



**Ireland's report card
on physical activity
in children & youth**

**ARE OUR CHILDREN
UP TO THE MARK?**

ON YOUR MARKS, GET SET, GO!



2014

Why are we Interested in Children's Physical Activity?

- Children and young people are natural movers, but the youth of the world have grown accustomed to inactive and sedentary lifestyles.
- Regular physical activity has many benefits in childhood including improvement in mental health, cognition and general academic performance; assists with weight control; reduces anxiety and depression; assists social development as well as adding to quality of life as active children are more likely to choose other healthy behaviours.^{1,2}
- There is a growing concern around children's inactivity levels worldwide³ and Ireland's children are not up to the mark.
- Increasing the physical activity levels of children is of particular importance as children who are physically active are more likely to be active and less likely to be unhealthy in adulthood.⁴ Thus, changes in children's physical activity influences the public health of the population.⁵
- It has been estimated, based on available adult survey data, that in Ireland 9% of the burden of disease of coronary heart disease, 11% of type 2 diabetes, 15% of breast cancer, and 16% of colon cancer can be attributed to physical inactivity.⁶
- The importance of physical activity for health is recognised in policy documents from the island of Ireland which target increases in physical activity as a key performance indicator.^{7,8}

What can the Report Card be used for?

- The Report Card on Physical Activity is a knowledge exchange and translation instrument that has been used internationally⁹ and its use is increasing.¹⁰
- It is a way of collating all data related to children's physical activity levels from Ireland and 'grading' the evidence under a number of indicators.
- This Report Card will support efforts to change policy and programming for children's physical activity.
- This first Report Card will act as a baseline for surveillance of physical activity promotion efforts in Ireland.
- The Report Card will serve as a vital tool for practitioners and policy makers on both sides of the border to identify key needs and gaps, allocate funds and develop activity promotion initiatives.
- Surveillance of indicators related to physical activity is vital for sustainable success and, ultimately, to improve the public health of the nation.

Key Stages of Creating Ireland's Physical Activity Report Card 2014

01.

The research work group (RWG) first met in May 2013 to discuss the Report Card format and to identify key data sources.

02.

Data sources were identified through databases and online searches.

03.

Relevant data were extracted and each indicator was discussed, assessed and a proposed grade for each indicator was established using the standardised, international grading system by the RWG.⁹

04.

Key data were sent to four external researchers with experience of the Report Card grading process to validate the proposed grades for the 2014 Report Card.

05.

A targeted consultation session with practitioners and policy makers from Ireland occurred where the proposed grades were presented.

Indicators used in Ireland's Physical Activity Report Card 2014

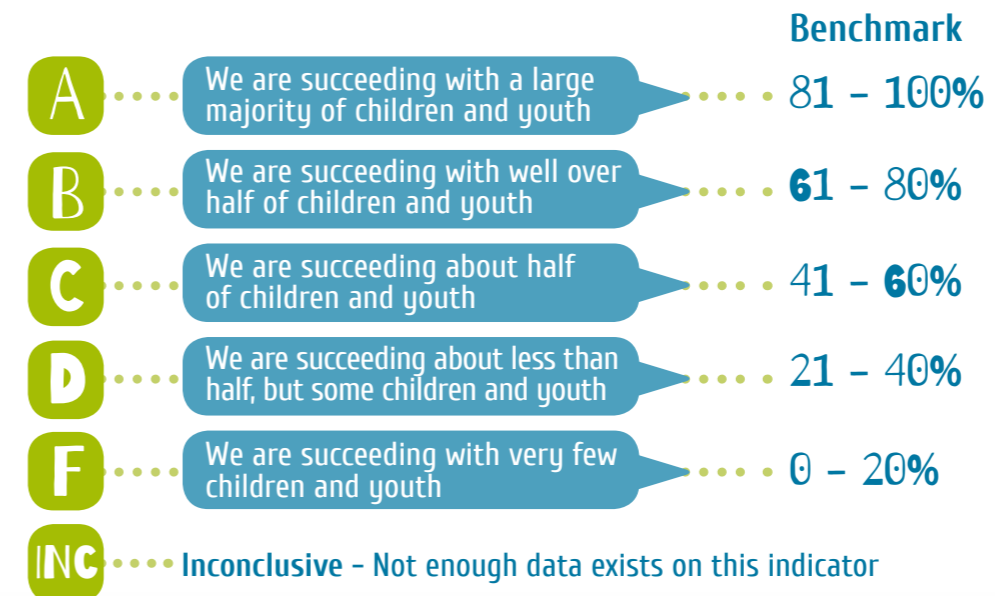
Behaviours Related to Physical Activity

- 1 •• Overall Physical Activity Levels
- 2 •• Organized Sport Participation
- 3 •• Active Play
- 4 •• Active Transportation
- 5 •• Sedentary Behaviours (TV viewing)
- 6 •• Physical Education

Settings Related to Physical Activity

- 7 •• Home (Family) – support, parental behaviours
- 8 •• School – extra-curricular sport participation
- 9 •• Community and the Built Environment – perceived quality and safety
- 10 •• Government – strategies, policies, investments

International Standardised Grading Scheme⁹



Data sources used in Ireland's Physical Activity Report Card 2014

- Take PART (Physical Activity Research for Teenagers) Studies 2003-2005¹¹⁻¹³
- Growing up in Ireland (GUI) Wave 1 of the 9 year old cohort 2007-2009¹⁴
- ESRI Keeping them in the Game (2013) which contains a reanalysis of data from 2007-2009¹⁵
- UK Millennium Cohort Study (MCS4) 2008-2009^{16, 17}
- Baseline Survey of Timetabled PE in Primary Schools in Northern Ireland 2009¹⁸
- Children's Sport Participation and Physical Activity (CSPPA) 2009¹⁹ and volunteer survey²⁰
- Health Behaviour of School-Aged Children (HBSC) wave 2009-2010^{21, 22}
- Young Persons' Behaviour and Attitudes Survey (YPBAS) 2010²³
- Census of the Population of Ireland 2011²⁴



OVERALL PHYSICAL ACTIVITY LEVELS

Background

Physical activity has benefits for cardiometabolic health, bone and mental health as well as body composition of children.²⁵ There is a dose-response relationship between physical activity and health markers, whereby the greater the dose of physical activity a young person engages in, the greater the health benefit. However, even small increases in physical activity can have significant health benefits in high-risk youth.²⁵

Target/Recommendation/Benchmark

The percentage (%) of children in Ireland meeting the physical activity guidelines of 60 minutes of moderate to vigorous physical activity (MVPA) every day.^{26, 27}

Data

- *HBSC*: 25% of 11 to 15 year olds²¹
- *YPBAS*: 12% of 11 to 16 years year olds²³
- *GUI*: 25% of 9 year olds¹⁴
- *CSPPA*: 19% of primary and 12% post primary¹⁹
- *MCS4*: 43% of 7 to 8 year olds based on accelerometry¹⁷

Inequities/Equalities

- A sex difference existed in the data with females being less active than their male counterparts.^{19, 21}
- Similar to other countries,^{28, 29} the sex gap widens with age.⁵
- The prevalence of meeting physical activity recommendations among children and youth living in the Republic of Ireland were lower than those residing in Northern Ireland, although Northern Ireland children had the lowest physical activity of the UK countries involved in *MCS4*.

Gaps/Recommendations

- All Republic of Ireland physical activity data used here are from self-report methods and thus may be an overestimate due to limitations of this method.
- There are gaps in physical activity data in younger age groups (< 7 years old).
- Objective data, such as accelerometry, are needed. However, choice of measurement method is subject to budgetary constraints, adherence to the protocol (i.e., the children actually wearing them) and ease of data processing.

Comment

- The participants in *MCS4* likely represented the most active age group and would not be representative of all ages of Irish young people.
- Data using pedometers have been collected in Ireland on small, localised samples.³⁰⁻³³
- From a public health perspective, details on context, location and purpose of activity may be of more interest.

Overall Physical Activity Levels



SEDENTARY BEHAVIOUR (TV VIEWING)

Background

Sedentary behaviour is "any waking behaviour spent in a sitting or reclining position that requires an energy expenditure of <1.5 metabolic equivalents."³¹ Sedentary behaviours have been related to disease risk factors in adults³² and screen time has been positively associated with levels of overweight and obesity amongst 9 year old Irish children independent of physical activity levels.³³

Target/Recommendation/Benchmark

The % of children watching < 2 hours of TV/day.³⁴

Data

- *HBSC*: 46% of 11 to 15 year olds reported watching < 2 hours TV/day²²
- *YPBAS*: 73% of 11 to 16 year olds spent < 10 hour/week²³
- *GUI*: 21% of 9 year olds watched < 1 hour TV/video¹⁴
- *MCS4*: 23% of 7 to 8 year olds spent < 1 hour watching TV/video¹⁶
- *CSPPA*: 79% of primary and 71% of post-primary children reported watching < 2 hours of TV/day¹⁹

Inequities/Equalities

- TV viewing increases with age.^{19, 22}
- Evidence of differences based on parent education and family structure with children from one parent families watching more TV than two parent families, and TV viewing decreasing with increasing educational attainment of the mother.¹⁴

Gaps/Recommendations

- Guidelines for total screen time are needed, and they currently exist in the US³⁴ and Canada.³⁵
- Sedentary time is much more than just watching TV so assessment of total time spent sedentary is vital.

Comment

- In 2014, with the abundance of non-TV screen media, monitoring just TV viewing time is likely to underestimate total time spent sedentary.
- Data from objective measurement devices have found that Irish adolescents sit for more than 8 hours/day while awake.

Sedentary Behaviour (TV viewing)



ACTIVE TRANSPORTATION

Background

Active transport refers to walking, running or cycling to destinations using non-motorised means. Adults who participate in active transportation have lower cardiovascular risk (11%),³⁷ while children who walk or cycle have higher physical activity levels.³⁸ Active transport is cost-effective³⁹ and has benefits across other sectors such as reducing emissions and traffic congestion.

Target/Recommendation/Benchmark

The % of children reporting walking or cycling to or from school each day.

Data

- YPBAS: 24% of 11 to 16 year olds²³
- GUI: 26% of 9 year olds¹⁴
- CSPPA: 32% of primary children and 43% of post-primary children¹⁹
- Census of Population of Ireland (2011): 25% of primary and 24% of post-primary²⁴

Inequities/Equalities

- *Urban-rural divide:* Children in more rural areas have less opportunity to commute actively than those living in urban environments (39% versus 18%).^{12, 13}
- *Distance is important:* While children living closest to school are most likely to travel to school using active means, 39% of children who lived within half a mile of the school, and 70% of children who lived between 1 and 1.5 miles of the school travelled by car.¹⁴

Gaps/Recommendations

- Annual surveillance of mode of transport to and from school for all children as well as travel methods beyond the daily commute to school.
- Travel by bicycle is especially low in Irish children and should be investigated.
- Increased local and national initiatives to encourage replacement of motorised transport with cycling and walking for journeys to and from school. For example, the Green Flag award promotes active commuting <http://www.greenschoolsireland.org/>

Comment

- This indicator is one that does not follow the typical decline that is seen in overall physical activity and sport participation as children get older. This makes active transport a unique, viable and valuable form of physical activity.
- Transport, education and sport policies need to protect and encourage this form of activity.
- Adolescents cite a number of reasons why they like walking to school. These included 'I can choose my own route'; 'I can walk with my friends'; and 'It makes me feel healthier'.²³

Active Transportation



Physical Education



PHYSICAL EDUCATION

Background

Quality physical education (PE) lessons can enhance physical literacy and provide children with the opportunity to learn normative skills that will enable them to partake in a wide range of physical activities with confidence.⁴⁰

Target/Recommendation/Benchmark

The % of children receiving the recommended time for PE each week in school, i.e., 1 hour+/week on the Primary curriculum⁴¹ and 2 hours/week for post-primary⁴² in the Republic of Ireland and 2 hours/week for children aged 4-16 in Northern Ireland.⁴³

Data

- CSPPA: 35% of primary (5th and 6th class) children and 10% of post-primary children reported receiving the recommended PE.¹⁹
- *Baseline Survey of Timetabled PE in Primary Schools in Northern Ireland:* Of the 419 primary schools in Northern Ireland that returned surveys, 17% reported 2+ hours of PE/week.¹⁸

Inequities/Equalities

- Recommended levels of PE are lower than global and European averages^{18, 44} and, based on the data, the prevalence of meeting those recommendations is even lower.
- Possible differences by type and size of school are evident with children in mixed sex schools reporting less PE than those in single sex schools¹⁹ and with PE time decreasing as enrollment numbers increase.¹⁸

Gaps/Recommendations

- The removal of PE as a subject from the post-primary junior cycle curriculum in the Republic of Ireland⁴⁵ will have a significant negative impact on this outcome in the future.

Comment

- There is a discrepancy between the recommended time allocation for PE and the amount of PE that students self-report.
- If PE allocation is low in schools, children need access to physical activity throughout the school day in order for them to achieve the 60 minutes of MVPA per day guideline.



ORGANISED SPORT PARTICIPATION

Background

The benefits of sports participation include increases in motor and social skill and function, improvements in self-esteem and sport contributes to overall daily physical activity goals.

Target/Recommendation/Benchmark

% of children participating in sport twice/week as per LISPA guidance.⁴⁷

Data

- *MCS4*: 40% of parents report participation in 2+ days/week sport by their 7 to 8 year olds.¹⁶
- *GUI*: 56% of 9 year old males and 33% of 9 year old females report playing sport almost every day.¹⁴
- *CSPPA*: 64% primary and 54% post-primary (sex differences found) report at least 2-3 days/week of extra-school sport.¹⁹

Inequities/Equalities

- Sport participation typically decreases with age and SES and sex differences are evident.¹⁵

Gaps/Recommendations

- Sports can occur during PE, when casually playing with friends, as an extra-curricular hobby or with extra school club/community sport.^{19, 48}
- Surveillance of the different contexts/settings is required to highlight gaps and inequities.

Comment

- Extra-school club/community sport is a major part of the social landscape in Ireland, with opportunities available to participate based in voluntary, community based sports clubs and organisations.⁴⁸



Organised Sport Participation

The Report Card format has been used in Canada since 2005, the state of Louisiana in the US since 2008 and Ireland will now join 14 other countries at the Active Healthy Kids Canada Global Summit on the Physical Activity of Children in Toronto in May, 2014 to release their 2014 Report Cards

ACTIVE PLAY

Background

Active play may include unstructured outdoor physical activity in children's free time,⁴⁹ active free play, or simply spontaneous activity. It is important for the physical, mental, and social aspects of growth and development,⁴⁶ allows the accumulation of more activity⁵⁰ and replaces time when children could otherwise be sedentary.

Target/Recommendation/Benchmark

Although active play is mentioned as a contributor to MVPA recommendations²⁷ and guidelines exist for very young children,²⁶ there are no recommendations for active play alone.

Data

- *GUI (unpublished)*: 49% of children reported playing games outside with a parent within the last week while 23% said that playing games outside was their most favourite thing to do in their free time.

Inequities/Equalities

- The current evidence base is not sufficient to provide this information.

Gaps/Recommendations

- Need data on active play and activity in early childhood in general.
- A clear definition of active play is needed, what constitutes active play, for what ages, in what settings and with whom.
- Where should active play sit in relation to sport and overall physical activity as they may overlap, and any such overlap may be difficult to quantify?

Comment

- *Promising in the Republic*: An Active Play Plan⁵¹ and an early years curriculum framework (birth to 6 years)⁵², with a section on learning and developing through play, exist.
- *Promising in Northern Ireland*: Dedicated Play Board (www.playboard.org)
- *All island approach*: Bring Back Play is a focus of the current Safefood campaign (<http://safefood.eu/Childhood-Obesity/Welcome.aspx>)

Active Play

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HOME

Background

The family is a major influencing factor on the physical activity of children. Social support from the family is critical⁵³ with a child being almost twice as likely to be physically active if their parents are supportive of physical activity.⁵⁴

Target/Recommendation/Benchmark

There are a number of influencers on children's physical activity including parental support, modelling and shared activities that are important to monitor.⁵⁵ The level and amount of these influencers sufficient to increase children's activity levels are not clear.

Data

- *MCS4*: 22% of children undertake physical activities with their family every day/almost every day while 8% of parents play active games with their children every day/almost every day.¹⁶
- *GUI (unpublished)*: 6% of parents of 9 year old children play sports/cards/games with their child every day while 49% of the children reported playing games outside with their parent within the last week.
- *CSPPA*: The typical sport club volunteer is a parent aged 35-54 years old.²⁰

Inequities/Equalities

The current evidence base is not sufficient to provide this information.

Gaps/Recommendations

Need robust data and agreement on what factors related to the home and family setting are best to monitor over time.

Comment

- Attaching youth challenges to big sporting events for adults may be a nice way to get families active together

Home

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The key considerations when grading were:
(i) representative nature of the data; (ii) sample size;
(iii) possibility of the study being repeated or the question being asked again in future studies;
(iv) how other countries had graded their data in respect to quantifying inequities in the data (e.g., sex, age, or ethnic group differences).

SCHOOL

Background

Apart from PE lessons and break-times, school can be a sedentary setting where long bouts of sitting are normal. Physical activity in the school setting will benefit children as active children have greater attention spans, faster cognitive speeds and higher scores on standardised academic tests compared to their less active counterparts.^{56, 57}

Target/Recommendation/Benchmark

The % of children participating in 2+ hours/week in extra-curricular sport and school based recreation.⁵⁸

Data

- *CSPPA*: 42% of primary and 57% of post-primary students reported participating in extra-curricular sport 2+ times/week.¹⁹
- *YPBAS*: 49% of adolescents reported 2 hours of PE or games at school while 46% are part of school club or team.²³

Inequities/Equalities

- Team extra-curricular sports participation drops when moving from primary to post-primary school.¹⁵

Gaps/Recommendations

- There is a need for better data on physical activity and sedentary behaviours during school time, since the impact of the core physical activity curriculum and the school setting vary widely across Ireland.

Comment

- The school day has the potential to contribute 58 minutes of activity each day through mandatory PE (+23 minutes), active transport to/from school (+16 minutes) and classroom PA breaks (+19 minutes).⁵⁹
- Extra-curricular sport is often a central focus of the life and identity of schools.⁴⁸

School

C-

Ireland's first Report Card on Physical Activity in Children and Youth represents data from over 35,000 children (plus census data from 2011) aged 7 to 18 years, sampled between 2003 and 2010 and, where possible, from representative datasets.

COMMUNITY AND THE BUILT ENVIRONMENT

Background

The National Heart Alliance has recognised the importance of the built environment for promoting physical activity and achieving health.⁶⁰

Target/Recommendation/Benchmark

The % of parents perceiving their local area as safe and % of adolescents perceiving their local facilities as good quality.

Data

- *MCS4*: 47% of parents say their 7-8 year old child plays on the street/public.¹⁶
- *YPBAS*: 53% of adolescents say play/leisure facilities locally are very good/fairly good.²³
- *GUI*: 68% of parents agree that it is safe to walk alone after dark in their area, 91% agree it is safe to play outside during the day and 58% agree there are safe parks/playgrounds in their area.¹⁴

Inequities/Equalities

- Parents living in rural areas were slightly more likely to say it was safe to walk alone after dark and play outside than urban based parents. However, urban based parents rate their parks and play areas as being safer than parents living in rural areas, possibly reflecting a lack of parks in the rural areas.¹⁴

Gaps/Recommendations

- Perceptions do not always lead to actual use of physical activity promoting facilities or increased physical activity behaviour.
- Accessible objective data on quantity and quality of local play and recreation facilities (including green space and foot paths), connectivity, urban planning is needed.

Comment

- Volunteerism is an important non-governmental, community based support for sport. In the Republic, 97% of the junior sport workforce are volunteers with a typical commitment of 1 day/week²⁰, while 92% of sports clubs in Northern Ireland could not operate without volunteers.⁶¹

Community and the Built Environment



B

GOVERNMENT

Background

Traditional physical activity programming that focus on the individual have had limited success in promoting long-term adherence to physical activity guidelines.⁶² At the public policy level, the development and implementation of policies that promote physical activity, enhance programmes for all children to be active and develop environments that promote active choices are necessary.

Target/recommendation/benchmark

- It was difficult to set a target for this indicator as there are a number of governmental initiatives that could support and influence children's physical activity participation.
- At the very least, the RWG felt that having a National Physical Activity Plan, knowing the level of monetary and workforce investment in physical activity and having evidence of co-ordination of endeavours across sectors that works would be a start.

Data

- *Strengths in the Republic*: Dedicated Department of Children and Youth Affairs (www.dcy.gov.ie); Healthy Ireland with physical activity as the exemplar,⁷ and a National Cycle Framework⁶³ as part of Smarter Transport for a Sustainable Future.⁶⁴
- *Strengths in the North*: The NI Strategy for Sport and Physical Recreation 2009-2019 (Sport Matters)⁵⁸ and the development of the Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland 2012-2022.⁸

Inequities/Equalities

- Addressing barriers to physical activity participation for females as well as for children with disabilities.

Gaps/Recommendations

- Absence of a National Physical Activity Plan.
- Unavailability of physical activity workforce details nationwide.
- Unavailability of investment data means that much of the key evidence on this indicator is lacking.
- Halting the proposed downgrading of PE to a short course in the post-primary curriculum by the Department of Education and Skills (in the Republic) would be a useful step to improve the grade.
- Embracing 2 hours/week of PE and 2 hours/week of sport and physical activity during and after-school (in Northern Ireland) as the recommended in rest of the UK and making this recommendation a requirement would be a useful step to improve the grade.

Comment

- A National Physical Activity Plan can enable policy makers from several different sectors to tackle the goal of increasing physical activity among children and youth in Ireland from many different perspectives (e.g. health, transport, urban planning, environment, education).⁶⁵

Government

INC

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Consultations

- Department of Children and Youth (Republic of Ireland)
- Department of Education Northern Ireland
- Department of Education (Republic of Ireland)
- Early Childhood Ireland
- Get Ireland Active
- Healthy Ireland
- Irish Heart Foundation
- Irish Primary PE Association
- Irish Sports Council
- Local Authority Play and Recreation Network
- Local Physical Activity Co-ordinators Network
- National Physical Activity Plan Group
- Sport Northern Ireland

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The Report Card can be accessed at <http://www.getirelandactive.ie/get-info/reportcard> and full details of the grading process and the data used can be found in the journal article Harrington, et al. Results from the Ireland's 2014 Report Card on Physical Activity in Children and Youth. *J Phys Act Health* 2014;11(suppl.1), which is in the Global Matrix supplement of the Journal of Physical Activity and Health.