

## Managing Noise Sensitivity

### Key points

1. It's very common after a brain injury to find it difficult to be in noisy environments.
2. Being surrounded by sound may bring on your symptoms, perhaps causing you to avoid places and events. This avoidance can contribute to feelings of isolation and anxiety.
3. There are ways to help manage noise sensitivity. First, use techniques to cope with noise. Second, gradually introduce noise to build tolerance.
4. Dealing with noise sensitivity takes time. Don't be discouraged if you don't see improvement right away.

### Noise sensitivity after a brain injury

Your brain may not process auditory information the way it did before your injury. Your brain will use more energy than it did before in noisy environments. Because of this, you may experience anxiety, disorientation, headaches and other symptoms in places that never bothered you before.

### How can noise affect you?

Being in a noise-filled place – such as a grocery store, restaurant, sporting event or social gathering can be disabling and uncomfortable. You may have difficulty concentrating and participating in conversations. You may want to avoid noisy places making you feel isolated and alone, bringing on anxiety and depression. If you are affected by noise sensitivity, you can take steps to manage loud environments – and to increasingly build your tolerance to noise.

### How to manage noise sensitivity

- Use strategies and tools to help your brain cope with noisy environments.
- Introduce your brain to noise gradually and build your tolerance.
- You may want to see an audiologist experienced in treating individuals with a brain injury.

## How to cope with noisy environments

- When going out, choose less-noisy environments to begin such as a:
  - small, quiet restaurant instead of a large crowded one
  - viewing gallery at a hockey rink, rather than inside the rink
  - small grocery store at a less busy time of day.
- Limit the amount of time you are exposed to noise.
- Identify sources of uncomfortable noise and make a change (for example, turn down the volume of the music or stand farther away from an exhaust fan).
- Take breaks in a quiet environment. Use techniques, such as mindfulness, to help settle your symptoms.
- Wear noise reduction or musician's ear filters for the time you're in a noisy setting, but not all day.\*
- Wear noise-cancelling ear buds to cancel out some background noises.\*

## Strategies to build noise tolerance

Tolerance refers to how much noise you can be exposed to without making your symptoms worse. Start building your tolerance at home. Choose a noise that is comfortable for you, such as nature sounds, beach waves, city traffic, crowd noise or instrumental music. Listen to the sound at a comfortable level. Start with listening for 10 minutes and gradually go longer (to 30 minutes). Some suggestions for mobile apps that have a variety of different sounds to try are:

- White Noise
- Noisli
- Coffitivity

When you are comfortable with these simple noises, begin listening to talk radio, podcasts or music (noises that will stretch your tolerance). Again, listen for 10 minutes, increasing your listening time up to 30 minutes or more.

You can increase your tolerance by increasing the:

- types of sounds you listen to
- volume of noises/sounds
- length of exposure to noise/sounds

## Building tolerance takes time – be patient

Consistent practice is the key to building tolerance and keeping your concussion symptoms under control. Take small steps over time to improve your noise sensitivity. Your symptoms may get worse before you start to notice a change. However, the techniques and strategies outlined above are part of the process of planning and pacing your activity. Plan before you go into a noisy setting and pace yourself to become more and more accustomed to noises and sounds.

\* Overusing ear filters or noise-cancelling ear buds can worsen your noise sensitivity. Use them only when you go to noisy environments, not when you're at home. Ensure you gradually wean yourself off from these devices, so you can build noise tolerance.