Inequalities in young people’s health
Key findings from the Health Behaviour in School-aged Children (HBSC) 2005/2006 survey

Based on a survey conducted in 2005/2006 on 204 000 young people (11, 13, and 15 years old) in 41 countries and regions across Europe and in North America, this fourth HBSC international report provides the latest evidence on the health and health-related behaviour, and their social contexts, of young people in industrialized nations. This new report – the most comprehensive to date – highlights where inequalities exist in aspects of young people’s health and well-being, encompassing gender, age and geographic and socioeconomic dimensions of health.

The countries and regions surveyed are Austria, Belgium (Flemish), Belgium (French), Bulgaria, Canada, Croatia, Czech Republic, Denmark, England, Estonia, Finland, France, Germany, Greece, Greenland, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Scotland, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United States and Wales. The study covers a wide geographical area involving a variety of cultures, climates, topographies, and economic, historic and policy contexts. It uses the United Nations categories of northern, southern, eastern and western Europe and North America.

The study shows that disparities in health are widespread and concern every country and region and provides foundational information to assist in the development of further research and strategies.

Clearly, boys and girls differ in terms of reported health behaviours, health outcomes and settings for health. Existing data do not, however, universally favour one gender over the other but show that different issues are of concern for males and females. Consistently with previous findings, boys are still more likely to engage in all risk behaviours. The patterns for smoking, however, support the argument that some equalization may be taking place. Despite more frequent consumption of healthier foods and lower levels of overweight and obesity, girls are more likely to be on weight-reducing diets and to be dissatisfied with their bodies. While high

life satisfaction is common among young people in all countries, a widening gender gap is observed, with boys more likely to report high life satisfaction.

As children grow and develop, important changes are observed in terms of their risk behaviours, the social influences that surround them and the health outcomes that they experience. Children’s perceived ratings of their health decline with increasing age, with both physical and emotional symptoms being reported more often in the older age-groups. Younger children are more likely to report a wide variety of positive health behaviours but engagement in these health behaviours declines as children enter adolescence.

The report brings together the most comprehensive cross-national picture to date of the health of young people. Boys from northern Europe report more positive health. Young people in western Europe and boys in northern Europe report poorer relationships with their families; young people in these countries and regions also report more peer involvement than young people in either eastern or southern Europe. While North America stands out as having the lowest rates of smoking, it has among the highest rates of cannabis use, a finding that deserves further exploration. The report also highlights the high levels of obesity in North America, the relatively low consumption of fruits in parts of northern Europe and the higher level of contraceptive pill use in western Europe as compared to eastern and southern Europe.

The clear association between family affluence, positive health and health-promoting behaviours confirms previous HBSC analyses on self-rated health, daily fruit eating, consumption of soft drinks, tooth brushing and physical activity. The new survey also supports previous studies, which identified inconsistent relationships between socioeconomic status and tobacco use and alcohol consumption in adolescence. Associations with family affluence varied in direction and between countries and regions.

**Health and well-being** Young people’s rating of their own health varies widely between countries and regions. Fair or poor self-rated health is more common among older children and girls. Young people in northern Europe and those from less affluent families are more likely to report fair or poor health.

**Smoking** All three age-groups show large cross-national differences in weekly smoking. At age 15, 7–37% of boys and 7–48% of girls are weekly smokers, most of them smoking daily. The most striking feature of weekly smoking behaviour is the increase between ages 13 and 15 and the emerging variation in rates across countries. Boys and girls in Canada and the United States are least likely to be weekly smokers at age 15.

**Drinking** Weekly drinking is widespread among both boys and girls but with considerable variation across countries and regions. It increases substantially between ages 13 and 15 and is more common among boys. Having been drunk twice or more is most common among young people in northern European countries (such as Denmark, the United Kingdom and the Baltic states) and least common among those in southern Europe.

**Cannabis use by 15-year-olds** Cannabis use varies across countries for 15-year-olds, ranging from 3% to 34% (who have ever used cannabis in their lifetime). On average, boys are more likely to use cannabis than girls: 8% and 6%, respectively, have used it in the last 30 days, and rates are most similar for boys and girls where overall country rates are highest. The 15-year-olds in Canada, the United States and Spain are most likely to report recent cannabis use.
**Sexual health of 15-year-olds** While the average percentage of young people aged 15 having had sexual intercourse is 24% for girls and 30% for boys, levels vary widely between the countries and regions: from 5% to 66% of girls and 13% to 55% of boys. For girls, those in southern and western Europe are least likely to have experienced sexual intercourse, but there are no clear geographical patterns for boys. Rates are highest for both boys and girls in Greenland. On average, among the sexually active, 72% of girls and 81% of boys report using a condom during their last sexual intercourse. Use of the contraceptive pill among the sexually active 15-year-olds surveyed is highest in western Europe and lowest in eastern and southern Europe. Note that several countries and regions did not include questions on sexual health.

**Physical activity** Young people should participate in one hour or more of at least moderate physical activity every day. Less than half of young people do so in almost every country and region. Slovakian boys and girls are most likely to meet the guidelines in every age-group. Across all countries and regions and all age-groups, girls are less active than boys and the gender gap increases with age. Fifteen-year-olds are less likely (average 16%) to report meeting the guidelines than 11-year-olds (average 26%) in the majority of countries. In under half the countries, those from more affluent families are more likely to meet the guidelines.

**Eating habits** Daily fruit consumption varies significantly between countries, is highest for 11-year-olds and declines with age. Boys are less likely than girls to report eating fruit, as are those from less affluent families in almost all countries. The daily consumption of soft drinks also varies cross-nationally and tends to be higher among older adolescents. Consumption of soft drinks is associated with low family affluence in the majority of countries, except in eastern Europe and the Baltic states where the reverse is found. Eating breakfast on school days decreases with age. Those from less affluent families, particularly in northern and western Europe, are less likely to eat breakfast every school day.

**Body dissatisfaction, dieting and weight control** Girls are more likely than boys to see themselves as a bit or much too fat, and this negative body image becomes more prevalent with age. Feeling too fat is more apparent among girls living in northern and western Europe. In western Europe, it is associated with lower levels of family affluence. Rates of dieting and weight-control behaviour are higher in girls than boys at all ages, the gender gap widening with age. Attempting to lose weight seems to be a common feature of girls’ lifestyles by the age of 13 (with rates up to 32% for girls). Among 15-year-olds, attempting to lose weight is reported by more than 30% of girls in Iceland, Italy, Wales, Hungary, Denmark and French-speaking Belgium.

**Overweight** The data presented on overweight and obesity are derived from self-reported height and weight information used to calculate body mass index, not from actual measurements, and so need to be treated with some caution. The general term “overweight” includes two groups: those who are considered obese and those who are considered overweight but not obese. The proportions of 13- and 15-year-old boys and girls who are overweight range from 4% to 35% across countries and regions. Canada, Greenland, Malta and the United States have among the highest rates. Boys and those from less affluent families report higher levels of overweight and obesity, particularly in North America and western Europe.

**Oral health** Regular (more than once a day) tooth brushing is not the norm in all countries. Tooth brushing increases with age, and is higher among girls. Boys and girls from more affluent families universally brush their teeth more often. Across the three age-groups, the range among boys and girls is between 20% (15-year-old boys in Malta) and 91% (15-year-old girls in
Switzerland). The highest levels of tooth brushing are found in Switzerland, Sweden, Germany, Austria and Italy.

**Bullying and fighting** Levels of being bullied (at least twice in the past couple of months) range from 2% to 37% across all countries, regions and age-groups and both genders. Bullying others is less common, but is reported by more than 30% of 15-year-old boys in Lithuania, Latvia and Greece. Being bullied and bullying others are typically more common among boys; both are less frequent among the older age-groups. Levels of physical fighting also show cross-national variation and marked gender differences, with relatively low levels of fighting among girls. Rates of fighting are highest for 11-year-olds: on average 25% of boys and 7% of girls aged 11 report fighting three or more times in the last year. The rates of fighting are highest in Turkey, Slovakia and French-speaking Belgium.

**Injuries** The proportions of boys and girls who sustained injuries requiring medical attention once or more in the previous 12 months increase between the ages of 11 and 15, with consistent gender and socioeconomic differences. At age 15, the rates for boys range from 28% to 65%, while for girls they range from 21% to 50%. Injury rates are higher among those from more affluent families, and those from northern Europe.

**Young people’s life circumstances: family, peers, school** The social context of young people’s lives is also important for their health and well-being. In this study, we examine patterns in family and peer relationships and the school setting. There are important differences by gender, family affluence, age and geography in these contexts.

**Parents** How easy young people find it to talk to their parents about things that really bother them varies across countries, and declines with age. Boys and girls from eastern Europe are most likely to report ease of communication with their mother. Gender differences are small but, where they do exist, they favour boys. Girls find it less easy to talk to their fathers than do boys, and this gender gap increases with age.

**Peers** The number of close friends tends to decrease between the ages of 11 and 15, yet there are large variations in the numbers reporting that they have three or more close friends; among 11-year-olds, the rates vary from 49% of Maltese boys to 93% of English girls. Time spent with peers increases with age and is greatest among boys; but the differences are large across countries. Daily electronic communication with peers also varies cross-nationally, and is more common in northern Europe. On average at age 15, 56% of girls (range 33–83%) and 43% of boys (range 22–70%) report being in electronic contact with peers on a daily basis. Having three or more close friends and electronic communication with peers are both more common among adolescents from highly affluent families.

**School** The extent to which young people report positive school experiences varies with age, gender and country or region. Younger children and girls are more likely to report liking school a lot: 38% of 11-year-olds and 20% of 15-year-olds report liking school. The variation across countries is large: from 4% of 13-year-old Estonian boys, to 82% of 11-year-old girls from The former Yugoslav Republic of Macedonia. Feeling pressured by schoolwork is more common among boys than girls at age 11 and among girls in the older age-groups. Boys and girls in western Europe are least likely to report feeling pressured by their schoolwork.
For more information contact:

**TECHNICAL INFORMATION**

Dr Erio Ziglio  
Head, WHO European Office for Investment for Health and Development  
Palazzo Franchetti, S. Marco 2847  
1-30124 Venice, Italy  
Tel.: +39 041 2793865. Fax: +39 041 2793869  
E-mail: ezi@ihd.euro.who.int

Professor Candace Currie  
Director, Child and Adolescent Health Research Unit  
University of Edinburgh  
St Leonard’s Land, Holyrood Road  
Edinburgh EH8 8AQ, Scotland, United Kingdom  
Tel.: +44 (0)131 651 6258. Fax: +44 (0)131 651 6271  
E-mail: candace.currie@ed.ac.uk

Ms Vivian Barnekow  
Child and Adolescent Health  
Country Policies and Systems  
WHO Regional Office for Europe  
Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark  
Tel.: +45 39 17 14 10. Fax: +45 39 17 18 18  
E-mail: vbr@euro.who.int

**PRESS INFORMATION**

Ms Liuba Negru  
Press and Media Relations  
WHO Regional Office for Europe  
Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark  
Tel.: +45 39 17 13 44. Fax: +45 39 17 18 80  
E-mail: lne@euro.who.int

Press materials can be found on the Regional Office web site (http://www.euro.who.int/mediacentre).