



## CAA FAST FACTS FOR PRIMARY CARE

# Hearing Health and Cognitive Health in Aging Adult Patients: How to Frame the Conversation

Over the past several decades, there has been a great deal of research and discussion about the connections between hearing loss and cognitive decline. While we do not know whether treating hearing loss will reduce the risk of dementia, there is limited evidence showing that treating hearing loss may mitigate cognitive decline in some people at increased risk for dementia (Lin et al., 2023). We do know, however, that treating hearing loss can have positive effects on communication. Better communication, in turn, can have positive effects on overall cognitive, social, emotional and functional well-being.

## When Should Hearing Loss be Screened?

Age-related hearing loss (ARHL; sometimes called presbycusis) is common in the aging population. The prevalence of ARHL increases markedly with age. Reports of difficulty understanding speech in group or noisy situations may start in middle age. By 75 years of age, about half of Canadians will have a clinically significant hearing loss (Mick et al., 2021). From the time of first noticing hearing problems, many people delay help-seeking for a decade. The World Health Organization (WHO) recommends that hearing screening for older adults start at 50 years of age (WHO, 2021). Importantly, hearing loss is one of the key capacities that the WHO recommends be included in integrated primary care for older people (ICOPE; WHO, 2024) and screening

techniques (including the WHO online app) are suggested.

Older people with hearing loss may have faster cognitive decline compared to people with normal hearing (Phillips et al., 2022). Audiologic rehabilitation can support patients with hearing loss and their families. Treatments, including the use of technologies (e.g., hearing aids), counselling, and training in communication strategies, can help to overcome communication barriers in social interactions (Mick et al., 2018). Those who hear better are more apt to engage in physical and social activities, which may be protective against cognitive decline (Pichora-Fuller, 2025).

## Where Does Aging Happen in the Auditory System?

There are different sub-types of ARHL. The “sensory” type (e.g., in people with a history of occupational noise exposure) and the “metabolic” type (e.g., in people with diabetes or cardiovascular risk factors) present as a gradual high-frequency sensorineural hearing loss when audiometric pure-tone detection thresholds are measured. In addition, “neural” type ARHL across multiple levels of the auditory nervous system may affect speech understanding in noise, even when there is no more than a mild degree of hearing loss as measured by audiometry.



## How Hearing Loss May Affect Cognitive Performance

In ideal listening conditions (e.g., when a person with normal hearing talks to a friend in their home), the brain can easily and rapidly convert incoming speech sounds as the person is understanding the conversation. However, much of everyday life happens in challenging listening conditions (e.g., when a person has hearing loss and there are many people talking while walking on a downtown street that is crowded and noisy). Importantly, listening in everyday life can become even more challenging when hearing loss is combined with other age-related health issues (e.g., vision or mobility impairments). In many of the challenging conditions of everyday life, the brain must work harder to process auditory inputs and to combine the multiple sensory and motor cues needed to successfully perform activities such as conversing while crossing a busy street.

Person-centered approaches to make it easier to listen while participating in everyday activities may include one or more rehabilitative technological, environmental, behavioural and/or attitudinal approaches.

Using a hearing aid and/or other assistive technologies can help by improving the quality of incoming auditory information. Listening environments can be modified by reducing background noise to simplify auditory information and by improving lighting to enhance the person’s ability to see helpful visual speech cues. Counselling and training can help older hard-of-hearing adults and their friends and family to learn and apply new conversational strategies to minimize the negative effects of poor communication on relationships and emotional responses. Person-centered rehabilitation can make listening easier and more enjoyable. Reducing the cognitive effort needed to listen, especially in challenging conditions, can improve cognitive performance on measures such as memory (Phillips et al., 2022) and more generally support healthy aging (Blustein et al., 2023).

We advocate for a “hearing better can help you live and think better” message and approach to guiding patients to prioritize their hearing health in the context of healthy aging (see also Blustein et al., 2023).

## Symptoms and Warning Signs

- Patients experiencing hearing loss, particularly as they age, may complain that they have difficulty hearing and following conversations. This difficulty may be more pronounced in the presence of background noise. Difficulties hearing and understanding may be noticed gradually, starting in middle age.
- Patients complaining of social withdrawal or reduced physical activity because of problems hearing and engaging in communication and social interaction should be evaluated by an audiologist.
- Sudden hearing losses require immediate evaluation by an audiologist or otolaryngologist.

## Supportive Tips

- Encourage patients to know their hearing ability. Encourage testing before there are complaints provides a baseline for patients. Hearing health is an important part of overall health.

## Treatment and Management

- Audiologic rehabilitation can support patients to hear better, including the use of technologies (e.g., hearing aids), counselling, and training in communication strategies.
- Audiologists are trained professionals who can discuss person- and family-centered solutions to manage hearing loss.

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Date: March 2025

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