

Smart Moves

Information about Fall Prevention for Older Adults

Produced by

SMARTRISK™



SAUVE-QUI-PENSE™
preventing injury with smart thinking

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This book is dedicated to Canadian seniors and seeks to empower communities to take action on fall prevention.

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INTRODUCTION

Many people believe that they're most at risk of dying from a disease or illness such as heart disease or cancer, but Canadians are far more likely to die through unintentional injuries such as car crashes, falls, drowning and poisoning, or intentional injuries including suicide and violence. Injuries kill more Canadians between the ages of one and 44 than any other cause.

Injuries are also a serious issue for older adults, many of whom fall. Indeed, one in three seniors will fall this year. Falls are a common cause of disability and often result in a senior having to give up living independently. Falls are common among the very elderly, but large numbers of younger, active people also fall. If you are at risk for falls, you can take action to prevent injuries before they occur.

This book is part of a new fall prevention program developed by SMARTRISK, with the assistance of health care experts and older adults. The program is the result of years of research into the causes of falls and the best ways to prevent them. This book will help you understand that falls can be prevented and it will tell you exactly how to do so. Following the enclosed suggestions can help you dramatically reduce your risk of falling, while continuing to lead a full and active life.



How to use this book

We decided to put the information into a book so that you will have a comprehensive resource that you can refer to in the future. The first thing you should do is read page 5 to find out why falls happen and then assess your personal risk. Next, review the table of contents to find sections you are interested in or would like to learn more about. You will find information on bone health, the importance of exercise, suggestions for changes you can make to your home to reduce fall risks, and advice on the appropriate use of medications.

Each section offers practical advice and smart moves you can make to manage your risks for falls and reduce your chances of injury. Each section also offers information on who can help and how to find out more about fall prevention. Not all of the information in this book will apply to you, but we encourage you to read each section so that you can become aware of fall risks and take steps toward preventing them.



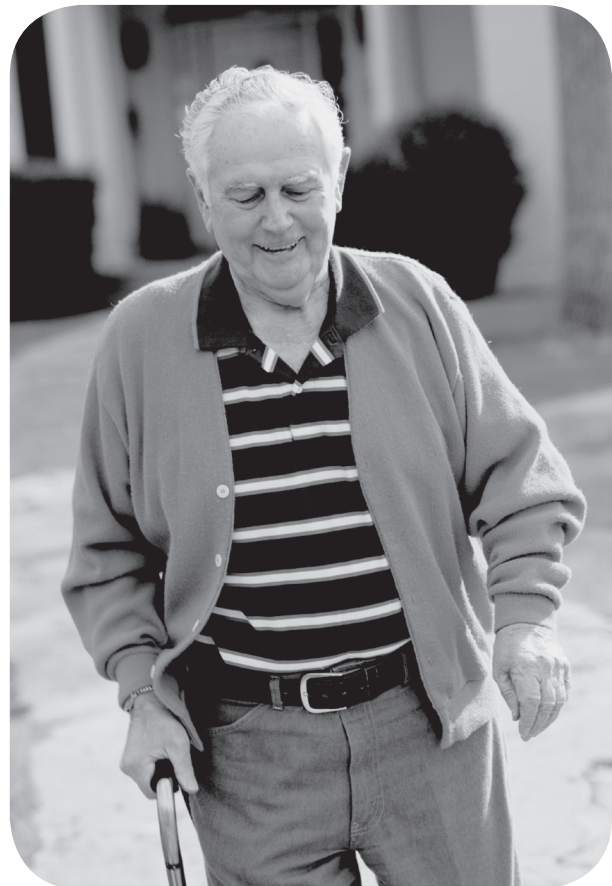
At the end of the book, we discuss what to do if you fall and ways for family members and caregivers of older adults to help. We recommend that you ask your spouse, child, friend, or neighbour to read through the material with you. It is a useful resource for people who wish to improve their health and reduce their chances of falling. It is also a useful guide for health professionals who care for older adults to take action on falls prevention.

What is SMARTRISK?

SMARTRISK is a national, charitable organization dedicated to preventing injuries among all Canadians, with a special emphasis on children, youth, and seniors. Created in 1992, SMARTRISK believes that most injuries are predictable and preventable.

The SMARTRISK approach is centred on the belief that life is about taking risks. Risk is part of everyday living - whether it's driving, walking, cooking, or working around the house or yard. Most people don't see the risks in their lives, and as a result, they get hurt doing things they like to do and want to do. SMARTRISK helps people see the risks in their everyday lives and shows them how to take those risks in the smartest way possible so that they can live life to the fullest.

Living life to the fullest for older adults means being able to do things on your own, getting out and trying new activities, continuing to go for walks, and being able to hold and play with your grandchildren. Once you begin to identify and understand the variety of risks in life, you can manage those risks in a way that you won't get hurt, so that you can have a great time with your life and continue to do everything you want to do.



What are the facts on falls?

- 1 in 3 seniors fall every year. Half of seniors who fall do so repeatedly.
- 1 in 4 falls result in injuries, including sprains, fractures, and even death.
- Falls are the leading cause of death due to injury among Canadians over 65.
- Many older people who survive falls never fully recover. They face chronic pain and reduced mobility to the point where they lose their independence and enjoyment of life.
- Many seniors who fall live with an ongoing fear of another fall.
- Falls are a serious burden on Canada's health care system. Direct health care costs relating to falls among seniors are estimated at \$1 billion every year.
- Canada's senior population is expected to grow to 9.2 million by 2041, more than double the senior population of 3.9 million in 2001. As the proportion of the elderly in our population continues to increase, preventing falls takes on even more importance.

Aren't falls an inevitable part of growing older?

Falls are often seen as a problem affecting only the frail elderly, something that just happens as people grow older. **Falling is not inevitable and it is not caused by age.** Some of the illnesses and disabilities that may come with age can certainly contribute to a fall, but they do not actually cause it. Physical inactivity can lead to muscle weakness, joint stiffness and poor balance, all of which can play a role in falling. Some medications

can cause dizziness and drowsiness leading to instability. And hazards in and around homes and in public places can contribute to falls. **Falls are not accidents.** Falls are often the result of a combination of factors, and in many cases, they can be prevented.

Fall risks

There are many possible causes of falling. Some are related to your health and physical condition such as poor balance or muscle strength. Others are risks in your home or in public places such as loose carpets, wet floors, or narrow stairs, all of which increase your chance of tripping. When several are combined, your risk of falling increases. That is why both your health and environment need to be examined to manage your risk of fall injuries.

The following questions will help you assess your personal risk.

- Have you fallen before?
- Are you afraid of falling?
- Do you have osteoporosis?
- Do you have arthritis?
- Are you physically inactive?
- When you get up from a chair, do you have to use your arms?
- Do you sometimes lose your balance and does this affect your walking?
- Do you have trouble seeing obstacles in your path?
- Do you take more than one medication?
- Do you take sleeping pills to help you sleep?

If the answer is **yes** to any of these questions, ask your health care provider and family members to help you address the issue of falls and prevent injuries **before** they occur. The information in this book will help you get started.

Who is your health care provider?

There are many types of professionals that help seniors maintain their health and independence. If you need advice or care about fall prevention, a number of options are available. You can discuss fall risks and injury prevention with your health care provider:

- Physician
- Nurse Practitioner
- Registered Nurse
- Pharmacist
- Physiotherapist
- Occupational Therapist
- Chiropractor
- Podiatrist or Chiropodist
- Optometrist
- Registered Dietitian
- Registered Massage Therapist

Your **Public Health Unit** or **Community Health Centre** will also be able to provide you with information about how to stay healthy and prevent a fall.

To find your local Public Health Unit, call the Association of Local Public Health Agencies at 416-595-0006 or visit their website: www.alphaweb.org.

To find your local Community Health Centre, call the Association of Ontario Health Centres at 416-236-2539 or visit their website: www.aohc.org.

Four smart moves to reduce fall risks

Research tells us that falls can be prevented. There are strategies that have been shown to be effective. The information in this book will help you see the risks in your life and offer advice on how to manage those risks so that you can enjoy life and continue to do all the things you need to do and want to do. There are four smart moves to help you reduce your risk of falls and injury. Each has a section on its own in this book. Read the information that interests you most and refer back to it as needed.



Plan ahead

Talk to your health care provider and family about osteoporosis and fall prevention.



Be active

Exercise every day to keep your muscles and bones in good condition.



Look first

Be aware of your surroundings and hazards that might cause a fall.



Choose smart

When taking medications, think clearly and manage fall risks.

Preventing falls means maintaining control over your life, remaining active and independent as long as possible and continuing to do the things you love to do as you age.

PLAN AHEAD

Bone health



PLAN AHEAD

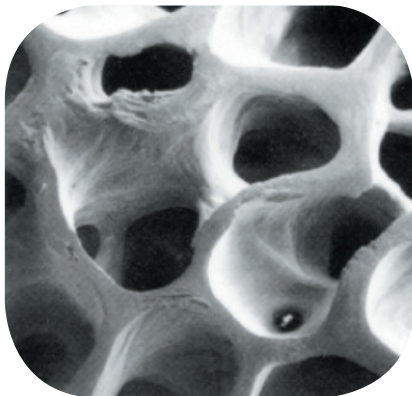
Bone health



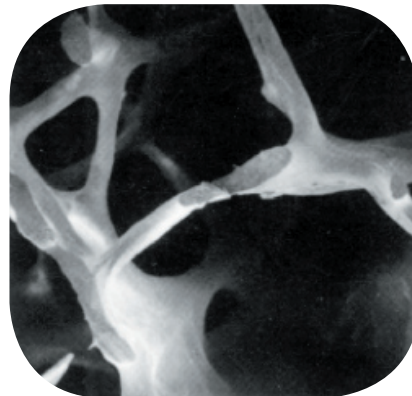
Talk to your health care provider and family about osteoporosis and fall prevention.

While some falls have no serious effect, some result in cuts and bruises, some result in head injuries, and some result in broken bones. Bone is a living tissue. It is constantly renewed through a process in which old bone is removed and replaced by new bone. Calcium is an important element in building strong bones.

When you are a child and teenager, you build the bone that lasts you a lifetime. After your mid-30's, the cells that build bone are less efficient. This can become a problem if you experience rapid bone loss, a condition called osteoporosis. This condition makes your bones thinner and weaker, putting you at greater risk for a fracture, especially of the hip, pelvis, shoulder, or wrist.



Healthy bone



Bone with osteoporosis

What is osteoporosis?

- A disease in which bones become porous and brittle – and therefore easy to break. It is often undetected until a fracture occurs.
- A disease that affects both men and women. 1 in 4 women, and 1 in 8 men over 50, has osteoporosis.
- Many individuals with osteoporosis lead normal, healthy lives. Others are forced to make changes to their lifestyles due to recurring fractures and pain.
- It is common for people with osteoporosis to break a bone while doing everyday activities. Simple movements like bending over to pick something up or even the force of sneezing can cause a fracture.
- Hip fractures are usually the most serious type of fracture from osteoporosis and can increase the likelihood of permanent disability by 50% and death by as much as 20%. Many seniors who have had a hip fracture have difficulty continuing to live on their own and are no longer able to live in their homes.
- The good news is that people who have osteoporosis are able to reduce bone loss and their risk of fractures through early diagnosis, treatment, and a fall prevention plan.

Know your risks for osteoporosis

You should know if you are at risk of developing osteoporosis so that you can take steps to prevent it. The more risk factors you have, the greater your risk of developing osteoporosis. If you are over 50 and have at least one of the major risk factors, or two or more of the minor risk factors, you should talk to your health care provider about osteoporosis and fall prevention. Early diagnosis allows you to manage the condition and lowers your chances of suffering a fracture.



Major risk factors

- age 65 or older
- previous fracture, especially after age 40
- family history of osteoporosis
- low bone mass apparent on x-ray
- past menopause
- prolonged sex hormone deficiencies
- ovaries removed or menopause before age 45
- prolonged use of certain medications that can cause bone loss
- tendency to fall

Minor risk factors

- rheumatoid arthritis
- overactive thyroid
- thin, "small boned" build
- white or Asian ancestry
- not enough calcium and vitamin D in your diet
- not enough physical activity
- smoker
- caffeine (more than 4 cups of coffee, tea, cola a day)
- alcohol (more than 2 alcoholic beverages a day)

Plan ahead for healthy bones

Knowing your risks for osteoporosis can help you identify those things you can change. There are simple things you can do every day to reduce your chances of developing the disease, so that if you fall, you are less likely to get hurt. It is possible to prevent, delay, or reduce the amount of bone lost as you get older if you plan ahead and choose healthy habits. It is also possible to rebuild bone mass if you have already been diagnosed with osteoporosis. Here are the most important routes to healthy bones:

Get enough calcium

Your bones need calcium to keep them strong and healthy, so they won't break. People over the age of 50 need **1,500 mg** of calcium every day. Many different foods are high in calcium such as milk, cheese, fortified orange juice, salmon with bones, and dried figs. But it is difficult to get all the calcium you need from food. It is strongly recommended that you take a calcium supplement. Talk to your health care provider about the best source of calcium for you.

Take vitamin D

Your body needs vitamin D in order to absorb calcium. Adults over 50 require **800 IU** of vitamin D every day. Natural sunlight is a good source of vitamin D, as are some foods, such as fortified milk, margarine, eggs, and some fish. However, most people do not get enough vitamin D from their lifestyle, especially in the winter, or from food. It is strongly recommended that you take a vitamin D supplement. Many calcium supplements combine calcium and vitamin D to help you get what you need in one tablet. Talk to your health care provider about the best source of vitamin D for you.

Be active

People who are inactive lose bone faster than people who exercise. The best form of exercise to maintain strong bones is weight-bearing activities such as walking, aerobics, and dancing. Strength exercise such as the use of weights or exercise bands will also help strengthen your bones.

Activities that improve flexibility and posture can help those with osteoporosis reduce pain and manage daily activities more easily. Try to exercise everyday to get the most benefits.



If you have osteoporosis, consult a physiotherapist or occupational therapist to teach you how to perform exercise safely. In general, you should avoid activities that require twisting or bouncing movements. If you have a history of compression fractures or are at high risk for fractures, make sure you do not do exercises that require you to bend forward from the waist from a sitting, standing, or lying position.

If you smoke, quit

People who smoke lose bone faster than non-smokers. Try to stop smoking even if you have been smoking for a long time. Set realistic goals for yourself and talk to your health care provider about what you can do to quit.

Be smart with alcohol

People who drink alcohol lose bone faster than non-drinkers. If you don't already drink, don't start for health reasons. If you do drink, avoid getting intoxicated or drunk. Women should try to drink no more than 9 standard drinks per week. Men should try to drink no more than 14 standard drinks per week. 1 standard drink = 5 oz./142 ml of wine (12% alcohol), 1.5 oz./43 ml of spirits (40% alcohol), or 12 oz./341 ml of regular strength beer (5% alcohol).

Drink caffeine in moderation

Caffeine will also affect the condition of your bones, especially if you drink more than 4 cups a day (1 cup = 250 ml). Try to reduce the amount of caffeine you consume. Try decaffeinated coffee, cola, or tea.

Talk to your health care provider about your risk

If you are at risk of osteoporosis, you will likely be referred for a bone mineral density (BMD) test, a simple x-ray that looks at your spine and hips. All post-menopausal women and men over 50 should talk to their health care provider about getting a BMD test. A BMD test can tell you whether or not you have osteoporosis and how likely you are to develop it in the future. It can help you make decisions that may prevent fractures or further bone loss. If the test shows low bone density, you'll want to work closely with your doctor to develop a plan of treatment that includes changes in diet, physical activity, possible drug treatments, and fall prevention.



What to ask your health care provider

- Am I at risk for osteoporosis?
- Am I taking any medications that could cause bone loss?
- What is the best source of calcium and vitamin D for me?
- What types of exercise should I do?
- Should I get a bone mineral density test?



- Should I be taking medicines to help rebuild my bones? If yes, what are the benefits and risks of taking such drugs?
- When will a follow-up exam be needed?

You should know that some people with no risk factors develop osteoporosis. That's why it's important to plan ahead for healthy bones by following the suggestions above.

You should also talk to your family about osteoporosis and fall prevention. Ask them to help you assess your risk and work with them to develop a plan for healthy aging.

Other illnesses can increase your risk for falls

In general, the better you plan ahead for your overall health, the less at risk you will be for a fall. Steps to prevent falls are included throughout this book. Each section is a topic for you to discuss with your health care provider and family. You can stay active and avoid illness by following these suggestions:

- get regular medical checkups
- eat well-balanced meals
- be active every day
- choose healthy habits
- have your eyes and hearing tested regularly
- manage your medications
- get enough rest
- maintain a positive outlook
- stay in touch with friends
- use assistive devices if you need them

Some illnesses can cause problems with daily living and this can increase your risk of falling. Rheumatoid arthritis, osteoarthritis (joint problems), both high and low blood pressure, Parkinson's disease, diabetes, anemia, some heart conditions, and even having a cold or the flu can increase your risk of falling because of the following symptoms:

- lightheadedness
- a drop in blood pressure
- blurred vision
- stooped posture
- joint stiffness
- leg cramps or pain
- shuffling
- your legs giving way
- your body swaying

These symptoms can have physical and emotional effects on people. They can reduce your ability to move around and do things on your own. If you have an illness, it can be distressing and it can make it difficult for you to get out and enjoy life. They can drain your energy and cause you to feel frustrated, lonely, angry, or even resentful. These feelings are normal for anyone coping with physical changes and loss of function.

As each illness affects people differently, the most important point is to control your condition and not let it control you. If you have any of the above illnesses, it is important for you to manage your condition and talk to your health care provider about fall prevention. If you don't have any of the above illnesses, but you experience one or more of the above symptoms, consider the risks for falls and act now to prevent further illness and disability.

How to find out more about osteoporosis

The Osteoporosis Society of Canada

The Osteoporosis Society of Canada provides information and support to help prevent and treat osteoporosis. They produce and distribute a number of brochures and fact sheets, cookbooks, audiotapes, and videotapes. They can provide referrals to osteoporosis programs, self-help and support groups. To find a program in your area, call the OSC at 1-800-463-6842 or visit their website: www.osteoporosis.ca.

BE ACTIVE

The importance of exercise



BE ACTIVE

The importance of exercise



Exercise every day to keep your muscles and bones in good condition.

Exercise is an important part of any falls prevention plan. As people get older, muscles and bones get weaker and balance and coordination declines. These changes come from not being active and the result can be falls and injuries. When you exercise to strengthen your muscles and bones, you are helping to reduce your risk of falling. Exercise helps you:

- move around more easily
- stay flexible
- have more energy
- improve your balance
- become stronger
- sleep well
- walk better
- feel good

If you already exercise, you are probably familiar with the benefits of exercise and the risks associated with inactivity. But did you know that exercise can help you prevent falls? Regular exercise, combined with well-balanced meals and a healthy lifestyle, will reduce your risk of falling and help keep you healthy and active for life.

The older we get, the more important it is to exercise

You may have been active throughout your life, through sports or recreation or leisure. You may have stopped as you have aged, or you may think that you don't need to exercise or can't exercise anymore. Regardless of what you do today, exercise will improve your life now and in the future. As you get older, you may need to modify your activity to fit your needs and physical condition, but try to make exercise a part of your daily schedule.

Types of exercise

There are four types of exercise important for falls prevention: **endurance**, **strength**, **balance**, and **flexibility**. All types will reduce your risk of injury. The chart below describes what they do and how often you should aim to do them.

Type of exercise	Purpose	How often?
Endurance	Improves stamina of heart and lungs. Strengthens bones and reduces risk of fractures.	Accumulate 30 minutes, 4 to 7 days per week
Strength	Makes muscles stronger and improves balance. Helps people function well into their nineties.	30 minutes, 3 times per week
Balance	Improves posture, stability, and coordination.	30 minutes, 3 times per week
Flexibility	Improves the flexibility and range of motion of your joints.	10 to 20 minutes, every day



Endurance exercise, also known as aerobic exercise, will improve the condition of your heart and lungs. It may prevent or delay many diseases that are associated with aging, such as heart disease, diabetes, arthritis, and osteoporosis. Endurance exercise may slow and/or reverse age-associated declines in function, helping you to maintain your independence and ability to carry out every day tasks. It will give you more energy. It may also increase bone mass and muscle strength, depending on which activity you choose.

- Start with an activity you enjoy doing. **Go for a walk, try an aerobics class, ride your bike, go swimming, go dancing, or play tennis.**

Strength exercise, also known as resistance training or weight training will make a difference in your life, whether you are already exercising or just starting out. When your muscles are strong, it can mean the difference between being able to get up from a chair by yourself or having to wait for someone to help you get up.

Studies show that strength exercise improves muscle function, slows bone loss and increases bone density. It helps people manage their weight by increasing metabolism. It also helps people with osteoporosis, osteoarthritis, and diabetes manage their condition. Strength exercise is recommended for people of all ages, but the benefits are enormous for older adults.

- Start with little or no weight and choose exercises that work all of your major muscle groups. To progress, use free-weights, weight machines, or exercise bands to create resistance. **Leg, back and abdominal muscles are most important to prevent falls.**

Balance activities are fundamental to normal daily living and thus, maintaining independence. Balance was one factor that helped you stay upright the last time you slipped and almost fell on the ice, for example.

As you age, your ability to sense when you are losing your balance begins to fade. You may lose your ability to sense where your body is and this makes you unstable.

Balance relies on sensory information being sent from inner ears, eyes, muscles, joints and pressure sensors in the soles of your feet to your brain. The brain has to process sensory information and then the muscles have to have enough strength and range of motion to generate the required action,



whether it's stepping or grasping. As you grow older, you may find it hard to re-establish your balance after it has been upset. Or you may notice a change in the way you walk – perhaps a tendency to shuffle. Your body is constantly balancing and re-balancing itself as you change position, stand up, walk, sit down, or bend over. Human bodies are designed to maintain effective balance, but sometimes, the task becomes difficult. The good news is that aging doesn't have to mean that you lose your balance.

- All forms of exercise will improve your balance and walking. **Do exercises for your legs and work on your posture to maintain stability and prevent falls.**

Flexibility exercise, also known as stretching, is important for older adults. In fact, the older you get, the more important it becomes to stretch on a regular basis. With age and inactivity, your body gradually loses its range of motion. Muscles can lose their elasticity and become weak and tight. But the body has an amazing capacity for the recovery of lost flexibility if you stretch regularly.



Stretching increases the range of motion of your muscles and joints. If you stumble and throw your arm out to regain your balance, you have a much better chance of preventing a fall if your shoulders and arms can move in their full range. Stretching also makes other types of exercise and daily activities such as reaching to high shelves or picking things up from the floor easier to do.

- Once you learn how to stretch, you will be able to develop your own routines to suit your needs. **Learn how to stretch all the muscles of your body.**

Exercise is your choice

If you already exercise, keep it up! Make sure you do enough and try different types of exercise to balance your routine. If you don't exercise, the information here will help you start. But it is up to you to make the choice to begin. Smart moves for getting started are:

Start slowly

Gradually build up your activities and your level of effort. A mixture of activities is better for you and more interesting.

Listen to your body

You should always be able to catch your breath and speak comfortably while exercising. No exercise should make you feel really tired. Exercise should make you feel better!

Choose the right activity

Consider your age and fitness level. For example, if you were a jogger in the past, you may need to consider other forms of exercise that are not stressful on your knees and joints such as walking, lifting weights, or swimming.

Make a commitment

The benefits of exercise come from making it a personal habit in your life. Aim to build in exercise as a routine part of your day, whether it is in the morning, afternoon or evening.

Set personal goals

Some are related to daily activities to help you function and do things on your own. Others are personal achievements that would make you feel vibrant and satisfied. Whatever your goals, improving your physical fitness will help you achieve them.

Consider convenience and social factors

Some activities are difficult to do because they require training, equipment, or are not available in certain locations. Think about what you can already do and then explore new activities if they are available. Have you ever thought about joining a community exercise program? Exercising with others can be fun and sometimes the company can help you continue your fitness program.

Get trained

Proper instruction, supervision, and safety should always come first. Try to avoid activities that require a lot of skill unless you have a qualified exercise instructor to show you how to do them. Even simple exercises are sometimes done incorrectly and can result in an injury. If you are unsure about what you should be doing, ask for help before you begin.



Who can help you with exercise?

You should seek advice when you want to change your exercise program or try a new activity. For example, if you want to start lifting weights, greatly increase your daily walks, or even run a marathon, talk to a professional before you start. Individuals in your community who can assess your fitness levels and recommend exercises that are appropriate for you include:

- Group Exercise Leaders
- Personal Trainers
- Health and Fitness Consultants
- Physiotherapists
- Occupational Therapists

Group Exercise Leaders, Personal Trainers, and Health and Fitness Consultants can be found at many fitness, recreation and community centres such as the YMCA. Physiotherapists and Occupational Therapists can be found at community health centres, hospitals, private health clinics, or through home health care programs. Make sure they are qualified to work with older adults. **Inquire about their credentials.** Ask if they are certified by a legitimate organization to provide safe and effective exercise programming for older adults.

When you should talk to a Physician or Nurse Practitioner before you exercise

If you have a medical condition or an injury, you will need to change your exercise or wait for healing before you begin. You can still exercise, but only after obtaining medical approval and then starting in a supervised environment. The following questions will help you assess when you should talk to your physician or nurse practitioner before you exercise:

If the answer is **yes** to any of these questions, you should talk to your physician or nurse practitioner before you begin.

yes no

- Has a doctor ever said that you have a heart condition *and* that you should only do exercise recommended by a physician?
- Do you feel pain in your chest when you exercise?
- In the past month, have you had chest pain when you were *not* exercising?
- Do you lose your balance because of dizziness or do you ever lose consciousness?
- Do you have a bone or joint problem that could be made worse by a change in your physical activity?
- Is your physician currently prescribing drugs for your blood pressure or heart condition?
- Do you know of any other reason why you should not do physical activity?

You have just read about the four types of exercise and the benefits for older adults. If you are ready to begin, you will find information about how to start exercise and prevent injury at the back of this book, in Appendix A.

A special note about your feet

For you to be able to exercise and remain active as you age, it is important to take care of your feet. Keeping your feet healthy and wearing the right shoes will help reduce your risk of losing your balance and falling. If your feet ache, if they feel numb, if you have bunions or corns that hurt, or if the

soles of your feet have hard cracked skin, these conditions can cause you to walk differently and they may upset your balance.



Nurses, podiatrists, and chiropodists (foot specialists) can help you take care of problems with your feet, but these services are not always covered by your provincial health plan. Physiotherapists and occupational therapists can also offer advice and exercises for your feet. For your shoes, shoemakers can repair and add non-slip soles to your shoes. Talk to your health care provider to find out what services are available.

Tips for healthy feet:

- maintain good circulation in your feet, ankles, and legs
- move your feet and ankles after sitting for a long period of time
- massage your feet regularly or get a foot massage from a professional
- Chiropodists and Physiotherapists can offer additional advice and exercises for your feet

Choose smart footwear:

- wear shoes that fit well
- wear shoes that have a non-slip sole
- keep your shoes clean and in good condition
- tie your laces tight or choose no-lace shoes
- wear slippers that are enclosed at the back and ones that don't slip
- pick up your feet when you walk
- when exercising, choose a quality athletic shoe to prevent injury

How to find out more about exercise

Canadian Centre for Activity and Aging

The Canadian Centre for Activity and Aging is a registered, charitable organization dedicated to promoting an active, healthy lifestyle for Canadian adults to enhance the dignity of the aging process. To find a CCAA Certified Fitness Leader in your community, call the CCAA at 519-661-1603 or visit their website: www.uwo.ca/actage.

Canadian Physiotherapy Association

The Canadian Physiotherapy Association is the voluntary organization representing over 9,000 physiotherapists across the country. For helpful tips on improving physical mobility as you age, or to find a physiotherapist in your community, call the CPA at 1-800-387-8679 or visit their website: www.physiotherapy.ca.

Other Sources of Help

If you belong to a church or community service organization, ask if they offer exercise programs or classes for seniors. You can also contact your local Public Health Unit, Community Health Centre, YMCA or recreation centre to find out what exercise programs are available in your community and when you can join in!

The following guide is also available: *Canada's Physical Activity Guide to Healthy Active Living for Older Adults*, by Health Canada. This guide is free and easy to use and is geared specifically toward older Canadians. Contact 1-888-334-9769 or visit this website: www.paguide.com. Government of Canada, 2000.

LOOK FIRST

Risks in the home and in public places





LOOK FIRST

Risks in the home and in public places

Be aware of your surroundings and hazards that might cause a fall.

Everyone wants to live independently in their own homes as they get older. Many people fear losing this ability because they believe that as they age, they won't be able to take care of themselves and will have to move into a nursing home. The reality is only about 7% of Canadian seniors live in institutions, such as nursing homes. And most seniors don't move into nursing homes until they are quite elderly. In fact, of the 93% of elderly adults living at home, 75% report being in good or excellent health!

Most Canadian seniors are staying healthier, more vibrant, and active for much more of their lives than ever before. Many look forward to spending their retirement years in their own homes where they feel comfortable and confident living.

Risks in the home

However, living at home can involve some risks. Did you know that the home is the most common place for seniors to be injured due to a fall? Over half of all injuries from falls happen at home. The number one place to fall in the home is on stairs, followed by the garden or yard and in the bedroom.

However, **most falls are preventable** and the risks in and around the home can be reduced. The checklists below will help you identify fall risks in every area of your home. Here's what you can do:

- Look around your home and note features that are likely to present problems for you as you age. Read the statements and ideally, you will eventually be able to say **yes** to each condition.
- Once you have looked around your home, you can greatly reduce your risk of falling by making some changes. Most are simple and cost nothing. Others may require help from a family member or a hired professional.

Don't worry about trying to tackle the entire list in one day. If you wish to plan ahead for a safe home, think of it as an ongoing process that will take place over many months, based on what you can reasonably do. At the end of this section, you will find information on how to get both physical and financial help with assessing your home and making modifications.





Inside your home checklist

On all floors

- floors are not waxed or slippery
- floors are free from glare
- floors are clear of clutter and tripping hazards (such as pet toys)
- floors are in good condition with smooth and even surfaces
- floor vents are secure and not raised from the floor
- doorways are flush to the floor, within 2.5 cm (1")
- area rugs have a non-skid backing
- scatter rugs are removed
- carpets are in good condition, with no worn spots, curled edges or rips
- electrical and telephone cords do not run across the floor, and are tacked or taped down to the baseboards
- there is a working flashlight available in case of a power outage
- there is a working telephone and emergency numbers available

On all stairs

- stairways are well lit
- there is a 2-way light switch at both the top and bottom of stairs
- there are sturdy handrails on both sides of the stairs with knobs at the end extending past the top and bottom steps

- handrails are mounted with enough room between the wall and rail to allow for a hand to grip around
- steps are even in height and depth
- steps are no higher than 17.5 cm (7") and are at least 27.5 cm (11") deep from front to back
- steps have a non-slip surface
- steps are in good repair
- any loose carpet is securely tacked down
- steps are free of clutter
- there are contrasting colour stripes on the edge of each step

In the bathroom

- the bathroom is well lit
- a night light is installed
- grab bars are installed in the tub or shower and beside the toilet. One grab bar should be placed near the entrance to the tub or shower and one on the back wall. Make sure they are securely and professionally installed.
- a raised toilet seat is installed if you have trouble getting on and off the toilet
- a non-slip rubber bath mat is available and used in the tub and shower
- a bath seat is installed in the tub or shower if you have trouble taking a shower standing up



- a hand-held showerhead is used if you use a shower seat
- a bath mat with a non-skid backing is placed on the floor next to the tub or shower
- the soap dish is deep so that the soap won't slip out
- taps are easy to reach in both the sink and bathing areas

In the bedroom

- the bedroom is well lit
- a night light is installed
- there is a table lamp near your bed
- there is a working phone and emergency numbers near your bed
- the night time temperature is kept above 18°C (64°F), as lower temperatures can reduce body temperature and lead to dizziness and a fall

In the kitchen

- dishes and other commonly used items are easy to reach
- heavier items are kept in lower shelves or bottom cupboards
- a stable step stool with a safety rail and rubber tips is used for reaching items higher up
- taps can be easily turned on and off

In the basement, garage, workroom and laundry room

- floors are free from dirt and grease
- storage areas are well organized
- heavy items are kept on lower shelves or bottom cupboards
- edges of shelves are marked with an adhesive or painted edge strip

In all rooms

- rooms are well lit, using the maximum wattage bulbs recommended for the fixtures
- shades are on fixtures to avoid glare
- a light switch is near the entrance of all rooms
- night lights are installed in all rooms, on stairways, and in hallways
- grab bars can be placed in any room to make it easier for you to move around

Outside your home checklist

In the garden

- the garden hose is stored off the ground in a secure area
- rakes and shovels are put away when not in use
- garden tools are kept in an easy to reach location
- the ground is free from trip hazards such as piles of leaves and twigs
- garden furniture is sturdy and kept in good repair

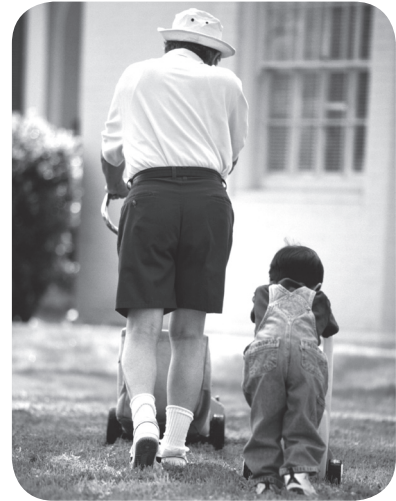


On all walkways and entranceways

- the front entranceway is well lit
- if you live in a house, a motion-sensitive light is installed at the entranceway
- snow, ice, newspapers, leaves or any other debris are cleared from the ground and eaves troughs
- the ground and stairs are in good repair with no cracks, holes or uneven surfaces
- any shrubs that are along the sides of entranceways are well trimmed
- a handrail is installed along your front walkway if you have trouble walking short distances
- there is a small bench or chair at your entryway to sit on when putting on or taking off footwear
- the width of the front doorway is greater than 80 cm (32"), so that walkers can fit through easily
- doors, including the garage door, are easy to open and close
- patio doors are easy to see and walk through
- outdoor stairs are sanded or salted during the winter and maintained free of ice and snow

Reducing your risks every day

There are many things you can do every day around your home to reduce your risks of falling, even if you can't make some of the changes above. Think about your risk for falls and make smart choices about the risks you take. Sometimes, a slip or trip on normal ground is bad enough, but a fall down the stairs or from a ladder can lead to a serious injury. No matter how old you are, it only takes a second to think about what you're doing and to choose to do it in a smart way. It is always a smart move to:



Look first in and around your home

- always watch for hazards and dangers
- watch for any pets before going up and down stairs
- remove your reading glasses before walking, especially on stairs
- when you come in from outside on a sunny day, or when you move from a light to dark room, stand still or move slowly while your eyes adjust to the change

Choose smart when doing everyday activities

- move at a speed that feels comfortable
- concentrate on what you're doing while you're doing it
- maintain good posture by keeping your back straight, shoulders relaxed and abdominal muscles pulled in tight



- sit rather than stand while dressing
- before you get up out of a chair or up from bed, wait 10 seconds before rising to your feet to prevent dizziness
- wear comfortable clothing that is properly hemmed
- pick up your feet when you walk
- wipe up spills immediately
- if you have trouble standing for long periods, consider making changes to allow you to work in the kitchen, bathroom, or any other area of the house while seated
- vary your activities so you are not in the same position for a long time
- stand up and move around every half hour or so, if possible
- use glasses, hearing aids, reaching devices, canes, and walkers if you need them – view them as sources of strength to help you do things, not signs of weakness
- while weeding in the garden, use a kneeling pad or low stool and rise slowly when finished
- when using a ladder, make sure it is stable and in good condition
- ask for help when climbing on ladders or carrying heavy items up stairs
- carry small loads of laundry one at a time
- always keep one hand free when carrying things up or down stairs

How to lift things safely

- bend your knees, not your back
- keep your abdominal muscles tight
- keep loads you are carrying close to your body
- move your feet, avoid twisting your back when working

Risks in public places

Sometimes falls are caused by hazards in public places such as on sidewalks, at pedestrian crossings, in parks, on buses, or in buildings such as shopping centres. Many communities have safety programs where you can report unsafe conditions. This is a good idea to ensure that repairs are made and injuries are prevented. You can also report unsafe conditions to your municipality, apartment owner, landlord, and store managers. The following conditions will help you identify fall risks in public places.

In your community checklist

Sidewalks and roads

- surface should be level, free of cracks and potholes
- area should be well lit
- paths should be free of obstructions such as signs, building materials and garbage
- trees that are planted should have no exposed roots
- area should be free of overhanging branches of trees or bushes



Pedestrian crossings

- should be clearly marked with non-slip paint
- should be well lit
- islands should be available on longer crossings to allow a safe place to rest while catching breath
- timing of traffic lights should be adjusted to allow older people more time to cross

Parks

- pathways should be kept in good repair
- free of slippery surfaces such as moss and fallen leaves
- shrubs and trees should not obstruct pathways
- plenty of seating should be provided

Buses

- should stop close to the curb
- should start after you are safely seated
- steps should be in good repair and clearly marked
- handrails should be provided and easily accessible
- seating should be provided in waiting area
- waiting area should be well lit

Shopping centres and businesses

- floors are not waxed or slippery
- floors are free from glare
- floors are level and steps are clearly marked
- floors are free of obstacles such as maintenance materials and garbage
- spills should be cleaned up right away
- seating should be available
- handrails should be provided and easily accessible

Sometimes you may not be able to improve conditions in your community and this is when you should:

Plan ahead when going outside

- give yourself enough time to get to where you are going
- avoid darkness, bad weather, and busy traffic if possible
- use a familiar and safe route
- take advantage of home delivery when available or use a shopping cart to transport large or heavy packages
- if you use a cane or walker, make sure the device supports your weight, height, and is very stable
- if you use a cane or walker, keep it clean and in good condition
- when taking the bus, have your fare ready before you board the bus to prevent losing your balance while looking for change

- wear a hat and sunglasses outside on sunny days to reduce glare
- wear bright colours if you are walking in the dark so that people can see you



Look first in public places

- walk slowly and carefully
- always watch for hazards and dangers
- practise defensive walking – be mindful of traffic, traffic signals, bicycles, joggers, etc.
- cross the road at crosswalks, intersections, or traffic lights
- walk on the side of the road facing oncoming traffic

A special note about your eyes

The ability to see clearly to **look first** to avoid hazards is important for fall prevention. It is normal for eyes to change as you get older. As people age,

- eyesight becomes less accurate
- pupils become smaller and take longer to adjust to different levels of light and dark
- eyes become more sensitive and glare becomes a problem
- it becomes harder to judge distance and depth
- it becomes harder to see contrasts between colours

Poor nutrition, poor lighting, mental strain and wearing glasses with an incorrect prescription can all affect your vision. When combined with potential hazards in your environment, such as steps, carpet edges, wet floors, uneven sidewalks and curbs, vision problems can increase your risk of falling because you can't clearly see where you are going. To reduce your risk, take care of your eyes as you age.

Tips for healthy eyes:

- have your eyes tested yearly
- wear the correct prescription
- wear glasses only when you need them
- remove your reading glasses before going up and down stairs
- ensure lighting in your home is good
- blink your eyes frequently when doing close work or reading
- take a break and rest your eyes often



Eye exercises

Exercising your eyes will help keep them in good condition. Here's how:

- Keep your head still, move your eyes up and down, then from side to side. Rest and repeat the exercise several times.
- Hold a pencil at a comfortable distance away from your face and focus on the tip. Bring it slowly toward your nose and keep your eyes on the point. Rest and repeat.

- Hold a pencil close to your face, focus on the tip, then look away to an object across the room. Focus on the pencil again, and then look away to the object. Repeat several times then rest.



Tips for people with eye disorders

Symptoms from eye disorders may affect your ability to see your surroundings clearly. The earlier you can be treated, the less your risk of a fall.

- Sometimes, changes in blood pressure, heart palpitations, and increased pressure within your eyes can reduce your vision for about 5 to 10 minutes. Stay still if this happens and your vision should gradually return to normal.
- Some conditions, such as glaucoma and cataracts, as well as insufficient amounts of vitamin B12 or thiamine, can lead to blurred or cloudy vision. These symptoms tend to start gradually and you may not notice them, that is why medical testing is important.

Where you can get help with home risks

Canadian Mortgage and Housing Corporation

The Canadian Mortgage and Housing Corporation, the federal housing agency, operates financial assistance programs for seniors to carry out minor home adaptations. To find out more, call the CMHC at 1-800-668-2642 or visit their website: www.cmhc-schl.gc.ca.

Community Care Access Centres

Community Care Access Centres help seniors by providing in-home services to those who qualify for assistance. They can provide an in-home assessment by a trained occupational therapist who can identify possible

fall hazards and help to implement suggested home modifications. To find your local Community Care Access Centre, call the Ontario Association of Community Care Access Centres at 416-750-1720 or visit their website: www.oaccac.on.ca.

Other Sources of Help

If you belong to a church or community service organization, ask if they offer any programs or assistance for seniors. You can also contact your local Public Health Unit or Community Health Centre to find out more about home safety.

The following book is also available: *Elder Design: Designing and Furnishing Your Home for Your Later Years*, by Rosemary Bakker. This is a guide to the home products, design concepts, and technologies for a safe, accessible environment. Penguin Books, 1997.

CHOOSE SMART Medication Use



CHOOSE SMART

Medication use



When taking medications, think clearly and manage fall risks.

Medications can be important to your health. However, some medicines have side effects that can increase your risk of falling. Some medicines can affect your balance and coordination. Taking a number of medicines (including prescription, over the counter, and herbal remedies) may also increase the side effects. You can reduce your risk of falling by understanding more about the medications you take and their side effects.

Know your medications

The following list includes medications that have been shown in research to increase the risk of falls. However, many medications have not been fully studied for fall risk. Thus, it is important to always ask your health care provider about the possible side effects of all your medications. They should be able to help you decide if the side effects of your medications may add up to an increased risk of falls.

Sleeping pills, tranquilizers, and antidepressants are the medicines most commonly linked to a higher fall risk. These drugs can make you feel drowsy or confused, and you may find it difficult to concentrate. Even if you don't have these side effects, it's possible you may still be at higher risk of a fall. Here's what you can do if you are taking sleeping pills, tranquilizers, or anti-depressants:

- Ask your doctor if you are on the lowest possible dose of the medication (some research shows that the higher the dose, the higher the risk of falls).
- Ask your doctor if you still need this medication or if you could gradually stop using it (research shows that fall risk decreases when these medications are gradually stopped).
- Ask about alternatives to these medications (for example, non-drug methods to help with sleep, counselling, etc.).
- If you are taking medicines to help you sleep, take care when you move around, especially at night. Get out of bed slowly and have enough light to see your way around.
- Do not stop taking these medications suddenly. They should always be stopped gradually under the advice of a doctor. This is because some of them can have more side effects if stopped suddenly.

Some blood pressure and some heart medications have been shown to be linked to fall risk. They can sometimes make you feel dizzy, especially when you stand up too quickly. This can make it more difficult for you to adjust your body when changing positions, especially from lying down to sitting to standing. Here's what you can do if you are taking blood pressure or heart medications:

- Let your doctor know you feel dizzy when you sit up or stand up quickly. He or she may be able to change your medication or lower the dose.
- If you do have problems with dizziness when sitting up or standing, try moving more slowly. For example, after lying down, sit on the edge of a chair or bed and wait 10 seconds before you stand up. Also, take care when bending down to get dressed or when doing house or yard work.



Pain killers have sometimes been linked to fall risk. They may affect your mental alertness and coordination. Here's what you can do if you are taking painkillers:

- It is important to work with your doctor to try to find the best pain medication for you that has fewer side effects.

However, good pain control may also decrease the risk of falls. There are many non-medication treatments such as heating pads, exercise, and rest that may be helpful for relieving pain. Ask your health care provider about these treatments.

Certain **allergy medications** can make you feel sleepy or dizzy. While these medications have not been studied specifically for their relationship to falls, their possible side effects could make them a risk factor. Here's what you can do if you are taking allergy medications:

- Take them at night so that most of the side effects wear off by morning.
- Ask your pharmacist for an allergy medicine that does not cause drowsiness or sleepiness.

Be aware of personal side effects

Be aware of how you feel after taking medicines. Only you know how you will react. Everyone responds slightly differently and it is not always possible to predict what will happen when medicines are combined. Try using a diary to monitor how you feel after taking medicines. Discuss any side effects you are having with your health care provider, especially if you feel dizzy or if your balance is affected. It may be possible to change your medication.

Things that can change or increase side effects

Watch for a change in side effects and be aware of fall risks when you:

- start a new medication
- change the type or brand of medicine you take
- change the number of tablets you are taking
- have the cold or the flu
- feel unusually tired, worried or depressed
- change your eating habits causing your blood sugar to fall

When you start a new medication

Falls can happen when you start a new medication. When you are prescribed a new medicine, tell your doctor or pharmacist that you are concerned about your risk for falling. Ask the following questions:

- What side effects does this medication have?
- Will it make me feel dizzy or lightheaded?
- Is there an alternative to the medication?
- Is there anything else I can take or do?

Be smart with alcohol



It is wise to be careful about drinking alcohol, no matter how old you are or whether you are taking medications. Even one or two drinks can slow thinking and decrease mental alertness, judgement, physical coordination, and reaction time. All these effects increase the risk of falling. Simple tasks like walking, climbing steps, and turning around are more difficult while under the influence of alcohol.

If you are taking medications, think carefully about the effects of drinking alcohol. Remember:

- alcohol does not mix well with medications, either prescription or over-the-counter products
- some prescription drugs (especially tranquilizers, barbituates, pain killers, and antihistamines) intensify your reaction to alcohol, leading to earlier intoxication and reduced alertness
- alcohol can produce exaggerated responses to some drugs because it causes the drugs to affect your body more quickly
- alcohol and diuretics (e.g., tea, coffee) can combine in some people to reduce blood pressure, thus making them feel dizzy



If you are unsure about the effects of alcohol and the possible interactions with the medications you are taking, talk to your doctor or pharmacist.

Minimize your medications

Studies have shown that the more medications and chronic diseases a person has, the higher their risk of falling. You can minimize the risk by:

- making sure there is a reason for continued use of each medication by asking your health care provider regularly if you still need the medicine.
- keeping an updated list of all of your medications (including over the counter and herbal products) and sharing it with all your doctors and pharmacists so they don't accidentally give you a drug similar to the ones you are taking (or one that can cause a drug interaction)
- not sharing medications (including over the counter and herbal products) with friends or family
- making sure you follow the directions given by your doctor (for example, not taking too much medication which can increase side effects, taking too little medication which can make chronic diseases worse)

Learn to sleep without using sedatives

Studies have shown that when people stop using sedatives to help them sleep, their risk of falling decreases. Try to stay off sleeping pills completely. Even using sleeping pills occasionally poses just as high a fall risk as using them every day.

Ask your health care provider about alternative remedies to help you sleep. Under your doctor's or nurse practitioner's guidance, lower the dose of your sleeping pill (for example, decrease your dosage each week over a month or so). It will be normal that you experience some insomnia (inability to sleep) when you get down to a low dose, but this should pass

after 3 or 4 days. Be aware of and report any other unusual feelings to your doctor or nurse practitioner. Here are more useful tips for learning how to sleep without drugs:



- understand that it is normal to sleep less as you get older – as long as you don't feel tired the next day, you probably got enough sleep
- have a regular bedtime and awakening time in the morning – avoid oversleeping in the morning
- create a good sleeping environment – comfortable mattress, moderate room temperature, quiet bedroom
- if you awaken at night, stay in bed and try to relax – if that doesn't work, get up and read or listen to music for a little while, then go back to bed
- associate your bed with sleep – avoid sleeping in other areas of the house, avoid watching television in bed
- learn to relax – try a warm bath or a muscle relaxation program
- get regular exercise in the morning or early afternoon – avoid strenuous activity in the evening
- avoid caffeine beverages and chocolate after mid-afternoon
- avoid alcohol – even 1 glass of wine at dinner can make you feel wakeful during the night
- avoid heavy meals at night – try a warm or cold glass of milk at bedtime

Remember to take your medication

If you sometimes forget, or if you feel uncertain or anxious about whether you've taken your medication, try using a pill organizer. Use a reminder box or a similar product, which can be bought from the pharmacy. This will help you take your medications regularly, and in correct amounts.

If you have missed taking your medication, be careful when you start taking it again. Some drugs can cause you to feel dizzy or tired when you resume taking them. Call your pharmacist if you have questions about this. Also, some drugs, even some available without prescription, can cause memory loss. That is why it is important to know your medication and explore alternatives to ones that affect your memory.

Talk to your health care providers about your medications

Health professionals have a responsibility to prescribe drugs that do not conflict with other medications you are taking, but they can only do so if they know what you are taking. Tell all your health care providers about the medications you take. At least once a year, give them a list of all your medications, including all prescription, over the counter, and herbal remedies. They will be able to check into any possible medication interactions or additive side effects.

If you react to a medicine or experience side effects (for example, insomnia), tell your doctor or pharmacist. He or she may be able to adjust the dose, or suggest you take it at different times of the day. There may be another type of medicine that will work for you without making you feel dizzy or drowsy. Or there may be alternatives to taking the medication altogether.



What to ask your health care provider for each medication

- Do I still need this?
- What are the side effects?
- Does it increase my risk for falls?
- Can I use a lower dose to decrease the possibility of side effects like falls?
- Is there an alternative to the medication?
- Is there anything else I can take or do?

Remember that your pharmacist is a good source of information. They can review the medications you take and answer questions about them. They can also advise you on the risks associated with combining certain medications. Try to choose a pharmacy that keeps a computer record of your medications.

How to find out more about medications

Ontario Pharmacists' Association

The Ontario Pharmacists' Association is the voluntary professional association representing over 5,000 practicing pharmacists in Ontario. For helpful information on safe medication use, or to find a pharmacist in your community, call the OPA at 1-877-341-0788 or visit their website: www.opatoday.com.

Telehealth Ontario

You can connect with an experienced, knowledgeable pharmacist through Telehealth Ontario. You do not need to provide your health insurance number and all information is confidential. To talk to a pharmacist about safe medication use, call Telehealth Ontario at 1-866-797-0000.

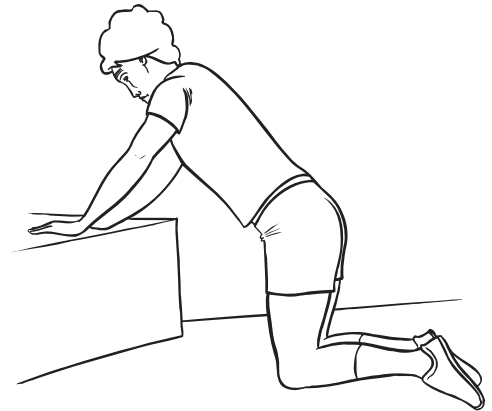
WHAT TO DO IF YOU FALL

Try not to panic, rest for a moment

If you fall at home

Even if you are not physically injured, you may experience some shock from the fall. It is a smart move to:

- stay still for a few minutes
- think clearly
- decide if you can get up or if you need help



If you can get up

This is the best way to get up from a fall:

- Roll onto your side.
- Use one hand, placed on the floor about the level of your ribs, to push your shoulders off the floor. Your weight is on your hip.
- Roll forward, onto your knees, leaning on your hands for support.
- Crawl to the nearest chair, sofa, or bed and place your hands on the seat.
- Stay still for 10 seconds.
- Lift one of your knees so that one leg is bent, foot flat on floor.

- Lean on your hands, use the chair for support and use your leg muscles to push yourself up to standing.
- Then sit down, rest, and tell someone you have fallen.

If you need help

Stay on the floor and don't try to get up. Reach for the nearest phone and call 911. Stay on the line until help arrives. Keep yourself as warm and comfortable as possible. If you're in the bedroom, pull the bedspread from the bed and cover yourself with it. If you're in the living room or hallway, use a blanket or coat. You can also reach for a cushion to put under your head or knees. If you're in the bathroom, use a towel as a covering or a pillow. If you are wet or if your bladder lets go while you are waiting, move away from the wet area and try to keep warm. Move your arms and legs gently to help reduce pressure areas. Consider installing a personal alarm call system to get assistance in the event of a fall.

Practise getting up from the floor Being active every day through exercise will help keep your muscles and bones in good condition. If you fall, you will be less likely to get hurt and it will be easier for you to get up from the floor. Follow the instructions above to practise getting up from the floor on a regular basis.

If you fall in a public place

The same advice applies. It is a smart move to:

- stay still for a few minutes
- think clearly
- decide if you can get up or if you need help

It can feel embarrassing to fall at home or in a public place. If you happen

to fall, focus on whether or not you are injured. If you try to get up too quickly, it could mean the difference between a mere bruise and a serious fracture. Remember to assess the situation, only you can decide whether you're capable of getting up. If there is someone willing to help you, tell them you need a minute to think.

Recovering from a fall

If you have a fall that does not require a hospital visit, but leaves you feeling bruised and sore, let yourself rest for a couple of days. If you find moving difficult, here are ways to help you recover:

- use an aid such as a cane, pole or bar to help you sit or stand
- ease yourself back to general activity as soon as you can
- some form of physical activity such as work around the house, stretching, or slowly walking around will help you feel better

You may need to see a physiotherapist to help you recover, so talk to your health care provider about appropriate treatment.

FOR FAMILIES AND CAREGIVERS

Information about fall prevention

Despite the enormous impact on seniors and the cost of care, falls among older people are largely ignored in society. One reason for this may be because of the misconception that falls are an inevitable part of aging. There is also a stigma associated with having a fall. Older people who fall are generally quite embarrassed and will often not want anyone to know about the event.



Although an older person may be concerned about falling, they may not be able to share their feelings with people who can help. Also, older people who fall often blame themselves. They will tell you that it was their fault because they weren't paying attention. But the reasons for falls are complex. They are preventable, provided that attention is paid to bone health, exercise, home modifications, and medication management.

Fear of falling is very real for older people and it affects their mental and physical well-being. For some people, fear forces them to stay at home,

and they stop doing activities they enjoy. The problem is that their risk for falling increases when they become isolated, lonely and inactive. Nearly half of older people who fall reduce their activity significantly because of the fear of falling again. Support and encouragement of friends and family is very important. However, well-meaning friends and family often discourage an older person from being active because of their own fears for their loved one's safety.

What you can do if someone you love has fallen or is at risk of falling

- Set aside your own fears and anxieties in order to assist them.
- Be sensitive to the embarrassment associated with falls.
- Encourage them to talk about the issue of falls with you and their health care provider.
- Assist them in recognizing that falls are preventable, not inevitable.
- Offer assistance to help them feel less anxious and less afraid.
- Help them manage fall risks so they can live life to the fullest and continue to do everything they love to do.
- Recognize and support their competence and ability to do things on their own.
- Encourage them to be active on their own - suggest they get out and go for a walk instead of telling them to take it easy.
- Help them to take steps and provide them with options to reduce risks for falls in their home.

APPENDIX A

Your action plan to prevent falls

After reading the information in this book, you have learned that falls are preventable and not a normal part of aging. There are many things you can do to help reduce your risks of falling. But it is up to you to make smart choices and manage your risks. Take a look at this list. Use it to remind yourself about the things you will do. Use it as a guide for what to discuss with your health care provider and family to begin to address the issue of falls. If you are already doing some things, look at the others to see what you can work on next.

What I will do to manage my risks for falls:

I will plan ahead:

- I will talk to my health care provider and family about osteoporosis and fall prevention.
- I will ask my health care provider if I need a bone mineral density test to find out about the condition of my bones.
- I will take care of my bones by taking 1500 mg of calcium each day.
- I will take care of my bones by taking 800 IU of vitamin D each day.
- I will take care of my bones by exercising every day.

- I will take care of my bones by not smoking.
- I will take care of my bones by drinking alcohol and caffeine in moderation.
- If I have osteoporosis, I will talk to my health care provider about possible drug treatments to help improve the condition of my bones.
- If I experience symptoms that increase my risk for falls, such as dizziness, lightheadedness, or pain in my legs, I will manage my condition and talk to my health care provider about fall prevention.

I will be active:

- I will exercise every day to keep my muscles and bones in good condition.
- I will choose activities that are safe and fun for me to do.
- I will try new activities to improve my endurance, strength, balance and flexibility.
- I will start exercise slowly and listen to my body.
- I will set personal goals for exercise.
- I will get trained to do activities that require skill to do.
- I will consider joining a community exercise program.
- I will talk to my health care provider about exercise when I want to change my exercise program or try a new activity.
- I will talk to my health care provider about exercise if I have a medical condition.
- I will take care of my feet and choose smart footwear.

I will look first:

- I will be aware of my surroundings and hazards that might cause a fall.
- I will use the home checklists in this book to assess my home for fall risks.
- I will begin to make changes to my home as required.
- I will be careful when going up and down stairs.
- I will make smart choices when doing house or yard work.
- I will move around at a pace that is comfortable.
- I will ask for help when I need it.
- I will talk to my health care provider about using mobility aids if I need them.
- I will be aware of fall risks and be careful in public places.
- I will take care of my eyes and visit my optometrist regularly.

I will choose smart:

- When taking medications, I will think clearly and manage my risks for falls.
- I will know my medications and be aware of their side effects.
- I will talk to my health care provider about the medicines I take and the risks associated with falls.
- I will try to minimize the number of medications I take.

- I will learn to sleep without using sedatives.
- I will be smart with alcohol when I'm taking medications.
- I will talk to my pharmacist about taking medications safely.

I know my personal risks for falls. I will manage my risks for falls in the smartest way possible so that I can enjoy life and continue to do everything I love to do.

(Sign name here)

APPENDIX B

Be active to prevent falls: How to start exercise and prevent injury

If you are reading this, congratulations! You have just made a smart move to prevent falls and hopefully you will choose to exercise every day.

The information here is organized according to the four types of exercise important for falls prevention: **aerobic, strength, balance, and flexibility**. Read through each section to become familiar with how to start each one and prevent injury. Most people should be able to do the recommended exercises. Remember, if you are unsure about what you should be doing, talk to your health care provider or a health and fitness consultant before you start.”

We want to help you exercise safely at your own pace. We also want you to enjoy what you are doing. That is why the information here is meant to be used as guide for getting started or to try a new activity. Ultimately, what you do is up to you. The most important part of exercise is to feel good while you are doing it! Here is what you need to know about being active to prevent falls.

Endurance exercise

Endurance	Improves stamina of heart and lungs. Strengthens bones and reduces risk of fractures.	Accumulate 30 minutes, 4 to 7 days per week
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How to start

- Start with an activity you enjoy doing. **Go for a walk, try an aerobics class, ride your bike, go swimming, go dancing, or play tennis.**
- If you choose a moderate activity such as walking, you will probably be able to do the activity daily. If this is too tiring initially, try the activity every other day. Work up to 4 to 7 days per week.
- Aim to get your heart rate up for 30 minutes each session. Duration should be at least 10 minutes to start, but plan to gradually increase. You can accumulate 10 minute bouts of activity throughout the day and still get the endurance benefit.
- If you choose to walk, simply walk a little further than you normally do and progress to walking further and faster as the weeks and months pass.
- Start each session slowly and give yourself 10 minutes to warm up and 10 minutes to cool down. Warming up prepares your body for exercise and reduces risk of injury. Cooling down allows your body to relax and prevents stiffness and soreness in muscles.
- Do something continuous to make you breathe hard. To know if you are working hard enough, simply ask yourself. If it feels too hard, it probably is. Slow down, catch your breath, and try again when you feel ready. Even a moderate level of sustained activity will provide you with benefits.

Preventing injury from endurance exercise

- Choose an activity that is right for you. Some activities involve jumping or pounding that may be uncomfortable or can lead to injury.
- If you are exercising outdoors, look first to avoid uneven ground, icy surfaces, and extreme weather conditions.
- Use the right safety equipment. Helmets, knee and elbow pads, and eye protection will keep you safe and allow you to keep doing activities you enjoy.
- Some discomfort with endurance exercise is normal. You should be able to talk comfortably and you should never exert yourself to the point of breathlessness and pain. Pain, dizziness, light-headedness, or heart palpitations are clear signals to stop and consult your health care provider.
- If you have osteoporosis, the best form of endurance exercise is weight-bearing activities such as walking, aerobics, and dancing. Try to exercise everyday to get the most benefits.



If you have osteoporosis, consult a physiotherapist or occupational therapist to teach you how to perform exercise safely. In general, you should avoid activities that require twisting or bouncing movements. If you have a history of compression fractures or are at high risk for fractures, make sure you do not do exercises that require you to bend forward from the waist from a sitting, standing, or lying position.

Strength exercise

Strength	Makes muscles stronger and improves balance. Helps people function well into their nineties.	30 minutes, 3 times per week
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How to start

- Start with little or no weight and choose exercises that work all of your major muscle groups. To progress, use free-weights, weight machines, or exercise bands to create resistance. **Leg, back, and abdominal muscles are most important to prevent falls.**
- An every other day routine is best to give your muscles and joints time to recover. Work up to 3 times per week.
- The time you spend each session will depend on the exercises you choose. Start with 1 exercise for each major muscle group and work up to doing more when you are ready.
- Perform exercises using no weights first and gradually progress to lifting weights or using exercise bands when you are ready. Use little or no weight for the first 8 weeks to allow your body to adapt.
- Give your muscles a chance to recuperate before doing the same exercises again. You may be a little sore, but it will pass.
- Start with 8 repetitions of each exercise and gradually progress to doing 15. Exhale during the harder pushing or pulling phases of the movement and inhale during the easier phases.
- Concentrate on good body alignment and technique. Maintain

good posture by keeping your back straight, shoulders relaxed, and abdominal muscles tight. Perform exercises in a slow, controlled manner. Understand and think about the muscles you are working and you will have better improvement.

- To progress, gradually increase the number of repetitions you do and the amount of weight you lift. How? You can make your own weights at home by filling socks with beans and tying them at the ends. You can use equipment specifically made for strength exercises such as weights or exercise bands (sold at sporting stores and some pharmacies). The use of weight machines may offer some advantages for older adults – they provide a stable body position and can allow greater control of the exercise movement.
- Take the time to strength train safely. There are many good books and resources available on strength training for older adults; some are listed in the References section at the back of this book. Many fitness and community centres also offer strength classes and weight training programs for older adults.

Preventing injury from strength exercise

- Breathe normally. Holding your breath while straining can cause changes in blood pressure. Try to breathe once for every repetition.
- Try not to overdo it. Muscle soreness lasting up to a few days and slight fatigue are normal after strength exercises, but exhaustion, sore joints, and unpleasant muscle pulling are not. The latter symptoms mean you are overdoing it. None of the exercises you do should cause pain and the range within which you move your arms and legs should never hurt.
- It is important to check with your doctor or nurse practitioner before

doing exercises with weights if you have a history of cardiovascular, orthopedic, or neuromuscular problem(s).



If you have osteoporosis, consult a physiotherapist or occupational therapist to teach you how to perform exercise safely. In general, you should avoid activities that require twisting or bouncing movements. If you have a history of compression fractures or are at high risk for fractures, make sure you do not do exercises that require you to bend forward from the waist from a sitting, standing, or lying position.

Balance activities

Balance	Improves posture, stability, and coordination.	30 minutes, 3 times per week
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How to start

- All forms of exercise will improve your balance and walking. **Do exercises for your legs and work on your posture to maintain stability to prevent falls.**
- Strength exercises will improve your posture by keeping your muscles strong. Focus on your legs, back, and abdominal muscles for better stability.
- You can also try different types of exercise such as tai chi or yoga to improve your balance and coordination.
- The time you spend doing balance activities will depend on what exercises you choose to do. Try to work in balance exercises 3 times per week.

Simply do strength exercises that work your legs and abdominals and you will improve your balance. Follow these steps over several weeks to improve your balance while exercising:

- Begin by holding on to a chair for support.
- Then try holding on to a chair with only one or two fingertips.
- When you feel steady, do not use a support.

You can also try the following movements to help improve your balance. They will help you become more aware of your body and how your muscles work to help you stay upright:

- Practise walking in a straight line. Walk heel-to-toe. Position your heel just in front of the toes of the opposite foot each time you take a step. Your heel and toes should almost touch.
- Stand on one foot, then the other, without holding on to anything for support. You can do this anytime, anywhere (for example, while waiting in line at the grocery store or at the bus stop).
- Practise good posture when exercising and doing everyday activities. Keep your back straight, shoulders relaxed and abdominal muscles tight.
- Practise good posture when sitting. Sit in a chair in a proper upright position. Sit so your hips, knees, ankles, and elbows are at a 90 degree angle. Keep your back straight, shoulders relaxed and abdominal muscles tight.

Preventing injury from balance activities

- If your balance is poor, it is best to perform exercises under qualified supervision. Physiotherapists can measure your balance and help design an exercise program that will improve your stability and posture.

Flexibility exercise

Flexibility	Stretching improves the flexibility and range of motion of your joints.	10 to 20 minutes, every day
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How to start

- Once you learn how to stretch, you will be able to develop your own routines to suit your own needs. **Learn how to stretch all the muscles in your body.**
- You can stretch every day, as often as you like. Try to stretch every day, especially when your muscles are warm after endurance or strength exercise.
- The time you spend on stretching will depend on which exercises you choose to do. Work in 10 to 20 minutes every day.
- You can stretch at home on a comfortable mat or carpet. Or you can participate in a stretching class at your local fitness or community centre. Try different types of exercise such as yoga to add variety to your stretching program.
- Always start with an easy stretch and don't go beyond your comfortable limits. Easy stretches should be held for 10 to 30 seconds. Progress by holding stretches for longer periods of time. Work up to holding a stretch for 30 to 60 seconds.
- At first, silently count the seconds for each stretch. This will ensure that you hold the proper tension for a long enough time. After a while, you will be stretching by the way it feels, without the distraction of counting.

- Be patient, it takes time to loosen up tight muscles.

Preventing injury from flexibility exercise

- Do not bounce when you stretch. Find a place that is fairly comfortable that allows you to stretch and relax at the same time.
- Do not hold your breath while you are stretching. If a stretch inhibits your normal breathing pattern, then you are not relaxed. Just ease up on the stretch so that you can breathe easily.



If you have osteoporosis, consult a physiotherapist or occupational therapist to teach you how to perform exercise safely. In general, you should avoid activities that require twisting or bouncing movements. If you have a history of compression fractures or are at high risk for fractures, make sure you do not do exercises that require you to bend forward from the waist from a sitting, standing, or lying position.

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Information was also adapted from resources from the following organizations:

Algoma Health Unit, Safe Communities Partnership

Capital Health Authority, Alberta, Steady As You Go Program

Durham Region Health Department, Public Health Prevention Network.

Health Canada and Veterans Affairs Canada, Falls Prevention Initiative

Hastings and Prince Edward Counties Health Unit, Falls Prevention Coalition

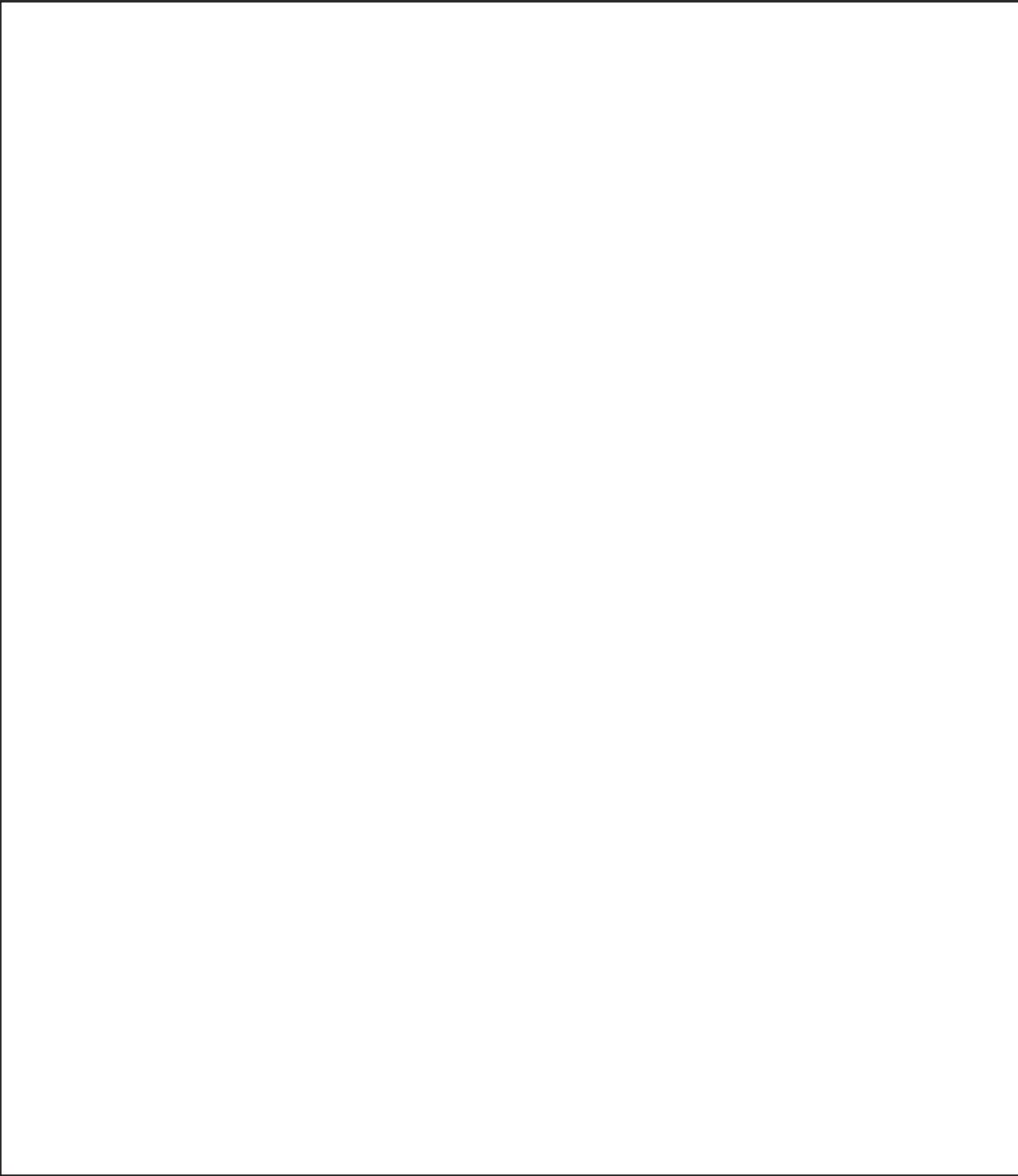
North Coast Public Health Unit, New South Wales, Australia, Stay on Your Feet Program

Peterborough County-City Health Unit, Healthy Elderly Program

Trauma Prevention Council, Central West Seniors' Safety Committee

Community resources for fall prevention

Use this page to record important phone numbers for programs, services, and contacts related to your health and fall prevention.

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