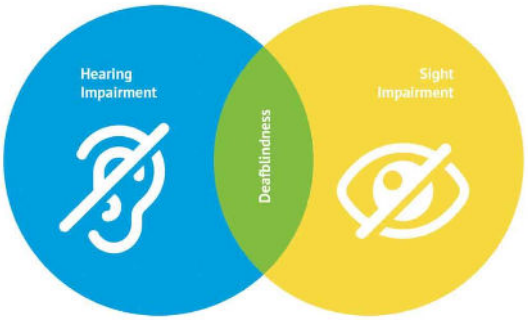
Sensory Impairments

- Hearing, sight, or speech
- Each limitation requires different assessment/treatment approaches
- Sensory impairment does not mean mental impairment
- Impairment may be partial or complete

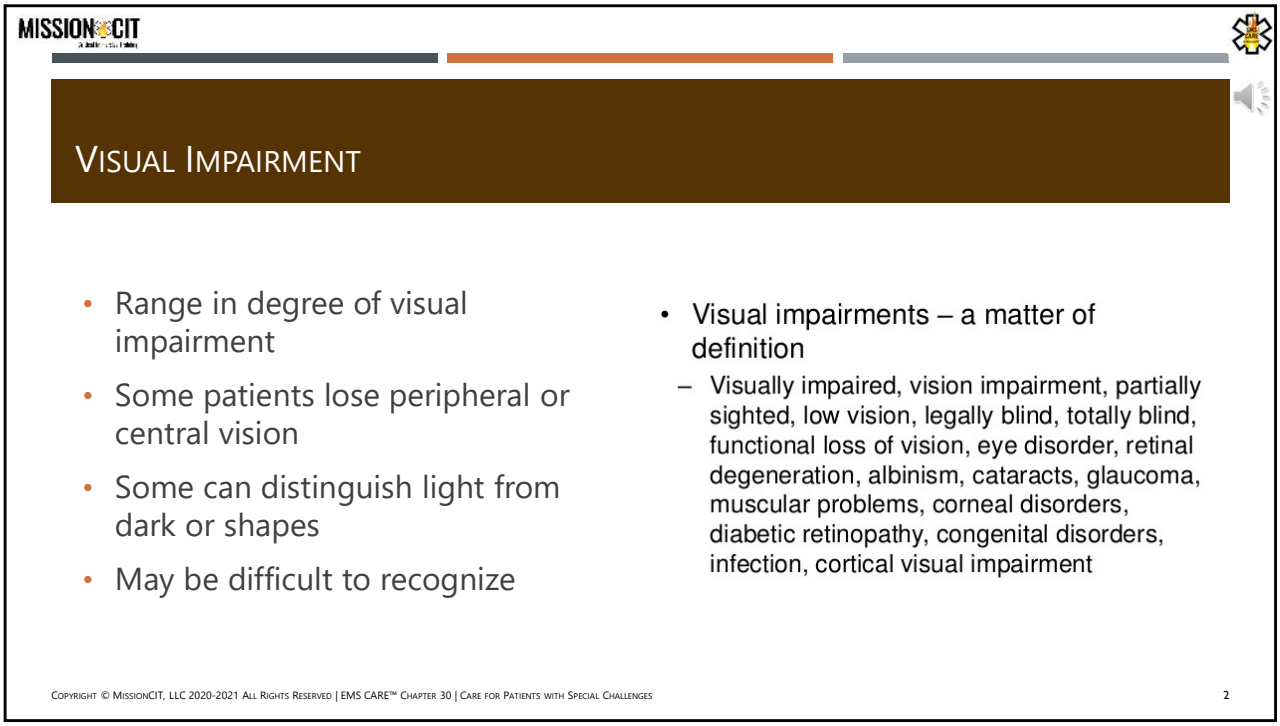


Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 30 | Care for Patients with Special Challenges

Now, let's continue with Part C of this lesson, Sensory Disabilities. Here we discuss Visual, Hearing and Speech impairments.

"Sensory disabilities" can involve any of the five senses, but for most purposes, it generally refers to a disability related to hearing, vision, or both. We add speech as it is a key component for critical care, so the EMT needs to know how to manage these patients.

Remember that sensory impairment does not mean mental deficiency.

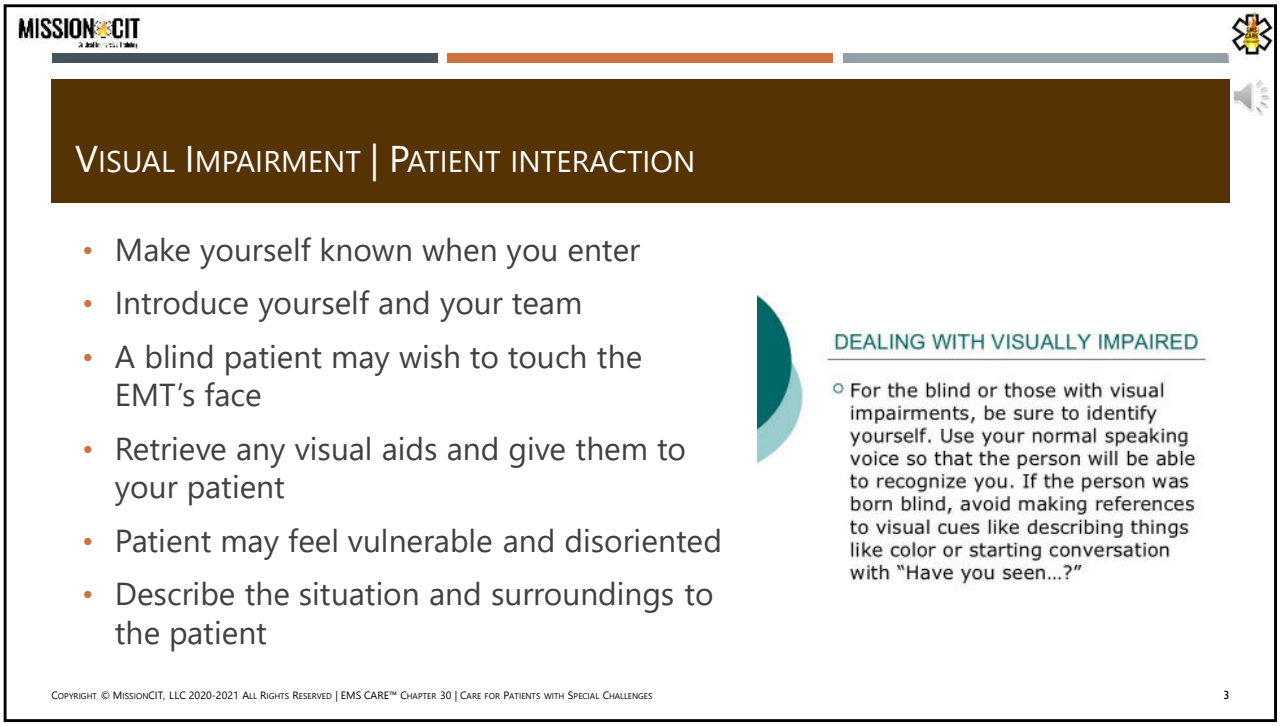


Visual impairment is used to describe any kind of vision loss. Whether it's someone who cannot see at all or someone who has partial vision loss. Some people are completely blind, but many others have what's called legal blindness.

According to the American Optometric Association, Visual impairment is defined as a functional limitation of the eyes or visual system. It may present as reduced visual acuity or contrast sensitivity, visual field loss, photophobia, diplopia, visual distortion, visual perceptual difficulties, or any combination of the above.

These functional limitations can result from congenital, hereditary, or acquired conditions.

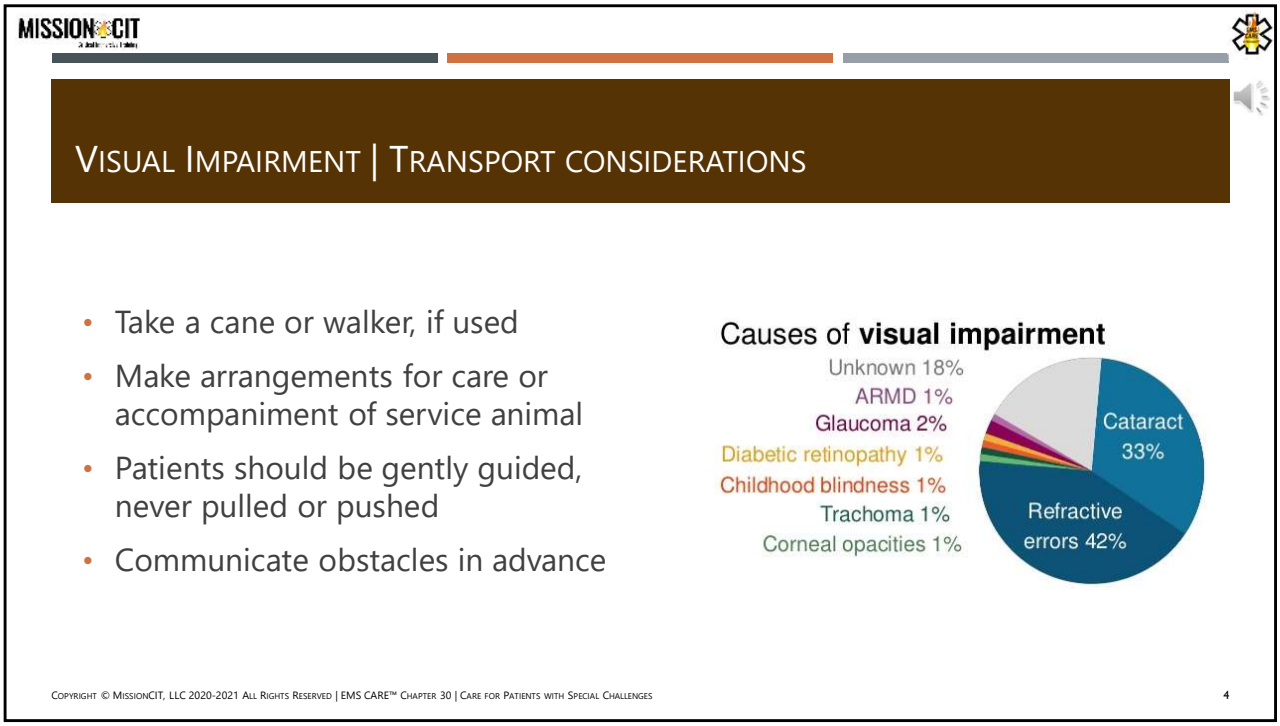
A visual impairment may cause disability by significantly interfering with one's ability to function independently, to perform activities of daily living, or to be able to travel safely.



When attending to a visually impaired patient, it's important to consider a few adjustments to your protocol.

- First, make yourself known when you enter.
- Be sure to Introduce yourself and your team.
- Often, a blind patient may wish to touch the EMT's face.
- Retrieve eyeglasses or any visual aids and give them to your patient.
- Remember that the Patient may feel vulnerable and disoriented. And finally,

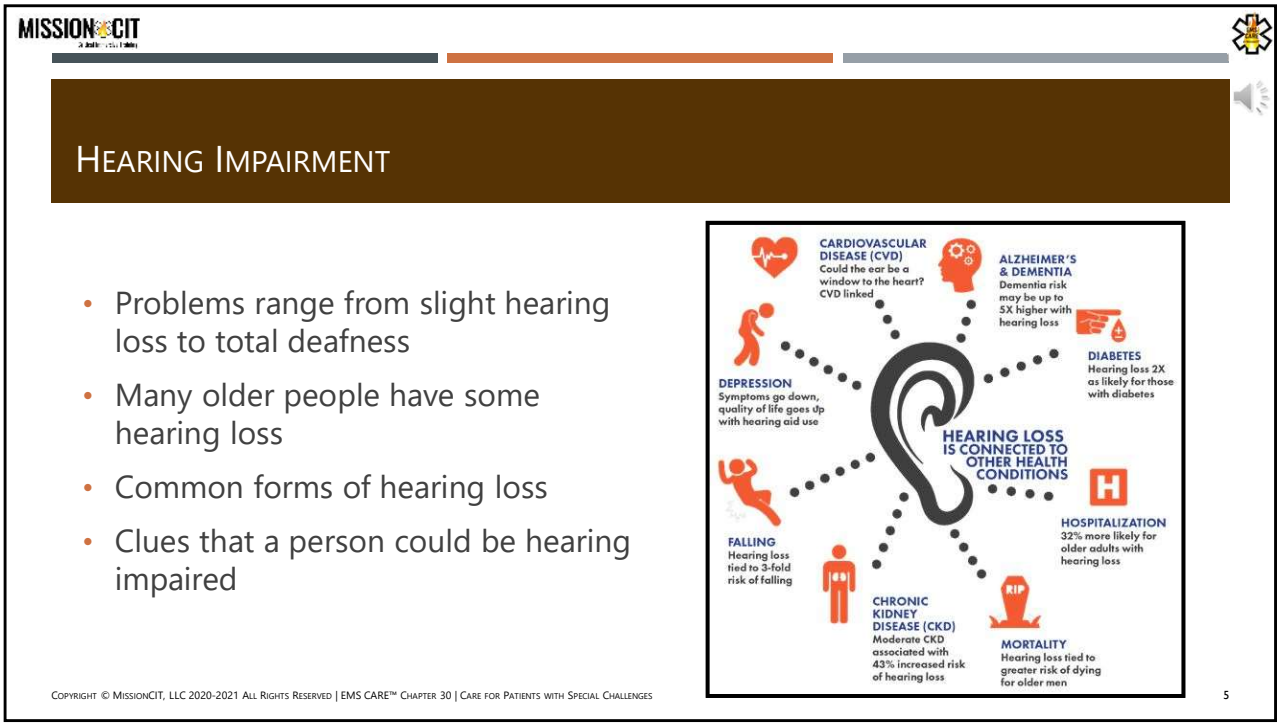
- Try to comfort the patient by describing the situation and surroundings as you attend to their needs.



When transporting a visually impaired patient, be sure to consider the following.

- If the Patient uses a cane or walker, remember to take it with you.
- A service animal should remain with the patient and will provide reassurance for them. Understand your local protocol in case you may need to make arrangements for the care of the animal.
- An ambulatory patient may be led by a light touch on the arm or elbow or the patient may rest their hand on your shoulder.

- As conditions permit, allow the patient to guide you so they are comfortable.
- Patients should be gently guided but never pulled or pushed. And,
- Obstacles need to be communicated in advance.



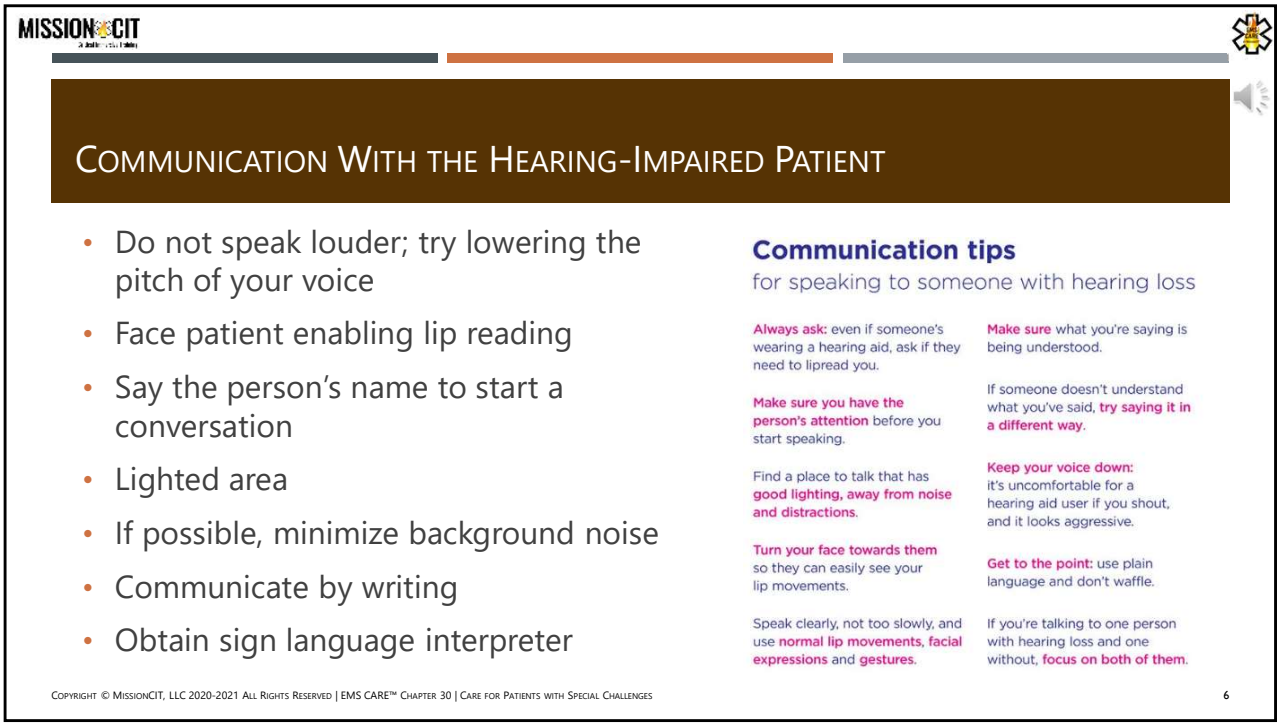
Hearing impairment is usually the result of inner ear or nerve damage. It may be caused by a congenital defect, injury, disease, certain medications, exposure to loud noise, or age-related wear and tear.

The chief symptom is an inability to hear sound.

For some, hearing may be possible with surgery or a hearing device. Lip-reading skills, written or printed text, and sign language may help with communication.

Impairment may range from a slight hearing loss to total deafness. Some clues that a person could be hearing

impaired include the presence of hearing aids, the poor pronunciation of words, or failure to respond to your presence or questions.



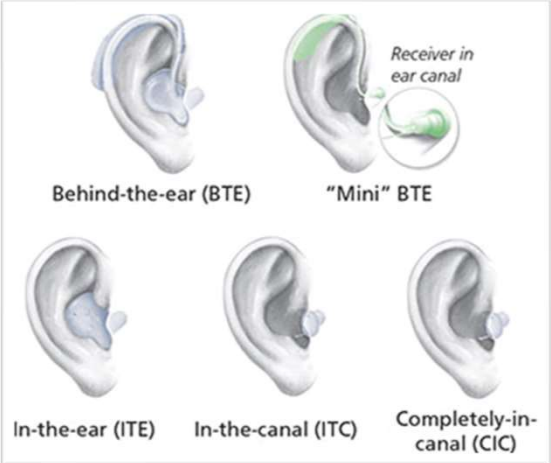
Communication with a hearing-impaired patient is often challenging. Here are some possibilities that may improve communication.

- First, do not speak louder, and try lowering the pitch of your voice.
- Face the hearing-impaired person directly, on the same level and in good light whenever possible.
- Say the person's name before beginning a conversation. This gives the listener a chance to focus attention and reduces the chance of missing words at the beginning of the conversation.

- Be aware of possible distortion of sounds for the hearing-impaired person. They may hear your voice, but still may have difficulty understanding some words
- Most hearing-impaired people have greater difficulty understanding speech when there is background noise. Try to minimize extraneous noise when talking.
- Whenever possible, provide pertinent information in writing
- Recognize that everyone, especially the hard-of-hearing, has a more difficult time hearing and understanding when ill or tired
- Only one person should ask questions to avoid confusing the patient.
- Consider the “Reverse stethoscope” technique: put the earpieces of your stethoscope in the patient’s ear and speak softly into the diaphragm of the stethoscope.
- If sign language is an option, consider obtaining a sign language interpreter if conditions permit.

Hearing Aids

- Hearing aids make sound louder
- Several types are available
- Behind-the-ear, conventional body, in-the-canal, in-the-ear
- Device should fit snugly
- If whistling occurs, it may not be in far enough



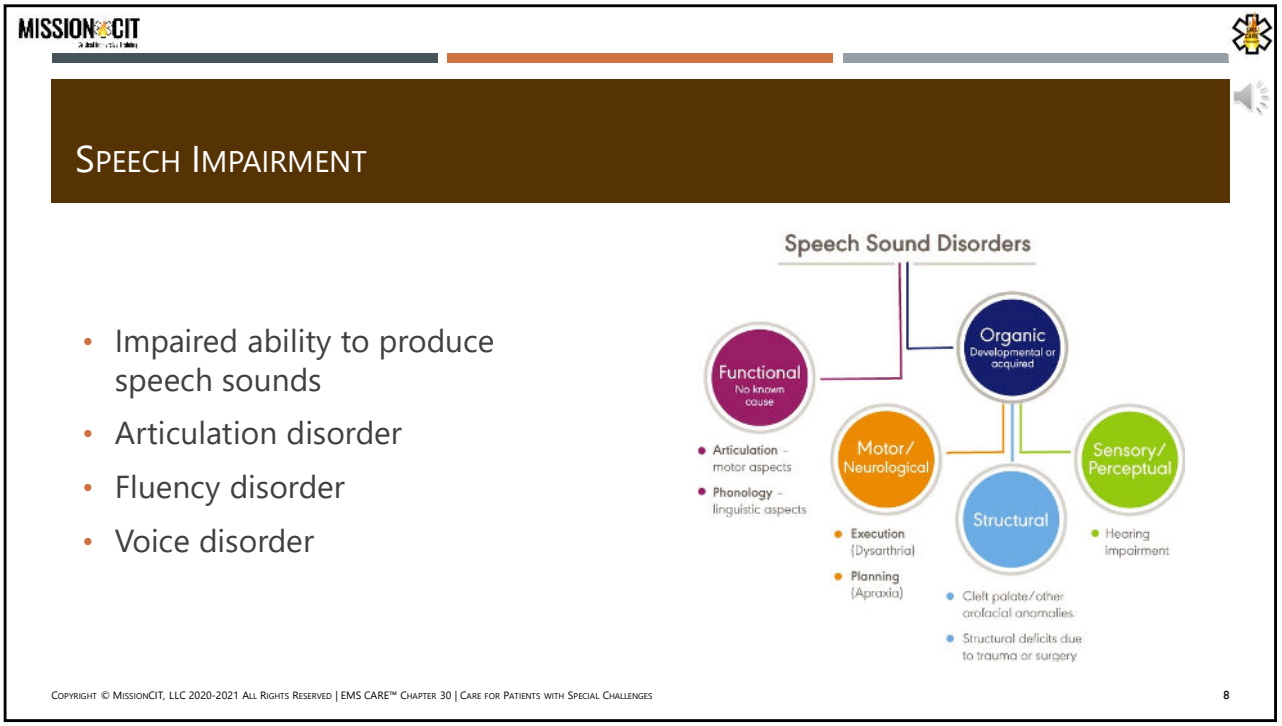
Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 30 | Care for Patients with Special Challenges

A hearing aid is a device designed to improve hearing by making sound audible to a person with hearing loss. A hearing aid works by using small microphones that collect sounds from the environment. A computer chip with an amplifier converts the incoming sound into digital code. It analyzes and adjusts the sound based on the patient's hearing loss, as well as listening needs and the level of background sounds. The amplified signals are then converted back into sound waves and delivered to the ears through speakers.

You may encounter patients who have forgotten to put in their hearing aids. Or the devices may not be working properly. If you see them unused, you can try to get the patient to use them if conditions permit.

Note that there are several types of hearing aids that may not be immediately obvious to you as shown in the diagram.

If the patient is wearing a hearing device, ask if it is snug and turned on.

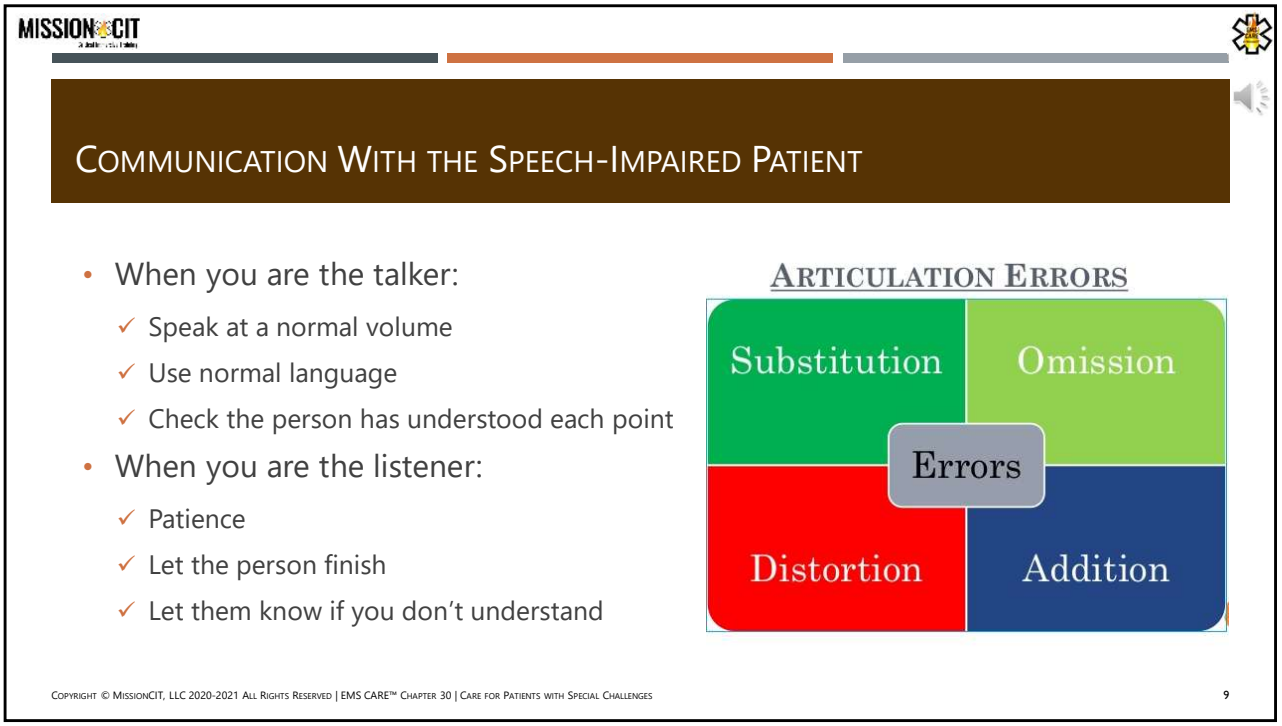


A speech impairment refers to a compromised ability to produce speech sounds and may range from mild to severe. It may include an articulation, fluency, or voice disorder.

An Articulation disorder is characterized by omissions or distortions of speech sounds.

A fluency disorder presents as an atypical flow, rhythm, or repetitions of sounds.

And a voice disorder is often an abnormal pitch, volume, resonance, vocal quality, or duration.



Communication with a speech-impaired patient is also challenging. Here are some possibilities that may improve communication.

When you are the talker

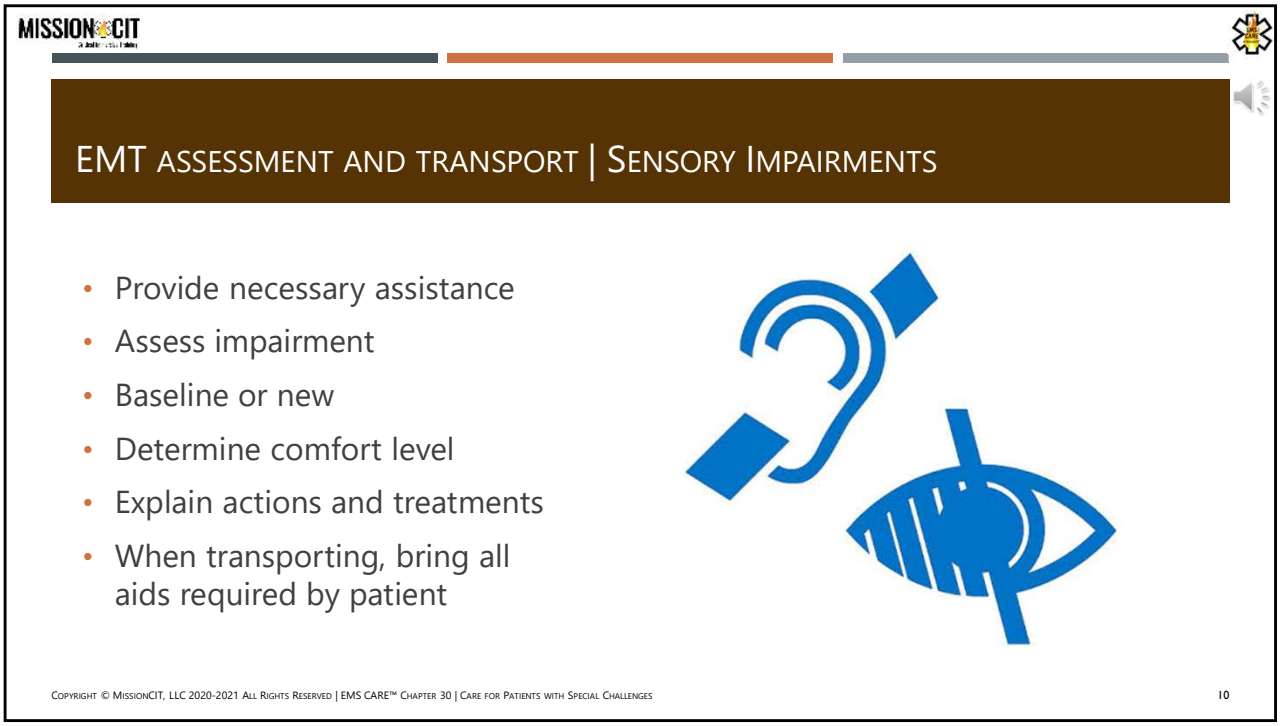
- Speak at a normal volume.
- Don't assume you have to speak slowly or use simple language.
- Check that the person has understood each point before continuing, you may need to give one piece of information at a time.

When you are the listener

- Patience is the key to communicating with someone who has communication impairment. Do not hurry them.
- Always let the person finish their sentence. It is rude and discouraging to cut someone off or finish a sentence for them.
- Let the person know if you don't understand them. Politely ask them to repeat what they said.
- And, Don't offer instructions. For example, don't ask the person to slow down or take a deep breath.

If the person has significant difficultly communicating with you, ask questions they can answer with a gesture or short answer. Offer the use of pen and paper but be aware many people whose speech is severely impaired also have difficulty handwriting.

Some people with speech impairments use devices to help them communicate. Others opt to use sign language and the National Relay Service.



So, a quick summary for assessing and transporting patients with sensory impairments.

During assessment, follow all primary and secondary assessment protocols appropriate for the call. As conditions permit, factor in the sensory impairment and adjust your actions as practical.

Be sure to assess the impairment as pertinent to the call as baseline or new. Explain actions and treatments with respect to the impairment.

Do your best to determine the patient's comfort level

with respect to the impairment when appropriate.

When transporting, bring all the aids required by the patient.

So, this is the end of lesson 2 on Congenital, Neurological and Sensory Disabilities. Justin will be with you for the next lesson on disabilities from traumatic injury, Bariatric Debilities, Chronic Disease and Terminal Illness.

Good Studying.