

## Light sensitivity

What is light and visual motion sensitivity and how can it impact you?

Sensitivity to light is a very common symptom after a brain injury/concussion. People often find bright indoor or outdoor light is uncomfortable to be around. Bright light can cause eye pain, headaches or fatigue. Fluorescent lighting often increases concussion symptoms. Many people find being in a visually busy environment such as a shopping mall or grocery store is very difficult and symptom provoking. They then avoid these places and social situations, which can lead to social isolation. This avoidance does not help them recover from their brain injury/concussion.

How to reduce light and visual motion sensitivity

1. Use strategies and tools that allow your brain to tolerate light and visual motion.
2. Gradually and consistently introduce your brain to light and visual motion to help reduce sensitivity.

A referral to an optometrist with experience treating individuals with a brain injury may be helpful. You can find an optometrist online at <https://www.visiontherapycanada.com/find-a-doc/>.

Strategies for coping with light and visual motion in your environment

- **Wear sunglasses outside:** Try different colour lenses to see which is the most helpful in reducing your sensitivity to light.
- **Wear lightly tinted glasses indoors, on overcast days or driving at night:** Again, try different colour lenses to see what is most comfortable and effective.
- **Wear a hat with a brim:** Indoors or outdoors a hat can reduce the amount of light and motion your eyes and brain need to process.
- **Try different lighting options indoors:**
  - access natural light whenever possible
  - use lamps instead of overhead lights
  - use LED lights on a dimmer rather than incandescent or fluorescent lights
  - remove one or two tubes from overhead fluorescent lights to help reduce the brightness.

- **Try binasal occlusion:** this strategy is explained in the following video and can be especially helpful for visual motion sensitivity
  - <https://www.sjhc.london.on.ca/regional-acquired-brain-injury-program/patients/vision>

### Improving your ability to tolerate light and visual motion

Expose yourself gradually to light. Do not hide in a dark room or live with the lights off. To challenge your brain to handling light work on:

- opening your curtains
- turning on lamps
- taking off your sunglasses

Then, work your way up to walking outdoors wearing lightly tinted sunglasses. Set a timer to keep track of your progress as you gradually increase the amount of time you are in a brighter environment.

For visual motion sensitivity try to start introducing movement into your environment. Start by:

- gently turning your head while you are walking
- walking on a patterned carpet
- throwing and catching a ball
- going into smaller stores for a short period of time and gradually progressing to bigger and busier environments and longer time periods.

### Remember

Building tolerance to light and visual motion takes time and consistency in order to see improvement. Your symptoms may get worse before they start to improve but we have seen patients slowly but steadily make changes in this area using the strategies outlined above.