

# Hearing & Dementia - 1



WEILL CORNELL MEDICAL COLLEGE

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## WOMEN'S HEALTH | *advisor*

HELPING WOMEN OVER 50 MAKE INFORMED HEALTH DECISIONS™

### HEARING LOSS TREATMENT

## Treat Hearing Loss Sooner, Not Later; It's Linked with a Higher Risk of Dementia

*Research shows that people who have trouble hearing are more likely to suffer from cognitive decline.*

Age-related hearing loss, or presbycusis, is common among older adults—almost two-thirds of Americans over the age of 70 have some degree of hearing loss, according to an article published in the February 28, 2011 issue of the *Journal of Gerontology*.

Several factors can contribute to presbycusis. As we get older, tiny hairs (cilia) in the section of the inner ear (cochlea) that transforms sound waves into nerve impulses gradually die off or are damaged, causing the structures of the ear to become less responsive to sound. In addition, a genetic predisposition to hearing loss may exacerbate poor hearing, as can exposure to loud noise over many years. Poor blood flow to the inner ear, which may be caused by cardiovascular disease and/or diabetes, also is a factor, and certain medications, including some chemotherapy drugs and strong antibiotics, also can raise the risk.

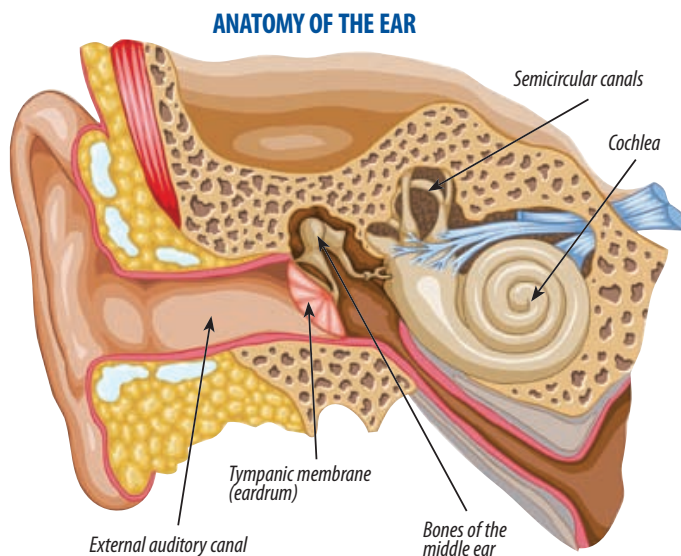
But untreated hearing loss carries a greater risk. A study published in the February 2011 issue of the *Archives of Neurology* suggests that older adults with hearing loss are more likely

to develop dementia, and their risk increases as hearing loss becomes more severe.

#### The hearing loss-dementia link

The link between hearing loss and loss of cognitive function has yet to be established, but experts have some theories.

As hearing loss progresses, people typically make small adjustments in an effort to compensate, such as standing closer to people who are speaking and trying to read their lips. But eventually, these compensatory measures become ineffective, and social withdrawal can set in. People with hearing loss tend to avoid other people and social gatherings because they're embarrassed by being unable to hear what others say.



Sound vibrations travel through the external auditory canal to the eardrum, which transmits them to the middle ear bones and on to the cochlea.

“It has been found that withdrawing from society and not interacting with peers can lead to depression and speed the progression of dementia,” says William Reisacher, MD, assistant professor of otorhinolaryngology at Weill Cornell Medical College. “It is important for older people with dementia to stay engaged in conversations as much as possible.”

It is also possible that the damage that occurs to cells that mediate hearing may serve as a marker for similar

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damage to nerve cells involved in memory and cognition. In addition, the brain may reallocate resources to help with hearing at the expense of cognition. The association could also arise from poor cardiovascular health, which previous studies suggest may factor into both presbycusis and a raised risk of dementia.

### Hearing loss affects your quality of life

“Going to a doctor to have one’s hearing evaluated does not mean that a person will be forced to use a hearing aid,” says Dr. Reisacher.

If your presbycusis isn’t serious enough for hearing aids, you may still benefit from using assistive listening devices for mild hearing loss. Simple personal amplifiers can help you in one-to-one conversations or in group settings where background noise might otherwise drown out voices. It’s also possible to purchase special

telephones for the hard of hearing, amplifiers for use with cell phones, and devices designed for use with televisions.

Unfortunately, many people ignore even advanced hearing loss because they feel self-conscious about wearing a hearing aid. However, many hearing aids available today are much smaller than older models; some types fit completely in the ear or the ear canal.

The cost of hearing aids also may be a factor for some people—they aren’t covered by most insurance companies, and they can cost from \$500 to \$2,000. If you can’t afford to purchase hearing aids, you may be able to obtain financial assistance. Contact the National Institute on Deafness and Other Communication Disorders at 800-241-1044 or by e-mail at [nidcdinfo@nidcd.nih.gov](mailto:nidcdinfo@nidcd.nih.gov) for information about financial assistance for hearing aids. 🌐

## WHAT YOU CAN DO

- **Be aware of red flags for age-related hearing loss, such as having to ask family members and friends to repeat themselves, the inability to follow conversations, particularly in noisy surroundings, and having to turn up the volume on the television or radio.**
- **Avoid lifestyle habits that could impede blood flow to the inner ear, such as smoking, and take steps to manage high blood pressure and diabetes, as these also affect blood flow.**
- **Protect your ears from loud noises (e.g., when mowing the lawn) by wearing ear plugs, and, if you are age 50 or older, have regular check-ups with an audiologist.**