



C U Y A H O G A C O U N T Y  
**Board of Developmental Disabilities**

# Fall Prevention

**Provider Training October 10, 2024**

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Supporting and empowering people with developmental disabilities  
to live, learn, work and play in the community

# Objectives

- Define what is a fall
- Understand how falls affect the DD population
- Introduce tools to assess fall risk
- Review how multiple factors can lead to a fall
- Problem solve how modifications to the environment can improve safety
- Consider safe ways to utilize equipment such as assistive devices and patient lifts
- Practice techniques for transfers and patient safety



# Introduction to Falls

A fall happens when a person loses their balance, goes down, and makes contact with a surface or object.



# Facts about Falls

- Falls are **more common in people with Developmental Disabilities (DD) ages 18-64** than in the same age group across the general population.
- People with DD fall as often as elderly people (similar fall rates).
- About **30% of adults with DD fall each year.**
- **About 65% of adults** who fall once will fall again.
- **15% of falls result in serious injury.**



# Common Causes of Falls

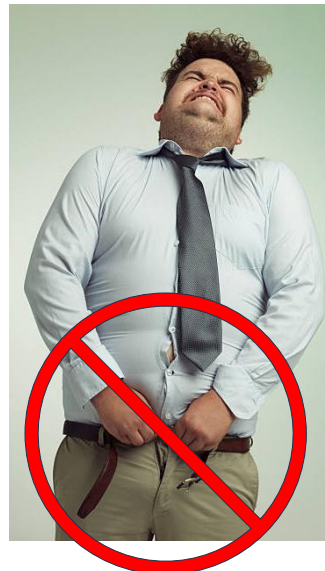
- Poor eyesight
- Muscle weakness
- Unsteady walking
- Seizure disorder
- Pain/Osteoporosis
- Dehydration
- Cognitive impairments or behavioral issues
- Low blood pressure/dizziness
- Environmental risk factors
- Improper footwear



# Proper Fitted Clothing



- Clothing should not drape over shoes
- Shoes with laces should always be tied. Trim or replace if needed
- Shirt sleeves should not obstruct hands from gripping grab bars
- Hats or hair should not obstruct eyesight
- Tight clothing can restrict movement, cut off circulation, or delays quick toileting which can lead to falls
- Carrying heavy backpacks or excessive bags affects balance whether held or attached to a walker



# Beware of Environmental Hazards

Power Cords



Throw Rugs



Loose Rails/Stairs



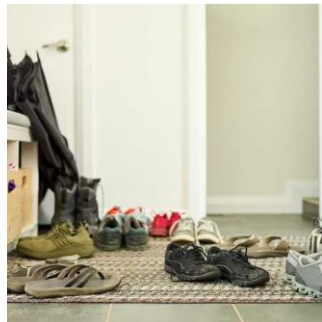
No Grab Bars



Wet Floor



Clutter



Dark Halls & Stairs

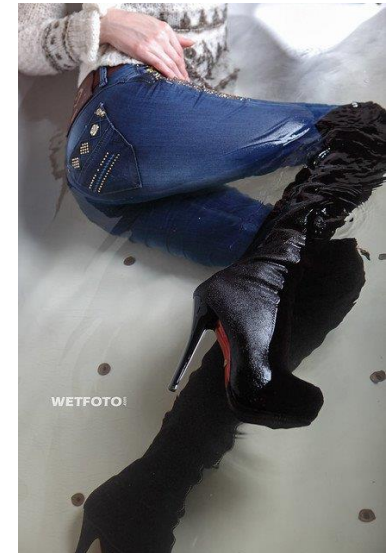
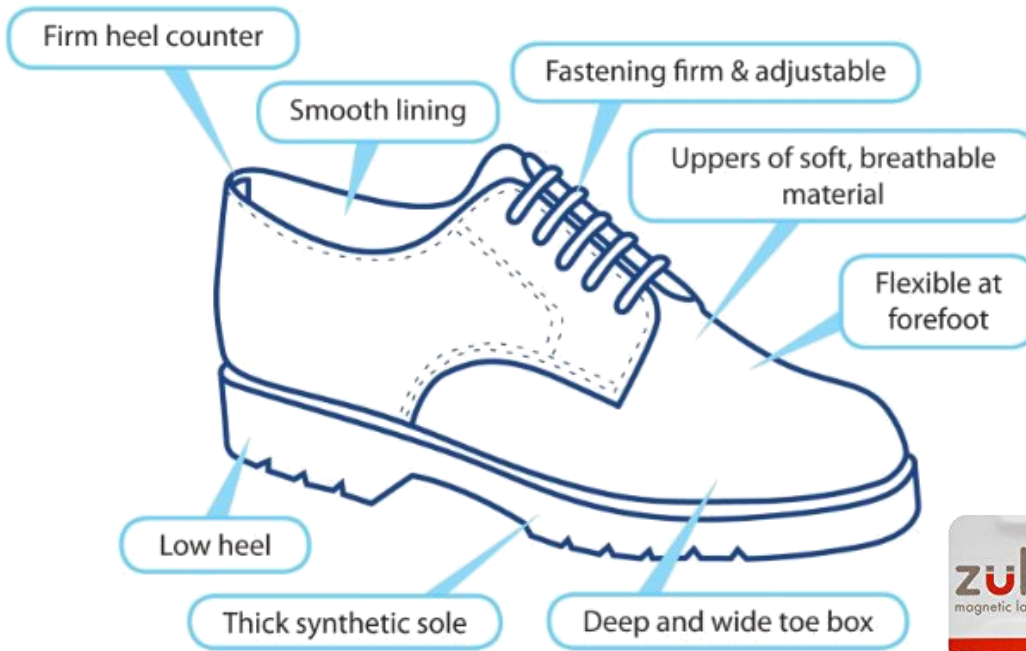


Snow & Ice



# Footwear and Clothing

## The Ideal Shoe





# Medications

Certain medications, as well as combinations of both over-the-counter and prescribed drugs, can increase the risk of falling. Medication management can reduce interactions and side effects that may lead to falls.



# Medications

Categories:

- **Psychoactive medications**, including anticonvulsants, antidepressants, antipsychotics, benzodiazepines, opioids, and sedatives/hypnotics
- Prescription and over-the-counter **antihistamines**
- **Muscle relaxants**
- Medications affecting **blood pressure**
- **Anticholinergics**, including medications to treat **urinary incontinence**, overactive bladder, or COPD



# Medications

Review prescription drugs, over-the-counter medications, and herbal supplements. Some can cause dizziness, sedation, confusion, blurred vision, or orthostatic hypotension.



# Fall Prevention Planning

Planning and actions **BEFORE** a fall happens

What to do **WHEN** a fall happens

How to respond **AFTER** a fall happens



# Planning and actions **BEFORE** a fall happens



# Check your risk for falling

| Check YES or NO by each statement.                                | YES +2 | NO 0 |
|---|--------|------|
| I have fallen in the past year.                                   |        |      |
| I have been advised to use a cane or walker to get around safely. |        |      |
| Sometimes I feel unsteady when I walk.                            |        |      |
| I steady myself by holding onto furniture or walls when I walk.   |        |      |
| I am worried about falling.                                       |        |      |
| I need to push with my hands to get up from a chair.              |        |      |

|  |  |  |
|--|--|--|
| I have trouble stepping up onto a curb.                        |  |  |
| I often have to rush to the toilet.                            |  |  |
| I have lost some feeling in my feet.                           |  |  |
| I take medications that can make me feel lightheaded or tired. |  |  |
| I take medications that help me sleep or improve my mood.      |  |  |
| I often feel depressed.  |  |  |
| <b>Total:</b>  |  |  |

Add 2 points for each Yes answer. A score of 4 or more means there may be a fall risk.

From Centers for Disease Control and Prevention (CDC) Stopping Elderly Accidents, Deaths & Injuries (STEADI)



# Check for Safety

Use this checklist to find and fix hazards in your home.

|   |  |
|---|--|
| <b>Stairs (indoors and outdoors)</b>                      |  |
| Always keep objects off steps                             |  |
| Fix loose or uneven steps                                 |  |
| Fix loose handrails                                       |  |
| Make sure there are rails on both sides of the steps      |  |
| Make sure the stairs are well lit                         |  |
| <b>Floors</b>   |  |
| Move furniture so paths are clear                         |  |
| Remove throw rugs or use double-sided tape to secure them |  |
| Always keep objects off the floor                         |  |
| Keep cords out of the way                                 |  |
| <b>Kitchen</b>  |  |
| Keep items you use often on lower shelves                 |  |
| Avoid using step stools                                   |  |
| Clean up spills right away                                |  |

|  |  |
|--|--|
| <b>Bedrooms</b>  |  |
| Use a night light so you can see where you are walking                                   |  |
| Keep a flashlight next to your bed in case of power outages                              |  |
| Keep areas where you walk tidy. Do not leave anything on the floor                       |  |
| Use a bed rail if extra assistance is needed to get in and out of bed                    |  |
| <b>Bathrooms</b>   |  |
| Use a non-slip rubber mat on the floor of the tub or shower                              |  |
| Use a non-slip absorbent bathmat outside of the shower to keep the floor dry             |  |
| Have grab bars installed in and next to the shower and next to the toilet                |  |
| <b>Miscellaneous</b>   |  |
| Check for improper foot ware: socks, backless shoes, heeled shoes, bare feet, worn soles |  |



# Caregivers Play an important role in reducing falls

- Be aware of **who may be at risk** for falls.
- **Report any sudden changes** in a person's condition.
- **Anticipate** the needs of people at risk and meet those needs.
- Provide **extra supervision** for people at risk.
- **Have a plan** for communicating risks between all caregiver shifts.





# What to do WHEN a fall happens

## What to do when your loved one has a fall



[Read more](#)



# When a fall happens...

- **Stay calm:** Take a few deep breaths to relax.
- **Assess the situation:** Ask the person if they're hurt and if they can get up on their own.
- **Check for injuries:** Look for bruises, sprains, or broken bones.
- **Call for help:** If the person is bleeding, in pain, or lost consciousness, call 911 immediately.
- **Help them get up:** If there are only minor injuries, help the person slowly sit up and then stand.
- **Keep them comfortable:** If they're not injured, help them to a comfortable sitting or lying position and stay with them until they feel better.
- **Consider the cause:** Even if you witnessed the fall, there may be other factors that contributed to it.



# The ISP is Key!



# Using Cuyahoga DD Resources

Discuss concerns with house supervisor and/or SA to initiate PT referral.



## A PT will:

- **Check the environment** for hazards and recommend ways to improve safety. (Ex. removing tripping hazards, secure loose rugs, reduce clutter, etc.)
- **Perform special tests** to determine a person's risk for falls.
- **Educate caregivers** on how to keep people safe based on their specific risks and needs.
- Share **home exercise programs** that improve strength and balance.



# Physical Therapists help prevent falls

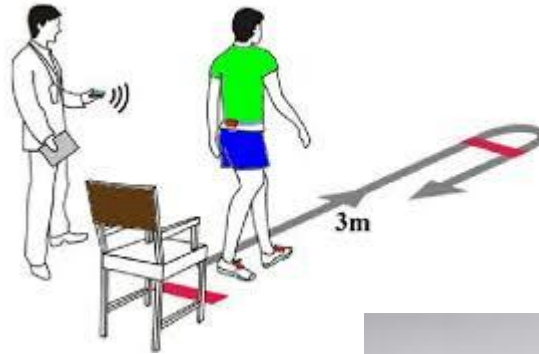
## A PT will:

- **Assess for assistive device and other equipment** to improve safety (cane, walker, rollator, wheelchair, bed rail, bed or chair alarm, non-slip bath mat, toilet safety frame, bath lift)
- May recommend **home modifications** such as: a tub cut out or accessible shower, handrails or grab bars, stair glide, ramps and vertical platform lifts, improved lighting, etc.
- **Review medical history** and medications that may increase risk
- **Check heart rate and blood pressure** at rest and while changing positions (from sitting or lying to standing)
- **Perform a simple vision test**
- **Assess feet and footwear**



# Tools to Evaluate Fall Risk

- TUG




- SLS



- STEADI



# Example of Post Fall Assessment

|  <b>Post-Fall SPLATT Assessment</b> |   |  |   |
|--|---|--|---|
| Name of Individual: _____  |   | Date and Time of Fall: _____   |   |
| Name of Staff Person Completing Assessment: _____  |   |  |   |
| <b>1) Symptoms before the fall</b><br><br>If possible, ask individual<br>"Why do you think you fell?"                | <input type="checkbox"/> Dizziness<br><input type="checkbox"/> Trip/slip<br><input type="checkbox"/> Loss of balance<br><input type="checkbox"/> Legs gave way/Leg weakness   | <input type="checkbox"/> Disorientation/Confusion<br><input type="checkbox"/> Unconsciousness/fainting<br><input type="checkbox"/> Pushed/Shoved<br><input type="checkbox"/> Experiencing urgency (moving quickly) | <input type="checkbox"/> Seizure<br><input type="checkbox"/> Unknown<br><input type="checkbox"/> Other (list):  |
|  | <input type="checkbox"/> Community<br><input type="checkbox"/> Living Rm/Dining Rm<br><input type="checkbox"/> Bedroom<br><input type="checkbox"/> Bathroom<br><input type="checkbox"/> Kitchen   | <input type="checkbox"/> Outdoors<br><input type="checkbox"/> Stairs<br><input type="checkbox"/> Basement<br><input type="checkbox"/> Vehicle<br><input type="checkbox"/> Day Program                              | <input type="checkbox"/> Unknown<br><input type="checkbox"/> Other (list):  |
| <b>3) Activity (at time of fall)</b><br>If possible, ask the individual<br>"What were you doing when you fell?"      | <input type="checkbox"/> Transfer<br><input type="checkbox"/> Walking with assistance<br><input type="checkbox"/> Walking unassisted<br><input type="checkbox"/> Reaching for something<br><input type="checkbox"/> Walking with a cane, walker, or other assistive device<br><input type="checkbox"/> Other: | <input type="checkbox"/> Person found on floor<br><input type="checkbox"/> Person lowered self to floor<br><input type="checkbox"/> Staff lowered person to floor<br><input type="checkbox"/> Getting up or down   | <input type="checkbox"/> Behavioral Incident<br><input type="checkbox"/> Bathing<br><input type="checkbox"/> Toileting<br><input type="checkbox"/> Unknown<br><input type="checkbox"/> Transportation |
| <b>4) Environmental factors contributing to the fall</b><br><i>(check all that apply)</i>                            | <input type="checkbox"/> Clutter/obstacles<br><input type="checkbox"/> Floor spills<br><input type="checkbox"/> Rugs<br><input type="checkbox"/> Unstable/broken furniture  | <input type="checkbox"/> Wheelchair<br><input type="checkbox"/> Improper footwear<br><input type="checkbox"/> Outdoor conditions<br><input type="checkbox"/> Poor lighting   | <input type="checkbox"/> Unknown<br><input type="checkbox"/> Other:   |

Adapted by the Center for Developmental Disabilities Evaluation and Research (CDDER) from information in the Essential Falls Management Series: Falls and People with Intellectual & Developmental Disabilities by Rein Tideiksaar (2007) Health Professionals Press, Inc., Baltimore. ©University of Massachusetts Medical School, CDDER.



# How to respond **AFTER** a fall happens



**TEAMWORK!**





# Transfer Devices

## **What are patient transfer devices?**

Transfer devices help to safely transfer people from one place to another. They reduce the risk of falls, and the physical effort required to move the patient, reducing the risk of injury to patients and caregivers.



# Types of Assistive Devices

- Slide Sheets
- Transfer Belt
- Slide Board / Transfer Board
- Manual Standing Aids
- Sit to Stand Devices
- Hydraulic or power lift with sling



# Assistive Devices

## ASSISTIVE DEVICES FOR WALKING



### CANES

- \* CAN BEAR WEIGHT but UNSTABLE or TOO WEAK on ONE SIDE



### CRUTCHES

- \* PARTIALLY or FULLY REDUCE WEIGHT BEARING on LOWER LIMB



### WALKERS

- \* GREATEST STABILITY
- \* for THOSE that CAN BEAR WEIGHT but ARE WEAK or UNSTABLE

MOST ALUMINUM DEVICES HAVE a PUSH-BUTTON ENABLES their ADJUSTMENT to CLIENT'S HEIGHT



# Home Modifications



# Vehicle modifications



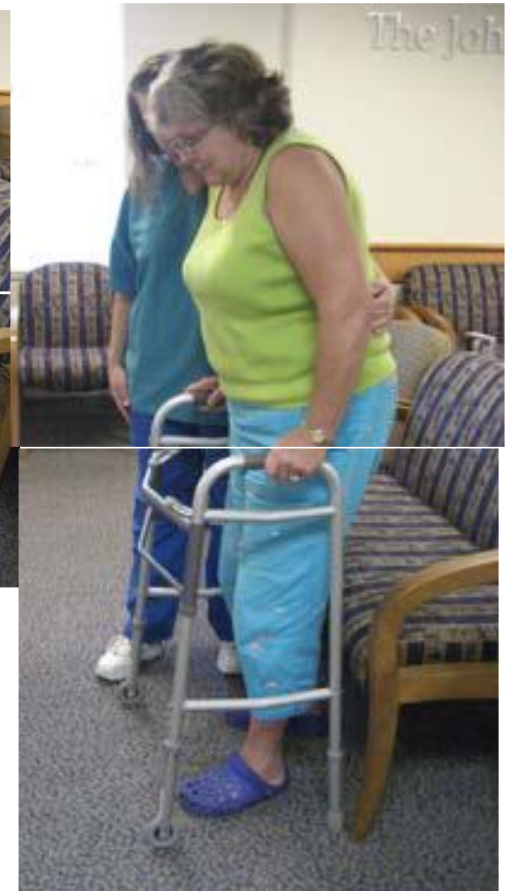
# Hands On Practice Session



# Use of Gait Belt



# Sit to Stand Transfers



Begin sitting upright with your feet flat on the ground and your hands on the armrests of the chair.

1. Move your bottom forward in the chair before you start the movement
2. Lean your torso forward so your head is over your toes, then press into your feet and hands to stand up.





# Standing to Sit

- Wheelchair locks locked
- Caregiver behind and to the side holding gait belt
- Reach with one hand for arm rest of wheelchair or chair
- Verbal cues to sit down slowly



# Walking in crowded areas

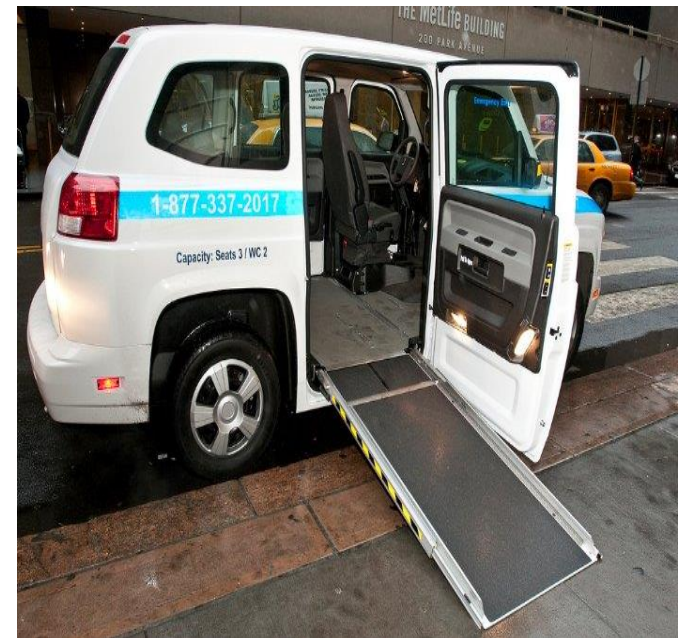


# Stairs



# Vehicles and Parking Lots

- Be aware of other vehicles. Others may not see individuals at wheelchair level.
- Look for uneven surfaces and tripping hazards.
- Move the passenger seat back as far as possible with the seat reclined back.
- Turn and sit on the seat, then bring one leg in at a time.



**For more information about falls or  
physical therapy services, contact  
Lauren Baxter, Adult OTPT Supervisor:  
216-598-8901**

Cuyahoga County Board of DD  
1275 Lakeside Avenue East  
216-241-8230 - General Information  
216-736-2673 - Eligibility  
[CuyahogaBDD.org](http://CuyahogaBDD.org)



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