

## Prevalence of Balance and Vestibular Disorders In US Adults



Julie Hofman, P.T.A. with patient, Jerry D., performing routine balance exercises and

Balance and vestibular dysfunction are a common problem in the US. Recent initiatives have focused on detecting balance disorders and treating them. This includes PQRS measures of Fall-Risk Assessment.

### *A study in the Archives of Internal Medicine reported the following:*

“Vestibular dysfunction can lead to a fall, which are associated with serious injury and limited mobility. Falls rank among the leading causes of death among older individuals.

The costs of increased needs and diminished autonomy associated with falls also exert a tremendous societal toll.

These costs appear to be rising; a recent study found that the prevalence and incidence of fall-induced injuries increased significantly in the past 25 years, even after adjustment for age.

When this increasing incidence is considered in relation to an aging population, the prospect of a significant public health problem is clear.”

The researchers utilized data from the 2001-2004 National Health and Nutrition Examination Surveys.

The results of the surveys showed 35.4% of US adults aged 40 years and older (approximately 69 million Americans) had vestibular dysfunction.

Those participants with vestibular dysfunction symptoms were 12 times as likely to fall.

### *The Romberg Test of Standing Balance: A Simple Test for Vestibular and Proprioceptive Dysfunction*

Maintaining balance while standing requires input from three sensory systems:

1. Proprioception (joint position sense)
2. Vision
3. The Vestibular System

Two of the three sensory systems must be intact for an individual to maintain balance.

The Romberg Test is performed by asking the patient to stand with arms at the side, feet together and eyes closed to eliminate visual input. (The patient should be closely guarded while the test is performed to prevent falling as shown in the above picture.)

Swaying or beginning to fall are positive Romberg signs. 32% of US Adults in the surveys had positive signs of vestibular dysfunction.

Reference:

*Arch Intern Med.* 2009;169(10):938-944

# PRO Therapy

# Positive Outcomes

## Conclusions

The cost of falls in the US is excessively high (greater than \$20 billion annually in the aforementioned surveys).

Vestibular dysfunctions and proprioceptive deficits (specifically in the Lower Extremities) is a condition which responds positively to conservative treatment including but not limited to vestibular rehabilitation and Physical Therapy.

Simple, yet effective tests are available and being utilized to help correctly identify people who may be at risk of falls.

Proper and efficient diagnosis combined with successful treatment outcomes lower the risk of falls.

At PRO Therapy, our therapists specialize in helping people with balance and vestibular dysfunction including the following conditions:

- BPPV (dizziness while lying down)
- General Deconditioning
- Lower Extremity Weakness
- VOR Deficits

If you find that a patient is at risk of falls, physical therapy is an effective and low cost treatment option.

We promise to give your patients the highest level of treatment resulting in improved outcomes for your referrals.

We will do all we can to have your patients **THANK YOU** for sending them to our care.

To refer a patient, please call 928-854-4776 or fax patient info to 928-854-4857.



William "Bill" Cooper, with Ronni Sikes, P.T.A.

*"I began physical therapy after I had a stroke. I couldn't walk without a walker and I was very insecure with my balance. Now, I can walk without a walker and my balance is 90% better.*

*The physical therapists are excellent in working with all problems and knew all the right steps to take to improve my strength. The staff is professional and very courteous.*

*Special thanks, to my therapist for the very thorough evaluation and working out a program for such great improvement.*

*Thank you PRO Therapy for the excellent care that you provided!"*

