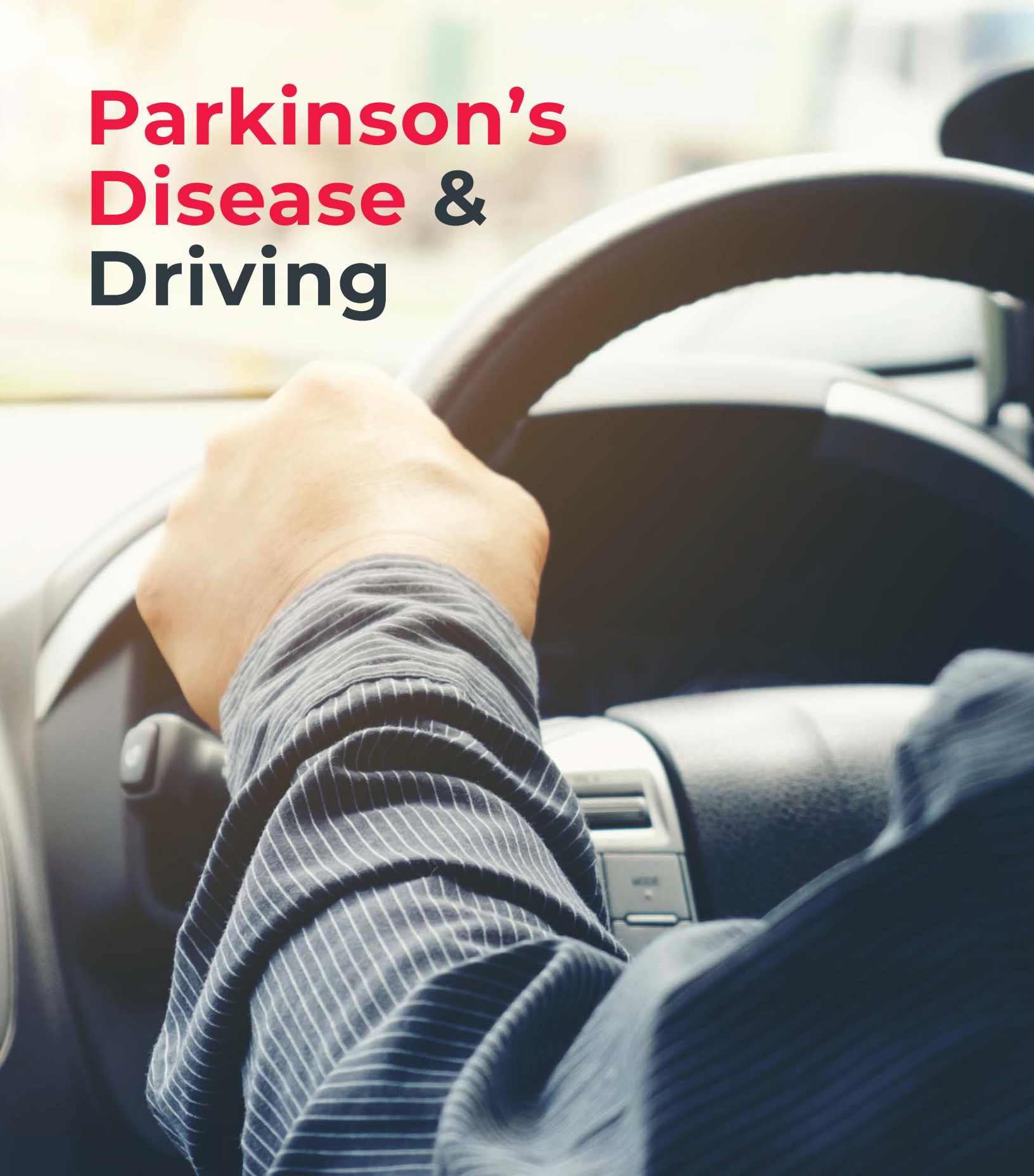


Parkinson's Disease & Driving



Parkinson's Disease and Driving



Driving is one of the most important things that we do on a daily basis. It is an essential part of many of our activities of daily living. It is how most of us get to work, school and various appointments; it's how we travel to and from household and social activities. Driving gives us independence and freedom.

Driving is a complex task that requires you to be aware at all times and be able to respond quickly to the constantly changing circumstances. Anything that impacts or affects your ability to drive should be taken into serious consideration. This includes Parkinson's disease (PD), which has physical, mental and emotional symptoms.

Research shows that even healthy people outlive their ability to drive by several years and most often this is due to changes in vision as we age. Most drivers however, do not plan to retire from driving as they age. Many people realize when their driving skills are diminishing, often resulting in decreased confidence on the road. In some cases, the fear of isolation or loss of independence overrides their judgment concerning their driving abilities, resulting in denial of having any problems. This is especially true for those with Parkinson's. People with Parkinson's may be additionally fearful that the need to stop driving indicates a progression in their disease.

If you have received a diagnosis of Parkinson's disease, then you should be aware of how the disease will affect your driving ability. This will help you to plan well in advance so you can continue to do the things you used to do when you are no longer driving.

Parkinson's disease (PD) is a very individualized disease. It differs from person to person. Because driving is a complex activity that requires your full attention – physically, mentally and emotionally – your ability to drive safely may be affected in different ways, and at different stages of the disease. PD can affect your driving by affecting your mental clarity, focus and ability to multitask. Slowness of movement may impact your reaction time. Changes in your visual perception may impair your ability to judge distances between other cars. Medication effectiveness, vehicle modifications and skills upgrading may only delay the inevitable.

Driving Skills Assessment

At some point after being diagnosed with Parkinson's, and before your symptoms become too advanced, you should consider having your driving skills properly assessed. For a person with Parkinson's (PWP) this assessment is two-fold: assessing their general driving skills relating to natural aging and assessing those affected by the PD symptoms. You may want to ask someone you trust to take a drive with you and help you evaluate your driving using the following checklist:

Driving Skills	Yes	No
Remembers to buckle seat belt.		
Checks and adjusts mirrors as needed.		
Transitions from one pedal to the other with ease.		
Comes to a stop at the appropriate time and distance.		
Remembers to use appropriate signals when changing lanes or turning.		
Checks 'blind spots' by turning neck and upper body with relative ease.		
Remains within the lane without straying.		
Drives at the appropriate speed with consistency.		
Adjusts their speed to traffic and road conditions.		
Obeys traffic rules, stops and signals.		
Yields the right of way as appropriate.		
Aware of other cars, bikes, riders, pedestrians on the road.		
Reacts in a timely manner to changing driving situations.		
Knows where they are at all times, especially on familiar routes.		
Plans ahead for exits and turns.		
Puts the vehicle into park upon parking.		

Red Flags

Oftentimes, those with conditions that affect their driving are aware of several 'red flags' that indicate their driving skills are declining and safety may be an issue. Those with Parkinson's may wish to realistically assess if any of the following applies to them:

Red Flag Questions	Yes	No
Have you had any 'close calls' or 'near misses'?		
Have you had any at-fault motor vehicle accidents or 'fender benders'?		
Have you been the recipient of honks or unpleasant comments from other drivers?		
Have family or friends refused to ride in the car when you are driving?		
Are you no longer allowed to drive your grand-children around?		
Have family or friends told you they are concerned about your driving?		
Have you failed to park your car after numerous attempts to do so?		
Have you received any tickets for any traffic violations?		
Has your car insurance premium been raised due to traffic violations or at-fault accidents?		
Have you been driving and somehow gotten lost in areas familiar to you?		
Have you had trouble reading street signs or seeing traffic signals in time to respond?		
Have you experienced problems following or remembering directions?		
Have you experienced issues responding to changing driving situations?		
Have you had moments of confusion, especially on familiar routes?		
Have you had problems planning your exits and turns?		
Have you forgotten to put the car into park upon parking?		

Improving Your Driving Skills

Everyone can benefit from improving their driving skills, particularly those with Parkinson's. Consider the following:

- *Ask your doctor if your medications can affect your driving skills and be honest in reporting sleepiness or dizziness*
- *Be aware of your energy levels throughout the day and avoid driving during "off" periods*
- *Practice good sleep hygiene techniques as much as possible to help with fatigue and only drive when well rested*
- *Avoid driving when medications are not working optimally*
- *Stay fit and physically active to maintain the range of motion and reaction time needed for driving and help with your energy level*
- *Work on stretching your neck and torso to maintain the flexibility needed to look over your shoulder while driving*
- *Maintain good posture to provide support and visual access while driving*
- *Eliminate distractions while driving:*
 - *Listening to the radio*
 - *Talking with a passenger*
 - *Avoid cell phone usage - even hands-free. Having a long conversation on a speaker phone can cause you to get distracted.*
 - *Eating or drinking*
- *Avoid driving after dark (our vision changes as we age)*
- *Avoid driving in bad weather*
- *Choose familiar, comfortable routes at non-peak hours whenever possible*
- *Consider using a GPS system in your car*
- *Share driving responsibilities whenever possible*
- *Drive a little slower – but remain in the safe range*
- *Stick to short-distance trips whenever possible*



Talking to the Driver with Parkinson's Disease

Talking to any person about their driving can be challenging. If you have noticed a decline in the driving skills of someone you know with PD, you may want to do the following:

- 1 Ride along as a passenger with the PWP to see first-hand how they are behind the wheel. Assess their driving skills using the checklist in this booklet. If you have any concerns, do not bring them up while they are driving!
- 2 Address the behaviours, not the person with Parkinson's, when you share your concerns with them. Avoid the blame and shame game. Consider the following examples:

Say	Do Not Say
<p>“You seemed to be a little confused at that intersection and I felt nervous as you didn't appear to know how to get out of the situation.”</p>	<p>“You got totally confused at that intersection. You didn't have a clue what to do and you scared me!”</p>
<p>“This afternoon, you were only doing 30km an hour when we were out and the speed limit along most of the route was 50km. Did you notice the cars lined up behind us? Is that common for you?”</p>	<p>“You were driving so slowly this afternoon that half the traffic on the road was piled up behind us – didn't you see that?”</p>

- 3 Prepare for some defensiveness and emotions. Driving is an important part of independence and self-worth. Recognize and acknowledge the PWP's past good driving record, if appropriate. Focus the discussion on the present.
- 4 Discuss their emotions and express empathy. Acknowledge and validate that giving up driving is a loss that requires a difficult period of transition.
- 5 Together, agree on a plan of action and time-frame. Self-imposed limitations may be the immediate option.
- 6 If you meet with adamant resistance, talk about the risks. Discuss the risks and dangers to the PWP and others if they continue driving unsafely. Talk to the health care team for support.



Here are the research findings¹ identifying persons with Parkinson's (PWP) as being less safe than non-Parkinson's drivers. Some of the problems identified include:

- Longer reaction times
- Problems shifting feet between pedals
- Difficulties with lane changing
- Checking 'blind spots' due to neck and upper body stiffness
- Reduced steering accuracy
- Responding to light changes due to vision impairments
- Difficulties parking and/or reversing
- Inability to break suddenly due to muscle cramping or leg edema from medications
- Reduced memory capabilities
- Slower judgement and decision-making
- Confusion due to early dementia
- Excessive daytime sleepiness due to disease or medications

¹ Foley DJ, Heimovitz HK, Guralnik JM, Brock DB. Driving life expectancy of persons aged 70 years and older in the United States. Am J. Public Health 2002;92(8):1284-9.



Transportation Options

Develop a list and plan for other forms of transportation. Further, develop a transition plan to a non-driving lifestyle. Here are some tips:

- Explore public transportation
 - Cost benefits - can be less expensive than maintaining a car (care, insurance, parking, etc.)
 - Transportation for persons with disabilities and seniors - there may be existing parallel transportation systems, with door to door service
- Investigate volunteer driver services offered by some agencies
- Look into the costs of rideshare programs - e.g. Uber, Lyft™
- Approach a retired neighbor or friend for a lift

Legislation

Parkinson's Disease is a progressive disease displaying both motor and non-motor symptoms, and the medications used to treat those symptoms have numerous side-effects. The Canadian Council of Motor Transport Administrators (CCMTA), in their *Determining Driver Fitness in Canada* (2015) publication, state that there is “a small but consistent body of research indicating that functional deficits associated with Parkinson's disease or its treatment may impair driving performance.” They go on to say that a “further consideration for driving is the fluctuation in the effects of the medication” resulting in ON and OFF-periods.

Also, according to the CCMTA, a driver's reassessment will be required if “the driver has a medical condition that is progressive”, and a driver reassessment is required - at a minimum - every 5 years if the condition is progressive. However, a reassessment interval can be set at one year if “a driver's cognitive function is impaired and the level of cognitive impairment is likely to increase over time”.

The **Canadian Medical Association's Driver's Guide – 9th edition (2017)** states the following:

“During the early stages, Parkinson's disease affects only fine coordination and therefore should not affect fitness to drive. With progression, impairment of the speed of gross movements and of reaction time may begin to make driving unsafe. The situation can be worsened by any associated cognitive impairment, side effects of medications (ex. somnolence, involuntary movements, hallucinations) and an increasingly unpredictable response to medication leading to “wearing off” and other motor function fluctuations”. They continue in saying, ***“The main concern is a delay in reaction time in response to complex traffic situations, which increases the risk of collision. Periodic assessment of cognitive processing speed will help in determining changes in reaction time.”*** For this reason, cognitive testing may be performed regularly by your health care team, followed by an on-road driving test, as deemed necessary.

Remember, your health care provider is responsible for identifying and assessing drivers who may be unfit to drive. In some provinces, physicians are legally bound to report certain medical conditions that may affect driving. For more information, contact your provincial ministry of transportation or transportation and driving authority.

It is important to remember that driving is not a right, but a privilege that carries certain risks. Giving up your driver's license can be an emotionally charged and upsetting process. It may mark the end of a stage in your life as a driver and a loss of independence. It also means that many of the activities that you once participated in, or managed on your own, will have to be changed, or performed by someone else. Your family and your health care team will help support you through this challenging process to ensure your safety and the safety of others.

For more information on provincial legislation, contact your provincial Ministry of Transportation.

ALBERTA

1-780-427-8230

310-0000 (Toll Free within Province)

Main Floor

Twin Atria Building Alberta

Transportation

4999 – 98th Avenue

Edmonton, AB T6B 2X3

BRITISH COLUMBIA

1-800-663-7867

1-250-387-6121 (Victoria)

1-640-660-2421 (Vancouver)

P.O. Box 9055,

Prov. Stn. Govt.

Victoria, BC V8W 9E2

MANITOBA

1-204-945-8912

200 - 301 Weston Street

Winnipeg, MB R3E 3H4

ONTARIO

1-800-268-4686

1-416-327-9200 (Toronto)

77 Wellesley Street West

Ferguson Block, 3rd Floor

Toronto, ON M7A 1Z8

NEW BRUNSWICK

1-506-453-3939

King's Place

P.O. Box 6000

Fredericton, NB E3B 5H1

NEWFOUNDLAND

1-709-729-4834

100 Prince Phillip Drive

P.O. Box 8700

St. John's, NL

A1B 4J6

NORTHWEST TERRITORY

1-867-767-9087

New Government Building

5015 – 49th Street, 1st Floor

Yellowknife, NT X1A 2L9

NOVA SCOTIA

1-800-670-4357

1-902-424-5200

Public Enquires

Nova Scotia

P.O. Box 2734

Halifax, NS B3J 3K5

NUNAVUT

1-867-975-7840

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1104C Inuksugait Plaza

P.O. Box 1000, Stn. 1575

Iqaluit, NU X0A 0H0

PRINCE EDWARD ISLAND

1-800-236-5196

(General Inquiries)

1-902-368-5271

(Driver's License)

P.O. Box 2000

Charlottetown, PE C1A 7N8

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1-800-361-7620

1-418-643-7620 (Québec)

1-514-873-7620 (Montréal)

Case postale 19600

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333, boulevard Jean-Lesage

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2260 - 11th Avenue

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1-800-661-0408

(Toll Free in Territory)

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