Patterns and trends in child physical activity

A presentation of the latest data on child physical activity
Around two in ten children aged 5-15 years meet the government recommendations* for physical activity (boys 21%, girls 16%)

*Child recommendations for physical activity in CMO report 2011 – one hour moderate activity per day. HSE reports at least 60 minutes of moderate to vigorous activity on all seven days in the last week.
Around four in ten children aged 5-15 years are physically inactive*
(boys 39%, girls 45%)

*Fewer than 30 minutes of moderate to vigorous activity on each day or 60 minutes or more on fewer than seven days in the last week
Around one in ten children aged 2-4 years meet the government recommendation* for physical activity (boys 9%, girls 10%)

*At least 180 minutes (3 hours) of physical activity on all seven days in the last week
Physical activity by region
Health Survey for England 2012, boys aged 5-15 years

- **Meets recommendations**
- **Some activity**
- **Low activity**

<table>
<thead>
<tr>
<th>Region</th>
<th>Meets recommendations</th>
<th>Some activity</th>
<th>Low activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>South East</td>
<td>26%</td>
<td>43%</td>
<td>32%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>25%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>London</td>
<td>24%</td>
<td>34%</td>
<td>42%</td>
</tr>
<tr>
<td>North West</td>
<td>21%</td>
<td>46%</td>
<td>33%</td>
</tr>
<tr>
<td>Yorkshire &amp; the Humber</td>
<td>21%</td>
<td>40%</td>
<td>39%</td>
</tr>
<tr>
<td>North East</td>
<td>19%</td>
<td>45%</td>
<td>36%</td>
</tr>
<tr>
<td>East of England</td>
<td>17%</td>
<td>42%</td>
<td>41%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>14%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>South West</td>
<td>13%</td>
<td>34%</td>
<td>52%</td>
</tr>
</tbody>
</table>

**Low activity**: <30 minutes of MVPA on each day, or MVPA of 60+ minutes on less than seven days in the last week

**Some activity**: 30-59 minutes of MVPA on all seven days in the last week

**Meets recommendations**: At least 60 minutes of moderate to vigorous (MVPA) on all seven days in the last week

MVPA = moderate to vigorous intensity physical activity
Physical activity by region
Health Survey for England 2012, girls aged 5-15 years

- **Meets recommendations**: At least 60 minutes of moderate to vigorous (MVPA) on all seven days in the last week
- **Some activity**: 30-59 minutes of MVPA on all seven days in the last week
- **Low activity**: <30 minutes of MVPA on each day, or MVPA of 60+ minutes on less than seven days in the last week

**MVPA** = moderate to vigorous intensity physical activity

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MVPA = moderate to vigorous intensity physical activity
Trends in physical activity
Children aged 2-15 years; Health Survey for England 2008-2012

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MVPA = moderate to vigorous intensity physical activity
Physical inactivity by household income

Children aged 2-15 years; Health Survey for England 2012

Equivalised household income is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles). Physical activity levels were compared between these groups.
Time spent sedentary in leisure time
Children aged 2-15 years; Health Survey for England 2012

Proportion of children who spent six or more hours being sedentary per day by age group

Weekdays

Weekends

Age 2-4 | Age 5-7 | Age 8-10 | Age 11-12 | Age 13-15 |
--- | --- | --- | --- | --- |
Boys | 7% | 4% | 7% | 11% | 24% |
Girls | 7% | 4% | 3% | 6% | 16% |

Age 2-4 | Age 5-7 | Age 8-10 | Age 11-12 | Age 13-15 |
--- | --- | --- | --- | --- |
Boys | 10% | 15% | 22% | 27% | 43% |
Girls | 9% | 16% | 21% | 17% | 37% |
Trends in travel to school

Children aged 5-16 years; National Travel Survey, Great Britain 1995/97-2013

Data includes trips of less than 50 miles only
Key points

- More boys (21%) than girls (15%) aged 5–15 years met the national physical activity target in 2012, achieving an hour of moderate activity every day (Figure 1). This varies regionally in England from 20% to 13% in boys, and 22% to 10% in girls (Figure 2).
- Low levels of physical activity in children are related to household income, with those in the lowest income bracket more likely to report low levels of activity. Among boys, 47% in the lowest income group and 26% in the highest did less than 30 minutes of moderate activity each day. Among girls, the figures were 49% and 35% (Figure 3).
- Accelerometer data shows a substantial decrease in physical activity between ages 4–10 and 11–15 years, with very low levels for girls (Figure 4).
- Patterns of activity vary with age and across the week. On weekdays, few children under ten are sedentary for six hours or more, but the proportion more steeply to 24% in boys and 16% in girls aged 13–15 years. At weekends there is a steady increase in sedentary behaviour from age 2–4 (around 10%) to age 13–15 years (around 40%) (Figure 5).
- According to the 2013 National Travel Survey, 42% of children reported walking to school and 2% reported cycling to school in 2013 (Figure 6).

Self-reported data is influenced by the respondent’s ability to accurately recall and assess their physical activity. Accelerometer data is objective and provides standardised measures of physical activity. Although accelerometer data has advantages over self-reported data, it does have limitations; for example, accelerometers are less good at recording activities such as cycling and swimming.
Other useful PHE physical activity resources

- Everybody active, every day: an evidence-based approach to physical activity
- Everybody active, every day: what works, the evidence
- Obesity and the environment: increasing physical activity and active travel
- Active travel briefings for local authorities
- Standard evaluation framework for physical activity interventions
- Guide to physical activity data sources
- Guide to online tools for valuing physical activity, sport and obesity programmes
- E-learning modules on physical activity and health
- Change4Life campaign resources
- PHE obesity website - www.noo.org.uk
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