

GLOSSARY OF TERMS

Canadian 24-Hour Movement Guidelines:

An Integration of Physical Activity, Sedentary Behaviour, and Sleep



Canadian 24-Hour Movement Guidelines: Glossary of Terms

Terminology	Definition	Examples	References
24-Hour Movement Guidelines	The Canadian 24-Hour Movement Guidelines describe the recommended amount of time spent in all intensities of physical activity (light, moderate, vigorous), sedentary behaviour and sleep to optimize health benefits.	Canadian 24-Hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep Canadian 24-Hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep www.csep.ca/guidelines	Tremblay, M.S., et al. 2016. Canadian 24-hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Appl. Physiol. Nutr. Metab. 41(Suppl. 3). Tremblay, M.S., et al. 2017. Canadian 24-hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep. https://bmcpublichealth.biomedcentra l.com/articles/supplements/volume-17-supplement-5

Achievement	The extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college and university. (Health indicator)	 Grade point average Scores on standardized tests Grades in specific courses and self-reported questionnaires Measures of I.Q., concentration, memory or classroom behaviours Francisco B.O., et al. 2016. Body Mass Index, the most widely used but also widely criticized Index: Would a Criterion standard measure of total body fat be a better predictor of cardiovascular disease mortality? Mayo Clinic Proceedings; 91(4): 443-455. Steinmayr, R., et al. 2014. Academic Achievement. Oxford Bibliographies in Education. doi: 10.1093/obo/9780199756810-0108. Strong, W.B., et al. 2005. Evidence based physical activity for school-age youth. J Pediatr. 146(6): 732-737. Tremblay, M.S., et al. 2011. Systematic review of sedentary behaviour and health indicators in school-aged children and youth. Int. J. Behav. Nutr. Phy. 8(1): 98.
Activity Limitations	Difficulties an individual may have in executing activities.	 Includes activities such as walking, running, jumping, pushing a wheelchair, lifting, swimming, eating, dressing, etc. World Health Organizatin, 2001. International Classification of Functioning, Disability and Health. Geneva: WHO.
Adapted Physical Activity	Adaptations to physical activities to facilitate participation across a wide range of abilities.	 Wheelchair sports Adapted skiing & snowboarding Goalball Steadward, R.D., Wheeler, G.D., Watkinson, E.J. 2003. Adapted Physical Activity. The University of Alberta Press.
Adiposity	The state of excessive fat accumulation in the human body, more commonly referred to as "obesity"	Examples of adiposity measures are bioelectrical impedance analysis, dual-energy X-ray absorptiometry, skinfold thickness, etc.

Aerobic Physical Activities	Dynamic activities that involve large muscle groups and result in substantial increases in heart rate and energy expenditure; also called endurance activities. Regular participation results in improvements in cardiorespiratory and musculoskeletal fitness, leading to an increase in endurance performance, and better health.	 Brisk walking Running Swimming Bicycling Arm cycling Rowing Team sport (e.g., soccer, football, hockey or basketball) Dancing 	Howley, E.T. 2001. Type of activity: resistance, aerobic and leisure versus occupational physical activity. Med Sci. Sports Exerc, 33(Suppl.): S364-S369.
Ages	Infant: 1 month – 11.99 months Toddler: 1 year – 2.99 years Preschooler: 3 years – 4.99 years Child: 5-11 years Youth: 12-17 years Adult: 18-64 years Older adult: ≥ 65 years		
Apparently Healthy	In addition to the following-age specific criteria, refers to the absence of disease (based on clinical signs, symptoms and function), normally assessed by routine laboratory methods and physical evaluation. Children and adults that have overweight/obesity but no other diagnosed condition are considered apparently healthy. Early Years Those that are developing according to prescribed age specific milestones. Older Adults Community-dwelling older adults, not in a nursing home or long-term care environment, and not classified as frail.	To determine whether an individual may have a health condition, conduct preparticipation screening using evidence-informed tools i.e., Get Active Questionnaire by CSEP, PAR-Q+, etc. that will support recommendations for individual client-tailored physical activity and exercise programs.	

Balance Enhancement / Balance Training	Static and dynamic exercises that are designed to improve the ability to withstand challenges from postural sway or destabilizing stimuli caused by self-motion, neurological condition/s, the environment or other objects.	 Walking on uneven ground (e.g., unpaved areas or forest trails) Tai Chi Yoga Slack-line Stand-up paddle-boarding Balance tests (side-by-side stand, semi-tandem stand, tandem stand) Training specific to activities of daily living 	
Being Restrained	The time infants, toddlers and preschoolers are put in strollers, car seats or other situations when unable to move freely.	Car seatsStrollersHigh chair	
Body Composition	The proportion of fat and fat-free mass in the body. The measurement of body composition plays an important role in qualifying health and nutritional status, the impact of disease and change due to nutritional, therapeutic or behavioural intervention. (Health indicator)	 Body Mass Index (BMI) Waist circumference Percentage body fat While BMI and waist circumference do not measure body composition per se, in most circumstances they are good indicators of health risk associated with excess adiposity. 	Toomey, C.M., et al. 2015. A review of body composition measurement in the assessment of health. Topics in Clinical Nutrition, 30(1): 16-32.

Bone- Strengthening Activity	Physical activity that increases the strength of specific sites in bones that comprise the skeletal system. Bone-strengthening activities produce an impact or tension force on the bones that promote bone growth and strength. Weight-bearing activities and high impact exercises are most effective for the improvement of bone mineral content. A combination of these types of exercises is optimal for most to preserve or improve bone mineral density.	In addition to the following age-specific examples, includes: Running Jumping rope Lifting weights Sports that involve repeated foot impact (e.g., gymnastics, basketball, volleyball or tennis) Children and Youth Games (e.g., hopscotch) Hopping, skipping or jumping Adults and Older Adults Skipping, jumping, lifting, carrying or stair-climbing Heavy gardening Activities in which the muscle forces act to stress the bone (e.g., rowing will "stress" or "load" the spine)	Behringer, M. et al. 2014. Effects of weight bearing activities on bone mineral content and density in children and adolescents: a meta-analysis. J Bone Miner Res, 29(2): 467-478. Golden, N.H., et al. 2014. Optimizing bone health in children and adolescents. Pediatrics, 134(4): e1229-e1243. Xu, J., et al. 2016. Effects of exercise on bone status in female subjects, from young girls to postmenopausal women: an overview of systematic reviews and meta-analyses. Sports Med. (epub ahead of print).
Bout	A period of continuous physical activity. A period of continuous movement behaviour.	 10 minutes of continuous physical activity as recommended in the Canadian Physical Activity Guidelines for Adults 2 hours of continuous sedentary behaviour 7 hours of continuous sleep 45 minutes of continuous gardening 	
Cardio-metabolic Health	Refers to the integration of cardiovascular and metabolic mechanisms in the human body and their interplay that can impact health or disease.	Blood Pressure, Cholestrol, Triglyceride Levels, Waist- Circumfrence, Glucose/Insulin Levels (HOMA-IR), etc, that commonly contribute to one's cardiometabolic health.	

Cardio- respiratory Fitness	The ability of the circulatory and respiratory systems to supply oxygen to working muscles during sustained physical activity. Cardiorespiratory fitness is an independent predictor of cardiovascular disease and all-cause mortality. (Health indicator)	 Maximal oxygen consumption Aerobic power 20-metre shuttle performance 6-minute walk test 	Stubbs, B., et al. 2016. Exercise improves cardiorespiratory fitness in people with depression: A meta-analysis of randomized control trials. J. Affect. Disorders. 190: 249-253.
Cardiovascular and Metabolic Health	Functional status of the cardiovascular and metabolic systems, as assessed by biomarkers and functional indicators. (Health indicator)	 Metabolic syndrome components (e.g., abdominal obesity, high triglycerides, low HDL, high systolic blood pressure, high diastolic blood pressure and glucose intolerance or diagnosed diabetes) Body mass and body composition Maximal aerobic power & aerobic endurance 	
Cognition	The process of knowing, attending, remembering and reasoning; also the content of the processes, such as concepts and memories. (Health indicator)	 Mini Mental State Exam (MMSE) Memory tests Perceptual skills tests Tests of developmental level Academic achievement Math and verbal tests 	Gerrig, R.J., and Zimbardo, P.G. 2002. Glossary of psychological terms. Psychology and life (16th ed.). Boston: Allyn and Bacon. Sibley, B.A., and Etnier, J.L. 2003. The relationship between physical activity and cognition in children: a meta-analysis. Pediatr. Exer. Sci., 15(3): 243-256.
Cognitive Development	A field of neuroscience and psychology that focuses on a child's development for information processing, conceptualization, perception, language learning and other elements that complement healthy brain development. (Health indicator)	 Memory, language, problem solving, cognition, perception abilities, etc. 	
Disability	Umbrella term for impairments, activity limitations and participation restrictions.		World Health Organizatin, 2001. International Classification of Functioning, Disability and Health. Geneva: WHO.

Duration	The length of time a movement behaviour is performed.	30 minutes of exercise2 hours of TV watching1 hour nap20 minutes of gardening	
Emotional Regulation	The extrinsic and intrinsic processes responsible for monitoring, evaluating and modifying emotional reactions, especially their intensive and temporal features. Emotion regulation can operate through cognitive, expressive, behavioural, and physiological processes. An individual's ability to effectively manage and respond to emotional experiences. (Health indicator)	Being able to control one's temper, not feel overwhelmed by emotions, communicate calmly, etc.	Lopes, P.N., et al. 2005. Emotion regulation abilities and the quality of social interaction. Emotion. 5(1): 113. Thompson, R.A. 1991. Emotional regulation and emotional development. Educ. Psychol. Rev., 3(4): 269-307.
Energetic Play	Similar to moderate- to vigorous-intensity physical activity (MVPA). It is more appropriately contextualized for the early years and refers to activities for young children that get them working hard, breathing heavily and feeling warm.	 Ball games Activities in the park (e.g., riding a tricycle or bike) Water activities Tag 	
Exercise	Physical activity that is planned, structured, repetitive and purposive in the sense that improvement or maintenance of one or more components of physical fitness is an objective.	See structured physical activity examples under tab 'S'.	Caspersen, C.J., et al. 1985. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Rep, 100(2): 126.

Extended Periods	A prolonged period of time spent continuously in one behaviour.	In the Canadian 24-Hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep and the Canadian 24-Hour Movement Guidelines for Children and Youth (ages 5-17 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep it is recommended that infants, toddlers, pre-schoolers and children and youth limit extended time spent being sedentary. An extended period of sedentary time in this context corresponds to a prolonged period spent sitting or reclining, without taking a break (an interruption in sedentary time) during waking hours.	Tremblay, M.S., et al. 2017. Canadian 24-hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep. https://bmcpublichealth.biomedcentra l.com/articles/supplements/volume- 17-supplement-5 Tremblay M.S., et al. 2016. Canadian 24-hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Appl. Physiol. Nutr. Metab. 41(Suppl. 3).
Floor Based Play	A supervised play style for infants, usually in the family's home or daycare center, where children move on the floor and develop motor skills.	 Rolling, crawling, tummy time, reaching or grabbing for objects, toys, etc. 	
Frequency	The number of times a movement behaviour is performed per unit time. Frequency is generally expressed in sessions, episodes or bouts per day or week.	 Exercise 3 times per week Computer games daily Walking the dog 5 times per week Flight of stairs 4 times daily 	
Health Conditions	Includes diseases, disorders, injuries and traumas	 Trauma (spinal cord injury, brain injury, amputation) Congenital/genetic (cerebral palsy, multiple sclerosis, parkinsons disease). Disease (polio, meningococcyl) 	World Health Organizatin, 2001. International Classification of Functioning, Disability and Health. Geneva: WHO.

Health Indicator	A characteristic of an individual, population, or environment which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population (quality, quantity and time).	For Canadian Physical Activity and 24-Hour Movement Guidelines (see definitions under heading): Academic Achievement Body Composition Cardiorespiratory Fitness Cardiovascular and Metabolic Health Cognition Emotional Regulation Musculoskeletal Fitness Pro-Social Behaviours Psychosocial Health Quality of Life	https://www.cihi.ca/en/cihi-health- indicators (accessed 18 November 2017)
Health Professional	Qualified exercise professional or health practitioner.	 CSEP Certified Exercise Physiologist® (CSEP-CEP) Kinesiologist Medical doctor Nurse Physiotherapist Psychologist Occupational therapist 	
Incidental Activity	Physical activity that is accumulated by carrying out activities of daily living.	 Getting the mail Personal hygiene Preparing meals Light cleaning Shopping Banking 	
Interactive Non- Screen Based Behaviours	Stimulating activities that do not involve a screen as the mode of entertainment	 Reading, singing and/or story telling with a parent caregiver or friend. 	

Light-Intensity Physical Activity	On an absolute scale, light intensity refers to physical activity that is performed at: 1.5-4.0 times the intensity of rest for children and youth (1.5-4.0 METs) 1.5-3.0 times the intensity of rest for adults and older adults (1.5-3.0 METs) Light physical activities do not result in sweat production or shortness of breath. "Incidental activities" are typically light-intensity physical activities.	Children and Youth Slow walking Pushing wheelchair Croquet Mild stretching Personal hygiene Playing with animals Walking the dog Billiards Adults and Older Adults Slow walking Pushing wheelchair Light household tasks (groceries, washing dishes or cooking) Child care Croquet bocce Mild stretching Personal hygiene Light gardening or watering plants	Ainsworth, B.E., et al. 2000. Compendium of physical activities: an update of activity codes and MET intensities. Med.Sci.Sport. Exer. 32(9; Suppl.1): S498-S504. Harrell, J. S., et al. (2005). Energy costs of physical activities in children and adolescents. Med. Sci. Sport. Exer. 37(2): 329-36.
Lying	Lying refers to being in a horizontal position on a supporting surface. General definition applies to all age and ability groups. Lying behaviour can be either passive (≤ 1.5 METs) or active (> 1.5 METs).	 Passive lying (all age and ability groups): Lying on a couch, bed or floor while sedentary. Active lying (all age and ability groups): Isometric plank hold. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8
Mobility Impairment	Limitations to musculoskeletal and/or neurological body systems that influence functional ability.	 Musculoskeletal injury (e.g. fracture, muscle strain) Neurological impairment (e.g. secondary to cerebral palsy, spinal cord injury, multiple sclerosis) 	World Health Organizatin, 2001. International Classification of Functioning, Disability and Health. Geneva: WHO. Murphy, N.A. & Carbone, P.S. 2008. Promoting the Participation of Children With Disabilities in Sports, Recreation, and Physical Activities. Pediatrics. 121 (5). 1057-61.

Intensity Physical Activity (MPA) to physical activity that is performed at: • 4.0-6.9 times the intensity of rest for children and youth (4.0-6.9 METs) • 3.0-5.9 times the intensity of rest for adults and older adults (3.0-5.9 METs) The metabolism and capacity of older adults	 Children and Youth Active recreation (e.g., hiking, skateboarding, rollerblading or canoeing) Active transportation (e.g., cycling or brisk walking) Household chores and yard work (e.g., sweeping or pushing a lawn mower) 	Ainsworth, B.E., et al. 2000. Compendium of physical activities: an update of activity codes and MET intensities. Med. Sci. Sport. Exer. 32(9; Suppl. 1): S498-S504. Canadian Society for Exercise Physiology. 2013. CSEP-Physical Activity Training for Health. Canadian Society for Exercise Physiology, Ottawa, ON.
changes at different rates for different individuals. Accordingly, alternate approaches for classifying MPA are also used, including: • About 3.3 times the intensity of rest for someone of average fitness after age 65 years • > 60% of VO ₂ max • 40-60% of heart rate reserve On a scale relative to an individual's personal capacity (e.g., Rating of Perceived Exertion), moderate-intensity physical activity is usually represented by 5 to 6 on a scale from 1 to 10. Generally, MPA is intense enough to elevate the heart rate. A person can talk but not sing during activities of this intensity.	 Playing games that require catching and throwing (e.g., baseball or football) Adults and Older Adults Walking briskly (3 miles per hour or faster for adults, or 1.5 miles per hour or faster for older adults, but not race-walking) Water aerobics Cycling slower than 10 miles per hour Tennis (doubles) Ballroom dancing General gardening Household chores (e.g., vacuuming, washing the floor or climbing stairs) 	Hall, K.S., et al. 2013. METs and accelerometry of walking in older adults: standard versus measured energy cost. Med. Sci. Sport. Exer. 45(3): 574-582. Nelson, M.E., et al. 2007. Physical activity and public health in older adults: recommendation from the American College of Sports Medicine and the American Heart Association. Circulation. 116(9): 1094 Harrell, J.S., et al. 2005. Energy costs of physical activities in children and adolescents. Med. Sci. Sport. Exer. 37(2): 329-36. Paterson, D.H. and Warburton, D.E. 2010. Physical activity and functional limitations in older adults: a systematic review related to Canada's Physical Activity Guidelines. Int. J.Behav. Nutr. Phys. 11(7): 38.
Refers to the development of a child's musculoskeletal system and their ability to move around in, and manipulate their surrounding environment. (Health indicator)		

Movement

An act of changing physical location or position through the action of skeletal muscle.

Movement and non-movement behaviours throughout the day directly impact on biological processes and may mediate or moderate physiological responses and adaptations to other movement behaviours (i.e., they interact).

Movement:

- Exercise
- Walking
- Gardening
- Cleaning

Non-movement:

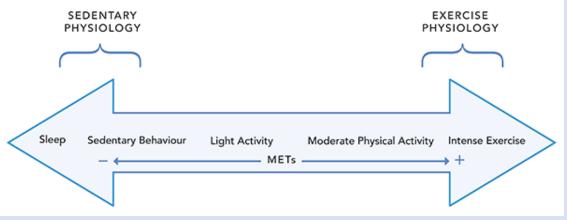
- Sleeping
- Watching TV
- Working on the computer
- Sitting

Chaput, J.P., et al. 2014. Importance of all movement behaviours in a 24 hour period for overall health. Int. J. Environ. Res. Public. Health. 11: 12575-12581.

Tremblay, M.S., et al. 2010. Physiological and health implications of a sedentary lifestyle. Appl. Physiol, Nutr. Metab. 35(6): 725-740.

Movement Continuum

The continuity of behaviours based on their intensity in METs (Metabolic Equivalents) from sleep to intense exercise. This representation illustrates that sleep and sedentary behaviours are distinct from a lack of physical activity. Physiological responses and adaptations to sleep and sedentary behaviours are not necessarily the opposite of exercise and may differ within and between physiological systems (e.g., cardiovascular vs. musculoskeletal). Behaviours on the movement continuum interact with respect to health, suggesting that an integration of all movement (and non-movement) behaviours should be considered together when assessing healthy living behaviours.



Chaput, J.P., et al. 2014. Importance of all movement behaviours in a 24 hour period for overall health. Int. J. Environ. Res. Public. Health. 11: 12575-12581.

Tremblay, M.S., et al. 2010. Physiological and health implications of a sedentary lifestyle. Appl. Physiol, Nutr. Metab. 35(6): 725-740.

Muscle Strengthening Activity	Physical activity that increases skeletal muscle strength, power, endurance or mass.	 Children and Youth Games (e.g., tug of war) Push-ups or modified push-ups (with knees on the floor) Resistance exercises using body weight, resistance bands, weight machines or hand-held weights Rope or tree climbing Sit-ups (curl-ups or crunches) Swinging on playground equipment/bars Chores that require lifting and carrying Adults and Older Adults Lifting weights Working with resistance bands Exercises that use body weight for resistance (e.g., push-ups, sit-ups) Heavy gardening (e.g., digging or shoveling) 	
Musculoskeletal Fitness	A group of fitness components including muscular strength, endurance and power. Muscular strength is the ability to generate force with a muscle or group of muscles; local muscular endurance is the ability to perform repeated contractions with a muscle or group of muscles under sub-maximal load; and muscular power refers to the rate at which muscles perform work. (Health indicator)	 Muscular strength: maximal bench press, maximal squat, grip strength Muscular endurance: push-ups, chinups, plank, arm cycling, chair stand test Muscular power: vertical jump, standing long jump, sit-to-stand 	Smith, J.J., et al. 2014. The health benefits of muscular fitness for children and adolescents: a systematic review and meta-analysis. Sports Med. 44(9): 1209-1223. Guralink, J.M. et al. 1995. Lower-extremity function in persons over the age of 70 years as a predictor of subsequent disability. N Engl J Med. 332(9):556-61.
MVPA	Moderate- to vigorous-intensity physical activity	See moderate-intensity physical activity and vigorous-intensity physical activity.	
Nap	A brief period of sleep, usually in the daytime, to serve as an adjunct to the usual night sleep period.		

Non-Screen- Based Sedentary Time	Refers to the time spent in sedentary behaviours that do not involve the use of screens. Recreational non-screen time: Time spent in non-screen based sedentary behaviours that are not related to school or work. General definition applies to all age and ability groups.	 Infants (<1 year or pre-walking): Lying supine on a mat while sedate; sitting in a stroller or car seat with little movement. Toddlers and preschoolers (1–4 years): Sitting in a child seat, chair or car seat; sitting idle in the sandbox or on the floor; reading a nonelectronic book or playing a board game while seated. Children and youth (5–17 years): Sitting at school; sitting doing homework or art work; reading a non-electronic book; playing a board game; sitting in a car. Adults (≥ 18 years): Reading a non- electronic book; playing a board game; sitting in a car. People who use a manual wheelchair or a power chair: Reading a non-electronic book; playing a board game; sitting in a car; being pushed while passively sitting in a manual wheelchair. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8
Participation Restrictions	Problems that an individual may experience in involvement in life situations.	 Interpersonal interaction (interacting in groups, forming relationships). Acquiring and keeping a job. Voting at a place without wheelchair access. Inability to compete in school sports. 	World Health Organization, 2001. International Classification of Functioning, Disability and Health. Geneva: WHO.
Physical Activity	Any bodily movement produced by skeletal muscle that results in energy expenditure, and increases heart rate and breathing.	See Low-, Moderate- and Vigorous- Intensity Physical Activity for examples.	Caspersen, C.J., et al. 1985. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Rep., 100(2): 126.

Physical Activity Guidelines	Canadian Physical Activity Guidelines provide recommendations regarding the frequency, intensity, amount and type of physical activity that can help prevent disease and/or improve health for apparently healthy Canadians.	 Canadian 24-Hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep (www.csep.ca/guidelines/) Canadian 24-Hour Movement Guidelines for Children and Youth (ages 5-17 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep (www.csep.ca/guidelines/) Canadian Physical Activity Guidelines for Adults (aged 18-64 years) (http://www.csep.ca/CMFiles/Guidelines/CSEP PAGuidelines adults en.pdf) Canadian Physical Activity Guidelines for Older Adults (aged 65+ years) (http://www.csep.ca/CMFiles/Guidelines/CSEP PAGuidelines older-adults en.pdf) 	Tremblay, M.S., et al. 2017. Canadian 24-hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep. https://bmcpublichealth.biomedcentra l.com/articles/supplements/volume- 17-supplement-5 Tremblay M.S., et al. 2016. Canadian 24-hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Appl. Physiol. Nutr. Metab. 41(Suppl. 3)
Physical Inactivity	An insufficient physical activity level to meet present physical activity recommendations. General definition applies to all age and ability groups.	 Toddlers and preschoolers (1–4 years): Not achieving 180 min of physical activity of any intensity per day. Children and youth (5–17 years): Not achieving 60 min of moderate- to vigorous-intensity physical activity per day. Adults (≥ 18 years): Not achieving 150 min of moderate-to-vigorous-intensity physical activity per week or 75 min of vigorous-intensity physical activity per week or an equivalent combination of moderate- and vigorous-intensity activity. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8
Prone Position	A position in which the body is lying face down. Also see "tummy-time"		

Pro-Social Behaviours	Behaviours that are carried out with the goal of helping other people. (Health indicator)	 Helping a friend who fell to get up Picking up something someone lost and giving it back Gerrig, R.J., and Zimbardo, P.G. 2002. Glossary of psychological terms. Psychology and life (16th ed.). Boston: Allyn and Bacon.
Quality of Life	An individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. Refers broadly to the general well-being of individuals, and encompasses evaluations of both positive and negative aspects of life. (Health indicator)	 Health Related Quality of Life (HRQL) is a concept developed by health researchers to describe the combination of several core dimensions including physical functioning, emotional well-being, social functioning and role activities, as well as health perceptions and global assessment of life satisfaction. Items that contribute to Qualify of Life include health, job status, housing, education, neighbourhood and community, etc. WHOQOL Group. 1995. The World Health Organization Quality of Life Assessment (WHOQOL): Position paper from the World Health Organization. Social Science & Medicine, 41: 1403-1409. Rejeski, W.J., and Mihalko, S.L. 2001. Physical activity and quality of life in older adults. J Gerontol A Biol Sci Med Sci, 56(Suppl 2): 23-35.
Psychosocial Health	Encompasses the mental, emotional, social and spiritual dimensions that contribute to one's health. (Health indicator)	
Reclining	Reclining is a body position between sitting and lying. General definition applies to all age and ability groups. Reclining behaviour can be either passive (≤ 1.5 METs) or active (> 1.5 METs).	 Passive reclining (all age and ability groups): Lounging/slouching on a chair or couch while sedentary. Active reclining (all age and ability groups): Recumbent cycling. Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8
Recreational Screen Time	Time spent in front of one or more screen- based devices during discretionary time (i.e., non-school or work-based use), while sedentary.	• TV, video game console, computer, tablet, phone or other screen. Tremblay, M.S., et al. 2011. Canadian sedentary behaviour guidelines for children and youth. Appl. Physiol. Nutr. Metab. 36(1): 59-64.

Rough-and- Tumble Play	A form of higher energy play where children climb over each other, wrestle, roll around and pretend to fight in the spirit of fun.	 Chasing each other, wrestling, play fighting, rolling around, etc. 	
Screen Time	Refers to the time spent on screen-based behaviours, which can be performed while being sedentary or physically active. **Recreational screen time:* Time spent in screen behaviours that are not related to school or work. **Stationary screen time:* Time spent using a screen-based device (e.g., smartphone, tablet, computer, television) while being stationary in any context (e.g., school, work, recreational). **Sedentary screen time:* Time spent using a screen-based device (e.g., smartphone, tablet, computer, television) while being sedentary in any context (e.g., school, work, recreational). **Active screen time:* Time spent using a screen-based device (e.g., smartphone, tablet, computer, television) while not being stationary in any context (e.g., school, work, recreational). **General definition applies to all age and ability groups.	 All age and ability groups: Watching TV, using a smartphone/tablet, using a computer. Active screen time: Playing active video games, running on a treadmill while watching television. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8

Sedentary Behaviour

Sedentary behaviour is any waking behaviour characterized by an energy expenditure ≤ 1.5 metabolic equivalents (METs), while in a sitting, reclining or lying posture.

Sedentary time: The time spent for any duration (e.g., minutes per day) or in any context (e.g., at school or work) in sedentary behaviours.

Sedentary bout: A period of uninterrupted sedentary time.

Sedentary interruptions/breaks: A nonsedentary bout in between two sedentary bouts.

Infants (< 1 year or pre-walking): Any waking behaviour characterized by low energy expenditure while restrained (e.g., stroller/pram, high chair, car seat/capsule), or when sedate (e.g., reclining/sitting in a chair with little movement but not restrained). Time spent in the prone position ("tummy time") is not considered a sedentary exposure.

Toddlers and preschoolers (1–4 years), children and youth (5–17 years), adults (≥ 18 years) and all ability groups: Same as the general definition.

- Infants (< 1 year or pre-walking):
 <p>Lying awake in the bed with minimal movement; sitting in a baby chair/high chair/stroller/car seat with minimal movement; being carried/held/cuddled by someone
- Toddlers and preschoolers (1–4 years): Use of electronic devices (e.g., television, computer, tablet, phone) while sitting, reclining or lying; reading/drawing/painting while sitting; sitting in stroller; sitting in baby chair or couch while eating a meal; sitting in a bus, car or train.
- Children and youth (5–17 years):
 Use of electronic devices (e.g.,
 television, computer, tablet, phone)
 while sitting, reclining or lying;
 reading/writing/ drawing/painting
 while sitting; homework while sitting;
 sitting at school; sitting in a bus, car
 or train.
- Adults (≥ 18 years): Use of electronic devices (e.g., television, computer, tablet, phone) while sitting, reclining or lying; reading/writing/talking while sitting; sitting in a bus, car or train.
- People who use a manual wheelchair or a power chair: Use of electronic devices (e.g., television, computer, tablet, phone) while sitting, reclining or lying; reading/writing/drawing /painting/talking while sitting; sitting in a bus, car or train; moving from place to place in a power chair; being pushed while passively sitting in a manual wheelchair.

Tremblay, M.S., et al. 2017.
Sedentary Behaviour Research
Network (SBRN) – Terminology
Consensus Project process and
outcome. International Journal of
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Activity (2017) 14:75. DOI
10.1186/s12966-017-0525-8

Sedentary Behaviour Guidelines	Canadian Sedentary Behaviour Guidelines provide recommendations regarding the volume and type of sedentary pursuits that help prevent disease and/or improve health for Canadians.	 Canadian 24-Hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep (www.csep.ca/guidelines/) Canadian 24-Hour Movement Guidelines for Children and Youth (ages 5-17 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep (www.csep.ca/guidelines/) 	Tremblay, M.S., et al. 2017. Canadian 24-hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep. https://bmcpublichealth.biomedcentra I.com/articles/supplements/volume- 17-supplement-5 Tremblay M.S., et al. 2016. Canadian 24-hour Movement Guidelines for Children and Youth: An Integration of Physical Activity, Sedentary Behaviour, and Sleep. Appl. Physiol. Nutr. Metab. 41(Suppl 3).
Sedentary Behaviour Pattern	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). General definition applies to all age and ability groups.	 Prolonger: Someone who accumulates sedentary time in extended continuous bouts. Breaker: Someone who accumulates sedentary time with frequent interruptions and in short bouts. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8
Sitting	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. **Active sitting:* Active sitting refers to any waking activity in a sitting posture characterized by an energy expenditure > 1.5 METs. **Passive sitting:* Passive sitting refers to any waking activity in a sitting posture characterized by an energy expenditure ≤ 1.5 METs. **General definition applies to all age and ability groups.**	 Active sitting: Working on a seated assembly line; playing guitar while seated; using devices that engage one's feet/legs while seated; doing arm ergometry while in a wheelchair. Passive sitting: Refer to sedentary behaviour examples while sitting. 	Tremblay, M.S., et al. 2017. Sedentary Behaviour Research Network (SBRN) – Terminology Consensus Project process and outcome. International Journal of Behavioural Nutrition and Physical Activity (2017) 14:75. DOI 10.1186/s12966-017-0525-8

Habits and practices conducive to sleeping well on a regular basis. The promotion of regular sleep is also known as sleep hygiene. • Going to bed at the same time each night, and rising at the same time each morning. • Sleeping in a quiet, dark and relaxing environment, which is not too hot or too cold. • Making your bed comfortable and using it only for sleeping (not for other activities, such as reading, watching TV or listening to music). • Removing all TVs, computers and other "gadgets" from the bedroom. • Avoiding large meals before bedtime. • Going to bed at the same time each night, and rising at the same time each night, and rising at the same time each morning. • Going to bed at the same time each night, and rising at the same time each night same time each night, and rising at the same time each night same time each night, and rising at the same time each night same time e

Standing

A position in which one has or is maintaining an upright position while supported by one's feet.

Active standing: Active standing refers to any waking activity in a standing posture characterized by an energy expenditure > 2.0 METs, while standing without ambulation, whether supported or unsupported. Passive standing: Passive standing refers to any waking activity in a standing posture characterized by an energy expenditure ≤ 2.0 METs, while standing without ambulation, whether supported or unsupported. Standing time: The time spent for any duration (e.g., minutes per day) or in any context (e.g., at school/work) while standing. Standing bout: A period of uninterrupted time while standing. Standing interruptions/breaks: A non-standing

Infants (< 1 year or pre-walking), toddlers and preschoolers (1–4 years), children and youth (5–17 years), adults (≥ 18 years) and people who use a manual wheelchair or a power chair: Same as the general definition.

People who are unable to stand: Not applicable.

bout in between two standing bouts.

- Active standing: Standing on a ladder; standing while painting; standing while washing dishes; working an assembly line while standing; standing while juggling; standing while lifting weights.
- Passive standing: Standing in a line; standing for a hallway discussion; use of electronic devices (e.g., television, computer, tablet, phone) while standing; standing at church.
- Supported standing: Standing while holding a couch, chair, or a parent's hand; standing with the aid of crutches, a cane, standing frame or body weight support.

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Stationary Behaviour

Stationary behaviour refers to any waking behaviour done while lying, reclining, sitting, or standing, with no ambulation, irrespective of energy expenditure.

Stationary time: The time spent for any duration (e.g., per day, per week), in any context (e.g., at school/work), and at any intensity (e.g., standing in a line, working on an assembly line with no ambulation, working at a standing desk, sitting in a classroom) in stationary behaviours. Stationary bout: A period of uninterrupted stationary time.

Stationary interruptions/breaks: A nonstationary bout in between two stationary bouts (applies to all age and ability groups except infants).

General definition applies to all age and ability groups except for infants (< 1 year to prewalking) and people with a mobility impairment who are unable to stand.

- Use of electronic devices (e.g., television, computer, tablet, phone) while sitting, reclining or lying; reading/writing/drawing/painting/ talking while sitting; sitting at school/work; sitting in a bus, car or train.
- Standing in a line; standing at church; standing for a hallway discussion; writing a text-message while standing; using a standing desk.
- Being carried/held/cuddled by someone.

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Structured Physical Activities	Activities that occur in a planned, deliberate, repetitive context.	 Children and Youth School physical education (PE) class Organized Lessons (e.g., dance, swimming or karate) Competitive sport (e.g., Gymnastics, house league soccer or travel hockey) Adults and Older Adults Yoga or Tai Chi class Fitness class Running, hiking or Nordic walking as part of a club or group Exercising in a gym under supervision, physiotherapy/rehabilitation Water aerobics Competitive sport 	
Surveillance	The continuous, systematic collection, analysis and interpretation of health-related data needed for the planning, implementation and evaluation of public health practice. Surveillance of population levels of physical activity and sedentary behaviours using a standardized protocol is an important and necessary part of a public health response to current concerns regarding lack of physical activity in many populations. For example, it allows for the monitoring of the proportion of children and youth meeting the 24-Hour Movement Guidelines.	 Canadian Health Measures Survey (CHMS) Health Behaviour of School-aged Children Survey (HBSC) 	WHO. (2016). Public Health Surveillance. Retrieved from: http://www.who.int/topics/public healt h surveillance/en/. WHO. (2016). Global Physical Activity Surveillance. Retrieved from: http://www.who.int/chp/steps/GPAQ/e n/.

Tummy Time	Unrestrained, supervised movement opportunities with infants placed in the prone position (on their tummies).	 Infants: For those not yet mobile, this includes at least 30 minutes of tummy time spread throughout the day while awake. 	Tremblay, M.S., et al. 2017. Canadian 24-hour Movement Guidelines for the Early Years (ages 0-4 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep. https://bmcpublichealth.biomedcentra I.com/articles/supplements/volume- 17-supplement-5
Unstructured physical activities	Activities that occur spontaneously, sporadically, are often unplanned or unscheduled and involve self-directed games, play and other activities without external structures (e.g., coaches, time clocks).	 Children and Youth Playing ball with the dog Recreational games with friends Swimming at the beach Family hike Walking, biking or skateboarding to school Building a tree fort Climbing outside Adults and Older Adults Running alone or with friends in the park Swimming at the beach Family hike Surfing Gardening Getting groceries Walking the dog 	

Vigorous-Intensity Physical Activity (VPA)

On an absolute scale, vigorous intensity refers to physical activity that is performed at:

- Typically 7.0 or more times the intensity of rest for children and youth (≥ 7.0 METs).
- 6.0 or more times the intensity of rest for adults and older adults (≥ 6.0 METs).

On a scale relative to an individual's personal capacity (e.g., Rating of Perceived Exertion), vigorous-intensity physical activity is usually 7 to 9 on a scale of 1 to 10.

Generally, during VPA heart rate increases substantially, body temperature increases quickly, and a person cannot say more than a few words without pausing for a breath.

Children and Youth

- Active games involving running and chasing (e.g., tag or flag football)
- Fast bicycle riding
- Jumping rope
- Martial arts (e.g., karate)
- Running
- Sports (e.g., ice or field hockey, basketball, swimming, soccer, tennis or gymnastics) including their adaptive equivalents (e.g. sledge hockey, wheelchair basketball, rugby, goal ball, sitting volleyball)
- Vigorous dancing
- Cross-country skiing
- Aerobics

Adults and Older Adults

- Race walking, fast walking for exercise, jogging or running
- Swimming laps / fast swimming
- Tennis (singles)
- Aerobic dancing
- Bicycling 16 kilometers per hour (10 mph) or faster
- Wheelchair racing
- Sports (e.g., ice or field hockey, basketball, swimming, soccer, tennis, or gymnastics) including their adaptive equivalents
- Jumping rope
- Heavy gardening (continuous digging or hoeing)
- Hiking uphill or with a heavy backpack

Ainsworth, B. E., et al. (2000). Compendium of physical activities: an update of activity codes and MET intensities. Med. Sci. Sport. Exer. 32(9; Suppl. 1): S498-S504. Harrell, J. S., et al. (2005). Energy costs of physical activities in children and adolescents. Med. Sci. Sport. Exer., 37(2): 329-36.