Better with Age

The 2019 ParticipACTION Report Card on Physical Activity for Adults: Supplementary Data
The 2019 ParticipACTION Report Card on Physical Activity for Adults: Supplementary Data
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure</td>
<td></td>
</tr>
<tr>
<td>Developed by a team of Canadian researchers and stakeholders in the</td>
<td></td>
</tr>
<tr>
<td>field of adult physical activity, recreation and sport, this report</td>
<td></td>
</tr>
<tr>
<td>represents a targeted and purposeful synthesis of the literature and</td>
<td></td>
</tr>
<tr>
<td>data sources. While in-depth literature searches and expert consultation</td>
<td></td>
</tr>
<tr>
<td>were undertaken, systematic reviews and meta-analyses were not carried</td>
<td></td>
</tr>
<tr>
<td>out. Data on national-level disparities were considered only for</td>
<td></td>
</tr>
<tr>
<td>certain indicators, where available.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ParticipACTION’s strategic and content partners played a critical</td>
<td></td>
</tr>
<tr>
<td>role in the research, development and communication of the 2019 Adult</td>
<td></td>
</tr>
<tr>
<td>Report Card.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Behaviours</td>
<td></td>
</tr>
<tr>
<td>Overall Physical Activity</td>
<td>4</td>
</tr>
<tr>
<td>Daily Movement</td>
<td>7</td>
</tr>
<tr>
<td>Moderate-to-Vigorous Physical Activity</td>
<td>10</td>
</tr>
<tr>
<td>Muscle &amp; Bone Strength</td>
<td>11</td>
</tr>
<tr>
<td>Balance</td>
<td>12</td>
</tr>
<tr>
<td>Sedentary Behaviours</td>
<td>14</td>
</tr>
<tr>
<td>Sleep</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Characteristics</td>
<td></td>
</tr>
<tr>
<td>Intentions</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Settings &amp; Sources of Influence</td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td>23</td>
</tr>
<tr>
<td>Workplace</td>
<td>25</td>
</tr>
<tr>
<td>Community &amp; Environment</td>
<td>31</td>
</tr>
<tr>
<td>Health &amp; Primary Care Settings</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies &amp; Investments</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>42</td>
</tr>
</tbody>
</table>
Report Card Development Team

Report Card Research Committee
Dr. Christine Cameron, Canadian Fitness and Lifestyle Research Institute
Dr. Jean-Philippe Chaput, CHEO Research Institute
Patricia Clark, Active Aging Canada
Dr. Margie Davenport, University of Alberta
Dr. Guy Faulkner, University of British Columbia
Dr. Jonathon Fowles, Acadia University
Dr. Lucie Lévesque, Queen's University
Dr. Michelle Porter, University of Manitoba
Dr. Ryan Rhodes, University of Victoria
Dr. Robert Ross, Queen's University
Elaine Shelton, Province of Nova Scotia
Dr. John Spence, University of Alberta

Date of Publication
October 29, 2019

Report Card Research Committee Chair
Nora Johnston

Research Manager
Dr. Soultana Macridis

Report Card Writers
Flip Livingstone
Antoine Tedesco

Project Management
Tala Chulak-Bozzer

Marketing and Communications
Rebecca Jones

Design and Production
Hambly & Woolley

Public Relations
Proof

Copy Editing
Ruth Hanley
Dr. Geneviève Leduc

Translation Services
Marie-Johanne Tousignant
Réseau Accès Participation
Overall Physical Activity Grade D

Importance of physical activity

This report card graded physical activity based on a combination of four distinct indicators, which include:

• Daily movement
• Moderate-to-vigorous physical activity (MVPA)
• Muscle- and bone-strengthening activities
• Balance training activities

Physical activity is a broad term that includes any bodily movement produced by muscle action that increases energy expenditure. Physical activity incorporates a variety of types of activity, of various intensities, such as aerobic (which makes you breathe harder and your heart beat faster, as a result, increases heart and lung fitness), strength training (muscle-strengthening activity increases bone strength and muscular fitness and should work all the major muscle groups of your body, that is, the legs, hips, back, chest, abdomen, shoulders and arms) and balance training (which includes strength and flexibility).

Based on Canada’s Physical Activity Guidelines, it is recommended that adults (18-64 years old) and older adults (65 years or older) accumulate at least 150 minutes of MVPA per week. It is also recommended to add muscle- and bone-strengthening activities of major muscle groups at least 2 days per week. For older adults, those with poor mobility should perform physical activities to enhance balance and prevent falls. Moderate-intensity physical activities will cause adults to sweat a little and breathe harder (e.g., brisk walking, wheeling, cycling) and vigorous-intensity physical activities will cause adults to sweat and be ‘out of breath’ (e.g., jogging, cross country skiing).
MVPA has many health benefits and can help reduce the risk of:

- Premature mortality
- Obesity
- Cardiovascular disease
- Stroke
- Hypertension
- Colon cancer
- Breast cancer
- Type 2 diabetes
- Mental health conditions, including depression and anxiety
- Dementia
- Alzheimer’s disease

In recent years, physical activity has become increasingly recognized for the role it plays in supporting mental health in clinical and non-clinical populations. Its capacity for improving mood, well-being, vitality, sleep and cognition is also well recognized.

In 2017, a World Health Organization (WHO) statement focused on depression as the leading cause of ill health and disability worldwide. Physical activity has been found to reduce levels of stress and symptoms of anxiety and depression in the general adult population and in older adults especially.

Regular MVPA also has an important role to play in improving cardiorespiratory health, fitness and cardiometabolic risk factors in persons with serious mental illness. In fact, the associations of physical activity with beneficial health outcomes begin when adopting very modest (approximately 1/3 of the guideline) amounts, suggesting that any MVPA is better than none. Exercise can also be useful in moderating weight gain that is typically associated with the use of certain medications, such as antipsychotics. This may help to mitigate the risk of negative physical health outcomes that tend to disproportionally affect this population, in particular metabolic syndrome, diabetes, cardiovascular disease and premature mortality.

Physical activity also has a role to play in the prevention and treatment of dementia. A recent evaluation of systematic reviews and consensus statements reported that regular physical activity improves performance of activities of daily living and mobility and may improve general cognition and balance in persons with Alzheimer’s and related dementias. Physical activity improves brain metabolism and increases the size of the hippocampus, resulting in up to a 50% decrease in the risk of developing Alzheimer’s. This is of particular relevance to older populations who are most afflicted by the disorder, with 7.1% of individuals 65 years or older and 24.6% of those 85 years or older afflicted.
Physical activity is also beneficial for the growth and maintenance of bone and muscle strength. It is recommended to add bone- and muscle-strengthening activities of major muscle groups at least 2 days per week. Particularly for older adults with poor mobility, performing physical activities to enhance balance and prevent falls are also recommended. Bone and muscle strength peak in early adulthood and decline with age. For example, individuals 50 years or older lose 1-2% of muscle mass and 1.5-3% in strength per year. Among adults in Canada, the average grip strength (a measure of muscle strength) consistently declines with age [Statistics Canada, 2016 to 2017, Canadian Health Measures Survey (CHMS)] [custom tabulation].

- 74.0 kg: 18- to 34-year-old adults
- 73.5 kg: 35- to 49-year-old adults
- 68.3 kg: 50- to 64-year-old adults
- 59.6 kg: 65- to 79-year-old adults

Engaging in physical activity throughout the life-course can help reduce the loss of muscle and bone strength, as well as balance. This is particularly important for older adults as falls remain the leading cause of injury-related hospitalizations with 20%-30% of older adults in Canada experiencing at least one fall per year.

Strength training and flexibility improves balance. Examples of balance activities include activities such as standing on one leg, balancing on a wobble board, practicing tai chi and walking heel to toe.
Daily Movement

Benchmark:

% of adults 18 years or older in Canada achieving ≥7,500 steps per day in a variety of light, moderate and vigorous activities that contribute to daily movements.

The grade is C

Key findings:

Higher levels of physical activity (including light, moderate and vigorous intensity) have been linked to positive health outcomes and a reduced risk for premature death.

On the basis of current evidence, adults achieving ≥7,500 steps per day are considered to have a 'physically active lifestyle' and those achieving 5,000 to 7,499 steps per day are considered to have a 'low active lifestyle'.

- 52% of adults 18 years or older in Canada take at least 7,500 steps per day, which falls within the physically active lifestyle category, (Statistics Canada, 2016 to 2017, CHMS [Cycle 5]).

- 52% of 18- to 34-year-old adults
- 58% of 35- to 49-year-old adults
- 55% of 50- to 64-year-old adults
- 53% of 65- to 79-year-old adults

- 29% of adults 18 years or older in Canada fall within the low active lifestyle category, 5,000 – 7,499 steps/day, (Statistics Canada, 2016 to 2017, CHMS [Cycle 5]).

- 32% of 18- to 34-year-old adults
- 30% of 35- to 49-year-old adults
- 27% of 50- to 64-year-old adults
- 30% of 65- to 79-year-old adults

- 18% of adults 18 years or older in Canada achieve less than 5,000 steps per day (Statistics Canada, 2016 to 2017, CHMS [Cycle 5]).

- 16% of 18- to 34-year-old adults
- 13% of 35- to 49-year-old adults
- 18% of 50- to 64-year-old adults
- 36% of 65- to 79-year-old adults
Opportunities to engage in light, moderate and vigorous physical activity throughout the day can be done in many ways, including:

**Work/occupational:** activities done as paid employment or work duties.

**Active transportation:** all human-powered forms of transportation, such as walking and cycling. Can also include the use of mobility aids such as a wheelchair. Active transportation can also be combined with other modes, such as public transit.

**Self-care:** activities related to care for yourself and others (e.g., hygiene, dressing).

**Home/domestic:** activities related to household activities and chores (e.g., laundry, home maintenance, snow cleaning).

**Active recreation:** activities that are diversions from daily routine designed for the refreshment of the body and mind (e.g., dog walking, cycling, skiing, and dance).

**Sports:** activities governed by a set of rules where an individual or team competes against another (e.g., soccer, basketball, hockey, tennis).

**Exercise:** activities that are planned, structured and repetitive, with the aim of improving health and fitness (e.g., swimming, running, yoga).

- Adults report spending 3 hours a week doing physical activities while at work, in or around their home or while volunteering (Statistics Canada, 2016, CCHS). These activities may fall across the spectrum of light, moderate and vigorous intensity.

- 26% of adults (18 years or older) reported participating in organized physical activity or sport and 68% of adults engaged in some form of unorganized physical activity or sport in the last 12 months (CFLRI, 2016-2018, Physical Activity Monitor).

- Walking is a simple and free physical activity that most adults of all ages, cultures and genders can participate in. Walking and cycling are the most popular forms of active transportation and are often combined with other modes, notably public transit.

- 21% of adults report using active transportation, such as walking or cycling to or from work or school (Statistics Canada, 2014, CCHS).
  - 51.9% of 18- to 34-year-old adults
  - 18.3% of 35- to 49-year-old adults
  - 14.6% of 50- to 64-year-old adults
  - 11.9% of 65- to 79-year-old adults

- On average, adults report spending 1.9 hours per week using active ways, such as walking or cycling, to get to-and-from places (Statistics Canada, 2016, CCHS).
• Older adults can benefit from practicing a more physically active lifestyle by increasing the number of steps per day.

• A recent study of older women, with an average age of 72 years, found that increased step volume, independent of intensity, (approximately 4,400 steps/day) was associated with 41% reduction in mortality rate compared to those with a lower step volume (approximately 2,700 steps/day). Mortality rate steadily declines as steps increase up until approximately 7,500 steps/day, after which the rates leveled off.

• Canadian Longitudinal Study on Aging (CLSA) found that two-thirds of participants aged 45-64 walked 3 or more days per week (women: 68.7% and men: 67.4%). Among participants 65 to 85 years, the percentage declined among women (62.9%), but remained stable among men (69.8%).

• CLSA also examined the percentage of adults 45 years or older who sometimes or often (3-7 days/week) perform light, moderate or strenuous sports or recreational activities and found:

<table>
<thead>
<tr>
<th></th>
<th>45-64 years</th>
<th>65-85 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>10.2%; 9.5%</td>
<td>9.7%; 10.8%</td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>5.3%; 5.1%</td>
<td>3.9%; 5.7%</td>
</tr>
<tr>
<td><strong>Strenuous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>19.2%; 23.8%</td>
<td>11.5%; 15.8%</td>
</tr>
</tbody>
</table>
**Moderate-to-Vigorous Physical Activity**

**Benchmark:**

% of adults 18 years or older who meet the Canadian Physical Activity Guidelines (at least 150 minutes of weekly MVPA in bouts of 10 minutes or more).² ³

**The grade is F**

Based on objectively measured data, 16% of adults living in Canada 18 to 79 years achieve at least 150 minutes of weekly MVPA in bouts of 10 minutes or more.² ³

- The percentage of adults meeting the physical activity guidelines can be further broken down by age category:
  - 15.7% of 18- to 34-year-old adults
  - 15.3% of 35- to 49-year-old adults
  - 18.8% of 50- to 64-year-old adults
  - 15.2% of 65- to 79-year-old adults

- When examining physical activity using ‘unbouted’ objectively measured data (all minutes of weekly MVPA), 44.8% of Canadians 18 to 79 years achieve at least 150 minutes per week (Statistics Canada, 2016 to 2017, CHMS [Cycle 5]).² ³
  - 47.6% of 18- to 64-year-old adults
  - 27.7% of 65- to 79-year-old adults

- At the time of the guidelines, they supported achieving recommendations in bouts of at least 10 minutes of physical activity to support health benefits and a reduction in mortality risk. With the evolving nature of the physical activity evidence base, researchers are now looking into ‘unbouted’ physical activity achievement. Based on ‘unbouted’ physical activity, the score for 150 minutes a week of moderate-to-vigorous physical activity would be C-. However, the current physical activity guidelines provide the recommendations of at least 10-minute bouts, and as such, the data has been graded against this current standard.
**Muscle & Bone Strength**

**Benchmark:**

% of adults 18 years or older who achieve at least 2 days of muscle- and bone-strengthening activities.\(^2,3\)

**The grade is INC**

**Key findings:**

- The Canadian Physical Activity Guidelines for adults and older adults recommend performing muscular exercise to increase muscle strength and endurance 2 times per week.\(^2,3\) This type of activity uses resistance to induce muscular contractions, which build strength, anaerobic endurance and size of skeletal muscles.

- This year’s grade is an INC as there is limited data available on adults 18 years or older to assess achieving the recommendation of performing physical activities to enhance muscle and bone strength.

- Based on CLSA data, 1 out of 4 Canadians age 45 years or older self-reported performing muscular exercises at least three times per week.\(^36\)

- Physical activities that support muscle and bone strength are important for active aging. According to the CLSA,\(^36\) the prevalence of limitations on basic activities of daily living, such as feeding and dressing oneself, increases with age from 3.2% among those 45 to 54 years old to 15.1% of those 75 years and older. These findings were similar with instrumental activities of daily living, which include complex tasks such as shopping, doing housework and preparing meals. Across all age groups limitations were highest among women.

- The combination of muscle- and bone-strengthening activities can also support maintenance and improvements in balance, which in turn, can reduce the risk of falls.

- In 2012, a systematic review of randomized trials of interventions to prevent falls among older adults identified that supervised group exercises and individually prescribed home exercise programs that combine both balance and strength exercises are most effective to prevent falls among those living independently.\(^38\)
**Balance**

**Benchmark:**

% of adults 65 years or older who perform physical activities to enhance balance and prevent falls.\(^2\)

**The grade is INC**

**Key findings:**

- The Canadian Physical Activity Guidelines for Older Adults recommend that those with poor mobility should perform physical activities such as standing on one leg or practicing tai chi to enhance balance and prevent falls.

- This year’s grade is an INC as there is limited national-level data available on adults 65 years or older to assess achievement of the recommendation of performing physical activities to enhance balance and prevent falls.

- Strength training and flexibility improve balance. Examples of balance activities include activities such as standing on one leg, balancing on a wobble board, practicing tai chi and walking heel to toe.

- The CLSA found that balance declines with age across age groups. For example, for males, the average balance time decreased from 53.18 seconds among those aged 45 to 54 years, to 18.32 seconds in those aged 75 years or older.\(^3\)

- Maintaining good balance can help prevent falls and injuries. Overall, 4.9% of participants in the CLSA study reported an injury that was due to a fall in the past year. Of all participants, 10.2% used at least one assistive device to support mobility, such as a walking stick, wheelchair, walker or motorized scooter.\(^3\)

- Among older adults in Canada, falls remain the leading cause of injury-related hospitalizations with between 20% and 30% of older adults falling each year.\(^3\)

- 20% of older adults living in the community reported a fall, of which a higher prevalence were over 80 years of age.\(^3,4\)

- A fall can result in chronic pain, reduced mobility, loss of independence and even death in some cases.\(^3\)

- Falls among older adults cause 95% of all hip fractures, and over one-third of older adults who are hospitalized due to a fall are admitted to long-term care facilities.\(^3,4\)

- In 2004, direct health care costs associated with falls among older adults was $2 billion. With a growing older adult population, estimated to make up 25% of the total population by 2036, these costs are expected to rise.\(^3\)
A systematic review of randomized trials of interventions to prevent falls among older adults identified that supervised group exercises and individually prescribed home exercise programs that combine both balance and strength exercises are most effective to prevent falls among those living independently.38
Benchmark:

Currently, there are no guideline recommendations in relation to sedentary behaviour for adults living in Canada.

The grade is INC

Importance of reducing sedentary behaviours

Sedentary behaviour is typically defined as any waking activity <1.5 metabolic equivalents (METs) while sitting or in a reclined position. Although there are no Canadian guidelines on sedentary behaviour for adults and older adults, research has found that people of all ages spend a large amount of their waking hours being sedentary while watching television, using a computer, driving a vehicle, and reading. Most recently, steps per day have been linked to achievement of meeting the MVPA. At this time, adults achieving less than 5,000 steps per day are considered to have a sedentary lifestyle.

Despite the many health benefits achieved through a physically active lifestyle, the time spent being sedentary contributes to health risks independent of physical activity. In fact, being sedentary for extended periods of time (e.g., sitting while watching television and using a computer), can increase the risk of:

- Cardiovascular diseases
- Type 2 diabetes
- Obesity
- Some cancers
- Pulmonary disease
- All-cause mortality

The risks of a sedentary lifestyle among older adults are similar as those of younger adults. However, there are additional conditions that are more relevant to older adults including, physical and cognitive impairments, frailty, social isolation, poor mental health, incontinence, disablement, and problems with sleep. Although not disease-specific, these conditions can impact overall quality of life.

With the number of older adults expected to grow in the near future, (i.e., 1 in 5 Canadians will be aged 65 and older by 2024), sedentary behaviour is an important lifestyle behaviour to address the burden on public health. Although research about sedentary behaviour among older adults is limited, a review by Chastin et al. found that increased sedentary time was associated with age, education level, not being in full-time employment, being unemployed or retired, and higher levels of obesity status. For instance, a recent study found that older Canadians aged 60 to 79 years of age accumulate a substantial amount of sedentary time.
regardless of their work status.\textsuperscript{50} Given that the transition to older adulthood is often a major life event (e.g., retirement) which provides an opportunity to develop new daily routines, efforts should be made to encourage more active pursuits in this population.\textsuperscript{51}

A recent review completed by the Sedentary Behaviour Research Network (SBRN) developed key terms and definitions of the different types of sedentary behaviour. These include\textsuperscript{52}:

<table>
<thead>
<tr>
<th><strong>Physical inactivity</strong></th>
<th>An insufficient physical activity level to meet present physical activity recommendations.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stationary behaviour</strong></td>
<td>Any waking behaviour done while lying, reclining, sitting, or standing, with no ambulation, irrespective of energy expenditure.</td>
</tr>
<tr>
<td><strong>Sedentary behaviour</strong></td>
<td>Sedentary behaviour is any waking behaviour characterized by an energy expenditure ≤1.5 metabolic equivalents (METs\textsuperscript{*}), while in a sitting, reclining, or lying posture.</td>
</tr>
<tr>
<td><strong>Standing</strong></td>
<td>A position in which one has or is maintaining an upright position while supported by one’s feet.</td>
</tr>
<tr>
<td><strong>Screen time</strong></td>
<td>Screen time refers to the time spent on screen-based behaviours. These behaviours can be performed while being sedentary or physically active.</td>
</tr>
<tr>
<td><strong>Non-screen-based sedentary time</strong></td>
<td>Non-screen-based sedentary time refers to the time spent in sedentary behaviours that do not involve the use of screens.</td>
</tr>
<tr>
<td><strong>Sitting</strong></td>
<td>A position in which one’s weight is supported by one’s buttocks rather than one’s feet and in which one’s back is upright.</td>
</tr>
<tr>
<td><strong>Reclining</strong></td>
<td>Reclining is a body position between sitting and lying.</td>
</tr>
<tr>
<td><strong>Lying</strong></td>
<td>Lying refers to being in a horizontal position on a supporting surface.</td>
</tr>
<tr>
<td><strong>Sedentary behaviour pattern</strong></td>
<td>The manner in which sedentary behaviour is accumulated throughout the day or week while awake (e.g., the timing, duration, and frequency of sedentary bouts and breaks).</td>
</tr>
</tbody>
</table>

\textsuperscript{*MET = Metabolic Equivalent. It corresponds to the resting metabolic rate of the population under study. A metabolic equivalent is deemed to be 3.5 ml O2/kg/min in adults without mobility impairment or chronic disease. A metabolic equivalent is generally higher in children and in those with conditions that elevate muscle activity or metabolism, and it is generally lower in those with paralysis, small muscle mass, or wasting conditions. The interpretation of MET values should be made with attention to the population under study.}
Key findings:

There are currently no sedentary behaviour guidelines for adults or older adults, resulting in an INC grade. However, based on the best available national-level evidence, the following key findings were found to support understanding of sedentary behaviour of Canadian adults:

- Adults 18 to 79 years are sedentary for 9.6 hours per day, excluding sleep time (Statistics Canada, 2014 to 2015, CHMS [Cycle 4])\(^{24}\):
  - 18- to 34-year-old adults: 9.5 hours per day
  - 35- to 49-year-old adults: 9.4 hours per day
  - 50- to 64-year-old adults: 9.8 hours per day
  - 65- to 79-year-old adults: 10.1 hours per day

- In an average week, adults 18 to 79 years spend 25 hours on a computer or tablet to watch videos, play computer games, send emails, or surf the Internet, while in a seated or reclined position (Statistics Canada, 2014 to 2015, CHMS [Cycle 4]).\(^ {34} \)

- On an average day, adults spend 3.6 hours in a seated or reclined position watching television, DVDs, or videos or spending time on a computer, tablet or other hand-held electronic device e.g., watching videos, playing computer/video games, emailing or surfing the Internet (2014-15, CHMS [cycle 4]).\(^ {34} \):
  - 18- to 34-year-old adults: 4.0 hours per day
  - 35- to 49-year-old adults: 3.0 hours per day
  - 50- to 64-year-old adults: 3.4 hours per day
  - 65- to 79-year-old adults: 4.0 hours per day

- Approximately 86% of adults 18 to 79 years or older are sedentary for more than 8 hours per day (excluding sleep time).

## Engagement in Daily Sedentary Behaviours

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Sedentary Time (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18+ years</td>
<td>75.6%</td>
</tr>
<tr>
<td>18-64</td>
<td>78.1%</td>
</tr>
<tr>
<td>65+</td>
<td>67.5%</td>
</tr>
</tbody>
</table>

Data Source: Data Source: Statistics Canada, 2016 to 2016, CHMS [Cycle 5] [custom tabulation]
Sleep

Benchmark:

% of adults living in Canada who meet the sleep duration recommendations.54

- 7 to 9 hours for adults 18 to 64 years of age
- 7 to 8 hours for adults 65 years or older

The grade is B-

Importance of sleep

Sleep behaviour is recognized as an important determinant of overall health and well-being across the life-course.54-56 Sleep supports many daily physical body functions including neural development, learning, memory, emotional regulation, as well as metabolic and cardiovascular health.57 Although Canada does not have specific guidelines for sleep at the moment among adults, the National Sleep Foundation (a U.S. non-profit organization that promotes public understanding of sleep and sleep disorders) recommends that adults 18 to 64 years old should sleep for 7 to 9 hours per night, and adults 65 years or older should sleep for 7 to 8 hours per night.54

Sleeping too few hours within a 24-hour period is associated with increased fatigue, decreased psychomotor performance, accidents and reduced physical and psychological health, including weight regulation, mental health, blood sugar regulation, blood pressure and cardiovascular health.54,58

At the same time, sleeping more than the recommended hours of sleep within a 24-hour period may be an indicator of an underlying medical, neurological, or psychiatric issue. Among older adults, too few hours of sleep is associated with morbidity (e.g., poor general health, diabetes, hypertension) and mortality.58

Being physically active can support improvements in sleep. In fact, both regular and small bouts of physical activity can have benefits on overall sleep, sleep efficiency, onset latency, quality, as well as rapid eye movement sleep. Increasing minutes of MVPA per session can also improve sleep onset latency (reducing the time it takes to fall asleep).59
Key findings:

- 64.5% of adults 18 to 79 years meet the sleep duration recommendations (Statistics Canada, 2009-11 to 2014-15, CHMS [cycle 2-4]):

  - 18 to 34 years: 66.8%
  - 35 to 49 years: 66.3%
  - 50 to 64 years: 65.8%
  - 65 to 79 years: 54.1%

- On average, adults 18 to 79 years achieve 7.2 hours of sleep per night:

  - 18 to 64 years: 7.1 hours
    - On average, women slept significantly longer than men (7.24 vs 7.00 hours per night)
    - Those with higher household education and income were more likely to report meeting sleep duration recommendations compared to those with less education and lower incomes.

- 65 to 79 years: 7.2 hours
  - Approximately one-third reported fewer than the recommended 7 hours per night.
  - Those with higher income households were more likely to achieve sleep duration recommendations compared to those of lower income households.

- Sleep Quality

  - Based on CHMS data, 43% of men and 55% of women aged 18-64 years reported trouble going to sleep or staying asleep "sometimes/most of the time/all of the time".
  - Similar to CLSA data, compared to men, women generally report lower sleep quality and experience more insomnia symptoms.

  - Based on CHMS data, among older adults aged 65 to 79 years, women (59%) were more likely than men (40%) to report trouble going to sleep or staying asleep "sometimes/most of the time/all of the time".
Individual Characteristics

Intentions

Benchmark:
% of adults living in Canada intending to be physically active in the next 6 months.

Grade B+

Importance of intentions and physical activity

Intention, or the willingness to invest effort in a particular behaviour, is considered to be an important link between cognitions and behaviour.\textsuperscript{61,62} Intention features prominently in several of the most common theoretical models.\textsuperscript{63,64} For instance, in the Theory of Planned Behaviour (TPB), intention is highlighted as the central factor mediating the relationship between behaviour and three determinants:

- Attitude, which refers to the evaluation of the positive or negative outcomes of a behaviour;
- Normative beliefs, or the degree to which one believes a behaviour is accepted (or not) by peers; and
- Perceived behavioural control, or the degree of control a person believes they have in performing a behaviour.\textsuperscript{63}

Tests of TPB have lent some support for its utility in predicting physical activity and sedentary behaviour.\textsuperscript{65-67}

The relationship between intention and behaviour specifically has demonstrated validity,\textsuperscript{64} with several reviews noting a positive relationship between intention and physical activity behaviour.\textsuperscript{68-71} For instance, a recent systematic review conducted by Rhodes et al.\textsuperscript{69} found intention to be a reliable predictor of physical activity change, with seven of the eleven studies identified supporting the relationship between intention and change in physical activity. A recent study conducted by Prapavessis et al.\textsuperscript{65} found intention to significantly predict sedentary behaviour in both work and leisure settings among 372 Canadian adults.

Despite positive findings, the relationship between intention and behaviour is not a perfect predictor of behaviour, a phenomenon notoriously referred to as the ‘intention-behaviour gap.’ Indeed, almost half of intenders do not follow through on their intentions to engage in physical activity.\textsuperscript{64,72} Nevertheless, research suggests that intention is acknowledged as a necessary, if not sufficient condition, in determining physical activity behaviour; that is, research shows that individuals without the intention to engage in physical activity are exceedingly unlikely to engage in physical activity.
Some research also shows that plans and habits may follow good intentions; however, the most established is plans as a consequence of intentions.\textsuperscript{64,72,73}

**Key findings:**

- 74\% of adults living in Canada (18 years or older) indicate that they have strong intention (6 or 7 on a 7-point scale) to be physically active within the next 6 months (CFLRI, 2014-2015. Physical Activity Monitor)\textsuperscript{[custom tabulation]}.

- Although there are no significant differences between men and women, a greater proportion of adults 18 to 24 years old cite strong intentions compared to adults 45 years or older and a greater proportion of adults 25 to 44 years cite strong intentions to be active compared to adults 65 years or older.

- 75\%\footnote{significantly higher} of adults 18 to 64 years of age and 68\% of adults 65 year and older cite strong intentions to be active. This relationship with age is significant among women but not men.\footnote{significantly higher}

There are various factors that can contribute to one’s intentions to be physically active. These include one’s knowledge and awareness about the amount of physical activity required for health benefits, beliefs about the benefits of physical activity, attitudes toward physical activity, one’s confidence that they can be active in their day, one’s perception of their ability to do physical activity regularly, and their enjoyment of the activities they are participating in.\textsuperscript{74,75}
### Steps to Behaviour Change

<table>
<thead>
<tr>
<th>Awareness and Exposure</th>
<th>Knowledge and Understanding</th>
<th>Beliefs and Attitudes</th>
<th>Self-Efficacy and Control</th>
<th>Intention</th>
<th>Behaviour Trialling</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% of adults are aware of any adult PA guidelines; 37% have heard of Canada’s PA guidelines.</td>
<td>62% of adults have knowledge of the amount of recommended PA required per week.</td>
<td>Adults ‘very strongly agree’ that PA prevents heart disease (84%) and helps with activities of daily living (77%) and stress management (72%); 58% of adults say PA is very important.</td>
<td>78% of adults are at least ‘moderately confident’ they can be active even when busy or do not feel like it; 63% have considerable control fitting PA into their lifestyle.</td>
<td>54% of adults fully intend to be active in the next 6 months.</td>
<td>41% of adults have attended a class or tried some kind of PA in the past year; 63% have made active choices in their usual work routine (e.g., taking the stairs) to be more active.</td>
</tr>
<tr>
<td>Highest recall of PA guidelines among 18-to-24-year-olds.</td>
<td>More adults 65+ years have knowledge of the amount of PA required per week compared to 45-to-64-year-olds.</td>
<td>More older adults 65+ years say PA is ‘very important’, but less older adults than younger adults &lt;65, agree on the importance of PA to prevent heart disease, improve stress management and helps with activities of daily living.</td>
<td>More adults 65+ years are at least ‘moderately confident’ they can be active when busy compared to 25-to-64-year-olds.</td>
<td></td>
<td>Greater proportion of adults under 45 years old are likely take a step towards being active, such as trying a class or making active choices at work; fewer adults 65+ years are likely to do this.</td>
</tr>
</tbody>
</table>

CPAG: Canadian Physical Activity Guidelines; PA: physical activity

The 2019 ParticipACTION Report Card on Physical Activity for Adults: Supplementary Data
Importance of Physical Literacy

Canada’s Physical Literacy Consensus Statement defines physical literacy as “a disposition in which individuals have the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for maintaining purposeful physical pursuits throughout the life-course”. As such, it seems that a basic level of physical literacy would be required to meet the demands of occupational tasks, physical recreational pursuits and activities of daily living. It has been widely proposed that physical literacy may positively influence an individual’s physical activity and sedentary behaviour and by extension the health outcomes typically associated such behaviours. Conversely, it has been suggested that those who struggle with their physical literacy may be more likely to disengage from physical activities, placing themselves at greater risk of negative health effects.

In recent years, a positive relationship exists between physical literacy, physical activity levels and potential health outcomes in children. For instance, a recent Canadian study of children 8 to 13 years found that the physical competence, motivation and confidence domains of physical literacy were all negatively associated with sedentary behaviour, while the domain knowledge and understanding domain was negatively related to screen-based sedentary time. Children who meet the 24-Hour Movement Guidelines have been found to score higher on physical competence as well as confidence and motivation domains. Further, a positive relationship was observed between physical literacy and cardiovascular fitness across all domains of physical literacy. Though not focused on physical literacy, per se, some longitudinal and casual studies have noted a positive relationship between fundamental movement skills, an important component of physical literacy and physical activity levels.

It seems reasonable to expect that such findings might translate to the adult population. Unfortunately, physical literacy in adult populations has received relatively little attention in the literature, despite the fact that popular definitions of the construct refer to lifelong participation in physical activity. There is also some evidence to support the relationship between physical activity and specific domains related to the concept of physical literacy (i.e., knowledge, confidence, motivation, physical competence).
**Settings & Sources of Influence**

**Social Support**

**Benchmark:**

% of adults who receive social support to be physically active from key individuals (family, peers, other key individuals) and community.

**The grade is INC**

**Importance of supporting physical activity and reducing sedentary behaviours in the workplace**

Ecological models suggest that a strategy for increasing physical activity participation within a population is to reconstruct the “social climate.” This can be accomplished through:

1. Changing norms and beliefs
2. Providing direct support for modifying environments
3. Implementing policies to encourage physical activity

A means to achieve behaviour change of whole populations may be to de-normalize physical inactivity and re-normalize physical activity through changing norms and beliefs and by providing direct support for modifying environments and policies to encourage physical activity.87,88

In general, older adults, those living in urban or semi-urban settings, and individuals meeting physical activity guidelines had higher odds of reporting seeing people walking or exercising or kids playing actively outdoors in their neighborhood.87,88

**Key findings:**

- This year’s grade is an INC as there is limited national-level data available to provide a full understanding of the social support individuals receive from family, peers, or other key influencing individuals to be physically active.

- 53% of adults living in Canada (18 years or older) agree to some extent that most of their family members walk for at least 30 minutes on almost every day (CFLRI, 2014-2015, Physical Activity Monitor).[custom tabulation]
  - A higher proportion of active individuals agree to some extent compared to inactive individuals

- 37% of adults living in Canada (18 years or older) agree to some extent that most of their friends walk for at least 30 minutes on almost every day (CFLRI, 2014-2015, Physical Activity Monitor).[custom tabulation]
  - A higher proportion of 18- to 24-year-old adults agree to some extent compared to 25- to 64-year-old adults
Barriers to Physical Activity:

- Difficulties finding the right coaching/instruction (22%)
  - Adults 18-64 years: 21%
  - Adults 65+ years: 25% (non-significant difference)

- Difficulties finding others to be active with (33%)
  - Adults 18-64 years: 33%
  - Adults 65+ years: 33% (non-significant difference)

- Difficulties finding family-oriented physical activity programs/classes (25%)
  - Adults 18-64 years: 25%
  - Adults 65+ years: 22% (non-significant difference)

- High dollar costs (37%)
  - Adults 18-64 years: 38%
  - Adults 65+ years: 33%

- Difficulties getting to and from places to be active (19%)
  - Adults 18-64 years: 18%
  - Adults 65+ years: 26%

- Difficulties finding the necessary support services (care, parking; 27%)
  - Adults 18-64 years: 26%
  - Adults 65+ years: 31%
Benchmark:

% of workplaces that provide opportunities for employees to be more physically active and less sedentary throughout the workday.

This is provided through awareness and education opportunities as well as social and organizational supports via leadership capacity and infrastructure, community assets and partnerships, and policies and programs.

The grade is INC

Importance of supporting physical activity and reducing sedentary behaviours in the workplace

Considering the amount of time individuals spend at work, the workplace is an ideal setting to support opportunities to be more physically active and less sedentary throughout the day. This is especially important for those in office-based settings, in which most of the day is spent sitting.

Not achieving enough physical activity and engaging in more sedentary behaviour are risk factors for many chronic conditions, such as Type 2 diabetes, obesity, cardiovascular disease, stroke, cancer (breast, colon, colorectal, endometrial and epithelial ovarian), depression and anxiety. The risks associated with sedentary behaviour have also been found to be independent of and distinct from physical inactivity.
There are many ways in which workplaces can support increases in physical activity and reductions in sedentary behaviours throughout the workday that is beneficial to both the employee and the overall workplace. More specifically, these benefits can span across the health and social well-being of employees, the image of the workplace and economic aspects of the workplace. Examples of benefits include, but are not limited to:

- Increased productivity during working hours
- Fewer costs because of reduced absenteeism, fewer occupational accidents and fewer occupational diseases
- Improved employee relations
- Improved mental wellness and ability to balance high demands and stress among employees
- Improved work environment, including staff morale and attitudes toward the organization
- Fewer occupational accidents, injuries and diseases
- Lower employee turnover
- Enhanced corporate image as health is valued by society
- A more receptive climate for, and ability to cope with workplace changes.

Workplaces can support its employees to be more active and less sedentary throughout the workday by increasing employee awareness and education, providing social and organizational support, fostering community assets and partnerships and developing favourable policies and programs.

Key findings:

This year, the workplace received an INC grade. The most recent national data based on the workplace was collected in 2007-08, which was deemed too old for grading the current workplace context.

Data from the Conference Board of Canada’s Workplace survey from their report entitled “Moving Ahead: Workplace interventions to reduce physical inactivity and sedentary behaviour,” were also reviewed. However, the survey was conducted in fewer workplaces, (approximately 200), and deemed not representative of the national picture.

- Overall, employers observed the following benefits for their organizations as a result of supporting opportunities to be active at the workplace (CFLRI, 2007-2008, Workplace Survey):

  - Increased productivity (93%)
  - Reduced health care costs/insurance premiums (91%)
  - Reduced absenteeism as a benefit of physical activity programs (86%)
  - Reduced workers compensation claims as a benefit of physical activity programs (74%)
  - Reduced number of accidents (70%)
Below is a summary of key findings on the different ways employers have supported workplace physical activity from these key data sets.

**Employer awareness and education**

**Definition:** Aspects that influence employees’ knowledge and awareness are: information about the benefits and risks associated with physical activity and/or sedentary behaviour, the skills needed to increase physical activity and reduce sedentary behaviour and the programs and policies available at the workplace related to physical activity and/or sedentary behavior.99

- According to employers, workplaces provide the following (CFLRI, 2007-2008, Workplace Survey) [custom tabulation]:
  - Information and promotional materials about policies and programs in support of physical activity (39%)
  - Encouragement of active commuting to and from work (26%)
  - Seminars, workshops, training (29%)
  - Instructions or guidelines on how to be active (35%)
  - Awards, recognition, incentives or other motivational programs to increase/maintain participation in physical activity (21%)

- A greater proportion of large companies cite the availability of these supports.

- According to the Conference Board of Canada,100 a sample of approximately 200 workplaces provided the following:
  - Information on where to be active (49%)
  - Wellness resources and information (86%)
  - Information sessions/lunch (72%)
  - Wellness newsletter/column (60%)
  - Health fairs (32%)
  - Fitness counselling (37%)
Social support

Definition: Social support refers to the various types of support or assistance that people receive from others. Social support includes things people do to demonstrate their care for others and enhances their self-worth, tangible forms of help (e.g., providing a babysitter to watch kids while one exercises), by providing information or role modeling positive behaviours.

- There are limited data available to assess the various forms of social supports provided by workplaces to their employees, however, among workplaces, employers identified the following perceived benefits through the support of workplace physical activity: improved employee health and wellness (98%); improved morale (95%); better employee relations (89%); improved corporate culture (90%); greater job satisfaction (84%).

- According to the Conference Board of Canada, workplaces provide the following supports for employees and programming: wellness staff requiring a degree/certification (22%); wellness committee (55%); evaluation and monitoring of wellness strategy/policy (once a year= 46%; ad-hoc= 36%); employee surveys to track participation, satisfaction, (40%-employee surveys; 77% track participation).

Organizational support

Definition: Organizational support through leadership, capacity, and infrastructure is reflected in internal organizational structure and operations that impact employee behaviour.

- According to employers, workplaces provide the following facilities/amenities in support of physical activity (CFLRI, 2007-2008, Workplace Survey) [custom tabulation]:
  - Easily accessible stairwells (73%)
  - Change areas or locker rooms (61%)
  - Bicycle racks (51% of companies)
  - Showers (39%)
  - Fitness facilities or exercise rooms (18%)
  - Signs encouraging stair use (17%)
  - Exercise equipment (e.g., weights or stationary bicycles, 17%)

- Generally speaking, a greater proportion of larger companies cite the availability of many facilities and amenities compared to smaller companies.
Community assets and partnership

Definition: Community assets and partnerships include organizations, people, facilities, funding, regulations, etc. These can be leveraged to develop effective solutions.

- According to employers, workplaces have community assets and partnerships in support of physical activity (CFLRI, 2007-2008, Workplace Survey):
  - Access to off-site physical activity and fitness facilities (54%)
  - Access to community facilities (e.g., schools after hours, 59%)
  - Open spaces for playing Frisbee/catch (53%)
  - Access to nearby walking or bicycling trails (68%)

Policies and programs

Definition: Programs refer to coordinated health promotion strategies and/or activities designed to improve the health and wellness of employees. Policies refer to rules or principles in the workplace that guide managers and employees.

- According to employers, workplaces provide the following formal and informal policies in support of physical activity (CFLRI, 2007-2008, Workplace Survey):
  - Dress down/casual dress (65%)
  - Flexible working hours (59%)
  - Job sharing (40%)
  - Special physical activity events (32%)
  - Extended lunch hours (30%)
  - Telecommuting/working at home (26%)
  - Promotion of physical activity opportunities as a recruitment incentive (21%)

- A greater proportion of large companies (compared to smaller) provide formal policies regarding: flexible working hours, telecommuting or working at home, dress down/casual dress, special physical activity events during work hours, promotion of physical activity opportunities as a recruitment incentive (CFLRI, 2007-2008, Workplace Survey).

- According to the Conference Board of Canada, employers provide the following policies in support of physical activity:
  - Flexible work arrangement (63%)
  - Prompts to interrupt long periods of sedentary time (38%)
  - Formal corporate wellness strategy (32% formal; 48% informal)
  - Stand-alone wellness policy (17%)
• According to employers, workplaces provide the following physical activity programs (CFLRI, 2007-2008, Workplace Survey):
  • Recreational events such as golf tournaments, ski trips (59%)
  • Team sports such as softball, hockey (36%)
  • Group discounts or subsidies at a local fitness facility (31%)
  • Special physical activity events such as Sneaker Day (29%)
  • Individual sports such as tennis or swimming (26%)
  • Fitness testing or physical activity counselling (21%)
  • Group exercise programs such as a running club or walking club (19%)
  • Individualized fitness programs (12%)
  • Seasonal programs to encourage year-long participation (13%)
  • Other events (20%)

• A greater proportion of large companies provide the following programs in support of physical activity: team sports, recreational events, opportunities for other events, group discounts or subsidies, group exercise programs, fitness testing or physical activity counselling, individualized fitness programs (CFLRI, 2007-2008, Workplace Survey).

• According to the Conference Board of Canada,100 employers provide the following physical activity programs:
  • Lifestyle behaviour coaching programs (50%)
  • Health screening program/health risk (51%)
  • Fitness equipment subsidy/reimbursement (22%)
  • Support/sponsor company sports (31%)
  • Support/sponsor company physical (46%)
  • Other support for personal fitness (40%)
Community & Environment

Benchmark:

% of communities that are aware of and use physical activity guidelines and information.

% of communities that have a formal strategy for physical activity.

% of communities that have formal active transportation plans.

% of communities providing supports for active transportation.

% of communities indicating partnership/collaboration for delivering physical activity/sport programming.

% of communities providing safe and appropriate facilities for physical activity and sport.

% of communities providing programming to support various populations.

The grade is B-

Important role of community & environment on physical activity

There are many ways in which communities can support adults and older adults to be physically active. Community-wide media campaigns to develop awareness of the benefits of and opportunities to be physically active, involving multiple approaches (social support, health education, etc.) and multiple community sectors has been found to be effective strategies. At the same time, the physical and built environments provide opportunities or barriers to be physically active, such as natural cues within the community and changing local environments to enhance access to opportunities for physical activity (e.g., building walking trails, recreation facilities, street-scale/design, and traffic calming measures).

The relationship between the built and natural environment and physical activity has been linked to better health, such as lower body mass index and body fat; improved cardiovascular disease risk factors; lower risk for cancer; lower risk for premature death from all causes; better mental health; and a stronger sense of community belonging.
In 2017, the Chief Public Health Officer’s Report on the State of Public Health in Canada emphasized the importance of building communities that support an active, healthy lifestyle. This report recognizes the importance of designing communities that support active transportation and promote opportunities to be physically active in a variety of well-connected spaces and places for all ages, cultures and abilities.\textsuperscript{114}

Active transportation is any form of human-powered travel (e.g., walking, cycling, non-mechanized wheel chairing, public transit etc.) individuals can use on their journey from place to place.\textsuperscript{115} As a form of physical activity, it too has the ability to support reductions in chronic disease development and support an overall active population.\textsuperscript{116-118} Developing and incorporating active transportation plans or incorporating active transportation within formal community plans can help promote both utilitarian (destination-oriented activity) and recreational (leisure activities) physical activity.\textsuperscript{114}

In Canada, active transportation has been associated with\textsuperscript{119-131}:
- A public transit stop nearby
- A choice of destinations within a reasonable distance
- Well-maintained sidewalks
- Dedicated areas for cycling (e.g., safe cycling routes, few hills, good connections between roads and routes and paths are accessible to various destinations)
- Affordable recreation facilities
- Safe traffic

Community and environments in which people live must also consider diverse and vulnerable population groups as part of community development, programming and services.

As the Canadian population ages, ensuring the community and built environment supports healthy aging is important. At the same time, those living with a mobility or disability-related conditions are not always considered in community design and development plans.\textsuperscript{132-134} Neighbourhoods with good accessibility, high quality and safe streets, lower traffic density, uncrowded and open spaces, and benches for opportunities to rest, are supportive of a mobile and social population among older adults and those living with a mobility or disability-related condition.\textsuperscript{134-136} This is especially important for the prevention of falls – a leading cause of hospitalization among older adults.\textsuperscript{29,41}

Indigenous communities, particularly those that are rural, remote, or isolated communities, face unique built environment challenges to support physical activity. Although the research is limited in the area of healthy active living and the built environment, some identified barriers include isolation, restrictive environment not conducive for physical activity, such as weather, safety, and dangerous animals), limited opportunities, support, programs, time, recreational facilities and equipment.\textsuperscript{137-139}
Key findings:

The Canadian Fitness and Lifestyle Research Institute conducted the Survey of Physical Activity Opportunities in Canadian Communities in 2015, which collects community-based information on:

- Municipal policies
- Infrastructure
- Services supporting physical activity
- Municipal programming and schedules
- Barriers and requirements; and
- Availability of physical activity information

The key findings outlined below are based on communities across Canada with a population ≥1,000 residents.

Supports & Information

- Communities use various forms of physical activity resources for information, which include [CFLRI, 2015, Survey of Communities]
  - National guidelines (55%)
  - Provincial/territorial guidelines (39%)
  - Physical literacy strategies (28%)
  - The use of these resources generally rises with increasing population size, with the exception that the use of provincial/territorial guidelines does not vary with community size

- In terms of partnership supports, communities work with other organizations when developing physical activity/sport facilities, programs, services. These partnerships generally increase with increasing population size. The types of organizations communities partner with include:
  - Not-for-profit organizations (94% of communities)
  - Schools/boards (86%)
  - Provincial/territorial government/agencies (75%)
  - Business/private sector (71%)
  - Local public health (67%)
  - Local planning (61%)
  - Provincial sport organizations (61%)
  - Federal government/national agencies (55%)
  - Local transportation departments (32%)
• With partnerships, there are also opportunities for shared-use agreements.

• 81% of communities (≥1,000 residents) have agreements with school boards about shared use of school and municipal facilities; 52% for sharing resources and programming.

• 88% of communities have agreements with sport organizations or physical activity clubs about the use of municipal facilities; 64% for sharing resources and programming.

• A slight increase in shared use agreements was found in larger communities.

• Some communities also indicated some form of discounted fee structures to support various population groups (CFLRI, 2015 Survey of Communities).
  - Older adults (60% of communities)
  - Families (59%)
  - Lower income households (45%)
  - Individuals with disabilities (26%)
  - Such discounted fee structures generally increase with increasing community size

Policies, strategies and plans

• 35% of communities have indicated that they have a formal strategy to support physical activity and sport.

• 24% have a formal transportation master plan.

• 22% have a formal active transportation plan.

• Some communities indicated having a policy in place for developing safe pedestrian and bicycling routes when:
  - retrofitting existing communities (24%)
  - developing new areas (38%)
  - reconstructing roads (34%)

Programming

• Communities indicated that they offer targeted programming for (CFLRI, 2015, Survey of Communities).
  - Adults (94% of communities)
  - Older adults (91%)
  - Families (87%)
  - Women (80%)
  - Adult beginners (78%)
  - The availability of programming increases with increasing community population
Facilities

- The top listed facilities cited among communities include (CFLRI, 2015 Survey of Communities) [custom tabulation].
  - Parks and green spaces (93% of communities)
  - Baseball and softball diamonds (90%)
  - Ice rinks (88%)
  - Soccer or football fields (84%)
  - Community centres, halls, shared facilities (81%)
  - Tennis or racquetball courts (79%)
  - Basketball courts (73%)
  - Playing and climbing structures (73%)
  - Arenas (67%)
  - Gyms (65%)
  - The availability of most facilities increases with increasing community size

- At the same time, additional facility and infrastructure needs were identified by communities to further support physical activity. These include (CFLRI, 2015 Survey of Communities) [custom tabulation].
  - More walking, bicycling, multi-purpose trails (65% of communities)
  - More indoor sport and recreation facilities (54%)
  - More outdoor sport and recreation facilities (49%)
  - More playgrounds and green spaces (30%)
  - The percentage of communities citing more indoor sport and recreation facilities as a pressing need increases with increasing community size

- Many communities identified the need for repair and maintenance of various physical activity-related facilities, including:
  - Repair of indoor sport and recreation facilities (43% of communities)
  - Repair of outdoor sport and recreation facilities (46%)
  - Maintenance of playgrounds and green spaces (42%)
  - Maintenance of walking, bicycling, multi-purpose trails (43%)
  - Improved networking of trails, paths, sidewalks (59%)
  - Improved linkages of bicycle pathways, lanes with roadways, transport (46%)
  - The percentage of communities citing repair and maintenance of indoor/outdoor sport and recreation facilities, maintenance of walking, bicycling, multipurpose trails, improved networking of trails, paths, sidewalks, and improved linkages of pathways and lanes as a pressing need increases with increasing community size
Health & Primary Care Settings

Benchmark:

% of adults who receive support to be physically active from a health professional.

The grade is C-

Important role of health-care professionals and settings

The health-care setting is an opportune avenue to promote physical activity to adults living in Canada. Physicians and other health care providers are well-respected in providing health advice and have regular contact with their patients.

Physical activity counselling provided by clinicians or counsellors alone that explored motivation increased self-reported physical activity at least 12 months following the intervention.\textsuperscript{140}

Physicians writing a prescription in a goal-oriented counselling appointment, resulted in 18 more minutes per week of MVPA among patients, and 4% more patients meeting physical activity guidelines.\textsuperscript{141} A systematic review had similar conclusions, whereby small to medium positive intervention effects (e.g., physicians providing advice or counselling face-to-face or by phone on multiple occasions) were observed.\textsuperscript{142}

Therefore, health-care providers can be important influencers to healthy behaviour and are well-positioned to help guide and support adults living in Canada to be active.

One study found that approximately 52% of family physicians meet the physical activity guidelines themselves.\textsuperscript{143} Those physicians who exercise have been found to counsel their patients more about exercise. Moreover, Canadian physicians' health-care opinions have been found to be related to their own habits and counselling.\textsuperscript{144} For example, physicians who strongly agreed, or agreed that "they will perform better counselling if they have healthy habits" showed higher rates of performing counselling.\textsuperscript{144} Physicians who were more interested in prevention were most likely to provide counselling to patients than those more interested in treatment.\textsuperscript{144} Based on the 2001 National Physician Workforce Survey, 16% of family physicians provided a written physical activity prescription.\textsuperscript{145}

Physicians and other health-care providers have many barriers to physical activity counselling and exercise prescription, such as time, knowledge, confidence and billing structures.\textsuperscript{146,147} Given these barriers, and the opportunity to improve dissemination of guideline recommendations to Canadians through health-care, more efforts should be made to support health-care providers in providing counselling and exercise prescription.
Key findings:

- According to the 2014-15 Physical Activity Monitor (PAM) survey, 40% of adults have heard about physical activity from a health professional in the past 12 months (CFLRI, sub-sample of 2014-15, Physical Activity Monitor).
- Higher percentage of adults 65 years and older have heard about physical activity from a health professional in the last 12 months compared to 25- to 44-year-olds.
- 23% of adults indicated that they have sought advice from a health care professional about becoming more active, within the past year.
- Among these adults, 66% felt that the advice was considerably helpful (CFLRI, 2014-15, Physical Activity Monitor).
- There is no difference between age groups.
Strategies & Investments

Government

Benchmark:

Evidence exists of leadership and commitment in promoting physical activity opportunities for adults of all ages and abilities.

Funds and resources are allocated for the implementation of physical activity promotion strategies and initiatives for adults of all ages, abilities and cultures.

The grade is B-

Key findings:

Policy

• A Common Vision for Increasing Physical Activity and Reducing Sedentary Living in Canada: Let’s Get Moving

On May 2018, the federal government released The Common Vision – a national policy document intended to guide the country toward ways of increasing physical activity and reducing sedentary living. The first of its kind in Canada, it takes policy focus on physical activity and its relationship to sport, recreation, health and other relevant policy areas.

The Common Vision incorporates Indigenous perspectives, as well as input from many organizational leaders across Canada, and is meant to complement and align with other relevant policies including:

• The Canadian Sport Policy
• The Framework for Recreation in Canada: Pathways to Well-being
• Active Canada 20/20: A Physical Activity strategy and Change Agenda for Canada – Complementary Approaches
• Curbing Obesity: A Federal, Provincial, and Territorial Framework for Action to Promote Healthy Weights – Supportive Environments for Healthy Weights

The Common Vision is guided by five interdependent principles that are foundational to increasing physical activity and reducing sedentary living. They include Physical Literacy, Life Course, Population Approach, Evidence-based and Emergent-focused and Motivations.

The Common Vision also includes a comprehensive set of 6 Areas of Focus for collaborative
action – Cultural Norms, Spaces and Places, Public Engagement, Partnerships, Leadership and Learning and Progress – that were identified through a comprehensive national consultation and engagement process.

Specific criteria of key elements of a successful physical activity policy, which were identified in the international literature and international consensus meetings on Physical Activity. Based on these criteria, the Common Vision has achieved consultation with key stakeholders toward policy development, incorporates a comprehensive policy approach inclusive of multiple agencies, strategies and different population groups, works at different levels of government, society, and physical environment, integrates the national physical activity guidelines and is recognized through branding across governments and agencies. However, at this time, it is unclear how the Common Vision is being utilized, implemented, and supported (e.g., support and resources) across government, non-government, private sector, coalitions and partnerships across Canada. Moreover, there is no defined timeframe for policy commitment, evaluation of the policy or surveillance structures in place to determine progress and success.

Leadership

Canada is committed to the WHO Global Action Plan for Physical Activity (2018-2030), which include 4 core objectives:

- **Create active societies** - Create a paradigm shift in all of society by enhancing knowledge and understanding of, and appreciation for, the multiple benefits of regular physical activity, according to ability and at all ages.
- **Create active environments** - Create and maintain environments that promote and safeguard the rights of all people, of all ages, to have equitable access to safe places and spaces, in their cities and communities, in which to engage in regular physical activity, according to ability
- **Create active people** - Create and promote access to opportunities and programmes, across multiple settings, to help people of all ages and abilities engage in regular physical activity as individuals, families and communities.
- **Create active systems** - Create and strengthen leadership, governance, multisectoral partnerships, workforce capabilities, advocacy and information systems across sectors to achieve excellence in resource mobilization and implementation of coordinated international, national and subnational action to increase physical activity and reduce sedentary behaviour.
Canada has evidence-based physical activity guidelines for:
- Adults (18-64 years)\(^3\)
- Older adults (65+ years)\(^2\)
- Pregnancy\(^153\)
- Multiple Sclerosis\(^154\)
- Spinal Cord Injury\(^155\)
- Parkinson's Disease\(^156\)
- Hypertension\(^157\)

The Canadian Society for Exercise Physiology (CSEP) is leading the development of 24-Hour Movement Guidelines Adults and Older Adults, which are anticipated for release in Fall 2020.

The Government of Canada recently passed The Accessible Canada Act. The act aims to ensure a barrier-free Canada, which will benefit individuals living with disabilities.\(^158\)

The Federal Government will amend the Physical Activity and Sport Act to support reconciliation by ensuring that policies to promote physical activity as a fundamental element of health and well-being, reduce barriers to sports participation, increase the pursuit of excellence in sport, and build capacity in the Canadian sport system, and is inclusive of Indigenous peoples.

Sport Canada and federal representatives met with the Aboriginal Sport Circle to reiterate the need for collaborative action to address the calls to action.\(^159\) Specifically, the ongoing work in other areas related to Indigenous sport development.

Indigenous Sport, Physical Activity and Recreation Council (ISPARC) offers several programs in the areas of community sport development, performance sport programs, and healthy living activities.

**Funding**

- The 2019 federal budget proposes to provide $30 million over 5 years to enable sports organizations in Canada to promote accessible, ethical, equitable and safe sports for families, athletes and coaches.\(^160\)

- $3 million in funding over 4 years is being provided to the Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) to support its efforts to increase participation of women and girls in sport.\(^160\)

- Budget 2019 proposes a one-time transfer of $2.2 billion through the Federal Gas Tax Fund to address short-term active transportation infrastructure priorities in municipalities and First Nation communities.\(^160\)
• Budget 2019 proposes significant additional funding of $100 million over five years, with $20 million per year ongoing, for the New Horizons for Seniors Program so that it can continue to improve older adults’ quality of life and better promote their active participation in the community.\textsuperscript{160}

• 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.\textsuperscript{161}

• Budget 2018 proposes $16 million over 5 years with $2 million per year ongoing, for Special Olympics Canada.\textsuperscript{161}

• In 2018, the Government proposed to invest $47.5 million over 5 years, and $9.5 million per year ongoing to expand the use of sport for social development in more than 300 Indigenous communities.\textsuperscript{161}

• In 2017-2018 Sport Canada invested over $450,000 in multisport service organizations to support Indigenous sport development and leadership skills in indigenous communities. Included among multisport service organizations spending in 2017-18 was a contribution of $800,000 to the Aboriginal Sport Circle, which is the national organization responsible for advancing Indigenous sport development in Canada.

• In partnership with provinces and individual Canadians, Budget 2017, proposes to invest $50 million over 5 years to be delivered through the Parks Canada Agency, to complete, enhance, and maintain the Trans Canada Trail.\textsuperscript{162}

• The 2016 Federal Budget provided $2.2 million over 3 years to Activate Your Health – a workplace wellness within companies in Quebec.\textsuperscript{163}

• In 2016 budget proposes $76.9 million over 2 years, starting in 2016–17, to support the construction of cultural and recreational infrastructure on reserve.\textsuperscript{163}
Abbreviations

CFLRI
Canadian Fitness and Lifestyle Research Institute

CCHS
Canadian Community Health Survey

CHMS
Canadian Health Measures Survey

FPT
Federal, provincial and territorial

INC
Incomplete

ISRC
Interprovincial Sport and Recreation Council

METS
metabolic equivalents

MVPA
Moderate-to-vigorous physical activity

PAM
Physical Activity Monitor

PHAC
Public Health Agency of Canada

RCRC
Report Card Research Committee

SBRN
Sedentary Behaviour Research Network

WHO
World Health Organization
Major Data Sources

The following are major data sources used in the 2019 Report Card:

**Canadian Community Health Survey (CCHS)**

Formed in 1991, the CCHS is a cross-sectional survey that collects information related to health status, health care utilization and health determinants for the Canadian population every 2 years. The main objectives of this survey include: supporting health surveillance programs by providing health data at the national, provincial and intra-provincial levels; providing a single data source for health research on small populations and rare characteristics; and, creating a flexible survey instrument that includes a rapid response option to address emerging issues related to the health of the population.

**Canadian Health Measures Survey (CHMS)**

The CHMS, launched in 2007, is collecting key information relevant to the health of Canadians by means of direct physical measurements such as blood pressure, height, weight and physical fitness. As part of the CHMS, a clinical oral health examination helps to evaluate the association of oral health with major health concerns such as diabetes, and respiratory and cardiovascular diseases. In addition, the survey is collecting blood and urine samples to test for chronic and infectious diseases, as well as nutrition and environment markers. Through household interviews, the CHMS is gathering information related to nutrition, smoking habits, alcohol use, medical history, current health status, sexual behaviour, lifestyle and physical activity, the environment and housing characteristics, as well as demographic and socio-economic variables.

**General Social Survey (GSS)**

The GSS is a series of annual, cross-sectional surveys gathering data on social trends to monitor changes in the living conditions and well-being of Canadians ages 15 years or older, and to provide information on specific social policy issues.

**Physical Activity Monitor (PAM)**

The PAM is an annual telephone survey of nationally representative population samples which tracks physical activity and sport participation among Canadians and tracks changes in physical activity patterns over time, along with factors influencing participation. The surveys representativeness of various specific populations (for example by gender groups, age groups, geographic, and socio-economic groups) are strengths of the surveys. The surveys are cross-sectional in nature, so the data are applicable to surveillance and hypothesis generating purposes, but are not applicable for assessing cause and effect.

**Municipalities (2005)**

The Municipalities survey collects community based data on municipal policies, infrastructure, services supporting physical activity, municipal programming and schedules, barriers and requirements, and availability of physical activity information.

**Workplace (2007-2008)**

The Workplace survey collects data on supportive workplace policies, availability of facilities at work or near work to be active, work related benefits and barriers to physical activity, demand for resources, and encouragement for physical activity.
The 2019 ParticipACTION Report Card on Physical Activity for Adults: Supplementary Data

References


Everything gets better when you get active.