

FACT SHEET



Cognitive Changes After Brain Injury Auditory Perception

QUICK FACTS

- Auditory perception is the ability to receive and interpret information received through the ears
- A loss of auditory perception is not the same as physical hearing loss
- Allows us to interact with our environment, communicate, be alerted to potential threats, and enjoy music

WHAT MIGHT IT LOOK LIKE?

- Misunderstanding of speech and an inability to formulate a response
- Inability to retrieve words
- Failure to recognize warning sounds (e.g. fire alarm)

Auditory perception is a multi step process:

- **Detection:** actually hearing the sound
- **Discrimination:** differentiating the sound from other background noise
- **Identification and recognition:** knowing where the sound is coming from, such as from a voice
- **Comprehension:** understanding the sounds that we hear (e.g. someone telling us something) or understanding the meaning of the sounds (e.g. knowing to leave the building when the fire alarm rings)

WHAT ARE THE POSSIBLE CAUSES AND COMPLICATIONS?

Possible causes:

- Injury to the auditory receptors of the brain
- Damage to the temporal lobe

Possible complications:

- Inability to understand warning sounds can place individuals at risk
- A loss of auditory perception can be isolating and lead to depression
- When individuals cannot understand what they are hearing they may become frustrated and/or embarrassed

WHAT CAN WE DO?

- Ask the survivor to repeat verbal instructions
- Reduce auditory distractions (e.g. turn the radio down, avoid crowds)
- Give survivor extra time to process verbal communication
- Write down instructions to help the individual understand

Disclaimer: This information is not meant to replace advice from a medical doctor. Consult a health care provider regarding specific medical concerns or treatment.