### The Global Matrix 3.0 Toolkit

The Global Matrix was led by the Active Healthy Kids Global Alliance (AHKGA; <u>www.activehealthykids.org</u>), a not-for-profit organization dedicated to powering the movement to get kids moving. This network is comprised of researchers, health professionals and stakeholders who are working together to advance physical activity in children and youth from around the world.

Each country's research process to determine grades was based on the Canadian framework from the <u>ParticipACTION Report Card on Physical Activity for Children and Youth</u>. Ten common indicators were compared: Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviours, Physical Fitness, Family and Peers, School, Community and Environment, and Government. Report Cards from each of the 49 countries, as well as the results of the global comparisons, were presented at the opening plenary of the <u>Movement to Move</u> <u>Conference</u> in Adelaide, Australia and published in the <u>Journal of Physical Activity and Health</u> on November 27, 2018.

This package is to help you share the report and its findings with your colleagues and networks.

#### This package includes the following:

- Social media guidelines and suggested posts
- Sample article you can use to promote this report via your website and/or e-newsletter
- Questions and answers
- Infographics Canadian and Global
- Canadian Press Release

As a stakeholder committed to supporting the physical activity of children and youth, we encourage you to share this information with your networks. Together we can make a difference – please share, disseminate and promote this material the best you can!

#### For more information contact:

Dr. Leigh Vanderloo Knowledge Translation Manager Ivanderloo@participACTION.com



#### SOCIAL MEDIA CONTENT

#### Suggested Tags and Links

Use @ParticipACTION and link to <u>https://www.participaction.com/en-ca/resources/global-matrix</u> to share the report. We will also post blog entries about the Global Matrix 3.0 at <u>participACTION.com/en-ca/blog</u>. We encourage you to share them with your networks.

Please use the following hashtag with all your communications: **#globalmatrix** 

#### Announcing the release of the Global Matrix 3.0

- Breaking! Active Healthy Kids Global Alliance releases the Global Matrix 3.0 a global comparison of children's physical activity levels from across the globe: <u>https://www.participaction.com/en-ca/resources/global-matrix</u>
- Breaking! Increasing modernization, urbanization, and screen-viewing is negatively affecting children's activity levels around the world. Check out the findings from the Global Matrix 3.0 at <a href="https://www.participaction.com/en-ca/resources/global-matrix">https://www.participaction.com/en-ca/resources/global-matrix</a>
- According to the ParticipACTION Report Card, Canadian kids receive a D+ for overall physical activity levels. We still have a long way to go! Find out more: <u>https://www.participaction.com/en-ca/resources/global-matrix</u>
- New international data show that screen-viewing is reaching crisis levels and is putting the world's children at-risk for multiple negative health issues – this includes Canadian kids. Learn more: <u>https://www.participaction.com/en-ca/resources/global-matrix</u>

#### Announcing the Publication of Supporting Material

- Steeped in evidence, supporting documents from the Global Matrix 3.0 are now live at the @JPAH. journals.humankinetics.com/toc/jpah/15/s2
- Want a closer look at how children in multiple Asian countries are faring in terms of physical activity and sedentary behaviours? Check out the recent Report Card publications at <a href="https://www.journals.elsevier.com/journal-of-exercise-science-and-fitness">www.journals.elsevier.com/journal-of-exercise-science-and-fitness</a>

#### **NEWSLETTER/WEBSITE ARTICLE**

The following copy can be used/adapted for additional communication channels.

On November 26, the Active Healthy Kids Global Alliance released the Global Matrix 3.0 – the most comprehensive comparison of child and youth physical activity across the globe.

This year marks the third iteration of this robust global comparison. The Global Matrix 3.0 compares 49 countries from six continents to assess global trends in childhood physical activity



in developed and developing nations. ParticipACTION is once again thrilled to contribute to this global initiative by providing Canadian-specific data.

Want to know how Canada stacks up to the rest of the world? Please visit <u>https://www.participaction.com/en-ca/resources/global-matrix</u> to view the full global comparison of all 49 nations, including the individual reports cards of each participating country.

#### **CANADIAN PRESS RELEASE**

Canada earns low ranking in new global childhood physical activity report; screen time and reliance on technology identified as major culprits

## Report urges recognition of childhood physical activity as a global health priority; inactivity levels reach crisis proportions worldwide

**NOVEMBER 26, 2018 - TORONTO** – Childhood physical inactivity has reached crisis levels with many children around the world – including in Canada – not moving enough to maintain healthy growth and development, according to a global report released today. Compared to 48 other countries, Canada lags behind on grades that measure Overall Physical Activity (D+), Sedentary Behaviour (D+) and the newest indicator, Physical Fitness (D).

The report was developed by the Active Healthy Kids Global Alliance (AHKGA) to assess global trends in childhood physical activity and formed what is known as the Global Matrix. For Canada, it included data from the <u>ParticipACTION Report Card on Physical Activity for Children and Youth</u>.

"The results are alarming: on average, kids are still sitting too much and moving too little to reach their full potential," said Dr. Leigh Vanderloo, exercise scientist at ParticipACTION. "The world is facing a global childhood inactivity epidemic, and it will take multiple groups working together from across all of society to shift behaviours and get children moving. That is why a global analysis such as this is so beneficial – it helps us see the trends and learn from each other."

The report shows that modern lifestyles, including increases in screen time, the urbanization of communities and the increasing automation of previously manual tasks, are contributing to this pervasive public health problem that must be recognized as a priority in Canada and around the world. In Canada, for instance, only 35 percent of 5- to 17-year-olds are getting the recommended 60 minutes of heart-pumping physical activity, while 51 percent engage in more recreational screen time than is recommended by the <u>Canadian 24-Hour Movement Guidelines</u>.

"We all have a collective responsibility to address these cultural and social norms – particularly screen time – because inactive children are at risk for adverse physical,



mental, social and cognitive health problems," said Dr. Mark Tremblay, President of the AHKGA and senior scientist at the CHEO Research Institute in Ottawa. "This generation will face a range of challenges, including the impacts of climate change, increasing globalization, and the consequences of rapid technological change. They will need to be purposely physically active in order to grow into healthy, resilient adults who can survive and thrive in a changing world."

The report found that countries with the most active children and youth, including Slovenia and Japan, each rely on very different approaches to get kids moving but what is consistent among all of them is that physical activity is driven by pervasive cultural and social norms. Being active is not just a choice, but a way of life.

Slovenia, for instance, which obtained the best grades for Overall Physical Activity (A–), Family and Peers (B+), and Government (A), places an importance on sport, viewing it as an effective tool in fostering national identity. It also has a national school-based surveillance system in place to measure physical fitness of children 6–19 years old. These measures have increased youth physical activity levels to 80 percent.

Japan, which had the best grades for Active Transportation (A–) and Physical Fitness (A), and no grades lower than C–, has a highly established walking-to-school policy which has been successful at promoting active transportation among children and youth.

Based on this report, Canadian researchers are calling for awareness, advocacy, and the creation of supportive physical and social environments which collectively can help shift the norm and make physical activity a part of every Canadian child's life. Priorities include:

- Creating a culture of active transportation through urban and school travel planning, as well as campaigns to encourage kids to walk, bike or wheel to school;
- Using social marketing across multiple sectors to help build a solid understanding of the negative effects of screen time, along with ways to help manage it;
- Working to build awareness, understanding and adherence to the Canadian 24-Hour Movement Guidelines across the entire child population, including low-income families, Indigenous populations and children with disabilities.

An interactive map with country grades is available at: <u>https://www.participaction.com/en-</u> <u>ca/resources/global-matrix</u>.

#### About the Global Comparisons

The global comparisons were led by the Active Healthy Kids Global Alliance (AHKGA; <u>www.activehealthykids.org</u>), a not-for-profit organization dedicated to powering the movement to get kids moving. Each country's research process to determine grades was based on the framework from the ParticipACTION Report Card on Physical Activity for Children and Youth. Ten common indicators were compared: Overall Physical Activity, Organized Sport and Physical



Activity, Active Play, Active Transportation, Sedentary Behaviours, Physical Fitness, Family and Peers, School, Community and Environment, and Government. Report Cards from each of the 49 countries, as well as the results of the global comparisons, were presented at the opening plenary of the <u>Movement to Move Conference</u> in Adelaide, Australia and published in the <u>Journal of Physical Activity and Health</u>.

#### **About ParticipACTION**

ParticipACTION is a national non-profit organization that helps Canadians sit less and move more. Originally established in 1971, ParticipACTION works with its partners, which include sport, physical activity, recreation organizations, government and corporate sponsors, to make physical activity a vital part of everyday life. ParticipACTION is generously supported by the Government of Canada. For more information, please visit <u>participACTION.com</u>.

#### For more information, please contact:

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#### **QUESTIONS & ANSWERS**

#### 1. Why do we need a Global Matrix on Physical Activity for Children and Youth?

While previous research has shown that the world is facing a childhood physical inactivity crisis, this initiative brings more information to have a better idea of the reality of the situation at national levels for 49 countries. For each participating country, teams of researchers put together the best available evidence concerning 10 physical activity related indicators (Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviors, Physical Fitness, Family and Peers, School, Community and Environment, Government) in a Report Card and assigned each indicator a grade (from A+ to F) following a standardized grading scheme. This compilation of grades and information allowed for the characterization of the context of the physical activity of children and youth within each country, allowing for comparisons across countries. The comparisons highlight common global challenges and areas of concern; who is leading and who is lagging for each indicator; and identifies successful strategies to promote physical activity.



## 2. My country got a D- for Physical activity, what does it mean? And what does a grade of B mean?

The grades were assigned according to the standardized grading scheme below.

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

#### 3. Why does the Global Matrix focus only on these 10 indicators?

The Report Cards for the Global Matrix 3.0 were developed under the guidance of the Active Healthy Kids Global Alliance (AHKGA) and based on the framework from the Canadian ParticipACTION Report Card on Physical Activity for Children and Youth. The 10 indicators used were agreed upon after the release of the Global Matrix 2.0 in Bangkok, Thailand, by the 38 countries that participated in the Report Card development process. The specific benchmarks and grading scheme used for the Global Matrix 3.0 were agreed upon by the Global Matrix 3.0 country Report Card leaders.

#### 4. Why does the Global Matrix only focus on 5-17 year-olds?

The AHKGA decided to only focus on the 5-17 year-olds (school-age children) for consistency because there were no data available on 0-4.9 year-olds in most countries. The AHKGA is currently involved in another physical activity surveillance research project that aims to collect physical activity data internationally on 0-4.9 year-olds in the future. Please contact Dr. Mark Tremblay (mtremblay@cheo.on.ca) if you want to be involved.

#### 5. As a concerned parent or citizen, what can I do about these physical activity grades?

In order to be successful, we need to create a social climate where making the active choice is the default. As a citizen, you can contribute to this achievement by



embracing and promoting an active lifestyle, being a role model for your peers, and welcoming and supporting the development of initiatives designed to improve physical activity for ALL in your community. We also propose several specific recommendations you can do as a parent in various settings to ensure that your children are active enough and learn the importance of physical activity and healthy living.

#### 6. Why is my country not in the Global Matrix?

For each participating country, a local physical activity expert contacted the AHKGA to express their willingness to register their country to the Global Matrix. Then instructions and guidance were provided by AHKGA on how to register their country, how to create a Report Card development team, and what steps to follow.

If you are local physical activity expert interested to work on the development of a Report Card for your country, contact Salomé Aubert (<u>saubert@cheo.on.ca</u>) and Joel Barnes (<u>jbarnes@cheo.on.ca</u>) to express your interest in participating in the Global Matrix 4.0. Be aware that this is a 2-year commitment and requires financial resources.

If you are not an expert but want to support/sponsor the development of a Report Card for your country, contact Salomé Aubert (<u>saubert@cheo.on.ca</u>) and Joel Barnes (<u>jbarnes@cheo.on.ca</u>).

#### 7. How can I support this Global Matrix initiative?

Developing the Report Cards and the Global Matrix has a cost. There is a possibility of sponsorship or you can also support the development of a specific Report Card in a low- or medium-income country. Please contact Salomé Aubert (<u>saubert@cheo.on.ca</u>) and Joel Barnes (<u>jbarnes@cheo.on.ca</u>) if you are interested.

You can support this project by disseminating and promoting its findings on social media or through other means – however you can! Posts and event live feeds will be posted on the ParticipACTION and AHKGA website (<u>www.activehealthykids.org</u>) and are available for sharing. You can also follow ParticipACTION (@ParticipACTION) and AHKGA (@ActiveHealthykids.org) on Twitter.

## 8. Where can I find more information about the Global Matrix initiative, the grades of my countries, or more specific information?

Visit the ParticipACTION website (<u>https://www.participaction.com/en-ca/resources/global-matrix</u>) to find the grades for each country. You can also consult the AHKGA website (<u>www.activehealthykids.org</u>) for additional Report Card documents, scientific articles, an interactive map and information on the Report Card development teams. If you still have questions, contact Salomé Aubert (<u>saubert@cheo.on.ca</u>) and Joel Barnes (<u>jbarnes@cheo.on.ca</u>).



# **GLOBAL MATRIX 3.0** ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH HOW CANADA STACKS UP?



# What are the grades of Canada in comparison with the global average?



**Overall Physical Activity (global average is D):** On average, 35% of 5- to 17-year-olds accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity per day.



**Organized Sport and Physical Activity (global average is C):** 77% of 5- to 19-year-olds participate in organized physical activity or sport.



Active Play (global average is D+): 20% of 5- to 11-year-olds spend several hours a day (> 2 hours) in unorganized physical activity; 37% of 11- to 15-year-olds report playing outdoors for several hours a day (> 2 hours) outside of school hours.



Active Transportation (global average is C): 21% of 5- to 19-year-olds typically use active modes of transportation, 63% use inactive modes and 16% use a combination of active and inactive modes of transportation to travel to and from school.



Sedentary Behaviours (global average is D+): On average, 64% of 5- to 9-year-olds meet the screen time recommendation ( $\leq$  2 hours of recreational screen time per day); 8% of 10- to 17-year-olds and 22% of 12- to 17-year-olds meet the screen time recommendation, respectively.



**Physical Fitness (global average is C):** On average, 9- to 12-year-olds are among the lowest 30% for cardiorespiratory fitness (shuttle run in 20-metre laps) based on age- and sex-specific international normative data.



**Family and Peers (global average is D+):** 92% of students in grades 9 to 12 in Alberta, British Columbia, Nunavut, Ontario and Quebec report having parents/guardians who support them in being physically active; 36% of parents with 5- to 17-year-olds report playing active games with them.



**School (global average is C):** 46% of school administrators report having a fully implemented policy to provide mandated Daily Physical Activity to all students; 71% to 91% of school administrators report several physical activity amenities available on-site at school.



**Community and Environment (global average is C):** Among municipalities with at least 1,000 residents, most report the presence of facilities that support community physical activity and sport; however, approximately half of these municipalities report important infrastructure needs.



**Government (global average is C):** There are observable efforts from the federal government to increase physical activity support, but there is little evidence that this support will impact physical activity levels directly.

In summary, Canada is above the global average in physical activity infrastructure and program grades but the majority of Canadian children and youth are not active enough, spend too much time in front of screens, and have a low level of physical fitness.



## What can we do to improve the situation?

## Canadian physical activity experts identified **three priorities**:

1. Create a **culture of active transportation** in all settings through national and local campaigns, mandatory school travel planning by all schools, and urban planning.

2. Invest in a multi-level, multi-sectoral social marketing campaign and research agenda to elevate understanding, implementation and uptake strategies to **manage recreational screen time**.

3. Invest resources and energy to **facilitate awareness**, **understanding and adherence to the 24-hour guidelines** across the entire population with attentiveness to **marginalized subgroups** (e.g. low-income families, Indigenous populations, children with disabilities).





## WHAT IS THE GLOBAL MATRIX 3.0 ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH?



## Context

Children are too sedentary, not active enough, and it's showing through their levels of physical fitness.

Inactive children are more at risk for adverse physical, mental, social and cognitive health problems



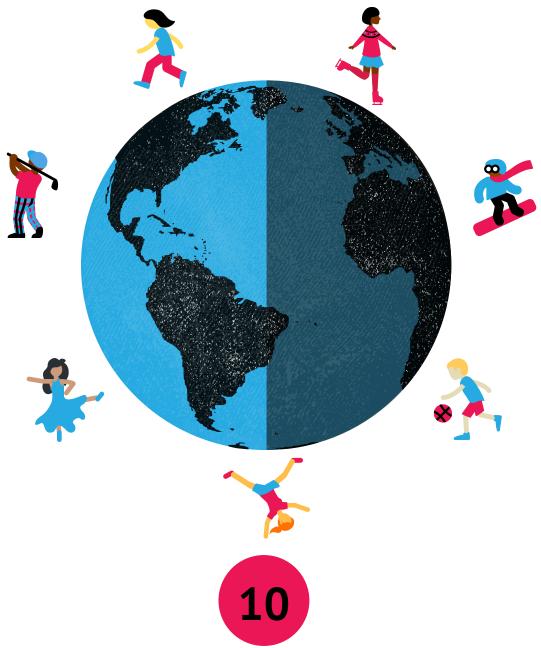
### Purpose

To learn more about the state of the physical activity of children around the world and how to improve it.

## How?

For each participating country, a team of experts prepared a **Report Card on Physical Activity for Children and Youth** following a standardized development process to grade (from A+ to E) a variety of physical activity indicators. This initiative

A+ to F) a variety of physical activity indicators. This initiative allowed researchers to perform **global comparisons**.



## **Common Physical Activity Indicators**

Overall Physical Activity Organized Sport and Physical Activity Active Play Active Transportation Sedentary Behaviors Physical Fitness Family and Peers School Community and Environment Government



Experts around the world



Participating countries from 6 continents



Physical Activity Grades



# **GLOBAL MATRIX 3.0** ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH GLOBAL FINDINGS



What do the Global Comparisons show?

Low levels of Physical Activity and high levels of Sedentary Behaviours are observed worldwide among children and youth.

- The average grade for Physical Activity is D, and the majority (75%) of countries have a failing grade (D or F)
- The average grade for Sedentary Behaviours is D+

# Some countries are more successful at getting kids moving. What can we learn from them?



**Slovenia** obtained the best grades for Overall Physical Activity (A–), Family and Peers (B+), and Government (A), for an overall average of B. This seems to be the result of the collective support for physical activity from the government, the educational system, and the parents themselves.



In **Zimbabwe**, the grades were above average for Overall Physical Activity (C+) and Sedentary Behaviours (B). The physical activity of Zimbabwean children is mostly affected by Active Transportation, which, for the majority, is a necessary way of life.



Japan obtained the best grades for Active Transportation (A-) and Physical Fitness (A). Japan has an enforcement order stating that public schools should be located no more than 4-6 km from the student's home. This policy is very successful at promoting active transportation among children and youth.



## What can we do to improve the situation?



Physical activity experts around the world identified **four priorities**:



1. Creating a global movement for comprehensive school physical activity programs that supports ALL children and youth to be active through a variety of strategic interventions (e.g., active recess options, physical activity breaks, compulsory physical education).

2. Creating a global culture of active kids / active people in all settings prioritizing active transportation above other modes of transportation.

3. Investing in a social intervention and research agenda to improve strategies to manage recreational screen time among children and youth.

4. Developing a standardized global surveillance system of the physical activity and related indicators among children and youth to fill the current gaps, especially in low- and medium-income countries.

