

### CAN HEARING LOSS INCREASE THE RISK OF FALLS?

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Owners of Comprehensive Ear & Hearing

People's worries change as they get older. For seniors, what was important several years ago, such as landing that promotion at work, is no longer relevant. And what used to be laughable, such as the fear of falling, is now top of mind, and not only during the winter months.

That fear is not unfounded. **According to the Center for Disease Control, millions of people age 65 or older fall each year;** it's the leading cause of fatal and non-fatal injuries in that age group. And after the first fall, your chances of falling again are doubled, posing a threat to your health, your budget and your independence.

There are many steps you can take to lower your risk of falling, including staying physically fit, installing grab bars and railings in your home, ensuring there is always adequate light for walking and – getting your hearing tested.

Surprised? **A growing body of research**, including a study from Johns Hopkins School of Medicine and the National Institute of Aging, **says hearing loss significantly increases the chances of falling for older people.**

Researchers studied hearing ability and vestibular function (a person's sense of balance and spatial orientation) in more than 2,000 people between the ages of 40 and 69. The test subjects also indicated whether or not they had fallen over the past year.

According to the results, researchers found that **people with a mild hearing loss of 25 decibels were nearly three times more likely to have a history of falling.** And for every 10-decibel increase in that hearing loss, the chance of falling increased 140%.

This finding was consistent regardless of other factors that are connected to falling, like age or cardiovascular health.

Theories as to why hearing loss increases the risk of falling are still only theories. Johns Hopkins researcher Dr. Frank Lin suggested that impaired hearing can affect how aware you are of your surroundings and how you inter-

act with those surroundings, including clutter, pets or furniture. He also suggested "cognitive load" might play a role, meaning the brain may be busy trying to make up for hearing loss and therefore has less power for balance.

"Gait and balance are things most people take for granted," Lin said in a news release about the study. "But they are actually very cognitively demanding. "If hearing loss imposes a cognitive load, there may be fewer cognitive resources to help with maintaining balance and gait."

**So, can corrected hearing reduce the risk? More research suggests that it can.** In a small study conducted by Washington University in St. Louis, test subjects wearing hearing aids in both ears scored better on balance tests when their hearing aids were on versus when they were turned off.

In a news release about the study, Dr. Timothy E. Hurler, senior study author, said it wasn't just that a person is more alert while wearing hearing aids. "The participants appeared to be using the sound information coming through their hearing aids as auditory reference points or landmarks to help maintain balance," he said.

"It's a bit like using your eyes to tell where you are in space. If we turn out the lights, people sway a little bit – more than they would if they could see. This study suggests that opening your ears also gives you information about balance."

So, if falling is something you're worried about, start installing those grab bars and extra lighting on your sidewalks, and then call your local hearing aid provider for a free assessment. The earlier hearing loss is treated, the sooner it can be corrected before it affects your quality of life.

#### SOURCES:

- <https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>
- [http://www.hopkinsmedicine.org/news/media/releases/hearing\\_loss\\_linked\\_to\\_three\\_fold\\_risk\\_of\\_falling](http://www.hopkinsmedicine.org/news/media/releases/hearing_loss_linked_to_three_fold_risk_of_falling)
- <https://source.wustl.edu/2014/12/hearing-aids-may-improve-balance/>
- <http://www.healthyhearing.com/report/52548-New-research-links-hearing-loss-to-an-increased-risk-of-falls>



Terry DeGroot, M.D.

**Dr. Terry DeGroot is available at both Comprehensive Ear & Hearing locations for medical ear & hearing care including cerumen management.**

**If you have a patient with any of the following symptoms an appointment with Dr. DeGroot is recommended:**

- Sudden hearing loss or noticeable change in hearing
- Ringing in the ears
- Ear pain or pressure
- History of ear wax accumulation

**People with Hearing Loss are**

**3x**

**MORE LIKELY to have a history of falling**



- One out of five falls causes a serious injury such as broken bones or a head injury.
- Each year, 2.8 million older people are treated in emergency departments for fall injuries.
- Over 800,000 patients a year are hospitalized because of a fall injury, most often because of a head injury or hip fracture.

- Each year at least 300,000 older people are hospitalized for hip fractures.
- More than 95% of hip fractures are caused by falling, usually by falling sideways.
- Falls are the most common cause of traumatic brain injuries (TBI).
- Adjusted for inflation, the direct medical costs for fall injuries are \$31 billion annually. Hospital costs account for two-thirds of the total.



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**Adults with untreated hearing loss**

were more likely to report depression, anxiety and paranoia than peers who wore hearing aids.<sup>4</sup>

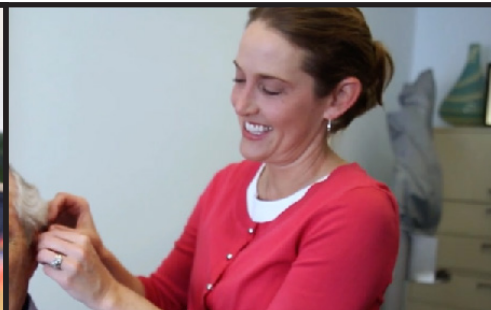


\*50 years and older

**Over 360 million**  
of the world's population  
have disabling hearing loss.<sup>5</sup>



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