

# Quality Is No Accident

The Massachusetts DDS • Quality & Risk Management Brief • April 2010



## Falls Prevention and People with Intellectual/Developmental Disability

### Introduction

Falls can be a significant issue for adults with intellectual disabilities (ID). Adults with ID have an increased risk of falling when compared to the general population, and are more likely to experience an injury after a fall occurs. Agencies can prevent falls by determining a person's fall risk, educating staff to external and internal falls risk factors, and using prevention strategies to mitigate that risk.

### What causes falls?

Most falls are caused by a combination of internal and external risk factors. Internal risk factors include side effects from medication, underlying medical conditions, poor eyesight, unsteady gait and balance, and muscle weakness. External factors such as poor lighting, unstable furniture, improper footwear, clutter, & broken wheelchairs also contribute to falls.

### What is a fall?

A Fall is any loss of balance or uncontrolled, unintended bodily contact with a surface or object. This includes the floor, furnishings, other persons, etc. This also includes falling back onto a chair or bed after rising, if the transition is uncontrolled.

### The STOP Falls Pilot and Massachusetts

Data was collected on all falls, regardless if injury occurred, experienced by 900 individuals in a 6 month period. Preliminary results and lessons learned are discussed on page 4.

#### RESEARCH SUGGESTS THAT:

**Individuals with ID are at risk:** Each year, 30% of individuals with ID experience a fall. Additionally, 35% of injuries reported in HCSIS between Sept. 06' & Aug. 07' were related to falls.

**Fall History Matters:** Two thirds of individuals who fall once are likely to fall again in the year.

**A Lasting Impact:** Up to 50% of individuals who fall once will avoid activities from fear of falling again.

# Assess & Manage Risk

Assessing a person's fall risk is the first step in planning for falls prevention. Managing that risk can reduce the likelihood that the person will experience a fall. When determining risk, **consider the person's recent history of falls**. The STOP Falls pilot suggests that adults with ID who had experienced one or more falls in the recent past, had **5 times the risk** of falling again in the next six month period. Don't know an individual's fall history? Now's a good time to start keeping track. One month of fall history data is sufficient. Remember to track falls with and without injury. **A Fall Risk Assessment** will help determine an individual's fall potential and individual risk factors. The assessment is a checklist of 10 to 15 significant risk factors that are known to be predictors of falls. These include recent fall history, confusion or disorientation, vision or hearing impairment, alteration in urination, medication use, weak arm/leg strength, unsteady balance, and use of a walking aid. Generally, the more checks an individual has, the greater their risk for falling. Sample assessment is available on the DDS website.

## Preventing Falls

After identifying a person's fall risk, the **following strategies** can help manage that risk and reduce the likelihood of a fall.

**1) Medical:** Identify and diagnose underlying medical conditions that may be increasing a person's risk. For example, **UTI's** can cause disorientation and fatigue. Treating **osteoporosis** with calcium supplements and weight bearing activity can help reduce the risk of injurious falls. Finally, consider **medication side**

**effects**. STOP Falls found that adults with intellectual disabilities who take **more than four** prescription drugs have 2.4 times the risk of falling.

**2) Rehabilitative:** Increase strength, mobility and balance for all individuals, especially those at risk for falling. **Adults with unsteady balance have 5.0 times the risk of falling** compared to other adults with ID. Regular walking, stretching, and strengthening programs can help dramatically.

**3) Environmental:** Train staffs to identify, remove, **or fix environmental hazards**, or report problems as needed. Got a loose rug? Secure it with double-sided tape or remove it. Ensure beds and couches are at proper heights, install steady armrests and handrails, and replace burned out lights, pronto!

**4) Educational:** Train staff on falls risk factors and keep awareness levels high through periodic reminders, program meetings, health fairs, newsletter tips, etc.

# Monitoring Risk

## The Post-Fall Assessment: Learning From A Fall

**Purpose:** Post-fall assessments help staff gather information about a fall to identify possible causes. Knowing the cause of a fall can prevent future falls if the cause is addressed.

**After each fall, the following steps should occur:**

1. Evaluate injury and life-threatening conditions and treat accordingly.
2. Identify circumstances of the fall using the **SPLATT method**. The SPLATT method is referenced in national literature sources and **used in the field** to gather falls data.
3. Evaluate the surrounding environment for possible factors that contributed to the fall.
4. Modify interventions and strategies based on information gathered. For example, maybe the individual can benefit from a gait belt, med review, or balance program.

**S** Symptoms (preceding the fall)  
**P** Previous falls (history of falling)  
**L** Location (of fall)  
**A** Activity (at time of fall)  
**T** Time (date and hour of day)  
**T** Trauma

**Tips:** Agencies can create a simple Post-Fall Assessment to answer the SPLATT questions, and ask staff to complete the form after every fall.

With some "frequent fallers," causes of falls cannot always be identified. Instead, develop a protocol to support that person to reduce as much risk of injury as possible.

---

## Falls Resources

There are many Falls Prevention Resources available online. Here are a few to get you started:

- ➔ The CD-ROM, **Falls and People with Intellectual and Developmental Disabilities**, by Rein Tideiksaar, includes resources for developing and delivering a falls prevention program. Agencies received copies from DDS in September 2008. Additional copies can be ordered at <http://www.healthpropress.com>
- ➔ **"Exercise and Physical Activity: Your Everyday Guide from the National Institute on Aging."** National Institute on Aging: 800-222-2225; Free PDF download available at [www.nia.nih.gov](http://www.nia.nih.gov); NIH Publication No. 09-4258
- ➔ Cameron, Kathleen A., R.Ph., M.P.H. **"The Role of Medication Modification in Falls Prevention and Reduction."** Falls Free: Promoting a National Falls Prevention Action Plan, Research Review Papers, National Council on Aging, 2005. Printed by Philips Lifeline.

# STOP Falls Pilot

The **Screen Train Observe Prevent Falls** Pilot concluded in August 2009. Five provider agencies, DDS, and the Center for Developmental Disabilities Evaluation and Research (CDDER) worked collaboratively to develop and pilot post-falls data collection tools, systems, and processes to track all falls, regardless if injury occurred, experienced by individuals over the course of six months. Over 900 adults in residential, day supports, and individual supports participated. Preliminary results from the pilot are below.

## 1) How frequently do individuals fall?

A total of 473 falls were recorded among participants, resulting in a rate of 51 falls per 100 people. About 24% of participants receiving residential or day supports experienced one or more fall during this pilot. Many falls (46%) occurred while the person was ambulating. Results suggest that the location with the most falls is the common area (23%).

## 2) Which factors increase the risk of falling?

In addition to factors explained under "Preventing Falls" on page 2, the pilot suggests that adults with ID who require a walking aid have 2.5 times the risk of falling compared to other adults with ID; those with seizure disorders have 1.7 times the risk of falling; and those with alterations in urination (e.g. frequency, urgency, or incontinence) have 1.7 times the risk of falling. Additionally, the pilot suggests that adults with ID over the age of 60 have 1.9 times the risk of falling.

## 3) Did falls decrease during the pilot?

Pilot results suggest a **33% reduction in the rate of falls** for adults in residential and/or day services from the first month of the pilot to the subsequent 5 months. This decrease was statistically significant. There was also a decrease in the proportion of people who experienced one or more falls in the first month, compared to the subsequent 5 months of the pilot. The decrease may be due to staff education and awareness programs implemented during the pilot.

**A Big Thank You** to the following staff (pictured left to right) and agencies for participating in the STOP Falls Pilot:

Susan DoCanto, Southeastern Residential Services; Greg McGowan, Nexus; Rodger Hebert, Bridgewell; Melissa White, Rehabilitative Resources, Inc; and Melissa Pepin, LifeStream.

