

ON WITH LIFE
BRAIN INJURY + STROKE + NEURO

Navigating Driving Rehabilitation in a Neuro Setting

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SMALL STEPS. GIANT STRIDES.

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Who are the Speakers?

- Andy Nelson, Owner Safer Driver Solutions
 - Lead Instructor, Driver Rehabilitation Professional, MBA
 - President, Iowa Association of Safety Education
 - President, ADED Iowa/Nebraska Chapter
- Michelle Flora, COTA, CBIS, CSRS, LSVT Certified
 - Driving Rehabilitation COTA
 - Working towards Driving Rehab Professional (DRP)
 - Lead of driving rehab program at OWL

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Objectives

- Understand the steps and progression of our driving rehabilitation program and the difference between private driving education, and clinical driving rehab programs
- DOT rules/regulation on return to drive after a neuro injury
- What Health Care professionals should be aware of and when to refer to return to drive
- Case studies on challenging and unique cases

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Who is Safer Driver Solutions?

- Our services towards Independent Living
- Programs
 - Driving for Exceptional Learners
 - Driving with Physical Disabilities
 - Driver Rehabilitation
 - Driving Evaluations
 - Driver Education - Teens & Adults And International



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Driving for Exceptional Learners Program?

- Who we serve
 - Autism, Anxiety, ADHD
 - Cognitive disabilities -
 - Downs Syndrome, Executive Functioning Disorders, Learning Disabilities
 - Deaf and Hard of Hearing, Low Vision
 - Everyone learns at their own pace.
 - We need to give them time to learn, understand, practice, fail, practice and then succeed.



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Driving with Physical Disabilities- Heartland Mobility

- Who we serve
 - Physical Disabilities -
 - Paraplegic, Paralysis, Left Foot Accelerator, Neuropathy
 - Prescription for adaptive equipment in vehicles, training

Driver Rehabilitation

- Who we serve
 - Medical patients
 - Workers comp clients



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Driving Evaluation

- Who we serve
 - Medical patients
 - DOT referrals
 - Family referrals
 - State agencies to determine ability to drive

Driver Education



- Who do we serve
 - Teens ages 14 - 18
 - Adults 18 & up
 - International residents who need a license



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New Drivers



- This is the view 90% of your new, disabled drivers have seen.
 - Ask your new driver when they have actually sat in the front seat.
 - The answer may surprise you.

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New Drivers View

This is the common view they have. They do not have any idea what the view is from the driver's seat. Suddenly, they are expected to understand it all.




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New Drivers View

If this image were presented to you....

And you were told that you are going to learn to drive this today.....



Would you know what to do? Would you think you could learn this?

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Questions to Ask New or Rehabing Drivers

- How do you start the car?
- Where is the brake pedal?
- Where is the accelerator pedal?
 - Would they even know what that is. We have to use terminology they understand.
- What is a taillight?
 - What color is it and where do you see it on other vehicles?
- What is the speedometer?
 - What does it tell you? What is speed? What is safe speed?
- Where is the turn signal switch?
 - What does it do? Why do we use it?
- What is a blinker?
- What are you looking for when looking outside the windshield?
 - How do you explain that to your new driver or driver re-learning?
- Why are there mirrors on the sides of the car?
 - How do you explain their function?
 - How do I know where they should be set?

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We are the EXCEPTION to the Rule on training drivers with disabilities.

- Individuals with disabilities should have the same opportunities to learn how to drive as their peers.
 - Their success depends on instructional techniques and understanding that this takes individualized instruction
 - Each individual we work with will be different from the next
- Consider the new driver who wants to learn or the driver trying to re-learn after an injury or medical affliction




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Safer Driver- Driving R

1. We accept referrals from any source; IVRS, DHS, Private, Medical and Non-physician
2. Intake process on our website
 - Medical Intake
 - Medical Releases
 - New Driver Intake Form
 - New Driver Health Questionnaire
3. We meet the client, discuss the situation and goals.
 - a. If the client has no permit or lost it, we can administer the permit test instead of the DOT.
 4. We schedule a clinical and/or driving evaluation. Most of time it is a Driving Evaluation.
 - a. For us, the in-vehicle evaluation is the best step.
5. Identify the needs and either move forward or agree to cessation.
6. Training begins and we set a goal based on the scheduling for completion between 30 - 90 days.
7. We schedule certify individuals under 21 who do not have an adaptive equipment requirement.
8. We schedule individuals 21 and over with local courthouse driving tests and provide the vehicle until licensure.
9. For those with adaptive equipment needs... It's a work in progress....
10. We follow up with all our clients every 3 months to discuss progress and new driving goals.

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Funding Safer Driver

	Driving for Exceptional Learners	Driving with Physical Disabilities	Driver Rehabilitation	Driver Evaluations	Driver Education
IVRS	\$	\$	\$	\$	\$
SSI - Pass	\$	\$	\$	\$	\$
Private Pay	\$	\$	\$	\$	\$
Vet Admin		\$	\$	\$	
Insurance		\$	\$	\$	
Workers Comp		\$	\$	\$	



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Driving Post Neuro Injury

- Traumatic Brain Injury (TBI) and Acquired Brain Injury, typically occur due to a physical injury or through neurological impairments.
 - These types of neuro injury can often lead to affecting your ability to drive, and drive safely
- Symptoms:
 - Visual response and accuracy
 - Physical reaction time
 - Memory
 - Problem solving skills
 - Executive functioning skills
 - Physical function

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Clinical Based Driving Programs

- OWL Driving Program
 - Completed through outpatient Occupational Therapy
 - Collaboration between all disciplines (SLP, PT, Counseling, neuro-psych)
 - Looking at driving readiness
- Formal On the Road Evaluation
 - Started Formal Driving Evaluations in September, 2021
 - 3-5+ driving evaluations a month
 - Typically seeing Person Served who have had a neuro injury of stroke, TBI, SCI, progressive neuro diseases, general public
 - Collaboration: Primary Care Physicians, Neurologist, PM&R Physicians, Vision Specialist, DOT, Neuro Psychologist, and care partners
 - Out of pocket expense

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Driving Rehab in the Neuro Setting:

- Referral is attained by physician, care partner, or driver themselves
- OT evaluation identifies need or desire for return to driving and creates a goal
- Assess baseline functions through written assessments, Dynavision, and driving simulator
- Continued collaboration with person served, care partners, and health care professionals
- Towards end of treatment identify next steps/make recommendations
 - Gradual return to driving
 - Formal driving evaluation
 - Driving re-examination through DOT

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Common Question

- Question: How many hours do you tend to go with a person served or client before you stop or discharge?
- Answer: Every Person Served or client is different

Private Practice	Clinical Practice
What to look for: <ul style="list-style-type: none"> • Driving environment • Need of independence • Cognition • Physical Capabilities • On the road performance 	What to look for: <ul style="list-style-type: none"> • Cognitive gains • Progression with assessments • Progress with reaction time • Progression on the simulator • Vision • The driving environment they wish to return to
Time: <ul style="list-style-type: none"> • 30-40 hours on the road 	Time: <ul style="list-style-type: none"> • 1-3 months • Sometimes second or third episodes of care

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Domino Effect of Premature Reporting:

- Physician informs DOT office of a recent medical episode
- DOT notifies person served/clients of a temporary or indefinite suspension of license with schedule of re-examination
- **RED FLAG!**
- Detriments:
 - Potentially not ready, not fully recovered from their injury, and are still rehabbing back to their fullest potential
 - Pre-mature re-examination may cause further damage to their driving record, setting them up for failure, further delaying their independence, and ability to work

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Iowa DOT Guidelines

What types of health conditions can affect my driving ability	My license is expiring soon, will I need my doctor's approval to renew my license?	Are there specific requirements after a seizure or blackout?
Seizure Blackout/Loss of consciousness	Any health condition that could affect driver fitness may result in a request for a completed medical report and/or a driving exam when presenting to renew your license.	Iowa rules require a six-month, episode free period verified by a satisfactory medical report before licensing. Exceptions- • Single, nonrecurring episode with an identified cause and treatment is not required • Has been identified as syncope. • Occurs only when asleep. • Withdraw from medication
Diabetes Neuromuscular disorder Sleep disorder Heart problem Dementia or cognitive impairment Mental illness Substance abuse		

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DOT Medical Re-examination Process

- Informed by a physician that a patient is not fit to drive at this time due to a change in medical status, loss of consciousness, or seizure like episode

Per Iowa Code:
Chapter 761-605.4(4) of the Iowa Administrative Code states in part:
The department shall not knowingly license any person who suffers from syncope of any cause, any type of periodic or episodic loss of consciousness, or any paroxysmal disturbances of consciousness, including but not limited to epilepsy, until that person has not had an episode of loss of consciousness or loss of voluntary control for six months, and then only upon receipt of a medical report favorable toward licensing.

- Suspension placed on the driving record
- New medical clearance report completed by a physician
- Appointment of Re-examination at DMV
- May need to appeal
- A temporary driving permit granted for on the road evaluation

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What To Expect at the DOT

1. Try and schedule the drive test at a county courthouse if applicable.
 - a. Even if you have to drive an extra 30 - 60 miles, it will be worth it.
2. Practice beforehand in the town. Learn the area.
3. Plan to be there 30 minutes ahead.
4. They will do the vision exam first, then review the drive test policy.
5. The vehicle that will used on the test must be in excellent working order.
 - a. All lights must work, turn signals, brake lights, back up lights and headlights.
 - b. Horn must work.
 - c. Both front and rear license plate must be on
 - d. You must provide registration. It must be up to date.
 - e. You must provide proof of insurance.
 - f. The driver must have their instructional permit and it must be current.
 - g. Vehicle should be clean and free of debris.
 - h. No one can ride with the examiner during the test.
 - i. Except a driver who is deaf. An interpreter is allowed.
6. The DOT Drive test lasts about 15 minutes.
7. A pre-trip policy document is provided prior to the beginning of the drive to read.
8. During the drive, the driver may ask the examiner questions related to a direction that was not understood for clarification.
9. During the test, the examiner will both speak and use hand signals to communicate directions.



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Courthouse VS DOT Service Center

Courthouse:

- Examiners are more compassionate
- You can stop in and talk to them
- They get to meet the client prior to the drive test and Humanizes them. They are not just a number.



DOT Service Center:

- Examiners are overworked, busy and often grumpy.
- They never seem to have a good day and are often biased towards those with disabilities.



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What We Recommend

- After a neuro injury or change in medical stat and prior to discharge from hospital a conversation between physician and Person Served/Client related to driving should occur
- **Document that Person Served should not drive until follow up with primary care physician, or referring medical professional**
 - In that time period a person should be seen by OT therapy or Driving Rehab Specialist to determine driving capabilities
 - Typically, 4-6 weeks before follow up with primary physician
- Driving Rehab Specialist or Occupational Therapist can provide recommendations to primary physician on course of action after that period of time and if need to notify DOT for a **re-examination** is necessary

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Key Takeways

1. Spend time learning about your client and their condition.
2. Refer to a driving rehab program and driving rehab professionals before initiating DOT re-examination
3. Be prepared to spend the appropriate time with instruction and rehab. Work with the client until they have a license, or it is determined they are not able to drive safely.
4. If you are unsure, reach out for help before terminating services.
5. Explore all the options

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OWL Case Study #1

Person Served: 41 y/o, Female
 Diagnosis: CVA
 Timeline of Neuro Injury:
 • 12/2021: L MCA CVA
 Symptoms: Aphasia, Dysphasia, R hemiparesis
 • 1/2022: D/c home
 • 2/2022: OWL initial evaluation
 • Driving goal added 3/2022
 • 3/2022: Driving Evaluation Scheduled
 • 5/2022: DOT Re-exam scheduled, cancelled due to illness
 • 6/2022: Hospitalization, Evaluation postponed
 • 8/2022: Diagnosis w/ MoyaMoya
 • 12/2022: Driving Eval
 • Barriers to Driving Readiness: Hemiparesis, Aphasia, Dysphasia

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Safer Driver Case Study #1

Person Served: 21 year old Male

Diagnosed with Downs Syndrome

Main Limitations - never driven before

Solution: Worked with us and got his permit. Had 40 hours of training with us.

Passed the DOT Drive Test.

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OWL Case Study #2
 Person Served: 19 y/o, Male


Diagnosis: TBI, Subdural Hemorrhage

Timeline of Neuro Injury:

- 10/2022 Fall
- 10/21/2022 discharged home with parents
- 11/2022: OT Eval
- Driving Only Goal

Barriers to Driving Readiness: L elbow injury, cognition, divided attention
 Driving Rehabilitation Outcomes: Recommended

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OWL Case Study #2- Outcomes

- Attended DOT re-examination appointment
- Was denied ability to sit for written or on the road due to loss of consciousness
- Put in appeal to medical board with documentation from PCP, PM&R, and OWL driving readiness report
- Granted re-instatement of license

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Safer Driver Case Study #2
 Person Served - 42 year old female

Diagnosis' - Mild intellectual disability, allergic rhinitis due to pollen, Hyperlipidemia, Essential tremor

Main limitations - Essential tremors, migraines, needed breaks every 15 minutes

Solution: Worked with us and got her permit. Had 40 hours of training with us.
 Passed the DOT Drive Test.

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QUESTIONS?

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Contact Info for Safer Driver Programs

Saferdriver.net 
IowaDriverRehab.com 



DRIVING FOR
ACCEPTABLE
LEARNERS



SAFER DRIVER



Heartland
MOBILITY



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Contact Info for OWL Driving Rehab Program

On With Life Return to Drive Program

- Ph: 515-289-9696
- Fax: 515-289-9649

Prior to scheduling an evaluation, we will need the following:

- Request a driving evaluation order from your primary care provider.
- Proof of valid Driver's License
- Copy of Eye exam note (must be from appointment in the last 6 (months)
- Payment

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