Preventing falls keeps you independent and can save lives.
CONTENTS

Introduction 03
Regarding falls 04
Risk factors for falls 08
Preventing falls 15
Home monitoring checklist 22
What to do in the event of a fall 28
Walking aids 32
Emergency Contacts 33
References 34
If you look in the eyes of the young, you see flame. If you look in the eyes of the old, you see light. (Victor Hugo)

We usually think of older people as those above 65 years of age; however, ageing is a process that unfolds throughout life and to which we can positively contribute with our conduct and choices. Preventing falls is an area where we can act. This Handbook can be of extreme importance to the people we support at Cáritas Diocesana de Coimbra - so they may remain independent and healthy for as long as possible and, therefore, happier.

Carina Dantas, Cáritas de Coimbra

Ageing is an inevitable process, currently with a large demographic, social and public health impact. The considerable increase in life expectancy has not always been accompanied by an increase in quality of life, which calls for a reflection on the health policy to be adopted and the measures to be implemented for helping older people, including the need for health care targeted towards this age group. Falls are one of the major causes of morbidity and mortality in people aged 65 and over, taking away their independence, mobility and often leading to hospitalisation. The risk of falling can be assessed and prevented by checking the risk factors and using different methods, including surveys. The implementation of this best practice handbook on Falls shares the knowledge and implementation of measures that stimulate self-confidence in older people and their caregivers.

Professor Anabela Mota Pinto, Faculty of Medicine of the University of Coimbra

Portugal is one of the countries with the highest ageing demographics in the world. Its population of 65+ years is approximately 19 % of the total population (2011). The information shared in this work is a valuable asset that will, from a self-training perspective, not only enable the reduction of avoidable risks, but will also improve the quality of life and autonomy in senior citizens. The risk of a fall can and should be prevented. Whether citizens, institutions and/or technicians, we will all be better equipped to achieve this goal.

Professor Paulo Nuno Nossa, Department of Geography of the University of Coimbra
INTRODUCTION

Healthy ageing is not restricted to simply preventing sickness and injuries. It also involves being able to enjoy life to the fullest, promoting a healthy lifestyle, being physically and mentally active and involved in a social surrounding.

Anyone can fall, at any time. By being aware of the risk factors and implementing measures to prevent and resolve them, we can avoid any likely falls.

These guidelines, included in the Best Practice Handbook – Preventing Falls in Older People, prepared on the basis of best practices recommendations, are aimed at improving the safety and quality of care given to older people.

THIS HANDBOOK IS INTENDED FOR:

This Handbook was designed to help people understand some of the causes of falls, keeping people safe and independent in their own home and offering any likely solutions. It may help you or someone you care for, and it may also be the basis for planning your future.

We all want to enjoy good health and remain independent. In this handbook, you can find advice and information on:

• monitoring medication,
• hearing and vision care,
• how to keep your feet healthy,
• suitable footwear,
• nutrition,
• measures for maintaining a safe home,
• healthy lifestyle.

The back of this booklet displays a section that lists a few telephone numbers, where you can get help in the event of an emergency, and a safety list for preventing falls at home.
Falls may result in fractured bones, limiting your autonomy and quality of life. On an international level, studies show that 30% of people over the age of 65 suffer at least one fall per year. The good news is that falls can be prevented.

Please answer the following questions:
Checklist
To help prevent falls
If you are aged 65 or over, you are at a greater risk of falling. A fall may result in serious injuries that can reduce your mobility, independence, and affect your lifestyle.

REMEMBER:
• Falling is not a normal part of ageing
• Most falls can be prevented

The following checklist can help you identify the causes that place you at a higher risk of falling.

Please answer the following questions:
Check the box only if answering "Yes"

Have you suffered fall in the last year? □
If you have previously fallen, the likelihood of falling again is greater. This makes it particularly important for you to take some measures to avoid falls.

Do you have problems with balance, do your feet feel unstable or do you have trouble in getting up from a seat? □
Do some balance and strength exercises every day for 15 minutes, (e.g. Tai Chi,). You can do a series of balance exercises at home or you can find a programme within your community.

Do you exercise for less than 30 minutes? □
Many falls are the result of muscle weakness and/or lack of balance. Stay strong and healthy! After seeking medical advice, do some hiking, swimming, group exercises or any other physical activities that you like.

Do you take more than three prescription drugs a day? Are you on any medication for sleeping, blood pressure, emotional disturbances, pain or any other drugs that make you drowsy? □
Some secondary effects and prescription drug combinations may increase the risk of a fall. Have your medication checked by your doctor every once a year or whenever you start taking a new drug.

Do you eat less than three nutritious meals per day? □
In order to have good health, it is important that you eat healthily and, if necessary, that you take a vitamin supplement (such as vitamin D). Limit your alcohol intake.

**Do you wear high heels, slippery soles or shoes that do not fit your foot well?**
Suitable footwear is the key to preventing falls. Wear shoes that fit well and that provide good support, both outdoors and indoors. At home, do not wear only socks or slippers.

**Have you suffered a stroke? Do you suffer from arthritis, diabetes, Parkinson’s disease, heart problems, high/low blood pressure or bladder issues?**
Many health conditions may increase the risk of falling. If you see any changes in your health, visit your doctor as soon as possible.

**Has it been more that two years since your last eye exam?**
You should be assessed by an ophthalmologist at least every two years. Your vision may have changed without you noticing it.

**Do you undertake activities that may put you at risk of falling, such as climbing a ladder?**
Are there any hazards in your house that might lead to a fall, such as slippery rugs, stairs without handrails or poor lighting?
Always pay attention to what you're doing and ask for help with activities that could put you at a risk of falling. Assess the risks present in your home. A safe home can help you maintain an independent lifestyle.
IF YOU ANSWERED "YES" TO ONE OR MORE OF THESE QUESTIONS, YOU MAY HAVE IDENTIFIED THE PERSONAL RISK FACTORS, LIABLE TO PUT YOU AT A RISK OF FALLING. TO FIND OUT HOW YOU CAN REDUCE THE RISK, READ ALL SECTIONS OF THIS BOOKLET. SHARE THIS LIST WITH YOUR FAMILY, CLOSE FRIENDS AND CAREGIVERS, SO THEY MAY HELP AND SUPPORT YOUR EFFORTS TO PREVENT FALLS.
RISK FACTORS

As we age, we are more prone to falls. People may fall for a series of reasons. These reasons are known as “risk factors”.

Some older people are more likely to fall than others because they have more associated risk factors. These factors can be the result of an illness or an unhealthier lifestyle.

LEARN ABOUT THE MAJOR REASONS BEHIND FALLS IN OLDER PEOPLE:

- Decreased hearing and eyesight;
- Less strength and balance;
- Changes in posture or poor mobility;
- The need to take different types of medicine;
- Using unsuitable footwear;
- Nutrition;

Around us, both in the home and outside, we also see factors that may lead to insecurity, such as:

- Slippery floors, worn-out carpets, loose rugs, uneven floors;
- Poor lighting.

*There are many things that you can do to reduce the risk of falling*
Medication Control

Although medication is a necessity for many people, it can also contribute towards the risk of falling.

Some medication, on its own, or when combined, can cause unbalance, drowsiness, dizziness and decreased attention, thus increasing the risk of falls.

It is important to respect the medical prescription and take the medication on-time, always with water. Every time you go for a medical appointment, you should alert your doctor about all the medicines you are taking.

Never self-medicate!
Have your medication regularly checked by your doctor.

• Only take medication prescribed specifically for you;
• Do not take any additional medication without consulting your doctor;
• Do not take medication that has been prescribed for others;
• Make sure you understand how and when to take your medication. Your doctor can provide you with this information;
• Ask your doctor if the prescribed medication may leave you prone to falls;
• Your doctor or pharmacist can inform you of any medication’s side effects. If you think you may be suffering from any side effects, tell your doctor;
• Some drugs should not, under any circumstances, be taken with alcohol; ask your doctor about the effects that alcohol may have on the medication you are taking.

Have your medication regularly reviewed by your doctor:

• Once a year;
• Whenever you start a new medication;
• If you experience any symptoms that make you feel weak or unsteady, if you feel drowsy, dizzy, have blurred vision or difficulty thinking clearly.

Remember: alcohol can slow your reflexes and affect your balance!
Caring for your Hearing

• Do you have difficulty in listening to the TV or do you avoid group conversations, because you can’t hear well? Do you experience dizziness or do you easily lose your balance?
• Did you know that the eyes are closely linked to the ears and that they depend on each other for a good balance and a clear eyesight?

This happens because hearing and balance are functions of the inner ear. Therefore, it is very important to undergo a hearing examination.

If you suspect that you are suffering from hearing loss or ringing in the ears, see your doctor. Sometimes an infection or the accumulation of wax may be enough to cause problems, such as dizziness or loss of balance. This, in turn, may put you at a risk of falling, therefore, it is important to seek treatment. Your doctor may refer you for a hearing test.

Suggestions

• Check your hearing at least once a year;
• If you use a hearing aid, make sure it is in good working order;
Remember: carry out screenings, identify and treat hearing problems helps to improve your hearing and balance.
Caring for your Eyesight

Your eyesight plays an important role in your balance and movement. Reduced eyesight may lead to falls. Over time, our eyesight can change, which may lead to falls. These changes often happen at such a gradual pace that we do not notice them.

The most common changes include:

- Blurry vision;
- Difficulty in seeing well in low light
- More time to adapt to abrupt changes to light and darkness.
- Greater light sensitivity
- Teary-eyes
What to do:

- Have your eyesight checked every two years.
- Always wear prescription glasses.
- If you notice any changes to your eyesight, visit your doctor.
- Make sure you always wear your glasses and do not simply keep them in your purse or pocket!
- Make sure your glasses are clean and well-adjusted to your face.
- Wear sunglasses and/or a hat on sunny days.
- Avoid abrupt changes in light. If you move from a light into a dark space, or vice-versa, stop, and give your eyes time to adjust to the light before continuing.
- Keep stairs and living areas well lit.
- Put on your glasses before getting out of bed to go to the bathroom.
- Refer to the lighting section of this Handbook for ideas on what steps to take in your home.

Reduced eyesight and hearing may put you at risk of falling.

Remember: Reading glasses are for reading!
OTHER FACTORS

Controlling bladder and bowel problems

The increased risk of falling has been linked to incontinence. Falls are usually the result of losing your balance, for example when rushing to the toilet, or an increased likelihood of slipping on urine.

- See your doctor to discuss the problem;
- Make a habit of keeping hydrated (although not too much tea, coffee, soft drinks or alcohol)
- When you reduce your drink intake, your urine becomes even more concentrated, which can lead to problems.
PREVENTING FALLS

PHYSICAL ACTIVITY
Do you exercise on a regular basis?

Exercise is very important in maintaining your strength and balance. It is related to gaining muscle strength and boosting confidence. Keeping active is one of the most important measures towards helping prevent trips or falls. Balance is something that you need whenever you move from one position to another. Muscle weakness due to a general lack of exercise or specific conditions, such as arthritis, can lead to an increase in risk of falling.

SUGGESTIONS

• No matter your age or physical limitation, regular exercises or any physical activity will benefit you, making you feel fitter and also reducing the risk of falling;
• You should regularly participate in physical activities, such as walks, yoga, water gymnastics or aerobics classes, always adapted to your physical conditions and limitations.
• Choose exercises that improve your balance and muscle strength;
• Always have a medical examination before starting any new physical activity;
• Aerobics classes designed for older people are very beneficial, specially regarding balance, confidence and strength. They can also be used to promote a new social support network.

*How to avoid falls and injuries? The best treatment is regular exercise.*
Our body is designed to move. Exercise keeps us healthy and reduces the risk of falling, helping us to:

- Improve balance;
- Improve muscle strength and flexibility;
- Keep our bones strong;
- Increase energy levels;
- Help with insomnia;
- Help control blood pressure, blood sugars and weight.

**What you can do:**

- Be physically active every day. Whatever your age, you should set the goal of doing at least 30 minutes of exercise, at least 5 times a week;

- Talk your doctor if you have health issues or pain associated with exercise;

- If you have muscle-joint problems, exercise can help control pain, weakness, and stiffness.
When starting new exercises, you should:

- Begin slowly;
- Once you are able to do the exercises easily and comfortably, you can begin to increase the difficulty level;
- Use support;
- Wear appropriate footwear;
- Listen to your body;
- Do exercises that you are safe and comfortable with. If any exercise makes you feel increased pain or shortness of breath, stop and speak to your doctor.
HEALTHY FEET AND SUITABLE FOOTWEAR

Caring for your feet and wearing shoes that fit correctly will help you feel safer and may prevent foot conditions (such as calluses, bunions, ingrown toenails or ulcers).

CARING FOR YOUR FEET

• See a doctor if you find any problems or have any foot pain.
• Keep your feet healthy at all times, with your nails short and your calluses treated.
• Exercise your feet, move your feet in circles, to ensure good circulation in the ankles and legs.
• Try a foot massage and use a foot moisturiser.

SHOES

• Footwear is one of the most important items to preventing falls and/or foot problems. Footwear can affect balance and change the way you walk.
• High-heels, slippery soles or shoes with a tight fit may cause you to lose balance and fall.
• If you combine unsafe footwear with foot problems, the risk of falling is even greater.

WEAR SUITABLE FOOTWEAR

• Prefer Velcro shoes, shoes with no heels and a with a non-slip sole.
• If required, make sure the shoe has enough space for inserting an insole.
HEALTHY EATING

Healthy eating can help keep you healthy.

SUGGESTIONS

• Make sure you eat at least three meals per day, and include nutritious snacks during the morning;
• Eat plenty of vegetables (including legumes) and fruit;
• Eat calcium-rich foods. Try to eat three to four dairy products per day, such as milk, cheese and yogurt;
• Drink more than one litre of water per day, especially on warmer days;
• Do not use sugar or use it in moderation.

Vitamin D

Vitamin D has a fundamental role in preventing fractures. Some studies have shown that vitamin D plays an important role in muscle strengthening and also on balance. Older people with high levels of vitamin D have more muscle strength and a smaller risk of falling.
TAKE CARE OF YOUR HEALTH

Some health conditions increase the risk of falling. They may cause muscle stiffness or joint pain, problems with eyesight, reduced concentration, pain and lack of energy, bone fragility, numbness or loss of sensation in the feet and/or legs, resulting in instability or lack of balance.

Most chronic diseases and other long-term health issues can be treated or improved. These include:

- Heart disease;
- Diabetes;
- Muscle-joint disease;
- Osteoporosis;
- High / low blood pressure;
- Depression;
- Stroke;
- Parkinson’s disease;
- Cataracts or other problems with eyesight;
- Incontinence.

Some conditions may put you at a risk of falling causing you to change your behaviour, such as running to the bathroom due to poor bladder control.
WHAT YOU CAN DO:

• Have regular check-ups with your doctor to ensure that your medical conditions are being treated correctly. Discuss any concerns that you may have with your doctor before they turn into bigger problems.

• Keep yourself active

• Have a varied diet and drink plenty of water, especially on hot days. Food supplements may be recommended if needed - ask your doctor or a nutritionist.

• Make sure you feel steady before walking.

• Keep up to date with information regarding your medical conditions.

• If you suffer from osteoporosis, your doctor may prescribe some calcium and vitamin D pills, as well as other medication, exercises or changes to your diet
CHECKLIST - HOME

Half of the injuries occurring with older people happen at home and most are due to falls. Some falls occur when we don’t realise that our physical abilities have changed and continue to do routine tasks that may put us at risk.

Most falls usually occur in the kitchen, stairs and bathroom. Although most of us feel that our homes are safe, when we look at matters objectively, we can identify a series of indoor hazards.

If we identify these hazards at an early stage and change the way in which we do some tasks, we can reduce our chances of falling.

Here are some tips to make your home safer.

Use the following checklist to identify and reduce the risks in your home.

There are many things you can do to promote and maintain our health and independence - so why not start today?
FLOORS AND PAVING:

• Choose a non-slip floor, such as carpet or non-slip tiles;
• Paving should be in good condition;
• Replace any loose rugs with non-slip rugs or nail them to the floor;
• Keep floors obstacle-free;
• Arrange your furniture in a way that it does not prevent movement;
• Keep the floor free from any wires or telephone cables;
• Clean-up any spills immediately;
• Place contrasting colours or textures where there are any uneven floor levels;
• Use an extension cord or tape to secure cables and wires close to the wall to clear the path.

LIGHTING:

• Make sure that all rooms, corridors and stairs have sufficient lighting;
• Light switches should be easy to access and close to each door;
• When replacing a light bulb, ask for help if it is too high or difficult to access;
• Increase the power of light bulbs;
• Place extra lighting in areas that pose a greater risk of falling;
• Use a night-light in the passageway between the bedroom and bathroom;
• Keep a flashlight close to hand, in case of a power outage;
• Place a light switch at the top and bottom of staircases.
STAIRS:

• Make sure that stairs and steps are well lit;
• Install sturdy handrails on both sides of the staircase (75 cm above step level);
• Make sure your stairs are not slippery;
• Use non-slip coloured tape (about 2.5 cm) to clearly mark the edges of the steps.
• Never rush when using the stairs.
• Keep stairs and steps clutter-free.
• Have light switches at the top and bottom of staircases;
• Repair any damage immediately;
• Make sure that any carpeting is firmly stuck to the steps or remove it completely.
• Secure loose handrails or replace with new ones.

KITCHEN:

• Arrange your kitchen to keep items you use regularly within easy reach;
• Store lightweight items in the top cupboards and heavy items in the bottom cupboards;
• Ask for help if you need to reach high places;
• Clean any floor spills immediately to avoid slipping;
• Never use a chair as a stepladder.

Exercise on a regular basis. Exercising can strengthen and improve your balance and coordination.
**BATHROOM:**

- Use rugs or anti-slip flooring in the bathroom;
- Use rubber mats and non-slip mats in the bath or shower;
- Use a hand-held shower head and a robust bath seat;
- Install support bars next to the toilet to help you support yourself;
- Use support bars, instead of towel rails when entering and exiting the bath or shower.
- Clean-up any damp spots or spills immediately.

**Alarm devices (remote monitoring) can help you in the event of a fall**

**BEDROOM - BED:**

- Always have a lamp, light switch or flashlight within easy reach of your bed;
- Keep a telephone close to your bed;
- Install support bars to help you lie down and get out of bed safely;
- If you wear glasses, always keep them within easy reach;
- The height of your bed is correct when your feet reach the floor when sitting;
- Arrange clothes that you wear the most in an easy access place in your wardrobe;
- Never lock the door.

**Always keep emergency phone numbers in large letters close to each telephone.**
OUTDOORS/GARDEN

- Keep the walkways, garage and pavements around your home in a good state of conservation;
- Keep entrances, pavements and walkways well-lit and obstacle-free;
- Carry out any required maintenance to make sure that walkways are not slippery - remove any leaves and moss;
- Take particular care when walking on wet pavements and pavements with grass;
- Beware of uneven surfaces caused by tree roots;
- Ensure that paths are clear by trimming any tree branches and shrubs;
- Do not leave gardening tools, hoses or other obstacles in passageways. Store after use;
- Report any damaged public roads to the relevant authorities;
- Wear shoes that provide support and stability.

LIVING ROOM:

- Leave enough space to move safely around your furniture;
- Make sure that electrical cables are stored out of the way;
- Make sure that furniture is steady;
- Use chairs, armchairs or sofas that have side support for easy sitting and getting-up;
- The height of the chair or armchair is important. Your back should be well supported and your feet should touch the ground;
- Low seats can be compensated by placing cushions.
Take whatever time you need to carry out your activities and beware of your limitations

OTHER IMPORTANT TIPS:

• Wear shoes with anti-slip soles;
• To prevent slipping avoid shoes with laces that can become loose.
• If necessary, use your technical aid (Zimmer frame, crutches, walking stick) to assist with walking;
• Walk slowly and carefully, be aware of pavement flaws, obstacles, slopes, slippery surfaces and other hazards;
• Always keep a list of emergency contacts close to your telephone
WHAT TO DO IF YOU FALL?

If you fall, the most important thing to remember is: Do not panic!
It is normal to feel a little bit shaken, but keep calm. This will help you to assess your situation and remember what to do.

DO YOU FEEL DIZZY, IN PAIN OR VERY UNSTEADY??

- Ask for help, call someone or push the alarm button, if you have one;
- If you cannot get up, try dragging yourself to the phone, to the entrance door or use an alarm and ask for help;
- If you have any doubts about the seriousness of the injury, do not move and wait for the ambulance to arrive.
LEARN HOW TO GET UP
FROM THE FLOOR, ON YOUR OWN

The following pictures show a common way to get up from the floor that will help most people.

If you feel good, then try to get up by following these steps:

1 CALM DOWN. CATCH YOUR BREATH AND RECOVER FROM THE OR-Deal.

2 CHECK YOUR BODY. IF YOU'RE NOT SERIOUSLY INJURED, YOU CAN TRY TO GET UP. IF YOU ARE INJURED, FOR EXAMPLE, WITH SOME-THING BROKEN, YOU NEED TO STAY WHERE YOU ARE AND PUT INTO ACTION A PLAN FOR HELP.

3 IF YOU ARE NOT INJURED, LOOK AROUND AND TRY TO FIND THE CLOSEST AND STURDiest PIECE OF FURNITURE (PREFERABLY A CHAIR). THE SAFEST AND EASIEST WAY TO GET UP IS TO SUPPORT YOURSELF ON SOMETHING FIRM.
4. Roll over onto your side or drag yourself up to the chair.

5. From a kneeling position, place your arms on the seat of the chair.

6. Bring one knee forward and place your foot on the floor.

7. Stand up using your arms as support on the chair.

8. Rest whenever you need to. If you can’t get up the first time, rest and try again.
AFTER A FALL

It is important to talk to your doctor about your fall and its likely causes and talk to someone else (a family member, a friend or neighbour), to establish the cause of your fall and what measures need to be taken to prevent it from happening again;

• Keep a personal alarm or a mobile phone with you at all times, so that you can call for help in an emergency;

• Give a spare key to a family member or neighbour so that they can reach you quickly.

Remember!

It is advisable to make a plan of action to prevent another fall. This may help you feel more confident and in control.
WALKING AID

There is safety equipment available to help prevent a fall and protect you. Mobility techniques can help you feel steady and safe. It is important that your aid is used correctly.

It is important to use safety equipment that meets your needs.

**WALKING STICKS, ZIMMER FRAMES, CRUTCHES AND WHEELCHAIRS, WHEN TO USE AND HOW TO USE THEM?**

- If you feel unsteady when walking or need to lean on furniture for support, consider using a walking aid, such as a walking stick or a Zimmer frame;
- Always seek professional advice regarding the most appropriate technical help;
- Pay attention to the rubber tips on your walking stick, Zimmer frame or crutches, regularly checking that they are securely fastened and replaced them when worn;
- When walking, it is important that the walking aid is of the correct length. Seek advice from your doctor/physiotherapist to learn how to use it;
- Keep your walking aid with you or in an easy-to-reach location;
- Arrange your furniture and remove any objects that block passageways when you are using your walking aid;
- Periodically check that your wheelchair maintains its safety conditions: tires and braking system. Always lock your wheelchair and remove the foot rests before moves.
EMERGENCY CONTACTS

Linha do Cidadão Idoso ("Senior Citizen Line")
(weekdays from 9 a.m. to 5 p.m.)
800 203 531

Voz Amiga ("Friendly Voice") (Anguish, Loneliness and Suicide Prevention)
800 20 26 69

Linha de Saúde Pública ("Public Health Line")
808 21 13 11

SOS
112

Intoxication
808 250 143

Hospitals (HUC)
239 400 400

Firemen (Volunteer Firefighters of Coimbra)
239 822 323

Police (Coimbra GNR [Republican Guard])
239 794 300

Linha SOS Pessoa Idosa ("SOS Older people Line")
800 990 100
REFERENCES:


Don’t fall for it, falls can be prevented!: a guide to preventing falls for older people. Australia 2011

Check for Safety. A Home Fall Prevention Checklist for Older Adults.

Department of Health and Human Services Centers for Disease Control and Prevention

Step Ahead. Preventing falls - a guide for older people.


FALLS & INJURY - reducing the risks

Acknowledgements: This work was partially supported by the GrowMeUp project, funded by the European Union’s research and innovation programme Horizonte 2020, under grant agreement no. 643647.
Preventing falls keeps you independent and can save lives.
Preventing falls keeps you independent and can save lives.