Preventing falls: Tips for everyday life

Presented by:

Sandra Neveu, Physiotherapist, Home Support, Disability and Rehabilitation Directorate (DSADDR), Centre intégré de santé et de services sociaux (CISSS) de l'Outaouais

Catherine Baril, Programming and Research Officer, Public Health Branch, Centre intégré de santé et de services sociaux de l'Outaouais

June 2024







Topics

- 1) Why worry about falls?
- 2) What causes falls: risk factors.
- 3) How to prevent falls: tips for everyday life.
- 4) The Integrated Dynamic Balance Program (PIED): a fall prevention program offered in our area.



In Canada

Falls are the leading cause of hospitalizations and injury deaths among those aged 65 and over

(Public Health Agency of Canada, 2022)

In Quebec

People 65 and older represent:

>91.9% of deaths from falls between 2000 and 2019

(Fichier des décès, 2022)

> 71.2% of all hospitalizations caused by a fall between

2011 and 2021 (Med-Écho, 2022)



In the Outaouais Region

ln 2020-2021:

- The proportion of people aged 65 and over who suffered unintentional injuries from falls was 6.6%
- This proportion is significantly higher than what is observed in the rest of Quebec, which is 4.5%

(QPHS) 2020-2021



- Falls are a major public health issue in Canada and around the world
- Falls result in more years of disabled life than transportation-related accidents, drownings, burns and poisonings combined

(WHO, 2021)

- The cost of treating falls-related injuries is high
- For most falls (61%), people fell while walking

(Public Health Agency of Canada, 2022)



Falls-related injuries:

- May cause fractures or head injuries
- Reduce the quality of life of seniors
- In some cases, precipitate the need to move to a longterm care facility



Because falls are preventable!





What causes falls

Risk factors

Risk factors

Some people are more at risk:

- **≻**Women
- ➤ People aged 80 or older
- > Seniors living alone or on low incomes.

(Public Health Agency of Canada, 2022; WHO, 2021)



Risk factors

Risk factors can be:

1) Personal:

- Health problems
- Decreased balance and muscle strength
- Vision or hearing problems
- Taking certain medications that may cause dizziness
- Life habits
- Risk taking.

2) Environmental:

- Tripping obstacles
- Poor lighting
- Slippery surfaces
- Congested foot traffic areas.

(INSPQ, 2019)

How to prevent falls?

Tips for everyday life



et de services sociaux de l'Outaouais



How to prevent falls

- The most effective fall prevention interventions are primarily exercise programs.
- A consensus of experts recommend the implementation of multifactor programs, which should aim to:
 - Improve balance, strength and gait
 - Eliminate environmental hazards
 - Decrease the number of medications
 - Correct orthostatic hypotension and treat heart problems (e.g., arrhythmia)
 - Correct visual problems
 - Provide information specific to the current intervention. (INSPQ, 2019)



Organizing your home safely!





Organizing your home safely!

Some general tips:

- ✓ Reduce congestion and clear walkways
- ✓ Do not leave any electrical wires, cables or other obstacles lying around
- ✓ Get rid of small carpets and rugs, or make sure they are slip-resistant.

You CAN Prevent Falls! - Government of Canada









Organizing your home safely!

Bathroom:

- Place a non-slip coating at the bottom of your bathtub or shower
- Install grab bars near the toilet and bath to help you sit and stand
- Immediately wipe down condensation or spills on the floor.



Organizing your home safely!

Kitchen:

- Store commonly used pots and pans in easy-to-access areas
- Keep heavier items in bottom cabinets
- Use a stable step ladder with a safety railing to reach elevated areas
- Always wipe down spilled liquids immediately.



Organizing your home safely

Stairs:

- Have good lighting
- Install banisters on both sides of stairs
- Remove your reading glasses before climbing or descending.

Organizing your home safely

Outside the house:

- Ensure that the steps and walkways leading to your home are in good condition, free of snow, ice and leaves
- Keep your entrance well lit
- Put away garden tools such as garden hoses and rakes when not in use.







Know your medications well



Know your medications well

Psychotropic medications that help you relax, sleep or improve your mood may increase your risk of falling.

A few tips:

- Always follow the medication dosage
- Talk to your pharmacist who knows your file and who can give you specific information about your medications
- Maintain an up-to-date list of medications you take at home and in your wallet
- Do not share your prescription medication, avoid taking expired medication and always take them back to a pharmacy.

<u>Medication and Falls | Staying On Your Feet – Taking Steps to Prevent Falls</u>



Be aware of orthostatic hypotension

Orthostatic hypotension, or Postural hypotension, is a drop in pressure when you stand up.

This may be caused by:

- The need to stay in bed for a long time
- Decreased blood volume due to dehydration or surgery
- Certain medications such as those to help you urinate (diuretics), or to lower your blood pressure (antihypertensive drugs)
- Certain diseases of the nervous system (e.g. Parkinson's disease).



Be aware of orthostatic hypotension

A few tips to reduce its impact:

- Keep the head of your bed higher
- Before getting up, do some feet and hand exercises, move your legs
- Sit down and get up slowly, especially after waking up in the morning
- Drink enough throughout the day (unless contraindicated)
- Do not stand for long without moving
- Avoid intense heat, including hot baths.

Falls-Prevention-Postural-Hypotension.pdf (nsw.gov.au)



Get your eyes checked every year!



Centre intégré de santé et de services sociaux de l'Outaouais

Québec * *

Get your eyes checked every year

As you get older, some changes in vision can occur:

- Eyes take longer to get used to changes in light
- It is more difficult to detect objects, particularly at night
- You perception of distance may change
- You may develop diseases like cataracts, glaucoma, macular degeneration
- If you wear bifocals or glasses with progressive lenses, it is more difficult to see the floor
- Pay attention to stairways and curbs.

Vision Tips – Finding Balance (findingbalancealberta.ca)



Stay active!



Stay active! Do exercises that work your balance and muscle strength

Make sure you have proper footwear for exercise:

Tips for everyday life

The heel is wide.
The back of the heel is high enough to support it and prevent it from slipping.

For better stability, the sole thickness should not exceed 1 inch (2.54 cm).

For comfort, and to allow the feet to expand, there are several possible adjustments: Velcro fasteners, elastic laces or side elastic bands.

The sole should provide good adhesion, without sticking to the floor.

<u>Ideal Shoe 2023 (findingbalancealberta.ca)</u>



Stay active and do exercises that work your balance and muscle strength

To be more active, do a variety of physical activities of varying intensity:

- At least 150 minutes (2.5 hours) of moderate to vigorous physical activity per week
- Strength training at least twice a week
- Exercises to strengthen balance (e.g., Tai Chi, dancing)
- Several hours of light-intensity physical activity, such as standing.

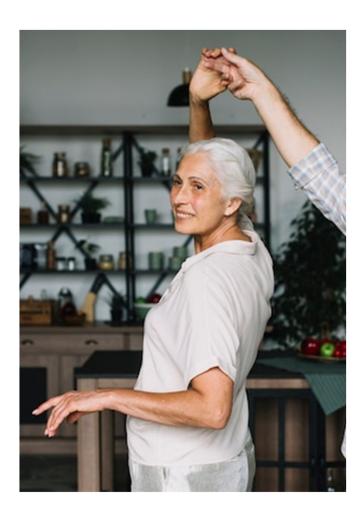
Canadian 24-Hour Movement Guidelines (65+)



Many physical activities are beneficial in preventing falls:

- Dance
- Tai chi
- Judo
- Strength training
- Aquafitness
- Yoga

And any other activity that works on flexibility, balance and muscular strength.



What to do if you fall?

- ✓ Stay calm!
- √ Take your time before getting up
- ✓ Make sure you are not injured
- ✓ Contact Info-Santé 811 (in Quebec) or the Telephone Health Advisory Service (in Ontario) if you're unsure of what to do
- ✓ Inform your healthcare provider of your fall.

What To Do After Fall-eng.pdf (canada.ca)

The Integrated Dynamic
Balance Program:
A falls prevention program
offered in the Outaouais Region





Fall prevention best practices

In Quebec, the Integrated Dynamic Balance Program (PIED) is included in the **2015-2025 National Public Health Program** as a service to be deployed to prevent falls among seniors living at home.

This program was evaluated and demonstrated significant improvement between initial and final assessment for all tests on balance, stability limit and muscular strength in the lower limbs (Bégin et al., 2014).









The Program in Action!

GOAL

Prevent falls and fractures among independent seniors who live at home and who are concerned about falls or their balance.

Designed to have the intensity of clinical interventions, while being accessible to seniors living at home.

(Trickey et al., 2002)

OBJECTIVES

Improve balance and leg strength.

Help maintain bone density in areas most vulnerable to fractures (wrists, hips and spine).

Develop the ability to set up the home and adopt safe behaviours.

Increase a sense of effectiveness in preventing falls.

Promote the maintenance of regular physical activity.

DESCRIPTION

- A FREE program available throughout the region;
- Duration of 12 weeks (2x per week)
- Facilitated by physical rehabilitation professionals
- Ten fall prevention videos covering:
 - Healthy life habits
 - Safe behaviours
 - How to set up the home
 - Medication taking
 - Osteoporosis
- Exercises at home (1x per week).

TARGET AUDIENCE

- People 55 or older and more independent
- Living at home
- Having fallen over the last 12 months and/or concerned about falls (fear of falling)
- People who are motivated and able to complete a group exercise program twice a week for 12 weeks.

This program is not appropriate for...

Seniors who have difficulty with standing exercises or who have significant health problems.



REGISTRATION PROCESS



Self-registration by participants



Interested individuals should call their region-specific number or send an email



Voicemail where people can leave their name and phone number



Return call to complete questionnaire and confirm registration

Some resources to go further

Exercise programs that can be done in the comfort of your own home:

- The GO to move! Move 50+ (move50plus.ca)
 - English and French.
- <u>SAFE | Home | Exercises for Seniors (safeseniors.com)</u> English and French.



Some resources to go further

- Prevent Falls Ottawa Public Health (ottawapublichealth.ca)
- Be Active Ottawa Public Health (ottawapublichealth.ca)
- Take Five to Prevent Falls Canada Safety
 Council
- Preventing falls at home (chumontreal.qc.ca)



References

Public Health Agency of Canada (2022). Surveillance report on falls among older adults in Canada. Find in: <u>Surveillance report on falls among older adults in Canada – Canada.ca</u>

Institut de la statistique du Québec. Quebec population health survey(2020-2021) Available from: Infocentre, Institut national de santé publique du Québec.

Institut national de santé publique du Québec (2004, mis à jour en 2019). Cadre de référence. La prévention des chutes dans un continuum de services pour les aînés vivant à domicile. Ministère de la Santé et des services sociaux, Québec.

World Health Organization (2021). Falls. Find in: Falls (who.int)



End of the presentation

Thank you for your participation!

