Older Adult Falls: A Public Health Problem
Falls are the leading cause of injury deaths among older adults. Equally troubling, nonfatal falls affect many older adults and result in significant medical costs.

- Every 22 minutes, an older adult dies from a fall-related injury.
- Every 13 seconds, an older adult is treated in an emergency department for a fall.
- Fall-related injuries for older adults are among the 20 most costly medical conditions. The average cost of a fall hospitalization is $32,705.
- $30 billion is spent annually on direct medical costs related to falls.
- Among people who fall, less than half talk to their healthcare provider about falls.

Falls can also have major psychological and social consequences. Seniors may restrict their activities because of a fear of falling and a loss of self-confidence, which can lead to reduced mobility, fewer social interactions, decreased physical fitness, and reduced quality of life.

CDC’s Unique Role and Strategies that Work
For more than 20 years, the National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention (CDC’s Injury Center) has been the nation’s leading public health authority on violence and injury prevention. CDC Injury Center’s overall strategy is to make fall prevention (screening, assessment, treatment, and referral) a routine part of clinical care. Evidence shows the majority of modifiable risk factors can be identified and addressed in the healthcare setting, yet providers often lack the tools needed to intervene. The CDC Injury Center’s practice-based tools are perceived as the gold standard for screening and managing fall risk. The CDC Injury Center also supports the implementation and evaluation of effective community-based programs and policies.

- Supporting external fall prevention partners with resources, available online and through technical assistance:
  - **STEADI (Stopping Elderly Accidents, Deaths, and Injuries) tool kit** was created with healthcare provider input and describes a physician-delegated approach to incorporating fall prevention in clinical settings. It provides a simple algorithm for screening, assessments, treatment, and follow-up based on the American Geriatric Society’s clinical practice guidelines.
  - **Compendium of Effective Fall Interventions** describes 22 scientifically tested and proven interventions and provides relevant details about these interventions for organizations who want to implement fall prevention programs. The interventions are grouped into three categories: 1) exercise-based; 2) home modification; and 3) multifaceted.
Many of the Core Violence and Injury Prevention Program (Core VIPP) states are doing innovative work on falls prevention. CDC’s Injury Center currently provides funding to three state health departments (Colorado, New York, and Oregon) to work with local healthcare providers to implement and evaluate the STEADI tool kit and link patients to community-based programs.

- **Integrating public health with clinical care:** Modifiable risk factors, like medication use and Vitamin D deficiency, can be addressed in the healthcare setting. With healthcare provider feedback, CDC’s Injury Center is developing the tools providers need. For example:
  - **Clinical Decision Support:** developing a fall prevention clinical decision support module for two electronic health record systems (Epic and GE Centricity) based on the STEADI toolkit. Each module will streamline how fall prevention is conducted in the clinical setting. The modules prompt providers to screen for fall risk; assess gait, strength, and balance; optimize medication; determine need for follow-up; and allow clinic staff to document assessment results and treatment plans.
  - **Education and Training:** developing online training courses for medical providers (medical doctors, nurses, physical therapists, and others) on how to incorporate STEADI in their clinical practice. Course participants will receive continuing education credit for participating.
  - **STEADI Step One:** developing an approach which consists of three simple asks of clinicians when seeing their patients age 65 and older: 1) screen older adults for their fall risk using three key questions; 2) recommend Vitamin D supplements to older adults (vitamin D supplementation can reduce falls up to 17%); and 3) review and optimize medications for all patients who screen positive for fall risk (better medication management can reduce falls by up to 66%). STEADI Step One is a brief, modified form of the full STEADI toolkit intended to enhance rapid adoption of falls screening, assessment, treatment, and referral.
    - **Vitamin D:** Vitamin D supplements for adults 65 and older are effective in reducing falls. The United States Preventive Services Task Force supports this recommendation.
    - **Medication Optimization:** Medication optimization works by reducing negative interactions and side effects that may lead to falls. Effectively managing medications includes eliminating medications that are no longer needed; reducing doses of necessary medications to the lowest effective dose; and avoiding prescribing medications for an older person where the risk from side effects outweighs the benefit.

**Older Adult Falls Prevention in Action**

CDC’s Injury Center is developing a phased Falls Screening and Management Program. Phase One targets primary care providers and will focus on how to screen for fall risk, optimize medication use, and recommend Vitamin D supplementation. These interventions address the 21% of community-dwelling older adults who are prescribed potentially-inappropriate medication that can increase their risk of falls. Subsequent phases will focus on the role other medical specialists (e.g., pharmacist, nurses, physical therapists) play in reducing falls as well as on other clinical interventions (e.g., cataract surgery, physical therapy) that could be employed to reduce falls.

The states receiving supplemental falls funding through Core VIPP are already seeing successes:

- In 2012, the United Health Services Medical Group in New York State implemented the STEADI Toolkit in 17 healthcare practices and incorporated the STEADI algorithm into the electronic health record (EHR) system. Thus far, 167 participating physicians have conducted more than 30,000 fall risk screenings.
• In 2013, STEADI was piloted in the Oregon Health & Science University (OHSU) primary care clinics, reaching over 500 patients age 75 and older. In support of the fall prevention integration with clinical care, OHSU made modifications to their EHR system. The changes streamlined the process of conducting a fall risk assessment and subsequently encouraged providers to screen, assess, treat, and refer patients based on the patient’s identified risk.

Future Goals
The number of people age 65 and older in the U.S. is growing. As a result, continued efforts to reduce falls and thereby save lives and decrease associated costs are critical. Future goals include:

• Developing focused falls screening and management program for primary care providers that emphasizes screening, optimizing medications, and Vitamin D supplements;
• Enhance training opportunities for physicians to increase the level of engagement and partnership with the medical community and further integrate falls prevention within the clinical setting;
• Build partnerships with accountable care organizations and other large healthcare organizations interested in implementing and evaluating the proposed older adult falls screening and management program; and
• Expand partnerships with community-based organizations, state health departments, and other agencies to encourage the use of evidence-based strength and balance programs as well as increase providers’ awareness of available local and ongoing options.