

A GROWING CONCERN

Unintentional falls among older adults are a leading cause of fatal and nonfatal injury in the U.S. and Illinois. Hospital costs associated with injuries sustained by falls account for a substantial share of health care dollars spent on injury-related care.

In 2014, 841 Illinois residents ages 65 and older died from falls and over 106,600 fall injuries were treated at hospitals and emergency departments (Figure 1).

This report provides recent data on unintentional fall injuries and deaths among Illinois residents ages 65 and older. It includes information about groups with the highest rates, associated costs, and current prevention strategies and activities in Illinois.

QUICK FACTS



Residents ages 65 and older account for **79 percent of all fall deaths** and 37.0 percent of nonfatal fall hospitalizations in Illinois.



Falls are the **leading cause of traumatic brain injury (TBI)** in Illinois residents ages 65 and older, accounting for 37 percent of TBI deaths and 56 percent of TBI hospitalizations.



Projected lifetime costs associated with fall injuries in 2014 among Illinois residents ages 65 and older are estimated to be **\$2.35 billion**.



Each week, there are 1,923 emergency department visits among residents ages 65 and older, 213 hospitalizations, and **16 deaths due to fall injuries** in Illinois.

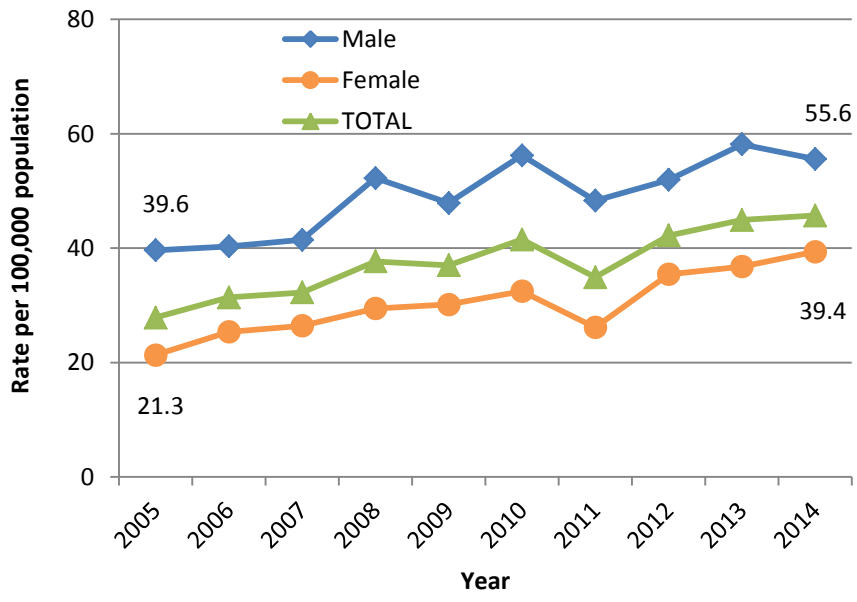
FIGURE 1. Burden of Fall Injuries among Residents Ages 65 and older—Illinois, 2014



Source: Illinois Department of Public Health, Division of Patient Safety and Quality, Hospital Discharge Dataset, 2014; Illinois Department of Public Health, Center for Health Statistics, Vital Records, 2014.

FALL DEATHS

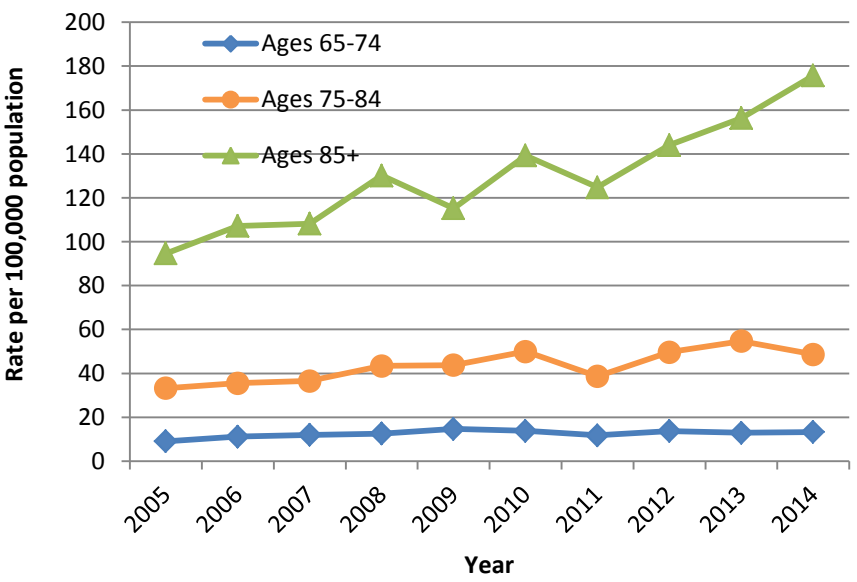
FIGURE 2. Age-adjusted Rate of Fall Deaths by Sex, Ages 65 and older—Illinois, 2005-2014



- From 2005 to 2014, the age-adjusted rate of fall deaths increased from 27.9 per 100,000 in 2005 to 45.7 per 100,000 in 2014.
- Fall death rates increased among both males and females during this time period.
- In 2014, the fall death rate in males was approximately 70 percent higher than in females.

Source: Illinois Department of Public Health, Center for Health Statistics, Vital Records, 2014.

FIGURE 3. Age-specific Rate of Fall Deaths by Age Group, Ages 65 and older—Illinois, 2005-2014



- Fall death rates remained stable among all adults aged 65-84.
- The highest increase was among persons ages 85+.
- Rates for persons ages 85 and older increased, from 94.7 per 100,000 in 2005 to 175.7 per 100,000 in 2014.

Source: Illinois Department of Public Health, Center for Health Statistics, Vital Records, 2014.

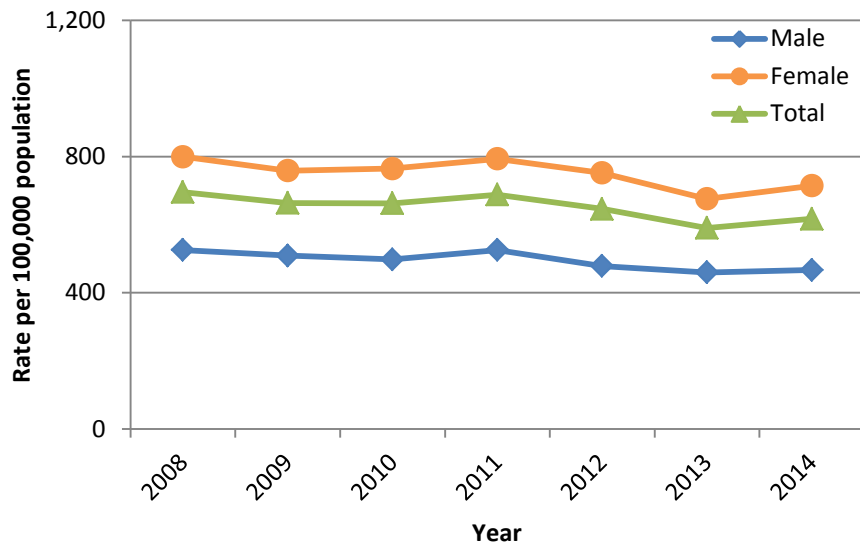


Illinois

Special Emphasis Report: Fall Injuries among Older Adults 2008-2014

NONFATAL FALL HOSPITALIZATIONS

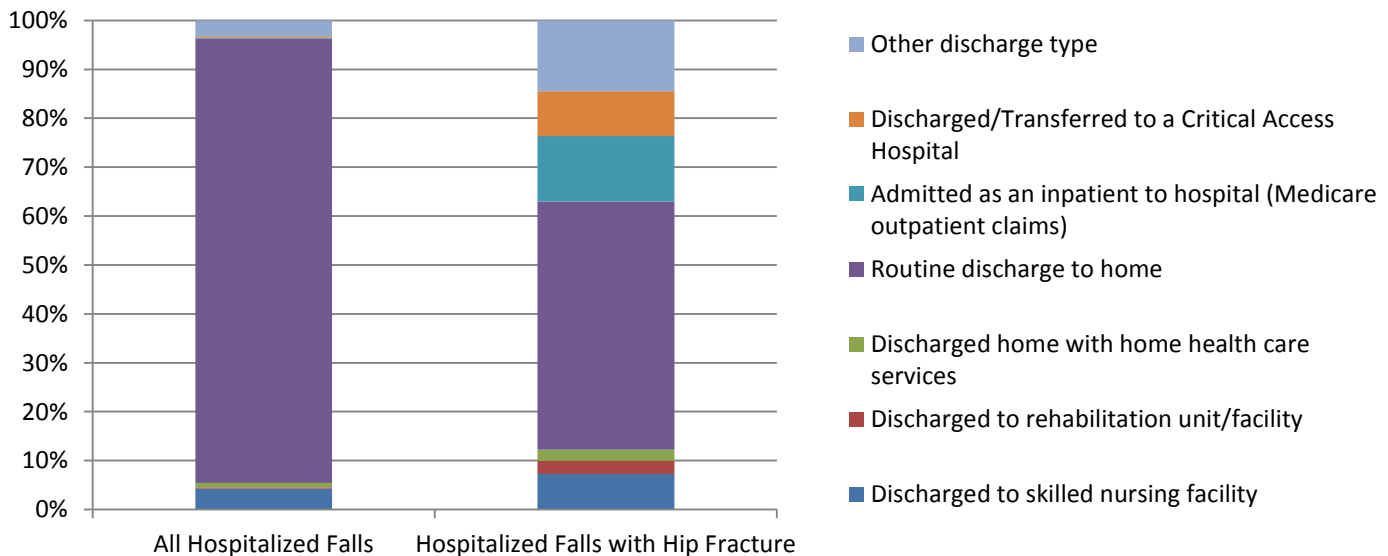
FIGURE 4. Age-adjusted Rate of Nonfatal Fall Hospitalizations by Sex, Ages 65 and older—Illinois, 2008-2014



- Nonfatal fall hospitalizations remained relatively stable from 2008 through 2011. Rates decreased slightly through 2013 but had an increase in 2014.
- In 2014, rates among females are approximately 1.5 times that of males.

Source: Illinois Department of Public Health, Division of Patient Safety and Quality, Hospital Discharge Dataset, 2014;

FIGURE 5. Percent of Nonfatal Fall Hospitalizations by Discharge Disposition, Ages 65 and older—Illinois, 2014



Source: Illinois Department of Public Health, Division of Patient Safety and Quality, Hospital Discharge Dataset, 2014;

- 90.9 percent of all fall hospitalizations were a routine discharge to home.
- Among falls resulting in a hip fracture, 50.8 percent were discharged to home, 13.4 percent admitted as an inpatient to the hospital, and 14.5 percent discharged to 'other' discharge type.
- About 4 percent of fall hospitalizations and 7 percent of falls resulting in hip fractures were discharged to a skilled nursing facility.



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DEMOGRAPHIC DATA

TABLE 1. Number and Rate of Fall Deaths and Nonfatal Fall Hospitalizations and Emergency Department (ED) Visits, Ages 65 and older—Illinois, 2014

	Fall Deaths		Nonfatal Fall Hospitalizations and Emergency Department (ED) Visits			
	Number of Deaths	Death Rate per 100,000 ²	Number of Hospitalizations	Nonfatal Hospitalization Rate per 100,000 ²	Number of ED Visits	Nonfatal ED Visit Rate per 100,000 ²
TOTAL	841	45.7	11,079	617.2	100,043	4,975.82
Sex						
Male	384	55.6	3,298	466.7	36,758	4,964.6
Female	457	39.4	7,781	714.5	63,280	6,031.7
Age Group						
Ages 65-74	133	13.3	2,740	142.9	41,260	1,116.2
Ages 75-84	258	48.6	3,925	262.6	32,548	1,670.8
Ages 85+	450	175.7	4,414	211.5	26,235	2,188.8
Race/Ethnicity						
White, NH ³	766	51.0	9,045	626.3	78,159	5,504.6
Black, NH	30	16.1	614	319.9	8,367	4,079.5
Hispanic	30	28.7	794	860.2	7,880	7,814.0
Asian/PI ⁴ , NH	15	27.4	168	283.7	1,497	2,243.1
AI/AN ⁵ , NH	0	0.0	14	575.4	87	3,306.1

²Rates are age-adjusted. Rates are adjusted to age-specific for age-group categories; ³Non-Hispanic; ⁴Pacific Islander; ⁵American Indian/Alaskan Native
Source: Illinois Department of Public Health, Division of Patient Safety and Quality, Hospital Discharge Dataset, 2014; Illinois Department of Public Health, Center for Health Statistics, Vital Records, 2014.

- Males had a higher rate of fall deaths than females (55.6 per 100,000 and 39.4 per 100,000, respectively).
- Females had higher rates for nonfatal hospitalizations and ED visits.
- Persons ages 85+ had the highest rates of fatal and nonfatal fall injuries.
- Non-Hispanic White residents had the highest rates of fall deaths and Non-Hispanic Black residents had the lowest.
- Hispanic residents had the highest rates of fall hospitalizations and ED visits and Non-Hispanic Asian/PI residents had the lowest.



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PROJECTED LIFETIME COSTS

Lifetime costs⁴ associated with unintentional fall injuries in 2014 among Illinois residents ages 65 and older are estimated to be over \$2.35 billion. Most of these costs were associated with injuries requiring hospitalizations.

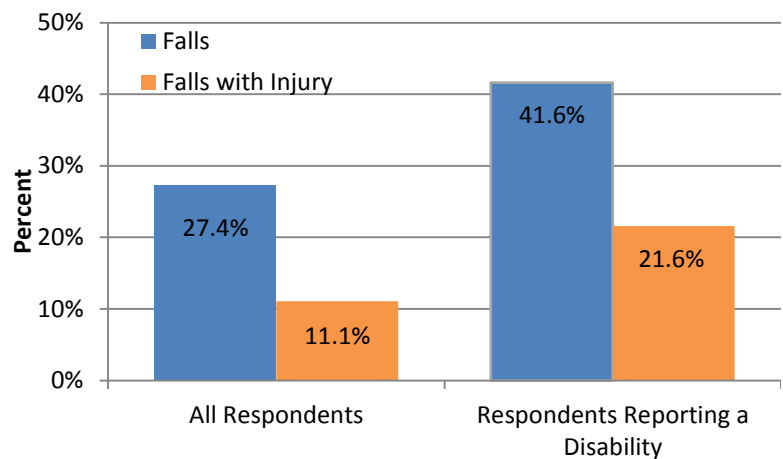
	Number of Injuries	Medical Cost	Work Loss Cost	Combined Cost
Deaths	841	\$21,983,000	\$114,226,000	\$136,210,000
Hospitalizations	28,731	\$1,180,591,000	\$866,764,000	\$2,047,355,000
ED Visits	307,210	\$120,866,000	\$52,581,000	\$173,447,000
TOTAL	336,782	\$1,323,440,000	\$1,033,571,000	\$2,356,012,000

SURVEY DATA

- According to the 2014 Illinois Behavioral Risk Factor Surveillance Survey (BRFSS), an estimated 475,000 of Illinois adults ages 65 and older reported having fallen and of those whom have fallen 40.5 percent reported a fall-related injury in the past 12 months.
- Older Illinois adults who reported the following conditions were significantly *more likely*⁵ to report falls and fall-related injuries in the past 12 months:

- poor mental health/depression
- chronic obstructive pulmonary disease (COPD)
- coronary artery disease (CAD)
- asthma
- stroke
- cancer
- diabetes
- obesity
- no exercise
- disability⁶

FIGURE 6. Self-Reported Falls and Fall Injuries in the Past 12 Months, Ages 65 and older--Illinois, 2014



Source: Illinois Department of Public Health, Center for Health Statistics, BRFSS, 2014.

- Older adults who reported a physical, cognitive and/or emotional disability⁶ had particularly high fall rates, with an estimated 252,000 reporting having fallen and of those whom have fallen 51.9 percent reporting fall-related injuries in the past 12 months.

⁴ Costs were calculated using the CDC's WISQARS Cost Module application which provides cost estimates for medical and work loss for injury-related deaths, hospitalizations, and emergency department visits. <http://www.cdc.gov/injury/wisqars/>.

⁵ These conditions are statistically significant at the (P<.05 level). However, causality shouldn't be assumed. Selected chronic health conditions: respondents reported "Yes" to **EVER** having been diagnosed with: Diabetes; Asthma; Stroke; Cancer; Depression; Chronic obstructive pulmonary disease (COPD); Coronary artery disease (CAD)/Angina or with Myocardial infarction. Poor mental health includes persons who reported experiencing 14+ days of poor mental health in the past month. Respondents are asked their height and weight to calculate BMI. Obesity is defined as a BMI greater than or equal to 30.0. Exercise is defined as respondents reporting "No" to **ANY** leisure-time physical activity.

⁶ Disability is defined as having one or more of the following conditions for at least one year; (1) impairment or health problem that limited activities or caused cognitive difficulties, (2) used special equipment or required help from others to get around.



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FALL PREVENTION RESOURCES

STEADI (Stopping Elderly Accidents Deaths & Injuries): The Centers for Disease Control and Prevention (CDC) is working to make fall prevention a routine part of clinical care. STEADI uses established clinical guidelines and effective strategies to help primary care providers address their older patients' fall risk and identify modifiable risk factors: www.cdc.gov/steadi.

PREVENTION ACTIVITIES IN ILLINOIS

- The *Illinois Fall Prevention Coalition* represents over 100 members across the state. The Coalition's priorities are to support the delivery of evidence-based programs designed to reduce fall risk and enhance networking among individuals with an interest in fall prevention. Together, the Coalition's Directory, sponsored by White Crane Wellness Center of Chicago, and its quarterly newsletter are important sources of information regarding fall prevention resources/activities in the state.
- Illinois Community Health and Aging Collaborative and Area Agencies on Aging supports an Administration for Community Living/Administration on Aging funded initiative, led by Rush University Medical Center's Health & Aging to increase the number of older adults and older adults with disabilities at risk for falls who participate in *Matter of Balance*. The project will result in an integrated, sustainable evidence-based falls prevention network statewide while ensuring its sustainability through innovative funding arrangements, and embedding the programs into Illinois' health and long-term services and supports systems.
- University of Illinois at Chicago faculty was awarded a \$2.5 million, three-year grant entitled **ENGAGE-IL (ENhancement of Geriatric Care for All through Training and Empowerment)**. The project was funded by the Health Resources and Services (HRSA) as part of its Geriatrics Workforce Enhancement Program. The products resulting from the project will include a series of on-line, continuing education courses on topics relevant to primary care in geriatrics, including falls prevention. The educational and training materials developed through this project will be widely disseminated throughout Illinois, and nationally.
- Illinois is home to over 43 *Matter of Balance* master trainers from 24 different organizations and institutions. Many of these master trainer sites are very active. For example, Advocate Good Shepherd Hospital in Lake County, Illinois has been a *Matter of Balance* Master trainer site since 2012 and has trained 60 coaches from 20 different organizations to teach *Matter of Balance* throughout northern Illinois. Two of these organizations are now master trainer sites and are teaching others to coach *Matter of Balance* classes in their communities.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
Injury and Violence Prevention Program

<http://www.dph.illinois.gov/topics-services/prevention-wellness/injury-violence-prevention>

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