

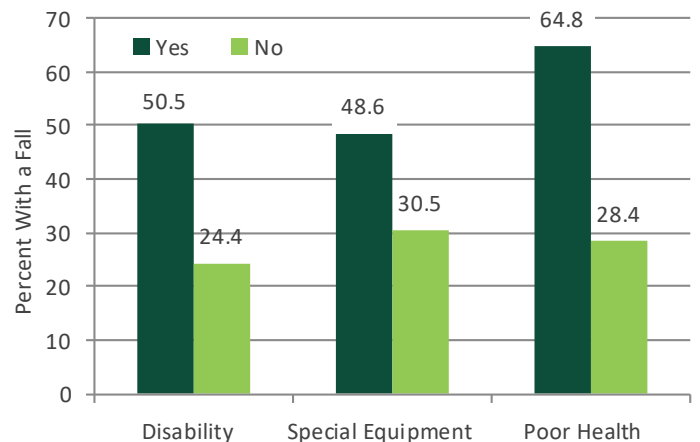


Unintentional injuries can cause lasting physical, mental, and social distress among seniors. After an injury, a senior may have physical limitations or pain, may be afraid of future injury, may not be able to perform their daily activities without assistance, and may experience financial strain from the cost of an injury. Preventing unintentional injuries can improve the quality of life among seniors.

In Spokane County, one in six people are 65 years of age or older. Similar to national trends, the number of seniors has been increasing in the county. In 2016, there were 76,824 seniors in Spokane County.

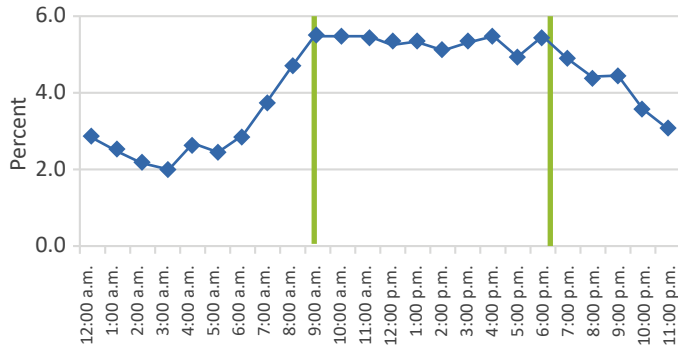
During 2016, nearly one in three seniors (34.2%) in Spokane County reported falling in the last year. Approximately one in eight seniors (12.9%) had a fall in the last year that caused an injury that limited regular activities for at least a day or made them go see a doctor. These proportions are similar to those seen in Washington state. In Spokane County, there is no difference between male and female seniors and reports of falling in the last year (35.5% and 33.1% respectively).¹

Seniors Reporting a Fall in the Last Year by Presence of Physical Factors



- Seniors with a disability were 3.2 times more likely to report a fall than were those without a disability.
- Seniors who use special equipment for a medical condition, such as a cane or wheelchair, were 2.2 times more likely to report a fall than were those who do not use special equipment.
- Seniors who self-report that they are in fair or poor health were 4.7 times more likely to have a fall than were those in good health.

911 Calls for Assistance with a Fall by Time of Day
Spokane County, 2012



Fall-Related 911 Calls²

In 2012, an average of 540 calls each month was received through the 911 system for assistance due to a fall each month. The age of the individual needing assistance was not reported. As such, 911 calls for a fall reflect all people, not just seniors. Fire personnel in Spokane County were dispatched an average of 18 times per day to assist with a fall. Among 911 calls for a fall, 20% was for public assistance without an injury. These calls were for individuals who had fallen and needed help getting up. One in 10 calls (10%) were for a fall that resulted in a serious injury. The majority of fall-related calls (61%) were for assistance with a likely non-serious injury from a fall. The remaining calls were received with an unknown status of the person who had fallen.

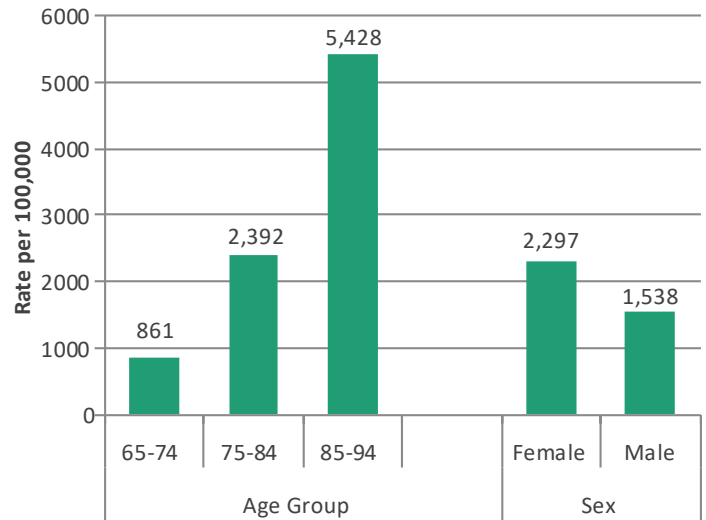
The lowest average number of daily calls was 16 in May. The highest average number of daily calls was 19 in January, July, August, and December. Throughout the day, the number of 911 fall calls was steady between 9:00 am and 6:00 pm, at which point the call levels began to decrease throughout the night. At 5:00 am, the call volume began to increase.

Fall-Related Hospitalizations³

Each year among Spokane County residents, there are nearly 1,900 hospitalizations due to fall-related injuries among people of all ages. Two in three occurred among individuals 65 years of age or older; approximately 1,300 per year. The rate of hospitalization among seniors for a fall-related injury decreased slightly from 2011-2015; 1,792 per 100,000 in 2015. The 2015 Spokane County rate was significantly higher than the state rate of 1,626 per 100,000 seniors.

Women accounted for 63.3% of fall-related hospitalizations among people 65 years of age or older. Adjusting for the difference in population, the female hospitalization rate was still significantly higher than the male rate; 20.7 per 1,000 for females and 14.6 per 1,000 for males. Females were more likely than males to be hospitalized for a fall-related injury.

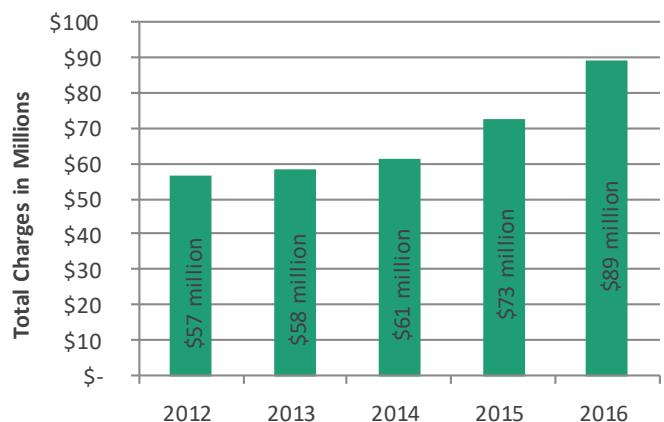
Fall-Related Hospitalizations by Age Group
Spokane County, 2011-2015



The risk of a fall-related hospitalization increased with age. Compared to individuals 65-74 years of age, those 75-84 years of age were 2.9 times more likely to have a fall-related hospitalization and those 85 years of age or older were 6.7 times more likely to have a fall-related hospitalization.

Among seniors who were hospitalized from a fall, 29.3% had an associated fractured femur. A small proportion (8.2%) had a traumatic brain injury as a primary diagnosis.

Cost of a Fall-Related Hospitalization
Among Seniors, Spokane County

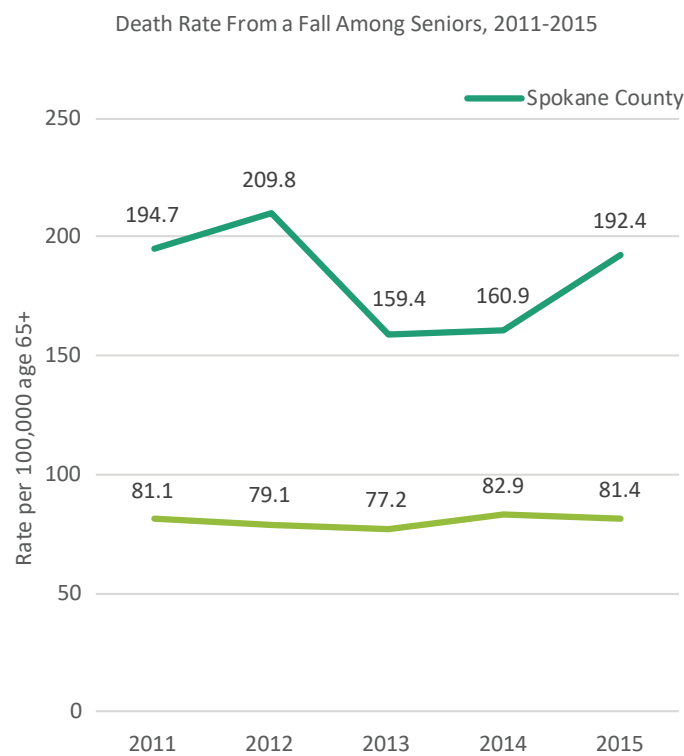


The average charge for a fall-related hospitalization among seniors during 2012-2016 was \$46,895. The total charge in the five-year period was \$337 million. The average length of stay in the hospital was six days, with a range of 1-213 days. Among seniors hospitalized for a fall-related injury, 72% were admitted six or fewer days.

Only 14.1% of seniors hospitalized for a fall-related injury had a routine discharge. Half (54.9%) were discharged to a skilled nursing facility. Another 14.6% were discharged to home with home health assistance and 5.2% were discharged to a rehabilitation facility. Four percent died and the remainder had various other discharge types.

Fall-Related Deaths⁴

During 2011-2015, the death rate from falls decreased. There were a total of 621 fall-related deaths among seniors in the five-year period.

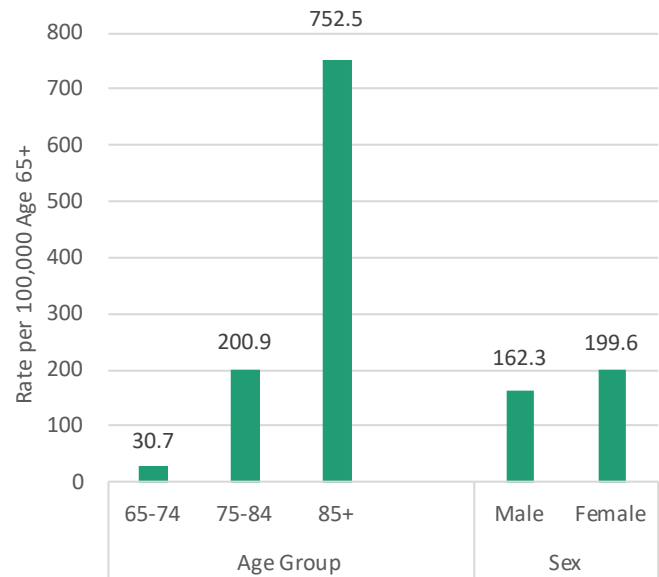


Unintentional injury was the sixth leading cause of death among seniors in Spokane County in 2015. Of those, 74.3% were from fall-related injuries. Deaths from a fall slightly increased in 2015. The number in 2015 was the highest recorded. Spokane County had a significantly higher death rate from fall-related injuries than Washington state.

More deaths from a fall occurred among women and accounted for 54.9% of fall-related deaths among

people 65 years of age or older. However, there were more women in the 65 or older population. Adjusting for the difference in population, male and female seniors had a similar fall-related death rate.

Fall-Related Deaths by Age Group and Sex Spokane County, 2011-2015



The risk of a fall-related death increased with age. Compared to individuals 65-74 years of age, those 75-84 years of age were 5.5 times more likely to have a fall-related death and those 85 years of age or older were 23.6 times more likely to have a fall-related death.

Among seniors who died from a fall-related injury, 49.7% fell at home. Another 39.7% fell at a nursing home. A small proportion, 1.4%, fell in a public location. The remainder either fell at a worksite or at an unknown location.

Approximately one-third of seniors who died from a fall-related injury died in a nursing home (35.7%) and one-fourth died in hospice care (26.6%) or died as a hospital inpatient (25.2%). About 9.8% died at home, and 1.4% died in an emergency room. The remaining 1.4% died in other locations.

Among seniors who died from a fall-related injury, 49.0% had an associated femur fracture and 23.1% had a traumatic brain injury. Only 0.7% of fall-related deaths had both a femur fracture and a traumatic brain injury.

What Can Be Done to Prevent Falls

As evidenced through the preceding data, falls among older adults poses a serious problem—for the health, well-being and life expectancy of individual seniors; for family members and other

providers who care for seniors; and for the community at large. Action by individuals and different sectors of our community can prevent many falls. The number of seniors will be increasing dramatically over the coming decades, underscoring the importance of falls prevention. The recommendations below are based on falls prevention research over the last decade and provided through the:

- Centers for Disease Control and Prevention, 2008
- U.S. Preventive Services Task Force Recommendation Statement, August 2012

Each sector of the community identified below plays an important role in reducing falls among older adults. Key actions that each group can take are outlined. More information is available from the organizations listed in the resource section.

Seniors, Families, and Caregivers

- Increase balance and mobility (the most effective intervention)
 - Strong muscles and bones help older adults move better with ease.
 - Exercises can increase balance, strength, and flexibility and reduce risk of falls.
 - People new to exercise or with conditions such as heart disease, arthritis or diabetes should talk with their doctor before they begin.
- Take Vitamin D supplements
 - Taking vitamin D supplements can reduce risk of falls among older adults.
 - Individuals should check with their doctor before starting supplements.

- Have vision checked by an eye doctor at least once a year
 - Poor vision is associated with an increased risk of falling.
- Individuals should use one pharmacy and have medications and supplements reviewed at least once a year
 - As individuals age, the way medicines work in their body can change.
 - Some medicines, or combinations of medicines, can make someone sleepy or dizzy and can cause a fall.
- Make home safer
 - Remove throw rugs and clutter to create clear walking paths.
 - Install grab bars and non-slip mats by toilets and in bathing areas.
 - Put night lights along the path from the bedroom and bathroom.
 - Wear footwear with a tread.
- Identify and correct risk factors for a fall
 - Older adults can ask their doctor to conduct a comprehensive fall risk assessment or they can use one that is online.
 - Creating a personal plan to reduce the risks identified is a powerful tool in remaining independent and healthy.

Health Care Providers

- Recommend patients begin physical therapy or an exercise program with balance and strength training based on risk assessment. A meta-analysis of exercise interventions found that balance training should be a part of any exercise program to decrease falls.
- Remind patients that additional calcium and Vitamin D intake is important to prevent bone loss or reduce fracture risk.
- Review medications and side effects with patients.
- Recommend patients modify their home environment and personal fall risk factors.

- Refer patients to a specialist (physical therapists, occupational therapist, home health fall prevention programs, etc.) when they are at risk of a fall.
- Stopping Elderly Accidents, Deaths and Injuries (STEADI) Tool Kit gives health care providers the information and tools they need to assess and address their older patients' fall risk.
<http://www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html>



Check for Safety: A Home Fall Prevention Checklist for Older Adults

www.cdc.gov/homeandrecreationalafety/falls/pubs.html

Community

- Develop and participate in a community-based falls prevention coalition to pool community resources and develop collaborative solutions.
- Increase the availability of low-cost, accessible exercise programs tailored for older adults that feature balance, strength and flexibility.
- Advocate for physical activity opportunities for all community members including complete streets and walkable environments.

Policy Makers

- Adequately fund mandates that support Medicare changes to include physical activity and durable medical equipment benefits.
- Prioritize prevention, including senior fall prevention, by placing it on the public health agenda.

Resources

Spokane Regional Health District Senior Falls Prevention Program

<https://srhd.org/programs-and-services/falls-prevention>

Centers for Disease Control & Prevention

<http://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html>

U.S. Preventive Services Task Force

www.uspreventiveservicestaskforce.org

Fall Prevention Center for Excellence

www.stopfalls.org

National Institute on Aging

www.nia.nih.gov/health/topics/falls

Floors: Look at the floor in each room.

Q: When you walk through a room, do you have to walk around furniture?

Ask someone to move the furniture so your path is clear.

Q: Do you have throw rugs on the floor?

Remove the rugs or use double-sided tape or a non-slip backing so the rugs won't slip.

Q: Are there papers, books, towels, shoes, magazines, boxes, blankets, or other objects on the floor?

Pick up things that are on the floor. Always keep objects off the floor.

Q: Do you have to walk over or around wires or cords (like lamp, telephone, or extension cords)?

Coil or tape cords and wires next to the wall so you can't trip over them. If needed, have an electrician put in another outlet.

Stairs and Steps: Look at the stairs you use both inside and outside your home.

Q: Are there papers, shoes, books, or other objects on the stairs?

Pick up things on the stairs. Always keep objects off stairs.

Q: Are some steps broken or uneven?

Fix loose or uneven steps.

Q: Are you missing a light over the stairway?

Have an electrician put in an overhead light at the top and bottom of the stairs.

Q: Do you have only one light switch for your stairs (only at the top or at the bottom of the stairs)?

Have an electrician put in a light switch at the top and bottom of the stairs. You can get light switches that glow.

Q: Has the stairway light bulb burned out?

Have a friend or family member change the light bulb.

Q: Is the carpet on the steps loose or torn?

Make sure the carpet is firmly attached to every step, or remove the carpet and attach non-slip rubber treads to the stairs.

Q: Are the handrails loose or broken? Is there a handrail on only one side of the stairs?

Fix loose handrails or put in new ones. Make sure handrails are on both sides of the stairs and are as long as the stairs.

Kitchen: Look at your kitchen and eating area.

Q: Are the things you use often on high shelves?

Move items in your cabinets. Keep things you use often on the lower shelves (about waist level).

Q: Is your step stool unsteady?

If you must use a step stool, get one with a bar to hold on to. Never use a chair as a step stool.

Bathrooms: Look at all your bathrooms.

Q: Is the tub or shower floor slippery?

Put a non-slip rubber mat or self-stick strips on the floor of the tub or shower.

Q: Do you need some support when you get in and out of the tub or up from the toilet?

Have a carpenter put grab bars inside the tub and next to the toilet.

Bedrooms: Look at all your bedrooms.

Q: Is the light near the bed hard to reach?

Place a lamp close to the bed where it's easy to reach.

Q: Is the path from your bed to the bathroom dark?

Put in a night-light so you can see where you're walking. Some night-lights go on by themselves after dark.

1 Data Source: Washington State Department of Health, Center for Health Statistics, 2012 Behavioral Risk Factor Surveillance System, supported in part by Centers for Disease Control and Prevention, Cooperative Agreement U58/SO000047- 2.

2 Spokane County Combined Communication Center, Limited 911 call data, 2012. Data analysis by Spokane Regional Health District.

3 Washington State Department of Health, Comprehensive Hospital Abstract Reporting System, 2009-2013. Data analysis by Spokane Regional Health District.

4 Washington State Department of Health, Center for Health Statistics, 2009-2013. Data analysis by Spokane Regional Health District.



Spokane Regional Health District - Data Center

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