



## Falls Prevention

There is a lot of useful information on falls prevention for older people and much of it is clearly written. This CRNCC *In Focus* aims to connect members to local, regional and international sites that contain innovative and best practice examples of strategies and programs for preventing falls among older adults.

### Why focus on falls?

Falls are the most common cause of personal injury and disability, and a leading cause of death for Canadian seniors (Sorcinelli, 2007). In addition to the serious costs and consequences for seniors and families, falls increase the demand for costly emergency services, hospital in-patient beds and long-term care residential placements.

### What do we know about falls?

Canadian data reported by the Public Health Agency of Canada (2005) show that:

- falls are the second leading cause (after motor vehicle accidents) of injury-related hospitalizations for all ages;
- almost 62% of injury-related hospitalizations for seniors resulted from falls;
- the fall-related injury rate for seniors is nine times greater than for other age groups;
- falls cause more than 90% of hip fractures in seniors;
- 20% of seniors with hip fractures die within a year of their injury;
- 40% of all admissions to nursing homes are the result of falls by seniors;
- a 20% reduction in falls could save \$138 million annually.

In the U.S., the National Center for Injury Prevention and Control estimates that:

- more than one-third of adults aged 65 years and older fall each year;
- 20% to 30% of seniors who fall suffer moderate to severe injuries such as hip fractures or head traumas that reduce mobility and independence and increase the risk of premature death.

Fear of falling can also increase social isolation. For example, seniors may be reluctant to go out when the weather is wet, snowy and slippery for fear of falling. Social isolation can in turn lead to depression, anxiety and a general lack of well-being. This may partly account for most (one-half to two-thirds) falls occurring in and around the home. Most injuries are caused by falls on the same level (not from falling down stairs) or from a standing height (e.g., tripping while walking).

The good news is that a growing body of evidence suggests that most falls are predictable and preventable. Education, awareness, and home-based interventions such as fall risk assessments and management have been shown to reduce fall rates and emergency visits (Fortinsky, 2008).

### How can we prevent falls?

Many sites offer tips for preventing falls. The City of Toronto, Public Health, lists 12 Tips to Prevent Falls at

[http://www.toronto.ca/health/falls\\_prevention.htm](http://www.toronto.ca/health/falls_prevention.htm)

1. exercise regularly to maintain muscle and bone strength and flexibility;
2. eat regular balanced meals to avoid weakness, dizziness and fatigue;
3. have regular check-ups to monitor and address hearing, vision or muscle changes;
4. use medications safely - some drugs cause dizziness or drowsiness;

5. wear supportive shoes with low heels and non-skid soles;
6. make sure canes or walkers are the proper height for you;
7. keep stairs and traffic areas clear;
8. avoid small carpets or rugs that could slide or bunch up;
9. light pathways, stairs, hallways, bathrooms and any other dark areas;
10. do home safety checks for handrails, lighting, non-skid mats, and grab bars;
11. stay socially connected by taking time for friends;
12. take your time and avoid rushing.

To reinforce the City of Toronto Public Health list, Sherrington et al. (2008) reviewed multiple fall prevention strategies and concluded that exercise programs (excluding walking) can help prevent falls among older people living in the community when exercise is frequent and sustained (e.g., two times a week for at least 25 weeks). As well, exercise programs which challenge balance (e.g., Tai Chi) help prevent falls (Li, 2008).

## Some innovative and best practice examples

The following initiatives demonstrate the considerable advantages of collaborating across the continuum of care to provide education, programs, home assessments and recommendations for home adaptations and referrals to help older people prevent injuries and maintain independence. As well, post-fall care in the community can potentially reduce hospital length of stay and ambulatory care days through extended convalescent care and seniors' health education and wellness programs.

- *Stay on Your Feet* was a program first piloted in Australia with successful outcomes. The Ontario Neurotrauma Foundation selected communities within the Kingston, Grey-Bruce and Elliot Lake regions to build similar *Stay on your Feet* community-health provider partnership projects to increase and promote awareness, education and policy development around falls prevention. For example, *Stay on your Feet* has developed a series of "Fall Risk

Questions" and tips on what to do if you are at risk. To find out more, go to:

<http://www.stepsafe.com/history.html>

- Among the programs designed by Fraser Health (British Columbia) to reduce the incidence of falls and fall-related injuries, is the collaborative *Mobile Falls Clinic* where seniors have access to a nurse, dietician, kinesiologist, pharmacist and physiotherapist. <http://www.fraserhealth.ca/SERVICES/SENIORSHEALTH/Pages/FallsandInjuryPrevention.aspx>
- The Hamilton Niagara Haldimand Brant LHIN is also implementing a collaborative multi-sectoral *Travelling Falls Prevention Clinic* (<http://www.hnhblhin.on.ca/Page.aspx?id=2572>)
- SMARTRISK is a national non-profit organization dedicated to preventing injuries and saving lives. While it focuses on all age categories, it has developed *Smart Moves: A Toolkit to Prevent Falls for Older Adults*. The Toolkit was created in consultation with focus groups of seniors, health care providers, and caregivers of older adults. It has also been pilot tested and evaluated with the assistance of 2 Ontario Public Health Units and 6 Community Health Centres. [http://www.smartrisk.ca/about\\_us/programs\\_and\\_services/smart\\_moves/smart\\_moves\\_a\\_toolkit\\_to\\_prevent\\_falls\\_in\\_older\\_adults.html](http://www.smartrisk.ca/about_us/programs_and_services/smart_moves/smart_moves_a_toolkit_to_prevent_falls_in_older_adults.html)
- *Promising Pathways* (2005) is a handbook that highlights the key elements required to develop and implement effective falls prevention programs for seniors and veterans living in the community. In addition, a variety of tools and resources are included to make it easier for everyone to engage in the "promising pathway" of falls prevention. <http://www.vacc.gc.ca/clients/sub.cfm?source=health/fallsp/propath>

## How can I learn more?

There are numerous excellent publications and resources available about falls and falls prevention. Here are some examples of sites you can visit.

- *It's Your Health - Seniors and Aging - Preventing Falls in and around Your Home* is a 2006 article from Health Canada and the Public Health Agency of Canada. It offers a number of simple steps older people can take in and around the home to help prevent falls and the injuries caused by falling. <http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/fp-pc-eng.php>
- Report on Seniors' falls in Canada (2005) provides a wealth of information to support the efforts of all those who work on research, programs and policies to reduce seniors' falls and fall-related injuries. Go to [http://www.phac-aspc.gc.ca/seniors-aines/pubs/seniors\\_falls/pdf/seniors-falls\\_e.pdf](http://www.phac-aspc.gc.ca/seniors-aines/pubs/seniors_falls/pdf/seniors-falls_e.pdf)
- Inventory of Fall Prevention Initiatives in Canada (2005) provides a snapshot of falls prevention activities nationally. Find it at [http://www.phac-aspc.gc.ca/seniors-aines/pubs/fall\\_prevention\\_initiatives/pdf/fall\\_prevention\\_initiatives\\_e.pdf](http://www.phac-aspc.gc.ca/seniors-aines/pubs/fall_prevention_initiatives/pdf/fall_prevention_initiatives_e.pdf)
- The National Trauma Registry Report: Major Injury in Canada, 2004/2005 is available on the web site of the Canadian Institute for Health Information (CIHI) at [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=AR\\_26\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_26_E)
- The National Center for Injury Prevention and Control in Atlanta, Georgia, provides facts and figures on falls in the U.S. at <http://www.cdc.gov/ncipc/factsheets/falls.htm>
- Veterans Affairs Canada provides resources to veterans and the broader community on health promotion and falls prevention, including an extensive guide on choosing and using appropriate assistive devices. See: <http://www.vac-acc.gc.ca/clients/sub.cfm?source=health;>
- Canada Mortgage and Housing Corporation presents a number of resource guides that give practical advice on minimizing the risks of falls through home safety and adaptations such as evaluating optimal bath grab bar placement and design suggestions for safe stairs. See:
  - Evaluation of Optimal Bath Grab Bar Placement for Seniors <http://www.cmhc-schl.gc.ca/odpub/pdf/63245.pdf>
  - Preventing Falls on Stairs <http://www.cmhc-schl.gc.ca/odpub/pdf/63637.pdf>
  - Maintaining Seniors' Independence: A Guide to Home Adaptations <http://www.cmhc-schl.gc.ca/odpub/pdf/61042.pdf>
- There is increasing attention and interest in "universal design" for new housing. This is a concept of designing spaces that promote aging in place. The Australian Network of Universal Housing Design presents guidelines for designing safe and lifecycle friendly housing <http://www.anuhd.org/>
- Presentation - Universal Housing Design: "It just makes good sense." [http://www.nationalhousingconference.org.au/downloads/2005/DayTwo/WardM\\_Paper.pdf](http://www.nationalhousingconference.org.au/downloads/2005/DayTwo/WardM_Paper.pdf)
- The Registered Nurses' Association of Ontario (RNAO) has created a best practice guideline for the prevention of falls and fall injuries [http://www.rnao.org/Storage/12/617\\_BPG\\_Falls\\_rev05.pdf](http://www.rnao.org/Storage/12/617_BPG_Falls_rev05.pdf)
- Active Independent Aging: A community guide for falls prevention and active living is designed to promote the health and independence of older adults and veterans through falls prevention, active living and activity-friendly environments. Visit: <http://www.falls-chutes.com/guide/english/intro/>

- The Annual Falls Prevention and Policy Network Symposium offers an inspirational forum for networking and sharing with peers; gives updates on provincial falls prevention strategies and initiatives; and, provides real-life examples of policy development in the area of injury prevention. See: <http://www.peelregion.ca/health/falls-prevention/>
- The Kingston, Frontenac and Lennox & Addington Falls Prevention Coalition has a number of helpful resources that can be easily downloaded. <http://www.stepsafe.com/resources.html>
- For an international perspective, you may subscribe to The ProFaNE Online Community (Prevention of Falls Network Europe), an active working group of Health Care Practitioners, Researchers and Public Health Specialists dedicated to the prevention of falls in Europe and beyond. <http://www.profane.eu.org/>

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