2018

New Zealand

Physical Activity Report Card

for

Children

& Youth

Acknowledgements

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Background

Physical activity is essential for health in children and young people. Yet globally and in New Zealand many children and youth are not sufficiently active for optimal health outcomes.

New Zealand's physical activity guidelines for children and youth state that children and youth (aged 5 to 18 years) should accumulate 60 minutes or more of moderate-to-vigorous intensity physical activity (i.e., activities that make them huff and puff) daily. The guidelines also recommend that children and youth spend less than two hours per day (out of school time) in front of television, computers, and gaming consoles, and that they should be active in as many ways as possible.

This is the third Report Card for Physical Activity in New Zealand, with the previous report cards published in 2014 and 2016, as part of the Global Matrix of Report Cards initiative. This international collaboration uses a harmonised process for evaluating how countries are performing in relation to children's physical activity behaviours and related environmental contexts.

Report Cards are useful for raising awareness and advocating for health promoting policies and environments for healthy, active children and youth.

The 2018 Report Cards assign grades across ten indicators (overall physical activity, organised sport and physical activity, active play, active transportation, sedentary behaviours, physical fitness, family and peers, school, community and environment, government) using the benchmarking criteria provided overleaf. Criteria and data sources differ between time points and countries, therefore caution must be taken when making comparisons.

Key recommendations

1. Develop and implement nationally representative surveys that enable the consistent and regular measurement of key Physical Activity Report Card indicators.
2. Support active transportation through investment in multi-sectoral approaches including urban planning, school and community-led initiatives and social marketing campaigns.
3. Promote all dimensions of physical activity (overall activity, active play, recreation, organised sport, active transport) and the reduction of screen time through policy, research, evidence-based social marketing campaigns and urban design.

Grading criteria		
A	81-100%	We are succeeding with a large majority of children
B	61-80%	We are succeeding with well over half of children
C	41-60%	We are succeeding with about half of children
D	21-40%	We are succeeding with less than half, but some, children
F	0-20%	We are succeeding with very few children

Indicator	Definition	
Overall Physical Activity	Any bodily movement produced by skeletal muscles that requires energy expenditure.	
Organised Sport and Physical Activity	A subset of physical activity that is structured, goal-oriented, competitive and contest-based.	
Active Play	Active play may involve symbolic activity or games with or without clearly defined rules; the activity may be unstructured/unorganized, social or solitary, but the distinguishing features are a playful context, combined with activity that is significantly above resting metabolic rate. Active play tends to occur sporadically, with frequent rest periods, which makes it difficult to record.	
Active Transportation	Active transportation refers to any form of human-powered transportation – walking, cycling, using a wheelchair, in-line skating or skateboarding.	
Sedentary Behaviours	Any waking behaviour characterized by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining or lying posture.	
Family and Peers	Any member within the family who can control or influence the physical activity opportunities and participation of children and youth in this environment.	
School	Any policies, organizational factors (e.g., infrastructure, accountability for policy implementation) or student factors (e.g., physical activity options based on age, gender or ethnicity) in the school environment that can influence the physical activity opportunities and participation of children and youth in this environment.	
Community & environment	Any policies or organizational factors (e.g., infrastructure, accountability for policy implementation) in the municipal environment that can influence the physical activity opportunities and participation of children and youth in this environment.	
Government	Any governmental body with authority to influence physical activity opportunities or participation of children and youth through policy, legislation or regulation.	

	Benchmark
	% of children and youth who meet the Global Recommendations on Physical Activity for Health, which recommend that children and youth accumulate a combined total of at least 60 minutes of daily moderate- to vigorous-intensity physical activity.
	% of children and youth who participate in organized sport and/or physical activity programs.
	% of children and youth who engage in unstructured/unorganized active play for several hours a day. % of children and youth who report being outdoors for several hours a day.
	% of children and youth who use active transportation to get to and from places (e.g., school, park, mall, friend's house).
	% of children and youth who have no more than two hours of screen time per day.
	% of family members (e.g., parents, guardians) who facilitate physical activity and sport opportunities for their children (e.g., volunteering, coaching, driving, paying for membership fees and equipment). % of parents who meet the Global Recommendations on Physical Activity for Health, which recommend that adults accumulate at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity. % of family members (e.g., parents, guardians) who are physically active with their kids. % of children and youth with friends and peers who encourage and support them to be physically active. % of children and youth who encourage and support their friends and peers to be physically active.
	% of schools with active school policies (e.g., daily physical education, daily physical activity, recess, "everyone plays" approach, bike racks at school, traffic calming on school property, outdoor time). % of schools where the majority (≥ 80%) of students are taught by a physical education specialist. % of schools where the majority (≥ 80%) of students are offered the mandated amount of physical education (for the given state/territory/region/country). % of schools that offer physical activity opportunities (excluding physical education) to the majority (> 80%) of their students. % of parents who report their children and youth have access to physical activity opportunities at school in addition to physical education classes. % of schools with students who have regular access to facilities and equipment that support physical activity (e.g., gymnasium, outdoor playgrounds, sporting fields, multi-purpose space for physical activity, equipment in good condition).
	% of children or parents who perceive their community/ municipality is doing a good job at promoting physical activity (e.g., variety, location, cost, quality). % of communities/municipalities that report they have policies promoting physical activity. % of communities/municipalities that report they have infrastructure (e.g., sidewalks, trails, paths, bike lanes) specifically geared toward promoting physical activity. % of children or parents who report having facilities, programs, parks and playgrounds available to them in their community. % of children or parents who report living in a safe neighbourhood where they can be physically active. % of children or parents who report having well-maintained facilities, parks and playgrounds in their community that are safe to use.
	Evidence of leadership and commitment in providing physical activity opportunities for all children and youth. Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and youth. 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).

Overall physical activity

The Active New Zealand Survey showed 7% of 5-17 year-olds accumulate at least 60 minutes of moderate to vigorous physical activity per day through the activities they do for sport, physical education, exercise or fun [1].

Regional datasets using accelerometry indicate 38% of children aged 8-13 years [2] and 39% of youth aged 13-18 years [3] accumulate at least 60 minutes of moderate to vigorous physical activity daily.

There were no significant differences in those meeting the recommended levels of physical activity by age, sex, or socio-economic status in the Active New Zealand Survey. Across all studies, children and youth identifying as being of Asian ethnicity were significantly less likely to be classified as sufficiently active than other ethnic groups.

In the Neighbourhoods for Active Kids study, significantly more primary school aged children met the recommended levels of physical activity (44%) than intermediate school aged children (32%) [2].

Males were more likely to be classified as being sufficiently active than females (53% males versus 24% females in children, 46% versus 36% in adolescents) in both studies using accelerometry.

D-

Encouraging lifelong participation in physical activity is essential for health. Targeted and culturally appropriate strategies are needed to increase physical activity participation in New Zealand children and youth.

Organised sport participation

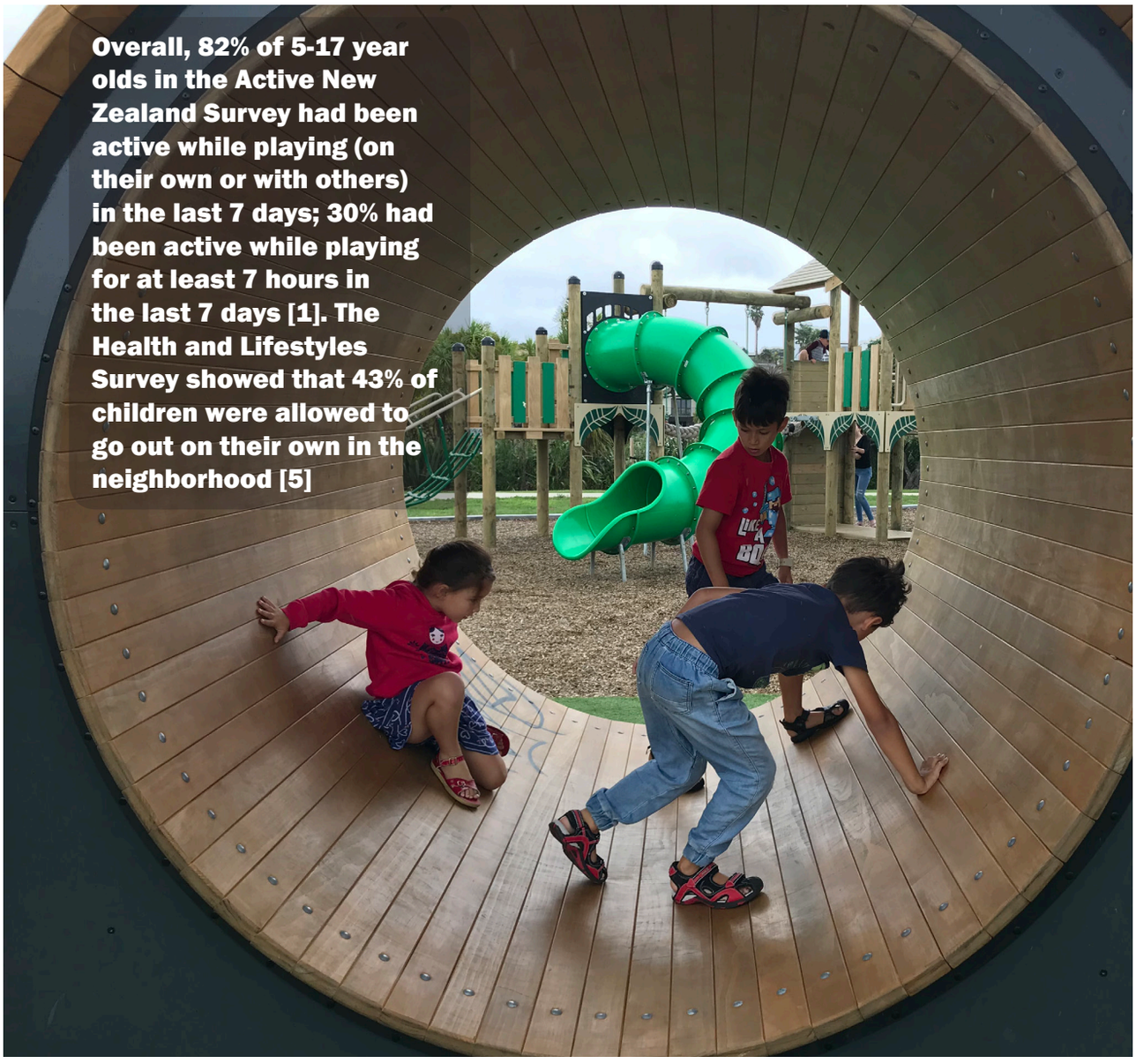
81% of 5-17 year olds participated in any organised sport (physical education or classes at school, competitions/tournaments, and training or practicing with a coach/instructor) in the past 7 days in the Active New Zealand Survey [1]. The number of students representing their secondary school in sport continues to remain stable with almost 150,000 students (53%) representing their school in 2017. Since 2005 this figure has been between 51% and 54%. A survey of youth aged 13-18 showed 54% of youth had a meaningful engagement in sport in their school setting over a period of 6 weeks or more [4]. No significant differences existed in participation between males and females, or by area-level socio-economic status.

Participation rates increased from 81% in 5-7 year olds to 86% in 10-14 year olds and then sharply declined to 66% in 15-17 year olds. Organised sport participation was significantly lower in children who identified as being of Asian ethnicity (77%) compared to European (81%), Māori (83%) and Pacific (81%) ethnic groups.

B

Supports for older adolescents to remain engaged in organised sports are needed.

Active play



Overall, 82% of 5-17 year olds in the Active New Zealand Survey had been active while playing (on their own or with others) in the last 7 days; 30% had been active while playing for at least 7 hours in the last 7 days [1]. The Health and Lifestyles Survey showed that 43% of children were allowed to go out on their own in the neighborhood [5]

C+

Frequent active, unstructured play that includes time spent in natural outdoor environments is essential for children's development. More research is required to understand and promote active play participation in New Zealand children.

Active transportation

45% of children and youth aged 5-14 years usually used active transport to school in the New Zealand Health Survey [6]. The Active New Zealand Survey showed 43% of children and youth aged 5-17 year olds usually used active transport to and from school [1]. Just under a third (30%) of children aged 5-16 years used active transport to school in The Health and Lifestyles Survey [5]. 30% of children aged 5-12 years and 31% of youth aged 13-17 years used active transport to school in the New Zealand Household Travel Survey [7]. A quarter (24%) of 6 year olds in a longitudinal cohort study usually used active transport to get to and from school (Growing up in New Zealand Study [8] unpublished custom analysis).

Older children (aged 10-14 years) were more likely to actively travel to school than younger children (aged 5-9) years in the New Zealand Health Survey (49% versus 41%), however no differences were observed across these age groups in the Health and Lifestyles Survey. A trend of increasing active school transport with age was observed in the Active New Zealand Survey, with a drop off for youth aged 15-17 years.

Less girls actively travelled to school than boys.

C-

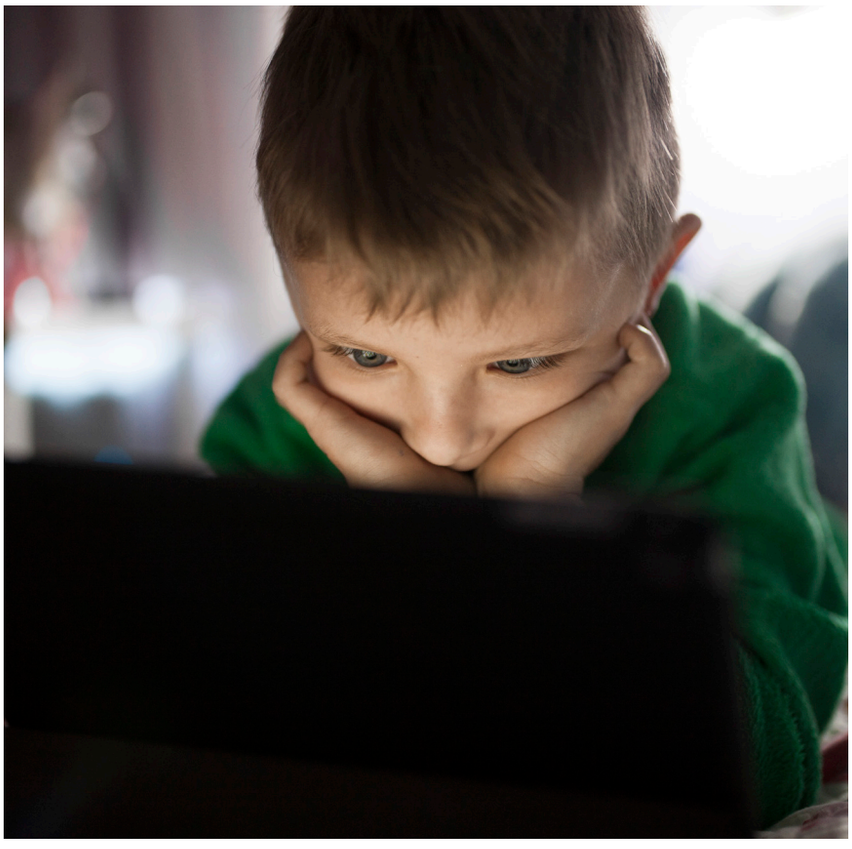
Strategies to encourage active travel to school are needed, especially for girls, younger children, and older adolescents.

Sedentary behaviour

Overall, 9% of youth aged 10-14 years and 16% of children aged 5-9 years in the New Zealand Health Survey had less than 2 hours of screen time out of school hours per day [6]. The Active New Zealand Survey showed 21% of 5-17 year olds had less than 2 hours of screen time out of school hours per day [1]. The Health and Lifestyles Survey showed 61% of 5-16 year-olds had 2 hours or less of television, gaming, or internet use per day [5].

No significant differences in meeting recommended limits for screen time by socio-economic status or some ethnic groups (Pacific, Asian) were found in the New Zealand Health Survey. Males were significantly more likely to exceed recommended screen time than females, as were children and youth identifying as Māori versus their non-Māori peers (especially females). Less children aged 5-9 years watched screens for two or more hours per day (85%) compared with those aged 10-14 years (92%).

No significant differences in meeting recommended limits for screen time by ethnicity, sex, or socio-economic status were found in the Active New Zealand survey. Younger children (aged 5-7 years) were significantly more likely to have less than 2 hours of screen time daily (34%) compared with older children aged 12-14 years (17%) or 15-17 years (8%).



D

Screen time is high and increases with age. Strategies to promote optimal use of screens are required, especially for adolescents.

Whānau/family and peers

Almost a quarter (22%) of adults participating in the Active New Zealand Survey and who had a person aged less than 18 years in their household met physical activity guidelines through the activity they did for sport, exercise or recreation [1]. Over a quarter (27%) of parents/caregivers in the Health and Lifestyles Survey reported meeting the physical activity guidelines [5].

Three quarters (76%) of adults in the Active New Zealand Survey and who had a young person in their household agreed with the statement "Being physically active together is an important part of our family life." 12% of parents in the Growing Up in New Zealand Study reported coaching or helping with sports teams or other activities at their child's school ([8] unpublished custom analysis).

In the Active New Zealand Survey there was a trend towards lower levels of being classified as sufficiently active for parents/caregivers/guardians living in higher deprivation areas (19%) compared with those living in lower deprivation areas (24%).

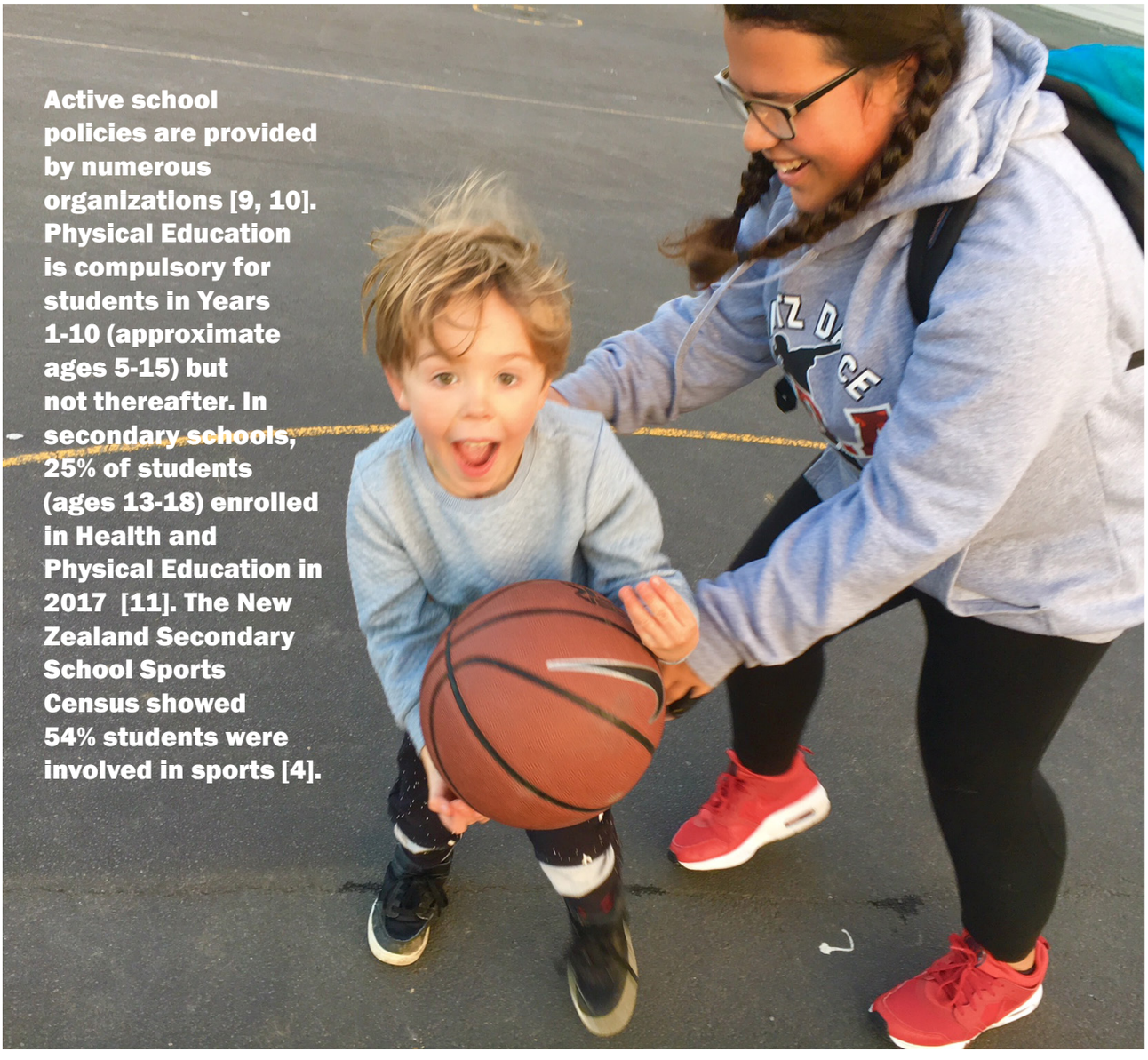
In the Growing up in New Zealand study, those living in higher deprivation areas were more likely to be involved in coaching or helping with sports teams or other activities (17%) compared with those living in medium (11%) or low (8%) deprivation areas.

There was also a trend towards increased walking to and from school with a friend or sibling by area-level socio-economic status (low deprivation 3%, medium 5%, high 8%)

C-

Being physically active together is important to New Zealand families. Interventions that value and support family involvement in physical activity are warranted.

School



Active school policies are provided by numerous organizations [9, 10]. Physical Education is compulsory for students in Years 1-10 (approximate ages 5-15) but not thereafter. In secondary schools, 25% of students (ages 13-18) enrolled in Health and Physical Education in 2017 [11]. The New Zealand Secondary School Sports Census showed 54% students were involved in sports [4].

B-

Schools are essential settings to provide the foundation for lifelong physical activity. Strategies to encourage physical activity throughout school years (e.g., integrating physical activity into the curriculum) may reduce barriers to participation in older youth.

Community and environment

All six major New Zealand cities had: a) policies/strategies about cycling and walking embedded in their broader transport strategies, b) policies to increase cycling, walking and physical activity, c) strong engagement with the wider community, and d) programs/activities to promote and support cycling and walking among their residents [12].

On average, 13.6% of the total roads across the six New Zealand cities had cycling infrastructure (4.4% in Auckland) and 70.2% of streets had footpaths with considerable variability between the cities. In Auckland, 39% of residents lived within five minutes' walk of a suburb park and 60% of adults perceived their neighborhoods to be safe at night [13].

In the national State of Play Survey 26.8% of New Zealand parents believed independent roaming does not expose children to the risk of road accidents and 40.1% believed that children who independently roam their neighborhood are not likely to encounter ill-intentioned adults [14].

There were insufficient data to conduct sub-group analysis. In addition, most data are from urban areas, and data from rural areas are lacking.

B

Significant improvements in many urban areas of New Zealand have occurred to support walking and cycling modes of transport.

Government

According to the Ministry of Health, Childhood Obesity Action Plan, the target of 95% of obese children identified in the B4 School Check (B4SC) programme to be offered a referral to a health professional for clinical assessment and family based nutrition, activity and lifestyle interventions by December 2017 has been exceeded on average across regions in New Zealand. In particular 98% of obese children were referred to a health professional in the last quarter (April-June 2018).[9]

In 2016/2017, NZD 2.1 million was allocated to ten district health boards in order to provide better nutrition and activity programs to families, in order to support the Raising Healthy Kids Target. Sport New Zealand have identified in their most recent strategic plan (2015-2020) that they aim to allocate more funds to increasing the participation of youth in sport in both low participation and declining participation areas with an expected increase of 3% overall in sport participation by 2020. The Sport in Education program currently focuses on eight schools involved in the 2012-2015 project with no clear information regarding an expansion of the project.

B+

Progress is being made but not across all initiatives, or for all communities.

References

1. Sport New Zealand: Active NZ and Active NZ Young People. Wellington, New Zealand: Author; 2018.

2. Oliver M, McPhee J, Carroll P, Ikeda E, Mavoa S, Mackay L, Kearns RA, Kytta M, Asiasiga L, Garrett N et al: Neighbourhoods for Active Kids: Study protocol for a cross-sectional examination of neighbourhood features and children's physical activity, active travel, independent mobility, and body size. BMC Public Health 2016.

3. Mandic S, Williams J, Moore A, Hopkins D, Flaherty C, Wilson G, Garcia Bengoechea E, Spence JC: Built Environment and Active Transport to School (BEATS) Study: protocol for a cross-sectional study. BMJ Open 2016, 6(5):e011196.

4. New Zealand Secondary School Sports Council: NZSSSC Representation Census 2017. Oakura, New Zealand: Author; 2017.

5. Health Promotion Agency: 2016 Health and Lifestyles Survey: Methodology Report. Wellington, New Zealand: Author; 2017.

6. Ministry of Health: Annual Update of Key Results 2016/17: New Zealand Health Survey. Wellington, New Zealand: Author; 2017.

7. Household travel survey [https://www.transport.govt.nz/resources/household-travel-survey/]

8. Morton SMB, Atatoa Carr PE, Bandara DK, Grant CC, Ivory VC, Kingi TR, Liang R, Perese LM, Peterson E, Pryor JE et al: Growing Up in New Zealand: A Longitudinal Study of New Zealand Children and Their Families. Report 1: Before We Are Born. Auckland, New Zealand: Growing Up in New Zealand, University of Auckland; 2010.

9. How is my DHB performing? – 2017/18 [https://www.health.govt.nz/new-zealand-health-system/health-targets/how-my-dhb-performing-2017-18]

10. Sport in Education Project [https://sportnz.org.nz/managing-sport/search-for-a-resource/programmes-and-projects/sport-in-education-project-]

11. Education Counts. Subject Enrolment [https://www.educationcounts.govt.nz/statistics/schooling/student-numbers/subject-enrolment]

12. Shaw C, Russell M: Benchmarking Cycling and Walking in Six New Zealand Cities. Pilot study 2015. Wellington, New Zealand: New Zealand Centre for Sustainable Cities, University of Otago; 2016.

13. Eichler N, Mehta S: Monitoring Report 2017. Auckland, New Zealand: Healthy Auckland Together; 2017.

14. Duncan S, McPhee J: State of Play Survey - Executive Report. Auckland, New Zealand: Auckland University of Technology; 2015.

2018 New Zealand Physical Activity Report Card for Children and Youth

Introduction

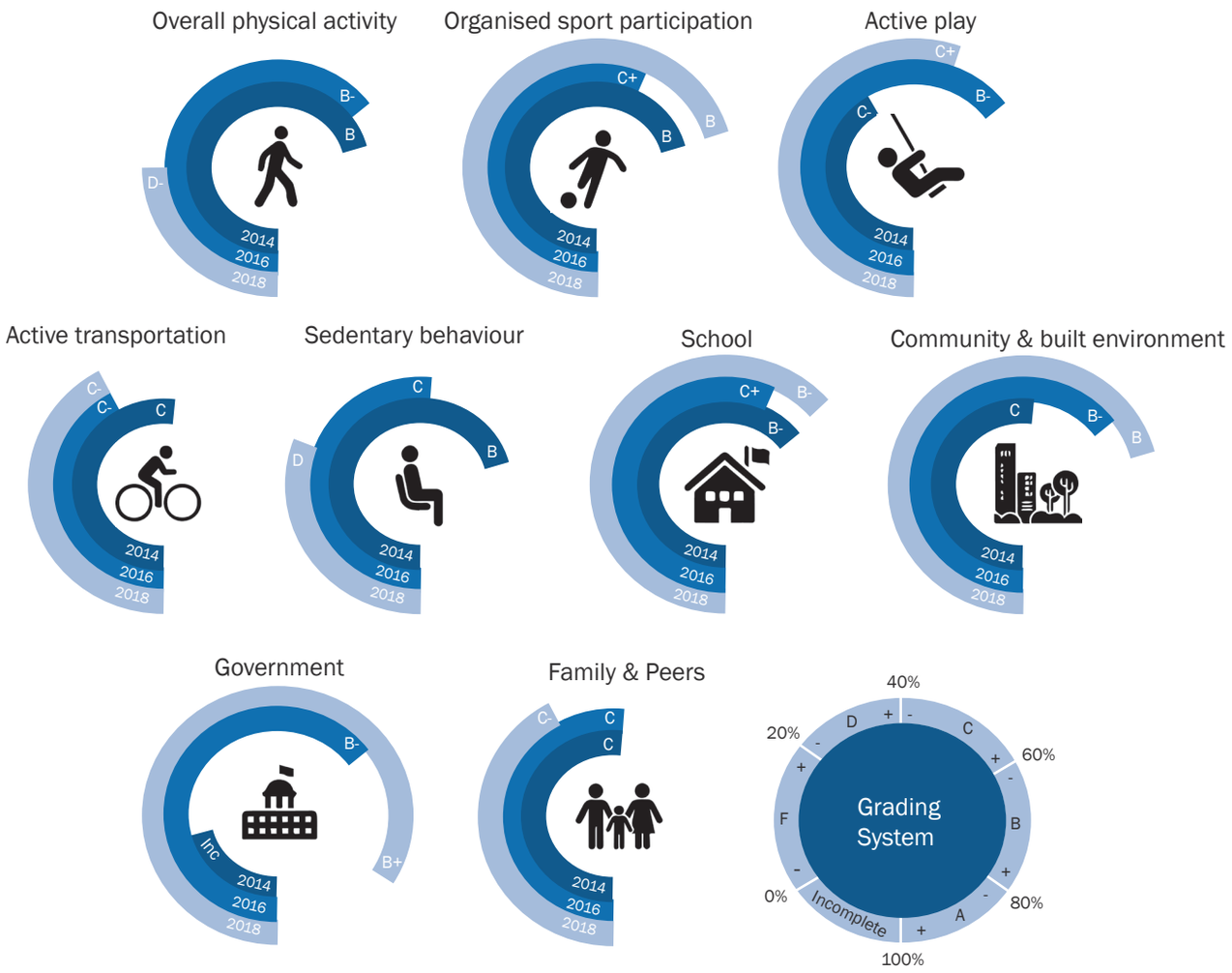
The 2018 New Zealand Physical Activity Report Card reviewed national & regional survey data describing physical activity among children & youth (5–18 y). This Short Report Card aims to inform advocacy, policy and program development. It also aims to enable international comparison with very high human development index (VHDI) countries participating in the Global Matrix 3.0. This Report Card updates the previous 2014[a] and 2016[b] reviews and grades.

Methods

Physical activity research experts convened to review relevant national & regional survey data, & grade 10 core physical activity indicators outlined in the Active Healthy Kids Global Matrix.[c] Nationally representative and objectively measured data were prioritised, & final grades were agreed by panel consensus.

Findings

Some datasets and some questions differed from those available when generating previous cards, and from international cards, limiting direct comparability over time and with international datasets. New Zealand children and youth have low levels of physical activity and high levels of screen time. Substantial support for physical activity exists at the governmental/ policy level, as well as within school, community, and environment settings. Future initiatives should consider opportunities to build on the existing support systems and develop effective interventions to encourage physical activity, active transportation, active play and family and peer support, and reduce screen time in children and youth. There is a need regular nationally representative surveys that capture standardised measures of important physical activity indicators to gain high quality evidence for the current state of physical activity, as well as to identify meaningful trends.



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References

[a]J Phys Act Health. 2014 May;11 Suppl 1:S83-7. doi: 10.1123/jpah.2014-0180 [b]J Phys Act Health. 2016 Nov;13(11 Suppl 2):S225-S230 [c]Active Health Kids Global Alliance (2018). www.activehealthykids.org