# THE ABILITY TOOLKIT

A Resource for Parents of Children and Youth with a Disability

PHYSICAL ACTIVITY | SEDENTARY BEHAVIOUR | SLEEP

# **ABOUT** THE GUIDELINES

#### **The Guidelines**

The Canadian 24-Hour Movement Guidelines for Children and Youth outline the amounts of physical activity, sedentary behaviour, and sleep that children and youth who are 5-17 years old should get in a 24-hour day. The guidelines are based on the latest research evidence. They were developed by scientific experts from around the world.

#### The Point in Question

The guidelines are based on research involving able-bodied and typically developing youth. More research is needed before guidelines specific to children and youth with a disability are developed. With some additional information, however, the current guidelines can be used to help children and youth with a disability experience the health benefits of limiting sedentary time and getting enough physical activity and sleep.

#### The Purpose

The Ability Toolkit was developed to help parents and guardians support their child or teen with a disability meet the Canadian 24-Hour Movement Guidelines for Children and Youth. The Ability Toolkit provides information relevant to adapting the guidelines to the unique movement abilities of children or teenagers with any type of disability. Some information may be especially useful for parents and guardians of children and teens with a physical disability.

#### Adapt it

Think about what aspects of the guidelines and The Ability Toolkit make sense for you and your child or teen. If needed, talk to a health care professional for additional suggestions about what types and amounts of activities are right for your child or teen. A health professional might include a doctor, a physiotherapist, a nurse practitioner, an occupational therapist or a qualified exercise professional.











## **GUIDELINES** AT A GLANCE



For optimal health benefits, children and youth (aged 5–17 years) should achieve high levels of physical activity, low levels of sedentary behaviour, and sufficient sleep each day.

#### A healthy 24 hours includes:



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### SWEAT

#### Moderate To Vigorous Physical Activity

An accumulation of at least 60 minutes per day of moderate to vigorous physical activity involving a variety of aerobic activities. Vigorous physical activities, and muscle and bone strengthening activities should each be incorporated at least 3 days per week;

### STEP

#### Light Physical Activity

Several hours of a variety of structured and unstructured light physical activities;

# SLEEP

#### Sleep

Uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years, with consistent bed and wake-up times;

### SIT

#### **Sedentary Behaviour**

No more than 2 hours per day of recreational screen time;

Limited sitting for extended periods.

Preserving sufficient sleep, trading indoor time for outdoor time, and replacing sedentary behaviours and light physical activity with additional moderate to vigorous physical activity can provide greater health benefits.

## INTERPRETING THE GUIDELINES



#### **TYPES OF MOVEMENT**



on how hard your child or teen has to work to do the activity. Everybody is different, so the same activity might fall in different categories for different children.

#### **Light Physical Activity**

**STEP** 

**The term "Step" represents the light physical activity recommendation.** Light physical activities include activities that require a small amount of effort and do not make your child or teen feel out of breath. Your child or teen does not need to move the lower half of their body to perform these activities. Movement of any body part(s) can count as light physical activity.



Remember that even very light physical activity is better than no physical activity at all!



#### Moderate to Vigorous Physical Activity

**The term "Sweat" represents the moderate to vigorous physical activity recommendation.** Moderate to vigorous physical activities require physical effort, and make your child or teen feel more tired and breathe harder than usual. A child or teen may not physically sweat when they do these activities. For examples of activities, turn to the next page. Ways to walk

Walking is a great source of moderate to vigorous physical activity and light physical activity depending on how hard your child or teen works. Walking can be done with just your feet, with a walking aid, or with a wheelchair.

# ACTIVITIES

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#### ADAPTED PHYSICAL ACTIVITY

Many physical activities can be changed slightly to allow for participation across a wide range of abilities. There are three main types of physical activities, all of which can be adapted. The three types of physical activities are described below.



Introduce a variety of activities to find something your child or teen enjoys.



**Aerobic Physical Activities** 

These activities involve movement over extended periods of time to increase heart rate and energy use. Aerobic activities improve heart and lung health.

Walking/running/wheeling Bicycling/tricycling Swimming Dancing Sports Playing at the park Playing with a pet



**Muscle Strengthening Activities** 

These activities work different muscle groups and increase muscle strength and power.

Lifting weights Physiotherapy Yoga Martial arts Digging Climbing Sports



**Bone Strengthening Activities** 

These activities involve impact or tension that promote bone growth and strength.

Sports Physiotherapy Walking/running Jumping Skipping Lifting weights

# ACTIVITIES

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### PHYSICAL ACTIVITY EQUIPMENT

Your child or teen may find it helpful to use adapted equipment to meet their unique ability needs – this may be especially true for children with a physical disability. The objects and devices that help people do some physical activities come in many forms. Here are a few examples of popular physical activity equipment that can be used by people of various abilities – and most of which can be used right at home!



Don't forget to drink plenty of water during physical activity!



#### **Resistance Band**

Stretchy bands can be used to perform various strengthening exercises.

**Ball Stander** 

and hitting a ball -

with a ball stand.

play a game of T-ball

Practice swinging



#### Arm Ergometer

Also called an "arm bike", using this device is a great arms and aerobic exercise.



This ball makes a sound and is helpful for those with a visual impairment.

Hand Grip Aid

Hand grip aids can

be used with weights

and other equipment.



#### Weighted Ball

Instead of lifting weights, medicine balls are a good alternative.





#### Boccia Set

This fun game can be played outdoors or indoors.



#### Adaptive Jump Rope

Jump ropes can be adapted for different abilities.

#### Try sport

Many sports are inclusive and can be adapted. Examples include: sailing, swimming, soccer, athletics, basketball, tennis, skiing, hockey, curling, boccia ball, bowling, horseback riding, goalball, ballroom dancing, yoga, martial arts, and many more.

#### **Power Chair Sport**

If your child or teen uses a power chair, you might consider giving power chair soccer, curling, hockey, boccia ball, or bowling a try. Boccia ball and bowling can be adapted using a ramp.

## INTERPRETING THE GUIDELINES

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# SLEEP

#### **Uninterrupted Sleep**

Some children and teens may have difficulty achieving the recommended hours of uninterrupted sleep. The fewer interruptions and the closer to the recommended hours of sleep, the greater the benefits for your child or teen.



Establish a regular bedtime schedule



Remove screens from the bedroom



Avoid recreational screen time before bedtime



Avoid large meals before bedtime

SIT

#### Sedentary Behaviour

#### The term "Sit" represents the sedentary behaviour recommendation,

which suggests limiting screen time and limiting being sedentary for extended periods. Sedentary activities are done in a seated, reclined, or lying position and involve little to no activity or energy.



Change seated or reclined position. If applicable to your child, try a stander



Take many short movement breaks



Encourage outdoor activities

Limit recreational

screen time to no

per day

more than 2 hours



## What is recreational screen time?

Recreational screen time is time spent using devices with screens (e.g., watching TV, playing video games) that are not for school, work, health, or communication purposes.



#### **Seated Versus Sedentary**

Some children and teens spend more time in a seated or reclined position (e.g., when they use a wheelchair). But seated positions are not always sedentary. There are many seated activities that count as moderate to vigorous or light physical activities (e.g., boccia ball, wheelchair basketball, wheeling around the block).

# GETTING ACTIVE

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### ) YOU CAN DO IT!

#### It's too difficult

- Set small, realistic goals
- Talk to other parents and/or health care professionals for more ideas

#### There's no time

- Make a weekly activity plan
- Include physical activities in your daily routine

#### lt's not safe

- Start slowly. Encourage your child to increase their activity as they feel more comfortable
- Consult a health care provider if you have any safety concerns

#### It's too expensive

- Many activities require little to no money (e.g., playing at the park, swinging a bat)
- Organizations exist that provide funding, grants, and subsidized or free equipment or programs (See the next page)
- Become familiar with the tax credits that may apply to you

#### It's not accessible

- Just play! Physical activity does not only have to be in a league or gym
- Determine what physical activity equipment you could try at home
- Explore some of the resources on the next page

Try being active together as a family. That way, everyone will experience health benefits!



If you are thinking of supporting your child to try a new program, visit first and see if it would be a good fit.

#### MAKE A PLAN

#### Chat with your child or teen.

Together, try to come up with specific and realistic weekly goals for their sleep, physical activity, and sedentary time. If setting goals for all these behaviours is overwhelming, pick one behaviour to start.

### Think about where, when, and how you will support your child or teen to meet

**these goals.** See what activities interest them. It is easier to stick to a plan when your child or teen is having fun! Don't forget to encourage and support them along the way (and maybe even join them!). There are many benefits associated with following the Canadian 24-Hour Movement Guidelines, including:

THERE ARE HEALTH BENEFITS!







Mental health benefits Increased social wellbeing

# RESOURCES



### REMEMBER

#### A Healthy 24-Hours Includes:



#### **Program Resources**

Jooay *jooay.com* – Available on the Apple Apps store.

#### **Advocacy Resources**

Accessibility Audit Tool e-mail: *email@nchpad.org* to request the AIMFREE Consumer Manual

How | Walk www.nchpad.org/howiwalk/

#### **Financial & Transportation Resources**

Disability Credit Canada www.disabilitycreditcanada.com

Grants jumpstart.canadiantire.ca – Visit "Apply", www.paralympic.ca

Mobility Basics www.mobilitybasics.ca/canfund

Funding Options for Wheelchair Accessible Vehicles *www.wheelchairvans.ca/funding* 

Consult your provincial government website for additional tax credits.

There are communities of parents, children, youth, healthcare professionals, national organizations, and others who are here to support you and your child. You are not alone. This page includes examples of national resources. Provincial and regional resources and recreational centres are also great sources of information.

#### **Information Resources**

Canadian 24-Hour Movement Guidelines for Children and Youth *www.csep.ca/guidelines* 

Active Living Alliance for Canadians with a Disability *www.ala.ca* 

Canadian Disability Participation Project *www.cdpp.ca* 

Canadian Society for Exercise Physiology *www.csep.ca* 

Canucks Autism Network www.canucksautism.ca – Visit "Helpful Resources"

NCHPAD – Building Healthy Inclusive Communities *www.nchpad.org* 

SCI Action Canada www.sciactioncanada.ca

Sport for Life Society www.sportforlife.ca

#### **Activities Resources**

ParticipACTION

*www.participACTION.com* – Visit "150 Play List" and "Build Your Best Day!" webpages

Canadian Tire Jumpstart jumpstart.canadiantire.ca

Canadian Paralympic Committee www.paralympic.ca

Special Olympics www.specialolympics.ca

Easter Seals www.easterseals.ca

Inclusive Physical Literacy www.physicalliteracy.ca/inclusion/

#### **Research Reference**

Need computer/internet access? Visit your local library or community centre to access these online resources. Tremblay, Mark S., et al. "Canadian 24-hour movement guidelines for children and youth: an integration of physical activity, sedentary behaviour, and sleep." Applied Physiology, Nutrition, and Metabolism 41.6 (2016): S311-S327. PDF: www.nrcresearchpress.com/doi/pdf/10.1139/apnm-2016-0151

Handler, L, Tennant, E., Faulkner, G., & Latimer-Cheung, (in press). *Perceptions of inclusivity: The Canadian 24-Hour Movement Guidelines for Children and Youth. Adapted Physical Activity Quarterly.* 

# ENDNOTES

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#### THE ABILITY TOOLKIT

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PARTICIPACT

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ALLIANCE DE VIE ACTIVE pour les Canadiens ayant un handicap

#### Website

This resource is available online at *www.participACTION.com* and *www.CSEP.ca* 

#### Contact

Canadian Society for Exercise Physiology (CSEP) 1-877-651-3755