

FACT SHEET



Physical Changes After Brain Injury Sensory - Hearing

QUICK FACTS

- May occur due to physical damage to the ear or a impairment in how the brain processes the sound
- Possible hearing difficulties include:
 - » **Tinnitus** - ringing in the ears
 - » **Hyperacusis** - hypersensitivity to sound
 - » **Meniere's syndrome** - pressure and pain in the ear
 - » **Auditory agnosia** - inability of the brain to understand or recognize certain sounds and their meaning (i.e. hear the phone ring but not know what to do)
 - » **Hearing loss** - sounds are muffled, less clear, and ears may feel plugged

WHAT MIGHT IT LOOK LIKE?

- Restlessness, irritability, agitation
- Becoming overwhelmed in certain environments (i.e. restaurants, stores, social gatherings)
- Inability to concentrate
- Difficulty following instructions and conversations

WHAT ARE THE POSSIBLE CAUSES AND COMPLICATIONS?

Possible causes:

- Damage to the tiny bones of the middle ear
- The inner ear or cochlea could also be fractured
- Damage to the areas of the brain which process sound
- May worsen with:
 - Exposure to loud noises
 - Alcohol, nicotine, and drugs/medications
 - Quinine found in tonic water

Possible complications:

- Increased frustration and fatigue
- Feelings of isolation and depression

WHAT CAN WE DO?

- Limit conversations to one or two people
- Stand handshake distance away
- Get attention before speaking and face individual
- Hearing aids may be prescribed
- Use of other forms of communication to complement speech (i.e. written, pictorial)
- Avoid staying completely away from everyday sounds as you can become hypersensitive
- Slowly increase the exposure to noise in small increments
- Use earplugs or ear muffs when necessary
- Go to places when they are less crowded or noisy
- Ensure proper diet, sleep and exercise
- Reduce salt if fluid pressure is experienced in the ear
- Encourage listening to music, having a fan running, or playing white noise to help mask the ringing in their ears from tinnitus

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