

Healthy active living: Physical activity guidelines for children and adolescents

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Abstract

The epidemic of childhood obesity is rising globally. Although the risk factors for obesity are multifactorial, many are related to lifestyle and may be amenable to intervention. These factors include sedentary time and non-exercise activity thermogenesis, as well as the frequency, intensity, amounts and types of physical activity. Front-line health care practitioners are ideally suited to monitor children, adolescents and their families' physical activity levels, to evaluate lifestyle choices and to offer appropriate counselling. This statement presents guidelines for reducing sedentary time and for increasing the level of physical activity in the paediatric population. Developmentally appropriate physical activity recommendations for infants, toddlers, preschoolers, children and adolescents are provided. Advocacy strategies for promoting healthy active living at the local, municipal, provincial/territorial and federal levels are included.

Key Words: Adolescents; Children; Obesity; Physical activity; Screen time; Sedentary behaviour

Introduction

The WHO defines 'health' as a state of complete physical, mental and social well-being and not merely as the absence of disease or infirmity^[1]. Health Canada describes 'healthy living' as making choices that enhance physical, mental, social and spiritual health^[2]. All Canadians need a physically active, healthy lifestyle, beginning in their early years. Unfortunately, poor nutrition, inactivity, childhood obesity and declining fitness are common^{[3][4]}. The prevalence of obesity has nearly tripled over the last 25 years, with up to 26% of young people (two to 17 years of age) overweight or obese, and 41% of their Aboriginal peers^{[5][6]}. Health consequences of childhood obesity include insulin resistance, type 2 diabetes, dyslipidemia, hypertension, obstructive sleep apnea, nonalcoholic steatohepatitis, poor self-esteem and a lower health-related quality of life^{[7][8]}. The etiology of obesity is multifactorial but key causes include excessive caloric intake, sedentary behaviour patterns, inadequate physical activity (PA) and lack of exercise (Table 1)^[3]. The purpose of this statement is to provide health care practitioners with counselling and advocacy strategies that promote PA and reduce sedentary time in children, adolescents and their families. For present purposes, the term 'youth' refers to both children and adolescents.

TABLE 1
Definitions of sedentary behaviour, physical activity and exercise, with examples

Sedentary behaviour	Physical activity	Exercise
Behaviours associated with low energy expenditure, such as prolonged sitting or lounging in transit or at work, home or leisure	Any body movement that works muscles using more than resting energy	Planned, structured and repetitive PA to condition any part of the body
TV viewing	Free play	<i>Aerobic exercise</i> – moderate-to-vigorous activity which increases heart rate and sweat production and improves cardiovascular endurance.
Computer use	Structured activities	<i>Flexibility</i> – increases muscle/joint range of motion.
Video games	Activities of daily living	<i>Anaerobic exercise</i> (weight training) – improves muscle strength.
Car transportation		

Chair/couch use		High impact weight-bearing exercise – promotes bone health.
Phone chatting/texting		
PA Physical activity		

Sedentary behaviour patterns

Youth are more sedentary than ever with the widespread availability of television (TV), videos, video games, computers and multimedia phones. Social networking and entertainment through newer technologies also play a role ^[9]. Using accelerometers, the 2007 to 2009 Canadian Health Measures Survey (CHMS) found that youth spend an averaged 8.6 h sedentary time and four h light-intensity PA/day during waking hours, which increased and reduced with age respectively ^[10]. Early childhood sedentary behaviour patterns worsen with age ^[11]. Sedentary behaviours are associated with reduced PA, increased body mass index (BMI) and adiposity ^[12]. Children logging >2 h screen time/day are twice as likely to be overweight or obese than peers watching ≥ 1 h/day ^[5]. Children of lower socioeconomic status (SES) and who have a TV set in a bedroom are at even higher risk ^{[13][14]}. Factors implicated in the relationship between screen time and obesity risk include the displacement of PA, a reduced resting metabolism, and higher consumption of low-nutritive value foods regularly encouraged by advertising. Youth with more sedentary behaviours (especially long hours of TV viewing) may also develop – independent of PA time – metabolic syndrome, hypertension, inattention, poor school performance and reduced self-image ^[15].

Inadequate physical activity

Canadian youth fitness has declined significantly and adiposity has increased since 1981 ^[3]. The CHMS demonstrated that only 7% of Canadian youth accumulate at least 60 min of moderate-to-vigorous PA (MVPA) six or more days/week ^[10]. Childhood MVPA decreases over time ^[11]. Non-exercise activity thermogenesis (NEAT) levels (eg, standing, fidgeting, walking, stair-climbing), are low ^[16]. Inactive role models and lower parental education levels and SES may also affect paediatric PA negatively ^[17]. Although participating in organized sport or recreation programs increases PA, issues of cost, accessibility and parental time commitment often reduce participation ^{[4][17]}. Local parks and recreational facilities are often underutilized because of maintenance or safety issues ^[4]. Children who are older, female, Aboriginal, ‘overscheduled’ or not involved in – or who dislike – sport and recreation programs are less active than their peers ^{[4][17]}. Youth who are disabled or who live in public housing commonly have less access to affordable, quality recreational facilities ^{[17][19]}. Ex-

tremes of climate, heavy traffic and local crime rates may further inhibit outdoor ambulation and play ^{[17][20]}. Lack of green space and urban sprawl that favors vehicular over other modes of transportation, further reduce PA ^[19].

Sedentary behaviours and insufficient unstructured free-play in the early years have negative impacts on healthy growth and development ^{[21][22]}. Older children spend most of their daytime hours in schools where academic programming has gradually displaced PA, a trend driven by the perceived negative effect of nonacademic time on scholarly performance. However, research suggests that school-based PA and physical education (PE) do not interfere with, and may improve, student grades ^[23]. Exercise has been shown to improve executive function and math scores in overweight children ^[24]. PE promotes ‘physical literacy’: moving with competence, increasing fitness, discovering how to play, and learning through physical and health-related curriculums ^[4]. Mandated PE times vary among Canadian provinces/territories; of those with PE policies, only 35% indicate complete implementation ^[25].

Only 24% of young Canadians actively commute (eg, bicycle or walk) to school daily ^[26]. Since 2000, school transportation by car has increased for younger children, especially those from families with higher incomes and better-educated parents. All age groups have played less outdoors after school over the past decade ^[26].

School sports participation drops by an estimated 14% (for boys) and 26% (for girls) between grades six and 12 ^[4]. Policy requiring equal PA or sport participation for all students is lacking in 58% of Canadian schools ^[25], with other possible barriers being disability, chronic illness, ethnicity, and female gender ^[17]. While the United States mandates gender equity for school-based sport participation ^[27] no comparable federal regulation exists in Canada.

Benefits of aerobic physical activity

Regular aerobic PA can help to reduce weight, visceral/subcutaneous abdominal fat and systemic blood pressure in obese youth ^[28]. It can also improve early markers of atherosclerosis (eg, reduced arterial stiffness), insulin resistance, type 2 diabetes, non-alcoholic fatty liver disease, sleep disordered breathing and cardiorespiratory fitness ^{[28][31]}. Aerobic exercise is associated with positive self-concept and psychological well-being as well as reduced anxiety/depression ^{[32][33]}. Out-

door education programs can improve youth self-esteem, the motivation to learn, conflict resolution and problem-solving skills ^[34]. Team sports can build new skills, increase self-confidence and lead to new friendships ^{[4][35]}. Exergaming (active computer games) may be a novel way to promote PA but evidence is mixed as to whether they engage children enough to improve cardiorespiratory fitness ^[36]. Experts suggest that exergaming may be a suitable replacement for sedentary activities – providing the body moves sufficiently – but should not replace outdoor active play, PE or sport ^[4]

Benefits of other types of physical activity

All youth, including those with special health care needs (SHCN) (eg, living with asthma, diabetes or a neuromuscular disability), experience benefits from flexibility exercises, strength training and weight-bearing PA ^{[28][37][38]}. Growing children and children with neuromuscular disabilities need stretching programs to improve flexibility ^{[17][38]}. High-impact PA promotes bone health and while bone mass is largely determined by genotype, weight-bearing PA can improve bone mass acquisition and structural adaptation in youth ^[39]. Ten minutes of moderate-to-high impact activities (such as running and jumping) performed two to three days/week can have a modest positive effect on bone mineral density ^[28]. Strength training increases neuromuscular learning and muscle/bone strength in both girls and boys during preadolescence and adolescence ^[40]. The WHO recommends a healthy school-community model for older children, where PA is promoted in multiple settings ^[41]. Research demonstrates that multifaceted school-based programs addressing PA, sedentary time and nutrition are most effective when they are implemented in multiple settings and have parental support ^[42].

Age-appropriate sedentary and physical activity guidelines

Infants, toddlers and preschoolers

Research suggests that PA improves motor skills, body composition and aspects of metabolic health and social development in children younger than five years of age ^{[21][43]}. Canadian guidelines (Table 2) recommend that infants accumulate supervised PA several times a day, especially through floor-based play: tummy time, reaching, pushing, pulling and crawling ^[43]. Children one to four years old should have both structured and unstructured activity (free play) for at least 180 min/day at any intensity ^[43]. Activities should include play, games, transportation, recreation and PE in a variety of environments.

Too much screen time negatively impacts aspects of cognitive and psychosocial development and may adversely affect body composition ^[44]. Exposure to screen-based activities in children younger than 2 years should be discouraged. Toddlers two to four years old should be limited to educational programming of less than one hour/day ^[44]. Families need to encourage movement in young children by reducing passive transportation (commutes by car or stroller) or time spent simply sitting or ‘resting’ during waking hours. The Canadian Paediatric Society (CPS) and American Academy of Pediatrics (AAP) ^{[45][46]} suggest gross motor play in age-appropriate spaces with emphasis on fun, exploring, experimentation and safety. Activities might include walks with family members, running, supervised water play, tumbling, dancing, throwing and catching ^{[17][45][48]}. The CPS also has recommendations for age-appropriate use of media in the home ^[49].

TABLE 2
Canadian Sedentary Behaviour and Physical Activity Guidelines for the early years ^{[43][44]}, older children, and adolescents ^{[50][51]}. Source: Canadian Society for Exercise Physiology.

Sedentary behaviour guidelines	Physical activity guidelines
<p>For healthy growth and development:</p> <p>Caregivers should minimize the time infants (<1 yr of age), toddlers (1-2 yrs) and preschoolers (3-4 yrs) spend being sedentary during waking hours, including prolonged sitting or being restrained (eg, in a stroller, high chair) for >1 h at a time.</p> <p>For children <2 years, screen time (eg, TV, computer, electronic games) is not recommended.</p> <p>For children 2-4 years, screen time should be limited to <1 h/day; less is better.</p>	<p>For healthy growth and development:</p> <p>Infants (<1 yr of age) should be physically active several times daily – particularly through interactive floor-based play.</p> <p>Toddlers (1-2 yrs) and preschoolers (3-4 yrs) should accumulate at least 180 min of physical activity at any intensity spread throughout the day, including:</p> <ul style="list-style-type: none"> • A variety of activities in different environments. • Activities that develop movement skills. • Progression toward at least 60 min of energetic play by 5 yrs of age.

	More daily physical activity provides greater benefits.
<p>For health benefits:</p> <p>Children (5-11 yrs) and youth (12-17 yrs) should minimize the time they spend being sedentary each day by:</p> <ul style="list-style-type: none"> • Limiting recreational screen time to no more than 2 h/day – lower levels are associated with additional health benefits. • Limiting sedentary (motorized) transport, extended sitting time, and time spent indoors throughout the day. 	<p>For health benefits:</p> <p>Children (5-11 yrs) and youth (12-17 yrs) should accumulate at least 60 min of moderate-to-vigorous-intensity physical activity daily, including:</p> <ul style="list-style-type: none"> • Vigorous-intensity activities at least 3 days/week. • Activities that strengthen muscle and bone at least 3 days/week. <p>More daily PA provides greater health benefits.</p>
<i>PA Physical activity</i>	

Children (5 to 9 years)

Canadian guidelines (Table 2) recommend that recreational screen time (TV, computer, video games, multimedia phones) be limited to no more than two hours/day. They also recommend limiting transportation in a motorized vehicle, time spent indoors, and extended periods simply sitting, with family, at school or during community events^{[17][50]}. Children whose screen time runs over two hours/day should be encouraged to reduce, progressively, time spent with electronic media. Irrespective of gender, race, ethnicity or socio-economic status, children need to participate in a variety of enjoyable and safe play activities that support their natural development^[51]. They require daily activity through play, games, sports, transportation, recreation, PE, or by exercising with family, or in school and community settings^[51]. Children should be accumulating ≥ 60 min of MVPA/day, including vigorous-intensity activities ≥ 3 days/week and muscle/bone strengthening activities ≥ 3 days/week above and beyond the incidental PA of daily living. More daily PA provides greater health benefits^[51].

Children and youth with SHCN need daily exercise, with a health professional helping to determine suitable types and amounts of PA when necessary. Less active youth can achieve health benefits by starting with smaller amounts of PA, then gradually increasing duration, frequency and intensity to meet daily guidelines^[51]. As motor skills, visual tracking and balance improve, free play involving more sophisticated movement patterns, with emphasis on fundamental skill acquisition, is recommended. Since weight, height, endurance and motor skill development are similar in girls and boys, co-ed participation is not contraindicated^{[17][47]}. Organized sports with short instruction times, flexible rules, free time in practices and a focus on fun are favoured for this age group, whose ability to learn team strategy is limited^[47]. Running, swimming, soccer, baseball, tennis, gymnastics, martial arts, skating and skiing are suggested^{[17][46][47]}.

Children (10 to 12 years)

Similar sedentary behaviour restrictions and PA recommendations apply to older children (Table 2). Fully developed visual tracking, balance and motor skills allow for emphasis on advanced skill development and sports strategy. An improved ability to process verbal instructions and to integrate information from multiple sources allows for better participation in team sports; however, skill development-building, participation and fun should still be the focus of play^{[17][46][47]}. Puberty begins at different times and progresses at different rates in this age group, making for a diverse range of sizes, builds and strengths. Basing placement in contact sports on physical maturity rather than chronologic age may reduce injury-risk and allow for individual success, especially for those in early puberty. Strength training may be initiated provided that such programs are well supervised, use small free weights with high (15 to 20) repetitions, demonstrate proper technique, and avoid heavier weights and maximum lifts (ie, squat lifts, clean and jerk, dead lifts)^{[17][40]}.

Adolescents (13 to 17 years)

The needs to limit sedentary pastimes and reinforce PA recommendations apply equally to adolescents (Table 2). For highly social individuals who are influenced by peers, identifying fun, interesting activities that include their friends becomes crucial for long-term participation. Personal fitness, active transportation, sharing household chores, and competitive or noncompetitive sports are recommended. While some teens enjoy organized competitive sports, an estimated 75% drop out by age 15, suggesting a need to focus on the individual interests of youth^[47]. Ideally, enrollment in competitive contact and collision sports should be based on size and ability rather than age^[17]. As weight training continues, individuals reaching physical maturity can safely pursue longer sets using heavier weights and fewer repetitions, assuming the importance of proper technique is stressed^{[17][40][47]}.

The health professional's role

Clinical care

Health care providers are often asked for PA advice. While most give verbal counselling, few provide written prescriptions^[52]. Paediatricians seem to promote aerobic activities less often than family doctors or internists, and they are the least likely to promote strength training^[53]. Common barriers are constraints on time with patients, insufficient knowledge, and inadequate reimbursement for this kind of care^[54]. Routine health assessments should include screening for lifestyle risks. The American Academy of Pediatrics recommends identifying unhealthy eating patterns, a patient's PA habits and calculating/plotting BMI at least once a year^[17]. Important steps include determining current PA levels and the extent of sedentary behaviours, counselling on the benefits of PA, addressing barriers to life-style change and to a patient's self-efficacy in making needed changes^{[17][47]}. The "passport to health" program, a tool created to promote five servings of fruit or vegetables, two hours of screen time, one

hour of PA, and zero sugar-sweetened drinks every day, can increase in-office detection of childhood obesity and engage families in behavioural change^[55]. Motivational interviewing, a person-centred, goal-oriented method of communication, may help to elicit and strengthen intrinsic motivation for positive change^[56]. This approach has been shown to be effective in the management of obesity in families and adolescents^[57].

Strategies listed in [Table 3](#) may be helpful for guiding patients and families toward healthy active living (HAL). Less active families or members unprepared to change should be asked about possible barriers and offered potential solutions ([Table 4](#))^[47]. Once a family is ready to begin, a personal PA 'prescription' should be written out and posted in the home. This strategy takes advantage of a familiar medical model, thus reinforcing the importance of PA for optimal family health. Frequency (daily), intensity (moderate-to-vigorous), time (accumulate ≥ 60 min/day), and type of activity (FITT criteria) should be included in this family plan^{[15][47]}. PA choices should be integrated into daily activities in ways that make them fun, easy, natural and desirable. Including parents as agents of change is crucial for young children.

TABLE 3
Strategies to improve HAL for children, adolescents and families^{[17][47]}

Reducing sedentary activities	Increasing physical activity
Counsel families to remove television sets and computers from bedrooms	Create individual PA prescriptions: <ul style="list-style-type: none"> • CPS Prescription for Healthy Active Kids • CPS Healthy Active Living: Quick Reference Sheet
Counsel families to avoid eating in front of the TV	Post photos or posters demonstrating: <ul style="list-style-type: none"> • families eating together without TV • children involved in active play/dancing during TV shows
Encourage families to replace screen time (TV, computer games, interactive cell phones, internet browsing, chat lines and related social media) with PA	Determine child/adolescent access to free play, sports, and high quality school PE. Provide current information about local activities for families, community events, or recreational programs
Counsel families to avoid sitting for prolonged periods of time and to increase active transportation	Increase incidental movement: <ul style="list-style-type: none"> • Take breaks from sedentary activities • Avoid sitting for prolonged periods • Walk throughout the day • Take the stairs
Suggest families engage in games promoting PA rather than computer games	Provide educational information in waiting rooms: <ul style="list-style-type: none"> • CPS HAL pamphlets • Canada's Physical Activity Guidelines • Active Healthy Kids Canada • ParticipACTION • Pedometers and exergaming

Engage families to mentor young children so they can develop suitable PA skills	Encourage inviting an older child to motivate a younger one to adopt recreational PA or sport
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PA Physical activity; CPS Canadian Paediatric Society; HAL Healthy active living

TABLE 4
Modified from *Care of the Young Athlete* [47]

Suggested strategies to common barriers to PA

Barrier	Strategy
Lack of time	Build activity into each day – active transportation
	Take the stairs
	Get off bus a stop early
	Take PE in school
	Play active games with friends
Dislike for sports/Lack sport-specific skills	Dance, swim, walk or hike with a friend or pet
	Increase active hobbies/transportation
Unsafe neighborhood	Dance to music or do a workout video at home
	Join the community recreation centre
	Participate in PE at school
	Take an after-school activity
Out of shape	Start slow – 10 min

Advocacy (Table 5)

Promoting HAL is key to enhancing the health and well-being of children and youth. Clinicians and their professional bodies should advocate for policies at the community, provincial/territorial and federal levels that help to ensure healthy lifestyles.

Municipalities need to follow leaders like Vélo Québec, who build sidewalks and bicycle paths to allow safer community walking and cycling [58]. Proper maintenance in playgrounds helps to promote PA; keeping play spaces clean and play equipment in good repair, and nurturing parks and other green spaces, are important for developing healthy, active neighborhoods [59]. Provincial/territorial governments must improve school-related PA and PE programs from kindergarten through grade 12. Supporting sports programs and recreational facilities for all age groups and eliminating gender, financial and disability barriers are also essential. The federal government’s 2007 Children’s Fitness Tax Credit may be increasing PA program enrollment for families that can afford registration costs, but more strategies to benefit low-income families are needed [60]. Long-term federal support for HAL infrastructure and projects is needed at provincial/territorial and municipal levels, including strategies designed in consultation with First Nations leaders for Aboriginal children and youth. Governments, industry and charitable organizations must work together to fund population-based PA and obesity prevention-related research.

TABLE 5
Advocacy strategies Adapted from *Active Healthy Kids Canada Report Card 2010* [4]

FEDERAL	PROVINCIAL
Mandate socially responsible media to promote PA and reduce inactivity	Enhance access to recreational facilities during school hours
Modify the 2007 Children’s Fitness Tax Credit to benefit families living in poverty	Enhance access to school gyms after hours
Continue to provide provincial and municipal funding for sport infrastructure	Promote PA before, during and after school
Continue to provide provincial and municipal funding for active transportation projects	Mandate quality daily PE led by qualified teachers in all schools (kindergarten-grade12)
Continue to provide 100% GST rebate for municipality infrastructure HAL-promoting projects	Implement PE curriculums that emphasize developing knowledge, attitudes, motor and behavioural skills required for healthy active lifestyles

Fund robust PA monitoring and surveillance systems	Offer PE classes for everyone, regardless of ability, illness, injury, and developmental disability
Fund revisions of early years, child and youth PA guidelines and resources	Plan adequate resources for program funding, trained PE personnel, safe equipment, and facilities
Create new guidelines/guides for children with special health care needs	Ensure safe sport and recreational facilities
Support ParticipACTION free of commercial bias	Promote active transportation
Maintain Joint Consortium for School Health	
Develop and fund suitable PA promotion strategies for First Nations, Inuit and Métis children and youth	
Provide sufficient funding for population-based PA- and obesity prevention-related research	

PA Physical activity; HAL Healthy active living; PE Physical education

Conclusion

Healthy active living is the goal for all youth. Reducing sedentary time and reinforcing individual, non-competitive and life-long involvement with sports or recreational PA are essential steps toward achieving this goal. PA should meet the needs and interests of everyone, including children and youth living with poverty, a special health care need, a developmental disability, or a mental health issue. Being obese or overweight, having a sedentary lifestyle, or living with a lack of family interest in sport, fitness or recreational PA, are barriers to HAL that may need active management to overcome. Developing and maintaining physical and social environments that encourage and enable PA in safe settings should be a priority for governments and communities. The implementation of quality PE programs in schools should emphasize fun and help students to develop knowledge, positive attitudes, motor and behavioural skills, and the personal confidence and competence needed to adopt and maintain a physically active lifestyle. Parents and caregivers should participate in school-led PA initiatives and sustain these efforts at home.

Recommendations

The Canadian Paediatric Society makes the following recommendations concerning healthy active living (HAL) and physical activity (PA) for children and adolescents:

Physicians and health care professionals should promote HAL by:

- Documenting the number of hours/day spent on sedentary activities by families.
- Discouraging the use of screen-based activities for children under two years of age; limiting recreational screen time to <1 h/day for children two to four years of age, and to ≤2 h/day for older children. Health care professionals should discuss these recommendations with families.
- Counselling families to become more active by finding alternatives to sedentary (ie, motorized) transport, and by limiting time spent simply sitting or being indoors throughout the day.
- Encouraging families to keep television sets, video games, cell phones and computers out of childrens bedrooms.
- Identifying barriers to the adoption of PA as part of family routine.
- Determining sources of PA for family members at regular health care visits, and promoting PA at every well-child or adolescent visit.
- Advising parents and caregivers that preschoolers should have an accumulated 180 min/day of PA at varying intensities, and that older children and adolescents should be accumulating at least 60 min/day of moderate-to-vigorous-intensity PA. These goals should include vigorous-intensity activities at least three days/week and activities that strengthen muscle and bone at least three days/week. More information can be derived from the Canadian Physical Activity Guidelines.
- Helping parents to become more active role models by building on PA that family members of all ages and abilities can do together as a family routine.

- Using anticipatory guidance to ensure that children play outside safely, with appropriate protective equipment (eg, bicycle helmets, personal flotation devices).
- Advising parents to support their child's preferences in sport and recreational activities, provided that they are safe and appropriate to the child's age and developmental stage.
- Encouraging older students to become HAL role models and leaders for younger schoolmates.
- Being active role models themselves.
- Calculating and plotting BMI trajectories and identifying obesity-related co-morbidities at every well-child or adolescent visit.

Clinicians and their professional organizations should advocate for:

- Regular revisions of the Canadian Physical Activity Guidelines for children and youth, to reflect current, evidence-based recommendations.
- Creating Canadian Physical Activity Guidelines for Aboriginal children and youth, and for young people with special health care needs.
- Developing and funding strategies to promote PA specific to First Nations, Inuit and Métis children and youth – in collaboration with Aboriginal groups.
- Social marketing to promote PA involvement and participation.
- The elimination of television advertising that promotes fast food, unhealthy foods and sedentary behaviour during children's programming.
- Establishing a school wellness council, on which local physician representation is encouraged.
- A school curriculum teaching students the health benefits of regular PA.
- Compulsory, quality, daily PE classes in schools (kindergarten through grade 12) taught by qualified, trained teachers. Also, the provision of a variety of school-related PA in addition to PE, including the protection of children's recess time and extracurricular PA programs and non-structured PA before, during and after school hours.
- Accessible community sport/recreation programs where school gyms or local facilities are open before and after regular hours and PA opportunities are available to all children and youth at low or no cost.
- Safe recreational facilities, parks, playgrounds, bicycle paths, sidewalks and crosswalks.
- Funding quality research on the promotion of healthy active living.

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