

Physical Activity Assessment and Counselling: A key determinant of health for every Canadian.

REVISED STATEMENT (October 2019)

Background

The College of Family Physicians of Canada (CFPC) recognizes that physical activity is a key component in the management of chronic disease and significantly reduces the risk of premature death. The evidence linking physical activity with improved health and quality of life is compelling and supported by a robust body of research. Current scientific knowledge constitutes strong support for the recommendations of the Canadian Physical Activity Guidelines, which state:¹

- Children and youth should accumulate "at least 60 minutes per day of moderate to vigorous intensity physical activity involving a variety of aerobic activities."
- Adults and older adults (aged 65 years and older):
 - o "Should accumulate at least 150 minutes of moderate to vigorous intensity aerobic activity per week, in bouts of 10 minutes or more."
 - "It is also beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week."
- In addition, for older adults: "Those with poor mobility should perform physical activities to enhance balance and prevent falls."

Why is it important?

- The World Health Organization (WHO) concluded that "Insufficient physical activity is one of the leading risk factors for death worldwide" and that "Insufficient physical activity is a key risk factor for noncommunicable diseases (NCDs) such as cardiovascular diseases, cancer and diabetes." In line with these conclusions, the WHO proposed a global action plan on physical activity.
- According to the most recent Canadian population-wide data (2015), four in five adults and three in five children and youth do not meet the minimum guidelines for physical activity.⁴
- Chronic diseases and other illnesses cost the Canadian economy an estimated \$190 billion annually, with \$122 billion in indirect income and productivity losses and \$68 billion in direct health care costs.⁵
- The proportion of older adults (aged 65 and over) will rise from 15.3 per cent in 2013 to between 23.8 per cent and 27.8 per cent in 2063, and falls are the leading cause of fatal and non-fatal injuries in this population.⁶⁷
- Indigenous Canadians are at the greatest risk of becoming overweight or obese and developing chronic disease.8



- Rates of obesity in Canada are on the rise among all age groups. Between 1978 and 2017, the proportion of adults who are overweight or obese rose from 49 per cent to 64 per cent. In 2013 the percentage of children and youth being overweight or obese was 28.9 per cent.
- Physical inactivity, poor diet, and the aging demographics of the population are linked to increasing rates of chronic conditions such as obesity, cardiovascular disease, and type 2 diabetes. For example, the prevalence of type 2 diabetes in Canada was 8.1 per cent in 2014 and increased approximately 70 per cent in the past decade, with a higher risk for non-European ethnic groups and individuals of lower socioeconomic status.¹¹

Key messages for family physicians

- Cardiovascular fitness is an important and independent factor associated with favourable health outcomes affecting incidence of chronic diseases, adverse cardiovascular events, and death.¹²
- Dose-effect meta-analysis of the effect of physical activity on the risk of mortality indicates that even a modest change from a sedentary to a mildly active lifestyle is associated with a large benefit.¹³
- Physical activity can help prevent and manage over 26 chronic diseases, including anxiety, depression, stroke, hypertension, coronary heart disease, type 2 diabetes, and osteoarthritis.¹⁴
- Growing evidence links physical activity to lower risk of several cancers, with the highest level of evidence for colon and breast cancer. ¹⁵
- In children and youth (6 to 18 years of age), increased physical activity can reduce the risk of obesity (elevated BMI).¹⁶
- For adults, the more physically active they are in their leisure time, the lower the incidence of metabolic syndrome.¹⁷
- Physical activity has a positive effect on cognitive function and mental health in children/adolescents, adults, and older adults. 5,18,19,20,
- For older adults, studies indicate that physical activity helps maintain functional independence, and exercise interventions can reduce the risk of falls by 21 per cent, and fall-related fractures by 40 per cent.^{21,22,23}

Key messages on physical activity counselling

- Physician counselling on physical activity (physical activity prescription) is a highly efficient intervention since the number needed to treat (NNT) resulting in one person adopting an active lifestyle that will meet the recommended level of physical activity is 12.²⁴
- The Canadian Academy of Sport and Exercise Medicine (CASEM) has developed an evidence-based position statement that can provide guidance for all physicians about counselling on physical activity for the prevention and management of chronic diseases.²⁵
- The CFPC, in collaboration with several primary care organizations, has developed a tool to support exercise prescription by health care professionals.^{26,27}



• The CFPC Foundation for Advancing Family Medicine has supported the development of evidence-based patient handouts on physical activity for specific common chronic conditions ²⁸

Recommendations

- A physically active lifestyle is such an important determinant of health that family physicians should assess it upon every periodic health evaluation.
- To support and facilitate a systemic consideration of physical activity as an important determinant of health, electronic health records must also be tooled for appropriate documentation of physical activity levels of each patient (e.g., inactive, moderately active, meets guidelines, exceeds the basic level of physical activity recommended).
- Family physicians must develop the knowledge and skills that allow them to provide safe, informed, and specific counselling to patients about physical activity.
- Family physicians should adopt a patient-centred and iterative approach aiming for the gradual integration of a physically active lifestyle.
- The CFPC supports national curriculum development within Canada's medical schools that ensures education on the prescription of physical activity and exercise both in the prevention and treatment of noncommunicable disease.
- To help address the increasing health and economic burden associated with physical inactivity, governments must further support long-term public health strategies that aim to facilitate the adoption of more physically active lifestyles by all Canadians.

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¹ Canadian Society for Exercise Physiology. Canadian 24-hour movement guidelines for children and youth: an integration of physical activity, sedentary behaviour, and sleep. Available from: https://csepguidelines.ca/wp-content/themes/csep2017/pdf/Canadian24HourMovementGuidelines2016 2.pdf. Accessed 2019 Sep 30.

² World Health Organization. Fact Sheet: Physical activity. 2018. Available from: www.who.int/news-room/fact-sheets/detail/physical-activity. Accessed 2019 Sep 30.

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