Physical Activity and Sedentary Behaviour
Key Messages

PARC
This document will assist you and your colleagues to deliver consistent messages on the Canadian Physical Activity Guidelines, Canadian 24-Hour Movement Guidelines for Children and Youth, and Sedentary Behaviour Guidelines, each of which was developed by the Canadian Society for Exercise Physiology. Each message has supporting evidence, action steps, and motivational messages to use in your communication strategies and to create awareness of the guidelines.

Based on scientific research (the Canadian Physical Activity Guidelines for the Early Years: 0-4; the Canadian Physical Activity Guidelines for Adults: 18-64 years; the Canadian 24-Movement Guidelines for Children and Youth (aged 5-17 years); and the Canadian Sedentary Behaviour Guidelines for the Early Years: 0-4), Canadians do not know how much or what type of physical activity they need to stay healthy, adults are more inactive than ever before, and children and youth are spending the better part of each day sitting in front of a screen. When all of this sit time is accumulated, Canadian children’s optimal health and overall development is dangerously compromised. This, in part, is the rationale behind creating this document. In addition, the issues surrounding obesity and physical inactivity are complex and involve factors such as income, area of residence, and employment status. The factors that influence behaviour change are not reflected in the key messages. The messages reflect only what individuals from different age groups should strive to achieve for their own optimal health.

It is also important to note that the Canadian Physical Activity Guidelines and the Canadian Sedentary Behaviour Guidelines are different and have separate health outcomes. More recently, the guidelines that relate to Canadian youth aged 5–17 have been updated to include recommendations for sleep, changing sedentary behaviour, and increasing physical activity. They are referred to as the Canadian 24-Hour Movement Guidelines for Children and Youth.

Messaging that applies to all Canadian Physical Activity Guidelines:

• Start slowly and gradually increase time, frequency, and intensity of activity
• Being physically active is beneficial for all age groups in the prevention or maintenance of some chronic diseases.
• More daily physical activity provides greater health benefits

Messaging that applies to the Canadian 24-Hour Movement Guidelines for Children and Youth (aged 5-17 years):

• Aim for better quality and consistency of sleep as this provides greater health benefits
• Accumulate at least 60 minutes per day of moderate to vigorous physical activity
• Add vigorous physical activities to strengthen muscle and bone, at least three days per week.
• Include several hours of a variety of structured and unstructured light physical activities.
• Limit sitting for extended periods of time
• Limit recreational screen time to two hours per day
Canadian Physical Activity Guidelines for the Early Years 0–4

- The guidelines encourage children in the early years to be more physically active than the guidelines state, as more health benefits come from being more physically active.
- The guideline recommendations place a high value on the benefits of physical activity that accumulate throughout life.

Why is this important?

- Just 70% of early years-aged children in Canada (3- to 4-year-olds) are meeting the physical activity recommendations for this age group, which recommend 180 minutes of daily activity at any intensity.¹
- The number of overweight and obese Canadians younger than 6 years old is rising. Two regional reports tell us that the prevalence of obesity in children aged 2 to 5 years is between 8% and 11%.² Research shows a link between higher levels of physical activity in children and lower levels of anxiety and depression.³
- The National Longitudinal Survey of Children and Youth (NLSCY) indicates that only 36% of 2–3-year-olds and 44% of 4–5-year-olds regularly engage in an unorganized sport and physical activity each week.⁴

Action⁵

For healthy growth and development:

**Infants** (aged less than 1 year) should be physically active several times daily - particularly through interactive floor-based play. This can include tummy time, reaching and grasping for objects, playing and rolling on the floor, and crawling.

Infants should be physically active daily as a part of supervised indoor and outdoor experiences.

**Toddlers** (aged 1–2 years) and **preschoolers** (aged 3–4 years) should accumulate at least 180 minutes of physical activity at any intensity spread throughout the day, including:

- a variety of activities in different environments,
- activities that develop movement skills, and
- progression toward at least 60 minutes of energetic play by 5 years of age.

Being active as a toddler or preschooler means any activity that gets children moving, such as climbing stairs, playing outside, running, or dancing.

The older children get the more energetic play they need such as hopping, jumping, skipping, and bike riding.

Motivational message

- Being physically active every day may help young children maintain a healthy body weight, improve movement skills, have fun, and be happy.
- Being physically active helps children experience the natural consequences of success and failure. This balance helps to build confidence through play.
- Any way, every day. Get active together!
- Now is the time to get up and get moving!
- Creating healthy habits and routines today makes for a healthier experience across the lifespan.
Canadian Sedentary Behaviour Guidelines for the Early Years 0 – 4 Years

• The guidelines are evidence-based and provide protocols to minimize the amount of time children in the early years should be sedentary to achieve health benefits.
• Per the guidelines, less time spent being sedentary and more time being physically active is encouraged and better for children’s health.
• Sedentary behaviour is time when children are doing very little physical movement, such as sitting or reclining in a stroller, high chair, or car seat; watching television; or playing with electronic games.

Why is this important?

• Only 15% of 3- to 4-year-olds in Canada meet the Canadian Sedentary Behaviour Guidelines for the Early Years, which recommend that daily screen time (i.e., use of computers, television, etc.) be limited to less than one hour.\(^6\)
• Approximately 90% of children are being exposed to screen-based activities before 2 years of age.\(^7\)
• Young children may experience additional negative health outcomes when exposed to excessive sedentary behaviour, such as impaired attention span and cognitive development.\(^8\)
• A Canadian survey reported that approximately 25% of children aged 2–5 years watch more than two hours of television a day.\(^9\)
• Promoting appropriate sedentary behaviour habits at a young age may have positive effects on immediate and long-term health.
• Sedentary screen time is associated with detrimental effects on aspects of cognitive and psychosocial development and may be associated with adverse effects on body composition.

Action

• For healthy growth and development, parents and caregivers should minimize the time young children spend being sedentary during waking hours. This includes prolonged sitting or being restrained (e.g., stroller, high chair) for more than one hour at a time.
• For those under 2 years, screen time (e.g., TV, computer, video games, smart phones) is not recommended.
• For children 2–4 years, screen time should be limited to under an hour per day; less is better.

Motivational message

• Spending less time being sedentary can help young children maintain a healthy body weight, develop social skills, and improve language skills.
• Now is the time to get up and get moving!
• The whole day matters regarding the health of our children and youth.
Canadian 24-Hour Movement Guidelines for Children and Youth (aged 5–17 years)

- The guidelines highlight the importance of preserving sufficient sleep, trading indoor time for outdoor time, and replacing sedentary behaviour and light physical activity with additional moderate to vigorous physical activities that can provide greater health benefits

Why is this important?

- The 2016 ParticipACTION Report Card assigned children and youth a grade of “F” for Sedentary Behaviour as very few children and youth at any age are meeting the sedentary behaviour recommendations in the Canadian 24-Hour Movement Guidelines for Children and Youth.  
  - Only 24% of 5- to 17-year-olds meet the Canadian Sedentary Behaviour Guidelines recommendation of no more than 2 hours of recreational screen time per day.  
  - Too much screen time is associated with negative psychological consequences, such as reduced academic achievement and insufficient sleep.  
  - Over the past 30 years, childhood obesity rates have tripled in Canada. Today’s children are at risk of becoming the first generation who may not live as long as their parents.
  - Children and youth are getting an average of 44 hours of screen time a week: six hours a day on weekdays and more than seven hours a day on weekends. This leaves very little time for play and exceeds the recommendation of a maximum two hours per day of recreational screen time.
  - A total of 31.5% of Canadian children and youth are overweight or obese.

Action

Children and youth not only need several hours of light physical activity each day but they also need at least 60 minutes of moderate- to vigorous-intensity physical activity. This includes vigorous physical activities that increase the heart rate and breathing rate, muscle- and bone-strengthening activities three days a week, and a variety of aerobic activities both indoors and out.  

- Moderate-intensity physical activity causes children to sweat a little and breathe harder and includes activities such as bike riding and playground activities.
- Examples of other moderate to vigorous physical activities are skateboarding, tag, fitness classes, basketball, hockey, soccer, swimming, tennis, rollerblading, sledding in the park, or skiing.
- Vigorous-intensity physical activity causes children to sweat and be “out of breath” and includes activities such as running or swimming.
- The guidelines also recommend activities that strengthen muscle and bone (weight bearing activities) at least three days per week, such as jumping, skipping, and climbing.
- These guidelines also recommend that inactive forms of transportation (such as being in a car), extended sitting, and time spent indoors throughout the day should be limited.
- Children and youth need several hours of a variety of structured and unstructured light physical activity daily.
- The intensity of the exercise is dependent upon the effort exerted during the activity.
- Children and youth should limit recreational screen time to no more than two hours per day and can achieve additional health benefits if this time is decreased further.
Motivational message

• Being physically active every day helps children maintain a healthy body weight and increases overall physical strength.
• Physical activity builds capacity in youth as they learn how to be leaders, how to be creative and problem solve, and how to meet and build healthy relationships with friends.
• Sit time needs to be limited and moderate-vigorous physical activity supported.
• Remember, activity can take place in the home, at school, indoors or outdoors, on water, ice, or in the air, and these activities can take place during all seasons.
• Trade indoor time for outdoor time. Spending more time being active and less time being sedentary helps children perform better in school, learn new skills, and improve self-confidence.
• Leave the car at home to enjoy a family bike ride or nature walk.
• Make family time active time.
• The whole day matters in the health of your children.
• Children aged 5-13 years need 9 to 11 hours of uninterrupted sleep with consistent bed and wake times.
• Youth aged 14-17 years need 8 to 10 hours of uninterrupted sleep with consistent bed and wake up times.
• Going to bed and waking up at the same time each day is best for optimal health. Even on the weekends.
• Getting physically active is a great way to meet friends and build healthy relationships.
• How much time our children sweat, step, sleep, and sit matters!
• How are you going to spend your next 24 hours?

Canadian Physical Activity Guidelines for Adults—18–64 Years

• The evidence-based guidelines provide a minimum target to begin to achieve health benefits, more is better.

Why is this important?

• Currently, only 15% of Canadian adults engage in at least 150 minutes of moderate- to vigorous-intensity physical activity per week.\(^{17}\)
• Many Canadians do not know how much or what type of physical activity they need to stay healthy.\(^{18}\)
• Nearly half (47%) of Canadian adults aren’t active for even 30 minutes one day of the week.\(^{19}\)
• According to the Canadian Community Health Survey for Ontario, in 2010, 34% of adults (18 years and older) were overweight (40.7% of males, 27.3% of females) and 18.7% of adults (18 years and older) were obese (20.3% of males, 17.0% of females).\(^{20}\)
• Approximately 33% of deaths related to coronary heart disease; 25% of deaths related to stroke and osteoporosis; 20% of deaths related to colon cancer, hypertension, and type 2 diabetes; and 14% of deaths related to breast cancer could be prevented by following the current Canadian Physical Activity Guidelines.\(^{21}\)

Action

Adults need at least 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week in bouts of 10 minutes or more.\(^{22}\)

• Moderate-intensity physical activity causes adults to sweat a little and breathe harder and includes activities such as brisk walking and bike riding.
• Vigorous-intensity physical activity causes adults to sweat and be “out of breath” and includes activities such as jogging and cross-country skiing.
The intensity of the exercise is dependent upon the effort exerted during the activity.

Examples of other moderate to vigorous physical activities are dance classes, fitness classes, or playing a sport.

The guidelines also recommend muscle- and bone-strengthening activities such as skipping, jumping, and light weight-resistance training using major muscle groups at least two days per week.

Motivational message

- Being physically active 150 minutes per week can reduce the risk of chronic diseases such as heart disease, some cancers, type 2 diabetes, high blood pressure, and stroke.
- Being active also improves strength, morale, and self-esteem.
- Your children and grandchildren are watching you! Model healthy habits for your children. The more you move, the more they will move.
- Now is the time to get up and get moving!

Canadian Physical Activity Guidelines for Older Adults—65 Years and Older

- The evidence-based guidelines provide a minimum target to begin to achieve health benefits, more is better.

Why is this important?

- Many older adults may be uncertain about how much or what type of physical activity they need to stay healthy.¹³
- A total of 80% of Ontarians older than age 65 have at least one chronic disease, while approximately 70% suffer from two or more.¹⁴
- The cost of medical treatment and lost productivity for chronic diseases is estimated to cost Ontario $80 billion a year.¹⁵
- The CANSIM table, which includes information for adults 65 years and older, shows that in Ontario in 2010:¹⁶
  - 34.0% of adults (18 years and older) were overweight (40.7% of males, 27.3% of females),
  - 18.7% of adults (18 years and older) were obese (20.3% of males, 17.0% of females),
  - 20.1% of youth (12–17 years) were overweight or obese (24.9% of males, 14.8% of females),
  - 39.6% of adults 65 years and older were overweight (46.4% of males, 34.0% of females), and
  - 18.4% of adults 65 years and older were obese (18.6% of males, 18.2% of females).

Action

Older adults should aim to achieve 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week in 10 minute bouts or more.¹⁷

- Moderate-intensity activity causes an older adult to sweat a little and breathe harder, and includes activities such as brisk walking and bicycling.
- Vigorous-intensity activity causes an older adult to sweat and be “out of breath,” and includes activities such as cross-country skiing and swimming.
- The intensity of the exercise is dependent upon the effort exerted during the activity.
- Examples of other moderate- to vigorous-intensity physical activities are dancing, fitness classes, running, urban/Nordic pole walking, and playing a sport. These guidelines also recommend muscle- and bone-strengthening activities such as heavy gardening or light weight-resistance training using major muscle groups at least two days a week.
Motivational message

• It’s never too late to start being active.
• Older adults who are physically active may have enhanced balance and may become less likely to experience a fall.
• Being physically active for 150 minutes per week can help reduce the risk of developing chronic diseases, such as high blood pressure, diabetes, and heart disease.
• Being physically active helps older adults maintain independence longer and increases bone health and mental health.
• Model healthy choices to those younger than you in your family.
• Keep up with your grandchildren and children by being active every day.
• Now is the time to get up and get moving!
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Donna Mills, Region of Niagara Region Public Health
Frances Brunet, Eastern Ontario Health Unit
Lori Felner, Middlesex-London Health Unit
Louise Daw, Physical Activity Resource Centre, Ophea
Marie Clarke, Ontario Society of Physical Activity Promoters in Public Health
Mary Duggan, Canadian Society for Exercise Society
Mary Jane Gordon, Kingston, Frontenac, and Lennox & Addington Public Health
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Sarah Gallsworthy, Sports and Recreation Consultant
Stasia Starr, Thunder Bay District Public Health
Tara Maher, Program Training Consultation Centre, PTCC
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