How are Scotland’s young people doing?
A cross-national perspective on physical and emotional well-being

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How are we doing? Scotland in a cross-national perspective

General Health
- By the age of 15, the proportion of girls who reported their health as fair or poor exceeded that of boys in every HBSC country.
- Among all 15 year old HBSC respondents, between 7.6% and 31.5% of boys and 12.8% and 63.1% of girls in each country reported their health to be fair or poor.
- In Scotland 15.9% of boys and 31.5% of girls aged 15 reported their health to be fair or poor.

Bullying
- Reports of having been bullied at least two or three times a month over the past couple of months decline with age and among all HBSC 15 year olds ranged from 2.4% to 31.8% across countries.
- In Scotland, 4.9% of 15 year old boys and 6.3% of girls reported having been bullied at least two or three times a month over the past couple of months.

Fighting
- There are clear cross-national gender differences in fighting three or more times a year with 11.8% of all HBSC boys and 3.4% of all girls reporting involvement in this behaviour.
- Of 15 year old respondents in Scotland, 18.1% of boys and 6.5% of girls reported involvement in three or more fights during the past year.
- Reports of multiple fights from pupils in Scotland exceeded HBSC averages for all age groups.

Injuries
- Among all 15 year old HBSC respondents who reported at least one injury, 45.3% reported two or more injuries over the last year which required medical attention; 48.2% of boys and 41.7% of girls.
- At age 15, of those reporting injuries, 55.4% of boys and 50.0% of girls in Scotland reported two or more injuries over the past 12 months which required medical attention.
- Multiple injury rates in Scotland which required medical attention were exceeded in only two countries for boys and in four countries for girls.

Introduction
Scotland first participated in the Health Behaviour in School-Aged Children (HBSC): a WHO Collaborative Cross-National Study in 1986, along with 12 other countries. The most recent HBSC survey in 2001/2 was conducted in 35 countries, including Scotland.
HBSC makes a unique contribution to the study of young people’s health through the collection of cross-national data in surveys conducted every four years using a common survey protocol. This allows the measurement and tracking of aspects of adolescent health and health-related behaviours and their developmental and social contexts.

The report Young People’s Health in Context begins the international dissemination of findings from the 2001/2 HBSC survey of more than 160,000 young people. Data from the 2001/2 survey profile health and health-related behaviours within and between countries. This information will contribute to an evidence base for policy making at local, national and international levels.
Based upon chapters in *Young People’s Health in Context*, this Briefing Paper compares Scotland with other HBSC countries. The focus is on physical and emotional well-being, with particular reference to reports of: general health status, bullying, fighting and injuries. It is recommended that readers consult the report in its entirety for both expanded details of results and pertinent literature.

**Methods**

In 2001/2, 35 countries drew national samples of 11, 13 and 15 year olds in accordance with the Study protocol.¹

In the main, fieldwork took place between the autumn of 2001 and the spring of 2002.² Approximately 1,500 respondents in each age group were targeted in every country. Pupils who were absent on the day of the survey were not followed up.

Data were collected by self-administered questionnaire. On completion of fieldwork, national data files were prepared using standard documentation and submitted to the HBSC International Data Bank at the University of Bergen, Norway. Data files were checked, cleaned and returned to countries for approval prior to their placement in the international file. Further details can be found in *Young People’s Health in Context*.²

The final 2001/2 international data file is composed of data from: Austria, Belgium (Flemish and French speaking populations), Canada, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Greenland, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, FYR Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Russia, Scotland, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United States and Wales.³

**Presentation of Cross-National Results**

Results from the 2001/02 survey represent more than 160,000 young people. Respondents were distributed fairly evenly with respect to gender and age. The mean age within each age group was 11.6, 13.6 and 15.6 years.²

The sample in Scotland was nationally representative, drawn from mixed ability classes of both state and independent schools and yielded responses from 4,404 young people in Primary 7 (11 year olds), Secondary 2 (13 year olds) and Secondary 4 (15 year olds).

This Briefing Paper focuses on 15 year olds, although data on 11 and 13 year olds are presented. Comparisons are provided between Scotland, the entire HBSC survey and a subset of participating countries. Data from England and Wales are presented to show similarities and differences within the UK. A further four countries, one from each quartile, are also presented.⁵

Each figure illustrates the cross-national range of responses and the HBSC average. The ranking of each country, for boys and girls combined, is also shown in brackets. Ranks should be interpreted with caution and may reflect relatively small cross-national differences. A country may appear in one figure but not another because of its relative international ranking.

**Health & Well-being**

In many parts of the world, adolescent mortality rates are low and relatively few young people seek medical attention for chronic illness or disease compared to older adult populations. For these reasons, traditional measures of mortality and morbidity, such as

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**Figure 1.** Fair or poor general health as reported by 15 year olds.

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys (HBSC average)</th>
<th>Girls (HBSC average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>16.7 (12.1)</td>
<td>14.9 (15.7)</td>
</tr>
<tr>
<td>13</td>
<td>19.1 (13.6)</td>
<td>23.6 (20.8)</td>
</tr>
<tr>
<td>15</td>
<td>15.9 (16.1)</td>
<td>31.5 (27.2)</td>
</tr>
</tbody>
</table>

¹ A regional sample was selected in Germany (Nordrhein-Westfalen, Berlin, Hessen and Sachsen). Separate studies were carried out in Flemish and French speaking populations in Belgium, England, Scotland and Wales. Due to the small size of the 11, 13 and 15 year old population in Greenland, a census was taken.²

² Non-UK countries were ranked according to the responses from boys and girls combined. Countries ranked 3rd and 11th from the top and 3rd and 11th from the bottom of a cross-national comparison were used to represent the top two quartiles and the bottom two quartiles.
Although this type of victimization was reported less frequently in Scotland as compared to other countries, it nonetheless affects on average about one young person in each classroom among 15 year olds and more younger pupils. Efforts should continue to reduce bullying, particularly among younger pupils.

Unlike reports of having been bullied, reports of fighting reflect clear gender differences. Of all HBSC survey participants aged 15, between 4.1% and 18.1% in each country reported having been in a physical fight 3 or more times in the past year. Of these 15 year olds, 11.8% were boys and 3.4% were girls (Figure 3). In many countries, including England, Scotland and Wales, reported rates of frequent fighting among boys were at least twice those of girls.

Of 15 year old respondents in Scotland, 18.1% of boys and 6.5% of girls reported involvement in three or more fights during the past year. Figure 3 shows that reports of fighting are more common among 11 year olds. Between ages 11 and 15 years reporting declined by approximately 11% among boys and 2% among girls. Nonetheless, reports of multiple fights from pupils in Scotland exceeded the HBSC survey average in all age groups.

Both bullying and fighting can affect physical, mental and emotional well-being. They present challenges that transcend national boundaries. It has been shown that intervention policies and various school-based health promotion strategies have been efficacious in reducing the number of occurrences. In part, some of the success in reducing aggressive behaviours such as bullying and fighting stems from zero tolerance. Other approaches include education, modelling conflict resolution and encouraging respect for others. An anti-bullying network is established in Scotland.

Injuries

The likelihood of injury increases as children enter adolescence. Injuries are a major cause of morbidity among young people and account for more than 70% of all deaths. Major causes of injuries to young people are their involvement in sporting-related activities as well as accidents in the home, school and in conjunction with road traffic.

Injuries were measured using a single previously validated item in the HBSC questionnaire. The item was preceded by a definition of what constitutes an injury requiring medical attention:

Many young people get hurt or injured from activities such as playing sports or fighting with others at different places such as the street or home. Injuries can include being poisoned or burned. Injuries do not include illnesses such as Measles or the Flu. The following question is about injuries you may have had during the past 12 months.

During the past 12 months, how many times were you injured and had to be treated by a doctor or nurse?

Response categories were: I was not injured in the past 12 months; 1 time; 2 times; 3 times; 4 times or more.

Positive responses to the last three categories were combined to reflect two or more injuries during the past 12 months which required medical attention.

Table 1. Fifty year olds who reported two or more injuries which required medical attention within the last year, among reports of any injury at all.

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys (HBSC average)</th>
<th>Girls (HBSC average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>63.0 (49.7)</td>
<td>43.7 (41.7)</td>
</tr>
<tr>
<td>13</td>
<td>54.3 (48.9)</td>
<td>42.7 (40.8)</td>
</tr>
<tr>
<td>15</td>
<td>58.4 (48.2)</td>
<td>50.0 (41.7)</td>
</tr>
</tbody>
</table>

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Figure 2. Reports of having been bullied at least 2 to 3 times a month over the past couple of months among 15 year olds.

Percent (%) reporting having been bullied at least two to three times over the past couple of months

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scotland (HBSC average)</td>
<td>Scotland (HBSC average)</td>
</tr>
<tr>
<td>11</td>
<td>9.7 [16.4]</td>
<td>10.3 [12.8]</td>
</tr>
<tr>
<td>13</td>
<td>9.6 [15.4]</td>
<td>9.7 [12.4]</td>
</tr>
<tr>
<td>15</td>
<td>4.9 [10.7]</td>
<td>6.3 [8.6]</td>
</tr>
</tbody>
</table>


Figure 3. Reports of fighting three or more times over the past year among 15 year olds.

Percent (%) reporting fighting three or more times over the past year

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scotland (HBSC average)</td>
<td>Scotland (HBSC average)</td>
</tr>
<tr>
<td>11</td>
<td>29.2 [18.4]</td>
<td>8.6 [4.8]</td>
</tr>
<tr>
<td>13</td>
<td>22.2 [14.3]</td>
<td>6.7 [4.5]</td>
</tr>
</tbody>
</table>

those used in adult populations, are less well suited for monitoring the health of young people.

Asking young people to report on their own health provides an evidence base which does not rely upon clinical diagnoses or reporting by parents or guardians. Subjective health assessments can, and often do, have measurable behavioural correlates relating to academic achievement, social involvement or physical activity, for example.

Self-reported general health status was measured using the commonly used question:

Would you say your health is...?

Response categories were: Excellent; Good; Fair; or Poor.

The proportion of young people who rated their health status as fair or poor varied considerably cross-nationally, as well as by age and gender.

Reports from boys showed less variation by age, both cross-nationally and within Scotland as compared to girls (Figure 1).

In 28 countries, more 11 year old girls reported fair or poor health as compared with their male peers. By age 13, this was the case in 33 countries. By the age of 15, it was apparent in every country.

The magnitude of the gender gap increased with age. Differences of 10% to 19% in reports of fair or poor health between girls and boys at age 11 were observed in four countries. At 13 years, this gap was observed in seven countries with a further two countries showing differences of between 20% and 29%. By 15 years, the 10% to 19% differential was noted in 14 countries with an additional three countries reporting gaps of between 20% to 29% and one country reporting a gap of greater than 30%. At age 15, the gender difference in Scotland was 15.6%.

Among all 15 year old HBSC respondents, between 7.6% and 31.5% of boys and 12.8% and 63.1% of girls reported their health to be fair or poor. In Scotland this was the case for 15.9% of boys and 31.5% of girls. Rates exceeded those reported in Scotland in eight countries for girls and in 13 countries for boys, including England and Wales in each case.

It is noteworthy that more girls than boys reported their health to be fair or poor by the age of 15 in every country. This is a common occurrence among adults as women often report poorer health than men. These data support the notion that this subjective health differential begins early in life and that it transcends cultural boundaries.

Bullying & fighting

Bullying and fighting are behaviours that can have an impact on health and well-being. Bullying and fighting are observed at international, national and local levels and are not confined to the young.

Bullying reflects an imbalance in interpersonal relationships and can involve verbal abuse or physical actions of a hostile intent. Bullying often involves a repetitive type of behaviour and reflects a perceived imbalance of power between the perpetrator and the victim. A bully, either a boy or a girl, often chooses a victim who is smaller, younger or thought not to be as strong, either physically or psychologically, as themselves. The immediate effects of victimisation can include physical harm, anxiety and lowered self-esteem.

Physical fighting is another anti-social behaviour which can result in psychological as well as physical harm. As is the case with bullying and victimisation, researchers have shown that these behaviours can persist into adulthood.

Two items were used to measure bullying others and being bullied although only one is presented here. Pupils were first presented with definitions to clarify conceptual issues.

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 doesn’t like, or when they are deliberately left out of things. But it is not bullying when two students of about the same strength quarrel or fight. It is also not bullying when the teasing is done in a friendly and playful way.

How often have you been bullied at school in the past couple of months?

Response categories were: I haven’t been bullied at school in the past couple of months; It has only happened once or twice; 2 or 3 times a month; About once a week; Several times a week.

Affirmative responses to the last three categories were combined to represent young people who reported having been bullied at least two or three times a month in the past couple of months.

Fighting was measured using a single question.

During the past 12 months, how many times were you in a physical fight?

Response categories were: I have not been in a physical fight; 1 time; 2 times; 3 times; 4 times or more.

Affirmative responses to the last two categories were combined to represent young people who reported having been in a fight three or more times in the past 12 months.

As can be seen from Figures 2 and 3, reports of victimisation at school and fighting decline with age.

Among 15 year olds, reports of being bullied at least two or three times a month in the past couple of months vary markedly between countries (Figure 2). Cross-nationally, 16.9% of 15 year olds reported being bullied, ranging from 2.4% to 33.8%. No consistent gender differences were observed cross-nationally, although in six countries, including Scotland and Wales, 15 year old girls reported being bullied slightly more than their male peers.

Across all age groups, reports from pupils in Scotland were below the HBSC average. Among 15 year olds in Scotland, 6.6% reported having been bullied at least two or three times a month in the past couple of months, 4.9% of boys and 6.3% of girls.
Cross-nationally, the proportion of 15 year olds that reported any injury at all which required medical attention was 43.9%, 50.8% of boys and 37.6% of girls, as compared with 54.3% of boys and 32.9% of girls in Scotland.

Multiple injuries, reported rates of two or more injuries among those HBSC 15 year olds reporting injuries over the past year, varied cross-nationally between 32.0% and 54.2%. The HBSC average was 45.3%, with boys reporting slightly higher rates than girls, 48.2% and 41.7% respectively.

As can be seen from Figure 4, rates reported in Scotland were above HBSC averages and varied somewhat by age and gender. Of those reporting injuries at age 15, 55.4% of boys and 50.0% of girls reported two or more injuries over the last 12 months which required medical attention. These rates were exceeded in only two countries for boys and in four countries for girls.

Although medical services, factors affecting decisions to seek medical attention, school policies and seasonal differences at the time of each national survey are likely to have affected the findings, the high level of cross-national reporting reflects the ubiquitous nature of injuries among young people. Educational and environmental strategies to reduce avoidable injuries should continue to target both young people and adults.4

Acknowledgements

We thank the Regional and Island Authorities for granting permission for their schools to participate in the survey; and all the young people who completed questionnaires; and the schools and teachers who kindly agreed to administer the survey.

Acknowledgement is made to all members of the international HBSC research network who prepared the HBSC protocol, collected national data and the support of the WHO Regional Office for Europe.

The cross-national information presented here has been extracted from Chapter 3: Young People’s Health in Context. The following authors are gratefully acknowledged: Torsjøn Tosheim, Ralii Villimaa and Mia Danielson (The Health and Well-Being of Young People); Wendy Craig and Yossi Harel (Involvement in Bullying and Physical Fights) and William Pickett (Injuries).

We are grateful to Chris Roberts, Health Promotion Division, Welsh Assembly Government and Phil Hanlon, Department of Public Health University of Glasgow for their comments on earlier drafts of this paper and Oddrun Samdal, HBSC Databank Manager, Centre for Health Promotion, University of Bergen.

The HBSC study in Scotland is funded by NHS Health Scotland.

HBSC publications and HBSC information

Further information on the international report from the 2001/02 survey can be obtained from the international Study website www.hbsc.org. The International Coordinating Centre of the HBSC Study is the Child and Adolescent Health Research Unit (CAHRU), The University of Edinburgh.

Reports from this and earlier surveys include


References


5. www.childbullying.net


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University of St Andrews

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How are Scotland’s young people doing?
A cross-national perspective on health-related risk

Leslie Alexander, Candace Currie, Joanna Todd and Rebecca Smith
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Introduction
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HBSC makes a unique contribution to the study of young people’s health through the collection of cross-national data in surveys conducted every four years using a common survey protocol. This allows the measurement and tracking of aspects of adolescent health and health-related behaviours and their developmental and social contexts.

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Based upon chapters in Young People’s Health in Context, this Briefing Paper compares Scotland with other HBSC countries. The focus is on health-related risk, with particular reference to reports of: weekly smoking, drunkenness, cannabis use and condom use. It is recommended that readers consult the report in its entirety for both expanded details of results and pertinent literature.

Methods
In 2001/2, 35 countries drew national samples of 11, 13 and 15 year olds in accordance with the Study protocol.

In the main, fieldwork took place between the autumn of 2001 and the spring of 2002. Approximately 1,500 respondents in each age group were targeted in every country. Pupils who were absent on the day of the survey were not followed up.

Data were collected by self-administered questionnaires. On completion of fieldwork, national data files were prepared using standard documentation and submitted to the HBSC International Data Bank at the University of Bergen, Norway. Data files were checked, cleaned and returned to countries for approval prior to their placement in the international file. Further details can be found in Young People’s Health in Context.
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Presentation of Cross-National Results

Results from the 2001/02 survey represent more than 160,000 young people. Respondents were distributed fairly evenly with respect to gender and age. The mean age within each age group was 11.6, 13.6 and 15.6 years.

The sample in Scotland was nationally representative, drawn from mixed ability classes of both state and independent schools and yielded responses from 4,404 young people in Primary 7 (11 year olds), Secondary 2 (13 year olds) and Secondary 4 (15 year olds).

This Briefing Paper focuses on 15 year olds, although data on 11 and 13 year olds are presented. Comparisons are provided between Scotland, the entire HBSC survey and a subset of participating countries. Data from England and Wales are presented to show similarities and differences within the UK. A further four countries, one from each quartile, are also presented.

Each figure illustrates the cross-national range of responses and the HBSC average. The ranking of each country, for boys and girls combined, is also shown in brackets. Rankings should be interpreted with caution and may reflect relatively small cross-national differences. A country may appear in one figure but not another because of its relative international ranking.

Tobacco Smoking

Attitudes and behaviour of family and peers, as well as personal beliefs, affect a young person's decision to start smoking. For some young people, smoking is an important part of image presentation and contributes to peer group affiliation. For many, smoking will become a life long habit.

The long term consequences of smoking may be less salient for young people or may be disregarded in favour of perceived social benefits or in the belief that it curbs weight gain, for example.

A measure of smoking frequency was obtained by asking young people:

How often do you smoke tobacco at present?

Response categories were: I don't smoke; Every day; At least once a week; but not every day; Less than once a week.

Figure 1 illustrates regular or weekly smoking of tobacco, defined as at least once a week, by 15 year olds.

Reports of weekly smoking increase with age (Figure 1). Cross-nationally, weekly smoking rates for all 15 year old HBSC respondents varied between 14.0% and 62.4%. Average rates for boys and girls at

Figure 1. Reported weekly smoking among 15 year olds.


### Notes

9 A regional sample was selected in Germany (Nordrhein-Westfalen, Berlin, Hessere and Sachsen), separate studies were carried out in Flemish and French speaking populations in Belgium, England, Scotland and Wales. Due to the small size of the 11, 13 and 15 year old population in Greenland, a census was taken.

11 Non-UK countries were ranked according to the responses from boys and girls combined. Countries ranked 3rd and 11th from the top and 3rd and 11th from the bottom of a cross-national comparison were used to represent the top two quartiles and the bottom two quartiles.
**Sexual health**

A major aim of public health initiatives and health promotion in Scotland has been the reduction and prevention of sexually transmitted infections (STIs) as well as a reduction in the number of unwanted teenage pregnancies.5,7

In Scotland, STIs, particularly chlamydia, have been increasing among young people. Sexual health educational programmes now highlight the use of condoms not only as a safeguard against AIDS, HIV and other STIs but also as a means of contraception.

Data on sexual health were gathered from 27 countries; in eight countries questions were not included in the questionnaire.1

Questions were adapted from the US Youth Risk Behavior Survey.1,2 Data were collected from 15 year olds only, due to the sensitivity of the topic. The following questions were asked:

**Have you ever had sexual intercourse? (Sometimes this is called ‘making love,’ ‘having sex,’ or ‘going all the way!’)**

Response categories were: Yes; No.

**The last time you had sexual intercourse, did you or your partner use a condom?**

Response categories were: I have never had sexual intercourse; Yes; No.

**The last time you had sexual intercourse, what method(s) did you or your partner use to prevent pregnancy?**

Response categories for each of the following options were:

- Condom use was calculated for those young people who identified themselves as being sexually active and answered positively to either question regarding condom usage.

For the HBSC sample as a whole, 23.9% of 15 year olds reported themselves to be sexually active (28.1% boys and 20.2% girls). In Scotland, rates were higher (32.9% boys and 34.6% girls), slightly less than the proportion of sexually active young people in England and Wales.

Overall, 75.5% of sexually active young people in 27 countries reported using a condom the last time they had sexual intercourse, 80.2% of boys and 68.6% of girls. The range for HBSC countries was 69.6% to 91.2% for boys and between 57.6% and 89.1% for girls. Boys reported condom use more often than girls in 25 of the 27 countries surveyed.

In Scotland, 76.2% of boys and 63.4% of girls reported condom use. In five countries reported condom use exceeded 85% among boys but only in Spain did girls report this level of usage.

Condom use is influenced by a number of factors including social norms, availability, cost, religion, personal preferences and drug or alcohol use, for example. In Scotland, public health professionals strongly advocate condom use as a means of both protection and contraception. The new sexual health strategy for Scotland sets

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**Figure 4.** Reported condom use during last intercourse among 15 year olds.

<table>
<thead>
<tr>
<th>Country</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>80.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Latvia</td>
<td>85.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Estonia</td>
<td>80.0</td>
<td>65.0</td>
</tr>
<tr>
<td>England</td>
<td>80.0</td>
<td>75.0</td>
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<tr>
<td>SCOTLAND</td>
<td>89.0</td>
<td>78.0</td>
</tr>
<tr>
<td>Germany</td>
<td>80.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Wales</td>
<td>80.0</td>
<td>70.0</td>
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<tr>
<td>HBSC</td>
<td>80.0</td>
<td>65.0</td>
</tr>
</tbody>
</table>

**Percent (%) reporting the use of a condom during their last sexual intercourse**

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys Scotland (HBSC average)</th>
<th>Girls Scotland (HBSC average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>76.2 (80.2)</td>
<td>63.4 (69.8)</td>
</tr>
</tbody>
</table>


† In both Israel and Germany, data were collected from a subset of respondents. These countries not represented include: Denmark, Ireland, Norway, the United States, Malta, the Czech Republic, Russia and Italy.2
Reports of being drunk on two or more occasions from 15 year olds in Scotland (51.9% for boys and 51.8% for girls) were above HBSC averages (Figure 2). For both genders combined, Scotland ranked 7th out of the 35 HBSC countries with slightly higher rates of drunkenness being reported in England and Wales.

Research elsewhere has also highlighted the high levels of teenage drinking and drunkenness in Scotland and it is clear that these require continued attention.

In relation to preventive measures, social, economic, cultural and legislative differences between HBSC countries make it unlikely that a common approach to tackling drunkenness and promoting sensible drinking would be either feasible or effective. The impacts of the numerous alcohol strategies in place, locally and nationally, need to be regularly examined to ensure that the cost of these strategies is offset by their efficacy.

**Cannabis use**

Although the use of cannabis is illegal in the vast majority of HBSC countries, it has been reported to be the most widely used substance after alcohol and tobacco.²,⁶

It has been suggested that the use of cannabis has become normalised within many cultures in Europe and North America and that modest use facilitates social interaction. However, more frequent use can have adverse consequences, including psychological or physical harm and a greater propensity to engage in risky behaviour.

Given the relatively infrequent use of cannabis among 11 and 13 year olds, these groups were not included in data collection on this topic.

Cannabis use was estimated using two questions, namely:

*Have you ever taken cannabis in your life?*
*Have you ever taken cannabis in the last 12 months?*

Response categories for both questions were: Never; Once or twice; 3 to 5 times; 6 to 9 times; 10 to 19 times; 20 to 39 times; More than 39 times.

Those who reported using cannabis have been categorised as either regular or heavy users (data on discontinued and experimental users are not presented here). Regular or recreational users were defined as using cannabis between three and 39 times in the past year. Heavy users are those who reported using cannabis 40 or more times in the last year (a frequency equivalent to once every nine days or more).

Reported rates of cannabis use varied markedly across the HBSC sample and by gender. In eleven countries, less than 1% of the young people surveyed reported using cannabis 40 or more times a year (heavy users). In 17 countries, heavy users represented between 1% and 4.9% of respondents and in six countries, including Scotland, heavy users accounted for between 5% and 10% of respondents. Heavy use was reported by 6.6% of boys in Scotland and 4.5% girls.

In Scotland, 13.1% of respondents reported that they had used cannabis between 3 and 39 times in the past year (regular users) as compared with an HBSC average of 7.9% (Figure 3). Reported regular use in Scotland was similar to that in England and the USA. Findings from the HBSC survey are similar to those from other studies carried out in Scotland.³,⁴,⁶

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**Figure 3.** Regular and heavy cannabis use reported among 15 year olds, ranked by heavy users.

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<table>
<thead>
<tr>
<th>Age: user category</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>15: regular users</td>
<td>12.9 (8.8)</td>
<td>13.4 (7.1)</td>
</tr>
<tr>
<td>15: heavy users</td>
<td>6.6 (4.1)</td>
<td>4.5 (1.7)</td>
</tr>
</tbody>
</table>

age 15 were similar across countries (23.9% and 23.3%, respectively). However, in 19 countries including Scotland, England and Wales, rates for girls exceeded those for boys.

For 15-year-old boys in Scotland, self-reported weekly smoking (15.9%) was below the male HBSC average although this was not the case for girls, 23.2% of whom reported smoking at least once a week. Among girls in Scotland, self-reported weekly smoking rates exceeded those of their male peers by 7.3%.

While 15-year-old boys in Scotland have one of the lowest weekly smoking rates in the 2001/2 HBSC survey, with only five other countries having lower rates, weekly smoking rates among girls were higher and 15 countries reported lower rates than in Scotland. A recent Scottish survey has shown a decline in weekly smoking among 15-year-old boys since 1982, but rates for girls have shown little change. These findings may point to gender differences in the motivational factors influencing smoking behaviour and require further investigation.

**Alcohol use**

For young people, the use of alcohol can be influenced by a number of factors, including cultural and familial norms, peer pressure and personal preferences. Advertising also exerts an influence employing positive images of sexual attraction, romance and adventure. Although many young people may for a variety of reasons perceive the use of alcohol to be appealing, alcohol consumption among children and adolescents is known to have adverse outcomes. These include: a greater propensity to engage in other risk related behaviours such as unprotected sex; under achievement; truancy; injury and alcohol-related deaths. Within Scotland, the Scottish Executive has developed a Plan of Action to reduce harmful drinking by children and young people.4

A number of questions were used to measure the use of alcohol and associated behaviours including frequency and types of alcohol consumed, the age of first drinking alcohol and getting drunk.

Self-reported drunkenness provides a measure of excessive alcohol use. Young people were asked:

_Have you ever had so much alcohol that you were really drunk?_ Response categories were: No, never; Yes, once; Yes, 2-3 times; Yes, 4-10 times; Yes, more than 10 times.

Figure 2 illustrates self-reported drunkenness, on two or more occasions, among 15-year-olds.

Reports of being drunk on two or more occasions increase with age and vary cross-nationally. Reported drunkenness among 15-year-olds varied between countries from 16.9% to 67.7% for boys and from 5.9% to 64.8% for girls. On average across all HBSC countries, rates of being drunk on two or more occasions were higher among 15-year-old boys (39.8%) than girls (31.4%). In only four countries, including Wales and Finland, did rates among girls aged 15 exceed those of their male peers.

In general, when reported rates are low, gender differences are more marked as can be seen in Figure 2; among the higher rates reported, such as those in Scotland, gender differences are less apparent.

**Figure 2. Proportion of 15-year-olds reporting drunkenness on 2 or more occasions.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wales</td>
<td>41.0</td>
<td>32.0</td>
</tr>
<tr>
<td>England</td>
<td>59.0</td>
<td>41.0</td>
</tr>
<tr>
<td>Finland</td>
<td>51.0</td>
<td>43.0</td>
</tr>
<tr>
<td>Scotland</td>
<td>57.0</td>
<td>49.0</td>
</tr>
<tr>
<td>Sweden</td>
<td>63.0</td>
<td>55.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>54.0</td>
<td>46.0</td>
</tr>
<tr>
<td>France</td>
<td>43.0</td>
<td>35.0</td>
</tr>
<tr>
<td>HBSC</td>
<td>51.0</td>
<td>43.0</td>
</tr>
</tbody>
</table>

Percent (%) reporting drunkenness on two or more occasions

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys Scotland (HBSC average)</th>
<th>Girls Scotland (HBSC average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>6.3 (4.3)</td>
<td>3.2 (1.6)</td>
</tr>
<tr>
<td>13</td>
<td>19.0 (14.5)</td>
<td>21.3 (9.7)</td>
</tr>
<tr>
<td>15</td>
<td>51.9 (39.8)</td>
<td>51.8 (31.4)</td>
</tr>
</tbody>
</table>

targets and identifies a number of positive strategies to combat the increasing incidence of STIs and unwanted pregnancies, including: school based education; provision of accessible contraceptive clinics and health services as well as prompt diagnosis and treatment of STIs. 6, 7

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HBSC publications and HBSC information

Further information on the international report from the 2001/02 survey can be obtained from the International Study website www.hbsc.org. The International Coordinating Centre of the HBSC Study is the Child and Adolescent Health Research Unit (CAHRIU), The University of Edinburgh.

References


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