

MEDICAL REVIEW BOARD

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C/O: Federal Motor Carrier Safety Administration

1200 New Jersey Avenue, SE

Washington, DC 20590

December 13, 2016

T.F. Scott Darling, III

Administrator

Federal Motor Carrier Safety Administration

1200 New Jersey Avenue, SE

Washington, DC 20590

Dear Administrator Darling:

On October 25, 2016, the Medical Review Board (MRB) met in a public meeting to deliberate on *Medical Review Board Task 16-2* regarding review of the Federal Motor Carrier Safety Administration’s (FMCSA’s) medical advisory criteria found in 49 CFR part 391, Appendix A. FMCSA tasked the MRB with considering the medical advisory criteria and conducting a review of the criteria to: (1) prioritize such criteria that should be incorporated into the medical regulations to promote clear, consistent, and enforceable rules; (2) identify advisory criteria that appear to be inconsistent with current medical practice and standards of care, as well as any that make enforcement of key medical standards difficult; and (3) identify medical advisory criteria that should remain in place.

The attached report includes the MRB’s recommendations related to *Medical Review Board Task 16-2*. On behalf of the MRB, I respectfully submit this report to FMCSA for its consideration.

Sincerely,

//signed//

Gina C. Pervall, MD

Chairman, Medical Review Board

Enclosure

**Introduction**

The Medical Review Board (MRB) of the Federal Motor Carrier Safety Administration (FMCSA) reviewed and considered the medical advisory criteria currently found in Appendix A of 49 CFR part 391, as the Agency requested in *Medical Review Board Task 16-2*. The MRB recommends that FMCSA revise the medical advisory criteria as indicated below and maintain this revised medical advisory criteria as guidance.

As a general matter, the MRB recommends that the Agency begin each category of medical standards in the medical advisory criteria with a recitation of the relevant regulation, using italicized font for this text to distinguish clearly the content that is regulatory requirements versus guidance. Further, the MRB recommends that the text used to describe each regulatory requirement should be the precise language of the regulatory text for purposes of accuracy and clarity. Finally, in addition to the recommended language changes in redline-strikeout below, the MRB presents to the Agency some specific recommendations under certain categories of medical advisory criteria that relate to determining whether some of the medical advisory criteria continue to be consistent with current medical practice and standards of care.

**Recommended Revisions to Medical Advisory Criteria (49 CFR Part 391, Appendix A)**

1. **Introduction**
   1. MRB Recommended Revisions: This appendix contains the Agency’s regulations (italicized) as well as guidelines in the form of Medical Advisory Criteria to help certified medical examiners (CMEs) assess a driver's physical qualification. These guidelines are strictly advisory and were established after consultation with physicians, States, and industry representatives, and, in some areas, after consideration of recommendations from the Federal Motor Carrier Safety Administration’s (FMCSA) Medical Review Board (MRB) and Medical Expert Panels (MEP).
2. **Interpretation of Medical Standards – Introductory Text**
   1. MRB Recommended Revisions: Since the issuance of the regulations for physical qualifications of commercial motor vehicle (CMV) drivers, ~~the Federal Motor Carrier Safety Administration~~FMCSA has published recommendations called Advisory Criteria to help ~~medical examiners~~CMEs in determining whether a driver meets the physical qualifications for commercial driving. These recommendations have been condensed to provide information to ~~medical examiners~~CMEs that is directly relevant to the physical examination ~~and is not already included in the Medical Examination Report Form~~.
3. **Interpretation of Medical Standards – Categories** 
   1. Loss of Limb: § 391.41(b)(1)
      1. The current statement in this section of the medical advisory criteria is a slightly different statement of the actual regulation at § 391.41(b). The MRB recommends using the precise wording of the regulation and italicizing regulatory text in the medical advisory criteria.
      2. MRB Recommended Revisions: *A person is physically qualified to drive a ~~commercial motor vehicle~~CMV if that person~~:~~ —Has no loss of a foot, a leg, a hand or an arm, or has been granted a ~~Skills Performance Evaluation~~skill performance evaluation certificate pursuant to § 391.49.*
   2. Limb Impairment: § 391.41(b)(2)
      1. MRB Recommendations:
         1. FMCSA should revise what is currently paragraph II.B.2 under Limb Impairment to read as follows: A person who suffers ~~loss of a foot, leg, hand or arm or whose~~ a permanent limb impairment that in any way interferes with the safe performance of normal tasks associated with operating a ~~commercial motor vehicle~~CMV must be referred to FMCSA for a ~~is subject to the~~ s~~S~~kills p~~P~~erformance e~~E~~valuation (SPE) ~~Certificate Program~~ pursuant to § 391.49, assuming the person is otherwise qualified.
         2. FMCSA should remove paragraphs II.B.3 and II.B.4 of the medical advisory criteria.
   3. Diabetes: § 391.41(b)(3)
      1. MRB Recommendation: FMCSA should remove all text in this section except for a restatement of the regulatory requirement relating to diabetes (currently paragraph II.C.1 of the medical advisory criteria).
   4. Cardiovascular Condition: § 391.41(b)(4)
      1. MRB Recommendation: FMCSA should convene a MEP to evaluate the cardiovascular standard.
      2. MRB Recommended Revision (paragraph II.D.2 of the medical advisory criteria): The term “has no current clinical diagnosis of” is specifically designed to encompass: “a clinical diagnosis of” a current cardiovascular condition, or a cardiovascular condition which has not fully stabilized regardless of the time limit. The term “known to be accompanied by” is designed to include a clinical diagnosis of a cardiovascular disease, including arrhythmia, which is accompanied by symptoms of syncope, dyspnea, collapse or congestive cardiac failure; and/or which is s likely to cause syncope, dyspnea, collapse or congestive cardiac failure
      3. MRB Recommended Revision (paragraph II.D.3 of the medical advisory criteria): It is the intent of the Federal Motor Carrier Safety Regulations to render unqualified, a driver who has a current cardiovascular disease which is accompanied by and/or likely to cause symptoms of syncope, dyspnea, collapse, or congestive cardiac failure. However, the subjective decision of whether the nature and severity of an individual's condition will likely cause symptoms of cardiovascular insufficiency is on an individual basis and qualification rests with the ~~medical examiner~~CME and the motor carrier. In those cases where there is an occurrence of cardiovascular insufficiency (myocardial infarction, thrombosis, etc.), it is suggested before a driver is certified that he or she have a normal resting and stress electrocardiogram, no residual complications and no physical limitations, and is taking no medication likely to interfere with safe driving.
      4. MRB Recommended Revision (paragraph II.D.4 of the medical advisory criteria): Coronary artery bypass surgery and pacemaker implantation are remedial procedures and thus, not medically disqualifying. Implantable cardioverter defibrillators are disqualifying due to risk of syncope. Coumadin is a medical treatment which can improve the health and safety of the driver and should not, by its use, medically disqualify the ~~commercial motor vehicle~~CMV driver. The emphasis should be on the underlying medical condition(s) which require treatment and the general health of the driver. ~~The Federal Motor Carrier Safety Administration should be contacted at (202) 366-4001 for additional recommendations regarding the physical qualification of drivers on coumadin.~~
   5. Respiratory Dysfunction: § 391.41(b)(5)
      1. MRB Recommendations:
         1. FMCSA should adopt the October 2016 joint MRB-MCSAC recommendations relating to obstructive sleep apnea.
         2. Drivers requiring supplemental oxygen should be disqualified from operating a CMV in interstate commerce.
         3. FMCSA should delete current paragraph II.E.2.
      2. MRB Recommended Revisions (paragraph II.E.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person—~~:~~ Has no established medical history or clinical diagnosis of a respiratory dysfunction likely to interfere with his/her ability to control and drive a commercial motor vehicle safely.*
      3. MRB Recommended Revisions (paragraph II.E.3 of the medical advisory criteria): There are many conditions that interfere with oxygen exchange and may result in incapacitation, including emphysema, chronic asthma, carcinoma, tuberculosis, chronic bronchitis and sleep apnea. If the ~~medical examiner~~CME detects a respiratory dysfunction, that in any way is likely to interfere with the driver’s ability to safely control and drive a ~~commercial motor vehicle~~CMV, the driver must be referred to a specialist for further evaluation and therapy. Anticoagulation therapy for deep vein thrombosis and/or pulmonary thromboembolism is not medically disqualifying once optimum dose is achieved, provided lower extremity venous examinations remain normal and the treating physician gives a favorable recommendation.
   6. Hypertension: § 391.41(b)(6)
      1. MRB Recommendation: FMCSA should convene an MEP to evaluate the cardiovascular standard, including hypertension. Based on the evaluation of the MEP, the hypertension guidelines should be incorporated into a regulatory requirement.
      2. MRB Recommended Revision (paragraph II.F.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person—~~:~~ Has no current clinical diagnosis of high blood pressure likely to interfere with his/her ability to operate a commercial motor vehicle safely.*
      3. MRB Recommendation: FMCSA should delete paragraph II.F.2 of the medical advisory criteria.
      4. MRB Recommended Revision (paragraph II.F.6 of the medical advisory criteria): Annual recertification is recommended if the ~~medical examiner~~CME does not know the severity of hypertension prior to treatment. An elevated blood pressure finding should be confirmed by at least two ~~subsequent~~ measurements ~~on different days~~.
      5. MRB Recommendation: FMCSA should delete paragraphs II.F.7 and II.F.8 of the medical advisory criteria.
   7. Rheumatic, Arthritic, Orthopedic, Muscular, Neuromuscular or Vascular Disease: § 391.41(b)(7)
      1. MRB Recommended Revision (paragraph II.G.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person—~~:~~ Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular or vascular disease which interferes with ~~the~~ his/her ability to control and operate a commercial motor vehicle safely.*
      2. MRB Recommendation: FMCSA should delete paragraph II.G.2 of the medical advisory criteria.
   8. Epilepsy: § 391.41(b)(8)
      1. MRB Recommended Revision (paragraph II.H.2 of the medical advisory criteria): Epilepsy is a chronic functional disease characterized by seizures or episodes that occur without warning, resulting in loss of voluntary control which may lead to loss of consciousness and/or seizures. Therefore, the following drivers cannot be qualified:

(i) A driver who has a medical history of epilepsy;

(ii) A driver who has a current clinical diagnosis of epilepsy; or

(iii) A driver who is taking ~~antiseizure medication.~~medication to manage seizures.

* + 1. MRB Recommended Revision (paragraph II.H.3 of the medical advisory criteria): If an individual has had a sudden episode of ~~a~~ nonepileptic seizure or loss of consciousness of unknown cause ~~which did~~ not requiring~~e~~ anti-seizure medication, the~~decision~~ CME must determine if the ~~as to whether~~ that person’s condition will likely cause loss of consciousness or loss of ability to control a CMV~~motor vehicle~~ in consultation with a treating clinician or neurologist ~~is made on an individual basis by the medical examiner in consultation with the treating physician~~. Before certification is considered, it is ~~suggested~~ recommended that a 6-month waiting period elapse from the time of the episode. Following the waiting period, it is ~~suggested~~ recommended that the individual have a complete neurological examination. If the results of the examination are negative and anti-seizure medication is not required, then the driver may be qualified.
    2. MRB Recommended Revision (paragraph II.H.5 of the medical advisory criteria): Drivers with a history of epilepsy/seizures off anti-seizure medication and seizure-free for 10 years may be qualified to drive a ~~commercial motor vehicle~~CMV in interstate commerce with an exemption from FMCSA. Interstate drivers with a history of a single unprovoked seizure with subsequent anti-seizure medication may be qualified to drive a ~~commercial motor vehicle~~CMV in interstate commerce if seizure-free and off anti-seizure medication for a 5-year period or more.
  1. Mental Disorders: § 391.41(b)(9)
     1. MRB Recommended Revision (paragraph II.I.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person—~~:~~ Has no mental, nervous, organic or functional disease or psychiatric disorder likely to interfere with his/her ability to drive a motor vehicle safely.*
     2. MRB Recommended Revision (paragraph II.I.3 of the medical advisory criteria): ~~Many bus and truck drivers have documented that “nervous trouble” related to neurotic, personality, or emotional or adjustment problems is responsible for a significant fraction of their preventable accidents.~~ The degree to which an individual is able to appreciate, evaluate and adequately respond to environmental strain and emotional stress is critical when assessing an individual's mental alertness and flexibility to cope with the stresses of ~~commercial motor vehicle~~CMV driving. Careful consideration should be given to the side effects and interactions of medications in the overall qualification determination.
     3. MRB Recommendation: FMCSA should delete paragraph II.I.4 of the medical advisory criteria.
  2. Vision: § 391.41(b)(10)
     1. MRB Recommendations:
        1. In 2015, the MRB recommended changes to the vision standard that would replace the vision exemption. FMCSA should implement those recommended changes.
        2. Regarding paragraph II.J.2 interpretation of the term “ability to recognize the colors of,” the MRB discourages the use of actual traffic lights to determine the ability to distinguish red, green, and amber due to the lack of traffic light uniformity.
        3. FMCSA should delete paragraph II.J.3 of the medical advisory criteria.
     2. MRB Recommended Revision (paragraph II.J.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person~~—: H~~as distant visual acuity of at least 20/40 (Snellen) in each eye ~~with or~~ without corrective lenses or visual acuity separately corrected to 20/40 (Snellen) or better with corrective lenses, distant binocular acuity of at least 20/40 (Snellen) in both eyes with or without corrective lenses, field of vision of at least 70° ~~degrees~~ in the horizontal ~~m~~Meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber.*
     3. MRB Recommended Revision (paragraph II.J.4 of the medical advisory criteria): If an individual meets the criteria by the use of glasses or contact lenses, the following statement shall appear on the ~~Medical Examiner's~~CME’s Certificate: “Qualified only if wearing corrective lenses.” ~~commercial motor vehicle~~ CMV drivers who do not meet the Federal vision standard may ~~call (202) 366-4001~~ apply for ~~an application for~~ a vision exemption.
  3. Hearing: § 391.41(b)(11)
     1. MRB Recommended Revision (paragraph II.K.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person—~~:~~ First perceives a forced whispered voice in the better ear at not less than 5 feet with or without the use of a hearing aid~~,~~ or, if tested by use of an audiometric device, does not have an average hearing loss in the better ear greater than 40 decibels at 500 Hz, 1,000 Hz, and 2,000 Hz with or without a hearing aid when the audiometric device is calibrated to American National Standard (formerly AS~~D~~A Standard) Z24.5-1951.*
     2. MRB Recommendation: FMCSA should delete paragraph II.K.2 of the medical advisory criteria.
     3. MRB Recommended Revision (paragraph II.K.3 of the medical advisory criteria): If an individual meets the criteria by using a hearing aid or having a cochlear implant, the driver must ~~wear that hearing aid~~utilize the device and have it in operation at all times while driving. Also, the driver must be in possession of a spare power source for the hearing aid.
     4. MRB Recommended Revision (paragraph II.K.4 of the medical advisory criteria): For the whispered voice test, the individual should be stationed at least 5 feet from the ~~medical examiner~~ CME with the ear being tested turned toward the ~~medical examiner~~CME. The other ear is covered. Using the breath which remains after a normal expiration, the ~~medical examiner~~CME whispers words or random numbers such as 66, 18, 3, etc. The ~~medical examiner~~CME should not use only sibilants (s sounding materials). The opposite ear should be tested in the same manner.
     5. MRB Recommended Revision (paragraph II.K.5 of the medical advisory criteria): If the individual fails the whispered voice test, the audiometric test should be administered. If an individual meets the criteria by the use of a hearing aid, the following statement must appear on the ~~Medical Examiner~~CME’s Certificate “Qualified only when wearing a hearing aid.”
     6. Based on the MRB’s review of a 2011 Medical Expert Panel report on cochlear implants and CMV driver safety,[[1]](#footnote-1) most MRB members would recommend that, for drivers who have a cochlear implant, evaluation of the hearing standard should be done with audiometric testing to demonstrate function. However, one MRB member (Dr. Morris) opposed such a requirement, reasoning that it would create two classes of drivers – one for which the forced whisper test is acceptable, and one for which it is not.[[2]](#footnote-2)
  4. Drug Use: § 391.41(b)(12)
     1. MRB Recommendation: The MRB refers FMCSA to its recommendations on this topic, including the 2014 joint MCSAC-MRB recommendations relating to the use of Schedule II medications by CMV drivers and the accompanying “391.41 CMV Driver Medication Questionnaire,” as well as the MRB’s October 2016 recommendations on opioids and benzodiazepines (see October 2016 Discussion Notes regarding recently issued U.S. Food and Drug Administration (FDA) warnings and Centers for Disease Prevention and Control (CDC) guideline).
     2. MRB Recommended Revision (paragraph II.L.1 of the medical advisory criteria): *A person is physically qualified to drive a commercial motor vehicle if that person— (i)  ~~d~~Does not use any drug or substance identified in 21 CFR 1308.11 Schedule I, an amphetamine, a narcotic, or other habit-forming drug. (ii) Does not use any ~~A driver may use a~~ non-Schedule I drug or substance that is identified in the other Schedules in 21 CFR part 1308 except when the use~~if the substance or drug~~ is prescribed by a licensed medical practitioner, as defined in § 382.107, who~~: (i) I~~ is familiar with the driver's medical history~~, and assigned duties;~~ and ~~(ii) H~~has advised the driver that the ~~prescribed~~ substance or drug will not adversely affect the driver's ability to safely operate a commercial motor vehicle.*
     3. MRB Recommended Revision (paragraph II.L.2 of the medical advisory criteria): This exception does not apply to methadone or buprenorphine. The intent of the medical certification process is to medically evaluate a driver to ensure that the driver has no medical condition which interferes with the safe performance of driving tasks on a public road. If a driver uses an amphetamine, a narcotic or any other habit-forming drug, it may be cause for the driver to be found medically unqualified. If a driver uses a Schedule I drug or substance, it will be cause for the driver to be found medically unqualified. Motor carriers are encouraged to obtain a practitioner's written statement about the effects on transportation safety of the use of a particular drug.
     4. MRB Recommended Revision (paragraph II.L.3 of the medical advisory criteria): A test for controlled substances is not required as part of ~~this biennial~~the certification process. The ~~Federal Motor Carrier Safety Administration~~FMCSA or the driver’s employer should be contacted directly for information on controlled substances and alcohol testing under Part 382 of the FMCSRs.
     5. MRB Recommendation: FMCSA should delete paragraph II.L.4 of the medical advisory criteria.
     6. MRB Recommended Revision (paragraph II.L.5 of the medical advisory criteria): The driver is medically ~~unqualified for the duration of the prohibited drug(s)~~disqualified for prohibited drug(s) use ~~use and~~ until ~~a second examination~~the driver ~~shows the driver~~provides proof of ~~is free from the prohibited drug(s) use. Recertification may involve~~ a DOT-certified substance abuse evaluation, the successful completion of a drug rehabilitation program, and a negative drug test result. ~~Additionally, given that the certification period is normally two years,~~ T~~t~~he ~~medical examiner~~CME has the option to certify for a period of less than 2 years if this ~~medical examiner~~CME determines more frequent monitoring is required.
  5. Alcoholism: §391.41(b)(13)
     1. MRB Recommended Revision (paragraph II.M.2 of the medical advisory criteria): The term “current clinical diagnosis of” is specifically designed to encompass a current alcoholic illness or those instances where the individual's physical condition has not fully stabilized, regardless of the time element. If an individual shows signs of having an alcohol-use problem, ~~he or she~~the driver should be referred to a specialist. After counseling and/or treatment, the driver~~he or she~~ may be considered for certification.

1. Targeted Evidence Report: Cochlear Implants and Commercial Motor Vehicle Driver Safety (2011), *available at* <https://www.fmcsa.dot.gov/regulations/medical/reports-how-medical-conditions-impact-driving>(last accessed Dec. 12, 2016). [↑](#footnote-ref-1)
2. See Meeting Minutes for June 30, 2011, MRB meeting, which documented the discussion of the 2011 Medical Expert Panel report. Medical Review Board Meeting Summary (June 30, 2011), *available at* <https://www.fmcsa.dot.gov/meeting-summaries-2011> (last accessed Dec. 12, 2016). [↑](#footnote-ref-2)