

# Lifestyle Management 101

## Preventing Falls in the Elderly

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**Centre de santé**  
Saint-Boniface



# Faculty/Presenter Disclosure

- Faculty: Melissa Skrabek-Senéal

## Relationships with commercial interests:

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- Consulting Fees: n/a
- Other: n/a



# Mitigating Potential Bias

There are no potential biases because the topics that I covered for the previously mentioned associations are not directly related to the presentation and the information that will be shared today.

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We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.



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# Brief Introductions

Melissa Skrabek-Senécal, BKin-AT CAT(C)

- Primary Care Exercise Specialist at Centre de santé Saint-Boniface
- Lead an interdisciplinary team conducting individualized, multicomponent fall prevention risk assessments and recommendations for community-based individuals
- Developed and implemented a community-based fall prevention exercise program
- Currently working with several organizations to introduce the program to a wider population



# Course Objectives

1. Review recommended exercise interventions and physical training for adults at risk of falls to improve their strength and balance
2. Practical application of exercises to share
3. Resource navigation – Review of available resources as well as who to contact for direct support in your region



# Magnitude of Falls

- Falls are the leading cause of injury deaths, hospitalizations, and permanent/partial disabilities of all types of injuries in Canada. In 2015, Manitoba reported the highest provincial rate of fall-related mortality in Canada. (Parachute 2015)
- Approximately 30% of community-based seniors over 65 will fall at least once a year, and that number increases to 50% in seniors over the age of 80. (National Institute for Health and Care Excellence (NICE), 2013)
- 95% of all hip fractures are directly linked to falls. (Public Health Agency of Canada 2014)



# Magnitude of Falls (continued)

- Falls are the leading cause of injury-related hospitalizations (86%) among older adults residing in the Winnipeg health region. (Winnipeg Regional Health Authority Public Health Surveillance Team. Winnipeg Health Regional Injury Report, 2000-2010. Winnipeg: Winnipeg Regional Health Authority; 2014.)





Consider the following:

**If we prevent the fall, we prevent the fracture.**

Focus needs to be shifted on how to

**Stay on your Feet**



# Guiding Principles

- Many falls are preventable and predictable
- Some falls cannot be prevented
- Focus should be on proactively preventing fall injuries and decreasing the frequency of falls
- Fall prevention is a shared responsibility that requires a collaborative effort from everyone involved



## Recommended exercise interventions and physical training for adults at risk of falls to improve their strength and balance – What the research shows us in community settings

- Exercise interventions and physical training improve strength and balance and reduce fall and fall injuries, particularly fractures. (El-Khoury, Cassou, Charles, & Dargent-Molina, 2013; Gillespie et al., 2012; NICE, 2013; Stubbs, Brefka, et al., 2015)
- To promote adherence and effectiveness, exercise interventions should be individualized (Mulligan, Tschoepe, & Smith, 2014; NICE, 2013) and supported by an exercise professional. (Martin et al., 2013; Mulligan et al., 2014; NICE, 2013) This is particularly important for adults at high risk of falls with physical co-morbidities. (Stubbs, Brefka, et al., 2015)
- Exercises should be adjusted to the person's abilities (Di Bardino et al., 2012) including cognitive abilities (Chan et al., 2015) and fear of falling. (Lach & Parsons, 2013)



## Recommended exercise interventions and physical training for adults at risk of falls to improve their strength and balance – What the research shows us in community settings (continued)

- Comprehensive exercise programs delivered in groups that focus on fall prevention, muscle strengthening, and balance have been shown to effectively address risk factors, prevent falls and reduce injury from falls.

(El-Koury et al., 2013; Gillespie et al., 2012; NICE, 2013; Stubbe, Brefka, et al., 2015; U.S. Preventive Services Task Force, 2012)

- The protective effects of exercise are most beneficial for severe fall injuries, such as fractures. (El-Koury et al., 2013)
- Individuals with a history of recurrent falls and/or balance and gait deficits will benefit most from proper prescription of exercise. (NICE, 2013)





# Exercise Prescription for Fall Prevention

Updated recommendations for fall prevention practice in older people living in the community:

1. Exercise programs should aim to provide a high challenge to balance
2. At least 3 hours of balance exercise should be performed each week
3. Ongoing participation in exercise is necessary or the benefits will be lost (Sherrington C, Michaleff ZA, Fairhall N, et al., 2017)



# Home Balance & Strength Exercises



## Stand with one foot in front of the other (walk stance)

- Stand next to a sturdy table or counter for support.
- Place one foot in front of the other with a 10 cm (4 inch) gap between the toe of your back foot and heel of your front foot.
- Hold for 10 seconds and repeat with the other foot in front.

### For increased difficulty:

- 1 Use your hands less for support.
- 2 Place your back and front foot closer together.
- 3 Repeat it twice on each leg.
- 4 Slowly walk heel to toe alongside a table or counter.



## Lift your leg to the side

- Stand next to a sturdy table or counter for support.
- Keep your toes pointing forward, lift one leg out to the side and hold for 5 seconds.
- Slowly lower your leg back to the ground.
- Repeat with the other leg.
- Do this 8 times.

### For increased difficulty:

- 1 Use your hands less for support.
- 2 Slowly walk sideways alongside a table or bench, first to your left and then to your right.



## Raise up onto your toes

- Stand next to a sturdy table or counter for support.
- Raise onto your toes by lifting both heels off the ground, and hold for 5 seconds.
- Slowly lower your heels back to the ground.
- Do this 5 times.

### For increased difficulty:

- 1 Use your hands less for support.
- 2 Stand on your right leg and raise onto your toes. Repeat on your left leg.
- 3 Repeat it 10 times.



## Lift your knees

- Stand next to a sturdy table or counter for support.
- Lift your foot off the ground and hold it for 5 seconds.
- Repeat with the other foot.
- Do this 8 times on each leg.

### For increased difficulty:

- 1 Use your hands less for support.
- 2 Lift your knee to hip level.
- 3 Hold it for 10 seconds.



## Sit to stand from a chair

- Sit in a chair with arm rests.
- Scoot your bottom to the front edge of the chair and put your hands on the arm rests.
- Place your feet hip width apart.
- Lean forward and stand up slowly.
- Slowly lower yourself to sit back into the chair.
- Do this 5 times.

### For increased difficulty:

- 1 Use your hands less for support.
- 2 Repeat it 10 times.



# Resource Navigation

<https://preventfalls.ca/resources/resources-for-older-adults/>

Resources for previous slide and several others

<http://canadianfallprevention.ca/>

The Canadian Fall Prevention Curriculum© (CFPC) is designed to build on existing knowledge and skills of health professionals and community leaders working in the area of fall and injury prevention among older adults (those 65 and over).

<https://www.fallsloop.com/>

Loop is the online communication platform that brings together front-line workers, practitioners, caregivers, researchers and policy planners working for the health and independence of the public through fall prevention. Loop is a place to problem-solve together and discuss how to implement evidence-informed and promising practices.





# Who to Contact in Your Region

- Karla Atanacio (Manitoba Health, Seniors and Active Living)
- Jeremy Brooks (Southern Health)
- Gail Brewis (Southern Health)
- Russel Thorne (Northern Health)
- Colleen Collins (Northern Health)
- Cynthia Menzies (WRHA)
- Jim Evanchuk (Active Aging in Manitoba)
- Kathy Henderson (WRHA)
- Tracy Thiele (WRHA)
- Meghan Quinn (Interlake-Eastern)
- Beverly Aerie (Interlake-Eastern)
- Nancy McPherson (Prairie Mountain Health)
- Kim Toews (Prairie Mountain Health)





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