

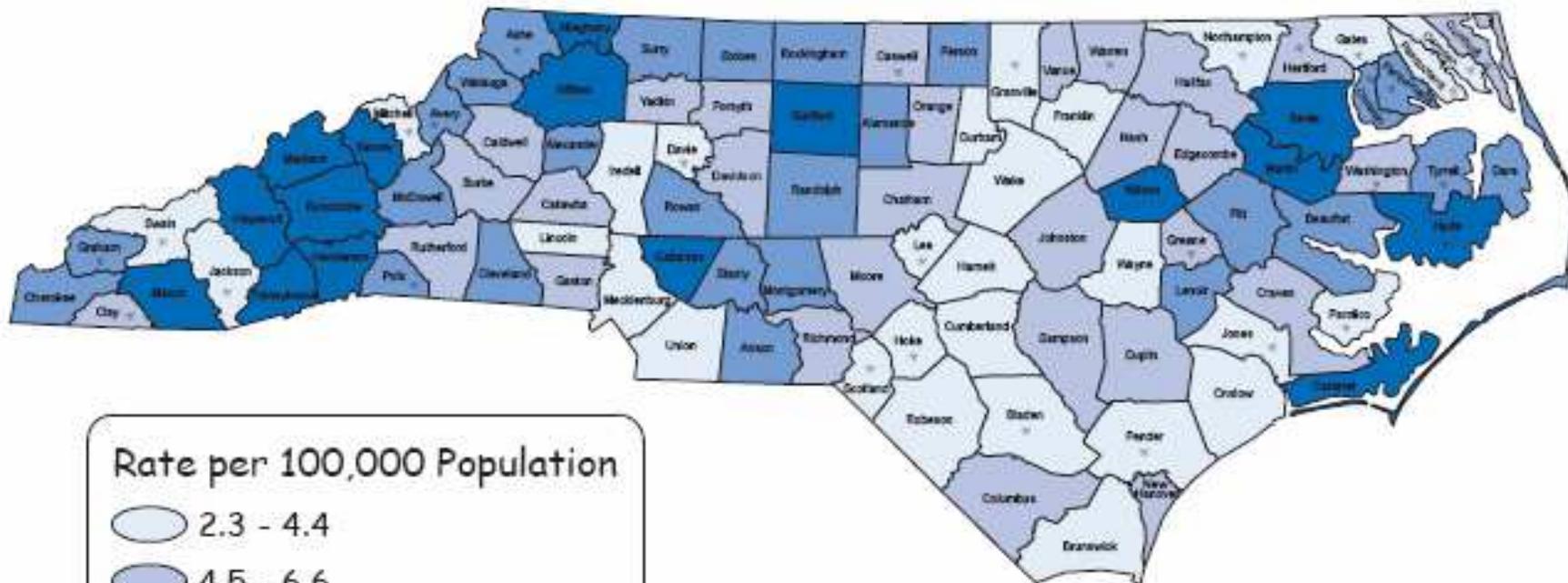
A Public Health Priority: Preventing Falls Among Older Adults (age 65+)

Sharon Rhyne, MHA, MBA
Health Promotion Manager
Chronic Disease and Injury Section
NC Division of Public Health

North Carolina
Injury & Violence
PREVENTION Branch



North Carolina Resident Unintentional Falls Death Rates, 2002 - 2006



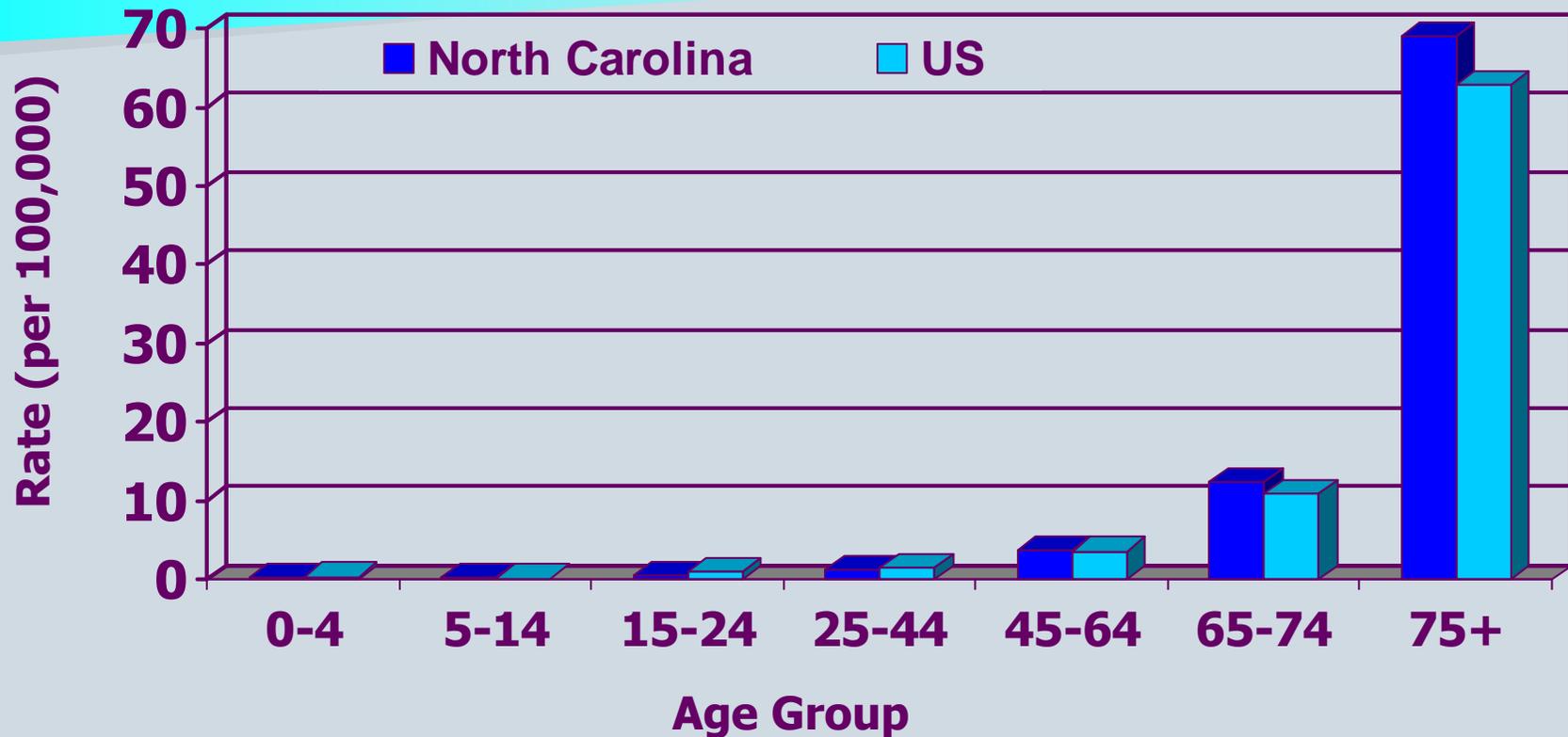
Rate per 100,000 Population

-  2.3 - 4.4
-  4.5 - 6.6
-  6.7 - 10.2
-  10.3 - 19.5

*Note: Rates based on less than 10 deaths are unreliable and should be interpreted with caution.

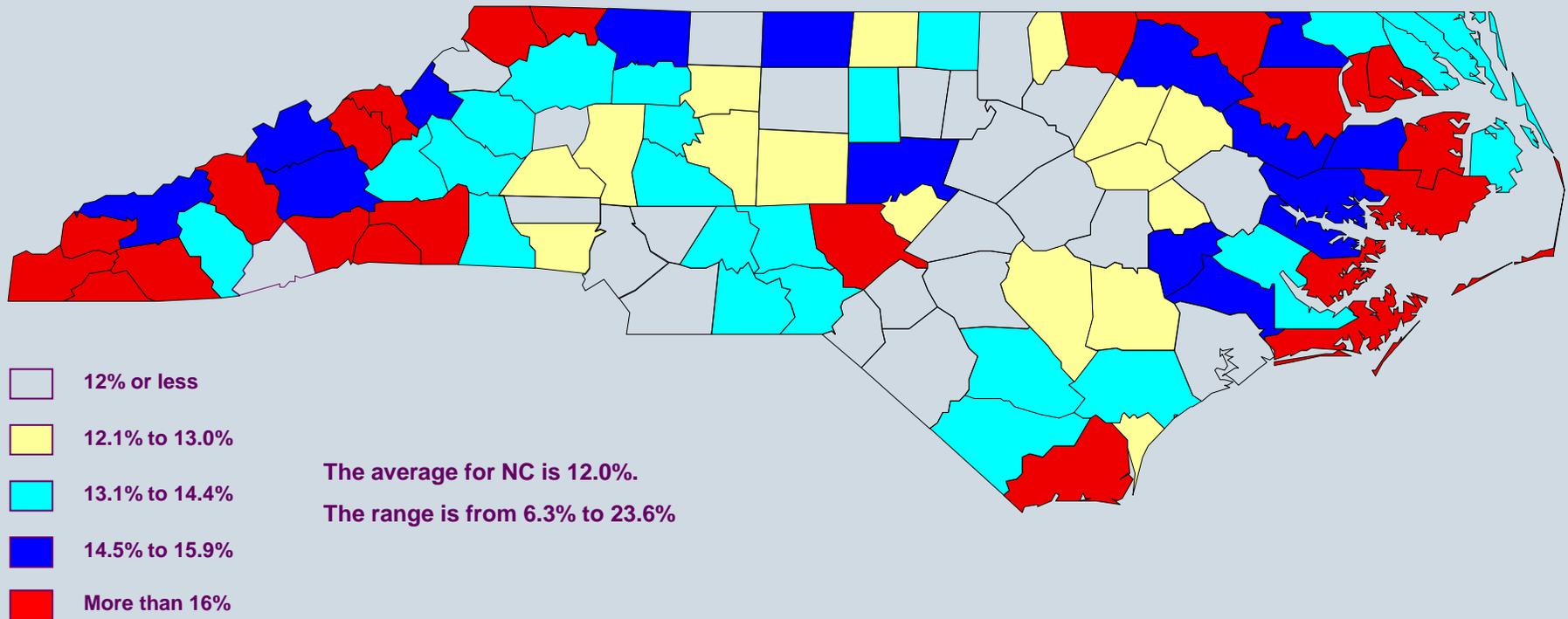
Fall-Related Deaths, NC and US

Source: National Center for Health Statistics, 1999-2005

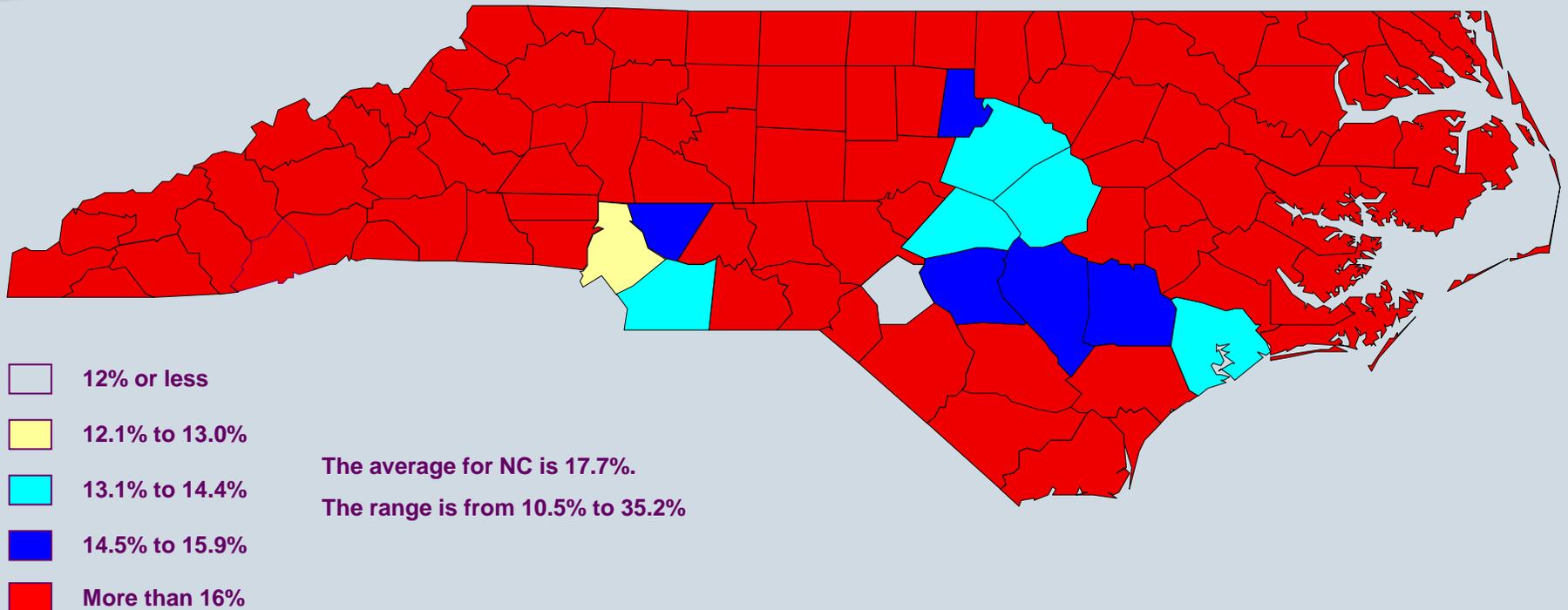


Rates of fall death are similar in North Carolina and the U.S. across age

Percent of Population Age 65+ in North Carolina, 2000



Percent of Population Age 65+ in North Carolina, 2030*



*Based on July 2006 population projections

Fall Projections for Adults 65+

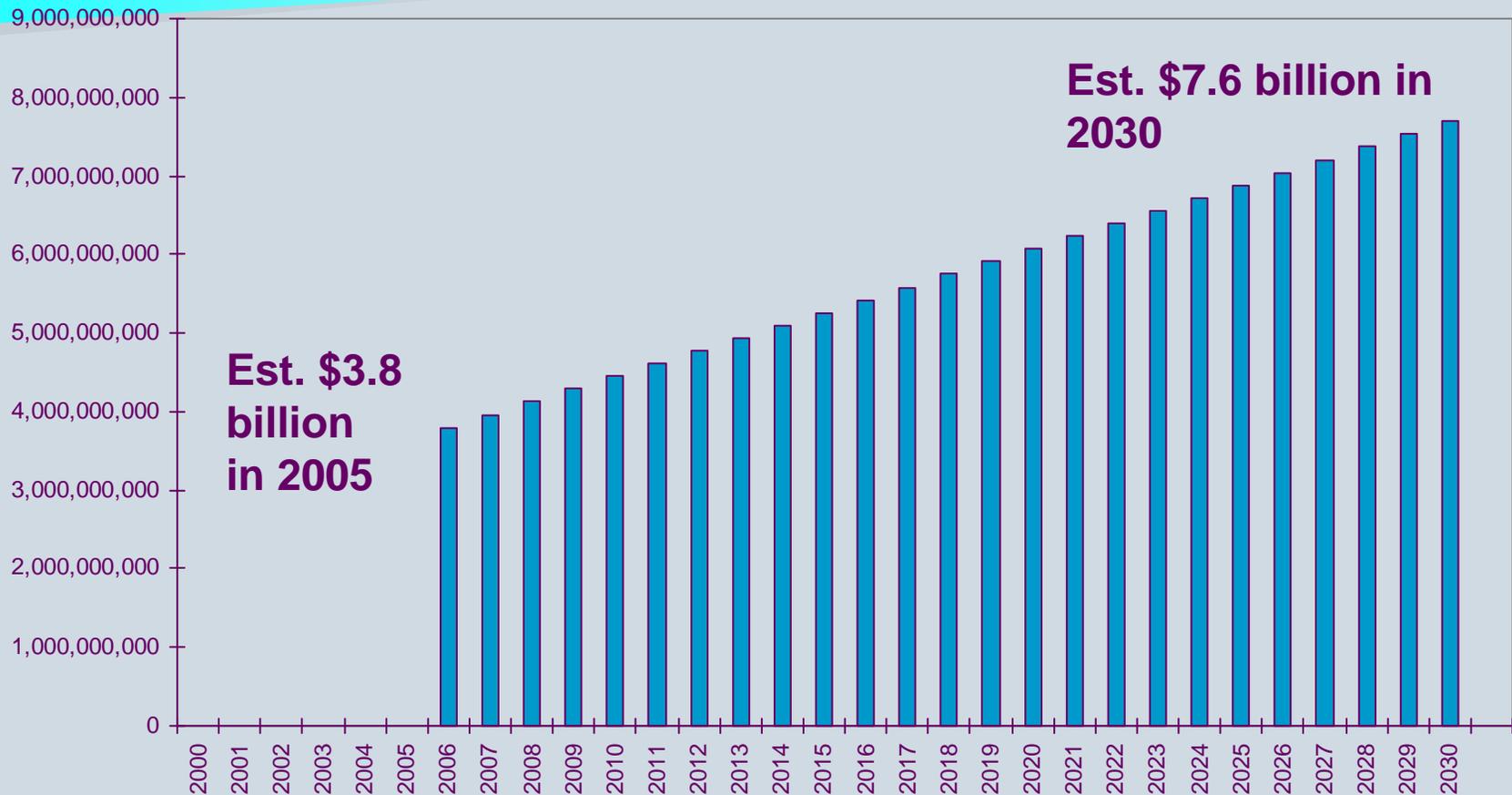
	2006/2007*	Year 2030
Deaths	480	947
Hospitalizations	17,579	35,569
Emergency Dept. Visits	44,541	87,921

Note: Current rate used for all projections

***Source: State Center for Health Statistics for 2007 Death & 2006 Hospital Data. NC DETECT/NCEDD for 2007 ED Data**



Cost Projections for "Silver Tsunami" Hospitalizations



Data source: Estimated hospitalization costs based on estimated population growth for 65+ Costs (direct & work) for hospital admitted NC falls estimated to be \$3.8 billion in 2005, Ted Miller et al.

Falls in Older Adults in NC

- The leading cause of fatal injuries (2000-2007) and the 2nd leading cause of nonfatal injury hospitalizations (2004-2005) for people over age 65 in NC
- The death rate due to falls for people ≥ 65 was 23 times the rate for those < 65 (2007)
- From 1999-2006, the death rate from falls increased 28% for all ages, 34% in those ≥ 65

Falls in US and NC

- 35% of people 65 and older fall each year¹
- Those who fall are 2-3 times more likely to fall again²
- 10%-20% of falls cause serious injuries³

1. Hornbrook, *Gerontologist*, 1994; Hausdorff, *Arch Phys Med & Rehab*, 2001 and NC BRFSS. 2006.

2. Tinetti, *New Eng J Med*, 1988; Teno, *JAGS*, 1990

3. Sterling, *J Trauma-Inj Infection & Critical Care*, 2001

Impact on Quality of Life of Older Adults



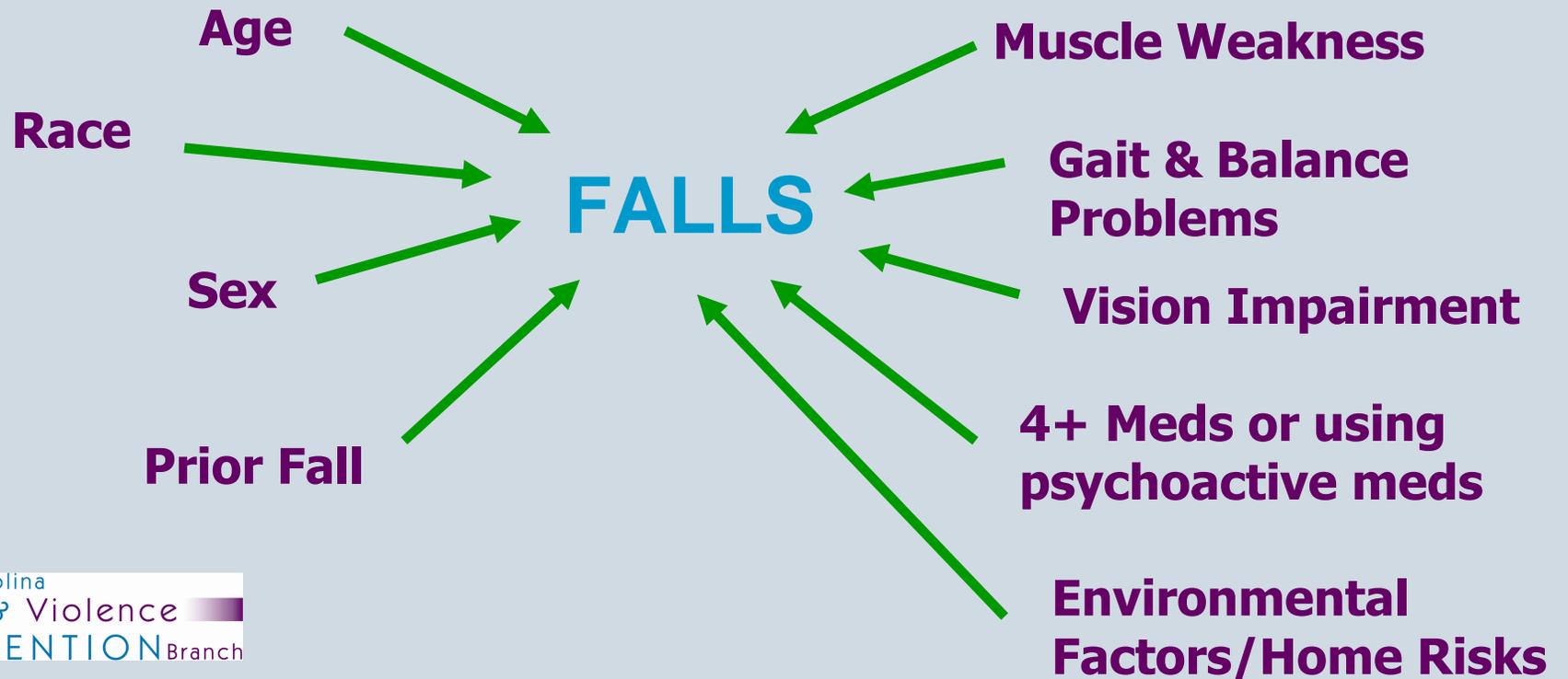
- 20% - 30% fear falling¹
- 20% die within a year after hip fracture²
- 25% in a nursing home one year later³

-
1. Vellas BJ, *Age & Aging*, 1997; Friedman SM, *JAGS*, 2002
 2. Lu-Yao GL, *AJPH*, 1994
 3. Magaziner, *J Gerontology: Medical Sciences*, 2000

Falls Are Usually Multifactorial

Non-Modifiable Factors

Modifiable Factors



A Complex Problem

- Over 60% of falls result from multiple interacting factors

(Campbell, 2007)

- Effective interventions

- Multi-factor interventions

- 30% decrease in falls (Tinetti, 1994; Hogan, 2001; Niklaus, 2003)

- Single-factor community-based interventions

- 30-50% decrease in falls (Campbell, 2007)



Challenges

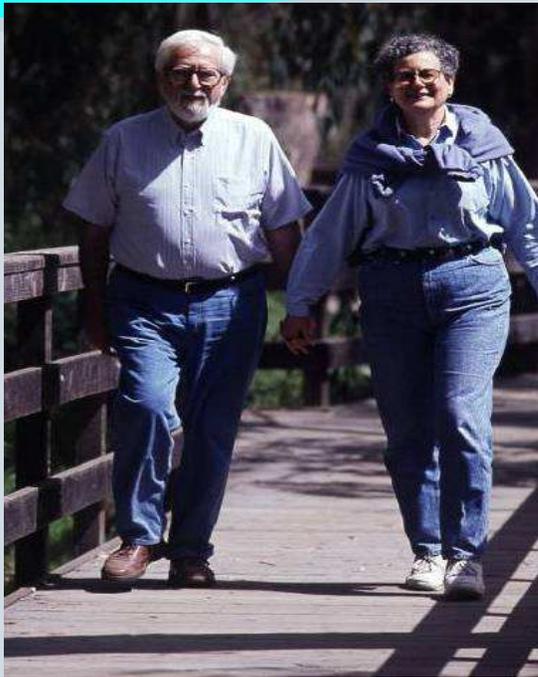
- Assumption on part of older adults and providers that falls are inevitable vs. preventable
- Older adults hesitant to mention a fall (stigma)
- Older adults not being assessed for fall risk
- Providers lack time, knowledge of effective interventions



Challenges (cont.)

- Limited interventions/programs at community level
- Problem must be addressed in a systematic, broad-based framework
- Lack of funding at both state and federal level

Interventions: What Works?



- Research supports these intervention strategies:
 - Comprehensive clinical assessment¹
 - Exercise for balance & strength²
 - Medication management³
 - Vision correction⁴
 - Reducing home hazards⁵

1. American Geriatrics Society, *JAGS*, 2001
2. Lord SR, *JAGS*, 2001
3. Cumming RG, *Drugs & Aging*, 1998
4. Ray W, *Topics in Geriatric R Rehab*, 1990
5. Day L, *BMJ* 2002; Gill TM, *JAGS*, 1999

Interventions: What Works?

- **Specific Evidence-based Programs:**
 - **Tai Chi** (Voukelatos, 2007; Li, 2005; Wolf, 1997)
 - **Stepping On** (Clemson, 2004)
 - **Matter of Balance** (addresses fear of falling)
(Healy, 2008)



NC Falls Prevention Coalition (one of 23 in US)

- Established in April 2008
- 40+ Partner Organizations (and growing)
- Goal: To reduce the number of falls, fall-related injuries, and seriousness of injuries resulting from falls for North Carolinians



NC Falls Prevention Coalition Focus

- Infrastructure
- Community Awareness & Education
- Provider Education
- Risk Assessment and Behavioral Intervention
- Surveillance and Evaluation
- Advocacy for Supportive Policies and Environments

Recommendations

- Reduce falls risk and improve outcomes through coordinated, routine assessment and increased availability of evidence-based interventions/programs (\$100,000)
 - Translating research
 - Current programs such as Matter of Balance, Stepping On, Tai Chi, etc.

Recommendations (cont.)

- Increase fall prevention awareness
 - Media/communications campaign (\$300,000)
 - Website (approx. \$5,000)
- Educate medical and community service providers
 - Falls summit (2 locations, \$50,000 total)
- Support for NC Falls Prevention Coalition (\$80,000)

Be Safe!

Remain Fit!

Stay on Your Feet!



Acknowledgements

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