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# MANITOBA'S FIVE-YEAR FALLS PREVENTION PLAN

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2015-2020

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## **Introduction**

The five-year provincial injury prevention plan (2015-2020) identified fall-related injuries as a prevention priority. Falls remain the leading cause for injury hospitalization and deaths in Manitoba. Falls and associated outcomes not only harm the injured individuals but also their family, friends, care providers and the health care system. However, we do know that these personal and economic costs can be avoided through effective falls prevention intervention initiatives. This five-year Falls Prevention Plan is focused on children and youth (0-14) and older adults (65+) and builds on the successes of the implementation of the Manitoba Falls Prevention Strategy established in 2006. The five-year plan will provide direction and opportunities for cooperation and collaboration among falls prevention stakeholders regarding the prevention and reduction of fall-related hospitalization and deaths in Manitoba.

## **Background**

In 2006, a Manitoba Falls Prevention Framework and Strategy was developed with an overall goal of reducing fall-related hospitalization and deaths by 10% in 2010 through reductions in the target populations of children and youth, and older adults. To meet this goal, objectives and activities were developed under the strategic priorities of: leadership and policy development, surveillance, research and evaluation, sustainability and community capacity (programming, education, and training). While a reduction in fall-related hospitalization was achieved among older adults (65+), the target for reducing deaths was not achieved. Despite these efforts to prevent and reduce fall-related injury hospitalization and deaths, there is still more work that needs to be done collaboratively with fall prevention stakeholders to prevent and reduce fall-related hospitalization and deaths in Manitoba.

## **The Plan Development Process**

To inform the development of the five-year Falls Prevention Plan, several consultations took place with internal and external falls prevention stakeholders. The results of the evaluation of the 2006 Falls Prevention Strategy conducted in 2014 and the recent injury surveillance data on falls (2000-2012) also helped inform the development of the five-year Falls Prevention Plan. Using themes generated from consultation feedback and the evaluation results, a Falls Prevention Plan and Framework was developed.

## The Problem – What We Know About Falls Prevention in Manitoba

A recent Injury Prevention Surveillance Report (2000-2012) reviewed that:

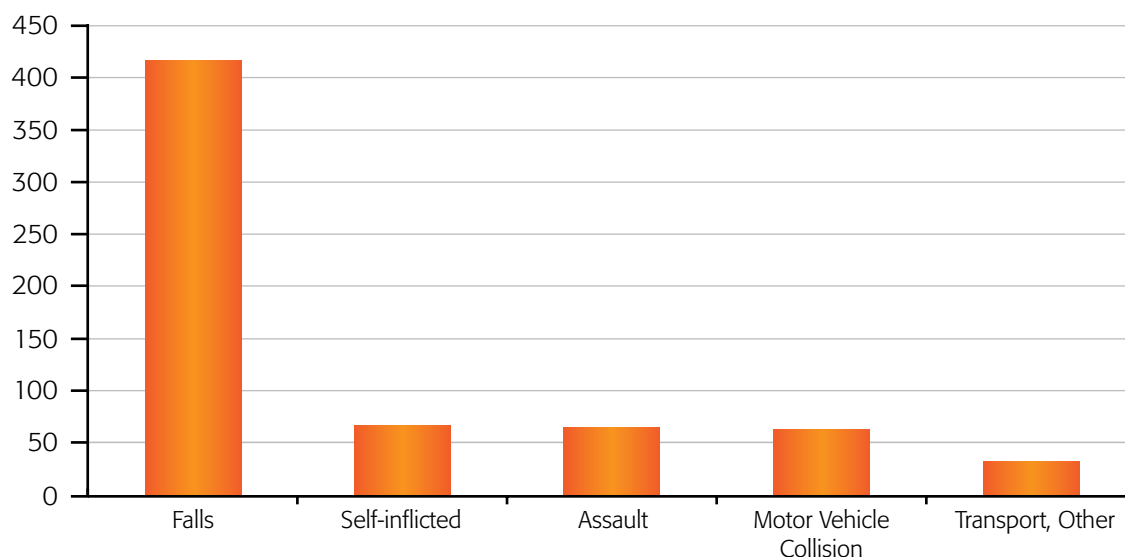
- Falls are a leading cause of injury hospitalization and deaths in Manitoba. When injuries are separated into intentional and unintentional injuries, falls remain the leading cause of unintentional injury deaths.
- The number of unintentional injuries that occurred in Manitoba over the 13 years represents approximately 83 per cent of all injuries that occurred in this time period.
- When injuries are separated by age group, falls are the leading cause of hospitalization for children 0-14 years of age and all adults over 34 years of age. However, the rate for hospitalization is even higher in the 65+ age group.
- Between 2000-2012 there were 1,949 deaths due to falls in Manitoba and 64,408 fall-related hospitalizations. While the rate of fall-related hospitalizations has remained stable over this 13-year period, the age-standardized rate of fall deaths has increased from 7.7 per 100,000 in 2000 up to 12.0 per 100,000 in 2012.
- Each year in Manitoba approximately 150 fall-related deaths occur and approximately 5,367 individuals are admitted to hospital due to a fall.
- Hospitalization rates for falls were high for both older adults and children. In children, the highest rate was found among the 5-9 year olds at 127.1 per 100,000, with the next highest rate among the 10-14 year olds at 110.4 per 100,000. Hospitalization rates was highest among older adults 85 years of age and older at 5,771.3 per 100,000 followed by older adults between 75 and 85 years of age at 2,189 per 100,000.

Below are the data tables on the top five leading causes of injury hospitalizations, percentage of fall related injury hospitalizations by age group and the top five leading causes of injury deaths according to the 2000-2012 Manitoba Injury Surveillance Report.

**Table 1**

Table 1 below shows the top five leading causes of injury hospitalizations in Manitoba.

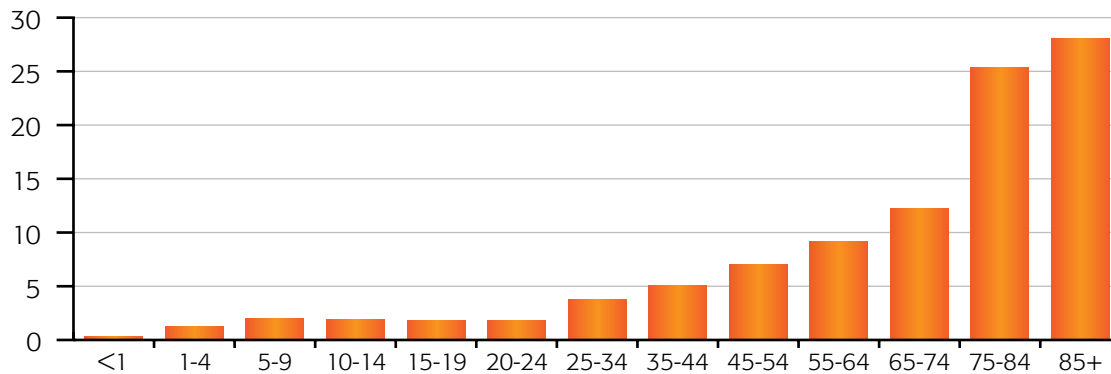
### Leading Causes of Injury Hospitalizations, MB (2000-2012) (per 100,000)



**Table 2**

Table 2 below shows fall related injury hospitalizations by age group in Manitoba.

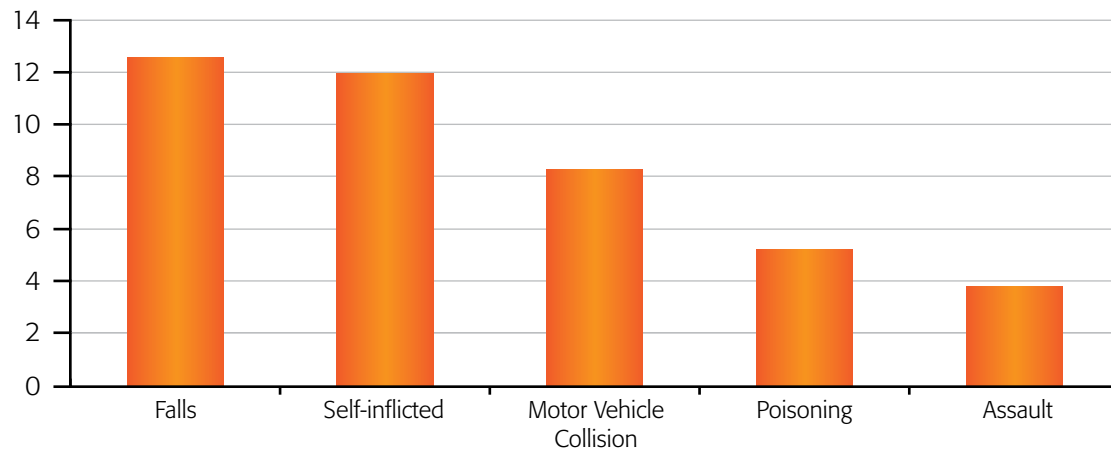
**Percentage of Fall Related Injury Hospitalizations by Age Group (2000-2012)**



**Table 3**

Table 3 below shows the top five leading causes of injury deaths in Manitoba.

**Leading Causes of Injury Deaths, MB (2000-2012) (per 100,000)**



Falls are the number one leading cause of injury hospitalization and deaths in Manitoba. The 2015-2020 Falls Prevention Plan focuses on falls only. The other leading causes of hospitalization and death, self-inflicted, motor vehicle collision, poisoning, transport and assault are being addressed in a separate plan.

The 2015 Economic Burden of Injury in Canada report revealed that in 2010, almost one-third (30%) of Manitoba's \$1.2 billion spending on injury was incurred due to fall injuries with \$265 million spent on direct health care costs. Falls were the most expensive cause of injury with a per capita cost of \$283. Similar to the 2000-2012 Injury surveillance report, falls were the highest injury-related death rate cause in Manitoba; 17.2 deaths occurred for every 100,000 Manitobans.

## Who is at Risk?

While anyone can fall at any time, children under five years of age and older adults are at a higher risk of being seriously injured. The good news is that we know what puts people at risk of falling and being injured. There are both modifiable and non-modifiable risk factors that put people at risk for falls. Falls among children and youth, and older adults are addressed separately, given that different risk and protective factors and different interventions are applicable to each age group.

## Risk Factors

### Falls in Children and Youth

From birth through the teen years, children are at risk of becoming seriously injured in a fall. How and where a fall happens and how seriously a child is injured tends to depend on their age. Falls mechanisms change as the child gets older.

- Falls in **infants** tend to happen around the home. Infants commonly fall from elevated surfaces such as change tables, cribs, high chairs, counter tops or down the stairs.
- Falls in **children between one and nine years of age** tend to occur in playgrounds. Children of all ages love to play at the park or playground, where fall related injuries are common.
- **Youth** tend to fall during sports and leisure activities. Falls or collisions during sports such as hockey and skiing, and recreational activities such as trampoline use, skateboarding, roller skating and cycling are the leading cause of injury hospitalizations for Canadians under 20 years of age.

The type of fall related injuries among children and youth include injury to the head, injury to the knee and lower leg, injury to elbow and forearm and injury to the shoulder and upper arm (Discharge Abstract Database, 2010/11 to 2014/15).

### Falls in Older Adults

Research regarding falls in seniors has isolated a number of risk factors that impact not only the severity of a fall, but also whether a fall is more likely to occur. In general terms, these risk factors can be divided into four categories: Biological/Medical; Behavioural; Environmental; and Socio-Economic. Table 4 below shows the factors associated with an increased risk of falling among older adults under each category.

**Table 4**

<b>Biological/Medical</b>	<b>Behavioural</b>
Pertaining to the human body	History of falls
Related to the natural aging process	Fear of falling
Chronic, acute or palliative health conditions	Medication use
Mobility impairment (poor balance, impaired gait, muscle weakness)	Excessive alcohol
Advanced age (age-related changes; vision, hearing)	Risk taking
Poor health and disabilities <ul style="list-style-type: none"> <li>• Dementia</li> <li>• Stroke</li> <li>• Parkinson’s disease/Arthritis</li> <li>• Cardiovascular disease</li> <li>• Bowel and bladder</li> <li>• Foot disorders</li> <li>• Acute illness</li> <li>• Addictions</li> </ul>	Lack of exercise
	Poor footwear
	Inappropriate clothing
	Assistive devices
	Poor nutrition/hydration
	Addictions
	Substance abuse
<b>Environmental</b>	<b>Socio-economic</b>
Home hazards	Living alone
Community hazards	Social isolation
Institutional hazards	Poor family support
	Lack of transportation
	Language barriers
	Illiteracy
	Low income
	Cultural/Ethnicity

Source: BC Injury Canadian Falls Prevention Curriculum (CFPC), 2015

According to the Public Health Agency of Canada’s Senior’s Falls in Canada: Second Report (2014), the majority of falls among seniors resulted in broken or fractured bones and over one-third of fall-related hospitalizations among seniors resulted in a hip fracture.

In 2013/14, a total of 5,611 Manitobans were hospitalized due to a fall. Most falls occurred at home and those who experienced a fall sustained injury to hip and thigh. Seniors aged 65 and older accounted for approximately 66% of those hospitalized. Of the seniors hospitalized, nearly 31% (1,139) of them were

transferred to Personal Care Homes. In the same year, 188 individuals died due to a fall which amounts to a total of 586 potential years of life lost or 3.1 years of life lost per individual (Discharge Abstract Database, 2015).

From an economic perspective, falls are a significant burden to the health care system due to resulting need for services including physician visits, prolonged hospital and nursing home care, outpatient clinics, and rehabilitation services. The evidence highlights the substantial negative impact of falls on the health care system. The evidence points to a need to invest in prevention and support improvements in falls prevention initiatives across the province.

## **Manitoba's Falls Prevention Plan and Framework (2015-2020)**

The Falls Prevention Plan and Framework (2015-2020) will be used as a guide to facilitate partnerships and coordinate efforts in the prevention and reduction of fall-related injuries in Manitoba.

### **Vision**

- A safer Manitoba

### **Mission**

- To create a safer Manitoba by engaging Manitobans in making falls prevention a priority

### **Goals**

The overall goals of the Falls Prevention Plan are:

- To reduce the risk of falls
- To reduce the severity of injuries from falls
- To reduce societal costs of falls
- To reduce health care costs and thereby contribute to health system sustainability, and
- To influence attitudes and behaviours by creating a culture of safety

### **Strategic Pillars**

- Leadership and Policy Development
- Surveillance, Research and Evaluation
- Sustainability
- Community Capacity (includes programming, awareness, education and training)

### **Guiding Principles**

The following guiding principles will be used in implementing the Falls Prevention Plan:

- Comprehensive population health approach – actions are taken on a full range of health determinants by means of health promotion strategies: strengthen community action, build healthy public policy, create supportive environments, develop personal skills and re-orient health services.
- Multi-sectoral partnerships – the need to work collaboratively with other partners with a similar goal of preventing or reducing falls in various settings.



- Shared responsibility – recognizing that everyone has a role to play in falls prevention.
- Evidence-informed – decision-making in falls prevention considers the valuable evidence from a variety of sources to underpin the development of falls prevention strategies.
- Health Equity – taking into consideration potential inequities that may impact the health of the population.
- Life course perspective – an understanding that some risk factors for falls accumulate over time. Accordingly, some interventions such as bone health education may be more appropriate at younger ages, even though the risk of falling is not as great for this age group.
- Harm Reduction – a set of strategies and tactics that encourages people to reduce harm to themselves and their communities, through the sharing of relevant information, facts and practical tools that will allow them to make informed, educated decisions.

## **Outcomes**

The three outcomes of the Falls Prevention Plan are:

- Strengthened partnerships and increased falls prevention awareness to reduce the number of falls among Manitobans.
- Development of new and/or strengthening of existing innovative approaches to reduce falls and minimize negative outcomes associated with falls.
- Strengthened surveillance, reporting and evaluation to enhance our understanding of falls prevention and reporting in Manitoba and inform future decision-making and policy planning.

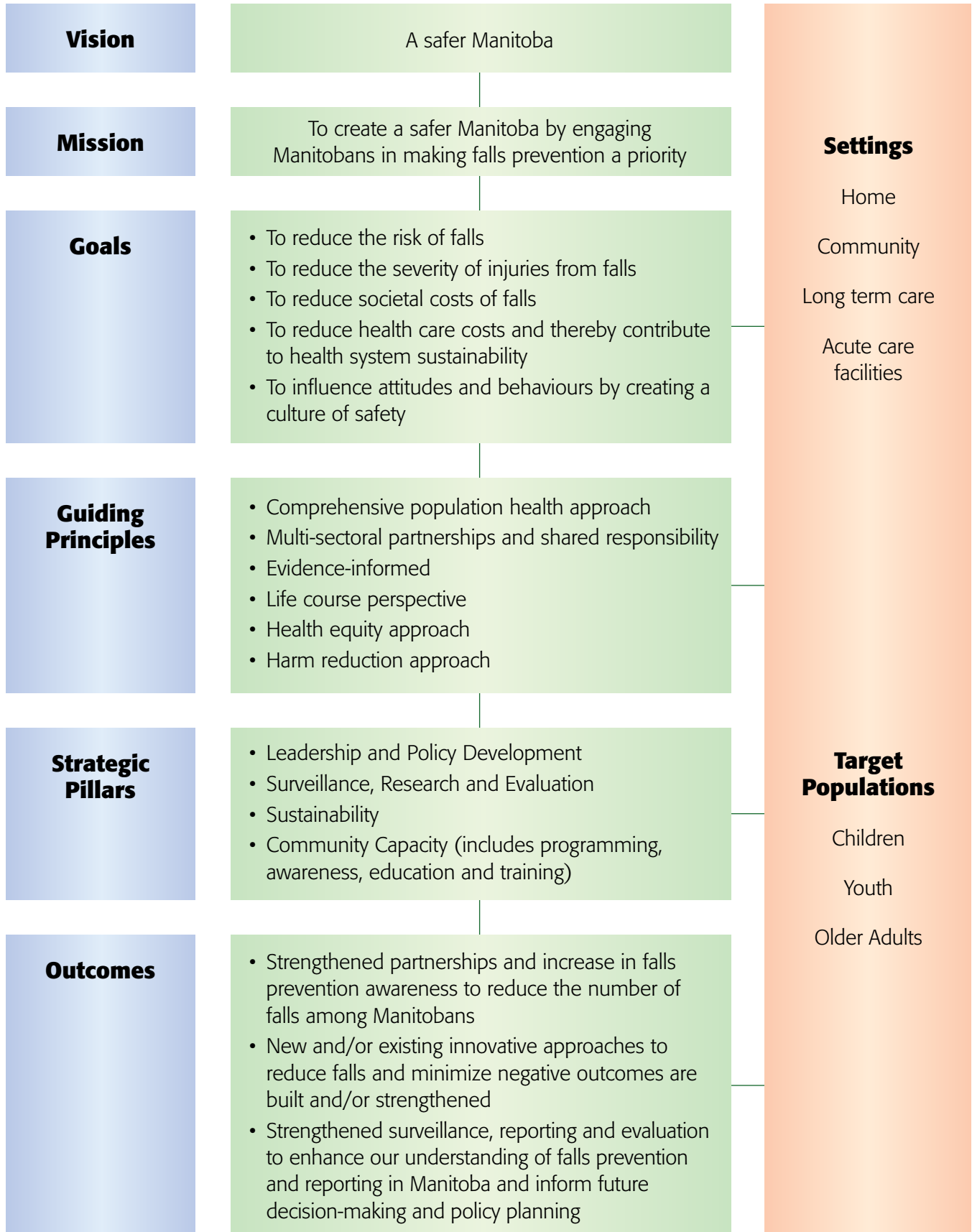
## **Shared Responsibility for Success**

Falls, particularly among seniors, continue to be a public health concern. However, the responsibility for preventing falls is shared across many sectors such as acute care, longterm care and community including caregivers and individuals. Implementing a coordinated approach to falls prevention efforts across the province can make a huge impact in reducing the effects of falls and minimizing the burden associated with health care costs. Hence, the success of this plan will be driven by the collective efforts of government, government-funded organizations, non-governmental organizations, and Regional Health Authorities.

## **Evaluation of the Falls Prevention Plan and Framework**

A falls prevention evaluation plan and framework will be developed and will outline the goals, specific objectives, indicators as well as data sources for the evaluation of the falls prevention plan and framework. The Department has developed a Falls Prevention Work Plan to guide the implementation of the Falls Prevention Plan and Framework. The work plan identifies the activities and expected outcomes and will help inform the evaluation of the falls prevention plan and framework. The newly established Falls Prevention Advisory Committee, consisting of representatives from all five regional health authorities and internal stakeholder branches within the department, will be involved in the evaluation process. The evaluation of the plan is expected to begin at the end of the five years to assess the extent to which intended objectives will be achieved.

# Provincial Falls Prevention Framework (July 2015)



## Acknowledgments

The following organizations have contributed their knowledge and expertise in shaping the five year falls prevention plan and framework for the province. We would like to recognize their valuable contributions:

- Health, Seniors and Active Living
  - Healthy Living and Healthy Populations Branch
  - Seniors and Healthy Aging Secretariat
  - Acute, Tertiary and Specialty Care Branch
  - Continuing Care Branch
- Manitoba Falls Prevention Network
- Osteoporosis Canada – Manitoba Chapter
- Regional Health Authorities
- Health in Common
- Manitoba Falls Prevention Steering Committee
- All individuals who participated in the Falls Prevention Plan consultations

