

---

# Falls and Fall Risk

*The American Medical Directors Association (AMDA) has utilized interdisciplinary expert panels to develop several clinical practice guidelines (CPGs) on key geriatric syndromes. Through the organization's generosity, AMDA has made a summarized version of its CPGs available to allow our readers to begin thinking about the process needed to improve outcomes associated with these syndromes. The first CPG we will feature addresses a major problem for assisted living facilities—falls and fall risk. Falls are a main reason that residents leave ALFs and move to alternative settings. Therefore, logic dictates that those ALFs that are able to reduce falls will be able to retain residents longer and thus increase occupancy rates. We hope that facilities can use the information in this guideline to enhance falls prevention efforts.*

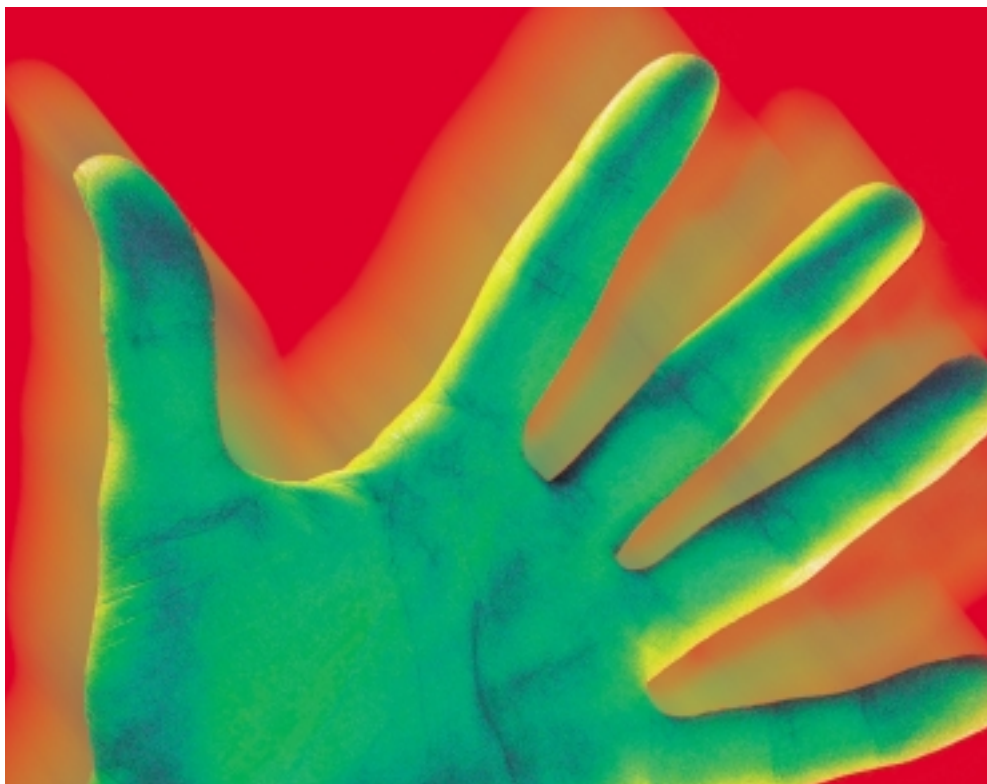
## Definition

Falling is a problem characterized by the failure to maintain an appropriate lying, sitting, or standing position, resulting in an individual's sudden, unintentional relocation either to the ground or into contact with another object below his or her starting point.

## Introduction

Falling is a significant cause of injury and death in older persons, especially the frail elderly. This is a major issue in assisted living facilities. Individuals in assisted living facilities fall for a variety of reasons. Often, several factors (eg, age-related changes, acute or chronic conditions, medication effects, factors related to the resident's environment or activities, inability or failure to follow safety measures, and/or physical weakness) are involved simultaneously. Among other things, decreased body mass and osteoporosis may result in serious injuries as a consequence of a fall.

Preventing falls presents a significant challenge in all settings, including assisted living facilities, and requires a substantial interdisciplinary team effort. Such efforts should focus on minimizing fall risk and the risk of fall-related injuries while maximizing individual digni-



ty, freedom, and quality of life. These efforts will go a long way toward avoiding these preventable events and allowing assisted living residents to age in place.

### Step 1

***Does the resident have a history of falls?*** A history of falls is a strong predictor of future falls. Review the resident's record for

evidence of previous falls. Ask the resident and the resident's caregiver or family if the individual has a history of falling.

### Step 2

***Is the resident at risk of falling?***

Many risk factors are associated with falls. Multiple factors often are involved in a given individual. For

*(continued on page 28)*

## Falls and Fall Risk

(continued from page 26)

example, a previous fall may generate a fear of falling again, which results in reduced mobility and leads to deconditioning—a loss of strength, balance, and agility that may rapidly follow a period of immobilization. An acute illness such as pneumonia may cause lethargy, dizziness, or deconditioning and thus lead to falls. In addition, the following comorbid conditions may be associated with falls:

- Musculoskeletal problems that impair strength and biomechanics. Neurologic and cardiac illnesses.
- Orthostatic hypotension and medications that impair alertness and balance or cause orthostatic hypotension.
- Urinary or fecal urgency that leads to frequent visits to the toilet.
- Visual impairments and peripheral neuropathies that impair position sense.

Document risk factors for falling in the resident's record and discuss the resident's fall risk in care conferences.

### Step 3

*Has the resident just fallen?* Provide staff with a clear, written procedure that describes what to do when a resident falls. When a resident has just fallen or is found on the floor without a witness to the fall, staff should provide appropriate first aid. Notify the resident's attending physician and family in an appropriate time frame. For falls that do not result in significant injury or a condition change, the practitioner may be notified routinely (eg, by fax or by phone the next office day) instead of immediately.

Document relevant post-fall clinical findings such as vital signs, pain, swelling, bruising, and decreased mobility in the resident's record. It is also desirable to note the absence of

such significant findings (so-called "pertinent negatives") to demonstrate that the resident is being monitored appropriately.

### Step 4

*Define the nature, frequency, and causes of a resident's falls.* After an observed or probable fall or after a fall risk has been identified, a more detailed analysis of the resident's falling or fall risk should occur.

The nature of falls or fall risk refers to their characteristics and related circumstances—for example:

- Buckling of the right knee or leaning far to one side while trying to ambulate. A tendency to slide from a chair while sitting. Falling after standing up or while trying to get to the bathroom at night.

Frequency refers to the intervals between falls or between situations



## Provide staff with a clear, written procedure that describes what to do when a resident falls.



that present a risk of falling. Was a recent fall new or recurrent? Recurrent falling may require broader attempts at cause identification than isolated or occasional falling.

### Step 5

*Define the resident's actual and potential complications of falls.* Some falls may result in significant complications. It is important to define complications of falls and significant potential complications of falling for each resident.

For example, residents who have a history of falls without significant

injury may sustain a more serious injury in subsequent falls. Those with significant osteoporosis are more likely to sustain fractures of the hip, wrist, and spine from falls. Residents with reduced amounts of muscle, fat, and subcutaneous tissue to absorb the impact of a fall also are more susceptible to fractures. Current use of anticoagulants is a risk factor for significant injury from falls; use of these medications may result in greater blood loss relative to the degree of trauma.

### Step 6

*Develop a plan for managing falls and fall risks.* Care goals related to falling are to try to prevent falling and to prevent recurrent falls in residents who have fallen before. The management of falls and fall risk may involve one or several measures. Use a clear, consistent approach to select interventions to manage and prevent falling in individual residents. Be aware that risk prediction is imprecise; some low-risk individuals may fall, and some high-risk individuals may not. However, effective risk assessment should enable facility staff to anticipate risks correctly more often than not.

It is appropriate to prioritize approaches to managing fall risk and falling. That is, if a systematic evaluation of a resident's fall risk identifies several possible interventions, it is reasonable to choose one of these interventions to try first.

If falling reoccurs despite the initial intervention, additional or different interventions may be needed. Adjust the resident's care plan as necessary to reflect the implementation of new or modified interventions to try to minimize the risk of falling and fall-related injuries. Briefly document the rationale for specific interventions to show that causes of the problem are being sought.

Although no specific efforts or combinations of interventions have been shown to prevent all falls or all injuries associated with falling, it is often possible to reduce the

frequency of falls and the severity of injuries associated with falling.

## Step 7

**Manage the causes of falling.** Managing falls can be complicated because many falls do not result from a single cause but rather from the interaction of several factors. Successful fall management uses a systematic approach that may require repeated reassessment and adjustment.

Cause-specific interventions are only available and effective sometimes. At other times, the best that can be done is to try various interventions until falls are reduced or stopped completely, or until an uncorrectable reason is identified for continuation of the problem.

**Falls associated with medication use.** Evaluate the resident's drug regimen carefully to identify medications that may be precipitating falls. For example, many medications can cause dizziness or postural hypotension, which can increase fall risk. Falls that start after a change in a resident's medications should trigger a review of the resident's entire medication regimen. Long-standing medications that may not have been problematic in the past should be re-evaluated in conjunction with recent acute illnesses or general condition changes.

## Step 8

**Implement relevant general measures to address falling and fall risks.** Various generic approaches (those that are not directed at specific causes) can have an impact on the prevention and management of falls. Coordinate initiatives to prevent and manage falls with those of the facility safety committee, reviews of falls by the quality improvement committee, and efforts to ensure a safe environment for wanderers.

## Step 9

**Manage factors that may cause serious consequences of falling.** Some of the physical, functional, and environ-

mental factors that predispose residents to falling also increase the risk of serious consequences of these falls. Many members of the interdisciplinary care team, as well as staff in support services such as housekeeping and maintenance, can help to address these risk factors.

## Step 10

**Monitor falling in individuals with a fall risk or fall history.** As previously noted, there are no foolproof ways to prevent all falls. Further, it is often not possible to predict with certainty whether a particular intervention to manage falling or fall risk will be effective in a given resident.

Monitor and document the resident's response to interventions

**Preventing falls and minimizing fall-related injuries constitutes a significant challenge for assisted living facilities and requires a substantial interdisciplinary team effort.**

intended to reduce falling or the risks of falling. If interventions have been successful in preventing falls, continue with current approaches or reconsider whether these measures are still needed if the problem that required the intervention (eg, dizziness, joint pain) has resolved or been corrected.

If the resident continues to fall, re-evaluate the situation and reconsider current interventions. Amend the care plan as necessary to reflect the addition of new interventions and the need for continued monitoring.

## Step 11

**Conduct quality improvement activities related to falls.** Include analysis of falls in the facility's quality improvement studies. Track accidents and falls by (at a minimum) time, location, and identified categories of causes. The total number of falls will fluctuate from month to month.

### Summary

Falling is a significant cause of injury and death in older persons, especially the frail elderly. Preventing falls and minimizing fall-related injuries constitutes a significant challenge for assisted living facilities and requires a substantial interdisciplinary team effort. Managing falls requires recognizing that many falls do not result from a single cause but rather from the interaction of numerous intrinsic and extrinsic factors. Successful fall management uses a systematic approach that may require repeated reassessment and adjustment. Although no specific efforts or combinations of interventions have been shown to prevent all falls or injuries associated with falling, it is often possible to reduce the frequency of falls and the severity of injuries associated with falling.

*The complete "Falls and Fall Risk" clinical practice guideline is available from AMDA at [www.amda.com](http://www.amda.com).*

ALC

### Selected Bibliography

American Geriatrics Society, British Geriatrics Society, and American Academy of Orthopedic Surgeons Panel on Falls Prevention. Guidelines for the Prevention of Falls in Older Persons. *J Am Geriatr Soc* 2001; 49: 664-672.

Aronow WS, Ahn C. Association of postprandial hypotension with incidence of falls, syncope, coronary events, stroke, and total mortality at 29-month follow-up in 499 older nursing home residents. *J Am Geriatr Soc* 1997 Sep;45 (9):1051-1053.

Capezuti E, Evans L, Strumpf N, Maislin G. Physical restraint use and falls in nursing home residents. *J Am Geriatr Soc* 1996 (Jun); 44(6): 627-633.

*(continued on page 32)*