

#### Thailand's 2018 Report Card on Physical Activity for Children and Youth







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#### SUMMARY OF THAILAND'S 2018 REPORT CARD

The Thailand's 2018 Report Card (The 2018 TRC) is the second report card that assesses the current level of physical activity among Thai children aged 6-17 years old, by taking into account the ten core indicators that were developed by the Active Healthy Kids Global Alliance. Similar to the previous report, the 2018 TRC also developed its grades based on the Global Matrix 3.0 (GM 3.0) to enable an international comparison. The grade assignment was under taken by the National Report Card Committee comprising experts from key stakeholders.

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Most of the indicators in the 2018 TRC employed the data from two nationally representative surveys: the 2016 Thailand Report Card Survey<sup>1</sup> and the 2015-2017 Thailand Physical Activity Surveillance.

The 2016 TRC was used for the baseline data while the Thailand Physical Activity Surveillance data were used to estimate the rate of change in Physical Activity (PA) and Sedentary Behavior (SB). Although the final score remains poor (D-), the percentage of children and youth accumulating at least 60 minutes of moderate to vigorous physical activity (MVPA) per day on average slightly increased from 23.2% in 2016 to 26.2% in 2018. The Active Play indicator had the lowest score (F), while the School's indicator improved from C to B. However, attention should be addressed to the Active Transportation indicator, where the proportion of children and youth who used active transportation decreased from 73.6% in 2016 (B) to 53.4% in 2018 (C). Sedentary behavior of Thai children and youth also deserve particular attention since only 25.6% met the Canadian Sedentary Behavior Guidelines of having less than two hours of recreational screen time per day.

Despite adequate support from the government and community, including schools and families, the proportion of Thai children and youth who engaged in a recommended level of PA (60 minutes per day) remains low. While a favorable grade was given to the School indicator (B), this should not be seen as a comprehensive achievement since it does not cover all aspects of PA promotion efforts.

The percentage of children and youth accumulating at least 60 minutes of moderate to vigorous physical activity (MVPA) per day on average slightly increased from 23.2% in 2016 to **26.2%** in **2018**.

In 2014, the Active Healthy Kids Global Alliance (AHKGA) initiated a global movement called *The Global Matrix Report Card (RC)* which enable countries to assess the current situation of PA among children and youth.

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#### WHAT IS THE 2018 TRC?

Non-communicable diseases are among the top ten causes of death of over 16 million people in the world.<sup>2,3</sup> The pandemic of physical inactivity has spurred the governments of many nations to issue a call to action<sup>4</sup> to prevent premature deaths of the younger population. In 2014, the Active Healthy Kids Global Alliance (AHKGA) initiated a global movement called The Global Matrix Report Card (RC) which enable countries to assess the current situation of PA among children and youth. The RC is a synthesis of the existing programs and policy addressing physical activity for children. It comprises a set of standard indicators to enable comparison between countries which is expected to stimulate policymakers to take action based on the grades received. The AHKGA itself is a growing community consisting of member countries and a network of researchers, health professionals and stakeholders who are working to advance PA in children and youth from around the world.



Global Matrix 1.0 was first released on May 20, 2014 at the 2014 Global Summit on the Physical Activity of Children in Toronto, Canada and involved 15 countries from five continents where 135 grades were submitted.

Global Matrix 2.0 was launched on November 16, 2016 at the International Society for Physical Activity and Health in Bangkok, Thailand. The number of participating countries increased to 38 countries from six continents, and 342 grades were successfully submitted for international comparison.

Global Matrix 3.0 will be released on November 27, 2018 at the Movement to Move event in Adelaide, Australia where 50 countries from six continents have demonstrated their commitment to joining the movement by submitting a total of 500 grades.









The 2018 TRC provides scientific evidence for policymakers and health professionals to observe the current level of PA among children, and the existing problems to be addressed. Since joining the global movement in 2014 and completing the 2016 TRC Thailand has achieved several signs of progress on PA for children and youth. The government has promoted PA through several policies nationwide after considering the severity of physical inactivity among young Thais. While diabetes mellitus and obesity among Thai adults tend have been on the rise since 2009<sup>5-7</sup>, Type 2 Diabetes Mellitus (T2DM) is now diagnosed more frequently among children and adolescents (than adults), with an increased trend of obesity from 5% in 1995 to 18% in 1999 and 23.4% in 2013.<sup>8,9</sup>

Using the 2016 TRC as a baseline, and the Thailand Physical Activity Surveillance data, the 2018 TRC provides scientific evidence for policymakers and health professionals to observe the current level of PA among children, and the existing problems to be addressed. Acknowledging the importance of multi-sector partnership, the authors developed the 2018 TRC by involving local and national strategic partners including scholars, professionals, and representatives from several ministries working toward healthy active living and child health in the grading assignment process. The authors certainly hope that the results of the 2018 TRC will be beneficial for the Thai government in developing the National Physical Activity Plan and also future policy addressing children's health.

# Benefits of Physical Activity in Children

The dose-response relationship observed in previous studies indicates that the more PA, the higher the health benefit. Studies have documented numerous health benefits of PA for children. The dose-response relationship observed in previous studies indicates that the more PA, the higher the health benefit. Several experimental studies suggest that engaging in a modest level of PA may benefit children and youth.<sup>10-12</sup> Individuals who did a daily average of 15 minutes of moderate-intensity exercise had significant health benefits when compared to individuals who were inactive.<sup>12</sup> Nevertheless, vigorous-intensity activities, such as aerobic-based activities that stress the cardiovascular and respiratory systems, have the greatest health benefit.

The benefits of regular PA on the health of youth comprise short-term fitness to long-term potential for reducing the incidence of chronic diseases that manifest in adulthood.<sup>11</sup> Children who exercised for an average of 92 minutes per week or 15 minutes a day had a 14% reduced risk of all-cause mortality and a three-year longer life expectancy.<sup>12</sup> Physically inactive children were 1.89 times more likely to have hypercholesterolemia and 1.03 times more likely to have low HDL cholesterol compared to moderately- and highly-fit children. PA also benefits the bones<sup>13,14</sup> and several components of mental health (self-concept, anxiety and depression).<sup>15</sup>

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#### DATA SOURCES

The 2018 TRC uses two nationally representative surveys and one secondary dataset as follows:

- 1) The Thailand's 2016 Report Card
- 2) Thailand Physical Activity Surveillance 2015-2017
- 3) Secondary data from the Office of the Education Commission and government policies

### METHODOLOGY

The indicators of the 2018 TRC were adopted from the Global Matrix

- 2.0 which includes
- 1) Overall Physical Activity
- 2) Organized Sports and Physical Activity
- 3) Active Play
- 4) Active Transportation
- 5) Sedentary Behavior
- 6) Family and Peers
- 7) School
- 8) Community and Environment
- 9) Government

The TRC includes an additional indicator :

10) Physical Fitness

Most of the indicators (1, 2, 4, 5, 6, and 8) in the 2018 TRC employed the data from two nationally representative surveys: the 2016 Thailand Report Card Survey and the 2015-2017 Thailand Physical Activity Surveillance. Thailand's 2016 Report Card was used for the baseline data while the Thailand Physical Activity Surveillance data were used to estimate the rate of change in PA and SB.

The authors employed a demographic technique (the forward survival method, in particular) to estimate the current PA level of children and youth. Firstly, the authors listed the level of PA from two different data sources (GPAQ 2016 and The 2016 TRC -- expressed in single age), and then calculated the difference in the rate of PA level as one component of estimation. Secondly, the authors followed people aged (x) years old in a single age and estimated their PA in the subsequent years (x+n) as a cohort. The authors identified the rate of change from baseline and the estimated PA, then the authors calculated the current level of PA by using the proportion of change for each age.

For the Active Play indicator, the Feelfit accelerometer was used to measure steps, calories, and the duration of MVPA. During one week (five consecutive days), teachers attached Feelfit to the students once they arrived at school (8.00 a.m.), and then removed the tool off when the students were about to go home (3.00 p.m.). Fifteen schools were involved in 2017 and 2018. For the School indicator, the authors collected information from the Office of Basic Education Commission of the Ministry of Education (MOE). Of 30,297 schools in Thailand, about 74% (22,208 schools) completed the report on the number of PA facilities and equipment. The authors summarized the data of schools which reported having PA and sports facilities during 2017-2018.

For the Family and Peers indicator, the data come from the Active School Project. The authors asked the children and parents several questions on parent, family member and peer support for PA such as "*How often do your parents play or exercise with you*?" And also "*How do your parents support you to actively exercise or play sports*?"

For the Government indicator, the authors listed the existing policies at the national level which cover leadership, commitment, funding, resources and initiative in PA promotion, including

- 1) Physical Activity Promotion for all ages and healthy space
- 2) Strategy of Physical Activity
- 3) Teach Less Learn More
- 4) Active Play initiative in school settings
- 5) Physical Activity guidelines for children, from the Ministry of Public Health (MOPH) and the Thai Health Promotion Foundation
- 6) National Sports Competition for students, hosted by the Department of Physical Education

- 7) Thailand National Youth Games, conducted by the Sports Authority of Thailand
- 8) Sports Competition for Students sponsored by local administrative organizations

The authors requested the committee to state the status and impacts of relevant policies in promoting PA for children and youth nationwide by considering the criteria of the following domains: leadership, commitment, funding, resoures and initiative in PA promotion, and excluded some policies that do not meet the criteria.

The committee itself is comprised of 13 bodies including the Thai Health Promotion Foundation, International Health Policy Program Foundation, Institute for Population and Social Research Mahidol University, Faculty of Engineering Mahidol University, Faculty of Medicine Ramathibodi Hospital Mahidol University, Kasetsart University, Department of Physical Education, Thai Jogging, Raipoong, The Royal College of Physicians of Thailand (RCPT), Healthy Kids, Healthy Food, Faculty of Architecture Chulalongkorn University, Thailand National Health Commission Office (NHCO) and the MOPH.

The authors then requested the committee to score the relevant policies, ranging from 0 to 5. Next, the scores were accumulated into a percentage and finally converted into a grade.

The committee was requested to state the status and impacts of relevant policies in promoting PA for children and youth nationwide by considering the criteria of the following domains: leadership, commitment, funding, resources and initiative

#### **Research Instruments**

Thailand Physical Activity Children Survey (TPACS) Thailand Physical Activity Surveillance 2015-2017 Feelfit accelerometer

#### **RESEARCH INSTRUMENTS**

The 2016 TRC was employed as the baseline data. The 2016 TRC itself obtained the data from "Thailand Physical Activity Children Survey (TPACS)" conducted in 2015. TPACS was a school-based survey which collected data from 16,788 children aged 6-17 years in 336 schools, and school principals in 27 provinces in nine regions and Bangkok.

Apart from the 2016 TRC, the current 2018 TRC also employed data from the Thailand Physical Activity Surveillance 2015-2017 to estimate the rate of change in PA. A total of 1,480 students were involved in 2015, comprised of 726 boys and 754 girls. In 2016, 715 boys and 689 girls made up the total of 1,404 students in that round. In 2017, 687 boys and 600 girls were involved in the surveillance. Generally, the TPAS used the General Physical Activity Questionnaire (GPAQ V.2) with additional questions on perceptions and attitudes toward PA (TPAS 2015), behavioral change on a healthy diet, mental health, blood pressure (TPAS 2016) and participation in running and cycling (TPAS 2017).

The Feelfit accelerometer was used to measure steps, calories, and the active duration for the Active Play indicator from the Active School Project. During five consecutive days, teachers attached Feelfit to the students once they arrived at school (8.00 a.m.), and removed the tool off when the students were about to go home (3.00 p.m.).

A school facility check list was employed to collect data from the Office of Basic Education Commission for the School indicator, while an Active School questionnaire was used to collect Family and Peer data.

A policy inventory was used for the Government indicator. The authors listed the existing policies at the national level which reflect leadership, commitment, funding, resources and initiative in PA promotion. The authors excluded some policies that did not meet the criteria of domains, and the authors requested the committee to score the status and impacts of relevant policies in promoting PA for children and youth nationwide.



## **DEVELOPMENT PROCESS**

March-April 2018 Literature review



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#### **GRADING SCHEME**

To enable comparison among countries, the 2018 TRC adopted the global agreement grading scheme. To assign a grade for each indicator, Thailand followed the benchmark and core indicators that have been established by the AHKGA. However, in order to refine the grades, 'minus' or 'plus' was added, indicating improvement (plus) or degradation (minus) from the previous RC.

A+ 94% - 100%

- A: The country is succeeding with a large majority of children and youth (87% 93%)
- A- 80% 86%
- B+ 74% 79%
- B: The country is succeeding with well over half of children and youth (67% 73%)
- B- 60% 66%
- C+ 54% 59%
- C: The country is succeeding with about half of children and youth (47% 53%)
- *C- 40% 46%*
- D+ 34% 39%
- D: The country is succeeding with less than half but some children and youth (27% 33%) D- 20% - 26%
- F: The country is succeeding with very few children and youth (< 20%)
- INC = Incomplete insufficient or inadequate information to assign a grade

#### How to assign a grade?

The Report Card team calculated the scores for each indicator by employing the best available data and analyzed the scores by using some relevant demographic techniques. Indicators were developed based on GM 3.0 benchmarks and grading guidelines. After the scores were obtained, the Report Card team invited the Report Card Committee to review the proposed grades for each indicator. The committee then assessed each indicator score and discussed the findings until a consensus grade was reached.

The indicators were classified into three main groups:

Behavioral indicator Setting and source of influence Government indicators

#### **CORE INDICATORS**

Ten core indicators were developed based on the international agreements in the Global Matrix 2.0 to allow country comparison. The indicators were classified into three main groups. Behavioral indicators contribute to Overall PA level, and are comprised of participation in Organized Sports and PA, Active Play, Active Transportation to school and Sedentary Behavior. Settings and sources of influence that enable children to perform PA include Family and Peers support, School, Community and Environment. The third group consists of the Government indicator which generally assesses the strategies and investment that reinforce the policies to support PA for children and youth.

		All age	Percentage by age group and sex									
Indicators		groups and sex	6-8		9-11		12-14		15-17		TOTAL	
	BOY		GIRL	BOY	GIRL	BOY	GIRL	BOY	GIRL	BOY	GIRL	
1	Overall Physical Activity	26.2	28.9	23.8	28.3	21.5	42.2	11.9	39.0	9.7	34.9	16.3
2	Organized Sports and	44.1	21.7	31.5	42.6	53.4	60.6	32.3	59.5	45.2	47.3	40.9
	Physical Activity			0.10				0				
3	Active Play	8.7	9.8	7.2	9.4	6.7	14.2	4.1	13.1	3.2	11.6	5.4
4	Active Transportation	53.4	38.0	37.5	52.2	61.0	78.9	62.2	36.2	55.5	52.4	54.7
5	Sedentary Behaviors	25.6	18.6	22.5	25.4	21.6	36.3	18.7	29.4	28.9	27.9	23.0
6	Family and Peers	71.0	59.9	64.4	70.4	67.6	72.4	77.6	73.8	70.5	70.0	70.3
7	School	70.1										
8	Community and Environment	64.2										
9	Government	74.4										
10	Physical Fitness	INC										





### **Overall Physical Activity**



Percentage of children and youth engaging in at least 60 minutes of moderate- to vigorous-intensity physical activity (MVPA) per day

Overall PA of Thai children and youth is considered low (D-). The 2018 TRC found that only 26.2% of Thai children and youth met the recommended level of 60 minutes of MVPA per day on average. A grade of D- indicates that the proportion of children and youth who met the recommended level of 60 minutes MVPA ranged between 20-26% of 6-17 years old. Although considered low, the proportion of Thai children and youth who had adequate PA slightly increased from 23.2% in 2016 to 26.2% in 2018.

The authors differentiated the proportion based on age group and gender to see how PA is practiced in each level of schooling: junior primary (6-8), senior primary (9-11), junior secondary (12-14) and senior secondary (15-17). This stratification takes into account the physical and physiological development of the children. Boys are generally more active compared to girls in all age groups (34.9% versus 16.3%, respectively). The proportion of boys with adequate level and intensity of PA is likely to increase with age and reach its peak at 12-14 years old before it slightly declines at age 15-17 years old. While for girls, PA is likely to decline with age, as shown by the higher proportion of girls aged 6-8 and 9-11 years old who met recommended level of MVPA.


### Overall physical activity of Thai children and youth by gender and age group



Figure 1 Overall physical activity level of Thai children and youth by gender and age group



The largest discrepancy between boys and girls can be observed in 12-14 and 15-17 age groups (see Figure 1), where *the proportion of boys* (42.2 and 39.0%, respectively) who are more physically active is distinctly higher compared to girls (11.9 and 9.7%, respectively).

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Figure 1 also shows that age-sex-specific PA is generally driven by biological differences between boys and girls, which relates to physical and psychological developmental stages at each age.

Among boys, physical development increases their level of PA. By contrast, among girls, psychological development reduces the level of PA because their inconvenient attire (skirts) restricts them to move more freely.

The proportion of boys who participated in organized sports and PA is slightly higher compared to girls



### Organized Sports and Physical Activity



Percentage of children and youth participating in an organized sports and/or physical activity program.

Almost half (44.1%) of Thai children and youth had participated in an organized sports and/or PA program. Although the proportion is slightly lower than in the previous TRC (46.6%), the interpretation of comparative results should be done with caution since a different measurement was used. Alternately, this could be the real portrayal of the Thai situation, wherein almost all schools in Thailand are focusing on excellence in academic performance and many organized sports programs have been postponed or cancelled.

Overall, the proportion of boys who participated in organized sports and PA is slightly higher compared to girls (47.3 versus 40.9%, respectively). In the 6-8 and 9-11 age groups the proportion of girls (31.5 and 53.4%, respectively) who participated in organized sports and PA was higher than for boys (21.7 and 42.6%, respectively). The largest discrepancy was found among the 12-14 age group, where the proportion of boys who participated in organized sports and PA was almost twice (60.6%) than girls (32.3%). The type of organized sports in Thailand may suit boys more than girls. Also, Thai girls, more than their male counterparts, do not want to become sweaty and dirty.

Only **8.7%** of Thai children and youth engaged in unstructured/unorganized active play at any intensity for more two hours a day.



### **Active Play**



Percentage of children and youth engaged in unstructured/ unorganized active play at any intensity for more than two hours a day

The Active Play indicator received the lowest grade (F) among the nine indicators. Overall, only 8.7% of Thai children and youth engaged in unstructured/unorganized active play at any intensity for more two hours a day. The previous TRC also found a low proportion (19.9%) of Thai children and youth aged 6-17 who engaged in active play during school time. Again, differences in the indicator and measurement between the 2016 TRC and the 2018 TRC suggest caution in interpreting the results. The 2016 TRC Active Play indicator was calculated based on the percentage of children who played actively, e.g., taking a walk or running around with friends in  $\geq$ 2 free time periods on school days, while the 2018 TRC estimated the percentage of children and youth engaged in unstructured/ unorganized active play at any intensity for more than two hours a day.



Similar to previous indicators, boys were more active than girls in all age groups. The proportion of boys who reported engaging in unstructured/unorganized active play was continuously higher compared to girls. The proportion of boys who engaged in active play gradually increased with age and reached a peak at 12-14 years before slightly declining in 15-17 years old. For girls, the proportion of active girls declined with age. The largest difference was found among the 12-14 and 15-17 age group, where the proportion of active boys (14.2 and 13.1%, respectively) was higher than girls (4.1 and 3.2%, respectively).

The proportion of girls who employed an active mode was lowest (**37.5%**) at the youngest age group (**6-8** years old) and increased in the older age groups.



### **Active Transportation**



Percentage of children and youth who used active transportation (walking, cycling, using a wheelchair, in-line skating or skateboarding) to get to and/ from places

About half (53.4%) of Thai children and youth used active modes of transportation (walking, cycling, using a wheelchair, in-line skating or skateboarding) to get to and from places. A grade of C was assigned for this indicator following the benchmark of Global Matrix 3.0 for countries in which about half of children and youth (47-53%) engaged in active transport. The current grade (C) is lower than the previous 2016 TRC (grade of B) as 73.6% of children and youth in that round reported taking active transport, e.g., walking, biking, and taking public transportation as their usual means to travel to and from school.

Unlike other indicators where boys are generally more active, more girls (54.7%) used active transportation modes than boys (52.4%). The proportion of girls who employed an active mode was lowest (37.5%) at the youngest age group (6-8 years old) and increased in the older age groups (61.0% in 9-11 and 62.2% in 12-14 age group) before it slightly declined to 55.5% in the 15-17 years old. Likewise, the proportion of boys who engaged in active modes of transportation was lowest (38.0%) at the youngest age group (6-8) and reached a peak among 12-14 years old (78.9%).

Only **25.6%** of Thai children and youth had less than two hours recreational screen time per day



### **Sedentary Behaviors**



Percentage of children and youth who met the Canadian Sedentary Behavior Guidelines (5 to 17 years old: no more than two hours of recreational screen time per day)

Overall, only 25.6% of Thai children and youth had less than two hours recreational screen time per day, which means a higher proportion of Thai youth engaged in more sedentary behavior. The finding in the latest report is slightly different from the previous one in which the percentage of Thai children and youth who had sedentary behavior (e.g., watched TV and played electronic games) was 21.8%.

Generally, *boys are less sedentary than girls.* The proportion of boys who met the Canadian Sedentary Behavior Guidelines of having less than two hours screen time per day was slightly higher (27.9%) than girls (23.0%). In all age groups, the percentage of boys who were less sedentary is constantly higher than girls. The proportion of boys who had less than two hours screen time per day was lowest (18.6%) among youngest boys (6-8) and highest at 12-14 years old (36.3%). On the contrary, the proportion of girls who had less than two hours screen time was lowest (18.7%) among the 12-14 age group. Family and peers, as a source of influence, played a role in enabling PA for Thai children and youth.

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### **Family and Peers**



Percentage family members (e.g., parents, guardians) who facilitated physical activity and sports opportunities for their children (e.g., volunteering, coaching, driving, paying for membership fees and equipment)

Unlike the behavior indicators that mostly obtained low grades (except active transport which was graded B), the settings and source of influence indicators show better achievement. Family and peers, as a source of influence, played a role in enabling PA for Thai children and youth. Fully 71.0% of family members (e.g., parents, guardians) facilitated PA and sports opportunities for their children (e.g., volunteering, coaching, driving, paying for membership fees and equipment). The previous 2016 TRC also graded this indicator as "B" as 71.4% of children reported that their parents and peers encouraged them to play sports and exercise.

The proportion of boys and girls who reported sufficient family support was highest at 12-14 years old and lowest at the youngest age group (6-8 years old). Although, generally, *boys in all age groups perceived a higher level of support,* the proportion of girls at 12-14 years old (77.6%) who acknowledged family and peer support is slightly higher than boys (72.4%).

About **70%** of schools have regular access to facilities and equipment that support physical activity



### School



Percentage of schools with students who have regular access to facilities and equipment that support physical activity (e.g., gymnasium, outdoor playgrounds, sports fields, multi-purpose space for physical activity, equipment in good condition)

To grade the School indicator, the authors collected information from the Office of Basic Education Commission. Of 30,297 schools in Thailand, about 73.3% (22,208 schools) completed the report on the number of PA facilities and equipment. Of those, 70.1% are considered 'supportive', marked by providing regular access to facilities and equipment that support PA (e.g., gymnasium, outdoor playgrounds, sports fields, multi-purpose space for PA, and equipment in good condition).

With the current figure, Thailand deserves a B grade, which would be an improvement from the previous report card assessment grade of C. It should be noted however, the indicators employed for grading are different between 2016 and 2018 TRC.



While the 2018 TRC used the percentage of schools with students who have regular access to facilities and equipment that support PA, the 2016 TRC relied an assessment based on several aspects: (1) percentage of schools having physicaleducation classes taught by specialist PE teacher(s), (2) percentage of schools with certain active school policies, (3) percentage of schools offering physical education class time  $\geq$ 150 minutes/week, (4) percentage of parents participating in extracurricular activities organized at school, (5) percentage of schools allowing students to use indoor/outdoor sports facilities and equipment before and after school, and (6) percentage of schools organizing extracurricular activities that provide students with opportunities to be physically active outside school hours (excluding formal physical education class).

**64.2%** of children or parents reported having facilities, programs, parks and playgrounds available to them in their community



### Community and Environment



Percentage of children or parents who reported having facilities, programs, parks and playgrounds available to them in their community

In terms of the community and environment, 64.2% of children or parents reported having facilities, programs, parks and playgrounds available to them in their community. The data come from the Thailand Physical Activity Surveillance 2015-2017, where parents and children were asked to respond to questions such as *"Do you have vigorous intensity physical activity in recreation?"* and continued with several more questions such as *"When did you start it?"* and *"Where do you normally do your physical activity?"* The responses included: fitness center, sub-district/ district/ provincial sports stadium, public park, working area, school/ temple/ government office area, house/ residential area, sidewalk, canal side, orchard/ farm/ field, bike lane, and some tourist places.

The policy makers believed the existing policies in PA have been implemented, as shown by leadership, commitment, funding, resources and relevant initiatives to promote PA for children and youth nationwide

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## Government



The policy makers believed the existing policies in PA have been implemented, as shown by leadership, commitment, funding, resources and relevant initiatives to promote PA for children and youth nationwide

Thailand has made a great effort in promoting PA for children and youth. Since 2014, several policies have been implemented to increase the PA level of Thais. Of the existing policies at the national level, those which provide leadership, commitment, funding, resources and initiative in PA promotion, include: 1) Physical Activity Promotion initiative for all ages and healthy space; 2) Strategy of Physical Activity; 3) Teach Less Learn More; 4) Active Play initiative in the school setting; 5) Physical Activity guidelines for children, from the MOPH and the Thai Health Promotion Foundation; 6) National Sports Competition for Students, hosted by the Department of Physical Education; 7) Thailand National Youth Games, conducted by the Sports Authority of Thailand; and 8) Sports competition for students sponsored by local administrative organizations.

The National Report Card Committee was requested to score each policy that met the criteria of domains and exclude the ones that did not. As a result, 74.4% of the policy makers believed that the existing policies in PA have been implemented to promote PA for children and youth nationwide.





Incomplete. The Physical Fitness indicator, cannot be measured since the data was were collected at the school level but had not yet been reported to the Office of Basic Education Commission at the Ministry of MOE at the time of this report.

## SUMMARY OF GRADES

### **Overall Physical Activity**



F

**26.2%** of children and youth accumulated at least 60 minutes of MVPA per dayon average.

### **Organized Sports and Physical Activity**

**44.1%** of children and youth participated in organized sports and/or a physical activity program.

### **Active Play**

**8.7%** of children and youth engaged in unstructured/unorganized active play at any intensity for more than two hours a day

### **Active Transportation**

**53.4%** of children and youth used active transportation (walking, cycling, using a wheelchair, in-line skating or skateboarding) to get to and from places

### **Sedentary Behaviours**

**25.6%** of children and youth met the Canadian Sedentary Behaviour Guidelines (5 to 17 years old: no more than two hours of recreational screen time per day)

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### Family and Peers

**71.0%** of family members (e.g., parents, guardians) facilitated physica activity and sports opportunities for their children (e.g., volunteering, coaching, driving and paying for membership fees and equipment)

### School



**70.1%** of schools provide regular access to facilities and equipment that support physical activity for their students (e.g., gymnasium, outdoor playgrounds, sports fields, multi-purpose space for physical activity, equipment in good condition).

### **Community and Environment**



**64.2%** of children or parents reported having facilities, programs, parks and playgrounds available to them in their community.

### Government

**74.4%** of the policy makers believed that the existing policies on physical activity had been implemented, as shown by their strong leadership, commitment, funding, resources and relevant initiatives to promote PA for children and youth nationwide.

### **Physical Fitness**

INC

Incomplete data.

### RECOMMENDATION

### Situation

The unavailability of standards for PA promotion for schools

### Policy recommendation

Promote unified PA by involving school teachers as educators and health promoters in order to improve PA and to reduce recreational screen time of children and youth

#### Benefit

Having teachers as the key agent of change, schools can create an active learning process with intense communication between students and teachers to enable effective knowledgetransfer

### Challenges

The number of skilled teachers who qualify for delivering physical education and health promotion messages may be limited. Training workshops for school teachers is needed to ensure the quantity and quality of PE specialists

### Scores for behavioral indicators mostly had the lowest grades

Future programs should emphasize quality of PA by providing more opportunity and space for children and youth to play during school time and recess PA could be integrated or incorporated into student's activities either at home or school by involving teachers, parents and the community The current Thai curriculadoes not encourage students to move during class, and that couldbe the most significant barrier to youth activity. However, any national change in the school curricula requires cooperation from the MOE, the MOPH and other institutions. In addition, it is not easy to gain parents' sustainable involvement

PA is declining among adolescents

Promoting collective PA where a olescents are encouraged to set their goals together Increase the self-efficacy of each individualas group influence willbe able to improve the intensity of PA by increasing collective efficacy A collective PA programcould be difficult to sustain. Creative team challenges and rewards could be designed to motivate the teammembers to maintain their regular PA and increase their PA intensitygradually



1. An important obstacle to promoting PA for Thai children and youth is theabsence of standards for PA promotion for schools. While organized PA already occurs in most schools, there are no guidelines to specify what level and intensity of activity best fits children's age and development. Therefore, *Thailand needs to promote unified PA by involving school teachers as educators and health promotors in order to improve PA and to reduce recreational screen time of children and youth.* By having teachers as the key agents of change, schools can create an active learning process with intense communication between students and teachers to enable effective knowledge transfer. The challenge for implementing such a policy is the inadequate number of teachers as physical education specialists or health promotors at schools. Thus, training workshops are necessary to ensure the quality and quantity of PE specialists.





2. The scores for the behavioral indicators were mostly at the lowest grades. Thus, future programs should emphasize quality of PA by providing more opportunity and space for children and youth to play during school time and recess. PA could be integrated or incorporated into students' activities either at home or school and. thus, require the cooperation between schools, parents and community in designing age-appropriate play activities to address children's and youth's need. It should be noted however, that the nature of the current Thai school curricula (which does not encourage students to move during class) could be the greatest barrier to more exercise. The reconstruction of the school curricula requires cooperation from many sectors such as the MOE, the MOPH and other institutions, and would take years to implement. In addition, it is not easy to gain the parents' sustainable involvement at home. This report found that girls had lower PA in most age groups than their male counterparts. Thus, it may be appropriate to re-evaluate the girls' daily school uniform and allow them to wear more comfortable attire to enable movement for play and PA.





3. To address PA decline among adolescents, *promoting collective PA is deemed necessary.* With regard to adolescents' dependency on their peers, collective PA can serve as social support where adolescents are encouraged to set their goals together. Collective PA will also increase the self-efficacy of each individual as the group influence will be able to improve the intensity of PA by increasing collective efficacy. A collective PA program might be difficult to sustain as a regular routine. Creative team challenges and rewards could be designed to motivate the team members to maintain their regular PA and gradually increase their PA intensity.

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