

# Falls Among Older Adults, 2000-2004



## Introduction

Unintentional injuries pose a daily threat to the health and well being of Utah's elderly residents. Falls are the most common cause of fatal injury among adults aged 65 and older in Utah, and led to nearly one-third of all injury deaths in that age group for the years 2000-2004. Women are treated for fall injuries at twice the rate of men, but the death rate from fall injuries is higher among males.

The risk of injuries from falls increases with age, largely due to weakening of bones (osteoporosis) and reduced mobility. More than half of women over age 65 suffer from osteoporosis, and females sustain 75 to 80 percent of all hip fractures. These fractures exact a staggering cost, both financially and in quality of life. One-fourth of those who sustain a hip fracture die within one year and fifty percent never return to their prior level of mobility or independence.

Falls among older Americans cost the nation more than \$27 billion in direct medical costs every year. By 2020, the total annual cost of these injuries is expected to reach \$44 billion.

- For the five-year period 2000-2004 in Utah:
- 370 people aged 65 and older died from fall-related injuries (202 males, 168 females).
  - Women sustained more than twice as many fall injuries as men (23,254 emergency room visits vs. 10,188 for men)
  - 13,374 Utahns were hospitalized with fall injuries (9,616 women vs. 3,758 men).

In 2005, the Utah Department of Health Violence and Injury Prevention Program conducted a Safety and Health Survey to determine the risk of falls among older adults.

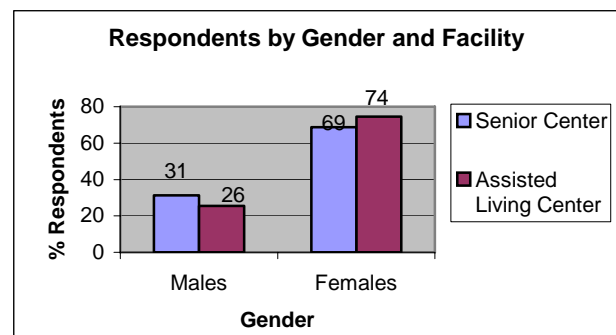
Program staff distributed a questionnaire among residents who visit any of the more than 100 senior citizen centers (SCCs) across the state, as well as among residents of dozens of assisted living centers (ALCs). By surveying the two

populations, researchers found variations in risk among more mobile seniors when compared to those who are less active and who need some help with daily activities.

Of the 108 SCCs contacted, 94 agreed to participate in the survey. Of 94 ALCs contacted, 55 responded. A total of 3,500 surveys were distributed; of those, 2,645 were completed.

## Demographics

Among both groups, more females than males completed the survey (69% women, 31% men at SCCs and 74% women, 26% men at ALCs).

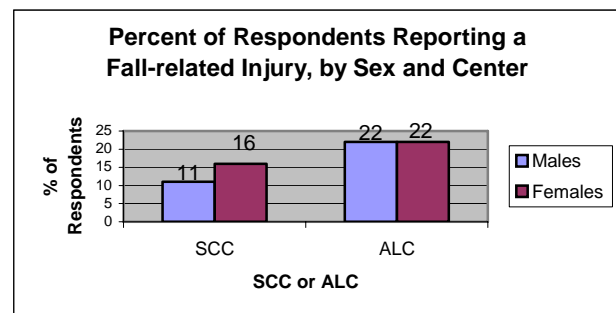


The mean age of both sexes was 76 years at senior citizen centers and 88 years at assisted living centers, with the majority of respondents falling into the 65-74 and 75-84 age groups.

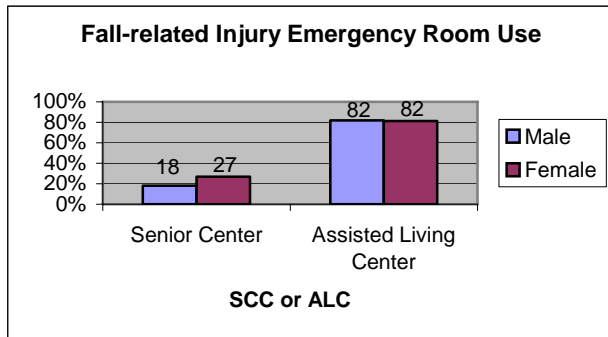
## Results

### Fall Risk and Treatment

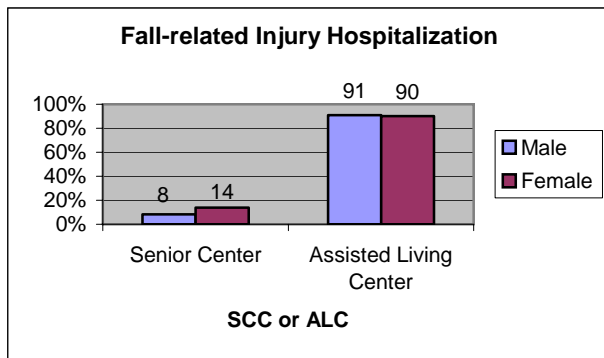
Respondents were asked whether they had been injured in a fall in the 12 months prior to the survey. Fall rates were higher among ALC residents and higher among women. (Figure 2)



When asked whether they sought emergency room treatment for the injury, ALC residents were four times more likely to say yes.

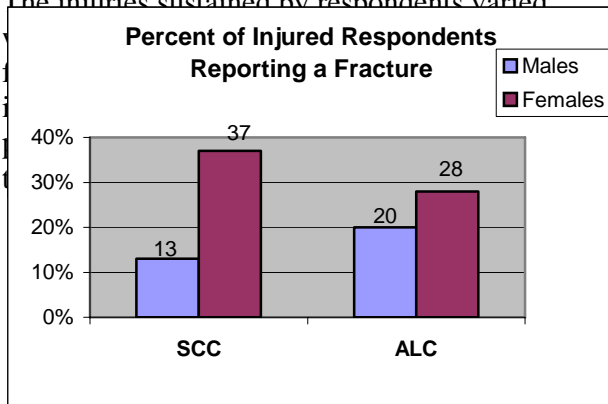


Similarly, significantly more ALC residents reported being hospitalized after a recent fall.



### Injury Type

The injuries sustained by respondents varied



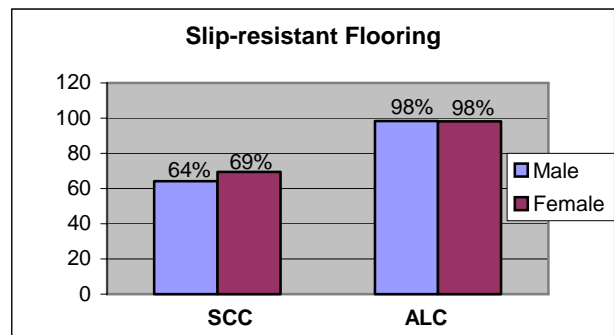
### Risk Factors

To understand what puts older Utahns at risk for falls, respondents were asked several questions regarding their home environment and lifestyle.

### Home Environment

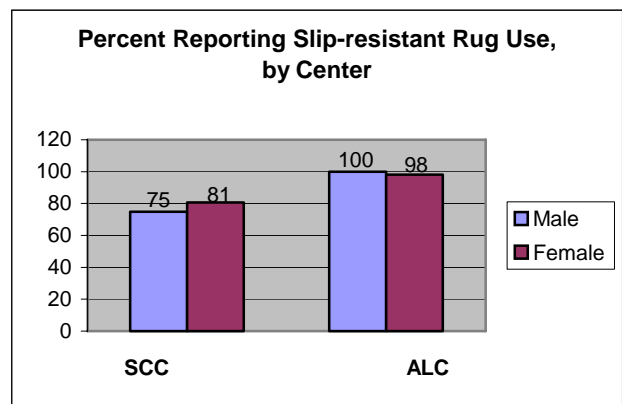
Research has shown that slippery floors in bathrooms, loose throw rugs, electrical cords and clutter in hallways and on stairs lead to a significant percentage of home-related falls.

When asked whether the tub/shower floor in the home was slip-resistant, SCC clients still living in their own homes were far more likely to answer no. ALC clients overwhelmingly answered yes, as slip-resistant surfacing is required by Utah health care facilities licensing code.

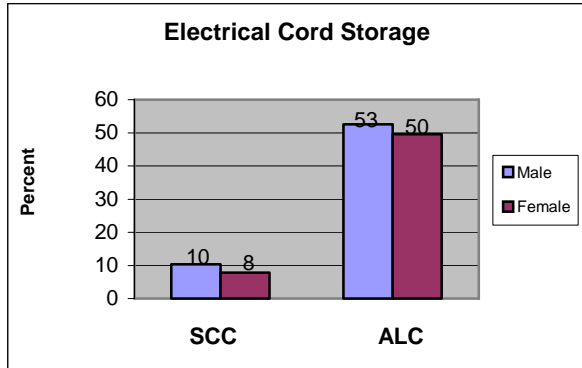


Regarding loose rugs (“throw” or “scatter” rugs), ALC residents were more likely to use slip-resistant backing or pads than SCC visitors.

More often, scatter rugs were banned at ALCs because of the hazard they pose.



ALC residents were also more likely to put away electrical cords and keep hallways and stairways cleared and free of clutter. The differences may be due in part to internal regulations at ALCs.

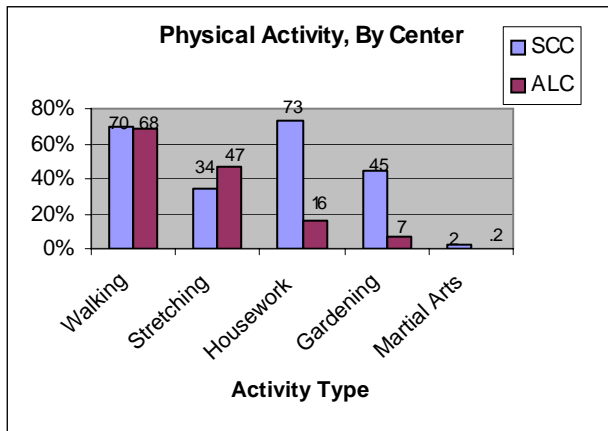


Finally, the use of step stools to reach overhead items varied among the subject populations, with 85% of senior center visitors reporting their use, compared to 51% of ALC residents.

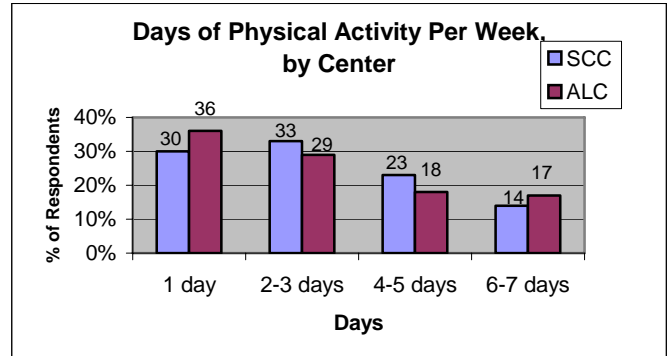
### Lifestyle

Exercise and physical activity, footwear choice and the use of walkers and canes also impact a person's risk for falling.

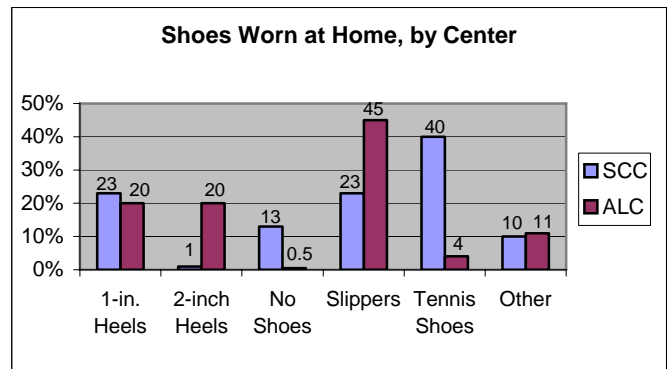
Regarding physical activity, the majority of survey respondents report that they walk or do stretching exercises. Note the very limited number involved in martial arts, an activity promoted as for seniors who want to maintain balance and flexibility.



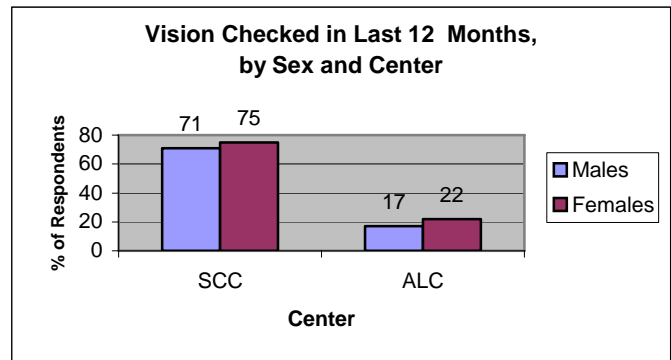
Of the older adults who report being physically active, the majority say they do so 30 minutes or more one to three days per week.



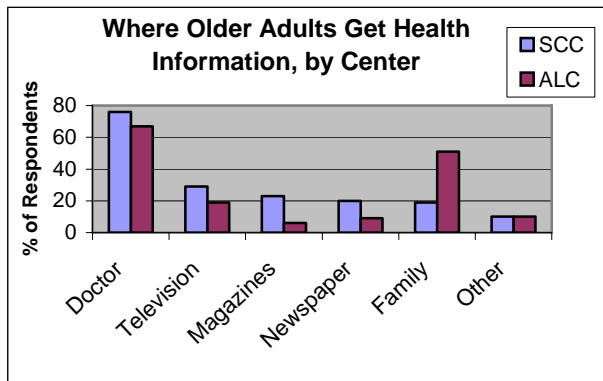
Comfortable yet sturdy shoes with soles that grip are one of the most important factors in fall prevention. Yet this study found that many seniors in both populations wear heels or slippers around the home.



Nationally, failing eyesight is often mentioned as a cause of falls among older adults. In this survey, ALC residents and males reported lower rates of vision screening.



Finally, the survey asked respondents where they get most of their health information. SCC clients named their doctors, television and magazines most often, while ALC residents cited their physicians, family, and television.



## Conclusions

Nationally, it is estimated that one of every three community-dwelling people aged 65 and older will fall annually. The reported fall rate among both populations for this survey was lower, at 22.6% for ALC residents and 14.0% for SCC visitors. This is not surprising, however, as self-reporting of injuries is historically lower than the true numbers of injuries documented through hospital and emergency department databases.

National reports have long shown that fall risk increases with age. Survey responses bear this out, as the highest fall rates were among those aged 85 and older who reside in assisted living centers. Fall injuries among this age group are typically more severe and result in more deaths.

Survey respondents reported several home environment and lifestyle patterns that increase their risk for falls. Among the most significant:

- A lack of grab bars and slip-resistant flooring in the tub/shower (50% and 65%, respectively, among SCC clients,)
- Improper footwear (85% of ALC residents report wearing slippers, 1-inch or higher heels or no shoes at all at home, compared with 60% of SCC clients).

- No vision screening during year prior to survey (while 75% of SCC clients reported having their vision checked, only 19% of SCC residents did.)
- Low rates of physical activity: 30% of SCC visitors and 36% of ALC residents report being physically active for 30 minutes zero or one time a week.

All the above factors contribute to a person's risk of falling. Other causes include medications, osteoporosis, arthritis, dementia, Parkinson's disease and a history of stroke.

In the home, other risk factors include poorly lit stairs and hallways, icy sidewalks and clutter.

Seniors and the people who care for them can follow these tips to reduce fall risk:

- Have your vision checked annually.
- Have a doctor review all your medications, supplements and OTC drugs for side effects and interactions.
- Wear low shoes with sturdy soles, and don't wear slippers or socks without shoes around the home.
- Check with your doctor to develop an exercise and strengthening regimen.
- Eat a well balanced diet with plenty of calcium, or take bone-building medication if you have osteoporosis.
- Check your home for and correct fall hazards like loose rugs and electrical cords, clutter, loose or missing handrails and slippery bath surfaces.

Fall injuries can significantly impact a person's quality of life. Hip fractures and traumatic brain injuries sustained in falls can be fatal. Checking your home for hazards and following the above tips can help you or a loved one live a safer, healthier life.

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