

Guidance for the Core Curriculum Specifications

The guidance for the core curriculum specifications is intended to assist training organizations in developing programs that would be used to fulfill the proposed requirements in the Federal Motor Carrier Safety Administration's (FMCSA) final rule for the National Registry of Certified Medical Examiners (National Registry). The final rule states that a medical examiner must complete a training program. FMCSA explained in the preamble to the final rule that training providers and organizations must follow the core curriculum specifications in developing training programs for medical examiners who apply for listing on the Agency's National Registry. This training prepares medical examiners to:

- Apply knowledge of FMCSA's driver physical qualifications standards and advisory criteria to findings gathered during the driver's medical examination; and
- Make sound determinations of the driver's medical and physical qualifications for safely operating a commercial motor vehicle (CMV) in interstate commerce.

The rule, 49 CFR 390.105(b), lists eight topics which must be covered in the core curriculum specifications. The core curriculum specifications are arranged below by numbered topic, followed by guidance to assist training providers in developing programs based on the core curriculum specifications.

Guidance for Each of the Core Curriculum Specifications

(1) Background, rationale, mission and goals of the FMCSA medical examiner's role in reducing crashes, injuries and fatalities involving commercial motor vehicles.

Mission and Goals of Federal Motor Carrier Safety Administration (FMCSA)

- Discuss the history of FMCSA and its position within the Department of Transportation including its establishment by the Motor Carrier Safety Improvement Act of 1999 and emphasize FMCSA's Mission to reduce crashes, injuries and fatalities involving large trucks and buses.

Role of the Medical Examiner

- Explain the role of the medical examiner as described in 49 CFR 391.43.

(2) Familiarization with the responsibilities and work environment of commercial motor vehicle (CMV) operations.

The Job of CMV Driving

- Describe the responsibilities, work schedules, physical and emotional demands and lifestyle among CMV drivers and how these vary by the type of driving.
- Discuss factors and job tasks that may be involved in a driver's performance, such as:
 - Loading and unloading trailers;
 - Inspecting the operating condition of the CMV; and
 - Work schedules:

- irregular work, rest, and eating patterns / dietary choices.

(3) Identification of the driver and obtaining, reviewing, and documenting driver medical history, including prescription and over-the-counter medications.

Driver Identification and Medical History:

Discuss the importance of driver identification and review of the following elements of the driver's medical history as related to the tasks of driving a CMV in interstate commerce.

- Inspect a State-issued identification document with the driver's photo to verify the identity of the individual being examined; identify the commercial driver's license or other types of driver's license.
- Identify, query and note issues in a driver's medical record and/or health history as available, which may include:
 - specific information regarding any affirmative responses in the history;
 - any illness, surgery, or injury in the last five years;
 - any other hospitalizations or surgeries;
 - any recent changes in health status;
 - whether he/she has any medical conditions or current complaints;
 - any incidents of disability / physical limitations;
 - current medications and supplements, and potential side effects, which may be potentially disqualifying;
 - his/ her use of recreational/addictive substances (e.g., nicotine, alcohol, inhalants, narcotics or other habit-forming drugs);
 - disorders of the eyes (e.g., retinopathy, cataracts, aphakia, glaucoma, macular degeneration, monocular vision);
 - disorders of the ears (e.g., hearing loss, hearing aids, vertigo, tinnitus, implants);
 - cardiac symptoms and disease (e.g., syncope, dyspnea, chest pain, palpitations, hypertension, congestive heart failure, myocardial infarction, coronary insufficiency, or thrombosis);
 - pulmonary symptoms and disease (e.g., dyspnea, orthopnea, chronic cough, asthma, chronic lung disorders, tuberculosis, previous pulmonary embolus, pneumothorax);
 - sleep disorders (e.g., obstructive sleep apnea, daytime sleepiness, loud snoring, other);
 - gastrointestinal disorders (e.g., liver disease, digestive problems, hernias);
 - genitourinary disorders (e.g., kidney stones and other renal conditions, renal failure, hernias);
 - diabetes mellitus:
 - current medications (type, potential side effects, duration on current medication);
 - complications from diabetes; and
 - presence and frequency of hypoglycemic / hyperglycemic episodes/reactions;
 - other endocrine disorders (e.g., thyroid disorders, interventions / treatment);

- musculoskeletal disorders (e.g., amputations, arthritis, spinal surgery);
- neurologic disorders (e.g., loss of consciousness, seizures, stroke / transient ischemic attack, headaches/ migraines, numbness / weakness) ; or
- psychiatric disorders (e.g., schizophrenia, severe depression, anxiety, bipolar disorder, or other conditions) that could impair a driver’s ability to safely function.

(4) Performing, reviewing and documenting the driver’s medical examination.

Physical Examination (Qualification/Disqualification Standards (§ 391.41 and 391.43))

- Explain the FMCSA physical examination requirements and advisory criteria in relationship to conducting the driver’s physical examination of the following:
 - Eyes (§ 391.41(b)(10))
 - equal reaction of both pupils to light;
 - evidence of nystagmus and exophthalmos;
 - evaluation of extra-ocular movements.
 - Ears (§ 391.41(b)(11))
 - abnormalities of the ear canal and tympanic membrane;
 - presence of a hearing aid.
 - Mouth and throat (§ 391.41(b)(5))
 - conditions contributing to difficulty swallowing, speaking or breathing;
 - Neck (§ 391.41(b)(7))
 - range of motion;
 - soft tissue palpation / examination (e.g., lymph nodes, thyroid gland).
 - Heart (§ 391.41(b)(4)and (b)(6))
 - chest inspection (e.g., surgical scars, pacemaker / implantable automatic defibrillator);
 - auscultation for thrills, murmurs, extra sounds, and enlargement;
 - blood pressure and pulse (rate and rhythm);
 - additional signs of disease (e.g., edema, bruits, diaphoresis, distended neck veins).
 - Lungs, chest, and thorax (§ 391.41(b)(5))
 - respiratory rate and pattern;
 - auscultation for abnormal breath sounds;
 - abnormal chest wall configuration / palpation.
 - Abdomen (§ 391.41(a)(3)(i) and 391.43(f))
 - surgical scars;
 - palpation for enlarged liver or spleen, abnormal masses or bruits / pulsation, abdominal tenderness, hernias (e.g., inguinal, umbilical, ventral, femoral or other abnormalities).
 - Spine (§ 391.41(b)(7))
 - surgical scars and deformities;
 - tenderness and muscle spasm ;
 - loss in range of motion and painful motion;
 - spinal deformities.

- Extremities and trunk (§ 391.41(b)(1), (b)(4) and (b)(7))
 - gait, mobility, and posture while bearing his/her weight; limping or signs of pain ;
 - loss, impairment, or use of orthosis;
 - deformities, atrophy, weakness, paralysis, or surgical scars;
 - elbow and shoulder strength, function, and mobility ;
 - handgrip and prehension relative to requirements for controlling a steering wheel and gear shift;
 - varicosities, skin abnormalities, and cyanosis, clubbing, or edema;
 - leg length discrepancy; lower extremity strength, motion, and function
 - other abnormalities of the trunk.
- Neurologic status (§ 391.41(b)(7), (b)(8) and(b)(9))
 - impaired equilibrium, coordination or speech pattern (e.g., ataxia);
 - sensory or positional abnormalities;
 - tremor;
 - radicular signs ;
 - reflexes (e.g., asymmetric deep-tendon, normal / abnormal patellar and Babinski).
- Mental status (§ 391.41(b)(9))
 - comprehension and interaction;
 - cognitive impairment;
 - signs of depression, paranoia, antagonism, or aggressiveness that may require follow-up with a mental health professional.

(5) Performing, obtaining and documenting diagnostic tests and obtaining additional testing or medical opinion from a medical specialist or treating physician.
Diagnostic Testing and Further Evaluation

- Describe the FMCSA diagnostic testing requirements and the medical examiner’s ability to request further testing and evaluation by a specialist.
 - Urine test for specific gravity, protein, blood and glucose (§ 391.41(a)(3)(i));
 - Whisper or audiometric testing (§ 391.41(b)(11));
 - Vision testing for color vision, distant acuity, horizontal field of vision and presence of monocular vision (§ 391.41(b)(10));
 - Other testing as indicated to determine the driver’s medical and physical qualifications for safely operating a CMV.
 - Refer to a specialist a driver who exhibits evidence of any of the following disorders (§ 391.43(e) and (f)):
 - vision (e.g., retinopathy, macular degeneration);
 - cardiac (e.g., myocardial infarction, coronary insufficiency, blood pressure control);
 - pulmonary (e.g., emphysema, fibrosis);
 - endocrine (e.g., diabetes);
 - musculoskeletal (e.g., arthritis, neuromuscular disease);

- neurologic (e.g., seizures);
- sleep (e.g., obstructive sleep apnea);
- mental / emotional health (e.g., depression, schizophrenia); or
- other medical condition(s) that may interfere with ability to safely operate a CMV.

(6) Informing and educating the driver about medications and non-disqualifying medical conditions that require remedial care.

Health Counseling

- Inform course participants of the importance of counseling the driver about:
 - possible consequences of non-compliance with a care plan for conditions that have been advised for periodic monitoring with primary healthcare provider;
 - possible side effects and interactions of medications (e.g., narcotics, anticoagulants, psychotropics) including products acquired over-the-counter (e.g., antihistamines, cold and cough medications or dietary supplements) that could negatively affect his/her driving;
 - the effect of fatigue, lack of sleep, poor diet, emotional conditions, stress, and other illnesses that can affect safe driving;
 - if he/she is a contact lens user, the importance of carrying a pair of glasses while driving;
 - if he/she uses a hearing aid, the importance of carrying a spare power source for the device while driving;
 - if he/she has a history of deep vein thrombosis, the risk associated with inactivity while driving and interventions that could prevent another thrombotic event;
 - if he/she has a diabetes exemption, that he/she should:
 - carry a rapidly absorbable form of glucose while driving;
 - self-monitor blood glucose one hour before driving and at least once every four hours while driving;
 - comply with each condition of his/her exemption;
 - plan to submit glucose monitoring logs for each annual recertification;
 - corrective or therapeutic steps needed for conditions which may progress and adversely impact safe driving ability (e.g., seek follow-up from primary care physician);
 - steps needed for reconsideration of medical certification if driver is certified with a limited interval, e.g., the return date and documentation required for extending the certification time period.

(7) Determining driver certification outcome and period for which certification should be valid.

Assessing the Driver's Qualifications and Disposition

- Explain how to assess the driver's medical and physical qualification to operate a CMV safely in interstate commerce using the medical examination findings

weighed against the physical and mental demands associated with operating a CMV by:

- Considering a driver's ability to
 - move his/her body through space while climbing ladders; bend, stoop, and crouch; enter and exit the cab;
 - manipulate steering wheel;
 - perform precision prehension and power grasping;
 - use arms, feet, and legs during CMV operation;
 - inspect the operating condition of a tractor and/or trailer;
 - monitor and adjust to a complex driving situation; and
 - consider the adverse health effects of fatigue associated with extended work hours without breaks;
- Considering identified disease or condition(s) progression rate, stability, and likelihood of gradual or sudden incapacitation for documented conditions (e.g., cardiovascular, neurologic, respiratory, musculoskeletal and other).

Medical Certificate Qualification/Disqualification Decision and Examination Intervals

- Discuss the medical examiner's obligation to consider potential risk to public safety and the driver's medical and physical qualifications to drive safely when issuing a Medical Examiner's Certificate, when to qualify/disqualify the driver and how to determine the expiration date of the certificate by:
 - using the requirements stated in the FMCSRs, with nondiscretionary certification standards to disqualify a driver
 - with a history of epilepsy;
 - with diabetes requiring insulin control (unless accompanied by an exemption);
 - when vision parameters (e.g., acuity, horizontal field of vision, color) fall below minimum standards unless accompanied by an exemption;
 - when hearing measurements with or without a hearing aid fall below minimum standards;
 - currently taking methadone;
 - with a current clinical diagnosis of alcoholism; or
 - who uses a controlled substance including a narcotic, an amphetamine, or another habit-forming drug without a prescription from the treating physician;
 - using clinical expertise, disqualify a driver when evidence shows a driver has a medical condition that in your opinion will likely interfere with the safe operation of a CMV;
 - certifying a driver for an appropriate duration of certification interval;
 - if he/she has a condition for which the medical examiner is deferring the driver's medical certification or disqualifying the driver, informing the driver of the reasons which may include:
 - a vision deficiency (e.g., retinopathy, macular degeneration);
 - the immediate post-operative period;

- a cardiac event (e.g., myocardial infarction, coronary insufficiency);
- a chronic pulmonary exacerbation (e.g., emphysema, fibrosis);
- uncontrolled hypertension;
- endocrine dysfunctions (e.g., insulin-dependent diabetes);
- musculoskeletal challenges (e.g., arthritis, neuromuscular disease);
- a neurologic event (e.g., seizures, stroke, TIA);
- a sleep disorder (e.g., obstructive sleep apnea); or
- mental health dysfunctions (e.g., depression, bipolar disorder).

(8) FMCSA reporting and documentation requirements.

Documentation of Medical Examination Findings

Demonstrate the required FMCSA medical examination report forms, appropriate methods for recording the medical examination findings and the rationale for certification decisions including:

- Medical Examination Report Form
 - identification of the driver;
 - use of appropriate Medical Examination Report form;
 - assurance that driver completes and signs driver's portion of the Medical Examination Report form;
 - specifics regarding any affirmative response on the driver's medical history;
 - height/weight, blood pressure, pulse;
 - results of the medical examination, including details of abnormal findings;
 - audiometric and vision testing results;
 - presence of a hearing aid and whether it is required to meet the standard;
 - if obtained, funduscopy examination results;
 - the need for corrective lenses for driving;
 - presence or absence of monocular vision and need for a vision exemption;
 - if driver has diabetes mellitus and is insulin dependent, the need for a diabetes exemption;
 - other laboratory, pulmonary, cardiac testing performed; and
 - the reason(s) for the disqualification and/or referral.

- Other supporting documentation
 - if driver has current vision exemption, include the ophthalmologist's or optometrist's report;
 - if a driver has a diabetes exemption, include the endocrinologist's and ophthalmologist's/optometrist's report;
 - treating physician's work release;
 - if obtained, specialist's evaluation report;
 - if the driver has a current Skill Performance Evaluation Certificate, include it; and

- results of Substance Abuse Professional evaluations for alcohol and drug use and/or abuse for a driver with
 - alcoholism who completed counseling and treatment to the point of full recovery.
- Medical Examiner's Certificate
 - certification status, which may require:
 - waiver / exemption;
 - wearing corrective lenses;
 - wearing a hearing aid; or
 - a Skill Performance Evaluation Certificate;
 - complete and accurate documentation on medical certification card including:
 - the examiner's name, examination date, office address, and telephone number and Medical Examiner signature; and
 - the driver's signature.