

**29 DEPARTMENT OF SECRETARY OF STATE**

**250 BUREAU OF MOTOR VEHICLES**

**Chapter 3: PHYSICAL, EMOTIONAL AND MENTAL COMPETENCE TO OPERATE A MOTOR VEHICLE**

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**SUMMARY:** These rules describe the standards to be used by the Secretary of State in determining physical, emotional and mental competence of persons to operate motor vehicles. The rules establish a reporting system that requires persons to submit medical information to the Secretary of State. Persons found incompetent to operate a motor vehicle in accordance with procedures outlined in these rules may have their driving privileges suspended, revoked or restricted.

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**SECTION 1: STANDARDS**

1. **Secretary of State.** The Secretary of State shall determine the physical, emotional, and mental competence of a person to operate a motor vehicle with the advice of the Medical Advisory Board and on the basis of the Functional Ability Profiles.
2. **Functional Ability Profiles.** Standards to determine the competence of a person to operate a motor vehicle are those contained in the "Functional Ability Profiles" adopted by the Secretary of State with the assistance of the Medical Advisory Board.

**SECTION 2: REPORTING SYSTEM**

1. **Medical conditions requiring report.** Conditions which may result in functional limitations and increase risk of unsafe operation of a motor vehicle should be reported. Conditions for which a person is required to submit a report to the Secretary of State include, but are not limited to, alterations/loss of consciousness, brain injury, cardiovascular, chronic respiratory diseases, CVA/stroke, hypoglycemia, musculoskeletal, neurological (including dementia, epilepsy/seizures, narcolepsy, Parkinson's, sleep apnea), substance use, mental health conditions, and visual disorders.
2. **Sources of information.** Sources of information concerning medical conditions include, but are not limited to:
  - A. Permit, license, or renewal applications, and accident reports;
  - B. Written reports from family, physicians, law enforcement personnel and other government agencies; and
  - C. Signed statements from citizens.
3. **Nature of medical report.** Upon receipt of information concerning the existence of a medical condition for which a report is required, or which may affect a person's ability to

operate a motor vehicle, the Secretary of State or their designee shall request the person involved to submit a medical report from a physician or from other qualified treatment personnel who may be specified. Other treatment personnel may include licensed or certified professionals as follows: Licensed physicians (MD, DO, or ND from a CNME accredited program), nurse practitioners (NP), physician's assistants (PA), optometrists (OD), chiropractors (only for musculoskeletal issues), licensed clinical social workers (LCSW) trained in substance abuse or mental health, speech, physical or occupational therapists (ST, PT or OT); psychologists, and any other medical personnel as deemed appropriate by the Secretary of State or their designee. Medical professionals should not make assessments outside their area of expertise or knowledge.

- A. To be acceptable, the medical report must be made on forms supplied or approved by the Secretary of State and must contain the physician's or other treatment personnel's diagnosis of the patient's condition(s) and any prescribed medication(s). The date of exam must normally be within the past 12 months, unless otherwise specified.
- B. The Secretary of State or their designee may specify the clinician qualifications in certain situations when appropriate.
- C. The Secretary of State or their designee may require an individual to certify in writing the date of the person's last seizure, or alteration of consciousness.

#### 4. **Action by the Secretary of State**

- A. Upon receipt of a medical report indicating that a person is competent to operate a motor vehicle, the Secretary of State or their designee may approve the person's competence to operate a motor vehicle, with or without restrictions, taking into consideration the safety of the public and the welfare of the driver.
- B. Upon receipt of a medical report indicating that a person is not competent to operate a motor vehicle, or upon the failure or refusal of a person to submit the requested information, the Secretary of State or their designee shall follow one or more of the following procedures:
  - (1) If, from records or other sufficient evidence, the Secretary of State has cause to believe that a person is not physically, emotionally, or mentally competent to operate a motor vehicle, the Secretary of State may:
    - (a) Obtain the advice of any member of the Medical Advisory Board or the Board collectively. The Board, or any member may formulate advice from the existing records and reports or may request that an examination and report be made by the Board or any other qualified person so designated. The licensed driver or applicant may present a written report from a physician or other qualified person of the driver's choice, to the Board or the member reviewing the matter and such report must be given due consideration. Members of the Board and other persons making examinations and reports are not liable for their opinions and recommendations pursuant to this subsection.

- (b) Require a person to submit to a driving evaluation. Upon the conclusion of such an evaluation, the Secretary of State shall take action as may be appropriate. The Secretary of State may suspend the license of such person, allow person to retain a license, or issue a license subject to any conditions or restrictions deemed advisable, having in mind the safety of the public and the person.
  - (c) After hearing, suspend any operator's license, operating privileges, or privilege to apply for and obtain a license in the State of Maine.
  - (d) Without preliminary hearing, suspend any operator's license, operating privilege, or privilege to apply for and obtain a license in the State of Maine if the Secretary of State determines that the person's continued operation of a motor vehicle presents a potential danger to the person or other persons or property. The Secretary of State shall notify the person that a hearing will be provided without undue delay.
5. **Confidentiality of reports.** Reports received under this rule are confidential in accordance with the Maine Motor Vehicle Statutes.

### SECTION 3: FUNCTIONAL ABILITY PROFILES

Functional ability to operate a vehicle safely may be affected by a wide range of physical, mental or emotional impairments. To simplify reporting and to make possible a comparison of relative risks and limitations, the Medical Advisory Board has developed Functional Ability Profiles for fourteen categories, with multiple levels under each profile. Conditions that may affect the safety of a person to operate a motor vehicle, but are not included in the specified categories, may be reported using the general definitions listed below. Clinician recommendations to limit or expand driving privileges, shorten or extend intervals for review, add or delete restrictions or require a road test will be given due consideration. However, the Secretary of State or their designee will make the final determination.

Each profile follows the same format and describes levels or degrees of impairment. The profile levels are intended to describe potential for at risk driving; they are not meant to correspond to clinical definitions.

1. **No diagnosed condition.** This section is used for a patient who has indicated to the Bureau of Motor Vehicles a problem for which no evidence is found, or for which no ongoing condition can be identified. For example, this category might apply to a person with a heart murmur as a young child who indicates heart trouble, or to a teenager who fainted in gym class once on a hot day who indicates blackouts.
2. **Condition fully recovered/compensated.** This category includes history of a condition that has been resolved or does not warrant review. Guidance for the use of this section is provided in each profile.

### 3. **Active impairment**

- A. **Mild.** This section deals with conditions which warrant periodic medical review because of an ongoing condition that could deteriorate, and/or conditions that may impair ability to drive but which are controlled so that a person can still operate a motor vehicle safely.
- B. **Moderate.** This section deals with conditions that require more frequent medical review, or may necessitate use of personal medical devices, orthotics, adaptive equipment for the car, or restrictions to safely operate a motor vehicle. Some conditions may require a driving test to determine fitness to drive, or may preclude driving, but with potential for recovery allowing safe operation of a motor vehicle.
- C. **Severe.** This section deals with conditions that preclude safe operation of a motor vehicle. This may be due to the severity of the condition; because the condition is not controlled; or because of a new condition which requires further testing and follow-up to determine safety to operate.

In all cases, periodic review may result in a different profile level as the condition improves or deteriorates. Tables for specific conditions included within this chapter of rules, also articulate a frequency of periodic review commensurate with the level of risk.

When the circumstances of an individual driver do not clearly fit within the guidelines presented in these rules, the Medical Advisory Board or any Member may be consulted for review, on a case-by-case basis.

Reporting of temporary conditions is not required. However, a person experiencing a condition or taking medications that may impair their ability to safely operate a motor vehicle should refrain from operating a motor vehicle until their condition improves or they are no longer taking the medication.

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## **CARDIOVASCULAR CONDITIONS PREAMBLE**

Cardiovascular disease may affect a driver's ability in a variety of ways, most particularly being the possibility of cardiac syncope or near syncope, due to either dysrhythmia or medications/devices used to treat the cardiac condition. Guidelines are provided for important categories of diagnoses that may require driving restriction or periodic review.

### **Supraventricular Arrhythmia (SVT) and Bradyarrhythmia:**

In general, profile 2 would apply to individuals whose arrhythmia has been of a minor nature or so remote and well controlled that the patient is expected to drive without his/her condition presenting a risk to the public. In other cases of Supraventricular Tachycardia, Atrial Fibrillation, or bradydysrhythmias, the risk is related to the likelihood of recurrence, and the likelihood that recurrence may result in alteration or loss of consciousness.

### **Ventricular Tachycardia and Ventricular Fibrillation (VT and VF)**

In cases of ventricular tachycardia or ventricular fibrillation risk for driving is related to the likelihood of recurrence and the likelihood that recurrence may result in an alteration of level of consciousness or loss of consciousness (AOC or LOC). Implantable Cardioverter-Defibrillators (ICD) present special circumstances and problems. Generally, a patient who receives such a device for a presenting rhythm that resulted in loss of consciousness (e.g., for secondary prevention,<sup>i</sup> following syncope or sudden death), or a person who experiences interference with abilities needed to control a motor vehicle, alteration or loss of consciousness associated with discharge of the device for an abnormal rhythm, should not drive for 6 months. Driving may be resumed after 6 months being free from an event. Patients who have a device implanted for primary prevention<sup>i</sup> who have not presented a syncopal rhythm yet, may be allowed to resume driving within a week at the judgment of treating clinician.

### **Other Cardiac Conditions**

This section includes other cardiac conditions which could cause syncope or near syncope; or that are severe enough to cause symptoms at rest that could affect driving or meet New York Heart Association Class IV criteria. For cardiac conditions which could cause syncope or near syncope, risk for driving is related to the likelihood of alteration or loss of consciousness.

Clinician recommendations about resumption of driving or the interval for review will be taken into consideration.

Vasovagal syncope is excluded from this FAP unless episodes have occurred while driving. Driving may resume after receiving treatment and being symptom free 3 months. For an unexplained alteration or loss of consciousness, please refer to that FAP.

### **Generalized Deconditioning:**

A person with generalized deconditioning which reduces functional capacity should be evaluated using the "Miscellaneous Musculoskeletal and Neurological Conditions" FAP.

**Footnotes:**

<sup>1</sup>Primary prevention refers to placement of an ICD in a person that has not experienced a sudden cardiac arrest but is at high risk for such an event. Placement in a person that has already experienced a cardiac event such as syncope or cardiac arrest is referred to as secondary prevention.

**FUNCTIONAL ABILITY PROFILE**  
**Cardiovascular Conditions<sup>1</sup>: Ventricular Tachycardia/Ventricular Fibrillation<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No known history of Ventricular Tachycardia (VT) or Ventricular Fibrillation (VF)	N/A
2.	Condition fully recovered	Arrhythmia by history, not documented, asymptomatic	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)		
	a. Mild risk	Non-syncopal, non-sustained ventricular tachycardia.	4 years
	b. Moderate risk	Sustained VT or VF, treated with medication or ICD <sup>3</sup> , more than 6 months without recurrence of syncope.  For drivers with ICD, no pre or post shock syncope, alteration of consciousness, or interference with ability to control a motor vehicle, within past 6 months.	2 years
	c. Severe risk	Sustained VT or VF untreated or treated with medication or ICD <sup>2</sup> less than 6 months, or syncopal arrhythmia not responding to treatment; or  New or worsening established conditions under investigation to	No driving



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		determine potential risk for unsafe driving.	
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<sup>1</sup> For further discussion regarding CARDIOVASCULAR CONDITIONS, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> ICD includes implantable cardioverter defibrillators

**FUNCTIONAL ABILITY PROFILE**  
**Cardiovascular Conditions<sup>1</sup>: Supraventricular Arrhythmias<sup>2</sup>/Bradyarrhythmias**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No known history of supraventricular arrhythmias or bradyarrhythmias	N/A
2.	Condition fully recovered	Arrhythmias by history, not documented, asymptomatic; or  Documented supraventricular arrhythmias (SVT) or bradyarrhythmias, with none in the last 18 months and no other identified heart disease.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Documented SVT or bradyarrhythmia and excluding transient arrhythmias or conduction defects associated with acute myocardial infarction.	
	a. Mild risk	Documented arrhythmias associated with syncope more than 18 months ago, asymptomatic; and/or  A-fib or supraventricular tachycardia without syncope, only mildly symptomatic (e.g., dyspnea, mild lightheadedness).	6 years
	b. Moderate risk	Documented arrhythmias associated with syncope within the past 6-18 months, mildly symptomatic (e.g., dyspnea, mild lightheadedness).	2 years
	c. Severe risk	Documented arrhythmias associated with syncope within the past 6 months	No driving

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		or symptoms that interfere with normal functioning; or  New conditions presumed to be arrhythmic under investigation to determine potential risk for unsafe driving.	
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1For further discussion regarding **CARDIOVASCULAR CONDITIONS**, please refer to **PREAMBLE** at the beginning of this section.

**FUNCTIONAL ABILITY PROFILE**  
**Cardiovascular Conditions<sup>1</sup>: Other Cardiac<sup>2</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No known conditions	No history of any cardiac conditions	N/A
2.	Condition fully recovered	History of a cardiac condition that has been resolved or does not warrant review <sup>2</sup> according to FAP guidelines, and no history of cardiac syncope within the past 4 years.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Any cardiac condition not specified in another FAP and meets the criteria below. For vasovagal episodes see footnote <sup>5</sup> .	Clinician must specify diagnosis & reason for concern.
	a. Mild risk	On-going cardiac condition that warrants review due to risk of developing symptoms severe enough to affect ability to operate a motor vehicle; and/or  History of syncopal episode greater than 18 months but less than 4 years.	4 years
	b. Moderate risk	On-going condition that warrants more frequent review, or  History of syncopal episode 6-18 months ago	2 years  Clinician may recommend shorter interval for review
	c. Severe risk	Condition precludes safe operation of a motor vehicle. This may be due to any of the following: the severity of the condition (E.g., angina or	No driving  Clinician must specify reason for suspension <sup>4</sup>

		<p>shortness of breath at rest or with minimal activity (NYHA IV)); or</p> <p>Non-vasovagal syncopal episodes less than 6 months ago, and likelihood of recurrence unknown<sup>3,5</sup>; or</p> <p>New or suspected condition which requires further testing and follow-up to determine safety to operate; or</p> <p>History of vasovagal syncope while driving or with high-risk features, treated for less than 3 months, or untreated. See footnote<sup>3</sup></p>	
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<sup>1</sup> For further discussion regarding **CARDIOVASCULAR CONDITIONS**, please refer to Preamble at the beginning of this section.

<sup>2</sup> Other cardiac conditions which normally would not require review may include CAD, CHF, valvular heart disease or others.

<sup>3</sup> Vasovagal syncope is excluded from this FAP as long as episodes have not occurred while driving or in high-risk setting (occurs without warning and in any position, has no clear precipitating causes, and/or occurs frequently). Driving may resume after receiving appropriate treatment and being symptom free 3 months. For unexplained alteration or loss of consciousness, refer to the “Unexplained Alteration of Consciousness” FAP.

<sup>4</sup> Document reason for suspension, such as diagnosis and specific symptoms.

<sup>5</sup> Definitive therapy for prevention of syncope may allow driving in less than 6 months on an individual basis.

## CHRONIC RESPIRATORY DISEASE PREAMBLE

Chronic respiratory disease includes conditions that may result in hypoxemia and chronic respiratory failure. Chronic obstructive pulmonary disease (COPD) refers to those pulmonary diseases characterized by obstruction to the outflow of breath, as measured by expiratory flow rates, and includes emphysema, chronic bronchitis, and some forms of chronic asthma. Restrictive respiratory diseases are distinct in limitation of expansion of the lung and include any type of pulmonary fibrosis, chronic infection with scarring, dust deposition, etc. Although the pathology is different, a final common pathway for both types of respiratory disease will be breathlessness, hypoxia, infections, eventual pulmonary insufficiency, and finally respiratory failure. Additionally, other disease processes such as congestive heart failure, cor pulmonale, pulmonary hypertension, among other disease processes can lead to chronic hypoxia.

Most studies of driving ability and COPD have focused on the neuropsychological effects of hypoxia. Classic studies in the 1980's found difficulties in COPD patients on complex cognitive testing. Grant and colleagues (1982)<sup>A</sup> studied 203 severely hypoxic patients (mean PO<sub>2</sub> of 51) and matched controls, and found 42% with cognitive difficulties in the study group compared to 14% in the controls. These did not correlate well with standard pulmonary function tests (PFT's). A second study by Prigatano (1983)<sup>B</sup> confirmed the same type of cognitive limits in slightly less hypoxic patients, mean PO<sub>2</sub> of 66. A meta-analysis<sup>C</sup> done by several of these researchers in 1987 found that neuropsychological effects were correlated with level of hypoxia.

Studies using driving simulators,<sup>D, E</sup> done by European researchers, have confirmed that even mildly hypoxic patients have perceptual difficulties and perform less well than controls. Few studies however have shown higher crash rates among COPD patients, although some Utah driver data<sup>F</sup> suggests that persons with any pulmonary condition are at higher risk of crashes.

A recent large trial testing long-term treatment with supplemental oxygen in COPD patients with moderate resting desaturation (89-93%) or moderate exercise induced hypoxia was performed.<sup>G</sup> There was no significant improvement in time to death or hospitalizations with supplemental oxygen. In addition, there was no significant difference in measures of quality of life. Thus, at this time there would not be an expectation for these patients to require oxygen with driving, if their resting O<sub>2</sub> Sat > 88%.

Restrictive respiratory diseases or any other disease process (CHF, pulmonary hypertension, cor pulmonale, etc.) could be subject to the same driving restrictions when hypoxic respiratory failure develops.

Shorter review periods are beneficial in persons with higher class of disease or those requiring oxygen (even nocturnal or partial use) given that such persons are prone to exacerbations worsening their daily status, prone to gradual decline, and prone to experience difficulty with stressful driving conditions. Those who cannot maintain adequate oxygenation with supplementation should not drive.

**FUNCTIONAL ABILITY PROFILE**  
**Chronic Respiratory Disease<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history of chronic respiratory disease	N/A
2.	Condition fully recovered	Any respiratory condition, recovered or cured; or  Minimal, reversible, episodic, controlled pulmonary condition.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Chronic respiratory disease <sup>2</sup>	
	a. Mild risk	COPD, restrictive respiratory diseases or other disease processes with mild dyspnea, able to maintain O <sub>2</sub> Sat 89% or greater on room air, at rest.	4 years
	b. Moderate risk	COPD, restrictive respiratory diseases or other disease processes with moderate dyspnea, O <sub>2</sub> Sat 88% or less, or PaO <sub>2</sub> 55 or less on room air, but able to maintain <i>O<sub>2</sub> Sat 89% or greater on oxygen supplementation</i> ; or  Exercise or sleep induced O <sub>2</sub> sat 88% or less but able to maintain 89% at rest on room air.	2 year  If O <sub>2</sub> sat less than 88% (on room air) while at rest must use O <sub>2</sub> while driving.  Note: Those with only sleep or exercise induced hypoxia are not required to use O <sub>2</sub> while driving.

	c. Severe risk	<p>COPD, restrictive respiratory diseases or other disease processes with severe dyspnea and/or hypoxia that cannot be controlled to maintain O<sub>2</sub> Sat 89% or greater, or PaO<sub>2</sub> 56 or greater on oxygen at rest; or</p> <p>New condition with poorly controlled hypoxia, unable to maintain O<sub>2</sub> sat at 89% or above, under investigation.</p>	No driving
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<sup>1</sup> For further discussion regarding CHRONIC RESPIRATORY DISEASE, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> Specify the diagnosis



## DEMENTIA PREAMBLE

Many disease processes can cause dementia, most commonly Alzheimer's Dementia, stroke, and Parkinson's Disease. Less common causes include Lewy Body and fronto-temporal dementias, HIV and other chronic viral CNS infections, B12 deficiency, chronic alcohol damage, and multiple sclerosis. All dementias cause some mixture of permanent, often progressive, loss or impairment of cognitive skills like memory, visuo-spatial perception, language, abstraction, prosody and/or praxis impairments, and/or executive function (complex reasoning, planning and judgment).

Cognitive impairment due to another diagnosis such as mental health or neurodevelopmental disorders should be reviewed according to the appropriate Functional Ability Profile (FAP). Dementia caused by another diagnosis such as stroke, brain Injury or other medical conditions should trigger completion of a profile level for the other condition as well as dementia. When there are cognitive changes or other combination of deficits raising concern for unsafe driving but there is no diagnosis of dementia and no explanatory diagnosis, refer to the "Medical – Other" FAP. In setting of unknown diagnosis, physician will need to determine appropriate work up or refer to appropriate specialist.

Memory loss is usually the first symptom to occur in Alzheimer's Dementia, but alone is insufficient to make that diagnosis without other cognitive deficits. Memory loss may be absent or at least occur later in several other types of dementia. Dementias must also be differentiated from other cognitive impairments like a congenital intellectual disability, transient impairments from delirium-producing conditions, or "mild cognitive impairment" (MCI) which entails mild memory or other cognitive deficits but no functional impairment. MCI carries no increased crash risk, nor may mild dementia. However, the potential for progression in both justifies more frequent physician re-evaluations.

The cognitive changes associated with dementia often affect drivers' ability to operate competently and increase crash risks. Those risks are elevated, especially in emergencies and in complicated traffic patterns, such as at intersections, with lane changes, while merging and making left-hand turns.

Unfortunately, there are no tests of driving competence with 100% sensitivity/specificity. Current evidence does show several potentially useful clinical associations between specific cognitive test results and driving outcomes, although scoring cut-points for safe/unsafe driving often vary among studies. Nevertheless, office tests of attention, executive function, visuo-spatial skills, and memory are useful in assessments of drivers with dementia. These include Trails B, Useful Field of View, clock drawing, Snellgrove Maze Test and several others.<sup>A, B</sup> Testing should be tailored to the type of dementia and the particular deficits identified to best capture degree and severity of the impairment.<sup>C</sup>

Although clinical testing and screening have limited ability to predict whether or not an individual driver may be able to pass a road test, screening scores may be used as supporting evidence when selecting a profile level and completing the Driver Medical Evaluation form. For example, a Mini Mental Status Exam (MMSE) of 24-26+, Clinical Dementia Rating Scale (CDR) <1, or Montreal Cognitive Assessment Test (MoCA)  $\geq 22$  would usually be associated with mild cognitive impairment and lower crash risk. An MMSE 20-23, CDR 1-1.5, or MoCA 19-21 may be associated with moderate cognitive impairment and greater crash risk. While an MMSE  $\leq 19$ , CDR 2 or greater, or MoCA  $\leq 18$ , or deficits in visuo-spatial or executive function would often be associated with greater impairment and higher crash risk. Drivers with a screening (MMSE) score of <24 fail road tests 70% of the time, but 30% pass; those with scores of <19 fail 95% of the time, and only 5% pass.<sup>A</sup> All relevant factors, including self-report or family/caregiver reports of unsafe driving, should be taken into consideration. Documentation should support evidence for the diagnosis and profile level written on the Driver Medical Evaluation form.

Although not all experts agree, the Driver Fitness Working Group<sup>A</sup> states that the presence of two or more of the following factors may indicate the need for a cognitive assessment by a health care professional. Applicants with greater numbers of risk factors should be considered at greater risk, although the relative risks are not necessarily additive.

- 1) Age 80 years or older
- 2) History of a recent crash or moving violations
- 3) Applicant self-report or caregiver report of impaired skills
- 4) Use of psychoactive medications such as benzodiazepines, neuroleptics, antidepressants, or use of medications for Alzheimer's Disease
- 5) History of active alcohol abuse
- 6) History of falls
- 7) Inability to understand or hear instructions during interactions with the health professional
- 8) Scores with simple screening tools that indicate the possibility of a cognitive deficit

Online medical textbooks maintain useful reviews of all these issues.<sup>D</sup>

When BMV is notified that a licensed driver is diagnosed with dementia, the driver will usually be required to submit a "Driver Medical Evaluation" (CR-24) form, completed by an appropriate clinician. Depending on the outcome of the Evaluation, the driver may also be required to take a road test, which must be administered by a BMV Driver's License Examiner.

For a description of the BMV road test components, see the Appendix. It should be noted that Driver License Examiners are not trained in cognitive evaluation.

Online programs intended to assist older drivers self-evaluate driving skills may help them to an appropriate decision to retire from driving. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may also be useful. Please be aware that BMV does not normally require these evaluations and they are not a substitute for the BMV road test. Refer to the appendix for more information about Occupational Therapy Evaluations.

**FUNCTIONAL ABILITY PROFILE**  
**Dementia<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No diagnosed dementia, no suspected dementia of concern for driving.	N/A
2.	Condition fully recovered	Cognitive impairment recovered. (Rare, usually within 6 months of identification. Example: recovery following a stroke.)	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Diagnosed dementias (not MCI), other causes having been ruled out. (For Lewy Body Dementia, see footnote <sup>2</sup> ).  Or,  New cognitive impairment under investigation, see Dementia Preamble.	Documentation should support evidence of the diagnosis and profile level reported.
	a. Mild risk	Consistent slight forgetfulness, or mild deficits in judgment and problem solving. May have mild comprehension difficulties. No evidence of executive dysfunction or visuo-spatial impairment.  No known driving impairment.	2 years <sup>3</sup>  ROAD TEST if recommended by clinician
	b. Moderate risk	Cognitive impairment interferes with everyday activities and there may be geographic disorientation, or deficits in judgment, difficulty problem solving or managing sudden events. Without significant evidence of executive dysfunction or visuo-spatial impairment.  Potential concern for driving impairment.	1 year <sup>3</sup>  ROAD TEST

	c. Severe risk	<p>Cognitive impairment significant to the point that new information is not retained; or judgment and problem solving significantly impaired; or there is disorientation to time and place or may be unable to manage complex chores or activities; or</p> <p>History of unsafe driving; or driving is not safe in judgment of clinician; or</p> <p>New cognitive impairment under investigation for dementia, with concern for potentially unsafe driving.</p>	<p>No driving</p> <p>Documentation supports evidence of the diagnosis and profile level reported</p>
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<sup>1</sup> For further discussion regarding DEMENTIA, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> Lewy Body Dementia exhibiting significant movement disorder manifestations should also be reviewed using the Parkinson's FAP.

<sup>3</sup> If clinician documents progression of disease and recommends more frequent review and road testing, the interval may be shortened.

**HYPOGLYCEMIA PREAMBLE**

Hypoglycemia involving a loss of consciousness or requiring third party assistance is incompatible with driving and is especially concerning when accompanied by hypoglycemia unawareness. Examples of requiring third party assistance include but are not limited to: (1) The driver became so confused while hypoglycemic that they got lost while driving and had to call for help; (2) A driver had an alteration of consciousness while hypoglycemic that required someone else to get them to eat or drink something in order to recover.

Some drivers whom the clinician feels are not treating the hypoglycemia condition properly may not be safe to drive, even though they have not had a hypoglycemic episode involving a loss of consciousness or requiring third party assistance. In these cases, the clinician should consider public safety and contact the BMV for guidance.

Drivers with other conditions should be assessed under the appropriate guidelines, e.g., diabetic retinopathy should be reviewed using the Visual Acuity profile, peripheral neuropathy should be reviewed using the Miscellaneous Musculoskeletal and Neurological Disorders profile.

**FUNCTIONAL ABILITY PROFILE**  
**Hypoglycemia<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history of hypoglycemic episodes involving a loss of consciousness or requiring third party assistance.	N/A
2.	Condition fully recovered	No hypoglycemic episodes involving a loss of consciousness or requiring third party assistance within past 3 years.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe)	At least one episode of hypoglycemia involving a loss of consciousness or requiring third party assistance within the past 3 years.  Refer to hypoglycemia “Preamble” for others at high risk.	
	a. Mild risk	History of hypoglycemia involving a loss of consciousness or requiring third party assistance, more than 12 months ago but fewer than 3 years ago.	3 years
	b. Moderate risk	i. One or more episodes of hypoglycemia involving a loss of consciousness or requiring third party assistance between 3-12 months ago, with hypoglycemia awareness; or	1 year
		ii. One or more episodes of hypoglycemia involving a loss of consciousness or requiring third party assistance between 3-12 months ago and has hypoglycemia unawareness. The clinician should mark this on the Driver Medical Evaluation form and	3 months

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		work with the patient to develop a plan of action to improve awareness. <sup>2</sup>	
	c. Severe risk	One or more hypoglycemic episodes involving a loss of consciousness or requiring third party assistance, within the past 3 months.	No driving

<sup>1</sup> For further discussion regarding HYPOGLYCEMIA, please refer to Preamble at the beginning of this section.

<sup>2</sup> Examples: Increased glucose target to prevent hypoglycemia or introduce a real-time continuous glucose monitor (CGM) or increase finger stick glucose testing frequency.

## MENTAL HEALTH CONDITIONS PREAMBLE

There is no certain way of predicting which persons with mental health conditions will have accidents, but many high-risk drivers are such because of symptoms from mental health conditions. In a review of medical literature spanning 1960-2000, the National Highway Traffic Safety Administration noted that people with schizophrenia, personality disorders and chronic alcohol abuse are at highest risk for unsafe driving.<sup>A</sup> (Guidelines for Substance Use Disorders are listed in a separate FAP.)

Given that many mental health conditions wax and wane in severity, this FAP attempts to provide guidelines that protect public safety but allow driving when possible. Recommendations are drawn from a review of medical literature, a review of recommendations from other jurisdictions, and from the experiences of physicians in Maine.

Diagnosis of a mental health condition is important, but clinicians should also focus on a patient's function, in particular attention and concentration, executive function (or other cognitive functioning as it relates to the mental health condition), psychosis, psychomotor retardation, response disinhibition or impulsivity, intent for dangerousness to self or others, and on whether or not the patient has the insight to recognize limitations or the judgment to stop driving if limiting symptoms occur.

When assessing safety and stability, clinicians should also consider patient histories and collateral information about motor vehicle crashes, driving citations, relapses in substance use disorder, patient compliance with treatment, and relapses in the mental health condition for which the patient is being treated in order to gain a fuller picture of the patient's ability to drive safely. One episode of poor judgment does not necessarily mean a patient should stop driving. There should be a pattern of concerning behaviors or symptoms.

Many individuals with mental health conditions are maintained on medications on an outpatient basis. These drugs have varying degrees of sedative side effects and can potentiate other central nervous system depressants. Persons receiving such medications should be screened in terms of severity of side effects incident to medication and the adequacy of the remission of symptoms related to the mental health condition, as it relates to operating a motor vehicle.

Normally, BMV will not require reporting of prescribed medications used as ordered. However, in cases where proper use of prescription medications have resulted in driver impairment, such as OUI, crashes, reports of unsafe driving, or when a clinician is concerned that a patient may be non-compliant with driving recommendations, use of the Prescription Medications and/or Opioid Replacement Therapy FAP is appropriate. Please note that clinicians are responsible to assess their patients for potential risk and advise them whether to drive or not based on their medications and medical conditions.

Medications that are of particular concern for sedation, especially if patients are prescribed more than two or are concurrently prescribed opioids, are using marijuana<sup>B, C, D, E</sup> or abusing drugs or alcohol,<sup>F</sup> include the tricyclic antidepressants, sedative hypnotics, some antipsychotics, and benzodiazepines. Methadone and benzodiazepines are a particularly troubling combination for risk of sedation. (See Substance Use Disorder FAP if that is primary diagnosis).



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## Special Circumstances

### **Electroconvulsive Therapy (ECT):**

A seizure induced by ECT treatment is not considered a Seizure Disorder for purposes of driving a motor vehicle. Transient confusion or cognitive changes would be expected to clear in a day or two after treatment, during which the patient should not drive. However, it is possible for ECT treatments to result in long-lasting cognitive changes that impair the ability to drive safely, usually in the context of evolving dementia. Under these circumstances evaluate according to the Dementia FAP.

### **Psychogenic Non-epileptic Seizures (PNES):**

PNES are considered to be a form of Conversion Disorder in DSM-V (the most recent DSM at the time this FAP was written).<sup>G, H</sup> Until a formal diagnosis of PNES has been made (consultation with Neurology and EEG Video Monitoring are especially helpful in this regard), clinicians should use the FAP for Seizures even if PNES is suspected. Once PNES is formally diagnosed, the evaluation of driver safety should be individualized but patients with PNES are very likely to fall within Profile Level 3b or 3c on this FAP. There is no clear consensus in the medical literature about driving limitations for PNES, but in a study in the United Kingdom, 50% of neurologists who specialize in diagnosing PNES felt that driving restrictions should be similar to that for epilepsy. There are reports of motor vehicle crashes related to PNES.<sup>I</sup> Prognosis for cessation of psychogenic seizures is better if PNES resolves spontaneously in the first year or two, but poor if the symptoms have gone on for 10 or more years.

### **Medical conditions with mental health symptoms:**

Other conditions may at times be associated with mental health symptoms and may require review using this FAP. Examples may include but are not limited to Parkinson's or Tourette's Syndrome.

### **Novel treatments or treatment in development:**

Transcranial Magnetic Stimulation<sup>J</sup> and intravenous ketamine are examples of new or novel treatments at the time of this FAP preparation that have no track record in the medical literature as far as driver safety is concerned (but are not meant to be the only treatments considered here). Practitioners using any new or novel treatments are strongly urged to consider a patient's ability to drive safely as part of their post-treatment assessment protocols.

**FUNCTIONAL ABILITY PROFILE**  
**Mental Health Conditions<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history of mental health condition.	N/A
2.	Condition fully recovered	<p>Diagnoses of depression, anxiety, Autism, or ADHD (ADD), but no association with functional impairment in the past 2 years or more in the judgment of the treating clinician; or</p> <p>History of a mental health condition in sustained remission 2 years or more. No functional impairment in the judgment of the treating clinician. No impairment in driving abilities from medication/treatment side effects and does not meet criteria listed in sections below.</p>	N/A
3.	<p>Active impairment</p> <p>(Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)</p>	<p>On-going symptoms that meet current DSM criteria for a mental disorder.<sup>2, 3</sup></p> <p>Please refer to Mental Health Conditions Preamble for “Special Circumstances”.</p>	
	a. Mild risk	<p>Condition stable but less than 2 years; no concerns related to current cognitive function and only minimal functional impairment from symptoms or medications or other treatments; or</p> <p>Occasional recurrence of mild to moderate symptoms without suicidal or homicidal intent and with insight and judgment adequate to stop driving if functional limitations or medication side effects occur.</p>	2 years or less if recommended by clinician

	b. Moderate risk	<p>History of symptoms that might jeopardize safe operation of a motor vehicle but stable for at least 3 months and fit to drive; and</p> <p>No concerns related to current cognitive function. Demonstrates overall compliance with treatment/recovery plan, has insight and judgment adequate to stop driving if functional limitations or medication side effects occur; and</p> <p>Does not exhibit symptoms that might jeopardize safe operation, such as suicidal or homicidal intent, aggressive or violent behaviors, impulsivity, psychosis, inattentiveness.</p> <p>NOTE: Clinician may recommend a road test when appropriate and SHOULD recommend a road test if transitioning from Profile Level 3c to Profile Level 3b, or if returning to driving after 6 months or more of no driving.</p>	<p>1 year or less if recommended by clinician</p> <p>ROAD TEST<sup>5</sup> if recommended by clinician</p>
	c. Severe risk	<p>Currently, or within the past 3 months, has exhibited symptoms that might jeopardize safe operation of a motor vehicle and/or has not demonstrated overall compliance with treatment/recovery plan.</p> <p>Symptoms that may jeopardize safe operation may include significant executive function or cognitive impairment related to a mental health condition, chronic dangerous behaviors<sup>4</sup> toward self or others, chronic suicidal or homicidal intent; severe anger, impulsivity or irritability that create a driving hazard; chronic delusions<sup>6</sup> or hallucinations<sup>6</sup> that impair driving ability; chronic poor insight and judgment about driving limitations leading to dangerous behaviors; chronic medication or treatment side effects that impair safe vehicle</p>	No driving

		<p>operation, such as sedation, blurred vision or certain movement disorders; or</p> <p>New condition or onset of symptoms, under investigation <b>and</b> that may pose risk to safe operation of a motor vehicle.</p>	
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<sup>1</sup> For further discussion regarding MENTAL HEALTH CONDITIONS, please refer to Preamble at the beginning of this section.

<sup>2</sup> For substance use or withdrawal disorders, please see FAP for Substance Use Disorders.

<sup>3</sup> Diagnoses of depression, anxiety, Autism, or ADHD (ADD) are common disorders and require consideration in this section. They require on-going review when associated with functional impairment within the past 2 years, in the judgement of the treating clinician.

<sup>4</sup> Dangerous behaviors include but are not limited to those described.

<sup>5</sup> For a description of BMV road test, please refer to the Appendix.

<sup>6</sup> Examples of hallucinations and delusions that create risk for unsafe driving include but are not limited to those that cause the person to take action, cause distraction or startling, or command hallucinations.

## MUSCULOSKELETAL AND NEUROLOGICAL DISORDERS PREAMBLE

There are a wide variety of neurologic and musculoskeletal disorders which can impact driving safety. Impairment may be the result of altered muscular, skeletal, neurologic, and/or cognitive function. Motor, sensory, and/or cognitive deficits may adversely affect strength, coordination, reaction time, range of motion, visual perception, processing speed, judgment, problem solving, attention, memory, and/or awareness, in terms of a driver's ability to perform the actions necessary to safely operate a motor vehicle.

Disorders affecting cognition such as epilepsy, stroke, traumatic brain injury, Parkinson's disease, dementia, as well as disorders affecting neuromuscular function such as multiple sclerosis, Parkinson's disease, muscular dystrophy, cerebral palsy, myasthenia gravis, amyotrophic lateral sclerosis, spinocerebellar ataxia, foot drop, neuropathy, and spinal cord disorders all may present their own unique barriers to safe motor vehicle operation. What's more, there is considerable overlap in the clinical manifestations of these disorders. A driver with these conditions may have chronic functional limitations that have the potential to affect safe operation of a motor vehicle and should be evaluated. **When functional abilities are in question, a road test may be recommended by the clinician or required by BMV. A description of the road test may be found in the Appendix.**

Many of these conditions may result in symptoms or impairments that fall under more than one Functional Ability Profile (FAP) and will need to be evaluated using more than one FAP. For example, following a stroke a driver may experience a motor deficit which requires them to use adaptive equipment for their vehicle and may also have a visual field or acuity disturbance. A person with Parkinson's Disease may have cognitive or psychiatric deficits as well as the neurological and motor deficits. They would need to be evaluated using the Parkinson's, as well as the Dementia or Mental Health Conditions FAP. A person with Tourette's Syndrome may exhibit symptoms that should be reviewed using the Mental Health Conditions FAP. BMV will use the most restrictive FAP to determine the fitness of a person to drive.

Neurological disorders may have an unpredictable, episodic, or progressive course and require periodic evaluation by a qualified medical practitioner. The treating clinician may recommend the timing of evaluation but should have a working knowledge of a driver's current condition when filling out the Driver Medical Evaluation (CR-24) form. **When completing the CR-24 the driver must have been seen within the past 12 months or less.**

Individuals with any number of neurological and musculoskeletal conditions may use adaptive equipment when driving. **Person's that use adaptive driving aids for the vehicle must take a road test.** Although referral to a driving rehabilitation specialist may be indicated in some cases, it is not required by BMV. When BMV requires a road test, it will be administered by a BMV Driver's License Examiner. The road test will determine whether the person is allowed to drive and if there are driving restrictions. **A description of a comprehensive OT driving evaluation and the BMV the road test may be found in the Appendix. Adaptive driving aids for the vehicle may include but are not limited to hand controls, pedal extenders, seat modifications, etc.**

Driver's that are prescribed personal assistive medical devices for a chronic condition will be required to take a road test. **Personal assistive medical devices include** but are not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation. If a cane is the only medical device needed, the clinician may recommend that the road test be waived.

**Conditions which require review include but are not limited to the following:**

**Amputation or Limb Deficiency:**

Amputation or limb deficiencies may be either congenital or acquired of the upper or lower extremities, with functional implications to safe driving being the decreased ability to operate one or more of the vehicle controls. Adaptive driving aids for the vehicle will require consideration depending on the specific limb deficiency, use of prosthesis and overall functional abilities of the person. Evaluation by a driving rehabilitation specialist may be appropriate depending on the extent of impairment. However, it is not required and does not take the place of the BMV road test. The Miscellaneous Musculoskeletal and Neurological Functional Ability Profile should be used to assess potential for driving impairment.

**Arthritis or Joint Disorders:**

This category would include related conditions such as rheumatoid arthritis, osteoarthritis, ankylosing spondylitis, and spinal stenosis, among others. Affected structures include joints and/or spinal nerves. These conditions can cause pain, decreased strength and range of motion, and impaired functional mobility, potentially altering the ability to safely operate motor a motor vehicle. In assessing these persons for potential driving impairment, overall functional performance of the person in terms of ability to perform activities of daily living should be taken into consideration to help determine if adaptive driving aids for the vehicle or other strategies may be needed. The Miscellaneous Musculoskeletal and Neurological Conditions Functional Ability Profile should be used to assess driving impairment.

**Brain Injury:**

Brain injury causes dysfunction of the central nervous system resulting from trauma or forces to the head significant enough to alter brain function. Cognitive changes after a brain injury can affect mood, memory, executive function, judgment, initiation, attention, and problem-solving. In addition, because self-awareness and judgment may be affected, a person may not be able recognize their impairments. Depending on the extent of the injury, other deficits may include altered gait, balance and sensation, as well as impaired muscle and joint function due to weakness, spasticity, and contracture. These persons may require ankle-foot orthoses or upper extremity orthotics to improve mobility and use of extremities. Factors that impact the ability to drive safely after a brain injury can be extensive, and a comprehensive driving evaluation by a driving rehabilitation specialist should be considered. Use the Stroke/Brain Injury Functional Ability Profile to assess impairment. Other medical impairments following brain injury may include but are not limited to seizures and visual disturbances. These may need evaluation separately using the additional Functional Ability Profile.

**Cerebrovascular Accident (CVA or Stroke):**

Stroke may have a complicated and variable presentation. Residual impairments may include altered strength, mobility, coordination, motor planning, sensation, spatial planning, body or environmental awareness, vision, communication, judgment, and cognition. Motor deficits or contractures may require upper or lower extremity personal assistive medical devices or adaptive driving aids for the vehicle.

Due to the possibility of multiple potential deficits, a comprehensive evaluation by a driving rehabilitation specialist may be indicated but is not required. Use the Brain Injury/Stroke Functional Ability Profile to assess impairment. Other medical impairments following a stroke may include but are not limited to seizures, aphasia and/or visual disturbances. These may need to be evaluated separately using the additional Functional Ability Profile. **Please note that a transient ischemic attack (TIA)** by definition has no residual deficit and is therefore not subject to the Stroke FAP.

**Miscellaneous Musculoskeletal and Neurological Conditions**

Neurologic and musculoskeletal conditions with the potential to impair a person's ability to safely operate a motor vehicle are numerous, and therefore have not all been specifically listed. **Even if these conditions have not been adequately identified in any of the other categories, they still should be evaluated.** Examples of neuromuscular conditions which would be appropriately evaluated using the Miscellaneous

Musculoskeletal and Neurological Conditions FAP include but are not limited to muscular dystrophy, cerebral palsy, amyotrophic lateral sclerosis, peripheral/other neuropathies, syringomyelia, non-stroke related aphasia, Tourette's Syndrome, as well as any **generalized deconditioning syndrome** due to any etiology which reduces functional capacity to drive. These conditions may require personal assistive medical devices or adaptive driving aids for the vehicle, cause deficits in mobility, sensation, strength, coordination, reaction time, range of motion, and/or other abilities needed to safely operate a motor vehicle. Referral to a driving rehabilitation specialist, although not required, may be indicated in some cases. Also, persons who have an implanted spinal cord/dorsal column stimulator are advised to turn off the device prior to driving due to the potential for unexpected changes in stimulation with activity that could possibly be unsafe. **When visual, cognitive, psychiatric or other conditions also exist, they should be evaluated separately using the appropriate profile.**

If a clinician has concerns regarding an individual's ability to operate a vehicle safely that are not captured in this FAP, a road test may be requested. Include documentation of all pertinent medical concerns and the rationale for requesting a road test.

### **Multiple Sclerosis (MS):**

Multiple Sclerosis is a highly variable disorder. Some people may have few if any perceptible symptoms associated with the disorder, while others may be significantly impaired. MS may cause visual impairment, cognitive impairment, alterations in sensation, muscle weakness, incoordination, spasticity, or joint contracture. Upper and/or lower extremity orthotics may be required, or a person may require vehicle adaptations or be operating a vehicle from a mobility device (such as a wheelchair). These deficits may cause difficulties with manipulation of vehicle controls, and driver performance in complex driving environments. Comprehensive evaluation for adaptive driving aids and an evaluation by a driving rehabilitation specialist may be beneficial but is not required. The progressive nature of MS warrants periodic reassessment of driving risk using the MS Functional Ability Profile. Psychiatric, cognitive, or visual deficits should be evaluated separately using the appropriate Functional Ability Profile.

### **Parkinson's or Parkinsonian Syndromes:**

Parkinson's Disease and Parkinsonism physical signs include tremor, bradykinesia, postural instability, and rigidity, along with complex cognitive issues such as dementia and mood disturbance. These deficits may cause slowed reaction times, difficulties with vehicle controls, and impaired performance in complex driving environments further complicated by medication efficacy. Evaluation by a driving rehabilitation specialist may be indicated. The progressive nature of the disorder warrants periodic reassessment using the Parkinson's Functional Ability Profile. Psychiatric or cognitive issues should be evaluated separately using the appropriate Functional Ability Profile.

For the purpose of this FAP, Progressive Supranuclear Palsy, Multisystem Atrophy, Corticobasal Ganglionic Degenerations, Medication Induced Parkinsonism and Lewy Body Dementia are considered Parkinsonian Syndromes. The cognitive implications of Lewy Body Dementia should be reviewed using the Dementia FAP. Other movement disorders should be reviewed using the Miscellaneous Musculoskeletal and Neurological Conditions FAP.

### **Spinal Cord Injury (SCI):**

SCI of the cervical, thoracic, or lumbosacral regions is the result of a medical condition, lesion or trauma to the neural elements within the spinal canal. This causes impairment of motor and sensory function to the upper or lower limbs and trunk which is variable and depends on the level of injury. Although common terms to describe spinal cord injury are paraplegia and tetraplegia (quadriplegia), The American Spinal Injury Association (ASIA) Impairment Scale more precisely grades the degree of impairment according to the spinal level of preserved motor and sensory function. Safe driving after SCI may be impaired due the altered ability to operate vehicle controls; so use of orthotics, adaptive driving aids for the vehicle, and an

adapted motor vehicle for use with mobility device/wheelchair are often required. Comprehensive evaluation by a driving rehabilitation specialist should be considered. The Miscellaneous Musculoskeletal and Neurological Conditions Functional Ability Profile should be used to assess driving impairment.



**FUNCTIONAL ABILITY PROFILE**  
**Cerebrovascular Accident (CVA/Stroke) or Brain Injury<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history or stroke or brain injury.	N/A
2.	Condition fully recovered	History of stroke or brain injury without residual physical, cognitive or vision deficits or impairments.  Does not require personal assistive medical devices <sup>2</sup> or adaptive driving aids for the vehicle as a result of the stroke or brain injury.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	History of stroke or brain injury with residual <sup>3</sup> cognitive, physical or vision deficits. For TIA, see. <sup>4</sup>	Please document residual deficits on Driver Medical form.
	a. Mild risk	Residual <sup>3</sup> cognitive, physical or vision deficits, but unlikely risk to safely operating a motor vehicle and does not require personal assistive medical or devices <sup>2</sup> or adaptive driving aids for the vehicle; or  Clinician documents stable 3b condition that is unlikely to deteriorate, and driver has already passed a road test.	N/A  Clinician may request ROAD TEST if unsure <sup>5, 6</sup>
	b. Moderate risk	Residual <sup>3</sup> cognitive, physical or vision deficits that could potentially impair ability to safely drive, and/or requires personal assistive medical devices <sup>2</sup> or adaptive driving aids for the vehicle.	4 years  ROAD TEST <sup>5, 6</sup>

	c. Severe risk	Residual <sup>3</sup> cognitive, physical or vision deficits that are significant enough to impair ability to safely drive; or  Cognitive, physical or vision changes when stroke is suspected, and condition is being investigated.	No driving
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<sup>1</sup> For further discussion regarding CEREBROVASCULAR ACCIDENT OR BRAIN INJURY, please refer to Preamble at the beginning of this section.

<sup>2</sup> Driver's that are prescribed personal assistive medical devices for a chronic condition, such as but not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation will be required to take a road test. If a cane is the only medical device needed, the clinician may recommend that the road test be waived.

<sup>3</sup> Stroke and brain injury may lead to other impairments that need to be evaluated using an additional FAP, such as seizures, visual deficits such as hemianopsia or diplopia. The most restrictive Profile will determine the driving privileges.

<sup>4</sup> Please note that a transient ischemic attack (TIA) by definition has no residual deficit and is therefore not subject to this FAP.

<sup>5</sup> If a clinician has concerns regarding an individual's ability to operate a vehicle safely that are not captured in this FAP, a road test may be requested. Include documentation of all pertinent medical concerns, and rationale for requesting road test.

<sup>6</sup> Refer to the appendix for more information about BMV Road Tests and Comprehensive Occupational Therapy Driving Evaluations. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may be appropriate in some situations, but BMV does not normally require these evaluations and they are not a substitute for the BMV road test.

**FUNCTIONAL ABILITY PROFILE**  
**Miscellaneous Musculoskeletal and Neurological Disorders<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history of musculoskeletal or neurological condition(s)	N/A
2.	Condition fully recovered	History of injury, deficiency, disorder, or other condition recovered, no longer requires treatment and maintains normal function; and does not require use of personal assistive medical devices <sup>2</sup> or adaptive driving aids for the vehicle.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Chronic condition such as amputation or limitation of limb, arthritis, joint disorders, spinal cord injury, non-Parkinsonian movement disorders, or others which may affect neuromuscular function; and currently requires treatment or cause impairments, restrictions, or deficits.	For spinal cord/dorsal column stimulator see <sup>3</sup> .  If clinician has concerns that are not captured in this FAP, see footnote <sup>4</sup>
	a. Mild risk	Chronic condition that does not pose risk for safe driving and does not require use of personal assistive medical devices <sup>2</sup> or adaptive driving aids for the vehicle; or  Clinician documents stable Profile Level 3b condition that is unlikely to deteriorate, and driver has already passed road test.	N/A <sup>4</sup>
	b. Moderate risk	Chronic condition, which may impair ability to drive safely and/or requires use of personal assistive medical devices <sup>2</sup> or adaptive driving aids for the vehicle, such as hand/foot controls.	4 years <sup>5</sup>  ROAD TEST <sup>5, 6</sup>

	c. Severe risk	Chronic condition which causes impairments that interfere with the ability to operate safely.	No driving
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<sup>1</sup> For further discussion regarding MISCELLANEOUS MUSCULOSKELETAL AND NEUROLOGICAL DISORDERS, please refer to Preamble at the beginning of this section.

<sup>2</sup> Driver's that are prescribed personal assistive medical devices for a chronic condition, such as but not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation will be required to take a road test. If a cane is the only medical device needed, the clinician may recommend that the road test be waived.

<sup>3</sup> Persons who have an implanted spinal cord/dorsal column stimulator are advised to turn off the device prior to driving due to the potential for unexpected changes in stimulation with activity that could possibly be unsafe.

<sup>4</sup> If a clinician has concerns regarding an individual's ability to operate a vehicle safely that are not captured in this FAP, a road test may be requested. Include documentation of all pertinent medical concerns, and rationale for requesting a road test.

<sup>5</sup> Interval for review and road test may be more frequent if recommended by clinician.

<sup>6</sup> Refer to the appendix for more information about BMV Road Tests and Comprehensive Occupational Therapy Driving Evaluations. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may be appropriate in some situations, but BMV does not normally require these evaluations and they are not a substitute for the BMV road test.

**FUNCTIONAL ABILITY PROFILE**  
**Multiple Sclerosis<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No diagnosed multiple sclerosis	N/A
2.	Condition fully recovered	There is no recovery from multiple sclerosis	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Multiple sclerosis may affect many domains of the nervous system including cognition, vision, motor skills, coordination etc. In addition, it may cause fatigue and/or psychiatric symptoms. <sup>2</sup>	
	a. Mild risk	Symptoms <sup>2</sup> well controlled, or condition is quiescent. No side effects from medications that could potentially impair driving. No personal assistive medical devices <sup>3</sup> or adaptive driving aids for the vehicle; or  Clinician documents stable 3b condition that is unlikely to deteriorate, and driver has already passed a road test.	4 years <sup>4</sup>
	b. Moderate risk	Symptoms <sup>2</sup> or medication side effects that may potentially impair safe driving and/or requires personal assistive medical devices <sup>3</sup> or adaptive driving aids for the vehicle.	2 years  ROAD TEST <sup>3, 5</sup>
	c. Severe risk	Symptoms <sup>2</sup> or side effects of medication severe enough to impair safe driving.	No driving

<sup>1</sup> For further discussion regarding MULTIPLE SCLEROSIS, please refer to Preamble at the beginning of this section.

<sup>2</sup> Multiple Sclerosis is highly variable. Some people may have few if any perceptible symptoms associated with the disorder, while others may be significantly physically or cognitively impaired. Symptoms may fall under more than one FAP and all appropriate FAP's should be used. For example, a driver may require vehicle modifications or have a significant visual field or acuity disturbance. The most restrictive FAP will determine driving privileges or restrictions.

<sup>3</sup> Driver's that are prescribed personal assistive medical devices for a chronic condition, such as but not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation, will be required to take a road test. If a cane is the only medical device needed, the clinician may recommend that the road test be waived.

<sup>4</sup> Clinician may recommend a longer interval for review for those whose condition is quiescent or stable and well controlled, and without concerning side effects from medications.

<sup>5</sup> Refer to the appendix for more information about BMV Road Tests and Comprehensive Occupational Therapy Driving Evaluations. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may be appropriate in some situations, but BMV does not normally require these evaluations and they are not a substitute for the BMV road test.

**FUNCTIONAL ABILITY PROFILE**  
**Parkinson's and Parkinsonian Syndromes<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No diagnosed Parkinson's <sup>2</sup>	N/A
2.	Condition fully recovered	Parkinson's Disease and/or Parkinsonian Syndromes <sup>2</sup> are lifelong conditions and there is no recovery.  Drug induced Parkinsonism may be considered recovered when symptoms resolve after the causative medication is stopped.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Parkinson's Disease and/or Parkinsonian Syndromes <sup>2</sup> may cause tremor, autonomic instability, rigidity, bradykinesia and/or dyskinesia, cognitive or psychiatric symptoms. <sup>3</sup>	
	a. Mild risk	Mild physical symptoms that do not pose risk for safe operation of a vehicle. No cognitive or psychiatric symptoms. <sup>3</sup> Medications do not cause impairment. Does not require personal assistive medical devices <sup>5</sup> or adaptive driving aids for the vehicle.	2 years <sup>4, 5</sup>
	b. Moderate risk	Physical symptoms and/or side effects of medication may potentially interfere with the safe operation of a motor vehicle. May have early cognitive or psychiatric symptoms; <sup>3</sup> and/or require personal assistive medical devices <sup>5</sup> or adaptive driving aids for the vehicle.	1 year  ROAD TEST <sup>5, 6</sup>

	c. Severe risk	Physical symptoms or side effects of medications are incompatible with safe operation of a motor vehicle. For cognitive or psychiatric symptoms, see <sup>3</sup> .	No driving
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<sup>1</sup> For further discussion regarding PARKINSON'S OR PARKINSONIAN SYNDROMES, please refer to Preamble at the beginning of this section.

<sup>2</sup> For the purpose of this FAP, Lewy Body Dementia, Multisystem Atrophy, Corticobasal Ganglionic Degenerations, medication induced Parkinsonism, Vascular Parkinsonism, and Progressive Supranuclear Palsy are considered Parkinsonian Syndromes.

<sup>3</sup> Cognitive or Psychiatric symptoms should be evaluated using the Dementia or Mental Health Conditions FAP.

<sup>4</sup> When Parkinsonian Syndrome is caused by medications and patient is stable, the clinician may recommend extending the review interval up to 4 years.

<sup>5</sup> Driver's that are prescribed personal assistive medical devices for a chronic condition, such as but not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation will be required to take a road test. If a cane is the only medical device needed, the clinician may recommend that the road test be waived.

<sup>6</sup> Refer to the appendix for more information about BMV Road Tests and Comprehensive Occupational Therapy Driving Evaluations. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may be appropriate in some situations, but BMV does not normally require these evaluations and they are not a substitute for the BMV road test.



## NARCOLEPSY OR IDEOPATHIC HYPERSOMNIA PREAMBLE

Narcolepsy is a chronic condition of the central nervous system characterized by the brain's inability to control sleep-wake cycles. The prevalence is not clear but estimated at approximately 0.1% of the US population.<sup>A</sup> Many researchers believe the condition remains undiagnosed or underdiagnosed in many affected individuals. At various times throughout the day, people with narcolepsy can experience excessive daytime sleepiness: the onset of sleep is usually heralded by awareness of sleepiness which usually becomes more predictable over time and with experience. In addition to daytime sleepiness, other symptoms can include cataplexy which is the sudden loss of voluntary muscle tone triggered by strong emotions, sleep paralysis, sleep hallucinations, and disturbed night sleep. Symptoms commonly begin in the teen years but may occur later in life as well.

The diagnosis of narcolepsy should be made by a physician (generally a sleep specialist, neurologist or pulmonologist). When possible, these patients are frequently followed by these same specialists or their associated nurse practitioners and physician assistants.

Narcolepsy is a lifetime condition that requires ongoing monitoring and assessment, as response to medications may wane over time, or cataplexy may develop years after other symptoms. Given that daytime sleepiness can be profound, careful monitoring for increasing levels of sleepiness and emergence of cataplexy are essential. An overnight polysomnogram with multiple sleep latency test (MSLT)<sup>i</sup> is recommended for diagnosis. Practice parameters recommend regular follow up to determine adherence and response to treatment; a patient stabilized on medications should be seen regularly; at least once per year, and ideally twice yearly.<sup>B</sup> Follow up MSLT<sup>i</sup> or MWT<sup>ii</sup> are not routinely performed, but may be used to assess an individual's ability to remain awake (or propensity to fall asleep) if sleepiness poses a risk for public or personal safety.<sup>C</sup>

There are significant implications for driving safety given the core symptoms of this condition but there is a paucity of data regarding narcolepsy and driving safety. People with untreated symptoms of narcolepsy have three to four-fold risk of crashes compared to the general population (self-reported data).<sup>D, E, F</sup> The few studies that examined crash risk and narcolepsy were performed in untreated individuals and utilized driving simulators: the applicability to real world driving is not known.<sup>G</sup> Narcolepsy is a treatable condition, and both behavioral interventions and medications are used. Medications used to treat sleepiness include but are not limited to stimulants (amphetamine/ methylphenidate), wake promoting (modafinil, armodafinil, pitolisant) and sodium oxybate (Xyrem/Xyway). Cataplexy is treated with medications such as Serotonin and Norepinephrine Reuptake Inhibitor/Selective Serotonin Reuptake Inhibitor medications (SNRI/SSRI's), tricyclic antidepressant medications, pitolisant, and/or sodium oxybate.

Narcolepsy with cataplexy may create increased risk for unsafe driving. Given the risk for crashes if symptoms are not effectively treated, clinician documentation should include additional information regarding current symptoms that may impact safe operation of a motor vehicle. Specifically, documentation should include the presence or absence and severity of cataplexy, cataplexy triggers, degree of residual daytime sleepiness, and adherence to medications and behavioral strategies.

Idiopathic hypersomnia is a sleep condition characterized by chronic excessive sleepiness. Patients struggle to maintain wakefulness during the day, with sleep occurring at inappropriate times and interfering with daily activities. The diagnosis of idiopathic hypersomnia requires an overnight polysomnography to rule out other possible etiologies such as obstructive sleep apnea. This may be followed by a multiple sleep latency test demonstrating a shortened sleep latency (< 8 minutes) and < 2 sleep-onset REM periods which will help to differentiate from a narcolepsy diagnosis.<sup>H</sup> Medications including stimulants and wake promoting medications are often used to manage daytime sleepiness.<sup>I</sup>

**Footnotes:**

<sup>i</sup> Multiple Sleep Latency Test: performed in Sleep Centers. Objective determination of an individual's underlying sleepiness by measuring latency to sleep in 5 trials of 20 minutes each after documentation of adequate sleep the night prior to testing. Pathologic sleepiness is defined as a mean sleep latency of less than 8 minutes. May be used to assess efficacy of treatment.<sup>j</sup>

<sup>ii</sup> Maintenance of Wakefulness Test: performed in Sleep Centers. Objective assessment of ability to stay awake while passive and sedentary in a non-stimulating environment. The strongest evidence for an individual's ability to maintain wakefulness is provided by a capacity to remain awake through 4 trials of 40 minutes each. AASM standards state that MWT testing is indicated when assessing individuals whose inability to remain alert constitutes a safety hazard and in patients with Narcolepsy. May be used to assess efficacy of treatment.<sup>k</sup>

**FUNCTIONAL ABILITY PROFILE**  
**Narcolepsy or Idiopathic Hypersomnia<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No diagnosed narcolepsy or idiopathic hypersomnia.	N/A
2.	Condition fully recovered	Narcolepsy is a chronic lifelong condition.	Do not use this profile level for narcolepsy.
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	<p>This diagnosis must be made by a physician, (preferably a sleep specialist, neurologist or pulmonologist), or nurse practitioners and physicians assistants with specialized training in narcolepsy.</p> <p>This FAP applies to patients who have a confirmed diagnosis of narcolepsy or idiopathic hypersomnia. (For exception, see profile level 3c.)</p> <p>Clinician assessment recommended at least annually.</p>	Clinician should assess risk, evaluating the presence/absence of cataplexy (type of symptoms and frequency), cataplexy triggers, effectiveness of treatment, and adherence to treatment.
	a. Mild risk	<p>No recent crashes or near misses due to sleepiness or cataplexy, and</p> <p>Mild subjective sleepiness (Epworth Sleepiness Scale<sup>2</sup> of 12 or less), and</p> <p>Consistent use of medications and behavioral strategies, and</p> <p>No cataplexy, or predictable mild cataplexy that does not cause risk for driving and is controlled with behavioral strategies and medication.</p>	2 year
	b. Moderate risk	No recent crashes or near misses due to sleepiness, and	1 year

		<p>Moderate subjective sleepiness (ESS<sup>2</sup> 13-15), and</p> <p>Consistent use of medications and behavioral strategies for sleepiness, and avoidance of driving if sleepy, and</p> <p>No cataplexy or predictable mild cataplexy that does not cause risk for driving and is controlled with behavioral strategies and medication.</p>	
	c. Severe risk	<p>Recent crash or near miss due to sleepiness or cataplexy; or</p> <p>Uncontrolled narcolepsy; or</p> <p>Inconsistent use of medications or no effective medication yet found; or</p> <p>Severe subjective sleepiness (ESS<sup>2</sup> 16 or higher); or</p> <p>Unpredictable cataplexy or cataplexy that poses risk for driving; or</p> <p>Suspected narcolepsy under investigation with concern for safety.</p>	No driving

<sup>1</sup> For further discussion regarding NARCOLEPSY OR IDEOPATHIC HYPERSOMNIA, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> The Epworth Sleepiness Scale is a widely used measure of subjective daytime sleepiness. It is a validated sleep questionnaire containing eight items that ask for self-reported disclosure of expectation of “dozing” in a variety of situations. Dozing probability ratings are none (0), slight (1), moderate (2), or high (3) in eight hypothetical situations. A scale of 0-10 is normal, 11-12 is mild, 13-15 is moderate, and 16-24 is severe excessive daytime sleepiness. <https://epworthsleepinessscale.com/about-the-ess/>.

## **OTHER MEDICAL PREAMBLE**

The Medical Advisory Board recognizes that not all patients fit into one of the diagnostic categories outlined in the Functional Ability Profile (FAP) rules. The category of Medical-Other has been created to encompass drivers with conditions not included in other specified FAP categories, especially when there are multiple medical or fluctuating medical problems that may negatively impact ability to drive safely. Examples may include recurring hepatic encephalopathy, symptoms associated with renal failure and dialysis, brain cancer, or others.

The evaluating clinician should use this profile only when one of the other listed categories does not adequately capture the clinician's concerns **and** when there are specific concerns for unsafe operation of a motor vehicle. The clinician should *include a narrative description of the medical concerns and their impact on driving* when submitting a Driver Medical Evaluation (CR-24 form).

**This FAP excludes** conditions addressed in other FAP's. Please note that generalized deconditioning can be addressed using the Miscellaneous Musculoskeletal and/or Neurological Conditions FAP. Concerns related to polypharmacy may be addressed using the FAP for Prescription Medications and/or Opioid Replacement Therapy.

**FUNCTIONAL ABILITY PROFILE**  
**Other Medical<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No known disorder	N/A
2.	Condition fully recovered	Condition is recovered with no on-going risk for unsafe driving.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	A condition or combination of conditions that poses risk for unsafe driving but is not included in any other specified FAP category.	Requires diagnosis and description of concerns
	a. Mild risk	Condition warrants review for impact on driving.  A medical concern with fluctuating symptoms that could impair driving; or  Multiple medical problems that together may impair ability to drive safely; or  A condition that could impair driving but is not included in any other specified FAP category.	2 years or as recommended by clinician
	b. Moderate risk	Condition may require more frequent medical review, or may require use of personal assistive medical devices, <sup>2</sup> adaptive driving aids for the vehicle, driving restrictions or a road test; <sup>3</sup> and/or  A medical condition with fluctuating symptoms; or multiple medical	1 year or as recommended by clinician  Road test <sup>3</sup> may be recommended by clinician.

		problems; or a condition not listed in any other FAP category; and condition could impair driving.	
	c. Severe risk	A medical condition not included in any other specified FAP category that presently impairs skills needed for safe driving. This may be due to severity of the condition; because the condition is not controlled; due to treatment side effects or because condition requires further evaluation to determine safety to drive.	No driving Specific impairment must be described.  No driving will be allowed until a new Driver Medical Evaluation form is completed, detailing resolution of condition.

<sup>1</sup> For further discussion regarding OTHER MEDICAL, please refer to Preamble at the beginning of this section.

<sup>2</sup> Personal assistive medical devices include but are not limited to a wheelchair, prosthesis, orthosis, walker, or a cane when required for normal ambulation.

<sup>3</sup> Refer to the appendix for more information about BMV Road Tests and/or a Comprehensive Occupational Therapy Driving Evaluation. On-road tests with a driving rehabilitation instructor, occupational therapist or a driver educator may be appropriate in some situations, but BMV does not normally require these evaluations and they are not a substitute for a BMV road test.

## **PRESCRIPTION MEDICATIONS &/or OPIOID REPLACEMENT THERAPY PREAMBLE**

Prescription medications, even when taken as prescribed, have the potential for side effects, <sup>1</sup>dependence, or interactions which may alter the ability to drive, or exacerbate a decline in function related to an underlying medical condition. It is important for clinicians to know that a driver who is impaired due to prescribed medication or medical marijuana can also be charged with OUI.

Clinicians are responsible to assess their patients for potential risks and advise them whether to drive or not based on their medications and medical conditions. With this in mind, the clinician's role is to recognize high-risk individuals from a medical perspective and assess their physical and mental fitness to drive safely.

### **Normally, BMV does not require reporting when prescribed medications are used as ordered.**

However, in cases where proper use of prescription medications has resulted in driver impairment, leading to OUI, crashes, reports of unsafe driving, or when a clinician is concerned that a patient may be non-compliant with driving recommendations, use of the Prescription Medications and/or Opioid Replacement FAP is appropriate.

This FAP may be used when there is a specific concern for driving with a person on prescription medications, including prescribed opioid medications for replacement therapy or pain management, or any other medications that may potentially impair driving. Medications of particular concern for driving include the tricyclic antidepressants, sedative hypnotics, some antipsychotics, and benzodiazepines. Concern is even greater when patients are prescribed more than two medications or are concurrently prescribed opioids, using medical marijuana, or are misusing drugs or alcohol. Methadone and benzodiazepines are a particularly troubling combination for risk of sedation. Data on buprenorphine and driving indicate that once established on a dose and in stable recovery, most people can safely drive. This must be assessed on an individual basis.<sup>A</sup> Medical Marijuana, although not a prescription medication, is included here due to its' potential to produce side effects that could impair driving.

Statistically, once a patient is on an established dose of methadone, the risk for sedation or at-risk driving is minimal (barring any other polysubstance abuse or polypharmacy).<sup>B</sup> However, on an individual basis, in the period of time immediately following an opioid replacement dose, there may be an increased risk for sedation to the point that the patient should be counseled not to drive. This is particularly pertinent in the case of methadone, since patients may have to drive to receive a dose at a methadone clinic and then drive home and is especially worrisome if the patient is also on a benzodiazepine.

<sup>1</sup> *Physical dependence occurs when a person develops a physiologic tolerance to a substance or substances. Physical dependence on a prescribed medication when taken as ordered does not create concern for driving in and of itself. Be aware that many patients who exhibit "drug-seeking" behaviors are likely exhibiting physical dependence (which may be iatrogenic from legitimate treatment by the medical provider).*



**FUNCTIONAL ABILITY PROFILE**  
**Prescription Medications and/or Opioid Replacement Therapy<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No known disorder	No known history of unsafe driving due to prescribed medications.	N/A
2.	Condition fully recovered	No longer on opiate replacement therapy, with no relapses and no evidence of prescription abuse for at least 2 years; <sup>2</sup> or  No longer prescribed the medication(s) that caused impairment or no on-going side effects that could impair driving x 1 year. <sup>2</sup>	N/A
3.	Active impairment <sup>3</sup>  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	On prescription medication, <sup>3</sup> or  On opioid replacement therapy, (e.g., suboxone or methadone or similar prescription), when there is a specific concern for driving; and	
	a. Mild risk	Stable and functioning well with no other Substance Use Disorder issues <sup>2</sup> and no sedation or unsafe side effects. No impairment of motor, judgment or intellectual functions from prescription medications; or  Off prescription medications but not long enough to meet criteria for Profile Level 2. <sup>2</sup>	2 years
	b. Moderate risk	Experiences sedating or other side effects from medication, but with judgment to avoid driving while having these side effects, and no other Substance Use Disorder issues. <sup>2</sup>	1 year  ROAD TEST

		NOTE: If there is a history of poor judgment about driving under these circumstances, leading to OUI, crashes, or reports of unsafe driving, must demonstrate they have the judgment to avoid driving while having these side effects or have been off medication for at least 3 months AND passed a ROAD TEST, to resume driving.	
	c. Severe risk	i. Experiences sedation or side effects from medication <sup>2</sup> , with poor judgment about driving under these circumstances, leading to OUI, crashes or reports of unsafe driving and has not yet met criteria for Profile Level 3.b; or	No driving
		ii. Has problems with substances of abuse that increase the risk for dangerous driving in combination with prescription medications. <sup>2</sup>	Comply with appropriate profile level on Substance Use Disorder FAP

<sup>1</sup> For further discussion regarding PRESCRIPTION MEDICATIONS AND/OR OPIOID REPLACEMENT THERAPY, please refer to Preamble at the beginning of this section.

<sup>2</sup> Comply with "Substance Use Disorders" FAP when patient misuses prescription medications or non-prescribed drugs.

<sup>3</sup> Normally, prescribed medications used as ordered do not need to be reported to BMV. Clinicians are responsible to assess their patients for potential risk and advise them whether to drive or not based on their medications and medical conditions. However, in cases where proper use of prescription medications has resulted in driver impairment, such as OUI, crashes, reports of unsafe driving, or when a clinician is concerned that a patient may be non-compliant with driving recommendations, use of this FAP is appropriate.

## SEIZURES AND EPILEPSY PREAMBLE

A seizure is a disruption in the normal electrical activity in the brain resulting in temporary cerebral dysfunction. Epilepsy is defined as a disorder in which a person has had two or more unprovoked seizures. Epilepsy excludes people with provoked (otherwise known as symptomatic) seizures such as from eclampsia, central nervous system infection, secondary to an adverse drug reaction, acute stroke, metabolic derangement, or alcohol withdrawal. Seizures and epilepsy shall be evaluated using this FAP. The disorders causing provoked seizures as well as many other physiological processes may cause an alteration in consciousness sufficient to preclude the safe operation of a motor vehicle. These shall abide by the FAP in the appropriate section if known, or that entitled, "Unexplained Alteration or Loss of Consciousness".

### Guidelines For Special Circumstances:

1. ***First ever unprovoked seizures***, will be no driving for 6 months off medication or no driving until a minimum of 3 months seizure free on medication. Then follow the rules for epilepsy.
2. ***If a person has a provoked seizure*** that is that is very *unlikely to recur* such as a seizure caused by a medication that is subsequently stopped, then driving may resume when the treating clinician feels it is reasonable. If the *likelihood of recurrence of a provoked seizure is not known*, e.g., a head injury or brain infection, no driving is allowed until seizure free for at least 6 months. *If the reason for the seizure is captured in a different FAP, such as substance use disorder, a profile level for the other FAP should also be submitted* and the more restrictive FAP will determine driving restrictions.
3. ***Seizures occurring in the setting of medically supervised medication*** changes are profile level 3c and are not to drive until the treating clinician believes the person is medically stable. Generally, at least one month on a new medication regimen. When stable, they may be changed to profile level 3a. When *medication is tapered* with the intention to stop anti-seizure medications, they should be profile level 3c and no driving allowed while tapering and for 3 months after the medication has been stopped. The person will then be considered profile 3a until profile 2 is appropriate.
4. ***If there is a pattern of at least one year of nocturnal only seizures*** then driving is permitted and the person shall be considered profile 3a. This diagnosis should be made by a neurologist or other appropriately qualified clinician.
5. ***If there is an established pattern (6 months or longer) of only simple partial seizures, without any alteration of consciousness and they do not affect the abilities needed to operate a motor vehicle***, then driving is permitted and the person shall be considered profile 3a. Example: Arm parasthesias without weakness or alteration of consciousness after brain tumor resection. This diagnosis should be made by a neurologist or other appropriately qualified clinician.
6. ***Suspected psychogenic non-epileptic seizures (PNES)*** should be evaluated using this FAP. However, once a diagnosis of PNES is confirmed, the mental Health Conditions FAP should be used.
7. ***Seizures caused by Electroconvulsive Therapy*** are excluded from this FAP.

**FUNCTIONAL ABILITY PROFILE**  
**Epilepsy and UNPROVOKED Seizures<sup>1</sup>**

Profile Levels	Degree of Impairment/ Potential for At Risk Driving	Condition Definition / Example	Interval for Review and Other Actions
1.	No diagnosed condition	No history of seizures.	N/A
2.	Condition fully recovered	History of epilepsy: 2 years seizure free, off medications (e.g., after resolution of a childhood epilepsy syndrome or successful tapering off seizure medications when a person has been free of seizures for an extended period of time).	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Epilepsy or UNPROVOKED seizure  For special circumstances such as first ever unprovoked seizure, medication changes, nocturnal or partial seizures only and psychogenic non-epileptic seizures (PNES), refer to “Guidelines” in the Preamble.  See separate FAP for provoked (symptomatic) seizures.	
	a. Mild risk (seizures controlled)	History of epilepsy: On or off medication. Seizure free 3 months or more; or  First ever unprovoked seizure, at least 3 months or more seizure free on medication; or  First ever unprovoked seizure, at least 6 months or more seizure free off medication; or  Seizures in context of medication changes, see footnote <sup>2</sup> ; or  A pattern of nocturnal only seizures for at least 1 year, see footnote <sup>3</sup> ; or	2 years

		Established pattern of ONLY simple partial seizures for at least 6 months, without effect on abilities needed to drive safely, see footnote <sup>4</sup> ; or  Suspected psychogenic non-epileptic seizures, seizure free at least 3 months or more, see footnote <sup>5</sup> .	
	b. Moderate risk	N/A	N/A
	c. Severe risk (seizures uncontrolled)	Seizure within previous 3 months, refractory epilepsy or medication non-adherence; or  First ever unprovoked seizure less than 3 months seizure free on medication; or  First ever unprovoked seizure, less than 6 months seizure free off medication; or  Seizures in context of medication changes, see footnote <sup>2</sup> ; or  Suspected psychogenic non-epileptic seizures, seizure free less than 3 months, see footnote <sup>5</sup> .	No driving

<sup>1</sup> For further discussion regarding SEIZURES AND EPILEPSY, please refer to Preamble at the beginning of this section.

<sup>2</sup> Seizures occurring in the setting of medically supervised medication changes are profile level 3c and are not allowed to drive until the treating clinician believes the person is medically stable. Generally, at least one month on a new medication regimen. When stable, they may be changed to profile level 3a. When medication is tapered with the intention to stop anti-seizure medications, this will be profile level 3c and no driving is allowed while tapering and for 3 months after the medication has been stopped. The person will then be considered profile 3a until profile 2 is appropriate.

<sup>3</sup> If there is a pattern of at least one year of nocturnal only seizures then driving is permitted and the person shall be considered profile 3a. This diagnosis should be made by a neurologist or other appropriately qualified clinician.

<sup>4</sup> If there is an established pattern (6 months or longer) of only simple partial seizures, without any alteration of consciousness and they do not affect abilities needed to operate a motor vehicle, then driving is permitted and the person shall be considered profile 3a. Example: Arm parasthesias without weakness or alteration of consciousness after brain tumor resection. This diagnosis should be made by a neurologist or other appropriately qualified clinician.

<sup>5</sup> Suspected psychogenic non-epileptic seizures (PNES) should be evaluated using this FAP. However, once a diagnosis of PNES is confirmed, the mental health conditions FAP should be used.

**FUNCTIONAL ABILITY PROFILE**  
**Symptomatic or PROVOKED Seizures<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No history of seizures	N/A
2.	Condition fully recovered	Seizure provoked by known cause, very unlikely to recur (e.g., resolution of a subdural hematoma or resection of a meningioma that had caused seizures). Refer to “Guidelines” in the Preamble.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	PROVOKED (symptomatic) seizures  For special circumstances such as the reason for the seizure is captured in a separate FAP, seizures in the context of medication changes, and psychogenic non-epileptic seizures (PNES), refer to “Guidelines” in the Preamble.  See separate FAP for UNPROVOKED seizures.	
	a. Mild risk (seizures controlled)	Provoked seizure unlikely to recur (e.g., caused by a medication that is subsequently stopped) and clinician feels it is reasonable to allow driving; or  Provoked seizures, likelihood of recurrence unknown (e.g., following head injury or brain infection), more than 6 months ago and clinician feels it is reasonable to resume driving; or  Seizures in context of medication changes, see footnote <sup>2</sup> ; or  Seizures caused by substance use or withdrawal, more than 6 months ago	2 years

		and meets all criteria to resume driving, see footnote <sup>3,4</sup> ; or  Suspected psychogenic non-epileptic seizure, more than 3 months ago <sup>4</sup> and clinician feels it is reasonable to allow driving, see footnote. <sup>5</sup>	
	b. Moderate risk	N/A	N/A
	c. Severe risk (seizures uncontrolled)	Provoked seizure unlikely to recur but clinician has not yet cleared to resume driving; or  Provoked seizures, likelihood of recurrence unknown, less than 6 months ago; or  Seizures in context of medication changes, see footnote <sup>2</sup> ; or  Seizure caused by substance use or withdrawal within previous 6 months, see footnotes <sup>3,4</sup> ; or  Suspected psychogenic non-epileptic seizure within past 3 months, see footnote <sup>5</sup> .	No driving

<sup>1</sup> For further discussion regarding SEIZURES AND EPILEPSY, please refer to Preamble at the beginning of this section.

<sup>2</sup> *Seizures occurring in the setting of medically supervised medication changes* are profile level 3c and are not allowed to drive until the treating clinician believes the person is medically stable. Generally, at least one month on a new medication regimen. When stable, they may be changed to profile level 3a. When *medication is tapered with the intention to stop anti-seizure medications*, this will be profile level 3c and no driving is allowed while tapering and for 3 months after the medication has been stopped. The person will then be considered profile 3a until profile 2 is appropriate.

<sup>3</sup> *If the reason for the seizure is captured in a different FAP, such as substance use disorder, a profile level for the other FAP should also be submitted* and the more restrictive FAP will determine driving restrictions.

<sup>4</sup> *When seizure is due to substance use or withdrawal*, refer to Substance Use Disorder FAP criteria for abstinence and/or compliance with treatment/recovery.

<sup>5</sup> *Suspected psychogenic non-epileptic seizures (PNES)* should be evaluated using this FAP. However, once a diagnosis of PNES is confirmed, the mental health conditions FAP should be used.

## **SLEEP APNEA SYNDROME PREAMBLE**

Driver sleepiness<sup>A</sup> is a major cause of motor vehicle crashes. Most crashes due to drowsy driving likely occur in healthy but sleep deprived individuals, but drivers with sleep apnea are at increased risk for motor vehicle accidents.

OSA (and possibly central sleep apnea) can cause impairment in daytime performance. It is associated with increased risk of motor vehicle crashes, with estimates ranging from 2% to 7% in those with sleep apnea compared to those without.<sup>B, C</sup> The condition is common (2-8% in older literature, with more recent estimates suggesting that 25% of adult men in the US are affected), and the frequency of occurrence increases with age, BMI (body mass index) and comorbid conditions such as diabetes.

People with sleep apnea may have delayed reaction times and inattentiveness in addition to frank sleepiness. Some are unaware of their sleepiness and cognitive impairment. It is important to recognize that excessive daytime sleepiness and crash risk may not correlate with the severity of the sleep apnea. A recent study demonstrated that increased risk of motor vehicle crashes is present in those with mild OSA as well as those with severe disease.<sup>D</sup> The diagnosis of OSA is made through polysomnography (PSG), and/or Home Sleep Studies (HSAT).

Treatment of sleep apnea generally improves daytime sleepiness. Use of continuous or bi-level positive airway pressure (CPAP or BPAP) is a highly effective treatment with studies suggesting that daytime symptoms improve within two weeks of positive airway pressure (PAP) treatment.<sup>E, F</sup> It is the only treatment modality demonstrated to reduce crash risk.<sup>G</sup>

Other treatment options for sleep apnea potentially may include weight loss through lifestyle modifications and/or bariatric surgery for severe obesity, use of oral mandibular advancement devices, positional therapy (if non-supine AHI equal to or less than 15), upper airway (hypoglossal nerve) stimulation therapy, upper airway surgery and craniofacial surgery,<sup>H</sup> and craniofacial surgery. Hypoglossal nerve stimulators have been approved by the FDA for treatment of sleep apnea.<sup>I</sup> Assessment of treatment efficacy (AHI equal to or less than 15) with sleep testing is recommended.

It is difficult for clinicians to assess sleepiness (and possible impairment while driving) in a patient with sleep apnea. Sleepiness cannot be measured easily by objective testing. Maintenance of Wakefulness Tests (MWT)<sup>J</sup> and Multiple Sleep Latency Tests (MSLT)<sup>J</sup> are the objective measures of daytime sleepiness. They are not routinely used to assess daytime sleepiness in drivers, however, may be used at the clinician's discretion when subjective measures suggest excessive sleepiness despite treatment. The clinician uses subjective reports as well as objective data from CPAP downloads to assess adherence to treatment and level of daytime sleepiness.

The Epworth Sleepiness Scale (ESS) is a widely used measure of subjective daytime sleepiness. It is a validated sleep questionnaire containing eight items that ask for self-reported disclosure of expectation of "dozing" in a variety of situations. Dozing probability ratings are none (0), slight (1), moderate (2), or high (3) in eight hypothetical situations. A score of 0 to 10 is normal, 11-12 is mild, 13-15 is moderate, and 16 or greater is severe daytime sleepiness.<sup>K</sup>

The diagnosis of sleep apnea should only be made by a physician or nurse practitioner or physician's assistant with specialized training in Sleep Medicine. Those with sleep apnea are frequently followed by a sleep specialist, neurologist, or a pulmonologist. In some cases, a dentist with specialized education and certification, may collaborate with the sleep specialist to provide oral appliance therapy.



Patients on PAP therapy should have data downloaded from their device to measure adherence with therapy. Medicare guidelines<sup>L</sup> are the standard for adherence to treatment and require an average of 4 hours PAP use per night 70% of the time.

The clinician must educate patients that driving safety is ultimately the individual's responsibility. Insufficient sleep time, medications, shift work and illness may affect one's ability to drive safely despite consistent use of PAP therapy.

**FUNCTIONAL ABILITY PROFILE**  
**Sleep Apnea Syndrome<sup>1</sup>**

Profile Levels	Degree of Impairment/ Potential for At Risk Driving	Condition Definition / Example	Interval for Review and Other Actions
1.	No diagnosed condition	No diagnosis of sleep apnea	N/A
2.	Condition fully recovered	Recovered after treatment such as independent weight loss, bariatric surgery, or ENT surgery that has been confirmed with a Polysomnography or Home Sleep Apnea Test (HSAT) demonstrating an AHI <sup>2</sup> less than 5 events/hour.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	See footnote regarding PAP therapy. <sup>3</sup> This diagnosis should be made only after a sleep study. Neurology, pulmonary or sleep medicine specialists are often the clinicians to provide follow-up.	
	a. Mild risk	<p>No report of accident or near miss of concern; and</p> <p>AHI<sup>2</sup> 5-15 on diagnostic PSG or HSAT and not sleepy, ESS (Epworth Sleepiness Scale)<sup>4</sup> 12 or less and not on treatment; or,</p> <p>Treatments such as upper airway stimulation therapy, surgery, positional therapy, or oral appliance<sup>5</sup>. Polysomnogram or HSAT demonstrates an AHI<sup>2</sup> on treatment of equal to or less than 15. ESS<sup>4</sup> score 12 or less; or,</p> <p>PAP download demonstrates adherence to treatment.<sup>3,6,7</sup> AHI<sup>2</sup> equal</p>	3 years

		to or less than 15 on download. ESS <sup>4</sup> 12 or less.	
	b. Moderate risk	No report of accidents or near miss of concern; and  PAP download demonstrates adherence to treatment. <sup>3, 6, 7</sup> AHI <sup>2</sup> may be greater than 15 on download (could include central sleep apnea). ESS <sup>4</sup> 13-15.	1 year
	c. Severe risk	History of falling asleep while driving or near miss, or strong suspicion of sleep apnea with concern for unsafe driving; and/or  Non-responsive <sup>7</sup> or non-adherent <sup>8</sup> to therapy.	No driving

<sup>1</sup> For further discussion regarding SLEEP APNEA SYNDROME, please refer to Preamble at the beginning of this section.

<sup>2</sup> AHI: apnea/hypopnea index: number of obstructive events per hour of sleep.

<sup>3</sup> Treatment with positive airway pressure therapy. PAP devices include but are not limited to, CPAP (continuous positive airway pressure), BiPAP (bi-level positive airway pressure), and ASV (adaptive servo-ventilation).

<sup>4</sup> The Epworth Sleepiness Scale is a widely used measure of subjective daytime sleepiness. A score of 10 or less out of 24 is considered normal. A score greater than 10 suggests a degree of excessive sleepiness.<sup>K</sup>

<sup>5</sup> For those with an oral appliance, positional therapy, upper airway stimulation therapy or surgery, repeat PSG or HSAT must be done with treatment in place.

<sup>6</sup> Adherence to or compliance with PAP treatment derived from Medicare guidelines: use of PAP an average of four or more hours per night at least 70% of the time.

<sup>7</sup> Other or new treatments may be considered on an individual basis if effective in treating AHI and excessive somnolence, when recommended by the clinician and upon review of the Medical Advisory Board. Assessment by a sleep specialist may be required.

<sup>8</sup> For drivers who have not been compliant with PAP therapy but are willing to seek effective treatment, the clinician may write a letter to request that driving be allowed during workup if there are no specific concerns for unsafe driving. Normally, this should be done before completing the Driver Medical Evaluation form. The letter must contain a recent ESS score, the request to allow driving, the plan for treatment and the estimated time frame. Clinician may call BMV Medical Section with any questions or concerns, at 207-624-9000, Ext. 52124.

## SUBSTANCE USE DISORDER PREAMBLE

Driving under the influence of marijuana, opioids and alcohol can have profound effects on driving. Almost 1 in 3 fatal motor vehicle accidents in Maine involved alcohol.<sup>A</sup> Use of illicit drugs or misuse of prescription drugs can make driving a car unsafe, just like driving after drinking alcohol. It's hard to measure how many crashes are caused by drugged driving, but estimates show that 43 percent of drivers tested in fatal car crashes were found positive for drugs and over half of those drivers were positive for two or more drugs.<sup>B, C</sup>

Many substances affect driving.<sup>C</sup> According to the National Academy of Sciences and the National Institutes of Health, there is evidence of an association between cannabis use and increased risk of motor vehicle crash.<sup>D</sup> Marijuana affects psychomotor skills and cognitive functions critical to driving including vigilance, drowsiness, time and distance perception, reaction time, divided attention, lane tracking, coordination, and balance. Opioids can cause drowsiness and can impair cognitive function. Alcohol can reduce coordination, concentration, ability to track moving objects and reduce response to emergency driving situations as well as difficulty steering and maintaining lane position. It can also cause drowsiness. The use of more than one drug or drugs combined with alcohol increase the effects on driver performance. The yearly prevalence of fatally injured drivers who tested positive for drugs increased significantly from 2007 to 2017. These findings highlight that drugged driving remains a public health priority.<sup>E</sup>

Clinicians are responsible to assess their patients for potential risks and advise them whether to drive or not based on their medications and medical conditions. Being alert to other medical or social history information that points to drug or alcohol abuse, such as gastrointestinal symptoms, falls or injuries, muscle or neurologic symptoms, infections, and social or work problems is part of that process. With this in mind, the clinician's role is to recognize high-risk individuals from a medical perspective and assess their physical and mental fitness to drive safely. Compliance with treatment and recovery is also a critical factor in determining whether a patient is stable and fit to return to safe driving. In addition, criteria for defining use versus abuse may be different in a community setting compared to use when in a treatment/recovery program where abstinence is a criterion. For specific details regarding abstinence and driving, refer to the FAP Table.

A diagnosis of Substance Use Disorder<sup>F</sup> can involve substance misuse or dependence and is diagnosed when a patient continues to use a substance or combination of substances at the expense of significant medical, social or legal consequences. *Please note that the descriptions of "Mild," "Moderate" or "Severe" in the Substance Use Disorder FAP Table, **do NOT** correspond to the similarly named categories in the DSM.*

In order to evaluate a patient for substance use-related fitness to drive safely, the clinician must take into account many factors. These include the substance/substances being used (e.g. alcohol, benzodiazepines, opiates/opioids, sedative-hypnotics, marijuana/cannabis, stimulants, heroin, cocaine, methamphetamine, and/or other street drugs), interactions between substances, including interactions with prescribed medications, the patient's insight into his/her misuse behaviors, his/her judgment about driving when intoxicated or impaired, the risk for polysubstance use and abuse, and the patient's ability or motivation to comply or participate in rehabilitation and recovery. In the context of alcohol or drug use this can be particularly challenging given the intermittent and/or relapsing nature of Substance Use Disorders.

Other medical risks or side effects related to Substance Use Disorder also need to be taken into account. For example, a person may have difficulty driving safely during periods of withdrawal from substances, especially alcohol and benzodiazepines where delirium and seizures are a risk. Withdrawal from opiates/opioids or heavy marijuana use can cause physical symptoms that would impair muscle control,

concentration and attention. Chronic heavy alcohol use<sup>G</sup> also puts a person at increasing risk for cognitive impairment and neuromuscular decline, both of which mean potentially unsafe motor vehicle operation. **Please note that a driver who suffers a convulsive seizure caused by abuse of or withdrawal from street drugs, prescription medications or alcohol is unfit to drive for a minimum of 6 months per NHTSA Driver Fitness Medical Guidelines.**<sup>H</sup> Clinicians also need to be aware of the risks to public safety from drivers that combine substances of abuse, and/or mix them with legitimately prescribed medications. Among the most significant substance mixtures are alcohol in combination with either marijuana or a stimulant such as cocaine; marijuana used along with either a stimulant, benzodiazepine or an opioid; and benzodiazepines combined with opioid. Methadone and benzodiazepines are an especially worrisome combination due to a greatly increased risk of sedation.

Currently, the legal environment surrounding marijuana/cannabis has seen several changes. Clinicians need to be aware of related safety risks. NHTSA's Fatality Analysis Reporting System (FARS) reported that drugs were present in nearly 43% of the fatally injured drivers with a known test result, more frequently than alcohol was present.<sup>I</sup> Over a 10-year study period, cannabis has been detected in the blood in an increasing number of drivers involved in fatal accidents (from 4.2% in 1999 to 12.2% in 2010 in one study of 23,591 fatal accidents).<sup>J</sup> The most recent NHTSA Roadside Survey<sup>K</sup> at the time of this writing, found drugs in 22% of drivers both on weekend nights and on weekday days.

***Resources and Tools for Clinicians:***

*(These resources are not part of rules. They are provided for informational purposes only.)*

- *Maine's Prescription Monitoring Program. As of April, 2015, the link to sign up as a PMP "data requester" is <http://www.maine.gov/pmp>.*
- *Screening tools for alcohol risk exist, such as CAGE<sup>L</sup> and AUDIT.<sup>M</sup>*
- *Laboratory assessment may give objective evidence for substance use or compliance with a recovery program. However, urine drug testing is fraught with pitfalls. Medical providers are strongly encouraged to educate themselves before interpreting drug test data (for example via the paper on rational urine drug testing cited here)<sup>N</sup>. Medical providers need to be aware of the parameters for detection of the laboratory they use.<sup>O</sup>*
- *Biomarkers for Alcohol<sup>O</sup>—Located in the Appendix*

**FUNCTIONAL ABILITY PROFILE**  
**Substance Use Disorder<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No known substance use disorder.	N/A
2.	Condition fully recovered	History of substance use disorder, in sustained recovery for 2 or more years, and <i>must not fit any</i> of the profile level descriptions below.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Substance use at any point in the past two years that meets current DSM Criteria for a Substance Use Disorder; and	
	a. Mild risk	<b>No motor, judgment or intellectual impairment with NO history of consequences</b> such as, but not limited to, medical detox, drug or alcohol related seizure <sup>2</sup> , adverse driving or legal consequences of substance use <b>for the past 12 months, &amp; no more than 1 consequence in last 5 years.</b>	1 year  Until criteria met for Profile Level 2.
	b. Moderate risk	<b>History of problematic substance use significant enough to cause motor, judgment, or intellectual impairment, and may include</b> drug or alcohol related events such as, but not limited to, motor vehicle crash, OUI or serious medical consequences. (E.g. medical detoxification or seizure <sup>2</sup> from use or withdrawal)	6 months  (To resume driving after specified period of abstinence, driver must be medically cleared and pass a ROAD TEST.)

		<p><b>Has been abstinent or has demonstrated</b> overall compliance with treatment/recovery plan<sup>3</sup> for <b>at least 3 months</b> with <i>up to one</i> event in one year or <i>two events</i> in 5 years, <b>EXCEPT</b> in case of <i>convulsive seizure</i><sup>2</sup> related to abuse of or withdrawal from alcohol or drugs.</p> <p><b>Has at least 6 months of abstinence or compliance with treatment/recovery plan<sup>3</sup>; or</b></p> <p><b>History of two or more</b> events in 1 year, <i>three or more</i> in 5 years, has been <b>abstinent or demonstrated overall compliance with treatment/recovery plan<sup>3</sup> for at least 1 year.</b></p>	
	<p>c. Severe risk</p>	<p><b>History of drug or alcohol related event(s)</b> including motor vehicle crash, OUI, or medical consequences (including medical detoxification or seizure<sup>2</sup> from use or withdrawal).</p> <p><b>Driver has not been abstinent or has not been compliant with treatment/recovery plan long enough</b> to meet criteria for Profile Level 3.b.; <b>or</b></p> <p><b>Substance use significant enough</b> to cause permanent motor, judgment, or intellectual impairment. For dementia related to substance use, see footnote<sup>4</sup></p>	<p>No driving</p>

<sup>1</sup> For further discussion regarding SUBSTANCE USE DISORDER, please refer to Preamble at the beginning of this section.

<sup>2</sup> For other types of seizures, refer to Seizure /Epilepsy FAP.

<sup>3</sup> Patient demonstrates overall compliance with treatment or personal recovery plan. Patient must be abstinent or have only had minimal use that does not lead to actions that jeopardize public safety; no new driving incidents. Patient is stable and fit to return to safe driving.

<sup>4</sup> If patient has dementia related to substance use, use Dementia FAP.

**UNEXPLAINED ALTERATION / LOSS OF CONSCIOUSNESS PREAMBLE**

The Functional Ability Profile (FAP) for alteration/loss of consciousness shall pertain to drivers who have an **unexplained** alteration in their thought process that would preclude safe operation of a motor vehicle. This is a relatively common occurrence. Through medical investigation the cause may be identified or **explained** and the person should then be categorized under the appropriate FAP. Medical work up should evaluate possible cardiac and/or neurologic causes. An explained alteration of consciousness (AOC) with low to no likelihood of recurrence is not generally subject to the FAP rules. Examples of this include concussion with recovery, adverse drug reaction, or medical illness with recovery such as pneumonia, sepsis, singular cough syncope, or anaphylactic reactions. ***Vasovagal syncope is excluded from this FAP unless episodes have occurred while driving. Driving may resume after receiving treatment and being symptom free 3 months (Please refer to Cardiovascular Conditions FAP).***



**FUNCTIONAL ABILITY PROFILE**  
**Unexplained Alteration of Consciousness (AOC)<sup>1</sup>**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	No known disorder	N/A
2.	Condition fully recovered	History of unexplained AOC but none in 4 years.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Refer to Preamble for description.	
	a. Mild risk	History of unexplained AOC greater than 1 year ago.	2 years
	b. Moderate risk	History of any unexplained AOC within 6 months – 1 year ago.	1 year
	c. Severe risk	Any unexplained AOC within the past 6 months.	No driving

<sup>1</sup> For further discussion regarding UNEXPLAINED ALTERATION OF CONSCIOUSNESS, please refer to Preamble at the beginning of this section.

## VISUAL CONDITIONS PREAMBLE

The main elements of vision necessary for safe driving are adequate visual acuity and peripheral vision. These two items are elaborated in the following pages as Functional Ability Profile (FAP) Tables on visual parameters. Other visual factors that may impact driving ability but which may not easily be measured are also discussed below.

Visual acuity is tested using a Snellen chart. It is tested in each eye without correction and with the correction the patient typically uses when driving. Refraction is not required for visual acuity testing. Corrective lenses, including contact lenses are permissible for testing. **Bioptic telescopic lenses (BTL's) may not be used to meet the visual acuity requirements.** A minimum of 50% of the letters on the line of the eye chart must be correctly identified to qualify as passing that level of acuity.

For screening purposes, peripheral vision should be tested using a 10 mm round white test object at a distance of 330 mm, preferably without corrective lenses, but contact lenses or corrective lenses may be worn. Alternatively, confrontation visual fields and devices such as, but not limited to, an arc perimeter, tangent screen or a Goldmann visual field using a V4e target are all acceptable forms of testing. With the subject fixating straight ahead at a fixation target in primary gaze, a horizontal visual field of 110 degrees is required to meet the vision standard. **Field expansion devices**, spectacle systems incorporating pasted or mounted prisms, mirrors or a camera in or on a carrier lens or frame which are designed to shift the visual field in one or both eyes so that objects within a scotoma can be seen, **may not be used for testing.**

A binocular Esterman visual field test may be performed when it is inconclusive that the total horizontal field on the screening exam meets the 110-degree minimum. Examples of Esterman test results may be found in the appendix. Corrective lenses normally worn for driving may be worn for the Esterman, but field expansion devices may not be used for testing. The subject is to focus on the central fixation point of the perimeter and scanning eye movements are not permitted. Examples of conditions where the Esterman visual field may provide clarification include, but are not limited to hemianopsias, quadrantanopsias, retinitis pigmentosa, bilateral proliferative diabetic retinopathy following panretinal photocoagulation, and severe bilateral glaucoma. Homonymous hemianopsia is a condition where there is visual field loss to one side (either the right half or the left half) in both eyes and is most often the result of a brain injury. Most subjects with this type of vision loss will not be considered fit to drive because they will be unable to meet the minimum horizontal visual field of 110 degrees. The Esterman visual field only measures points as far peripherally as 75 degrees to the left and right of fixation. The normal peripheral visual field does extend out to 90 degrees or slightly greater, leaving a portion of the peripheral field that cannot be assessed with the Esterman test. If, on the basis of confrontational or other visual field testing it has been established that the subject can see beyond the 75° tested horizontally on the Esterman, this fact may be noted and the additional degrees counted toward the total visual field when determining whether or not the 110 degree minimum has been met.

Subjects who do not meet vision requirements due to a visual field defect may be eligible for individual consideration for licensing by meeting the following criteria:

- 1) The defect has been present for a minimum of 12 months.
- 2) The defect was caused by an isolated and non-progressive event or condition.
- 3) The subject has no other progressive condition that is likely to cause additional visual field loss.
- 4) The visual acuity is 20/40 or better in the better seeing eye and is 20/100 or better in the fellow eye. Correction may be used to test for visual acuity.
- 5) The subject does not experience diplopia.
- 6) A subject with a Learner's Permit must log at least 70 hours of supervised driving during daylight hours, regardless of their age.

- 7) The subject satisfactorily passes a road test. A description of the road test may be found in the appendix.
- 8) The subject's driving record shows a pattern of safe motor vehicle operation with specific consideration given to at fault crashes or law enforcement reports of adverse driving.
- 9) The Medical Advisory Board or their designated representative(s) will assess for approval of licensing based on a review of the preceding criteria or any other relevant factors. Their decision will determine whether to allow driving. Further vision testing, including but not limited to an Esterman test, may be required. Refer to the appendix for criteria that may be used to review the Esterman test of a subject that does not meet the minimum vision standard; as well as other relevant factors that may be considered.
- 10) A license that is approved for such an exceptional case will be restricted to daylight only driving and will be reviewed at intervals of not greater than 2 years.

When binocular diplopia creates a concern for safe operation of a motor vehicle, the clinician should recommend corrective measures. No driving restrictions are required as long as the visual acuity and peripheral visual field requirements described above are met. Fogging, patching, and temporary or permanent prisms used with lenses may all be employed. If the clinician has concern for safe operation due to diplopia that is not included in this description, they may recommend a restriction or a road test.

Based on criteria described in the FAP Tables, the following restrictions will be applied to a driver's license:

- 1) Corrective lenses are required for drivers whose uncorrected visual acuity is less than (i.e. worse than) 20/40 in both eyes.
- 2) Daylight only driving is permitted for drivers whose visual acuity is 20/50 – 20/100 in the better seeing eye.

The daylight only driving restriction imposed as a result of visual acuity may be removed based on:

- 1) A report from an optometrist or ophthalmologist advising that no additional eye conditions or other known relevant factors exist that may affect the ability to safely operate a motor vehicle, AND
- 2) BMV review of the subject's driving record (crashes, adverse reports of driving, etc.) shows they have the ability to operate a motor vehicle safely and in accordance with all applicable laws, rules and regulations governing the operation of motor vehicles; AND
- 3) Passing a BMV night-time driver's examination that demonstrates the ability to operate a motor vehicle safely.

Individuals undergoing BMV vision review with potentially progressive pathology affecting either visual acuity or peripheral visual field are required to have their eyes examined at specified intervals. A clinician may request a shorter interval based on the likelihood of more rapid deterioration.

Sometimes an ocular defect or disease does not cause the applicant to fail the eye examination but the examining clinician suspects that the condition may affect driving ability. It is reasonable to ask that a road test be given by a BMV Driver's License Examiner to look at specific aspects of driving. For example, a patient with retinitis pigmentosa who wants to drive at night may pass the eye exam but the effect of the disease on the patient's night driving ability remains uncertain. The clinician might recommend a nighttime road test. Alternatively, a patient who has suffered a stroke or a patient with bilateral severe glaucoma may meet the visual field-testing criteria, but the ability to detect obstacles and remain in the driving lane may be questioned. A road test may be requested by the clinician. A road test cannot be requested in order to obtain a license for an individual who has failed to meet the vision standards, unless they have already met the "exceptional case" criteria. A description of the road test may be found in the appendix.

When there is a history of traumatic brain injury or stroke that has resulted in either decreased vision and/or peripheral field loss, an Eye Examination Form (MVE-103) must be completed using the Visual Conditions FAP; and a Driver Medical Evaluation (CR-24) form must be completed using the Cerebrovascular Accident (CVA/Stroke) or Traumatic Brain Injury (TBI) FAP. Each form should be completed by the appropriate health care provider.

Night vision, contrast sensitivity, and glare recovery may be impaired in the presence of various pathologies such as corneal scars, cataracts, and retinal disease. Evidence is inconclusive that testing these parameters of visual function can determine which drivers can safely operate a motor vehicle. Defects in color vision, which may impair the ability to distinguish traffic signals, are not sufficient reason in the absence of any other visual loss to deny or restrict driving.

**FUNCTIONAL ABILITY PROFILE**  
**Visual Conditions<sup>1</sup>: Visual Acuity**

<b>Profile Levels</b>	<b>Degree of Impairment/ Potential for At Risk Driving</b>	<b>Condition Definition / Example</b>	<b>Interval for Review and Other Actions</b>
1.	No diagnosed condition	Visual acuity is equal to or better than 20/40 in the better seeing eye without correction and with no progressive disease. <sup>2</sup>	N/A
2.	Condition fully recovered	Visual acuity equal to or better than 20/40 in the better seeing eye with correction and the condition is stable. <sup>2</sup>	Restrict to corrective lenses
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe.)	Presence of progressive disease or of another serious visual deficit (glaucoma, diabetic retinopathy, macular degeneration, cataract and others).  <b>Bioptic telescopic lenses are not permitted for vision testing.<sup>2</sup></b>	Those needing corrective lenses to meet visual acuity requirements will be restricted to wearing them while driving for all profile levels described below.
	a. Mild risk	Visual acuity equal to or better than 20/40 in the better seeing eye but could deteriorate due to progressive disease. <sup>2</sup>	4 years or earlier if recommended by vision examiner
	b. Moderate risk	Visual acuity 20/50 - 20/100 in the better seeing eye. <sup>2</sup>	2 years or earlier if recommended by vision examiner  Restrict to daylight driving only <sup>3</sup>
	c. Severe risk	Visual acuity less (worse) than 20/100 in the better seeing eye. <sup>2</sup>	No driving

<sup>1</sup> For further discussion regarding VISUAL CONDITIONS, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> **Bioptic telescopic lenses (BTL's) may not be used** for the purposes of meeting any of the visual acuity requirements. Drivers who meet the Visual Acuity requirements without BTL's may use them for taking the road test and for driving.

<sup>3</sup> The daylight only driving restriction may be removed based on:

- A report from an optometrist or ophthalmologist advising that no additional eye conditions or other known relevant factors exist that may affect the ability to safely operate a motor vehicle, AND
- BMV review of the person's driving record (crashes, citations, etc.) shows they have the ability to operate a motor vehicle safely and in accordance with all applicable laws, rules and regulations governing the operation of motor vehicles; AND
- Passing a BMV night-time driver's examination that demonstrates the ability to operate a motor vehicle safely.

**FUNCTIONAL ABILITY PROFILE**  
**Visual Conditions<sup>1</sup>: Peripheral Vision**

Profile Levels	Degree of Impairment/ Potential for At Risk Driving	Condition Definition / Example	Interval for Review and Other Actions
1.	No diagnosed condition	Total horizontal visual field <sup>2, 3</sup> of at least 110°; no progressive disease and no visual field deficits.	N/A
2.	Condition fully recovered	Past history of visual field <sup>2, 3</sup> defect but current horizontal total is 110° or more and condition is recovered.	N/A
3.	Active impairment  (Profile levels are intended to describe potential for at risk driving; they are NOT consistent with clinical definitions for mild, moderate or severe)	Presence of progressive conditions, visual field loss following CVA/TBI, +/- or other serious visual diseases or deficits (E.g., hemianopsia, quadrantanopsia, retinitis pigmentosa, bilateral severe glaucoma <sup>4, 5</sup> ).  <b>For instructions on measuring peripheral vision, see preamble and footnotes.<sup>2, 3</sup></b>	
	a. Mild risk	Total horizontal visual field <sup>2, 3</sup> of 110° OR more with a visual field deficit <sup>4, 6</sup> but without expectation of deterioration.	4 years or earlier if recommended by vision examiner.  Esterman test may be performed. <sup>6</sup>  Road test may be required if recommended by vision examiner or MAB.
	b. Moderate risk	Total horizontal visual field <sup>2, 3</sup> at least 110° with potential for deterioration. <sup>4, 6</sup>	1 year or earlier if recommended by vision examiner.  Esterman test may be performed. <sup>6</sup>

			Road test may be required if recommended by vision examiner or MAB.
	c. Severe risk	Total horizontal visual field <sup>2, 3</sup> less than 110°. <sup>4, 5, 6</sup>	No driving

<sup>1</sup> For further discussion regarding VISUAL CONDITIONS, please refer to PREAMBLE at the beginning of this section.

<sup>2</sup> For screening purposes, peripheral vision should be tested using a 10 mm round white test object at a distance of 330 mm, preferably without corrective lenses, but contact lenses or corrective lenses may be worn. Alternatively, confrontation visual fields and devices such as, but not limited to, an arc perimeter, tangent screen or a Goldmann visual field using a V4e target are all acceptable forms of testing. The subject must be fixating straight ahead at a fixation target in primary gaze.

<sup>3</sup> **Field expansion devices**, spectacle systems incorporating pasted or mounted prisms, mirrors or a camera in or on a carrier lens or frame which are designed to shift the visual field in one or both eyes so that objects within a scotoma can be seen, **may not be used for testing visual field.**

<sup>4</sup> If hemianopsia or quadrantanopsia is present, driver will also need to be evaluated using the Brain Injury/Stroke profile guidelines.

<sup>5</sup> See the Visual Conditions Preamble for exceptional case consideration criteria.

<sup>6</sup> A binocular Esterman visual field test may be performed when it is uncertain that the total horizontal field on the screening exam meets the 110-degree minimum. Refer to preamble.



**APPENDIX**

**(Items included in the appendix are for information only and are not incorporated into rules.)**

## BUREAU OF MOTOR VEHICLES – DRIVING TEST

### Purpose of test

There are a wide variety of physical, emotional and mental conditions that have the potential to impact an individual's ability to drive safely. Impairment may be the result of altered muscular, skeletal, neurologic or cognitive functions. Motor, sensory, and/or cognitive deficits may adversely affect strength, coordination, reaction time, range of motion, visual perception, processing speed, judgment, problem solving, attention/concentration, memory, and/or awareness, to name a few. Some impairment may require restrictions such as corrective lenses, or adaptive equipment for the vehicle. Most people with these conditions may continue to operate safely without restriction. In the most severe circumstances, a person's condition may preclude driving. In certain situations, a driving test will be required to determine whether or not a person is capable of properly operating a motor vehicle. This is not a comprehensive medical evaluation. It is a simple driving test to evaluate basic driving skills.

### Components of driving test

Experience	Adjust to conditions Familiar with vehicle Proper control
Shifting	Select proper gear Proper use of clutch No stalling
Traffic Rules	Appropriate stops Operate within own lane Proper lane position Proper operation at traffic signal
Signs/Signals	Stop at STOP sign Stop at red light Stop for stopped school bus
Turning	Left/Right Approach from correct lane Enter correct lane No cutting corner No wide approach at intersection No wide entrance of lane at intersection Proper recovery
Backing	Straight line back without going into traffic lane, onto sidewalk or curb Offset back (parallel parking) Look over shoulder Look to rear
Signaling	Signal appropriately Use correct signals
Posted Speed	Stay within posted speed limits
Pedestrians	Yield for pedestrians in crosswalk and roadway
Railroad Crossing	Obey signals Observe both ways before crossing
Yielding	Yield properly
Other	Observe at intersections Observe when changing lanes

Collision                      Observe when pulling from curb  
   Avoid collision with another vehicle or any fixed object

**(This information is included for information only and is not incorporated into rules.)**

## **DRIVING EVALUATIONS BY AN OCCUPATIONAL THERAPIST**

“Occupational therapy practitioners with specialized training in driver rehabilitation may administer comprehensive driving evaluations. This type of driving evaluation typically includes two parts: one part in an office or clinic and the second part behind the wheel of a car. The purpose of the evaluation in the office or clinic is to examine the physical, visual, and mental abilities required for safe driving. This would include:

- Reaction time, needed for stopping fast enough to avoid a crash;
- Basic visual acuity, or sharpness of vision; and
- Decision making, judgment, and planning (e.g., needed for making left turns).”

*Quotation from the American Occupational Association website. For more information, please visit: <https://www.aota.org/practice/productive-aging/driving/clients/evaluate/eval-by-ot.aspx>*

**(This information is included for information only and is not incorporated into rules.)**

## POTENTIAL BIOMARKERS OF ALCOHOL USE

Note: Medical providers are strongly encouraged to read the information in this reference to get more details about the appropriate use of these lab tests. The tests are listed here as a basic introduction. Medical providers need to understand the subtleties of these lab tests and the potential for false positives and false negatives when using these tests clinically.

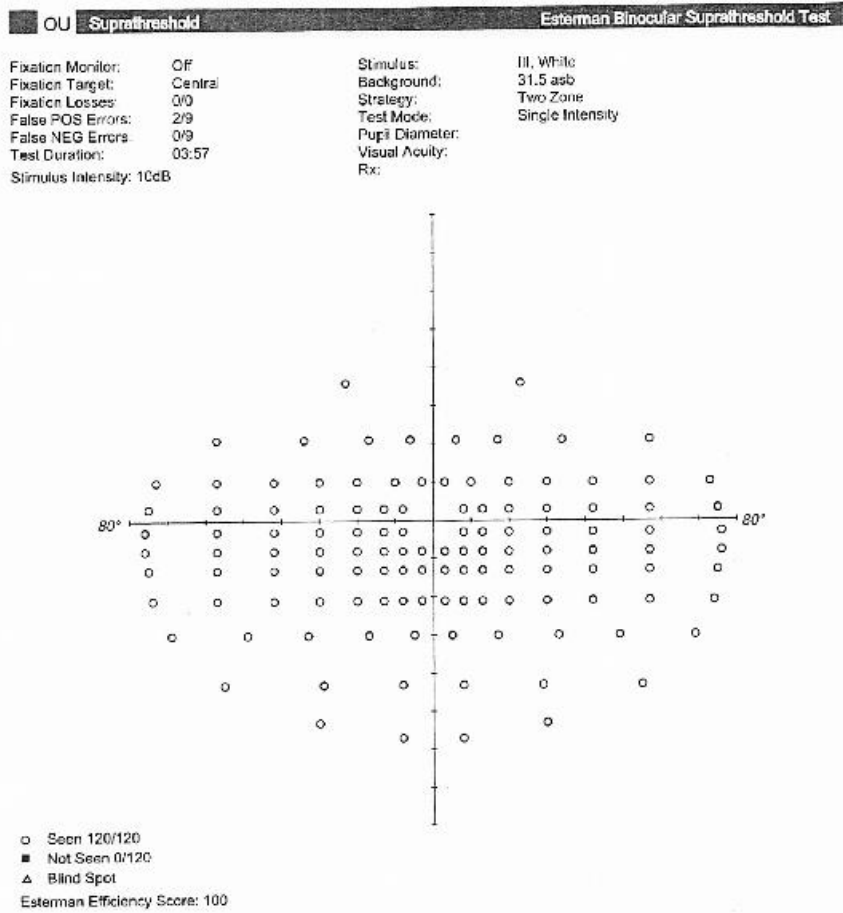
<b>Biomarker<sup>1</sup></b>	<b>Screens for Heavy Drinking</b>	<b>Identifies Relapse to Heavy Drinking</b>	<b>Monitors Abstinence</b>	<b>Time to return to normal - Range with abstinence</b>
<b>CDT</b>	yes	yes		2-3 weeks
<b>Ethyl Glucuronide (urine)</b>		yes	yes	1-3 days
<b>EtS</b>		yes	yes	1-3 days
<b>GGT</b>	yes			2-4 weeks
<b>MCV</b>	yes			several months
<b>Phosphatidyl ethanol</b>		yes		2-4 weeks
<b>AST, ALT</b>	yes			2-4 weeks

<sup>1</sup>The role of Biomarkers in the Treatment of Alcohol use Disorder, Revision Spring 2012. Volume 11, Issue 2. [www.samhsa.gov](http://www.samhsa.gov)

**This reference is available free, online, and is included for information only. It is not a part of rules.**

### SAMPLE BINOCULAR ESTERMAN TEST - 1

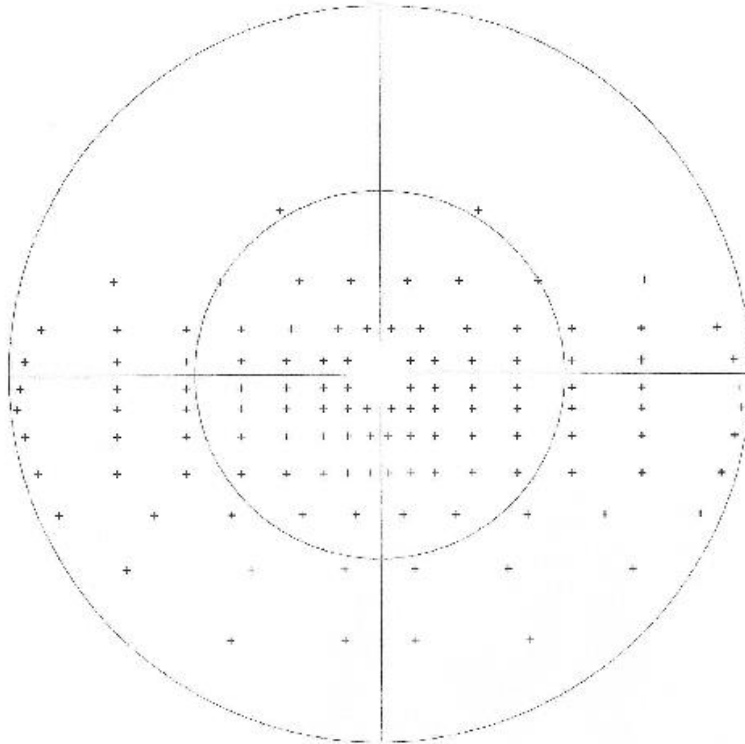
(Included for information only and not incorporated into rules.)



**SAMPLE BINOCULAR ESTERMAN TEST - 2**  
 (Included for information only and not incorporated into rules.)

test test, 4/10/1997 (22yrs)  
 ID test

**Esterman Binocular**  
**Both eyes / 10/10/2019 / 14:12:39**  
 Symbols



Programs: 01 Standard White/White - IIT  
 Parameters: 31.4 / 1000 esp III 100 ms  
 Catch trials: 10 (17%) / 20 (3%)  
 Refraction S/C/A:  
 Pupil (mm):  
 NV:

Questions / responses: 120 / 0  
 Duration: 09:31  
 RF: 8.3  
 VA [m]:  
 IOP (mmHg):

80°	
+ Points seen:	120 / 120
■ Points missed:	0 / 120
Score [%]:	100

Comment:



EyeSuite™ Static perimetry, V3.8.1  
 © 2019 SMI, 01-10-2019 14:12:39



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