

Canadian kids need to move more to boost their brain health

2018

The ParticipACTION Report Card on Physical Activity for Children and Youth

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GRADE

D+

Overall Physical Activity



Canadian kids aren't active enough.

- 35% of 5- to 17-year-olds meet the physical activity recommendation within the Canadian 24-Hour Movement Guidelines for Children and Youth (2014-15 CHMS, Statistics Canada).^{Custom analysis}
- 62% of 3- to 4-year-olds meet the physical activity recommendation within the Canadian 24-Hour Movement Guidelines for the Early Years (2009-11, 2012-13 and 2014-15 CHMS, Statistics Canada).⁸⁷

Daily Behaviours

D Active Play & Leisure Activities

- 20% of 5- to 17-year-olds in Canada spend several hours a day (≥ 2 hours) in unorganized physical activity, according to their parents (2014-15 CHMS, Statistics Canada).^{Custom analysis}
- 37% of 11- to 15-year-olds in Canada report playing outdoors for several hours a day (≥ 2 hours) outside of school hours (2013-14 HBSC, WHO/PHAC).^{Custom analysis}

D- Active Transportation

- Based on parent- and self-report data on 5- to 19-year-olds in Canada, 21% typically use active modes of transportation (e.g., walk, bike), 63% use inactive modes (e.g., car, bus) and 16% use a combination of active and inactive modes of transportation to travel to and from school (2014-16 CANPLAY, CFLRI).¹⁰⁸

B Organized Sport Participation

- According to parents, 77% of 5- to 19-year-olds participate in organized physical activity or sport (2014-16 CANPLAY, CFLRI).¹⁰⁸
- According to parents, 46% of 3- to 4-year-olds spend time in physical activity through participation in organized lessons, or league or team sports (2012-13 and 2014-15 CHMS, Statistics Canada).^{Custom analysis}

C- Physical Education

- According to school administrators who reported on physical education time, 33% of grade K-8 students in Canada are getting at least 150 minutes of physical education (PE) per week (2015 OPASS, CFLRI).^{Custom analysis}
- 72% of high school students in Canada are taking PE, according to school administrators (2015 OPASS, CFLRI).^{Custom analysis}
- 61% of students in grades 9 to 12 in Alberta, British Columbia, Nunavut, Ontario and Quebec are taking a PE class in the current school year (2016-17 COMPASS, University of Waterloo).^{Custom analysis}

D Sedentary Behaviours

- The proportion of children and youth in Canada meeting the screen time recommendation within the Canadian 24-Hour Movement Guidelines for Children and Youth varies considerably (0-54%) by dataset and age group.
- 24% of 3- to 4-year-olds in Canada meet the screen time recommendation within the Canadian 24-Hour Movement Guidelines for the Early Years (2009-11, 2012-13 and 2014-15 CHMS, Statistics Canada).⁸⁷

B+ Sleep

- Approximately three quarters of 5- to 17-year-olds in Canada meet the sleep recommendation within the Canadian 24-Hour Movement Guidelines for Children and Youth (2014-15 CHMS, Statistics Canada).⁸⁷
- 84% of 3- to 4-year-olds in Canada meet the sleep recommendation within the Canadian 24-Hour Movement Guidelines for the Early Years (2009-11, 2012-13, 2014-15 CHMS, Statistics Canada).⁸⁷

F 24-Hour Movement Behaviours

- 15% of children and youth in Canada meet all three recommendations within the Canadian 24-Hour Movement Guidelines for Children and Youth (2014-15 CHMS, Statistics Canada).^{Custom analysis}
- 13% of 3- to 4-year-olds in Canada meet all three recommendations of the Canadian 24-Hour Movement Guidelines for the Early Years (2009-15 CHMS, Statistics Canada).⁸⁷

Individual Characteristics

D+ Physical Literacy

- 36% of 8- to 12-year-olds in Canada assessed by the Canadian Assessment of Physical Literacy (CAPL) meet or exceed the minimum level recommended for physical literacy (2014-17 CAPL, HALO).²⁸⁷

D Physical Fitness

- 9- to 12-year-olds in Canada are at the 28th percentile, on average, for cardiorespiratory fitness based on age- and sex-specific international normative data.²⁸⁸ (2014-17 CAPL, HALO).^{Custom analysis}

Settings & Sources of Influence

C+ Family & Peers

- 92% of students in grades 9 to 12 in Alberta, British Columbia, Nunavut, Ontario and Quebec report having parents/step-parents/guardians who support them in being physically active (2016-17 COMPASS, University of Waterloo).^{Custom analysis}
- 36% of parents in Canada with 5- to 17-year-olds report typically playing active games with their kids (based on a subsample of the 2014-15 PAM, CFLRI).^{Custom analysis}

B- School

- 74% of school administrators in Canada report that they use a PE specialist to teach PE in their school (2015 OPASS, CFLRI).⁸⁸
- 48% of school administrators in Canada report having a fully implemented policy to provide daily physical education to all students (2015 OPASS, CFLRI).⁸⁸

B+ Community & Environment

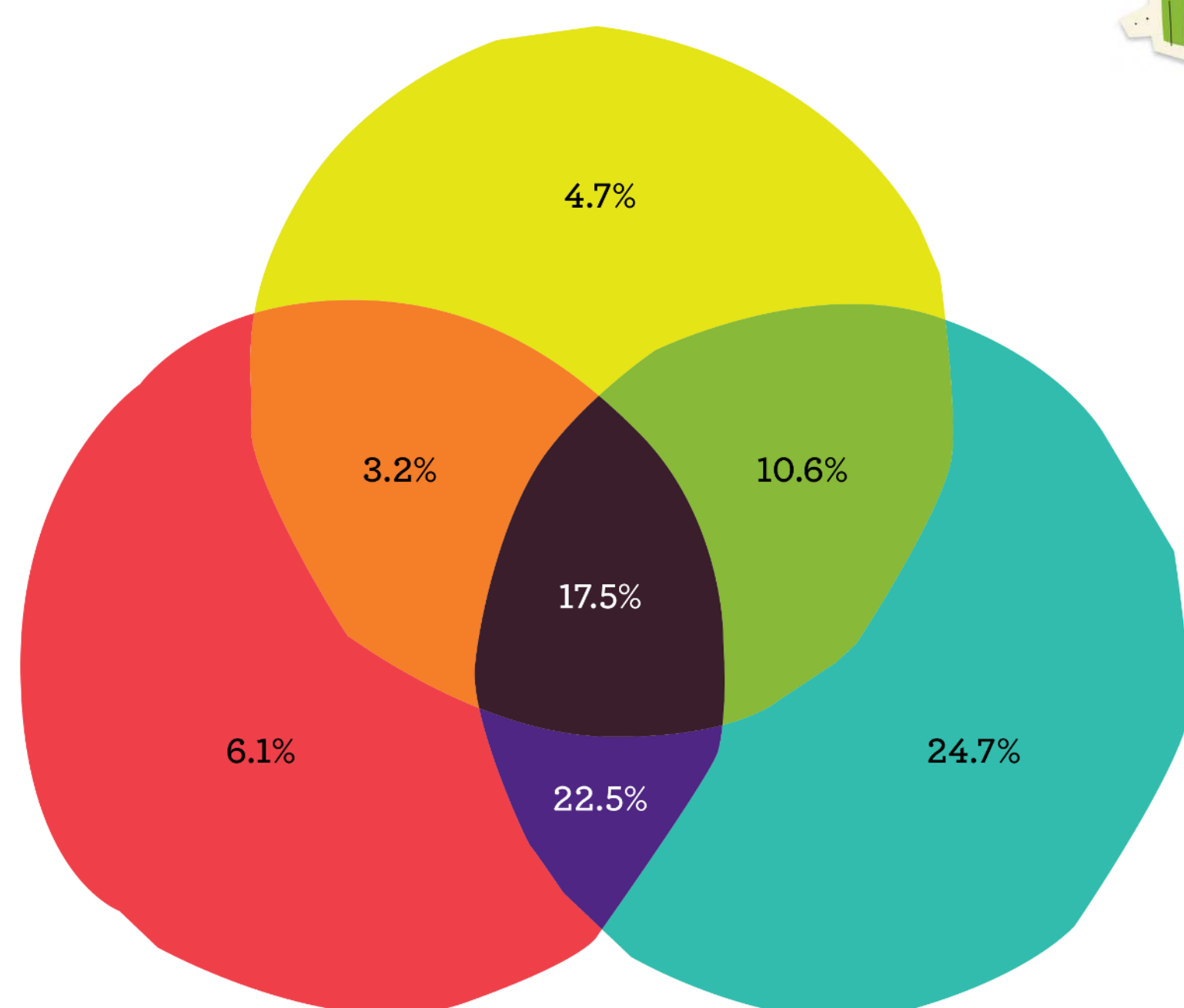
- Among municipalities with at least 1,000 residents, 35% have formal strategies for physical activity and sport opportunities (2015 SPAOCC, CFLRI).⁸⁹
- Less than 20% of parents report that crime, traffic or poorly maintained sidewalks are an issue in their neighbourhood (based on a subsample of the 2014-15 PAM, CFLRI).^{Custom analysis}

Strategies & Investments

C+ Government

- The 2018 federal budget highlighted the government's commitment to improving the country's physical activity levels by pledging to invest \$5 million per year for five consecutive years (totaling \$25 million) to ParticipACTION.¹⁰⁹
- The federal budget also announced \$30 million over three years to support data, research and innovative practices to promote women's and girls' participation in sport. An additional \$47.5 million over five years, and \$9.5 million per year ongoing, was allocated to Indigenous sport.²⁸⁹

Physical Activity (36.0%)



Screen Time (49.3%) Sleep Duration (75.3%)
(10.7% met none of the guidelines)

Figure. Venn diagram illustrating the proportion of 5- to 17-year-olds in Canada meeting various combinations of recommendations within the Canadian 24-Hour Movement Behaviour Guidelines for Children and Youth (source: Roberts et al, 2017⁶⁴).

The Science Is In KIDS + STEPS + SWEAT = HEALTHIER BRAINS

Kids need to drop the phones, turn away from the screens, get off the couch and break a sweat. It's time for them to get moving more – for the sake of their brains.

For decades we've known that physical activity improves heart health, helps maintain healthy body weights and builds strong bones and muscles in kids across a range of skills and abilities.^{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25} Now we are taking a closer look at what physical activity does for one of their most vital and complex organs: the brain.

The data around physical activity are alarming: on average, kids are still sitting too much and moving too little to reach their full potential.

Only 35% of 5- to 17- year-olds are reaching their recommended physical activity levels as outlined in the Canadian 24-Hour Movement Guidelines for Children and Youth. Just 62% of 3- to 4-year-olds are achieving the recommended activity levels for their age group. In addition, 51% of 5- to 17-year-olds and 76% of 3- to 4-year-olds are engaging in more screen time than is recommended by the Canadian 24-Hour Movement Guidelines for recreational screen-based sedentary behaviours.

Why does this matter? It's all about the brain + body equation.

There are important connections between the health of the body and of the brain, connections that must be fostered in order for kids to reach their mental, emotional and intellectual potential. Kids' bodies have to move to get the wheels in their brains turning. They need to be active. Their brain health depends on it. A growing body of evidence indicates that physical activity in childhood is essential for a healthy brain and leads to improved:

- thinking and learning
- emotional regulation and self-control
- problem-solving ability
- memory
- brain plasticity – the growth of new brain tissue
- stress management
- ability to cope with anxiety and depressive symptoms
- self-esteem and self-worth
- attention and focus

+ Adding more physical activity to kids' routines could be the missing part of the equation to support their success in the classroom, on the field, and with their friends.