

"Life Doesn't Stop": Using the **Driving and Dementia** Roadmap (DDR) to Support Driving Cessation

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ASC-CCNA Brain Xchange September 22, 2022





TEALTH SCIENCES CENTR



Land Acknowledgement

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Acknowledgements

Funded by:

- Canadian Consortium on Neurodegeneration in Aging (CCNA) – Canadian Institutes of Health Research (CIHR) and Partners
- Centre for Aging and Brain Health Innovation (CABHI)
- Ontario Ministry of Health Academic Health Sciences Centres (AHSC) Alternative Funding Plan (AFP) Innovation Fund

Special Thanks to:

- Alzheimer Society of Manitoba
- Alzheimer Society of Niagara Region
- Alzheimer Society Nova Scotia
- Alzheimer Society of Saskatchewan
- Alzheimer Society Southwest Partners
- Alzheimer Society of Toronto

Overview

- 1. Background: driving and dementia
- 2. Development of the Driving and Dementia Roadmap (DDR)
- 3. Tour of the DDR
- 4. DDR early evaluation results
- 5. Next steps

Background: Driving and Dementia

Driving Cessation & Dementia

- Driving cessation is a complex, challenging and emotion-laden process for people living with dementia, their family/friend carers and their healthcare providers
 - Making the decision to stop driving
 - Transitioning to non-driving

 Requires a balancing of personal and public safety with psychosocial consequences

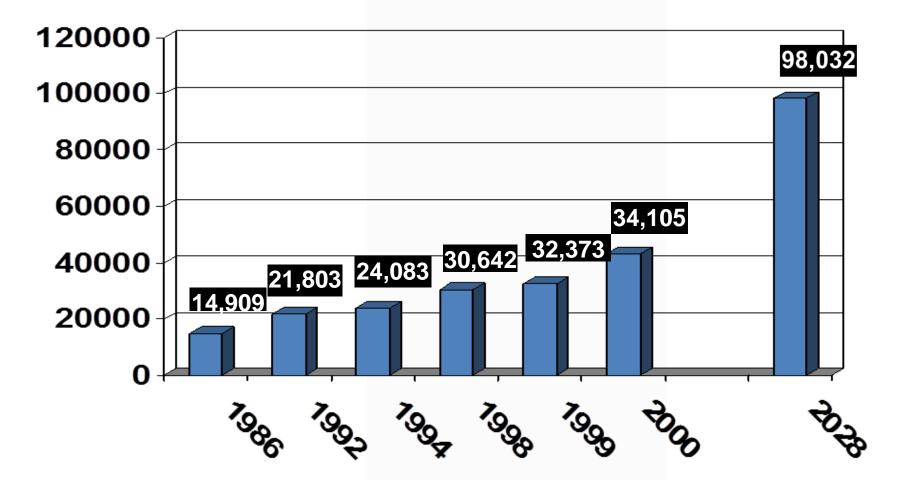
COSID – People with Dementia Driving

- Canadian Outcome Study in Dementia mild and moderate dementia
- 28% driving at baseline

Time Period	% Still Driving
2 Years	~50%
3 Years	~25%

Herrmann et al., CMAJ 2006

Estimated Numbers of Drivers with Dementia in Ontario



Hopkins et al. Can J Psychiatry 2004;49:434-8

Driving Performance with Dementia

- More problems with road rules, lane maintenance, lane changing, turning, maintaining road speed, stopping appropriately and avoiding collisions
- Less attention and slower decision-making
- Driving performance decreased with increasing dementia severity
- 6/10 studies found that drivers with dementia crashed more often than controls (~2x to 10x)
- 15-65% failed on-road driving assessment

Jacobs et al., J Neurol 2017 Man-Son-Hing et al., JAGS 2007 Chee et al., Am J Geriatr Psychiatry 2017

On-Road Driving Performance Pooled Data

	Controls (n=102)	V. Mild AD (n=73)	Mild AD (n=61)
Clear Pass	79%	49%	37%
Marginal	19%	38%	31%
Fail	2%	13%	32%

Duchek et al., JAGS 2003; Ott et al., Neurology 2008

Health and Psychosocial Outcomes of Driving Cessation

- Less social engagement and out of home activity
- More depressive symptoms
- Poorer general health
- Poorer functional status
- Greater cognitive decline
- Greater long term care placement
- Greater risk of mortality

Chihuri et al., JAGS, 2016 Sanford et al., Dementia, 2019

Emotional Impact of Driving Cessation



Sanford et al., Dementia, 2019 Sanford et al., Clinical Gerontologist, 2020

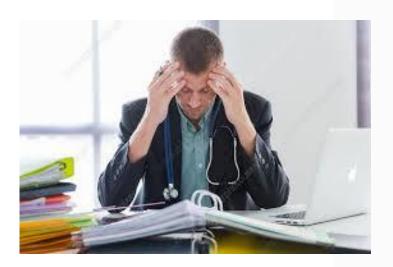
People with dementia

- Denial
- Grief/sadness
- Loss of identity, self-esteem
- Depression
- Anger directed at family members & healthcare providers

Emotional Impact of Driving Cessation

Family/Friend Carers

- Loss, sadness, grief
- Fear, anxiety
- Frustration, anger, guilt





Healthcare providers

- Stress
- Remorse
- Emotional strain

Sanford et al., Dementia, 2019 Sinnott et al., BMJ Open, 2019

Challenges of Driving Cessation

- Lack of understanding about the relationship between dementia and driving
- No one likes to talk about driving cessation issues (including healthcare providers)
- Lack of training and knowledge among healthcare providers about assessing fitness to drive, supporting quality of life post-cessation
- Few established interventions
- Resources difficult to access and their credibility hard to determine

Sinnott et al., PLoS One, 2018 Silverstein & Turk, Gerontol Geriatr Educ, 2015 Stasiulis et al, Gerontologist, 2020

Development of the Driving and Dementia Roadmap



Project Aim

 To develop a resource to support people with dementia, family/friend carers and healthcare providers in the decision-making and transitioning to non-driving

Systematic Reviews

Journals of Gerontology: Psychological Sciences

Advance Access publication December 26, 2016

doi:10.1093/geronb/gbw158

cite as: J Gerontol B Psychol Sci Soc Sci, 2018, Vol. 73, No. 7, 1185–1189

Meta-analysis of Driving Cessation and Dementia: Does

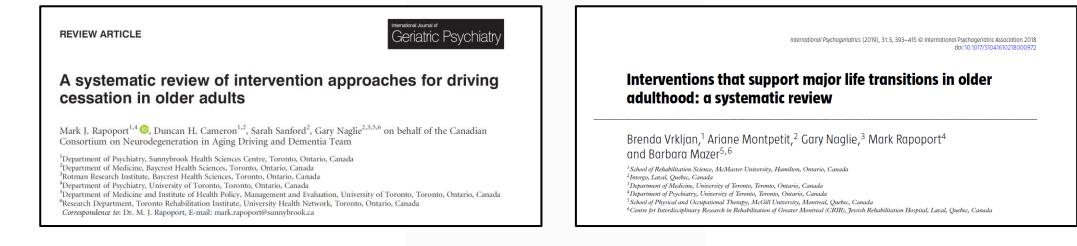
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OXFORD

SYSTEMIC REVIEW/META-ANALYSIS

Psychotherapeutic Interventions for Dementia: a Systematic Review



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https://doi.org/10.5770/cgj.24.447

Decision Editor: Bob G. Knight, PhD

Received May 9, 2016; Accepted November 14, 2016

Brief Report

Sex Matter?

GERONTOLOGICAL

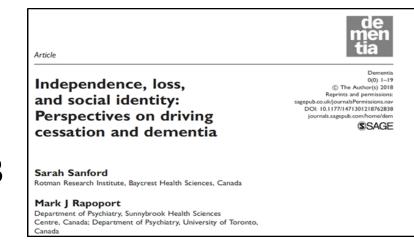
and Community Medicine, University of Toronto, Ontario, Canada.

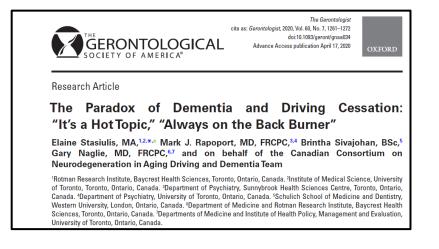
Avenue, Suite E349, Toronto, Ontario M4N 3M5, Canada. E-mail: mary.tierney@sunnybrook.ca

Qualitative Studies

- Explored key stakeholders' perspectives of driving cessation and dementia
- Interviews and focus groups with 10 healthcare providers, 6 organizational reps, 13 family caregivers, 2 persons with dementia

- Examined factors relevant to effective implementation of a driving resource
- Interviews with 15 AS staff members in 4 provinces





Meta-synthesis of Qualitative Studies

- Meta-synthesis of qualitative studies on key informant subjective experiences of driving cessation and dementia
- Included 9 studies published between 2002 and 2016

CLINICAL GERONTOLOGIST https://doi.org/10.1080/07317115.2018.1483992 Routledge Taylor & Francis Group

Check for updates

Subjective Experiences of Driving Cessation and Dementia: A Meta-Synthesis of Qualitative Literature

Sarah Sanford PhD^a, Gary Naglie MD^{a,b,c,d}, Duncan H. Cameron MSc^e, Mark J. Rapoport MD^{f,g}, on behalf of the Canadian Consortium on Neurodegeneration in Aging Driving and Dementia Team

^aRotman Research Institute, Toronto, Canada; ^bDepartment of Medicine, Baycrest Health Sciences, Toronto, Canada; ^cDepartment of Medicine and Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada; ^dResearch Department, Toronto Rehabilitation Institute-University Health Network, Toronto, Canada; ^sDepartment of Psychology, Neuroscience & Behaviour, McMaster University, Hamilton, Canada; ^fDepartment of Psychiatry, Sunnybrook Health Sciences Centre, Toronto, Canada; ^gDepartment of Psychiatry, University of Toronto, Toronto, Canada

Key Findings and Implications

- Perceived lack of education and resources for advanced planning and decision-making about driving cessation and the transition to non-driving
- Facilitating discussions about driving cessation are critical for early planning and promoting shared decision-making

Key Findings and Implications

 Addressing the emotional effects of driving cessation are as important as attending to the practical aspects (e.g., transportation planning)

"The trauma of losing her vehicle, the use of her vehicle was as traumatic as losing my dad. It was like losing a spouse...." (Family Carer)

 Family/friend carers need support in their role of maintaining purpose, roles and social participation of people with dementia

Driving and Dementia Intervention Framework (DD-IF)

Practical Components

- Information & Awareness about Driving & Dementia
- Communication
- Mobility & Community Access

Emotion-Focused Components

- Relationships & Role Transitions
- Crisis & Conflict
- Loss & Grief
- Identity & Meaning

Review of Resources & Tools

- Assembled resources and tools
 - Identified and assessed publically available resources and tools that address driving cessation
 - Assessment based on evidence base, relevance and usability
 - From a total of 75 tools reviewed, 24 tools were selected
- Curated the tools and resources to align with the Driving and Dementia Intervention Framework

Advisory Group Engagement

- •4 people living with dementia and 4 family carers
- Recruited with help from the Murray Alzheimer Research and Education Program (MAREP)
- Provided on-going feedback on DDR's content and design

Feedback from Healthcare Professionals & Driving Authority Representative

- Geriatric psychiatrist, occupational therapist and manager (driving authorities)
- Provided feedback on the healthcare professional portal

Other Contributors

- Plain language writer with experience developing educational content for people with dementia
- Web developers
- Graphic designers

DRIVING & DEMENTIA ROADMAP



CONTACT US FONT SIZE: A A

Search our site Q



I have dementia...

and I am still driving.

and I am no longer driving.

I am a family/friend caring for... a person with dementia who is still driving.

CCNA

Baycrest

CCNV

a person with dementia who is no longer driving.

I am a provider who is...

a healthcare professional.

CIHR IRSC Canadian Institutes of Health Research Instituts de recherche en santé du Canada

Sunnybrook

www.drivinganddementia.ca

(This link will be active as of October 18, 2022)

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Support for the driving with dementia journey

I have dementia...

and I am still driving.

and I am no longer driving.

I am a family/friend caring for...

a person with dementia who is still driving.

a person with dementia who is no longer driving.

I am a provider who is...

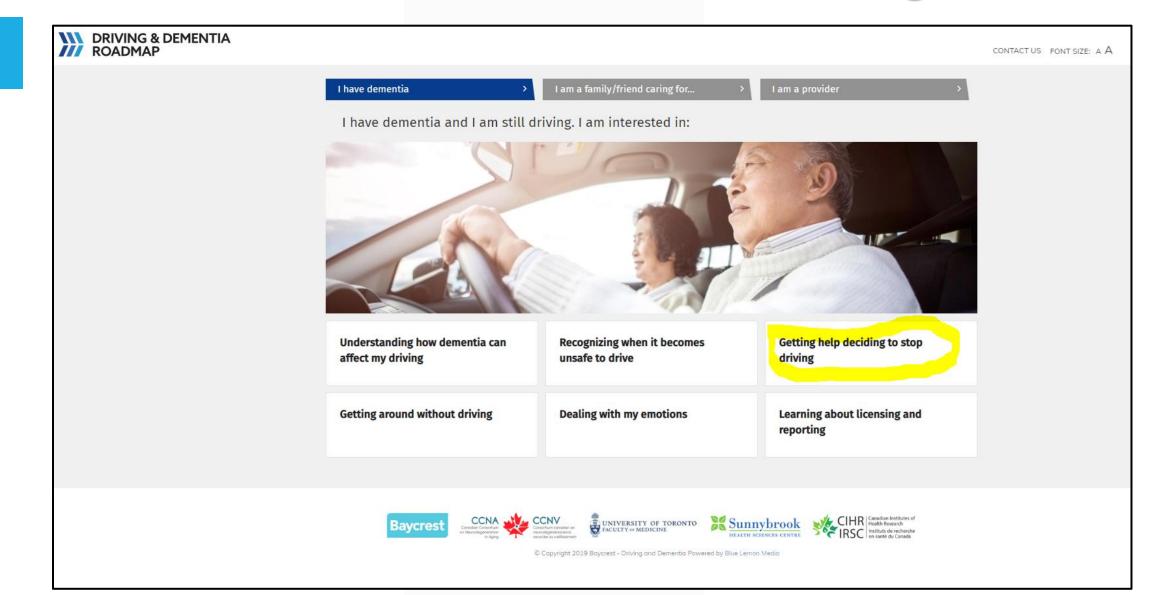
a healthcare professional.





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Person with Dementia Still Driving



I have dementia

I am a family/friend caring for...

I am a provider

I have dementia and I am still driving. I am interested in:

Sections

- Understanding how dementia can affect my driving
- Recognizing when it becomes unsafe to drive
- Getting help deciding to stop driving
- Getting around without driving
- Dealing with my emotions
- Learning about licensing and reporting

- Getting help deciding to stop driving
- Deciding to stop driving can be a difficult decision.Make sure to get support.

> Talk to someone you trust

Talk to your doctor

✓ Try these worksheets

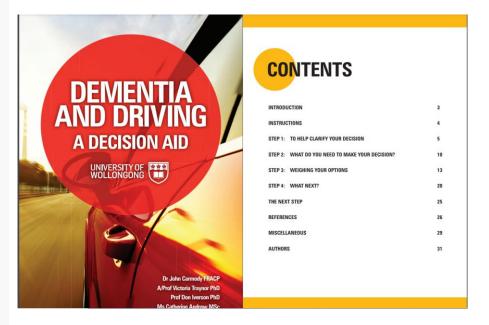
For help deciding when is the right time to give up driving, click on on the titles below. After you review each worksheet, when you close the worksheet's web page, it will automatically take you back to here.

- <u>Dementia and Driving A Decision Aid</u> produced by the University of Wollongong, Australia.
- Warning Signs for Drivers with Dementia produced by The Hartford.
- Agreement with my Family about Driving produced by The Hartford.

For help coming up with ways to get around when you are no longer able to drive, click on the titles below. Some parts of these worksheets may not be helpful if you live in a rural community.

- Getting There: Using Alternative Transportation produced by The Hartford.
- Driving Activities: Where, When and Why? produced by The Hartford.

Getting help deciding to stop driving





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Support for the driving with dementia journey

I have dementia...

and I am still driving.

and I am no longer driving.

I am a family/friend caring for...

a person with dementia who is still driving.

a person with dementia who is no longer driving.

I am a provider who is...

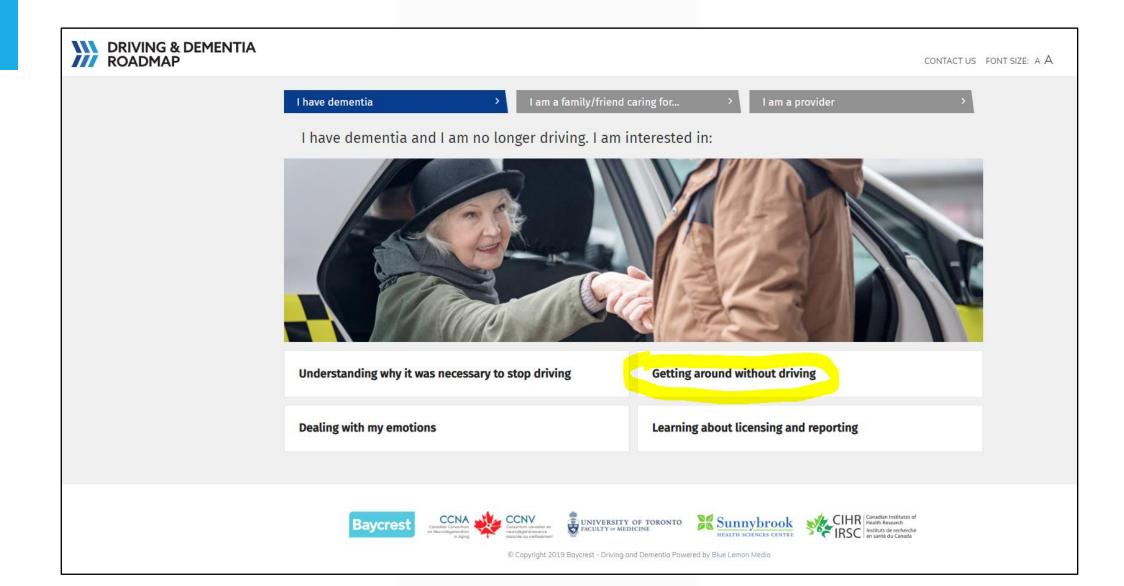
a healthcare professional.



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Person with Dementia No Longer Driving



I have dementia and I am no longer driving. I am interested in:

Sections

- Understanding why it was necessary to stop driving
- Getting around without driving
- Dealing with my emotions
- Learning about licensing and reporting

Getting around without driving

- Think of all the places you go to and then see if any of these options would work for getting there:
 - Lifts from family and friends
 - Carpooling
 - Public transit
 - Community organizations that offer driver services
- Taxis
- Ridehailing (e.g., Uber, Lyft)
- Retirement residences with van service
- Lifts from members of your religious organization

Consider changing some of your routines with the support of someone you trust such as a family member, friend, or neighbour. For example:

- Instead of visiting the bank, set up automatic bill payments.
- Instead of going to the grocery store, mall, and pharmacy, shop online and use grocery and pharmacy delivery services, as well as services like Meals-on-Wheels.
- Instead of going out to services like the hairdresser or doctor, arrange for home visits.

Here's what a person with dementia has to say:

"People are there to help and they like to help. It makes them feel good to help. If you rely on people a little more it can actually be a good thing. It can bring you closer together."

> Watch this video

> Try these worksheets

Getting around without driving

GETTING THERE: USING ALTERNATIVE TRANSPORTATION



When looking for alternative transportation, you need to explore all options - from informal arrangements with relatives and friends, to formal public services. You can use this worksheet, along with the questions on the back side, as you explore all your transportation options.

Transportation Alternatives	Telephone	Availability, Destination (day, time, route)	Cost	Notes (pros & cons)
Family Members:				
Friends:				
Demand-responsive Services:				
Private Program				
Services:				
Taxi/Car Services:				
Mass Transit:				
Other Local				

DRIVING & DEMENTIA ROADMAP

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Support for the driving with dementia journey

I have dementia...

and I am still driving.

and I am no longer driving.

I am a family/friend caring for...

a person with dementia who is still driving.

a person with dementia who is no longer driving.

I am a provider who is...

a healthcare professional.

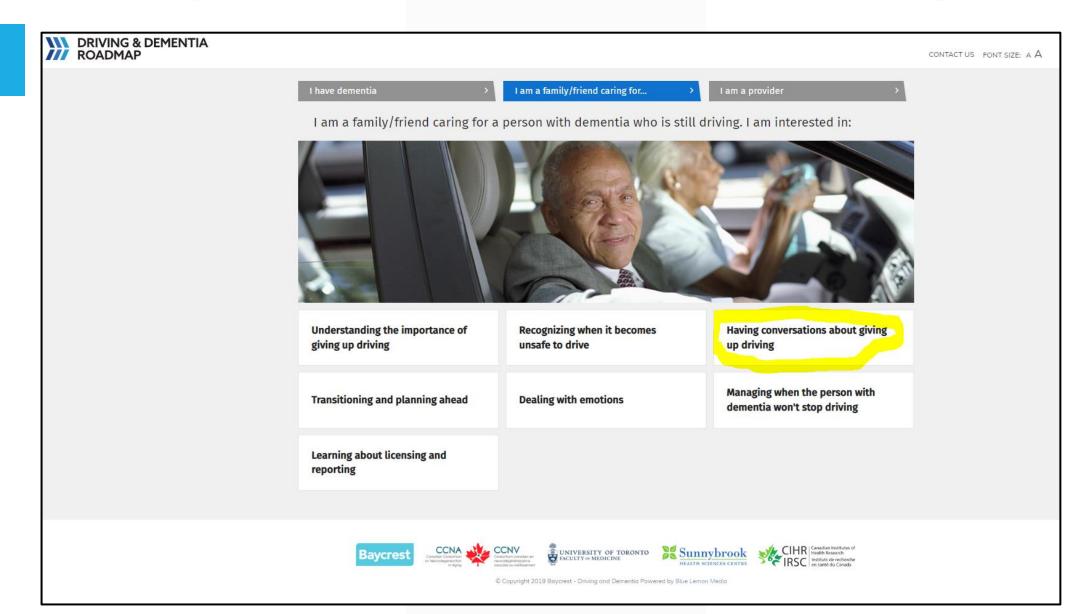
CIHR Health Research IRSC Institutes of Health Research Institutes de recherche en santé du Canada





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Family/Friend Carer of PWD Still Driving



Having conversations about giving up driving

I am a family/friend caring for a person with dementia who is still driving. I am interested in:

Sections

- Understanding the importance of giving up driving
- Recognizing when it becomes unsafe to drive
- Having conversations about giving up driving
- Transitioning and planning ahead
- Dealing with Emotions
- Managing when the person with dementia won't stop driving
- Learning about licensing and reporting

Having conversations about giving up driving

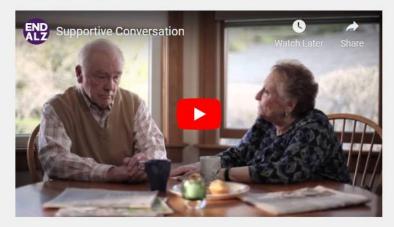
When starting a conversation about driving risk with the person with dementia, it is important to show compassion and empathy. Think about how it would feel to no longer be able to drive. Share your thoughts with the person with dementia while encouraging them to also talk about what the loss of driving means to them.

> Have ongoing discussions about driving risk

> Try these worksheets

✓ Watch these videos

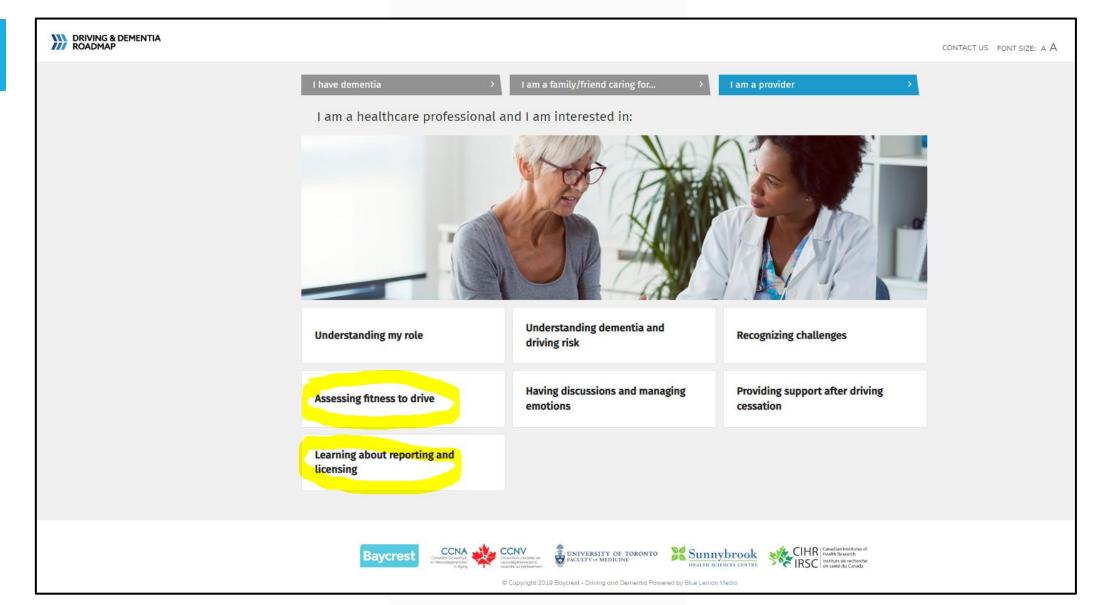
See a wife having a supportive conversation about giving up driving with her husband who has dementia.



Source: Alzheimer's Society

See various family/friend carers having conversations about giving up driving with people with dementia. Although some of the content is specific to Australia, most of the ideas are helpful no matter where you live.

Healthcare Professional



Assessing Fitness to Drive

l have dementia	> I am a family/friend caring for > I am a provider >
I am a healthcare profes	ssional and I am interested in:
Sections Understanding my role Understanding dementia and driving risk Recognizing challenges Assessing fitness to drive Having discussions and managing emotions Providing support after driving cessation Learning about reporting and licensing	Assessing fitness to drive The inevitability of driving cessation in people with a neurodegenerative dementia makes it essential to assess fitness to drive by conducting an in-office assessment at various stages of disease progression. This is important for the safety of people with dementia and the public. Given that a range of complex factors can affect driving ability, it's important to gather information from different perspectives during the assessment. Equally important is that you base your decision on the sum of the findings, rather than just from a specific component of the assessment. In addition, after the assessment, you must follow legislative requirements for your province or territory regarding reporting unsafe driving. Learn what it means to use a comprehensive approach to inform your decision and follow these steps to conduct an in-office assessment. Y Use a comprehensive approach to inform your decision Follow the steps below
	 Step 2: Assess the functional impact of dementia Functional impact of dementia Assess the functional impact of dementia because as the disease progresses, functional abilities decline that may affect driving ability. If any basic activities of daily living are impacted due to cognitive impairment, the severity of the dementia has progressed to the point where they are no longer safe to drive. If 2 or more IADLs are impacted due to cognitive impairment (but no basic ADL impairment), it is likely that driving is impaired as well. If the person with dementia desires to continue driving, a comprehensive driving evaluation is strongly recommended.
	 Step 3: Assess other medical and psychiatric co-morbidities Step 4: Take a driving history Step 5: Conduct a cognitive assessment Step 6: Conduct a physical and neurological examination Step 7: Interpret the findings Step 8: Formulate the next steps

I am a healthcare professional and I am interested in:

Sections

Learning about reporting and licensing

- Understanding my role
- Understanding dementia and driving risk
- Recognizing challenges
- Assessing fitness to drive
- Having discussions and managing emotions
- Providing support after driving cessation
- Learning about reporting and licensing

Most if not all provinces and territories require that people with dementia declare that they have a medical condition. This is because a medical condition can affect driving In addition, most if not all motor vehicle insurance policies include a clause requiring people with dementia to tell their insurer that they have a medical condition because it can affect their driving. Find out more about dementia and drivers' licensing and reporting below.

Public reporting of unsafe driving

* Requirements for healthcare professionals to report dementia diagnosisis

As a health condition that could affect driving ability, all provinces and territories require mandatory and/or discretionary reporting by healthcare professionals of a dementia diagnosis. In many cases, healthcare professionals have a duty to make this report. For more information, please click on the region where the person with dementia lives below.

Please note, in some cases, although the link below provides this information, it also includes other information. You will have to browse through the link.

In other cases because this information is not available, we have included a link to the drivers' licensing authority. This way, you can follow-up directly with the authority to find out more.

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon

> What to expect in a comprehensive driving evaluation

> Licence suspension appeal process

Learning about reporting and licensing

Qualitative Implementation Evaluation

- To explore the DDR's acceptability, adaptability and preliminary benefits and limitations
- 6 Alzheimer Society(AS) organizations in 4 provinces (NS, Ont, Man, Alb)
- 19 AS staff, 8 current and former drivers with dementia, 13 family/friend carers

Qualitative Implementation Evaluation – Preliminary Findings

- Reported <u>high levels of acceptability</u>; found the DDR "very, very useful", "very enlightening" and "absolutely necessary"
- Brought <u>deeper awareness and understanding</u> about driving cessation, which impacted participants' approach (e.g., more diligent about observing warning signs)

"Its (DDR) helping me to monitor her more. I'm going to make sure that every few months that I either go in the car with her or follow her and talk to her about it on a regular basis." (Family Carer)

"It (DDR) made me realize there's an end to driving, somewhere in the future. Actually, I hadn't even thought of it. Somewhere along the line, I know I've got to stop." (PWD)

Qualitative Implementation Evaluation – Preliminary Findings

- Emotion-specific content provided insight about grief and loss, enabling family members to attend to the emotional ramifications and initiate conversations with empathy and patience
- Strategies to remain mobile after driving cessation brought relief and hope

"It (DDR) gave me a little bit of hope that together as a team with my siblings, we can figure out a plan..." (Family Carer)

Exploring the DDR's Uptake and Impact

- Official launch in mid-October 2022
- Research questions:
 - >How does the DDR get taken up (i.e., adopted and utilized)?
 - How does the DDR impact the way users approach and manage driving cessation?
- Methods:
 - Google Analytics
 - >Surveys
 - Interviews

Questions?

www.drivinganddementia.ca

(Link will be active on Oct 18, 2022)

THANK YOU!

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