

Preventing Falls

Learner's Guide



Facts about Falls

- Falls rank among the top five causes of death from unintentional injuries in the United States.
- Falls are the leading cause of death from injuries for people ages 65 and older. In 1995, 7,700 Americans over age 65 died as a result of falls.
- The risk of falling increases with age. An estimated one-third of Americans over age 65 will suffer falls each year.



- Older adults who have fallen previously or who stumble frequently are two to three times more likely to fall within the next year.
 - Fall-related death rates and hip fracture hospitalization rates are on the rise.
 - Falls are the cause of a large proportion of fatal traumatic brain injuries among seniors. From 1989 to 1998, the fall-induced traumatic brain injury death rate among people ages 80 and older increased 60%.
 - Falls are responsible for at least 95% of hip fractures among older adults.
- Hip fractures often cause an elderly person to lose functional abilities and develop other health problems. Sometimes hip fractures lead to death.

Why Do People Fall?

People fall for a variety of reasons. Some people are more prone to falls than others. These people generally have one or more "risk factor" for falls. This means they have a condition or a characteristic that makes them more likely to fall.





These characteristics significantly increase a person's risk of falling:

- Being female
- Being white or Asian
- Being over age 65
- Being thin
- Smoking
- Having a family history of falls
- Having had a previous fall
- Having lower body weakness
- Having gait or balance problems
- Having osteoporosis
- Having foot problems
- Having low blood pressure or blood pressure that drops when the person stands up
- Having had a stroke
- Having physical limitations
- Wearing glasses or having other visual problems
- Having more than one chronic disease
- Having Parkinson's, multiple sclerosis, seizure disorder, or other neuromuscular disease
- Having urinary incontinence
- Having Alzheimer's or being confused or cognitively impaired
- Lack of exercise
- Excessive alcohol intake
- Low calcium intake
- Having early menopause
- Taking more than four medications
- Taking psychotropic medications
- Wearing shoes with thick, soft soles

Environmental Reasons for Falls

In addition to the factors listed above, problems in the environment often cause falls. People trip on many things: clutter, throw rugs, wrinkled carpets, electrical cords and wires, and telephone cords. They slip on wet floors or in showers and tubs. They fall because they can't see where they are going in a darkened room. We must make the environment safe for people.





Fall Prevention

We can prevent many falls, even for people who are prone to falling because they have a lot of risk factors. We will look at four areas of fall prevention:

Medications

Environment

Senses

Strength

Addressing only one area of fall prevention is not enough. Interventions that work require multiple approaches. Look at the entire M.E.S.S. to determine what to do.

Medications



If someone is on four or more medications they have a higher risk of falling. Anyone who takes medicine to treat anxiety, depression, behavior problems, or insomnia has a higher risk of falling. Many other medications have side effects that increase the risk of falling. A nurse or pharmacist should review an older person's medications regularly to see if they are taking anything that might cause them to fall.

If someone is having trouble with falls, try these interventions:

- Ask a nurse or pharmacist to review the person's medication regimen, looking for prescription or over-the-counter medicines that may cause:
 - Dizziness
 - Disorientation or confusion
 - Impaired memory or judgment
 - Unsteady gait, imbalance, or weakness
 - Drowsiness
 - Lack of coordination
- When such medications are in use, the doctor may be able to prescribe alternatives.
- The client or the client's family, nurse, or pharmacist should ask the doctor to evaluate the client and review the medications in light of the risk of falls.



Environment

To reduce environmental hazards that cause people to fall, perform these interventions:

- Reduce clutter **everywhere**.
- Ensure that eyeglasses, dentures, hearing aid, telephone, and other essential items are within easy reach of the bed and/or chair.
- Place everyday objects at an easy height to avoid reaching and bending.
- Arrange furniture in all rooms to maintain clear pathways. Remove protruding furniture or objects in traffic areas.
- Remove throw rugs and fix wrinkled carpeting.
- Ensure that call lights are easily accessible and highly visible. Tie red ribbons around call light cords if they are difficult to see. Remind people to use them.
- Clean up spills **immediately**.
- Maintain wheelchairs, walkers, and canes in proper working order. Check wheelchair brakes regularly. Check the tips of walkers and canes regularly. Be sure the wheelchair, walker, or cane is the correct size and height for the individual using it.
- Use nightlights in bathrooms, bedrooms, and hallways. Be sure they work.
- Place brightly colored collars on pets so people can see them easily.
- People should wear properly fitting, sturdy slippers or shoes with laces, high sides, and nonskid thin soles **at all times**. Keep them laced and tied. Avoid shoes with thick, soft soles, like jogging shoes. People should never wear socks without shoes.
- Use nonskid bath mats. Nonskid waterproof shoes are available for showering.
- When walking outside, remember that water, ice, and snow can make surfaces slippery. Older people should avoid going out in these conditions.
- Teach and encourage the use of handrails. Older people should avoid stairs.
- Maintain a warm temperature. When people are cold their muscles don't work as well as when they are warm, putting them at higher risk for falling.
- Place bright red tape along the path from the bed or chair to the bathroom to clearly mark the way. Lower the person's bed so his or her feet easily reach the floor.
- Consider such aids as lift chairs, emergency call pendants, bedside commodes, and hip pads for people prone to falls.





Senses

These interventions address sensory problems that increase the risk of falls:



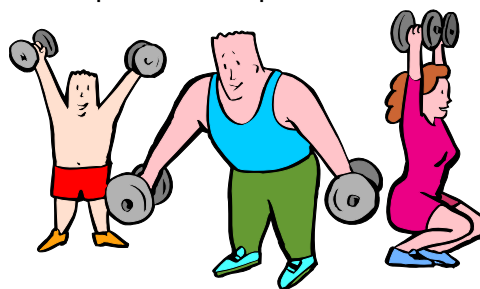
- Keep eyeglasses clean and in good condition with a current prescription. Encourage regular eye exams.
- Bifocals more than double the risk of a fall. It's usually best to have two separate pairs if needed, one for reading and one for distance.
- Teach people to rise from the bed or chair slowly to prevent dizziness.
- Remind clients to ask for help if they feel weak, dizzy, or lightheaded when getting up.
- Disoriented clients should be located in rooms closer to the front of the building.
- Repeatedly remind clients with dementia about the call light.
- Make a plan for frequent monitoring of clients who have periods of confusion.
- Be aware that clients who are new to a residence are at greater risk of falling because they are in unfamiliar surroundings.
- Over 80% of older people have one or more foot problems. Foot pain and other foot problems contribute to an increased risk of falls. Encourage older people to keep their feet healthy and help them use the services of a podiatrist or chiroprapist.
- Encourage people to enjoy the sun. Vitamin D helps keep bones strong, and is formed by the action of sunlight on the skin.
- Encourage calcium intake in the diet to build bones. Calcium is in dairy products, grains, beans, nuts, and dark green vegetables.

Strength

People with good body strength and flexibility are much less likely to fall than those who are weaker and less flexible. Regular exercise is the key to maintaining and improving muscle strength, flexibility, and good balance. In addition, activity keeps muscles warm. Cold muscles don't work as well and may lead to accidents.

Although vigorous exercise reduces the risk of fall-related fractures among **healthy** seniors, it increases risk among those with functional limitations. Such older adults may require individualized exercise programs. Physical and occupational therapists can help with individualized plans if the doctor approves.

Exercises that improve lower body strength and balance reduce the risk of falls and fall-related injuries. Studies have shown that practicing Tai Chi can improve balance and reduce falls. Progressive resistance training, such as using free weights or stretch bands, can increase strength and improve mobility. Whatever type of exercise they choose, encourage seniors to **GET MOVING!**





Fall Trivia Activity

<p>1. Name three characteristics or conditions that make someone more prone to falling.</p>	<p>2. Name two major injuries that often occur when an elderly person falls.</p>	<p>3. When planning interventions to prevent falls, you should look at the whole M.E.S.S. What do these initials stand for?</p>
<p>4. Name two environmental interventions that could help someone who is prone to falling.</p>	<p>5. Name two sensory interventions that could help someone who is prone to falling.</p>	<p>6. Name two strength interventions that could help someone who is prone to falling.</p>
<p>7. What is the leading cause of death from injuries for people aged 65 and over?</p>	<p>8. Name two medication side effects that could increase a person's risk of falling.</p>	<p>9. Who is responsible for preventing falls?</p>
<p>10. How should people get up out of a chair or bed to prevent falling?</p>	<p>11. Why is it good to maintain a warm temperature in the environment?</p>	<p>12. Name two nutrients that help build strong bones.</p>
<p>13. What kind of shoe is best to wear to prevent falling?</p>	<p>14. What should pets wear so people can see them before they get underfoot?</p>	<p>15. Falls are responsible for what percentage of hip fractures among older adults?</p>
<p>16. Name two environmental reasons for falls.</p>	<p>17. Name two diseases that make people more likely to fall.</p>	<p>18. Why are people who have just moved into a new place more likely to fall?</p>





Fall Trivia Activity: Answer Key

1. Any three characteristics or conditions from the list entitled *Why Do People Fall?* on page 2 of the Learner's Guide are correct.
2. Brain injury and hip fracture.
3. Medications, Environment, Senses, and Strength.
4. Any two interventions from the list entitled *Environment* on page 4 of the Learner's Guide are correct.
5. Any two interventions from the list entitled *Senses* on page 5 of the Learner's Guide are correct.
6. Any two interventions from the list entitled *Strength* on page 5 of the Learner's Guide are correct.
7. Falling.
8. Dizziness; disorientation or confusion; impaired memory or judgment; unsteady gait, imbalance, or weakness; drowsiness; lack of coordination.
9. Everyone.
10. Slowly.
11. Warm muscles work better than cold muscles.
12. Calcium and Vitamin D.
13. A properly fitting, sturdy lace-up shoe with high sides and a thin nonskid sole.
14. Brightly colored collars.
15. At least 95%.
16. Any two of these are correct: spills, electrical cords or wires, telephone cords, throw rugs, wrinkled carpets, clutter, darkness, wet floors, wet showers and tubs.
17. Any two of these are correct: Parkinson's disease, multiple sclerosis, Alzheimer's disease, seizure disorder (epilepsy), other neuromuscular disease, osteoporosis, or stroke.
18. Because they are not yet familiar with their surroundings.

