

Visual Stimuli

When we have vestibular disorders, we are more dependent on our central vision and ignore our peripheral vision. It's also common to experience visual motion sensitivity. You may have trouble with

Anxiety about driving

If you are anxious that something may go wrong, it could start the dizzy-anxious-dizzy cycle. This is not your fault, and the anxiety around driving can absolutely be helped.

Head Movements

Moving your head is very stimulating for the vestibular system, so when you move frequently with driving it can be difficult for your vestibular system to adjust.

Eye Movements & Teaming (binocular vision dysfunction)

Saccadic movements (eye 'jumps') and BVD can both cause dizziness when not treated. <u>Saccade practice</u> and eye teaming exercises help.

Motion Sensitivity

Being sensitive to motion with a vestibular disorder is common. Your threshold to motion sensitivity is lowered and your sensation is higher. Reorienting your body to space and motion helps solve this.



Intro to Driving

Driving Part 2

Driving Exercises

OPTOKINETIC VIDEOS:

Mountain to ocean views
Washington DC

Driving Through a Tunnel
Driving down a Road

** all optokinetic videos are open source on my YouTube Channel, but here are a few to get you started now that you know how to use them



US Government Stance on Dizziness and driving:Direct Quotes:

<u>Acute labyrinthitis:</u> Patients with acute labyrinthitis or positional vertigo with horizontal head movement should be advised not to drive at all until their condition has subsided or responded to treatment.

<u>Recurrent attacks of vertigo:</u> Patients who are subject to recurrent attacks of vertigo that occur without warning also should not drive until it is certain that their spells of dizziness have been controlled or abated.

Acute labyrinthitis, Benign paroxysmal vertigo, Meniere's Disease, Recurrent Vertigo: **should not drive while symptoms persist.**

Source:

https://www.nhtsa.gov/sites/nhtsa.gov/files/medical20cond20809 20690-8-04_medical20cond2080920690-8-04.pdf



Answer these before you drive:

- What are your prodrome or aura symptoms? Are they enough to pull off the side of the road?
- Are you having an active attack right now?
- Do you think you feel safe driving if you got into a stickier situation?
- How are your reflexes?
- Have you practiced driving with someone else? Have you practiced driving in physical therapy?
- Can you turn your head quickly In different directions without dizziness?
- Can you tolerate videos of driving?

EXERCISES BEFORE DRIVING

What to Work on

- Quick head turns
 - Turning to check your blind spot and turning head to stop signs
 - Turning to reverse
- Spatial awareness eyes open and closed,
 - Does it feel like you have awareness of where the you and the car are in space?
- Tracking and moving eyes
 - Saccadic exercises
 - Visual Tracking
 - Jogging with head turns
- Can you sit in the car and use the blinker, shift, etc.?
- Peripheral vision
 - Binasal occlusion glasses, <u>shaking your thumbs in</u> <u>the periphery</u>



EXERCISES BEFORE DRIVING

What to Work on

- Visual vestibular integration
 - Optokinetic Stripes & videos
 - <u>Stripes</u> for short amounts of time for seated and standing vestibular stimulation
 - Driving videos
 - These are listed in the module!
- To make this harder, stand or sit on an uneven surface, get closer to the screen (it should be 90% of your visual field)

RETURNING TO DRIVING

Getting in the Car



- 1. Get In the car, and depending on how long it's been since you last drove, refamiliarize yourself with the car.
- 2. Start the car and place your hands on the steering wheel. Turn the blinkers on and off, test out the other functions, like windshield wipers, while the car is not moving.
- 3. Practice head turns, quick and slow, and all the way behind you, like you would to change lanes or reverse.
- 4. Ask someone to drive you to an empty parking lot (like an empty elementary school on the weekend)
- 5. Perform 1-3 In this new environment and consider how you feel about starting to drive.
- 6. Put the car in drive, if you're comfortable, and drive straight down the parking lot.
- 7. If that is comfortable, drive straight again but practice small head turns.
- 8. Slowly begin to add in turning the car, stopping at stop signs with head turns, and other functional movements.

RETURNING TO DRIVING

Getting in the Car



- 9. When you are comfortable in the parking lot, move on to back roads and calm neighborhoods.
- 10. Slowly become more and more comfortable with driving on streets that may have other cars, obstacles, stop signs, and stop lights.
- 11. Practice left and right turns in the car, as well as looking in all necessary directions.
- 12. Progress to larger roads, with and then without, a passenger, as you feel more comfortable.



- Use the optokinetic driving videos to help with motion sickness.
- Set your peripheral mirrors in a comfortable spot before driving so you don't have to move your head as much
- Use your GPS <u>always</u> because vestibular disorders can make it difficult to determine navigation on your own
- Avoid distractions like eating, drinking, music, or using your phone.
- Avoid large expansive roads, ones with many switchbacks, or a single-lane roads (especially near a cliff).
- Dismiss the noise find translucent window covers that you can see through but decreases the light transmitted through the windows
- Wear your <u>migraine glasses</u>



- Focus on the horizon
- Nausea relief bands
- Bring water and snacks
- Take breaks as needed (once/hour for 5 minutes to walk around and give your vestibular system a break)
- Dismiss the noise find translucent window covers that you can see through but decreases the light transmitted through the windows - be sure the driver can still see & there are not blind spots!
- Wear your <u>migraine glasses</u>



Remember: this module is for informational purposes only and may not be the best fit for you and your personal situation. It shall not be construed as medical advice. The information and education provided here is not intended or implied to supplement or replace professional medical treatment, advice, and/or diagnosis. Always check with your own physician or medical professional before trying or implementing any information read here.