Making Sense of Sensory Losses as We Age

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Target Audience
• Adults of all ages

Lesson Objectives
As a result of participation in this program, participants will be able to:
• Understand the process of aging and normal physical changes
• Engage in activities that assist in understanding sensory loss
• Understand what impact sensory losses have on day-to-day living
• Identify ways of adapting to sensory loss as we age

Lesson Planning and Materials
• Study and learn the ideas and information presented in the organizational materials that you wish to present to your intended audience.
• Plan a lesson introduction, which may include suggested activities or your own ideas.
• Gather materials to use during the lesson, including:
  - Sunglasses with yellow lenses
  - Phone book (small print if possible)
  - Pen/pencil and paper
  - Tape recorder or CD player
  - “The Unfair Hearing Test” audio tape or CD (audio files on the lesson CD)
  - Chocolate kiss candy
  - Transparent tape
  - Gardening gloves
  - Coin purse with play money
  - Medicine bottle with colored buttons (or candy)
  - Deck of playing cards
  - 12 inches of ribbon or string

Handouts
Materials to be made available can include:
• Facilitators Guide – for the individual providing the instruction
• Facilitator Handouts – handouts for the facilitator to use on Sensory Loss Activities 1 through 5
• Participant Handout – “Making Sense of Sensory Loss – Childhood, Adulthood, Elderhood?”
• Evaluation – one per participant

Time Schedule
One to two hours, depending on the activities chosen. May include:
• Introduction – Spend five to 10 minutes of the opening discussion on the five senses and sensory losses the audience can identify.
• Presentation of Key Concepts and Lesson – Take time as needed (30 to 90 minutes) to present the information and concepts in the lesson. Refer to the facilitators guide as needed; provide for activities and discussion by the group.
• Lesson Review and Program Evaluation – Allow five to 10 minutes for review and conducting the lesson evaluation.
Introduce yourself and welcome the participants. Briefly identify the five senses: **touch, taste, hearing, smell and vision.** Ask participants to introduce themselves and name a sensory loss that they can identify with or have observed.

Go through the lesson objectives so participants can form some expectations.

The process of aging begins at birth and continues throughout life. Change is an inevitable part of the aging process. **Sensation** is the physical and mental process that allows us to receive information from our surrounding environment through the ears, skin, tongue, nostrils, eyes and other specialized sense organs. Key sensing processes include vision, hearing, touch, taste and smell.

Sensory loss is defined as a decreased ability to respond to stimuli that affect our senses (hearing, touch, etc.). For example, vision loss might mean that we cannot see a person across the street wave at us, or hearing loss might result in us struggling to hear people speaking in a certain tone of voice. Sensory loss is inevitable, but that does not mean adults who are losing one or more of their senses are out of luck.

Sensory changes do not occur at the same age for each person, nor do all changes occur at the same time and at the same degree. An awareness of different sensory changes and their effects can be helpful. Also, a variety of resources are available that can help minimize the impact of sensory losses as we age.
Visual 6
Key Concepts – Vision, Aging and Sensory Losses

As we age, the shape of the eye lens changes. The lens and cornea become less transparent, the pupil becomes smaller and the field of vision shrinks. Visual difficulties may come with these physical changes in the eye. Common types of vision loss include glaucoma, cataracts, macular degeneration and diabetic retinopathy.

Take a moment to discuss these loss types.

Visual 7

Read the information on slides 7 and 8.

Then give participants time to view slide 9 for a visual look at the change in vision that occurs as a result of glaucoma.

Visual 8

Usually, the damage from glaucoma reduces the peripheral vision of the eye (the kind of vision that allows you to notice things around you when you are not looking directly at them). The central vision of the eye generally is not affected until the damage has gone on for a long time. Activities such as driving a car may be impeded by this type of vision loss.

Visual 9

Visual example of the effects of vision loss due to glaucoma.

Have participants discuss instances where this type of visual impairment would affect daily activities. Allow participants to share their personal experiences.

Visual 10

Read the information on slides 10 and 11.

Then give participants time to view slide 12 for a visual look at the change in vision that occurs as a result of cataracts.
**Visual 11**

The most common symptoms of a cataract are:
- Color vision changes
- Lights appear dimmer
- Light sources may seem to be double or blurred
- Colored halos may appear around lights
- Poor night vision
- Frequent prescription changes in your eyeglasses or contact lenses

These symptoms also can be a sign of other eye problems. If you have any of these symptoms, check with your eye care professional.

**Visual 12**

Visual example of the effects of vision loss due to cataracts.

Have participants discuss instances where this type of visual impairment would affect daily activities. Allow participants to share their personal experiences.

**Visual 13**

Read the information on slide 13.

Then give participants time to view slide 14 for a visual look at the change in vision that occurs as a result of macular degeneration.

**Visual 14**

Visual example of the effects of vision loss due to macular degeneration.

Have participants discuss instances where this type of visual impairment would affect daily activities. Allow participants to share their personal experiences.

**Visual 15**

Read the information on slide 15. Then give participants time to view slide 16 for a visual look at the change in vision that occurs as a result of diabetic retinopathy.
Visual 16

Visual example of the effects of vision loss due to diabetic retinopathy.

Have participants discuss instances where this type of visual impairment would affect daily activities. Allow participants to share their personal experiences.

Visual 17

Review the importance of good eye health and encourage the participants to schedule regular visits with an optometrist to secure proper glasses or other treatment as needed for optimal vision. Also, remind them of the value of getting regular eye checkups to assess their eye health.

Visual 18

Find Sensory Activity 1, the “Vision Activity,” and have participants do all or some of the activity as time allows.

Visual 19

Key Concepts – Hearing, Aging and Sensory Losses

Although only 2 percent of people age 55 and older are classified as legally deaf, from 30 percent to 50 percent of older adults suffer a hearing loss that is serious enough to negatively affect the quality of communication and interpersonal relationships. Hearing loss is an important type of sensory loss that deserves attention, as it is more common than any other type of chronic condition.

Visual 20

People may complain that they can hear the spoken sounds, but they can’t understand what the speaker is saying.

Words that are quite different can sound the same, such as tea/pea/key, shop/shot/shock or fine/shine/sign.
People with decreased ability to hear may deny or be embarrassed to talk about the problem. Hearing aids, while very beneficial, never can replace normal hearing.

Find Sensory Activity 2, the “Unfair Hearing Test,” and have participants engage in all or some of the activity as time allows.

Review these tips for hearing health and have participants give other suggestions.

Many people are not aware that an individual’s sense of smell and his or her sense of taste are closely related. Sensory losses in taste and smell can lead to other health concerns for aging individuals. For example, the lack of taste appeal may discourage older adults from eating. This indirectly may lead to poor nutrition.

Our “odor memories” frequently have strong emotional qualities and are associated with the good or bad experiences in which they occurred. Olfaction (sense of smell) is handled by the same part of the brain (the limbic system) that handles memories and emotions.
No two people smell the same odor in exactly the same way. In other words, a rose may smell sweeter to some people than to others. Because smell plays an important role in sense related to food quality, safety precautions in handling food are important for older adults. This particularly includes proper storage of food, refrigeration and other food safety guidelines.

Sweet and salty tastes seem to be the first ones affected by sensory loss. Drugs are often bitter. This bitterness comes out in the saliva and can alter the sense of taste.

For older people, normal seasoning on foods may seem bland. Use of herbs instead of salt may be one answer to increasing the flavor of foods without increasing sodium content, especially for older adults who have high blood pressure.

Find Sensory Activity 3, “The Smell of Chocolate,” and have participants engage in all or some of the activity as time allows.

One way to compensate for the loss of taste sometimes seen with illness and aging is to concentrate on contrasts in texture, temperature and flavor in preparing foods.

The process of aging also impacts our sense of touch as we grow older. Loss of tissue and elasticity in skin cells means that older people may become less responsive to stimuli affecting our sense of touch.
Visual 31

Touch is a necessary sense that alerts us to changes in temperature, movement or pain. We put on more clothes when we feel the temperature cool on our skin. We move a hand away when someone leans too heavily on it.

Visual 32

Handling or picking up certain objects may become more difficult due to loss of touch. Small motor skills, such as writing with a pen or picking up objects, might be affected.

Visual 33

Individuals experiencing these disturbances are considered to be at high risk of injury of various sorts. This is because they are deprived of the normal defense mechanisms that touch provides.

Visual 34

Find Sensory Activity 4, “Touch and Dexterity,” and have participants engage in all or some of the activity as time allows.

Visual 35

Find Sensory Activity 5, “The Aging Skin,” and have participants engage in all or some of the activity as time allows.
The challenges of life do not become easier as one ages. Fears, physical difficulties and various losses occur. They include sensory losses in the areas of vision, hearing, taste, smell and touch. However, individuals who are prepared and informed can cope successfully with these life changes.

Take steps to learn about sensory losses and do what you can to maintain health in each area of your physical well-being. A variety of skills, resources and support is available to you that can assist in maintaining sensory wellness.

Today we discussed several issues related to sensory loss, including vision, hearing, touch, taste and smell. Encourage participants to fill out the program evaluation form and share it with the program facilitator, who will return it to the local county office of the NDSU Extension Service.

Resources for Coping with Sensory Loss

- National Association of Geriatric Education Centers – [www.nagec.org](http://www.nagec.org)
- The American Geriatrics Society – [www.americangeriatrics.org](http://www.americangeriatrics.org)
- North Dakota Adult and Aging Services – [www.nd.gov/health/services/adultaging](http://www.nd.gov/health/services/adultaging)
- American Society on Aging – [www.asaging.org](http://www.asaging.org)
- North Dakota Interagency Program for Assistive Technology – [www.ndiat.org](http://www.ndiat.org)
Resources


Vision photos – permission granted by National Eye Institute, National Institutes of Health.