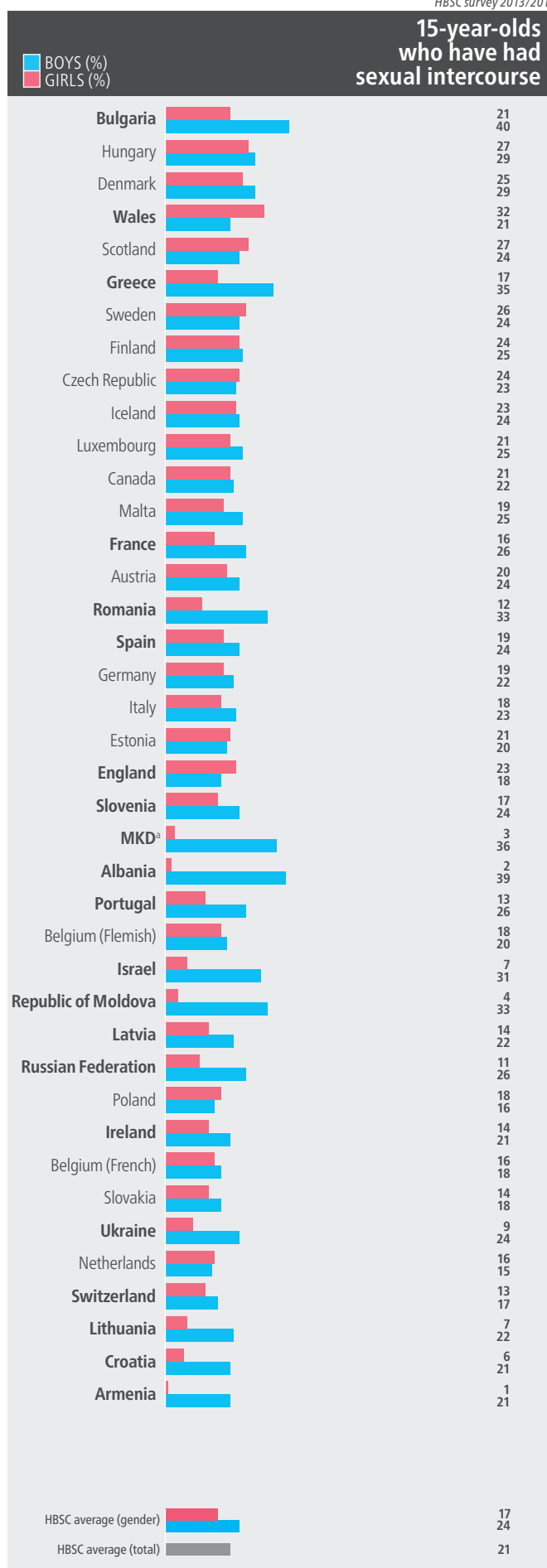
### Gender

Boys were more likely to report having had sexual intercourse in around half of countries and regions, with the greatest gender disparities being seen in eastern European countries. Higher prevalence among girls was reported in England and Wales.

### Family affluence

Sexual intercourse was associated with family affluence in some countries and regions, but the direction of association varied. The relationship was stronger in boys, for whom the tendency was for higher prevalence among those in the highest-affluence group. For girls, the association was positive in two countries and regions and negative in four.

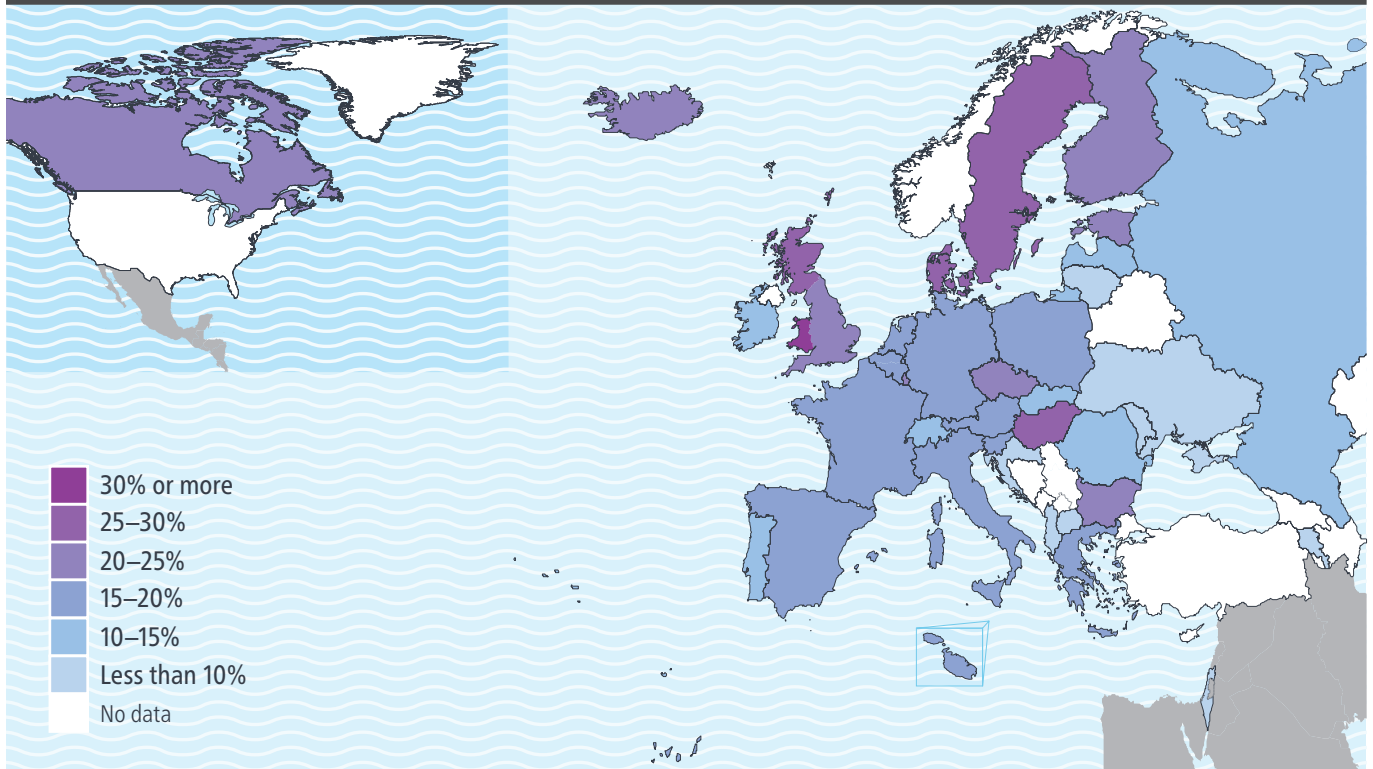
HBSC survey 2013/2014



<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: **indicates** significant gender difference (at  $p < 0.05$ ). No data were received from Greenland and Norway. The question was asked only of a subset of 15-year-olds in Belgium (French).

HBSC survey 2013/2014

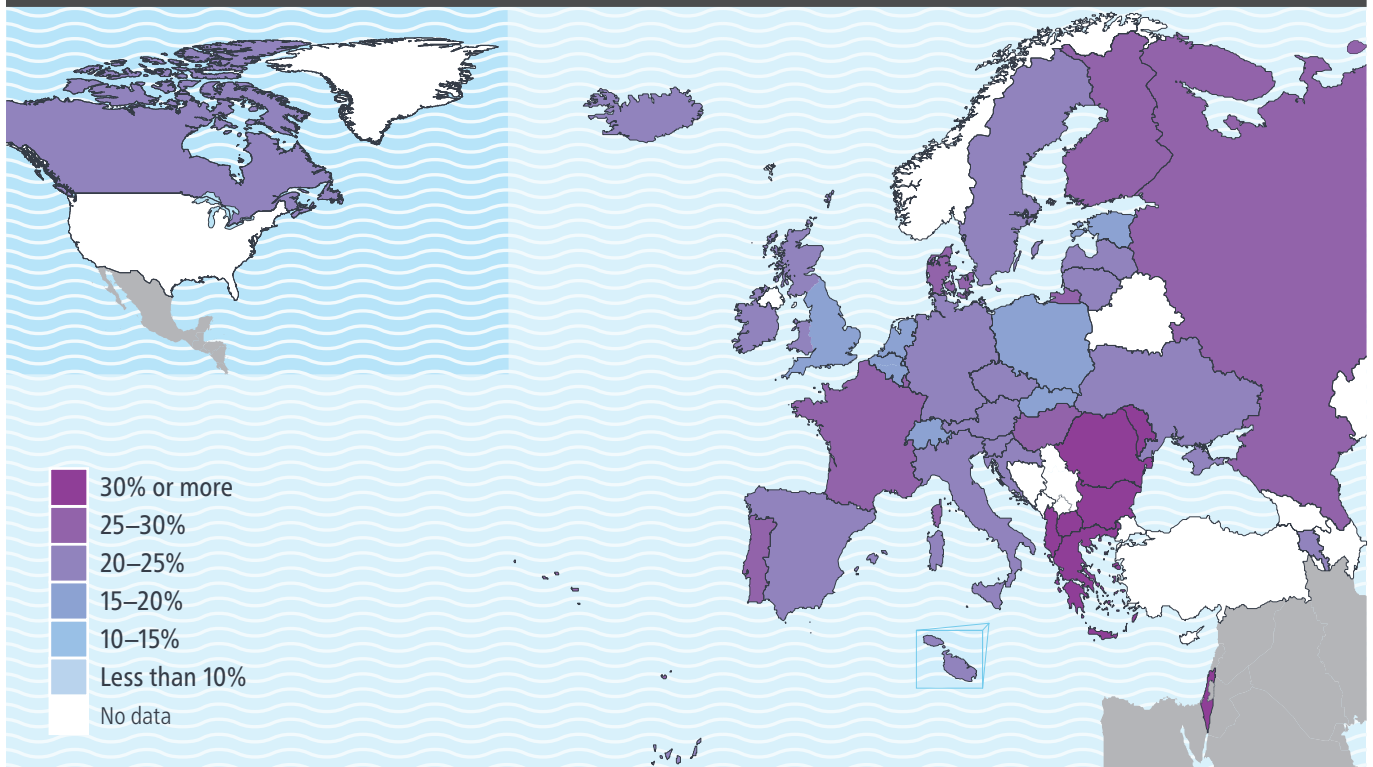
### 15-year-old girls who have had sexual intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

### 15-year-old boys who have had sexual intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

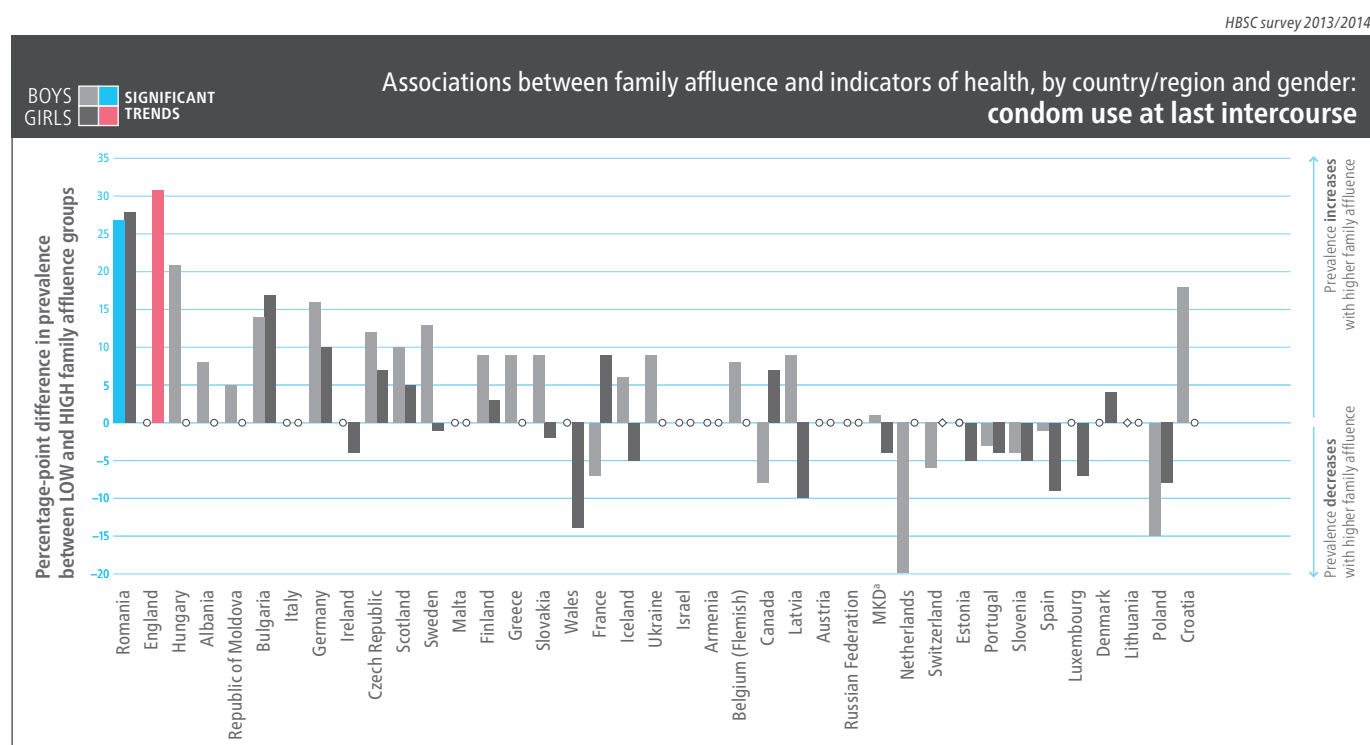


## SEXUAL BEHAVIOUR: CONDOM AND PILL USE

Evidence suggests that sexually transmitted infections (STIs) are increasing among adolescents in many European countries and regions (10), with adolescents being reported as having the highest incidence of some STIs of any age group (11). Condoms are the only effective method of preventing STIs during sexual intercourse and can easily be accessed by adolescents.

The contraceptive pill is an effective method of preventing pregnancy and is frequently used by adolescents in some countries and regions (12). Reducing adolescent pregnancies is an important goal in improving adolescent health and lowering maternal and child mortality (13).

Use of contraceptive methods varies by country and region (12).



\* The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than  $\pm 0.5\%$ .  
○ means no data are presented from the following countries and regions for boys and/or girls due to insufficient numbers of respondents: Albania (girls), Armenia (girls and boys), Austria (girls and boys), Belgium (Flemish) (girls), Croatia (girls), Denmark (boys), England (boys), Estonia (boys), Greece (girls), Hungary (girls), Ireland (girls), Israel (girls and boys), Italy (girls and boys), Lithuania (girls), Luxembourg (boys), Malta (girls and boys), Republic of Moldova (girls), Netherlands (girls), Russian Federation (girls and boys), Ukraine (girls) and Wales (boys). No data were received from Belgium (French), Greenland and Norway.

### MEASURES

Fifteen-year-olds only were asked whether they or their partner had used a condom or birth control pills (two separate questions) the last time they had had intercourse.

This question was amended from the HBSC 2009/2010 survey, when pill and condom use for the purpose of contraception was measured by providing a list of methods of contraceptives and students were asked to mark those used at last intercourse. The question was changed in the 2013/2014 survey as the method was found to result in a large number of missing responses.

## RESULTS

Findings presented here show the proportions of those who had had sexual intercourse who reported using a condom or the contraceptive pill at last intercourse, respectively.

### Condom use

#### Age

Data are presented for 15-year-olds only.

#### Gender

Boys were more likely to report condom use in 13 countries and regions, with girls more likely in only one country (Spain). No major gender disparities were noted in most, however.

#### Family affluence

No clear association with family affluence emerged in most countries and regions. A significant association was observed in only one for boys and one for girls, where condom use was higher among high-affluence groups.

### Pill use

#### Age

Data are presented for 15-year-olds only.

#### Gender

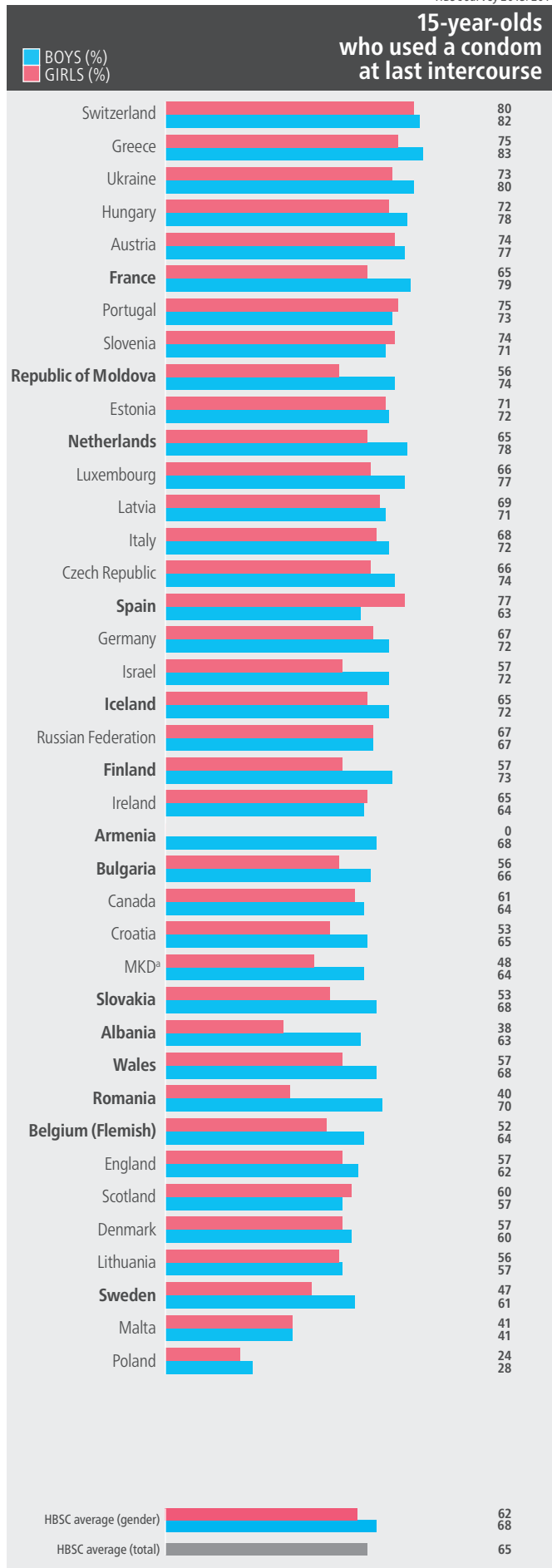
A significant gender difference was found in seven countries and regions, but no overall pattern of either boys or girls being more likely to report pill use emerged.

#### Family affluence

It was not possible to confirm significant relations between pill use at last intercourse and family affluence, as the numbers were too small to reliably identify statistical significance.

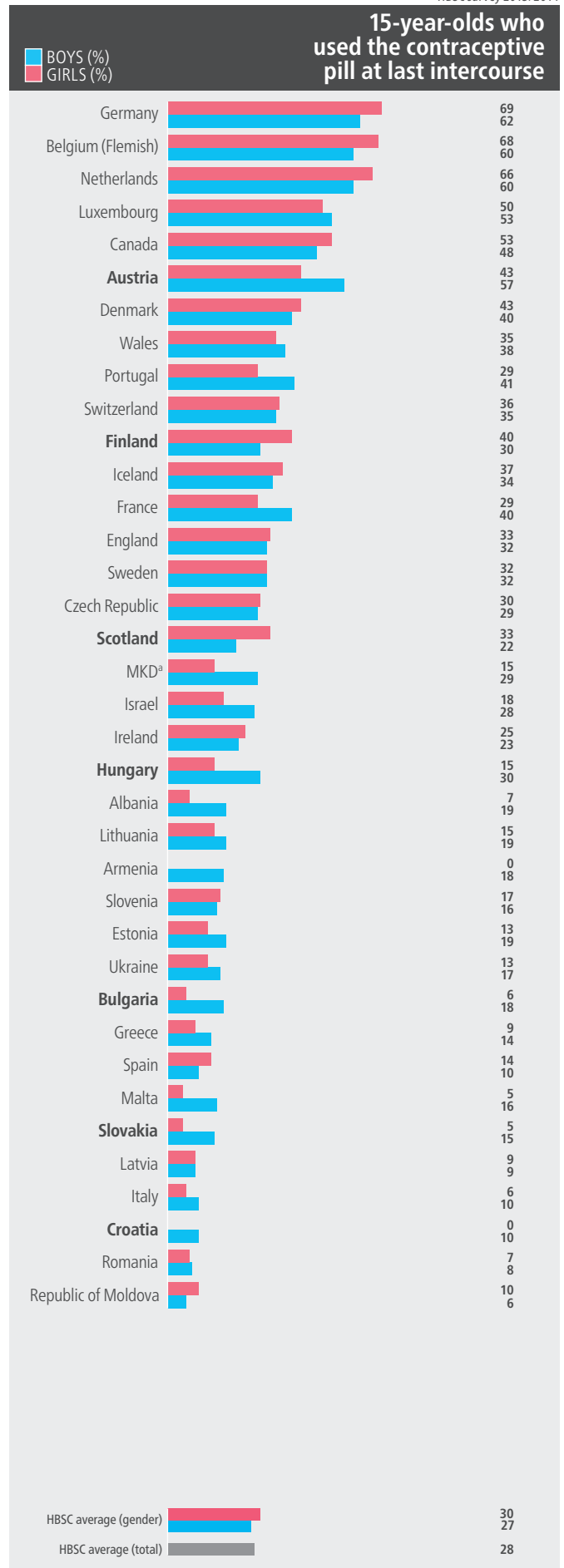


HBSC survey 2013/2014



<sup>a</sup> The former Yugoslav Republic of Macedonia.  
Note: no data were received from Armenia (girls), Belgium (French), Greenland and Norway.

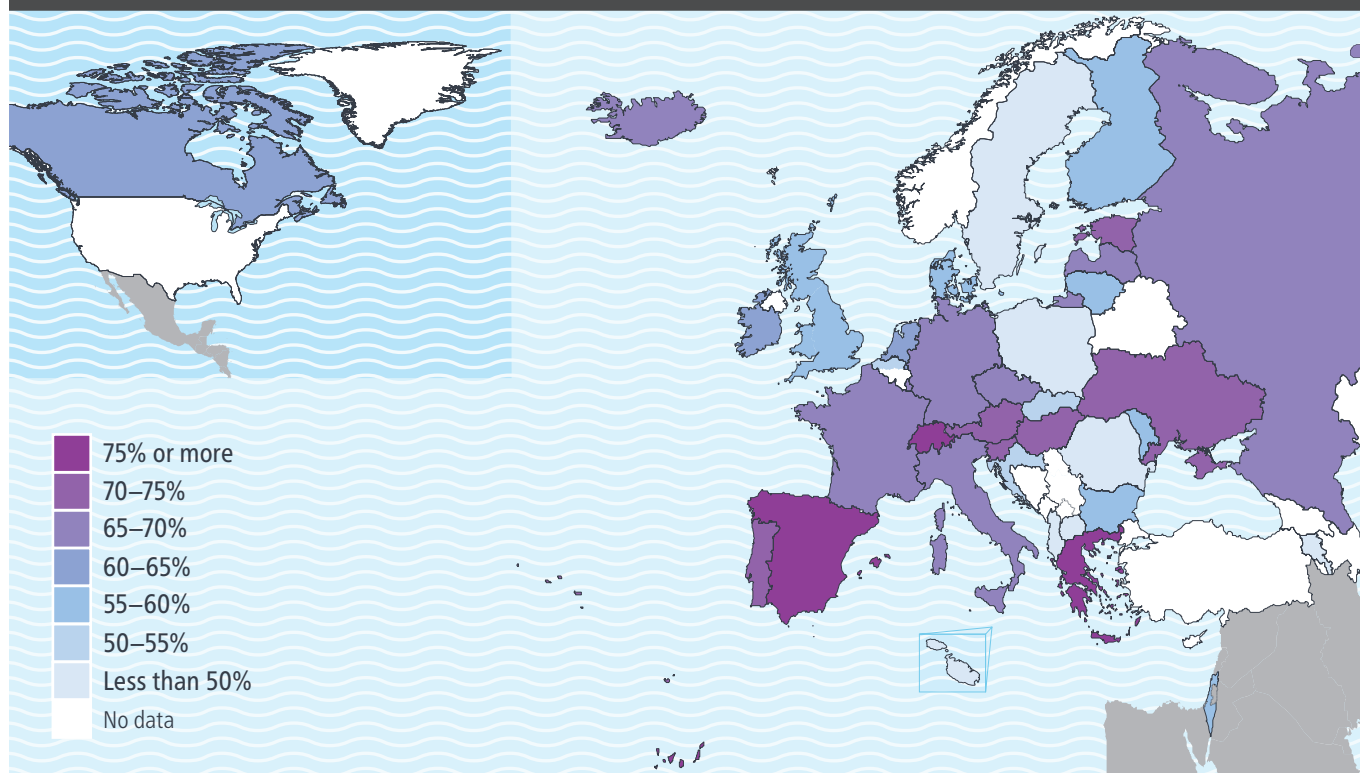
HBSC survey 2013/2014



Note: **indicates** significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ . No data were received from Armenia (girls), Belgium (French), Croatia (girls), Greenland, Norway, Poland and the Russian Federation.

HBSC survey 2013/2014

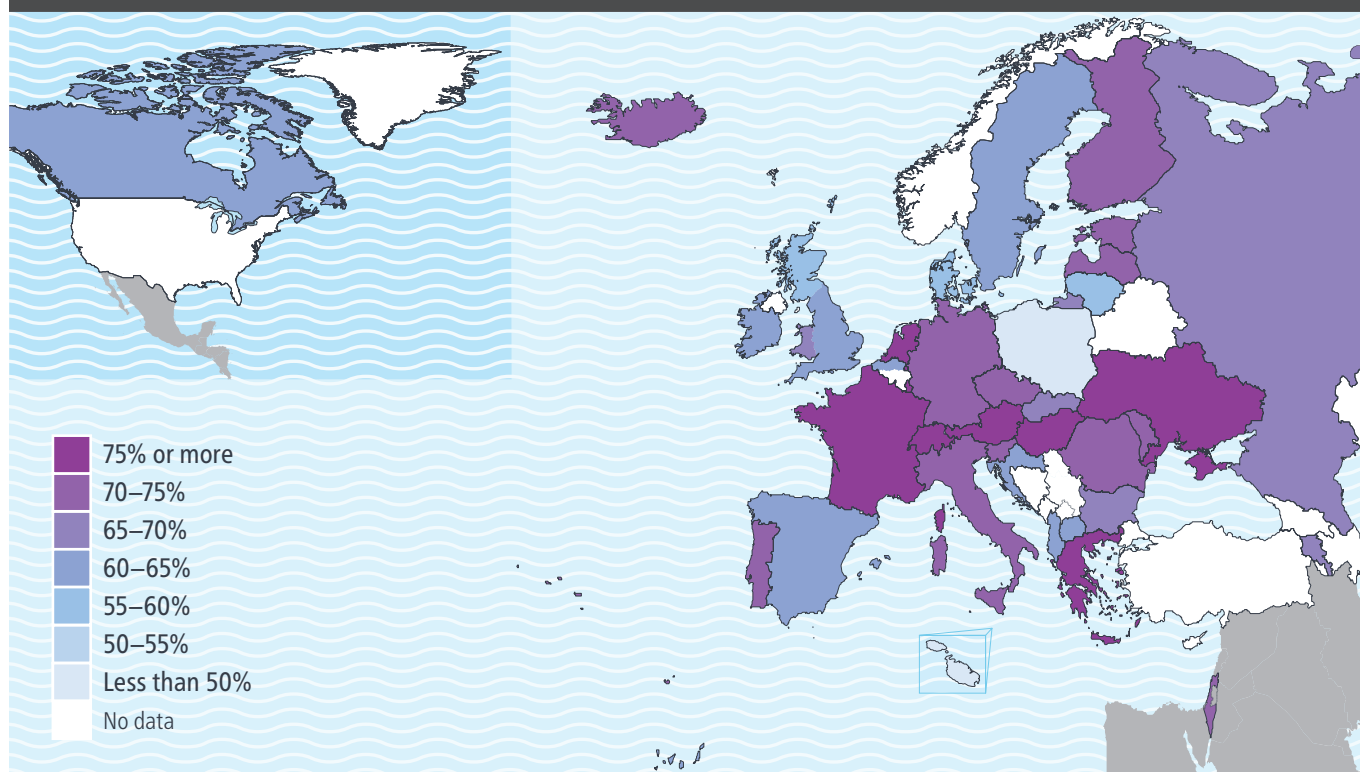
### 15-year-old girls who used a condom at last intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

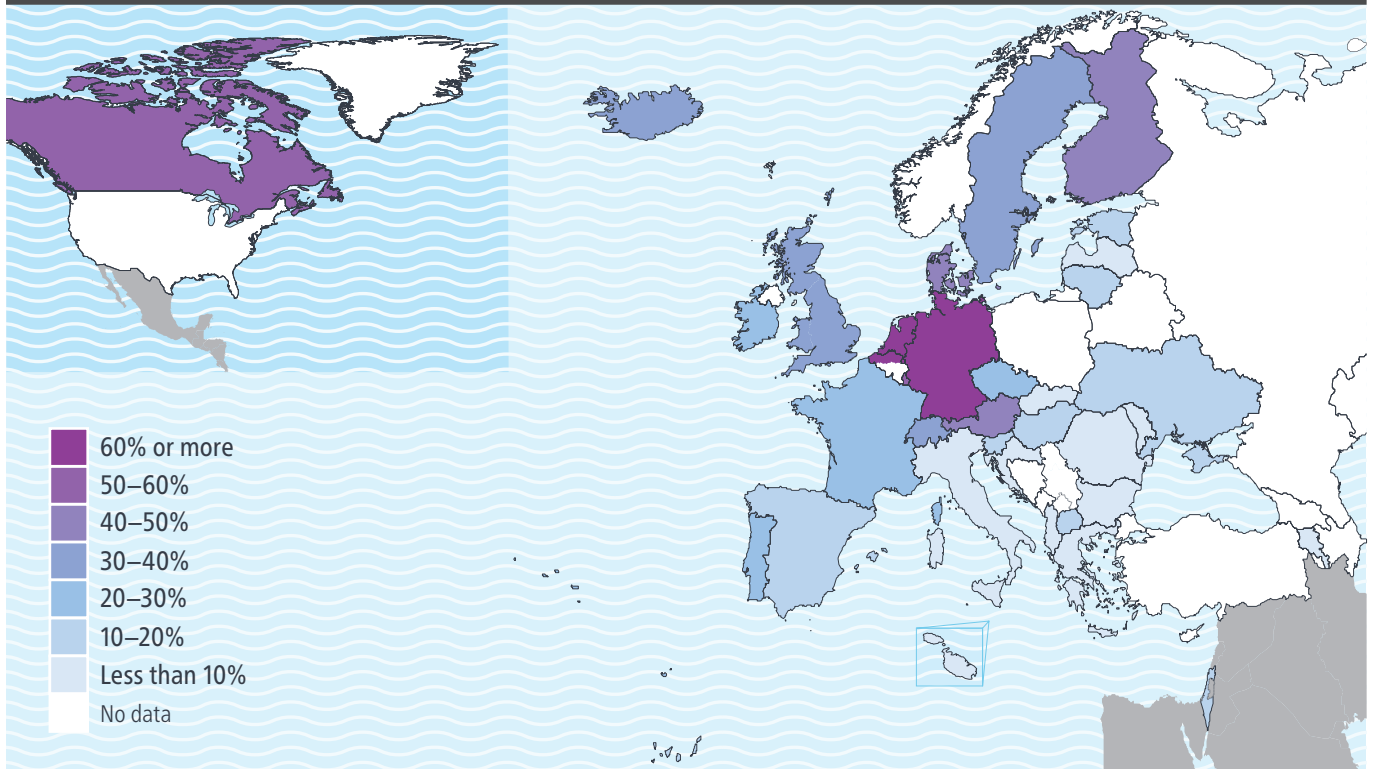
### 15-year-old boys who used a condom at last intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

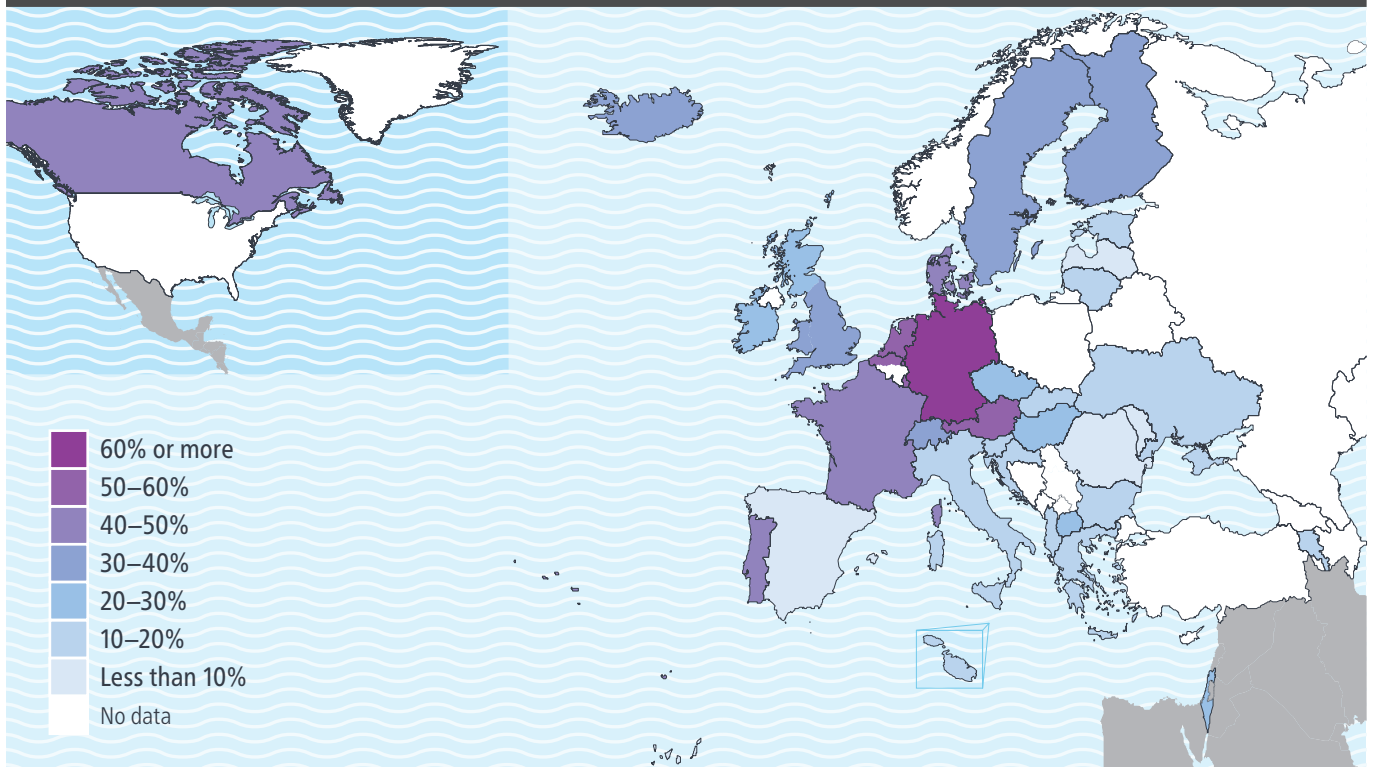
### 15-year-old girls who used the contraceptive pill at last intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

### 15-year-old boys who used the contraceptive pill at last intercourse



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

## SEXUAL BEHAVIOUR: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

Boys continue to be more likely to report sexual intercourse in most countries and regions, although there is evidence that the gender gap is reducing (14,15). The effect of family affluence on the likelihood of engaging in sexual intercourse varies by gender, but use of condoms and the contraceptive pill are not strongly associated with affluence.

Gender identity and norms determine expectations and behaviour (16) and are known to affect health outcomes (17). Gender identity solidifies in adolescence, so this is an important time period for addressing gender-based health inequalities (16). Working directly with boys to redefine gender roles may be a productive means of reducing health inequalities (18).

More than half of sexually active adolescents in most countries and regions report using a condom at last intercourse, but a significant minority leave themselves vulnerable to STIs. Use of contraceptive pills remains less frequent than condom use and is highest in northern and western European countries and regions. This may reflect a lack of access for young people elsewhere (19).

The decision to engage in sexual intercourse and the likelihood of using contraception during such encounters is influenced by young people's communication skills in relation to sex and relationships. Many young people in Europe still feel they receive inadequate information and advice on these matters, which they deem to be necessary before they become sexually active (9).

### POLICY REFLECTIONS

Progress has been made at policy level in addressing adolescents' sexual and reproductive health through, for example, introducing comprehensive sex and relationships education and improving access to services in some countries and regions. Many young people, however, still lack access to modern contraceptives (10) and face barriers to using confidential services (20).

WHO has made it clear that it wishes to see an improvement in access to good health services for all young people, irrespective of ethnicity, religion or SES, but lack of practitioner skills may hinder policies (where they exist) from being implemented (20). Research shows that young people who have access to comprehensive sex and relationships education, confidential reproductive health services and appropriate methods of contraception have better sexual health (21).

The HBSC data show that a significant minority of adolescents are sexually active and that many risk STIs or unplanned pregnancy by not using condoms or effective methods of birth control. Access to such means of protection is hampered for many by restrictions due to religious or cultural attitudes to adolescent sexuality and premarital sex. Each young person should nevertheless have access to sexual health services (13), with the school setting being key to providing health education and nurturing lifestyle skills to promote personal health and well-being (13).

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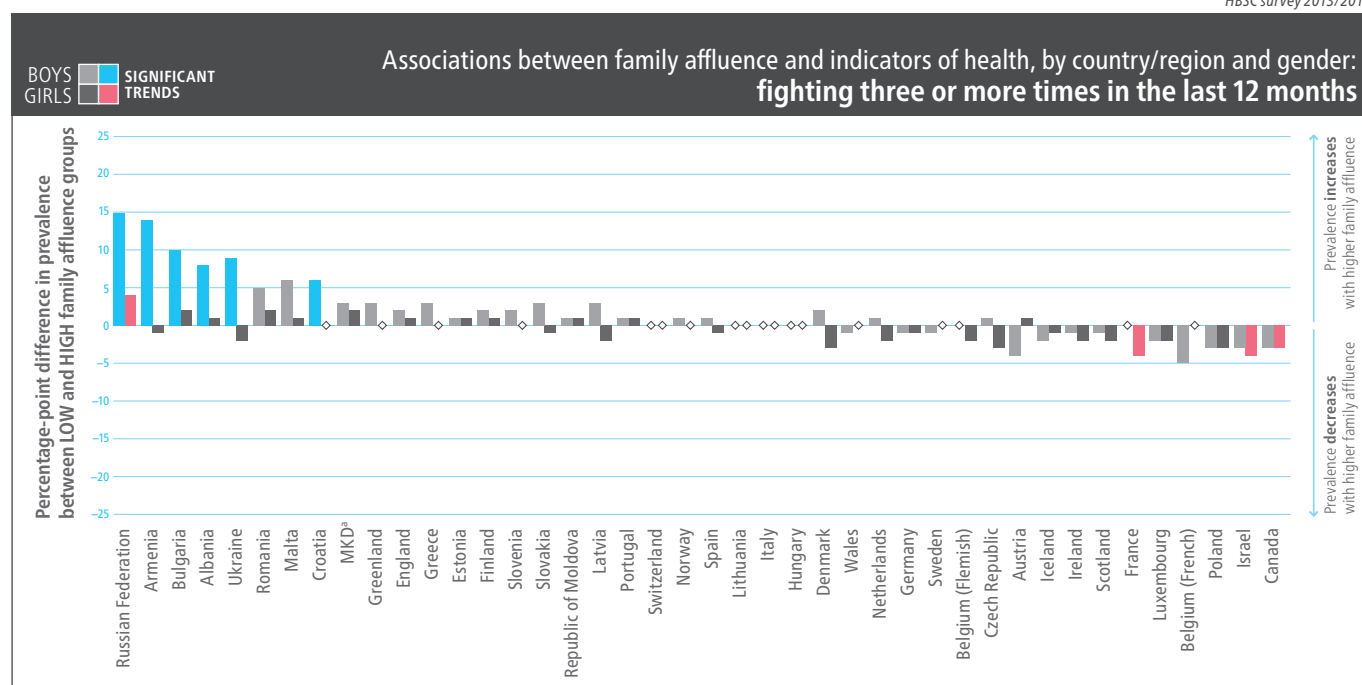


## FIGHTING

Despite the positive trend in reduction in levels over the past decade (1), physical fighting remains a leading health concern and is the most common manifestation of youth violence. Involvement is known to be related to individual, family and school relationships: children who fight report lower life satisfaction, poorer family and peer relationships and worse perceptions of their school environments (2,3).

Adolescents who fight are at risk of involvement in additional problem behaviours, such as alcohol and other substance use (4–6). Research shows that levels of violence are related to socioeconomic factors: inequality intensifies social hierarchies, reduces social control over violence, increases feelings of dissatisfaction and resentment, and fosters a harsh social environment in which conflict is likely to occur (7).

HBSC survey 2013/2014



### MEASURE

Young people were asked how many times in the past 12 months they had been involved in a physical fight. Response options ranged from none to four times or more.

Supplementary data on the proportion involved in a physical fight at least once in the past 12 months are provided in the Annex.



## RESULTS

Findings presented here show the proportions who reported physical fighting three times or more in the past 12 months.

### Age

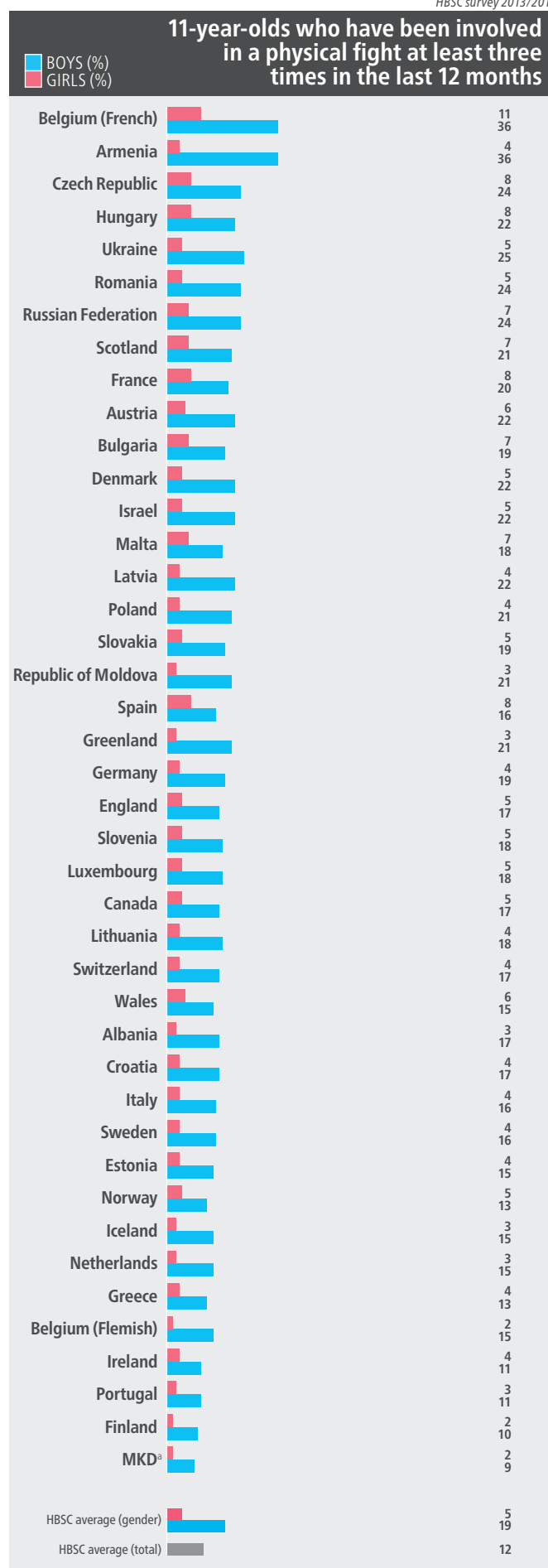
Significant changes over age occurred for boys in most countries and regions, with fighting tending to decline with increasing age. Age-related patterns were less clear for girls. The cross-national range in prevalence was very large, especially for boys.

### Gender

Boys were more likely to be involved at all ages and in all countries and regions except Malta (for 13-year-olds only).

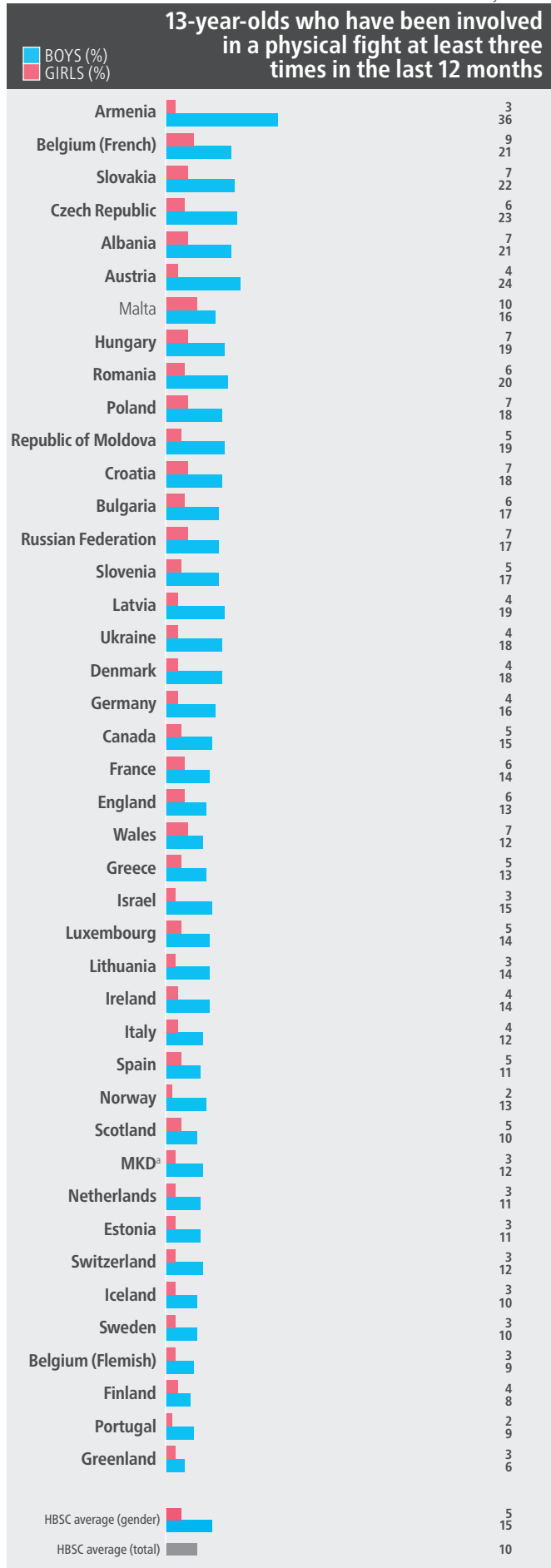
### Family affluence

Fighting differed according to family affluence in a few countries and regions, but no consistent pattern emerged for boys or girls. The largest difference was among boys in Armenia and the Russian Federation, where higher prevalence was associated with high affluence.

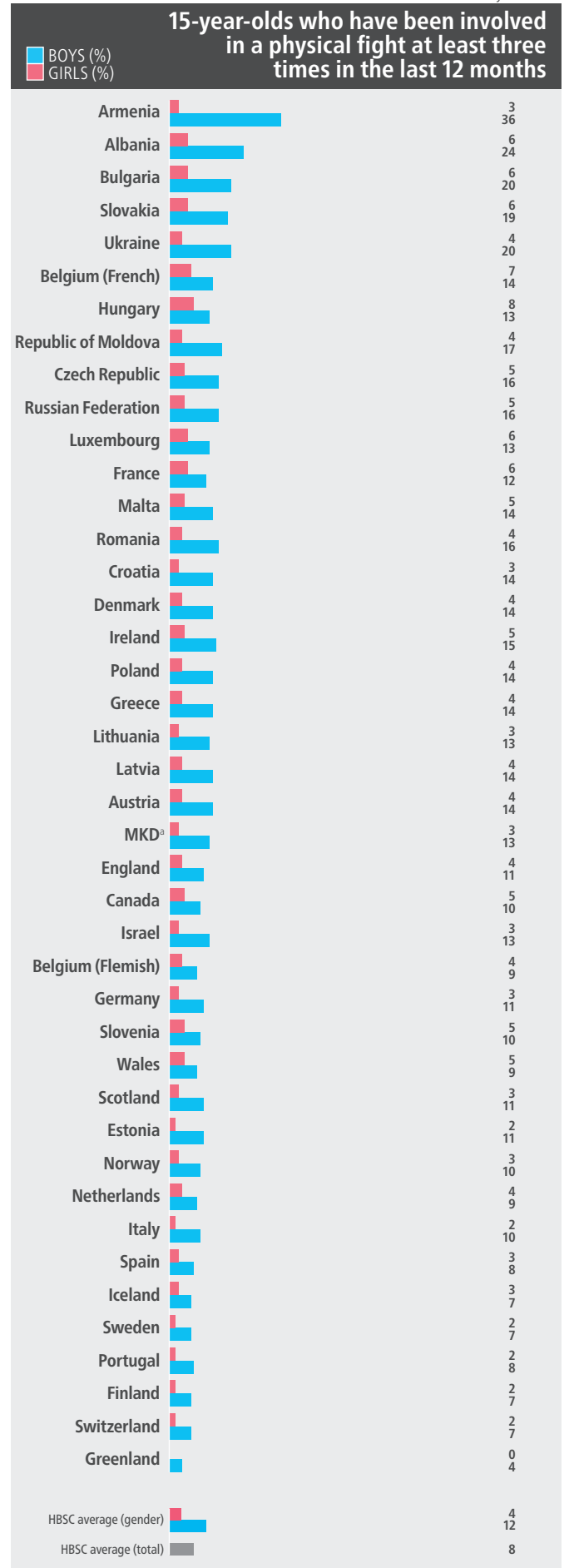


<sup>a</sup> The former Yugoslav Republic of Macedonia.

HBSC survey 2013/2014



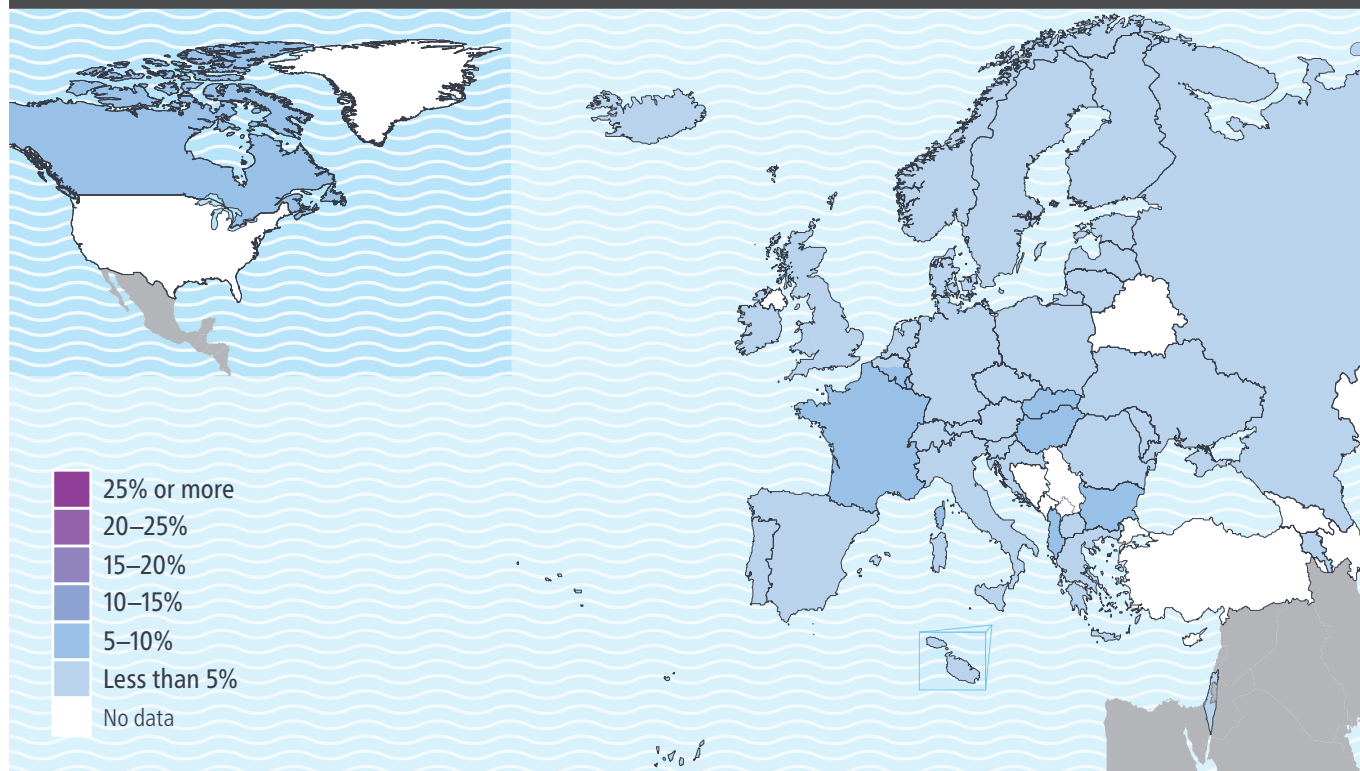
HBSC survey 2013/2014



Note: indicates significant gender difference (at  $p < 0.05$ ).

HBSC survey 2013/2014

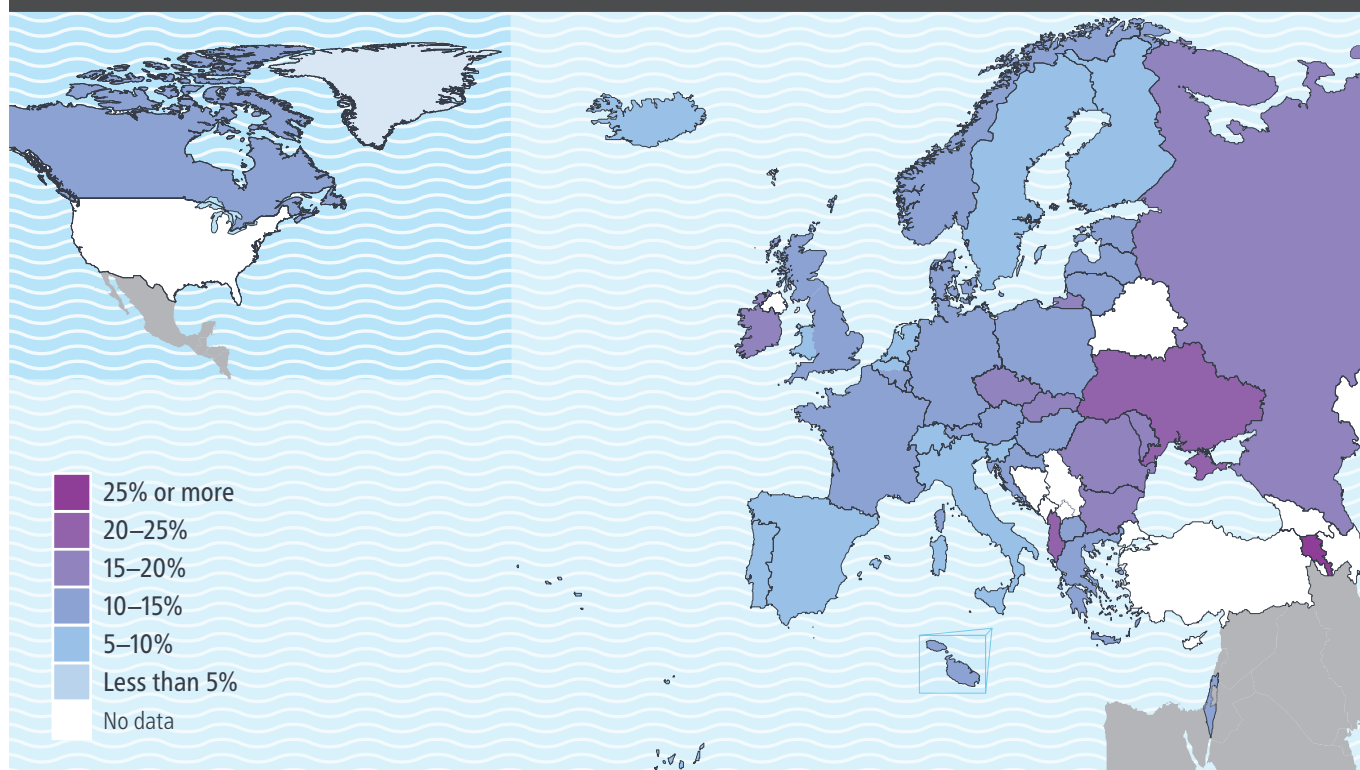
### 15-year-old girls who have been involved in a physical fight at least three times in the last 12 months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

### 15-year-old boys who have been involved in a physical fight at least three times in the last 12 months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

## FIGHTING: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

The findings suggest a continuation of the positive downward trend in fighting among young people (1). This may be a result of prevention initiatives in schools (8), but prevalence rates differ dramatically across countries and regions, suggesting variations in cultural norms relating to fighting and the success of intervention programmes (1).

As with previous findings, levels (notably among boys) decrease with age (9). Adolescents may develop the cognitive, emotional, behavioural and verbal resources to cope with frustrations and conflicts in a more constructive and less physical manner as they become older.

Findings confirm previous research that shows boys are involved more than girls (10), but there is no clear relationship with family affluence across countries and regions.

### POLICY REFLECTIONS

Violence is a leading cause of death and physical injury for young people (11). The main risk factors for involvement are male gender, younger age, bullying victimization, national homicide rates and poverty. In addition, multiple risk behaviours (such as alcohol use and smoking) are associated with violence (1,12). Social and school support seem to act as protective factors (12). Risk and protective factors may vary by race and ethnicity (12).

Prevention programmes should begin early and be developed with a gendered lens (1). Approaches that have proven effective include:

- universal school-based violence-prevention programmes, which provide students and school staff with information about violence, change how young people think and feel about it, and teach non-violent skills to resolve disputes;
- parenting-skill and family-relationship approaches, providing caregivers with support and teaching communication, problem-solving, monitoring and behaviour-management skills;
- intensive family-focused approaches that offer therapeutic services to high-risk chronic young offenders and their families to address individual, family, school and community factors that contribute to violence and delinquency;
- policy, environmental and structural approaches that create changes in community environments to enhance safety and affect risk and protective factors among young people; and
- early childhood education and care, which provides high-quality support to disadvantaged children and helps build a strong foundation for future learning and healthy development (11).

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## BULLYING: BEING BULLIED AND BULLYING OTHERS

Short- and long-term effects of involvement in bullying, both as perpetrator and victim, have been documented. Involvement in bullying affects young people's physical health, resulting in somatic symptoms such as head, back and stomach aches (1,2), psychological distress (depression, bad temper, nervousness, loneliness and suicidal ideation (3–6)) and long-term patterns of problem behaviour, including aggression, violence, problem drinking and substance use (7–10). Young people involved in bullying report more negative school experiences (11), reflected in poor relationships with peers and teachers.

Despite recent research showing positive trends towards a decrease in bullying victimization (12), studies have particularly emphasized the negative mental health outcomes of being a victim, which include psychological maladjustment, psychosomatic health problems and suicide (13,14). The risk for suicide is particularly high when harassment is prejudice-based, such as when related to race or sexual orientation (15). Negative internalized emotions can also lead some young victims towards alcohol and/or substance misuse (16).

### MEASURES

#### Being bullied

Young people were asked how often they had been bullied at school in the past couple of months. The question was preceded by the following definition of bullying (17):

*We say a student is being bullied when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she does not like or when he or she is deliberately left out of things. But it is not bullying when two students of about the same strength or power argue or fight. It is also not bullying when a student is teased in a friendly and playful way.*

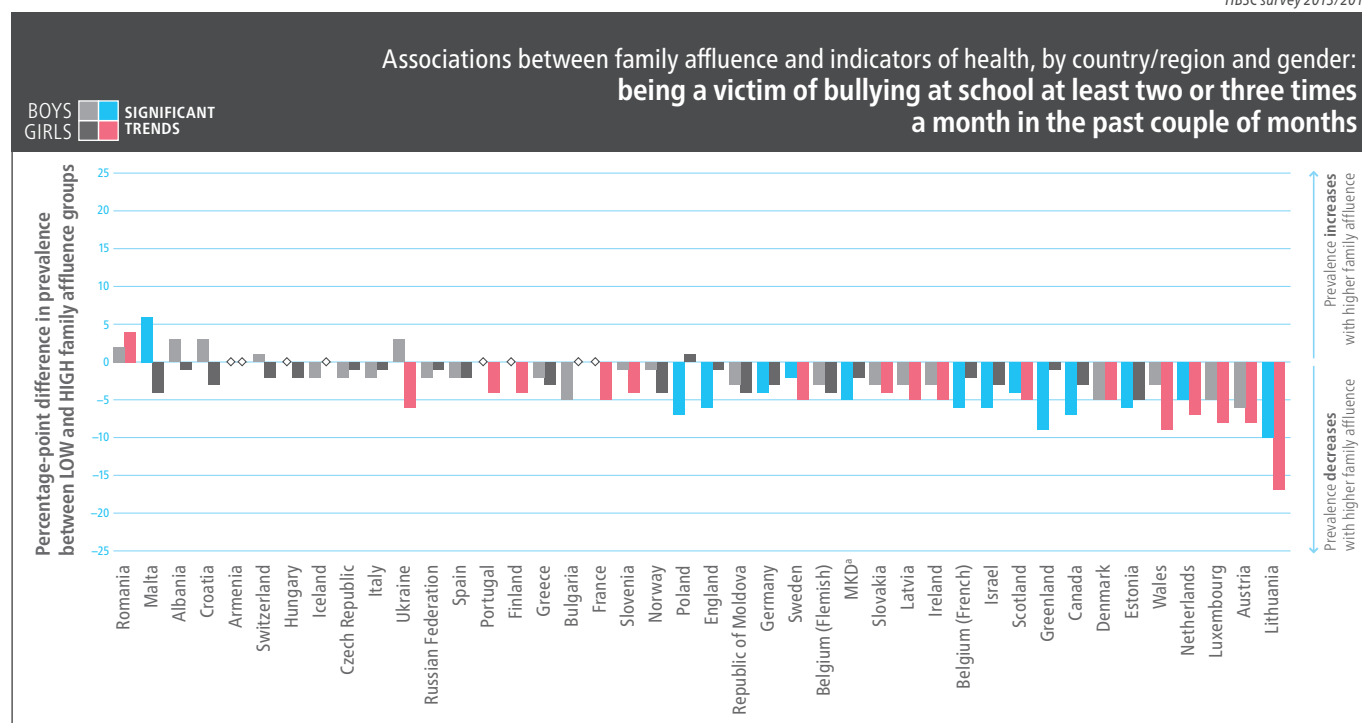
Response options ranged from zero to several times a week.

Supplementary data on being bullied at school at least once in the past couple of months are provided in the Annex.

#### Bullying others

Young people were asked how often they had taken part in bullying (an)other student(s) at school in the past couple of months, using the same definition (17). Response options ranged from zero to several times a week.

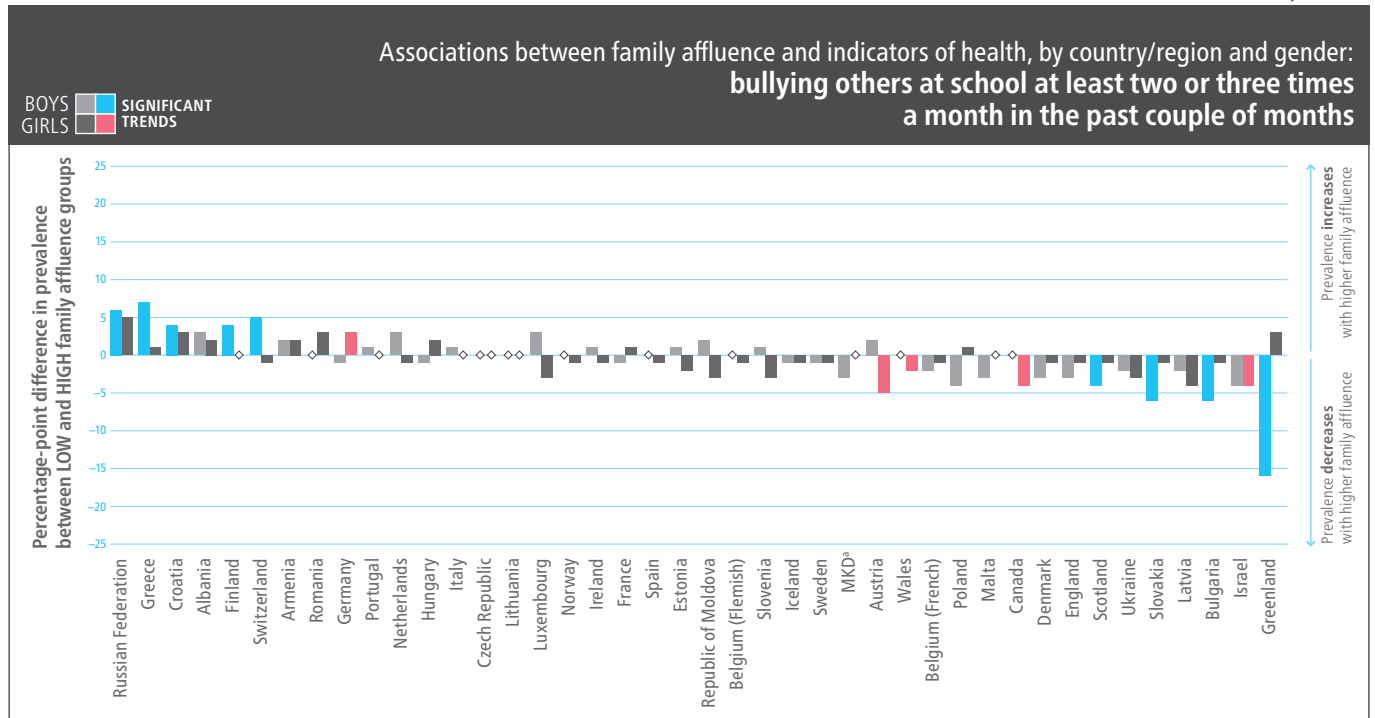
Supplementary data on bullying others at school at least once in the past couple of months are provided in the Annex.



<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than +/-0.5%.



HBSC survey 2013/2014



<sup>a</sup> The former Yugoslav Republic of Macedonia. Note: low- and high-affluence groups represent the lowest 20% and highest 20% in each country. ◇ means less than  $\pm 0.5\%$ .

## RESULTS

### Being bullied

Findings presented here show the proportions who reported being bullied at school at least two or three times a month in the past couple of months.

### Age

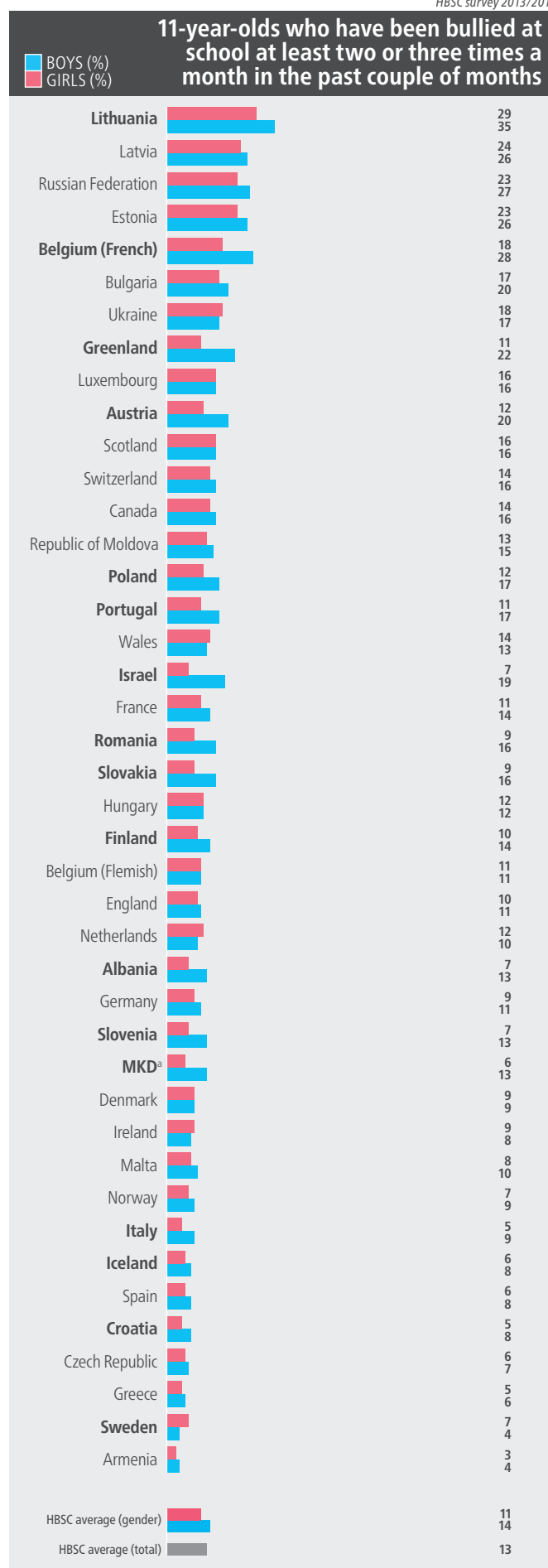
Overall prevalence was around 12% for boys and 10% for girls. Significant changes across ages were seen in most countries and regions (almost all for boys). With very few exceptions, being bullied decreased as age increased, peaking for boys at 11 and dropping to the lowest levels at 15. Levels for girls were constant at ages 11 and 13 and dropped at 15. Very large cross-national differences were observed, with high prevalence in some countries and low in others.

### Gender

Gender differences were seen in around a third of countries and regions. Generally, boys were bullied more, with findings suggesting different age-related patterns of victimization for boys and girls. Bullying peaked at age 13 for girls and 11 for boys.

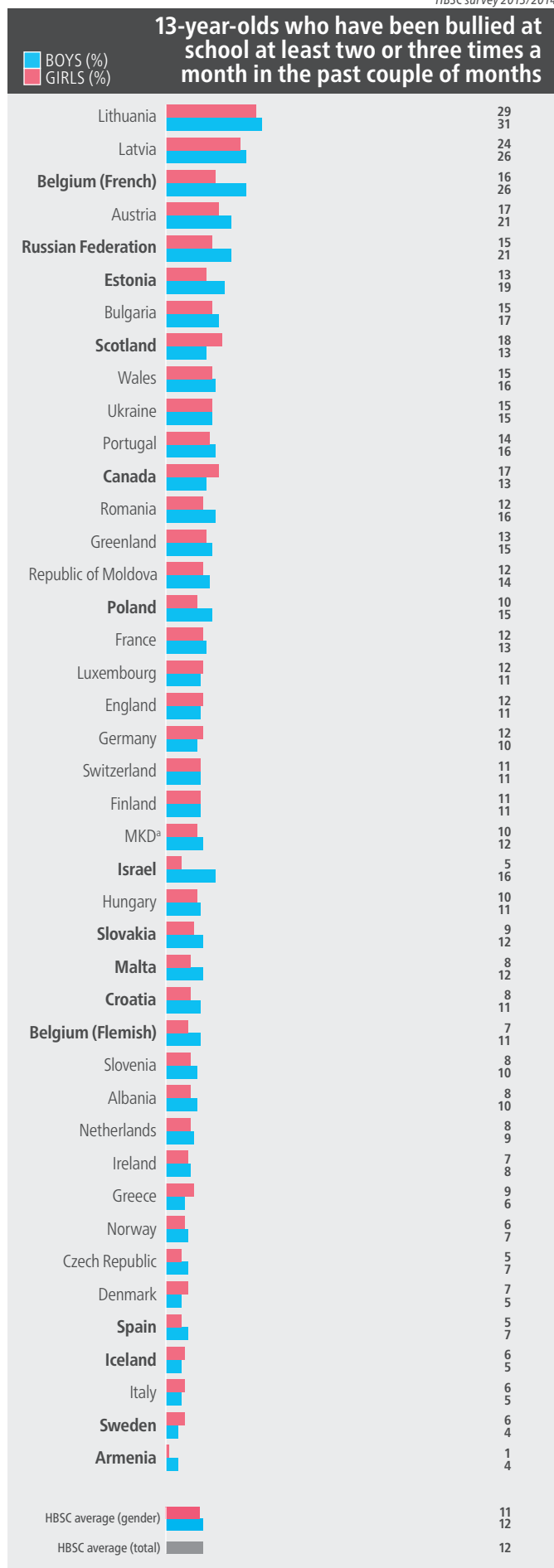
### Family affluence

Being bullied varied with family affluence in some countries and regions, involving lower bullying victimization with increasing affluence in virtually all cases.

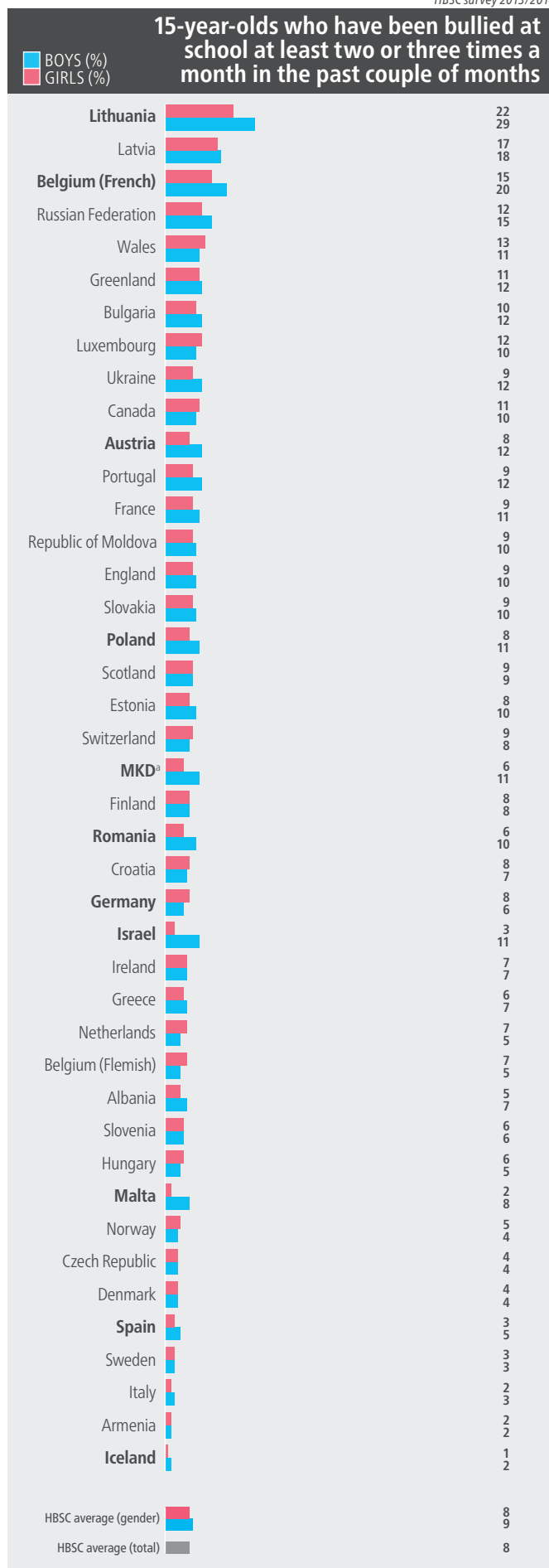


\* The former Yugoslav Republic of Macedonia.

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HBSC survey 2013/2014



Note: indicates significant gender difference (at  $p < 0.05$ ).

## RESULTS

### Bullying others

Findings presented here show the proportions who reported bullying others at least two or three times a month in the past couple of months.

### Age

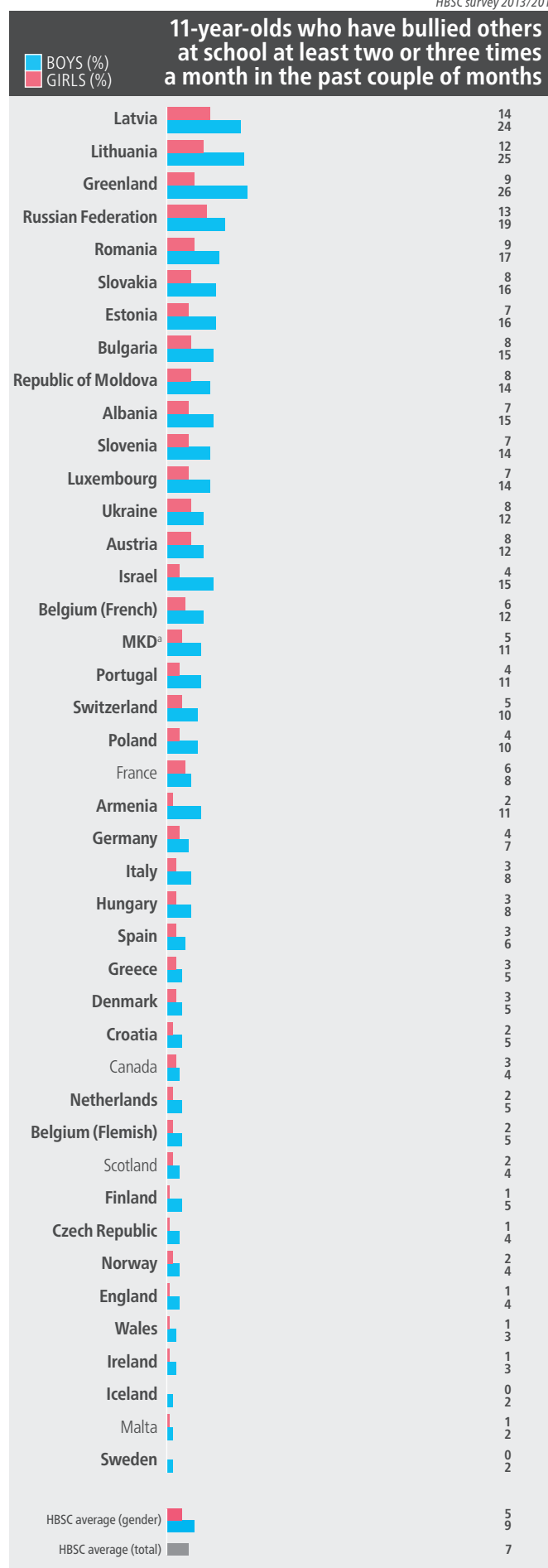
Overall prevalence was around 11% for boys and 6% for girls. A significant change with age was seen in many countries and regions; in almost all cases, there was an increase as age increased. The lowest levels for boys and girls were at age 11, with rises to ages 13 and 15. Large cross-national differences in prevalence were seen, with some countries (especially Latvia and Lithuania) being very high and others (Ireland and Sweden) very low.

### Gender

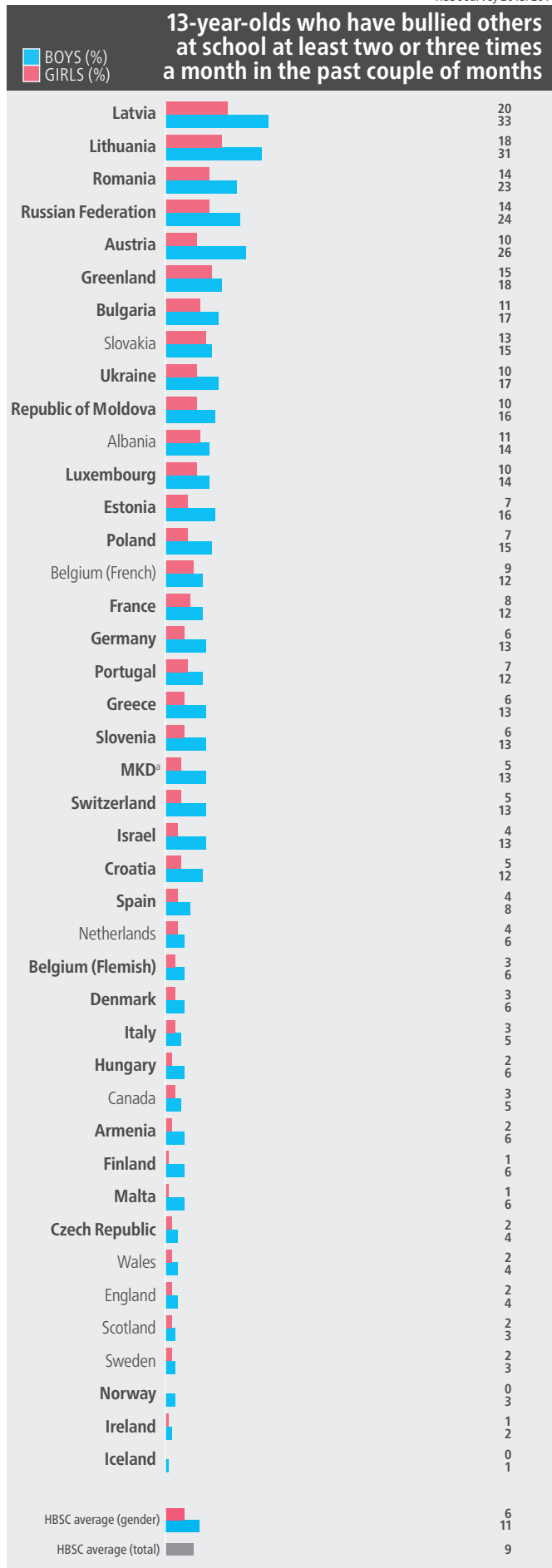
Significant gender differences were seen in almost all countries and regions at all ages, with boys bullying more.

### Family affluence

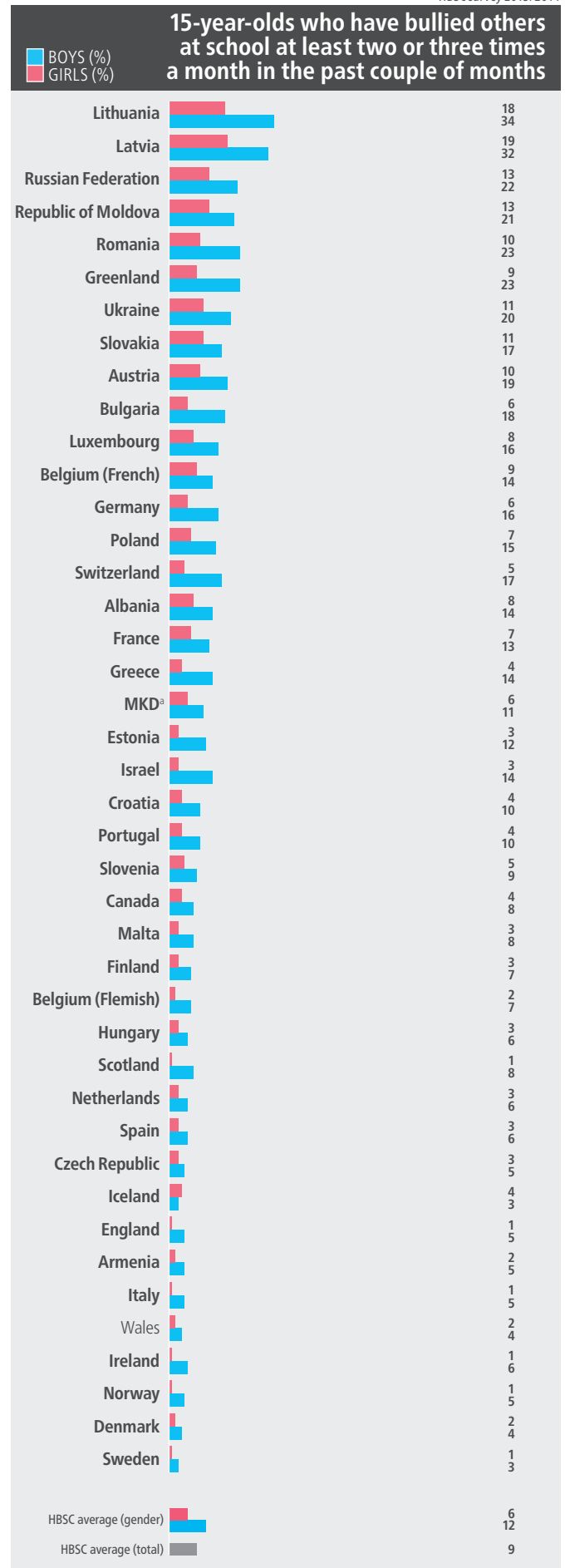
Prevalence varied across family affluence for a relatively small number of countries and regions, representing lower bullying with higher affluence for girls but no clear pattern for boys.



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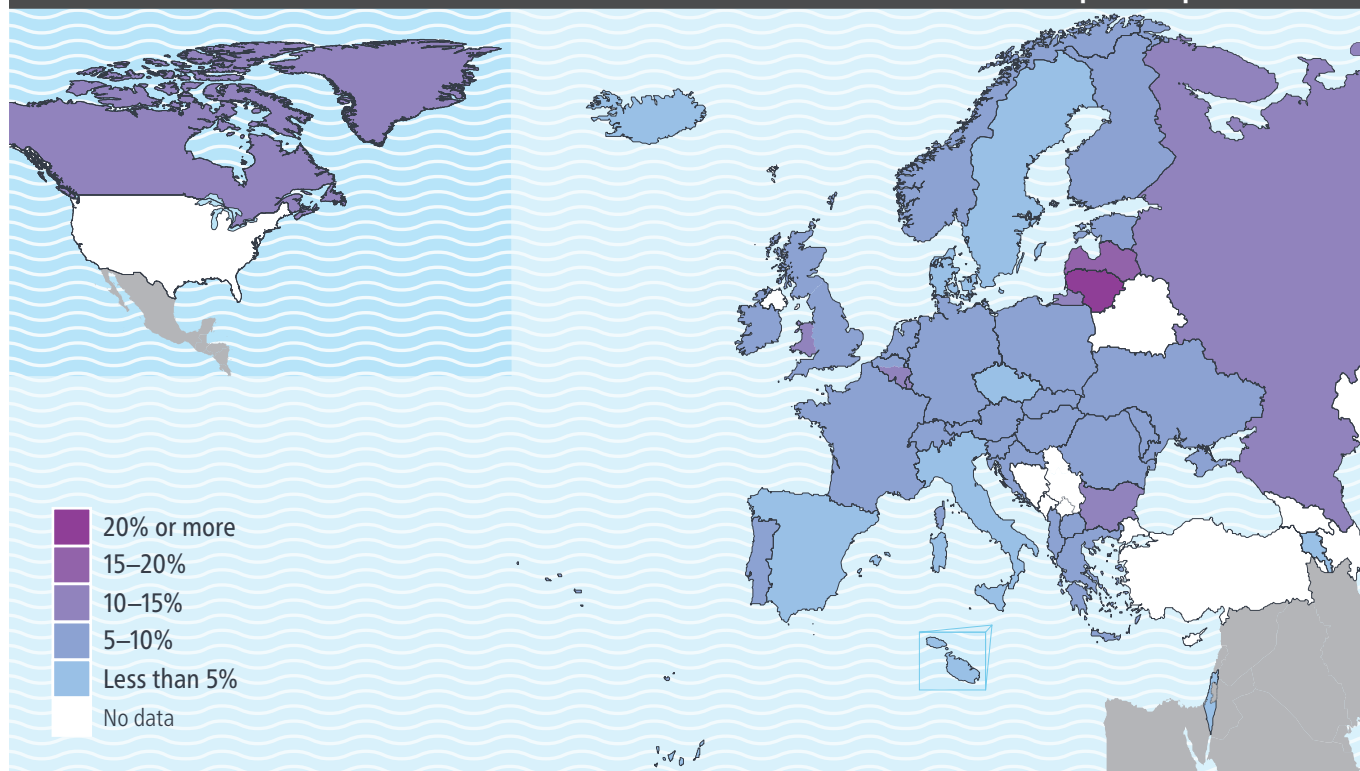
HBSC survey 2013/2014



Note: indicates significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ .

HBSC survey 2013/2014

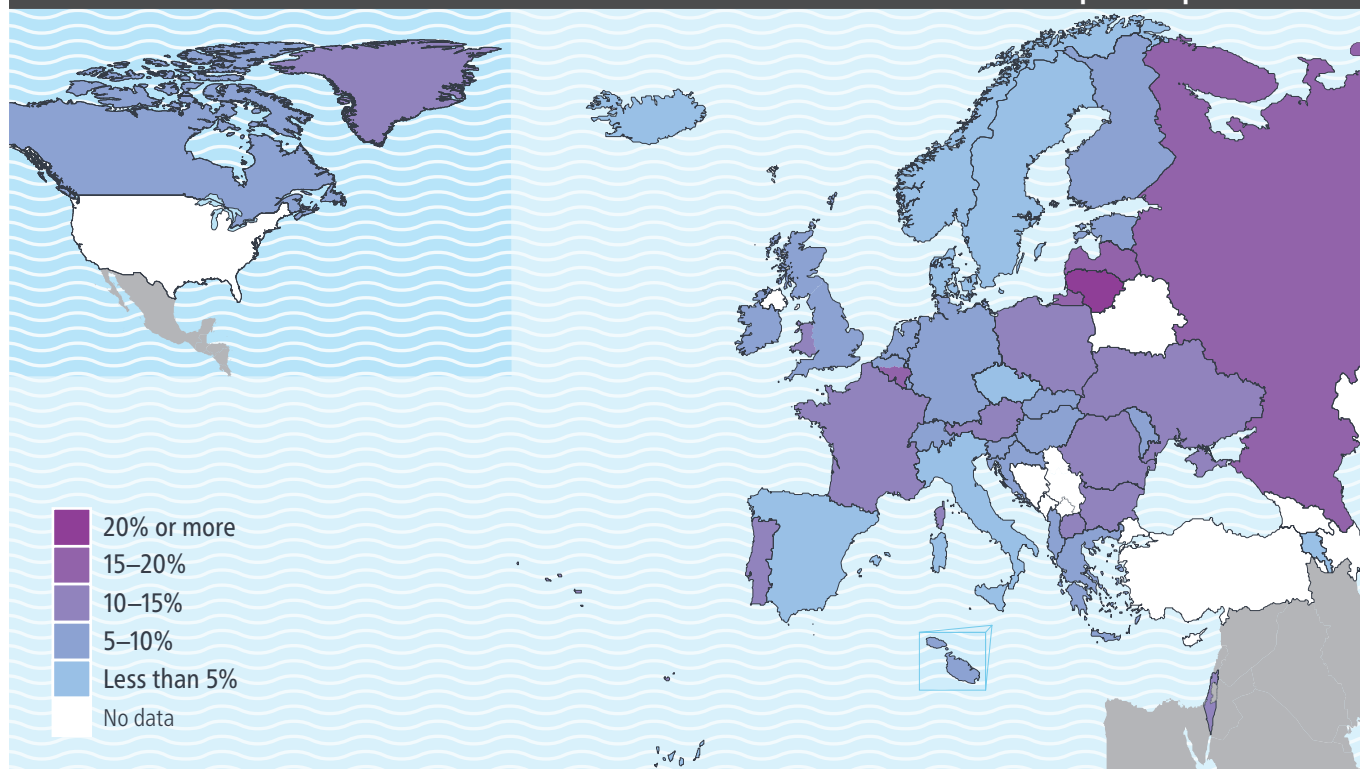
### 15-year-old girls who have been bullied at school at least two or three times a month in the past couple of months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

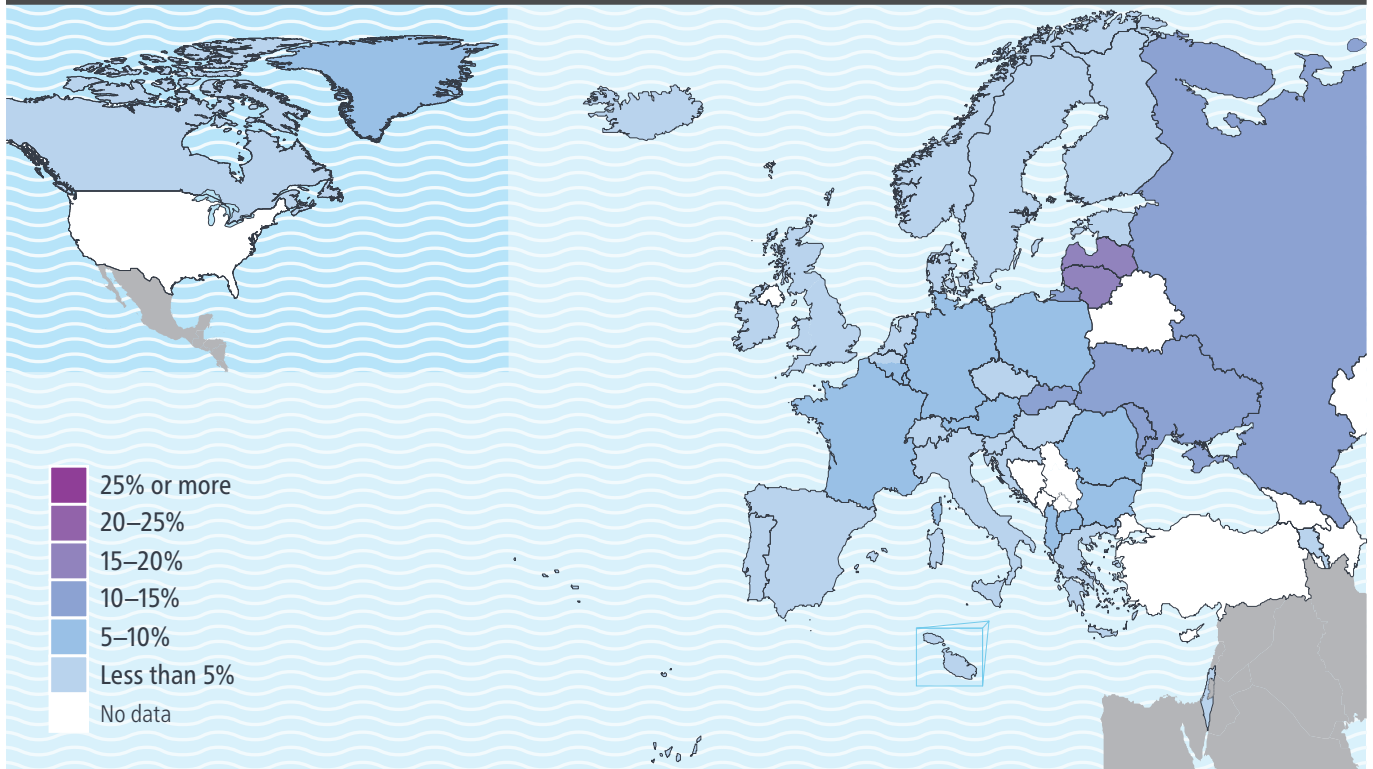
### 15-year-old boys who have been bullied at school at least two or three times a month in the past couple of months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

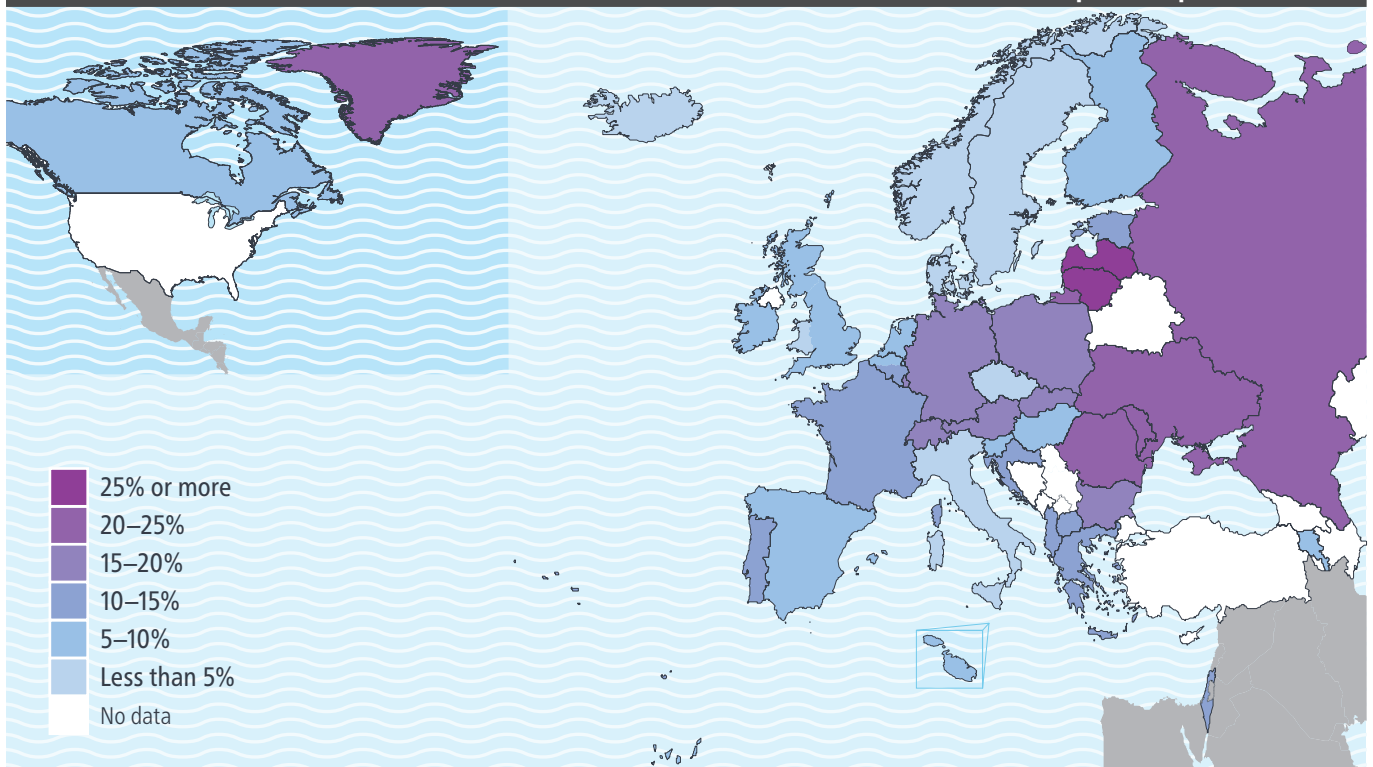
### 15-year-old girls who have bullied others at school at least two or three times a month in the past couple of months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.

HBSC survey 2013/2014

### 15-year-old boys who have bullied others at school at least two or three times a month in the past couple of months



Note: HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above.



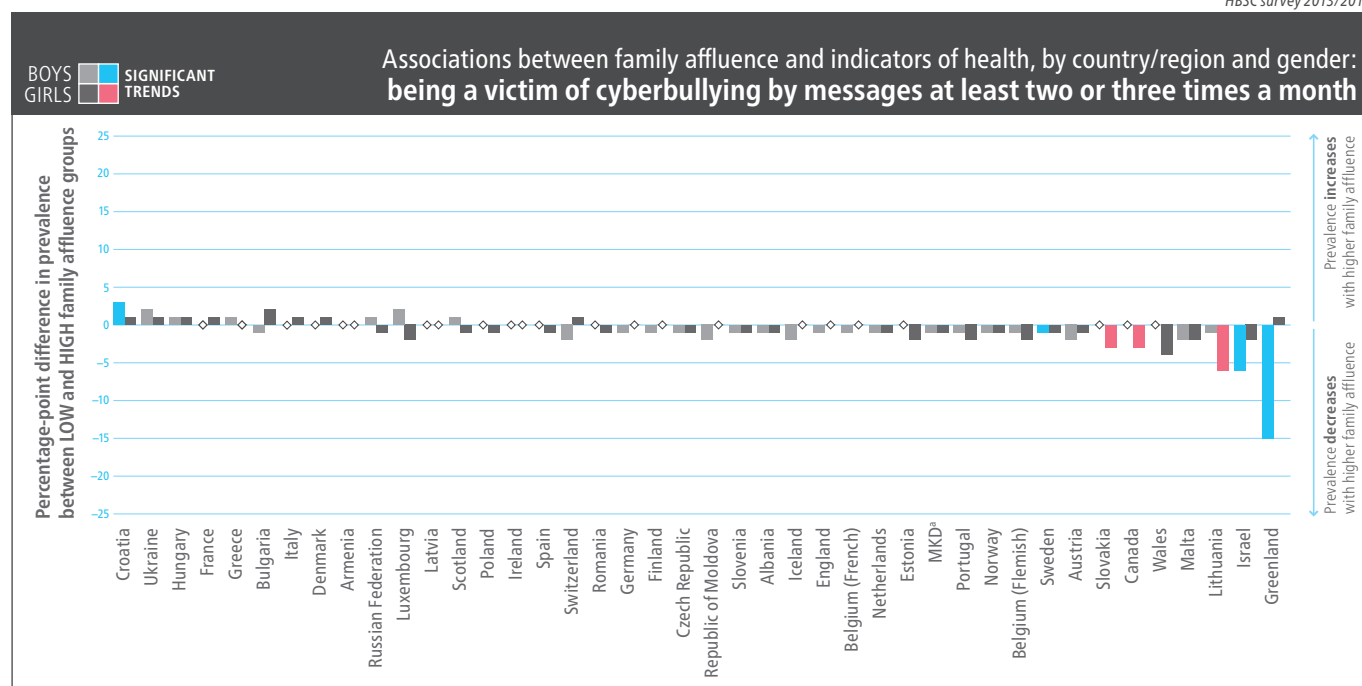


## BULLYING: CYBERBULLYING

Although research into cyberbullying is relatively nascent, clear and worrying relations have consistently been found between being a victim of cyberbullying and negative mental health outcomes such as depression, self-harm and suicidal ideation and attempts (18,19).

Cyberbullying has also been related to negative academic achievement and school difficulties, violent behaviour, difficulties with peers, unsafe sex practices and involvement in substance use (20–23).

HBSC survey 2013/2014



### MEASURE

Young people were asked how often they had been bullied through someone sending mean instant messages, wall-postings, emails and text messages, or had created a website that made fun of them. Options ranged from not at all in the past couple of months to several times a week.

An additional item on whether someone had taken unflattering or inappropriate pictures of the young person without permission and posted them online was included in the HBSC 2013/2014 survey. A summary table of the results and supplementary data on being cyberbullied by messages at least once can be found in the Annex.

## RESULTS

Findings presented here show the proportions who reported being a victim of cyberbullying at least two or three times a month.

### Age

Prevalence was similar for boys and girls. The age effect was significant in a minority of countries and regions, in which levels were slightly higher at age 11 for boys and peaked for girls at 13. This generally represented a decrease over age for boys, but the pattern was less clear for girls. Some cross-national differences in prevalence were observed, but these were less marked than for more traditional forms of bullying.

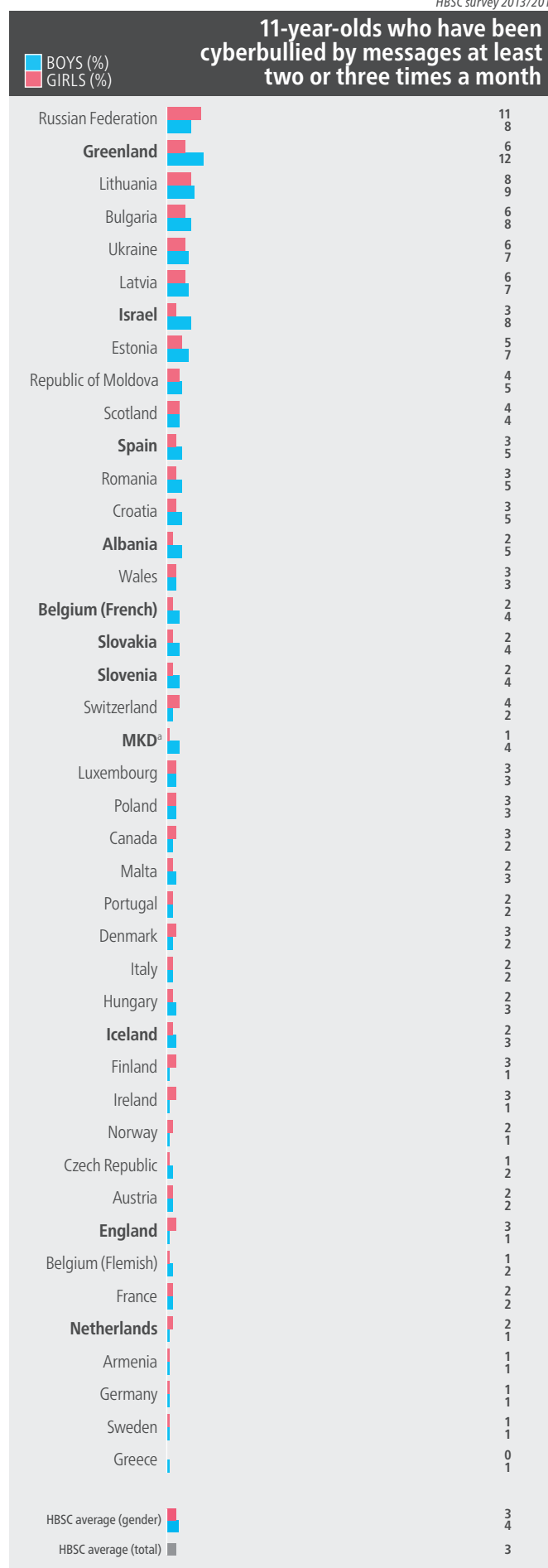
### Gender

Gender differences were seen in less than half of countries and regions, with no clear pattern emerging: some showed boys being cyberbullied more and others girls.

### Family affluence

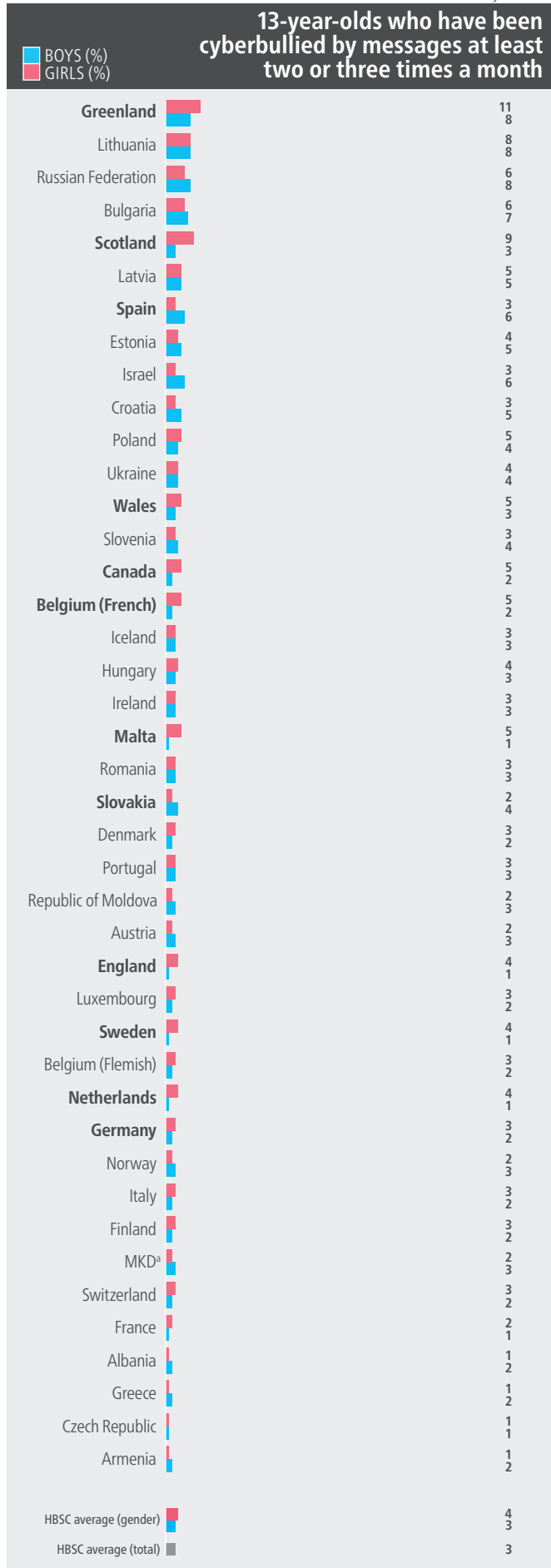
Differences according to family affluence were evident in very few countries and regions, in which cyberbullying was generally associated with lower affluence.

HBSC survey 2013/2014

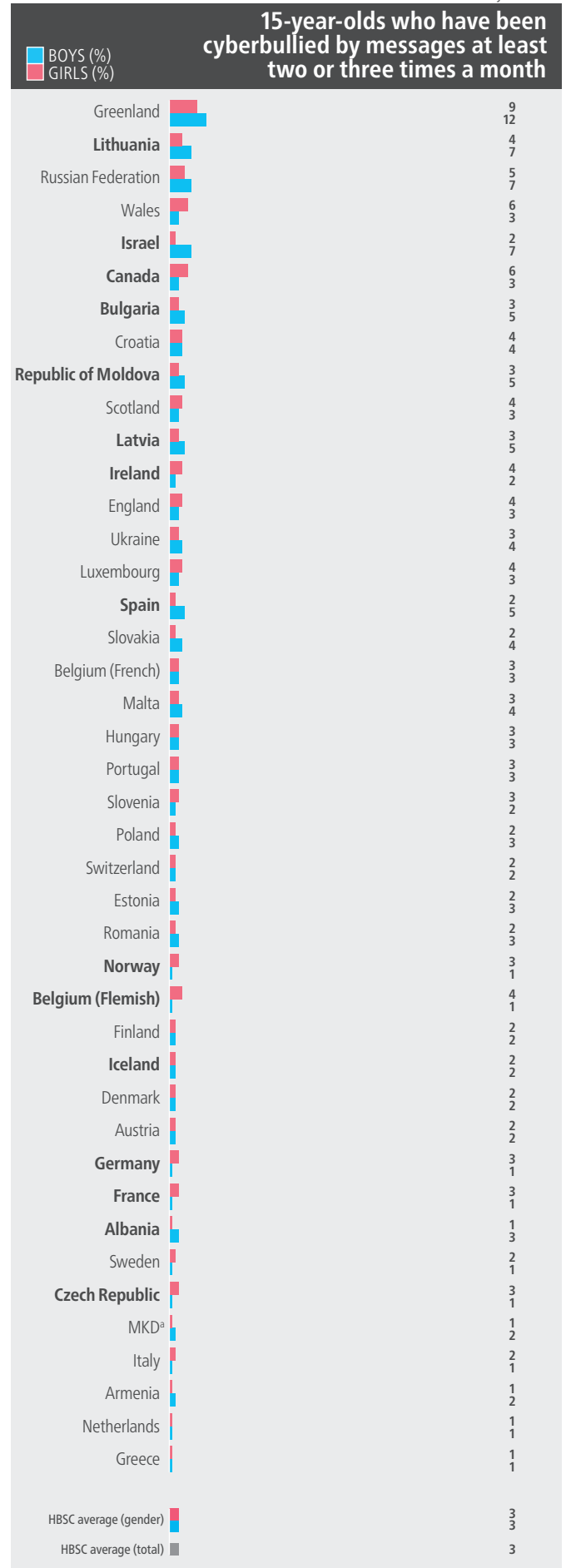


<sup>a</sup> The former Yugoslav Republic of Macedonia.

HBSC survey 2013/2014



HBSC survey 2013/2014



Note: indicates significant gender difference (at  $p < 0.05$ ). 0 means less than  $\pm 0.5\%$ .

## BULLYING: SCIENTIFIC DISCUSSION AND POLICY REFLECTIONS

### SCIENTIFIC DISCUSSION

Very large cross-national variations in levels of bullying perpetration and victimization are apparent. Findings suggest that bullying levels are affected by country-level factors such as cultural norms, socioeconomic levels and the success of intervention and prevention programmes in schools. While boys are significantly more likely to be involved as perpetrators in all countries and regions at almost all ages (24), gender differences are less strong for victimization, especially with increasing age. There is as yet no clear gender pattern for cyberbullying.

A relatively small minority of countries and regions show a relationship with family affluence. This tends to be a decrease in all types with higher affluence (25), but the patterns are not always consistent.

Initial analysis seems to suggest that cyberbullying is less prevalent than traditional forms. Cross-national variations may also be smaller. Research is needed to investigate the relationship of cyberbullying to known psychosocial determinants and outcomes and how its prevalence and patterning is similar to, and differs from, traditional forms of bullying.

### POLICY REFLECTIONS

Aggressive behaviour among young people continues to be an important public health problem (26). Activities such as parent training and meetings, improved playground supervision, disciplinary methods, classroom management, teacher training, classroom rules, a whole-school antibullying policy, school conferences, information for parents and cooperative group work are effective in reducing bullying (27). Reduction in victimization is associated with disciplinary methods, parent training and meetings, videos and cooperative group work (27).

Prevention programmes should be long-lasting (more than six months) and accredited (27). For older schoolchildren (those in high school or equivalent), programmes focusing on bystanders are more effective (28). Holistic school policies addressing cyberbullying should be developed in combination with reactive (deleting, blocking or ignoring messages) and proactive (digital literacy, security and awareness) prevention strategies for student computer use (29). Students and teachers should receive training to help them understand what constitutes cyberbullying and the role played by so-called sharing and liking.

Good epidemiological data are needed to build realistic action plans to regulate aggressive behaviours, set quantified targets with a timeline and monitor implementation, but current country-level action plans are not always informed by data (27).

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