

SINCE YOU CARE

A Series of Guides from MetLife in Cooperation with the National Alliance for Caregiving

Falls and Fall Prevention

About the Subject

Falls are the leading cause of injury-related visits to the emergency room in the U.S. and the primary cause of accidental deaths in people over age 65.¹

This fastest growing group represents 12.6% of the population and accounts for 24% of trauma fatalities for all age groups.²

Thirty-five percent to 40% of adults 65 years of age and older who are generally in good health fall at least once a year.

Compared with a younger population, 5% of individuals who fall require hospitalization. And as people age, the frequency of falls and deaths related to falls rises.

In people 65 years of age and over, falls are the cause of death in 75% of incidences.⁴

Falls represent very real possibilities for serious injury. Fractures are the most serious injury associated with falls, which account for 87% of all fractures for people over the age of 65.⁵ The most



MetLife

Caregivers face many challenges as they search for information and make decisions about how best to provide care to their loved ones. To help meet their needs,

MetLife offers SinceYouCaresm — a series of guides which provide practical suggestions and useful tools on a variety of specific care-related products.

common fractures are those of the hip, pelvis, spine, hand, and wrist.⁶ Falls are also the second leading cause of spinal cord and brain injury in the older population.⁷

A hip fracture, the injury most likely to require a 10 day to two week hospitalization, affects personal independence and most often results in admittance to a nursing home or rehabilitation facility. Nearly half of all people who suffer a hip fracture can no longer live independently and 25% will die within six months of the injury.⁸

Older adults who have experienced a fall often fear falling again and in response, reduce their level of physical activity. This reduction in activity leads to a decline in their physical condition and increases the risk of falls. They also fear the loss of function and physical and social isolation that may accompany a fall.

Things You Need to Know

Aging often causes changes in vision, hearing, reflexes, coordination and strength. There may be the progression of chronic illnesses such as diabetes, heart disease, and arthritis, or acute

events such as a heart attack or stroke. While the changes in eyesight and hearing often cannot be stopped, nor a heart attack or stroke always foreseen, there are measures that can be taken to help prevent falls.

Risk Factors

Risk factors for falls can be grouped into two categories:

- Internal factors
- External factors

Internal Factors

Bones

- As people age, their bones become more porous, weaker and more vulnerable to fractures. Falling and having osteoporosis may increase the possibility of a fracture. Bone density testing can diagnose osteoporosis and monitor the progress of its treatment. There are measures that can be taken to combat the development and progression of osteoporosis. Medication, diet and regular weight bearing exercise can help prevent deterioration of the bone in both men and women.

Eyes

- Diseases of the eye, such as glaucoma, cataracts and macular degeneration can

increase the risk of falls. These diseases can alter depth perception and peripheral vision, cause blurriness, and increase sensitivity to glare. It is important to have regular eye examinations, wear properly fitted eye-glasses, and take eye drops as prescribed.

Muscles

- As adults age, strength, flexibility, and coordination can be improved with regular physical exercise. Take a walk, do aerobics, and stretch as a regular part of your daily activities. Exercise can help with balance, muscle strength and coordination. Check with your physician before starting any new exercise program.

Diseases

Certain diseases, in advanced stages, can cause changes in coordination, strength and balance. Ongoing assessment is essential so that modifications can be made to the environment as needed.

- As Parkinson's Disease progresses, walking becomes more difficult and balance and coordination are affected.
- Alzheimer's Disease can distort judgment and perception of physical limitations.

- Advanced diabetes can alter sensory perceptions and muscle strength in arms and legs.

External Factors

Medications

- The use of multiple medications can cause changes in mental alertness, changes in balance and walking, confusion and alterations in blood pressure leading to dizziness and weakness. For example, diuretics (pills used to reduce water retention) can lead to an increase in falls that result from changes in blood pressure. Rushing to get to the bathroom because

of increased incontinence may also lead to a fall. Tranquilizers and anti-depressants can cause changes in mental status, alertness and cause fatigue. Make sure to check with your physician or pharmacist for side effects and drug interactions.

Environmental Hazards

- One-third of older adults fall because of environmental hazards in the home.⁹ Examples of home hazards include objects in pathways, poor lighting, loose throw rugs, loose carpets, uneven floor surfaces and wet floors.

Most falls in the home occur while standing on furniture or ladders or while going up and down the stairs.

Alcohol

- Alcohol is metabolized more slowly as a person ages and can cause alterations in cognition and perception of spaces and events, thereby increasing the risk for falls. Alcohol, in conjunction with medications, can cause increased fatigue and confusion. Alcohol intake should be limited so as not to impair balance, coordination, and mental alertness.



While internal factors may be difficult to modify or change, such as stopping the progression of Parkinson's Disease or diabetes, changing and adjusting external factors in a person's environment can help prevent falls.

Helpful Hints

Fall Prevention

Research suggests that one-third to one half of all accidents and falls in the home can be prevented with home modification and maintenance.¹⁰ Home modification may be as simple as installing grab bars in a shower or as complex as building ramps, widening doorways, and installing security systems. Home modification and maintenance make the living environment a safer place for older adults and prevent the possibility of a fall and the loss of independent function.

A comprehensive falls prevention program should consist of a medical evaluation that includes assessment of blood pressure, vision, hearing, balance, muscle loss and mental status. It should also include a thorough evaluation of the environment in which the older person lives.

You can check with your local Area Agency on Aging, which can be located by accessing the *Eldercare Locator* (see *Resources to Get You Started*) to see if they can suggest programs or individuals who can assist with an in-home safety evaluation program. Sometimes,

occupational therapists can come to the home to evaluate the bathroom and general living quarters to suggest safety improvements.

To Help Prevent Falls

- Do not get up too quickly from lying down or resting



because quick changes in position can cause dizziness.

- Wear supportive, low heeled, rubber-soled shoes.
- Exercise caution when walking on thick pile carpets.
- Do not wear smooth-soled slippers or socks on smooth floors such as wood or linoleum.
- Use caution when walking outdoors when it is wet or icy.
- Limit your alcohol intake.
- Do not wear glasses that are meant for reading when you are performing activities other than reading.

Helpful Home Modifications

Lighting

- Use night lights in halls and bathrooms for the evening. However, avoid very bright lights that could increase glare.
- Be sure that lighting is bright enough in hallways, stairways, and bathrooms.
- Place light switches at the top and bottom of the staircase.

Access

- Keep walkways clear of electrical cords or telephone wires.

- Arrange furniture so it does not interfere with walking.
- Check to see if thresholds present a tripping risk; widen doorways, if possible.
- Make sure that furniture is not too low to the floor or too high to be comfortable.
- Remove throw rugs and secure carpets.
- Place coffee tables on an area rug for added contrast.¹¹
- Ask family, friends or caregivers to always return furniture to its original location. This is especially helpful if you are sight-impaired.
- Make phones easily accessible from various rooms in the home.¹²

Mobility

- Install handrails on both sides of stairways, if possible.
- Mark the first and last stair with a strip of bright paint or colored adhesive tape made specifically for stair steps.
- When climbing stairs, don't carry large packages that obstruct your field of vision or upset your balance.
- Place non-skid strips in the tub or shower.
- Install grab bars in the tub or shower and next to the commode.
- Install an elevated seat on the commode.

If you need to hire a contractor for home modifications, be sure that the contractor is reliable. Older people are prime targets for fraud. Use recommendations from friends, check out references, insist on a valid contract, do not pay in cash and do not pay the bill in full until the job is completed. You can check with your local Better Business Bureau or your city/county Consumer Affairs Office regarding the contractor's reliability and performance record.

Resources to Get You Started

Books and Publications

The Perfect Fit: Creative Ideas for a Safe and Livable Home is an AARP booklet (Stock# D14823) that details safety features to help prevent falls in the home and is available free of charge by writing to: AARP Fulfillment, 601 E Street, NW, Washington, D.C. 20049.

Whatever Works contains information for people who lost their vision as adults. The book includes home modification information and is also available in Spanish and Russian. It is available from The Lighthouse, Inc. for a cost of \$5.00. To order, call 800-829-0500 (select voice menu option "information").

Internet Sites

Administration on Aging

This site is maintained by the U.S. Department of Health and Human Services and provides resources, news and developments and information for older adults. www.aoa.dhhs.gov

Falls and Hip Fractures

The Center for Communication and Consumer Services is a central source for a wide variety of information on aging for older people, their families, and those who work for or on behalf of older persons. The site provides Internet links to fall-related information on statistics and prevalence, prevention and research. www.aoa.dhhs.gov/prof/notes_falls.asp

National Association of The Area Agencies on Aging (n4a)

The n4a is the umbrella organization for the 655 Area Agencies on Aging throughout the United States which provide information and services, and coordinate and administer programs for older adults. The federally-funded Eldercare Locator, administered by n4a, provides callers with information about local services, including hospice, by zip code. Call 800-677-1116, 9:00 a.m.-8:00 p.m. ET, or access it at www.n4a.org.

National Resource Center on Aging and Injury

The Resource Center is a collaborative effort between the University Center on Aging, College of Health and Human Services at San Diego State University, and the American Society on Aging in San Francisco, CA. The site contains a vast amount of information about injuries among the older population and offers an online database and an extensive links page for older adults and families. www.nrcai.org

The Do-Able Renewable Home

This comprehensive, online publication, written by AARP, provides information you can use to make your home more livable and help you to overcome challenges that may occur as you age, such as limited movement, decreased strength, dexterity, hearing, or eyesight. You can access this publication by going to www.homemods.org. Click on "Library," found in the left hand menu, and then scroll down to "Online Publications," under "D." You may also access the publication in www.homemods.org by clicking on "Safety Checklist and Assessment Instrument" found in the left hand menu. Scroll down until you get to "The Do-Able Renewable Home."

The Fall Prevention Project

Temple University's Fall Prevention Project is a federally-funded grant project established to inform and educate older adults, health care practitioners and students about the causes of falls in older adults. Assessment, rehabilitation, and health promotion measures are discussed. www.temple.edu/older_adult/

The Wright Stuff-Health Care Products That Make Life A Little Easier

This site offers adaptive equipment and products to individuals with various health care needs. Access it on the Internet at www.thewright-stuff.com or call 877-750-0376, Monday-Friday, 8 a.m. to 5 p.m. CST.

U.S. Consumer Product Safety Commission

The site offers *Home Safety Checklist for Older Consumers*, Document #701. This may also be accessed on the Internet at www.ext.colostate.edu/pubs/consumer/10242.html. The checklist may also be obtained by writing to the U.S. Consumer Product Safety Commission, Washington, D.C., 20207. Please request by document name and number. The home page is www.cpsc.gov.



Dis-abilities

This site offers many specialty products to assist in the quality of life from adaptive equipment to traveling with a disability to home modifications. Access it on the Internet at www.dis-abilities.com.

Dynamic Living

This site offers products and equipment to make life easier and safer. It may be accessed on the Internet at www.dynamic-living.com, or call 888-940-0605 Monday-Friday 9 a.m. to 6 p.m. EST.

Useful Tools

Enclosed is a checklist to help you assess the readiness of your home's environment for your care recipient.

- Home Safety Checklist

Endnotes

- ¹ Fuller, G., *Falls in the Elderly*, American Family Physicians, April 1, 2000.
- ² *Falls*, Loyola University Chicago, Loyola University Health Systems, www.luh.org/depts/injprev/Falls/adult.htm (no date available).
- ³ Darves, B., *Strategies to Prevent Falls in High-Risk Elderly Patients*, American College of Physicians (ACP), May 2003.
- ⁴ Ibid.
- ⁵ *Falls and Hip Fractures Among Older Adults*, U.S. Department of Health & Human Services, Center for Disease Control, National Center for Injury Prevention & Control, Atlanta, GA, January 27, 2000.
- ⁶ Ibid.
- ⁷ *Preventing Falls & Fractures*, Crouse Hospital, Syracuse, NY 1997.
- ⁸ Barber, C.D., *Preventing Falls in the Elderly*, Colorado State University Cooperative Extension, No. 10.242. Reviewed September 1998 Page updated May 2, 2001.
- ⁹ Ibid.
- ¹⁰ *Home Modification and Repair*, U.S. Department of Health & Human Services, Administration on Aging, Washington, D.C., April 29, 2002.
- ¹¹ *Practical Advice for Safer Everyday Living* www.lighthouse.org/resources_home_safety.htm (no date available).
- ¹² *Home Safety Checklist for Older Consumers*, Consumer Product Safety Commission, CPSC Document # 701.

About the Authors of Since You CareSM

Since You Care guides are prepared by the MetLife Mature Market Institute in cooperation with the National Alliance for Caregiving and MetLife's Nurse Care Managers.

MetLife Mature Market InstituteSM is the company's information and policy resource center on issues related to aging, retirement, long-term care and the mature market.

MetLife Nurse Care Managers are available to MetLife's long-term care customers and their caregivers, on a daily basis, to help identify and resolve caregiving questions and concerns through counseling and referral.

National Alliance for Caregiving is a non-profit coalition of 38 national organizations that focuses on issues of family caregiving.

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This information is general in nature. It is not a substitute for obtaining guidance from a healthcare, financial or other professional.

Home Safety Checklist

Falls often result in death and severe injuries—87% of falls result in fractures for people over age 65. Hip fractures mean the end of independence for at least half of older adults who require hospitalization for their injury. Falls are also the second leading cause of spinal cord and brain injury in the older population. Sixty percent of fatal falls occur at home. This document can be useful in helping to spot potential fall hazards in your home.¹

Living Areas

	Yes	No
1. Are appliance, lighting, extension and phone cords out of the flow of traffic?	<input type="checkbox"/>	<input type="checkbox"/>
2. Are light switches conveniently located in each room?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are hallways well-lit, using non-glare bulbs?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are rooms and hallways free of obstruction such as boxes or plants?	<input type="checkbox"/>	<input type="checkbox"/>
5. Are all stairways well-lit, with sturdy handrails?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are stairs painted with rough-textured paint or edged with non-stick tread?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are stairways free of clutter?	<input type="checkbox"/>	<input type="checkbox"/>
8. Is wall-to-wall carpeting securely tacked down?	<input type="checkbox"/>	<input type="checkbox"/>
9. Are area rugs laid with a non-skid padding?	<input type="checkbox"/>	<input type="checkbox"/>

Bath and Shower

1. Are there grab bars on the wall next to the bathtub?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there a bathmat or non-skid strips on the floor of the bathtub?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the floor surfaces slippery when wet?	<input type="checkbox"/>	<input type="checkbox"/>

Be sure to periodically review these areas in your home for hazards.

¹ *Falls and Hip Fractures Among Older Adults*
National Center for Injury Prevention and Control
November 2000
www.cdc.gov/ncipc/factsheets/falls.htm.