

## Overview of Arthritis & the Older Adult

Education Health Care Professionals

### Part 2: Reducing the Risks



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## Risk Factors for Arthritis

### Non-Modifiable

- Over the age of 65
- Female
- Genetic predisposition
- Being of Métis descent
- Hormones

### Modifiable

- Obesity
- Smoking
- Joint injury
- Infection (staphylococcus)
- Occupation involving repetitive joint movements
- Physical inactivity

(AAC, 2014; CDC, 2017; PHAC 2010)



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## Arthritis: Increased Risk of Falls

- Older adults with OA of the hip or knee are at higher risk of falls due to lower-limb weakness, reduced mobility, pain and slowed gait. Impacts of hip or knee OA include impaired balance, ability to walk and complete other daily activities which often result in restricted participation in social activities.
- Older Adults with RA may suffer from the following issues which increase their likelihood of falling:
  - lower extremity muscle weakness
  - swollen and tender joints
  - postural instability
  - pain
  - fatigue
  - medication side-effects

(Arthritis Alliance of Canada, 2014; Arnold, & Gyurcsik, 2012; Stanmore et al., 2013)

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## Increased Risk of Falls continued

- In the Global Longitudinal Study of Osteoporosis in Women, researchers found that women who had osteoarthritis (approximately 40% of 51,386) experienced 30% more falls and were found to have a 20% greater risk of fracture than those without OA.
- A correlation between pain and the risk of falling has been established by a number of studies. For example, in a study of 749 older adults, those who reported having musculo-skeletal pain in two or more locations or severe pain that limited their ability to perform regular daily activities were more likely to fall. To support these findings another study of 6,641 adults 75 years and older who reported frequent knee pain, had an increase risk of falls of 25% and close to double the risk of hip fractures than those without frequent knee pain.

(Dunkin, n.d.)

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## Arthritis: Increased Risk of Fracture



- Older adults with arthritis may try to compensate for their mobility challenges in ways that increase their risk of injury, i.e. limp, change gait, shift body mass, avoid physical activity, etc.
- The combination of increased risk of falls along with common co-morbidities of diabetes and/or osteoporosis increases the risk of fractures in older adults with arthritis.

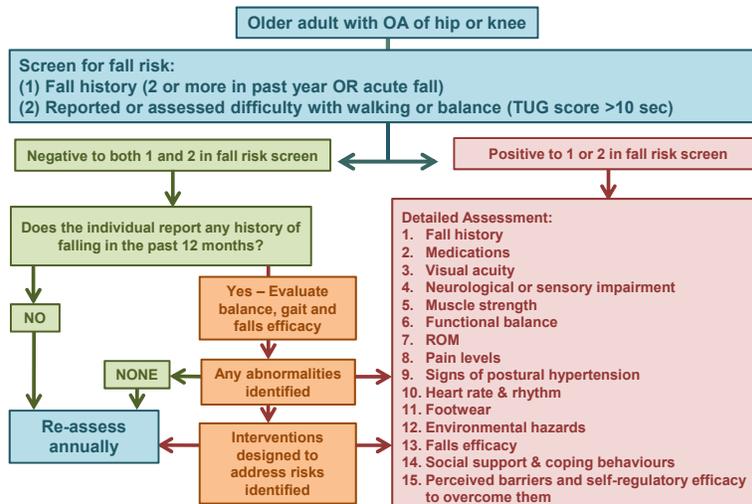
(Arthritis Alliance of Canada, 2014; Arnold, & Gyurcsik, 2012)



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## Algorithm for OA Fall-Risk Screening



Adapted from Arnold & Gyurcsik, 2012, Physiother Can. 2012 Summer; 64(3): 302–314.



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### Recommendations for Reducing Risks

- Exercise regime to reflect recommended guidelines for older adults
- Fall prevention education
- Address sensory impairments
- Treat pain to improve mobility
- Maintaining or achieving a healthy weight
- Reduce repetitive strain on joints
- Environmental modifications
- Smoking cessation
- Reduce consumption of substances that increase inflammation:
  - dairy, sugar, alcohol, tobacco, fried & processed foods, high sodium foods
- Increase consumption of substances that reduce inflammation:
  - turmeric, ginger, omega-3 fatty acids, green tea
- Address polypharmacy and medication side effects

[\(Arthritis Alliance of Canada, 2014; Artz, 2015; Chen et al., 2009; Eatright Ontario, 2017; Golding, 2006; Fall Prevention Community of Practice, LOOP, 2017\)](#)