

# MANAGING VISION CHANGES

## Following Concussion/Mild Traumatic Brain Injury

Traumatic Brain Injury Center of Excellence



### WHY AM I HAVING VISION PROBLEMS AFTER A CONCUSSION?

You are able to see the world around you because of a complex process that takes place between your eyes and your brain. Your eyes take in information from your surroundings, and your brain—which is connected to your eyes—processes and makes sense of the information. Vision depends on both your eyes and brain performing their unique functions properly. If there is damage to either one of them during concussion, you can have vision problems. A concussion can affect vision by damaging the eyes themselves, muscles that surround the eyes or parts of the brain involved in vision. Even small vision changes can affect your daily life by making it difficult to read, drive, exercise, and carry out work or school activities.

### WHAT ARE SOME POSSIBLE VISION PROBLEMS AFTER A CONCUSSION?

- Blurred Vision
- Bumping into objects or falling frequently
- Difficulty focusing
- Difficulty reading or frequently losing your place when reading
- Discomfort and dizziness in busy environments
- Double vision
- Dry eye
- Eye discomfort or pain
- Headaches with visual tasks
- Sensitivity to light

### WHAT SHOULD I DO IF I AM EXPERIENCING CHANGES IN VISION AFTER CONCUSSION?

Many people experience visual problems during the first 1–2 weeks after a concussion. However, it usually resolves on its own without the need for treatment. If your symptoms continue, contact your primary health care provider. They may refer you to an eye care provider, such as an optometrist, ophthalmologist, neuro-optometrist, occupational therapist or physical therapist for treatment.

## WHAT CAN I DO TO HELP MANAGE VISION PROBLEMS?

### 1. Increase print and image size

Use a magnifying device to make objects bigger. Increase font or image size when using electronic devices.

### 2. Keep your eyes moist

Use over-the-counter eye drops to lubricate your eyes and relieve any dry eye.

### 3. Minimize bothersome light sources and glare

Minimize bright, intense, blue and fluorescent light. Use natural light when possible. To minimize glare, cover surfaces that reflect light. For example attach a non-glare filter to your computer screen.

### 4. Reduce visual strain

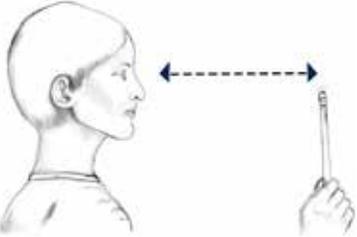
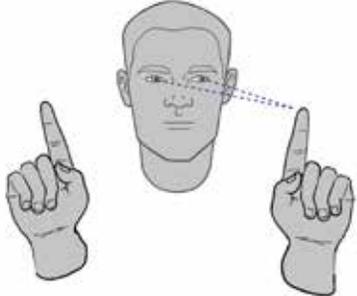
Keep all items needed to complete a task together in one place. Store items that you frequently use, for example house keys in a consistent location. Try to organize your eye movements by following a visual pattern when searching for an item in a room, for example looking up and down and then left to right.

### 5. Take frequent breaks

Follow the 20-20-20 rule: every 20 minutes, try to look away at something that is 20 feet away from you for at least 20 seconds. This will give your eyes a break when reading, watching television or using electronic devices.

### 6. Try vision exercises

Speak with your primary health care provider before starting these exercises to ensure that they are safe for you.

Exercise	Frequency <i>To be completed by health care provider</i>	Description	Instructions	
<b>Pencil Push-Ups</b>	_____ sets _____ repetitions _____ times daily	This exercise improves the ability of your eyes to work together when focusing on an object that is close by.	<ul style="list-style-type: none"> <li>• Hold a target—such as a pencil—in front of you at arm’s length</li> <li>• Slowly bring the pencil towards your nose, watching the target carefully and continuously with both eyes</li> <li>• When or if you see two pencils, stop moving the pencil towards you</li> <li>• Try to make the pencil clear (non-blurry and one pencil). You may have to move the pencil out slightly till you see one pencil again</li> <li>• Focus on the pencil tip for 5–10 seconds, and push it back out to arm’s length</li> </ul>	
<b>Saccades</b>	_____ sets _____ repetitions _____ times daily	This exercise improves the ability of your eyes to move quickly when moving your focus from one object to another.	<ul style="list-style-type: none"> <li>• Hold two fingertips in front of you at arm’s length, about 12 inches apart</li> <li>• Keep your head still during the exercise. Move only your eyes</li> <li>• Move your eyes as quickly as possible from point to point</li> </ul>	



## ADDITIONAL RESOURCES

Vision Center of Excellence: [vce.health.mil](http://vce.health.mil). Works with TRICARE, Military Health System, VA and other centers of excellence to improve vision health of service members, veterans, families and beneficiaries.