

**Occupational Therapy
Practice Guide for Enabling
Participation in Driving
2ND Edition**

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Prepared by:

**AHS Provincial Occupational
Therapy Driving Working Group**

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1. Introduction

In June 2013, “AHS Occupational Therapy Process Enabling Safe Participation in Driving” was made available to the occupational therapy community in Alberta. The document was part of a larger strategy to increase the capacity of occupational therapists in Alberta to engage in competent, best practice in the area of driving assessments. Research in this area continues to evolve at a rapid rate. The AHS Occupational Therapy Driving Working Group identified the need to update the original document to reflect the new information. This document is intended for occupational therapists with the purpose of guiding the practice of driving/clinical assessments and interventions in Alberta. The information and resources provided in this document are intended to promote consistent practice throughout the province. The information, resources and forms included are designed to reflect best practice and increase efficiencies. Documentation templates are included in the appendixes. These can be modified to reflect practice within sites across the province.

2. Occupational Therapy and Driving Assessment

a. Tier 1, 2, 3 Competencies

Driving evaluation is complex with serious implications if not performed by knowledgeable and skilled professionals. In most Canadian provinces, including Alberta, there is understanding that occupational therapists are ideally suited to provide expertise in driver screening, assessment and intervention (Korner-Bitensky, Toal-Sullivan & von Zweck, 2007a). In a 2009 Position Statement on Occupational Therapy and Driver Rehabilitation, CAOT stated “All registered occupational therapists in Canada should have the knowledge and skills to deliver some driver evaluation and rehabilitation services.” (CAOT, 2009) and endorsed a three-tier expertise framework (Korner-Bitensky, Toal-Sullivan & von Zweck, 2007b). After applying this model over the past number of years, it is believed that there is benefit to further delineate the second tier to Occupational Therapists who provide only Clinical Evaluations (Tier 2a) and those who provide Comprehensive Driving Evaluations (CDE) (Tier 2b/Tier 3). Within all three Tiers, occupational therapists have a professional obligation to report driving related concerns to Driver Fitness and Monitoring.

Tier 1: Generalist
Tier 2a: Advanced – Clinical Evaluation
Tier 2b: Advanced – Comprehensive Driving Evaluation
Tier 3: Advanced Specialist

TIER 1 - GENERALIST

The Tier 1 occupational therapist is able to explore the client’s goals related to driving; helping to determine if it is a valued occupation. They understand that driving, like all complex Instrumental Activities of Daily Living (IADL), requires high level cognitive, perceptual, physical, and sensory skills. Tier 1 occupational therapists have the ability to provide information on driving with specific medical conditions and healthy aging and driving. They are in an ideal position to guide discussions around options for community mobility for the non-driver, skills to be developed for the novice driver and planning for the possibility of eventual cessation with the older driver or those with progressive conditions.

The Tier 1 occupational therapist often has the knowledge and skills to identify clients who may have difficulty learning to drive or who may be at risk to continue or resume driving. In conjunction with their knowledge of client performance in complex IADLs, their screening may warrant a recommendation of driving cessation or that a novice is not yet ready to learn to drive. In the latter case, intervention may be offered to remediate challenge areas. Tier 1 occupational therapists can identify when to refer to the next level of expertise in driver screening, assessment and intervention. Not all clients require a Tier 2 or 3 evaluation.

TIER 2 - ADVANCED: The occupational therapist at this level has expertise in assessing physical, cognitive, visual-perceptual, and behavioural skills specifically related to safe driving. At the **Tier 2a** level, occupational therapists administer clinical evaluations using both standardized and non-standardized

assessments. The occupational therapist determines strengths and challenges for driving which may require further intervention or extra attention during on-road evaluation, if clinically indicated. At the **Tier 2b** level, occupational therapists incorporate an on-road evaluation when deemed appropriate. The on-road component is available when feasible from an operational and program perspective and when the therapists have the appropriate knowledge, skills and abilities to perform comprehensive driving evaluations (CDE). The CDE consists of clinical and on-road evaluation (cognitive road test) and may include provision of basic adaptive equipment (e.g. spinner knob, signal extender, adapted mirrors). The on-road evaluation assesses driver performance along a set route and is typically completed in a dual brake vehicle with a certified driving instructor and an occupational therapist.

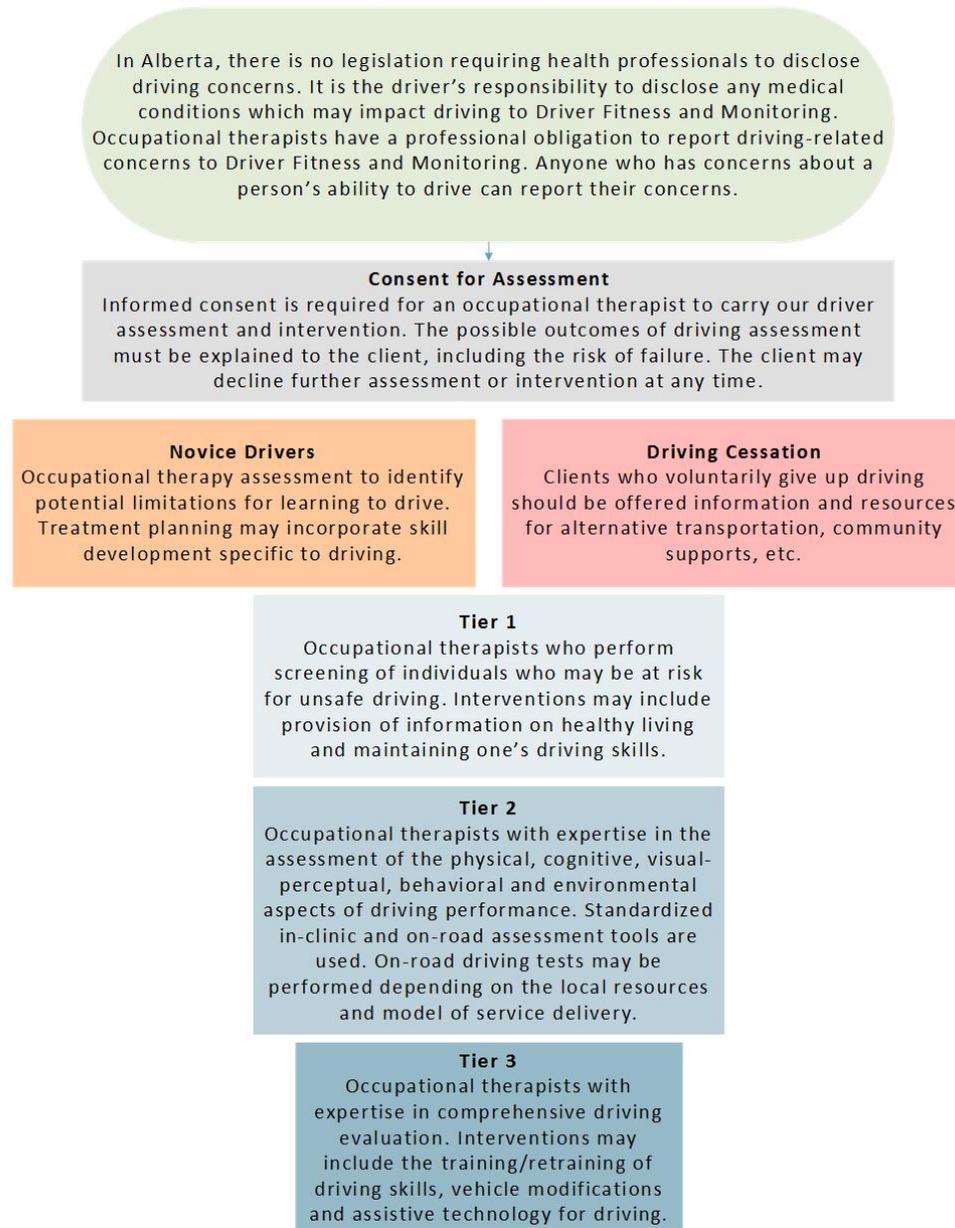
TIER 3 -ADVANCED-SPECIALIST: At this level, the occupational therapist completes a complex CDE and has highly specialized expertise in clinical assessment, training and/or retraining of driving skills, vehicle modifications and use of assistive technology for driving. Tier 3 occupational therapists complete assessments with clients with visual impairments (E.g. Hemianopsia) in which the client does not meet the minimum visual standard for driving but demonstrates potential to drive. The client's physician/ophthalmologist may refer the client for Tier 3 evaluation and are usually required to submit documentation to Driver Fitness and Monitoring supporting the client's potential to drive. Typically clients are referred to or may have already received rehabilitation services for development of compensatory strategies for visual impairment. Other indications for complex CDE at a Tier 3 level include clients who demonstrate impairments across multiple domains (E.g. visual and physical, physical and cognitive/perceptual) and clients who require specialized technology, such as electronic gas/brake.

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- Canadian Association of Occupational Therapists. (2009). *CAOT Position Statement: Occupational Therapy and Driver Rehabilitation*. Retrieved from <http://www.caot.ca/default.asp?pageid=1353>
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b. Figure 1: Framework for AHS Occupational Therapy Process for Enabling Participation in Driving

Figure 1. Occupational Therapy Practice Guide for Enabling Participation in Driving - Overview

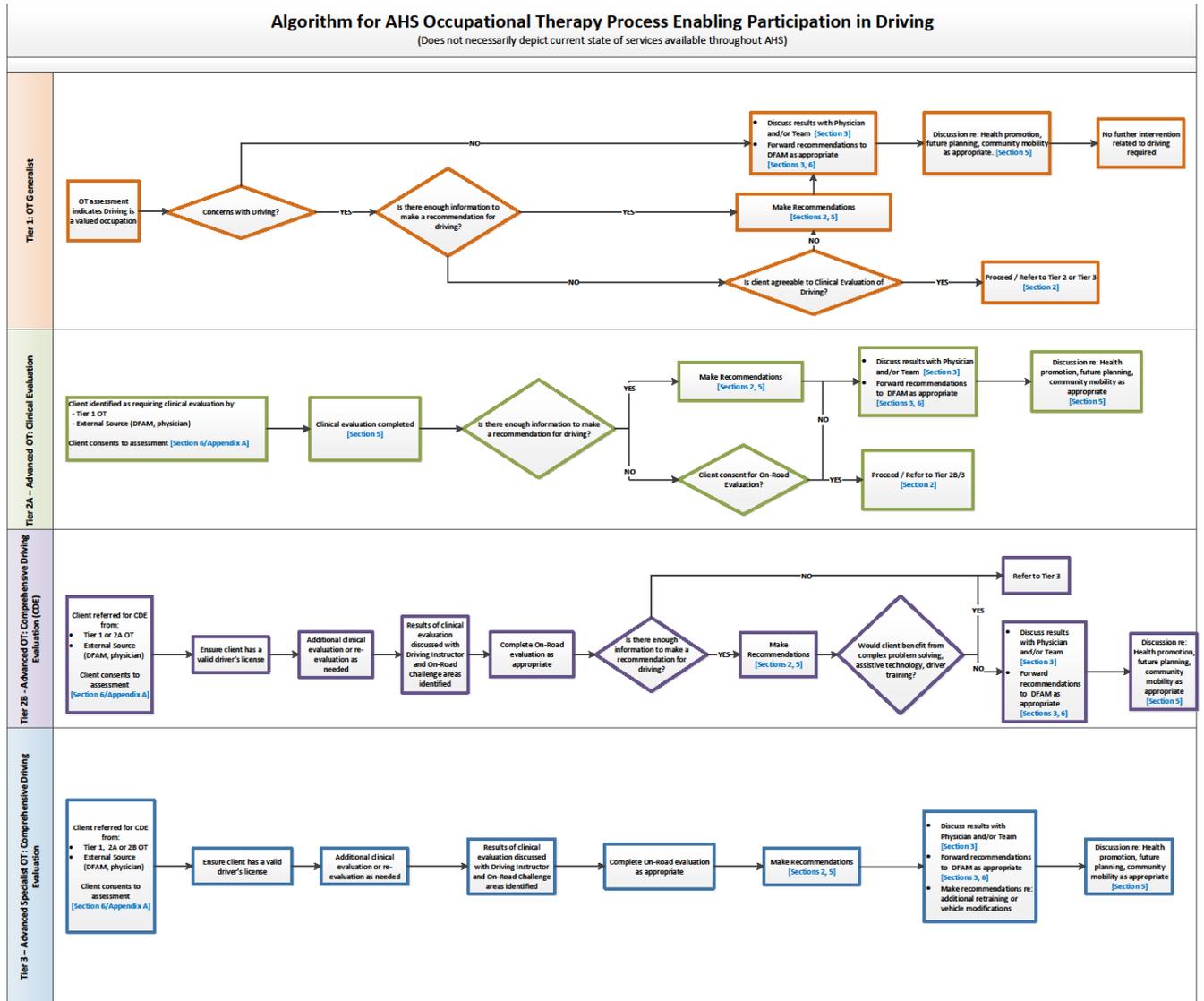


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c. **Figure 2: Algorithm for AHS Occupational Therapy Process for Enabling Participation in Driving**



3. Occupational Therapy Role in Determining Driver Fitness

a. Resource for Occupational Therapists

As client-centered, self-regulated professionals, Occupational Therapists may initiate driving discussions, screening or assessments with any client who identifies driving as a valued occupation and/or there is reason to explore the clients' abilities. This interaction may be focused on community mobility, health promotion, or injury prevention. However, in some situations, safety concerns arise and result in the need to involve licensing authorities. The provincial licensing authority is ultimately responsible for determining fitness to drive and is the only entity that has the authority to issue, suspend or revoke driving privileges. In Alberta, this authority is *Driver Fitness and Monitoring* (DFAM), a department within Alberta Transportation. DFAM or medical practitioners may initiate occupational therapy involvement in driving evaluation by requesting functional information to assist in making this determination.

The Canadian Council of Motor Transport Administrators (CCMTA) publishes a model for determining driver fitness as well as medical standards, which closely align with the Canadian Medical Association (CMA) Guidelines utilized by physicians. The most recent edition of the guidelines has adopted a model that has greater emphasis on individual assessment of function, as opposed to making determinations based primarily on medical conditions and a presumed effect on clients. The model supports the use of both medical and functional assessments and divides impairments into the following categories:

- Transient impairments: Temporary with little likelihood of recurrence. Examples include fractures, use of brace or cast, infection, after effect of surgery. **These impairments do not need to be reported and do not require driving assessment.** Typically, physicians can make recommendations for these impairments based on CMA guidelines.
- Episodic impairments: Unpredictable, sudden or intermittent impairments that may not have ongoing observable, testable, or measurable impact and therefore cannot be measured functionally. Examples include seizure disorder, aortic aneurysm, psychosis and narcolepsy. **Recommendations may be based on medical assessments.**
- Persistent impairments: Ongoing or continuous functional impairment that is measurable, testable and observable. The impairment may be stable or progressive but does not result in a sudden deterioration. **Recommendations may be based on medical and functional assessments.**

FUNCTIONAL ASSESSMENT: any kind of assessment that involves direct observation or measurement of functions necessary for driving. They include:

- Paper-pencil cognitive screens
- Computer based cognitive screens
- Cognitive road test
- **OCCUPATIONAL THERAPIST ASSESSMENT**
- Driver rehabilitation assessment
- Eye tests and examinations
- Hearing tests

CCMTA *Determining Driver Fitness in Canada*, 2015 (p. 26)

CCMTA acknowledges that individuals may have more than one type of impairment, an impairment that progresses from transient to persistent or a persistent impairment with periodic acute episodes.

In addition to the type of impairment and results of medical and functional assessments, the following may also be considered in making determination of driver fitness:

- *Insight* into medical or functional condition and how it may impact driving. Unless otherwise specified, DFAM would assume individuals have insight into their medical and functional condition.
- *Compliance* with treatment regimes, recommendations, and restrictions.
- *Compensation* with strategies or devices.

Motor, visual, or hearing impairments can potentially be compensated for. *“Individuals with progressive or irreversible declines in cognitive function cannot compensate for a cognitive impairment.”*

CCMTA *Determining Driver Fitness in Canada*, 2015 (p. 36)

- *License Conditions* that may assist with compensation or mitigating risk. (examples: use specific vehicle modification or adaptation, wear a specific device, daylight only, automatic transmission only, speed restriction, geographical restriction)

Occupational Therapists may want to comment on these considerations if making a recommendation regarding fitness to drive but should use caution in recommending licensing conditions focused on mitigating risk.

The following figure outlines the responsibilities of different parties in the overall process.

License Holder (Client)	Notify DFAM of any disease or disability that may interfere with safe operation of a motor vehicle.
Licensing Body (Alberta Transportation)	Driver Fitness and Monitoring(DFAM) is responsible for issuing, suspending or revoking driving privileges
Physicians	Provide medical assessment to assist in determination of fitness to drive
Occupational Therapists	Provide functional assessment to assist in determination of fitness to drive for those who are identified to have persistent impairments as per CMA guidelines

Reference

Canadian Council of Motor Transport Administrators (2015). *Determining Driver Fitness in Canada*. Retrieved from <http://ccmta.ca/en/reports-publications/item/determining-driver-fitness-in-canada-september-2013> on May 5, 2016.

b. Resource for Interdisciplinary Teams

What do occupational therapists do?

“Occupational therapy is the art and science of enabling engagement in everyday living, through occupation; of enabling people to perform the occupations that foster health and well-being; and of enabling a just and inclusive society so that all people may participate to their potential in the daily occupations of life” (Townsend & Polatajko, 2007, p. 372).

In other words, occupational therapists help people engage in occupations they need and want to do. Occupations are those things that people do that “occupy” their time including self-care, productivity and leisure.

Driving is an important occupation for many people and enables individuals to access or participate in other occupations. Access to resources in the community is a right. Driving is a privilege, not a right. The task of driving is highly complex and depends not only on the driver’s ability but also the environment in which the driving occurs.

The role of occupational therapy in driving.

“An understanding of the relationship among the person, occupation, and environment uniquely positions occupational therapists to provide valued and evidence-based services that promote driving as an occupation.” (CAOT, 2009)

Occupational therapists assess the individual’s strengths and abilities related to the skill of driving. They then consider the context in which the individual is required to perform the occupation of driving. From the assessment findings the occupational therapist may recommend:

- Interventions and training to help facilitate driving or delay driving cessation
- Further assessment to clarify level of risk and ability to drive or to continue driving.
- Driving cessation

Occupational therapy resources specific to driving assessment and interventions are highly variable depending on the geographic area. Please contact your local occupational therapist or site/zone professional practice lead to assist in accessing appropriate resources.

Reference

Canadian Association Occupational Therapy. (2009a). *CAOT Position statement - Occupational therapy and driver rehabilitation*. Retrieved from <http://www.caot.ca/default.asp?pageid=1353>

4. Tools for Screening and Assessment

Driving is a complex instrumental activity of daily living (IADL) that requires advanced skills in perception, analysis, and decision making on a continual basis, often without conscious effort (Dickerson, Reistetter, Davis, & Monahan, 2011; Mazer, Gelinas & Benoit, 2004). Screening and assessment of skills related to driving is multifactorial with evaluation of psychomotor, cognitive and visuo-perceptual components providing information on impairments that may impact an individual's ability to drive (Mazer et al., 2004; Vrkljan, McGrath & Letts, 2011).

No single assessment or screening tool can be used in isolation to determine fitness to drive.

a. Physical Assessment

The following physical components are required for safe operation of a motor vehicle: reach, range of motion and strength, endurance, speed of movement, coordination, stability and postural control and mobility (Mazer et al., 2004).

Occupational therapy assessment related to driving includes:

- General upper extremity active range of motion, strength, endurance, coordination and sensory ability as it relates to controlling a motor vehicle (e.g. steering and ability to operate secondary controls)
- General head, neck, and trunk rotation to appropriately shoulder check
- General trunk stability to maintain appropriate posture while driving
- General lower extremity active range of motion, strength, endurance, coordination and sensory ability to operate gas / brake pedals

b. Visual Assessment

The ability to attend and process visual information are vital skills in driving (Mazer et al., 2004). Visual impairments such as hemianopsia and reduced dynamic visual acuity may lower on-road performance (Elgin et al., 2010). Occupational therapists may refer to visual reports from an optometrist, ophthalmologist or other eye health specialist as part of their overall assessment.

Visual considerations related to driving include:

- Acuity – minimum of 20/50 vision with both eyes open and examined together (CCMTA, 2015)
- Visual Fields – at least 120 continuous degrees along the horizontal meridian and 15 continuous degrees above and below fixation with both eyes open and examined together (CCMTA, 2015)
- Visual unilateral spatial neglect should be screened for separately
- Other areas to consider: contrast sensitivity, saccades, nystagmus, diplopia

c. Cognitive/Perceptual Assessment

Standardized assessment tools are used to identify cognitive/perceptual deficits that impact driving. Occupational therapy screening and assessment may address attention, memory, executive function and visual perception. Initial screening may trigger in-depth clinical evaluation. The absence of strong and consistent evidence or established cut off points correlating with driving means no single tool can determine driving competency (CCMTA, 2015). Vrkljan, McGrath and Letts' (2011) critical review of literature found evidence that certain assessment scores may suggest a more in-depth evaluation is indicated. These authors recommend that occupational therapists should evaluate client need, psychometric properties of the tool and whether there is any evidence correlating the tool with on road performance when considering which tools to utilize.

Commonly used assessment tools include:

Trail Making Test A and B (TMT-A; TMT-B)

- Assesses visual scanning, planning, processing speed, divided attention
 - Excellent psychometric properties, some evidence associating with on-road performance. (Vrkljan, McGrath & Letts, 2011)
 - Systematic review for cut-off scores completed (Roy & Molnar, 2013)
 - For healthy older drivers, some evidence that TMT-A may be useful in identifying driving impairment. Cognitively impaired drivers may need more precise screening measures. (Papandonatos, Ott, Davis, Barco & Carr, 2015).
 - Full normative data stratified for age and education can be found in an article by Tombough, T. (2004).
- Motor Free Visual Perceptual Test (MVPT)
 - Assesses visual perceptual skills validated by the literature as relating to driving. Areas include figure/ground, visual search, visual discrimination, visual memory, and visual closure.
 - Good psychometrics
 - Mazer et al. (1998) suggested individuals who score less than or equal to 30 would benefit from a more comprehensive evaluation.
 - If using the MVPT-3, items 1-32 and 35-38 correspond to the original MVPT and established norms. Please note the orientation of the answers for questions 9 and 17 are slightly different from the original version of the assessment. Therapists should therefore exercise caution when comparing overall score to the original norms. The MVPT-4 does not correlate exactly with the original MVPT components therefore the original norms cannot be applied.

A selection of screening tools in a variety of areas can be selected based on client need, psychometric properties of the tool and whether there is any evidence correlating the tool with on road performance. *Vrkljan, McGrath & Letts (2011)*

- Montreal Cognitive Assessment (MoCA)
 - Allows for quick screening of visual spatial / executive function, memory, attention, abstraction, and orientation.
 - Not validated specifically for driving. Some evidence that lower MoCA scores may be correlated with failure of on-road evaluation in clients already diagnosed with a cognitive impairment. Despite this, authors state it should not be used in isolation for fitness to drive recommendations due to high false-positive rates (Hollis, Duncanson, Kapust, Xi, & O'Connor, 2015).
 - Another study of 243 participants suggest for neurological clients (stroke, brain injury, Parkinson's disease, multiple sclerosis, dementia) with self-reported cognitive impairment and a MoCA score of between 12 and 27 could be referred for on-road evaluation. (Esser, Dent, Jones, et al, 2016).
- Clock Drawing Test (CDT)
 - Evaluates visual-perceptual/spatial, working memory and executive functions
 - Oswanski et al. (2007) suggest cut off score of greater than or equal to 3 when using CDTs with a four point scoring system. This study was completed with individuals over the age of 55 therefore the authors expressed caution with application to other groups.
 - Freund et al. (2005) completed a study with drivers over the age of 60 evaluating performance on the CDT with performance on tasks on a driving simulator. They reported clients scoring less than five (seven point scoring system) on the CDT made more errors during tasks on the simulator (looked at hazardous errors that may indicate medical impairment along with traffic violation errors). They felt these clients would benefit from more comprehensive driving evaluation. The authors did not recommend using the assessment in isolation to determine fitness to drive.
- Useful Field of View (UFOV)
 - Computer-based assessment of visual attention for people with suspected or diagnosed cognitive impairment. Subtests evaluate processing speed, divided attention and selective attention.
 - Has been validated with respect to predictability of driving performance and risk for collisions.
 - Option to purchase cognitive retraining software. Limited availability across Alberta.
 - Purchasing and other information available at: <http://www.visualawareness.com/>
- Screen for the Identification of Cognitively Impaired Medically-At-Risk Drivers (SIMARD)
 - Developed specifically to assist clinicians in deciding when to refer for a more specialized driving assessment. Scores range from 0-130, with a score less than or equal to 30 indicating

- high probability of failing a driving assessment, a score between 31-70 indicating referral for a driving assessment recommended, and a score greater than 70 indicating low probability of failing a driving assessment.
- The authors (Dobbs & Schopflocher, 2010) claim the screening tool is highly predictive of failure of an on-road test. Subsequent to the publishing of the article, others in the medical community have challenged the validity of the results due to statistical methodology (Bedard, Weaver, Man-Son-Hing, Classen & Porter, 2011; Hogan & Bedard, 2011). Decisions about driving or need for further assessment should not be based solely on this screening tool.

SPECIAL CONSIDERATIONS FOR ASSESSMENT OF YOUTH/NOVICE DRIVERS

- Consider substituting alternate age appropriate cognitive/perceptual assessments for youth drivers where appropriate and available.
- Use cautious interpretation of assessments, in combination with task analysis and clinical observation:
 - There is limited evidence on the relationship between assessments and successful driving
 - Need to differentiate between the impacts of impairment vs. inexperience in driving.

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5. Occupational Therapy Interventions for Driving

Occupational Therapy interventions promoting fitness to drive may include modifications to the environment, adaptations or modifications to the vehicle, or treatment targeting the individual's impairments. Interventions are often focused on identifying the person's strengths and implementing strategies to compensate for current deficits. A systematic review of interventions identified five categories of occupational therapy involvement: *patient and family education; cognitive perceptual training; interventions addressing physical fitness; simulator training and behind the wheel training* (Goesz, 2014).

Despite a current lack of evidence for intervention related to driving, occupational therapists at a variety of levels of expertise may be involved in the following ways:

a. Client and Family Education

Health promotion: Promoting participation in meaningful occupations can be addressed by occupational therapists through education of clients and families with the goal of facilitating an individual's safe driving career in addition to providing information on alternative means of transportation.

Driving Cessation: In some instances, driving cessation must be considered. Though difficult, engaging in this conversation is an important intervention provided by occupational therapists. Mental health education equips the occupational therapist to intervene in a therapeutic manner, addressing psychosocial issues. Literature indicates loneliness, social isolation, reduced self-esteem, increased symptoms of clinical depression and strained relationships may develop following driving cessation (Gustafsson et al., 2011). As an individual may require time to absorb and understand the impact of driving cessation, they may or may not be receptive to information regarding alternative transportation and supports during this transition period. An occupational therapist may support the client through sharing and collaborating with the individual's primary care team around resources. This enables the client to access information and support wherever and whenever they are ready to engage in meaningful conversation. When engaging clients and families in conversations regarding driving cessation, using the language of "driving retirement" may be more acceptable.

Occupational therapists provide community education programs such as the CAOT endorsed Car Fit Program ([CarFit](#)) which targets the level of fit between the individual (driver) and their vehicle.

b. Domain Specific Training

Despite the lack of strong evidence for visual-perceptual or cognitive retraining specifically related to driving, Tier 1 (Generalist) and Tier 2 (Advanced) occupational therapists are often involved in these interventions as part of a client centered, functional treatment plan. In cases where a client's goal includes learning or returning to driving, domain specific training could be tailored to include areas most closely related to driving skills such as divided attention, visual search, spatial abilities and working memory/executive function.

c. Adaptive Equipment

Physical limitations can sometimes be mitigated with strategies or adaptive equipment to minimize the impact of fatigue, reduced coordination, increased muscle tone, tremors or spasms, reduced strength or reduced range of motion. Tier 2 (Advanced) and Tier 3 (Advanced-Specialist) therapists may prescribe 'low tech' adaptive equipment including the following:

LOW TECH EQUIPMENT	INDICATION
Spinner knob	Not able to complete hand over hand steering
Left foot accelerator	Difficulty with right foot movement and/or coordination
Hand controls	Difficulty with leg movement. Should be used in conjunction with spinner knob, as the client will only be able to steer with one hand (one hand will be on hand controls)

This type of equipment can be purchased at mobility dealers who specialize in vehicle modifications. The National Mobility Equipment Dealers Association (NMEDA) regulates such dealers and members must uphold standards for installation, education, and service. A list of approved NMEDA vendors can be found at: www.nmeda.com. This website also includes pictures and descriptions of a variety of vehicle adaptations. Please contact a Tier 2 or 3 occupational therapist or a local vendor for specifics of Canadian standards, as not all products on the site are approved in Canada.

While experienced Tier 2 occupational therapists may have the ability to assess for low tech equipment, evaluation with a Tier 3 occupational therapist may be beneficial for clients with complex driving equipment needs such as high tech vehicle modifications. Clients who require driving re-training may also benefit from working with a Tier 3 occupational therapist for on-road intervention. In Alberta, a limited number of driving schools can offer training once the need for equipment has been established.

In order to drive with adaptive equipment in Alberta, a special code is required on the Motor Operator's License. Individuals using equipment are usually required to complete a road test with a Provincial Examiner at a Registry office.

More advanced adaptive equipment, such as electronic gas and brake, and low effort or no effort steering, is very expensive and requires extensive training. This type of equipment should be recommended in consultation with a Tier 3 therapist.

Specialized equipment to assist with entry/exit of the vehicle for passengers with mobility impairments is an under-served practice area for occupational therapists. Consultation in this area ensures children, adults and older adults with mobility impairments are transported in a private vehicle as safely and independently as possible.

d. Simulators

Vehicle simulator technology has evolved immensely over the past decade, such that simulators are less expensive, more capable and more appropriate for use in multiple clinical settings (Classen & Brooks, 2014). Early support for the external validity of driving simulators has been shown in multiple studies which demonstrate similar types and numbers of driving errors between simulators and on-road performance (Meuleners & Fraser, 2014; Schechtman et al., 2009). As per the literature review by Classen & Brooks (2014), an expert panel determined that well-designed simulators and simulator protocols may have the potential to provide a safe and effective means for studying, assessing and training drivers and may be valuable as part of a comprehensive driver evaluation. Occupational therapists working with simulators must have appropriate knowledge and training in their use. Simulators may not be appropriate for all age and diagnostic groups (Classen & Brooks, 2014). As well, access to driving simulators and associated training can be extremely limited and expensive. Many clients experience symptoms of “simulator sickness” (including nausea, dizziness, light-headedness, and vomiting). Factors such as age, gender, diagnosis and severity of impairment are important considerations related to effectiveness and appropriateness of vehicle simulators and onset of simulator sickness (Classen & Brooks, 2014; Mazer et al., 2015). Despite a growing body of literature, there remains insufficient evidence to unequivocally support simulator reliability and validity as an effective assessment and intervention tool for occupational therapy practitioners (Classen, Dickerson & Justiss, 2012) and *simulators should not be used as the sole determinant of fitness to drive*. Further research is required to justify their use in clinical practice settings.

e. Retraining or Refresher Lessons

CAOT’s *National Blueprint for Older Drivers Fact Sheet for Driver Retraining Programs* indicates “that there is increasing evidence that older driver retraining can lead to improvements in general driving knowledge and driving-specific skills.” For older drivers, a combination of classroom and on-road training programs (such as Alberta Motor Associations “Drive 55”) may be a useful option for healthy drivers looking to improve or maintain their skills as they age.

f. Medically at Risk Older Drivers

Classen et al. (2014) provided an evidence based review of the current literature regarding interventions for medically at risk older drivers. Key clinically applicable recommendations include:

Stroke: Strong evidence to support graded simulator interventions for clients with stroke; moderate to strong evidence to support the use of multi-modal interventions (i.e., graded simulator intervention, traffic theory knowledge testing, and on-road training) to improve on-road outcomes. Insufficient evidence exists to support task/impairment focused rehabilitation of visual attention (i.e., Dynavision®), processing speed or general visual-perceptual exercises to improve on-road performance. Evidence

suggests occupational therapists should focus their efforts on driving related tasks such as behind the wheel training, as opposed to targeting underlying client factors.

Visual Impairments: Personalized education programs to increase awareness and knowledge are useful for clients with low vision, but this does not necessarily generalize to reduced crash risk. Insufficient evidence exists for the use of prism lenses to promote fitness to drive.

Cognitive Impairments: Insufficient/weak evidence exists to support the use of driving restrictions or compensatory strategies for drivers with dementia.

SPECIAL CONSIDERATIONS FOR INTERVENTION WITH YOUTH/NOVICE DRIVERS

Best practice evidence on driving interventions with youth/novice drivers is new and evolving

- There is strong evidence to support specialized instruction for individuals with cerebral palsy, developmental coordination disorder and spina bifida/myelomeningocele
- Intervention aimed at developing visual search strategies and hazard perception has been shown to be effective, and the use of a simulator for assessment and intervention has been shown to be more valid with a younger population.

General References for Intervention

Canadian Association of Occupational Therapists. (n.d.). *National blueprint for older drivers. Fact sheet for driver retraining programs*. Retrieved from: <http://www.caot.ca/Driving/OlderDriverFactSheetEffectivenessupdatedJune.pdf>

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de Oliveira, R., & Wann, J. P. (2012). Driving skills of young adults with developmental coordination disorder: Maintaining control and avoiding hazards. *Human Movement Science*, 31(3), 721-729.

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Kirby, A., Sugden, D., & Edwards, L. (2011). Driving behaviour in young adults with developmental coordination disorder. *Journal of Adult Development*, 18(3), 122-129.

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Stinchcombe, A., Gagnon, S., Zhang, J. J., Montembeault, P., & Bedard, M. (2011). Fluctuating attentional demand in a simulated driving assessment: The roles of age and driving complexity. *Traffic Injury Prevention*, 12(6), 576-587.

6. Consent, Disclosure, and Reporting Driving Concerns

a. Consent

Consent is an ongoing process that occurs throughout all interactions and can be withdrawn at any point. When obtaining consent, the occupational therapist must discuss the potential benefits, risks and outcomes of the driving screening, assessment or intervention. Consent must include the collaborative communication that will occur after the occupational therapy assessment, i.e. the occupational therapist will discuss findings with the client, family, physician and licensing authority as appropriate.

All conversations about consent, disclosure and reporting of driving concerns should be clearly recorded in the client's health record.

Given the higher risk nature of driving recommendations, Tier 2 and Tier 3 therapists should consider having clients complete a [Consent to Treatment/ Procedures Form](#) as well as [Consent to Disclose Health Information Form](#) prior to completion of the assessment. Upon completion of the assessment, ongoing consent to disclose information should be confirmed. More information regarding consent can be accessed on [Insite](#).

b. Disclosure of Information

AHS Guidelines for Disclosure of Information provides details of the occupational therapist's responsibilities under the Health Information Act (HIA) of Alberta. Disclosure of assessment results or concerns regarding driving ability can occur in a number of ways:

- i. *With client consent* (AHS Guidelines for Disclosure of Health Information, section 2.4): Clients can consent to release of health information to external sources, such as DFAM, by completing the following form: [Consent to Disclose Health Information Form](#).
- ii. *Without client consent to avert or minimize the risk of imminent danger* (AHS Guidelines for Disclosure of Health Information, section 3.2): The HIA allows disclosure of health information to prevent or minimize imminent danger to the health or safety of the public or to the individual. The following criteria regarding imminent danger must generally be satisfied:
 - Clarity – the intended victim or group of victims must be identifiable
 - Danger – the danger to the victim must be serious bodily harm or death
 - Imminence – the risk must be serious and a sense of urgency must be created by the threat of danger. The risk could be a future risk, but must be serious enough that a reasonable person would believe that the harm would be carried out.

Regardless of whether information is disclosed with or without consent, the recipient of the health information (i.e. DFAM) must be informed of the purpose and authority for the disclosure. This can be done by completing “[Notice to Recipient of Health Information](#)”, providing a copy to the recipient and including it in the health record. This is not required if the recipient is another health care provider or caregiver.

For more information on disclosure, refer to AHS Guidelines for Disclosure of Health Information, available on Insite.

- iii. *Without client consent to other custodians for purpose of continuing care or treatment* (AHS Guidelines for Disclosure of Health Information, sections 2.5.1 and 2.5.2): Client consent is not required to share information with other health care custodians, including physicians, or to other care providers for the purpose of continuing treatment or care. This could include a family member or friend who is providing care. The least amount of information necessary to provide care should be disclosed.

“The Registrar has the authority to require a person to submit to a medical or physical examination and may place special conditions or restrictions on a Driver license or suspend driving privileges. These actions will only be taken where there are reasonable and probable grounds to believe that the person is a safety risk to himself or to the motoring public.”

Retrieved from: <http://www.transportation.alberta.ca/2561.htm>

c. Reporting Concerns

In Alberta, there is no legislation requiring any health professional to disclose driving concerns and in fact, it is the driver’s responsibility to make DFAM aware of any medical conditions which may impact driving. This includes a Class 7 (Learner’s) license. Unfortunately, in many cases clients are unaware of this requirement or unwilling to report their condition.

It is required by law for a person who holds or applies for a Driver’s license to immediately disclose to the Registrar a disease or disability that may interfere with safe operation of a vehicle.

Alberta Transportation

While there is no explicit legal obligation to do so, all occupational therapists who have concerns regarding a client’s ability to drive safely have a *professional* and *ethical obligation* to follow up on these issues as there is potential impact on client and public safety (Slater, 2014). The Alberta College of Occupational Therapist Code of Ethics states occupational therapists “should take into

consideration safety and health issues when prioritizing services to protect the individual, ourselves and the public.” (ACOT, 2005, p7). There is the potential for an occupational therapist to face legal repercussions if concerns about driving safety were identified and not reported appropriately.

It is important to note that no health care professional, including a physician, can take away a driver’s license. As the licensing body in Alberta, only DFAM has the authority to suspend or terminate driving privileges. DFAM considers a number of factors when making determinations regarding driving including medical and functional assessments (See Section 3 above, Occupational Therapy Role in Determining Driver Fitness) supporting a collaborative approach to assessment and reporting. Ideally, reporting concerns to DFAM is done in a collaborative manner however any team member can report driver concerns.

The Canadian Association of Occupational Therapists (CAOT) has proposed the use of a National Driver Safety Concern form to serve as the occupational therapist’s statement of functional concern regarding safe driving. A version of this form is available in Appendix A and can be used in the absence of a complete assessment to express concerns with safe driving.

For Tier 2 and 3 occupational therapists who are specifically completing assessments with the goal of assessing driving skills, a Clinical Evaluation Form template is included in Appendix B. While a common assessment form can be useful to standardize practice and reporting across the province, both forms could be modified to reflect individualized programs.

References

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7. Resources and Suggested Readings

a. Driving Standards and Guidelines

Alberta Transportation – Driver Fitness and Monitoring ([Alberta Transportation Web Page](#)): multiple documents are available including medical conditions that may affect driving, guidelines for returning to driving and the physician electronic medical report form ([Electronic Medical Report Form](#)).

Canadian Council of Motor Transport Administrators – [Medical Standards for Drivers](#): This document forms the basis for AB Transportation guidelines regarding medical conditions and driving. Revisions made in December 2015 include a much stronger emphasis on functional assessment and inclusion of occupational therapists and driver rehabilitation specialists as strong contributors to the process.

Service Alberta - Information on classes of licenses, information on standard road tests including disqualification/errors

[Driver Licensing](#)

[Preparing for a Road Test](#)

b. Resources for Clients and Families

1. [Graduated licensing summary](#) for new drivers
2. [National Blueprint for Injury Prevention in Older Drivers](#) – CAOT project with information geared towards keeping individuals driving safely. Brochures for clients and families include warning signs, safe driving strategies, community mobility and driving retirement.
3. Alberta Motor Association – information on [Transportation Options for Seniors](#) in all areas of Alberta as well as other seniors driving resources
4. [Canadian Automobile Association](#)– Website has information for seniors regarding refresher courses, evaluating driving ability, how aging affects driving, medication effects, transportation planning and other resources.
5. [National Highway Transportation safety Administration](#) – Adapting motor Vehicles, How to understand and influence older drivers and Driving safely while aging gracefully.
6. [The Hartford](#) – Has online information and publications that can be ordered (hard copy and online). There is information for families to guide conversations about driving cessation as well as tips for gradual driving cessation for older drivers. Search “older drivers” for publication options.
7. Canada Safety council – [Drugs and the Older Driver](#) – this page provides information on the effect medications could have on driving.

8. [AOTA](#) – There are several basic fact sheets for consumers and their families including on expressing concerns, safety tips, aging changes that effect driving, myths about older drivers and how an occupational therapist can help.
9. [Strokengine](#) – There is client and family information about returning to drive after having a stroke.
10. [Medically At-Risk Driver Centre](#) – University of Alberta researchers and stakeholders. The website contains the SIMARD screen, a list of research projects, Cost of Driving calculator and Alternative Transportation Services Study
11. [CarFit](#) –A free community education program that offers older adults the opportunity to see how well their personal vehicles ‘fit’ them. Goal is to enhance safety for older drivers and increase their community mobility options
12. [Road Wise Review](#) – A free online screening tool developed by the AAA to help seniors measure certain mental and physical abilities important for safe driving

c. General Information for Health Care Providers

1. The Driving and Dementia Toolkit – Practical information for professionals providing services in the area of driving. The document includes “General Strategies” (including an algorithm), “Assessment” and “After Assessment”. [Candrive Driving Research for Older Adults](#)
2. [National Blueprint for Injury Prevention in Older Drivers](#) – information for professionals including warning signs, assessment and intervention strategies. The full document is also available online. It provides information on the relevant research and information surrounding the issue.
3. [Alberta Provincial Stroke Strategy](#) – has an information sheet on Driving After a Stroke in Alberta for health care professionals that clearly outlines the procedure and includes contact information.
4. National Highway Traffic Safety Administration – [Drive Well – Promoting Older Driver Safety and Mobility in Your Community – Toolkit](#). This is a comprehensive toolkit that can be used to present a variety of topics to the general public or older drivers and their families. The materials include handouts.
5. [Medically At-Risk Driver Centre](#) – University of Alberta researchers and stakeholders. The website contains the SIMARD screen, a list of research projects, Cost of Driving calculator and Alternative Transportation Services Study

6. [Evidence Based Review of Stroke Rehabilitation](#) – Community Reintegration (Section 19.5) – Provides evidence and recommendations for driving assessment and interventions for clients with strokes.
7. [Physician’s Guide](#) to Assessing and Counselling Older Drivers
8. [National Blueprint for Injury Prevention in Drivers with Arthritis](#) - The Canadian Association of Occupational Therapists (CAOT) National Blueprint for Injury Prevention in Drivers with Arthritis.

d. Resources for Occupational Therapists

1. [AHS Occupational Therapy Process: Enabling Safe Participation in Driving](#). This 3 hour workshop with Brenda Vrkljan and Nelle-Marie Hyde took place in March 2015 and is archived on the Provincial Occupational Therapy Professional Practice Council page on Insite.
2. [CAOT Older Driver Blueprint Links and Resources](#)
3. [AOTA](#) – Multiple education resources are available.
4. McGill University, School of Physical and Occupational Therapy – [Graduate Certificate in Assessing Driving Capabilities](#). There are academic requirements for entrance. This is an 18 month online program with course and practical components.
5. University of Western Ontario - [Master of Clinical Science \(MClSc\) in Driving Rehabilitation Therapy](#) states: “*Graduates of this program are qualified to be entry-level driving rehabilitation therapists working with medically-at-risk drivers.*”
6. [Association of Driver Rehabilitation Specialists](#) – Driver Rehabilitation Specialist Certification (CDRS) Exam, resources and annual education conference. Eligibility to write exam depends on education and direct clinical hours within this area of practice.
7. Medication – Two data base of medications and potential effects on driving.
[Roadwise](#) [Drug Interaction Checker](#)

e. Vehicle Modifications

1. [National Mobility Equipment Dealers Association](#) – samples of products (not all are approved in Canada so please consult a Tier 3 occupational therapist or mobility dealer).
2. [NHTSA](#) – Adapting motor vehicles for people with disabilities.
3. [Silver Cross Automotive](#) – Vendor for vehicle modifications
4. [American Automobile Association](#). (2012). Smart features for older drivers.

Appendix A: Driver Safety Concern Form (Alberta)

Driver Safety Concern Form (Alberta)

INSTRUCTIONS

1. Complete this form when requesting Alberta Transportation to determine fitness to drive.
2. Sign this Form in the signature block provided.
3. Mail, fax or take this form to a local registry office or directly to Alberta Transportation.

_____/_____/_____
NAME OF PERSON TO BE EVALUATED DATE OF BIRTH (if known)

STREET ADDRESS (if known)

PHONE NUMBER (if known)

Alberta Transportation may require an evaluation when there is reason to believe that a driver may no longer be qualified to hold a license or when there is reason to believe that the person requires assessment for adaptive aids or re-education. The individual may be required to undergo a medical assessment, vision tests, a test on knowledge about driving, or an on-road driving test.

In the space below please provide specific information such as events and dates of these events that caused you to question the individual's ability to drive safely. If you believe that the individual has a medical condition/functional impairment that impacts on safe driving, please provide information about the condition/impairment and if known to you, its impact on the individual's ability to drive safely. The information provided in this report will help Alberta Transportation identify the steps necessary to determine the driver's qualifications.

Specific concerns about the driver that are considered to be a safety risk:

Health Care Provider

_____/_____/_____
PRINTED NAME/SIGNATURE DATE

YOUR CONTACT NUMBER

Appendix B: Documentation Templates: Driving Assessment and Driving Evaluation Report



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:

NAME:

D.O.B:

Assessment Date	
Primary Physician	
AB Operator's License Number	
AB Operator's License Expiry	
Reason for Referral	Client Perception of Driving Capacity
	<input type="checkbox"/> No Concerns Reported <input type="checkbox"/> Concerns Reported: <input type="checkbox"/> Cognitive/Perceptual <input type="checkbox"/> Physical <input type="checkbox"/> Visual <input type="checkbox"/> Other
Most Responsible Diagnosis <i>(Date of onset and impact)</i>	
Co-morbidities <i>(Date of onset, impact)</i>	
History of seizures: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Medications <i>(Potential impact on driving and patient reported side effects)</i>	
Medication Management: <input type="checkbox"/> Independent <input type="checkbox"/> Assistance Recreational drug use: <input type="checkbox"/> Yes <input type="checkbox"/> No	

ID#:

NAME:

D.O.B:

OCCUPATIONAL THERAPY

DRIVING ASSESSMENT

Alcohol use: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Current Functional Status	
ADLs: <input type="checkbox"/> Independent <input type="checkbox"/> Needs Assistance IADLs: <input type="checkbox"/> Independent <input type="checkbox"/> Needs Assistance Mobility: <input type="checkbox"/> Independent <input type="checkbox"/> Needs Assistance Transfers: <input type="checkbox"/> Independent <input type="checkbox"/> Needs Assistance Communication: <input type="checkbox"/> Independent <input type="checkbox"/> Needs Assistance	
Driving Profile	
Last Drove:	Class of License Held: 1 2 3 4 5 6 7
Years Experience: <input type="checkbox"/> New Driver <input type="checkbox"/> 1 - 5 years <input type="checkbox"/> 5 – 10 years <input type="checkbox"/> Over 10 years	Driving Comfort: <input type="checkbox"/> City <input type="checkbox"/> Highway <input type="checkbox"/> Winter <input type="checkbox"/> Night
Driving Frequency: <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Episodic	Driving Goals: <input type="checkbox"/> Return to Independent Driving <input type="checkbox"/> Learn to Drive Independently <input type="checkbox"/> Other:
Types of Vehicles: <input type="checkbox"/> Automatic: car / truck / van / SUV <input type="checkbox"/> Manual: car / truck / van / SUV <input type="checkbox"/> Recreational: motorbike / quad / motor home / boat <input type="checkbox"/> Industrial: bobcat / forklift / back hoe / farm machinery	Current Method of Transportation: <input type="checkbox"/> Self <input type="checkbox"/> Spouse <input type="checkbox"/> Family / Friends <input type="checkbox"/> Taxi <input type="checkbox"/> Public: bus / train / accessible transit
Driving Judgment/Insight <input type="checkbox"/> Reported near misses or accidents: <input type="checkbox"/> Infractions: <input type="checkbox"/> Family feedback on driving: <input type="checkbox"/> Self-imposed driving limitations: <input type="checkbox"/> None	Formal Driving Education: <input type="checkbox"/> In Class <input type="checkbox"/> On Road <input type="checkbox"/> Dates: <input type="checkbox"/> None



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:

NAME:

D.O.B:

Vision and Hearing	
Hearing	<input type="checkbox"/> Functional <input type="checkbox"/> Impaired: <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Both Hearing Device: <input type="checkbox"/> Yes <input type="checkbox"/> No
Vision History	Date of last vision assessment: Corrective lenses worn for driving: <input type="checkbox"/> Yes <input type="checkbox"/> No Known Visual Problems: Other:
Acuity	Both eyes open: 20 over 20 / 25 / 30 / 40 / 50 / 70 / 100 / 200 Corrected: <input type="checkbox"/> Yes <input type="checkbox"/> No Evidence/Reports of Diplopia: <input type="checkbox"/> Yes <input type="checkbox"/> No
Contrast Sensitivity <i>(Bivaba – Minimum Normal 15 numbers @ 3 meters)</i>	
Oculomotor Function:	Smooth pursuits:
	Lateral Phorias:
	Saccades:
Visual Fields: <i>(Confrontation testing)</i>	
Visual Attention: <i>(Cancellation sheet, Extinction testing)</i>	



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:
NAME:
D.O.B:

Vision and Hearing	
Hearing	<input type="checkbox"/> Functional <input type="checkbox"/> Impaired: <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Both Hearing Device: <input type="checkbox"/> Yes <input type="checkbox"/> No
Vision History	Date of last vision assessment: Corrective lenses worn for driving: <input type="checkbox"/> Yes <input type="checkbox"/> No Known Visual Problems: Other:
Acuity	Both eyes open: 20 over 20 / 25 / 30 / 40 / 50 / 70 / 100 / 200 Corrected: <input type="checkbox"/> Yes <input type="checkbox"/> No Evidence/Reports of Diplopia: <input type="checkbox"/> Yes <input type="checkbox"/> No
Contrast Sensitivity <i>(Bivaba – Minimum Normal 15 numbers @ 3 meters)</i>	
Oculomotor Function:	Smooth pursuits:
	Lateral Phorias:
	Saccades:
Visual Fields: <i>(Confrontation testing)</i>	
Visual Attention: <i>(Cancellation sheet, Extinction testing)</i>	



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:

NAME:

D.O.B:

Physical – Upper Extremity (ROM and Strength)	
<input type="checkbox"/>	Patient has functional strength and range of motion in bilateral upper extremities to operate steering and vehicle controls.
<input type="checkbox"/>	Patient demonstrated impairments of upper extremity strength and/or range of motion. See results below:
ROM/Manual Muscle Testing/Other (Record for movements that are not within normal limits)	
Physical – Lower Extremity (ROM and Strength)	
<input type="checkbox"/>	Patient has functional strength and range of motion in bilateral lower extremities to operate accelerator, brake and clutch pedals.
<input type="checkbox"/>	Patient demonstrated impairments of lower extremity strength and/or range of motion. See results below:
ROM/Manual Muscle Testing/Other (Record for movements that are not within normal limits)	



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:

NAME:

D.O.B:

Physical – Neck and Trunk												
Shoulder Checking:												
<input type="checkbox"/> Functional neck and trunk rotation for bilateral shoulder check <input type="checkbox"/> Impaired neck and trunk rotation for left shoulder check <input type="checkbox"/> Impaired neck and trunk rotation for right shoulder check												
Comments:												
Sitting Balance:												
<input type="checkbox"/> Able to maintain/regain center of gravity when maximum external displacement is applied <input type="checkbox"/> Able to maintain/regain center of gravity with some external displacement <input type="checkbox"/> Able to maintain/regain center of gravity when reaching outside of base of support with arms/legs <input type="checkbox"/> Unable to independently maintain balance in sitting												
Comments:												
Brake Reaction Time												
Right Foot Accelerator											Avg:	WNL/Slow
Left Foot Accelerator											Avg:	WNL/Slow
Both Feet											Avg:	WNL/Slow
Accurate Transitions <input type="checkbox"/> Yes <input type="checkbox"/> No				Difficulty understanding <input type="checkbox"/> Yes <input type="checkbox"/> No				Improved with practice <input type="checkbox"/> Yes <input type="checkbox"/> No				
Comments:												



OCCUPATIONAL THERAPY
DRIVING ASSESSMENT

ID#:

NAME:

D.O.B:

Sensation and Coordination				
	Right		Left	
Proprioception	Upper extremity: Intact / Impaired Lower Extremity: Intact / Impaired		Upper extremity: Intact / Impaired Lower Extremity: Intact / Impaired	
Sensation	Intact / Impaired :		Intact / Impaired :	
Coordination	Test: Result:		Test: Result:	
	Test: Result:		Test: Result:	
Comments:				
Cognitive Perceptual				
Assessment	Results			Comments
Motor Free Visual Perceptual Test <i>(< 32 or > 6.32 sec predicts poor on road performance)</i>	Score	Average Time		
	/ 36	(Sec/Questions)		
Trails A (Trails A > 2 minutes and/or 2 errors predicts poor on road performance)	Able to Complete?	Time (seconds)	Errors	
Trails B	Able to Complete?	Time (seconds)	Errors	



Alberta Health
Services

ID#:

NAME:

D.O.B:

OCCUPATIONAL THERAPY

DRIVING ASSESSMENT

Date:	Name:	Signature:

ID#:

NAME:

D.O.B:

**OCCUPATIONAL THERAPY
DRIVING EVALUATION REPORT**

Assessment Date	
Primary Physician	
AB Operator's License Number	
AB Operator's License Expiry	
RECOMMENDATIONS (check all that apply):	
<input type="checkbox"/> No significant impairments identified that would impact driving. <ul style="list-style-type: none"> <input type="checkbox"/> Continue or resume driving. Client should proceed to their physician for completion of an Operator's Medical. Client may be required to complete a standard road test with a Provincial Examiner. 	
<input type="checkbox"/> Impairments were identified that may impact ability to drive safely. Further evaluation is required to make a definitive recommendation on ability to drive. It is recommended that the <u>client's physician</u> refer them for: <ul style="list-style-type: none"> <input type="checkbox"/> Comprehensive Tier 2b Driving Evaluation. <ul style="list-style-type: none"> Recommend referral to: <input type="checkbox"/> Comprehensive Tier 3 Driving Evaluation <input type="checkbox"/> Suggested Vehicle modifications <input type="checkbox"/> Vision assessment by an (Optometrist, Ophthalmologist, Not Applicable) <input type="checkbox"/> Recommend that client discontinue driving while waiting for further evaluation outlined above.	

ID#:

NAME:

D.O.B:

**OCCUPATIONAL THERAPY
DRIVING EVALUATION REPORT**

Significant deficits identified that are highly likely to impact ability to drive safely.
Recommend:

- Temporary driving cessation.
 Permanent driving cessation.

SUMMARY OF RESULTS AND RECOMMENDATIONS:

Date:

Name:

Signature:

CONSENT

Informed written consent received to proceed with in-clinic driving evaluation.

Yes No

Informed written consent received to release evaluation results to Driver Fitness and Monitoring.

Yes No

VISION ASSESSMENT**Vision**

(Visual standards for driving are acuity of 20/50 with both eyes and visual field of at least 120 continuous degrees along the horizontal meridian and 15 continuous degrees above and below fixation with both eyes open and examined together)

Visual acuity, visual fields, contrast sensitivity, oculomotor function, and visual perception Choose one assessed in relation to the task of safely operating of a motor vehicle.

Drop-down menu: (were / were not)

ID#:

NAME:

D.O.B:

**OCCUPATIONAL THERAPY
DRIVING EVALUATION REPORT**

Summary of Visual Screening Findings: Choose one

*Drop-down menu: (no impairments identified / one or more impairments identified)***PHYSICAL ASSESSMENT****Upper Extremity***(Functional range of motion and strength of the upper extremities are required to reach and manipulate the steering wheel, signal lights and gear shifter)*

Range of motion and strength of hands, arms and shoulders Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Summary of Findings: Choose one

*Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)***Lower Extremity***(Functional range of motion and strength of the lower extremities are required to reach and activate the accelerator and brake pedals)*

Range of motion and strength of feet, legs and hips Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Summary of Findings: Choose one

*Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)***Neck and Trunk***(Functional range of motion and strength of the neck and trunk are required to shoulder check to identify potential obstacles at the side and rear of the vehicle. Functional sitting balance including the ability to maintain and regain center of gravity against moderate external displacement forces is also required.)*

Range of motion and strength of the neck and trunk Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Sitting Balance Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)

**OCCUPATIONAL THERAPY
DRIVING EVALUATION REPORT**

ID#:

NAME:

D.O.B:

Coordination

(Safe driving requires the ability to make smooth, accurate, controlled movements of the hands, arms, feet and legs in order to operate pedals, the steering wheel and hand controls. Most of these movements need to be coordinated with little or no visual feedback.)

Coordination of the upper extremities Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Coordination of the lower extremities Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Proprioception of the upper extremities Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Proprioception of the lower extremities Choose one assessed in relation to the task of safely operating a motor vehicle without modifications.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)

COGNITIVE PERCEPTUAL ASSESSMENT**Attention**

(Safe driving requires the ability to sustain attention to the task of driving over an extended period of time, to selectively attend to stimuli such as traffic lights from among other environmental stimuli and to divide attention between stimuli such as the roadway ahead while being able to monitor traffic in the periphery.)

Sustained, selective and divided attention Choose one assessed.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)

Memory

ID#:

NAME:

D.O.B:

**OCCUPATIONAL THERAPY
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(Safe driving requires the ability to register, recall and manipulate information about signage, traffic rules, and various new environmental information such as when driving on a busy freeway or coming to a busy four way stop.)

Short term, working and long term memory Choose one assessed.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)

Visual Information Processing Speed

(Safe driving requires the ability to take in, analyze and respond quickly to visual information such as when merging into busy traffic.)

Visual processing speed Choose one assessed.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)

Visuospatial Abilities

(Safe driving requires the ability to process and understand visual information about the relationships between stimuli based on object recognition and the determination of size. This is required when making driving decision to collisions with other vehicles or with pedestrians.)

Spatial relationships, visual discrimination, figure ground, visual closure, and visual memory Choose one assessed.

Summary of Findings: Choose one

Drop-down menu: (was / was not ; no impairments identified / one or more impairments identified)