



## Falls in Nursing Homes

Falls among nursing home residents occur frequently and repeatedly. About 1,800 older adults living in nursing homes die each year from fall-related injuries and those who survive falls frequently sustain hip fractures and head injuries that result in permanent disability and reduced quality of life.<sup>1</sup>

### How big is the problem?

- In 2003, 1.5 million people 65 and older lived in nursing homes.<sup>2</sup> If current rates continue, by 2030 this number will rise to about 3 million.<sup>3</sup>
- About 5% of adults 65 and older live in nursing homes, but nursing home residents account for about 20% of deaths from falls in this age group.<sup>4</sup>
- Each year, a typical nursing home with 100 beds reports 100 to 200 falls. Many falls go unreported.<sup>4</sup>
- Between half and three-quarters of nursing home residents fall each year.<sup>5</sup> That's twice the rate of falls for older adults living in the community.
- Patients often fall more than once. The average is 2.6 falls per person per year.<sup>6</sup>
- About 35% of fall injuries occur among residents who cannot walk.<sup>7</sup>

### How serious are these falls?

- About 1,800 people living in nursing homes die each year from falls.<sup>1</sup>
- About 10% to 20% of nursing home falls cause serious injuries; 2% to 6% cause fractures.<sup>1</sup>
- Falls result in disability, functional decline and reduced quality of life. Fear of falling can cause further loss of function, depression, feelings of helplessness, and social isolation.<sup>5</sup>

### Why do falls occur more often in nursing homes?

Falling can be a sign of other health problems. People in nursing homes are generally frailer than older adults living in the community. They are usually older, have more chronic conditions, and have more difficulty walking. They also tend to have thought or memory problems, to have difficulty with activities of daily living, and to need help getting around or taking care of themselves.<sup>8</sup> All of these factors are linked to falling.<sup>9</sup>

### What are the most common causes of nursing home falls?

- Muscle weakness and walking or gait problems are the most common causes of falls among nursing home residents. These problems account for about 24% of the falls in nursing homes.<sup>5</sup>
- Environmental hazards in nursing homes cause 16% to 27% of falls among residents.<sup>1,5</sup>
- Such hazards include wet floors, poor lighting, incorrect bed height, and improperly fitted or maintained wheelchairs.<sup>5, 10</sup>
- Medications can increase the risk of falls and fall-related injuries. Drugs that affect the central nervous system, such as sedatives and anti-anxiety drugs, are of particular concern.<sup>11, 12</sup> Fall risk is significantly elevated during the three days following any change in these types of medications.<sup>13</sup>

- Other causes of falls include difficulty in moving from one place to another (for example, from the bed to a chair), poor foot care, poorly fitting shoes, and improper or incorrect use of walking aids.<sup>10, 14</sup>

## How can we prevent falls in nursing homes?

Fall prevention in nursing homes presents multiple challenges. It requires a combination of medical treatment, rehabilitation, and environmental changes. Fall prevention interventions can be implemented at the organizational, staff or patient levels.<sup>15</sup> The most effective interventions address multiple factors or use a multidisciplinary team.<sup>16</sup>

Fall interventions include:

- Assessing patients after a fall to identify and address risk factors and treat the underlying medical conditions.<sup>6</sup>
- Educating staff about fall risk factors and prevention strategies.<sup>10</sup>
- Reviewing prescribed medicines to assess their potential risks and benefits and to minimize use.<sup>17, 18</sup>
- Making changes in the nursing home environment to make it easier for residents to move around safely. Such changes include putting in grab bars, adding raised toilet seats, lowering bed heights, and installing handrails in the hallways.<sup>10</sup>
- Providing patients with hip pads that may prevent a hip fracture if a fall occurs.<sup>19</sup>
- Exercise programs can improve balance, strength, walking ability, and physical functioning among nursing home residents. However, such programs do not appear to reduce falls.<sup>20,21</sup>
- Vitamin D supplementation has been shown in a number of studies to reduce falls in nursing home residents. However, vitamin D as a fall intervention remains controversial.<sup>22</sup>
- Teaching residents who are not cognitively impaired behavioral strategies to avoid potentially hazardous situations is a promising approach.<sup>23</sup>

## Do physical restraints help prevent falls?

- Routinely using restraints does not lower the risk of falls or fall injuries. They should not be used as a fall prevention strategy.<sup>24, 25</sup> Restraints can actually increase the risk of fall-related injuries and deaths.<sup>5, 25</sup>
- Limiting a patient's freedom to move around leads to muscle weakness and reduces physical function.<sup>3</sup>
- The average rate of physical restraint use in nursing homes has fallen from more than 40% in the 1980s to approximately 10%.<sup>26</sup>
- Some nursing homes have reported an increase in falls since the regulations took effect, but most have seen a drop in fall-related injuries.<sup>9</sup>
- Direct injury from bedrails appears to be due to outmoded design or incorrect assembly; bedrails do not appear to increase the risk of falls or fall injuries.<sup>27</sup>

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