



**ACCREDITED TRAINING FOR THE NATIONAL
REGISTRY OF CERTIFIED MEDICAL
EXAMINERS**

MODULE 6

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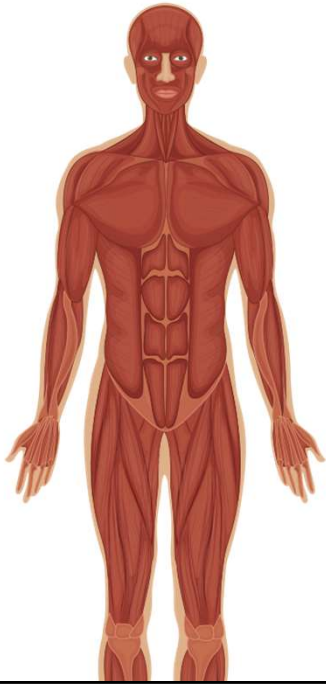


Welcome to the TeamCME accredited training for the national registry of certified medical examiners. This is Module 6.



THE MUSCULOSKELETAL EXAM





Musculoskeletal 49 CFR 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 his/her ability to control and operate a commercial motor vehicle safely***

49 CFR 391.41(b)(7) is the musculoskeletal standard for commercial driving. Because it's a standard, it must be followed, but it is a discretionary standard. It states that a driver can be qualified to drive if they have no established medical history or diagnosis of a rheumatic, arthritic, orthopedic, muscular, or vascular disease which interferes with their ability to control and operate a commercial motor vehicle safely.

Some diseases have acute episodes with symptoms that may interfere with the ability to operate a CMV safely. Others are slowly progressive and do not significantly interfere with the driver's abilities until later stages of the disease.

Symptoms of progressive diseases:

- Weakness
- Stiffness and rigidity
- Loss of muscular control
- Numbness and tingling
- Cramping
- Joint deformities

Considerations:

- The nature and severity of the driver's condition
 - Sensory loss
 - Loss of strength
- The degree of limitation present
 - Range of motion
 - The rate or stage of progression



Some diseases have acute episodes with symptoms that may interfere with the ability to operate a CMV safely. Others are slowly progressive and do not significantly interfere with the driver's abilities until later stages of the disease. Symptoms of progressive diseases include weakness, stiffness and rigidity, loss of muscular control, numbness and tingling, cramping, and joint deformities. When making a qualification determination, the ME should consider the nature and severity of the driver's condition, any sensory loss or loss of strength, the degree of limitation present, range of motion, and the rate or stage of progression.

Musculoskeletal Exam

Determine if a driver with limitations in movement has the need for an on-road performance evaluation or a Skill Performance Evaluation.

Examination:

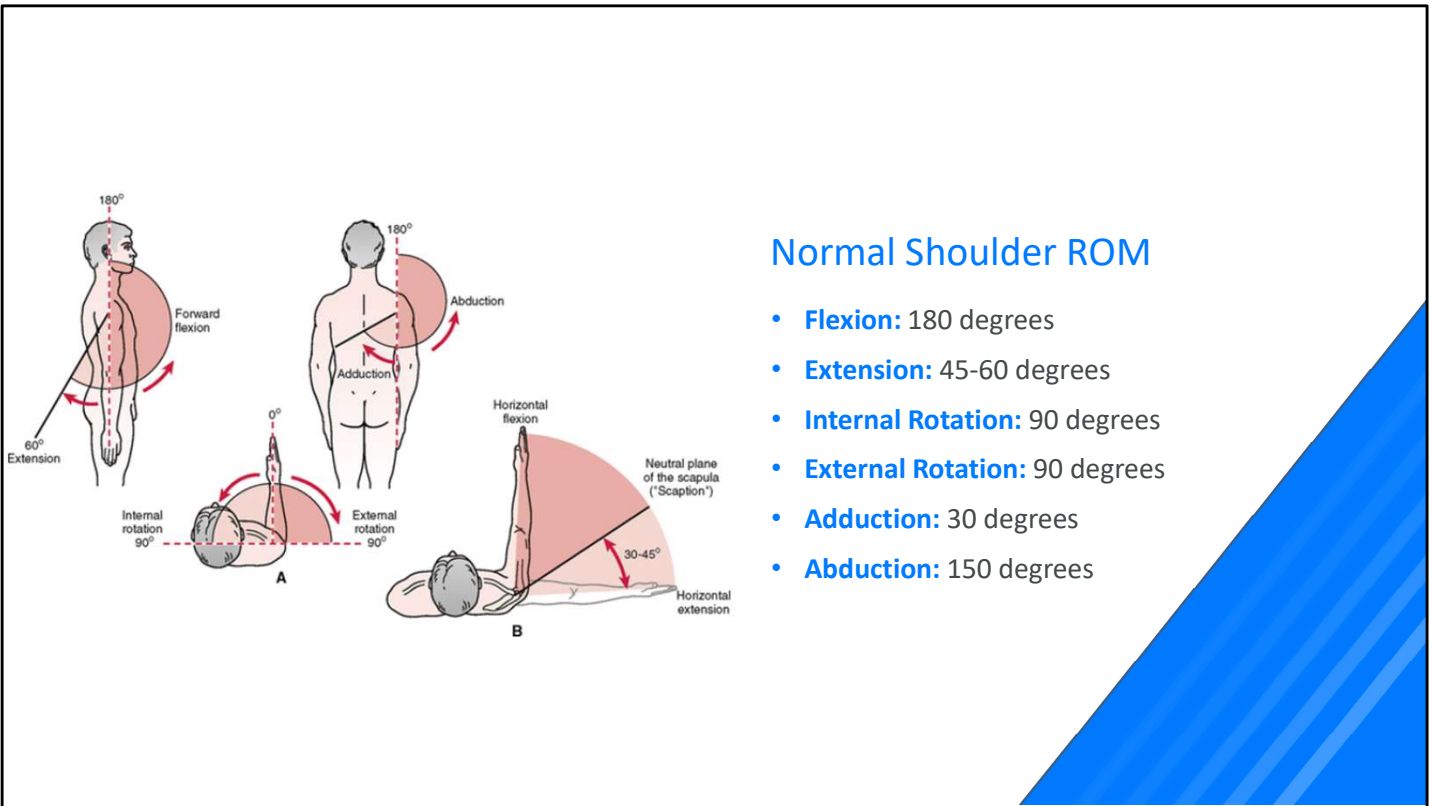
Spinal:

- Surgical scars and deformities
- Tenderness and muscle spasm
- Loss in range of motion/painful motion
- Kyphosis, scoliosis, other spinal deformities

Extremities:

- Gait, mobility, posture (weight bearing), limping or signs of pain
- Strength, function, mobility and stability of both upper and lower extremities

When evaluating a driver with a musculoskeletal condition, medical examiners should determine if a driver that has limitations in extremity movement requires an on-road performance evaluation or a skill performance evaluation. The examination includes a review of both the spinal and extremity areas. Medical examiners should look for surgical scars and deformities, tenderness, and muscle spasm, decrease in range of motion or painful motion, kyphosis, scoliosis, and other spinal or extremity deformity. Medical examiners should consider gait, mobility, weight-bearing posture and any signs of limping or pain. MEs should look for deformities, atrophy, muscle weakness, and paralysis. They should evaluate for strength, functional ability, mobility and stability of the extremities.



Normal Shoulder ROM

- **Flexion:** 180 degrees
- **Extension:** 45-60 degrees
- **Internal Rotation:** 90 degrees
- **External Rotation:** 90 degrees
- **Adduction:** 30 degrees
- **Abduction:** 150 degrees

It is important to know what is considered normal range to aide in determining whether a shoulder is stable, unstable, mobile, or immobile. Instability is generally a result of injury or absence of stabilizing ligaments, muscles, and an ineffective glenoid arch. Normal range of motion for a shoulder is Flexion of 180 degrees, Extension of 45-60 degrees, Internal Rotation of 90 degrees, External Rotation of 90 degrees, Adduction of 30 degrees, and Abduction of 150 degrees.

Grasp & Prehension

The driver must have sufficient grasp and prehension to control an oversized steering wheel, shift gears using a manual transmission and maneuver a vehicle in crowded areas.

Prehension: the ability to achieve sufficient “friction” on an object

Grasp Power: extremity strength

No specific tests or equipment are required to assess grasp and prehension.

MEs could use the following:

- For grasp:
 - Dynamometer designed to measure grip strength
 - Sphygmomanometer - Have driver repeatedly squeeze the inflated cuff while noting maximum deflection of gauge
- For prehension:
 - Broom stick or oversized steering wheel



Drivers must have sufficient grasp power and prehension in order to control an oversized steering wheel, shift gears using a manual transmission, and maneuver a vehicle in crowded areas that is especially difficult at low speeds. The concept of grip strength, or grasp power, is commonly understood. However, prehension is not a term that many medical examiners understand. The following example shows the difference between grasp power and prehension. Consider a driver who can only close his hand halfway to a full fist. They may have powerful grip strength, but once he gets his fingers into a half-closed position, he can no longer apply that force to an object that fits loosely in his hand. Prehension is a combination of grasp strength with sufficient frictional contact to hold on to an item, such as the diameter of a steering wheel. There are no FMCSA guidelines regarding how to test grasp and prehension. To test grasp, consider having the driver either squeeze two of your fingers, use a dynamometer, or use an inflated blood pressure cuff and watch the deflection on the gauge. One possible way to test prehension is for the driver to grasp a broom handle while attempting to pull the handle from the driver. You can also use an actual oversized steering wheel.

A 42-year-old female admits to having a cubital tunnel release in her right elbow 4 months ago. She did not bring any documentation from the surgeon and states that the physician retired 2 months after performing her surgery. She has not been seen by anyone else as part of surgical follow-up.

Physical exam:

- Recent scar on right elbow from surgery
- Symmetrical strength and mobility in the upper extremities
- Good grip strength
- Full ROM to the right elbow
- Everything else WNL

Should this driver be disqualified or certified? Why?

Can cubicle tunnel surgery affect grip strength? Explain the reasoning if that can occur.

A 42-year-old female admits to having a cubital tunnel release in her right elbow four months ago. She did not bring any documentation from the surgeon and states that the physician retired two months ago after performing her surgery. She has not been seen by anyone else as part of the surgical follow up. Physical exam demonstrates a recent scar on right elbow from surgery, symmetrical strength and mobility in the upper extremities, good grip strength, and full range of motion to the right elbow. Everything else is within normal limits. Should this driver be disqualified or certified? Why? Can cubicle tunnel surgery affect grip strength? Explain the reasoning if that can occur.

The surgical site is fully healed, and no abnormalities identified within the examination.

Certify for 2 years

Since cubital tunnel syndrome predominately affects the fourth and fifth fingers, and most of the grip strength is driven by the thumb, index and middle fingers, the preservation of sufficient grip strength to meet the standards is not unusual. However, if left untreated, it could progress to affecting the rest of the hand.

The surgical site is fully healed and there were no abnormalities identified within the examination. The best outcome for this driver is to be certified for two years. Cubital tunnel syndrome predominately effects the fourth and fifth digits and the majority of grip strength is derived by the thumb, index, and middle finger. Therefore, the preservation of sufficient grip strength to meet the standard is not unusual. If left untreated, cubital tunnel syndrome could progress to where it affects the rest of the hand.

The driver reports that he had surgery on his cervical spine 2 years ago. It involved a fusion of C4, C5 and C6. He has recovered fully and was released to return to work without restriction. He reports no pain and does not require medication of any kind. During the examination, the driver exhibits only 30 degrees of cervical rotation to both the right and the left. The examiners best decision would be to:

- A. Disqualify the driver
- B. Certify the driver for 1 year
- C. If the driver can rotate their body and/or torso enough to see both side view mirrors, certify the driver for 2 years
- D. Request additional information and clearance from the specialist who performed the surgery relating to any possible limitations the driver may have and provide the job description for a truck driver

The correct answer is **C**. The FMCSA guidelines and recommendations do not have any specifications on the required amount of motion of cervical spine or any other portion of the spine. The requirement is for the driver to be able to view both side view mirrors.

The driver reports that he had surgery on his cervical spine 2 years ago. It involved a fusion of C4, C5 and C6. He has recovered fully and was released to return to work without restriction. He reports no pain and does not require medication of any kind. During the examination, the driver exhibits only 30 degrees of cervical rotation to both the right and the left. The examiners best decision would be to **A, disqualify the driver. B, certify the driver for 1 year. C, if the driver can rotate their body and/or torso enough to see both side view mirrors, certify the driver for 2 years. Or D, request additional information and clearance from the specialist who performed the surgery relating to any possible limitations the driver may have and provide the job description for a truck driver.** The correct answer is **C**. The FMCSA guidelines and recommendations do not have any specifications on the required amount of motion of cervical spine or any other portion of the spine. The requirement is for the driver to be able to view both side view mirrors.

Additional Musculoskeletal Testing/Evaluation



Diagnostic-specific testing may be required to detect the presence or severity of the musculoskeletal condition.

Detection of an undiagnosed musculoskeletal finding during the physical qualification examination may indicate the need for further testing and evaluation.

Additional testing may be ordered by the ME, treating provider, or musculoskeletal specialist.

Diagnostic-specific testing may be required to detect the presence or severity of the musculoskeletal condition. Detection of an undiagnosed musculoskeletal finding during the physical qualification examination may indicate the need for further testing and evaluation. Additional testing may be ordered by the ME, treating provider, or musculoskeletal specialist.

Professional Evaluation

When requesting evaluation by a specialist, it is helpful to include a description of the role of the driver and medical standards/guidelines

Record additional test results on the Medical Exam Report form page 2: *“Other Testing if indicated”* and attached additional test results

TESTING		
Pulse rate: _____ Pulse rhythm regular: <input type="radio"/> Yes <input type="radio"/> No		
Blood Pressure	Systolic	Diastolic
Sitting		
Second reading (optional)		
Other testing if indicated		
<div style="border: 1px solid black; height: 20px;"></div>		

When requesting a musculoskeletal evaluation from a physiatrist, orthopedist, or occupational health specialist, it is helpful if the ME will include a description of the duties of a commercial driver, and a copy of the musculoskeletal standard and medical guidelines. The ME should report test results on Page 2 of the exam form in the *“Other testing if indicated”* area that appears under the blood pressure reading. If additional room is needed, the ME can attach test results to the exam form.

Musculoskeletal Medications

Rheumatology Medications

- Methotrexate
- Leflunomide
- Sulfasalazine
- Humira (Adalimumab)
- Azathioprine
- Enbrel (Etanercept)

Muscle Relaxers

- Cyclobenzaprine
- Metaxalone (Skelaxin)
- Baclofen
- Soma (Carisoprodol)



Here is a list for you to reference of some commonly prescribed medications for musculoskeletal conditions. The rheumatology medications are Disease Modifying Anti-Rheumatic Drugs (DMARDs). They cause a decreased immune response, thus making the individual more susceptible to infections. The ME should take into consideration that muscle relaxers cause drowsiness.



MUSCULOSKELETAL DISEASES

Conditions with Abnormal Muscle Activity

Abnormalities within the nerve or muscle membrane causing abnormal muscle excitability

Diseases that may interfere with safe driving:

- Myotonia
- Isaac's Syndrome
- Stiff-man Syndrome

Diseases with abnormal muscle excitability caused by abnormalities either in the nerve or in the muscle membrane may interfere with safe driving. These diseases include myotonia, Isaac's syndrome, and Stiff-man syndrome.

Multiple Sclerosis

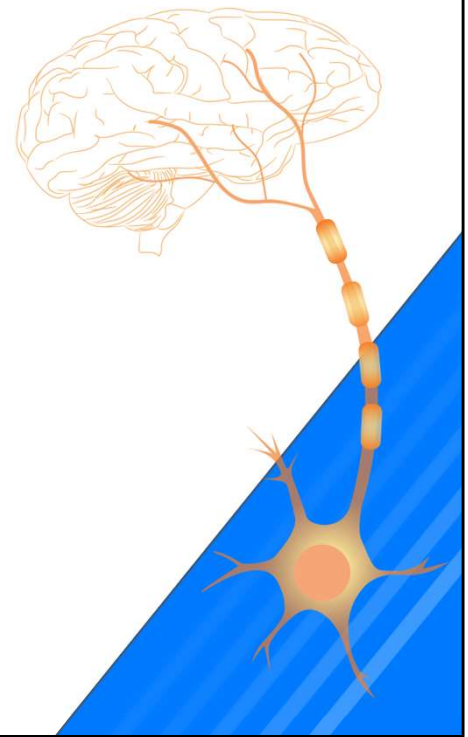
The immune system attacks the protective sheath that covers nerve fibers

- The disease can cause permanent damage or deterioration of the nerves
- Causes communication problems between the brain and the rest of the body
- Most individuals have a relapsing of symptoms over days or weeks followed by a period of remission of months or years
- The rate of disease progression varies greatly among individuals

Symptoms differ from individual-to-individual and over the course of the disease:

- Numbness/weakness
 - In one or more limbs on one side of the body at a time, OR
 - In the legs and trunk
- Electric-shock sensations occurring with certain neck movements
- Tremor
- Lack of coordination
- Unsteady gait
- Partial or complete loss of vision, usually in one eye at a time
- Prolonged double vision or blurry vision
- Fatigue
- Dizziness

“MEs should address the diagnosis of multiple sclerosis, on a case-by-case basis, to determine if the driver meets the physical qualification standard.”



In multiple sclerosis, the immune system attacks the protective sheath that covers nerve fibers and causes communication problems between the brain and the rest of the body. Eventually, the disease can cause permanent damage and deterioration of the nerves. Most individuals have a relapsing of symptoms over days or weeks, followed by a period of remission of months or years. The rate of disease progression varies greatly among individuals. Symptoms differ from individual-to-individual and over the course of the disease. These include numbness/weakness in one or more limbs on one side of the body at a time, OR in the legs and trunk, electric-shock sensations occurring with certain neck movements, tremor, lack of coordination, unsteady gait, partial or complete loss of vision, usually in one eye at a time, prolonged double vision or blurry vision, fatigue, and dizziness. “MEs should address the diagnosis of multiple sclerosis, on a case-by-case basis, to determine if the driver meets the physical qualification standard.”

Parkinson's Disease

Symptoms differ from individual-to-individual and over the course of the disease

- Often begin on one side of the body and usually remain worse on that side
 - Tremor
 - Slowed movement (bradykinesia)
 - Rigid muscles
 - Posture and balance impairment
 - Loss of automatic movements, such as blinking or smiling
 - Speech changes
- Symptoms of advanced stages include:
 - Orthostatic hypotension
 - Depression and emotional changes
 - Sleep disorders
 - Fatigue
 - Decreased cognitive function

“MEs should address the diagnosis of Parkinson's disease, on a case-by-case basis, to determine if the driver meets the physical qualification standards.”

Medications:

- Sinemet (Carbidopa-levodopa)
- Amantadine



Parkinson's disease is a progressive nervous system disorder that affects movement. Symptoms start gradually and can progress to increasing stiffness and/or slowing of movement. Symptoms often begin on one side of the body and usually remain worse on that side. They include tremor, slowed movement (bradykinesia), rigid muscles, posture and balance impairment, loss of automatic movements such as blinking or smiling, and speech changes. Symptoms of advanced stages include orthostatic hypotension, depression and emotional changes, sleep disorders, fatigue, and decreased cognitive function. The FMCSA handbook states “MEs should address the diagnosis of Parkinson's disease, on a case-by-case basis, to determine if the driver meets the physical qualification standards.” For the NRCME test, it's important to remember that Sinemet is for the treatment of Parkinson's disease.

Parkinson's Disease

Stage One:

- Tremor and other movement symptoms on one side of the body
 - Changes in posture, walking, and facial expressions
- (These may be considered as a **mild** risk for safe driving)

Stage Two:

- Tremor, rigidity and other movement symptoms affect both sides of the body
- Walking problems and poor posture may be apparent
- The person is able to live alone, but daily tasks are more difficult and lengthier

Stage Three:

- Loss of balance/unsteadiness when turning or pushed
- Falls are more common

Stage Four:

- May need to ambulate with a cane/walker for safety
- Needs significant help with activities of daily living

Stage Five:

- Stiffness in the legs may make it impossible to stand or walk



It is not necessary to memorize the stages of Parkinson's disease, or what symptoms are associated with each stage. However, for the NRCME test it is important to know that the symptoms associated with stage one are mild and an individual that has not progressed past these symptoms may be considered as a mild risk for safe driving. These symptoms include a tremor and other movement symptoms on one side of the body as well as changes in posture, walking, and facial expressions. When symptoms progress to a tremor on both sides of the body and rigidity, these are considered medium to moderate symptoms, and the driver should be disqualified.

Other Neuromuscular Diseases

Disease Process	Examples
Congenital Myopathies	Central core disease, Centronuclear myopathy, Congenital muscular dystrophy, Rod myopathy
Metabolic Muscle Disease	Homocystinuria, Phenylketonuria, Maple syrup urine disease
Motor Neuron Disease	Amyotrophic lateral sclerosis (ALS), Progressive bulbar palsy, Pseudobulbar palsy
Neuromuscular Junction Disorder	Myasthenia gravis, Lambert-Eaton Myasthenic syndrome, Neuromyotonia
Peripheral Neuropathy	Causes: Diabetes, Autoimmune disease, Vascular disease, Medications, Alcoholism, Vitamin deficiencies

This chart is taken directly from the FMCSA medical examiner's handbook. It provides a list of some of the diseases associated with each specific disease process. The handbook does not provide any additional information, recommendations, or guidance for these disease processes.

A thin, 56-year-old male driver presents for medical recertification. He relates that 2 years ago he was diagnosed with Parkinson's disease for which he has routine visits with his treating provider and is taking Sinemet. His medical history is otherwise unremarkable. Physical exam findings demonstrate a slight resting tremor of the left hand but good grasp and prehension strength. He has good range of motion and strength to the upper extremities. Exam of the lower extremities demonstrate good range of motion and strength. The gait exam shows some rigidity and slight shuffling of the feet. What level of risk is this driver when operating a CMV?

- A. No risk
- B. Low risk
- C. Medium risk
- D. High risk

The correct answer is **C**. The symptoms of tremor, rigidity and other movement symptoms affecting both sides of the body would be considered a medium risk when driving a CMV. For the NRCME testing purposes, **only consider certifying an individual with mild symptoms** who tolerates their medications without side effects that could affect safe driving. They must have no significant fluctuations in motor response, sometimes referred to as "on-off" effects. They must have satisfactory results on tests assessing key cognitive function. Also consider the statement from FMCSA: "MEs should address the diagnosis of Parkinson's disease, on a case-by-case basis, to determine if the driver meets the physical qualification standards."

A thin, 56-year-old male driver presents for medical recertification. He relates that 2 years ago he was diagnosed with Parkinson's disease for which he has routine visits with his treating provider and is taking Sinemet. His medical history is otherwise unremarkable. Physical exam findings demonstrate a slight resting tremor of the left hand but good grasp and prehension strength. He has good range of motion and strength to the upper extremities. Exam of the lower extremities demonstrate good range of motion and strength. The gait exam shows some rigidity and slight shuffling of the feet. What level of risk is this driver when operating a CMV? **A**, No risk. **B**, Low risk. **C**, Medium risk. Or **D**, High risk. **The correct answer is C**. The symptoms of tremor, rigidity and other movement symptoms affecting both sides of the body would be considered a medium risk when driving a CMV. For the NRCME testing purposes, **only consider certifying an individual with mild symptoms** who tolerates their medications without side effects that could affect safe driving. They must have no significant fluctuations in motor response, sometimes referred to as "on-off" effects. They must have satisfactory results on tests assessing key cognitive function. Also consider the statement from FMCSA: "MEs should address the diagnosis of Parkinson's disease, on a case-by-case basis, to determine if the driver meets the physical qualification standards."



SKILL PERFORMANCE EXAM



Skill Performance Evaluation 49 CFR 391.41(b)(1) & (b)(2)

A person who is not physically qualified to drive, but otherwise medically qualified, may still drive a commercial motor vehicle if a Skill Performance Evaluation (SPE) has been granted by the FMCSA Division Administrator

The letter of application for an SPE certificate shall be accompanied by:

- A copy of the medical examination form
- A copy of the medical examiner's certificate
- A medical evaluation summary completed by either a board-qualified or board-certified physiatrist or orthopedic surgeon



The Skill Performance Evaluation (SPE) is considered an alternative to the musculoskeletal standard. It allows a person who is not physically qualified, but who is otherwise medically qualified, to drive a commercial motor vehicle. To obtain a SPE, the driver submits an SPE application to the FMCSA or their State Driver's Licensing Agency. The Federal application must be accompanied by the following: A copy of the medical examination report form, a copy of the medical examiner's certificate indicating a SPE is required, and a medical evaluation summary completed by either a board qualified or board-certified physiatrist or orthopedic surgeon. Once FMCSA has received the application, obtaining a SPE is a relatively quick process, often taking less than a month.

Skill Performance Evaluation 49 CFR 391.41(b)(1) & (b)(2)

Driving Demonstrations:

An FMCSA agent may require a driver to demonstrate the driver's ability to safely operate the CMV the driver intends to operate.

- Includes three portions:
 - Non-driving and pre-trip inspection
 - Off-highway driving
 - On-highway driving

Restrictions may be included by FMCSA on the SPE certificate relating to the use of prosthetic or orthotic devices or equipment modifications.

FMCSA may require a driver applying for an SPE certificate to demonstrate, to an agent of FMCSA, the driver's ability to safely operate the CMV the driver intends to operate. The demonstration is accomplished by conducting an SPE that includes three portions: non-driving and pre-trip inspection, off-highway driving, and on-highway driving. Restrictions may be included by FMCSA on the SPE certificate relating to the use of prosthetic or orthotic devices or equipment modifications.

Fixed Deficit of an Extremity & the Skill Performance Evaluation 49 CFR 391.41 (b)(1)

The SPE is only applicable for fixed deficits of the extremities where the driver does not have sufficient functional capacity to perform the duties of a driver. *“Only drivers with loss of all five fingers are considered to have the loss of a hand.”*

Drivers with only one finger on a hand can be certified if they can demonstrate adequate grip strength and prehension to perform the duties of a driver.

If the severity of a fixed deficit is less than the whole hand but not sufficient use, or if the driver has a complete functional loss of the hand, this is medically disqualifying *unless the driver has an SPE as part of a limb impairment*.

Decisions regarding whether the loss, impairment, defect, or limitation is **fixed** will be made during a medical evaluation by a board qualified or board-certified physiatrist (doctor of physical medicine) or orthopedic surgeon, and be reviewed by FMCSA, as part of the SPE application process.

An SPE certificate is **not available** for impairment of the *spine or torso* that does not result in loss, impairment, defect, or limitation of a limb.

The SPE is only applicable for fixed deficits of the extremities where the driver does not have sufficient functional capacity to perform the duties of a driver. Drivers with only one finger on a hand can be certified if they can demonstrate adequate grip strength and prehension to perform the duties of a driver. If the severity of a fixed deficit is less than the whole hand but not sufficient use, or if the driver has a complete functional loss of the hand, this is medically disqualifying unless the driver has an SPE as part of a limb impairment. Decisions regarding whether the loss, impairment, defect, or limitation is fixed will be made during a medical evaluation by a board qualified or board-certified physiatrist (doctor of physical medicine) or orthopedic surgeon, and be reviewed by FMCSA, as part of the SPE application process. An SPE certificate is not available for impairment of the spine or torso that does not result in loss, impairment, defect, or limitation of a limb.

Skill Performance Evaluation 49 CFR 391.41(b)(1)

MEDICAL EXAMINER DETERMINATION (Federal)
 Use this section for examinations performed in accordance with the Federal Motor Carrier Safety Regulations (49 CFR 391.41-391.49):

Does not meet standards (specify reason): _____

Meets standards in 49 CFR 391.41; qualifies for 2-year certificate

Meets standards, but periodic monitoring required (specify reason): _____

Driver qualified for: 3 months 6 months 1 year other (specify): _____

Wearing corrective lenses Wearing hearing aid Accompanied by a waiver/exemption (specify type): _____

Accompanied by a Skill Performance Evaluation (SPE) Certificate Qualified by operation of 49 CFR 391.64 (if exempt)

Driving within an exempt intracity zone (see 49 CFR 391.62) (if exempt)

Determination pending (specify reason): _____

Return to medical exam office for follow-up on (must be 45 days or less): _____

Medical Examination Report amended (specify reason): _____

(if amended) Medical Examiner's Signature: _____ Date: _____

Incomplete examination (specify reason): _____

Form MCSA-5876

Public Burden Statement
 A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is: _____ including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information, and other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Office, _____

U.S. Department of Transportation
 Federal Motor Carrier
 Safety Administration

Medical Examiner's Certificate
 (for Commercial Driver Medical Certificate)

I certify that I have examined Last Name: _____ First Name: _____

the Federal Motor Carrier Safety Regulations (49 CFR 391.41-391.49) and, with knowledge of the driving duties of the driver, I find this person is qualified, and, if applicable, only when (check all that apply):

Wearing corrective lenses Accompanied by a _____ waiver/exemption

Wearing hearing aid Accompanied by a Skill Performance Evaluation (SPE) Certificate

On the exam report form, the ME should describe abnormal findings, the location and extent of the loss of a foot, a leg, or an arm; how and when the loss occurred; and the type of prosthesis used when applicable.

Mark the "Skill Performance Evaluation (SPE) Certificate" box on Page 4 or 5 and on the medical examiner's certificate.

Have the driver contact the FMCSA Service Center for the geographic area where the driver has legal residence.

On the exam report form, the ME should describe abnormal findings, the location and extent of the loss of a foot, a leg, or an arm; how and when the loss occurred; and the type of prosthesis used when applicable. If a driver wishes to apply for a skill performance evaluation, the medical examiner completes the medical examination report and issues a medical examiner certificate. The ME checks the "Accompanied by a Skill Performance Evaluation Certificate" box on the medical exam form and medical examiner's certificate. If medically qualified, the ME can issue up to a 2-year medical certificate. The medical examiner tells the driver that they should contact one of the FMCSA service centers for assistance. Most states have their own SPE programs for intrastate drivers.

Practice Scenario

A 44-year-old male who was born with Cerebral Palsy presents for a physical exam. He denies any other medical history.

Physical exam:

Upper extremities:

- Strength 5/5
- Full ROM
- DTR 3/4

Lower extremities:

- Strength 5/5 bilateral
- Slightly decreased dorsiflexion of the left foot
- Scissoring gait
- DTR 3/4
- Grip strength and prehension is WNL
- No balance deficiencies
- Normal mini-mental status exam
- The rest of the exam was unremarkable

Should this driver be disqualified or certified? Why?

Is an SPE required?

A 44-year-old male who was born with Cerebral Palsy presents for a physical exam. He denies any other medical history. His physical exam for the upper extremities demonstrates 5/5 strength, full range of motion, and 3 out of 4 for deep tendon reflexes. The exam findings for the lower extremities demonstrates a scissoring gait and slightly decreased dorsiflexion of the left foot. There are no balance deficiencies. Grip strength and prehension is WNL. Normal mini-mental status exam and the rest of the exam was unremarkable. Should this driver be disqualified or certified? Why? Is an SPE required?

Practice Scenario Answer

This driver meets the standards and can be certified for 2 years.

- Cerebral Palsy is not a progressive condition. The individual is born with their deficits, but some abilities can improve with surgical interventions, PT and OT
- If the ME feels that the driver does not have the ability to perform the duties of a driver, and the driver's condition is not expected to improve (fixed deformity), they could use the Skilled Performance Evaluation (SPE)

This driver meets the standards and can be certified for 2 years. Cerebral Palsy is not a progressive condition. The individual is born with their deficits, but some abilities can improve with surgical interventions, PT and OT. If the ME feels that the driver does not have the ability to perform the duties of a driver, and the driver's condition is not expected to improve (fixed deformity), they could use the Skilled Performance Evaluation (SPE).

Practice Scenario

A 52-year-old male who would like to start driving a commercial motor vehicle presents to your office for a DOT physical exam. He is missing all the fingers on the right hand, except for his thumb, due to a table saw accident 9 years ago. The injury has long since been healed. He is also wearing a custom-made brace over the left ankle due to osteoarthritis. The brace is designed to maintain the foot and ankle in proper alignment to preserve functionality and prevent further degeneration. Surgery is not recommended. The driver is also taking Enalapril for his recently diagnosed hypertension.

Physical exam:

BP: 132/76

Pulse: 64 bpm

Upper extremities:

- Right had missing digits 2-5
- Full ROM, Strength 5/5, DTR 2/4 bilaterally
- Grasp & Prehension to both hands was WNL

Lower extremities:

- Ankle Foot Orthosis (AFO) on the left with no ankle ROM
- Other than the left ankle, ROM, Strength, DTR all WNL bilaterally

The rest of the exam was unremarkable

A 52-year-old male who would like to start driving a commercial motor vehicle presents to your office for a DOT physical exam. He is missing all the fingers on the right hand, except for his thumb, due to a table saw accident 9 years ago. The injury has long since been healed. He is also wearing a custom-made brace over the left ankle due to osteoarthritis. The brace is designed to maintain the foot and ankle in proper alignment to preserve functionality and prevent further degeneration. Surgery is not recommended. The driver is also taking Enalapril for his recently diagnosed hypertension.

Physical exam: Blood pressure is 132/76, pulse is 64 beats per minute. For the upper extremities, the right hand is missing digits two through five. He has full range of motion, muscle strength, and normal deep tendon reflexes bilaterally. Grasp and prehension were found to be within normal limits for **both hands**. For the lower extremities, there is an ankle foot orthosis (AFO) on the left with no ankle range of motion. Otherwise, both lower extremities have full range of motion with muscle strength and deep tendon reflexes within normal limits. The rest of the exam was unremarkable.

Practice Scenario

A 52-year-old male who would like to start driving a commercial motor vehicle presents to your office for a DOT physical exam. He is missing all the fingers on the right hand, except for his thumb, due to a table saw accident 9 years ago. The injury has long since been healed. He is also wearing a custom-made brace over the left ankle due to osteoarthritis. The brace is designed to maintain the foot and ankle in proper alignment to preserve functionality and prevent further degeneration. Surgery is not recommended. The driver is also taking Enalapril for his recently diagnosed hypertension.

Physical exam:

BP: 132/76

Pulse: 64 bpm

Upper extremities:

- Right had missing digits 2-5
- Full ROM, Strength 5/5, DTR 2/4 bilaterally
- Grasp & Prehension to both hands was WNL

Lower extremities:

- Ankle Foot Orthosis (AFO) on the left with no ankle ROM
- Other than the left ankle, ROM, Strength, DTR all WNL bilaterally

The rest of the exam was unremarkable

Should this driver be disqualified or certified? Why?

If certified, for how long?

Is an SPE required?

Would anything be different if the driver didn't have HTN?

Does anything change if the BP was 146/82?

Should this driver be disqualified or certified? Why? If certified, for how long? Is an SPE required? Would anything be different if the driver didn't have HTN? Does anything change if the BP was 146/82?

Practice Scenario Answer

Musculoskeletal portion of the scenario:

- The driver is not missing **all** the fingers of his right hand and still has sufficient grasp and prehension to perform the duties of a driver. If this was the only issue, he could be certified for 2 years
 - If the driver was missing all his fingers including the thumb, or if he was found to have insufficient grasp and prehension, he would be eligible to apply for an SPE
- Because the driver is wearing an AFO on the left ankle and the condition is not expected to improve, this is considered a fixed deformity. They will not be able to drive until they have an SPE certificate
 - If this was the only issue, the ME could certify the driver for 2 years and mark the bullet on the form and certificate that states that the certificate must be accompanied by an SPE

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Hypertension portion of the scenario:

- Because this driver has a diagnosis of hypertension, the longest they can be certified is for one year. A blood pressure of 132/76 is below stage 1 or stage 2, so there is no need to limit the driver to less than one year
- If the blood pressure reading was 146/82, the driver should be limited to either a one-time 3-month certificate or be placed into determination pending

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End Result:

- The driver can only be certified for 1 year due to his history of hypertension
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This concludes the musculoskeletal portion of our training.