

Senior Fall Prevention



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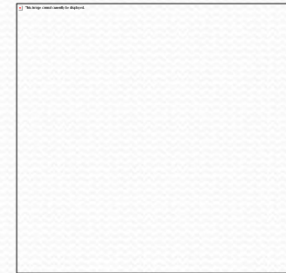


Objectives

- Review the history of the Knox County Senior Safety Task Force (SSTF)
- Review the history of the East Tennessee Area Agency on Aging & Disability (ETAAAD) Federal IID Funding Mandate
- Discuss the Center for Disease Control (CDC) Recommendations for Falls Prevention
- Discuss Tennessee's State of Aging
- Review fall prevention evidence based programs
- Program highlight - SAIL (Stay Active and Independent for Life)

Knoxville-Knox County Senior Safety Task Force

- Convened by the Knox County Health Department in 2008
- Group consists of public and private partnerships
- Planned first Started coordinating Fall Prevention Awareness Day (FPAD) activities and events in September 2008
- Brought the SAIL (Stay Active and Independent for Life) strength and balance exercise program to Knoxville in 2009





East Tennessee Area Agency on Aging & Disability

A Division of ETHRA

- Older Americans Act of 1965 & Evidenced Based Programs (EBPs)
- Administration on Aging (AoA)*mandate to target evidenced based health and wellness programming
- American Recovery & Reinvestment Act (ARRA) Grant of 2009
- Invitation to Senior Safety Task Force Member 2010



Fall Prevention Awareness Day (FPAD)

- National day promoted on the first day of fall
- Coordinated by the NCOA (National Council on Aging) starting in 2008



FPAD, cont

- In 2008 the Knoxville-Knox County SSTF started with a one day seminar offered at a local senior center
- In recent years the task force started conducting multiple events at a variety of venues
- We offer balance screenings to multiple locations year round
- In 2016 we partnered with a local TV station to produce a fall prevention PSA



Fall Prevention Facts





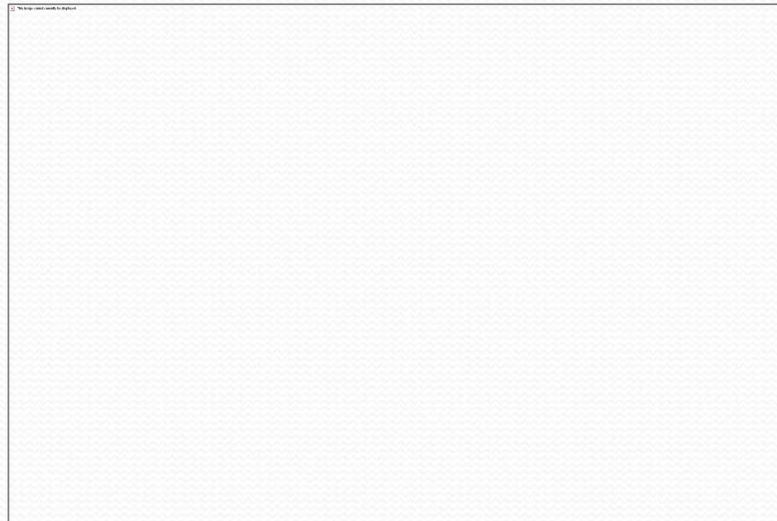
Pop Quiz:

What do all these people have in common?

- Actor William Holden
- Comedian George Burns
- Publisher Katherine Graham
- Journalist David Brinkley
- Literary legend Kurt Vonnegut, Jr.

Answer:

They all died from complications of a fall....



Why Prevent Falls?

- Major threat to the independence and quality of life for older adults
- Injury incident rate is very high for adults 65+
- High health care cost

Falls do not have to be an inevitable part of aging!!





What is the #1 reason seniors go to the hospital?

Falls!!

Important Facts on Falls

- 1 out of 4 older people falls each year, but less than half tell their doctor.
- Falling once doubles your chances of falling again.





Falls are Serious and Costly

- One out of five falls causes a serious injury such as broken bones or a head injury.
- Each year, 2.8 million older people 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.



Falls are Serious and Costly, cont.

- The average hospital cost for a fall injury is \$35,000.
- Fall injuries are among the 20 most expensive medical conditions.
- By 2020, the yearly cost for falls expected to reach \$43.8 billion.



What are the risk factors?

- Risk levels for falling increase with age.
- Over time, sensory impairments, muscle and skeletal disorders, and chronic diseases make people more susceptible.
- The rates of fall injuries for adults 85 and older are four to five times greater than those of adults 65 to 74.

Source: Aging Well
Bezaitis



Risk Factors

- Environmental hazards account for the majority of falls (home or public place)
- Gait disturbance
- Dizziness
- Vertigo
- Drop attack (sudden spontaneous falls)
- Confusion
- Lower extremity muscle weakness (can make an individual four times more likely to fall)



Risk factors, cont

- Arthritis
- A history of falling
- Balance and/or walking difficulties
- Muscle weakness
- Multiple medications/drug interactions



The Recurrence Factor:

- Those who have fallen once are three times more likely to fall again.
- Many people develop a fear of falling again which causes them to limit their activities, leading to reduced mobility and physical fitness.
- Use of multiple medications has also been a risk factor strongly associated with an increased possibility of falls, particularly psychotropic medications, cardiac drugs and diuretics.”

Source:
Aging Well
Laurence Rubenstein, M.D., MPH

How Do We Prevent Falls?

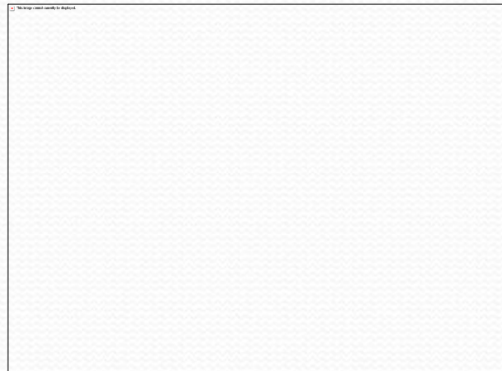
- ⦿ Exercise
- ⦿ Medication review/management
- ⦿ Vision exams
- ⦿ Home safety evaluation

Source: CDC (Centers for Disease Control) Injury Prevention



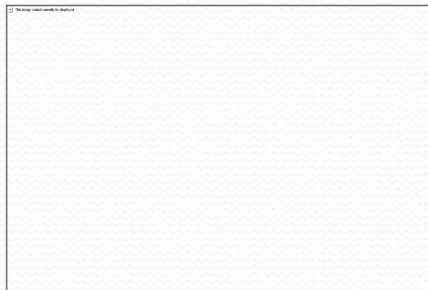
Exercise

- The Centers of Disease Control recommend that seniors get *2 hours and 30 min (150 min) of moderate intensity aerobic activity* (i.e. brisk walking) every week and *muscle strengthening activities 2 or more days a week that work all major muscle groups* (legs, hips, back, abdomen, chest, shoulders, arms).



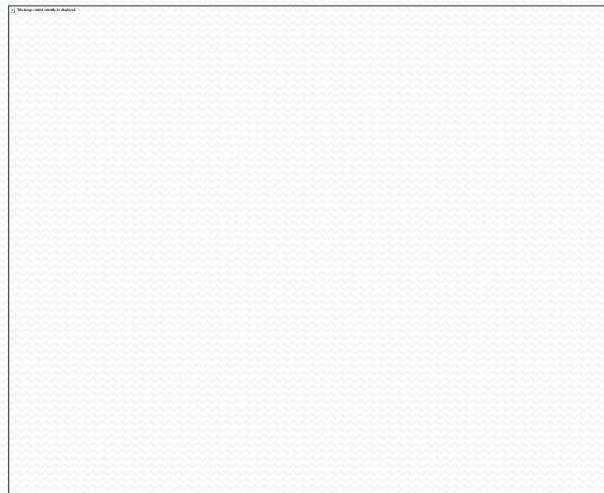
What kind is best?

- Strength, balance and mobility exercises, like Tai Chi and SAIL (Stay Active and Independent for Life).
- Whole body activities focusing on increasing endurance, strength, and power, especially in those muscle groups that affect postural alignment and stability, like ankle, knee and hip, i.e. SAIL (Stay Active and Independent for Life).



Vision Screening

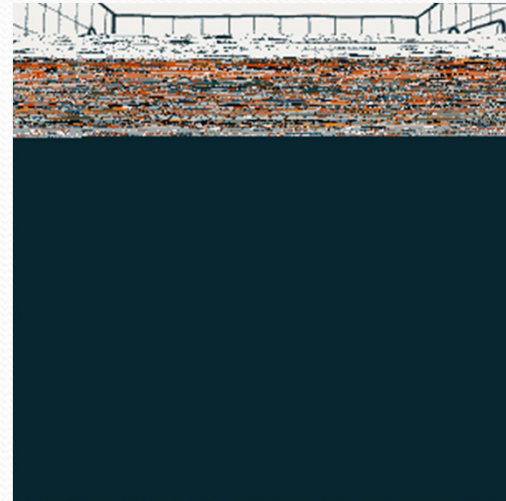
- ***Vision screening*** - every 1 to 2 years depending on if you have any eye conditions such as glaucoma, macular degeneration, cataracts, etc.



Home Safety

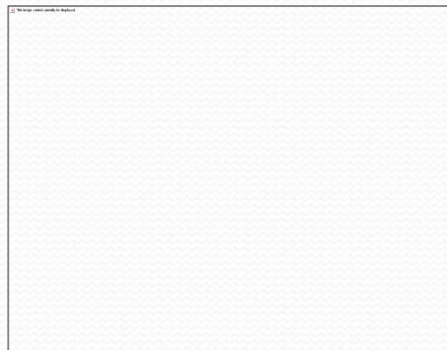
Here are a few things you can do to make your home safer:

- Increase lighting
- Install lightweight curtains or shades to reduce glare
- Remove obstacles, like cords
- Install railings along stairs
- Install grab bars near toilets, showers, and tubs
- Remove throw rugs or add no slip mats
- Move hard to reach often used items to a lower level



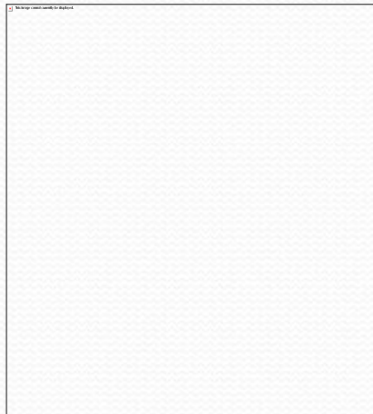
Medication Management

- Seniors taking 4 or more medications may put them at greater risk for falling. Review your medications with your doctor(s) **and** your pharmacist at each visit, and with each new prescription. Ask which of your medications can cause drowsiness, dizziness, or weakness as a side effect. Talk with your doctor about anything that could be a medication side effect or interaction.



Medication Management, cont

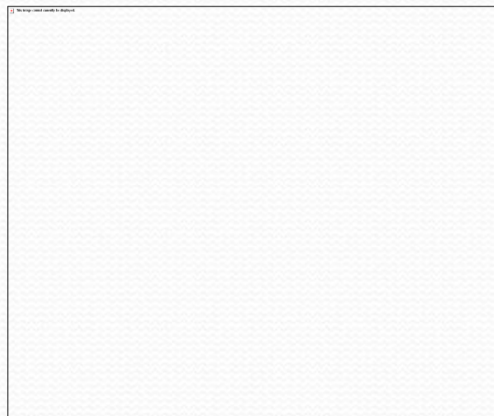
- Review medications with all patients 65 and older
- Stop medications when possible
- Switch to safer alternatives
- Reduce medications to the lowest effective dose



Medications to be avoided/limited

Psychoactive medications, such as:

- Anticonvulsants i.e., Topamax, Tegretol, Neurontin
- Antidepressants i.e., Celexa, Zoloft, Prozac, Paxil
- Antipsychotics, i.e., Xanax, Klonopin, Valium, Lyrica



Medications to be avoided/limited, cont

- Benzodiazepines - Benzodiazepines may be used in the treatment of anxiety, panic disorder, seizures, or sleep disorders. They may also be used as a muscle relaxant, during alcohol withdrawal, or before surgery to induce relaxation and amnesia (memory loss).
- Opioids
- Sedatives-hypnotics





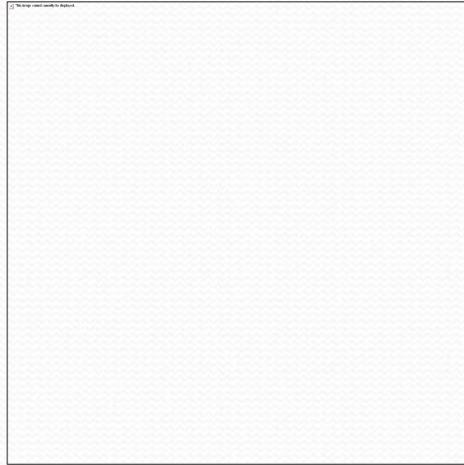
Seniors and opioids

- Pain pills are sending more senior citizens to the hospital in Tennessee
- Hospitalizations of the elderly due to pain killers have more than tripled over the last 10 years.
- Seniors are more likely to be prescribed opioids to address the chronic pain from illnesses that become more common in older age.
- Seniors cannot metabolize pain killers the same way that young adults can

Seniors and opioids

- TN is ranked No. 6 in the nation for the rates of opioid-related hospital admissions among senior citizens.
- In 2005, 467 out of every 100,000 people aged 65 and older spent time in the hospital for opioid-related use. In 2015, that rate shot up to 1,505.
- One-third of seniors enrolled in Medicare Part D prescription coverage filled at least one prescription for an opioid last year
 - That is about 14.4 million Seniors
- More than half a million of those beneficiaries received more than the average opioid dosages for at least three months.

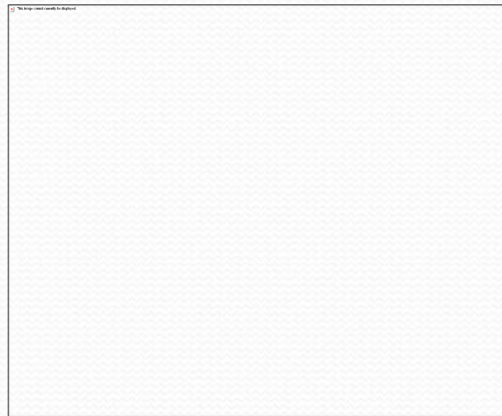
Source: The Tennessean and www.familydoctor.org



How do we know programs work?

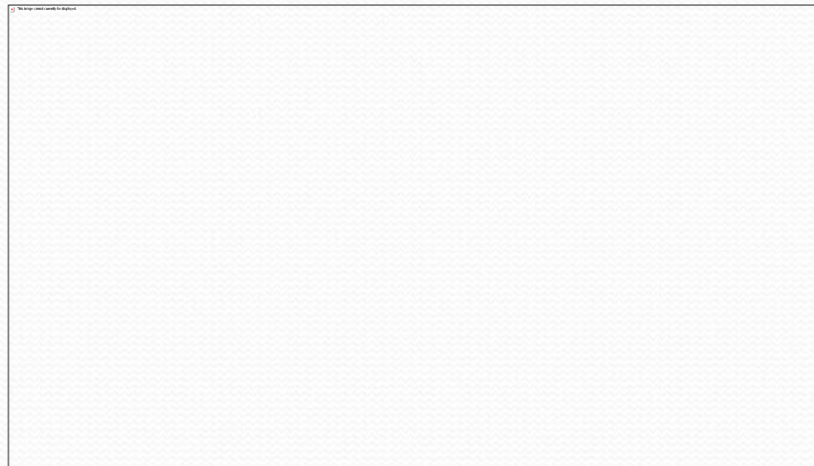
Definition of best practice

- Best practice is “A method or technique that has consistently shown results superior to those achieved with other means, and that is used as a benchmark.



Definition of Evidence Based

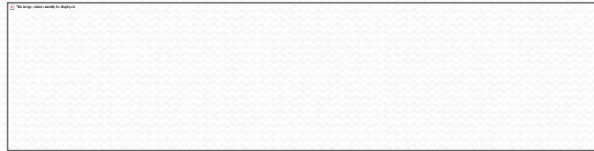
- In general, evidence-based programs are implemented with fidelity and use a clear, consistent model that is research-based, with a rigorous research design and grounded in relevant, empirically-based knowledge.





STEADI Healthcare Provider Program

- CDC's STEADI (Stopping Elderly Accidents, Deaths, & Injuries) Tool Kit
- Researchers at CDC's Injury Center created this tool kit for health care providers who treat older adults who are at risk of falling or who may have fallen in the past.



- Stepping On is a 7 week program that empowers older adults to carry out health behaviors that reduce the risk of falls.
- In a small group setting, older adults learn balance exercise and develop specific knowledge and skills to prevent falls.



- Matter of Balance is an 8 week program designed to reduce the fear of falling and increase activity levels among older adults.
- Participants learn to set realistic goals to increase activity, change their environment to reduce fall risk factors and learn simple exercises to increase strength and balance.

Tai Chi



- Tai Chi is a gentle form of movement using every part of the body coordinated in a natural and slow rhythm of motion. Tai Chi for Arthritis is a part of the Tai Chi for Health program created by Dr. Paul Lam, M.D. of Sydney, Australia.





The S.A.I.L. Program

- S.A.I.L. stands for *Stay Active and Independent for Life*
- S.A.I.L. was developed by the Washington State Department of Health and the Northwest Orthopedic Institute. The initial study was funded by a grant from the Centers for Disease Control.
- S.A.I.L. was translated from a study to a community program. It is designed for adults 65 and older.
- The results from the initial study showed a 25% less incidence rate of falls.
- Strength, balance and mobility among the study participants also increased significantly.

Evolution of the SAIL Program

- 2003-2005: Senior Falls Prevention Study (SFPS)
- 2005-2006: Translation of the findings
- 2006: SAIL instructor training
- 2007: Data from SFPS are published
- 2006-2007: Translational Research Evaluation (TRE)
- 2009: Online format of SAIL training
- 2011: Data from the TRE are published
- 2012: SAIL is recognized as a Title IID Evidence-Based Health Promotion Program by the AoA

SAIL Program Background

- Exercises based on current physical therapy & exercise literature best practices for improving endurance, strength, balance & flexibility.
- Education component integrated into group exercise classes (SAIL Guide, 2006)
- Training developed by PT vestibular balance specialists & RN, based on study findings & ongoing feedback (participants, instructors, site staff, class evaluations)





S.A.I.L. Features

- ⦿ A strength and balance fitness class
- ⦿ The class includes moderate aerobic exercise, strength exercises with wrist and ankle weights, a scripted balance component, and stretching exercises.
- ⦿ Exercises can be done seated or standing
- ⦿ Instructor is a certified fitness instructor with 2 days of training
- ⦿ Participant receives an information and resource booklet that include several self-risk assessments
- ⦿ Objective fitness testing

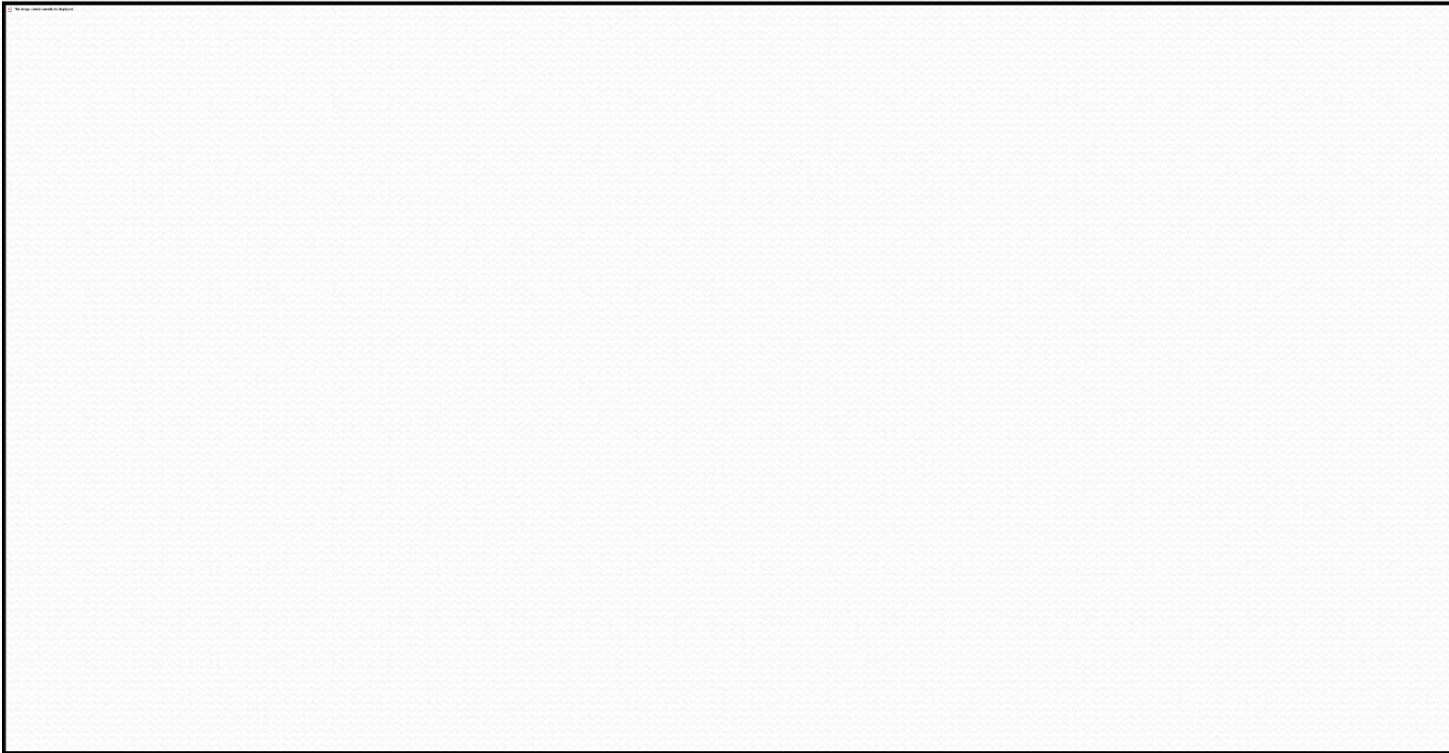


What are the benefits of SAIL?

- SAIL is public domain. Duplication, publication and translation of our material is encouraged and does not require permission.
- SAIL meets the highest criteria required by the Administration on Aging to be considered a best practice, evidence based program.



SAIL Classes





Where is SAIL available?

Knox County

- Carter Senior Center
- South Knoxville Senior Center
- Karns Senior Center
- Trinity Chapel Church

Outside Knox County

- Anderson County
- Blount County
- Claiborne County
- Hamblen County
- Loudon County
- Monroe County
- Morgan County



State of Aging in Tennessee

- Tennessee's over 65 population is higher than the national average
- Tennessee ranks in the bottom 10 states on almost all health and well-being measures
- Tennessee in particular has a high incidence of chronic conditions which increases the risk of falls and ranks the state well above the national norm



State of Aging in TN cont'd

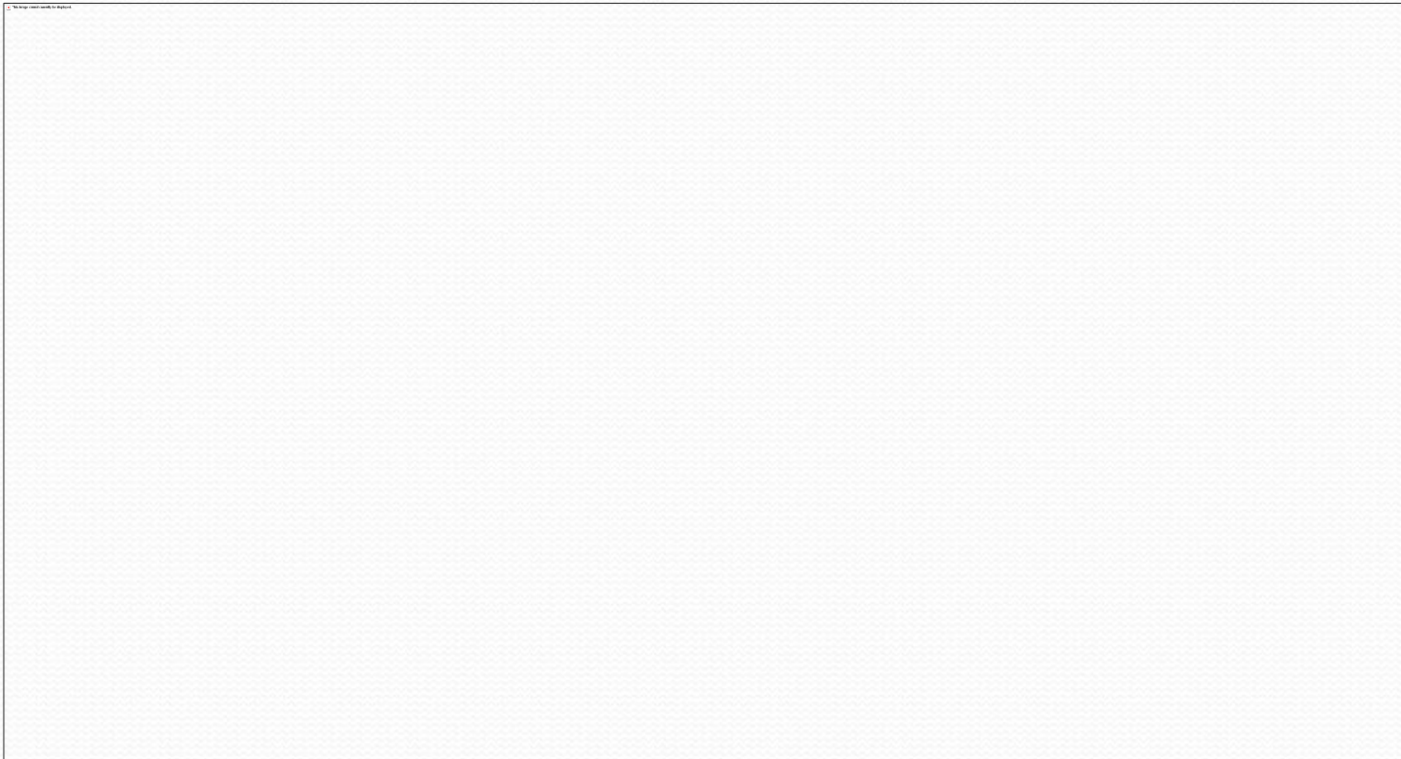
- Health care for older Americans drives 66% of the country's health care budget, but results in even higher personal costs in terms of diminished quality of life, loss of independence, and the ability to engage in and contribute to community life.
- It's important to note most chronic conditions older Americans experience are preventable or can be delayed by the practice of healthy behaviors, the earlier . . . the better.

*Governor's Task Force on Aging



Health & Wellness

Moving at the Speed of Life!





Fall **ER Visits** 60+per 100,000

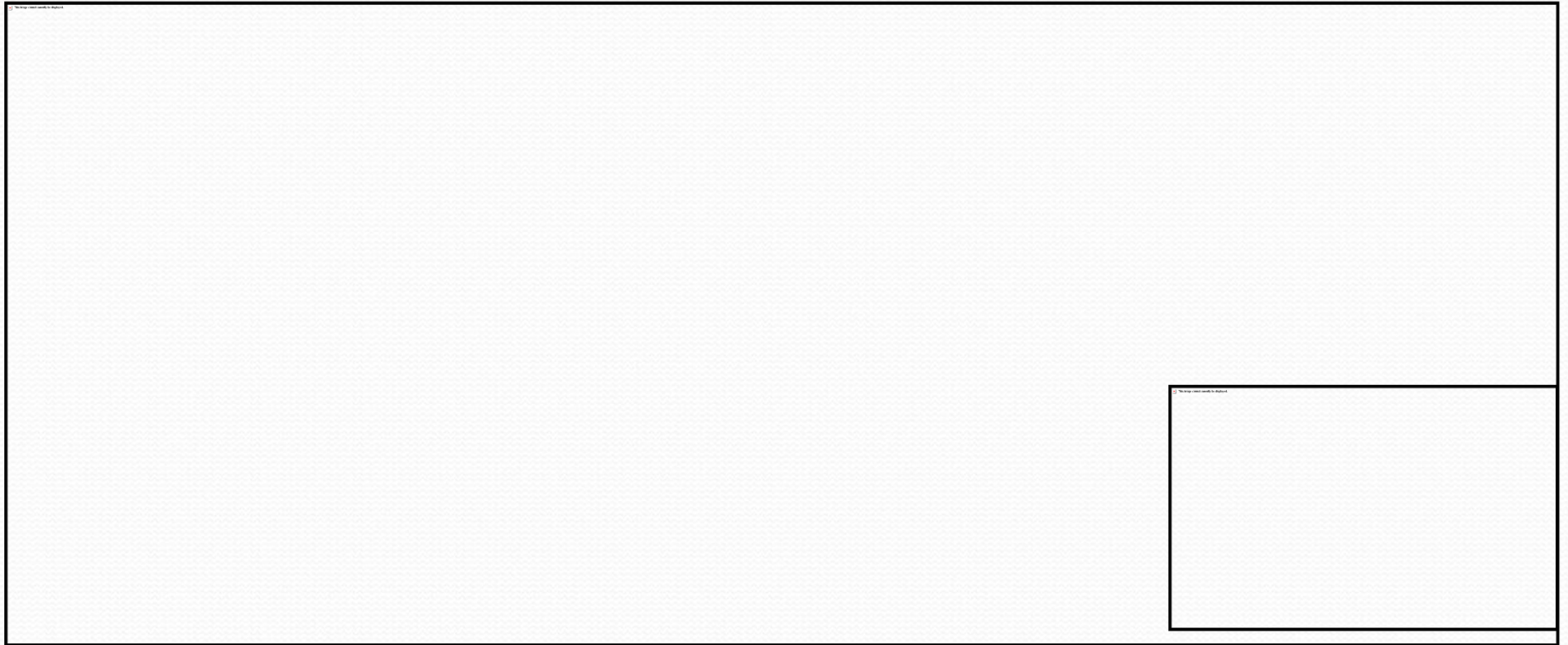
13 The State of New York's Health



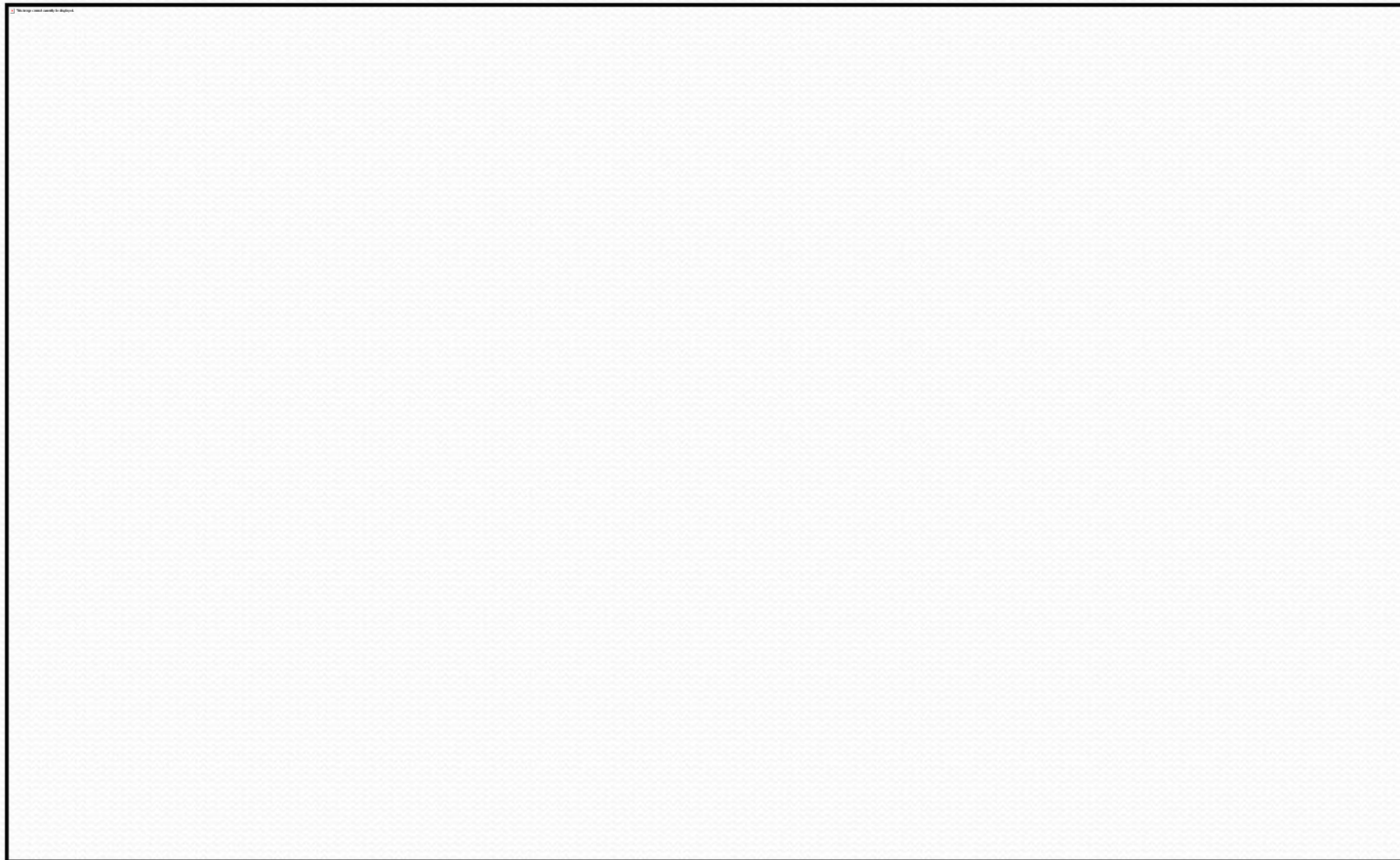
Falls in Tennessee

- Falls among older adults in Tennessee are both widespread and costly. In 2014 falls resulted in 62,817 ER visits and 567 deaths .
- Health care for older Americans drives 66% of the country's health care budget, but results in even higher personal costs in terms of *diminished quality of life, loss of independence, and the ability to engage in and contribute to community life.*
- It's important to note most falls and chronic conditions older adults experience are ***preventable*** or can be delayed by the practice of healthy behaviors.

EBP Fall Prevention Classes Across TN



Counties with no Evidence-Based Fall Prevention Programs



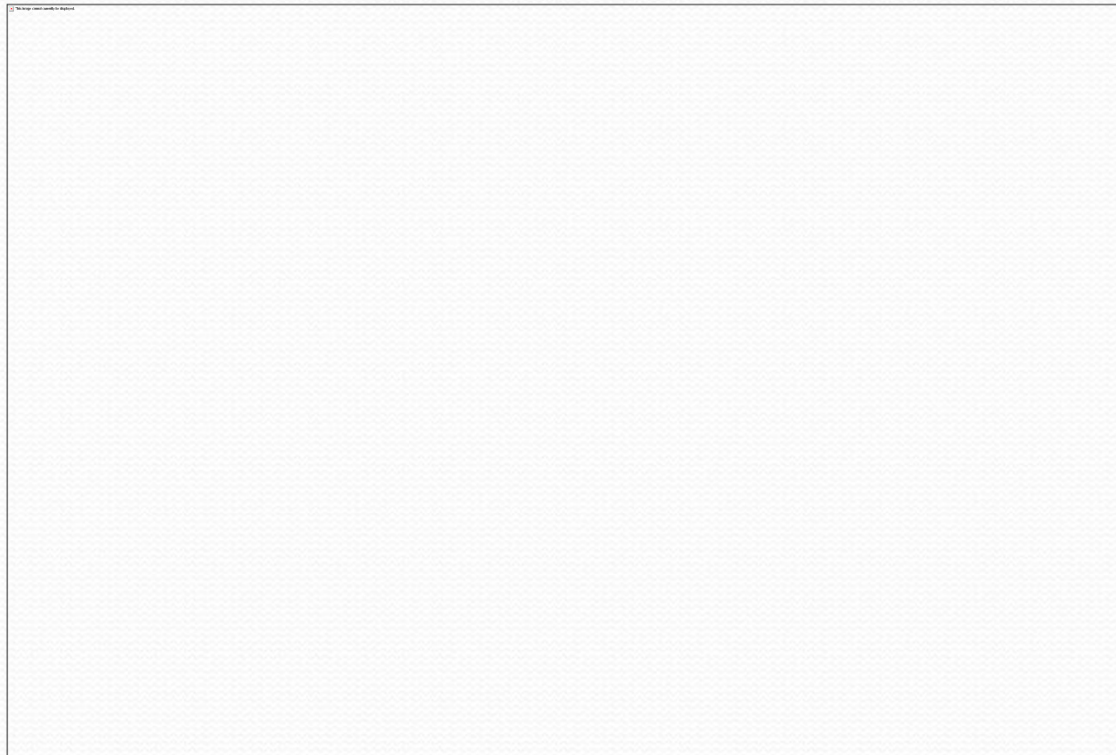


Physical Activity & Aging

Because of the low functioning status and high incidence of chronic disease and falls, there is no segment of the population that can **benefit more from regular exercise** than the elderly.



INCREASING physical activity is the **FIRST** and most important prescription for **ALL** chronic diseases . . .





Regular Physical Activity

- Improves health
- Decreases pain
- Improves mental acuity
- Improves functioning
- Improves cognition
- **Decreases risks of falls**



ETAAAD

Evidenced Based Programs

- Arthritis Foundation Aquatics
- Arthritis Foundation Exercise
- Arthritis Foundation Walk with Ease
- Tai Chi for Arthritis & Diabetes
- Chronic Disease Self Management Program
- Diabetes Self-Management Program
- Powerful Tools for Caregivers
- **Stay Active and Independent for Life (SAIL)**
- Stepping On*

Questions?

- Contact Information:

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