

FALLS ASSOCIATED WITH WALKING AIDS



Judy A. Stevens, PhD

Centers for Disease Control
and Prevention

National Center for Injury
Prevention & Control

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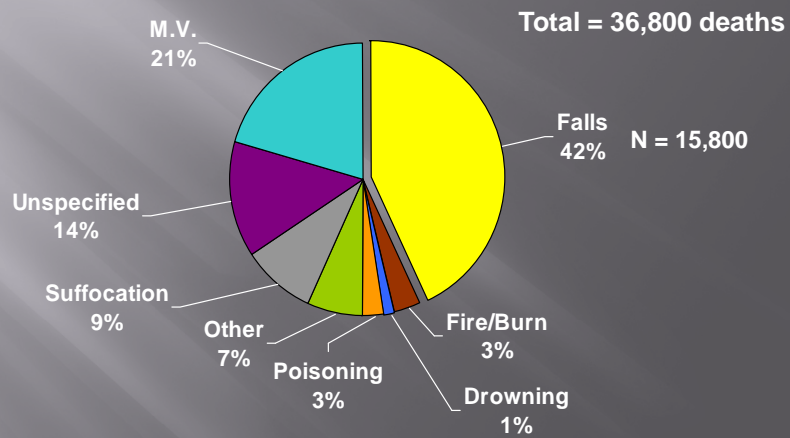
Falls

- 1 of 3 people 65+ fall **each** year¹
- Those who fall are 2-3 times more likely to fall again²
- 10%-20% of falls cause serious injuries³

1. Hornbrook, *Gerontologist*, 1994; Hausdorff, *Arch Phys Med & Rehab*, 2001
2. Tinetti, *New Eng J Med*, 1988; Teno, *JAGS*, 1990
3. Sterling, *J Trauma-Inj Infection & Critical Care*, 2001



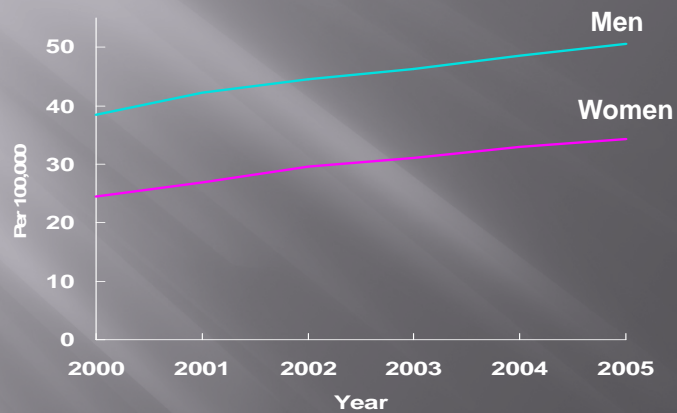
Leading Causes of Unintentional Injury Death Among People 65+, 2005



NCHS, Vital Records, 2005



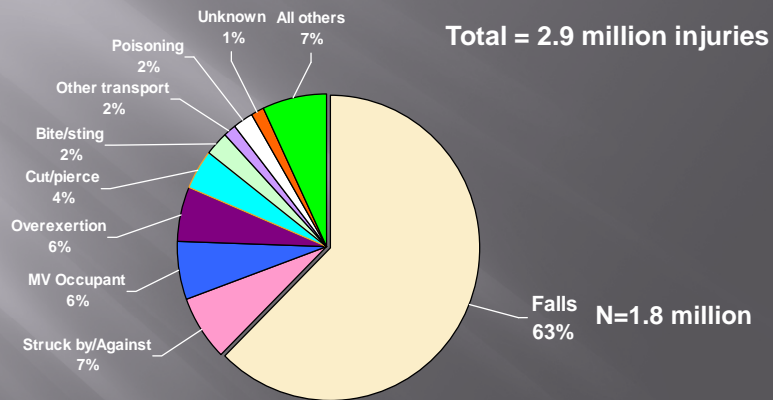
Trends in Age Adjusted Fall Death Rates Men & Women 65+, 2000-2005



NCHS, Vital Records, 2000-2005



Leading Causes of Nonfatal Unintentional Injuries Among People 65+, 2005



NEISS-AIP, 2005



Economic Impact

In 2000, total cost of fatal fall injuries among people 65+:

Total: ~ **\$19 billion**

- Fatal falls: **\$0.2 billion**
- Nonfatal injuries: **\$19 billion**



Stevens JA, *Inj Prev*, 2006



Impact on Quality of Life



- 20% - 30% fear falling¹
- 20% die within a year after hip fracture²
- 25% in a nursing home one year later³

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1. Vellas BJ, *Age & Aging*, 1997; Friedman SM, *JAGS*, 2002
 2. Lu-Yao GL, *AJPH*, 1994
 3. Magaziner, *J Gerontology: Medical Sciences*, 2000



Fall Prevention?

- Canes & walkers prescribed to help prevent falls
- Some studies have shown that walking aids are effective¹
- Others suggest that aids may increase fall risk²

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1. Batenii 2005
 2. Mahoney 2000, Charron 1995



Who Uses Walking Aids?

- 14% of seniors use at least one assistive device¹
- In 1994, 4.7 million older adults used walking aids
 - 3.1 million – canes
 - 1.4 million – walkers
 - 0.2 million – crutches

-
1. Harke J *Aging & Health*, 1998
 2. Kaye, 2000



Who Uses Walking Aids?

Use varies by:

- Age
- Gender
- Race & Ethnicity

Kaye, 2000



Data Source

- National Electronic Injury Surveillance System –All Injury Program (NEISS-AIP)
- Nationally representative sample of emergency departments
- Jan 1, 2001 to Dec 31, 2006

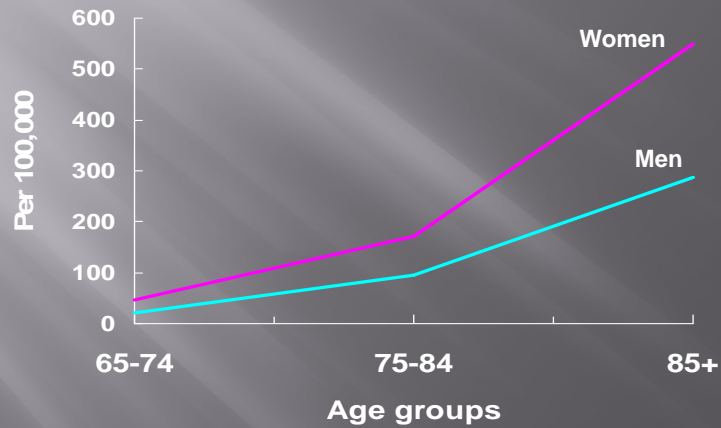


Results

- 47,300 injuries annually
- 7 times as many injuries with walkers as with canes
 - 41,300 injuries w walkers
 - 5,800 injuries w canes



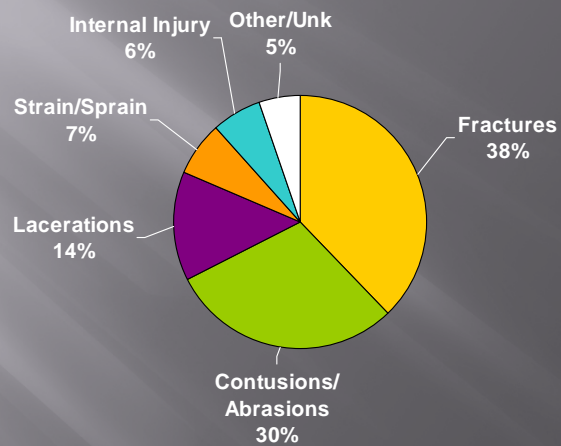
Fall Injury Rates for Men & Women Age 65+, 2001-2006



NCHS-AIP 2001-2006



Types of Injuries



NEISS-AIP, 2001-2006

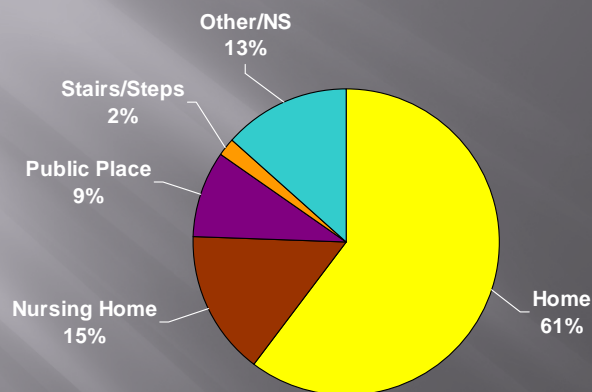


Diagnosis & Part of Body Injured

	Men	Women
Diagnosis		
Fracture	34%	40%
Contusion	28%	30%
Laceration	18%	13%
Part of Body		
Head or Neck	34%	26%
Lower trunk	31%	33%
Upper trunk	11%	11%



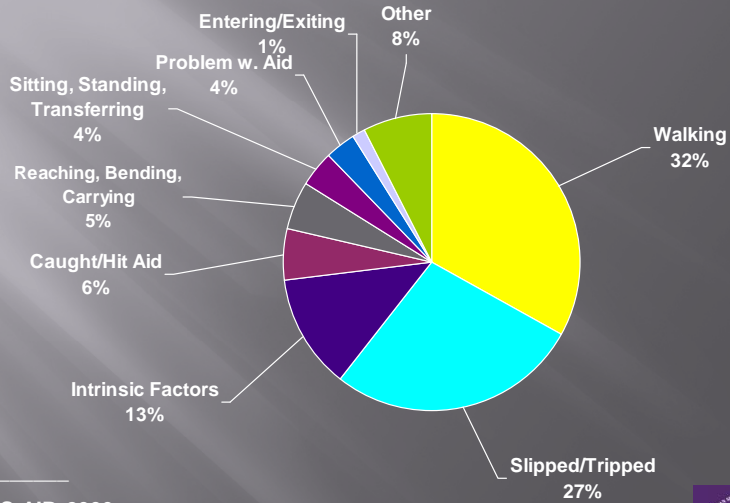
Where Did People Fall?



NEISS-AIP, 2001-2006



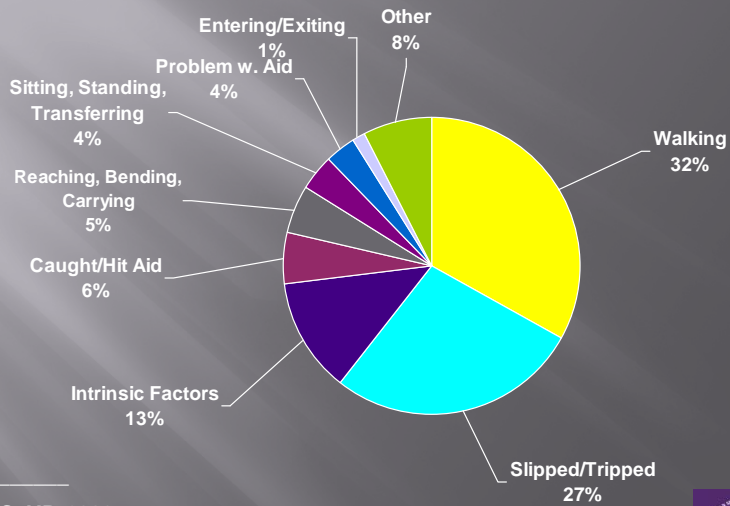
What Lead to the Fall?



NEISS-AIP, 2006



What Lead to the Fall?



NEISS-AIP, 2006



Conclusions

- ▣ Need better information
- ▣ Improve education about using walking aids safely
- ▣ Home environment + behavior
- ▣ Improve walker designs



Thank you!

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention/the Agency for Toxic Substances and Disease Registry.

