

# Considerations for Driving with a Parkinson's Disease

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# **Outline**

- 1 Essential Components for Driving
- 2 Consideration of Risk
- 3 Safe Driving
- 4 Process of Assessment
- Technology & Safety
- (6) Resources

## The Driving Dilemma



Enables independence and community mobility



Important for maintaining quality of life



Supports a sense of identity and competence



Worry for burden to loved ones



Perceived stigma of losing license



Lack of confidence in taking transit

# **Essential Components of Driving**



vision



Hearing



cognition



Sensation

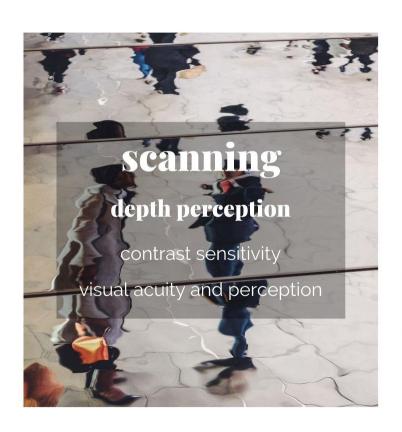


motor functions



Medications

## **Visual Perceptual Component**



- observe lines on the road or identify hazards in poor weather or at night
- check across traffic in full left and right visual fields
- judge distance to stop and start
- identify hazards and traffic signs

## **Physical Component**



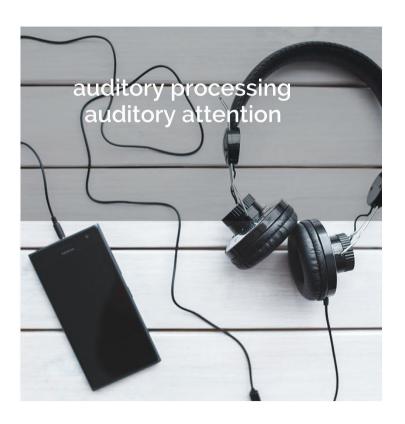
- operating vehicle controls using legs and arms
- completing hand-over-hand steering
- trunk stability for using controls and staying positioned when driving around corners
- quick response in an emergency situation
- transferring in/out of the vehicle and loading a mobility device
- rotation for shoulder checks and peripheral scanning

## **Cognitive Component**



- making decisions at the speed of traffic
- deciding who has the right of way
- defensive driving to avoid hazards
- attending to and shifting between stimuli
- planning and following route
- obeying traffic rules and integrating new information

## **Auditory Component**



- responding to sirens and emergencies
- localizing sounds with respect to your position
- understanding the meaning of sounds
- feedback to cognitive e.g.) indicator, direction assist

## **Sensory Component**



- determining pressure for gas and brake
- feedback for positioning of hands and feet without looking
- reaching for gear changes and dashboard controls

## **Medication Considerations**



- Symptom fluctuation with dosing
- Visual hallucinations
- Tone management
- Sleepiness, sleep attacks

## Consider your risk

- I only feel comfortable driving during the day
- I have trouble remembering where I put

 I frequently forget where I'm going or how to get there

the keys

- I often feel too tired to drive but do so anyways
- I sometimes get confused between the gas and the brake

- I'm not comfortable driving others
- I have trouble concentrating when the radio or GPS is on
- I do not want to discuss driving with my doctor because they will make me stop
- I have had multiple traffic violations or accidents
- My arms and legs do not always listen to what my brain tells them to do behind the wheel

## How can I remain a safe driver

#### **Discuss your Driving**

Discuss driving with your doctor or other health care professional as well as your family and friends

#### Reflect on your Driving

Assess your body, including physical and cognitive changes relating to your condition. You will be asked on renewal about changes in health status.

#### Ask for an Assessment

Better safe than sorry, ask for an assessment if you consider yourself at risk

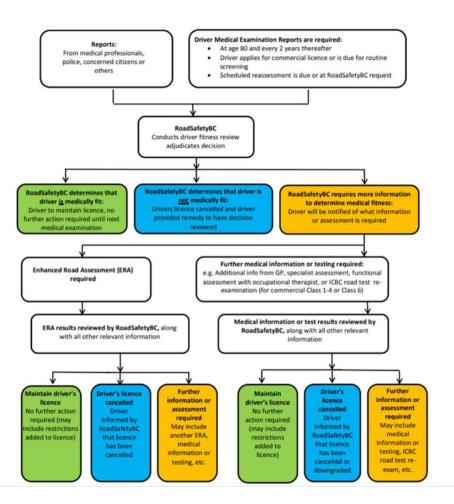
#### Be Open to Options

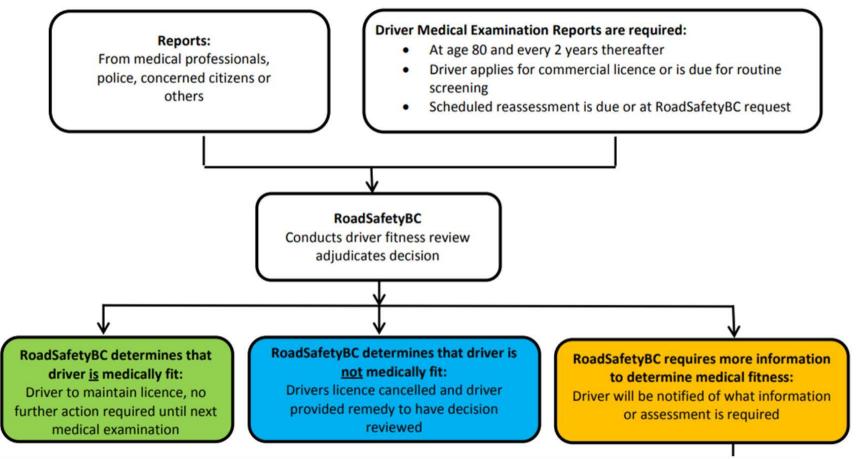
Stay flexible with options for driving and work with your family/support to make sure you are able to manage accessing the community

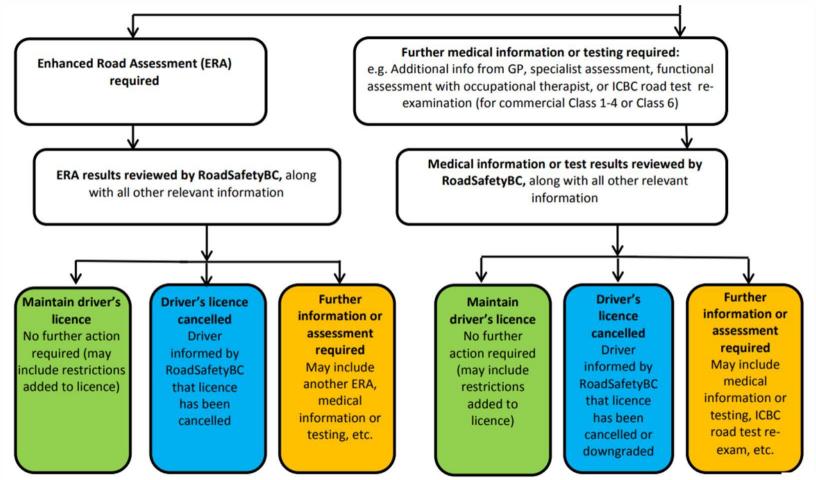
## General Safe Driving Tips

- After walking to the car, rest for a few minutes before driving to manage physical and cognitive fatigue
- Do a "check in" before driving, asking yourself how you feel
- Reduce distractions (turn off the radio, avoid conversation with passengers, turn off bluetooth calls)
- Plan your route and look it over if going somewhere new
- Pull over for a break if driving longer distances

- Ensure you are sitting comfortably and have good visual access.
- Bring a family member or friend along for support and feedback
- Plan out your day to avoid driving during rush hour, drive during non peak hours if possible
- Be aware of your medication routine and how it may impact your ability to drive (drowsiness, motor control)
- Check the weather and make sure the conditions are not a factor in your safety







## What is an Enhanced Road Assessment (ERA)



Sanctioned by Roadsafety BC



Conducted in your own vehicle



90 minute on road evaluation



Involves route reversal and driving skills



Not a secret:)

# What are the possible outcomes of an ERA?

- Continue driving with no changes
- 3 Discontinue driving

- Further medical information required
- Further assessment with FDE

## What is a Functional Driving Evaluation (FDE)?



Administered by occupational therapist or certified driver rehab specialist



1.5-3 hours of in-office assessment of physical, visual and cognitive abilities



1 hour on-road assessment with focus on functional, safe and practical driving

## What are the possible outcomes of an FDE?

Continue driving with no changes

Rehabilitation required to drive with modifications to vehicle or habits

3 Discontinue driving

## Adaptive Automobile Equipment

1 Mechanical hand controls/lateral foot block for foot pedals

Adaptive steering to involve less force/effort and more sensitivity

3 Spinner knob/modified texture grip for wheel

Wide angle rear view mirror & multiple angle mirrors

5 Specialized seats to ease transfers

6 Indicator/dashbaord/seatbelt extenders

# **Technology & Safety**



## Caregiver Role



- Hearing sensitive information from the right person can make a big difference
- Observe driving over time to understand changes in driving ability
- Look for a pattern of warning signs and for an increase in the frequency of occurrence
- Support in decision making; how much money could be available for alternative transportation if you were to stop driving
- Support in problem solving; explore ways partner can remain engaged in life's activities

## How do I prepare to stop driving?



- Practice using transit
- Finds ways to reduce your need to drive (e.g. grocery delivery)
- Seek support from family/friends
- Register for HandyDart
- Uber, Lyft or other ride share programs
- Research alternate modes of transportation
- Explore walking, biking, integrate activity

## Resources



Alternative resources



Dexterity and driving



**ERA** explained



Driving and PD



**CAA** material



PD video



Checklist



Alternate transit



## Literature

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