

ThinkFirst!

To Prevent Falls

Transplant Recipient Edition



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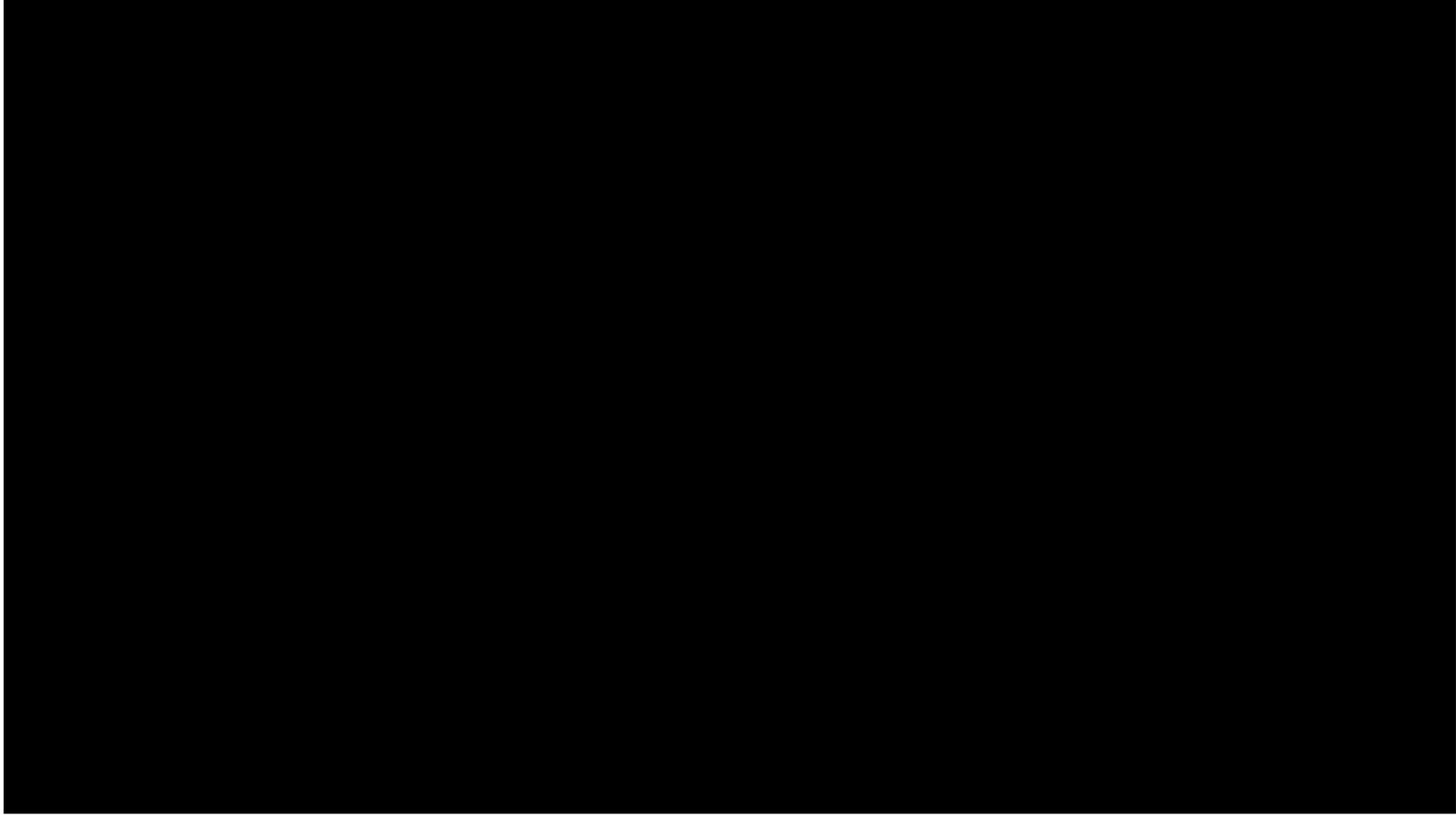
A Program of the
ThinkFirst National Injury
Prevention Foundation

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Pre-Class Survey



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Purpose

- To raise awareness of the prevalence of falls and their serious consequences
- To increase knowledge on reducing your risk for falls

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Falls are Common in Older Adults

More than one-third of people 65 and older fall each year

Two-thirds of those who fall will do so again within 6 months

Falls are the **leading** cause of both fatal and nonfatal injuries for those 65 and older

What If I Have Received a Transplant Too?

- Frailty-20-40% of solid organ transplant candidates

Population

Liver transplant candidates

Liver transplant recipients

Heart transplant recipients

HSCT / Bone marrow transplant

Older adult transplant patients

Approximate fall statistics

28.8% fall within 1 year

~15% report prior falls; fracture risk ~8.7%

High frailty (30–50%) → elevated fall risk

31–45% experience falls or near-falls

~7% fall within 100 days (HSCT data)

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General Risk Factors for Falls

- Unsafe home/outdoor environments
- Vision impairments
- Poor Nutrition
- Lack of muscle strength
- Medication regimens



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Why Do Transplant Recipients Fall More Often?

- Medications side effects
- Deconditioning and frailty
- Orthostatic hypotension
- Polypharmacy
- Acute recovery period



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Let's tackle the fear of falling...

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The Cycle of Falling



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Let's talk about simple steps to prevent falls...

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Let's start with home safety...

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Safety in the Home

- Living room
- Kitchen
- Bathroom
- Bedroom
- Stairs
- Hallways
- Walkways & ramps



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General Information

- Carry a phone
- Tripping hazards
- Clutter and cords
- Throw rugs
- Lighting
- Emergency response system



Kitchen

- Place often-used items within reach
- Use a reacher/grabber
- Use only a sturdy step stool with a handle- rubber bottoms
- Do not climb on a chair
- Do not carry pots of water
- Use non-slip mats
- Use special utensils with a better grip



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Bathroom

- Use non-slip mats
- Secure bath mats inside AND outside of tub
- Mount grab bars for both the shower and toilet
- Use raised toilet seat
- Use handheld shower
- Use tub seat or tub bench



Tools/Aides

Toilet aides for wiping



Incontinence aides



Skin Integrity Aides

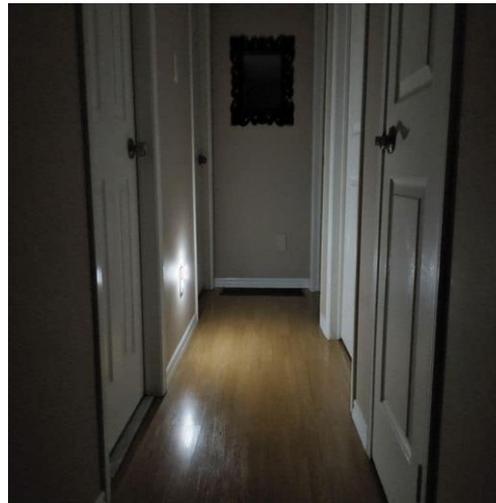


Dressing Aides



Bedroom

- Lighting, including flashlight or nightlight
- Pause when getting up
- Wear closed-back slippers
- De-clutter walkways
- Remove throw rugs
- Add a bedrail



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Stairs

- Remove throw rugs from top and bottom of steps
- Keep focused and count step numbers
- Handrails on both sides of stairs
- Keep hands free
- Adequate lighting of steps
- Use over shoulder bag or backpack
- Carry phone
- Wear shoes/slippers with good grip
- Tread strips on steps



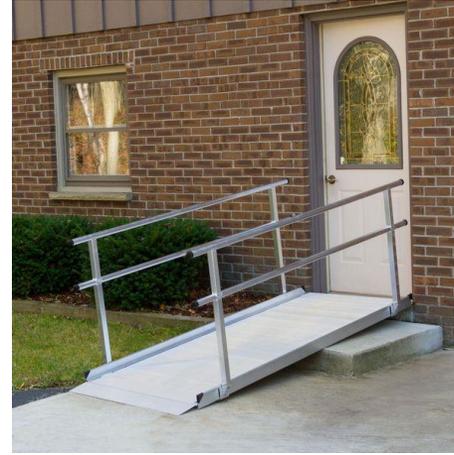
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Let's talk about
safety outside the home...

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Walkways & Ramps

- Ramps less than a 5° angle (1" rise every 12")
- Use handrails
- Use non-skid deck paint
- No step entry, if possible
- Keep hands free
- Always wear sturdy shoes



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In the Yard

- Carry phone
- Use sturdy shoes=closed back and good grips
- Always look ahead
- Use garden kneeler
- Use assistive devices
- Use a bag for supplies



On the Street

- Scan ahead
- Use crosswalks
- Be safe and seen
- Use reflective wear
- Use flashlight
- Cross away from parked cars
- Allow additional time for crossing



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Let's talk about vision
and how it relates to falls...

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Common Eye Disorders

- Age-related macular degeneration (AMD)
- Cataracts
- Glaucoma
- Diabetic retinopathy
- Transplant recipients have a higher risk of vision issues due to:
 - Long term immunosuppressive medications
 - Steroid use
 - Underlying diseases that led to transplant
 - Infections or metabolic complications posttransplant

MOST COMMON VISION PROBLEMS WITH AGING	
	Macular Degeneration
	Glaucoma
	Cataract
	Diabetic Retinopathy

National Eye Institute

Improve Visibility

- Proper lighting
- Large print
- Contrasting colors
- Prescription eyewear

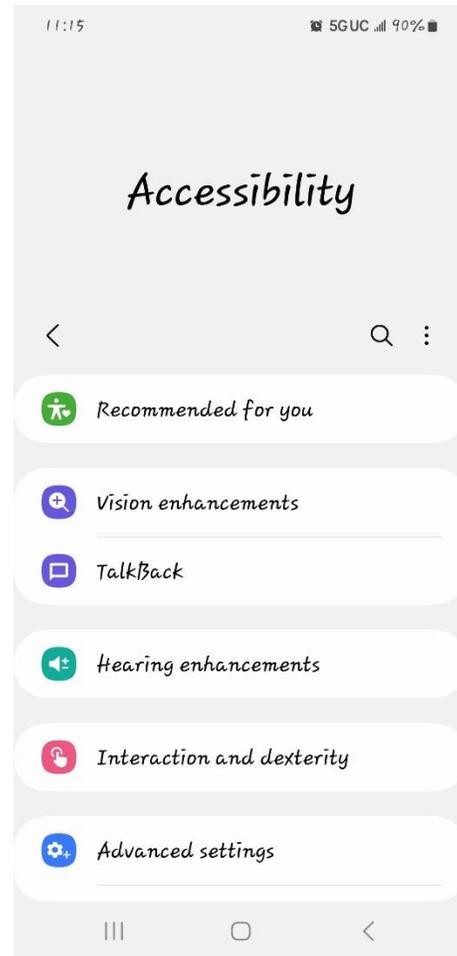


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Improve Visibility



iPhone settings



Android settings

Visit

www.seniorliving.org

to learn more

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Improve Visibility

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Be My Eyes



Free App

Sighted volunteers receive live video from callers' rear-facing smartphone camera to help navigate the environment

Aira



Pay for Use

Trained professionals to help you interpret your environment

Seeing AI



Iphone users- Free

Google Lookout



Android users- Free

Let's talk about nutrition...

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Healthy Eating for Fall Prevention

- Provides a sense of well-being
- Weight loss or maintenance of a healthy weight
- Reduces risk of chronic diseases
- Assists with energy levels
- Helps build/maintain muscles and brain/body functions



Poor Nutrition Can Contribute To:

- Frailness and falling
- More recovery time after a fall, injury, or surgery
- Illness and infection
- Loss of strength or bone mass
- Wounds heal poorly and increased risk of getting bedsores
- Vitamin D deficiency

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Lower Your Risk of Hip Fractures

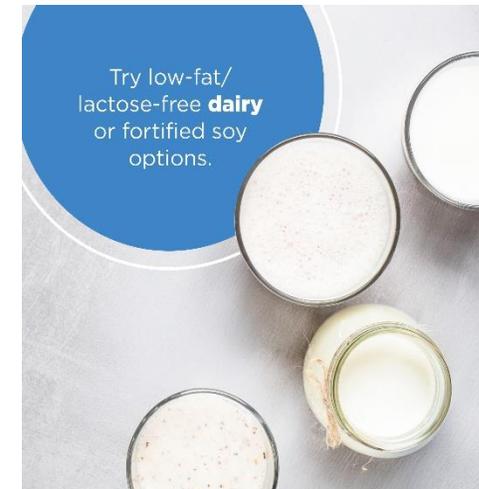
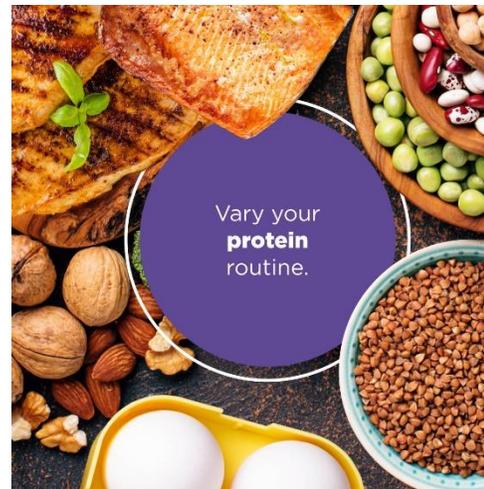
- Adequate calcium and vitamin D
 - Steroids can inhibit calcium absorption
- Weight bearing exercises
- Ask for osteoporosis screen
- Transplant Recipients:
 - 4-5x increased risk of fracture
 - Increased risk of posttransplant osteoporosis and fractures due to side effects of required medications



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Tips For Eating Healthy

- Drink plenty of liquids
- Make eating a social event
- Plan healthy meals
- Vary your vegetables, including canned and frozen options
- Use herbs and spices
- Keep food safe
- Ask your doctor about vitamins or supplements



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Tips For Eating Healthy-Transplant Recipient

- Protein helps with wound healing and recovery as well as preventing muscle breakdown from high dose steroid use
 - Protein Goals:
 - Acute posttransplant- 1.2-2.0 g/kg
 - Chronic posttransplant
 - With Diabetes: 0.8-0.9 g/kg
 - Without Diabetes: 0.6-0.8 g/kg
- Limit carbs like desserts, sweets, regular soft drinks, juice and processed foods with high sodium
 - Follow sodium guidelines (2300 mg daily) to prevent fluid buildup

Example: 150 lb = 68 kg
Acute posttransplant: 82-136 g daily
Chronic with DM: 54-61g daily
Chronic without DM: 40-54 g daily

Tips For Eating Healthy-Transplant Recipient

- Avoid foods that affect your medication absorption:
 - Grapefruit including juice
 - Pomelo fruit
 - Green/herbal tea
 - Turmeric
 - Pomegranate including juice
- High Risk foods to avoid:
 - Dairy: unpasteurized milk/cheese, cheeses from deli, moldy cheeses, soft ripened cheeses
 - Meat/fish/eggs: raw or undercooked meats or not cooked with heat, cold cuts, runny egg yolks, or anything with raw egg
 - Fruits/Vegetables: unwashed, raw bean sprouts, raw fruits and veggies from restaurants, precut fruits and veggies from the store, unpasteurized fruit and vegetable juices (unless made with washed produce)
 - Any foods from salad bar, buffets, street vendors, or parties that are sitting out for >2 hours

Nutrition Resources

- Dial 211 for food resources/help
- Meals on Wheels
- Grocery delivery services
- Council on Aging-
www.aging.maryland.gov
- Discuss with your doctor if you might need a nutritional supplement
- Ask your doctor to recommend seeing a dietitian/speech-language pathologist/occupational therapist



Academy of Nutrition
and Dietetics



AMERICAN SOCIETY OF[®]
TRANSPLANTATION

Visit National Council
On Aging for more
information



Let's talk about exercise...

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Why is Exercise Important?

Exercise increases both physical and mental well-being by improving:

- Coordination
- Flexibility
- Balance
- Strength
- Overall conditioning
- Blood pressure
- Sensory input
- Blood sugar



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Exercise Safety for Seniors

- Understand limitations of aging for everyone
 - Muscles fibers shrink and lose elasticity causing decreased strength and flexibility
 - Joints stiffen
 - Bone density decreases = increased risk of fracture
 - Slower reaction times
 - Recovery takes longer due to slower tissue repair
- Listen to your body, everyone is not at the same fitness level or ability
- If you experience any pain or difficulty with exercise, stop and consult your healthcare provider



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Free Virtual Classes

- AARP videos at <https://www.aarp.org/videos/health/fitness/>
- YouTube
 - National Institute on Aging- Go4Life
 - SilverSneakers
 - Seated exercises Options:
 - Dartmouth Health, search for “Seated Exercise for Older Adults”- no music
 - Metro Physical Therapy, search for “Seniors”- music

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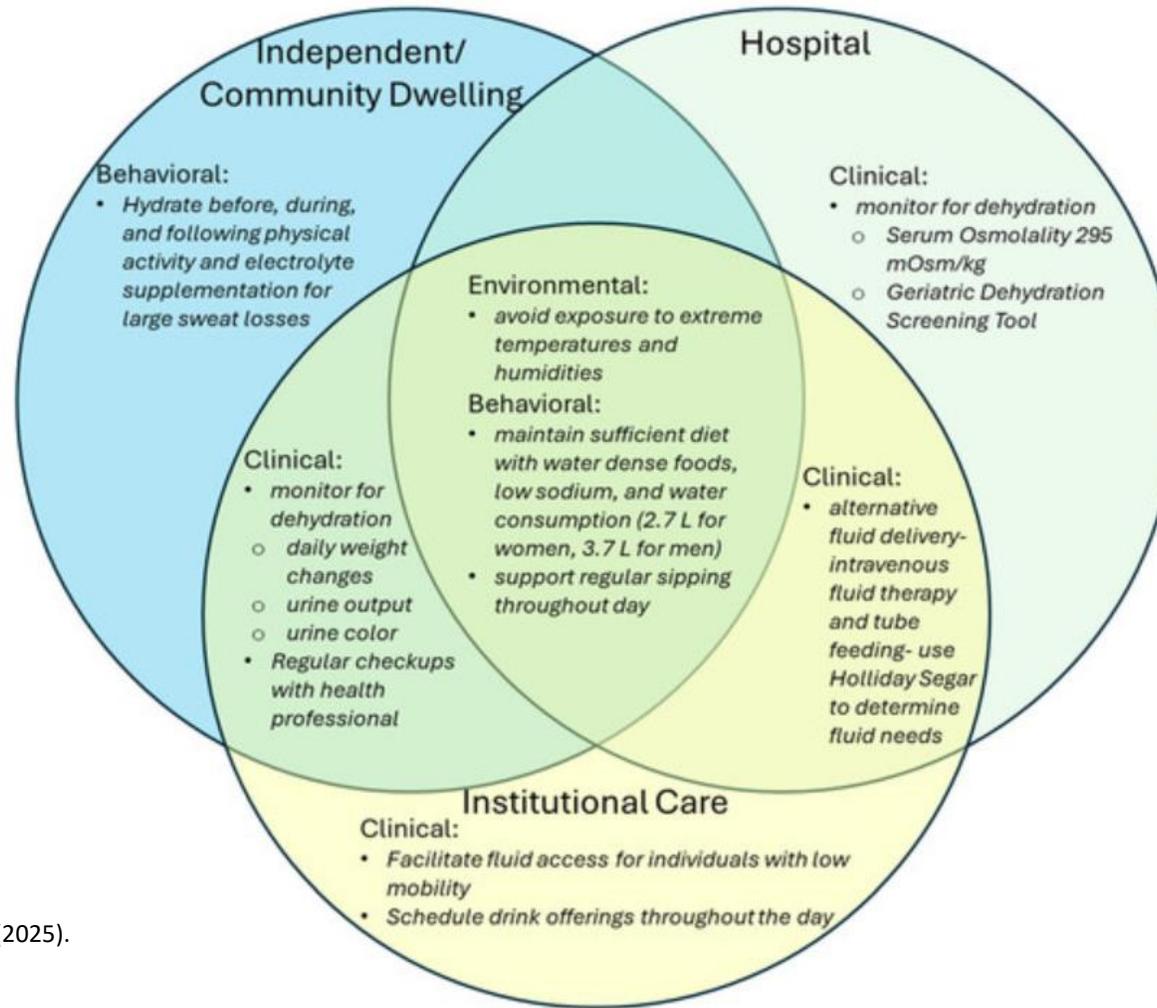
Transplant Recipients and Exercise

- Exercising is Safe Posttransplant
 - Unless otherwise advised by your medical team
 - Aerobic or combined aerobic plus resistance training
 - Moderate to Vigorous Intensity
 - 3-5 times a week
 - Minimum of 8 weeks

Recovery Phase	Time Frame	Setting	Supervision level
Early Posttransplant	1-6 months	In home or Outpatient	Supervised
Late Posttransplant	>6 months	In home or Private Fitness Centers	Unsupervised

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Transplant Recipients and Exercise



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Pickleball Tips

- Pickleball and other similar activities considerations
 - Need to warm up and stretch regularly to be able to perform fast sidesteps, sudden lunge motions, and quick torso movements
 - Increased risk of fractures
 - Perform weightbearing exercises, balance training, and bone density screenings regularly can help
 - Delayed reaction times can cause missteps and rushing leading to falls
 - Targeted training: footwork drills, single leg balance exercises, and reaction time games can help
 - Get enough and quality sleep for recovery
 - Invest in proper equipment like footwear and paddles
 - Work with a coach to learn proper form and training methods



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Let's take a look at medications...

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Disclaimer

This information is not intended to diagnose health problems or take the place of medical advice or care you receive from your physician or other healthcare provider. Always consult your healthcare provider about your medications, symptoms, and health problems.

Do **NOT** stop taking medications without speaking to your doctor first!

Medications That Increase Risk of Falls

- Blood pressure
- Anxiety “Nerve Pill”
- Diuretics “Water Pill”
- Antidepressants
- Laxatives
- Narcotics “Pain Pill”
- Blood thinners



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Transplant Medications

- Side effects of Various Commonly Prescribed Transplant Medications:
 - Nausea/vomiting
 - Diarrhea
 - Headache
 - High blood pressure
 - High cholesterol
 - Anemia
 - Arthritis
 - Weakened bones
 - Weight gain/increased appetite
 - Trouble sleeping
 - Mood swings
 - Tremors
 - Diabetes
 - Swelling/tingling of hands and feet

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Transplant Medications

- Tacrolimus- anti-rejection medication used in kidney, liver, pancreas, and small bowel transplantation
 - Side effects:
 - Difficulty with moving
 - Lack or loss of strength
 - Muscle stiffness
 - Increased risk of infections
- Gout after heart and kidney transplant is common
 - Can progress rapidly with transplant medications especially if preexisting prior to transplant

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Dizzy or Lightheaded?

- 10 second rule- sit before you stand
- Steady yourself
- Drink plenty of water
- Walk or exercise-from a chair if necessary!



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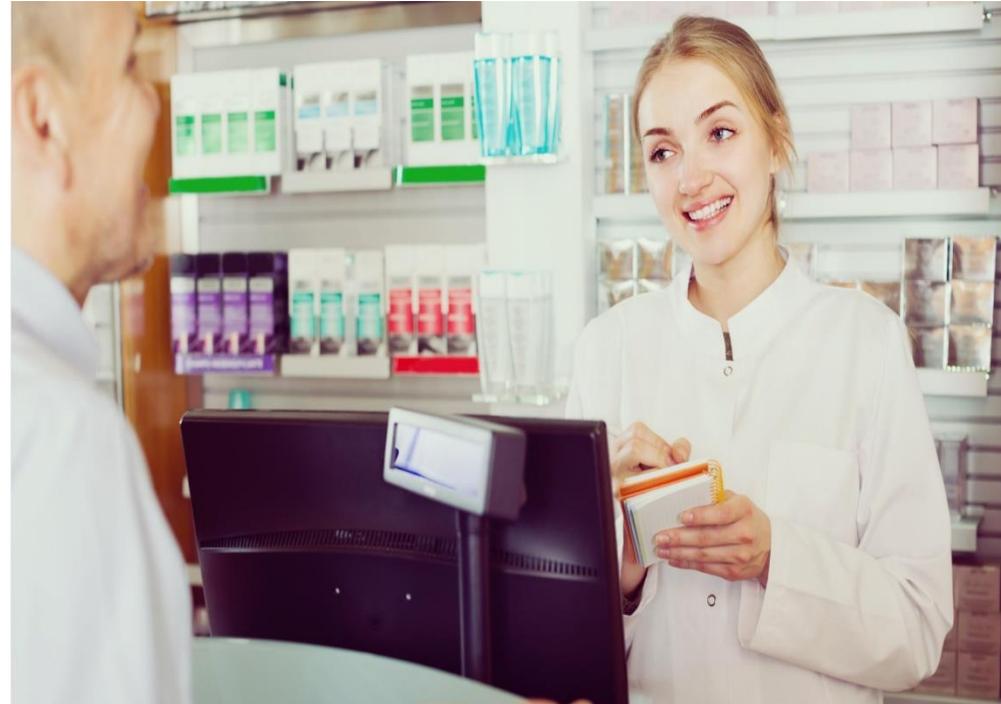
Blood Thinners and Falls

- Even a minor fall can be serious if you are taking a blood thinner
- If you fall; call 911/ICE/emergency response system
- Reduce your risk:
 - keep areas free of clutter
 - use nightlights
 - use assistive devices
 - DO NOT walk alone if you are dizzy or lightheaded!!

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Medications

- Over-the-counter drugs
- Keep a list
- Check labels
- Take medicines as ordered
- Learn about side-effects
- Play it safe



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Ask Your Doctor or Pharmacist

- Ask about side effects
- Ask about who to call if issues arise
- Ask the name of medication
- Ask what it treats
- Ask if there are interactions
- Ask how long you need it
- Ask about missing doses



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Let's talk with the doctor...

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Importance of Transparency

- Your information gives the doctor a full understanding of your situation and needs
- Assists with keeping your independence
- Doctor can treat issue before it is too late

Make A List Before You Go

1. Times fallen in last year
2. Last fall
3. Injuries from falling
4. Possible cause for fall
5. Changes made due to fall



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Helpful Tips Review

- Bring someone with you
- Communication is key
- Make a list of talking points
- Bring meds or med list
- Partnership



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What if I fall?

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How to Fall Safely

Try to:

- Protect your head
- Turn as you fall
- Keep arms and legs bent
- Stay loose
- Roll out of the impact
- Spread out the force of the fall



Bring your arms up to protect your head as you fall

Before Getting Up

- Take several deep breaths, stay calm, assess the situation
- Try to move arms and legs
- Make sure you are not hurt



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If You Are Hurt

- If you believe you are hurt,
DO NOT get up
- Call 911 or get help from a family member



If you have an emergency, always

CALL

9-1-1

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What If I Cannot Get Up?

- Call 911
- Try shouting or banging
- If available, press your pendent alarm
- Try to get comfortable
- Place pillow under your head and knees
- Try to keep warm
- Try to keep moving if you are able



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If You Are Not Hurt: How to Get Up

1. Roll over onto your side with your head in the direction of the roll
2. Roll over onto all fours
3. Crawl to stable chair
4. Approach chair from front
5. Put both hands on seat
6. Bend the stronger knee
7. Keep other knee on the floor
8. Slowly rise
9. Slowly twist around and sit in the chair

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After Getting Up

- Always notify your doctor when you fall regardless of injury
- It is important that you are aware of the signs and symptoms requiring medical attention following a fall: Please see handout for a complete list

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Let's talk about concussions...

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Signs and Symptoms of Concussion or TBI

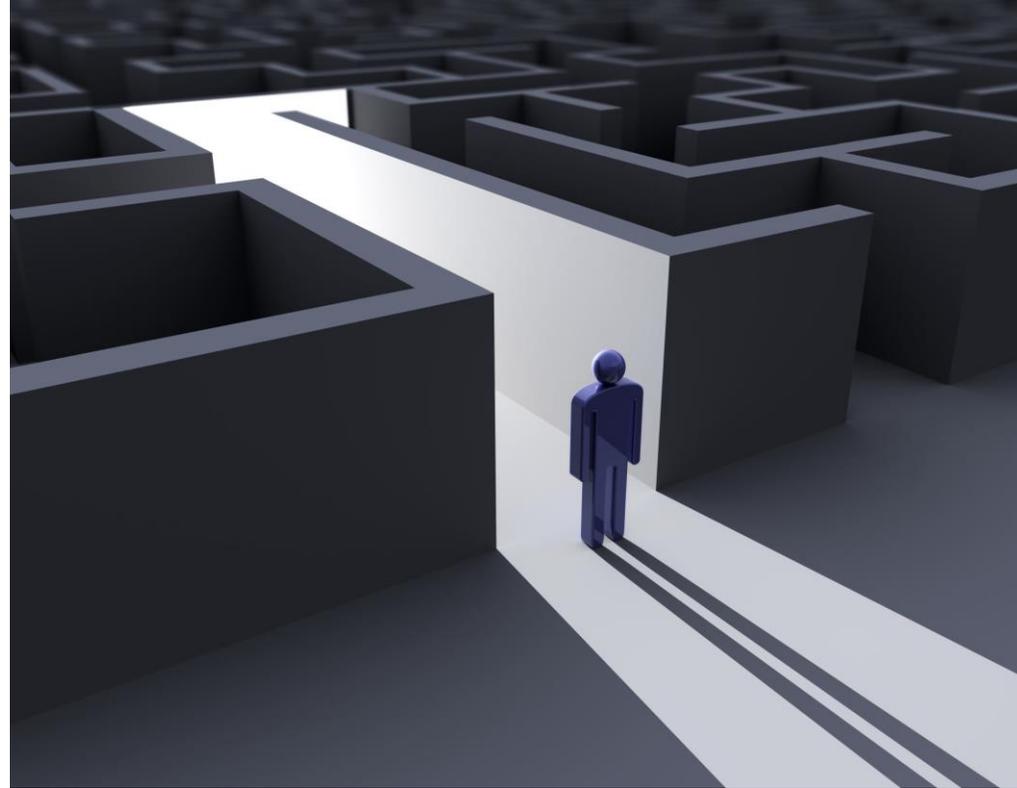
- Headache or head pressure
- Nausea or vomiting
- Blurred vision
- Dizziness
- Sensitivity to light or sound
- Feeling groggy or sluggish
- **YOU JUST DON'T FEEL RIGHT**



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Consequences of Concussions

- Memory loss
- Impaired judgement
- Difficulty concentrating
- Headaches
- Fatigue
- Loss of balance



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What should you do?

- Tell someone!
- Don't hide your symptoms!
- Talk with your doctor immediately
- Rest your brain

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In Conclusion...

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Conclusion

- Falls are **NOT** a natural part of aging
- There are many things you can do to help prevent a fall
- Please talk with your physician about falls
- Please see handouts and reference materials for more information and helpful resources

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Resources

- Dial **2-1-1** for resource assistance
- Maryland Access Point
 - Long term services assistance
 - Senior legal assistance
 - State Health Insurance Assistance Program (SHIP)
 - 1-844-627-5465
- Lifelong learning with Senior Planet- classes for computer/phone use
 - 1-920-666-1959
- Senior Call Check
 - FREE registration at www.aging.Maryland.gov
 - 1-866-502-0560
- Smartphone Apps:



Snug Safety



Life360

Resources for Equipment in Maryland

Get free Assistive Technology and Adaptive Tools

Maryland Assistive Technology Program
(MDTAP)



Maryland Accessible
Telecommunication Program
(MAT)



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Post-Class Survey



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Thank you for attending!

Presented by

R Adams Cowley Shock Trauma Center
Center for Injury Prevention
Think**First!** Maryland Shock Trauma

A Chapter of the Think**First** National Injury Prevention Foundation

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