

# Tracking Falls in California: Better Data Needed

Prepared by Christy M. Nishita, Ph.D. and InHee Choi, M.I.P.A.



Falls are prevalent among older Californians, but the state lacks the data needed for better planning and designing of fall prevention programs. Better data on the characteristics of persons who fall, where people fall, and the diseases/conditions associated with a fall will help to identify appropriate points of intervention. This brief summarizes sources of California falls data and recommends strategies to fill existing gaps.

## Falls are a Critical Health Problem

Fall injuries threaten the health and quality of life of California's 3.7 million older adults aged 65 and over. Projections indicate this number will increase to more than 8.3 million by 2030. Nationwide, more than one-third of older adults (65+) fall each year:

- Of older adults who fall, 20% to 30% suffer moderate to severe injuries
- Among persons age 75 and older, those who fall are four to five times more likely to be admitted to a long-term care facility

*Nationally, direct medical costs totaled \$19.3 billion for non-fatal fall injuries and \$179 million for fatal fall injuries in 2002. Based on the national estimates cited above, California's non-fatal fall injuries cost about \$2.4 billion each year in direct medical costs.*

## Importance of Accurate Falls Data

California can reduce fatal and nonfatal injuries and health care costs by better tracking and monitoring fall injuries in order to identify appropriate persons and settings most at-risk of falls. This information will help to identify subgroups at high risk for falls and therefore, guide the development of effective fall prevention initiatives and policies. Several data sources are available in California to track falls, to examine the demographic and health characteristics of older persons who fall, and to estimate their health care costs.



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## Data Systems for Fall Injury Surveillance

Non-Fatal Fall Injuries						Fatal Fall Injuries
Community		Health Care Systems				
California Behavioral Risk Factor Survey	California Health Interview Survey	Emergency Medical Services Data	Emergency Department Data	Hospital Patient Discharge Data	Nursing Facilities-Minimum Dataset	Death Certificate

- **California Behavioral Risk Factor Survey (CBRFS)**

The CBRFS is an annual telephone survey of California residents age 18 and older that asks respondents about their health status, risky behaviors, and use of services. In 2003 and 2006, the survey asked questions about falls in the last 3 months, but questions related to falls are not on a fixed cycle.

- **California Health Interview Survey (CHIS)**

The CHIS is a telephone survey, administered every two years beginning in 2001, that contains information on older Californians' health status, health behaviors, and health care usage. The 2003 survey posed a single question to older adults on whether the respondent has fallen to the ground more than once in the past 12 months. Additional falls-related questions are planned for the 2007 wave of data collection.

- **Emergency Medical Services (EMS) Data**

All EMS runs are captured on some kind of pre-hospital care form, regardless of whether the EMS responder did or did not transport the patient to an emergency department or trauma center. Paramedic records note the type of injury, but the reason for an injury (e.g., fall) may not be accurately recorded. In addition, each county has its own database without any requirements for reporting to the State. The California Emergency Medical Services Authority (EMSA) is promoting a new system to standardize reporting throughout the state using a database called the California Emergency Medical Services Information System (CEMSIS). The new system will produce information comparable to other states that are part of the National Emergency Medical Services Information System and will enable EMSA to accurately report to policy makers on fall trends, circumstances of the fall, and the characteristics of the faller.

- **Emergency Department Data**

Non-federal hospitals are required to file an Emergency Care Data record for each patient visit to a hospital emergency department. The records contain information on causes of injuries, including falls and have information on the type of fall (e.g., "fall on or from stairs or steps"). Standardized reporting of emergency department data to the state began in 2006 and data will become publicly available in 2007.

- **Hospital Patient Discharge Data**

This dataset contains discharge information on patients in all non-Federal acute care hospitals. The data contains information on falls, the type of fall, and the place the fall occurred. Data permits tracking of fall injury rates by patient characteristics (age, gender, race/ethnicity) and county. The data can also provide information on the total cost of the hospital stay and the setting in which the person was discharged.



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- **Minimum Dataset (MDS)**

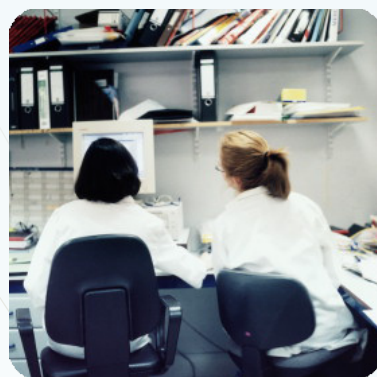
The MDS is a federally mandated clinical assessment of all residents in Medicare or Medicaid certified nursing homes. The admission, quarterly, and annual assessments contain two Quality Indicator questions about whether the resident fell within the past 30 and 180 days. These questions, along with assessments of balance, use of medications, and hip fractures provide a basis for tracking falls and other contributing factors.

- **Death Certificates**

California death certificates contain codes that can identify whether persons died due to fall injury. The data may be limited because falls may be the precipitating event in a downward spiral of health conditions that lead to death, but may not be listed as a “contributing” factor.

## Linkage of Data Sources

Each data source can provide pattern and trend information on persons who fall and in some cases, information on the cost and risk factors for falls. However, patients cannot be tracked through the different care settings in order to assess the overall cost and impact of fall injuries on the health care system. A universal linkage of data sources would provide essential information on the cost of falls to Medicaid and other state programs. Linked data will also help to track movements through different health care settings (e.g., hospital to nursing home) so that policy makers can develop programs and policies to prevent unwanted and unnecessary transitions.



## Recommendations

Efforts are underway to standardize and improve the collection of quality data. Policy makers need to be aware of and support the efforts of these agencies and organizations. As such, policy makers should:

- Provide continued support and sustained funding to collaborators on the CHIS project (University of California Los Angeles, California Department of Health Services, and the Public Health Institute) to both expand data collection on falls and ensure it is consistently collected in each wave of the survey.
- Monitor and support California’s Emergency Medical Services Authority’s development of a standardized data collection system (CEMSIS) and the Office of Statewide Health Planning and Development’s statewide data collection of emergency department data.



