

# Preventing Falls in Older Adults

## March 28, 2018

### Retired Teacher's Association Meeting

**Chiso Oboite**

Injury Prevention Specialist

MD Falls Free Coalition Coordinator

Center for Injury and Sexual Assault Prevention (CISAP)

Maryland Department of Health (MDH)

Prevention and Health Promotion Administration (PHPA)



MARYLAND  
Department of Health

# Objectives

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- 1) Understand why falls are serious
- 2) Understand that fall risk and falls prevention is a multifactorial issue.
- 3) Understand the burden of falls in Maryland
- 4) Know how Maryland addresses the issue
- 5) Understand available evidence-based fall prevention programs in the community
- 6) Find available educational resources for falls prevention
- 7) Use the Home Safety Checklist to assess home risks.

# Possible Impact of a Fall?

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- **1** out of **5** falls causes a serious injury such as broken bones or a head injury.
- Falls are the **most common cause** of **traumatic brain injuries** (TBI).
- More than **95% of hip fractures** are caused by falling, usually by falling sideways.

<http://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>

# Post-fall Syndrome

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- Dependence
- Loss of autonomy
- Depression
- Confusion
- Immobilization
- Restriction in daily activities

# Why Falls are Serious?

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- Independence and quality of life
- Fear of falling
- Placement in a skilled-nursing facility.<sup>1</sup>

1. Tinetti ME, Williams CS Falls, injuries due to falls, and the risk of admission to a nursing home. N Engl J Med. 1997 Oct 30;337(18):1279-84.

# The Burden of Falls in Maryland

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- According to available 2015 data, in Maryland, there were **13,048 hospitalizations** for fall injuries among all ages.<sup>2</sup>
- Of those, **9,519** were among older adults.<sup>2</sup>
- Falls were the **leading cause** of injury-related hospitalizations and ED visits for this age group in Maryland.<sup>1</sup>
- In 2015, **525** older adults died in fall-related incidents in Maryland.<sup>2</sup>

2. Unpublished data from the Maryland Health Services Cost Review Commission Hospital Discharge dataset.

# Trauma Center Registry Data 2015-2016

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- **A fall** is the **primary reason for admission** (33.5%) for all ages.<sup>3</sup>
- About **50%** of these admissions were adults 65 and older.<sup>3</sup>

# Falls are Costly

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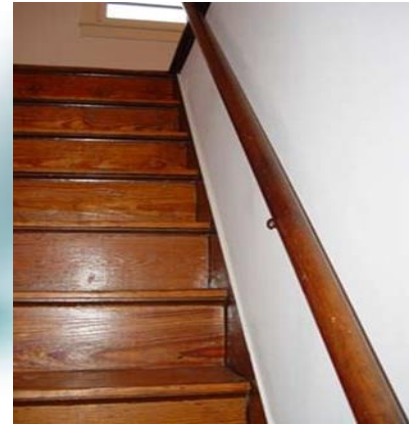
In 2014, the total **hospitalization charges** for treating falls was over **250 million** for adults 65 and older, and fall-related **emergency department visit charges** were **20 million**.<sup>4</sup>

4. Unpublished data from the Maryland Health Services Cost Review Commission Hospital Discharge dataset.



# Major Risk Factors for Falls in Older Adults

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- ✓ Lack of Exercise
- ✓ Medication Side Effects
- ✓ Vision Problem
- ✓ Home/Environmental Hazards

# Lack of Exercise

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Participate in an exercise program that focuses on balance, walking, and flexibility



# Medication Side Effects

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Some medications have side effects such as dizziness or sleepiness that could also interact with a person's health condition and increase the risk of falling.

Some medicines that may increase fall risk include:

- Medicines for sleep
- Painkillers
- Medicines affect mood
- Medicines that lower blood pressure

# Vision

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- **Have an eye exam at least once a year**
- **Update prescription as needed**
- **Bifocal or progressive lenses – perhaps get a pair of glasses with only distance prescription for outdoor activities, such as walking. Sometimes these types of lenses can make things seem closer or farther away than they are.**

# Home/Environmental Hazards

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- **Get rid of things that people could trip over.**
- **Grab bars**
- **Railings on stairs**
- **Home lighting**
- **Place daily used items in easy to reach cabinets. Avoid step-stools.**

**Fall Prevention Home Safety Checklist**

Please use this checklist to assess the home. Write Yes/No/NA in the boxes provided.

If you answer "No" (which indicates a problem) please provide details on the back as to the nature of the problem

		Bedroom	Entrance & Halls	Stairs & Floors	Kitchen	Bathroom	Living Area #1	Living Area #2	Other
<b>LIGHTING</b>	1. Are there light switches at entry?								
	2. Is the area well lit?								
	3. Are there any night lights?								
<b>FLOORING</b>	1. Is there level flooring? (tiles, carpet, linoleum, or hardwood)								
	2. Is the flooring secure? (free of scatter rugs)								
	3. Is there a slippery surface? (Wet, wax, oil, soiled, etc.)								
	4. Is the flooring free of clutter? (hazards such as electrical cords exposed or unexposed, any other hazards)								
	5. Are stairs in good repair?								
	6. Is there a clear outline of the steps?								
<b>RAILS &amp; SUPPORTS</b>	1. Are handrails properly installed and/or placed?								
	2. Are there any other supports present?								
	3. Are there non-slip adhesive surfaces, shower benches, elevated toilets or seats?								
	4. Is all furniture (including step stools) stable and secure?								
<b>OTHERS</b>	1. Has patient been evaluated for balance, strength, and overall well-being?	Yes	No	4. Does the patient use an assistive device?				Yes	No
	2. Have patient's medications been reviewed by a doctor/pharmacist within in the last 6 months?	Yes	No	5. Has patient been trained in the use of the assistive device?				Yes	No
	3. Is the patient able to take medicines appropriately?	Yes	No	6. Is patient wearing appropriate clothing?				Yes	No
	4. Has the patient had a comprehensive vision check within the last year?	Yes	No	7. Is patient wearing proper shoes?				Yes	No

### Summary of Recommendations

#### Lighting

- ✓ Light switches should be located at the top and bottom of stairs, and three-way switches should be utilized.
- ✓ Outline of steps should be easily visible.

#### Flooring

- ✓ "Good repair" of the stairs - No broken or uneven steps/stairs.
- ✓ Carpet should not be loose, torn, or uneven.
- ✓ Pathway should be free of clutter (i.e. scatter rugs, exposed electrical cords, etc.).

#### Railing/Other Supports

- ✓ Ensure handrails are secure and not too big for gripping.
- ✓ Bedrails and/or other supports in other living areas should be properly installed.

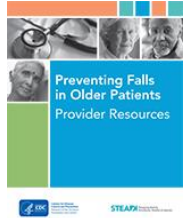
#### Personal Risk Factors

- ✓ Clothing and shoes - Wear proper shoes that have non-skid soles and/or shoes with velcro or fabric fasteners; avoid lace-up shoes, heels, and flip-flops. Avoid pants or dresses that are too long.
- ✓ Keep cell phone or cordless phone on person at all times.
- ✓ Drink plenty of fluids to prevent dehydration. Assess the amount and frequency of alcohol use.
- ✓ Consider purchasing a personal monitoring device (i.e. Lifeline Medical Alert).
- ✓ Water testing - Ensure hot water thermostat is set at 120 degrees Fahrenheit.
- ✓ Test smoke detectors for functionality.

# How do we address the problem?

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- The CDC provides resources about effective strategies in primary care settings including their STEADI toolkit (<http://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html>).
- The National Council on Aging (NCOA) annually leads the Nation in observing Falls Prevention Awareness Week (FPAW) and Falls Prevention Awareness Day (FPAD). FPAD normally falls on the first day of Fall. FPAD was first observed in 2008, it has grown from 11 states to 48 states and the District of Columbia as of 2015.





# MDH's Fall Prevention Activities

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## 1. Trainings and instructors (as of July 2017)

- Tai Ji Quan Moving for Better Balance (formally called Tai Chi for Better Balance) instructor trainings. Currently there are a total of **50 active instructors** teaching TJQMBB in the community.
- Active Stepping On leaders and master trainers: **54 leaders** and **10 master trainers**.

2. Task Force to Develop Home Safety Inspection Protocol - as a result of the HB 665 in 2012, the MDH and the Department of Aging developed a home safety checklist for professionals to use for home visits.

**3. Fall Prevention Awareness Week – MDH annually obtains proclamation from the Governor and coordinates week long activities with local agencies. In 2017, FPAW was from September 17-23, 2017; the community events reached 7,221 seniors during the week.**

**4. The MDH Center for Injury and Sexual Assault Prevention Program is the leader of the Maryland Falls Free Coalition that promotes falls prevention in older adults.**

# MDH Falls Prevention Website

## [https://phpa.health.maryland.gov/ohpetup/Pages/eip\\_falls.aspx](https://phpa.health.maryland.gov/ohpetup/Pages/eip_falls.aspx)

### Steps to Prevent Falls

- Ask**
  - Ask your 65+ patients if they have fallen in the past year.<sup>3</sup>
- Identify & Screen**
  - Identify risk factors for falls through screenings.<sup>3</sup>
- Refer**
  - Refer patients to specialist or community programs.<sup>3</sup>
- Follow Up**
  - Follow up with patients within 30 days.<sup>3</sup>

Prepared By:



UNIVERSITY of MARYLAND  
SCHOOL OF PHARMACY  
THE PETER LAMY CENTER  
ON DRUG THERAPY AND AGING

Contact Us

Maryland Falls Free Coalition  
201 W. Preston Street  
Baltimore, MD 21201  
1.866.703.3265  
[dhmh.injuryprevention@maryland.gov](mailto:dhmh.injuryprevention@maryland.gov)

References

1. Important Facts about Falls. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. Retrieved from <http://www.cdc.gov/ncepi/ncipc/unintentionalinjuryfalls.pdf>. Accessed July 20, 2016.
2. Dispublished data retrieved by the Maryland Core NIPP Program from the Health Services Cost Review Commission IHSCRC datasets, July 2016.
3. Preventing Falls in Older Patients by Provider Product Guide. Centers for Disease Control and Prevention. Retrieved from <http://www.cdc.gov/ncipc/unintentionalinjuryfalls/0012016.pdf>. Accessed July 20, 2016.
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## FALLS PREVENTION & YOUR OLDER PATIENTS

Simple steps to prevent falls in your patients




**Take Action Now!**

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Photos Retrieved from [www.wiki.com](http://www.wiki.com) on July 20, 2016:  
Vitamins and Pills Doctors

**A Personal Story**

"I was traveling when it happened," said Ruth. "I sustained a fracture and had to wear a neck brace for three months." Ruth experienced the fall in 2009.



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**Medicines & Fall Risk**

Stopping falls...one step at a time: fall prevention tips for older adults



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Contact Us

Maryland Falls Free Coalition  
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[dhmh.injuryprevention@maryland.gov](mailto:dhmh.injuryprevention@maryland.gov)

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ing photos were retrieved from [www.wiki.com](http://www.wiki.com) on July 20, 2016.



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## Preventing Falls



Stopping falls...one step at a time: fall prevention tips for older adults



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# Evidence-based Fall Prevention Programs

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- Tai Ji Quan Moving for Better Balance (<http://tjqmbb.org>)

- a 12-week, twice-a-week exercise program that improves the muscle strength and balance of the participants.

([https://www.youtube.com/watch?v=P4cboR6v\\_Eg&feature=youtu.be](https://www.youtube.com/watch?v=P4cboR6v_Eg&feature=youtu.be))



# Evidence-based Fall Prevention Programs

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- **Stepping On** – a 7-week, once a week multifaceted program that helps participants to conquer their fear of falls.

<https://wihealthyaging.org/wiha-debuts-stepping-on-video>

<http://steppingon.com/>



# Stepping On – Overview of Sessions

- 7 weekly sessions + 1 home visit + 1 booster session
- Small-group sessions of 2 hours each
- Balance and strength exercises each class – based on the Otago exercise program
- Discussion sessions with invited experts:
  - Starting exercise, getting out and about safely
    - Physical therapist
  - Environmental safety
    - Police officer, or community safety expert
  - Vision screens, coping with low vision
    - Low vision expert
  - Medication review
    - Pharmacist







# **Tai Ji Quan: Moving for Better Balance Demo**





# Thank you!

**Chiso Oboite**

**Phone: 410-767-8102**

**[Chiso.Oboite@Maryland.Gov](mailto:Chiso.Oboite@Maryland.Gov)**