

# Module #13 – Patient Safety

## Handout #1 – CDC Falls Fact Sheet

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### Important Facts about Falls

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Each year, millions of older people—those 65 and older—fall. In fact, more than one out of four older people falls each year, 1 but less than half tell their doctor. Falling once doubles your chances of falling again.

#### Falls Are Serious and Costly

- One out of five falls causes a significant injury such as broken bones or a head injury.<sup>4,5</sup>
- Each year, 3 million older people are treated in emergency departments for fall injuries.<sup>6</sup>
- Over 800,000 patients a year are hospitalized because of a fall injury, most often because of a head injury or hip fracture.<sup>6</sup>
- Each year at least 300,000 older people are hospitalized for hip fractures.<sup>7</sup>
- More than 95% of hip fractures are caused by falling,<sup>8</sup> usually by falling sideways.<sup>9</sup>
- Falls are the most common cause of traumatic brain injuries (TBI).<sup>10</sup>
- In 2015, the total medical costs for falls totaled more than \$50 billion.<sup>11</sup> Medicare and Medicaid shouldered 75% of these costs.

#### What Can Happen After a Fall?

Many falls do not cause injuries. But one out of five falls does cause a significant injury such as a broken bone or a head injury.<sup>4,5</sup> These injuries can make it hard for a person to get around, do everyday activities, or live on their own.

- Falls can cause broken bones, like wrist, arm, ankle, and hip fractures.
- Falls can cause head injuries. Head injuries can be extremely serious, especially if the person is taking certain medicines such as a blood thinner. An older person who falls and hits their head should see their doctor right away to make sure they do not have a brain injury.
- Many people who fall, even if they are not injured, become afraid of falling. This fear may cause a person to cut down on their everyday activities. When a person is less active, they become weaker and this increases their chances of falling.<sup>12</sup>

#### What Conditions Make You More Likely to Fall?

Research has identified many conditions that contribute to falling. These are called risk factors. Many risk factors can be changed or modified to help prevent falls. They include:

- Lower body weakness
- Vitamin D deficiency (that is, not enough vitamin D in your system)
- Difficulties with walking and balance

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- Use of medicines, such as tranquilizers, sedatives, or antidepressants. Even some over-the-counter medicines can affect balance and how steady you are on your feet.
- Vision problems
- Foot pain or poor footwear
- Home hazards or dangers such as
  - broken or uneven steps, and
  - throw rugs or clutter that can be tripped over.

Most falls are caused by a combination of risk factors. The more risk factors a person has, the greater their chances of falling.<sup>3</sup>

### Deaths from Older Adult Falls

Falls are the leading cause of injury-related death among adults age 65 and older, and the age-adjusted fall death rate is increasing.<sup>1,2</sup> The age-adjusted fall death rate is 64 deaths per 100,000 older adults.<sup>1</sup>

Fall death rates among adults age 65 and older increased about 30% from 2009 to 2018. The increase was observed in 30 states and the District of Columbia. The fastest growing rate was among adults aged 85 and older (about 4% per year).<sup>1</sup>

The rising number of deaths from falls among older adults can be addressed by screening for fall risk and intervening to address risk factors such as use of medicines that may increase fall risk, or poor strength and balance.<sup>13</sup>

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13. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. [Web-based Injury Statistics Query and Reporting System \(WISQARS\)](#) [online].

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## Handout #2 – Falls: Quick Facts!



### North Carolina

Special Emphasis Report: Fall Injuries among Older Adults  
2005-2014

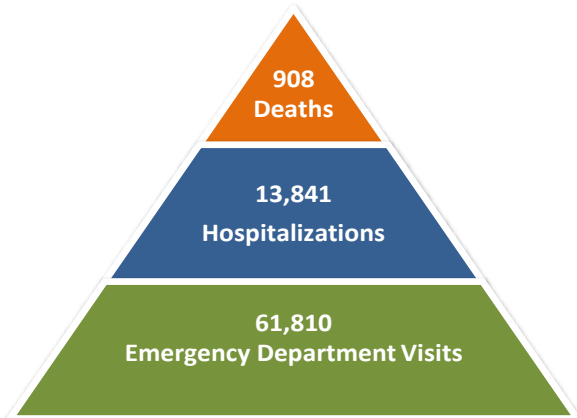
#### A GROWING CONCERN

Unintentional falls among older adults are a leading cause of fatal and nonfatal injury in the U.S. and North Carolina. Hospital costs associated with injuries sustained by falls account for a substantial share of health care dollars spent on injury-related care.

In 2014, 908 North Carolina residents ages 65 and older died and over 75,000 fall injuries were treated at hospitals and emergency departments (Figure 1).

This report provides recent data on unintentional fall injuries and deaths among North Carolina residents ages 65 and older. It includes information about groups with the highest rates, associated costs and current prevention strategies and activities in North Carolina.

**FIGURE 1.** Burden of Fall Injuries among Residents Ages 65 and older—North Carolina, 2014



#### QUICK FACTS



Residents ages 65 and older account for **88% of all fall deaths** and 73% of nonfatal fall hospitalizations in North Carolina.



Falls are a **leading cause of traumatic brain injury (TBI)** in North Carolina residents ages 65 and older, accounting for 36% of TBI deaths and 43% of TBI hospitalizations. **Eighty-four percent of fall deaths** and 69% of hospitalizations among older adults were associated with a TBI.



**Projected lifetime costs** associated with fall injuries in 2014 among North Carolina residents ages 65 and older are estimated to be almost \$1.4 billion.



**Each week, there are** 1,189 emergency department visits among residents ages 65 and older, 266 hospitalizations, **and 17 deaths due to fall injuries in North Carolina.**



In 2014, 58% fall deaths among this age group **occurred in the home**, less than 1% occurred in a residential facility such as a nursing home. The location wasn't known for 12%.

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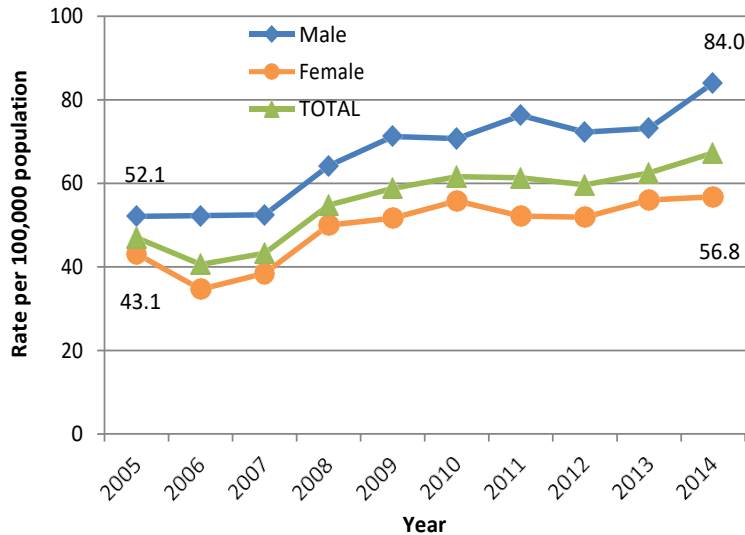


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## Handout #2 – Falls: Quick Facts!

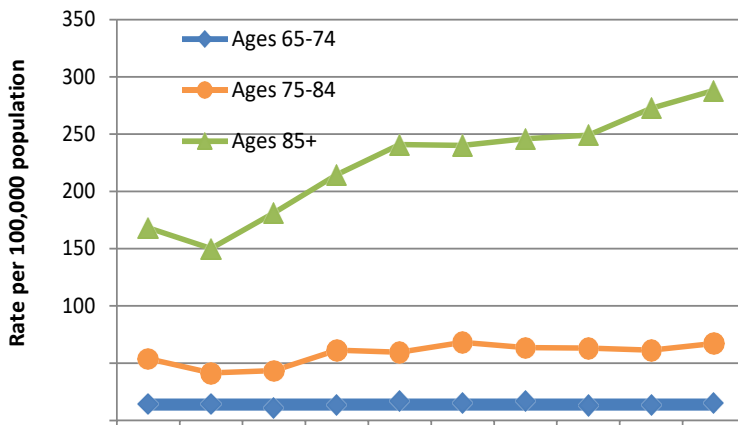
### FALL DEATHS

**FIGURE 2.** Age-adjusted Rate of Fall Deaths by Sex, Ages 65 and older—North Carolina, 2005-2014



- From 2005 to 2014, the age-adjusted rate of fall deaths increased from 47.0 per 100,000 in 2005 to 67.3 per 100,000 in 2014.
- Fall death rates increased among both males and females during this time period.
- In 2014, the fall death rate in males was approximately 48% higher than in females.

**FIGURE 3.** Age-specific Rate of Fall Deaths by Age Group, Ages 65 and older—North Carolina, 2005-2014



- Fall death rates increased among all three age groups.
- The highest increase was among persons ages 85 and older.
- Rates for persons ages 85 and older increased, from 168.1 per 100,000 in 2005 to 288.2 per 100,000 in 2014.

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### Handout #3 – Home Safety Assessment

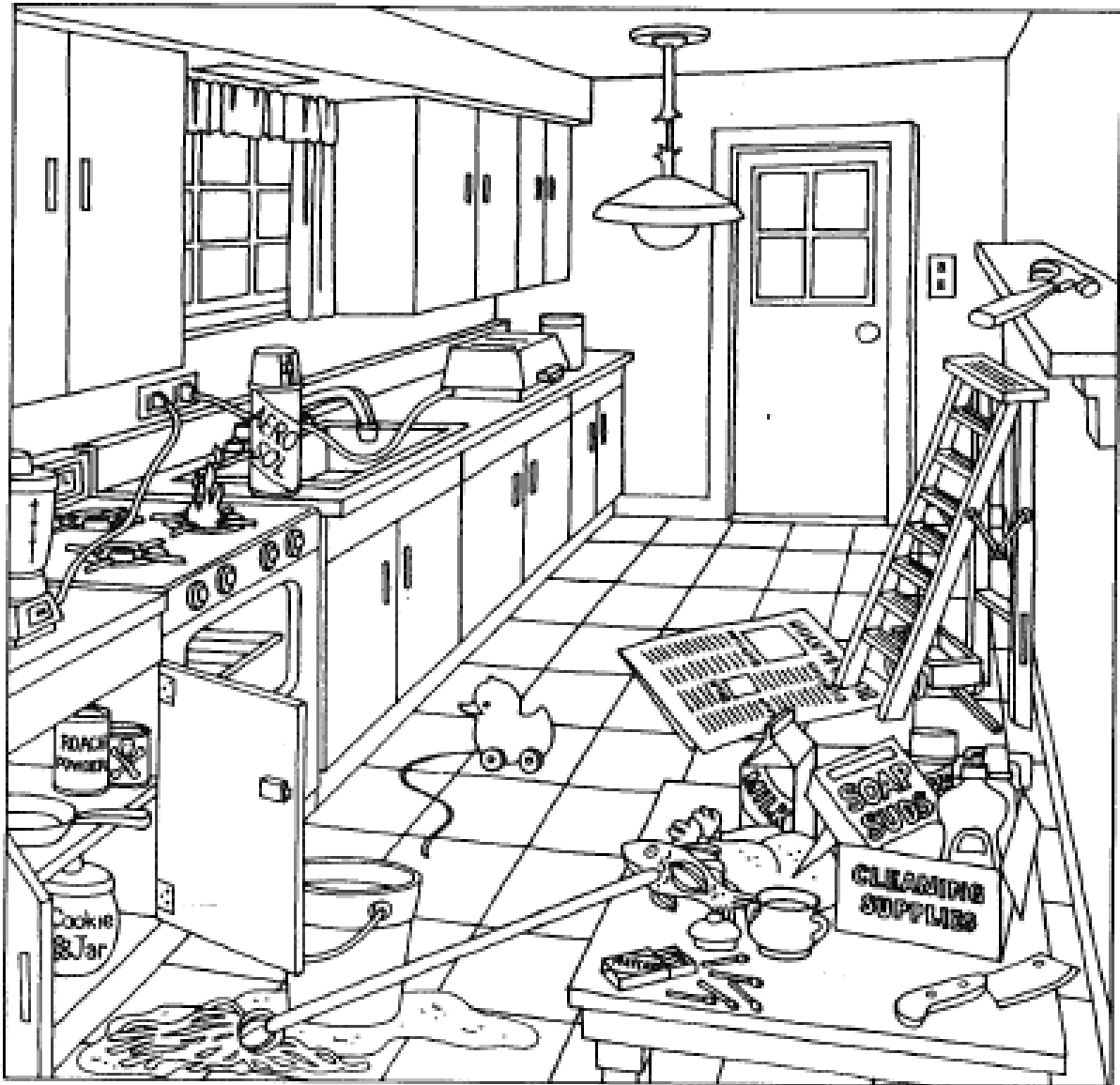
There are several features which should be carefully checked for safety in your patient's home. These include, but are not limited to:

|  | YES | NO |
|--|-----|----|
| If needed, are there handrails beside the tub and toilet?  |     |    |
| Are there skid proof mats on the floor and in the bathtub/shower?  |     |    |
| Are electrical appliances a safe distance from the bathtub/shower?   |     |    |
| Is the stove free of grease with no objects sitting on top of it?  |     |    |
| Is there baking soda on hand in case of a grease fire?   |     |    |
| Is the refrigerator working properly?  |     |    |
| Is food being stored properly?   |     |    |
| If there are mats on the kitchen floor, are they skid proof?   |     |    |
| Is the trash being taken out on a regular basis and not piling up?   |     |    |
| If there are throw rugs throughout the house or in the bedroom, are they backed with a rubber, non-skid backing?   |     |    |
| Are outlets in good, working condition, and not overloaded with cords?   |     |    |
| Are there night lights in the hallway, bathroom, and bedroom?  |     |    |
| Is furniture sturdy enough to give support to the patient?   |     |    |
| Are the rooms in the home clutter free?  |     |    |
| Are all exits unblocked and accessible?  |     |    |
| Are there working smoke detectors in the home?   |     |    |
| Is there a fire extinguisher in the home?  |     |    |
| Are emergency phone numbers listed somewhere visible?  |     |    |
| If the patient will be alone for an extended period of time, is there a person who will come and check on him/her? |     |    |

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### Activity #1 – How Many Hazards Can You Find?

# HOW MANY HAZARDS CAN YOU SPOT?



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### **Activity #2 - Case Scenarios**

1. A 92-year-old woman lives alone. She has severe arthritis and ambulates with a cane. Her pain is getting worse as the winter approaches. She moves slower than before and has recently started on a narcotic pain medication.

***What are her risk factors for falls?***

2. A 52-year-old woman was diagnosed with Alzheimer's 3 years ago. Her neighbors found her on the floor 3 times over the past 6 months. She has just been moved to her son's home 100 miles away.

***What are her risk factors for falls?***

3. An 82-year-old man just started on a new blood pressure medication. This medication is a diuretic and works by eliminating fluid from the body. You notice that he now holds onto the chair or bed when he stands up before he begins to walk.

***What are his risk factors for falls?***

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### **Activity #2 - Case Scenarios – Faculty Guide**

1. A 92-year-old woman lives alone. She has severe arthritis and ambulates with a cane. Her pain is getting worse as the winter approaches. She moves slower than before and has recently started on a narcotic pain medication.

***What are her risk factors for falls?***

***Age alone does not constitute an elevated risk for falls but this individual has lots of other conditions that does elevate her risk of falls such as arthritis, decreased mobility and especially the narcotic pain medication.***

2. A 52-year-old woman was diagnosed with Alzheimer's 3 years ago. Her neighbors found her on the floor 3 times over the past 6 months. She has just been moved to her son's home 100 miles away.

***What are her risk factors for falls?***

***There are several risk factors: Alzheimer's, history of frequent falls and now moving to an unfamiliar environment.***

3. An 82-year old man just started on a new blood pressure medication. This medication is a diuretic and works by eliminating fluid from the body. You notice that he now holds onto the chair or bed when he stands up before he begins to walk.

***What are his risk factors for falls?***

***The new blood pressure medication is unpredictable. There is no history to indicate how this individual will tolerate it. It may very well be too high or it could be causing his blood pressure to drop significantly when changing positions.***



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### **Activity #3 - Safety Concerns**

Decide if the safety issue should be of concern or if it is a good practice. Explain your answers.

| Safety Issue   | Good or Bad? | Explain |
|--|--------------|---------|
| 1. The legs on a patient's Hoyer lift do not lock.                             |              |         |
| 2. There are large boxes stacked in front of the back door.                    |              |         |
| 3. Medication bottles are clearly labeled and are kept in child proof bottles. |              |         |
| 4. A mobile home's floor is weak and gives when you walk on it.                |              |         |
| 5. There are grab bars in the patient's shower.                                |              |         |
| 6. There are exposed, frayed electrical wires in the patient's home.           |              |         |
| 7. The patient has a shower chair that is not sturdy.                          |              |         |
| 8. An emergency call system is installed into a patient's home.                |              |         |

Now produce 3 other safety concerns and 3 other good safety practices.

| Safety Concern | Good Safety Practice |
|----------------|----------------------|
| 1.             | 1.                   |
| 2.             | 2.                   |
| 3.             | 3.                   |

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### **Activity #3 - Safety Concerns**

#### **Answers**

1. Bad
2. Bad
3. Good
4. Bad
5. Good
6. Bad
7. Bad
8. Good