Seniors' Falls in Nova Scotia

June 2016

Current Status
& Policy Approaches
to Support Prevention

NOVA SCOTIA

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Background and Introduction

Falls are a significant public health problem throughout Canada. In 2010–2011, more than 250,000 seniors (aged 65+) experienced an injury due to a fall.[1] More than 78,000 were hospitalized as a result of their injuries, a 15 per cent increase from 2006–2007. Despite this increase in the number of hospitalizations, the rate of hospitalization remained steady.[2] Between 2003 and 2008, both the frequency and rate of fall-related deaths increased. In 2003, approximately 1,600 seniors died as a result of a fall compared to 2,691 in 2008.

Similar trends are evident in Nova Scotia. As Nova Scotia's population ages, the number of people at risk for falls will increase. As this report illustrates, although the rate of seniors' falls resulting in hospitalization or death has remained unchanged between 2005 and 2013, Nova Scotia's aging population means that an increasing number of seniors are falling and sustaining injuries each year. Traumatic brain injuries and hip fractures are among the most common severe and fatal injuries that result from falls.

There are a number of factors that increase risk for falls, including biological and medical factors, socioeconomic factors, behavioural risk factors, and environmental risk factors.[3] As such, preventing seniors' falls requires a range of interventions and the participation of multiple sectors.[4] Fall-related injuries to seniors not only affect individuals and their families, they also create strain on the healthcare system through increased demand on emergency departments, increasing wait times for surgeries, lengthy hospital stays, and increased demand for continuing care and long-term care. The most recent economic burden data from 2010 shows that the direct and indirect cost of seniors' falls in Nova Scotia is $243 million. This is an increase from $175 million in 2004. If rates continue on the same path as they did from 2004 to 2010, by 2035 fall-related injuries will cost Nova Scotia $462 million.[5]

Seniors' fall prevention is identified as a priority in Nova Scotia's Renewed Injury Prevention Strategy. In 2007, the document *Preventing Falls Among Older Nova Scotians: A Strategic Framework*[6] was released to guide work across sectors in seniors' fall prevention. The work of many partners, the Strategic Framework continues to be a guiding document for those working in seniors' fall prevention and is overseen by the Provincial Intersectoral Seniors' Fall Prevention Committee. To advance implementation of the Framework's strategic directions, the Department of Health and Wellness (DHW) supported three key structures:

> *1) Provincial Intersectoral Seniors' Falls Prevention Committee*: guides the ongoing implementation of the strategic framework and serves as a forum for information sharing, capacity building, and collaboration. The overall goal is to ensure a coordinated and collaborative approach for seniors' falls prevention across a wide range of sectors. Co-chaired by the DHW and a community partner, the committee has representation

from government departments and agencies, professional associations, researchers, academics, educators, and NGOs with a province-wide mandate.

2) Provincial Falls Prevention District Network: mechanism to stimulate collaboration on the development and implementation of falls prevention policies, tools, resources, data collection, and evaluation initiatives within the acute care health system. With competing priorities, limited resources, and the Required Organizational Practices (ROPs) for falls prevention introduced by Accreditation Canada, it was decided that Acute Care would be a priority for the Provincial Falls Prevention District Network. The goal is to reduce the duplication of efforts across district health authorities and create a standardized approach.

3) Community Links Preventing Falls Together Program (now Aging Well Together): aims to reduce falls among seniors in Nova Scotia by taking a population health approach and uses a variety of strategies to address the problem at the community, organizational, and individual level. The intent is to build the capacity of seniors-serving organizations and other community partners to develop and implement local programs and support for falls prevention, generate awareness and interest in addressing the issue, and advocate for local policy and action to create supportive physical and social environments.

This report was developed for those working in seniors' fall prevention, including policy makers, primary care providers, community organizations, and the Nova Scotia Health Authority. It provides both an assessment of the current status of seniors' falls that result in hospitalization and death in Nova Scotia and aims to identify opportunities where a policy approach to addressing the most serious seniors' falls may be appropriate across multiple settings.

Section 1: Seniors' Falls Resulting in Hospitalizations and Deaths in Nova Scotia

Section 1 of this report provides an overview of data on fall-related hospitalizations (admissions) and deaths among Nova Scotians ages 65 years and older. Emergency department data on fall-related injuries is not available in Nova Scotia. The data provided in this report provides a foundation to address seniors' falls across multiple sectors. By identifying the significant impact that these injuries have on seniors and their families, this report is a call to action for policy makers, health system leaders, injury prevention practitioners, and communities.

Methods

Data Sources

Hospitalization data for this report was obtained from databases housed at the Business Intelligence Analytics and Privacy (BIAP) division within the DHW. All data pertaining to deaths in Nova Scotia was obtained from the Nova Scotia Vital Statistics Division of Service Nova Scotia. Diagnostic information in both Vital Statistics (VS) Deaths Database and Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD) is coded using the International Statistical Classification of Diseases and Related Health Problems, more commonly referred to as ICD coding (ICD-10-CA). The ICD coding systems provide specific codes for health conditions and injuries. The codes used to identify injuries in this report are listed in Appendix 1. A brief description of each database is given below.

Canadian Institute of Health Information Discharge Abstract Database (CIHI-DAD)

The CIHI-DAD contains comprehensive, patient-level information (e.g., demographics, diagnoses, and treatments) for each admission to a Nova Scotia hospital. This data was used to identify Nova Scotia residents hospitalized for injury-related causes and to provide information about the nature of fall-related hospitalizations between 2005–2013 (e.g., place of occurrence, anatomic site injury, length of fall-related hospital stay, and outcome of the injury as a result of fall).[7]

Vital Statistics Deaths Database (VS)

The VS deaths database contains detailed information about all deaths in Nova Scotia, including demographics, causes of death, and underlying causes of death. This data was used to identify Nova Scotia residents who died as a result of injury between 2005 and 2012. Information of place of occurrence and anatomic site injury was also obtained from the VS deaths database.[8]

Study Population

The study population consisted of Nova Scotia seniors, aged 65 years and older at the time of their hospitalization or death, who were eligible for healthcare services during one or more of the calendar years 2005–2013 included for the study period.

Calculation of Injury-Related Hospitalizations (IRH) and Injury-Related Deaths (IRD) Rates

The codes used to identify injuries in this report are listed in Appendix 1. To ensure maximum sensitivity in detecting injury-related hospitalizations and deaths, all diagnostic (Dx) codes provided from the CIHI-DAD and VS records were included in the case definition (Dx1–25). An admission was flagged as fall-related if an ICD-10-CA code of W00-W19 was present. The rate of fall-related hospitalizations was calculated by dividing the number of fall-related hospital admissions by number of seniors at risk (using Statistics Canada population counts based on the 2011 Census (accessed July 2014)). A death was flagged as fall-related if an ICD-10-CA code of W00-W19 was present in the Vital Statistics record. Similarly, the rate of fall-related deaths was calculated by dividing the number of fall-related deaths by the number of seniors at risk in the population.

Acronyms

ALC	alternative level of care
CIHI-DAD	Canadian Institute for Health Information – Discharge Abstract Database
DHA	District Health Authority
FRD	fall-related death(s)
FRH	fall-related hospitalization(s)
ICD	International Classification of Diseases
IRD	injury-related death(s)
IRH	injury-related hospitalization(s)
VS	Vital Statistics

Limitations

The report does not provide a complete overview of seniors' fall-related injuries in Nova Scotia for the time period considered. Fall-related injuries that did not result in death or admission to hospital were not included. This includes those whose injuries were treated in an emergency department and were sent home, those who received care from a paramedic and were not transported to hospital, those who saw their family physician or a physician at a clinic, or those who did not access the healthcare system in any way. With these limitations in mind, the data presented in the report would be under-representative of all injuries across the province during the time period of the analysis.

Overview of Injuries in Nova Scotia, All Ages, 2005–2013

This section provides an overview on all major causes of external injury among Nova Scotians from 2005–2013 for injury-related hospitalizations (IRH) and 2005–2012 for injury-related deaths (IRD).

Injury-related Hospitalizations (IRH), 2005–2013

Figure 1 provides the frequency of all major external causes of injury leading to hospitalization by age group in Nova Scotia from 2005–2013. Falls are a significant cause of injury-related hospitalizations (IRH) across the lifespan, with the highest frequencies among adults who are middle-aged and seniors. Figure 2 indicates that falls account for 57 per cent of external cause for injury among all age groups. For the senior populations (65+ age groups), falls account for 89 per cent of all external cause of injury (not shown in figure).

Figure 1: Frequency of external cause for injury-related hospitalizations (IRH) in Nova Scotia, by age group, 2005–2013

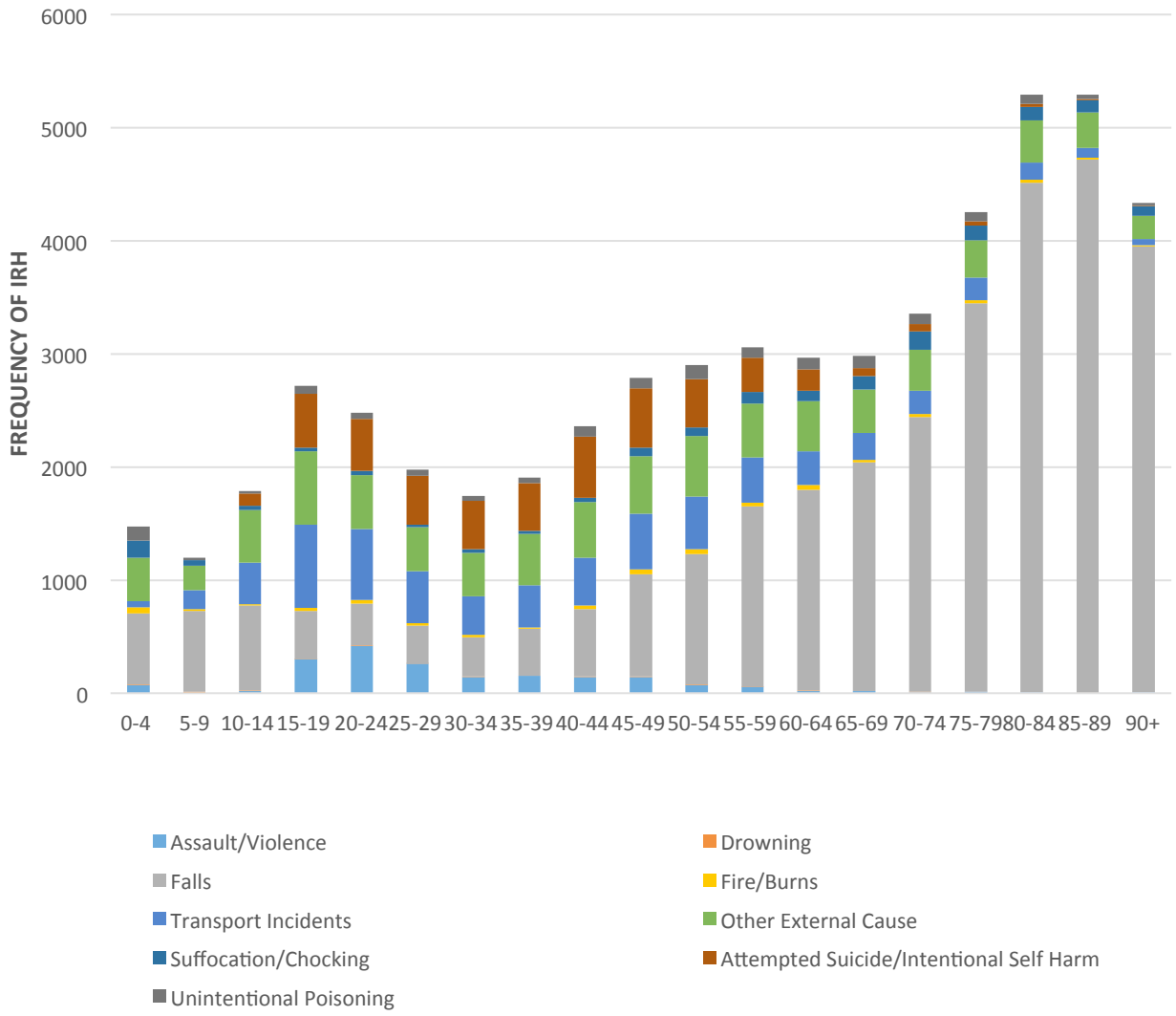
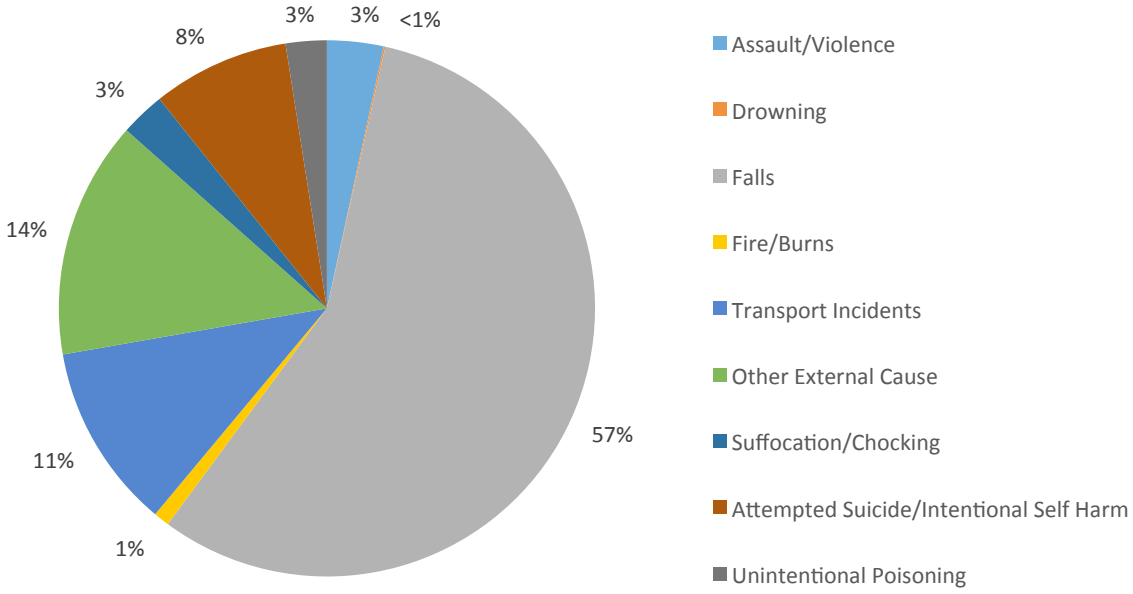


Figure 2: Percentage of external cause for injury-related hospitalizations (IRH) in Nova Scotia, all age groups, 2005–2013



Injury-related Deaths (IRD), 2005–2012

Figure 3 provides the frequency of all major external causes of injury leading to death by age group in Nova Scotia from 2005–2012. The most common cause of fatal injury changes substantially across age groups. While motor vehicle collisions and suicide/self-harm are the most common types of fatal injury in youth and young adults, falls are the most common cause of fatal injury for all ages over 65 years.

Figure 3: Frequency of external cause for injury-related deaths (IRD) in Nova Scotia, by age group, 2005–2012

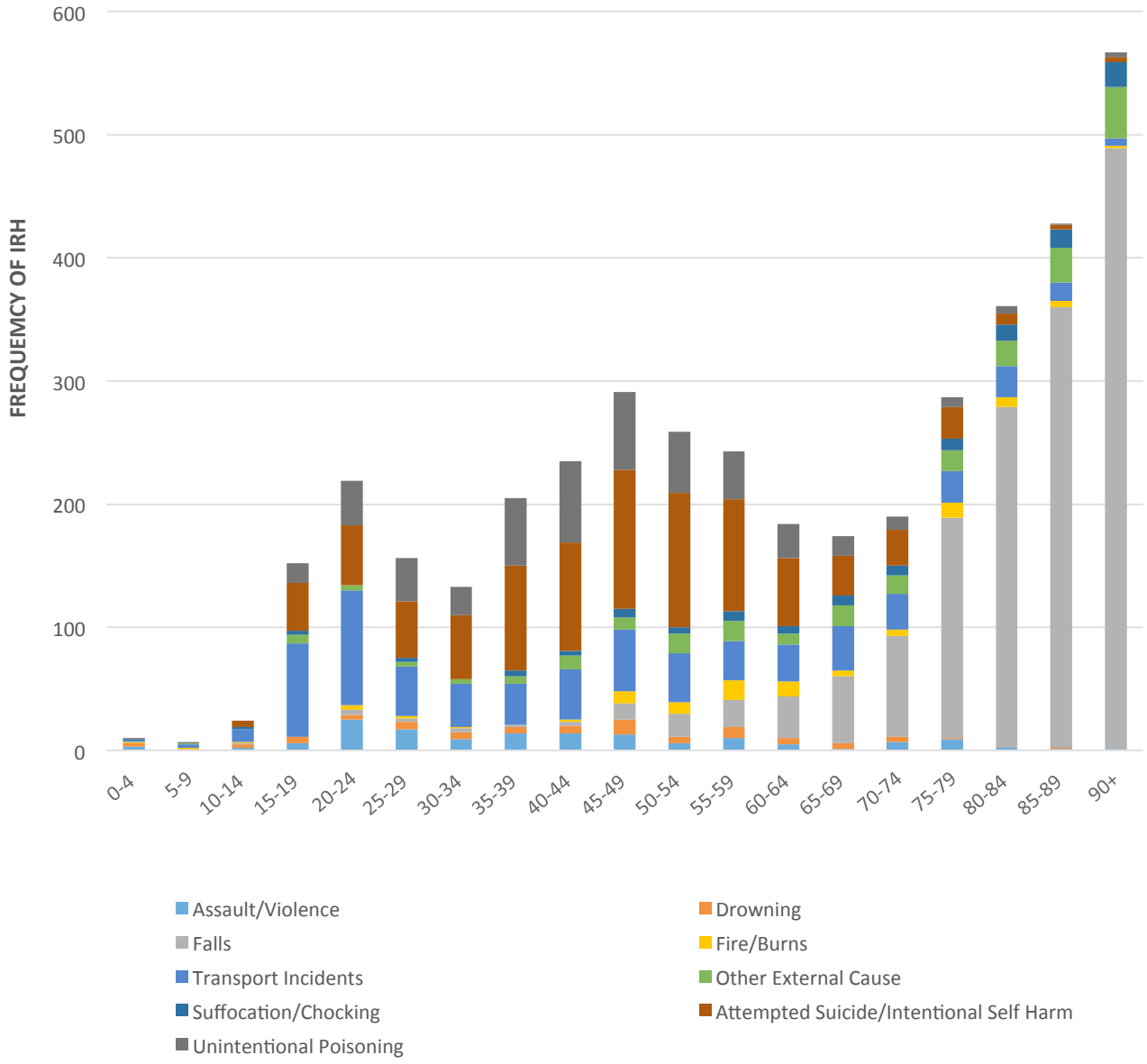


Figure 4 illustrates that falls are the leading cause of injury-related deaths among Nova Scotians of all ages, accounting for 37 per cent of all fatal injuries. For the senior population, falls account for 67 per cent of all external cause of injury (not shown in figure).

Figure 4: Percentage of external cause for injury-related deaths (IRD) in Nova Scotia, all age groups, 2005–2012

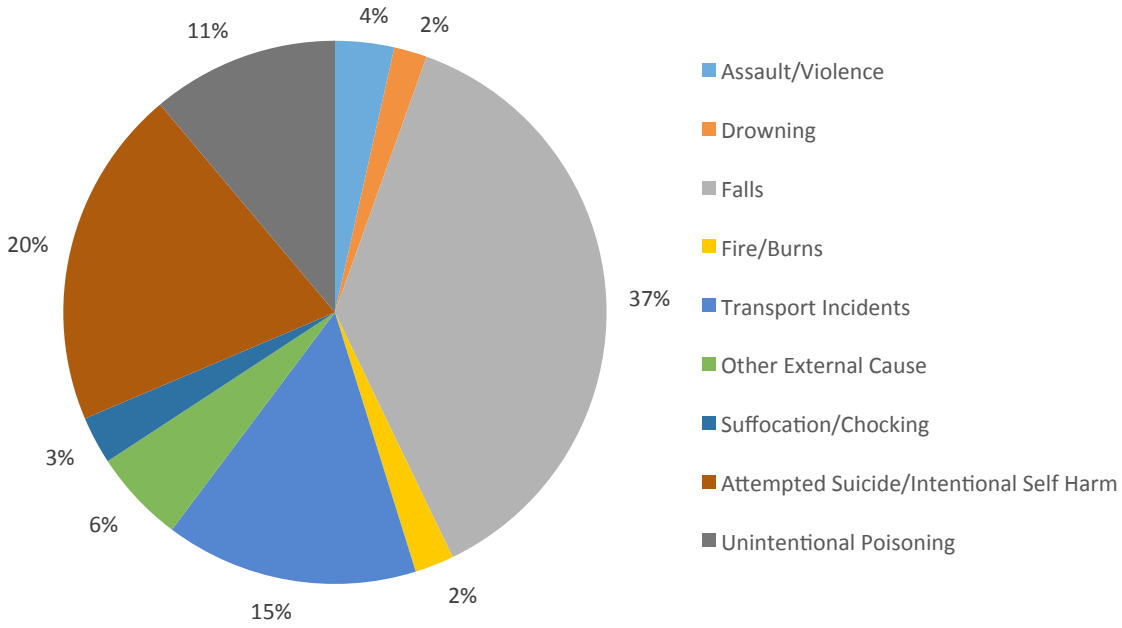


Figure 5 shows the rate of fall-related hospitalizations for all age groups. The rate of fall leading to hospitalizations increases dramatically among the senior population. This trend is also observed among seniors for fall-related deaths (Figure 6).

Figure 5: Rate per 100,000 for fall-related hospitalizations (FRH) in Nova Scotia, by age group, 2005–2013

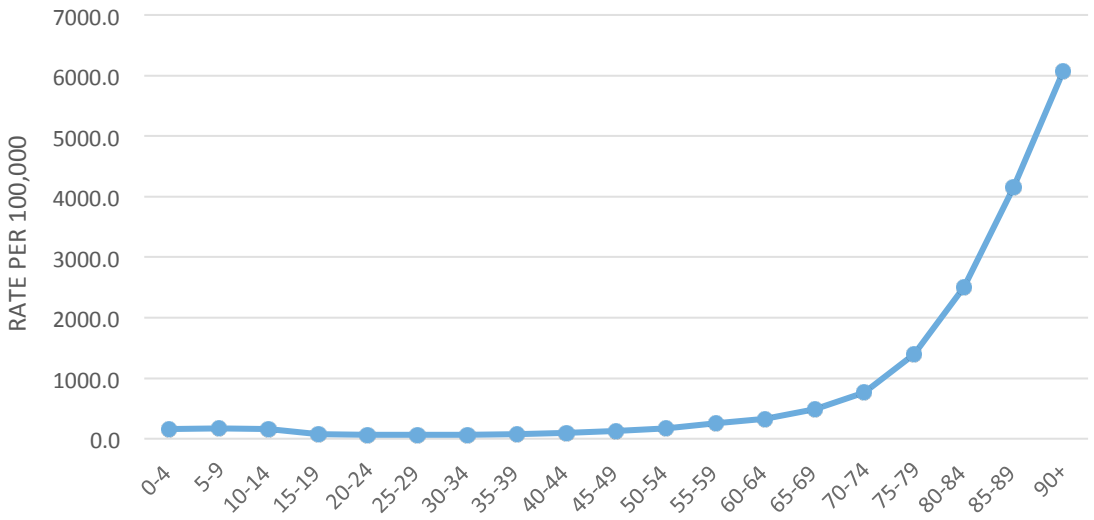
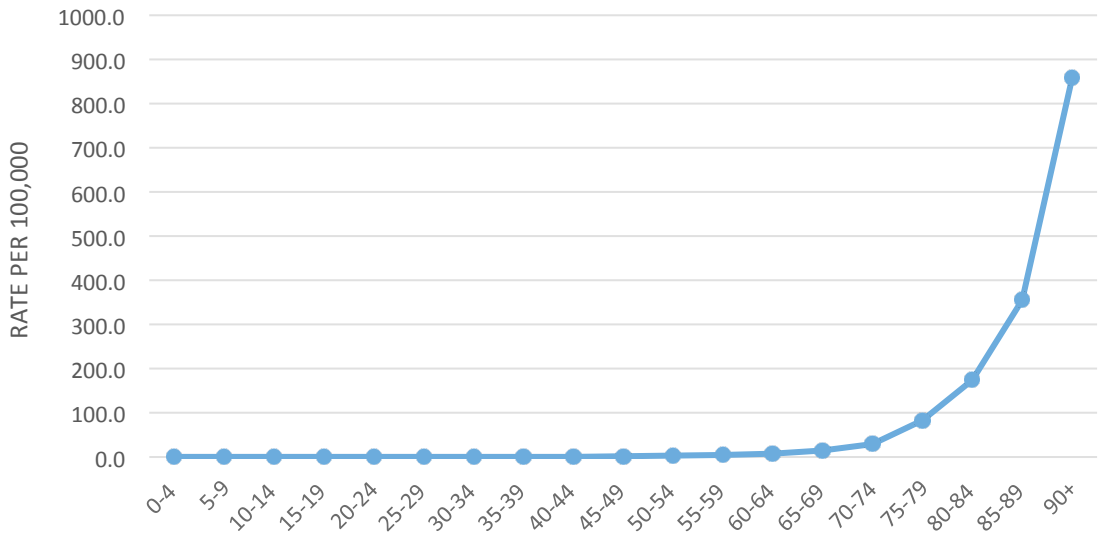


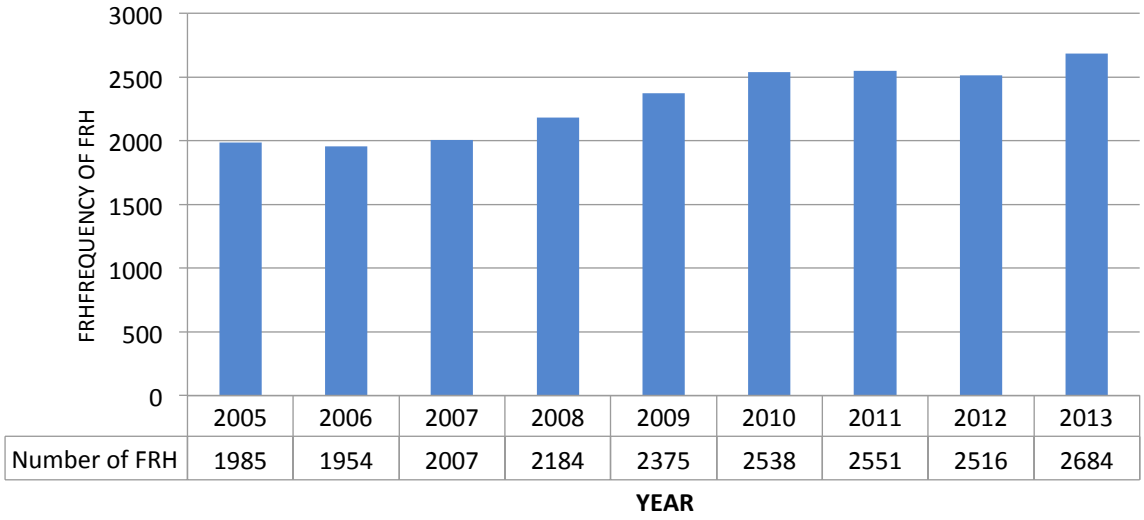
Figure 6: Rate per 100,000 for fall-related deaths (FRD) in Nova Scotia, by age group, 2005–2012



Fall-related Hospitalizations and Deaths among Nova Scotia Seniors

There were 20,794 fall-related hospital admissions among seniors in Nova Scotia between 2005 and 2013, with an average of 2,310.4 falls per year (Figure 7).

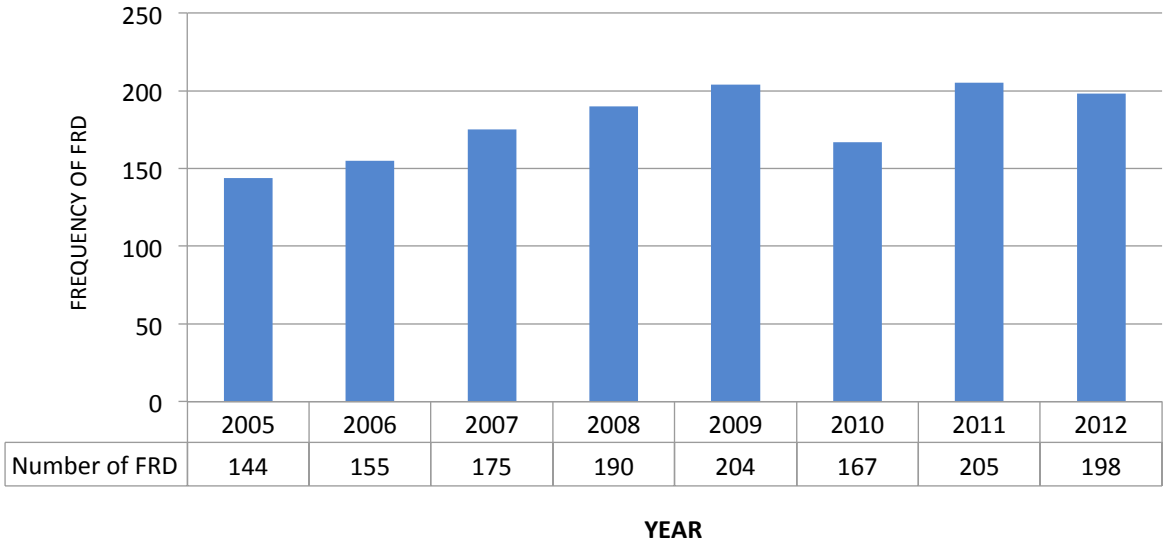
Figure 7: Frequency of fall-related hospitalizations (FRH) per year among seniors (65+)



	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of FRH	1985	1954	2007	2184	2375	2538	2551	2516	2684

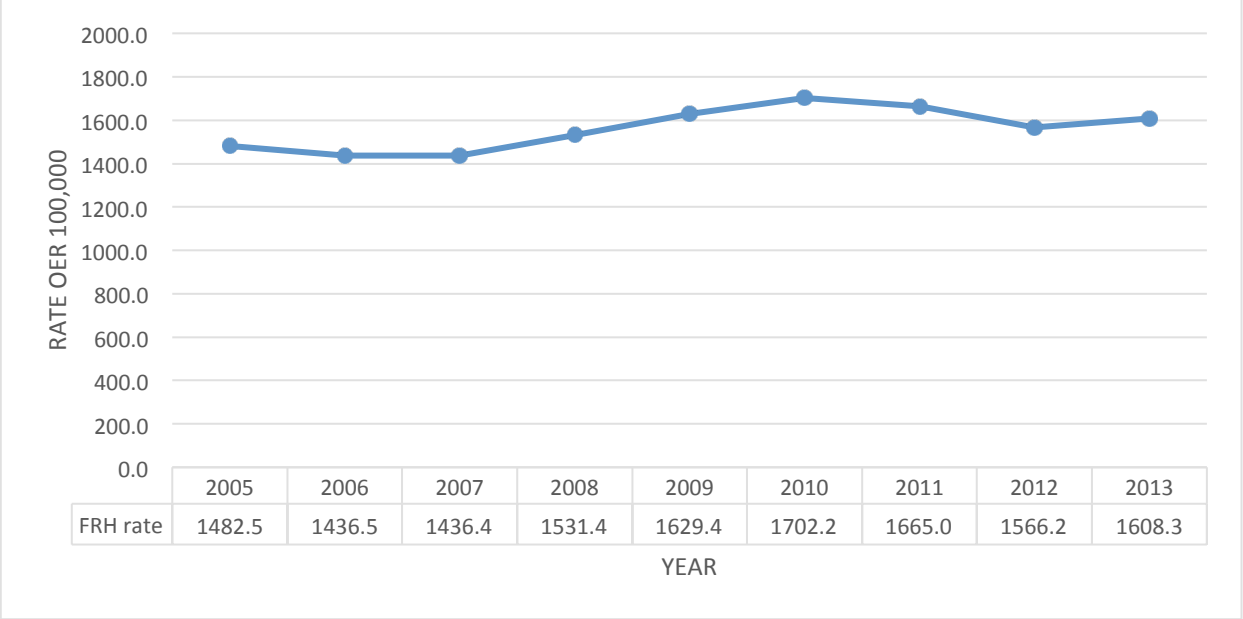
There were 1,438 fall-related deaths among seniors in Nova Scotia between 2005 and 2012, with an average of 179.75 fatal falls per year. Figure 8 provides an overview of the number of fall-related deaths per year.

Figure 8: Frequency of fall-related deaths (FRD) per year among seniors (65+)



In real numbers, the overall frequency of fall-related hospitalizations increased from 2005 to 2013; however, as the population in Nova Scotia continues to age, data indicates that the rate per 100,000 seniors remained relatively steady over the years examined (Figure 9).

Figure 9: Rate per 100,000 for fall-related hospitalizations (FRH) per year among seniors (65+)



Although the overall frequency of falls among seniors in Nova Scotia increased over the years, the rate remained relatively stable (Figure 10).

Figure 10: Rate per 100,000 for fall-related deaths (FRD) per year among seniors (65+)

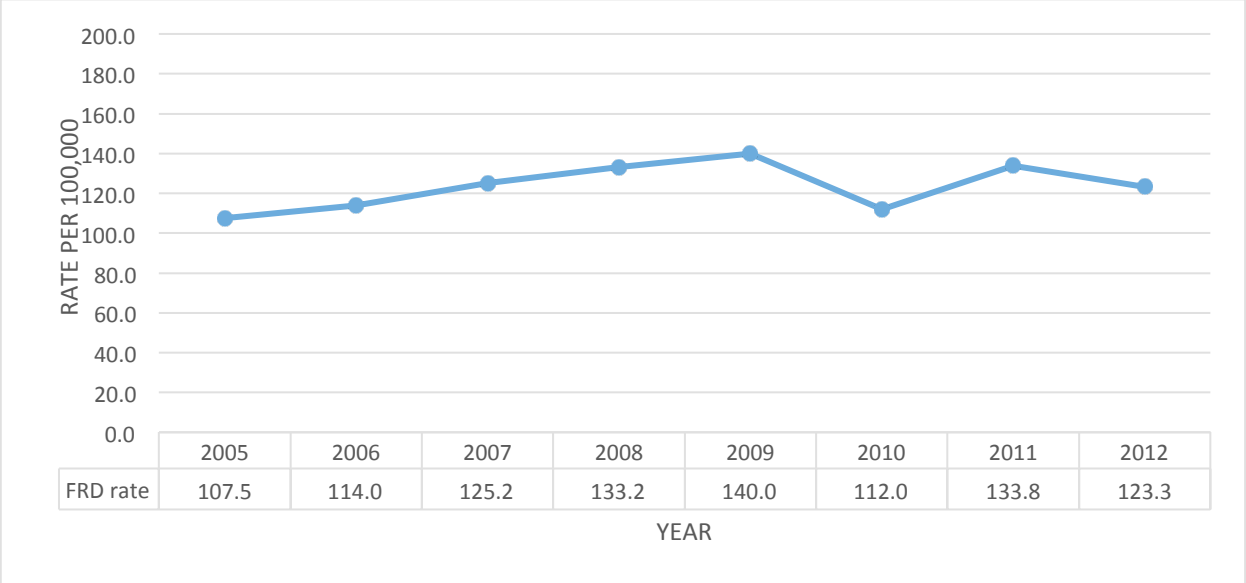


Figure 11 provides an overview of fall-related hospitalizations among seniors in Nova Scotia by Nova Scotia Health Authority Zone. At a rate of 1,390.2 per 100,000 senior population, Central Zone had the lowest rate of fall-related hospitalizations while the highest rate was Western Zone at 1,774.1 per 100,000 senior population. Figure 12 presents the rate of fall-related deaths by Zone. The highest rate of fall-related deaths was in Central Zone at 130.5 per 100,000 and the lowest was Eastern Zone at 80 per 100,000 population.

Figure 11: Rate per 100,000 for fall-related hospitalizations (FRH) among seniors (65+), by Zone, 2005–2013

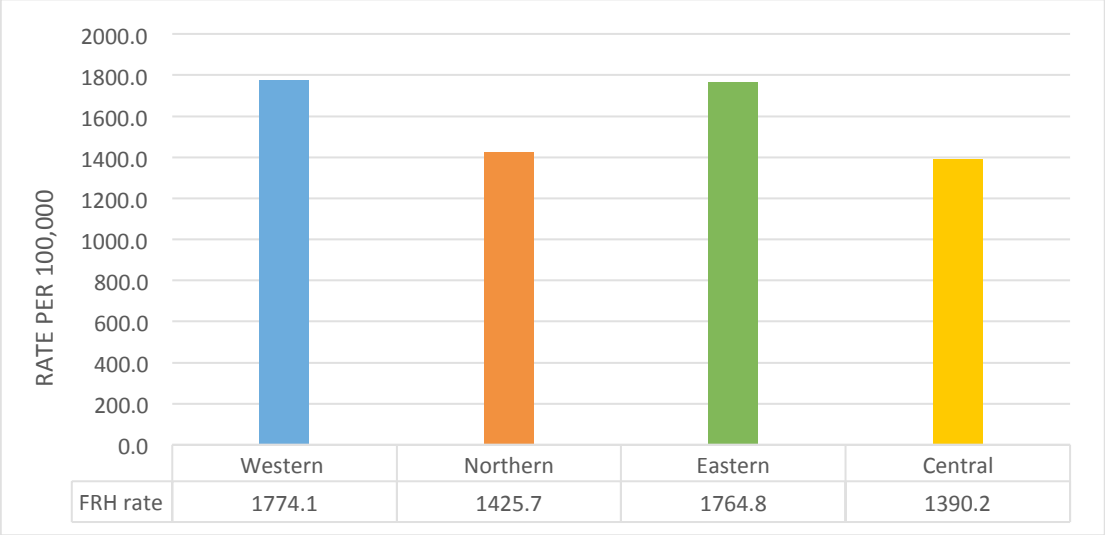
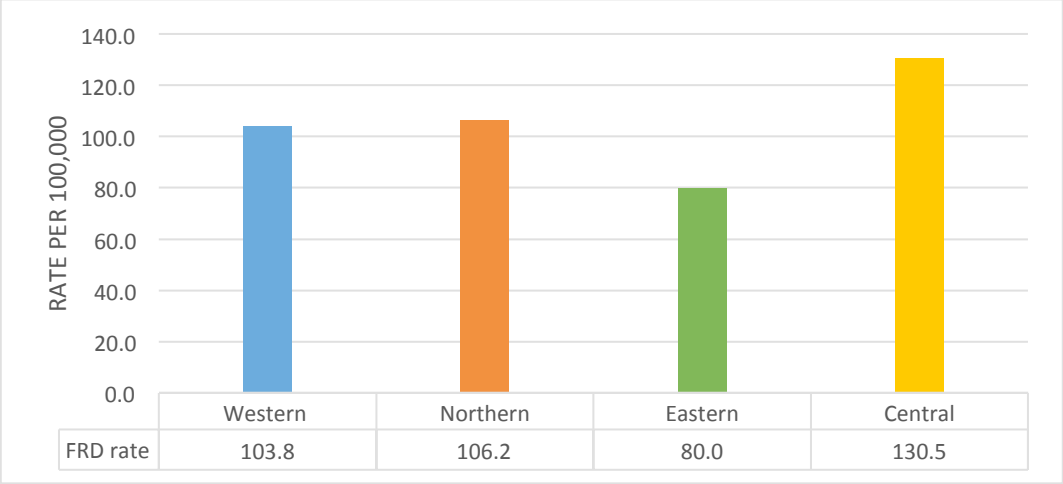
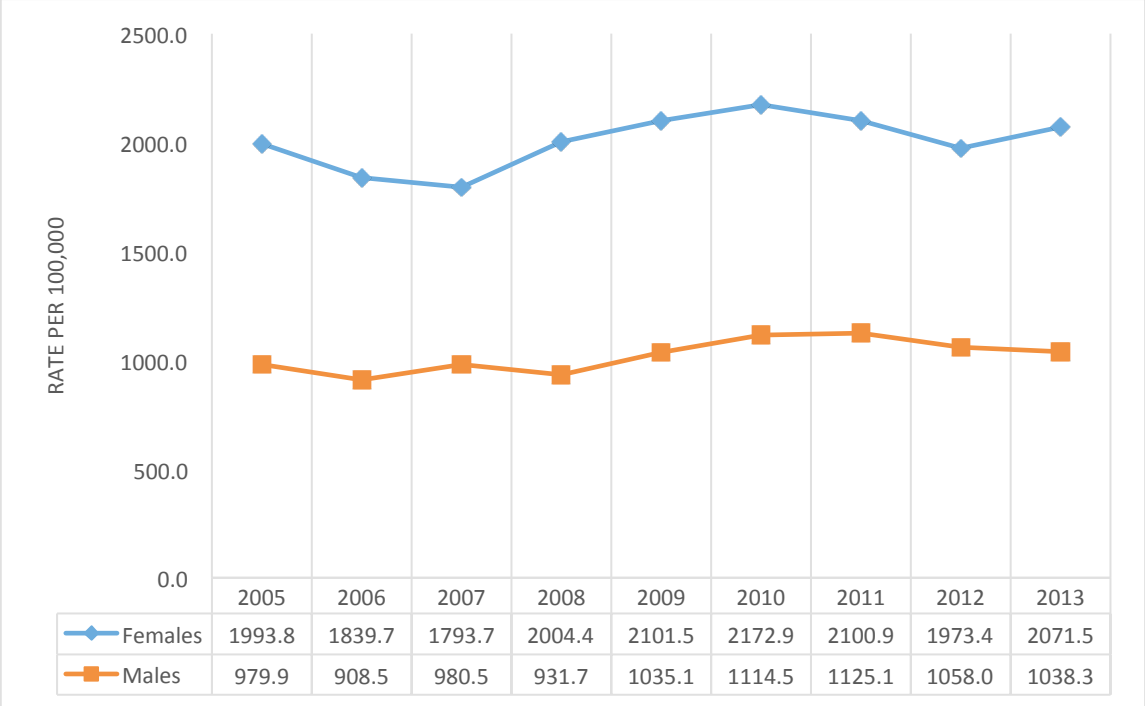


Figure 12: Rate per 100,000 for fall-related deaths (FRD) among seniors (65+), by Zone, 2005-2012



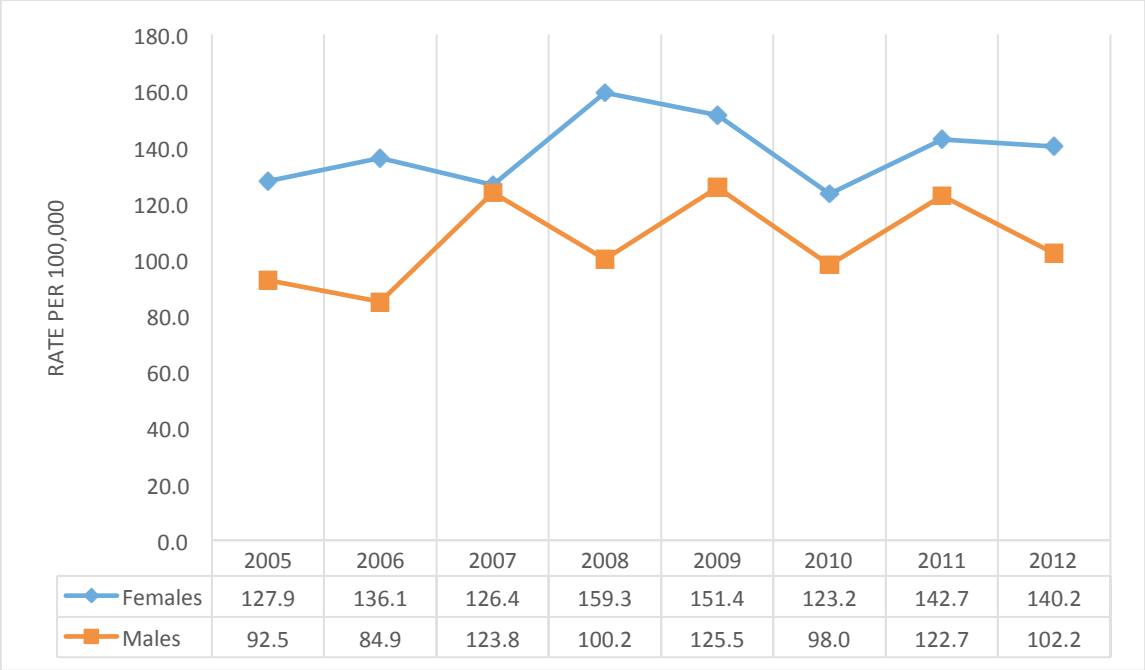
Women aged 65 years and older were twice as likely to have fall-related hospitalizations as men in the same age group (Figure 13). Between 2005 and 2013, female Nova Scotians aged 65 and older had an average rate of 2,005.8 per 100,000 senior population in comparison to a rate of 1,019.1 per 100,000 among male seniors.

Figure 13: Rate per 100,000 for fall-related hospitalizations (FRH) per year among seniors (65+), by gender, 2005–2013



The fall-related death rate for women age 65 and older was higher than for men (Figure 14). The average rate of fall-related deaths among women was 138.4 per 100,000 and among men it was 106.2 per 100,000.

Figure 14: Rate per 100,000 for fall-related deaths (FRD) per year among seniors (65+), by gender, 2005–2012



	2005	2006	2007	2008	2009	2010	2011	2012
Females	127.9	136.1	126.4	159.3	151.4	123.2	142.7	140.2
Males	92.5	84.9	123.8	100.2	125.5	98.0	122.7	102.2

The age-based rates of fall-related hospitalizations (Figure 15) and fall-related deaths (Figure 16) demonstrate that both increase with age, with the highest rates among those aged 90 years and older and the lowest rates among those aged 65–69 years.

Figure 15: Rate per 100,000 for fall-related hospitalizations (FRH) among seniors, by age group, 2005–2013

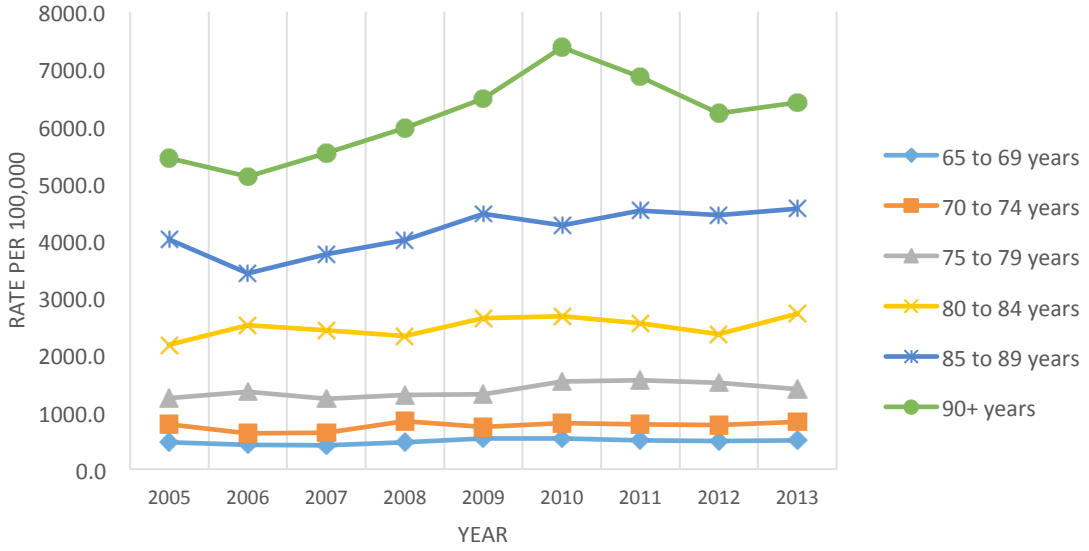
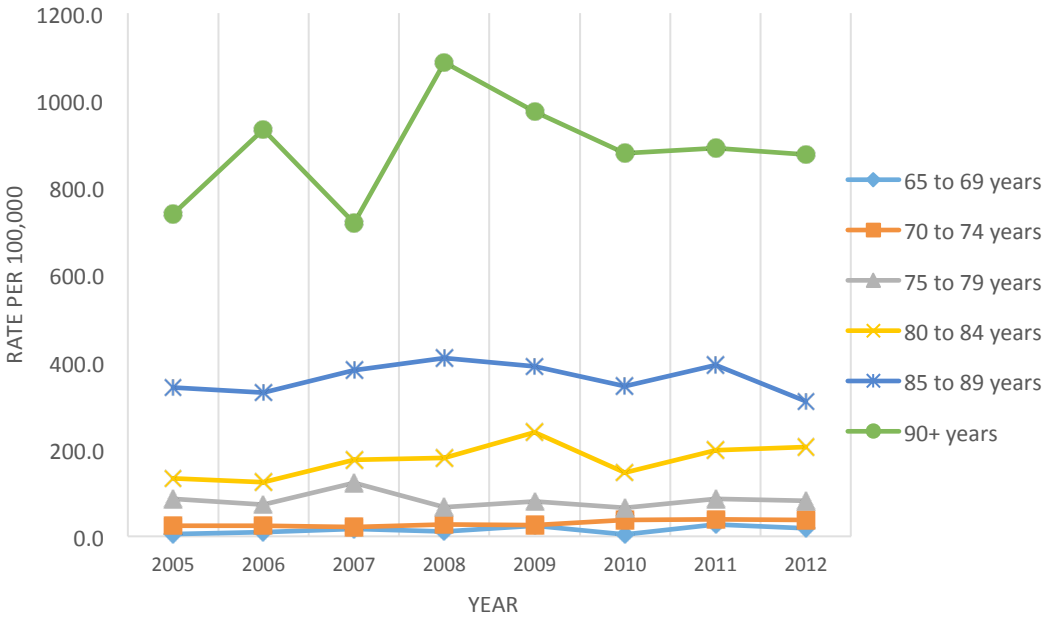


Figure 16: Rate per 100,000 for fall-related deaths (FRD) among seniors, by age group, 2005–2012



Anatomic Site of Injury for Fall-related Hospitalizations and Deaths among Nova Scotia Seniors

Figure 17 shows the anatomic site of injury for seniors admitted to hospitals due to a fall. The majority were hospitalized as the result of a hip fracture (42 per cent) followed by injuries to the upper extremities (15%) and both the torso and lower extremities at (12 per cent). For fall-related deaths, hip fractures account for 53 per cent of deaths while 14 per cent of deaths can be attributed to traumatic brain injury (TBI) (Figure 18).

Figure 17: Percentage of anatomic site of injury for fall-related hospitalizations (FRH) among seniors (65+), 2005–2013

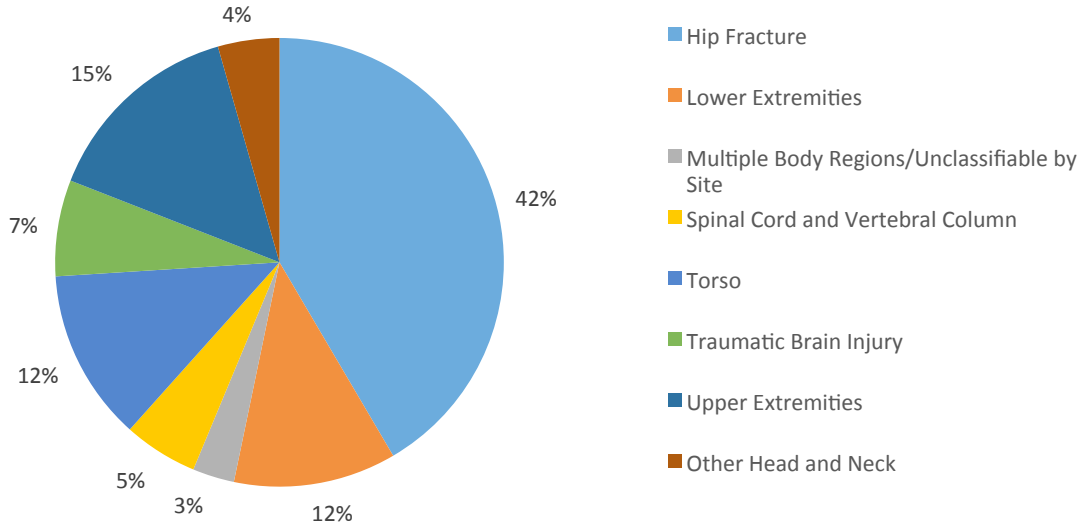
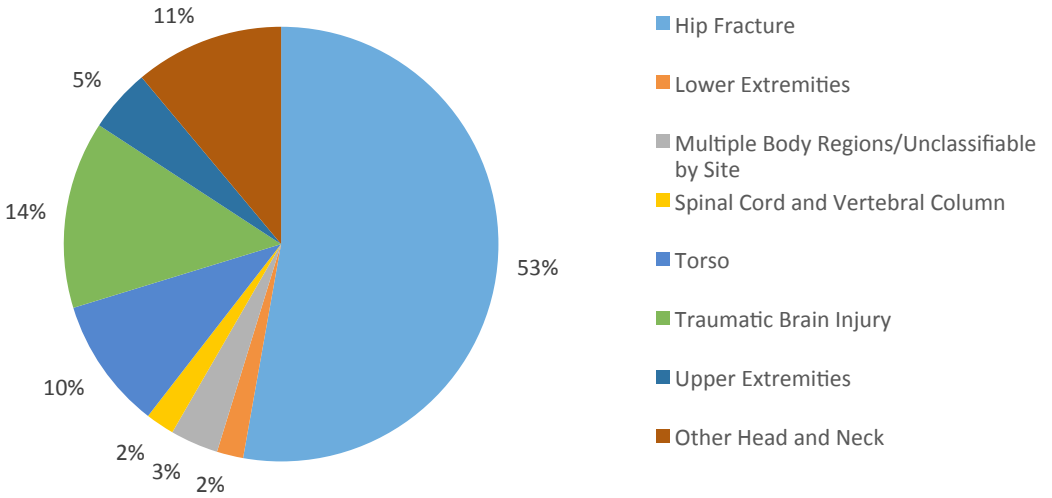


Figure 18: Percentage of anatomic site of injury for fall-related deaths (FRD) among seniors (65+), 2005–2012



Figures 19 and 20 provide an overview of the rate of fall-related hospitalizations and fall-related deaths by sex specific to hip fracture. For hip fractures, the rate of fall-related hospitalizations is higher in females in every age group. For fall-related deaths, the rate for hip fractures is similar between males and females.

Figure 19: Fall-related hospitalizations (FRH) specific to hip fracture among seniors (65+), 2005–2013

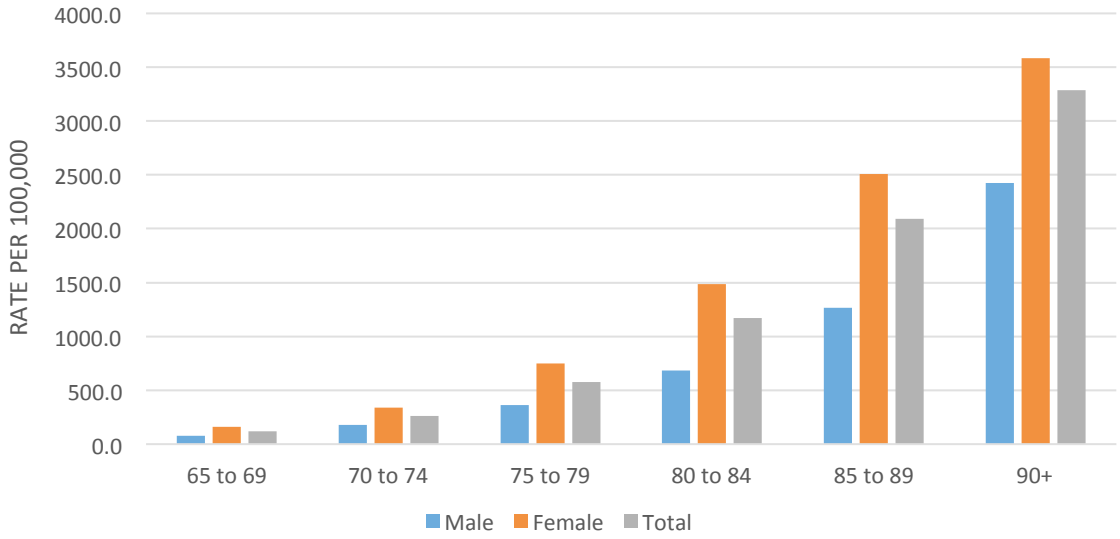
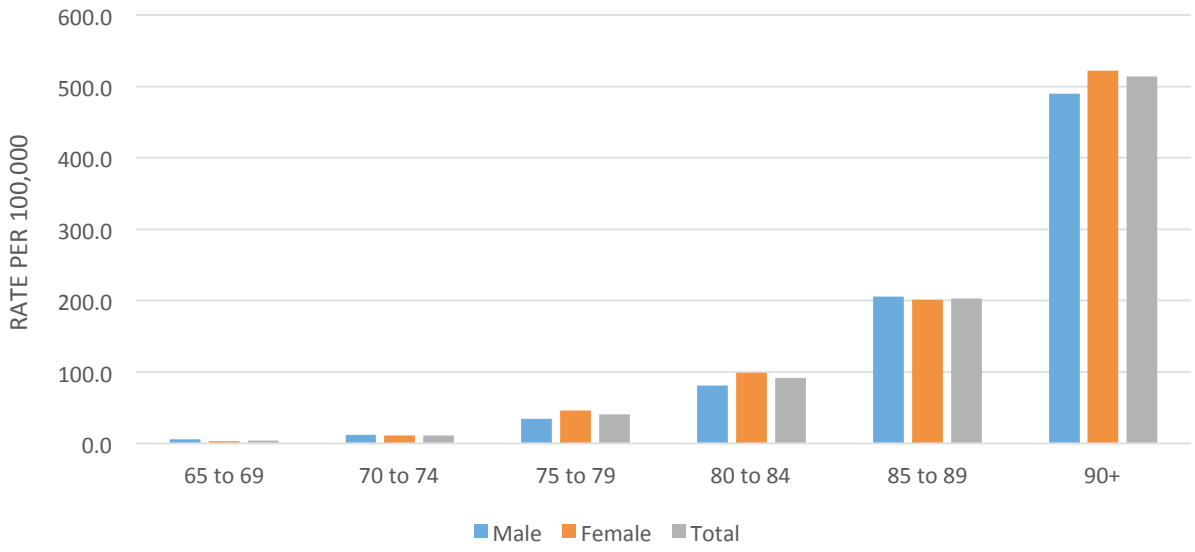


Figure 20: Fall-related deaths (FRD) specific to hip fracture among seniors (65+), 2005–2012



Figures 21 and 22 provide an overview of the rate of fall-related hospitalizations and fall-related deaths by sex specific to TBI. For TBI, the rate of fall-related hospitalizations and fall-related deaths is higher in males in every age group.

Figure 21: Fall-related hospitalizations (FRH) specific to traumatic brain injury among seniors (65+), 2005–2013

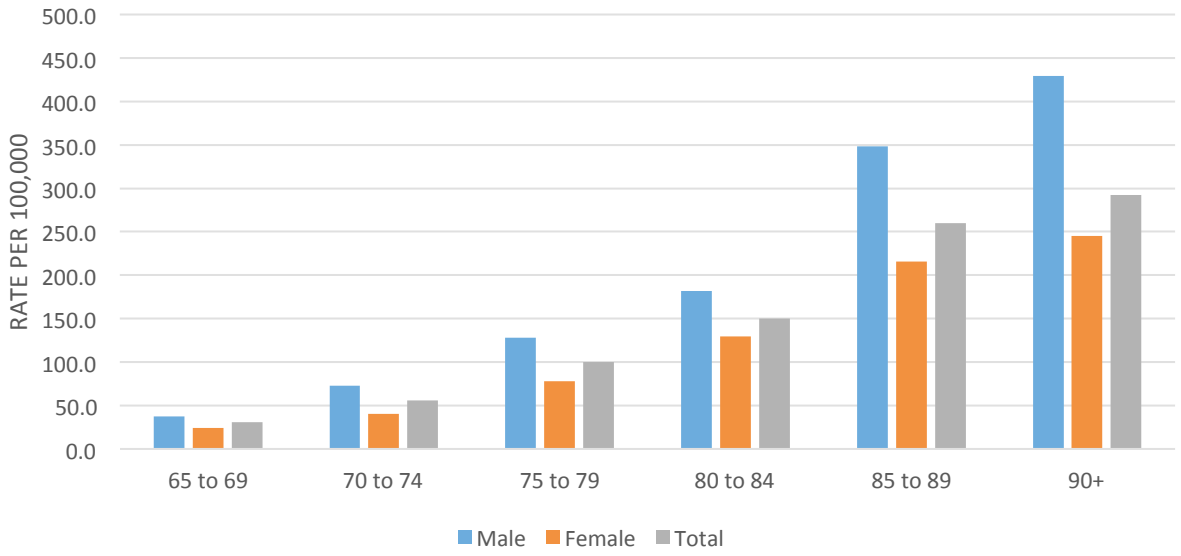
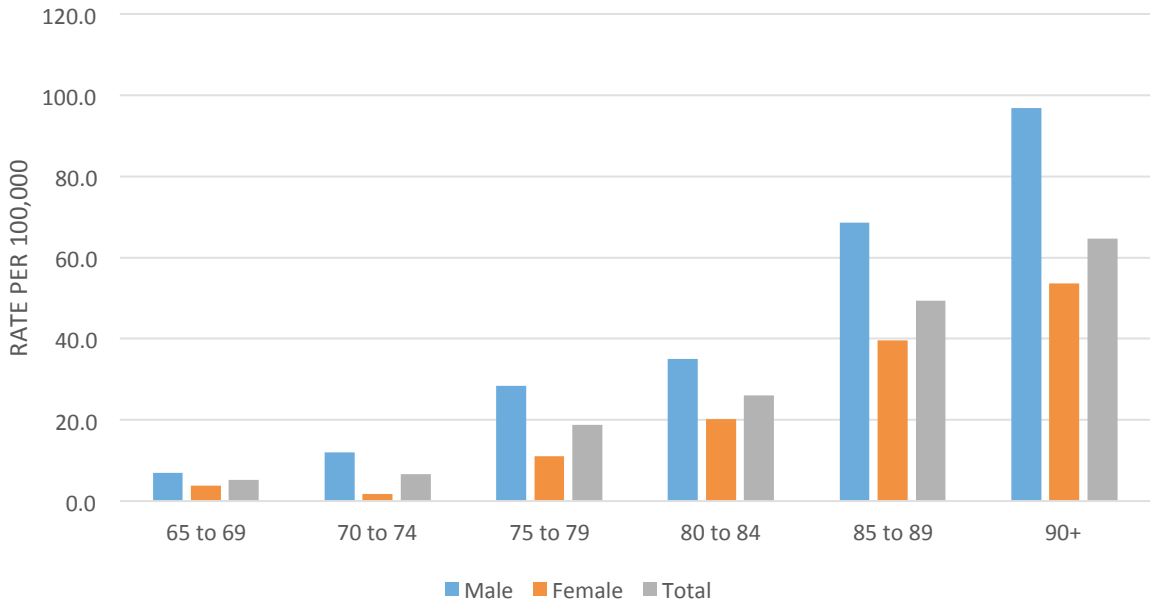


Figure 22: Fall-related deaths (FRD) specific to traumatic brain injury among seniors (65+), 2005–2012



Location of Injury for Fall-related Hospitalizations and Deaths among Nova Scotia Seniors

The majority of seniors who were hospitalized experienced the fall in their home (63 per cent). The second most common locations were in a residential facility (14 per cent) and other/unspecified location (13 per cent) (Figure 23). For fall-related deaths, seniors experienced a fall in the home 59 per cent of the time and in a residential institution 27 per cent (Figure 22).

Figure 23: Location of injury identified for fall-related hospitalizations (FRH) among seniors (65+), 2005–2013

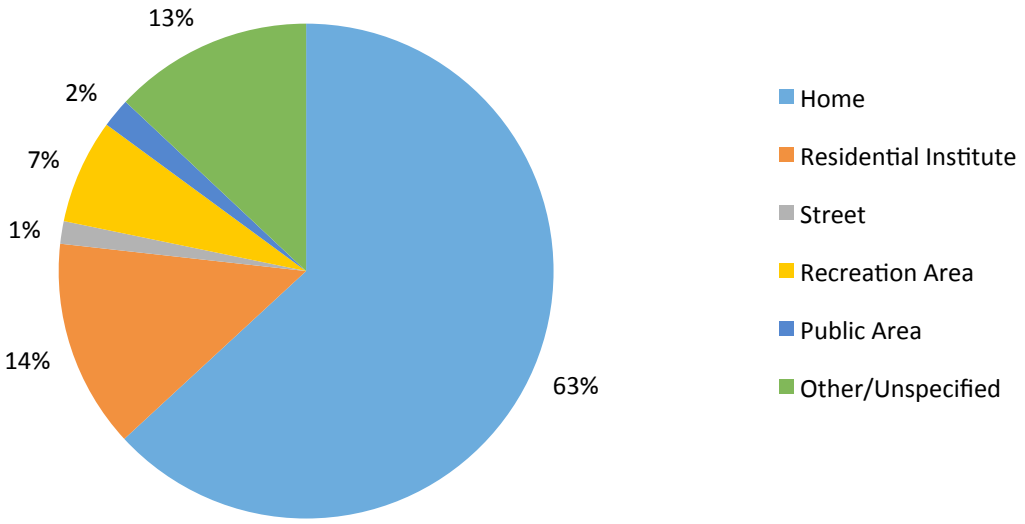
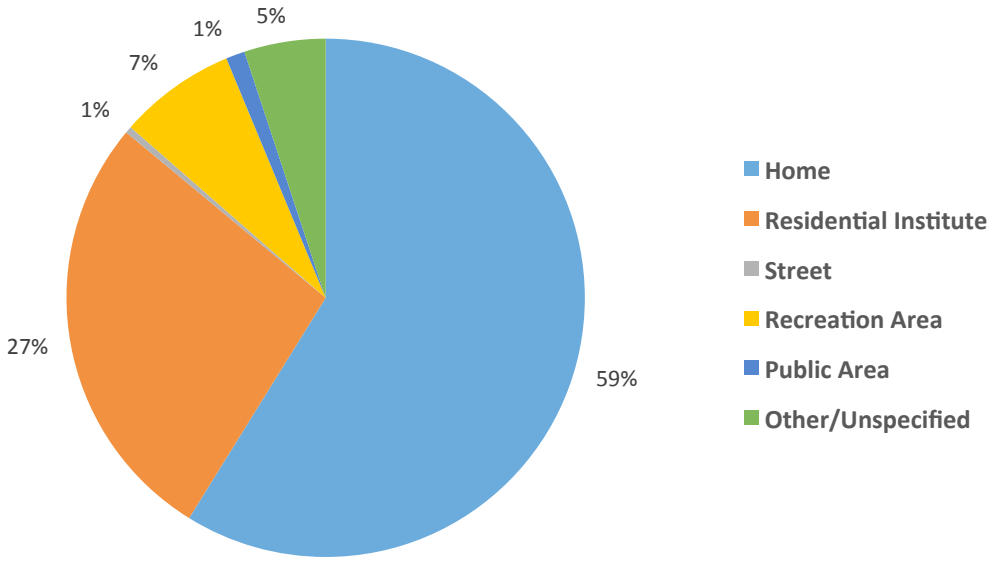


Figure 24: Location of injury for fall-related deaths (FRD) among seniors (65+), 2005–2012



Hospitalization Outcomes Resulting From Fall-related Injury among Nova Scotia Seniors

Figure 25 provides an overview of the average length of stay in hospital (days) due to a fall among seniors for both acute care and alternative level of care. While the average length of stay remains fairly steady after the age of 70 for acute care days, the average number of days for alternative level of care days increases steadily with each age group. Table 1 indicates that the likelihood of mortality from fall-related hospitalizations increases with age among seniors.

Figure 25: Average length of stay in hospital designated as acute versus alternative level of care (ALC) days among seniors (65+) for fall-related hospitalizations (FRHs) in Nova Scotia, 2005–2013

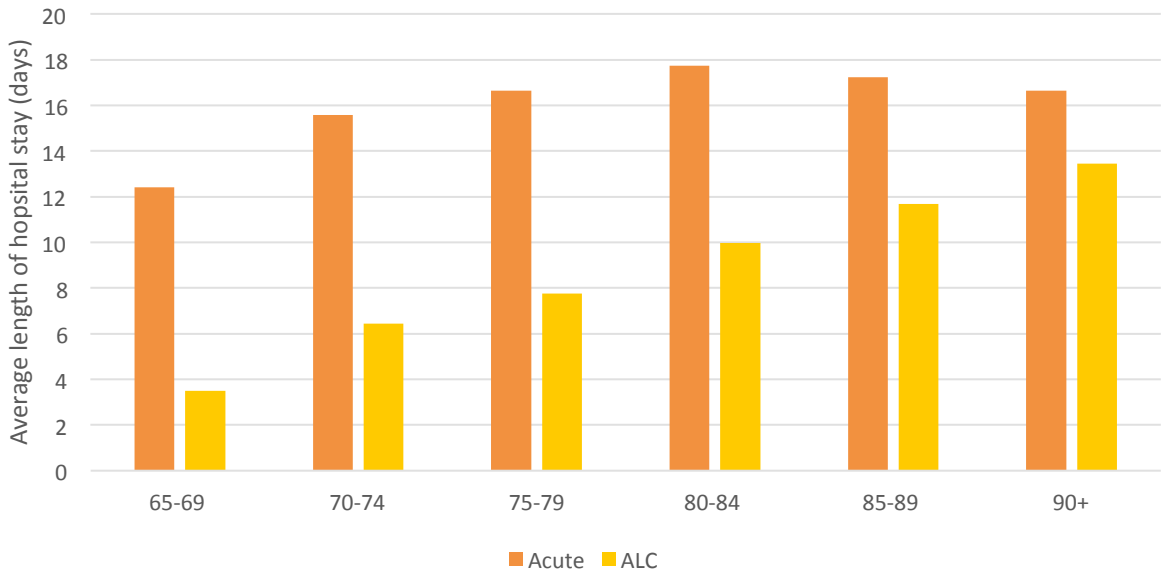


Table 1: Frequency and percentage of fall-related injury hospitalizations and in-hospital deaths among seniors (65+) in Nova Scotia, 2005–2013

Age Group	Hospitalizations (n)	Died (n)	Died (%)
65-69	1921	100	5.2
70-74	2272	155	6.8
75-79	3150	286	9.1
80-84	4105	403	9.8
85-89	4204	504	12.0
90+	3353	592	17.7
TOTAL	19005	2040	10.7

Section 2: Evidence Scan

Section 2 describes the results of a scan, which included a review of the academic and grey literature to determine promising policy approaches to preventing falls among seniors. The purpose of the review was not to undertake a comprehensive review of the literature of the evidence and best practice interventions related to falls prevention in seniors. Rather, the aim was to identify best practice policy approaches to preventing falls among seniors rather than approaches targeted at the individual (e.g., educating seniors, risk assessments, educating providers, etc.). Policy approaches in various settings, including the home, community, and healthcare system, were also of interest. While there is an extensive body of literature related to best practice interventions to prevent falls in seniors, including many systematic reviews and syntheses, there is less information available on policy approaches.

The review revealed interventions that hold promise for falls prevention in Nova Scotia across settings, including the need for multifactorial approaches based on risk, screening and risk assessments, education of various audiences, appropriate use of equipment, assessment and modification of environmental hazards, physical activity/exercise, and effective health management. The literature review report organized the policy approaches according to three areas: healthy public policy, organizational policies, and clinical practice guidelines. A group of key stakeholders met to assess the findings of the rapid review and identify potential policy options for Nova Scotia.

Methods

A brief review of the academic literature related to falls prevention among seniors was conducted with a focus on systematic reviews. The PubMed and Cumulative Index of Nursing and Allied Health (CINAHL) databases, Cochrane Library, and National Guidelines Clearinghouse were searched for English language articles since 2005. The search used appropriate terminology, alternative spellings and synonyms, Boolean operators, and relevant syntax for the requirements for each database. The search strategies included terms such as Fall* OR Fracture* AND Prevention & control (subheading) OR preventive health care OR primary prevention OR secondary prevention OR accident prevention OR preventive medicine OR prevent* AND senior* OR aged OR elderly OR old* OR resident* AND guideline* OR systematic-review* OR meta-analysis OR synthesis* OR recommendation* OR consensus OR literature-reviews*. The work or phases were searched as free text keywords and also as subject headings where available. The searches yielded 139 results. Title and abstract of all search results was reviewed for relevance. A selection of 27 articles was obtained and reviewed in further detail. Relevant findings are included in this report.

A search of systematic reviews and selected sources of grey literature related to falls prevention in seniors was conducted. Potential sources of grey literature were identified by the consultant in collaboration with DHW, and by searching relevant organization websites.

The following relevant websites were reviewed:

- Age-friendly Communities Hub Canada: http://afc-hub.ca/
- BC Injury Research and Prevention Unit: http://www.injuryresearch.bc.ca/search/Fall+Prevention+in+seniors/
- Canadian Fall Prevention Education Collaborative: http://www.canadianfallprevention.ca/cfpc-e-learning/

- Center for Disease Control: http://www.cdc.gov/
- Centre of Excellence on Mobility, Fall Prevention and Injury in Aging – UBC – Vancouver Coastal Health Research Institute: http://www.hiphealth.ca/research/research-projects/centre-of-excellence-on-mobility,-fall-prevention-and-injury-in-aging/
- Department of Health and Human Services, Victoria, Australia: https://www.google.ca/#q=victoria+health+in+australia
- Falls Prevention Center of Excellence: http://stopfalls.org/
- Finding Balance Alberta: http://www.findingbalancealberta.ca/
- Local Health Integration Network Collaborative: http://www.lhincollaborative.ca/
- New South Wales Government, Australia: http://www0.health.nsw.gov.au/policies/pd/2011/pdf/pd2011_029.pdf and http://www.cec.health.nsw.gov.au/programs/falls-prevention
- Ontario Injury Prevention Resource Centre: http://www.oninjuryresources.ca/
- Parachute: http://www.parachutecanada.org/
- Prevention of Falls Network for Dissemination ProFouND: http://profound.eu.com/
- Prevention of Falls Network Europe: http://profound.eu.com/
- Queensland Health, Australia: https://www.health.qld.gov.au/stayonyourfeet/
- Regional Geriatric Program of Ontario: http://rgps.on.ca/
- Safer Healthcare Now: www.saferhealthcarenow.ca
- WHO: http://www.who.int/en/
- Winnipeg Regional Health Authority: http://www.preventfalls.ca/

Best Practice Interventions

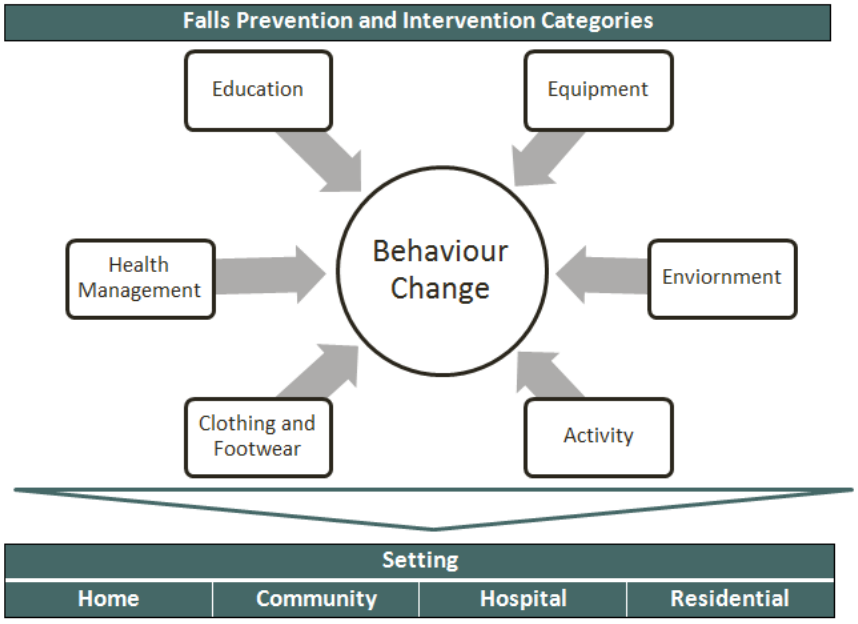
Multifactorial Approaches Based on Risk

As noted, there is an extensive body of research on best practices in falls prevention in seniors. A notable finding in many systematic reviews and other major publications is the importance of a multifactorial approach that targets selected individuals or groups of seniors based on their risk profiles.[9 10 11 12 13 14 15] Risk factors for falls among seniors are complex and interactive, and are categorized as biological/intrinsic, behavioural, environmental, and social/economic. In addition, risk factors for seniors may differ depending on where they live (e.g., private home in the community or institutional setting such as long-term care, residential care, or hospital), and research highlights the importance of tailoring interventions based on settings.[16 17]

Recent publications that synthesize the best practice interventions for falls prevention in seniors consistently discuss the following components: education, equipment, environment, activity, and health management.[18 19] These best practice interventions apply across settings, although the focus of the strategies/support may differ based on the setting.

In *Fall Prevention Programming, Designing, Implementing and Evaluating Fall Prevention Programs for Older Adults*, a comprehensive model for falls prevention is described that encompasses a multifactorial approach.[20] The following figure presents the model and associated categories.

Figure 26: The BEEEACH Model Categories and Settings of Assessment and Interventions



The BEEEACH categories include

- ***Behaviour change***: a common goal of all strategies, targeting interventions to client's readiness for change
- ***Education:*** of program participants
- ***Equipment:*** appropriate use of mobility aids and assistive devices
- ***Environment:*** assessment and modification of the environmental hazards in the home and public places
- ***Activity:*** physical and social
- ***Clothing and footwear:*** appropriate for risk reduction
- ***Health management:*** including medical assessments and referrals, medication reviews, vision tests, bone health, healthy nutrition and hydration, and chronic disease management

A brief description of key components of best practice interventions is provided below, including screening and risk assessments, education, equipment, environment, activity/exercise programs, and disease and health management.

Screening and Risk Assessments

Screening and assessment are the first steps in determining falls risk with two main goals: to tailor interventions to individual risk profiles and to maximize resources by targeting interventions to those at greatest risk.[21] Risk assessments range from simple self-assessments for individuals at lower risk (typically in the community) to comprehensive assessments by a multi-disciplinary healthcare team for those identified as high risk (typically frail elderly in institutions such as long-term care).[22] A number of validated fall risk assessment tools (FRAT) exist for community settings, residential care, and acute

care.[23] [24] [25] In Ontario's *Integrated Falls Prevention Framework and Toolkit*, it is recommended that a falls prevention program should aim to screen/assess as many seniors aged 65+ as possible in their catchment area to determine risk for falls.[26]

Education

Education is a key component of multifactorial falls prevention programs for seniors. It includes a range of activities targeted at audiences including seniors, formal and informal caregivers, healthcare providers, and community members.[27] [28] There are various aims of education, including increasing awareness about the issue, building understanding about the importance of prevention and best practice interventions, and building knowledge and skills to effectively implement and evaluate best practice interventions.[29] [30] [31] There are many education resources available for various audiences and settings that are compiled in several synthesis documents.[32] [33] [34] [35] There is a large body of literature on providing effective education and facilitating behaviour change that is beyond the scope of this environmental scan but would be important to incorporate within education initiatives for all audiences (e.g., education should be used in combination with other strategies, facilitating readiness to change, effective communication and motivational interviewing, adult education principles, etc.).

A notable education resource for healthcare providers being implemented in a variety of jurisdictions across Canada is the Canadian Fall Prevention Curriculum (CFPC). This resource provides those working with seniors the knowledge and skills needed to apply a public health approach to the prevention of falls and fall-related injuries. The goal of the Canadian Falls Prevention Curriculum is to give participants the knowledge and skills needed to operate from an evidence-based approach to seniors' falls and fall-related injury prevention, including

a) an approach to selection of interventions consistent with proven prevention strategies
b) an understanding of how to integrate falls-prevention/injury-reduction programming into existing seniors' health services policies and protocols
c) knowledge of appropriate evaluation and dissemination techniques[36]

Equipment

Appropriate use of equipment (e.g., walkers, wheelchairs, scooters, canes, wheelchair and stair lifts, non-slip mats, grab bars, chairs for tubs, and hip protectors) based on a comprehensive assessment by a provider with relevant clinical expertise is an important best practice intervention in falls prevention in seniors.[37] [38] [39] Training seniors how to use recommended equipment, including how to incorporate it into their daily life, is important in ensuring uptake. Ontario's *Fall Prevention Framework and Toolkit* discusses new and innovative technologies to help prevent falls, such as sensor technology (e.g., placed into soles of shoes for better balance, or worn on the wrist or ankle to detect subtle gait and balance problems) and cushioned or bouncy flooring.[40] Also included in this category, and particularly relevant in prevention of falls in the community, are anti-slip shoe devices for icy surfaces and ice picks for canes.[41] [42]

Environment

The assessment and modification of environmental hazards as a strategy for reducing falls risk is an important component of a multifactorial approach to falls prevention.[43] [44] [45] [46] Environmental

modification can be made across settings, and potential areas to consider for potential falls risk are outlined in *Fall Prevention Programming: Designing, Implementing and Evaluating Fall Prevention Programs for Older Adults:*

- indoor (door, furniture, walkways)
- outdoor (lighting of entrances, level walkways cleared of hazards)
- public places (sidewalks, crosswalks, lighting (adequate, no-glare, easily accessible switches)
- flooring (non-slip, level)
- stairs (geometry, visibility, handrails)[47]

Activity/Exercise

There is strong evidence of the benefits of physical activity/exercise for reducing the risk of falling among community-dwelling seniors.[48 49 50 51 52 53] Recent systematic reviews examining exercise programs have identified key features of effective individual or group programs. For example, these features may

- be tailored to individual capacity
- focus on balance, gait, muscle strength, flexibility endurance, or coordination
- reflect cultural preference
- be affordable, accessible, and enjoyable
- include motivation to sustain a routine over time
- target the general community and those at high risk
- include group or individual home-based programs
- include referrals for other risk factors as required
- include walking training (note that high-risk individuals should not be prescribed brisk walking programs)[54 55 56]

There are many best practice programs compiled in various synthesis documents.[57 58]

Health Management

Many medical conditions are known to contribute to falls risk; however, when properly assessed and treated, many of these risks can be reduced or eliminated.[59] In the Ontario *Integrated Provincial Falls Prevention Framework and Toolkit*, health management is divided into three sub-categories: optimal management of underlying health conditions and addictions, medication management, and modification of diet and nutrition.

Diseases and conditions known to contribute to falls risk need to be appropriately managed to reduce the impact of the disease or condition on the risk for falls. For example, appropriate treatment of visual problems, cardiovascular disorders, and hypotension has been demonstrated to reduce falls.[60 61 62]

Seniors are sometimes prescribed a large number of different medications, particularly if they have multiple chronic conditions. There is strong evidence for the association between an increasing number of medications and falls among seniors. Research indicates that regular review, adjustments, and removal of unnecessary medication under the supervision of an appropriate healthcare provider (e.g., physician or pharmacist) can help in reducing falls.[63 64 65 66]

Modification of diet and nutrition can help to prevent diseases and disorders that may increase the risk of falls.[67] [68] [69] Poor nutrition and dehydration cause poor physical reaction at the time of an injury as well as acting as a barrier to recovery.[70] [71] Vitamin and calcium supplementation is a popular intervention to help strengthen bone and increase muscle strength, which can help to reduce falls and injury from falls. Recent systematic reviews indicate that vitamin D taken with additional calcium supplements helps to reduce the risk of falls, particularly for a senior deficient in vitamin D.[72] [73] [74] [75]

Policy Strategies/Approaches

The best practice interventions for falls prevention described in the previous section have all been demonstrated to be effective in reducing falls among seniors. However, falls prevention is rarely approached in a systematic way at the national or provincial/regional levels.[76] This section of the report identifies broader policy approaches and strategies that can help to provide a more systematic approach to falls prevention. These policies or strategies typically include a range of the different interventions already described in this report.

In *Fall Prevention Programming: Designing, Implementing and Evaluating Fall Prevention Programs for Older Adults*, Scott notes that an integrated approach is required at three levels of change (practice, organizational supports, and system functions) to create a sustainable change in practice.[77] The levels of change in implementation are relevant for policy approaches and were therefore used to help organize the findings of this section.

At the system level, healthy public policy approaches that incorporate public health/population health principles are important in supporting falls prevention among seniors, particularly in the community. These broader policy frameworks based on population and public health approaches include the development and implementation of healthy public policy to help create supportive environments and facilitate system change. In some cases, these broader policy approaches may not be specific to falls prevention but may address aspects of falls prevention.

At the organization and practice levels, policy approaches such as the development and implementation of guidelines/clinical practice guidelines and organizational policies are strategies to help support practice change and implementation of best practice interventions. Given that a number of the best practice interventions described in the literature are targeted at healthcare providers across settings (e.g., primary care providers in the community, providers in hospitals and long-term care, and formal and informal care providers in residential care settings and seniors' homes), organizational and practice level strategies help to make sure these interventions are incorporated within the practice of care providers in various settings.

This section therefore describes policy approaches that support implementing best practices at the system, organizational, and practice level:

- healthy public policy (community/system level)
- organizational policies (organization level)
- clinical practice guidelines (practice level)

Healthy Public Policy

"Healthy public policy is characterized by an explicit concern for health and equity in all areas of policy and by an accountability for health impact. The main aim of healthy public policy is to create a supportive environment to enable people to lead healthy lives."[78] The creation of supportive physical and social environments to support health and well-being is a key tenet of health promotion and population health initiatives.[79] Based on the search criteria for this review, there were not a lot of specific examples of healthy public policy related to falls prevention found in the current literature search. This may be due to the fact that healthy public policy is developed in the broader context of supporting safe and healthy environments for overall aging.

Policy Frameworks

Many jurisdictions have developed strategies or frameworks that help facilitate system change through a variety of approaches, including policy, and guide and support their efforts in implementing falls prevention interventions and creating communities that support seniors' health. Although the components of strategies may vary slightly, there is agreement across policy documents and frameworks about the importance of and need for intersectoral collaboration to effectively support falls prevention for seniors in all settings.[80 81 82 83 84 85 86] Given the complexity and intersectionality of risk factors, including biological, behavioural, social and economic, and environmental, there is a need for governments at all levels and organizations from various sectors, including not-for-profit and community groups, to work together to support required community and system changes.

British Columbia, a leader in falls prevention nationally and internationally, applies a public health approach to the issue, including establishing a business case for falls prevention through epidemiological updates, standardized falls prevention training, a focus on targeting those most at risk, a collaborative approach to the integration of evidence with existing practice, and a cycle of improvement based on evaluation. The importance of data systems; research and knowledge exchange; leadership of policy makers, healthcare providers and community leaders; and resources provided by federal, provincial, and regional governments are key enablers to the application of the public health approach.[87]

A report by the Organisation for Economic Co-operation and Development (OECD) that focuses on Sweden's policy approach to the prevention and management of falls for seniors notes that multidisciplinary and forward-looking approaches are critical for any policy addressing falls prevention specifically, and safety and risk for seniors more generally.[88] This report also notes the importance of several factors that help to make sure the policy is effectively implemented at a national level:[89]

- Clearly define responsibilities of all actors and provide consistent governance structures.
- Clarify the legislative framework and ensure consistency in application of legislation and regulations at the local level; support local governments in doing this.
- Collect data that can help to inform policy development (e.g., number of falls in various settings, outcomes related to falls, etc.).
- Assign responsibility for the implementation and co-ordination of cross-sectoral prevention policies to a designated, centralized body.

These factors, while noted specifically in relation to Sweden, should be addressed within any broader policy framework for falls prevention.

In Australia, the Victoria state government has created a comprehensive website to support falls prevention work and the implementation of best practices. Resources include supports for local governments/municipalities to help promote falls prevention, including information to create policy changes for falls prevention. The toolkit notes that, "local government appears to have an opportunity for falls prevention policy within each of its service, regulatory and administrative functions."[90] Local governments are encouraged to develop an overall safety policy or incorporate safety within existing access policies to help ensure that all new buildings are accessible and falls safe. A sample policy is provided within the toolkit (reproduced in the Appendix 3 of this report). Other resources include an environmental audit form for the community to help identify environmental hazards.

Age-friendly Communities

In 2005, the World Health Organization (WHO) launched the *Global Age-Friendly Cities Initiative* to help support active aging and encourage cities to become more age-friendly.[91] Age-friendly Community (AFC) initiatives provide a policy approach to facilitating healthy and supportive environments for seniors.[92] The AFC policy approach, while not specific to falls prevention, can help to address the range of risk factors that contribute to falls, particularly environmental and socio-economic conditions. The WHO defines an age-friendly community as follows:

> "An age-friendly city encourages active aging by optimizing opportunities for health, participation and security in order to enhance quality of life as people age. In practical terms, an age-friendly city adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities." (p. 1)[93]

There are eight key areas that can be addressed to help create more age-friendly communities. These areas are

- outdoor spaces and buildings
- transportation
- housing
- social participation
- respect and social inclusion
- civic participation and employment
- communication and information
- community support and health services[94]

The outdoor spaces and buildings domain is particularly related to fall prevention, as ensuring the safety of built environments through the development of healthy public policy is critical. A community's physical environment, outdoor spaces and buildings, and houses have a strong influence on personal mobility and safety from injury, including falls prevention in seniors. Essential features of age-friendly communities related to the built environment include sidewalks that are well lit and kept in good shape, outdoor areas and public buildings that are safe and accessible, and housing that is safe and well designed for seniors.[95] In Vancouver's Age-friendly Action Plan, 60 actions are identified within various areas. One area, *Physical Built Environment*, contains a policy-related action to "revise the building by-

law to improve accessibility and allow more seniors to age in place." The specifics related to how this action is implemented are not provided.[96]

The Public Health Agency of Canada (PHAC) and all 10 provinces actively promote the AFC concept as a way to facilitate healthy and supportive environments for seniors in Canada.[97] There is extensive information about the work of various communities on AFC initiatives; however, a detailed review of this work is outside the scope of this literature review. PHAC notes that the overall process of developing an Age-friendly Community includes the following steps:[98]

- Establish an advisory committee that includes the active engagement of seniors.
- Secure a local municipal council resolution to actively support, promote, and work towards becoming age-friendly.
- Establish a robust and concrete plan of action that responds to the needs identified by seniors in the community.
- Demonstrate commitment to action by publicly posting the action plan.
- Commit to measuring activities, reviewing action plan outcomes, and reporting on them publicly.

Detailed AFC implementation guides emphasize the importance of conducting a local needs assessment as part of developing the plan of action to make communities more age-friendly.[99] [100] [101]

Accessibility

The issue of accessibility is being addressed across Canada in the design and construction of buildings, homes, and outdoor spaces. Principles of universal design say that all spaces should inherently be accessible to all users regardless of age, mobility, visual, auditory, or cognitive ability. Increasingly, spaces are being designed or retrofitted to ensure this accessibility, and falls prevention can also be addressed through this lens. For example:

- The City of Ottawa has developed Accessibility Design Standards that respond to the needs of seniors for all new construction and redevelopment of buildings/facilities owned, leased, or operated by the municipality. It also has a barrier retrofit program that supports the retrofit and installation of improvements in accessibility that will also help to prevent falls, such as guards and handrails, improved lighting, and more accessible stairs.[102]
- BC Housing provides a funding program to help support homeowners and landlords in making changes to support independence, such as adding handrails or reflective/contrast strips to stairs or replacing unsafe floor coverings.[103]
- Nova Scotia Housing provides a funding program to help homeowners pay for home adaptations so seniors with low incomes can stay in their homes independently for longer periods of time.[104]
- The Canadian Mortgage and Housing Corporation (CMHC) provides many resources related to accessibility, but these are educational/informational tools rather than policy documents.[105]

Building Codes

In *Fall Prevention Programming: Designing, Implementing and Evaluating Fall Prevention Programs for Older Adults*, the importance of safe outdoor environments and public spaces in preventing falls in the community are discussed. The need to work with and engage organizations that design, build, and

regulate the codes for new housing for seniors is identified.[106] Scott et al. note the need for "increased pressure to influence policy makers to entrench falls prevention in all jurisdictions that affect the health and safety of seniors, which includes improved building codes to reduce injury from falls caused by faulty stair design or lack of sidewalk maintenance."[107]

A detailed review of existing building codes was outside the scope of this rapid review. In Canada, the National Building Code is already consistent with universal design principles that include accessibility features.[108] National and provincial building codes are regularly reviewed and updated, and these processes can provide an opportunity to address falls prevention through regulation and policy. For example, when the National Building Code was last reviewed in 2014, the run length (the depth) of stairs was revised. Because this can be a factor in falls prevention, the Seniors Health Knowledge Network developed a document to help encourage healthcare professionals and others to submit feedback on this topic in support of a change that would help to prevent falls (*Public Review Process for the National Building Code of Canada: How to Submit Feedback*).[109] In addition, the CMHC provides an educational resource that highlights aspects of building codes, such as stair height and depth, that apply to preventing falls on stairs.[110] These types of educational tools can help to inform input into building code reviews, which in turn can ensure that these regulations and policies reflect falls prevention. In addition to the more general building codes, there may also be design guidelines and policies that apply specifically to buildings for seniors, such as long-term care facilities, and these can be a means to enhance falls prevention as well, although the selected documents reviewed for this research did not identify any specific guidelines related to falls prevention. These documents include, for example, *Design Guidelines for Continuing Care Facilities in Alberta*[111] and *Long Term Care Facility Requirements (Space and Design) - Appendix B*.[112]

Organizational Policies

As noted above, to help support improvements in falls prevention within institutions, the *Reducing Falls and Injuries from Falls: Getting Started Kit* was created. This resource discusses the importance of organizational policy that includes the identification of roles and responsibilities of each care provider. It is noted that organizational policies should reflect a culture where all healthcare and non-healthcare providers and staff have a role to play in ensuring falls prevention reduction for client safety.[113] Organizational policies can also support regular safety checks and include environmental audits and modifications as a component of falls prevention strategies.[114] Individual organizations such as municipalities or healthcare facilities may also have falls prevention strategies that apply to seniors, to patients, or more broadly to employees and other individuals using the organization's premises (see, for example, *Falls Prevention Ambulatory Care Areas*[115] and *Human Resources Policies: Slips, Trips and Falls Prevention Policy*.[116] However, these individual policies were outside the scope of this rapid review.

The development and implementation of standards or required practices provides a broader policy approach to improving organization-level policies and interventions around falls prevention. In Canada, Accreditation Canada introduced a Required Organization Practice (ROP) in 2007 for falls prevention. ROPs are evidence-based practices that mitigate risk and contribute to improving the quality and safety of health services. Compliance with these ROPs provides a measure of Canadian healthcare organizations' efforts to improve patient safety and reduce injury from falls (Accreditation Canada, n.d.). The ROP requires all health services organizations to implement and evaluate a falls prevention strategy to be accredited.[117] From 2011 to 2013, the Falls Prevention Strategy ROP was evaluated in 153

healthcare systems, 143 acute care organizations, 267 long-term care organizations, 43 home care organizations, 19 mental health organizations, and 121 other organizations. Compliance rates with this ROP were 80 per cent in 2013.[118]

Outside of Canada, the Australian Commission on Safety and Quality in Health Care has developed National Safety and Quality Health Care Service (NSQHS) Standards. The primary aims of the NSQHS Standards are to protect the public from harm and to improve the quality of health service provision. The standards are integral to accreditation, as they determine how and against what an organization's performance will be assessed. One of the 10 standards is related to preventing falls and harm from falls. The standard describes the systems and strategies to reduce the incidence of patient falls in health service organizations and best practice management when falls do occur.[119]

Clinical Practice Guidelines

An important method of supporting the implementation of the latest evidence into care/practice of healthcare providers is through the development of clinical practice guidelines (CPGs), which aim to improve the safety and quality of care.[120] A number of guidelines to support effective practice have been developed to support the prevention of falls in seniors including, but not limited to, the American Geriatric Society and British Geriatric Society Practice Guidelines for the Prevention of Falls in Older Persons,[121] Preventing Falls and Harm From Falls in Older People: Best Practice Guidelines for Australian Community Care,[122] Clinical Guidelines for the Assessment and Prevention of Falls in Older People published by the National Institute of Health and Care Excellence,[123] and Prevention of Falls and Fall Injuries in the Older Adult: Nursing Best Practice Guidelines Program from the Registered Nurses' Association of Ontario (RNAO).[124]

As noted in the Nursing Best Practice Guidelines Program publication, guidelines should be "used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care."[125] This statement speaks to the importance of ensuring guidelines are effectively disseminated and building the competency of providers to implement the guidelines, as well as ensuring required organizational supports exist. Because CPGs are developed to promote best practice for populations of patients, they will have variable applicability to individual patients. They do not define a standard of care, but may inform the standard of care.[126]

An in-depth exploration of evidence-based strategies to support the uptake of clinical practice guidelines and facilitate practice change was out of scope of the current literature review. However, in one of the key documents on seniors' falls prevention, *Fall Prevention Programming: Designing, Implementing and Evaluating Fall Prevention Programs for Older Adults*, steps to help facilitate practice change are described, including clarity and simplicity of the message, readiness to change, engagement, leadership, consistency, local context, and effective relationships.[127]

Another valuable resource for supporting the implementation of practice change is the *Fall Prevention/Injury Reduction Getting Started Kit* collaboratively created by Safer Healthcare Now and the RNAO in 2010 (and updated in 2015).[128] [129] Safer Healthcare Now is a national program supporting Canadian healthcare organizations to improve safety through the use of quality improvement methods and the integration of evidence into practice. The toolkit summarizes organizational and system strategies to support adoption of evidence-based falls prevention interventions in practice, including use

of professional development, skilled implementation specialists, performance assessment for healthcare practitioners' competency development, and implementation teams.

Section 3: Key Informant Interviews on Policy Approaches for Fall Prevention

Phase 2 of the environmental scan consisted of interviews with selected key informants. The purpose of the key informant interviews was to help validate the potential policy options for Nova Scotia and gather more information about potential opportunities to enhance policy approaches for seniors' falls prevention in Nova Scotia. The key stakeholders who met to assess the findings from the literature review and identify policy options helped to identify potential key informants who were then contacted by DHW and invited to participate in an interview. The results of the interviews capture the activities and policy approaches that the individual key informants were aware of when interviewed and may not adequately summarize all ongoing activities in Nova Scotia relating to falls prevention policy.

Methods

A total of 10 key informants participated in an interview (Appendix 2). A one-page table providing a high-level summary of the findings from the literature review and identified policy options was produced and circulated to key informants prior to the interview, along with the interview questions (Appendix 3). The interviews were conducted by telephone, audio recorded with the permission of interviewees, and transcribed verbatim. The transcripts formed the raw data for analysis and were thematically analyzed using qualitative methods. Qualitative software, NVivo, was used to support the data analysis, including data coding and theming, comparing and contrasting, and synthesizing.

Findings

The following section presents the findings from the key informant interviews organized according to current policy approaches or opportunities to link seniors' falls prevention, challenges in supporting policy approaches to address seniors' falls prevention, and supports to help ensure linkages are made to advance policy for seniors' falls prevention.

❖ Current Policy Approaches or Opportunities to Link Seniors' Falls Prevention

The following provides a summary of current policy approaches related to seniors' falls prevention in Nova Scotia, as well as potential opportunities to link or further develop seniors' falls prevention policy options.

Description	Quotations
Theme: Age-friendly Communities and Aging in Place	
<u>Provincial Statements of Interest and Healthy Communities</u> • Statements of Interest are developed as policy statements of the provincial government under the Municipal Government Act to identify provincial interest in the use and development of land. There are five statements in effect, including	*"The statement of provincial interest is a provincial policy, and then the municipalities when they prepare their municipal plans, that's their municipal planning strategy and land use by-law. So that could be called an official plan in some other jurisdictions, and then it's regulated through the land use or zoning by-law. Those planning documents are expected to be what we call reasonably consistent with a statement of provincial*

Description	Quotations
one on housing. Municipal planning documents must be reasonably consistent with statements of interest, and provide direction and a framework for dealing with the issue. • A Statement of Provincial Interest on Healthy Built Environments is being developed through the Department of Municipal Affairs and *THRIVE!* (previously referred to as a Statement of Interest on Healthy Communities) and the *THRIVE!* interdepartmental committee is overseeing this work. • From the *THRIVE!* website: A Statement of Provincial Interest is being developed to help guide municipalities in their planning for communities that support healthy eating and physical activity. • There is the potential to incorporate falls prevention within the Statement of Interest. • Review Statements of Interest from other jurisdictions to see what is incorporated and how/if they address seniors' falls prevention. • Link to Healthy Communities work; bring a seniors' falls prevention lens to the work.	*interest … recognize in some cases, that municipalities, if they are making some good progress in a particular direction, we might not come down as strongly in terms of what we might like them to see in their documents … We have tried to provide some guidance in the ones that we currently have, and certainly in the work that we are presently doing with the one, and we're actually calling it, we've renamed it slightly, at least internally, and are calling it, healthy built environments, which we think is a little bit more focused on the area which we are currently working on."* *"… If falls prevention was … reflected in the healthy community statement of interest, then recognizing that that's only going to apply to the municipalities that already plan. Then that makes the MGA review a little more relevant in terms of what's already going on in the province because some of the issues that have been identified in the public consultation piece of this were whether or not there should be some level of mandatory planning, and whether it should apply to just maybe the statements of interest. So if those statements of interest did have [seniors' falls prevention] in there, and that it was made mandatory, it would go a little longer. That's the only way I could see the MGA review being relevant to falls prevention."*
<u>Active Transportation</u> • *THRIVE!* is developing an active transportation policy and plan to guide the provincial government and municipalities on design, planning, and funding active transportation infrastructure. • Work on active transportation being led through DHW and others (e.g., Department of Municipal Affairs, Department of Seniors), and some municipalities will also support seniors' falls prevention. • Walk and Roll Halifax is a consortium of people working to make HRM more walkable, bike-able, and wheelchair friendly.	*"… We're looking at active transportation … if you provide better environments for active transportation, walking particularly, I guess, riding a bike or whatever, but more for seniors, one could say walking, is that if you can improve those environments and make them safe and inviting for those people, then they're probably going to be healthier and stronger, and hence are less likely to have falls."* *"… There's a group or consortium of people who want to do something about crosswalk safety, and more broadly it's walkability, people who are passionate about making Halifax more walkable and bike-able and wheelchair friendly. And there's a big consortium ... Walk 'n Roll Halifax and it's a consortium of people … they just started …"*
<u>Housing</u> • Housing Nova Scotia manages public housing; they have been supporting aging-	*"… In the capacity of the senior units, [Housing Nova Scotia has] been making aging-in-place adaptations for some time … the past 20 years we've always been*

Description	Quotations
in-place adaptations to houses for many years. • There is a lack of safe housing for seniors, and this needs to be addressed through age-friendly and healthy communities' work. • As noted above, there is a Provincial Statement of Interest on housing; explore if there is the potential to connect seniors' falls prevention to this work and what other jurisdictions are doing.	*doing something on aging in place."* *"… The Department of Seniors is a key player, and I think any engagement with communities is important … working on … age-friendly community plans, that's been very revealing about the relative role of housing. It's got to be number one or number two as an issue. And so there are others, like transportation and other health, like the need for intergenerational programming and seniors that are isolated, there's a whole range of … economic development is another one. I think they really pale in some ways in comparison to the housing question, and I don't think there's an area in the province that isn't, even downtown Halifax, downtown Dartmouth, they don't have any appropriate seniors' housing solutions there …"*
<u>Partnerships</u> • Make linkages between Healthy Communities and Age-friendly Communities, and link in seniors' falls prevention. • Connect with Age-friendly Community Networks. • Link Aging Well Together Coordinators and Coalitions to age-friendly plans (the municipal plans) where they exist; age-friendly community plans are integrated into the community economic development plan in some areas. • Explore partnerships with not-for-profit long-term care centres as they support seniors in communities and are developing innovative models where linkages could be made to falls prevention work.	*"… Big connections for age-friendly communities and seniors' falls are strong, so there is … we could look to making stronger connections to collaborating both on a provincial level as well as at the local level in the municipal work that's happening …"* *"Some municipalities that have developed age-friendly community plans, and are about to undergo implementing them. So if there were aging well together coordinators in various regions of the province that are not already tied into that work, it would be good to tie them in. In a lot of cases, they already are."* *"When we're looking at the built or the physical environment, [it] is under the purview of municipal planning policy. So the age-friendly networks of the municipality, it makes sense that they're going to be the ones that are looking at their municipal planning policies, adapting their municipal plans or their housing, or what have you. So having the aging well together coalitions tied into that only makes it more effective from the policy approach."* *"Community-governed organizations, which are the non-profit long-term care centres … a lot of them are highly committed to seniors' needs in our communities and they're innovative and I think an untapped resource to look at new models of service delivery with resolution of issues within the health system generally.*

Description	Quotations
	And I think if we had put falls along with many other potential topics of aging in place, and involve them as key partners, I think we would find some innovation coming out of that arena, and that it would push this work you're doing into many localities …."
<u>Senior-friendly Business Program</u> • In some municipalities in Nova Scotia, senior-friendly business programs have been developed that link to seniors' falls prevention.	*"… A senior-friendly business program … it's been taken up in some areas where the community volunteers will work with businesses to look at their business itself in terms of how the store front is set up … and ways that they can enhance it for seniors … nationally there's been a lot of work in other provinces where they have age-friendly business toolkits and programs that a lot of the municipalities work with as well."*
Theme: Public Policy	
<u>Provincial Policy Frameworks</u> • The Department of Seniors is currently developing a policy framework on aging, so there is the potential for seniors' falls prevention work/activities to connect to this policy framework. • The *THRIVE!* strategy should be expanded to include all ages, including seniors (currently the focus of the work is on children, youth and families); links to seniors' falls prevention could be made to the *THRIVE!* strategy. • Development of an Active Transportation Policy Framework is underway. (See above, under Active Transportation).	"*The Department of Seniors is leading the development of a provincial policy framework on aging, and that's across government … age-friendly communities [may be] as one of the pillars related to policy approaches to support an aging demographic … but that would be something where I think the seniors' falls would look to connect, to see how that plays out, and to see where some strong connections are … in that I see a provincial committee, intersectorally, but at a provincial level, the need for coming together so that we stay connected on this work. And I would see a seniors' falls representative provincially being around the table as a member of that committee."* *"… The active transportation policy framework that they're putting forward to the deputy minister, and they're hoping it will become a framework by which guides cross-government work, they've identified the age-friendly communities within that. And they've identified walking and the things that we would want to see in terms of seniors' falls prevention … so staying connected, in answering the question what's currently happening in terms of policy to support seniors' falls, well that's another thing."*
<u>Municipal Policy</u> • Work is underway in some municipalities in terms of developing policy related to housing and the built environment. • Explore opportunities to link or incorporate policy re: seniors' falls prevention into recreation programming within	*"… [A municipality is] looking at all of the policies related to housing and the built environment related to housing. Land use would be another example of that. They're looking at it both municipally here in Nova Scotia, as well as provincially, and they're looking nationally and internationally. And what they're trying to find is, what are the barriers that are preventing*

Description	Quotations
municipalities.	*good housing options for seniors that are some things they can do to optimize good housing options for seniors … they're working collaboratively with the Department of Seniors [whose role] is bringing together various department representatives that have a stake in this, to keep them informed of this work. And housing, when you make the connection over to seniors' falls, the types of housing that's available, there are linkages to seniors' falls, so I think that this is work we should stay connected on as it unfolds."* *"If there are programs, and most municipalities have recreation programs that are being done, is there a piece of policy built into their programming about how that's done, and how they ensure, much like they have healthy eating policies, is there falls prevention stuff or work being done? In the Recreation Department."*
<u>Legislation, Standards, and Guidelines</u> • There is new legislation being developed related to accessibility, consultations have been completed (the process is underway), and there is the potential to influence this legislation (given a seniors' falls prevention lens). • HRM has an Accessibility Advisory Committee. • The CMHC has an initiative called FlexHousing™. • CMHC's FlexHousing is an innovative approach to home design, renovation, and construction that is able to adapt and convert affordably as a household's lifestyle and needs change. As the needs of the household occupants change, ideally the floor plan, amenities, and services of the home can be easily, and cost-effectively, adapted. A checklist has been developed to support the creation of a FlexHouse. There is the potential to promote the checklist to developers and builders. • Housing Nova Scotia has visibility standards/requirements for the development of affordable housing; these standards/requirements help to address seniors' falls prevention.	*"I think Ontario and Manitoba have adopted accessibility legislation, and Nova Scotia is looking at that. There has been a task force established … and a number of focus groups across the province were held … they are looking at the Ontario legislation that was adopted. It was a phased-in approach, by year such and such you do this. I don't know if we may do something like that, but I don't know if we would mirror their legislation. They would adapt it to the Nova Scotia context where we have a lot of old buildings."* *"CMHC has some documentation on flex housing … it's building houses that can become adaptable if someone develops a disability. They're promoting certain things such as having one entrance be a level entrance, so somewhere along the line you've got one entrance into the house or the dwelling unit that comes off a driveway or a street without any stairs. Things like having wider doors to allow a person in a wheelchair to get in through a door … CMHC is doing some of that work, and they have published some guidelines, and they call it FlexHousing."* *"… There is a number of things that we deliver, particularly through cost-share relationships we have with CMHC, that CMHC says you administer. We deliver these programs and we have quite a bit of flexibility in essentially the policy behind the administrative side of how we do things … for example, in all our partnerships*

Description	Quotations
	we do with the private sector, we require that they have visibility, we have some visibility requirements we bring. So we have provincial and federal money going into a project, they must meet the minimum visibility standards which we have set … as our mandate in the development of affordable housing … I think there are certainly policy decisions that can drive accessibility for individuals living with mobility challenges." *"… When we build on or invest in new housing, we build to disability standards. That's sort of our guideline, and just as I said, we're always upgrading our senior public housing aging-in-place initiatives. Now again, this is involving self-contained dwelling units, but we're putting grab bars in bathrooms, putting in railings in hallways, automatic buttons for exterior doors to open."*
<u>Building Codes and Universal Design</u> • Building codes are developed nationally; they are adopted provincially with adaptations based on provincial context. Building codes are then enforced through provincial legislation, and municipalities adopt and administer. Building codes are updated every five years (this was last done in 2015). • In 2015, some adaptations were made to the building codes (e.g., rise and run of stairs) through the National Research Commission. • There are opportunities to influence the building codes to help address seniors' falls prevention (e.g., reinforced plywood for grab bars, etc.). • There are opportunities for municipalities and others to promote and build awareness about the building codes to help ensure uptake (e.g., promote to the architect community and developers, promote with building permit applications, include when developers are picking up their zoning information, include guidelines within new municipal plans, etc.). • As previously noted, Housing Nova Scotia is building to visibility and disability standards, and also complies with building codes. • There is an Ease of Use Working Group in	*"… The National Building Code is a code; you've got to meet it. These are guidelines, so to the extent that municipalities are aware of them, that's question number one. Question number two, would they like to promote them to the actual architect community, their developer community, and their construction community? There's no harm in them doing that because it could affect voluntarily the type of market response that I believe exists, or the opportunity for a market response within the private sector to address the housing need. And the third one is, how far, if anything, should be done in a regulatory environment?"* *"… Building codes are national, so there's little that the province, other than adopting the national building code or the latest edition of it, and there are some changes coming. You know, there's very little that municipalities can do or should do, other than they have to check plans, building, construction designs against the building code, right? So I don't think there's much to do there other than to make sure at the municipal level that building codes are being enforced, and number two, that the building code nationally is relevant."* *"So any type of assembly occupancy where older adults may congregate—it could be a church, it could be a legion hall, it could be a community hall—there's certain codes and standards put in place to ensure that*

Description	Quotations
Nova Scotia looking at universal design; so there may be opportunities for seniors' falls prevention work to connect with this group.	*these facilities … when they're being constructed, they're being constructed in terms of barrier-free design or barrier-free access. So that's a big commitment through the National Building Code and the Nova Scotia Building Code, is to ensure that the buildings do have adequate measured egress, that the stairs they're either inclining or descending … meet the rise and run, any types of ramps, they have to be constructed to a certain incline as well."* *"We have a working group looking at potential changes to the building code regulation … called Ease of Use in terms of developing more universal design aspects in particular, multi-unit residential … to allow greater aging-in-place options … it's called the Ease of Use. It started off, they were going to look at accessibility issues, and it has sort of morphed … if you build, this is what we want you to do, so that it's easier for everybody. So that's sort of morphed into an ease of use group, rather than strictly looking at an accessibility issue or barrier-free issue."*
Theme: Municipal Planning and By-laws	
• As previously noted, in some municipalities age-friendly plans are integrated into community economic development plans; and there is the opportunity to connect seniors falls prevention work. • There is the opportunity to incorporate guidelines re: building codes within municipal plans. • It is important that municipal planning and codes include the design of communities, not just buildings. • Although there is the opportunity to incorporate age-friendly community work within municipal plans, most municipal planning is about land use control/administrative versus broader visionary thinking related to aging in place or age-friendly communities. • It is also important to note that municipal planning is not mandatory.	*"The other things that are in the table related to working with the business sector or with the municipalities around the planning by-laws, I think all of those things can fall under an age-friendly community network that could have a very strong tie to supporting falls prevention."* *"… The ability to create co-housing, so thinking about families living with parents, parents having families move in and so on, and some of those pieces obviously help with the accessibility and connectivity of individuals to a community. And so, I would say that under the municipal planning and by-laws piece, there's a large piece of work and particularly here in HRM that is substantially moved through from the conversation we had a few years ago."* *"But basically we've had a look at their land use by-law, and there are two types of universal design—there's sort of universal design of housing, and those would be kind of ground-level access, opportunities to have a ground floor bedroom or conversion to a ground floor bedroom. And then there's universal design related to community adult environments, so street signage, sidewalks, those type of things."*

Description	Quotations
	"… When we talk about universal design and accessibility guidelines and stuff like that in planning, it's about individual things design [building design] … [there is a need to] think about evidence-based spatially … so that if you want to design a community to be more age-friendly and safer, so what needs to be there within what distance, that sort of thing … I think at the larger policy level, the need for consideration needs to be articulated. And at the more by-laws or design guideline level, they need to have more spatial perspectives of design rather than the design of individual elements themselves." *"We're in the midst of a review of our planning strategy and our land use by-law, and as part of that we're having a housing study done, a housing needs assessment study done with an age-friendly lens specifically on that … So in terms of our plan review, that's probably where we'll see the most action in age-friendly, and we have an active living strategy as well, which has some elements in there as well. What I should say about the plan review is … planning is not mandatory in the province, so those municipalities that are planning, their municipal planning strategies, if you're planning you have to have a planning strategy. And your planning strategy is the policy piece. Most [municipalities] really just deal with the administrative end of land use control. And administratively, this is our policy and this is how it works, when an application comes in, we're going to do this, this and this and here's the policies in terms of land use control. They're not very visionary, so they don't really go beyond land use. In other jurisdictions, like in Ontario, their official plans are much broader. So they reach beyond land use, so they would include things like age-friendly. They would include things like transportation policies and stuff like that. So very seldom will you see transportation as a topic in a municipal planning strategy in Nova Scotia … So what we're trying to do is bring some of that visionary broader policy piece into our documents when we do it. So hopefully ours will end up with an age-friendly section in there as well."*
Theme: Funding Programs	
• Housing Nova Scotia offers funding for low- to moderate-income homeowners to make repairs to help ensure houses are accessible	*"… Home repair, adaptation programs for seniors … Some of the most common repairs are like putting in ramps and modifying bathrooms or putting in walk-in*

Description	Quotations
and safe (there is a funding threshold); DHW supports this program with the provision of additional funding. • Municipal Affairs provides funding to community organizations to help ensure facilities are accessible. • Explore making alert bracelets tax deductible, and providing them for free for those over 65 years of age.	*showers or replacing the bathtubs with walk-in showers. Those are the most common repairs, upgrading stairs … homecare workers going in to assist someone, they won't go in unless the dwelling is safe, and that's often where we get involved if it's a low- to moderate-income homeowner, that we'll go in and we have different repair programs that can help upgrade their homes."* *"… The province launched a housing strategy in 2013, and as part of our housing strategy, it really was about choice. And so Housing Nova Scotia kind of wears two hats. One, we do about 2,200 home repairs per year for private homeowners. And so these are grants or forgivable loans, and really the key behind that and well over 50 per cent of that work is about helping people age in place with modifications. So one time our work was much heavier on the health and safety side of things. The emphasis now on adaptations has increased dramatically …"* *"… We have an accessibility program. I'm trying to remember the exact title, community accessibility program to provide some money to organizations, I think, like community facilities or whatever, so they are more accessible, put in ramps and these types of things. I guess one could say, okay, that might help seniors from falling."* *"I mean obviously you have a very heavy connection to nursing homes and small options, so I would say thinking about, what about homeowners who might be modest income, but above the levels that they might receive assistance through Housing Nova Scotia. Is there a place there where, whether a mandate needs to be expanded or whether DOH sees an opportunity to offer, whether it's an incentive or whether there's some kind of a kit that can be made available? I go back to, Conserve Nova Scotia used to have all these energy efficiency kits they would hand out to folks, and if all the pieces you needed were in there to make your home more efficient, then the cost of the fixed asset if you will wasn't incurred, it was just the cost of installing it … I think the federal government was offering a rebate program for home adaptations and that, and I think in Ontario they have an annual program that you can get assistance for up to $1,500*

Description	Quotations
	worth of work …"
Theme: Awards and Recognition	
• Explore the provision of recognition/awards for age-friendly construction/aging-in-place design.	*"… Within Housing, we used to give out housing awards. These were very simple, the whole idea of building a single family home that has different kinds of features. So we used to give awards in all these different areas. The Homebuilders' Association does a similar thing where they recognize, but theirs is more about design and different price points, and think about design, about aesthetics and high-end features … they do good work and we partner with the Homebuilders' Association to do a lot of things … look at is there some kind of recognition, which by default would be promotion for individuals in the development community who go down the road of being more innovative or deliberately taking on some of the things we discussed. So as simple as here's a plaque and some kind of a snippet that says, here's an organization, if you're aging in place, you want to do business with. And it might generate some competitiveness, which could increase the awareness of the issue amongst folks."*
Theme: Organizational Policy	
• The initial focus of seniors' falls prevention work was on building organizational capacity within health services organizations to develop and implement a seniors' falls prevention program, including policy approaches (e.g., least restraint policy, bed rail policy, etc.). • Currently the coordinator of Falls Prevention is collaboratively developing a provincial policy re: falls prevention, for health service organizations, and working with Quality and Patient Safety in the development of the policy; the Nova Scotia Health Authority will be responsible for implementation. • Housing Nova Scotia has policies to support aging in place. • There is opportunity to link to the Continuing Care Strategy to address seniors' falls prevention and physical activity. • Explore the opportunity of making the establishment of a falls prevention program in health service organizations a regulation, including a requirement that organizations	*"… The Canadian falls prevention curriculum across the province … we have over 300 people trained in the Canadian falls prevention curriculum. Essentially it's a program planning course, but you can make it into what you want it to be based upon your audience … an opportunity to talk about provincial policy and planning, and just some sort of consistent delivery of a falls prevention program."* *"… We have deliberately come forward about policies around increasing accessibility or actually even having policies around offering units to individuals on, for example, the first floor of a building, particularly if they're struggling with any mobility challenges. So as an organizational policy, we have deliberately looked at the idea of how can we support people wanting to age in place?"* *"… If we want to support aging in place, and if we want to start making that bridge between how are we going to keep seniors in their homes, but connected to the health services and the community supports that are required, Continuing Care needs to be able to articulate*

Description	Quotations
have to report on falls rate as this would help to increases awareness and accountability.	*that and it bridges it into the community sphere more than it has in the past ... So if they are in their homes longer, there's caregiving that happens there, there's respite care, there's health services to them or getting those individuals that do health services become paramount."* "*The point of the Continuing Care strategy, I guess, they very may well be looking at seniors' falls quite broadly and integrating that into the strategy, but you know, you never want to assume anything. So having a seniors' falls connection with the work that's underway in the revamp of that Continuing Care strategy, I think would be smart … make connections into as it relates to the active living and physical activity components."* *"… It would be awesome if falls prevention could also become a regulation [like hand hygiene] because what they have to do now is, they actually have to report on a regular basis—I'm not sure of timing and what it looks like—but they have to report to the public about all of the data that they get. So for us, it would be the same for falls prevention, that you would have to report your fall rate and your injury rate ... when you start making the public aware of some of the statistics and what's going on, it helps the profile … hand hygiene is huge. That's all everybody talks about now, is hand hygiene and their rates in terms of infection control. And it's like, wow, just like that, because it's a regulation. So now people are so much more aware, people make so much more of an effort in terms of doing something with it."*
Theme: Academia and Research	
• The School of Planning at Dalhousie University is beginning to incorporate the lens of age-friendly communities into courses and research, explore collaboration between the school and government, municipality, community work re: seniors' falls prevention (e.g., student placements, research opportunities, provide real world topics for student projects, etc.). • The Falls Prevention coordinator is partnering with Dalhousie University and the Department of Recreation in a municipality to implement a home exercise program.	"*We only have started the aging-in-place or age-friendly community design, sort of the research focus in our planning school … so the graduates are the ones who will develop those by-laws and design guidelines and policies. So we have started incorporating that particular lens of aging society in accessibility and universal design, just last year. So it is, but not particularly for falls prevention … I would like to talk to the Department of Seniors to maybe possibly collaborate to develop some student projects. Students are required to do a research project on their thesis, and there's lots of opportunities for collaboration with the HRM or Department of Seniors."*

Description	Quotations
• Housing Nova Scotia participates on the National Housing Research Committee. • Explore linkages with academics and researchers form across Canada to enhance seniors' falls prevention policy approaches.	*"We participate in a national housing research committee. All the provinces have reps there plus the universities. It's a research committee, so there are universities represented there and municipalities, and lots of non-profit housing groups are represented there. And CMHC is very active with the National Research Council and housing design and new elements, and that sort of thing. So we're fairly up to date on those sorts of things …"* "*One of the options, it's not only working with the various stakeholders here in Nova Scotia, but it's looking to who are those folks doing this work across Canada that already see the linkages and connections, and what can we learn from them?"* *"… With Alberta and BC, they have two research centres there … So BC has their centre, which is a centre for hip stuff. They also have an injury prevention centre where they do a ton of work on falls prevention … Alberta has the Alberta Centre for Injury Prevention and Control. So they have all these little projects … they always connect them to the university and to the research. And so I think when it comes down to policy, I just think it gives them a little bit more support, whether it's in terms of evidence, an academic body that's supporting the work."*
Theme: Awareness and Education	
• The Office of the Fire Marshall provides education to various organizations (e.g., homecare workers, VON, etc.) related to fire and falls safety. • To help support policy approaches, there is the need to build awareness and understanding related to prevention of seniors' falls among a variety of stakeholders (e.g., building inspectors, municipal councils, Nova Scotia Building Officials' Association, etc.). Information on universal design, age-friendly communities, etc. could be provided to a variety of organizations and individuals. • There is also the opportunity to link with apprenticeship programs about building codes, universal design, and age-friendly construction. • The Falls Prevention coordinator is working	*"… The Remembering When Program is a program that is designed to educate people in 16 key safety messages. Eight of them involve fire safety, eight of them involve fall prevention as well … we're [Office of Fire Marshall] talking to … it may be people that work directly with senior groups. So you may have people involved with the Rotary Club or the Legion ... You go out and you facilitate the program to these organizations, and in turn, the people that you train can actually go out and train the older adults living in their community. Because what we're finding is that not only are buildings not sometimes all that well accessible, neither are some of the programs. If you're living in a town or a city, programming is quite accessible. But if you're in rural Nova Scotia … the older adults living there may not have the access … for that type of an awareness campaign. So what we do, we go right into the community with community-based volunteers that are supplying these programs along*

Description	Quotations
with the Recreation Department in a municipality to implement a Home Support Exercise Program.	*with the rural volunteer fire services as well."* *"I do sit as part of developing programs for carpenters and apprentice carpenters in conjunction with the Apprenticeship Board of Nova Scotia to keep up to date on training and keep them informed on what's happening building code-wise, etc. But none of that is directly related to fall prevention, but again, as the National Building Code changes, and the way stairs are built, part of my role on that committee would be to say, by the way, people, you need to now start informing your tradespeople that these are the new requirements, and here's when they will come into effect."* *"… My thoughts are including disability in universal design pamphlets and checklists for renovating bathrooms and kitchens at all building supply outlets in Nova Scotia … Just have them there so they can hand them out to people when they come in and want to renovate their bathroom or their kitchen or other things in the house …"* *"… Having checklists so that when municipalities do building permits or are talking with people that are renovating their homes, that's another way to reach them."*

❖ Challenges

Key informants were asked to identify potential challenges to the development and implementation of policy approaches for seniors' falls prevention, which are presented in the following table.

Challenge	Supporting Quotation
<u>Lack of Awareness and Buy-in</u> • As noted previously (in sections of the above table), lack of awareness, interest, buy-in, and priority related to seniors-/age-friendly communities and seniors' falls prevention among some key stakeholders such as municipal councils, Public Health, developers, builders, etc. • Lack of awareness and understanding about policy approaches and how to develop and support their implementation.	*"… The age-friendly handle to me has the potential to get buried or lost. And I would suggest in not all municipal planning but in some of it, including the major municipality, it's not even on the agenda … there are other opportunities I think for densification, but these things take a long time to filter their way into municipal planning."* *"… Nobody is really looking at it [seniors' falls prevention] at a municipal level with that lens, and I don't know that there's a lot of, at least from the planning perspective and I would say maybe even higher, like at the CAO level … that there's a lot of awareness on the falls prevention stuff that's being done in the province."*

	"… Seniors were not a part of their [Public Health] mandate in Nova Scotia, which caused some silos by design. But people who worked within Public Health, they would recognize the demographic and on the ground they would expand what they were doing however, it was not the focus. So it was off the side of the desk more so than intentional." *"… The challenge is maybe people even understanding the whole process and the benefits to having a policy, and looking at things from that bigger approach. So locally for us, it's just figuring out who's doing what, and then trying to help them out … that takes time to find out …"*
<u>Lack of Linkages and Collaboration</u> • There are a lack of linkages and connections being made between organizations and stakeholders to address seniors' falls prevention, and collaboration can be challenging given the diversity of stakeholders involved in addressing seniors' falls prevention in terms of policy approaches. • Seniors' falls prevention may be too specific, and therefore some organizations and stakeholders do not see the connection to their work.	*"… Falls prevention is such a hard one … because I don't think it's clearly something that's really in the purview of any one jurisdiction. It's not a provincial thing, it's not a municipal thing, nor is it in one sector. It's not just a private sector thing or a public sector thing. Really, it's private-public sector and the NGO sort of sector, right, the non-profit. So where policy development is really generally done at the public sector level, and maybe at the non-profit sector level …"* *"… There are some disconnects sometimes between age-friendly communities and healthy communities. I think there's a bit of a disconnect in the province on that …"* *"I feel there's just that lack of communication amongst the departments and the branches in the department create extensive amounts of work."*
<u>Lack of Access to Resources and Services, and Cost</u> • There is a lack of access to key supports for seniors (and that would impact on falls), including assisted living and affordable housing for seniors, access to services such as snow removal and contractors, access to home care, etc. • Lack of access to local data to "make the case."	*"… We're hearing some real horror stories about the quality of the housing, the impact of low incomes, stretched pensions and high-energy bills that are making seniors defer maintenance. So there are some really negative things out there, so when government comes along and says, we support aging in place, we're going to ensure people live in their homes longer, that's fine if the housing is actually appropriate for them to do so."* *"So just the speed of access to contractors is sometimes a challenge, particularly in smaller communities where as they are aging, so are their contracting and workforce."* *"We may know what's good for seniors, but we may not have the resource to actually make that happen, or we don't have enough people to even produce that evidence that there's a critical mass of people who are affected by such-and-such in a tangible way."*

	"… Depending on who your clientele is, if you're building houses that you're looking at, okay, it'll be a three-bedroom house, you're tailoring [to] a young family, maybe a couple of kids, you know, those type of markets are very cost-conscious, as well as those houses tend to be smaller. So doing things such as increasing the tread width of a stair, and decreasing the rise leads to a greater area taken up by the stairs. That now takes away from living space, kitchen space, it just impacts the whole layout of the house. So I would say cost is always the number one concern among a lot of the stakeholders."

❖ Supports to Ensure Linkages

Interview participants were asked to identify and describe supports required to ensure that linkages are made to support policy approaches to address seniors' falls prevention with the following noted most often: partnerships and collaboration, the need to build awareness and understanding, nesting seniors' falls prevention within a broader focus and building on existing work, and funding staff. Each theme is described below.

◣ Partnerships and Collaboration

The opportunity for partnerships and collaboration was identified in terms of linking seniors' falls prevention and developing policy approaches. Respondents consistently discussed the need to involve a range of organizations and government departments to effectively implement policy approaches for seniors' falls prevention (e.g., all levels of government including federal, provincial, and municipal across sectors such as Seniors, Health and Wellness, Transportation, Housing, Community Services, Economic Development; Associations including the Nova Scotia Building Official Association, Home Builders Association, Fire Inspectors Association of Nova Scotia; not-for-profit organizations who support seniors and others). Partnerships with youth and youth organizations to support seniors and ultimately seniors' falls prevention were also discussed. The importance of ensuring that staff/partners working to address seniors' falls prevention are "at the right tables" and connected was highlighted.

"… There's an octopus ... there's this big head and then there's all these tentacles … the tentacles aren't always attached to the octopus' head … So it's really important to know what's going on, because we don't always know what's going on in other areas. And we thought, we shouldn't be out doing stuff about transportation or about housing if there's already things that exist."

"… So many are involved, it is important to identify what is being done so there is not duplication; determine how organizations can support one another. Also committees that [one] can connect with to advance work related to falls prevention locally and provincially."

"… I would say that ensuring that they're at the table when things like age-friendly communities are being discussed, or those policy pieces, or if the healthy community's policy statement or statement of

provincial interest is being discussed, making sure that they're at those tables. Because the more exposure they have, the more people will know that the work is actually being done. And I'm not sure that that piece is fully there."

"We have a pilot project going on where a youth group is being partnered with some seniors, so to help them if they need any …"

Build Awareness and Understanding about Falls Prevention and Policy

When discussing potential opportunities to link and connect policy approaches for seniors' falls prevention, the need to build awareness and understanding about the issue as well as the importance of policy among various stakeholders was identified (described in the table summarizing existing work and linkage opportunities). A variety of audiences were identified, including municipal councils, healthcare providers, planners, developers and builders, safety organizations, the general public, etc.

"I am the proponent of the more tools you can throw at, and the reasons for doing something is helpful. So if there was more understanding of falls prevention, it would lend itself to reasons for doing other things … Not only are we doing it for these reasons, but we're doing it because of fall prevention. We're doing it because it helps to produce an age-friendly community, all those sorts of things."

"… A lot of the work around falls prevention that we've accomplished has been in looking at preventing falls from the individual behaviour, within the institution-type behaviour changes and policies within health institutions, and educating and informing the individual on how they can prevent falls. And that work has taken off and has been fantastic, and it's because people can wrap their heads around it … it's tangible … when you move it up a level and we're looking at the policy approaches related to the physical environments, when we look at our community level and our municipal level of outdoor spaces, and buildings, and transportation and housing, and what are the policy approaches that are in place, well, then, yes, the output will likely be less falls. At a local level, unless you're a planner, a lot of the people who are currently involved with raising awareness and doing falls prevention work could benefit from education around making that more tangible to them."

Broader Focus and Building on Existing Work

The importance of linking falls prevention to broader work being done in age-friendly communities, accessibility and universal design, etc. was noted. These respondents noted that there is a great deal of policy work underway that will affect seniors' falls prevention, and therefore those working in seniors' falls prevention or supporting aging in general could connect to and enhance this existing work.

"… When we have committees or coalitions that are focused just on falls prevention as opposed to connected into healthy communities' work that looks at the various different components of our physical and social environments that [help to] prevent falls. I think that when we have too many narrower committees or work happening, the linkages and the collaboration doesn't happen. These very broad policy approaches. And therefore, the work has to happen at a broad collaborative level…we just have to, in practice, come together collaboratively around these broader umbrellas, so whether it's healthy

communities and seeing the strong connection with age-friendly as being part of a healthy community and thereby a seniors' falls lens being brought to that work, that's then moving policy into practice."

"… A lot of it is already happening. Planners are already doing so much in terms of accessibility … in terms of universal design and accessibility of building codes. So even the collaboration part, it's about us all becoming educated in what's happening as well, to share that out, what's possible."

Staff Support

The importance of paid staff to move policy approaches for seniors' falls prevention work forward was discussed. It was noted that "boots on the ground" are needed. It was recognized that new staff resources may not be feasible, but perhaps seniors' falls prevention work could be incorporated within existing local staff positions.

"… Is there an opportunity to do something similar to how the province has approached active transportation and active living in the province where they funded coordinators for the municipalities. They came in and they were staff-level, boots-on-the-ground sort of people, focusing on active living and active transportation. So I would wonder if there's an opportunity to fund that sort of position or take an existing position, fund a portion of it, and have them spend a percentage of their time focusing on falls prevention, but really more in a capacity-building role in the communities. So getting some boots on the ground in the communities, and working with community groups as a capacity-building role. And I would think that that would be the best approach or one of the best ways to move that forward."

Section 4: Conclusion

The hospitalizations and deaths data provided in this report illustrates that seniors' falls continue to be a significant public health issue in Nova Scotia, showing that falls are by far the most prevalent injury issue facing seniors in the province. The risk for a serious injury from a fall increases substantially with age. Women are at a significantly greater risk of sustaining a serious fall-related injury than men and are far more likely to have an injury requiring hospitalization. Rates of fall-related hospitalizations and deaths varied by zone. The Western and Eastern Zones had the highest rates of hospitalizations while Central Zone had the highest rate of deaths. The most common fall-related injury sustained resulting in hospitalizations or deaths was hip fracture. Traumatic brain injury was also a significant cause of fall-related deaths. Women were more likely to sustain a hip fracture while men were more likely to have a traumatic brain injury. The majority of fall-related hospitalizations and deaths occurred in the home, followed by residential facilities. The data demonstrates the continued burden of fall-related injuries in Nova Scotia while also providing information that can be used to target prevention efforts.

The environmental scan consisted of two phases, including a review of the academic and grey literature on policy approaches to seniors' falls prevention (phase 1), and key informant interviews to explore policy approaches for seniors' falls prevention underway in Nova Scotia, and to identify opportunities to link seniors' falls prevention to policy work. The literature review revealed an extensive body of literature related to seniors' falls prevention; however, much more information was available on individual approaches, such as education, compared to policy approaches. The search was expanded to the broader topic of age-friendly communities, which revealed more in terms of public policy to support seniors' falls prevention. Key informants from intersectoral government departments (e.g., Seniors, Housing, Health and Wellness, Municipal Affairs) and levels of government (e.g., provincial and municipal), as well as a private consultant and academic with expertise in planning, were interviewed to identify current policy initiatives in Nova Scotia that could support seniors' falls prevention and also identify opportunities for seniors' falls prevention to link to existing policy initiatives.

Both the literature search and findings from the interviews confirm that to effectively support policy approaches for seniors' falls prevention, there is the need to work with intersectoral government departments at all levels, community groups and organizations, associations, universities/academia, and the private sector. The findings from the key informant interviews identified several potential policy options to further seniors' falls prevention work in Nova Scotia. Although some of the policy initiatives are not specific to seniors' falls prevention there are many policy-related activities that help to address seniors' falls. Further, there appears to be willingness and enthusiasm to support more effective collaboration between the diverse stakeholders involved in supporting public policy related to seniors and falls prevention.

This report provides a foundation from which to explore a more comprehensive policy approach to seniors' fall prevention. Further analysis of the information in this report in partnership with fall prevention stakeholders will be required to determine next steps.

Appendix 1: ICD-10 Codes

ICD-10 Codes for Injury

Mechanism of Injury	ICD-10-CA Codes
Transport Incidents	V01, V010, V011, V019, V02, V020, V021, V029, V03, V030, V031, V039, V04, V040, V041, V049, V05, V050, V051, V059, V06, V060, V061, V069, V09, V090, V091, V092, V093, V099, V10, V100, V101, V102, V103, V104, V105, V109, V11, V110, V111, V112, V113, V114, V115, V119, V12, V120, V121, V122, V123, V124, V125, V129, V13, V130, V131, V132, V133, V134, V135, V139, V14, V140, V141, V142, V143, V144, V145, V149, V15, V150, V151, V152, V153, V154, V155, V159, V16, V160, V161, V162, V163, V164, V165, V169, V17, V170, V171, V172, V173, V174, V175, V179, V18, V180, V181, V182, V183, V184, V185, V189, V19, V190, V191, V192,V193, V194, V195, V196, V198, V199, V20, V200, V201, V202, V203, V204, V205, V209, V21, V210, V211, V212, V213, V214, V215, V219, V22, V220, V221, V222, V223, V224, V225, V229, V23, V230, V231, V232, V233, V234, V235, V239, V24, V240, V241, V242, V243, V244, V245, V249, V25, V250, V251, V252, V253, V254, V255, V259, V26, V260, V261, V262, V263, V264, V265, V269, V27, V270, V271, V272, V273, V274, V275, V279, V28, V280, V281, V282, V283, V284, V285, V289, V29, V290, V291, V292, V293, V294, V295, V296, V298, V299, V30, V300, V301, V302, V303, V304, V305, V306, V307, V309, V31, V310, V311, V312, V313, V314, V315, V316, V317, V319, V32, V320, V321, V322, V323, V324, V325, V326, V327, V329, V33, V330, V331, V332, V333, V334, V335, V336, V337, V339, V34, V340, V341, V342, V343, V344, V345, V346, V347, V349, V35, V350, V351, V352, V353, V354, V355, V356, V357, V359, V36, V360, V361, V362, V363, V364, V365, V366, V367, V369, V37, V370, V371, V372, V373, V374, V375, V376, V377, V379, V38, V380, V381, V382, V383, V384, V385, V386, V387, V389, V39, V390, V391, V392, V393, V394, V395, V396, V398, V399, V40, V400, V401, V402, V403, V404, V405, V406, V407, V409, V41, V410, V411, V412, V413, V414, V415, V416, V417, V419, V42, V420, V421, V422, V423, V424, V425, V426, V427, V429, V33, V430, V431, V432, V433, V434, V435, V436, V437, V439, V44, V440, V441, V442, V443, V444, V445, V446, V447, V449, V45, V450, V451, V452, V453, V454, V455, V456, V457, V459, V46, V460, V461, V462, V463, V464, V465, V466, V467, V469, V47, V470, V471, V472, V473, V474, V475, V476, V477, V479, V48, V480, V481, V482, V483, V484, V485, V486, V487, V489, V49, V490, V491, V492, V493, V494, V495, V496, V498, V499, V50, V500, V501, V502, V503, V504, V505, V506, V507, V509, V51, V510, V511, V512, V513, V514, V515, V516, V517, V519, V52, V520, V521, V522, V523, V524, V525, V526, V527, V529, V53, V530, V531, V532, V533, V534, V535, V536, V537, V539, V54, V540, V541, V542, V543, V544, V545, V546, V547, V549, V55, V550, V551, V552, V553, V554, V555, V556, V557, V559, V56, V560, V561, V562, V563, V564, V565, V566, V567, V569, V57, V570, V571, V572, V573, V574, V575, V576, V577, V579, V58, V580, V581, V582, V583, V584, V585, V586, V587, V589, V59, V590, V591, V592, V593, V594, V595, V596, V598, V599, V60, V600, V601, V602, V603, V604, V605, V606, V607, V609, V61, V610, V611, V612, V613, V614, V615, V616, V617, V619, V62, V620, V621, V622, V623, V624, V625, V626, V627, V629, V63, V630, V631, V632, V633, V634, V635, V636, V637, V639, V64, V640, V641, V642, V643, V644, V645, V646, V647, V649, V65, V650, V651, V652, V653, V654, V655, V656, V657, V659, V66, V660, V661, V662, V663, V664, V665, V666, V667, V669, V67, V670, V671, V672, V673, V674, V675, V676, V677, V679, V68, V680, V681, V682, V683, V684, V685, V686, V687, V689, V69, V690, V691, V692, V693, V694, V695, V696, V698, V699, V70, V700, V701, V702, V703, V704, V705, V706, V707, V709, V71, V710, V711, V712, V713, V714, V715, V716, V717, V719, V72, V720, V721, V722, V723, V724, V725, V726, V727, V729, V73, V730, V731, V732, V733, V734, V735, V736, V737, V739, V74, V740, V741, V742, V743, V744, V745, V746, V747, V749, V75, V750, V751, V752, V753, V754, V755, V756, V757, V759, V76, V760, V761, V762, V763, V764, V765, V765, V767, V769, V77, V770, V771, V772, V773, V774, V775, V776, V777, V779, V78, V780, V781, V782, V783, V784, V785, V787, V787, V789, V79, V790, V791, V792, V793, V794, V795, V797, V798, V799, V860, V8608, V861, V8618, V862, V863, V8638, V864, V865, V8658, V866, V8668, V867, V869, V8698, V80, V800, V801, V802, V803, V804, V805, V806, V807, V808, V809, V81, V810, V811, V812, V813, V814, V815, V816, V817, V818, V819, V82, V820, V821, V822, V823, V824, V825, V826, V827, V828, V829, V83, V830, V831, V832, V833, V834, V835, V836, V837, V839, V84, V840, V841, V842, V843, V844, V845, V846, V847, V849, V85, V850, V851, V852, V853, V854, V855, V856, V857, V859, V87, V870, V871, V872, V873, V874, V875, V876, V877, V878, V879, V88, V880, V881, V882, V883, V884, V885, V886, V887, V888, V889, V89, V890, V891, V892, V893, V899, V91, V910, V911, V912, V913, V914, V915, V916, V917, V918, V919, V93, V930, V931, V932, V933, V934, V935, V936, V937, V938, V939, V94, V940, V941, V942, V943, V944, V945, V946, V947, V948, V949, V95, V950, V951, V952, V953, V954, V958, V959, V96, V960, V961, V962, V968, V969, V97, V970, V971, V972, V973, V978, V98, V99

Drowning	V900, V920, W65, W66, W67, W68, W69, W70, W71, W72, W73, W74
Falls	W01, W02, W03, W04, W05, W06, W07, W08, W09, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19
Other External	W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W64, W85, W86, W87, W88, W89, W91, W92, W93, W94, W99, X20, X21, X22, X23, X24, X25, X26, X27, X28, X29, X30, X31, X32, X33, X34, X35, X36, X37, X38, X39, X50, X51, X52, X53, X54, X57, X58, X59, X590, X599, Y10, Y11, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y21, Y22, Y23, Y24, Y25, Y26, Y27, Y28, Y29, Y30, Y31, Y32, Y33, Y34, Y35, Y36
Suffocation/Choking	W44, W75, W76, W77, W78, W79, W80, W81, W83, W84
Fire/Burns	X00, X01, X02, X03, X04, X05, X06, X07, X08, X09, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19
Unintentional Poisoning	X40, X41, X42, X43, X44, X45, X46, X47, X48, X49
Attempted Suicide/ Intentional Self-harm	X60, X61, X62, X63, X64, X65, X66, X67, X68, X69, X70, X71, X72, X73, X74, X75, X76, X77, X78, X79, X80, X81, X82, X83, X84
Assault/Violence	X85, X86, X87, X88, X89, X90, X91, X92, X93, X94, X95, X96, X97, X98, X99,Y00, Y01, Y02, Y03, Y04, Y05, Y06, Y060, Y061, Y062, Y068, Y069, Y07, Y070, Y071, Y072, Y078, Y079, Y08, Y09

ICD-10 Codes for Anatomic Site

Anatomic Site	**ICD-10-CA Codes**
Traumatic Brain Injury	S011, S019, S021, S023, S027, S029, S04, S061, S069, S07, S097, S099, T901, T902, T904, T905, T908, T909
Other Head And Neck	S00, S009, S022, S024, S026, S031, S035, S04, S05, S059, S08, S09, S092, S10, S101, S107, S109, S110, S112, S117, S119, S128, S129, S132, S133, S135, S136, S143, S146, S15, S152, S153, S157, S159, S160, S170, S178, S179, S18, S197, S198, S199, T150, T160, T170, T174, T18, T200, T207, T260, T269, T270, T274, T280, T285, T330, T331, T340, T341, T352, T900, T903, T950
Spinal Cord And Vertebral Column	S120, S122, S127, S130, S131, S134, S140, S141, S142, S151, S220, S221, S230, S231, S233, S240, S242, S320, S322, S330, S332, S335, S337, S340, S344, T08, T093, T094, T911, T913
Torso	S200, S219, S222, S229, S232, S234, S235, S243, S246, S250, S260, S268, S269, S270, S279, S280, S281, S290, S297, S299, S300, S302, S307, S309, S310, S315, S317, S318, S323, S328, S333, S334, S345, S346, S348, S350, S354, S355, S357, S359, S360, S369, S370, S379, S380, S383, S390, S396, S399, T021, T031, T041, T065, T090, T092, T095, T099, T175, T178, T179, T181, T185, T188, T189, T19, T210, T217, T272, T273, T276, T277, T281, T283, T286, T288, T332, T333, T342, T343, T353, T912, T914, T915
Upper Extremities	S400, S499, S500, S599, S600, S699, T002, T012, T022, T024, T032, T042, T050, T052, T10, T119, T220, T239, T334, T335, T344, T345, T354, T920, T952
Hip Fracture	S72, S729"
Lower Extremities	S70, S709, S71, S719, S73, S739, S74, S749, S75, S759, S76, S769, S77, S779, S78, S789, S79, S799, S80, S899, S90, S999, T003, T013, T023, T025, T033, T043, T043, T053, T055, T12, T130, T139, T240, T247, T250, T257, T336, T338, T346, T348, T355, T930, T939, T953
Multiple Body Regions/ Unclassifiable By Site	T008, T009, T019, T008, T009, T019, T028, T029, T038, T039, T048, T049, T058, T059, T062, T064, T07, T140, T149, T271, T275, T284, T289, T300, T307, T310, T319, T320, T329, T339, T349, T350, T351, T356, T357, T360, T369, T370, T379, T380, T389, T390, T394, T398, T399, T400, T409, T410, T415, T420, T428, T430, T436, T438, T439, T440, T449, T450, T459, T460, T469, T470, T479, T480, T487, T490, T499, T500, T509, T510, T513, T518, T519, T520, T524, T528, T529, T530, T527, T539, T540, T543, T549, T55, T560, T569, T570, T573, T578, T579, T58, T590, T599, T600, T604, T608, T609, T610, T602, T618, T619, T620, T612, T628, T619, T630, T639, T640, T650, T656, T658, T659, T660, T670, T659, T68, T698, T699, T700, T704, T708, T709, T71, T730, T733, T738, T739, T740, T743, T748, T749, T750, T754, T758, T789, T790, T799, T800, T889, T910, T918, T919, T940, T941, T954, T958, T959, T96, T97, T980, T989

ICD-10 Codes for Place of Occurrence

Place of Occurrence	Place of Occurrence Description	ICD-10-CA Codes
Home	Home	U980
Residential Institution	Residential institution	U981
Recreation Area	School, other institution and public area; sports and athletics area	U982, U983
Street	Street and highway	U984
Public Area	Trade and service area; industrial and construction area; farm	U985, U986, U987
Other	Other/unspecified	U988, U989

Appendix 2: Key Informants

Name	Organization
Suzanne Baker	Falls Prevention Coordinator Nova Scotia Department of Health and Wellness and Nova Scotia Health Authority
Jacqueline Campbell	Community Development Coordinator Nova Scotia Department of Seniors
David Harrison	Member, Canadian Institute of Planners David W. Harrison Ltd.
Tara Maguire	Director of Community Development Municipality of the District of Chester
Andrew Paton	Senior Planner Department of Municipal Affairs
Joe Rogers	Building Code Coordinator, Office of the Fire Marshal Department of Municipal Affairs
Kim Stewart	Policy Analyst, Housing Services, Housing Nova Scotia Nova Scotia Department of Community Services
Derwin Swinemar	Deputy Fire Marshal, Office of the Fire Marshal Department of Municipal Affairs
Mikiko Terashima	Assistant Professor, School of Planning Dalhousie University
Daniel Troke	Chief Executive Officer Housing Nova Scotia

Appendix 3: Background

Seniors' Falls Prevention Environmental Scan: Key Informant Interview Background

Background

Falls among seniors in Nova Scotia are the leading cause of injury-related deaths and hospitalizations in the province, and although the rate of hospitalizations and deaths has remained relatively stable between 2005 and 2013, with an aging population the total number has increased yearly (Department of Health and Wellness). To help assess the status of seniors' falls prevention in Nova Scotia, the Nova Scotia Department of Health and Wellness is conducting an environmental scan with a focus on policy approaches. The following text box provides policy-related definitions that are being used to guide the work).[130]

Policy

- Policies guide our actions.
- Policies can be guidelines, rules, regulations, laws, principles, or directions.
- Policies say what is to be done, who is to do it, how it is to be done, and for (or to) whom it is to be done.

Public Policy

- All levels of government—federal, provincial, and municipal—create policies to address specific issues or problems. These public policies are developed through a process that involves input from citizens, government staff, and elected officials.

Organizational Policy

- Guides how organizations and businesses operate.

Phase 1: Literature Review

Phase 1 of the environmental scan included a rapid review of the academic and grey literature to determine best practice policy approaches to preventing falls among seniors. The review revealed best practice interventions for falls prevention across settings including the need for

- multifactorial approaches based on risk
- screening and risk assessments
- education of various audiences
- appropriate use of equipment
- assessment and modification of environmental hazards

- physical activity/ exercise
- effective health management

The environmental scan report organized the policy approaches according to three areas: healthy public policy, organizational policies, and clinical practice guidelines. A group of key stakeholders met to assess the findings of the rapid review and identify potential policy options for Nova Scotia related to each of these three areas. The following table provides a high-level summary of the findings from the literature review and feedback from key stakeholders.

Table: Policy Approaches for Seniors' Falls Prevention

Area	High-level Findings from the Literature	Potential Policy Options from Key Stakeholders
Healthy Public Policy	• ***Policy frameworks/strategies*** that include intersectoral collaboration • ***Age-friendly Communities*** programs and policy to facilitate healthy and supportive environments for seniors (this involves some of the categories below such as municipal by-laws, building codes and design standards)	• Connect with partners from across sectors to link with and influence policy and policy frameworks (e.g., the Department of Seniors – link to Provincial Policy Framework on Aging Issues; *THRIVE!* – expand to include all generations; active living policies and strategies; DHW and Municipal Affairs – Provincial Statement of Interest on Healthy Communities; Community Services and Housing Nova Scotia – update Provincial Statement of Interest on Housing; Continuing Care Strategy – policy re: active living and physical activity) • Review and renew existing Seniors' Falls Prevention Strategy
	• ***Provincial legislation***	• Connect with Community Services – accessibility legislation
	• ***Public health approach*** including using data to build the business case and monitor effectiveness (continuous quality improvement)	• Collect data to build a business case, and to inform ongoing policy work • Collect data from various settings, including the community, acute care, long-term care, etc.
	• ***Municipal planning and by-laws*** (e.g., revising building by-laws to improve accessibility and allow more seniors to age in place; local municipal Council resolution to actively support, promote and work towards becoming age-friendly)	• Review and update municipal by-laws to improve accessibility (e.g., snow removal, sidewalk repairs, access to public buildings and businesses); zoning by-laws (housing density); etc. • Work with the transportation sector (bus system, senior wheel bus)
	• ***Building codes and design standards*** (e.g., accessibility design standards that respond to the needs of seniors for all new construction and redevelopment of buildings/facilities; barrier retrofit programs; funding programs to help homeowners and landlords in making changes to support independence; review and update of national and provincial building codes)	• Engage business sector to develop age-friendly practices • Universal design (design approach to environments, products, services) • Work with Housing Sector (funding programs, affordable housing, design standards and building codes) • Explore opportunities to link to trades/apprenticeship initiatives (retrofit programs) • Work with the construction industry • Fire code standards

Area	High-level Findings from the Literature	Potential Policy Options from Key Stakeholders
	• ***Advocacy***	• Work with community groups to advocate to help influence by-laws, building codes and design standards
Organization Policies	• Standards, audits and safety checks, identify roles and responsibilities of all staff, create a supportive culture	• Examples of areas for policy development – risk assessments, least restraints, medication reviews • Develop organizational policy across the continuum of healthcare (e.g., primary care, acute care, continuing care) and across sectors; ensure accountability
Clinical Practice Guidelines (CPG)	• A number of guidelines exist – need to ensure they are effectively disseminated and build provider competency to support uptake and use	• Identify and use champions to support implementation of CPGs, build capacity, develop accountability mechanisms, use a collaborative approach

Phase 2: Key Informant Interviews

Phase 2 of the environmental scan consists of interviews with selected key informants. The purpose of the key informant interviews is to help validate the potential policy options for Nova Scotia (column three in the above table) and gather more information about potential opportunities to enhance policy approaches for seniors' falls prevention. The following questions will be explored during the interview:

1. Do you feel that the above table covers the potential policy options for seniors' falls prevention in Nova Scotia? Please describe.
   Probes: If not, why not? What is missing? What are other potential policy options? What else is needed to support seniors' falls prevention in Nova Scotia (from a policy perspective)?
2. What are you/What is your organization currently doing in terms of policy to support seniors' falls prevention? Please describe.
3. What work is underway in Nova Scotia that presents an opportunity to connect/link policy approaches for seniors' falls prevention?
   Probes: What is needed to ensure that the linkages are made? Do you have any other feedback/ suggestions about how to support policy approaches to help prevent falls among seniors? Please describe.

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