ACTIVE HEALTHY KIDS IRELAND

THE 2022 IRELAND NORTH AND SOUTH REPORT CARD ON PHYSICAL ACTIVITY FOR

CHILDREN AND ADOLESCENTS

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Abbreviations

AHKGA	Active Healthy Kids Global Alliance
ASD	Autism Spectrum Disorder
ASF	Active School Flag
CRF	Cardiorespiratory Fitness
CHS	Continuous Household Survey
COSI	Childhood Obesity Surveillance Initiative
CSPPA	Children's Sport Participation and Physical Activity Study
ESRI	Economic and Social Research Institute
FMS	Fundamental Movement Skills
GUI	Growing Up in Ireland
GPS	Global Positioning System
HBSC	Heath Behaviour of School-aged Children
INC	Incomplete
LISPA	Lifelong Involvement in Sport and Physical Activity
MCS	UK Millennium Cohort Study
Μνρα	Moderate-to-vigorous physical activity
ΡΑ	Physical Activity
PE	Physical Education
PLEY	The Play and Early Years
RWG	Ireland Report Card Research Working Group
₩НΟ	World Health Organisation
YPBAS	Young Persons' Behaviour and Attitude Survey



Background

Across the island of Ireland, children and adolescents (6-17 years) are recommended to accumulate at least 60 minutes per day of moderate-to-vigorous intensity physical activity (MVPA) (1), or an average of at least 60 minutes of MVPA per day across the week, for health (2).

Increasing participation in physical activity (PA) amongst our children and adolescents is a key priority within policy. In 2016, the 'National Physical Activity Plan' for Ireland set a specific target to increase the proportion of children undertaking at least 60 minutes of MVPA every day by 1% per annum (3). In Northern Ireland, one of the overarching objectives of the Fitter Future for All Framework (2012) is to 'increase the % of the population meeting the Chief Medical Officer's guidelines on PA' (4). In addition, the new Active Living - Sport and Physical Activity Strategy for Northern Ireland launched in March 2022, has a strong focus on children and adolescents, with the goal of providing children and young people with 'the best start in life through sport and PA opportunities' (5).

The **Ireland North and South Report Card on Physical Activity for Children and Adolescents** aims to provoke change in priorities, practices and funding in relation to children's PA across the island of Ireland. This Report Card builds on the work from previous Report Cards in 2014 (6) and 2016 (7) and will aim to serve as a tool for practitioners and policy makers to identify key needs and gaps, and to advocate for and allocate funds to children's PA promotion initiatives. In addition, the 2022 Report Card will, for the first time, include an indicator on Physical Fitness and a set of grades specific to children and adolescents with disabilities.

Ireland and Northern Ireland are two independent countries on the same island. As of 2020, the former is a self-governing country that remains part of the European Union and the latter forms part of the United Kingdom of Great Britain and Northern Ireland. The Belfast Agreement/Good Friday Agreement 1998, means that a power-sharing executive governs Northern Ireland, and this executive has devolved powers over areas of legislation and policy that may affect children's PA (for example, health and education). Due to the political landscape on the island of Ireland and continued focus on cross-border cooperation by both governments, the Ireland North and South Report Card is presented as a unified report for the whole island. Where the evidence for a specific indicator differ, different grades are assigned for Ireland and Northern Ireland.

The first Report Card, published in 2014 (6), assigned Ireland a D- grade for 'Overall Physical Activity', a D for 'Active Transportation' and a C- for 'School'. In the overall Global Matrix (8), Ireland scored particularly well for the 'Community and Built Environment Indicator' (B) with only two countries (Australia, Canada) receiving a higher grade. Ireland also scored highly for 'Sedentary Behaviour' (C-) with just three countries (Ghana, Kenya and New Zealand) assigned a higher grade. 'Physical Education' was graded with a D-, with discrepancies between recommended and actual time spent on Physical Education observed. 'Active Play', 'Home (family)' and 'Government' were all graded as Incomplete.

The 2016 edition of the Report Card (7) assigned Ireland an improved D grade for 'Overall Physical Activity', which meant Ireland scored higher than England (D-), Wales (D-) and Scotland (F). Ireland was also awarded an increased grade for 'Community and Built Environment' (B+), with only two of the thirty-eight countries (Netherlands, Canada) achieving a higher grade (9). For the first time, separate grades were assigned to Ireland (C-) and Northern Ireland (C+) for 'Organised Sport Participation', meaning only Northern Ireland improved from 2014. However, there were no further improvements for any of the other indicators, and 'School' was assigned a lower grade (D) having previously been graded as a C-. As with the 2014 Report Card, 'Active Play' and 'Home (family)' were assigned an 'Incomplete' grade.

These indicators were the two most frequently scored as 'Incomplete' within the 2016 Global Matrix (9), suggesting a global knowledge gap remained from 2014. The Government Strategies and Investments indicator was also assigned an 'Incomplete grade', alongside five other countries (England, Hong Kong, Netherlands, Spain and United States).

For the 2014 and 2016 report cards, data were mostly aligned between the two jurisdictions, with only 'Organised Sport Participation' being assigned separate grades for the two countries in the 2016 Report Card.

A Report Card was not produced for Ireland in 2018, due to a lack of new evidence from the 2016 Report Card, but there have since been updates to large national datasets including the Growing Up in Ireland study (GUI) (5, 6, 7) and Health Behaviour in School-aged Children (HBSC) study (8). The purpose of the 2022 Report Card, produced as part of the Active Healthy Kids Global Alliance (AHKGA), is to monitor changes and update the grades for each indicator considering new data that has emerged since 2016.

If you are interested in learning more about the Report Card process, please see the following background paper (14), or visit <u>https://www.activehealthykids.org/about/</u>

The following papers demonstrate how Ireland compared to the Global Matrix 1.0 in 2014 (8) and Global Matrix 2.0 in 2016 (9), with more details available at <u>https://www.activehealthykids.org/1-0/</u> and <u>https://www.activehealthykids.org/2-0/</u>

If you are a researcher, service provider or decision maker and would like to know whether there is a Report Card available for another country, please visit <u>https://www.activehealthykids.org/4-0/</u> This website is continually updated as countries launch and update their Report Cards.

Key Stages

To prepare the 2022 Ireland North and South Physical Activity Report Card, the strengths and weakness of the 2016 & 2014 Report Cards were reviewed. One of the primary strengths the 2022 edition was the inclusion of representatives in the research working group from across the island of Ireland, as this builds connections and allows for continued cross-border cooperation when advocating for PA. Compared to the 2014 Report Card, there was greater participation in the stakeholder consultation process which ensured that the voices and opinions of the users were heard. The 2016 Report Card was limited by the definition set for each benchmark by the Active Healthy Kids Global Alliance (AHKGA), as some of the larger, national datasets did not collect data that matched these benchmarks. Furthermore, there was a distinct lack of data for some of the indicators (for example, 'Active Play'), and certain groups (e.g., children with disabilities) were not well represented within available data.

Figure 1: Key stages of creating the Ireland North and South Physical Activity Report Card 2022



The Ireland Report Card **Research Working Group** (RWG) was established in



Proposed grades and accompanying rationale were

October 2020. Potential data sources for each indicator were identified. Relevant data were extracted and collated.



Proposed Ireland North and South Report Card grades were submitted to the AHKGA for review and audit in November



Members of the RWG met to discuss the indicators and benchmarks to be included in the Report Card.

On completion of the AHKGA audit, the grades were finalised and the Report Card was prepared.

The RWG members reviewed and data for each indicator and assigned a provisional grade based on factors including sample size, methodology and inequalities in the data.

A working group focused on data on indicators that were disaggregated by disabilities. This group followed the same steps (1-8).



Proposed grades and justifications were presented to the RWG. Following discussion and agreement, the RWG 'proposed grades' were awarded (A-F (including '+' or '-') or 'Incomplete' (INC) as per the standardised, international grading system (Figure 2). INC grades were awarded where not enough data existed on that indicator.



Figure 2: Indicators used in the Ireland North and South Report Card on Physical Activity for Children and Adolescents



* Introduced for Global Matrix 3.0 2016 – first time to be included in Ireland's Report Card **Not a mandatory indicator required by Global Matrix



Figure 3: International Standardised Grading scheme for Global Matrix 4.0

Data sources used

Data from academic research papers, open use datasets, data known to members of the research working group or stakeholders, reports and policy documents between 2016 and 2020 were extracted and collated. Data prior to 2016 were included in the previous Report Card. Data obtained since the implementation of COVID-19 public health social measures in March of 2020 were not included. Future report cards will consider the impact of COVID-19 restrictions on the grades.

The following main data sources were used in the Ireland North and South Report Card, with further detail on study characteristics highlighted in Table 1. For specific indicators, main data sources were supplemented by smaller research studies and/or grey literature. Further detail is available in the subsequent indicator chapters.

Ireland datasets		
Growing Up in Ireland (GUI) (10,11,12)	Data from the Growing Up in Ireland (GUI) Cohort '08 (formerly referred to as the Infant cohort) and Cohort '98 (formerly referred to as the Child Cohort) were used in this report card. GUI is a longitudinal study in Ireland, conducted by the Economic and Social Research Institute (ESRI) and Trinity College Dublin and funded by the Department of Children, Equality, Disability, Integration and Youth. Data from Cohort '98 Wave 3 (10), Cohort '08 Wave 4 (11) and Wave 5 (12) are reported. Data for both cohorts were collected using self-report questionnaires completed either by the primary caregiver, the child, or both.	
Heath Behaviour of School- aged Children (HBSC) (13)	The Health Behaviour of School-aged children: WHO Collaborative Cross- National study (HBSC) (13) is a collaborative, cross-national, school-based survey undertaken every four years that aims to gain insight on young people's health and wellbeing in a social context (at home, in school or with family and friends) in Ireland. The HBSC study was funded by the Department of Health, with data collected by the National University of Ireland Galway. Data collection took place between April and December 2018 in 254 schools (109 primary schools and 145 secondary schools). Data were collected using self-report questionnaires completed by school children.	
Northern Irela	nd datasets	
UK Millennium Cohort Study (MCS) (15)	The UK Millennium Cohort Study (MCS) is a UK-wide longitudinal study that follows the lives of children born in England, Scotland, Wales and Northern Ireland. The MCS is funded by the Economic and Social Research Council and is organised by The Centre for Longitudinal Studies (part of the University College London Social Research Institute). For this edition of the Report Card, data from Wave 7 Northern Ireland sub-sample were collated (15). Data were self- reported by the child.	
Young Persons' Behaviour and Attitude Survey (YPBAS) (16)	The Young Persons' Behaviour and Attitudes Survey (YPBAS) is commissioned by a consortium of government departments (including the Department of Health, Department for Infrastructure and Department for Communities), and examines a wide range of behaviours and attitudes of topics relevant to 11–16-year-olds in Northern Ireland. The YPBAS aims to evaluate the behaviours and lifestyles of secondary pupils and uses this insight to inform government policy and practice in relation to young people. The results of the seventh round of this survey were included in this Report Card (16). Data were collected using a self-report questionnaire, completed by the child.	

Continuous Household Survey (17)	The Northern Ireland Continuous Household Survey is administered by the Northern Ireland Statistics and Research Agency to collect information on a variety of topics relevant to Northern Ireland. Households are randomly selected to complete the survey. Data included in this report were collected in 2019/2020, with data on children's active transport self-reported by a parent/ guardian.	
Both Ireland and Northern Ireland		
Children's Sport Participation and Physical Activity Study (CSPPA) (18)	The Children's Sport Participation and Physical Activity Study (CSPPA) is a cross-sectional study examining participation in sport, physical activity and physical education among children aged 10 to 18 years. The study began in 2010. Prior to 2018, data were only collected for Ireland, in 2018, a Northern Ireland sample was included, enabling a comparison between the participation in PA and sport between the two Ireland and Northern Ireland for the first time. This work is a result of collaboration between Sport Ireland, Sport NI and Healthy Ireland. The 2018 study collected data on primary and secondary level pupils (aged 10–18 years), with 6,651 pupils completing a self-administered questionnaire (18).	
Every Minute Counts (24)	The purpose of the 2019 Every Minute Counts study was to investigate daily physical activity (PA) patterns of 8- to 9-year-old children from socially disadvantaged areas, in both Ireland and Northern Ireland. Physical activity of a sample of 408 children was measured and reported using PA measuring devices (accelerometers) over a 4-day period.	

Table 1: Characteristics of the main studies and samples used in the 2022 Report Card

	Year of data collection	Age (years)	Jurisdiction	Sample size	Reference
Ireland					
GUI Cohort '08 (Wave 4)	2016	7-8	Ireland	5,344	11
GUI Cohort '08 (Wave 5)	2017 - 2018	9	Ireland	8,032	12
GUI Cohort '98 (Wave 3)	2015 - 2016	17 - 18	Ireland	6,039	10
HBSC 2017/2018	2017 - 2018	8 - 18	Ireland	15,557	13
Northern Irela	Ind				
MCS (Wave 7)	2017 - 2019	17	Northern Ireland	976	15
YPBAS	2019 - 2020 °	11 - 16	Northern Ireland	8,118	16
CHS 2019/2020	2019 - 2020	4 - 18	Northern Ireland	898	17
Both Ireland and Northern Ireland					
CSPPA 2018	2018	10 - 18	Both	6,651	18
				Northern Ireland 1,954 Ireland 4,697	
a Data collection comp				1,954	

a. Data collection completed in February 2020 (pre-COVID-19)

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Summary of findings for the 2022 Ireland North and South Report Card



The 2022 Ireland North and South Report Card on physical activity for Children and Adolescents has shown we are making progress in relation to children's PA across the island of Ireland.



Positive trends observed across a number of indicators. Grades for three indicators ('Overall PA', 'School' and 'Physical Education') increased.



Two indicators ('Family and Peers' and 'Government') were assigned a grade for the first time, having previously been graded as 'Incomplete'.



The majority of grades remained unchanged for other indicators.



'Physical Fitness' was included as a new indicator in this edition of the Report Card but was graded as 'Incomplete'.



The availability of new data sources which have collated data on an all-island basis are valuable in adding to the evidence base around PA levels among children and young people.

As with previous editions of the Report Card, there were difficulties aligning data to the proposed benchmarks, primarily due to either the phrasing of questions, or the reporting of findings.



Grades on disability were included for the first time. Eight indicators were graded. Three indicators, 'Active Play', 'Physical Fitness', and 'Physical Education' were graded as 'Incomplete'.



When data specific to disability were compared to the overall grades, grades were generally lower for each indicator with the exception of Family and Peers, where the grade was higher.



Figure 4: Summary of grades awarded to each indicator for Irish Report Card 2014, 2016, 2022

INC: Incomplete

- ^a Previously known as Organised Sport Participation
- ^b Previously known as Sedentary Behaviour: TV viewing
- $^{\circ}$ Physical Fitness not previously included as an indicator
- ^d Previously known as Home (Family)
- ° Previously known as Community and Built Environment
- $^{\rm f}$ Previously known as Government Strategies and Investments

OVERALL PHYSICAL ACTIVITY LEVELS



Physical Activity is defined as any bodily movement produced by skeletal muscles that involves energy expenditure (19). Participation in regular PA is associated with a range of physical health benefits in children and adolescents (20). There are also psychological, social, and emotional benefits to participation in PA, with children who participate regularly reporting reduced depressive symptoms (21). In alignment with the 2020 WHO guidelines on PA and Sedentary Behaviour (20), children across the island of Ireland, are recommended to accumulate at least 60 minutes per day of MVPA (1), or an average of at least 60 minutes of MVPA per day across the week (2). To be considered moderate PA, participation should make the child feel warmer, with an increased heart and breathing rate.

Grade

15

Benchmark

- * The % of children and adolescents who meet the Global Recommendations on PA For Health, which recommend that children and adolescents accumulate at least 60 min of MVPA per day on average (22).
- OR
- * The % of children and adolescents meeting the guidelines on at least four days a week (when an average cannot be estimated) (22).

There were 26 data sources identified for the 'Overall Physical Activity' indicator. This is a large increase from the previous 2016 Report Card. Of these 26 data sources, eight were considered eligible for grading against the benchmark. Data sources were excluded for the following reasons: (1) Data were collected either before 2014 or after 2020. Data collected either during or after the COVID-19 pandemic were not included; (2) Data were not aligned to the benchmark of daily > 60 minutes/day of MVPA (on average); (3) Data sources were not large and/or representative.

Of the eight data sources included, six used self-reported measures (either parental or child-report). One (23) used device measured (accelerometer) data alone and one used self-reported data and supported findings by device measured (accelerometer) sub-sample (18).

7, 8-18
r day ting of rted eved
seline hinutes j-year hry-
MVPA
9.8% old).

Self-report data

Both Ireland and Northern Ireland		
CSPPA 2018 (18):	13% of pupils from Ireland, and 13% of pupils from Northern Ireland reported that they met the recommended 60 minutes MVPA every day, while 70% reported achieving it at least four days a week (n=6,651, 10-18 year olds).	
Device measured data		
Ireland datasets		
CSPPA 2018 (18):	Device-measured (accelerometer) data in a sub-set of pupils showed 11% of pupils achieved the recommended 60 minutes MVPA every day (n=275).	
Both Ireland and Northern Ireland		
Every Minute Counts (24):	Patterns and times of physical activity participation in children from socially disadvantaged areas across the island of Ireland (24): 56.7% of participants averaged 60 minutes MVPA per day (n=231, 8-9 year olds). Participants wore an accelerometer for four days.	

Inequities/ equalities

Overall, inequalities were observed in the data, with differences in PA patterns observed by gender with more males meeting the guidelines than females (10, 12, 13, 16, 18, 23, 24). There were also differences in age, with younger children more likely to meet the guidelines than adolescents (10, 16, 18, 23), in disability status, with less children with disabilities meeting the guidelines (12, 16, 18) and in socioeconomic status (SES), with those from lower SES backgrounds meeting the guidelines less often (10).

Comment



In the 2016 Report Card, Ireland and Northern Ireland was assigned the grade D. This was an increase from 2014 (D-). The 2022 grading represents a further increase in grade to C-, indicating a positive trajectory over time. However, this is likely to be due in part to a change in the benchmark which previously reported the % of children and young people meeting the guidelines of at least 60 minutes MVPA per day. In this report the benchmark was changed to how many children met the recommended 60 minutes of MVPA on average per day. Where an average could not be calculated, the % of children and adolescents meeting the guidelines on at least four days a week was utilised. It is promising to see the inclusion of studies using device-based measures of PA in this Report Card, as this was noted as a limitation in the previous Report Card. In addition, the availability of data from studies conducted in both Northern Ireland and Ireland enables stronger comparisons to be made North and South. However, there is still a greater availability of data from studies conducted in both Northern Ireland.

There are still inconsistencies in how PA is measured in self-report surveys. For example, some studies ask participants to report their PA over the past 14 days, which limits comparisons with the benchmark, and PA guidelines. As recommended in 2016, surveillance in Ireland and Northern Ireland would benefit from long term implementation of one valid tool across the age ranges and across jurisdictions. It is encouraging to see such recommendations adopted in newly available datasets, for example, CSPPA.

We acknowledge that this benchmark does not consider other aspects of the PA guidelines, for example, the recommendation for children and adolescents to undertake muscle-strengthening, flexibility and bone-strengthening exercises three times a week.

Data were limited for younger children, particularly for those under eight years of age. Examples of studies are emerging, that use devices (accelerometers) to measure PA levels and proficiency tests to measure fundamental movement skills (FMS) in re-school children in Ireland (25). This study found that 35% of children met the recommended daily MVPA guidelines. While the data was not used for grading this indicator, this is a good example of promising practice for future report cards.

ORGANISED SPORT AND PHYSICAL ACTIVITY Grade



Background

Organised sport is a type of leisure time PA and one of the four domains that contribute to overall PA. It is usually organised, often competitive, and played either as an individual, or in a team setting (26). Participation may range from sports at the local, community level right through to national level (27). Participation in organised sport has been shown to be beneficial for children enabling them to engage in regular PA (28) and provides young people with a range of psychological and social benefits (29).

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Organised sport and physical activity data

For this indicator 'Organised Sport and Physical Activity', five data sources (four from Ireland, one from both) were deemed applicable for grading. Of the 5 data sources included, all used self-reported (parental, child, teacher) measures of sport participation.

Self-report data

••••••	• • • • • • • • • • • • • • • • • • •
Ireland	
GUI Cohort '98 (Wave 3) (10):	56.7% (63.9% male and 44.8% female) reported participating in sport with others several times per week, while 37.2% (41.2% male and 32.7% of females) self-reported participating in individual sports several times per week (n=6,039, 17-to-18-years-old).
Impact of participation in extra-curricular physical activity on males from schools in disadvantaged areas (30):	43% of participants reported participating in extra-curricular sport (school- based activities outside of the formal physical education curriculum) two times per week (n=174 males, 12–15-year-olds). Participants were administered a self-report questionnaire at three timepoints across the same academic year.
Sports Participation in Youth as a Predictor of Physical Activity: A 5-year Longitudinal Study (23):	52.9% of males and 33.9% of females achieved at least two days of sport participation per week (n=873, 10-18 years old at baseline).
Both Ireland an	nd Northern Ireland
CSPPA (18)	
Northern Ireland:	44% of primary pupils reported participating in community sport at least two times a week, while 40% of secondary pupils reported the same. 51% of primary and 44% of secondary pupils reported participating in school sport at lunchtime or after school (n=1,954, 10–18-year-olds).
Ireland:	66% of primary and 52% of secondary pupils self-reported participating in community sport two times per week. 53% of primary and 48% of secondary pupils reported participating in school sport at lunchtime or after school (n=4,697, 10–18-year-olds).

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Inequities/ equalities

One study presented data from a male only group, all other data sources included males and females. Data from both Ireland and Northern Ireland were high quality, although data from Ireland were mostly re-analysis of older data sources. Inequalities were evident, with age, social class and gender being a factor in participation; females, those from lower social classes and older children were less likely to participate regularly in organised sport in both Ireland and Northern Ireland. Further work is needed to understand participation of younger cohorts in organised sport, as currently available data are largely from adolescent cohorts.

Comment



All included data used self-reported measures of 'Organised Sport Participation', however some datasets do not differentiate between community sport and school sport club participation, making comparisons across different settings difficult. The distinction between community and school sport, for example, is important for the implementation, funding, and monitoring of sports facilities. In addition, there are inconsistencies across studies in terms of reporting the frequency of participation in sport. For example, the GUI survey reported participation as 'several times per week', whereas other studies used one day, two-three days etc.

Although participation in organised sport is one of the main contributors to overall physical activity levels, there is a need to distinguish it from other forms of physical activity. A reliance on subjective measures in younger populations may lead to blurring between the four main domains, for example, children may be unable to distinguish between organised sport and active play. Direct, objective observation would help distinguish participation in organised sport from other domains of physical activity.



Background

Active Play, generally defined as any activity that involved moderate-to-vigorous bursts of high intensity, is one of the four domains in which children can accumulate their PA (31). Active Play can take many forms; there may or may not be defined rules, it may be structured or unstructured and it can be a solitary or social endeavour. Primarily, it is self-directed, unsupervised PA that is spontaneous and sporadic. Whichever way it is participated in, it provides children with the opportunity to increase their PA levels and has been shown to have benefits for classroom behaviour (32) and social development (33,34) in preschool children.

Benchmark

- * % of children and adolescents who engage in unstructured/unorganised active play at any intensity for more than two hours per day
 OR
- * % of children and adolescents who report being outdoors for more than two hours per day

Active play data

There were five data sources used in the grading of this indicator. All data sources were from Ireland, and all used self-reported measures with Active Play either reported by the child or reported by a proxy (parents, teachers, principals). Given the challenges in terms of data availability and alignment with the benchmark, specific detail on how Active Play was measured in the following studies is provided overleaf.

Self-report data

Ireland	
GUI Cohort '08 (Wave 4) (11):	85% of children took part in at least one activity outside of school 1-2 times per week or more, whilst only 3.9% report never participating (n=5,344, 7-8 year olds). Types of activities outside school: 'games that involve lots of running, like football', 'games that involve some activity, like trampolining' and 'plays 'make believe' or pretend games'. This measure was a proxy, completed by the primary caregiver. Response options do not align with the proposed benchmark.
GUI Cohort '08 (Wave 5) (12):	5% of primary care givers reported taking part in play with their child using toys or puzzles daily, and 6.3% participated in play involving sport/physical activity. (n=8,032, 9 year olds). Response options do not align with the proposed benchmark.
GUI Cohort '98 (Wave 3) (10):	24% of participants reported spending two or more hours per day outside (n=6,039, 17-18 year olds). Although this data matches the benchmark, given the age of participants in this cohort, it is unlikely this time spent outdoors is representative of active play.
Childhood Obesity Surveillance Initiative (COSI) (35):	On weekdays, 43% of parents reported that their children played for about two hours a day or more, but a much higher proportion (84.6%) reported the same or weekends (n=1,263, 6-8 year olds). WHO European COSI is a collaborative study with principal investigators from 35 countries. In Ireland, 5,701 children aged 6-12 years participated in Round 5 of the survey in 2018. A subsample of parents was asked to complete a family survey (n=1,263, 6-8 year olds). Using self-report questionnaires, parents were asked to report 'Outside school hours, how many hours per day does your child play actively/vigorously?'.
The Play and Early Years (PLEY) study (36):	On weekdays, 37% of parents reported that their child played outdoors for more than two hours per day on weekdays, and 56% on weekends (n=276, participants children aged 6 months - 6 years and 11 months). The PLEY study was an online survey conducted between June and October 2019. Parents completed the survey on behalf of their children, and were asked to report 'how much time is spent on various activities including playing outdoors on a weekday/weekend day'.
Northern Ireland	
No data sources used.	

Inequities/ equalities

There is a lack of evidence using direct and device-based measures of active play and studies that aggregate play behaviours by gender, socioeconomic status, age etc.

Comment

As in 2016 Active Play is assigned an incomplete grade in this report , due to a lack of sufficient evidence on Active



Play across the island Ireland. This indicator had the highest number of 'Incomplete' grades in the Global Matrix 3.0 in 2018, more than any other indicator (29 of 49 countries) (22). There is a lack of consensus on the definition for Active Play as well as a lack of standardised tools for measurement, this presents a problem globally and not just within Ireland.

While both the GUI Cohort '98 and Cohort '08 Waves ask questions relating to play and time spent outdoors, the inconsistent manner in which questions are asked makes it both difficult to compare data and to align data to the internationally set benchmark. The benchmark is arbitrary, and as there is no consensus or agreed definition of active play there continues to be inequalities in the data.

Current evidence is constrained by the lack of an internationally agreed definition of Active Play, which directly impacts the development of standardised measurements for Active Play throughout childhood. The benchmark, which specifies play for several hours a day, is arbitrary. Furthermore, even where data on Active Play are collected, it is largely self-reported by either children or their caregivers and questions are not being asked in a consistent, comparable manner.

A clear, concise, measurable definition of Active Play needs to be agreed, as was previously recommended in the 2014 and 2016 Report Cards. Often, Active Play can be incorporated into questions about PA and there is difficulty separating play from overall physical activity, organised sport and from physical education. Future studies should consider asking questions that elicit Active Play from other forms of physical activity.

There is a lack of evidence using direct and device-based measures of active play. There is a need for further work using direct observation and accelerometers to determine children's behaviours in their free time. For this Report Card, all data considered for the grading of the Active Play indicator used indirect, subjective, self-reported data. One of the primary limitations of these measurements is the possibility of misreporting. Parents may over- or underreport their children's PA but may also misinterpret 'play' as another form of PA.

ACTIVE TRANSPORTATION





Background

Active Transportation, i.e., using self-propelled mediums, such as walking or cycling, to travel all or part of the way to a destination (37), has been shown to contribute to higher levels of PA (38) and more favourable health outcomes (39) in children and adolescents. Recent decades have seen a decline in active transportation, and independent mobility i.e., travelling without parents/guardians, amongst young people (40). The benefits of encouraging active transportation amongst our children and adolescents reach beyond health, for example, societal and environmental benefits. As such, promoting active transportation represents one of the most practical and sustainable ways that we can increase population levels of PA (37).

Grade

Benchmark

* % of children and adolescents who use active transportation to get to and From places (e.g. school, park, mall, Friend's house)

The benchmark For this indicator has changed since we previously reported grades For Active Transportation in 2014 and 2016. In previous report cards, the data were graded against the proportion of children reporting active transport 'to OR From school each day. The revised benchmark now states, 'to AND From' and has expanded from school only to include other settings, For example, park and Friend's house.

RELAND

NORTHERN IRELAND

Active transportation data

There were four data sources used in the grading of this indicator. One dataset from Northern Ireland, two datasets from Ireland and one data source that combined both North and South. Two further datasets were consulted in the grading of this indicator, but due to the wording of the assessment tool, these data did not align with the benchmark for this indicator. All data sources used self-reported measures, with active transport reported either by the child or reported by a proxy (parent/guardian).

Self-report data

Ireland	
GUI Cohort '08 (Wave 5) (12):	23.4% of children usually go to school and come from school via active travel (n=8,032, 9-year-olds). This was a proxy measure completed by the parent/guardian.
Transport to school and mental well-being of children (41):	28.3% of children used active travel (walking or cycling) as the main part of their journey to and from school on a typical day (n=9,077, 10–17-year-olds). This study was an analysis of the 2018 HBSC study.
Northern Ireland	
Travel to and from school by pupils in Northern Ireland 2019/2020 (17):	20% of primary and 19% of secondary school children normally get to and from school via active transport (walking or cycling, all or part of the way) (n=898, 4–18-year-olds). This was a proxy measure completed by the parent/guardian.
Both Ireland ar	nd Northern Ireland
CSPPA (18)	
Northern Ireland:	12.9% of children in usually actively travelled to and from school (22.6% of primary vs 10.1% of secondary) (n=1,954, 10–18-year-olds).
Ireland:	28.3% of children usually actively travelled to and from school (28.5% of primary vs 28.2% of secondary) (n=4,697, 10–18-year-olds).

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Inequities/ equalities

In contrast with other indicators reported, there were no clear gender differences apparent within studies (12,18), however an urban vs rural gap was evident across a number of data sources. Studies also consistently showed that active transport levels decreased with age. Older children were more likely to use public transport to travel to and from school (41). There was a large gap between secondary pupils active transport levels between Ireland and Northern Ireland (18). No data was available for active transport in pre-school children. In addition, there is a lack of data available on active transport in other settings (e.g. recreation, friends, mall etc.) as per the indicator benchmark.

Comment

The D grade for Active Transportation has remained consistent for Ireland since 2016 and decreased slightly for Northern Ireland from a D in 2016 to D- in 2022. The change in grades awarded for Active Transportation are in part,



attributed to the changing of the benchmark. In previous report cards, the data were graded against the proportion of children reporting 'active transport to OR from school each day'. The new benchmark grades the indicator based on 'active transportation to AND from places'. A number of additional data sources did not align with the benchmark but do report a higher proportion of active transported a higher proportion of young people walk home from school (22%), compared with to school (16%) (16). The current benchmark does not consider the impact active transportation initiatives, such as Active Travel to School week, may have on commuting behaviours.

Given that a high proportion of children and adolescents live in close proximity to their schools in Ireland (within 1-2 miles) (17, 42), the potential for active transportation to increase PA in this population is far reaching. Consideration must be given to the reported barriers, with young people reporting environmental factors (not enough safe places to cross the road) and other factors (heavy schoolbags) as obstacles to their active commuting (18,37).

Of note are lower levels of Active Transportation in Northern Ireland secondary pupils when compared with their Irish peers (18% vs 40%), the practice of attending schools outside the local community in pursuit of a grammar education in Northern Ireland is potentially a factor in lowering levels of Active Transportation (18). The overall % of active transportation was lower in Northern Ireland primary pupils compared with Ireland also. Data from Northern Ireland indicated a stark decline in active transportation amongst primary school children, with 31% walking to school in 2013/14 compared with 19% in 2019/2020 (17). This decrease was not observed in secondary children perhaps reflecting already low levels. One point to note is the smaller sample sizes involved in surveys conducted within Northern Ireland.

All available data sources relied on self-report instruments. Future data collection strategies could incorporate the use of device-based measures of active transportation, to allow us to quantify the contribution active transportation to and from school makes to overall PA amongst adolescents. In addition, the use of GPS and tracking devices would improve the reporting of this data (37). There is also a lack of data on Active Travel to other settings, for example, leisure-related settings, which is important to get a full picture of the contribution of active transportation to young people's overal! PA (40). Although not directly aligned with the benchmark, the Irish Sports Monitor Study (43) includes data on Active Transportation, with 67.1% of participants reporting they undertook walking for transport at least once per week and 21.2% undertaking cycling for transport (n=456, 16–18-year-olds).

SEDENTARY BEHAVIOURS





Sedentary behaviour is defined as 'any waking behaviour characterised by an energy expenditure equal to or less than 1.5 metabolic equivalent units (METs) while in a sitting, reclining or lying position' (44). Sedentary Behaviours typically include TV viewing, smartphone and computer usage. In 2020, the WHO updated the Guidelines on Physical Activity to include recommendations for limiting sedentary time (20). High levels of sedentary be have been associated with negative impacts on children's physical health, for example, overweight/obesity (45), and mental ill health, for example, symptoms of depression and anxiety (46). Globally, sedentary time has been increasing in children and adolescents, with rising screen time likely to be a primary contributor (47).

Benchmark

* % of children and adolescents who meet the Canadian Sedentary Behaviour Guidelines (Guideline For 5- to 17-year-olds: no more than two hours of screen time per day)

In 2016, the benchmark for this indicator was 'the % of children watching less than two hours of television per day', and the grade assigned was a C- (7). This was due to data showing that >50% of children and adolescents in Ireland and Northern Ireland watch less than two hours of television per day. However, 'time spent watching television' as a measure of sedentary behaviour presented difficulties due to the rise of viewing on smartphones or other hand held devices and the subsequent likelihood that time spent watching television did not equate to time spent sitting.

Sedentary behaviours data

Four recent studies are included, three that use a questionnaire-based assessment (either child-reported or parental report) of sedentary time, and one which employs more objective accelerometer-based measurement. Three of the four included data sources presented data from Ireland, while one presented data from both Ireland and Northern Ireland

Self-report data

Ireland	
GUI Cohort '08 (Wave 4) (11):	72.6% of children spent <2 hours in front of any type of screen on weekdays, compared with 26.9% on weekend days (n=5,344, 7–8-year-olds). This was a proxy measure completed by the parent/guardian.
GUI Cohort '08 (Wave 5) (12):	On weekdays, 85% of children spent <2 hours per day watching TV programmes/DVDs from any source, compared with 49.5% on weekend days. Parents were also asked to report other screen-based activity (not TV). 90.8% of children spent < 2 hours engaged in other screen-based activity on weekdays, compared with 65.3% on weekend days (n=8,032, 9-year-olds). This was a proxy measure completed by the parent/guardian. As overall screen time was broken down into two separate questions, total screen time is not known, and therefore this data does not align directly with the benchmark.
Both Ireland an	nd Northern Ireland
CSPPA (18):	
Northern Ireland:	58.5% of primary school children, and 39.8% of secondary school children met the screen time guideline of no more than 120 minutes/day. Primary school children reported an average of 5.0 hours/day of screen time, and secondary pupils reported 6.9 hours/day of screen time (n=1,954, 10–18-year-olds).
Ireland:	63% of primary school children, and 42% of post-primary school children met the screen time guideline of no more than 120 minutes/day. Primary school children reported an average of 5.1 hours/day of screen time, and secondary pupils reported 6.6 hours/day of screen time (n=4,697, 10–18-year-olds).
S	elf-report and device-measured data
Ireland	
Cork Children's Lifestyle Questionnaire (48):	72% of females and 68% of males met the recommendation for < 2 hours of screen time per day. On average, females spent 8.5 hours of each day sedentary, compared with 8.6 hours/day for males (n=826, 8–11-year-olds). Sedentary time was measured in children using an accelerometer, worn for seven consecutive days. Parents completed a questionnaire to assess screen time, broken down into TV viewing and other screen time (e.g. games consoles).

Inequities/ equalities

There is an age-related increase in screen time, with fewer secondary school children meeting the guideline of < 2 hours per day. At secondary school, males had lower levels of sedentary leisure time than females (18). There is a clear distinction in screen time accumulated on weekdays versus weekend days, this is consistently shown across data (11,12,18).

Comment

There has been no change in the grade for Sedentary Behaviours from the 2016 report. There is a lack of an effective combined North/South



dataset, where the same methods are employed to evaluate screen time and sedentary behaviour. The GUI datasets are the largest data sources, but not all ages are represented.

In many studies conducted on the island of Ireland, screen time is not directly measured and is commonly separated into time spent on the internet and time spent watching television. Where data is presented as a combined 'Screen Time', there is likely to be an overlap as some internet use may be television viewing (e.g., watching videos on Netflix and/or YouTube) and often behaviours may be taking place simultaneously (for example, an individual may use the internet on their phone whilst watching television), and so data should be interpreted with caution. Additionally, as was mentioned in the previous 2016 Report Card (7), screen time may not be an appropriate surrogate measure for sedentary behaviour. Often, devices such as smartphones are used while individuals are on the move and so screen time may not be completely representative of sedentary behaviour. It is also worth noting that the current guideline used for sedentary behaviours.

Larger, national cohorts rely on self-reported measures of screen and sedentary time, which may be subject to misreporting. The data used for grading this time is a mix of different self-report questionnaires and data recorded by accelerometer. There is a need for further work using consistent measurement across the island.

PHYSICAL FITNESS

Background

Physical Fitness refers to a set of attributes related to one's ability to perform daily activities and includes both health- and skill-related components, including cardiorespiratory fitness (CRF), muscular strength and endurance, flexibility and body composition (17). Components of physical fitness have been associated with a lower risk in the earlier onset of diseases related to levels of physical inactivity (49, 50). With CRF, for example, shown to be an important indicator of both current and future health amongst adolescents (51). Recent Irish data also supports the link between PA and physical fitness, as children who met the PA guidelines had higher levels of CRF (18). The case for further assessment of physical fitness in national and international surveillance studies is warranted as an overall indicator of health in this population (22,51).

Grade

Benchmark

* The average percentile achieved on certain physical Fitness indicators, based on the normative values published by Tomkinson et al, 2018 (50).

These physical Fitness indicators (taken from the Eurofit Test Battery) (52) are:

- * Single leg test (balance)
- * Sit-and-Reach (Flexibility)
- * Plate tapping (upper body speed)
- * Standing broad jump test (lower body muscular power)
- Handgrip test (upper body muscular strength)
- * Sit-ups (abdominal muscular endurance)
- * Bent arm hang (upper body muscular endurance)
- IOx5m agility shuttle run (running speed-agility)
- * 20m shuttle run (tests cardiorespiratory endurance) and
- * Anthropometry (height, mass, skinfold)

For the Physical Fitness Indicator, nine data sources were identified. Of these, only three measured physical fitness in accordance with the Eurofit procedure published by Tomkinson (50). CRF was measured in all three studies using the 20m shuttle run, and two of the three studies measured upper body muscular strength using the handgrip test assessment, lower body muscular strength using the handgrip test and reach test. However, while the measures in these three data sources equated to the Eurofit battery tests, data presented does not align to the normative values reported by Tomkinson. A further six studies were considered but were not included in the grading of this indicator, due to differences in either the protocols involved in collecting physical fitness data, or how the data was presented.

Objective data

Ireland	
CSPPA 2018 (18):	CRF was assessed using the 20m shuttle run. Overall, 77% of pupils were in the Healthy Zone (n=1,325 children, mean age 13.5 years). When separated into primary and secondary, 84% of primary and 76% of secondary pupils had heart rates in the healthy zone. Data presented do not align with the recommended benchmark.
Britton et al., 2020 (53):	Series of fitness tests (20m shuttle run (CRF), handgrip, horizontal jumps, sit and reach test. Average scores were: CRF: 49.66 mL.kg.min, handgrip: 17.73kg, horizontal jump 37.21 cm, sit and reach test 9.93cm (n=261, mean age 12.22 years). Although the tests administered were in line with the Eurofit battery, data presented did not align with the recommended benchmark.
O'Keefe et al., (2020) (54):	Series of fitness tests (20m shuttle run (CRF), handgrip, horizontal jump, sit and reach test (flexibility). Average scores were: CRF: 47.4 shuttles, handgrip: 23kg, horizontal jump: 151cm, flexibility: 23.5cm (n=1,215, 13-14-years-old). Although the tests administered were in line with the Eurofit battery, data presented did not align with the benchmark.
Northern Ireland	

No data was included

Inequities/ equalities

There has been very little physical fitness data published since the previous 2016 Report Card (7). In particular, there are discrepancies in the level of data published between Ireland and Northern Ireland. There are some representative samples for Ireland, however, there are insufficient data in Northern Ireland published during this period.

Comment



In 2022, for the first time, the physical fitness indicator has been included for grading in the Ireland Report Card. Despite the availability of some data that employed the same methods as the EUROFIT test battery, we are unable to assign a grade to this indicator as the data presented do not align with the centile data, which has been set as the benchmark for this indicator (22).

To the best of the authorship team's knowledge there has been no specific data published in Ireland on the exact nine physical fitness assessments. In particular, skill related measures (agility, speed, balance) are underrepresented. Furthermore, data that have been published have been presented as mean values whereas Tomkinson et al. (50) report centile data. This has meant data that have been published do not align with the proposed benchmark.

Anthropometric testing and body composition (BMI, waist circumference etc.,) measures are not specifically identified as a physical fitness indicator in the Tomkinson et al., (2018) (50) normative values paper, however, this variable is an original Eurofit assessment measure. As a result of this specification, many relevant Irish papers with anthropometric data were discounted.

In the last Global Matrix, 27 countries were unable to present data to inform the grading of the physical fitness indicator, so that issues highlighted above are likely not specific to Ireland. It is important to recognise an increase in research outputs in this area, however there is still a gap in relation to the measurement of specific components of fitness, and a dearth of data for Northern Ireland.

FAMILY AND PEERS





Background

Support from parents, family and significant others, for example, peers have been recognised as important predictors of PA in children and adolescents (55). The mechanisms by which this support is provided are complex but can be categorised into tangible and intangible support (56). Tangible support may include practical support for being physically active, for example, providing transportation to activities (instrumental support) or co-participating in PA (conditional support). Intangible support may include providing motivation and information in relation to PA (56). The influence of peers on PA is also important, particularly as children move into adolescence and begin to develop more autonomy over such behaviours.

Benchmark

- * % of Family members (such as parents or guardians) who Facilitate PA and sport opportunities for their children (e.g. volunteering at sports clubs, coaching, driving)
- OR
- * % of parents who meet the global recommendations on PA For health, which recommend that adults accumulate at least 150 minutes of moderate-intensity aerobic PA throughout the week or do at least 75 minutes of vigorous intensity aerobic PA throughout the week or an equivalent combination

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* % of family members who are physically active with their kids

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- * % of children and adolescents with Friends and/or peers who encourage and support them to be physically active
- * % of children and adolescents who encourage and support their Friends and/or peers to be physically active

34

Family and peers data

For this indicator, data were available across a number of the benchmarks. Five data sources were identified, with four presenting data that was self-reported by the parents/caregivers. Four data sources were from Ireland, with one dataset across both jurisdictions.

Self-report

Ireland		
Healthy Ireland Survey (2019) (57):	49% of parents (40% of mothers, 60% of fathers) surveyed reported achieving moderate levels of PA for at least 30 minutes a day for five days of the week (n=2,001 parents, included if they reported having children aged under 18). The Healthy Ireland Survey is an annual interviewer-administered face-to-face survey commissioned by the Department of Health. It is part of the Healthy Ireland Framework to improve the health and wellbeing of people living in Ireland.	
GUI Cohort '08 Wave 4 (11):	Primary caregivers were asked to report whether they participate in sport and/or PA with their child, and 17.9% reported doing this at least once per week (n=5,344, children aged 7-8 years old).	
GUI Cohort '08 Wave 5 (12):	Primary and secondary caregivers were interviewed. 36.5% of primary caregivers and 39% of secondary caregivers reported that they participated in sport and/or PA with their child at least once per week (n=8,032, children aged 9 years old).	
Irish Sports Monitor (ISM) 2019 (43):	32.3% of parents (34.1% of mothers, 34.1% of fathers) were highly active (reported meeting the PA guidelines (n=2,596 parents, included if they reported having a child/children under 18). The ISM is a large population study undertaken biennially in order to provide trends in participation in sport and PA in Ireland.	
Both Ireland and Northern Ireland		
CSPPA (18):		
Northern Ireland:	48.6% of primary school children reported they 'sometimes' encouraged their friends to do physical activities or play sport in a typical week, with 17.5% saying they never did. In terms of how often their friends encouraged them, 44.1% reported sometimes and 25.2% said never. 40.6% of secondary school children reported they 'sometimes' encouraged their friends to do physical activities or play sport in a typical week, with 33.7% saying never. In terms of how often their friends encouraged them, 37.4% reported sometimes and 39.9% said never (n=1,954, 10–18-year-olds).	
Ireland:	56.6% of primary school children reported they 'sometimes' encouraged their friends to do physical activities or play sport in a typical week, with 13.7% saying never. In terms of how often their friends encouraged them, 46.9% reported sometimes and 23.1% said never. 52.2% of secondary school children reported they 'sometimes' encouraged their friends to do physical activities or play sport in a typical week, with 24.9% saying never. In terms of how often their friends to do physical activities or play sport in a typical week, with 24.9% saying never. In terms of how often their friends encouraged them, 44.7% reported sometimes and 33% said never (n=4,697, 10–18-year-olds).	

Inequities/ equalities

Findings from the 2019 Healthy Ireland Survey indicated that the proportion of parents meeting the PA guidelines was comparable to PA levels amongst non-parents (57). The data highlighted a gender difference in parents, with fathers more likely to meet the guidelines, compared with mothers (57). For the measurement of parent-child co-participation in PA and/or sports, data is based on children who were 7/8 years old and 9 years old. There are no data currently available for younger children and/or adolescents from the island of Ireland.

Comment

In both the 2014 and 2016 Irish Report Cards, Family and Peers (previously known as Home (Family) was graded INC due to a



lack of clear benchmark and limited data sources. This is the first time that peers have been included as part of this indicator, both in terms of giving and receiving encouragement to participate in PA.

This may be due, in part, to a slight change in the benchmark to include parental PA levels. Giving and/or receiving support for participation in PA from peers has not previously been included as a benchmark for grading this indicator in the Report Cards. Given that peer support has been incorporated into interventions targeting a range of health behaviours in children and adolescents, including PA (58), it is important that the influence of peers on PA is directly measured in such studies.

When measuring parental PA levels (43,57), data were based on parents with children under 18 years of age. This is a broad age range and different responses may be evident if parents of younger and older children were examined separately. All data included in the grading of this indicator used self-reported measures of PA and PA participation. Only the GUI dataset is large and representative. Data on parental PA levels were analysed from sub-samples within the respective studies (43,57) and as such, may not be representative of all parents.

Causality of the influence of parents on PA and/or PA participation has not been determined. For example, it is not known whether parents take their children to participate in sports because their children are more physically active, or if the children are more physically active because the parents take their children to participate in PA.
SCHOOL



Grade



37

Background

Schools represent a key setting for the promotion of PA, given that the majority of children spend a significant proportion of their waking hours at school. In addition, schools provide opportunities for PA promotion to children and adolescents from all social backgrounds and over a continuous period of time (59). Whole-of-school approaches have been identified as one of the 'Eight investments that work for PA'(59) and should include support for active travelling to and from school, structured and unstructured play across the school day, high quality curriculum-based activities, suitable physical environments, and supportive school policies.

Benchmark

For this report card, the benchmarks for the 'Schools' indicator were:

* % of schools with active school policies (e.g., daily physical education (PE), daily PA, outdoor time, bike racks at school)

OR

- * % of schools where the majority (\geq 80%) of pupils are taught by a PE specialist OR
- * % of schools where the majority (>80%) of pupils are offered the mandated amount of PE (Northern Ireland: two hours per week PE for 4- to 16-year-olds is recommended, Ireland: one hour per week at primary school, two hours per week for secondary students is recommended)

OR

* % of schools that offer PA opportunities (excluding PE) to the majority (≥80%) of their students

Benchmark (continued)

- * % of parents who report their children and adolescents have access to PA opportunities at school in addition to PE classes
 OR
- * % of schools with pupils who have regular access to Facilities and equipment that support PA (e.g. playgrounds, gymnasium, swimming pool)

In 2016, the benchmark for this indicator was '% of children participating in ≥ 2 hours/week of extra-curricular sport and school-based recreation', and was graded D. The benchmark has been broadened, and the grading is now based on % of schools, rather than % of children and adolescents.

School data

For this indicator, data were available across a number of the benchmarks. There were four data sources used to grade this indicator, with all using self-reported measures completed by school staff (teachers/principals). All data sources were collected in Ireland.

Ireland				
GUI Cohort '98 (Wave 3) (10):	36.7% of teachers reported there were 'Poor or Fair' sport facilities, while 63.3% of teachers reported the facilities in schools were 'Good or Excellent' (n=4728 teachers).			
Active School Flag (ASF) (60):	46% of all primary schools (n=1419 schools) have attained at least one flag, with 314 of these schools renewing their flag at least once. Ireland's ASF programme is a whole-school, multicomponent PA promotion initiative, with the goal of enabling 'more children to be more active, more often'. 85% of Irish primary schools have, at some point, registered with the ASF initiative (60).			
Childhood Obesity Surveillance Initiative (COSI) (35):	100% of principals reported their schools have an outdoor play area, with 77% having access to an indoor gym. 100% of schools included PE lessons within the school curriculum. 30.4% of schools organised sport/physical activities for children outside school hours (n=131 principals).			
Lifeskills survey (61):	Primary: 94% of schools are allocating at least one hour per week to PA and 82% report participating in PA or sporting competitions outside of school time. 65% of schools reported that a PA policy/plan was in place. Secondary: 97% of secondary schools reported pupils participate in physical activities outside of school time. 59% of schools have a PA plan/policy in place or have undertaken some work on a PA policy/plan. Only 4% of schools reported that they offer two hours or more of PE per week in first year, 3% did so in second year and 1% did so in third year. 35% of schools reported that they offer two or more hours of physical education per week in their transition year (n=1,676 schools).			

Inequities/ equalities

There are limited data available by school type across the Inequalities in PE presented in the PE indicator.

Comment

There are improvements from previous editions of the report card from D- (2014) and D (2016) to C- (2021), however grades cannot be



see the proportion of schools with a PA plan, as this is a key part of the whole-of-school approach to promote PA (59). In Ireland, the ASF initiative provides schools with relevant policies to promote an active school, and such a national programme has yet to be reported in Northern Ireland.

There are data missing across a number of the benchmarks for this indicator. Data on meeting the recommended amount of PE were available for both North and South but was presented as % of children and adolescents rather than % of schools, and therefore did not align with the benchmark and was not considered for this grade. All included data were from Ireland and were self-report measures. There is also a lack of data on whether school-children are taught by a dedicated PE specialist. While data about PE specialists has not been routinely captured, in Northern Ireland PE has been a compulsory part of the Northern Ireland Curriculum since 1989. Established and standard practice in all Northern Ireland secondary schools is for PE to be delivered by specialist PE Teachers and this was taken into consideration in assigning a grade for Northern Ireland. The next section focuses on a specific PE indicator. In this section more evidence on PE in schools in Ireland and Northern Ireland is presented.

PHYSICAL EDUCATION



Background

40

Quality Physical Education (PE) is the planned, progressive, inclusive learning experience that forms part of the curriculum in early years, primary and secondary education. In addition to contributing towards PA levels, PE can also contribute to helping children acquire the competencies, motivation, confidence, knowledge and understanding associated with physically literacy (62), and help them develop active lifestyles. The provision of a broad and balanced PE curriculum within schools is recommended. Physical Education has been a compulsory subject in the Northern Ireland Curriculum since 1989 and has a well-established programme of examinable PE courses at GCSE and A level. In Ireland however, recent changes since 2017 to the framework at Junior Cycle (first three years of secondary education) introduced 'Wellbeing' as a programme of study and PE as a compulsory area of study under this new programme (63). Within Junior Cycle, at least 300 hours of timetabled engagement must be provided by schools for the Wellbeing program, with a minimum of 135 hours within this dedicated to PE, to be taught by a qualified PE teacher. In addition, Ireland saw the introduction of Physical Education in schools as an examinable subject at Leaving Certificate for the first time in 2018 (18). Finally, curriculum reform at primary level in Ireland is also underway, with the draft framework, similar to the Junior Cycle framework, including PE as an element under a broader curriculum area of 'Wellbeing' (64).

Benchmark

- * % of children and adolescents receiving the recommended amount of PE each week in school.
 - For Northern Ireland the recommended amount of PE is two hours/week for 4-16-year-olds (65).
- For Ireland the recommended amount of PE is one hour/week at primary school, and two hours/week for secondary pupils (66).

Physical education data

For this indicator three data sources were identified, with two considered to be eligible for grading (16, 18). Both data sources used self-reported measures (by the pupil). One data source presented data from Northern Ireland (16) and one presented data from both the North and South (18).

Self-report				
Northern Ireland				
YPBAS 2019 (16):	62% of pupils reported having more than two hours of PE each week (n=8,118, 11–16-year-olds).			
Both Ireland and Northern Ireland				
CSPPA (18):				
Northern Ireland:	440% of secondary school children reported meeting the guideline for PE (n=1,954, 10–18-year-olds).			
Ireland:	23% of secondary school children reported meeting the guideline for PE (n=4,697, 10–18-year-olds).			

Inequities/ equalities

Gender differences were apparent, with more males meeting the PE guidelines compared with females at secondary school level (18). There are also variations in the number of pupils meeting the guidelines between Ireland and Northern Ireland with more secondary pupils in Northern Ireland meeting guidelines than in Ireland (18). In Northern Ireland, pupils attending schools of higher socio-economic status were significantly more likely to meet PE recommendations than those attending schools in areas of deprivation (67). In Ireland, pupils who attended school in rural areas reported receiving weekly PE more often than those in urban schools (18).

Comment

This indicator is not required for the Global Matrix reporting but has been included for monitoring as it was in previous editions of the Ireland North and South Report Cards, and is an area of particular policy interest.

There has been a slight increase from D- in 2016, to a D grade in this report. Reform in the curricula supporting delivery of PE has moved in a positive trajectory in Ireland but the implementation of these needs to be considered and monitored. PE is well established in Northern Ireland as a compulsory subject in the Northern Ireland curriculum delivered by specialist teachers however, 60% of secondary schools are still not meeting the recommended requirements (18).

In terms of curriculum content, in both Ireland and Northern Ireland, team and game-based sports (for example football (soccer), basketball, gaelic football, and rugby) tend to dominate the curriculum for males (18). A broader curriculum is apparent in Northern Ireland for females, with athletics, baseball/rounders, basketball, cross-country, dance and hockey being most popular (18). PE offerings of team sport activities remain prevalent for females in Ireland (e.g. basketball, gaelic football and soccer), but evidence supports that some individual activities are also popular (athletics and dance).

There was limited data on the provision of PE at primary school level. In Ireland, teacher reported data from GUI Cohort '08 (Wave 5) highlighted that 83% of teachers provided 31-60 minutes of PE per week, while 9.2% achieved 61-90 minutes per week (12). The CSPPA study also highlighted that in Northern Ireland, the majority of primary school children (97.1%) reported having PE classes at least once per week, but only 7.2% of children reported achieving the recommended 120 minutes of PE per week.

COMMUNITY AND ENVIRONMENT

Grade



43

Background

The communities that children grow up in and the environment that is available to them can have a significant impact on their participation in PA. The influence of the environment of children's PA can be either positive or negative. Research has shown that access to good transport infrastructure (for example, safe crossings) and publicly provided recreational infrastructure (for example, facilities) is positively associated with PA levels in youth (68). On the other hand, poor transport infrastructure (for example, traffic speed) and the local neighbourhood (for example, deprivation) are negatively associated with PA (68). The influence the physical environment may have on PA may vary from childhood into adolescence, with research suggesting adolescents may benefit more from built-environment features that encourage walking (69).

Benchmark

* % of children and/or parents who perceive that their community/municipality is doing a good job at promoting PA

OR

* % of communities/municipalities that report that they have policies promoting PA.

OR

* % of communities/municipalities that report that they have infrastructure geared towards promoting PA

OR

*% of children and/or parents who report having facilities/programs/parks/ playgrounds available to them in their community

OR

* % of children and/or parents who report having well-maintained facilities/ parks/playgrounds in their community that are safe to use.

Community and environment data

For this indicator six data sources were identified, five of which were from Ireland. All included data sources were large, representative datasets and all used self-reported measures. Three of the data sources used child-reported data, two used both parent- and child-reported data, and one used data reported by school principals. Data were available for two of the benchmarks; '% of children/parents who report having facilities/programs/parks/playgrounds available to them in their community' and '% of children and/or parents who report having well-maintained facilities/parks/playgrounds in their community that are safe to use'.

Self-report

Ireland				
HBSC 2018 (13):	49% stated that they always felt safe where they live (males: 53%, females: 45.5%). Over 75% reported that where they live is a good place to be, and 61% agreed that their local area had good placed (such as leisure centres, parks) to spend their free time (n=15,557 children, 8-18-years-old).			
GUI Cohort '98 (Wave 3) (10):	Both children and parents self-reported their opinions on the area in which they live. Of the parents, 44.9% agreed or strongly agreed that the area was safe for their 17-year-old, while >60% agreed/strongly agreed that there were safe places for teenagers to hang out and that there were facilities for their teenager in the area. Of the children interviewed, >60% agreed/strongly agreed that there were safe places for them to spend time and that they lived in a safe area and >75% that there were facilities available to them in the area (n=6,039, 17-to-18- years-old).			
GUI Cohort '08 (Wave 5) (12):	Both children and parents self-reported on the safety and provision of facilities in their area. Over two-thirds of parents agreed that it was safe to walk in the area after dark and that there were safe play spaces, and >90% parents agreed/ strongly agreed that it was safe for children to play outside during the day. From the child's perspective, >80% thought that there were good places for children to play and to play safely, and almost all (97%) felt safe in the area in which they lived (n=8,032, 9-year-olds).			
Childhood Obesity Surveillance Initiative (COSI) (35):	Principals were asked about the safety of walking and cycle routes for commuting to school. On a scale of 1-10, (1=very safe, 10=very unsafe) the median response was 7 (n=131 principals).			

Northern Ireland				
YPBAS 2019 (16):	Pupils self-reported how safe they felt in the area in which they lived, with 61.1% feeling very safe and 33.4% feeling quite safe. Children were also asked if they generally felt safe where they lived. Overall, 50.5% reported that they did feel safe, but there were gender differences (males: 54.4%, females 46.5%) (n=8,118, 11–16-year-olds).			
Both Ireland and Northern Ireland				
CSPPA (18):	61.9% agreed/strongly agreed that pathways were well maintained, and 47.1% stating that their neighbourhood was very walkable with over 60% felt that there were many places within easy walking distance of their home. Regarding the safety of the area where they live, 59.1% strongly or somewhat agreed that there were places that they avoided, but only 15.8% felt that the crime rate in their neighbourhood was high enough to prevent them walking during the day.			

Inequities/ equalities

Most parents and children perceive their area to be safe for PA with good facilities, but generally children are more likely to perceive an area as safe compared to parents. Males are more likely to perceive an area as safe compared to parents.

Comment



The grade awarded for, Community and the Built Environment in the 2022 report is B+, this has not changed from 2016. The focus of most data sources is safety. There is a need for further research to ask questions on services to encourage PA and PA opportunities specifically provided within the spaces. All available data were self-reported measures. There is a need for more objective measures, for example GPS, of the communities and environments where children and adolescents live and/or participate in PA.

There are missing data for some of the proposed benchmarks; there are no data for the promotion of PA in the community setting, the existence of community-based policies or the potential impact of policy on community-based PA. Data on very young children are limited, as are data on parental perceptions of community provision of PA opportunities for children and adolescents.

GOVERNMENT

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Across the island of Ireland PA is a priority for mental and physical health and wellbeing. This commitment is highlighted in a number of national polices or action plans for the promotion of children's PA. PA is an area where there is cross cutting government support and action and policy mapping exercises have been conducted in various policy documents to document the actions included in each of these strategic frameworks.

Table 2: Summary of Government Strategies from Ireland and Northern Ireland included in the 2022 Report Card

Strategic policy area	Ireland	Northern Ireland
National Strategic Framework for Health and Well-being	The Healthy Ireland Strategic Action Plan 2021-2025	Making Life Better 2012–2023
Physical Activity	Get Ireland Active: National Physical Activity Plan	Active Living - Sport and Physical Activity Strategy for Northern Ireland
Overweight and Obesity	A Healthy Weight for Ireland: Obesity Policy and Action Plan 2016 – 2025 Healthy Weight for Children HSE Action Plan 2021-2023	A Fitter Future for All, the regional framework for preventing and addressing overweight and obesity in Northern Ireland 2012-2022'.
Interface Issues	National Cycling Policy Framework Physical Education	Bicycle Strategy Northern Ireland Northern Ireland Physical
	Curriculum Specification/ Framework	Education Curriculum Specification/Framework

The Department for Communities, acting on behalf of all the departments of the Northern Ireland Executive, launched a new 10-year Sport and Physical Activity Strategy in March 2022. Active Living, the new Sport and Physical Activity Strategy for Northern Ireland, intends though its vision and associated key themes and goals, to create a vibrant, welcoming, enjoyable, inclusive and successful sector for everyone, contributing significantly to a healthier and more resilient society.

Benchmark

- Evidence of leadership and commitment in providing PA opportunities for all children and adolescents.
- Allocated Funds and resources for the implementation of PA promotion strategies and initiatives.
- c. Demonstrated progress through the key stages of public policy making (i.e., policy agenda, policy formation, policy implementation, policy evaluation and decisions about the future).

Grading summary

As this indicator had previously been graded INC, a different approach was taken to grading. The Government grade was determined using the Health-Enhancing PA Policy Audit Tool (HEPA PAT v2) and the scoring rubric developed by Ward and colleagues (70). The grading process for Ireland and Northern Ireland policies was completed by a Government Indicator Working Group, which met regularly to ensure accurate and consistent grading of specific components of Government policy and regular communication (e-mail and video calls) with report card partners in Wales and Scotland to ensure a consistent approach to the grading in line with their protocols.

An audit was carried out on all government policies in both Ireland and Northern Ireland. Policies were scored on specific components of government policy related to supporting actions, accountable organisations, reporting structures, funding and monitoring and evaluation of policies. This allowed for a % score to be applied to these areas of Government policy and graded in line with the other indicators and with the proposed benchmark.

Completion of the scoring rubric indicated a policy score of 67.5%, equating to a B grade. This is the first time this indicator has been awarded a grade, having previously been graded an INC in 2016 and 2014

Comment





We have achieved some success on the island of Ireland in

the development of policies with specific actions to promote PA in children and young people. These emerge within and are implemented across most government departments in Ireland and Northern Ireland and represent a broad range of sectors. They include actions to increase regular participation in PA for children and young people, and create the conditions to facilitate active school travel. Cross-government and interdepartmental working are key themes in the delivery of many policies.

Funding and delivery

In Ireland, funding dedicated to support identified actions to promote PA in children and young people was identifiable readily in many of the included policies. The Healthy Ireland Fund supports the implementation of policies and strategies within the Healthy Ireland Framework, including the National PA Plan (3). Many of the funded projects, at both national and local levels, have supported initiatives for PA. However, the explicit identification of funding to support the delivery of actions in the policy audit associated with this grading process highlighted this as a gap for this indicator in Ireland. In terms of delivery, partners were specifically identified to assist with achieving actions in approximately half of the policies, including, but are not limited to; Parkrun, Active School Flag, and Health Service Executive PA Co-ordinators.

In Northern Ireland, funding specifically allocated to support identified actions was identifiable in less than half of the policies. Within these, dedicated funding was evidenced through, for example, a Small Grants Programme for the development of greenway schemes supported by the Department of Infrastructure (2016). Delivery partners were specifically identified to assist with achieving the policy goals in 75% of the policies that reference PA promotion in children and young people.

CHILDREN AND ADOLESCENTS WITH DISABILITIES

Background

Children with disabilities receive additional physical, social and mental health benefits from participation in regular PA, yet many barriers have been reported across services, sectors and in research. A lack of data on the PA behaviours of children with disabilities (72) makes it challenging to understand what areas need tailored interventions and targeted action plans for improvement. For the first time, data on children with disabilities are included and grades assigned to indicators in accordance with the structure of the PA report card, in what is called the Para Report Cards on PA of children and adolescents with disabilities (73). More details of the grading process can be found from the brief report on grades for Ireland (74).

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Data

Studies with specific data on children and adolescents with disabilities were reviewed. As this is the firsttime data on disabilities are reported, a wider search duration from 2010 was used. Studies featured in the main report card that had data disaggregated by disabilities were also used for assessment purposes. Table 3 illustrates the % of datasets included that related to children and adolescents with disabilities. Estimates ranging from 4%-19% of the samples are evident. Grades were assigned from the latest and best available data.



Study	Measures of Disability	Estimate prevalence		
Ireland				
GUI Infant Wave 5 (9 years)	Parent report: Does your child have any longstanding illness, condition or disability?	4.0%		
GUI Child Wave 4 (17/18 years)	Self-report: Do you have any particular special educational need or disability that affects/affected your learning while at post-school education or training (other than 'exceptionally able' or 'gifted')? Parent report: Does your child have any of the following long-lasting conditions or difficulties? Blindness, Deafness, Daily activities, Intellectual disability, Learning difficulties, Psychological, Pain or Breathing, Other. "yes"	5.8%		
HBSC (10-17 years)	Self-reported Long-term illnesses or Disabilities as diagnosed by a doctor, "yes"	12.3%		
ISM (18 years and younger)	Self-reported long-term illness or disability that limits daily activities, "yes"	12.1%		
Northern Ireland				
YPBAS (11- 16 years)	Self-report physical or mental health conditions or illnesses, lasting or expected to last, for 12 months or more? "yes"	18.7%		
Both Ireland and Northern Ireland				
CSPPA (10- 18 years)	Washington Group/UNICEF Child Functioning Module – self-report version. 11 items on difficulties in core functions (seeing, hearing, walking, talking, handling objects, remembering, concentration, learning, changes to routines, controlling behaviour, and getting friends). "A lot of difficulties" or "cannot do" were coded as a person with disabilities.	15.0%		

Table 3: % of children and adolescents with disabilities from each of the main datasets included in 2022 Report Card

OVERALL PHYSICAL ACTIVITY

There were four data sources with data that included sub-samples of children and adolescents with disabilities that reported the % of children who took part in at least 60 minutes of MVPA daily. These sources and the respective percentages for the 'Overall Physical Activity' indicator included the CSPPA (13%), HBSC (22%), GUI Child Wave 3 (14%) and GUI Infant Wave 5 (23%) studies. There were two other studies reported from GUI data on children with Autism Spectrum Disorder (ASD). Children with ASD reported, on average that they did MVPA on two days less than a matched group of children without ASD (74). From the GUI child cohort Wave 2, 13.4% of 13 year olds with ASD self-reported the number of days of participation in leisure time, compared to 20.3% of matched children without ASD. Reports of meeting the guidelines were not published in these two studies, and were not included into the final grade. All data were from self-report surveys, rather than from device-based measures.



ORGANISED SPORT AND PHYSICAL ACTIVITY

There were four data sources for the indicator 'Organised Sport and Physical Activity'. From the CSPPA study, the % of children with disabilities taking part in sport in different settings were reported for; lunchtime (37%), current club participation in one sport or activity (43%), and at least two times a week in non-school sports club (36%). From the YPBAS study, 52% of children with disabilities reported to take part in organised sport. From the GUI child cohort Wave 3, 21% of the 17-18 year olds reported participation in sport with other several times per week. From the ISM study, 56% of 16-18 year olds with disabilities reported participation with organised activities at least two times a week.



ACTIVE PLAY

Grade

As with the main report, the challenges aligning data with the benchmark did not enable assessment of this indicator and allocation of a grade on 'Active Play'.

ACTIVE TRANSPORT

There were three data sources used in the grading of this indicator. In the CSPPA study, 41% of children with disabilities reported that they take part in active travel (walking or cycling). From the HBSC study, 26% of children with disabilities reported active travel to school and 29% from school. From GUI infant cohort Wave 5, 23% of children with disabilities usually went to and from school via Active Transport.

Some children with impairments rely upon school bus due to their specific mobility needs, for these children, levels of active travel is unlikely to change. More disaggregation by impairment types is needed to be able to target those who could increase levels of active travel.



SEDENTARY BEHAVIOURS

There were two data sources used in grading of this indicator. In the CSPPA study, 44% of children with disabilities met the screen time guideline of < 120 minutes/day. Using parent report surveys, 82% of children with disabilities in the GUI infant cohort Wave 5 spent <2 hours/day watching TV programmes/ DVDs from any source on weekdays and 49% on weekends (75). Slightly more children spent <2 hours/ day on other types of screen-based activities on weekdays (87%) and weekends (66%). The GUI data does not align directly with the benchmark, hence a consensus on the grade was mainly based on the CSPPA study.



PHYSICAL FITNESS

One study examined components of fitness among a convenience sample of 92 children with ASD. A modified test battery consisted of the 20m shuttle run, stork balance test, standing broad jump, sit and reach, and grip strength (76). Against the norms for the general children population, indicators were not met for this sample (Grade = F). As this is a single study, it was not sufficient to create a grade for this indicator.

Grade

FAMILY AND PEERS

Of the five benchmarks in this indicator, there were data for only three benchmarks from the CSPPA and GUI infant cohort Wave 5. In the CSPPA study, 65% of children and adolescents with disabilities reported they have a member of their household who sometimes or more frequently provides transport to participate in PA or sport. A further 53% of children and adolescents with disabilities report that there is a member of their household who sometimes or more frequently does PA or sport with them. 56% of children and adolescents with disabilities report that there friends to do PA or sport. From the GUI study, 35% of parents of children with disabilities reported they participate in PA with their child at least once a week. There were no available data on parents of children and adolescents with disabilities' meeting the global health recommendations for PA (150min/week moderate or 75min/week vigorous exercise) or children who support friends to be physically active.

Family structure is a vital component in the participation of children with disabilities in PA and sport. These results show the importance of family and peers in PA and sport of children with disabilities.

Grade C

SCHOOL

Grade

There were two data sources used in grading this indicator that covered two of the six benchmarks. In the CSPPA study when asked if their school 'not offering sports outside of class' was a reason for them not taking part in extracurricular sport, 86% of respondents said 'No'. Furthermore, 68% of children with disabilities reported the school sport facilities were fairly or very adequate. Similarly, 62% of teachers felt the facilities at school were good or excellent from the GUI child cohort Wave 3 study.

Data were lacking on the other benchmarks, as well as school policies, 'being taught by PE specialist', and 'offered recommended amount of PE'. The main report highlighted Active School Flag as a mechanism for school policies. Only recently, have there been provisions for Active School Flag in special schools, but this was not reported during the timeframe of the data collection. There is no Active School Flag or similar programme in Northern Ireland schools at present.

PHYSICAL EDUCATION

The CSPPA study was used for grading this indicator. A third (33%) of children with disabilities in the CSPPA study reported to meet PE guidelines in both Northern Ireland and Ireland. Data are lacking from the special education sector for primary level schooling. There was an under reporting of children with special educational needs in the sample frame for CSPPA 2018, hence the grade was incomplete.

Grade (INC)

Grade

COMMUNITY AND ENVIRONMENT

There were two data sources that covered three of the six benchmarks from CSPPA secondary level pupils and GUI child cohort Wave 3. From the CSPPA study, 73% of children with disabilities rated their neighbourhood as somewhat walkable or better and 55% agreed that their pathways were well maintained. 76% of children with disabilities in the GUI child cohort Wave 3 study felt there were facilities available to them, 55% agreed there were safe places for teenagers to hangout, 91% agreed the area was safe for 17y olds, and specifically 95% felt safe in the area which they live in. 94% of parents from the GUI child cohort Wave 3 study agreed that it was safe for children to play outside during the day and 80% after dark. There were no data on perceived community promotion of PA, communities reporting policies promoting PA, or community infrastructure that is geared toward promoting PA.

One further benchmark that would be useful in the domain of PA for children and adolescents with disabilities is the proportion of children and young people who have access to adapted PA or sport equipment. Assistive devices may be unique to individuals depending on the types of impairments, as well as supporting the opportunities to take part in PA. Despite this important benchmark, there was no known suitable data to indicate the rates of children with disabilities with access to adapted PA or sport equipment.

GOVERNMENT

A policy audit tool (74) was used to synthesise the evidence for the main grade of B. Following the ratification of the rights of persons with disabilities in Ireland, policy documents also identify PA for people with disabilities. Specific policy documents on PA for people with disabilities was also published from the Northern Ireland Assembly (77, 78). The new 10 year "Active Living" strategy for sport and PA in Northern Ireland aims to increase participation among children living with disabilities. Disability sport is one the foundation blocks and a priority population within the strategy. The strategy has recognised a number of goals to address the barriers to inclusive sport and PA. Some of these include improving physical literacy, addressing barriers to participation, improving mental and physical health and promoting inclusion through community engagement. In Ireland, the National Physical Activity Plan (3) includes 60 recommendations linked to children and young people as well as a disability.

In Ireland dormant funds accounts have supported the Sports Inclusion Disability Officers (SIDOs) across all 29 local sports partnerships in 2020 (79).

Grade (B)



Discussion

The 2022 Ireland North and South Report Card on PA for Children and Adolescents has shown we are making progress in relation to children's PA across the island of Ireland.

We are encouraged by the small, positive trends observed across a number of indicators, including 'Overall Physical Activity', 'School' and 'Physical Education', and the availability of new data sources which have collated data on an all-island basis. As noted in the commentary for each indicator however, modifications to the benchmarks since our last Report Cards in 2014 and 2016 has had an impact and while grades may have changed as a result, the proportion of children and adolescents who are succeeding in relation to certain indicators has remained relatively unaltered.

Inequalities are evident across a range of indicators with disability, gender, social-economic status and age all impacting on PA. Policy measures that addressed these inequalities need to continue to be developed and a framework for the systematic surveillance of indicators related to PA for children and adolescents with disabilities needs to continue.

Although we have observed an increase in the availability of data across the indicators, there are still gaps in terms of the representativeness of the data, and issues in terms of consistency of measurement tools used over time. Gaps still persist in relation to a number of indicators, for example, 'Active Play' and for sub-groups of children and adolescents, for example, data in younger children. At present, grading of the indicators is heavily reliant on self-report data and we would encourage the use of objective measures across the indicators.

The report assigned a grade to the Government indicator for the first time since the report's history. The previous report card grade for the 'Government' indicator in 2016 report was inconclusive. The grade may help to provide further rationale and support for the implementation of the objectives relating to children and adolescents with a disability in the National Physical Activity Plan. The launch of the "Active Living" Sport and Physical Activity Strategy for Northern Ireland in 2022 represents a further step in the right direction and an opportunity for Northern Ireland, in terms of implementation, monitoring and surveillance of PA and sport policy in the coming years.

Data obtained since the implementation of COVID-19 public health measures began in March 2020 were not included in the grading of indicators for this Report Card. Early evidence suggests that the restrictions introduced in an effort to control the spread of COVID-19 have negatively impacted children's PA. The impact of the COVID-19 pandemic on indicators relating to children and young peoples' PA will be considered in our next Report Card, when we have a greater availability of robust data.

Disability grades were included in this report card for the first time in response to one of the key recommendations of the 2016 report. Grades were assigned to eight indicators, based on data that were collected in larger studies which included children and adolescents with disabilities. These insights demonstrate the lower levels of PA among children and adolescents with disabilities. More positively, the importance of family and peers to promote PA is even greater in this population than the overall population. There are many gaps in the data and studies that are specifically designed to measure levels of activity in children and adolescents with disabilities.

Recommendations

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Continue to develop policy measures that address inequalities highlighted in the report across a range of determinants including disability, gender, socioeconomic status, and age impact on children and adolescent PA levels.



Continue to progress the development of a framework for the systematic surveillance of indicators related to PA for children and adolescents with disabilities. These include greater representation, and consistency of measurement tools in policy.



Prioritise research specifically designed to measure levels of activity in children and adolescents with disabilities.



Address persistent gaps in data availability in relation to a number of indicators, for example, 'Active Play' and for some sub-groups of children and adolescents, for example, data in younger children.



Increase the use of objective measures across the indicators to help overcome a reliance on selfreported data in relation to PA.

Action the grade on the Government indicator (B+), which was assigned a grade for the first time, to provide further rationale and support for the implementation of the National Physical Activity Plan in Ireland and "Active Living" Sport and Physical Activity Strategy for Northern Ireland.



Future report cards will need to consider the impact of COVID-19 public health measures on PA as data from March 2020 were not included in the grading of this Report Card. The impact of the COVID-19 pandemic on indicators will need to feature in subsequent Report Cards, when more robust data is available.

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