



Falls – A Preventable Injury Concern for Both Older Adults and Young Children

Older Adults

Many are working to create a society where older adults can live safe, healthy, and independent lives. One of the biggest threats to the health of older adults is the risk of falling. One out of three adults aged 65 years and older fall each year.¹ In fact, the Centers for Disease Control and Prevention reports that for people who are 65 years and older, falls are the leading cause of both fatal and nonfatal injuries.² In 2013 alone, 2.5 million nonfatal falls among older adults were treated in emergency departments and more than 734,000 of these patients were hospitalized.² Men are more likely than women to die from a fall, with a death rate approximately 40% higher after taking age into account,² while women have twice the rate of fall-related fractures than men.³

Falls can significantly limit an older adult's ability to remain self-sufficient. When an older adult falls, they are at risk of severe injuries, such as hip fractures and head traumas, increasing the risk of early death. Fractures that are caused by falls often times can lead to hospital stays and disability. Most often, fall-related fractures are in the person's hip, pelvis, spine, arm, hand, or ankle. Many people who fall, even if they are not injured, develop a fear of falling.⁴ This fear may cause them to limit their activities, which leads to reduced mobility and loss of physical fitness, and in turn increases their actual risk of falling.⁵

Fewer than half of those who fall talk to their healthcare provider about it. Talking to a healthcare provider about falls can help prevent future injury. According to the National Institutes of Health, falls can be a sign of a new medical problem that needs attention, such as diabetes or changes in blood pressure, particularly drops in blood pressure on standing up.⁵ They can also be a sign of problems with medication or eyesight that if disclosed to a medical provider, can be treated and corrected.

Fortunately, falls are a public health problem that is largely preventable. Many older adults with the help of physical therapy or use of safety products such as walking aids are at less of a risk for future falls. These interventions help older adults gain confidence in their abilities.

Today, there are proven interventions that can reduce falls and help older adults live better and longer.

Fall Prevention tips For Older Adults:

- Discuss with your medical provider or doctor any past experience of falls. Many underlying causes of falls can be treated or corrected. Also, ask your doctor or pharmacist to review your medicines—both prescription and over-the-counter—to identify medicines that may cause side effects or interactions such as dizziness or drowsiness.
- Exercise regularly. It is important that the exercises focus on increasing leg strength and improving balance, and that they get more challenging over time. Tai Chi programs are especially good.
- Not wearing bifocal or multifocal glasses when walking, especially on stairs, decreases the likelihood of falling. Have your eyes checked by an eye doctor at least once a year and update your eyeglasses to maximize your vision. Consider getting a pair with single vision distance lenses for some activities such as walking outside.
- Make your home safer by reducing tripping hazards like loose rugs, adding grab bars inside and outside the tub or shower and next to the toilet, adding railings on both sides of stairways, and improving the lighting in your home.

Children

According to the CDC, not only does this problem affect our older population, but falls are the leading cause of non-fatal injuries for children ages 0 to 19.⁶ Every day, approximately 8,000 children are treated in U.S. emergency rooms for fall-related injuries. This adds up to almost 2.8 million children each year, 40 percent of which are toddlers. In every region of the world more boys die from falls than girls.⁷

The unintentional fall-related death rate declined between 2001-2010 (from 0.26 per 100,000 population to 0.15 per 100,000 population). According to the CDC, in 2010, 127 youth died from a fall. The most common non-fatal injuries are seen to the face and head. On average, over 275,000 children suffer traumatic brain injuries annually from falls.

For children, falling is a normal part of growing up. As children learn to walk, climb, run and explore their environment, they may place themselves at risk of a fall. Below is a list of physical environments that are common places of activity for children/youth and prevention strategies that can reduce their risk of injury.

In the home, children are at risk for falls. Families can make their homes safer by using home safety devices, such as stair gates, guard rails, and non-slip mats. These devices help prevent a tumbles while children move around their living space.

Children are susceptible to falls at the playground. Be sure to check to play surfaces under playground equipment. Soft surfaces such as wood chips or sand, can reduce the severity of injury if a child falls playing.

As youth become school age, many partake in sports and other recreational activities. Be sure to equip your child with protective gear so that if they lose their balance and fall, the injury can be avoided, or reduced. Examples of protective equipment include helmets, knee and elbow pads, wrist guards, mouth pieces, etc. ⁶

Window safety

During the Spring and Summer, and even early fall young children are at risk for window falls. Changes in the weather cause families to open their windows to allow fresh, warm air into homes. According to the Safe Kids Worldwide 2015 Report to the Nation: Protecting Children in Your Home, about eight children under age 5 die each year from falling out a window, and more than 3,300 are injured seriously enough to go to the hospital. Boys are more likely to have a fall related injury than girls.

Researchers at the Center for Injury Research and Policy at Nationwide Children's Hospital found that toddlers account for roughly 66 percent of all window fall accidents. Toddlers are unaware of the risks in their surroundings, and often driven by curiosity, as a result they may approach a window and their high center of gravity could cause them to topple over.

When a child falls out of a window, especially from a second floor level, they typically fall head first. Almost 50 percent of children who land on their head suffer severe face and head injuries.

According to Safe Kids USA report the most common location for window falls are large urban areas and areas with overcrowded housing. Children in multi-unit apartments or houses have the highest number of window fall accidents. In fact, children residing in apartment buildings are 5 times more likely to suffer a window fall than a child living in a residence.

Unattended children run the greatest risk of falls and injuries, so the best first step to prevention is to carefully watch children as they play. Nothing can substitute careful supervision.

A common misconception is that a window screens will prevent a child from falling. Unfortunately this is not the case. Window screens are designed to provide ventilation and to keep insects out. They will not prevent a child's fall. Parents can purchase window locks or guards to prevent children from opening windows to an unsafe height. Window guards must have a quick release feature to ensure the window can be used as an egress route in a fire emergency.

Thankfully, many falls can be prevented, and parents and caregivers can play a key role in protecting children.

Window Fall Prevention for Children:

- Keep children away from open windows
- Keep windows locked when closed
- Open windows without guards from the top only
- Keep furniture away from windows so children cannot climb up
- Install window guards or safety locks on all windows above the first floor to prevent children from pushing them open more than 4".
 - Window guards should have release latch in case of fire
- Supervise children, ensure children play a safe distance away from windows, patio or balcony doors
- Check the ground below windows - scrubs, small trees, and soft edges will soften impact if there is a fall
- Children are kept away from open windows
- Check windows often during house rounds
- Repair windows quickly after damage
- Practice opening windows as if there were an emergency
- Teach older children to understand the dangers of climbing out of or jumping from windows.

References

1. Tromp AM, Pluijm SMF, Smit JH, et al. Fall-risk screening test: a prospective study on predictors for falls in community-dwelling elderly. *J Clin Epidemiol* 2001;54(8):837–844.
2. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. [Web-based Injury Statistics Query and Reporting System \(WISQARS\)](#) [online]. Accessed August 15, 2013.
3. Donald IP, Bulpitt CJ. The prognosis of falls in elderly people living at home. *Age and Ageing* 1999;28:121–5.
4. Bell AJ, Talbot-Stern JK, Hennessy A. Characteristics and outcomes of older patients presenting to the emergency department after a fall: a retrospective analysis. *Medical Journal of Australia* 2000;173(4):176–7.
Vellas BJ, Wayne SJ, Romero LJ, Baumgartner RN, Garry PJ. Fear of falling and restriction of mobility in elderly fallers. *Age and Ageing* 1997;26:189–193.
5. National Institutes of Health, Senior Health. http://www.who.int/violence_injury_prevention/child/injury/world_report/Falls_english.pdf [online]. Accessed July, 2015.
6. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Falls: The Reality: <http://www.cdc.gov/safechild/Falls/> [online]. Accessed July, 2015.
7. World Health Organization – Children and Falls: http://www.who.int/violence_injury_prevention/child/injury/world_report/Falls_english.pdf [online]. Accessed July, 2015.