AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

March 9, 2021

Docket Operations
U.S. Department of Transportation
West Building Ground Floor, Room W12–140
1200 New Jersey Avenue SE
Washington, DC 20590–0001

Re: Docket No. FMCSA–2019–0049

Dear Sir/ Madam:

On behalf of the American College of Occupational and Environmental Medicine (ACOEM), I appreciate the opportunity to comment on the Federal Motor Carrier Safety Administration's (FMCSA) call for public comments on the Notice of Proposed Rulemaking (NPRM) of an Alternative Vision Standard to replace the current vision standard and eliminate the current vison exemption program.

ACOEM, an international society of more than 4,000 occupational physicians and associated professionals, provides leadership to promote optimal health and safety of workers, workplaces, and environments. Occupational and environmental medicine (OEM) is the medical specialty devoted to the prevention and management of occupational and environmental injuries and illnesses. As such, it is the only medical specialty specifically involved in the matching of the worker's capabilities to the job requirements. OEM physicians work with a broad range of other health-related professionals including colleagues in internal medicine, cardiology, neurology, psychiatry, nephrology, endocrinology, rehabilitation medicine, orthopedics, and other surgical specialties. In addition, OEM physicians work with professionals in the fields of audiology, industrial hygiene, toxicology, occupational health nursing, safety engineering, industrial relations, health physics, ventilation engineering, mechanical engineering, biomechanics, law public policy, and health education.

ACOEM members perform thousands of physical examinations for commercial driver certification per year. Unlike many other health care professionals, occupational medicine specialists understand the importance of evaluating not just the individual's current medical condition, but also the job tasks an individual is required to perform and how that condition may impact safe performance of those tasks. Many of our members can relate one or more incidents where a driver, operating under a medical certificate, suffered a serious medical event with disastrous results. These medical conditions can place the driver and the public safety at unnecessary risk. They also pose additional financial and operational burdens on companies.

We wish to highlight some concerns our members have raised regarding several aspects of the proposed alternative vision standard.

Responsibility for Review of the Driver's Safety Record

The 2015 MRB[1] offered the recommendation that *IF* the vision standard was changed, a form/questionnaire be designed to be given to the eye specialist (ophthalmologist or optometrist) that *"includes all information required by the current Visual Exemption program"* which could then be reviewed by the medical examiner. The 2019 MRB[2] recommended that the vision standard not be changed, but that FMCSA should investigate whether the 3-year driving experience requirement could be shortened. One concern expressed by the 2019 MRB was how would the driver's safety record be adequately assessed given that with the exemption program, the FMCSA reviews the safety record of the driver that did not meet the vision standard. The NPRM shifts responsibility to the employer, who would be responsible for not only reviewing the safety record, but also conducting a road test which could result in inconsistent standards for assessing driver safety. The proposed standard would also shift considerable responsibility to the medical examiner who may not have the training or experiemce to adequately assess the vision impairment.

Expanding the Vision Standard

While the current exemption program would only be applicable to those drivers whose best corrected vision in their worse eye would prevent them from meeting the vision standard, as worded, the NPRM seems to allow any driver to meet the vision standard, provided their vision in one eye is at least 20/40 with or without corrective lenses. This would permit, for example, having one eye corrected to distant vision, and the other corrected for near, or a driver who chooses not to obtain corrective lenses if his vision in the better eye would meet the criteria.

The preamble discusses studies of individuals with "monocular vision" as the basis to support this alternative standard. These studies included truly monocular drivers and those that simply did not meet FMCSA's vision standard. True monocular vision is defined by medical professionals as vision with only one eye whether it be due to functional loss or physical loss of the eye and in many cases the individual will have time to accommodate to the vision deficit. As worded, the proposed regulation can apply to a driver who simply does not meet the visual acuity requirements and does not specify whether due to a long-term condition, surgery or just normal vision changes.

If this is accurate, then this regulation goes far beyond the scope of the original waiver and later exemption process which was only meant to cover those drivers whose best corrected vision in the worse eye was less than 20/40.

What Is "Stable" Vision?

[1] MRB Task 15-02 Report - https://www.fmcsa.dot.gov/advisory-committees/mrb/mrb-task-15-02-report
[2] Meeting Minutes July 15-16, 2019 (https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2020-08/MRB-meeting-minutes-july-2019-508c.pdf

If the alternative vision standard is only to apply to those with "stable" vision in their worse eye, how would stable be defined? Would a modest change in vision in the worse eye over a 5–10-year period be considered stable? Should any progressive eye disease, such as proliferative retinopathy, ever be considered stable? Not only will eye care professionals have different opinions on what is considered "stable" but many certified MEs will have insufficient knowledge of visual disorders to be able to evaluate whether an eye disorder is stable or progressive. Removing the 3-year driving experience requirement will only amplify this issue.

Acceptable Field of Vision

The field of vision has long been an area of controversy for examiners and others. The vision standard notes that 70 degrees in the horizontal meridian in each eye is sufficient, however, normal field of vision is twice that – 50 degrees nasally and 90 degrees temporally for a total of 140 degrees. Thus, the current vision standard allows half of a normal visual field to be acceptable. This is a very large defect and as proposed, the rule would allow a quarter of a normal visual field to meet the standard. This would be an appropriate time to address this issue. The MRB in 2013 recommended that a 120-degree field of vision be adopted.[3] In addition, any discussion on field of vision should specify whether from nasal, temporal or total.

Commercial Driving Experience Versus Road Test

The current requirement for 3 years of commercial driving experience with the vision deficiency would allow the individual with a vision impairment a period of time under which they could adjust to the vision deficit. Under the proposed alternative standard, aside from those who have had 3 years of intrastate or excepted interstate CMV driving experience with the vision deficiency, hold a valid Federal vision exemption, or are medically certified under § 391.64(b), a road test conducted by the motor carrier would suffice to assess the individual's ability to operate the CMV with the vision deficiency.

The road test itself as outlined in 49 CFR 391.41 is fairly minimal. It only requires demonstrating use of the CMV controls, turning and operating in traffic in addition to the pre and post trip duties. There is no requirement for evaluating safe operation in conditions of darkness, inclement weather, or complex multisensory environments such as congested traffic, construction zones, and the like where a vision deficiency may be detrimental. It is not specific to a vehicle. The task of operating a passenger carrying motorcoach is quite different than operating a semi-tractor with up to three trailers.

We are concerned a simple road test is insufficient evaluation for drivers lacking experience operating CMVs. The presently available data regarding the safety of drivers with monocular vision is inconclusive: "three studies that provided crash data for drivers with monocular vision in general driver populations were insufficient to determine whether individuals with monocular vision were at increased risk of a crash." Further, "Data on the relationship between monocular vision and crash involvement is sparse,

[3] MRB Meeting Summary, October 19, 2012 - https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/October_2012_Certified_Meeting_Summary.pdf

conflicting with respect to crash risk, and not definitive. Moreover, the Agency must exercise caution when interpreting the data because of the different definitions of "monocular vision" in the literature." These observations were pointed out in the docket and actually support maintaining the requirement for experience over a road test. There is a concern that, not only will the number of employer-required road tests significantly increase, but also some carriers, especially smaller ones, may be more lenient on the passing criteria of the road test.

The Role of Ophthalmologists

The change allowing an ophthalmologist to complete the vision portion of the examination appears to be an oversight not previously identified and certainly makes sense. In fact, an ophthalmologist may be preferred for complicated cases.

Flawed Basis for Alternative Standard

Overall, we have concerns that the basis for the alternative vision standard is flawed. The studies used to support this proposal are inconsistent both in definition of those studied and the conclusions reached. Some studies included those that were truly monocular, while others included persons who simply did not meet the FMCSA vision criteria. Some studies reported that there was insufficient evidence of monocular drivers being at higher risk of crash. We respectfully remind all concerned that lack of evidence of the risk is not evidence of absence. It was pointed out that the "data on the relationship between monocular vision and crash involvement is sparse, conflicting with respect to crash risk, and not definitive." While the results of the former waiver and current exemption programs have not demonstrated an increased crash risk, it is important to remember that drivers in those programs were a self-selected, highly motivated, carefully vetted (very specific criteria including 3 years driving experience and a good driving record), closely monitored group. Our opinion is that making the jump to apply these findings to the general population of drivers is lacking in sufficient evidence to modify the current vision standard.

Thank you for your consideration of our comments. Please do not hesitate to contact Patrick O'Connor, ACOEM's Director of Government Affairs, at 703-351-6222 with any questions.

Sincerely,

Beth A. Baker, MD, MPH, FACOEM
President