



Mobility-Restorative Therapy & Its Positive Effects on Future Fall Prevention

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THERAPY IN MOTION- EDMOND

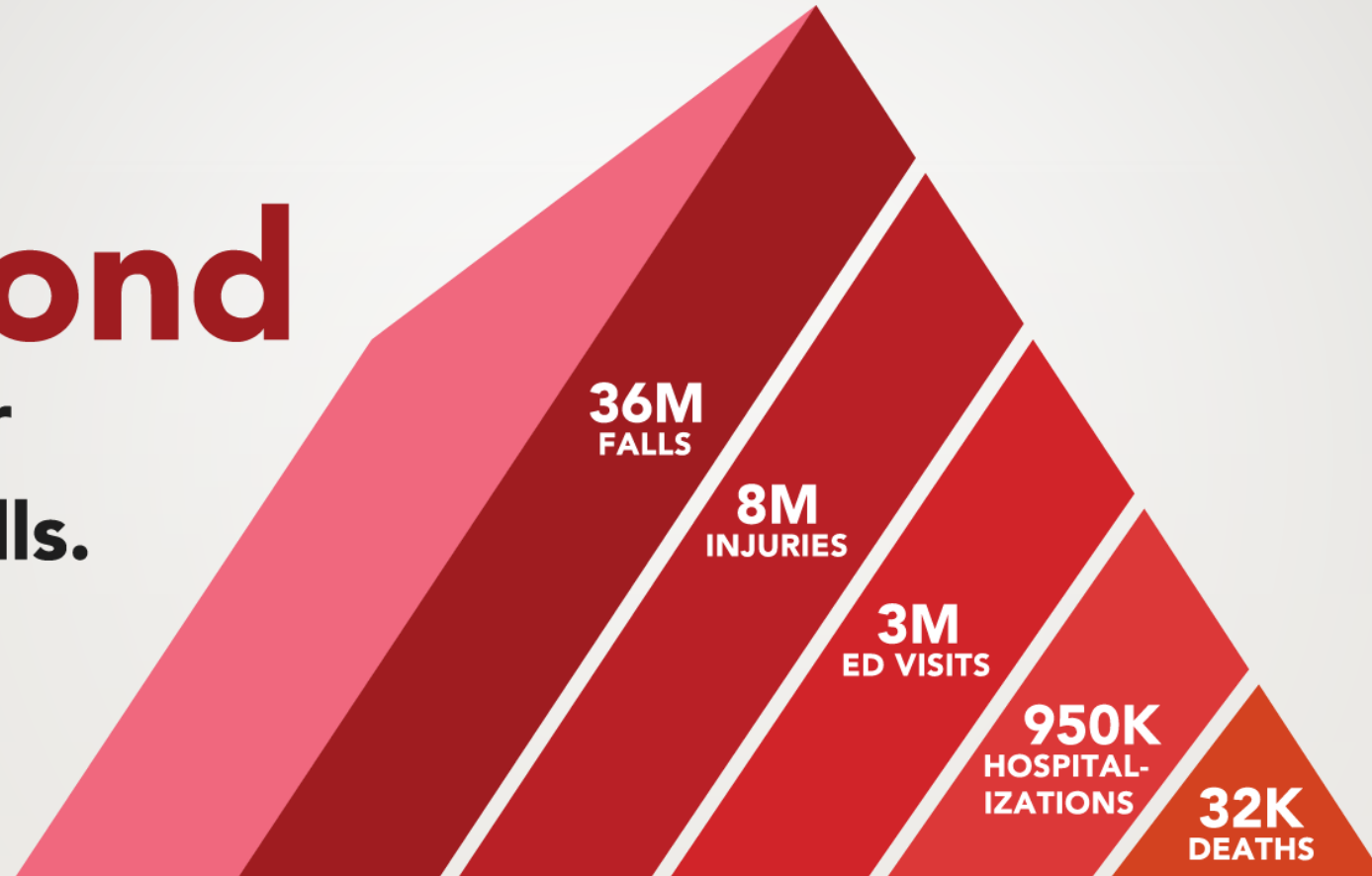
Objectives

- Discuss prevalence of falls in aging adults.
- Define mobility-restorative therapy in respect to falls prevention.
- Understand benefits of exercise and impact on aging adults.
- Review basic exercises for strength, flexibility, balance, and reaction time.

Purpose

- Unintentional injuries are the 7th leading cause of death among older adults. Falls are the number one cause of those unintentional injury deaths.
- Goals:
 - Implement falls prevention program
 - emphasis on mobility and exercise based therapies
 - limit subsequent injury
 - prolong healthy, active life

Every
second
an older
adult falls.



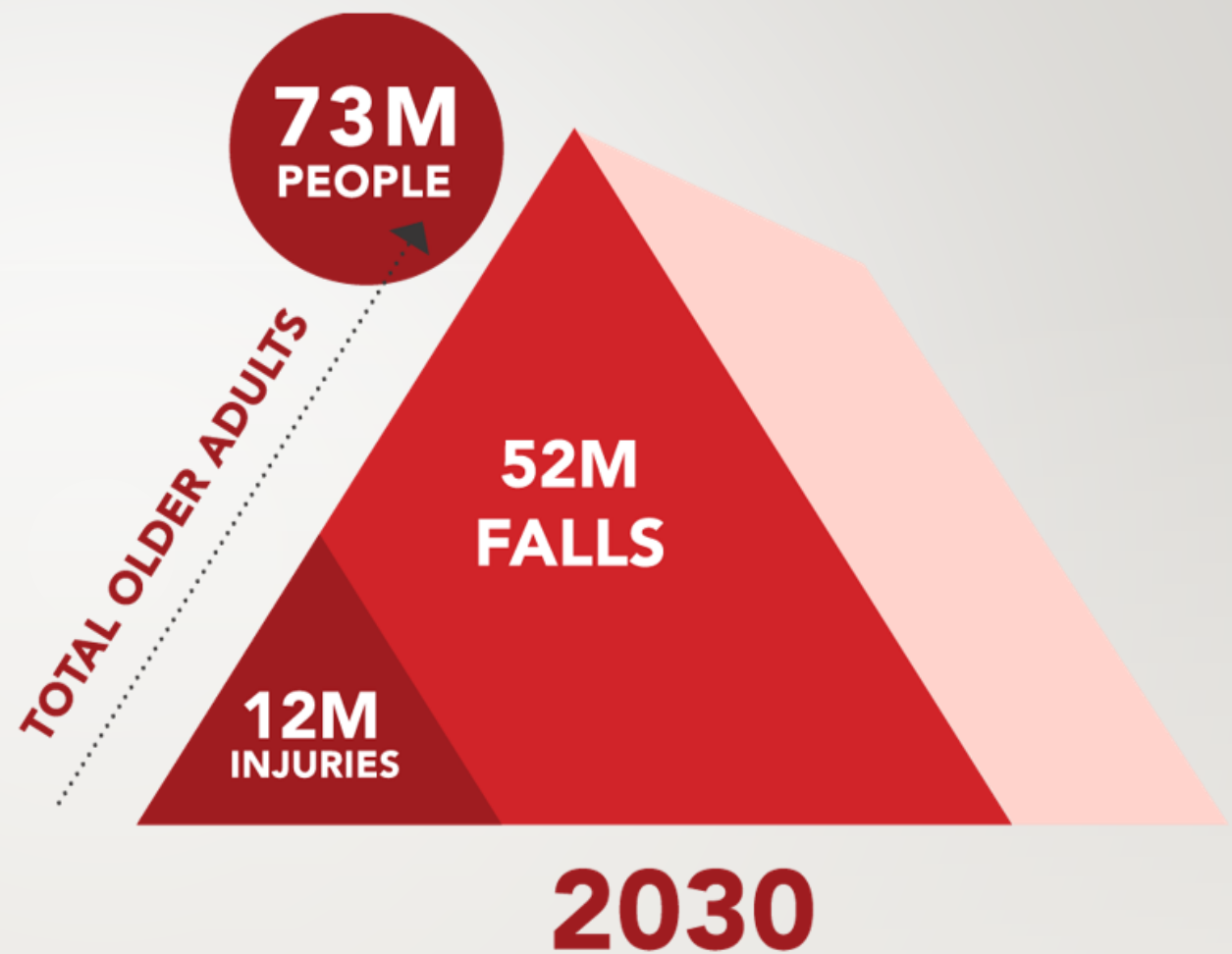
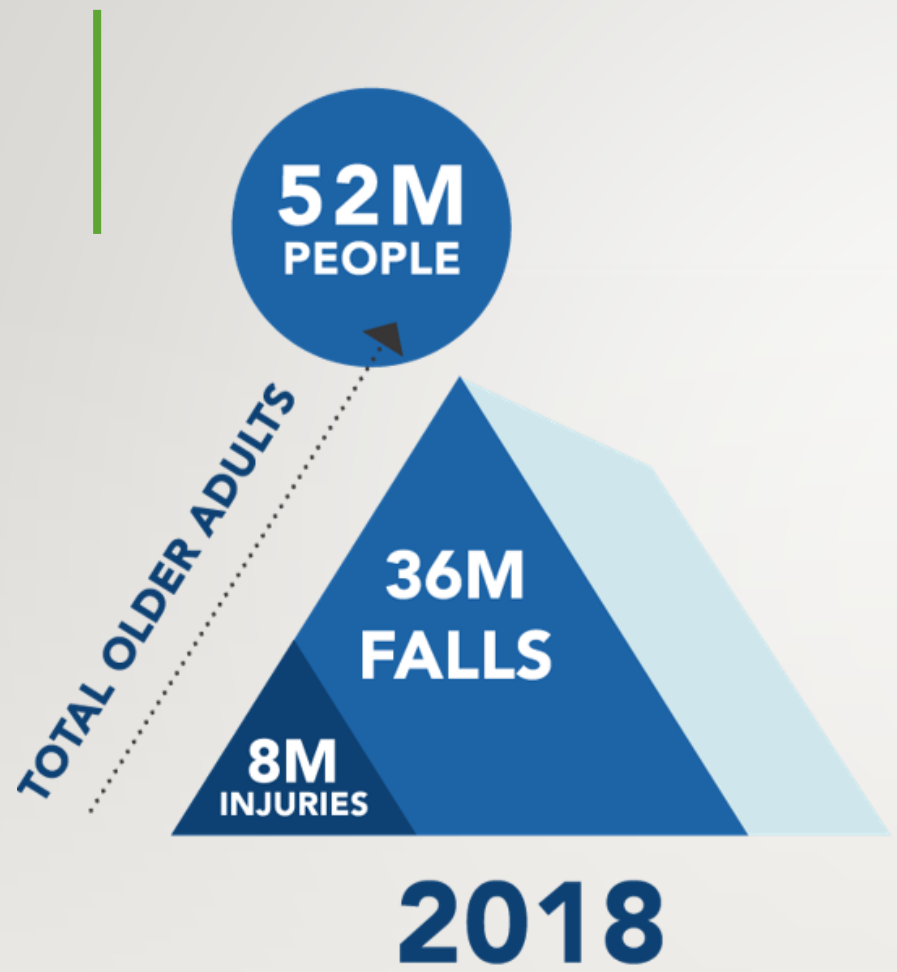


Consequences of Falls Among Older Adults

- More than 95% of hip fractures are due to falls
- Falls are the leading cause of traumatic brain injuries
- Falls and fall injuries increase the risk of nursing home placement

Cost of Falls

- Average hospitalization cost due to a fall injury is **\$30,000**
 - Fall-related injuries are a leading cause of hospital readmission
- Average cost per fall injury:
 - Emergency Department visits = **\$4,829**
 - Office-based and outpatient visits = **\$5,813**



Common Fall Risk Factors

Modifiable Risk Factors	Non-modifiable Risk Factors
<ul style="list-style-type: none">• Gait, strength, and balance deficits• Medications that increase fall risk• Home hazards• Orthostatic hypotension• Vision problems• Foot issues/inappropriate footwear• Vitamin D deficiency• Comorbidities	<ul style="list-style-type: none">• Age• Sex• Race/ethnicity• History of falls

Defining Mobility

- Ability/capacity to move purposefully
- Foundation for living a healthy and independent life
- Comprises all the skills required for everyday living:
 - Physical Stamina
 - Strength
 - Balance
 - Coordination
 - Range of Motion

Importance of maintaining mobility in adults

- Approximately 30% of people over 65 years of age living in the community fall each year.
- - Impact of mobility on fall risk
 - Exercise reduces the rate of falls by 23%
 - Multiple types of exercise (commonly balance and functional exercises plus resistance exercises) found to reduce the rate of falls by 34%

Overview of Mobility-Restorative Therapy

- Restorative therapy
 - helps maintain physical abilities to perform activities of daily living (ADLs) that promote independent living
- Physical Therapy
 - therapy used to preserve, enhance, or restore movement and physical function impaired or threatened by disease, injury, or disability
 - utilizes therapeutic exercise, physical modalities (such as massage and electrotherapy), assistive devices, and patient education and training

Team Approach with Mobility-Restorative Therapy

- Physical Therapy
- Occupational Therapy
- Restorative nursing
- Activities Director



Components of Mobility-Restorative Therapy

- Physical exercises targeting strength, balance, and flexibility
- Functional training to improve activities of daily living
- Environmental modifications to enhance safety and accessibility





Implementation Strategies

- Collaboration between healthcare professionals
- Individualized treatment plans based on patient needs and goals
- Incorporation of evidence-based interventions and best practices



Patient Instruction and Empowerment

- Importance of patient training in fall prevention
 - Exercise
 - Environment
 - Education
- Encouragement of active participation and self-management

Modifiable Risk Factors

- Most readily modifiable risk factors for fall reduction:
 - Muscle strength
 - Flexibility
 - Balance
 - Reaction time



Muscle Strength

- Focus on whole body functional movements
- Increased emphasis on major lower body exercises
- Exercise prescription
 - Ideally 3x/wk
 - Perform 3 sets of 10 repetitions (total of 30) throughout the day
 - May progress resistance as tolerated



Balance Exercises

- Exercise prescription
 - Ideally 3x/wk
 - Perform 3 sets of 10 repetitions (total of 30) throughout the day
 - May progress resistance as tolerated

Flexibility

- Exercise prescription
 - Ideally 3x/wk
 - Perform 3 sets of 30 second holds throughout the day
 - May progress resistance as tolerated



Reaction Time

- Can be performed with a partner or solo in a safe environment
- Should be tailored to individual abilities and fitness level
- ~10-20 minutes per session 2-3x/wk

Environmental Considerations

- Clutter can make seeing hazards more difficult.
 - Keep floors and paths clear
- Assess furniture and trip hazards including rugs that may roll or catch
- Check that there is enough color contrast between furniture and walls/curtains.
 - For example, a white coffee table on a white carpet is easy to trip over.
- Adequate lighting, including use of night lights


Compliance

- Utilization of checklists
- Enlist an accountability partner
- Participate in Group Class





Movement is Medicine

- Every second an aging adult falls
 - Exercise alone can reduce the rate of falls by 23%, combined with balance and reactive training, can further reduce risk to 34%
 - Focus on modifiable risk factors
 - A team based approach is important to encourage and facilitate healthy living and prevent falls
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