

2022

Aotearoa New Zealand Physical Activity Report Card for Children & Youth

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### **Executive summary**

This report card presents the grades for the fourth physical activity report card for children and youth as part of the Active Healthy Kids Global Alliance's Global Matrix.

Overall, the three key recommendations from the 2018 Report Card remain unchanged. We have added a fourth recommendation in the 2022 Report Card, which has highlighted a range of inequities across indicators based on sociodemographic characteristics.

1. Develop and implement regular

nationally representative surveys that enable consistent and regular measurement of key Physical Activity Report Card indicators.

2. Promote all dimensions of physical activity (overall physical activity, active play, recreation, organised sport, active transport) and the reduction of screen time through policy, research, evidencebased social marketing campaigns and urban design.

3. Support active transportation through investment in multisectoral approaches including urban planning, school and community-led initiatives and social marketing campaigns.

4. Implement targeted, comprehensive, and populationspecific approaches for supporting health-promoting activity behaviours and reducing inequities in these behaviours for children and youth in NZ.

Grades for each indicator and for previous years are depicted in the figure below, followed by key recommendations for each indicator on the next page.





### **Executive summary**

#### Overall physical activity

Nearly half of children and youth still do not participate in a sufficient amount of physical activity to realize the health and wellbeing benefits. Considerable room for improvement remains in the promotion of both aerobic and muscle strengthening physical activity, particularly addressing the evident inequities in overall physical activity and across all activity indicators.

# Organised sport and physical activity

Nearly two thirds of children and youth participate in organised sporting activities. Ensuring that these are quality experiences that positively engage children and youth is crucial to improving physical literacy and promoting lifelong physical activity participation.

#### Active play

Active play is important for child and youth development, but the available data does not provide a clear indication of participation levels. Further work is needed to refine the measurement of active play and determine evidence-based thresholds for benchmarking criteria.

#### Active transportation

Less than a third of children and youth use active transportation (walking, biking, scooting, skating, etc.) to get to or from school, highlighting an opportunity for substantial improvement. Strategies to increase active transportation, such as policies that influence socio-cultural norms and improve supporting infrastructure for children and youth to move safely around their neighbourhoods are crucial. **Physical literacy** 

The majority of children and youth scored well on the reported components of physical literacy (i.e., motivation, confidence, competence knowledge, and understanding). Further work is needed to identify gaps in physical literacy measurement and refine tracking methods.

#### Sedentary behaviours

Less than half of children and youth met sedentary behaviour recommendations. Developing and implementing evidencebased strategies that specifically reduce screen time are important for child and youth health and wellbeing.

#### Sleep

Most children and youth met age-specific sleep recommendations. More work is needed to understand the nuance of what constitutes and supports quality sleep for children and youth.

#### School

Just over half of secondary school students reported that they meaningfully participate in school sport(s). There was a considerable decline in the proportion of children and youth enrolled in physical education when it was not mandatory. Increasing opportunities for children and youth to be active at school is essential and should include options beyond school sport and

#### physical education. Whānau (family) and peers

Close social networks play an important role in shaping physical activity behaviours of children and youth, but the available data does not provide a clear indication of existing levels of support from family and friends. Future work is needed to integrate appropriate measures and evidence-based thresholds for peer and family support pertaining to physical activity.

#### Community and environment

The community and environment (built, natural, and social) are critical determinants of child and youth physical activity, but there was a paucity of up-todate data to assess this indicator. Regular data collection of relevant community and environment determinants of physical activity is needed.

#### Government

There has been considerable recent investment in physical activity promotion by governmental bodies (central and local). Evaluating how current investment has reached and benefited those most in need is paramount to sustaining future support and effectively addressing the long-standing inequities in physical activity, health, and wellbeing among children and youth.

### Background

Physical activity is essential for health and wellbeing in children and youth (aged 5-17 years) and can be accumulated across a range of dimensions, from organised sport to informal and unstructured play.<sup>12</sup> Globally, and in Aotearoa New Zealand (NZ), many tamariki - children and rangatahi - youth are not sufficiently active for optimal health and wellbeing outcomes.<sup>3</sup> Conversely, increased time spent sedentary is deleterious for child and youth health and wellbeing. Sedentary time among children and youth in NZ has increased over time to relatively high levels.4

Physical Activity Report Cards represent a useful tool for raising awareness and advocating for policies and environments that promote health and wellbeing for children and youth. This international collaborative effort uses a harmonised process for evaluating how countries are performing in relation to children's physical activity behaviours and related environmental contexts

This is the fourth Physical Activity Report Card for children and youth in NZ, with the previous report cards published in 2014<sup>5</sup>. 2016<sup>6</sup>, and 2018<sup>4</sup> as part of the Active Healthy Kids Global Alliance's Global Matrix.<sup>7</sup>

Globally, the 2022 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 consistent benchmarking criteria where possible (Table 1, Appendix 1). In addition, the 2022 NZ Report Card includes two new indicators - physical literacy and sleep which are not yet included as Global Matrix indicators. Sleep is a key component of NZ's physical activity guidelines for children and youth, which are to 'sit less, move more, and sleep well'.<sup>8</sup> Specifically, the Ministry of Health Manatū Hauora guidelines stipulate a healthy 24 hours includes:

> an accumulation of at least 60 min/ day of moderate to vigorous physical

activity (incorporate vigorous physical activities and activities that strengthen muscles and bones, at least 3 days/week) (note these differ from updated global recommendations that focus on an average of 60 min/day,



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no more than 2hrs/ day of recreational screen time, quality uninterrupted

sleep of 9 to 11 hrs/night for those aged 5 to 13 years and 8

to 10 hr/night for those aged 14 to 17 years, with consistent bed and wake-up times.

For the remainder of the day: sitting less, moving more, break

up sitting time, participating in structured and unstructured light physical activities.

We collated data from key datasets, national surveys, and reports produced since the last report card in 2018 to March 2020 (Appendix 2). Accordingly, the grades presented in this report all pertain to data collected prior to the arrival of COVID-19 in NZ.

Where possible, we explored differences in the proportion of children and youth meeting the global benchmarking criteria by gender (albeit the gender diverse group represented only 0.2% of the overall sample), ethnicity, disability, urbanicity (urban vs. rural), area-level socio-economic status, and age.

With the exception of active transport (where multiple datasets were used), the Sport New Zealand Ihi Aotearoa (Sport NZ) Active NZ Survey 2019 dataset was used to explore these sociodemographic differences.<sup>9</sup>

Overall, data sources, availability of data, and benchmarking criteria and thresholds have differed across time and countries. In light of these differences, it is essential to be cautious about making comparisons in grades between countries, and between time points for the NZ Report Cards.





# Background

Grade	% Meeting criteria	Interpretation	
A+	94–100	We are succeeding with a large majority of children and youth	
A	87–93		
A-	80–86		
B+	74–79	We are succeeding with well over half of children and youth	
В	67–73		
В-	60–66		
C+	54–59	We are succeeding with about half of children and youth	
С	47–53		
C-	40–46		
D+	34–39	We are succeeding with less than half but some children and youth	
D	27–33		
D-	20–26		
F	<20	We are succeeding with very few children and youth	
INC	Incomplete	Incomplete—insufficient or inadequate information to assign a grade	

### Overall physical activity C+



There is strong evidence for the benefits of an average of 60 minutes of moderate to vigorous physical activity (MVPA) daily for children's physical, psychological, and cognitive health.<sup>2</sup> MVPA is physical activity performed at more than 3 metabolic equivalents (METs), and can be described as activities that make you huff and puff, or have a perceived intensity of 5 or higher on a scale of 0 (lowest intensity) to 10 (highest intensity).

The overall physical activity grade was calculated based on the proportion of children and youth who participated in ≥420 min/week of MVPA,<sup>9</sup> equivalent to an average of 60 min/day of MVPA. Note this average approach is aligned with global recommendations rather than NZ's guidelines stipulating children and youth should accumulate at least 60 min/day of MVPA. Overall, 58.1% of children and youth accumulated ≥420 min/ week of MVPA.

**Gender.** Girls (54.5%) had lower levels of participating in  $\geq$ 420min/ week of MVPA than boys (61.6%) and those of another gender (61.5%).

Ethnicity. A higher proportion of children and youth of Māori (62.7%) and European (61.0%) ethnicities participated in ≥420min/week of MVPA compared with children and youth of other ethnicities. A considerably smaller proportion of children and youth of Asian ethnicities participated in ≥420min/week of MVPA than other ethnic groups (41.0% versus 58.1% overall).

**Disability.** The proportion of children and youth participating in ≥420 min/week of MVPA did not differ based on disability.



Deprivation. A higher proportion of children and youth residing in areas of lower socio-economic deprivation accumulated ≥420min/week of MVPA compared with their peers who resided in areas of higher deprivation (61.5% compared with 51.9%).

Urbanicity. A smaller proportion of children and youth residing in main urban areas accumulated ≥420min/week of MVPA compared to children and youth residing in less urban areas (56.4% vs 61.9% for secondary urban areas and 60.5% for rural areas).

Age. Younger children in school years 0-6 (59.9%, ~5-10 years of age) and youth in school years 11-13 (47.2%, ~15-17 years of age) had lower levels of participating in ≥420min/week of MVPA than children and youth in school years 7-10 (61.7%, ~11-14 years of age).

### Organised sport participation B-



Participation in organised sports plays a critical role in meeting total daily physical activity recommendations.<sup>10</sup> Child and youth participation in organised sport is associated with higher cardiorespiratory fitness<sup>11</sup> and mental wellbeing, including lower depression scores and fewer anxiety symptoms.<sup>12</sup> The quality of the sport experience may be particularly important in determining mental wellbeing and long term participation outcomes.<sup>13</sup>

Overall, 66.4% of children and youth participated in organised sport over the last 7 days.

The organised sport grade was calculated based on the proportion of children and youth who had been active in competition or tournament, or training with a coach/instructor in the last 7 days, excluding participation at school.<sup>9</sup>



**Gender.** A similar proportion of girls and boys participated in organised sport (66.0% and 66.9% respectively), and considerably fewer (50.0%) children and youth identifying as another gender participated in organised sport.

Ethnicity. A higher proportion of Pasifika (73.4%) and Māori (70.6%) children and youth engaged in organised sport than those of Middle Eastern, Latin American, African (MELAA; 65.2%), European (65.0%), or Asian (61.3%) ethnicity. A considerably smaller proportion of children and youth of "Other" ethnic groups engaged in organised sport (43.2%).

**Disability.** A similar proportion of disabled (64.5%) and non-disabled children and youth (66.6%) engaged in organised sport.

**Deprivation.** A higher proportion of children and youth residing in

areas of higher socio-economic deprivation were engaged in organised sport compared to children and youth residing in areas of lower deprivation (70.2% in high deprivation areas, compared with 64.9% in middeprivation and 65.5% in low deprivation areas).

**Urbanicity.** A higher proportion of children and youth residing in rural areas were engaged in organised sport than those residing in more urban areas (68.5% in rural areas, compared with 64.4% in secondary urban, and 66.3% in main urban areas).

**Age.** A higher proportion of children and youth in school years 7-10 participated in organised sport (74.3%, ~5-10 years of age), than those in years 0-6 (69.4%, ~5-10 years of age) and years 11-13 (44.2%, ~15-17 years of age).

### Active play INC



Active play facilitates child and youth development, cognitive development, and emotional wellbeing, and provides important opportunities to accumulate physical activity.<sup>4</sup>

"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."<sup>15</sup>

An inconclusive grade was reported for the active play indicator due to lack of sufficient data. As noted by the Active Healthy Kids Global Alliance, active play tends to occur sporadically, with frequent rest periods,<sup>15</sup> making accurate measurement challenging. The benchmarking criteria for this indicator stipulated 2 hrs/day of participating in active play or being outdoors for more than 2 hrs/day.

The Active NZ Young People Survey encompasses elements that potentially relate to active play, including:

- Engagement in any activities (including sport) that take place in an informal setting (e.g., playing or hanging out with family or friends)

- Engagement in selected play-

related activities (e.g., games, playground, make-believe)

- Engagement of the playrelated activities above in informal settings

While a high prevalence of participation in these behaviours was observed, the duration of participating in these behaviours was extremely low, likely due to measurement issues rather than a genuine lack of active play overall. Research is required to determine what specific combinations of activities and settings best comprise active play, and how best to measure duration of participating in these activities accurately.





### Physical literacy B



Physical literacy refers to the motivation, confidence, physical competence, knowledge, and understanding required to allow people to value and take responsibility for engaging in physical activity and sport for life.<sup>16</sup> Everyone has their own unique physical literacy that contributes to their overall wellbeing.<sup>17</sup>

The grade for physical literacy was determined based on the percentage of children and youth who reported agreement in response to questions regarding each of its components (motivation, confidence, competence, understanding, value, and engagement). Agreement was based on a total response of ≥24/30 for the six items, which were measured using a five-point scale ranging from disagree a lot (1) to agree a lot (5). Overall, 69.9% of children and youth reported agreement for physical literacy.

**Gender.** A similar proportion of girls (68.8%) and boys (71.0%) reported agreement, whereas considerably fewer children and youth identifying as another gender reported agreement (46.2%).

**Ethnicity.** A similar proportion of children and youth of European (71.2%), Māori (71.2%), Pasifika (71.5%), and MELAA (74.2%) ethnicity reported agreement. A lower proportion of Asian children and youth (59.9%) and those of other ethnicities (61.5%) reported agreement.

**Disability.** A considerably higher proportion of non-disabled children and youth reported agreement with being physically literate than disabled children and youth (71.7% versus 51.7% respectively).

**Deprivation**. The proportion of children and youth who reported agreement with physical literacy items decreased with increasing levels of socioeconomic deprivation (from 73.8% agreement in low deprivation areas to 65.4% in areas of high deprivation).

**Urbanicity.** There was little difference in physical literacy based on urbanicity (69.1% in main urban areas, 69.8% in secondary urban areas, and 72.2% in rural areas).

Age. The proportion of children and youth who reported agreement with physical literacy was lower among those in school years 11-13 (64.2%) compared with those in lower years (70.2% for years 0-6, 72% for years 7-10).





Active transportation (i.e., walking or wheeling to places) is associated with higher levels of health-promoting physical activity<sup>18,19</sup> and improved health outcomes.<sup>20</sup> Reducing motorised car use in favour of active transportation modes also has significant implications for supporting community vitality and climate change mitigation.<sup>21</sup> While active transportation can be accumulated between a range of settings, most evidence explored rates of travel to and/or from school by children and youth.

The overall grade for active transportation was determined based on the mean percentage of prevalence (31.3%) in active transportation to/from school derived from three national data sources between 2019 and 2020:

- The NZ Health Survey 2019/2020 showed that 42.4% of children and youth aged 5-14 years usually get to and from school actively.

- The NZ Household Travel Survey 2019-2020 showed 22.6% of children and youth aged 5-17 years actively travelled to or from school.

- The 2019 Active NZ Young People Survey showed that less than a third (29%) of children and youth aged 8-14 years usually got to and from school actively.

**Gender.** A smaller proportion of girls (28.4%) used active transportation to and/or from school than boys (34.1%) across all surveys.

**Ethnicity.** A smaller proportion of children and youth of Pacific (24.8%) ethnicity used active transportation to and/or from school compared to those of European and other (32.2%), Asian (33.2%) and Māori (33.7%) ethnicities across all surveys.

**Disability.** Active transportation to/from school did not differ based on disability in the Active NZ Young People Survey.

**Deprivation.** There was little difference in active transportation to/from school based on deprivation across all surveys.

**Urbanicity.** A smaller proportion of children and youth living in rural areas used active transportation to/from school than those living in urban areas (11.7% versus 28.7%, respectively) in the NZ Household Travel Survey and Active NZ Young People Survey.

Age. A smaller proportion of older youth (aged ~15-17 years) used active transportation to get to/from school compared with younger children (21.7% of those aged 15-17 years compared with 33.9% aged 10-14 years, and 29.9% aged 5-9 years) across all surveys.

### Sedentary behaviour C-

Strong evidence exists for the harmful impact of prolonged sedentary behaviour on children and youth health, including detrimental impacts on fitness and cardiometabolic health, body composition, behavior, and sleep.<sup>2</sup> Television viewing and/ or recreational screen time have stronger associations with adverse health outcomes in children and youth than total sedentary time (which might also include sitting time at school for example).<sup>2</sup> For the purposes of the Global Matrix, a threshold of participating in <2 hrs/day of sedentary behavior was stipulated.

Overall, 42.9% of children and youth met the threshold of having <2 hrs/day of screen time (including watching television; watching movies; on a computer, cellphone, tablet, or PlayStation or Xbox) outside of school or work, on a normal weekday or normal weekend day.<sup>9</sup>

**Gender.** A smaller proportion of children and youth identifying as another gender met the recommended threshold for sedentary behavior compared to girls and boys (14.3% versus 43.3% for girls and 42.7% for boys).

**Ethnicity.** A higher proportion of children and youth of European (46.4%), Pasifika (40.8%), and 'Other' ethnicities (44.4%) accumulated <2 hrs/day of screen time compared to Māori (38.3%), Asian (38.7%) and MELAA (33.8%) children and youth.

**Disability.** A smaller proportion of disabled children and youth



were non-sedentary compared to (28.2%) compared to nondisabled children and youth (44.4%).

**Deprivation.** A lower proportion of children and youth residing in higher socio-economic deprivation areas met the threshold compared to those residing in areas with lower levels of deprivation (35.9% met the threshold in high deprivation areas, compared with 46.0% in mid-deprivation and 44.5% in low deprivation areas). **Urbanicity.** Sedentary behaviours did not vary noticeably based on urbanicity (42.1% in main urban areas, 44.4% in secondary urban areas, and 45.0% in rural areas).

Age. The proportion of children and youth meeting the <2 hrs/day threshold was substantially lower with increasing age (61.1% for children and youth in school years 0-6, 35.7% in years 7-10, and 11.6% in years 11-13).



Adequate quality sleep supports healthy brain function, maintains physical health, and is important for growth and development.<sup>22,23</sup> Sleep was included as an indicator due to NZ's adoption of movement guidelines which state a healthy 24 hours included quality uninterrupted sleep of 9 to 11 hrs/ night for those aged 5 to 13 years, 8 to 10 hrs/night for those aged 14 to 17 years, with consistent bed and wake-up times.<sup>8</sup>

#### Overall, 74.6% of children and youth met sleep recommendations.

**Gender.** A considerably smaller proportion of children and youth identifying as another gender met

sleep recommendations (38.5%) compared to boys (76.3%) or girls (73.1%).

Ethnicity. The proportion of youth meeting sleep recommendations was highest among children and youth identifying as 'Other' ethnicities (80.8%), followed by children of European (78.5%), Māori (73.1%), Asian (69.4%), MELAA (66.7%) and Pasifika (60.5%) ethnicities.

**Disability.** More non-disabled children and youth (75.9%) met sleep recommendations compared with disabled children and youth (62.3%).

**Deprivation.** A lower proportion of children and youth from

areas of high socio-economic deprivation (69.9%) met sleep recommendations than children and youth from areas of mid to low deprivation (74.8% and 77.4%, respectively).

**Urbanicity.** The proportion of children and youth meeting sleep recommendations with was higher among those residing in less urban areas (73.8% in main urban areas, 74.6% in secondary urban areas, 77.3% in rural areas).

Age. The proportion of children and youth who met sleep recommendations was lower with advancing school year (81.4% in school years 0-6, 71.4% in years 7-10, 63.9% in years 11-13).



The environments in which children and youth live, work and play can have significant impacts on their physical activity behaviours, health and wellbeing.<sup>24-26</sup> Having appropriate infrastructure (e.g., footpaths, bike lanes, trails), availability of quality physical activity destinations (e.g., parks, playgrounds, facilities), easy access to places of importance, and safe places to be physically active are all important facilitators of physical activity in children and youth.

The community and environment indicator was assigned an inconclusive grade as there was insufficient current data to determine a grade.

A benchmarking activity across six major cities was utilized to

generate the 2018 Report Card grade,<sup>27</sup> however this activity has not been repeated to enable an updated grade calculation. Other benchmarking criteria for this grade focused on child and parent perceptions on communitylevel physical activity supports, for which regional and national level data do not exist. However, findings from a recent nationwide examination of access to key destinations<sup>28</sup> provide useful information and are reported here.

Overall, on average the nearest greenspace was 140 m away, blue space 640 m away, and physical activity facility (gyms; fitness centres; sports halls; settings for tennis, rugby, swimming, soccer, bowls, golf, hockey, cricket, martial arts, or rowing) 1600 m away from NZ homes. There was some suggestion of distance to physical activity facilities increasing with increasing arealevel deprivation, and there was an inverse relationship between physical activity accessibility and population size.

**1** 

Although these geographical/ area data are informative, limitations for the purposes of generating a grade for Report Cards include lack of individual level data, inclusion of physical activity facilities that are specific for sports rather than physical activity (for example, playgrounds were not included as facilities), and lack of information about facility quality and accessibility from the perspectives of children and youth.





Social support is an integral facilitator of physical activity in children and youth.<sup>29,30</sup> Children and youth whose parents<sup>31</sup> and peers<sup>32</sup> are active are more likely to be active themselves. The grade for whānau - family and peers was based on the proportion of household adults (with a child in the household) meeting physical activity recommendations (29.4%). When considering aerobic physical activity alone, 62.7% of household adults met aerobic recommendations.

This grade goes beyond the Global Matrix criteria, which focusses exclusively on aerobic physical activity recommendations, and additionally includes aerobic and muscle-strengthening recommendations.1

Inclusion of items pertaining to the other criteria (the proportion of parents or guardians who facilitate physical activity, the proportion of children and youth with friends and peers who encourage and support them to be physically active, and the proportion of children and youth who encourage and support their friends and peers to be physically active) in future surveillance is worth considering given the importance of social support for physical activity among children and youth.

### School C+





At present, NZ does not have guidelines regarding the amount of physical education (PE) required,<sup>33</sup> but PE is compulsory for students in school years 1 through 10 (ages ~5-15 years). From school year 11 onwards PE is optional, and the proportion of children and youth enrolled in PE or Health & PE as subjects declines considerably by school year based on 2019 Ministry of Education data: Year 9-10 students (87.8%), Year 11 students (42.8%), Year 12 students (28.7%), and Year 13 students (20.9%).<sup>34</sup>

The school indicator grade was

based on the average (55.0%) of the proportion of students 'meaningfully' engaged (roughly defined as participation of at least 6 weeks) in school sport according to the 2019 NZ Secondary School Sports Census (51.0%),<sup>35</sup> and the proportion of children and youth who had been active in PE or class at school in the last seven days according to the Active NZ Young Peoples survey (59.0%).

**Gender.** A smaller proportion of children and youth identifying as another gender had been active

in PE or class at school in the last seven days compared to girls and boys (35.7% versus 58.8% for girls and 59.3% for boys).

Ethnicity. A higher proportion of children and youth of Pasifika (66.7%), Māori (64.0%), and MELAA (63.6%) ethnicities had been active in PE or class at school in the last seven days compared to children and youth of European (56.8%), Asian (55.6%), and 'Other' (22.2%) ethnic groups.

**Disability.** Activity in PE or class at school in the last seven days did not differ between disabled (58.6%) and non-disabled (59.0%) children and youth.

**Deprivation.** A higher proportion of children and youth residing in high socio-economic deprivation areas had been active in PE or class at school in the last seven days (64.2%) than those residing in areas with lower levels of deprivation (56.6% in low deprivation areas, and 58.1%% in mid deprivation areas).

**Urbanicity.** The proportion of children and youth who had been active in PE or class at school in the last seven days did not differ based on urbanicity (59.9% for rural areas, 59.0% for main urban areas, and 57.5% for secondary urban areas)

Age. The proportion of children and youth who had been active in PE or class at school in the last seven days was highest among those in school years 7-10 (67.5%), followed by those in school years 0-6 (63.9%), and there was a considerably smaller proportion of those in school years 11-13 (30.8%).



Annually \$2.55Billion of funding (2019/2020) was invested in active recreation and sport across sectors in NZ (local government, central government, participation, gambling, commercial, universities and philanthropy). The Local Government sector accounts for the largest expenditure, allocating 50% of the total funding. Where feasible most major local, district and regional councils across the country provided evidence on investments made in child and youth active recreation and sport (2018-2021).

A key agency and kaitiaki (guardian) of the Play, Active Recreation and Sport system in NZ is Sport NZ Ihi Aotearoa. Sport NZ is a crown agency with a vision "to get Every Body Active in Aotearoa New Zealand". Their leadership role, strategy and priority focus on children and youth is articulated in the Every Body Active 2020-2032 strategic direction,<sup>36</sup> 2020-2024 strategic plan, Te Pākē o Ihi Aotearoa (2021-2032 Māori Outcomes framework),<sup>37</sup> and Te Aho o Ihi Aotearoa (2021-2024 Māori Activation Plan).<sup>38</sup>

Sport NZ completes annual assessments and reports on the performance of its investment into the sector and funds independent evaluations of all major initiatives to inform continuation or cessation of funding, and reshaping of initiatives.<sup>39</sup>

Since the 2018 NZ Report Card, there is evidence of significant central and local government investment in physical activity and sport initiatives, with Sport NZ playing a key role. Therefore, the Government indicator is graded as A (a significant improvement since the last evaluation of B+).

While there seems to be a disconnect between the improvement of this indicator and the rest in this report card, time is needed for initiatives to demonstrate a populationwide effect.

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## Appendices

Appendix 1: Action for Healthy Kids Global Alliance Global Matrix and Aotearoa's indicators and benchmarking criteria used for the 2022 Physical Activity Report

Indicator	AHKGA Definition	AHKGA criteria	Antearoa Report Card Criteria
Overall physical activity	Any bodily movement produced by skeletal muscles that requires energy expenditure.	% of children and youth who meet the Global Recommendations on Physical Activity for Health, which recommend that children and youth accumulate at least 60min of moderate-to vigorous-intensity physical activity per day on average.	Proportion who participated in ≥420 min/week of MVPA
Organised sport and physical activity	A subset of physical activity that is structured, goal-oriented, competitive and contest-based.	least 4d a week (when an average cannot be estimated). % of children and youth who participate in organized sport and/or physical activity programs.	Proportion who had been active in competition or tournament, or training with a coach/instructor in the last 7 days (excluding participation at school)
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.	<ul> <li>% of children and youth who engage in unstructured/unorganized active play at any intensity for more than 2 h a day.</li> <li>% of children and youth who report being outdoors for more than 2 h a day.</li> </ul>	N/A
Active transportation	Active transportation refers to any form of human- powered transportation – walking, cycling, using a wheelchair, in-line skating or skateboarding.	% of children and youth who meet the Canadian Sedentary Behaviour Guidelines (5- to 17-y-olds: no more than 2 h of recreational screen time per day). Note: the Guidelines currently provide a time limit recommendation for screen- related pursuits, but not for nonscreen-related pursuits.	Proportion who used active transport (walking, biking) to get to and from school
Sedentary behaviours	Any waking behaviour characterized by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining or lying posture.	% of children and youth who meet the Canadian Sedentary Behaviour Guidelines (5- to 17-y-olds: no more than 2 h of recreational screen time per day). Note: the Guidelines currently provide a time limit recommendation for screen- related pursuits, but not for nonscreen-related pursuits.	Proportion of children who met threshold of having <2hrs/day of screen time (including watching television; watching movies; on a computer, cellphone, tablet, or PlayStation or Xbox) outside of school or work, on a normal weekday or normal weekend day.
Physical fitness	Characteristics that permit a good performance of a given physical task in a specified physical, social, and psychological environment	Average percentile achieved on certain physical fitness indicators based on the normative values published by Tomkinson et al.1	N/A
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.	<ul> <li>% 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).</li> <li>% of parents who meet the Global Recommendations on Physical Activity for Health, which recommend that adults accumulate at least 150 min of moderate-intensity aerobic physical activity throughout the week or do at least 75 min of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity physical activity.</li> </ul>	Proportion of household adults who meet aerobic and muscle- strengthening recommendations
School	Any policies, organizational factors (o.g.	% of family members (e.g., parents, guardians) who are physically active with their kids	A combination of the propertion
	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.	<ul> <li>education (PE), daily physical activity, recess, "everyone plays" approach, bike racks at school, traffic calming on school property, outdoor time).</li> <li>% of schools where the majority (≥80%) of students are taught by a PE specialist.</li> <li>% of schools where the majority (≥80%) of students are offered the mandated amount of PE (for the given state/territory/region/country.</li> <li>% of schools that offer physical activity opportunities (excluding PE) to the majority (&gt;80%) of their students.</li> <li>% of parents who report their children and youth have access to physical activity opportunities at school in addition to PE classes.</li> <li>% of schools with students who have regular access to facilities and equipment that support physical activity</li> </ul>	<ul> <li>Meaningfully engaged in secondary school sport meaningfully engaged in secondary school sport</li> <li>Who had been active in PE or class at school in the last seven days</li> </ul>

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		(e.g., gymnasium, outdoor playgrounds, sporting fields, multipurpose space for physical activity, equipment in good condition).	
Community and 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.	<ul> <li>% of children or parents who perceive their community/municipality is doing a good job at promoting physical activity (e.g., variety, location, cost, quality).</li> <li>% of communities/municipalities that report they have policies promoting physical activity.</li> </ul>	N/A
Government	Any governmental body with authority to influence physical activity opportunities or participation of children and youth through policy, legislation or regulation.	<ul> <li>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.</li> <li>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).</li> <li>HEPA PAT v2 and the scoring rubric published by Ward et al.2</li> </ul>	Synthesis of information drawn from central and local government on investment and evaluation
Physical literacy	The motivation, confidence, physical competence, knowledge, and understanding required by participants that allows them to value and take responsibility for engaging in physical activity and sport for life. <sup>16</sup>	N/A	Proportion of children who reported agreement (on average) to questions regarding: motivation, confidence, competence, understanding, value, and engagement
Sleep	Reported sleep duration	N/A	Proportion who met sleep recommendations – 9-11hrs/night for those aged 5-13 years, 8- 10hrs/ night for those aged 14-17 years

# Appendices

Appendix 2: Data sources used to generate grades

Source	Description	Indicator(s)
Sport New Zealand Ihi Aotearoa (Sport NZ) Active NZ Young People Survey - 2019 <sup>40</sup>	<ul> <li>Survey (households adults assist where necessary)</li> <li>~6000 young people</li> <li>January 2019 – March 2020</li> </ul>	<ul> <li>Overall physical activity</li> <li>Organised sport and physical activity</li> <li>Active transportation</li> <li>Sedentary behaviours</li> <li>Family and peers</li> <li>School</li> <li>Physical literacy</li> <li>Sleep</li> </ul>
The NZ Health Survey - 2019/2020 <sup>41</sup>	<ul> <li>Home interview</li> <li>~5000 children annually</li> <li>July 2019 - March 2020</li> </ul>	- Active transportation
New NZ Travel Survey - 2019/2020 <sup>42</sup>	<ul> <li>Home interview/travel diary/travel logs (GPS)</li> <li>~1900 households</li> </ul>	<ul> <li>Active transportation</li> </ul>
NZ Secondary School Sport Census <sup>35</sup>	<ul> <li>Reported by secondary school sports coordinators</li> </ul>	- School