**Falls Among Minnesota Adults**

**Falling: inadvertently coming to rest on the ground, floor or other level lower than intended.**

**Minnesota Data**
Falls were the #1 cause of unintentional injury death in 2009, and have exceeded motor vehicle accidents since 2007.¹

- MN had the 5th highest fall death rate in the US at 14.03/100,000; nearly two times the US rate of 8.08. Both continue to rise.¹
- Adults age 65 and older accounted for more than 86% of MN fall deaths with a rate of 95.22/100,000, compared to the US rate of 51.61.¹
- Older adults in Minnesota experienced over 29,900 falls in 2009, causing 639 fatalities and an estimated medical cost of $255,435,200.²³
- MN falls have no apparent seasonal pattern.²

**US National Data**
Falls are the leading cause of traumatic brain injuries (TBI), fractures, emergency visits, and hospital admissions for trauma.⁵

- Adults age 75 and older have the highest rates of TBI related hospitalization and death.⁶
- About 78% of fall deaths, and 79% of medical costs were due to TBIs and lower extremity injuries.⁷
- The fall death & injury rates continue to rise, increasing costs of health care and impacting quality of life.³⁷
- More than one third of adults aged 65+, fall each year.⁴
- Less than half of people who fall inform their health care provider about it.⁴
- Over 82% of fall deaths occurred in adults 65 and older. People age 85+ were injured by falls four times as often as adults age 65–74 (2009).¹

**Cost**
- By 2020, the annual direct and indirect cost of fall injuries is expected to reach $54.9 billion (in 2007 dollars).⁴
- Fall injury cost increases rapidly with age.⁷
- Fractures account for over one-third of nonfatal injuries, and 61% of costs or $12 billion.⁷
- US cost of fatal fall injuries totaled $349 million (2005): $160 million for men and $189 million for women. Costs were similar for men and women until age 85, when the costs for women ($105 million) exceeded that of men ($62 million).⁷
- Up to 25% of adults living independently prior to a hip fracture require a nursing home stay of at least one year after their fracture.⁸
- Individuals who fall at age 75 and older are 4-5 times more likely to be admitted to long term care facilities for a year or more compared to those who fall at age 65 to 74.⁴
- Over 90% of hip fractures are caused by falls.
- In 2007, there were 264,000 hip fractures. Women had almost three times the fracture rate compared to men.⁹
- About 78% of fall deaths, and 79% of total costs were due to traumatic brain injuries (TBI) and injuries to the lower extremities.⁷
Factors That Increase Risk of Falling
- History of falls: two falls or one fall with injury in the past 12 months.
- Fear of falling
- Mobility problems due to impaired balance, muscle weakness, or chronic health conditions such as arthritis, diabetes or stroke
- Complications of chronic health conditions such as vision changes or loss of sensation in feet
- Poor nutritional status
- Medication side effects and/or interactions
- Alcohol use
- Home and environmental hazards such as (clutter, poor lighting, loose carpet, lack of railings on stairs, etc.)
- Incorrect size, type, or use of assistive devices (walkers, canes, crutches, etc.)
- Poorly designed public spaces

Preventing Falls & Fall injuries
Many conditions considered to be a result of aging are actually caused by inactivity. Increasing physical activity among mid-life and older adults is a key strategy to preventing falls.11, 12, 13

Effective strategies to reduce falls:
- Screen adults age 65+ and those at high risk for falls.
- Educate consumers about how to modify fall risk factors.
- Perform progressive balance & lower body strengthening exercises (at least 150 minutes per week).
- Review medications for increased risk and opportunities to decrease risk of falls.
- Manage on-going health conditions such as heart disease, diabetes, arthritis, osteoporosis, stroke, and depression to minimize risks associated with limited mobility, medication and pain.
- Ensure annual vision examinations.
- Ensure good nutrition to support strong bones & daily activity. Consider Vitamin D supplementation to achieve the recommended daily allowance set by the Institute of Medicine.13
- Conduct home safety assessments and implement needed modifications. 10, 11

Fear of Falling
Fear of falling frequently leads to individuals limiting their daily activities resulting in: reduced mobility, loss of physical fitness, and an increased risk of falling.

Improving Falls Prevention
Falling is a problem in which multiple risk factors interact. Individual fall risk profiles will include different components. Reducing risk and effectively preventing falls requires further research to:
- Accurately and reliably identify individuals at risk of falling;
- Characterize specific fall risk factors;
- Understand which risk reduction and falls prevention strategies are most appropriate for specific individuals and populations;
- Identify and assess the most cost-effective and feasible tools to use in clinical and community settings; and
- Provide the most appropriate risk reduction intervention in the best setting.13

References