Parkinson’s Disease and Driving
Virginia Mason

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The ability to drive a car is a powerful symbol of independence that is closely tied to self-esteem and self-efficacy. Driving is often important economically, to get to and from work. It can also be important socially, to visit friends and engage in activities.
Skills for Driving

- **Motor**
  - Coordination of Limbs
  - Range of Motion & Strength
- **Vision**
  - Visual Spatial
  - Visual Perceptual
- **Cognition**
  - Attention
  - Memory

Driving is complex!
What the sign said...

What you saw...

GO MAN!
Parkinson’s Symptoms Affecting Driving

- Tremors
- Bradykinesia
- Rigidity
- Postural Instability
- Cognitive changes
- Visual Perceptual changes
Motor Skills

**Skill**

- Coordination of limbs
- Range of motion and strength

**PD symptom affecting skill**

- Tremors
- Bradykinesia
- Rigidity
- Postural instability
Visual Skills

Skill

Visual Spatial - the capacity to understand and remember the spatial relations among objects.

Visual Perceptual – using all your senses to evaluate and interpret the environment around you.

PD symptom affecting skill

Impaired ability to estimate the amount of space between themselves and objects around them; especially when they are in motion.

Reduced contrast sensitivity - the ability to distinguish between objects and their backgrounds which is especially challenging in situations of low light, such as fog, glare, or at night.

Slowness in perceiving and reacting quickly to changing situations/hazards.
## Cognition

<table>
<thead>
<tr>
<th>Skill</th>
<th>PD symptom affecting skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>Difficulty attending to one task; easily distracted; difficulty shifting focus quickly – slower thinking and slower information processing</td>
</tr>
<tr>
<td>Memory</td>
<td>Difficulty holding information long enough to utilize it for making decisions</td>
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Medications

- Many different types of medications may impair driving safety
- Talk with your physician to understand your medication’s benefits AND potential side effects which could affect driving
- Can affect: levels of alertness, judgement, coordination, reaction time, blood pressure, and vision
- Conversely, Parkinson’s medications may improve some symptoms.
- Driving ability may vary when meds are “on” vs. “off”
Who will know when it is no longer safe to drive?

- Person with Parkinson’s
- Family/Care Partner
- Physician
- Occupational Therapist – Clinical Assessment
- Certified Driver Rehab Specialist (CDRS)/(DRS)
- DMV
<table>
<thead>
<tr>
<th>I get lost while driving.</th>
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<tbody>
<tr>
<td>My friends or family members say they are worried about my driving.</td>
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<td>Other cars seem to appear from nowhere.</td>
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<tr>
<td>I have trouble finding and reading signs in time to respond to them.</td>
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<td>Other drivers drive too fast.</td>
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<td>Other drivers often honk at me.</td>
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<tr>
<td>Driving stresses me out.</td>
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<tr>
<td>After driving, I feel tired.</td>
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<td>I feel sleepy when I drive.</td>
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<tr>
<td>I have had more “near-misses” lately.</td>
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<td>Busy intersections bother me.</td>
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<td>Left-hand turns make me nervous.</td>
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<tr>
<td>The glare from oncoming headlights bothers me.</td>
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<tr>
<td>My medication makes me dizzy or drowsy.</td>
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<tr>
<td>Statement</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
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<tr>
<td>I have trouble turning the steering wheel.</td>
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<tr>
<td>I have trouble pushing down the foot pedal.</td>
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<tr>
<td>I have trouble looking over my shoulder when I back up.</td>
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<tr>
<td>I have been stopped by the police for my driving.</td>
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<tr>
<td>People no longer will accept rides from me.</td>
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<tr>
<td>I have difficulty backing up.</td>
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<tr>
<td>I have had accidents that were my fault in the past year.</td>
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<tr>
<td>I am too cautious when driving.</td>
</tr>
<tr>
<td>I sometimes forget to use my mirrors or signals.</td>
</tr>
<tr>
<td>I sometimes forget to check for oncoming traffic.</td>
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<tr>
<td>I have more trouble parking lately.</td>
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</tbody>
</table>
Family/Care Partner

From The Hartford - At The Crossroads

Warning Signs for Drivers with Dementia

Agreement With My Family About Driving

Create a transportation plan
Physician

- Concerns raised by patient or family
- AMA Physician’s Guide to Assessing and Counseling Older Drivers
- ADReS – Assessment of Driving-Related Skills
- MoCA – Montreal Cognitive Assessment - 18 or less
- Clock Drawing Test
- Trails B- Trail Making Test
- DOL-Physical Examination Report
Performs a Clinical Assessment of Driving Skills – 60-90 minutes in length – ordered by MD and results given to ordering practitioner

- Coordination of Limbs
- Range of Motion
- Visual Spatial Skills
- Visual Perceptual Skills
- Attention
- Memory
The outcome of this clinical assessment can be one of three options:

1. Continue driving – education provided
2. Concern for driving - recommend behind-the-wheel test
3. Retire driving – counseling provided

If you pass a driving evaluation, it doesn’t mean that you can continue driving indefinitely. Because symptoms of Parkinson’s disease and dementia usually worsen over time, it’s important to be re-evaluated every six months and stop driving if you do not pass the test.
Certified Driver Rehab Specialist (CDRS)/(DRS)

The Association for Driver Rehab Specialists – ADED

Can do both clinical and in-car assessments

• Return to independent driving
• Follow-up driver training sessions to improve driving skills along with training in use of adaptive equipment as indicated
• Therapy to increase functional skills necessary for safe driving
• Driving retirement
3 CDRS in Washington State
   – Northwest Driver Rehab/Assistive Technology Solutions
   – UW Driver Rehab Program

3 DRS in Washington State
   – VA Seattle
   – CHCH, Edmonds
Washington is NOT a mandatory reporting state

Driver Evaluation Request - can be made by any concerned party – DOL will follow up with a letter outlining next steps

Physical Examination Report – DOL will follow up if they receive this from your medical provider
“Giving up your driver’s license does not mean giving up! Foregoing the use of your automobile may save your life or the life of someone you love.”

“Driving can be a sensitive issue, but it does not have to be. Relinquishing the keys to your car is a selfless act of caring and compassion. It shows that you care about yourself and those who may be put in harm’s way. I hope you can take some of these points to heart because it could change your life.”
What else can OT do?

Focus is function! We can help with:
- difficulty with self-care activities
- home safety and adaptive equipment
- management of arm weakness, stiffness or tremors
- strategies for success at home and at your job around physical and cognitive challenges
- pacing and energy conservation
The Hartford – At the Crossroads – Family Conversations About Alzheimer’s Disease, Dementia & Driving

Driving and Parkinson’s

Parkinson Foundation – Should I Keep Driving?
https://www.parkinson.org/Living-with-Parkinsons/Managing-Parkinsons/Advice-for-the-Newly-Diagnosed/Should-I-Keep-Driving