

## Aging Well with Post-Polio Syndrome: Don't Let Fall Prevention Fall through the Cracks

Researchers at the University of Washington's Aging Rehabilitation Research and Training Center, [agerrtc@uw.edu](mailto:agerrtc@uw.edu)

**Falling in older adults is a big public health problem.** Injuries that result from falling in older adults are serious, life-changing, costly, potentially fatal. In the United States, deaths from falls is the leading cause of injury-related deaths in adults over the age of 65.<sup>1</sup> In 2000, the incidence of falling injuries was estimated to be 10,300 for fatal and 2.6 million for non-fatal injuries in adults over the age of 65.<sup>2</sup> Both fatal and non-fatal injuries from falling increase with age among older adults.<sup>3</sup> The direct medical care costs of treating injuries from falling in the elderly is estimated to be \$0.2 billion for fatal injuries and \$19 billion for non-fatal injuries.<sup>2</sup> The economic cost for rehabilitation after falling is even greater when stays in a nursing home, assistive devices (canes, walkers, etc.) and physical therapy are considered. Once an initial fall occurs, it can lead to a fear-of-falling, which is associated with avoiding daily activities as well as physical activity.<sup>4</sup> This, in turn, becomes a troubled cycle as lack of physical activity increases the risk of falling.<sup>5</sup>



Polio survivors have a variety of symptoms that are known risk factors for falls in older adults and people with neuromuscular diseases such as muscle weakness, joint pain and fatigue. One study showed that the rate of polio survivors who fell at least once in the past year was four times that of other adults over 55.<sup>6</sup> This study also found polio survivors report falling more often in the afternoon and inside the home.<sup>6</sup> Three important predictors of falling were identified for polio survivors – a) Problems maintaining balance, b) Weakness in knee extension in the weakest leg, “knee buckling” and c) Fear of falling.<sup>6</sup>

### Polio Survivor Data from our Survey

Many Post-Polio Health International readers participated in our survey that asked some questions about falling. Here are the responses of people with post polio syndrome:

- 242 (54%) reported a fall within the last 6 months.
- 385 (86%) are concerned about falling.
- 366 (82%) reported not doing things because of fear of falling.

### What can you do to prevent falls?

Knowledge is half the battle. Falls inside the home have been linked to stairs with four or more steps, slippery floors, sliding rugs, low lighting levels, missing handrails, uneven flooring and obstructive walkways. Falls outdoors are often linked to walking on uneven or cracked sidewalks, curbs or streets. Other fall prevention tips include:

- Have your vision and hearing checked regularly.

- Talk to your doctor about side effects of medication that could affect coordination and balance or increase weakness.
- Wear rubber-soled and low-heeled shoes that fit well and fully support your feet, and replace worn cane and crutch tips.
- Avoid wearing socks when walking inside on hardwood or linoleum flooring. Socks with the grippers on the bottom or wearing Crocs while inside help prevent indoor falls.
- Be careful when walking outdoors on wet or icy sidewalks. Carry your cell phone on walks. Try to anticipate fatigue and bring what you might need for more support (cane, walker, etc.) or even a friend or family member.
- Ask your doctor what exercises you can do regularly to maintain strong bones, strength and flexibility. Exercise that improves bal-

ance and coordination (Tai Chi or Yoga) are most helpful.

- Keep your home safe – remove things you can trip over (shoes, papers, books, clothes) from stairs and high traffic areas. Keep clutter down!
- Install handrails or grab bars in your bathroom or other frequently used areas where you may need extra support (stairs and hallways).
- Improve the lighting in your home. As you age, you need brighter lights to see well.

The U.S. Centers for Disease Control and Prevention has produced brochures titled “*What YOU can do to prevent falls*” and “*Check for Safety: A Home Falls Prevention Checklist for Older Adults*” available in English, Spanish and Chinese. [www.cdc.gov/ncipc/duip/spotlite/falls.htm](http://www.cdc.gov/ncipc/duip/spotlite/falls.htm)

# Thank you

For recognizing your friends and loved ones with contributions to support the unique mission of PHI and IVUN. PHI strives to publish an accurate list. Please contact us if we made an error.

## Contributions to PHI's education, advocacy and networking activities ...

### In Memory of

Carol Allmendinger's sister, Ellen Mort Rubenstein  
Sue Cheney Arthur P. Siegfried, Esq.  
Jean DeJong Lawrence Turilli  
Catherine "Kay" McMullin

### In Honor of

Buzz Zucker

## Contributions to The Research Fund ...

### In Memory of

Jean DeJong  
Virginia L. Harris  
Lawrence Turilli

## Contributions to the Gilbert Goldenhersh Memorial Tribute Fund ...

Marcia & Howard Denenholz's brother-in-law, Jack

PHI Thanks its Members  
for their support. If you  
are not yet a Member,

# Join PHI!

Support Post-Polio Health  
International's educational,  
research, advocacy and  
networking mission.

PHI membership levels make it easy to start taking advantage of timely and important news and activities relating to the late effects of polio. Select your level below and return it with your check or credit card information. Memberships are 100 percent tax-deductible.

### \$30 Subscriber

Newsletter of your choice:

*Post-Polio Health* (quarterly)

OR  *Ventilator-Assisted Living* (bi-monthly)

### \$55 Subscriber Plus

Both newsletters:

*Post-Polio Health* (quarterly)

AND *Ventilator-Assisted Living* (bi-monthly)

### \$100 Contributor

ALL the benefits of Subscriber Plus AND

*Post-Polio Directory* AND

*Resource Directory for Ventilator-Assisted Living*;

discounts on special publications

and meetings sponsored by PHI

### \$150 Sustainer

ALL the benefits of Contributor AND

One additional complimentary gift membership to:

Person of your choice (include name and address) or

Person who has expressed financial need to PHI

Membership at the following levels includes ALL benefits PLUS special recognition in PHI publications:

\$250 **Bronze Level Sustainer**

\$500 **Silver Level Sustainer**

\$1,000 **Gold Level Sustainer**

\$5,000 **Platinum Level Sustainer**

\$10,000 **Gini Laurie Advocate**

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Country \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

email \_\_\_\_\_

Phone (include area/country code) \_\_\_\_\_

Fax (include area/country code) \_\_\_\_\_

I am enclosing a check for \$ \_\_\_\_\_ made payable to  
"Post-Polio Health International." (USD only)

Please charge \$ \_\_\_\_\_ to this credit card:

VISA  MasterCard  Discover

Card No. \_\_\_\_\_

Exp. Date \_\_\_\_\_

Name on Card \_\_\_\_\_

Signature \_\_\_\_\_

Send this form to: Post-Polio Health International  
4207 Lindell Blvd, #110  
Saint Louis, MO 63108-2930 USA  
Phone: 314-534-0475  
Fax: 314-534-5070

## ▶ References:

1. Stevens JA, Dellinger AM. Motor vehicle and fall related deaths among older Americans 1990-98: sex, race, and ethnic disparities. *Inj Prev* 2002; 8(4): 272-275.

2. Stevens JA, Corso PS, Finkelstein EA, Miller TR. The costs of fatal and non-fatal falls among older adults. *Inj Prev* 2006; 12(5):290-295.

3. Stevens JA, Ryan G, Kresnow M. Fatalities and Injuries from Falls Among Older Adults - United States, 1993-2003 and 2001-2005. *Mortality and Morbidity Weekly Report* 2006; 55(45):1221-1224.

4. Evitt CP, Quigley PA. Fear of falling in older adults: a guide to its prevalence, risk factors, and consequences. *Rehabil Nurs* 2004; 29(6):207-210.

5. Brouwer B, Musselman K, Culham E. Physical function and health status among seniors with and without a fear of falling. *Gerontology* 2004; 50(3):135-141.

6. Bickerstaffe A, Beelen A, Nollet F. Circumstances and consequences of falls in polio survivors. *J. Rehabil Med* 2010; 42: 908-915.

*The contents of this column were developed under a grant from the U.S. Department of Education, NIDRR grant number H133B080024. However, the contents do not necessarily represent the policy of the Department of Education, and endorsement by the federal government should not be assumed.*