

Falling is a very serious health problem for seniors

According to Statistic Canada¹:

- 30% of older adults experience at least one fall each year
- 95% of all older adults' hip fractures are due to a fall
- 50% of all falls in older adults causing hospitalization happen at home
- Over 33% of older adults admitted to Long Term Care following hospitalization for a fall
- Falls can result in chronic pain, reduced mobility, loss of independence and even death

Why do so many seniors fall?

Usually falls have more than one cause. For example, someone who slips or falls on a slippery floor may have weak leg muscles and be experiencing dizziness as a side effect of medication.

This booklet reviews the causes of falls and recommends changes you can make in the following areas to prevent falling and injury:

- Exercise
- Medication
- Assistive devices
- Environmental hazards (surroundings inside and outside home)

1. Government of Canada. Statistic Canada. (2021). Seniors' Falls in Canada: Second Report

[Seniors' Falls in Canada - Infographic - Canada.ca](https://www150.statcan.gc.ca/n1/pub/82-625-x/2021001/article/00001-eng.htm)

Exercise

Inactivity, chronic disabilities such as diabetes, arthritis, abnormal blood pressure and changes associated with normal aging can lead to gait, balance disorders and loss of mobility. Regular physical activity and exercise will increase muscle strength, improve co-ordination, and help to prevent falls.

Stay active to prevent falls:

- Flexibility activities, e.g., Tai Chi or gardening.
- Strength and balance activities, e.g., climbing stairs.

What to do:

- Talk to your Doctor or Nurse Practitioner before you start an exercise program.
- Tell your doctor about changes in balance.
- Avoid sudden changes in position.
- Use caution when bending down all the way to the floor and avoid getting up quickly after stooping.
- Make sure the exercises you choose are beneficial for you.
- Look at the resource list on the last page for program ideas.
- Make your activities as enjoyable as possible. Find a friend!
- Find out about exercise/activity programs for seniors in your area.

Refer to the City of Ottawa Activity Guide or call 613-580-2400.

**Call 1-888-334-9769
for a free copy of Canada's Physical Activity
Guide for Older Adults**

Nutrition: For Healthy Strong Bones

Calcium helps maintain your bone strength. A well-balanced diet that includes a good supply of calcium is very important for keeping your bones strong. If your body does not get the calcium it needs from your diet, it will remove it from your bones. As you age, your body does not absorb calcium as well. This, in turn, increases your need for calcium-rich foods.

How much calcium is enough?

Osteoporosis Canada recommends the following amounts of calcium every day to maintain strong bones.

1000 - 1500 mg per day

Which foods are best for calcium?

| Milk & Milk Products | Portion | Calcium |
|--|--------------------|---------|
| Milk - 2%, 1%, skim, chocolate | 1 cup | 300 mg |
| Yogurt | 3/4 cup | 295 mg |
| Cheese-Cheddar, Edam, Gouda | 1 1/4" / 3 cm cube | 245 mg |
| Ice Cream | 1/2 cup | 80 mg |
| Cottage cheese - 2%, 1% | 1/2 cup | 75 mg |
| Fish and Alternatives | | |
| Sardines, with bones | 1/2 can/55 g | 200 mg |
| Salmon, with bones-canned | 1/2 can/105 g | 240 mg |
| Fortified orange juice | 1 cup | 300 mg |
| Molasses, blackstrap | 1 tbsp | 180 mg |
| Combination dishes | | |
| Lasagna | 1 cup | 285 mg |
| Soup made with milk, such as cream of chicken, mushroom, or celery | 1 cup | 175 mg |

Vitamin D

A diet low in Vitamin D linked to reduced calcium absorption. For individuals with limited sun exposure and a decreased intake of milk and margarine, a vitamin D supplement is recommended.

A supplement with 1000 International Units (IU) is recommended per day.



Medication

Seniors are more at risk of falls if they take:

- Four or more medications daily (prescribed and non-prescribed).
- Medications to help them sleep or calm their nerves (sedatives).
American Journal of Epidemiology, 1990

Warning: Side effects of medications such as dizziness or feeling light-headed can also increase your risk of falling. Some medications react with others, and this may increase the side effects.

What to do:

- Review all your medications with your doctor every six months.
- Ask your doctor, nurse, or pharmacist about the side effects of the medication you take.
- Take medications correctly as indicated. Consider using a medication box.
- Tell your doctor if your medication makes you dizzy or lightheaded.
- Avoid taking alcohol with medications.
- Talk to your pharmacist before you take non-prescription, over the counter and herbal remedies.
- Never take someone else's medication.
- Instead of taking medication to help you sleep, consider alternatives such as listening to soft music, reading, relaxation exercises, or drinking warm milk.
- Talk to your doctor if insomnia persists.
- Always keep a list or record of all your medications with you.
- Shop at one pharmacy to have all your prescriptions filled.
- Return all expired medications to your pharmacist.

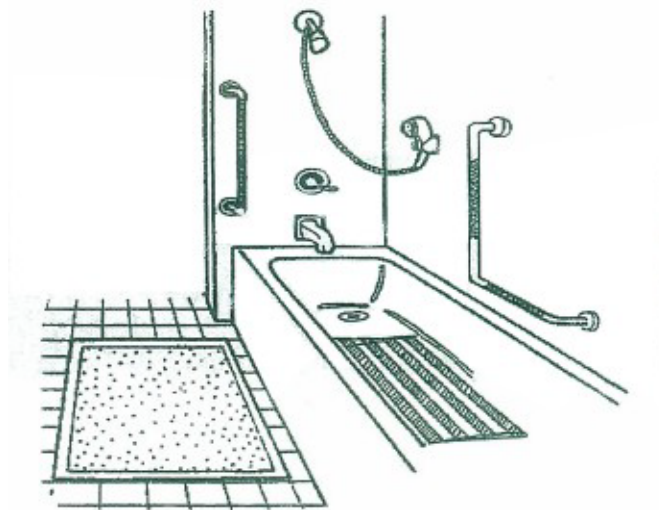
Assistive Devices

Devices such as canes, grab bars, handrails, hip protectors and walkers can really help prevent falls and reduce the risk of injuries. Individuals with balance and mobility problems are encouraged to use assistive devices for daily activities.

Assistive devices can make your bathroom safer:

- Use a long rubber bathmat inside your tub.
- Consider professional installation of grab bars in the tub area by a vendor.
- If getting into or out of the tub is difficult, consider buying a bath seat and a handheld shower or getting help with bathing.
- If sitting on or getting up from the toilet is difficult, consider buying a raised toilet seat and/or installing a grab bar.

Consider consulting an Occupational Therapist through Home Care for professional assessment and recommendations.



Use of a cane

Is it the right height for you?

- Turn the cane upside down and put the handle on the floor.
- Stand with your arms at your sides.
- The tip of the cane should be at the level of your wrist.

To adjust a wood cane:

- Turn the cane upside down, mark the cane at the level of your wrist.
- Remove the rubber tip.
- Have the cane cut $\frac{1}{2}$ inch shorter than where you marked it.
- Replace rubber tip.

To adjust an aluminum cane:

Most aluminum canes can easily be adjusted within an inch of the desired height.

Remember to replace worn rubber tips on your cane and do not forget to attach a new ice pick in the winter.

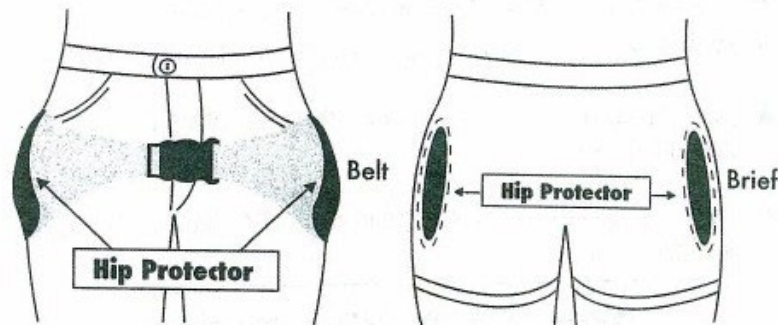
Learn to use a cane correctly:

- Always hold your cane on your strongest side.
- If you have a 'bad' leg (weak or painful) holds the cane opposite the 'bad' leg.
- Always move the cane and the opposite leg together.
- To go up the stairs, take the first step up with your strong leg. Then, move the cane and the "bad" leg to the same step.
- To go down the stairs, take the first step down with the cane and the "bad" leg. Then, lower the strong leg to that same step.



Consider wearing hip protectors:

A hip protector is a lightweight belt or pant with shields to guard the hips (head of the thighbone) against fractures and give added confidence. They may be purchased at Home Health Services and Supplies store.



Hip Protector graphics taken with permission, Tools for Living Well University of Ottawa and the Canadian Association of Occupational Therapists.

Use a walker for safer travels:

- Have your walker adjusted to your height
(see cane height, page 7)
- Roll the walker forward as you take steps standing straight into the center of the walker.



Learn to use the hand brakes correctly:

To sit on the seat of the walker:

- Lock the brakes firmly in place.
- Turn around slowly; transfer one hand to the opposite walker handle.
- Keep hands on both handles as you sit down.

When standing up from a chair or bed with your walker:

- Position walker in front of you and lock the brakes.
- Push up from the bed or chair; the walker could tip if you pull on it.
- Unlock brakes before you start walking.

To transfer to a chair or bed with your walker:

- Walk to the chair or bed and turn around using the walker.
- Back up to the chair or bed until the back of your legs touch the seat.
- Lock the brakes; reach for chair armrest or bed for support and sit down.

Hardware stores, department stores, medical equipment stores, drug stores and specialty stores may have useful devices to help make daily activities easier and safer.

Hazards In and Around Your Home

Unsafe surroundings contribute to 30 percent of both indoor and outdoor falls.

* Poor lighting, unsafe footwear and icy sidewalks are just a few of the environmental hazards that cause people to fall.

* Baseline Data, Ottawa-Carleton Falls Research Project, 1994.

What to do:

- Identify unsafe areas inside and outside your home.
- Complete the checklist on the following pages.
 - Your risk of falling increases with the number of hazards identified with a **No** answer.
- Start today to make changes to reduce the hazards in your home.
- Report hazards outside your home to the proper authorities:
 - In an apartment building, store, or restaurant, contact the owner or manager.
 - In a shopping mall, contact the mall authority.
 - On city streets or sidewalks, call the City of Ottawa at 613-580-2400

Falls Can Be Prevented

Checklist

Yes No

Throughout your home

| | | |
|---|--------------------------|--------------------------|
| Floors are not slippery. Spills are wiped up promptly. | <input type="checkbox"/> | <input type="checkbox"/> |
| Pathways are clear of extension cords and other objects. | <input type="checkbox"/> | <input type="checkbox"/> |
| Rugs have no ripples or tears. | <input type="checkbox"/> | <input type="checkbox"/> |
| Scatter mats are removed or securely taped to the floor. | <input type="checkbox"/> | <input type="checkbox"/> |
| Low tables are removed from the middle of the living room. | <input type="checkbox"/> | <input type="checkbox"/> |
| All furniture is sturdy. | <input type="checkbox"/> | <input type="checkbox"/> |
| Chairs have armrests and are the correct, comfortable height. | <input type="checkbox"/> | <input type="checkbox"/> |
| All light fixtures have a minimum of 60-watt bulbs. Good lighting installed in and around the house. | <input type="checkbox"/> | <input type="checkbox"/> |
| Entrance to every room has a light switch. | <input type="checkbox"/> | <input type="checkbox"/> |
| Stepladders or step stools are never used. | <input type="checkbox"/> | <input type="checkbox"/> |
| Items used every day stored within easy reach. | <input type="checkbox"/> | <input type="checkbox"/> |
| Exterior stairs kept free of ice and snow. Sprinkle grit or non-clumping cat litter. | <input type="checkbox"/> | <input type="checkbox"/> |

Checklist

Yes No

Entrance

Doors open easily.

There is a sturdy seat with armrests.

Mail is within easy reach.

Exterior and interior lighting is good.

Outside pathways are free of lawn furniture, hoses, and other objects.

Stairs (Inside and Outside)

Stair edges marked with contrasting color.

All steps are the same height and the same depth.

Stairs well-lit with a light switch at the bottom and top of the stairs.

Stairs have a non-slip surface and are in good repair.

Handrails well attached and present on BOTH sides of stairs.

Handrails are at the height of 36 to 39 inches or 90cm (1m).

Handrails extend 12 inches beyond top and bottom steps.

Your hand should wrap around two-thirds of handrail.

Stairs are always free of clutter or any objects.

Checklist

Yes No

Bathroom

Bathtub plug is easy to reach and to use.

Full-length rubber bathtub mat used for every bath or shower.

There are at least two grab bars in the tub area.

Portable grab bars (on the side of the tub) do not move when used for support.

Rug outside the bathtub has a rubber backing.

If you have problems getting into or out of the bathtub:

Use a bath seat.

Use a hand-held shower.

Ask for help with bathing.

If you have problems sitting on or getting up from the toilet:

Use a raised toilet seat.

Use a grab bar conveniently located.



Checklist

Yes No

Bedroom

A telephone easily reached from the bed.

A lamp and flashlight easily reached from the bed. The bed is the correct height (90-degree knee bend)

Personal Habits

I move slowly after lying or sitting to prevent dizziness and sit on the side of the bed a few minutes before I stand.

I do not hurry.

I remove my reading glasses when using the stairs.

I always wear well-fitted shoes or slippers with closed and low heels and non-slip soles.

I do not use bath oil and I use liquid soap to avoid bending for a bar of soap.

I do not wear long skirts, long house coats or loose slacks that I might trip or step on.

I turn on a night-light before I go to bed.

I turn on a light when I get up at night.

I avoid using a ladder or step stool and ask someone to help to reach high objects.

Living alone, I use a Personal Emergency Response Calling Service, or I buddy with a neighbor, family, or friend for a daily phone call.

Resource List

Regional Geriatric Program of Eastern Ontario, Stop Falls, Staying Independence Checklist

<https://www.rgpeo.com/stop-falls/staying-independence-checklist>

Pinecrest Queensway Community Health Center, West End Integrated Falls Prevention program 613-820-4922

<https://www.pqchc.com/services/Fall-Prevention-Seniors>

Queensway Carleton Hospital, Geriatric Day Hospital

<https://www.qch.on.ca/geriatricdayhospital>

Ottawa Public health Injury Prevention

<https://www.ottawapublichealth.ca/en/public-health-topics/prevent-falls.aspx>

Health Canada Physical activity tips for older adults (65 years and older)

<https://www.canada.ca/en/public-health/services/publications/healthy-living/physical-activity-tips-older-adults-65-years-older.html>

Canadian Centre for Activity and Aging-Home Support Exercise Program

<https://www.uwo.ca/actage>

Active Living Coalition for Older Adults

<https://www.activeagingcanada.ca>

Exercise: A Guide from the National Institute on Aging

<https://www.nia.nih.gov/health/four-types-exercise-can-improve-your-health-and-physical-ability>

Osteoporosis Canada

<https://osteoporosis.ca>

Growing Stronger: Strength Training for Older Adults:

<https://www.cdc.gov/nccdphp/dnpa/physical/growing>

Taoist Tai Chi for seniors

<https://www.taoisttaichi.org>

Resource List cont'd

**Additional information is from:
Ottawa Public Health Information: 613-580-OPHI (6744)**