§ 391.43 Medical examination; certificate of physical examination.

(a) Except as provided by paragraph (b) of this section and as provided by §391.42, the medical examination must be performed by a medical examiner listed on the National Registry of Certified Medical Examiners under subpart D of part 390 of this chapter.

(b) A licensed optometrist may perform so much of the medical examination as pertains to visual acuity, field of vision, and the ability to recognize colors as specified in paragraph (10) of §391.41(b).

(c) Medical examiners shall:

(1) Be knowledgeable of the specific physical and mental demands associated with operating a commercial motor vehicle and the requirements of this subpart, including the medical advisory criteria prepared by the FMCSA as guidelines to aid the medical examiner in making the qualification determination; and

(2) Be proficient in the use of and use the medical protocols necessary to adequately perform the medical examination required by this section.

(d) Any driver authorized to operate a commercial motor vehicle within an exempt intracity zone pursuant to §391.62 of this part shall furnish the examining medical examiner with a copy of the medical findings that led to the issuance of the first certificate of medical examination which allowed the driver to operate a commercial motor vehicle.

(e) Any driver operating under a limited exemption authorized by §391.64 shall furnish the medical examiner with a copy of the annual medical findings of the endocrinologist, ophthalmologist or optometrist, as required under that section. If the medical examiner finds the driver qualified under the limited exemption in §391.64, such fact shall be noted on the Medical Examiner’s Certificate.

(f) The medical examination shall be performed, and its results shall be recorded, substantially in accordance with the following instructions and examination form. Existing forms may be used until current printed supplies are depleted or until September 30, 2004, whichever occurs first.

INSTRUCTIONS FOR PERFORMING AND RECORDING PHYSICAL EXAMINATIONS

The medical examiner must be familiar with 49 CFR 391.41, Physical qualifications
§ 391.43 49 CFR Ch. III (10–1–13 Edition)

for drivers, and should review these instructions before performing the physical examination. Answer each question “yes” or “no” and record numerical readings where indicated on the medical examination form.

The medical examiner must be aware of the rigorous physical, mental, and emotional demands placed on the driver of a commercial motor vehicle. In the interest of public safety, the medical examiner is required to certify that the driver does not have any physical, mental, or organic condition that might affect the driver’s ability to operate a commercial motor vehicle safely.

General information. The purpose of this history and physical examination is to detect the presence of physical, mental, or organic conditions of such a character and extent as to affect the driver’s ability to operate a commercial motor vehicle safely. The examination should be conducted carefully and should at least include all of the information requested in the following form. History of certain conditions may be cause for rejection. Indicate the need for further testing and/or require evaluation by a specialist. Conditions may be recorded which do not, because of their character or degree, indicate that certification of physical fitness should be denied. However, these conditions should be discussed with the driver and he/she should be advised to take the necessary steps to insure correction, particularly of those conditions which, if neglected, might affect the driver’s ability to drive safely.

General appearance and development. Note marked overweight. Note any postural defect, perceptible limp, tremor, or other conditions that might be caused by alcoholism, thyroid intoxication or other illnesses.

Head-eyes. When other than the Snellen chart is used, the results of such test must be expressed in values comparable to the standard Snellen test. If the driver wears corrective lenses for driving, these should be worn while driver’s visual acuity is being tested. If contact lenses are worn, there should be sufficient evidence of good tolerance of and adaptation to their use. Indicate the driver’s need to wear corrective lenses to meet the vision standard on the Medical Examiner’s Certificate by checking the box. “Qualified only when wearing corrective lenses.” In recording distance vision use 20 feet as normal. Report all vision as a fraction with 20 as the numerator and the smallest type read at 20 feet as the denominator. Monocular drivers are not qualified to operate commercial motor vehicles in interstate commerce.

Ears. Note evidence of any ear disease, symptoms of aural vertigo, or Meniere’s Syndrome. When recording hearing, record distance from patient at which a forced whispered voice can first be heard. 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 68, 18, 23, etc. The examiner should not use only sibilants (sounding test 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. For the audiometric test, record decibel loss at 500 Hz, 1,000 Hz, and 2,000 Hz. Average the decibel loss at 500 Hz, 1,000 Hz and 2,000 Hz and record as described on the form. If the individual fails the audiometric test and the whispered voice test has not been administered, the whispered voice test should be performed to determine if the standard applicable to that test can be met.

Throat. Note any irremediable deformities likely to interfere with breathing or swallowing.

Heart. Note murmurs and arrhythmias, and any history of an enlarged heart, congestive heart failure, or cardiovascular disease that is accompanied by syncope, dyspnea, or collapse. Indicate onset date, diagnosis, medication, and any current limitation. An electrocardiogram is required when findings so indicate.

Blood pressure (BP). If a driver has hypertension and/or is being medicated for hypertension, he or she should be recertified more frequently. An individual diagnosed with Stage 1 hypertension (BP is 140/90–159/99) may be certified for one year. At recertification, an individual with a BP equal to or less than 140/90 may be certified for one year; however, if his or her BP is greater than 140/90 but less than 160/100, a one-time certificate for 3 months can be issued. An individual diagnosed with Stage 2 hypertension (BP is 160/100–179/109) should be treated and a one-time certificate for 3-month certification can be issued. An individual diagnosed with Stage 3 hypertension (BP equal to or greater than 180/110) should not be certified until his or her BP is reduced to 140/90 or less, and may be recertified every 6 months.

Lungs. Note abnormal chest wall expansion, respiratory rate, breath sounds including wheezes or alveolar rales, impaired respiratory function, dyspnea, or cyanosis. Abnormal finds on physical exam may require further testing such as pulmonary tests and/or x-ray of chest.

Abdomen and Viscera. Note enlarged liver, enlarged spleen, abnormal masses, bruises, hernia, and significant abdominal wall muscle weakness and tenderness. If the diagnosis suggests that the condition might interfere with the control and safe operation of a commercial motor vehicle, further testing and evaluation is required.
Genital-urinary and rectal examination. A urinalysis is required. Protein, blood or sugar in the urine may be an indication for further testing to rule out any underlying medical problems. Note hernias. A condition causing discomfort should be evaluated to determine the extent to which the condition might interfere with the control and safe operation of a commercial motor vehicle.

Neurological. Note impaired equilibrium, coordination, or speech pattern; paresthesia; asymmetric deep tendon reflexes; sensory or positional abnormalities; abnormal patellar and Babinski's reflexes; ataxia. Abnormal neurological responses may be an indication for further testing to rule out an underlying medical condition. Any neurological condition should be evaluated for the nature and severity of the condition, the degree of limitation present, the likelihood of progressive limitation, and the potential for sudden incapacitation. In instances where the medical examiner has determined that more frequent monitoring of a condition is appropriate, a certificate for a shorter period should be issued.

Spine, musculoskeletal. Previous surgery, deformities, limitation of motion, and tenderness should be noted. Findings may indicate additional testing and evaluation should be conducted.

Extremities. Carefully examine upper and lower extremities and note any loss or impairment of leg, foot, toe, arm, hand, or finger. Note any deformities, atrophy, paralysis, partial paralysis, clubbing, edema, or hypotonia. If a hand or finger deformity exists, determine whetherprehension and power grasp are sufficient to enable the driver to maintain steering wheel grip and to control other vehicle equipment during routine and emergency driving operations. If a foot or leg deformity exists, determine whether sufficient mobility and strength exist to enable the driver to operate pedals properly. In the case of any loss or impairment to an extremity which may interfere with the driver’s ability to operate a commercial motor vehicle safely, the medical examiner should state on the medical certificate “medically unqualified unless accompanied by a Skill Performance Evaluation Certificate.” The driver must then apply to the Field Service Center of the FMCSA, for the State in which the driver has legal residence, for a Skill Performance Evaluation Certificate under §391.49.

Laboratory and other testing. Other test(s) may be indicated based upon the medical history or findings of the physical examination.

Diabetes. If insulin is necessary to control a diabetic driver’s condition, the driver is not qualified to operate a commercial motor vehicle in interstate commerce. If mild diabetes is present and it is controlled by use of an oral hypoglycemic drug and/or diet and exercise, it should not be considered disqualifying. However, the driver must remain under adequate medical supervision.

Upon completion of the examination, the medical examiner must date and sign the form, provide his/her full name, office address and telephone number. The completed medical examination form shall be retained on file at the office of the medical examiner.
Medical Examination Report
FOR COMMERCIAL DRIVER FITNESS DETERMINATION

1. DRIVER'S INFORMATION  Driver completes this section

<table>
<thead>
<tr>
<th>Driver's Name (Last, First, Middle)</th>
<th>Social Security No.</th>
<th>Birthdate M / D / Y</th>
<th>Age</th>
<th>Sex M F</th>
<th>New Certification</th>
<th>Recertification</th>
<th>Follow-up</th>
<th>Date of Exam</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>City, State, Zip Code</th>
<th>Work Tel: ( )</th>
<th>Home Tel: ( )</th>
<th>Driver License No.</th>
<th>License Class</th>
<th>State of Issue</th>
</tr>
</thead>
</table>

2. HEALTH HISTORY  Driver completes this section, but medical examiner is encouraged to discuss with driver.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any illness or injury in the last 5 years?</td>
<td></td>
</tr>
<tr>
<td>Head/Brain injuries, disorders or illnesses</td>
<td></td>
</tr>
<tr>
<td>Asthma, epilepsy</td>
<td></td>
</tr>
<tr>
<td>Eye disorders or impaired vision (except corrective lenses)</td>
<td></td>
</tr>
<tr>
<td>Ear disorders, loss of hearing or balance</td>
<td></td>
</tr>
<tr>
<td>Heart disease or heart attack, other cardiovascular condition</td>
<td></td>
</tr>
<tr>
<td>Heart surgery (valve replacement, bypass, angioplasty, pacemaker)</td>
<td></td>
</tr>
<tr>
<td>High blood pressure</td>
<td></td>
</tr>
<tr>
<td>Muscular disease</td>
<td></td>
</tr>
<tr>
<td>Shortness of breath</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung disease, emphysema, asthma, chronic bronchitis</td>
<td></td>
</tr>
<tr>
<td>Kidney disease, dialysis</td>
<td></td>
</tr>
<tr>
<td>Liver disease</td>
<td></td>
</tr>
<tr>
<td>Digestive problems</td>
<td></td>
</tr>
<tr>
<td>Diabetes or elevated blood sugar controlled by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>diet</td>
</tr>
<tr>
<td></td>
<td>pills</td>
</tr>
<tr>
<td></td>
<td>insulin</td>
</tr>
<tr>
<td>Nervous or psychiatric disorders, e.g., severe depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>medication</td>
</tr>
<tr>
<td>Loss of, or altered consciousness</td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>ACUITY</th>
<th>UNCORRECTED</th>
<th>CORRECTED</th>
<th>HORIZONTAL FIELD OF VISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Eye</td>
<td>20/20</td>
<td>20/20</td>
<td>Right Eye</td>
</tr>
<tr>
<td>Left Eye</td>
<td>20/20</td>
<td>20/20</td>
<td>Left Eye</td>
</tr>
<tr>
<td>Both Eyes</td>
<td>20/20</td>
<td>20/20</td>
<td></td>
</tr>
</tbody>
</table>

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 ≥ 5 ft., with or without hearing aid, or b) average hearing loss in better ear ≤ 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 Left ear

- **b)** If audiometer is used, record hearing loss in decibels (acc. to ANSI Z24.5-1991)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Right Ear</th>
<th>Left Ear</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Hz</td>
<td>1000 Hz</td>
<td>2000 Hz</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. **BLOOD PRESSURE/PULSE RATE**

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

**Blood Pressure**

- Driver qualified if ≤140/90.
- Pulse Rate: Regular: Regular
- Record Pulse Rate: 160-179/100-109
- ≥180/110

**Reading**

- 140-159/90-99: Stage 1
- 160-179/100-109: Stage 2
- ≥180/110: Stage 3

**Expiration Date**

- 1 year
- One-time certificate for 3 months if ≥141-159/91-99.
- 6 months from date of exam if ≤140/90

<table>
<thead>
<tr>
<th>Reading</th>
<th>Category</th>
<th>Expiration Date</th>
<th>Recertification</th>
</tr>
</thead>
<tbody>
<tr>
<td>140-159/90-99</td>
<td>Stage 1</td>
<td>1 year</td>
<td>One-time certificate for 3 months if ≥141-159/91-99.</td>
</tr>
<tr>
<td>160-179/100-109</td>
<td>Stage 2</td>
<td>One-time certificate for 3 months.</td>
<td>1 year from date of exam if ≤140/90</td>
</tr>
<tr>
<td>≥180/110</td>
<td>Stage 3</td>
<td>6 months from date of exam if ≤140/90</td>
<td>6 months from date of exam if ≤140/90</td>
</tr>
</tbody>
</table>

6. **LABORATORY AND OTHER TEST FINDINGS**

Numerical readings must be recorded.

**SP. GR.** **PROTEIN** **BLOOD SUGAR**

**Urine analysis 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)**
### 7. PHYSICAL EXAMINATION

<table>
<thead>
<tr>
<th>1. General Appearance</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked overweight, tremor, signs of alcoholism, problem drinking, or drug abuse.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Eyes</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupillary equality reaction to light, accommodation, ocular motility, ocular muscle imbalance, extracranial movement, nystagmus, exophthalmos. Ask about retinopathy, cataracts, aphakia, glaucoma, macular degeneration and refer to a specialist if appropriate.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Ears</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarring of tympanic membrane, occlusion of external canal, perforated eardrums. Inremediable deformities likely to interfere with breathing or swallowing.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Mouth and Throat</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murmurs, extra sounds, enlarged heart, pacemaker, implantable defibrillator.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Heart</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal chest wall expansion, abnormal respiratory rate, abnormal breath sounds including wheezes or rales, impaired respiratory function, cyanosis. Abnormal findings on physical exam may require further testing such as pulmonary tests and/or xray of chest.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Lungs and chest, not including breath examination</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BODY SYSTEM

<table>
<thead>
<tr>
<th>7. Abdomen and Viscera</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enlarged liver, enlarged spleen, masses, bruises, hernia, significant abdominal wall muscle weakness.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Vascular System</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal pulse and amplitude, carotid or arterial bruits, varicos veins.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Genito-urinary System</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hernia.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Extremities-Limb</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss or impairment of leg, foot, toe, arm, hand, finger, Perceptible limp, deformities, atrophy, weakness, paralysis, claudication, hyperesthesia. Inadequate grip and pinch strength in grip. Inadequate mobility and strength in lower limb to operate pedals properly.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Spine, other musculoskeletal</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous surgery, deformities, limitation of motion, tenderness.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Neurological</th>
<th>CHECK FOR:</th>
<th>YES*</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired equilibrium, coordination or speech pattern: asymmetric, deep tendon reflexes, sensory or positional ataxia, abnormal pupil and Babinski’s reflexes, ataxia.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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: 6 months, 12 months, 1 year, or Other
- Temporarily disqualified due to (condition or medication): ________________
- Return to medical examiner's office for follow up on ________________
- Wearing corrective lenses
- 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 integrity zone (See 49 CFR 391.62)
- Medical Examiner’s signature
- Medical Examiner’s name
- Medical Examiner’s address
- Telephone number

**If meets standards, complete a Medical Examiner’s Certificate as stated in 49 CFR 391.43(b). (Driver must carry certificate when operating a commercial vehicle.)**
§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 Linth 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
   (iii) 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 no visual acuity of at least 20/40 (Snellen) in each eye with 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;

11. Has no current clinical diagnosis of alcoholism.

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 oversized steering wheel, shift gears using a manual transmission, and maneuver a vehicle in crowded areas.
INSTRUCTIONS TO THE MEDICAL EXAMINER

General Information

The purpose of this examination is to determine a driver’s physical qualifications 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) 395-1750 for further information (a vision exemption, qualifying drivers under 49 CFR 391.54, 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 it’s reference by section is highlighted.

Federal Motor Carrier Safety Regulations

Diabetes

§391.410(k)

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 hyperglycemic or hypoglycemic reactions (drowsiness, semiconsciousness, diabetic coma or insulin shock).

The administration of insulin is, within itself, a complicated process requiring insulin, syringes, needles, alcohol sponge and a sterile technique. Factors related to long-haul commercial motor vehicle operations, 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 (202) 395-1750 for an application for a diabetes exemption.


Cardiovascular Condition

§391.410(x)

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 symptoms of 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 qualifications rest 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 unqualified. Implantable cardioverter defibrillators are disregarded due to risk of syncope. Copains 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) 366-1790 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/cesregs/medreports.html)

Respiratory Dysfunction §391.41(b)(5)
A driver 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 (i.e., 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 asthma, chronic obstructive pulmonary disease, bronchitis, emphysema, 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. Anticoagulant therapy for deep vein thrombosis and/or pulmonary embolism is not unqualifying once optimum dose is achieved, provided further extreme 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/cesregs/medreports.html)

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 2006 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. 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 at last 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 treatment of the disease. 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 of 140/90 or less, or is medically certified for one year from date of the initial exam. The driver is certified annually thereafter.

A blood pressure of at 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 8 months) thereafter if all restert BP is 140/90 or less.

Annual re-certification 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 dizziness 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 cases 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/cesregs/medreports.html)

Rheumatic, Arthritic, Orthopedic, Muscular, Neurovascular 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, neurovascular or vascular disease which interfere 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 muscle 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 onset and display symptoms of muscle wasting (atrophy), swelling and paralysis 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, neurovascular 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 Diseases and Commercial Drivers at http://www.fmcsa.dot.gov/cesregs/medreports.html)
Epilepsy
§391.410(c)(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 antiepileptic medication.

Mental Disorders
§391.410(c)(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 paranoia that may lead to inattention, inattention loss of functional control and susceptibility to accidents while driving. Physical fatigue, headache, impaired coordination, recurring physical ailments and chronic “ragging” pain may be present to such a degree that certification for commercial driving is inadvisable. Somato- 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 “nervous trouble” related to nervous personality, or emotional or adjustment problems are 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, indelicate, 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 neurosis) 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.

Vision
§391.410(g)(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 traffic control signals and devices showing standard red, green, and amber” means that the individual can recognize and distinguish among traffic control signals that are red, yellow, and amber, not that the individual can read traffic signals and devices that are showing standards red, green, and amber.

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.”

OMV drivers who do not meet the Federal vision standard may call (202) 366-1790 for an application for a vision exemption.

Hearing
§391.410(i)(7)
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 the American National Standard (formerly ASA Standard) Z24.5-1951.

Since the prescribed standard under the FMCSA 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 06, 18,
(g) Upon completion of the medical examination required by this subpart:

1. The medical examiner must date and sign the Medical Examination Report and provide his or her full name, office address, and telephone number.

2. The examiner should not use only sibilants (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.

3. 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)

Drugs 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 prescription 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 FMCSR.

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.
§ 391.43

(2) If the medical examiner finds that the person examined is physically qualified to operate a commercial motor vehicle in accordance with §391.41(b), he or she must complete a certificate in the form prescribed in paragraph (h) of this section and furnish the original to the person who was examined. The examiner must provide a copy to a prospective or current employing motor carrier who requests it.

(3) Once every calendar month, beginning May 21, 2014, the medical examiner must electronically transmit to the Director, Office of Carrier, Driver and Vehicle Safety Standards, via a secure FMCSA-designated Web site, a completed Form MCSA-5850, Medical Examiner Submission of CMV Driver Medical Examination Results. The Form must include all information specified for each medical examination conducted during the previous month for any driver who is required to be examined by a medical examiner listed on the National Registry of Certified Medical Examiners.

(h) The medical examiner’s certificate shall be substantially in accordance with the following form.
(i) Each original (paper or electronic) completed Medical Examination Report and a copy or electronic version of each medical examiner's certificate must be retained on file at the office of the medical examiner for at least 3 years from the date of examination.

The medical examiner must make all records and information in these files available to an authorized representative of FMCSA or an authorized Federal, State, or local enforcement agency representative, within 48 hours after the request is made.
§ 391.45 Persons who must be medically examined and certified.

Except as provided in §391.67, the following persons must be medically examined and certified in accordance with §391.43 as physically qualified to operate a commercial motor vehicle:

(a) Any person who has not been medically examined and certified as physically qualified to operate a commercial motor vehicle;

(b)(1) Any driver who has not been medically examined and certified as qualified to operate a commercial motor vehicle during the preceding 24 months; or

(2) Any driver authorized to operate a commercial motor vehicle only with an exempt intracity zone pursuant to §391.62, or only by operation of the exemption in §391.64, if such driver has not been medically examined and certified as qualified to drive in such zone during the preceding 12 months; and

(c) Any driver whose ability to perform his/her normal duties has been impaired by a physical or mental injury or disease.


§ 391.47 Resolution of conflicts of medical evaluation.

(a) Applications. Applications for determination of a driver’s medical qualifications under standards in this part will only be accepted if they conform to the requirements of this section.

(b) Content. Applications will be accepted for consideration only if the following conditions are met.

(1) The application must contain the name and address of the driver, motor carrier, and all physicians involved in the proceeding.

(2) The applicant must submit proof that there is a disagreement between the physician for the driver and the physician for the motor carrier concerning the driver’s qualifications.

(3) The applicant must submit a copy of an opinion and report including results of all tests of an impartial medical specialist in the field in which the medical conflict arose. The specialist should be one agreed to by the motor carrier and the driver.

(i) In cases where the driver refuses to agree on a specialist and the applicant is the motor carrier, the applicant must submit a statement of his/her agreement to submit the matter to an impartial medical specialist in the field, proof that he/she has requested the driver to submit to the medical specialist, and the response, if any, of the driver to his/her request.

(ii) In cases where the motor carrier refuses to agree on a medical specialist, the driver must submit an opinion and test results of an impartial medical specialist, proof that he/she has requested the motor carrier to agree to submit the matter to the medical specialist and the response, if any, of the motor carrier to his/her request.

(4) The applicant must include a statement explaining in detail why the decision of the medical specialist identified in paragraph (b)(3) of this section, is unacceptable.

(5) The applicant must submit proof that the medical specialist mentioned in paragraph (b)(3) of this section was provided, prior to his/her determination, the medical history of the driver and an agreed-upon statement of the work the driver performs.

(6) The applicant must submit the medical history and statement of work provided to the medical specialist under paragraph (b)(5) of this section.

(7) The applicant must submit all medical records and statements of the physicians who have given opinions on the driver’s qualifications.

(8) The applicant must submit a description and a copy of all written and documentary evidence upon which the party making application relies in the form set out in 49 CFR 386.37.

(9) The application must be accompanied by a statement of the driver that he/she intends to drive in interstate commerce not subject to the