

# The fall that changed everything; how, why, and what next?

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# Note:

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- This slide deck does not reflect the stories of hundreds of older adults who have inspired me to care about falls.
- During our time together, we'll use photographs to tell their stories.
- This slide deck is a quick reference.

# One goal:

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- Care about falls.

# Falls

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- Annual cost \$50 billion.
- High prevalence in community:
  - 30% over age 65 fall
  - Falls lead to more falls.
- Falls:
  - Hurt people: #1 cause of nonfatal injuries
  - Kill people: #1 cause of fatal injuries

<https://www.cdc.gov/homeandrecreationalafety/pdf/falls/FallPreventionGuide-2015-a.pdf>, accessed 10/18/19

# Falls: why we care.

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- Falling kills people:
  - #6 cause of death in older people.
- Falling hurts people:
  - #2 cause of brain/spinal injury in older adults.
- Falling scares people:
  - 18% of restricted activity days, highest for any health condition.

Hazzard WR, et al, eds. *Principles of Geriatric Medicine and Gerontology*. 5th ed. New York: McGraw-Hill; 2003.

Cassel CK, et al, eds. *Geriatric Medicine: an evidence based approach*. 4th ed. New York: Springer-Verlag; 2003.

# Geriatric Trauma = Falls.

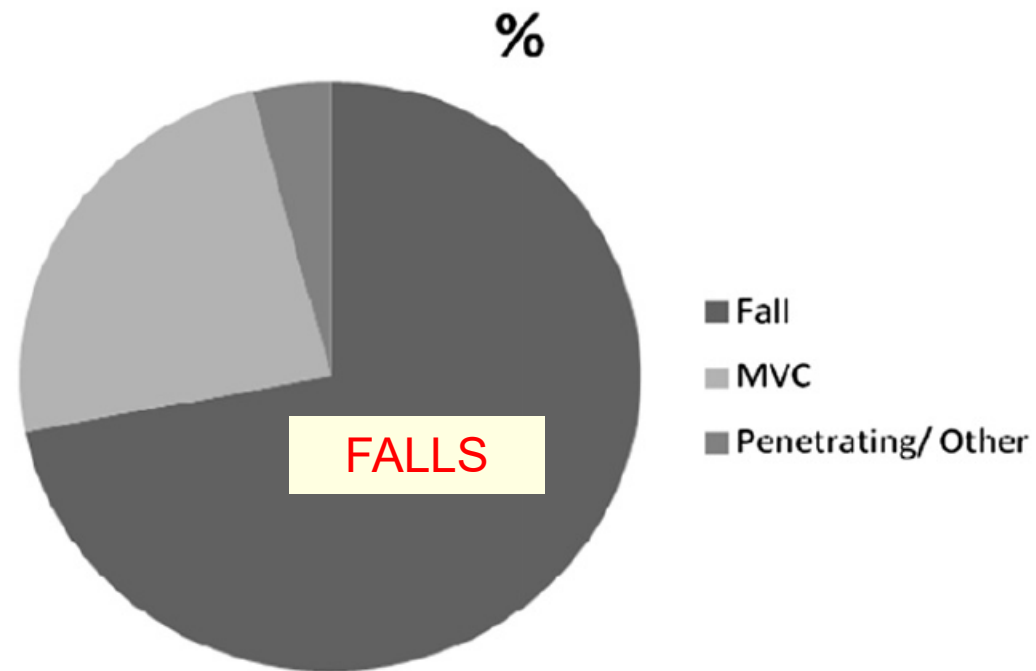


Fig. 1. Pie chart of injury mechanism in the elderly patient. MVC, motor vehicle accident.

# Three reasons for every fall.

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- 1. Age related changes **and/or**
- 2. Medications/(ETOH) **and/or**
- 3. Illness (10% due to an acute illness).\*

\* Cassel CK, et al, eds. *Geriatric Medicine: an evidence based approach*. 4th ed. New York: Springer-Verlag; 2003.

# 1. Age related

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- Cardiovascular - cardiogenic, orthostasis, volume sensitivity,...
- Neurologic - vision, proprioception, vestibular,...
- Musculoskeletal - deconditioning, mechanoreceptors, maladaptive reflexes,...



## 2. Medications.

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- “One the most modifiable risk factors for falls that has been repeatedly demonstrated in observational studies is medication use.”
- Benzodiazepines- short and long acting.
- Antidepressants of any sort.
- Antipsychotics.
- Cardiac and hypoglycemics.

Pacala JT, Sullivan GM, eds. *Geriatrics Review Syllabus: a core curriculum in geriatric medicine*. 7th ed. New York: American Geriatrics Society; 2010.

# 3.Illness

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- Chronic
- Acute

# Who deserves special attention?

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- Fall prevention for every older adult.
- Do something (labs, med review, PT, etc) for a person with:
  - A first fall
  - An increased frequency of falls

# What doesn't work in fall prevention

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- Ignoring it.
- Vitamin D, (sorry)
  - The USPSTF (2018) recommends against vitamin D supplementation to prevent falls in community-dwelling adults 65 years or older.
  - <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/falls-prevention-in-older-adults-interventions1#Pod7>

# What works in fall prevention

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- Engagement
- Get people moving, improve environment
- Medication management

# Engagement

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- 2015 CDC guide is comprehensive:
  - Preventing Falls: A Guide to Implementing Effective Community-Based Fall Prevention Programs
  - <https://www.cdc.gov/homeandrecreationalsafety/pdf/falls/FallPreventionGuide-2015-a.pdf>

# Get people moving, improve environment

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- Evidence that structured movement and home safety helps, at least during the intervention time.
- (Caveat – below resource cites several studies supporting Vitamin D that may now be out of favor.)
- CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults, 3rd Edition
  - <https://www.cdc.gov/HomeandRecreationalSafety/Falls/compendium.html>

# Medication management

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- Know the high risk drugs
  - <https://www.cdc.gov/steady/pdf/STEADI-FactSheet-MedsLinkedtoFalls-508.pdf>
- Have a framework
  - <https://www.cdc.gov/steady/pdf/STEADI-FactSheet-SAFEMedReview-508.pdf>
- Collaborate with pharmacists
  - <https://www.cdc.gov/steady/stories/toolkit.html>



# Take home points:

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- Falling scares, hurts, and kills people.
- Why people fall:
  - Age related changes
  - Medications
  - Illness
- What you do matters:
  - Engage with people, systems, community
  - Get them moving
  - Be a safe prescriber