

# Let's Talk About Falls!

## A Training Manual on Falls Prevention and Awareness among Older Persons



June 2007

## Table of Contents

1. Acknowledgements . . . . .	3
2. Introduction . . . . .	4
3. Falls Facts . . . . .	5
4. Principles of Adult & Elderly Learning . . . . .	6
5. Tips for Facilitating a Group . . . . .	8
6. Preparations . . . . .	9
7. Falls Prevention Program . . . . .	11
➤ Step 1: Introduction . . . . .	11
➤ Step 2: Falls Facts . . . . .	13
➤ Step 3: Falls Risks . . . . .	15
➤ Step 4: Falls Strategies . . . . .	19
➤ Step 5: Scenarios . . . . .	20
➤ Step 6: Concluding Comments . . . . .	21
8. References . . . . .	22
9. Additional materials	
➤ Falls Prevention Handout	
➤ Risks & Strategies Photographs	
➤ Hardware Supplies List	
➤ Risks & Strategies Quick Tip Sheet	
➤ Falls Prevention Home Checklist	

## **Acknowledgements**

This project was made possible by the National Council on Ageing in Belize and with the support and encouragement from the executive director, Ms. Lindy Jeffery.

Thank you to Alanna Lammens and Janie Speck who began the falls prevention initiative and provided valuable insight into the need for falls prevention education and awareness in Belize.

Thank you to all those who contributed to the preparation and revisions of this manual, including Dr. Terry Krupa, Dr. Kerryellen Vroman, Mary Lou Boudreau, and all of the individuals who participated in the pilot training sessions from HelpAge Benque, Belize, Corozal, Dangriga, Hopkins, Punta Gorda and also from the Mercy Care Centre, HOPE Punta Gorda, Red Cross Belize City, BCVI, Octavia Waight Residential Home, and the Humanitarian Society.

**\*\*\***

The National Council on Ageing wishes to thank Beth MacMillan and Lisa Palmer, Occupational Therapy students from Queens University, Canada, for compiling this very informative and useful manual. It acknowledges the importance of providing individuals and organizations working with older persons in Belize with a practical guide to preventing falls through increased awareness, education and instruction.

## Introduction

This manual describes a training program on falls prevention. It is designed to provide trainers with the knowledge and materials they need to lead a session on falls prevention and awareness. A trainer could be anyone who is in a position to deliver the program, whether this is directly to older persons, to their caregivers, health care workers, or other individuals concerned with the needs of older people.

A holistic approach is taken to identify the factors affecting falls in the various aspects of a person's life. Trainers are guided to divide risks factors and strategies into Person, Environment and Activity components. Person risk factors are those which stem from the individual and their physical and mental conditions. Environmental risk factors exist in the home and community and are external to the person. Activity risk factors occur during daily activities of living including self-care, work and leisure activities. Separating the factors in this manner will help to break down and identify risks; this makes it easier to target strategies to reduce falls.

The intention is to approach falls prevention in a way that recognizes older persons as active participants and decision-makers in their own health and well-being. Therefore, interactive learning is encouraged in this program and trainers are guided to act as facilitators in the learning process.

Principles of adult and elderly learning are integrated into the program. A section is included that outlines some of these principles with suggestions on how trainers can incorporate them in to their training session. Trainers may wish to explain these principles to participants if they are using this program to train other trainers.



## Falls Facts

Falls are a common occurrence among older people and the largest single cause of accidental death in people over the age of 65<sup>1</sup>. As age increases the death rate associated with falls also increases, such that for individuals over 75 years of age falls account for 70 % of accidental deaths. Statistics from many countries indicate that 1 in 3 elderly fall each year<sup>123</sup>. The population of older persons in Belize is expected to rise from 6% to 21.4% over the next 50 years<sup>4</sup>; therefore, now is the time to inform and educate individuals in falls prevention to prepare the ageing population in Belize for a healthy future.

Falls can occur anywhere, but are most often reported in the home. Studies show that approximately one-third of older persons living in the community, and two-thirds of older persons living in residential homes fall each year<sup>1</sup>. In Belize some of the risk factors for falls among older persons include female gender, muscle weakness, poor balance, improper footwear, stairs, visual impairments, chronic illnesses, and taking multiple medications<sup>2</sup>.

Falls in older people can have serious consequences. Up to one-third of individuals who fall suffer injuries such as bruises, hip fractures, or head traumas that impair their mobility and independence, and increase the risk of premature death<sup>56</sup>. Most fractures that occur in older adults are the result of a fall<sup>5</sup>. Falls are also associated with increased hospitalization, use of health services, dependence on family members, institutionalization, fear of falling, and are the strongest predictor of future falls<sup>5</sup>. Many of those who fall, even if they do not suffer injuries, will develop a fear of falling. This can limit their participation in activities, resulting in reduced mobility and physical fitness, and can increase their actual risk of falling<sup>5</sup>.

The likelihood of falling is increased when a combination of risk factors are present. There is a need to educate and inform older persons, their caregivers, and service providers about these risks in order to prevent falls<sup>7</sup>. Research suggests that awareness of falls risks can reduce the occurrence of falls among older people.



## Principles of Adult & Elderly Learning

Having an understanding of the following adult learning principles and environmental considerations will help you lead a successful training session. Suggestions are given about how you may apply these principles when delivering the falls prevention program. We recommend that you take a few moments to think about how you might best incorporate them into your teaching style.

### Adult learning considerations<sup>8</sup>

- Adults have accumulated a foundation of *life experiences* and *knowledge*  
Trainers can:
  - Guide participants to identify their own knowledge about falls risks and prevention strategies rather than simply supplying them with facts
  - Connect new learning on falls prevention with past experiences and knowledge
  
- Adults learn better when they are *motivated* by a topic and see *relevance* in what they are learning  
Trainers can:
  - Emphasize how the program is relevant to participants and can enhance their skills, knowledge and well-being.
  - Relate topics to their personal concerns or responsibilities (if training healthcare workers)
  - Find out what is important to each participant. For example, if a person identifies an activity he/she no longer does because of a fear of falling, ensure that you address this concern during the training session
  
- Adults need to be shown *respect*  
Trainers can:
  - Treat participants as equals in experience and knowledge.
  - Allow them to voice their opinions freely and acknowledge each participant's input.
  - Create an atmosphere of support, trust and empathy.



## Elderly learning considerations

- Older adults learn new material more slowly than younger adults
- Speak slowly, clearly, and make sure everyone can hear you
- Consider individual differences, as well as age-related changes in learning ability
- Be patient and allow older adults plenty of time to respond and express their opinions
- Combine instruction with practice to improve elders' learning performance
- Repeating information helps to enhance older adults' learning
- Consider the learning environment
  - *Lighting*: ensure the learning environment is well lit so that participants can see each other, the trainers, and the training material clearly
  - *Time of day*: carry out training at a convenient time for participants, and consider when they will be most alert and able to participate
  - *Location*: ensure the learning environment has minimal distractions so participants can hear clearly and remain focused
  - *Accessibility*: ensure the learning environment is physically accessible for all participants



## Tips for Facilitating a Group

To maximize learning among participants a trainer needs to consider the manner in which he or she facilitates the group. Here are a few suggestions to help you lead an effective group.

- Share
  - Share your knowledge of falls and provide examples of real life experiences as you see necessary.
- Encourage
  - Make contact with the entire audience and encourage everyone to participate.
- Monitor
  - Monitor discussions to ensure that they are relevant.
  - Re-direct the audience when conversation wanders.
- Prompt
  - Use questions and prompts to get participants involved in the discussion.
- Acknowledge
  - Acknowledge each participant's response as valuable.





## Preparations

The following is a list of suggestions and supplies that can help you deliver the falls prevention training program. Keep in mind that these may vary depending on the setting and available resources. We encourage you to be creative and adapt the environment to best suit the learning needs of your participants.

### Format

- Small group format, ideally with 5-10 people so that participants can easily interact and share their knowledge and experiences with one another. However, you can adapt this program to deliver falls prevention information to individual people if a group format is not feasible.

### Learning Setting

- Set up chairs in a circle so that participants can easily interact with one another.
- Coordinators may be seated among participants to encourage a sharing environment, but also will likely want to move about to facilitate group discussion and write down participants' ideas.

### Supplies

- Markers, pens and tape
- Photocopies of Falls Prevention Handout to pass out at the start of your session
- Copies or cut outs of Risks & Strategies Photographs
- Copies of Hardware Supplies List
- Copy of Risks & Strategies Quick Tip Sheet for referencing throughout the session
- Copies of Falls Prevention Home Checklist
- Juice, water, tea, or coffee



- 3 large sheets of paper taped to the wall as follows:

PERSON		ENVIRONMENT		ACTIVITY	
RISK	STRATEGY	RISK	STRATEGY	RISK	STRATEGY

Considerations

- Ensure that a bathroom is close by and accessible for all participants.
- Taking a break is always a good idea, but use your own judgment as to when and if a break is needed.



# Falls Prevention Program

## STEP 1: INTRODUCTION



### **Keep in mind:**

Depending on your audience you may not need to include every step of the program. For those of you who use this manual as a “train the trainer” program you will want to discuss trainer roles and responsibilities and principles of adult learning.

### Instructions:

#### 1. Explain who you are

- Your name, an explanation of your role(s), and that you will be giving a presentation on the risk factors of falls and strategies to prevent falling among older adults.

#### 2. Explain the format of the training session

- Tell participants approximately how long the session will run (1 – 1½ hours).
- Topics to be covered:
  - Falls facts
  - Falls risks
  - Falls strategies
  - Scenarios to discuss as a group



- If conducting a “train the trainer” session, you may wish to tell participants that you will also briefly discuss considerations for adult and elderly learning.
3. Go around the room and ask participants to introduce themselves and give a reason for why they are participating in the falls prevention session.
  4. Explain to participants that their participation is encouraged. They are the experts and the training session will work best with their input.
  5. Gather information from participants on falls. For example, you may ask them some of the following questions:
    - “Why do you think it is important to learn about falls?”
    - “Have you or anyone you know ever experienced a fall?”
    - “Do you worry about falling or someone else you know falling?”
    - “Are there things you want to do, but do not do, because you are worried about falling?”



## **STEP 2: FALLS FACTS**



### **Keep in mind:**

If training trainers who work for an organization that strives to improve the lives of older persons, you may wish to emphasize the seriousness of this topic. Encourage participants to think about falls prevention as a responsibility they have towards the people they work with. Ask them to reflect throughout the session on how they may incorporate falls prevention in to their daily work.

Explain why falls prevention education is important for the continued wellbeing of older people. To do so use the questions and statements below to describe important statistics about falls:

### **Questions and Answers**

- Q: How many older people fall each year?"
- A: Statistics from around the world show that 1 in 3 older persons fall each year. If you look at the person on either side of you, 1 among the 3 of you is likely to experience a fall this year.
  
- Q: "Where do falls happen most often?"
- A: Falls most often occur in the home.
  
- Q: "Are falls something that is talked about? Why do we not hear about falls?"
- A: Often older people do not report them. Perhaps it is not considered a serious issue.
  
- Q: "What are some of the consequences of an elderly person falling?"
- A: Falls are associated with increased fractures, hospitalization, institutionalization, use of health services, and dependence on family members.



## Statements

- Falls are responsible for the majority of hip fractures among older persons. They are the largest single cause of death due to injury. Twenty-five percent of people who experience a hip fracture die within one year. Another 25% never return to their previous level of functioning.
- Having one fall is the strongest predictor of having future falls.
- Although it may not be talked about, falls among older people is a serious topic. It affects the lives of older people individually, as well as their families and society as a whole. When someone falls they can lose their ability to be independent and may need to rely on their families and health services for their care.
- Increasing a person's awareness of the risks of falling can reduce their chance of falling.



### **STEP 3: FALLS RISKS**



#### **Keep in mind:**

Learning works best when participants first draw on their own knowledge and experiences. Encourage participation.

#### Instructions:

1. Explain Person, Environment and Activity components and why it is useful to look at falls risk from these three perspectives
  - Person factors are risks that happen at the individual level. Here we are talking about physical conditions or behaviours that may contribute to a fall.
  - Environment factors are risks external to the person. Here we are talking about risk factors that exist in the home or in your community.
  - Activity risk factors are anything you do during your daily activities that may increase your risk of falling or make you nervous about falling.
  - Separating risk factors in to person, environment, and activity makes it easier to determine what is precisely causing falls. This makes it easier to understand where, what, and how changes need to be made in a person's life to reduce the risk of falling.



2. Repeat the definition of **Person** and ask participants to identify any risk factors they can think of. Keep in mind that it may be necessary to dig deeper into participants' responses to find out why someone falls. Below is a list of possible prompts and responses you may use to stimulate discussion of risk factors.

	<b>Prompts</b>	<b>Person factors that may lead to a fall</b>
<b>Person</b>	<ul style="list-style-type: none"> <li>➤ <b>What are some age-related physical changes?</b></li> <li>➤ <b>What conditions can make a person more likely to fall?</b></li> <li>➤ <b>What kind of shoes do you wear?</b></li> <li>➤ <b>Do you take any medications?</b></li> <li>➤ <b>Do you ask for help carrying the shopping?</b></li> <li>➤ <b>Do you feel tired?</b></li> <li>➤ <b>Do you get regular exercise?</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Slow reflexes, weakness, poor balance, vision &amp; hearing loss</b></li> <li>➤ <b>Osteoporosis, diabetes, high or low blood pressure, stroke, arthritis, obesity</b></li> <li>➤ <b>High heels &amp; slippery soles</b></li> <li>➤ <b>Side effects of medications can include fatigue, dizziness, nausea, light headedness, and confusion</b></li> <li>➤ <b>Not speaking up for your needs</b></li> <li>➤ <b>Low energy, decreased strength, breathlessness</b></li> <li>➤ <b>Increased frailty, loss of muscle</b></li> </ul>



3. Now use the Risks & Strategies Quick Tip Sheet to add any Person risks that participants did not mention. You may use your discretion as to what information is relevant to the group you are training.
4. Repeat the definition of **Environment** and ask participants to identify any risk factors. You may use the following questions and prompts to stimulate responses.



	<b>Prompts</b>	<b>Environment factors that may lead to a fall</b>
<b>Environment</b>	<ul style="list-style-type: none"> <li>➤ <b>Do you have trouble with stairs?</b></li> <li>➤ <b>Are there wires &amp; cords in your house?</b></li> <li>➤ <b>Do you have trouble getting on or off the toilet or chair?</b></li> <li>➤ <b>Do you slip in the shower/bath?</b></li> <li>➤ <b>Is there sufficient lighting in your home &amp; on your stairs?</b></li> <li>➤ <b>Do you have loose rugs or linoleum in your house?</b></li> <li>➤ <b>Do you have animals?</b></li> <li>➤ <b>Are there lips or uneven flooring at entrance ways?</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Unstable/uneven steps, lack of or loose railings</b></li> <li>➤ <b>Exposed cords &amp; wires in the pathway</b></li> <li>➤ <b>No arm rests or grab bars</b></li> <li>➤ <b>No grab bars or anti-slip mat</b></li> <li>➤ <b>Difficulty seeing falls hazards</b></li> <li>➤ <b>Loose edges to trip on</b></li> <li>➤ <b>Animals running around</b></li> <li>➤ <b>Uneven surfaces &amp; lips between flooring can be tripped on</b></li> </ul>

5. Now use the Risks & Strategies Quick Tip Sheet to add any Environment risks that participants did not mention. You may use your discretion as to what information is relevant to the group you are training.
6. Repeat the definition of **Activity** and ask participants to identify any risk factors. You may use the following questions and prompts to stimulate responses.



	<b>Prompts</b>	<b>Activity factors that may lead to a fall</b>
<b>Activity</b>	<ul style="list-style-type: none"> <li>➤ <b>Do you feel unsteady when taking a shower?</b></li> <li>➤ <b>Do you ever slip on wet floors?</b></li> <li>➤ <b>Do you hurry to answer the phone or door?</b></li> <li>➤ <b>Do you feel dizzy when you change positions (from lying to sitting, sitting to standing, or bending down?)</b></li> <li>➤ <b>Do you have to climb or reach to get frequently used items?</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Standing with eyes closed while washing hair can cause dizziness</b></li> <li>➤ <b>Washing floors during the day &amp; not immediately wiping up spills</b></li> <li>➤ <b>Hurrying can increase your risk of tripping over obstacles, animals, &amp; bumping in to furniture</b></li> <li>➤ <b>Changing positions too quickly can cause dizziness</b></li> <li>➤ <b>Climbing &amp; reaching can throw you off balance</b></li> </ul>

7. Now use the Risks & Strategies Quick Tip Sheet to add any Activity risks that participants did not mention. You may use your discretion as to what information is relevant to the group you are training.
8. Explain to participants that the more risk factors a person has, the greater the likelihood that they will experience a fall.

#### **STEP 4: FALLS STRATEGIES**



#### **Keep in mind:**

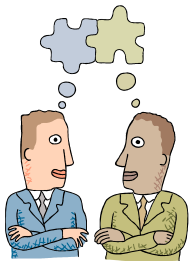
Many strategies have costs associated with them. Encourage participants to be creative when thinking of strategies (i.e. lower cost alternatives that use local materials and skills, fundraising for adaptive equipment). Each person is unique, therefore, remind participants to consider individual differences when applying strategies.



#### Instructions:

1. Explain to participants that you will now go through the risks identified in each Person, Environment and Activity component and as a group think of appropriate strategies to reduce the risk of falling.
2. Begin with Person risk factors and ask participants to identify any strategies they currently use, or know of others using, to reduce their risk of falling. Use strategies outlined in the Risks & Strategies Quick Tip Sheet to add to participants' responses.
3. Repeat with the Environment and Activity risk factors.

## **STEP 5: SCENARIOS**



### **Keep in mind:**

Be aware of the time you spend discussing each photograph in order that each participant has an opportunity to share.

### Instructions:

1. Pass around photographs of falls risks and strategies to participants.
2. Give them a moment to observe the photograph and look for possible risks and/or strategies.
3. Ask participants to stand up and share their photograph with the rest of the group. If their photograph is of a risk, ask them to identify appropriate strategies. If their photograph is of a strategy, ask them to explain how it might reduce the risk of falling. You may use the Photograph Explanation pages to supplement participants' responses.
4. Encourage discussion amongst participants. Ask them to think about how they may carry out some of these strategies. You may use the following questions to stimulate their thinking:

- How would you approach someone about making changes in their home?
- What might you say to someone who does not recognize falls risks in their behaviour or environment?
- Who else could you approach to reduce falls risks in the home or community?
  - E.g. local trades people, city council, families, etc.

### **STEP 6: CONCLUDING COMMENTS**



#### **Note to trainer:**

If you are conducting a “train the trainer” session, you should include adult and elderly learning principles and considerations and tips for facilitating a group at this time, before the concluding comments (see pages 5-7 of this manual).



#### Instructions:

1. Emphasize that falls is a serious issue. This manual is an attempt to increase awareness and to improve the lives of older people in Belize.
2. Re-state the importance of using and spreading this information to friends, relatives, co-workers and the elderly community. If the older persons or people who care for them know the risks associated with falls and how to prevent them, the greater the likelihood the elderly can stay safe on their feet.
3. Summarize the importance of looking for different risk factors and seeking ways to implement strategies to reduce risks.
  - Use the Falls Prevention Home Checklist on home visits.

- Discuss risks and strategies with individuals and their families.
- Seek assistance from other healthcare workers when you feel a situation is serious and/or beyond your capacity to help.

## References

---

<sup>1</sup> Fuller, G.F. (2000). Falls in the elderly. *American Family Physician*. Retrieved June 13<sup>th</sup> from: <http://www.aafp.org/afp/20000401/2159.html>.

<sup>2</sup> Lammens, A., & Speck, J. (2006). *An examination of the risk factors for falling in the elderly population of Belize*. Belize, Report for the National Council on Ageing.

<sup>3</sup> Reyes-Ortiz, C.A., Snih, S.A., & Markides, K.S. (2005). Falls among elderly persons in Latin America and the Caribbean and among elderly Mexican-Americans. *Pan American Journal of Public Health*, 17, 362-369.

<sup>4</sup> United Nations. (2003). *Older persons in Latin America and the Caribbean: Situation and policies*. Retrieved June 13<sup>th</sup> from: <http://www.eclac.cl/celade/noticias/paginas/3/13233/DLI1973-Summary.pdf>.

<sup>5</sup> Centre for Disease Control and Prevention. (2007). *Falls among older adults: An overview*. Retrieved June 13<sup>th</sup> from: <http://www.cdc.gov/ncipc/factsheets/adultfalls.htm>.

<sup>6</sup> Todd, C., & Skeleton, D. (2004). *What are the main risk factors for falls among older people and what are the most effective interventions to prevent these falls?* Copenhagen, WHO Regional Office for Europe (Health Evidence Network report). Retrieved June 13<sup>th</sup> from: <http://www.euro.who.int/document/E82552.pdf>.



---

<sup>7</sup> McInnes, E., & Askie, L. (2004). Evidence review on older people's views and experiences of falls prevention strategies. *Worldviews on Evidence-Based Nursing*, 1<sup>st</sup> quarter, 20-37.

<sup>8</sup> Lieb, S. (1991). *Principles of adult learning*. Retrieved June 13<sup>th</sup> from:  
<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>.