

## **Short Report**

### **HBSC Ireland: physical activity patterns by age and gender**

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#### **Introduction**

Health Behaviour in School-aged Children (HBSC) is a cross-national research study conducted in collaboration with the World Health Organisation (European Office). The study runs on a four-year cycle and in 2006 there were 41 participating countries across Europe and North America. HBSC collects data on key indicators of health, health attitudes and health behaviours, as well as the contexts of health for young people. The study is a school-based survey with information collected from students through self-completion questionnaires in classrooms. Further information on the International HBSC study can be found at [www.hbsc.org](http://www.hbsc.org).

The most recent HBSC Ireland dataset comprises 10,344 children from 5th class in primary school to 5th year in post-primary schools. The methods employed comply with the International HBSC protocol and are detailed in the first national report from the 2006 survey which can be found at [www.nuigalway.ie/hbsc](http://www.nuigalway.ie/hbsc).

#### **Focus**

This short report presents a brief analysis of Moderate-Vigorous Physical Activity (MVPA) among Irish schoolchildren by age, gender, urban or rural location and health board region. MVPA data are collected with the following question:

- “Over the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day?” with response options ‘0 days’ to ‘7 days’

## Findings

The data below are presented as percentages for each of the response options (0-7 days). Table 1 displays the percentages of children who reported being active over the last seven days by gender and overall. Table 2 presents these data by age group, and table 3 by age group and gender. Table 4 provides the MVPA data by gender and urban and rural location.

**Table 1: Percentages reporting moderate-vigorous physical activity in the past 7 days overall and by gender.**

Gender	Boys (%)	Girls (%)	Overall (%)
0 days	2.7	5.8	4.2
1 day	3.5	7.0	5.2
2 days	4.9	11.0	7.9
3 days	10.7	13.9	12.3
4 days	14.1	15.4	14.7
5 days	15.5	14.1	14.8
6 days	13.3	10.4	11.9
7 days	33.3	20.5	27.1
Missing	1.9	1.8	1.9
<i>n</i>	5286	5035	10136

**Table 2: Percentages reporting moderate-vigorous physical activity in the past 7 days by age group.**

Age Group	10-11 yrs (%)	12-14 yrs (%)	15-17 yrs (%)
0 days	1.3	2.0	7.5
1 day	1.5	3.4	8.7
2 days	3.6	6.1	11.5
3 days	6.6	11.4	15.4
4 days	11.3	14.8	16.0
5 days	15.8	15.8	13.4
6 days	15.4	13.4	8.9
7 days	42.3	31.1	16.9
Missing	2.2	1.9	1.7
<i>n</i>	1371	4846	3934

**Table 3: Percentages reporting moderate-vigorous physical activity in the past 7 days by gender and age group.**

Age Group	10-11 yrs		12-14 yrs (%)		15-17 yrs (%)	
	Boys (%)	Girls (%)	Boys (%)	Girls (%)	Boys (%)	Girls (%)
Gender						
0 days	1.4	1.2	1.5	2.6	3.9	11.6
1 day	.7	2.1	2.3	4.7	5.7	12.1
2 days	2.8	4.1	3.9	8.5	6.6	17.1
3 days	5.5	7.4	8.9	14.1	14.3	16.7
4 days	8.5	13.3	13.1	16.7	17.0	14.8
5 days	13.0	17.7	15.7	15.9	16.1	10.4
6 days	17.1	14.3	14.2	12.5	11.4	6.1
7 days	49.7	37.1	38.2	23.4	23.1	9.9
Missing	1.2	2.9	2.2	1.7	1.9	1.4
<i>n</i>	563	807	2534	2311	2089	1842

**Table 4: Percentages reporting moderate-vigorous physical activity in the past 7 days by gender and location.**

Age Group	Urban			Rural		
	Boys (%)	Girls (%)	Overall (%)	Boys (%)	Girls (%)	Overall (%)
Gender						
0 days	3.2	5.5	4.3	2.4	5.9	4.1
1 day	3.2	7.3	5.2	3.7	6.9	5.3
2 days	4.1	11.4	7.7	5.5	10.7	8.1
3 days	11.1	13.1	12.1	10.5	14.7	12.6
4 days	13.5	14.2	13.8	14.7	16.3	15.5
5 days	15.1	13.4	14.3	15.9	14.7	15.3
6 days	13.7	10.2	12.0	13.2	10.6	12.0
7 days	34.4	23.2	28.9	32.4	18.4	25.5
Missing	1.8	1.8	1.8	1.6	1.7	1.7
<i>n</i>	2154	2087	4245	2939	2846	5790

In order to investigate regional differences in MVPA a one-way MANOVA was conducted with age as a covariate. Although significant differences between students across health board regions were identified ( $F_{(7, 9973)} = 3.85; p < 0.001$ ), the mean (standard deviation) number of days per week that students reported MVPA for 60 minutes or more ranged from 4.4 (2.1) in the West to 4.7 (2.0) in the South East. The practical deviations are therefore minimal and it is likely that the statistically significant differences across health board regions are more likely to be due to the relatively large sample sizes.

## **Key findings**

- The majority of Irish children (53.8%) are physically active for 60 minutes or more on five or more days per week.
- Reported frequency of MVPA is highest among the youngest students and lowest in the elder age groups. This difference is found among both boys and girls. The greatest difference is seen in those reporting physical activity for at least 60 minutes per day on 7 days per week, which is 25% lower among the 15-17 year olds than among the 10-11 year olds.
- Girls consistently report being less active than boys irrespective of age group or location.
- There are few urban-rural differences in MVPA. One notable difference is found among girls; urban girls are more likely (23.2%) than rural girls (18.4%) to report engaging in physical activity for more than 60 minutes per day on 7 days a week.
- Though significant differences are found between health board regions, the identified differences are not of practical significance.

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