

DRIVEABLE AND DAMP: ROLE IN THE ASSESSMENT OF DRIVERS WITH DEMENTIA

-FREDERIC GASPARD THEATRE

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Disclosure

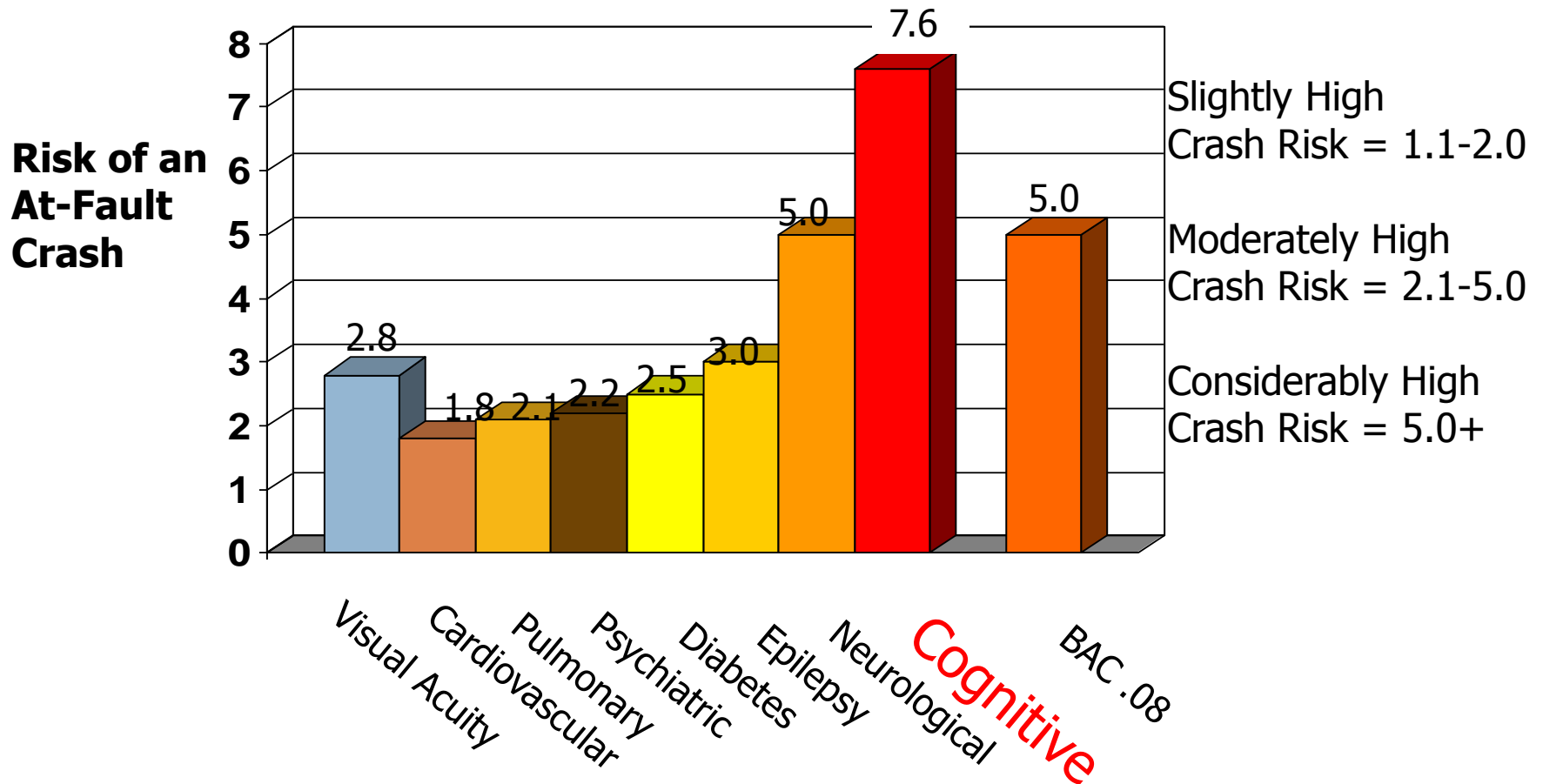
- Medical Advisor, Manitoba Public Insurance, Driver Fitness
- Paid a speaker fee by MPI
- No commercial interests

Objectives

- To review the impact of dementia on driver performance
- To discuss the role of health care professionals in assessing drivers with dementia and reporting to the licensing authority
- To present the Manitoba Public Insurance process for assessing drivers with dementia, including the tools that are utilized

What is the Risk?

Health Conditions and Crash Risk



(See Vernon, 2002; Vaa 2003; Sagberg, 2003; Charlton 2004; Dobbs, 2002 [Red Flags])

Driving Cessation

- Males – 6.2 years
- Females – 9.4 years
- Voluntary vs. Involuntary

Functional Requirements for Driving

- Driving is a complex task, requiring
 - adequate vision
 - motor control
 - coordination
 - ability to maintain attention
 - intact higher cognitive functioning:
 - perception and attention to/interpretation of stimuli
 - formulation of a plan to handle a situation based on previous experiences
 - execution of an action such as steering, braking
 - monitoring the outcome of a behaviour as feedback for subsequent action

NB. Insight – individuals with pathology that affects attention, perception, and executive function are less likely to be aware of their deficits.

Degree or Severity of Dementia

- Some memory impairment but no definite diagnosis
 - forgets names, location of objects
 - trouble finding words
 - difficulty travelling to new locations
 - difficulty handling problems at work
- Mild Dementia
 - difficulty with complex tasks (instrumental ADL)
 - finances, shopping, meal planning, cooking, taking medications, telephoning
- Moderate Dementia
 - difficulty with basic ADL – eating, dressing, hygiene
 - needs help choosing clothing & dressing
 - requires prompting and assistance with bathing
- Severe Dementia
 - decreased ability to use toilet/incontinence
 - vocabulary limited
 - loses ability to walk/sit
 - unable to smile

Driving Errors in Dementia

- Drives too slow
- Lane positioning
- Unsafe lane changes
- Inappropriate stops
- Trouble with turns, especially left turns

Health Care Professional Role and Responsibilities

- Health Care Professionals do not take away driver licences
- Mandatory reporting of potentially medically unfit drivers
- Rule out reversible causes of cognitive decline
- In office assessment of cognitively impaired drivers
 - Validity of cognitive screening tools:
 - MMSE, MOCA
 - Simard MD
 - Trails B
- Reassess frequently – every 6-12 months

Medical Compliance and Assessments/Driver Fitness, MPI

- ❑ Is separate dept from Bodily Injury (Claims)
- ❑ Evaluate medical information and co-ordinate functional assessments. Apply CCMTA [Medical Standards for Drivers](#) and internal policy
- ❑ Review medical reports from physicians/other HCP's
- ❑ Review information from Police/RCMP, public at large, self declarations.
- ❑ Assess and determine customer's ability to safely operate a motor vehicle.
- ❑ Coordinate access to various driver assessment tools, including DAMP, DriveABLE, in vehicle evaluations
- ❑ Drivers & Vehicle Act and The Highway Traffic Act provides authority

MPI Process for Drivers With Dementia

- Once information received, a medical report is requested
- Driver may be suspended pending the outcome
- Prior to proceeding to DriveABLE, all other CCMTA medical standards must be met
- Drivers are not candidates for DriveABLE if they have physical or vision impairments that may affect driving and/or ability to perform DriveABLE tasks
 - e.g. Parkinson Disease patient with cognitive issues
 - (refer to DAMP)

DriveABLE

- Evidence based assessment tool that evaluates driving errors related to cognitive impairment
- In use in North America, Australia, New Zealand, South Korea
- Developed by observing the types of high risk driving errors made by individuals with known dementia and not made by control groups
- Then a road test was designed that would expose candidates to suitable situations. The test is scored based on the number and severity of errors made
- A computer based written test was then developed and performance correlated with performance on the road test
(ie. designed to predict road test outcome)

In Office Cognitive Assessment

- Winnipeg or Brandon
- Cost is \$50
- Driver is asked to complete a series of tasks using a computerized touch screen/touching a button
- Administered by specially trained MPI staff
- Translation protocol
- Family members/caregivers are able to observe

In-Office Cognitive Assessment Tasks

- Motor Speed and Control (timed) – how quickly they can touch a shape on the screen
- Span of Attentional Field – make decisions about words shown briefly in the centre of the screen & a dot in the periphery
- Spatial Judgment and Decision Making (timed) – how well they make decisions

In-Office Cognitive Assessment Tasks

Cont'd

- Speed of Attentional Shifting (timed) – how quickly they respond to something shown in different spots on the screen
- Executive Function – ability to remember where they saw something (two parts)
- Identification of Driving Situations (timed) – watch videos of driving situations & answer multiple choice question

In office Cognitive Assessment

- Potential outcomes:
 - Pass - no further testing necessary
 - will be kept on annual medical recall
 - Inconclusive – must complete on road evaluation
 - Fail – licence is cancelled. Can retake once, or proceed to on-road evaluation, or appeal to Medical Review Committee

On Road Evaluation

- Winnipeg or Brandon
- Cost is \$75.00
- Completed by specially trained MPI driver examiners
- Conducted on a special road course designed to reveal driving errors associated with cognitive decline
- Potential outcomes:
 - Pass - no further testing required
 - annual medical recall
 - Fail - licence cancelled. Cannot retake. Can appeal to Medical Review Committee

Driver Assessment and Management Program

- Health Sciences Centre – OT department
- A 2 part functional assessment
 - in clinic – by OT
 - on road – by a specialized driving instructor
- Assess drivers with:
 - physical impairments (e.g. stroke, MS, Parkinson Disease, spinal cord injury, traumatic brain injury, amputation)
 - visual problems
 - combined physical/cognitive impairments
 - general debility related to multiple medical conditions, including the effect of medications
- Access coordinated by MPI – Medical Compliance and Assessment/Driver Fitness
- Cost - \$100.00
- Current wait time – 2 months

Strategies for Compensation

- Role of conditional licences (eg. local area only)?
- Use of co-pilots/navigators?
- Driver education programs?

Remember!

- A person with dementia qualifying for a licence is a temporary situation. In time, all will need to cease driving

Conclusions

- Dementia is a medical condition with a high risk of poor driving outcomes
- All individuals with dementia will eventually have to cease driving
- Individual assessment is required
- Families should watch for high risk driving errors and a lack of insight
- It is difficult for health care professionals to determine driving ability based on an office assessment
- Manitoba Public Insurance utilizes various tools to determine whether individuals with dementia can continue to drive



QUESTIONS?