

Medical Examination Report FOR COMMERCIAL DRIVER FITNESS DETERMINATION

649-F (6045)

1. DRIVER'S INFORMATION <small>Driver completes this section</small>					
Driver's Name (Last, First, Middle)	Social Security No.	Birthdate M/D/Y	Age	Sex <input type="checkbox"/> M <input type="checkbox"/> F	New Certification Recertification <input type="checkbox"/> Follow-up <input type="checkbox"/>
Address	City, State, Zip Code	Work Tel: ()	Driver License No.	License Class <input type="checkbox"/> A <input type="checkbox"/> C <input type="checkbox"/> B <input type="checkbox"/> D <input type="checkbox"/> Other	
		Home Tel: ()			Date of Exam

2. HEALTH HISTORY <small>Driver completes this section, but medical examiner is encouraged to discuss with driver.</small>	
<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Any illness or injury in the last 5 years? <input type="checkbox"/> Head/Brain injuries, disorders or illnesses <input type="checkbox"/> Seizures, epilepsy <input type="checkbox"/> medication _____</p> <p>Eye disorders or impaired vision (except corrective lenses) <input type="checkbox"/> Ear disorders, loss of hearing or balance <input type="checkbox"/> Heart disease or heart attack; other cardiovascular condition <input type="checkbox"/> medication _____</p> <p>Heart surgery (valve replacement/bypass, angioplasty, pacemaker) <input type="checkbox"/> High blood pressure <input type="checkbox"/> Muscular disease <input type="checkbox"/> Shortness of breath</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Lung disease, emphysema, asthma, chronic bronchitis <input type="checkbox"/> Kidney disease, dialysis <input type="checkbox"/> Liver disease <input type="checkbox"/> Digestive problems <input type="checkbox"/> Diabetes or elevated blood sugar controlled by: <input type="checkbox"/> diet <input type="checkbox"/> pills <input type="checkbox"/> Insulin <input type="checkbox"/> Nervous or psychiatric disorders, e.g., severe depression <input type="checkbox"/> medication _____ <input type="checkbox"/> Loss of, or altered consciousness</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Fainting, dizziness <input type="checkbox"/> Sleep disorders, pauses in breathing while asleep, daytime sleepiness, loud snoring <input type="checkbox"/> Stroke or paralysis <input type="checkbox"/> Missing or impaired hand, arm, foot, leg, finger, toe <input type="checkbox"/> Spinal injury or disease <input type="checkbox"/> Chronic low back pain <input type="checkbox"/> Regular, frequent alcohol use <input type="checkbox"/> Narcotic or habit forming drug use</p>

For any YES answer, indicate onset date, diagnosis, treating physician's name and address, and any current limitation. List all medications (including over-the-counter medications) used regularly or recently.

I certify that the above information is complete and true. I understand that inaccurate, false or missing information may invalidate the examination and my Medical Examiner's Certificate.

Driver's Signature _____ Date _____

Medical Examiner's Comments on Health History (The medical examiner must review and discuss with the driver any "yes" answers and potential hazards of medications, including over-the-counter medications, while driving. This discussion must be documented below.)

TESTING (Medical Examiner completes Section 3 through 7) Name: Last, _____

First, _____

Middle, _____

3. VISION

Standard: At least 20/40 acuity (Snellen) in each eye with or without correction. At least 70 degrees peripheral in horizontal meridian measured in each eye. The use of corrective lenses should be noted on the Medical Examiner's Certificate.

INSTRUCTIONS: When other than the Snellen chart is used, give test results in Snellen-comparable values. In recording distance vision, use 20 feet as normal. Report visual acuity as a ratio with 20 as numerator and the smallest type read at 20 feet as denominator. If the applicant wears corrective lenses, these should be worn while visual acuity is being tested. If the driver habitually wears contact lenses, or intends to do so while driving, sufficient evidence of good tolerance and adaptation to their use must be obvious. *Monocular drivers are not qualified.*

Numerical readings must be provided.

ACUITY	UNCORRECTED	CORRECTED	HORIZONTAL FIELD OF VISION
Right Eye	20/	20/	Right Eye <input type="radio"/>
Left Eye	20/	20/	Left Eye <input type="radio"/>
Both Eyes	20/	20/	

Applicant can recognize and distinguish among traffic control signals and devices showing standard red, green, and amber colors? Yes No

Applicant meets visual acuity requirement only when wearing: Corrective Lenses

Monocular Vision: Yes No

Complete next line only if vision testing is done by an ophthalmologist or optometrist

Date of Examination _____ Name of Ophthalmologist or Optometrist (print) _____ Tel. No. _____ License No./State of Issue _____ Signature _____

4. HEARING

Standard: a) Must first perceive forced whispered voice \geq 5 ft., with or without hearing aid, or b) average hearing loss in better ear \leq 40 dB

INSTRUCTIONS: To convert audiometric test results from ISO to ANSI, -14 dB from ISO for 500Hz, -10dB for 1,000 Hz, -8.5 dB for 2000 Hz. To average, add the readings for 3 frequencies tested and divide by 3.

Numerical readings must be recorded.

a) Record distance from individual at which forced whispered voice can first be heard.	Right ear \ Feet	Left Ear \ Feet

b) If audiometer is used, record hearing loss in decibels. (acc. to ANSI Z24.5-1951)

Average:	Right Ear				Left Ear			
	500 Hz	1000 Hz	2000 Hz	Average:	500 Hz	1000 Hz	2000 Hz	Average:

5. BLOOD PRESSURE/PULSE RATE

Numerical readings must be recorded. Medical Examiner should take at least two readings to confirm BP.

Blood Pressure	Systolic	Diastolic

Driver qualified if \leq 140/90.

Pulse Rate: Regular Irregular

Record Pulse Rate: _____

Reading	Category	Expiration Date	Recertification
140-159/90-99	Stage 1	1 year	1 year if \leq 140/90.
160-179/100-109	Stage 2	One-time certificate for 3 months.	One-time certificate for 3 months if 141-159/91-99.
\geq 180/110	Stage 3	6 months from date of exam if \leq 140/90	1 year from date of exam if \leq 140/90

6. LABORATORY AND OTHER TEST FINDINGS

Numerical readings must be recorded.

Urinalysis is required. Protein, blood or sugar in the urine may be an indication for further testing to rule out any underlying medical problem. Other Testing (Describe and record) _____

URINE SPECIMEN	SP. GR.	PROTEIN	BLOOD	SUGAR

7. PHYSICAL EXAMINATION

Height: _____ (in.) Weight: _____ (lbs.)

Name: Last, _____

First, _____

Middle, _____

The presence of a certain condition may not necessarily disqualify a driver, particularly if the condition is controlled adequately, is not likely to worsen or is readily amenable to treatment. Even if a condition does not disqualify a driver, the medical examiner may consider deferring the driver temporarily. Also, the driver should be advised to take the necessary steps to correct the condition as soon as possible particularly if the condition, if neglected, could result in more serious illness that might affect driving.

Check YES if there are any abnormalities. Check NO if the body system is normal. Discuss any YES answers in detail in the space below, and indicate whether it would affect the driver's ability to operate a commercial motor vehicle safely. Enter applicable item number before each comment. If organic disease is present, note that it has been compensated for. See *Instructions to the Medical Examiner* for guidance.

BODY SYSTEM	CHECK FOR:	YES*		BODY SYSTEM	CHECK FOR:	YES*	
		NO	NO			NO	NO
1. General Appearance	Marked overweight, tremor, signs of alcoholism, problem drinking, or drug abuse.			7. Abdomen and Viscera	Enlarged liver, enlarged spleen, masses, bruits, hernia, significant abdominal wall muscle weakness.		
2. Eyes	Pupillary equality, reaction to light, accommodation, ocular motility, ocular muscle imbalance, extraocular movement, nystagmus, exophthalmos. Ask about retinopathy, cataracts, aphakia, glaucoma, macular degeneration and refer to a specialist if appropriate.			8. Vascular System	Abnormal pulse and amplitude, carotid or arterial bruits, varicose veins.		
3. Ears	Scarring of tympanic membrane, occlusion of external canal, perforated eardrums.			9. Genito-urinary System	Hemias.		
4. Mouth and Throat	Irremediable deformities likely to interfere with breathing or swallowing.			10. Extremities- Limb	Loss or impairment of leg, foot, toe, arm, hand, finger, Perceptible limp, deformities, atrophy, weakness, paralysis, clubbing, edema, hypotonia. Insufficient grasp and prehension in upper limb to maintain steering wheel grip. Insufficient mobility and strength in lower limb to operate pedals properly.		
5. Heart	Murmurs, extra sounds, enlarged heart, pacemaker, implantable defibrillator.			11. Spine, other musculoskeletal	Previous surgery, deformities, limitation of motion, tenderness.		
6. Lungs and chest, not including breast examination	Abnormal chest wall expansion, abnormal respiratory rate, abnormal breath sounds including wheezes or alveolar rales, impaired respiratory function, cyanosis. Abnormal findings on physical exam may require further testing such as pulmonary tests and/ or xray of chest.			12. Neurological	Impaired equilibrium, coordination or speech pattern; asymmetric deep tendon reflexes, sensory or positional abnormalities, abnormal patellar and Babinski's reflexes, ataxia.		

***COMMENTS:**

Note certification status here. See *Instructions to the Medical Examiner* for guidance.

- Meets standards in 49 CFR 391.41; qualifies for 2 year certificate
- Does not meet standards
- Meets standards, but periodic monitoring required due to _____
- Driver qualified only for: 3 months 6 months 1 year Other _____

Temporarily disqualified due to (condition or medication): _____

Return to medical examiner's office for follow up on _____

- Wearing corrective lense
- Wearing hearing aid
- Accompanied by a _____ waiver/ exemption. Driver must present exemption at time of certification.
- Skill Performance Evaluation (SPE) Certificate
- Driving within an exempt intracity zone (See 49 CFR 391.62)
- Qualified by operation of 49 CFR 391.64

Medical Examiner's signature _____

Medical Examiner's name _____

Address _____

Telephone Number _____

if meets standards, complete a Medical Examiner's Certificate as stated in 49 CFR 391.43(h). (Driver must carry certificate when operating a commercial vehicle.)

49 CFR 391.41 Physical Qualifications for Drivers

THE DRIVER'S ROLE

Responsibilities, work schedules, physical and emotional demands, and lifestyles among commercial drivers vary by the type of driving that they do. Some of the main types of drivers include the following: turn around or short relay (drivers return to their home base each evening); long relay (drivers drive 9-11 hours and then have at least a 10-hour off-duty period), straight through haul (cross country drivers); and team drivers (drivers share the driving by alternating their 5-hour driving periods and 5-hour rest periods.)

The following factors may be involved in a driver's performance of duties: abrupt schedule changes and rotating work schedules, which may result in irregular sleep patterns and a driver beginning a trip in a fatigued condition; long hours; extended time away from family and friends, which may result in lack of social support; tight pickup and delivery schedules, with irregularity in work, rest, and eating patterns, adverse road, weather and traffic conditions, which may cause delays and lead to hurriedly loading or unloading cargo in order to compensate for the lost time; and environmental conditions such as excessive vibration, noise, and extremes in temperature. Transporting passengers or hazardous materials may add to the demands on the commercial driver.

There may be duties in addition to the driving task for which a driver is responsible and needs to be fit. Some of these responsibilities are: coupling and uncoupling trailer(s) from the tractor, loading and unloading trailer(s) (sometimes a driver may lift a heavy load or unload as much as 50,000 lbs. of freight after sitting for a long period of time without any stretching period); inspecting the operating condition of tractor and/or trailer(s) before, during and after delivery of cargo; lifting, installing, and removing heavy tire chains; and, lifting heavy tarpaulins to cover open top trailers. The above tasks demand agility, the ability to bend and stoop, the ability to maintain a crouching position to inspect the underside of the vehicle, frequent entering and exiting of the cab, and the ability to climb ladders on the tractor and/or trailer(s).

In addition, a driver must have the perceptual skills to monitor a sometimes complex driving situation, the judgment skills to make quick decisions, when necessary, and the manipulative skills to control an oversize steering wheel, shift gears using a manual transmission, and maneuver a vehicle in crowded areas.

§391.41 PHYSICAL QUALIFICATIONS FOR

DRIVERS

(a) A person shall not drive a commercial motor vehicle unless he is physically qualified to do so and, except as provided in §391.67, has on his person the original, or a photographic copy, of a medical examiner's certificate that he is physically qualified to drive a commercial motor vehicle.

(b) A person is physically qualified to drive a motor vehicle if that person:

(1) Has no loss of a foot, a leg, a hand, or an arm, or has been granted a Skill Performance Evaluation (SPE) Certificate (formerly Limb Waiver Program) pursuant to §391.49.

(2) Has no impairment of: (i) A hand or finger which interferes with prehension or power grasping; or (ii) An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or has been granted a SPE Certificate pursuant to §391.49.

(3) Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control;

(4) Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis, or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse, or congestive cardiac failure.

(5) Has no established medical history or clinical diagnosis

of a respiratory dysfunction likely to interfere with his ability to control and drive a commercial motor vehicle safely.

(6) Has no current clinical diagnosis of high blood pressure likely to interfere with his ability to operate a commercial motor vehicle safely.

(7) Has no established medical history or clinical diagnosis of rheumatic, arthritic, orthopedic, muscular, neuromuscular, or vascular disease which interferes with his ability to control and operate a commercial motor vehicle safely.

(8) Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a commercial motor vehicle;

(9) Has no mental, nervous, organic, or functional disease or psychiatric disorder likely to interfere with his ability to drive a commercial motor vehicle safely;

(10) Has distant visual acuity of at least 20/40 (Snellen) in each eye 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 70degrees in the horizontal meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green and amber;

(11) First perceives a forced whispered voice in the better ear 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 device when the audiometric device is calibrated to the American National Standard (formerly ASA Standard) Z24.5-1951;

(12)(i) 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 non-Schedule I drug or substance that is identified in the other Schedules in 21 part 1308 except when the use is prescribed by a licensed medical practitioner, as defined in § 382.107, who is familiar with the driver's medical history and has advised the driver that the substance will not adversely affect the driver's ability to safely operate a commercial motor vehicle.

(13) Has no current clinical diagnosis of alcoholism.

INSTRUCTIONS TO THE MEDICAL EXAMINER

General Information

The purpose of this examination is to determine a driver's physical qualification to operate a commercial motor vehicle (CMV) in interstate commerce according to the requirements in 49 CFR 391.41-49. Therefore, the medical examiner must be knowledgeable of these requirements and guidelines developed by the FMCSA to assist the medical examiner in making the qualification determination. The medical examiner should be familiar with the driver's responsibilities and work environment and is referred to the section on the form, **The Driver's Role**.

In addition to reviewing the **Health History** section with the driver and conducting the physical examination, the medical examiner should discuss common prescriptions and over-the-counter medications relative to the side effects and hazards of these medications while driving. Educate the driver to read warning labels on all medications. History of certain conditions may be cause for rejection, particularly if required by regulation, or may indicate the need for additional laboratory tests or more stringent examination perhaps by a medical specialist. These decisions are usually made by the medical examiner in light of the driver's job responsibilities, work schedule and potential for the conditions to render the driver unsafe.

Medical conditions should be recorded even if they are not cause for denial, and they should be discussed with the driver to encourage appropriate remedial care. This advice is especially needed when a condition, if neglected, could develop into a serious illness that could affect driving.

If the medical examiner determines that the driver is fit to drive and is also able to perform non-driving responsibilities as may be required, the medical examiner signs the medical certificate which the driver must carry with his/her license. The certificate must be dated. **Under current regulations, the certificate is valid for two years, unless the driver has a medical condition that does not prohibit driving but does require more frequent monitoring.** In such situations, the medical certificate should be issued for a shorter length of time. The physical examination should be done carefully and at least as complete as is indicated by the attached form. Contact the FMCSA at (202) 366-4001 for further information (a vision exemption, qualifying drivers under 49 CFR 391.64, etc.).

Interpretation of Medical Standards

Since the issuance of the regulations for physical qualifications of commercial drivers, the Federal Motor Carrier Safety Administration (FMCSA) has published recommendations called Advisory Criteria to help medical examiners in determining whether a driver meets the physical qualifications for commercial driving. These recommendations have been condensed to provide information to medical examiners that (1) is directly relevant to the physical examination and (2) is not already included in the medical examination form. The specific regulation is printed in italics and its reference by section is highlighted.

Federal Motor Carrier Safety Regulations -Advisory Criteria-

Loss of Limb:

\$391.41(b)(1)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has no loss of a foot, leg, hand or an arm, or has been granted a Skill Performance Evaluation (SPE) Certificate pursuant to Section 391.49.

Limb Impairment:

\$391.41(b)(2)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has no impairment of: (i) A hand or finger which interferes with prehension or power grasping; or (ii) An arm, foot, or leg which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or (iii) Any other significant limb defect or limitation which interferes with the ability to perform normal tasks associated with operating a commercial motor vehicle; or (iv) Has been granted a Skill Performance Evaluation (SPE) Certificate pursuant to Section 391.49.

A person who suffers loss of a foot, leg, hand or arm or whose limb impairment in any way interferes with the safe performance of normal tasks associated with operating a commercial motor vehicle is subject to the Skill Performance Evaluation Certification Program pursuant to section 391.49, assuming the person is otherwise qualified.

With the advancement of technology, medical aids and equipment modifications have been developed to compensate for certain disabilities. The SPE Certification Program (formerly the Limb Waiver Program) was designed to allow persons with the loss of a foot or limb or with functional impairment to qualify under the Federal Motor Carrier Safety Regulations (FMCSRs) by use of prosthetic devices or equipment modifications which enable them to safely operate a commercial motor vehicle. Since there are no medical aids equivalent to the original body or limb, certain risks are still present, and thus restrictions may be included on individual SPE certificates when a State Director for the FMCSA determines they are necessary to be consistent with safety and public interest.

If the driver is found otherwise medically qualified (**391.41(b)(3)** through **(13)**), the medical examiner must check on the medical certificate that the driver is qualified only if accompanied by a SPE certificate. The driver and the employing motor carrier are subject to appropriate penalty if the driver operates a motor vehicle in interstate or foreign commerce without a current SPE certificate for his/her physical disability.

Diabetes

\$391.41(b)(3)
A person is physically qualified to drive a commercial motor vehicle if that person:
Has no established medical history or clinical diagnosis of diabetes mellitus currently requiring insulin for control.
Diabetes mellitus is a disease which, on occasion, can result in a loss of consciousness or disorientation in time and space. Individuals who require insulin for control have conditions which can get out of control by the use of too much or too little insulin, or food intake not consistent with the insulin dosage. Incapacitation may occur from symptoms of hypoglycemic or hypoglycemic reactions (drowsiness, semiconsciousness, diabetic coma or insulin shock).

The administration of insulin is, within itself, a complicated process requiring insulin, syringe, needle, alcohol sponge and a sterile technique. Factors related to long-haul commercial motor vehicle operators, such as fatigue, lack of sleep, poor diet, emotional conditions, stress, and concomitant illness, compound the dangers, the FMCSA has consistently held that a diabetic who uses insulin for control does not meet the minimum physical requirements of the FMCSRs.

Hypoglycemic drugs, taken orally, are sometimes prescribed for diabetic individuals to help stimulate natural body production of insulin. If the condition can be controlled by the use of oral medication and diet, then an individual may be qualified under the present rule. CMV drivers who do not meet the Federal diabetes standard may call (703) 448-3094 for an application for a diabetes exemption.

(See Conference Report on Diabetic Disorders and Commercial Drivers and Insulin-Using Commercial Motor Vehicle Drivers at: <http://www.fmcsa.dot.gov/rulesregs/mreports.htm>)

Cardiovascular Condition

\$391.41(b)(4)
A person is physically qualified to drive a commercial motor vehicle if that person:

Has no current clinical diagnosis of myocardial infarction, angina pectoris, coronary insufficiency, thrombosis or any other cardiovascular disease of a variety known to be accompanied by syncope, dyspnea, collapse or congestive cardiac failure.

The term "has no current clinical diagnosis of" is specifically designed to encompass: "a clinical diagnosis of" (1) a current cardiovascular condition, or (2) 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 (1) which is accompanied by symptoms of syncope, dyspnea, collapse or congestive cardiac failure; and/or (2) which is likely to cause syncope, dyspnea, collapse or congestive cardiac failure.

It is the intent of the FMCSRs 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 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 (ECG), no residual complications and no physical limitations, and is taking no medication likely to interfere with safe driving.

Coronary artery bypass surgery and pacemaker implantation are remedial procedures and thus, not unqualifying. 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 driver. The emphasis should be on the underlying medical condition(s) which require treatment and the general health of the driver. The FMCSA should be contacted at (202) 366-4001 for additional recommendations regarding the physical qualification of drivers on coumadin.

(See Cardiovascular Advisory Panel Guidelines for the Medical Examination of Commercial Motor Vehicle Drivers at <http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Respiratory Dysfunction

§391.41(b)(5)
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 ability to control and drive a commercial motor vehicle safely.

Since a driver must be alert at all times, any change in his or her mental state is in direct conflict with highway safety. Even the slightest impairment in respiratory function under emergency conditions (when greater oxygen supply is necessary for performance) may be detrimental to safe driving.

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 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, 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 unqualifying once optimum dose is achieved, provided lower extremity venous examinations remain normal and the treating physician gives a favorable recommendation.

(See Conference on Pulmonary/Respiratory Disorders and Commercial Drivers at: <http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Hypertension

§391.41(b)(6)
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 ability to operate a commercial motor vehicle safely.

Hypertension alone is unlikely to cause sudden collapse; however, the likelihood increases when target organ damage, particularly cerebral vascular disease, is present. This regulatory criteria is based on FMCSA's Cardiovascular Advisory Guidelines for the Examination of CMV Drivers, which used the Sixth Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (1997).

Stage 1 hypertension corresponds to a systolic BP of 140-159 mmHg and/or a diastolic BP of 90-99 mmHg. The driver with a BP in this range is at low risk for hypertension-related acute incapacitation and may be medically certified to drive for a one-year period. Certification examinations should be done annually thereafter and should be at or less than 140/90. If less than 160/100, certification may be extended one time for 3 months.

A blood pressure of 160-179 systolic and/or 100-109 diastolic is considered Stage 2 hypertension, and the driver is not necessarily unqualified during evaluation and institution of treatment. The driver is given a one time certification of three months to reduce his or her blood pressure to less than or equal to 140/90. A blood pressure in this range is an absolute indication for anti-hypertensive drug therapy. Provided treatment is well tolerated and the driver demonstrates a BP value of 140/90 or less, he or she may be certified for one year from date of the initial exam. The driver is certified annually thereafter.

A blood pressure at or greater than 180 (systolic) and 110 (diastolic) is considered Stage 3, high risk for an acute BP-related event. The driver may not be qualified, even temporarily, until reduced to 140/90 or less and treatment is well tolerated. The driver may be certified for 6 months and biannually (every 6 months) thereafter if at recheck BP is 140/90 or less.

Annual recertification is recommended if the medical examiner 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. Treatment includes nonpharmacologic and pharmacologic modalities as well as counseling to reduce other risk factors. Most antihypertensive medications also have side effects, the importance of which must be judged on an individual basis. Individuals must be alerted to the hazards of these medications while driving. Side effects of somnolence or syncope are particularly undesirable in commercial drivers.

Secondary hypertension is based on the above stages. Evaluation is warranted if patient is persistently hypertensive

on maximal or near-maximal doses of 2-3 pharmacologic agents. Some causes of secondary hypertension may be amenable to surgical intervention or specific pharmacologic disease.

(See Cardiovascular Advisory Panel Guidelines for the Medical Examination of Commercial Motor Vehicle Drivers at: <http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Rheumatic, Arthritic, Orthopedic, Muscular, Neuromuscular or Vascular Disease §391.41(b)(7)

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 ability to control and operate a commercial motor vehicle safely.

Certain diseases are known to have acute episodes of transient muscle weakness, poor muscular coordination (ataxia), abnormal sensations (paresthesia), decreased muscular tone (hypotonia), visual disturbances and pain which may be suddenly incapacitating. With each recurring episode, these symptoms may become more pronounced and remain for longer periods of time. Other diseases have more insidious onsets and display symptoms of muscle wasting (atrophy), swelling and paresthesia which may not suddenly incapacitate a person but may restrict his/her movements and eventually interfere with the ability to safely operate a motor vehicle. In many instances these diseases are degenerative in nature or may result in deterioration of the involved area.

Once the individual has been diagnosed as having a rheumatic, arthritic, orthopedic, muscular, neuromuscular or vascular disease, then he/she has an established history of that disease. The physician, when examining an individual, should consider the following: (1) the nature and severity of the individual's condition (such as sensory loss or loss of strength); (2) the degree of limitation present (such as range of motion); (3) the likelihood of progressive limitation (not always present initially but may manifest itself over time); and (4) the likelihood of sudden incapacitation. If severe functional impairment exists, the driver does not qualify. In cases where more frequent monitoring is required, a certificate for a shorter period of time may be issued. (See Conference on Neurological Disorders and Commercial Drivers at:

<http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Epilepsy

\$391.41(b)(8)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no established medical history or clinical diagnosis of epilepsy or any other condition which is likely to cause loss of consciousness or any loss of ability to control a motor vehicle.

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: (1) a driver who has a medical history of epilepsy; (2) a driver who has a current clinical diagnosis of epilepsy; or (3) a driver who is taking antiseizure medication.

If an individual has had a sudden episode of a nonepileptic seizure or loss of consciousness of unknown cause which did not require antiseizure medication, the decision as to whether that person's condition will likely cause loss of consciousness or loss of ability to control a motor vehicle is made on an individual basis by the medical examiner in consultation with the treating physician. Before certification is considered, it is suggested that a 6 month waiting period elapse from the time of the episode. Following the waiting period, it is suggested that the individual have a complete neurological examination. If the results of the examination are negative and antiseizure medication is not required, then the driver may be qualified.

In those individual cases where a driver has a seizure or an episode of loss of consciousness that resulted from a known medical condition (e.g., drug reaction, high temperature, acute infectious disease, dehydration or acute metabolic disturbance), certification should be deferred until the driver has fully recovered from that condition and has no existing residual complications, and not taking antiseizure medication.

Drivers with a history of epilepsy/seizures off antiseizure medication and seizure-free for 10 years may be qualified to drive a CMV in interstate commerce. Interstate drivers with a history of a single unprovoked seizure may be qualified to drive a CMV in interstate commerce if seizure-free and off antiseizure medication for a 5-year period or more.

(See Conference on Neurological Disorders and Commercial Drivers at:

<http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Mental Disorders

\$391.41(b)(9)

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 ability to drive a motor vehicle safely.

Emotional or adjustment problems contribute directly to an individual's level of memory, reasoning, attention, and judgment. These problems often underlie physical disorders. A variety of functional disorders can cause drowsiness, dizziness, confusion, weakness or paralysis that may lead to incoordination, inattention, loss of functional control and susceptibility to accidents while driving. Physical fatigue, headache, impaired coordination, recurring physical ailments and chronic "hagging" pain may be present to such a degree that certification for commercial driving is inadvisable. Somatic and psychosomatic complaints should be thoroughly examined when determining an individual's overall fitness to drive. Disorders of a periodically incapacitating nature, even in the early stages of development, may warrant disqualification.

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 driving.

When examining the driver, it should be kept in mind that individuals who live under chronic emotional upsets may have deeply ingrained maladaptive or erratic behavior patterns. Excessively antagonistic, instinctive, impulsive, openly aggressive, paranoid or severely depressed behavior greatly interfere with the driver's ability to drive safely. Those individuals who are highly susceptible to frequent states of emotional instability (schizophrenia, affective psychoses, paranoia, anxiety or depressive neuroses) may warrant disqualification. Careful consideration should be given to the side effects and interactions of medications in the overall qualification determination. See Psychiatric Conference Report for specific recommendations on the use of medications and potential hazards for driving.

(See Conference on Psychiatric Disorders and Commercial Drivers at:

<http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Vision

\$391.41(b)(10)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has 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 meridian in each eye, and the ability to recognize the colors of traffic signals and devices showing standard red, green, and amber.

The term "ability to recognize the colors of" is interpreted to mean if a person can recognize and distinguish among traffic control signals and devices showing standard red, green and amber, he or she meets the minimum standard, even though he or she may have some type of color perception deficiency. If certain color perception tests are administered (such as Ishihara, Pseudoisochromatic, Yam) and doubtful findings are discovered, a controlled test using signal red, green and amber may be employed to determine the driver's ability to recognize these colors.

Contact lenses are permissible if there is sufficient evidence to indicate that the driver has good tolerance and is well adapted to their use. Use of a contact lens in one eye for distance visual acuity and another lens in the other eye for near vision is not acceptable, nor telescopic lenses acceptable for the driving of commercial motor vehicles.

If an individual meets the criteria by the use of glasses or contact lenses, the following statement shall appear on the Medical Examiner's Certificate: "Qualified only if wearing corrective lenses."

CMV drivers who do not meet the Federal vision standard may call (703) 448-3094 for an application for a vision exemption.

(See Visual Disorders and Commercial Drivers at: <http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Hearing

\$391.41(b)(11)

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 ADA Standard) Z24.5-1951.

Since the prescribed standard under the FMCSRs is the American Standards Association (ANSI), it may be necessary to convert the audiometric results from the ISO standard to the ANSI standard. Instructions are included on the Medical Examination report form.

If an individual meets the criteria by using a hearing aid, the driver must wear that hearing aid 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.

For the whispered voice test, the individual should be stationed at least 5 feet from the examiner with the ear being tested turned toward the examiner. The other ear is covered. Using the breath which remains after a normal expiration, the examiner whispers words or random numbers such as 66, 18,

23, etc. The examiner should not use only sibilants (s sounding materials). The opposite ear should be tested in the same manner. 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's Certificate "Qualified only when wearing a hearing aid." (See Hearing Disorders and Commercial Motor Vehicle Drivers at: <http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Drug Use

§391.41(b)(12)

A person is physically qualified to drive a commercial motor vehicle if that person does not use any drug or substance identified in 21 CFR 1308.11, an amphetamine, a narcotic, or other habit-forming drug. A driver may use a non-Schedule I drug or substance that is identified in the other Schedules in 21 part 1308 if the substance or drug is prescribed by a licensed medical practitioner who: (A) is familiar with the driver's medical history, and assigned duties; and (B) 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.

This exception does not apply to methadone. 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.

A test for controlled substances is not required as part of this biennial certification process. The FMCSA or the driver's employer should be contacted directly for information on controlled substances and alcohol testing under Part 382 of the FMCSRs.

The term "uses" is designed to encompass instances of prohibited drug use determined by a physician through established medical means. This may or may not involve body fluid testing. If body fluid testing takes place, positive test results should be confirmed by a second test of greater specificity. The term "habit-forming" is intended to include any drug or medication generally recognized as capable of becoming habitual, and which may impair the user's ability to operate a commercial motor vehicle safely.

The driver is medically unqualified for the duration of the prohibited drug(s) use and until a second examination shows the driver is free

from the prohibited drug(s) use. Recertification may involve a 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, the examiner has the option to certify for a period of less than 2 years if this examiner determines more frequent monitoring is required.

(See Conference on Neurological Disorders and Commercial Drivers and Conference on Psychiatric Disorders and Commercial Drivers at:

<http://www.fmcsa.dot.gov/rulesregs/medreports.htm>)

Alcoholism

§391.41(b)(13)

A person is physically qualified to drive a commercial motor vehicle if that person:

Has no *current clinical diagnosis of alcoholism*.

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 should be referred to a specialist. After counseling and/or treatment, he or she may be considered for certification.