



Facts on Aging

Aging & The Senses

Florida State University

Pepper Institute
on Aging &
Public Policy

Many Americans experience a range of age-related sensory impairments, most commonly some loss of vision and hearing. Sensory losses have enormous impact on the health, safety, independence, and quality of life of older individuals – yet they are not necessarily an inevitable result of aging. Early prevention as well as technological solutions can greatly enhance a person's life despite a reduced range of senses.

Loss of VISION

- Currently more than 38 million Americans age 40 and older have significant vision impairment and eye disease – 3.3 million of them are blind or experience low vision. About 35 million Americans age 40 and older, have an age-related eye disease such as age-related macular degeneration (AMD), cataract, glaucoma, and diabetic retinopathy. That number is expected to grow to 50 million by 2020.

Source: Alliance for Aging Research, 2007

- Vision impairment and eye disease are not only a significant cause of disability and lost independence, but also have a huge economic impact, costing the U.S. \$68 billion annually in direct healthcare costs, lost productivity, and diminished quality of life.
- About 1.7 million Americans have some form of AMD, which is the leading cause of vision loss among Americans ages 65 and over. Women tend to be at greater risk for AMD than men, and whites are much more likely to lose vision from AMD than blacks.

Source: National Eye Institute

- Age and a family history of AMD are the biggest risk factors. Other risk factors may include smoking, low lifetime intake of dark green leafy vegetables, high blood pressure, and cardiovascular disease.
- Special optical devices can help make the best use of the remaining vision by magnifying, filtering, or increasing the usable field of vision. Examples include:
 - Magnifiers or high-intensity lamps for reading

Source: U.S. Food & Drug Administration 2002

or performing other close-up tasks;

- Pocket-sized telescopes for distance vision;
- Closed-circuit televisions for reading, which magnify and project printed materials onto a television screen.

Source: American Foundation for the Blind

Loss of HEARING

- Hearing loss is very common with aging and is one of the most correctable yet often unrecognized problems. It contributes significantly to social isolation.
- About 25% of people between 65 and 74 years of age and 50% of people age 75 or older report difficulty hearing. Unfortunately, although 65% of those age 85 and older report hearing difficulty, only 8% use a hearing aid or other assistive listening device.
- Older men are more likely to have hearing loss than older women and people with Alzheimer's disease have a higher rate of hearing impairment than others.
- In a large-scale survey of over 2000 hearing-aid users more than half claimed that their relationships at home and the overall quality of their lives improved once they began using hearing aids. Hearing-aid users were less depressed and more socially engaged than older adults with comparable hearing loss who did not use hearing aids. More than half of family members reported observing improvements in interpersonal relationships with family members and at work among hearing-aid users.

Source: Ageworks.com - University of Southern California

Source: National Council on the Aging

- About one in three older adults have their hearing reduced by up to 35% because of the accumulation of ear wax which blocks the sound. This is one of the most treatable causes of hearing loss; health care professionals can remove excess ear wax. Another common cause of hearing loss among older adults is medications, especially antibiotics or diuretics which can cause permanent hearing impairment.

Source: Ageworks.com

Loss of SMELL

- As we age, the number of functioning smell receptors decreases, increasing the threshold for smell. It takes a more intense smell for it to be identified and differentiated from other smells. After the age of 50 the sense of smell decreases rapidly. By age 80, the sense of smell is reduced by about half.
- The lack of ability to smell spoiled food can lead to indigestion and food poisoning. Even more seriously, studies have shown that older persons may not be able to detect relatively high levels of mercaptoethanol, the odorant added to natural gas so that individuals can detect gas leakage.

Source: Ageworks.com - University of Southern California

- It is estimated that a complete loss of the sense of

smell is found in at least 1% of the U.S. population. In a recent study of individuals aged 53-97 years, 24% were found to have impaired olfactory function.

Source: Thomas Hummel & Steven Nordin, 2003

- Changes in flavor perception can affect food selection and the development of preferences and aversions. Older adults with a poor sense of

smell are less sensitive to dietary monotony than younger cohorts. These findings are consistent with the observation that food selection tends to become less varied with age, which can contribute to increased nutritional risk.

Source: "Age-Related Changes in Perception of Flavor and Aroma"

by Nancy E. Rawson

- One of the first areas affected in the brain of Alzheimer's patients is the sense of smell. Researchers

have developed a scratch and sniff smell test aimed at detecting Alzheimer's early on. Participants in the 5-year-study had to identify ten common smells: lemon, strawberry, smoke, soap, menthol, clove, pineapple, natural gas, lilac and leather. The results indicate that people with mild memory loss who scored lower on the test are much more likely to develop Alzheimer's later on.

Source: Columbia University Medical Center

"Sense of smell? ... I never gave it a thought. But when I lost it – it was like being struck blind. Life lost a lot of its savour – one doesn't realize how much 'savour' is smell. You smell people, you smell books, you smell the city, you smell the spring – maybe not consciously, but as a rich unconscious background to everything else. My whole world was suddenly radically poorer..."

Oliver Sacks, *The dog beneath the skin* (1985)



**Pepper Institute on Aging
and Public Policy**

Florida State University
College of Social Sciences
Tallahassee, FL 32306-1121
(850) 644-2831 • aging@fsu.edu
www.pepperinstitute.org