FALL PREVENTION STRATEGIES FOR OLDER ADULTS

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Falls in the U.S.

• Falls are the leading cause of fatal and non-fatal injuries among older adults
  • One out of four adults over age 65 fall each year (less than half tell their doctor)
  • One out five falls causes a serious injury such as broken bones or a head injury.
  • Each year, 2.8 million are treated in emergency departments for fall injuries
  • Over 800,000 patients a year are hospitalized because of a fall injury (most often because of a head injury or hip fracture)

Source: Centers for Disease Control and Prevention (CDC)
Older Adult Falls: A Growing Burden

Source: CDC
Costs of Falls Among Older Adults

• Falls are among the 20 most expensive medical conditions
• The average hospital cost for a fall injury is over $30,000
• The costs of treating fall injuries goes up with age

Source: CDC
Unintentional Fall-related Mortality Rates Among Persons 65 Years and Older, United States and Oklahoma, 1999-2016

Rate per 100,000 Population

Source: CDC Web-based Injury Statistics Query and Reporting System (WISQARS)
Falls in Oklahoma

- Falls are the leading cause of injury death among adults 65 years and older
- Nearly 500 die from fall-related injuries each year
- More than 6,500 older adults are hospitalized from a fall each year
- Acute care hospital charges total more than $250 million
- Most fall injuries happen in predictable, preventable ways

Source: Oklahoma Vital Statistics and Oklahoma Hospital Discharge Database, 2013-2015
Unintentional Fall-related Death Rates Among Persons 65 Years and Older by Age Group and Gender, Oklahoma, 2014-2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-69 years</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>70-74 years</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>75-79 years</td>
<td>58</td>
<td>82</td>
</tr>
<tr>
<td>80-84 years</td>
<td>125</td>
<td>158</td>
</tr>
<tr>
<td>85+ years</td>
<td>347</td>
<td>448</td>
</tr>
</tbody>
</table>

Rate per 100,000 Population

Source: Oklahoma Vital Statistics
Unintentional Fall-Related Hospitalization Rates by Age Group and Gender, Oklahoma, 2013-2015

Source: Oklahoma Hospital Discharge Database, 2013-2015
Inpatient Hospital Discharges due to Falls by Discharge Disposition, Adults aged 65 and older, Oklahoma, 2011-2015

Source: OSDH, Health Care Information, Hospital Discharge Data
Compiled by: OSDH, Injury Prevention Service
*Due to changes in coding from ICD-9-CM to ICD-10-CM, 2015 data include Q4 of CY2014 and Q1-Q3 2015
Unintentional Fall-related Death Rates of Older Adults (65 and older) by County of Residence, Oklahoma, 2009-2016

Rates per 100,000 population

- Top 5 counties
- 95.0 – 182.5
- 77.0 – 94.9
- 55.6 – 76.9
- 23.1 – 55.5
- <5 deaths

State rate: 78.8

Source: OSDH, Health Care Information, Vital Statistics Death Data
Compiled by: OSDH Injury Prevention Service
Unintentional Fall-related Inpatient Hospital Discharge Rates of Older Adults (65 and older) by County of Residence, Oklahoma, 2013-2015

Rates per 100,000 population
- Top 5 counties: 1,320 – 1,784.8
- 1,107 – 1,319.9
- 961 – 1,106.9
- 113 – 960.9
- <10 hospital discharges

State rate: 1,1762.2

Source: OSDH, Health Care Information, Hospital Discharge Database
Compiled by: OSDH Injury Prevention Service
Consequences of Falls

Inpatient Hospital Discharges due to Fall-related Hip Fracture by Discharge Disposition, Adults aged 65 and older, Oklahoma, 2011-2015*

Source: OSDH, Health Care Information, Hospital Discharge Data
Compiled by: OSDH, Injury Prevention Service
*Due to changes in coding from ICD-9-CM to ICD-10-CM, 2015 data include Q4 of CY2014 and Q1-Q3 2015
Consequences of Falls

Inpatient Hospital Discharges due to Fall-related Traumatic Brain Injury by Discharge Disposition, Adults aged 65 and older, Oklahoma, 2011-2015*

Source: OSDH, Health Care Information, Hospital Discharge Data
Compiled by: OSDH, Injury Prevention Service
*Due to changes in coding from ICD-9-CM to ICD-10-CM, 2015 data include Q4 of CY2014 and Q1-Q3 2015
How to Prevent Falls
Prevention

- Exercise
- Reduce poly pharmacy
- Eye exams
- Improve home lighting
- Reduce home hazards (most falls occur in the home)

To lower hip fracture risk
- Adequate amounts of calcium & vitamin D
- Weight bearing exercises
- Get screened and treated for osteoporosis
Educational Materials

Injury Prevention Brief

PREVENTING FALLS

Every week, 9 older adults die and 124 are hospitalized from a fall-related injury in Oklahoma.

ENVIRONMENT
- Most falls happen in homes and are entirely preventable.
- All areas in homes should be well lit. Use brighter light bulbs, and install night lights.
- Place throw rugs near to and inside the tub and next to the toilet. Use non-slip mats in the bathtub and on shower floors.

HEALTH
- Older adults with hip or bone weakness, arthritis, osteoporosis and Blood pressure medication are more prone to falls.
- Ask your doctor to assess your risk of falling.
- Share your history of recent falls.
- Get your vision and hearing checked annually.

MEDICAD***
- Many need it ( Calls 65)
- Ask a relative
- ask a friend
- ask a relative

EXERCISE
- Usually 1-2 days a week
- Yoga, Tai Chi
-走路

Moving for Better Balance in Oklahoma

TAI CHI
- Tai Chi, developed by Chinese practitioners, is an age-controlled fall prevention program that was designed to be used in community-based organizations. Also enabling evidence suggests that Tai Chi might be effective in reducing the risk of falling. Tai Chi is a low-impact, slow-motion exercise that can be modified to meet the individual participant’s needs and can be done in almost any location. It also helps to build confidence from the fear of falling, which is commonly found in older adults.

BENEFITS OF TAI CHI
- Improves Balance and Posture
- Improves Functional Limitations
- Strengthens Muscles
- Builds Confidence from the Fear of Falling
- Improves Mental and Physical Health (Positive attitudes, self-esteem and well-being)
- Improves Musculoskeletal Conditions (Reduction of arthritic symptoms, increase in flexibility and mobility)
- Improves Cardiovascular Functions
- Reduces Hypertension
- Improves the Quality of Sleep
- Enhances Stamina
- Increases Energy

RESOURCES
- Oklahoma Services are invited to join a local Tai Chi. Moving for Better Balance class. To receive more information on classes and how to prevent falls, contact the OSHD Injury Prevention Service at (405) 271-3430 or visit falls.health.ok.gov.

Home Safety Guide

Unintentional falls are the leading cause of injury death among adults aged 65 years and older. Most falls occur at home and happen in predictable, preventable ways. Here are home safety tips to keep you or your loved ones safe.

PREVENTING FALLS

Place a lamp within reach of your Bed.

Medication Safety Tips for Seniors

- To help prevent serious complications, even death, here are a few tips on how to store medications safely.

Did You Know?
- Many people who use medication are not aware of what to do when they are not feeling well. This can lead to more serious problems, leading to hospitalization and other physical issues, which then increases their risk of falling.

This image contains text that is not fully visible or legible. It appears to be an informational guide on injury prevention, specifically focusing on falls, and includes sections on the environment, health, and Tai Chi. There are also resources and contact information provided for further assistance. The guide emphasizes home safety tips and medication safety tips for seniors. The overall goal is to prevent falls and ensure the safety of older adults.
Centers for Disease Control and Prevention

Falls Resources

• A CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults, 3rd Edition

• Preventing Falls: A Guide to Implementing Effective Community-Based Fall Prevention Programs
Tai Chi: Moving for Better Balance

• Improved balance and physical performance
• Reduced falls by 55%
• Current class locations/times
  • Over 350 trained instructors within Oklahoma
  • Over 150 active classes; over 60 cities
  • http://falls.health.ok.gov
What is Tai Chi: Moving for Better Balance?

• Tai Chi is a centuries-old Chinese practice designed to exercise the mind and body through a series of gentle, flowing postures

• TCMBB - 8 forms derived from the 24 Tai Chi forms that emphasize weight shifting, postural alignment, and coordinated movements
Benefits of Tai Chi

- Improves Balance and Posture
- Improves Functional Limitations
- Strengthens Muscles
- Builds Confidence from the Fear of Falling
- Improves Mental and Physical Health (Positive attitudes, self-esteem and well-being)
- Improves Musculoskeletal Conditions (Reduction of arthritic symptoms; increases in flexibility and mobility)
- Improves Cardiovascular Functions • Reduces Hypertension
- Improves the Quality of Sleep
- Enhances Stamina
- Increases Energy Level
- Relieves Stress
Tai Chi Success Stories

“Tai Chi has significantly improved my balance and flexibility. My joint stiffness has also improved. I am a widow who lives alone on an acreage, so it is important to me to maintain my ability to live alone and maintain my property for as long as possible. Moreover, the practice is a stress reliever and provides me the incentive to get out of the house and do something with other people. I feel Tai Chi has improved my ability to live independently for a longer time.” – TCMBB participant

“I have Parkinson’s and due to this condition I am very unstable. I am in my second 12 week session. Tai Chi has made a big difference in my awareness of how I walk. It has strengthened my legs, and my endurance for activities has increased. I am a believer in this program and have encouraged friends and family to be involved.” – TCMBB participant
AGING VISION
How stairs look to people with aging vision

No white stripe  White stripe
How stairs look to people with yellowing vision + cataracts + glaucoma

- No white stripe
- White stripe
How a shower looks to people with yellowing vision + cataracts + glaucoma

Low-contrast step

High-contrast step
How a shower looks to people with yellowing vision + cataracts + glaucoma

Low-contrast step

High-contrast step
How a toilet seat looks to people with aging vision

White toilet seat   Black toilet seat
How a toilet seat looks to people with yellowing vision + cataracts + glaucoma

White toilet seat
Black toilet seat
STATE ACTION
Healthy Aging: Living Longer Better Collaborative

- Promote healthy aging across a range of disciplines and fields
  - Better align agency efforts with a broad network of partners including tribal nations and community-based organizations
  - Deepening relationships, extending collaborative efforts, and defining points of coordination
State Plan

- Four focus areas:
  - Tracking and Monitoring
  - Policies and Procedures
  - Public Education
  - Provider/Prescriber Education
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