

# Occupational Physical Exams

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# Today's Agenda

- Understand the need for and motivation behind occupational physical exams
- Examine the various components that make up common exams
- Develop techniques to navigate complex regimented exams
- Explore strategies to manage generalized exams where medical criteria are less clear





- Dec 29, 1970 – Occupational Safety and Health Act created OSHA as a regulatory agency of the Department of Labor
- 1985 - Compliance Safety and Health Officer (CSHO) Medical Examination Program established as part of the Office of Personnel Management (OPM)
- Mandatory **Periodic Physical Examination**
- Mandatory **Interim Medical Evaluation**



# Types of Occupational Exams

- Pre-employment
- Fit for Duty
- Annual Screening
- DOT
- Profession Specific

Firefighter, Police, FAA, Merchant Marine



# “Pre-Employment”



- An estimated 50% of U.S. workers undergo pre-employment examinations
- The Americans with Disabilities Act forbids employers from requiring prospective employees to undergo a health examination before extending a job offer.
- Employers may make job offers conditional on passing a pre-employment examination if this policy is applied consistently to all employees in a certain job category
- In the US, the term “**Pre-Placement**” exam (PPE) is most accurate but “**Pre-Employment**” is commonly used.



# Pre-Employment Exams

- Asking for verification that potential employee is safe and capable

- Physical Standard

- Job Descriptions – details of involved activity
- Performance Evaluation (HPE)

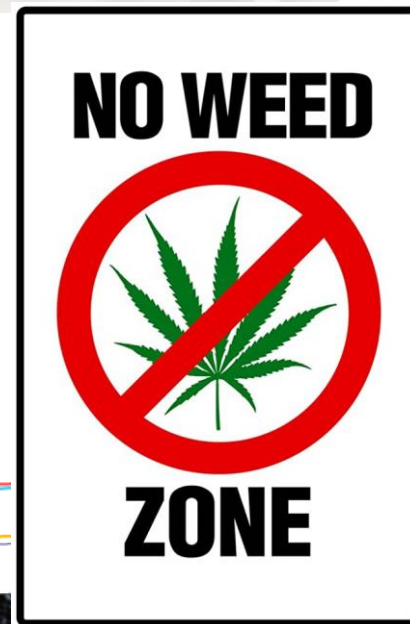
- Health & Safety Standard

- Laboratory/Serology testing
- Drug screening
- Spirometry
- Audiometry
- Radiographs
- Respirator Tests



# Why Employers Do It?

- Regulatory guidelines (OSHA, DOT)
- Ensure job performance capacity (find good hires)
- Identify those at risk for injury (reduce bad hires)
- Eliminate unwanted employees (drug screens)
- Minimize legal exposure (recurrent/existing injury)
- Establish baseline measures (occupational exposures)
- Lowers Work Comp Insurance Premiums (reduce cost)
- Gather medical information on employees (WC Claims)



# Is there really a need?

- **AARP** - 19 million working Americans between the ages of 21 and 64 have some physical limitation that may affect their ability to perform certain jobs.
- **CDC** - 25% of US Adults live with some form of disability, mobility disorders most common among older adults

## Are you hiring a worker comp claim?



Post-Employment Testing

**15%**

of all "unfit" for the job are missed by traditional screening standards

Traditional screening  
**1%** standards reject only applicants

Pre-Employment screening  
**16%** rejects applicants

\*From The Horton Group Occupational Safety Consulting & Insurance

# How much to do on a PPE?

- Depends on the employer expectations  
**Municipal Employer vs Mom & Pop Employer**
- Depends on type of job and inherent risks  
**Firefighter vs. food packing worker**
- Depends on your clinic's capacity and offerings  
**Audiometer, Spirometer, Blood Alcohol testing, etc.**
- Depends on availability of relevant guidelines  
**Written Criteria vs Good Clinical Judgement**



# Let's start with **regimented exams**

- Clear expectations of what has to be done
- Clear criteria of minimal/passing requirements
- Built in process to address concerns
- Existing forms to be completed

- DOT
- Firefighter
- FAA/Pilot
- Professional Diver



# DOT Exams

- Required for all commercial drivers
- Since 2014 can only be performed by **Certified Medical Examiners**
- Training course and exam every 10 years, 5-year interval training
- Numerous Exams -Concentra > 800,000/year  
-FastMed > 75,000/year in NC
- Highly detailed medical criteria
- MD, DO, NP, PA, Chiropractor (varies by state chiropractor laws)



Federal  
Motor Carrier  
Safety  
Administration



There are between **1.53 million** and **3.36 million** commercial drivers in the US

# FMCSA Medical Examiner Handbook

- Not all guidelines within the Medical Examiner Handbook.
- Bureaucracy and Politics are part of the process at times
  - 2016- Sleep Apnea Screening recommendations made by Medical Expert Panel and in August 2017 they were withdrawn
- Proposed new draft in 2022 withdraws a lot of guidance and puts more onus on providers



Federal Motor Carrier Safety Administration  
(FMCSA)

Medical Examiner Handbook



**Current Version**  
**260 pages**

**Proposed Draft**  
**178 pages**

# Some Guidelines in Stealth Mode

- FMCSA and Kidney Failure Guidelines: Details are located in a **PDF file posted in 2015** that is a collection of **Powerpoint slides from a 2008** presentation by the FMCSA Medical Expert Panel.
- When determination details are missing, **Google** search “FMCSA” and the topic and you usually find what you need.





# Quick References can be very helpful in the midst of busy clinics

Condition (only most common or most relevant listed here)	Waiting Period	Max. Certification	Required evaluation by specialist?	Many advisory criteria are not absolute – Use Clinical Judgment Notes:
Progressive Vision Disorders	0	1 year	Annual eye exam	
HTN 140-159/90-99 160-179/100-109 ≥ 180/110 ≥ 140/90 with HTN Rx	0 0 0 0	1 year 3 mo - once 0 1 year	Lifestyle change (ok 1 <sup>st</sup> time only). HTN Rx warranted. HTN Rx warranted. Annual follow-up with Tx Provider.	-If Driver has had previous HTN and returns without adequately controlled BP, disqualify, defer, or give 1-month certification as warranted by individual presentation. Intervention needed. Schedule follow-up. -If BP ≥ 180/110 disqualify. Once BP under < 140/90 can certify for 6 months. If remains <140/90 after 6 months may certify for 1 year.
Diabetes Mellitus	0	1 year	Regular follow-up with Tx Provider.	Hgb A1C must be below 10. Inquire about monitoring, symptoms, progression. Signs of inadequate control. Insulin use requires MCSA-5870 form completed by Tx Provider.
Sleep apnea (OSA) CPAP Post-surgical intervention.	1 month 3 months	1 year 1 year	<b>STOP-BANG</b> Criteria: One point for each of the following · <b>SNORE</b> loudly? · Often feel <b>TIRED</b> , fatigued, sleepy during the day? · Anyone ever <b>OBSERVED</b> you stop breathing during sleep? · Have or being treated for high blood <b>PRESSURE</b> ? · <b>BMI</b> > 33 · <b>NECK</b> circumference > 16 inch	-Disqualify and needs sleep study if: · You observe unexplained sleepiness · MVA likely related to sleep disturbances · STOP-BANG score 7-8 -Certify for 3 months and needs sleep study if: · STOP-BANG score 5-6 -Disqualify if non-compliant with CPAP (4 hrs/night, 70% nights)
<b>FASTMED URGENT CARE</b>	-Sleep apnea screening guidance has not been finalized by the FMCSA -FastMed uses the STOP-BANG screening criteria.			
Myocardial Infarction (MI)	2 months	1 year	Cardiology clearance yearly. ETT every 2 years.	To certify, driver must be asymptomatic, tolerate medications, have a satisfactory ETT, LVEF ≥ 40%, no EKG ischemic changes.
Coronary Artery Bypass Surgery	3 months	1 year	Cardiology clearance yearly ETT annually after 5 years.	To certify, driver must be asymptomatic, tolerate medications, LVEF ≥ 40%.
Pacemaker -AV block/sinus node dysfunction. -Neurocardiogenic syncope.	1 month 3 months	1 year	Regular follow-up with Tx Provider.	To certify, driver must have documentation indicating the presence of a functioning pacemaker and of routine pacemaker checks. Must be asymptomatic. Implantable cardioverter defibrillator (ICD) disqualifies.
TIA	1 year	1 year	Need Neurologist release.	Must not have any disqualifying deficits. Disqualify if on anticoagulants.
Stroke -Cerebellar or brainstem -Cortical/subcortical (seizure risk)	1 year 5 years	1 year 1 year	Need Neurologist release. Annual follow-up with Tx Provider.	Must not have any disqualifying deficits. Disqualify if on anticoagulants.
Seizure (provoked by systemic cause such as fever)	0	2 years	Need Neurologist release.	Certify once the underlying systemic dysfunction has been corrected and there is no disqualifying risk of recurrence.
Seizure (unprovoked or unknown cause)	5 years	1 year	Need Neurologist release.	Driver should be seizure free & off anticonvulsant medication for at least 5 years to distinguish between a medical history of a single instance of seizure and epilepsy.
Traumatic Brain Injury Mild – no seizures. Mild w/ early seizure. Moderate w/ early seizures.	2 years 1 year 5 years	2 years 1 year 1 year	Need Neurologist release. Need Neurologist release. Need Neurologist release.	Must be off anticonvulsant therapy for entire waiting period · Mild = initially unconscious < 30 minutes. · Early seizure = 1 <sup>st</sup> week. · Moderate = initially unconscious 30 min – 24 hours. · Severe = initially unconscious for > 24 hours = Disqualify.
Epilepsy (2 unprovoked seizures).			Need Neurologist release.	Generally disqualifies forever, but may certify after 10 years off any anticonvulsant therapy and seizure free.
Benign Positional Vertigo	2 months	2 years		Must be symptom free for waiting period.
Major Depression / Bipolar -After major depressive episode. -After suicide attempt, manic episode, severe depression.	6 months 1 year	1 year 1 year	Consult with mental health professional.	Waiting period must be symptom-free. Medication can be a major concern. Must comply with treatment program. Suicidal thoughts or active psychosis = Disqualify.
COPD (chronic bronchitis / emphysema)	0	2 years	Regular follow-up with treating physician including spirometry.	Spirometry recommended for smokers > 35 years old with breathing difficulty Disqualify if: hypoxemia at rest, chronic respiratory failure, or history of continuing cough with cough syncope, FEV1 < 65% predicted.

## History: Additional Questions to Ask Every Driver

Are you a smoker/ How much & for how long?  
Do you have any Chronic Medical conditions?  
Do you have any current Rx? Do you use any OTC medications?  
Are there any surgeries or hospitalizations in your health Hx?  
Do you have known physical limitations / disabilities?

**DISCLAIMER:** This quick reference was last updated in 2016. The FMCSA rules can and do change. More complete and current information can be found on the FMCSA website.

\*\*\* Drivers may potentially be cleared if not using while driving, no pattern of misuse, and prescribing MD provides written confirmation of responsible use and that use will not impair operation of a motor vehicle.

## Rx: Disqualifiers

Schedule I or II drugs	Insulin	Methadone
Benzodiazepines ***	Chantix	Any Rx to prevent seizures
Narcotics*** or illegal drugs (there is NO medical marijuana in federal law)		
ANY other OTC or Rx medication that the ME thinks may compromise safety		

## Some additional Rx often considered unsafe while driving:

Morphine	Pentazocine	Phenytoin	Chlordiazepoxide
Fentanyl	Tramadol	Chlorpromazine	Trazadone
Meperidine	Phenobarbital	Thioridazine	Diphenhydramine
Buprenorphine	Primidone	Meprobamate	Eszopiclone
Zaleplon (Sonata)	Zolpidem (Ambien)	Zopiclon	(Lunesta)

## Disqualifying Conditions

**Any condition or medication can disqualify if the Medical Examiner thinks it is a safety concern**

Vision inadequate (acuity, color, peripheral)	Narcolepsy
Monocular vision - see exemption below	Motor neuro disease (such as ALS)
Unstable proliferative retinopathy	Huntington's disease
Hearing inadequate (even with aids)	Wilson's disease
Uncontrolled vertigo	Current diagnosis of alcoholism
Meniere's disease	Schizophrenia (confirmed diagnosis)
Nonfunctioning labyrinth or labyrinthine fistula	Suicidal behavior or ideation
Chronic cough with cough syncope	Active psychosis
Respiratory failure	Dementias
Uncontrolled sleep apnea	CNS malignant tumors
Oxygen therapy	Epilepsy
CVD likely to cause syncope, dyspnea, collapse or heart failure	Mental conditions that affect judgment or perception
Implantable cardioverter - defibrillators	Migraines that cause neurologic deficit (such as visual deficit)
Insulin controlled diabetes - see exemption below	Dialysis

## Disqualifying Conditions that may be appealed\*

Multiple Sclerosis
Myopathy
Dyskinesia
Muscular dystrophies
Neuromuscular junction disorders
Cerebellar ataxia
Peripheral neuropathy
Parkinson's disease
Treatable dementia
CNS benign tumor

\*appealed to neurologist plus road test

Urinalysis	Normal	Dipstick Range	Possible causes (not comprehensive)
Blood	neg	- to +++	Inflammation, infection, Kidney disease, Prostate disease, Renal cancer
Glucose	neg	0 - ≥ 2000mg/dL	Diabetes, Pregnancy, Recent large meal (not common)
Protein	neg	0 - ≥ 2000mg/dL	Fever, Strenuous activity, Diabetes, Kidney Disease, Heart Disease, HTN, UTI, Drugs
Specific Gravity	1.000-1.030	1.000-1.030	Diluted, Dehydration, Glucosuria, Heart failure, Kidney failure, pH < 6 or > 7

Urinalysis	Common First Step of Follow-up Procedures for Positives
Blood	UA with microscopic analysis and/or referral to specialist
Glucose	Fingerstick glucose (must be below 200 mg/dL) Hgb A1C (must be below 10.0 %)
Protein	Assess Hx for likely causes. If none, repeat dipstick another day. If present, 24-hour urine protein or urine protein-creatinine ratio
Specific Gravity	Assess Hx for likely causes (like dehydration). If none, repeat dipstick another day. If persistent, consider possible disease, refer.

"Exemptions"	When Required	Mark the Certificate	Max Cert.	To apply, driver will also need:
Federal Vision <b>DO NOT CHECK WAIVER BOX</b>	Either eye cannot meet all standards: · 20/40 visual acuity · 70° peripheral vision · Able to distinguish red, green, amber	<input type="checkbox"/> Accompanied by Vision Evaluation Report (MCSA-5871)	1 year	· Monocular Vision Evaluation Report (MCSA-5871) completed by optometrist or ophthalmologist within 45 days of exam date. · Long form and certificate
Diabetes <b>DO NOT CHECK WAIVER BOX</b>	Insulin-Treated Diabetes Mellitus (ITDM)	<input type="checkbox"/> Accompanied by ITDM Assessment Form (MCSA-5870)	1 year	· ITDM Form (MCSA-5870) completed within 45 days of exam. · Long form and certificate
Skill Performance Evaluation (SPE)	· Limb amputation · Use of orthosis · Fixed deficit/impairment of limb that may affect ability to do duties safely	<input checked="" type="checkbox"/> Accompanied by a Skill Performance Evaluation Certificate	2 years	· Application packet · Long form and certificate · Evaluation by physiatrist or orthopedic surgeon · Road test by motor carrier

# Applying Criteria in a real world

Let's pretend you are DOT Certified and ready to do exams

The hard work has just begun, and it can be challenging to apply the criteria to **real people** in the **real world...**



# Societal Trends

- Divisions are emphasized.
- Hate generates more clicks than love. Social media prioritizes outrage through algorithms.
- [Epidemic of Anger](#) - Human aggression increases online due to partial anonymity.
- [Epidemic of Loneliness](#) - Any attention is better than no attention.
- [Epidemic of Indifference](#) - Anger gets you heard, even when you have nothing to say.
- Focus on superficial versus substantive.

# Our jobs are harder

- Compassionate care is tough to do when the audience is increasingly angry.
- Electronic Medical Records shows us who is not being honest. This leads to more confrontational situations.
- We spend more effort managing the **person** instead of the **medical issue**.
- Fear of litigation makes us hesitant to apply criteria.
- Fear of losing business may impact our thinking.



# Difficult Case – DOT with DM

- 47 yo male driver completes form and states he has DM and takes Metformin and Glipizide and sugars are running about 130-180 most times he checks.
- Exam is normal
- He does not know his last A1C so you check Epic Care Everywhere (EMR).
- You see his A1C is 8.7 and he has diabetic neuropathy, uses Lantus, and takes Gabapentin.

# What do you do?

- Always refer to the FMCSA guidelines. If you don't know, don't guess, find out.
- Share facts, not opinion or emotions.
- Remember the driver has just been caught in a lie and gets defensive (and we can get offended).
- Don't try to fix the lying – just explain how he can meet FMCSA guidelines and that you want to help him do it.
- Don't take it personally – you did not make up any of the regulations.



# FMCSA Guideines

- Diabetes needs to be “managed”
  - Must be under the care of a provider
  - Must have A1C under 10.0
- If insulin use the PCP must complete the Insulin-Treated Diabetes Mellitus assessment Form (MCSA-5870).
- Peripheral Neuropathy is automatically disqualifying unless cleared by MD/DO Neurologist

**DRIVING CHANGE 2023**

MCSA-5870 OMB No.: 2126-0006  
Expiration Date: 03/31/2025

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

Individual's Name: \_\_\_\_\_

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 failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-0006. Public reporting for this collection of information is estimated to be approximately 8 minutes per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRA, 1200 New Jersey Avenue, SE, Washington, D.C. 20590.

**INSULIN-TREATED DIABETES MELLITUS ASSESSMENT FORM**

Name: \_\_\_\_\_ DOB: \_\_\_\_\_

Driver's License Number (if applicable): \_\_\_\_\_ State: \_\_\_\_\_

This individual is being evaluated either to determine whether he/she meets the physical qualification standards of the Federal Motor Carrier Safety Administration (FMCSA) to operate a commercial motor vehicle or because the individual has recently experienced a severe hypoglycemic episode. A treating clinician should complete this form to the best of his/her ability based on his/her knowledge of the individual's medical history. Completion of this form does not imply that a treating clinician is making a medical certification decision to qualify the individual to drive a commercial motor vehicle. Any determination as to whether the individual is physically qualified to drive a commercial motor vehicle will be made by a certified medical examiner on FMCSA's National Registry of Certified Medical Examiners.

*FMCSA defines a treating clinician as a healthcare professional who manages, and prescribes insulin for, treatment of the individual's diabetes mellitus as authorized by the healthcare professional's applicable State licensing authority.*

**Instructions to the Individual:**

When you are being evaluated prior to a medical certification examination, the certified medical examiner must receive this form and begin the examination no later than 45 calendar days after a treating clinician signs this form.

When you are being evaluated after a severe hypoglycemic episode, you must retain this form and give it to the certified medical examiner at your next medical certification examination.

**Insulin-Treated Diabetes Mellitus Diagnosis**

1. Date insulin use began: \_\_\_\_\_

**Blood Glucose Self-Monitoring Records**

2. Has the individual maintained at least the preceding 3 months of ongoing blood glucose self-monitoring records while being treated with insulin that are measured with an electronic glucometer that stores all readings, records the date and time of readings, and from which data can be electronically downloaded?  
 Yes  No

3. Has the individual provided at least the preceding 3 months of electronic self-monitoring records while being treated with insulin from his/her glucometer to the treating clinician for review?  
 Yes  No

# Insulin Use

- Drivers must have the prescriber complete the Insulin-Treated Diabetes Assessment Form.
- Must be done within 45 days of exam date.
- We must review the form and be vigilant.
- Replaces the prior “waiver” system.
- Do not check the box for “waiver” on the DOT form.



### Blood Glucose Self-Monitoring Records

2. Has the individual maintained at least the preceding 3 months of ongoing blood glucose self-monitoring records while being treated with insulin that are measured with an electronic glucometer that stores all readings, records the date and time of readings, and from which data can be electronically downloaded?
- Yes    No
3. Has the individual provided at least the preceding 3 months of electronic self-monitoring records while being treated with insulin from his/her glucometer to the treating clinician for review?
- Yes    No

## Must have at least 3 months of insulin use and glucose monitoring reviewed by PCP

5. Is the individual compliant with blood glucose self-monitoring based on his/her specific treatment plan?
- Yes    No

Comments, if necessary:

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### Severe Hypoglycemic Episodes

6. Has the individual experienced any severe hypoglycemic episodes within the preceding 3 months? *FMCSA defines a severe hypoglycemic episode as one that requires the assistance of others, or results in loss of consciousness, seizure, or coma.*
- Yes    No

## Must be compliant and have no significant hypoglycemia

# Diabetes- hypoglycemia

Do Not Certify if the driver has:

- In the last 12 months, experienced a hypoglycemic reaction resulting in:
  - Seizure
  - Loss of consciousness
  - Need of assistance from another person
  - Period of impaired cognitive function that occurred without warning.
- In the last 5 years, had recurring (two or more) disqualifying hypoglycemic reactions (as described above).



- **Do not certify if the driver has:**
  - **A diagnosis of peripheral neuropathy that interferes with safe driving.**
  - **A diagnosis of proliferative retinopathy (e.g. unstable proliferative or non-proliferative)**

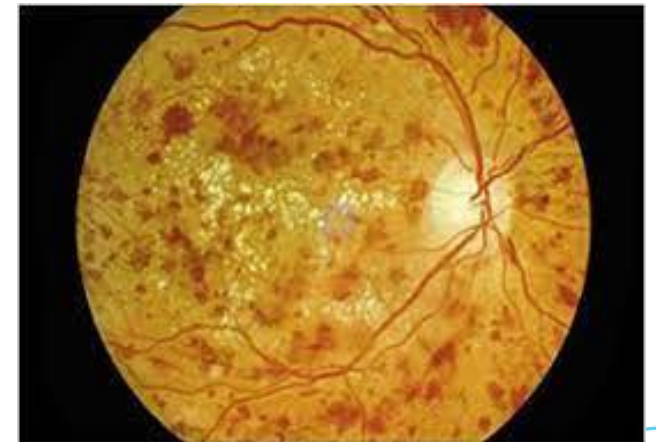
d. Peripheral neuropathy (e.g., sensory loss, decreased sensation, loss of vibratory sense, loss of position sense)?

Yes  No

10. Has the individual been diagnosed with either severe non-proliferative diabetic retinopathy or proliferative diabetic retinopathy?

Yes  No

- **Peripheral neuropathy requires MD/DO Neurology clearance**
- **Proliferative retinopathy requires Ophthalmology clearance**



# Factual Conversation

- Share what you have learned through outside records or results
- Let the driver know you have to (by law) address the concerns.
- When the patient gets emotional, you can't.
- If the driver says the information is wrong let them know all you need is a **letter from the PCP clarifying the correct information.**
- Clarify **EXACTLY** what is needed to meet criteria and write it on the long form.



# DOT Pending or Failure

- Give details of needed information on page 3 of the long form

- Clarify medical condition for failure or pending on page 4 of the long form

6. Cardiovascular  
7. Lungs/chest

Discuss any abnormal answers in detail in the space below and indicate whether it would affect the driver's ability to operate a CMV.  
Enter applicable item number before each comment.

Driver needs (1) Hgb A1C within the last 3 months and (2) Insulin Use Form completed (3) Neurology clearance for peripheral neuropathy

(Attach additional sheets if necessary)

Page 3

**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](#) (Federal)

Driving within an exempt intracity zone (see [49 CFR 391.62](#)) (Federal)

Determination pending (specify reason): DM, insulin use, Neuropathy

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: \_\_\_\_\_

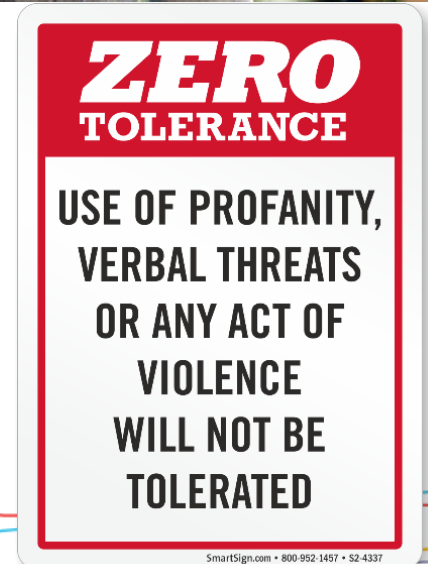
**No one made me  
do this before**



**“I can’t comment on what  
someone else did before. All I can  
do is try to help you meet the  
FMCSA requirements”**

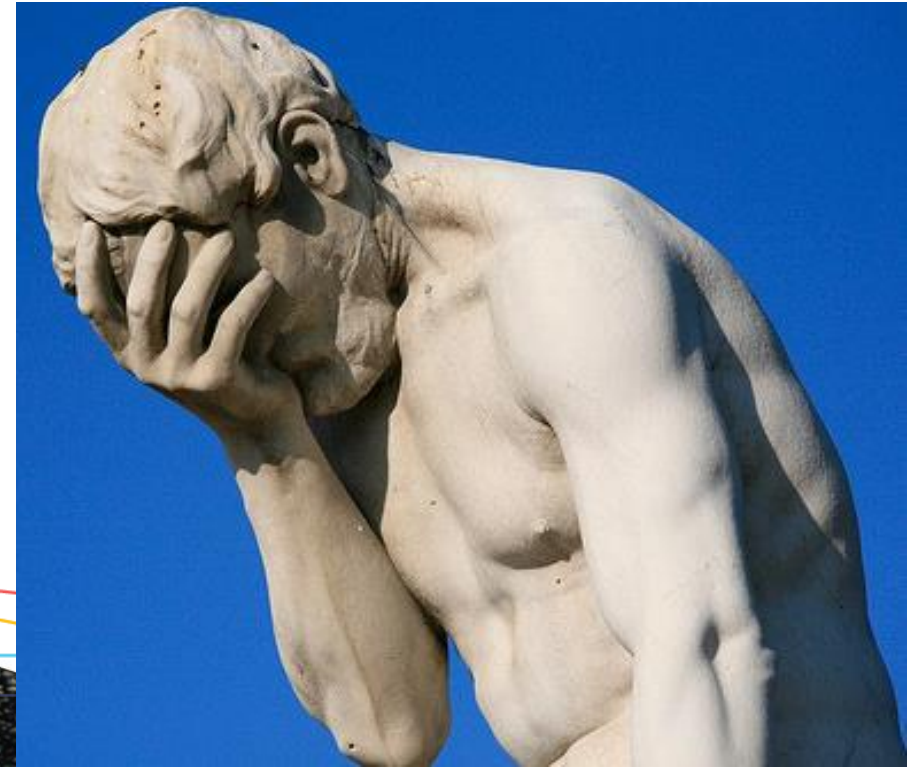
# What if the patient is still angry?

- Continue to pleasantly restate the steps to move forward.
- Let the driver know you do not decide the rules but you do have to follow them.
- Remind them you are ready to help once we get the needed information.
- No one should feel threatened.
- **DO NOT HESITATE TO CALL SUPERVISORS.** They can act as the voice of authority and take the heat.
- I'm happy to be the "bad cop" so you can be the "good cop".



# Failing a patient on an Exam

- Can be career-ending and put someone in financial peril
- Needs to be done only when all options are exhausted
- If through a regimented program (DOT, NFPA, Police) you need to **list the specific criteria** resulting in failure
- Employees may have an appeal process
- Anger **ALWAYS** directed at us
- Don't take it personally
- Keep your calm despite patient's attitude



# When to make DOT Pending?

- Whenever you can!
- Once a card is issued (no matter for how long) the FMCSA does not allow amendments or extension
- The driver **MUST** have and pay for a new physical next time (FMCSA rule)
- If a driver has **ANY CHANCE** to address the concerns within 45 days, give him/her that chance.



# Fire Fighter Physical



- National Fire Protection Agency (NFPA) Standards
- Standard 1582 on Comprehensive Occupational Medicine Programs (conforms with OSHA standards)
- Chapter 6 pages 13-47: PE guidelines, last updated 2018
- Includes
  - Hazardous Waste Operations and emergency response
  - Respiratory Protection
  - Occupational Noise Exposure
  - Bloodborne Pathogen



# NFPA 1582 Standard Includes

- History & Physical Exam
- Urinalysis
- CBC, CMP
- Lipid Profile
- TB Screening
- Hepatitis Screening\*
- Spirometry
- Respirator Fit Test
- Sleep Apnea Screen/Guidance
- Vaccination Review/Update\*
- EKG
- Cardiac Risk Assessment
- Cancer Screening\*
- Audiometry
- Vision Testing
- Chest X-ray\*



# Annual Occupational Medical Eval

- Every 12 months ( $\pm 3$  months)
- ASCVD Risk: 2-4% risk over 2 years or  $\geq 5\%$  over 10 years need stress testing (negative stress test repeated every 2-5 years)
- **Cancer Screening**: #1 cause of death among firefighters, 13% increased risk of CA, 9% increased death from CA
  - **Breast**- Mammography biannually over age 40, annually over age 50
  - **Colon**- screening (stool based at age 40 and colonoscopy at 45-75)
  - **Prostate**- discussion/screen age 50 for all and high-risk patients at age 40 (African American or 1<sup>st</sup> degree relative with prostate CA)
  - **Lung**- Low Dose CT annually age 50-74 for all smokers, those with 20-year pack hx or quit within the last 15 years

# Disqualifying conditions

- **Category A**- prevents clearance
- **Category B**- allows clearance as long as the individual can perform essential duties without significant risk to self or others



## 6.3.4\* Ears and Hearing.

6.3.4.1 Category A medical conditions shall include the following:

- (1) Chronic vertigo or impaired balance as demonstrated by the inability to tandem gait walk
- (2) On audiometric testing, without the aid of a hearing assistance device, average hearing loss in the unaided better ear worse than 40 decibels (dB) at 500 Hz, 1000 Hz, 2000 Hz, and 3000 Hz when the audiometric device is calibrated to ANSI/ASA S3.6, *Specification for Audiometers*
- (3) Any ear condition or hearing impairment that results in the candidate not being able to perform one or more of the essential job tasks

6.3.4.2 Category B medical conditions shall include the following:

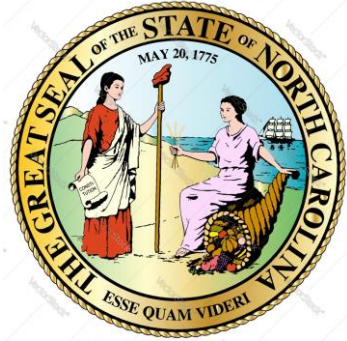
- (1)\* Unequal hearing loss
- (2) Average uncorrected hearing deficit at the test frequencies 500 Hz, 1000 Hz, 2000 Hz, and 3000 Hz worse than 40 dB in either ear
- (3) Atresia, stenosis, or tumor of the auditory canal
- (4)\* External otitis, recurrent
- (5)\* Agenesia or traumatic deformity of the auricle
- (6)\* Mastoiditis or surgical deformity of the mastoid
- (7)\* Ménière's disease, labyrinthitis, or tinnitus
- (8)\* Otitis media, recurrent
- (9) Surgical procedures to correct or improve hearing or other conditions of the ear

# Police Officer Exam

- Municipalities create standards
- Include medical exam guidelines
- May include physical performance component
- Include detailed list of Essential Job Functions
- Some are job responsibilities are extreme and involve significant **risk, physical stress, mental stress and judgement**
- Safety of employee and general public
- Provider needs to address “worst case” scenarios when making determinations



# MEDICAL SCREENING GUIDELINES FOR THE CERTIFICATION OF CRIMINAL JUSTICE OFFICERS IN THE STATE OF NORTH CAROLINA



- NC Department of Public Safety
- Guidelines used across the state
- 43-page document with guidelines and job description

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## Enforcement Tactics/Use of Force

- **Begin with a general assessment of patient with an eye on what police typically do**
- **Any medical concerns can be fleshed out in light of the particular job description and criteria in the guidelines**

- Use of force as necessary and appropriate in apprehension of criminal suspects.
- Carry authorized firearm when off duty.
- Clean and inspect weapon.
- Carry “secondary” firearm on duty.
- Fire weapon in self-defense at attacking or dangerous animal.
- Use less lethal munitions, e.g. bean bag, rubber pellets, etc.
- Participate in firearms training.
- Discharge firearm from moving vehicle (not including training).
- Discharge firearm in low light conditions, e.g. at night, in darkened room, etc. (not including training).
- Discharge firearm at person.
- Discharge firearm from protective cover position (not including training).
- Draw weapon to protect self or third party.
- Recognize disguised weapons, e.g. belt buckle, knife.
- Detain person at gunpoint.
- Carry knife on duty.
- Unload various firearms (including seized firearms) safely.
- Clear malfunction of various firearms (not including training).
- Reload firearms under combat conditions (not including training).
- Fire weapon in dark environment while using flashlight (not including training).
- Discharge shoulder weapons, e.g. rifle, shotgun, etc. (not including training).
- Defend oneself from position on ground.
- Use fists to defend one’s self.
- Use conductive energy weapon, e.g. taser, to control or subdue person.

## Physical Abilities

- Perform strenuous physical activities in a series, e.g. sprint, run upstairs, wrestle, pull, carry, etc.
- Perform duties wearing full duty gear.
- Perform duties wearing body armor for extended periods of time.
- Push open a door with your shoulder.
- Kick open a door with your foot.
- Break up fights between two or more persons.
- Carry by yourself an immobile child.
- Carry by yourself an immobile adult.
- Carry with someone else an immobile child on a stretcher or other device.
- Carry with someone else an immobile adult on a stretcher or other device.
- Drag by yourself an immobile child.
- Drag by yourself an immobile adult.
- Drag with someone else an immobile child.
- Drag with someone else an immobile adult.
- Climb a ladder.
- Crawl under an obstruction.
- Jump down from a height.
- Climb over a fence.
- Jump/vault over a fence or other barrier.
- Climb through a window or other such opening.
- Work in a confined, closed-in area.
- Drag or push heavy objects other than a vehicle.
- Push a motor vehicle out of a lane of traffic with another person.
- Jump across ditch or other such obstacle.
- Lift while in a stationary position a heavy object or person.
- Perform duties while wearing heavy equipment other than gun belt.
- Subdue person resisting arrest.
- Jump over obstacles while running.
- Stand for more than 4 hours of work shift.
- Walk for more than 4 hours of work shift.
- Sit for more than 4 hours of work shift.
- Use body pressure points to control person.
- Catch a falling person to prevent his/her injury.
- Bend over/kneel to search under vehicle.
- Grip person tightly to prevent escape/control movement.
- Disarm violent armed suspect.
- Physically remove person from vehicle who is resisting arrest.
- Climb fire escapes.
- Climb stairs in multiple story buildings.
- Strike person with expandable baton.
- Strike animal with expandable baton.
- Extend arm to reach and search tight spaces.
- Use controlling technique to gain compliance.
- Use submission holds to control person.
- Twist at waist to direct traffic.
- Hold person upright to prevent their falling, e.g. drunk.
- Crawl to search under car/residence, etc.
- Support person while walking to prevent their falling.
- Bend/kneel to apply shackles, cuffs, etc.
- Use chemical/OC spray to control person(s).
- Change tire on law enforcement or citizen's vehicle.
- Continue functioning while under effects of OC spray/chemical agents.
- Use face mask to prevent contact with chemical agents.
- Perform physically demanding duties for extended periods of time without meal or comfort breaks.
- Recognize and differentiate among sounds from multiple, simultaneous direction

# NC Dept of Public Safety

- Prefer that the candidate is failed if he/she does not meet the criteria or if there is any question about certifiability
- No “pending” option
- They use a secondary appeals process that allows a candidate a chance to address any medical concerns or for PCP to clarify any needed medical judgement
- “Inefficient” from my perspective but the protocol is up to the employer



# A Brief Moment on **Narcotics** and controlled **Anxiolytics**

WE INTERRUPT THE  
REGULARLY SCHEDULED  
PROGRAM TO BRING YOU  
THIS IMPORTANT MESSAGE

- Be cautious about these medications as the risk for impairment is significant and variable
- Difficult to determine risk in any individual patient on them chronically who is likely habituated
- Practically there is usually little risk but medicolegally that is almost impossible to prove
- Only “certify” a patient with prescriber clearance and in a setting where risk to patient and others is minimal



# FAA Pilot Physicals

- Must take training to become certified **Aviation Medical Examiner**
- Must be need for AMEs in your area
- Only MD/DO, no APPs can qualify
- Must complete (1) Medical Certification Standards and (2) Procedures Training and Clinical Aerospace Physiology Review
- Must then attend a Basic AME Seminar
- Refresher Course required every 3 years
- Must attend AME Seminar ever 6 years



- Regimented clinical guidelines and process
  - Thorough Hx & PE
  - Review of 3 years of medical records
- Very strict criteria for clearance

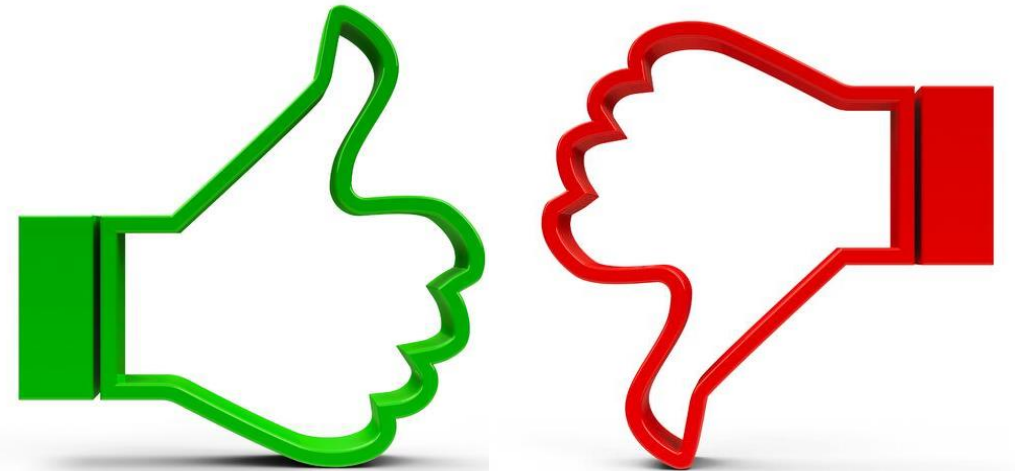
# OSHA Respirator Physical

- Multiple health-related and symptom questions
- If all answered “**no**” you can clear the employee for respirator use without any physical
- If any of the main 9 medical questions answered “**yes**” you must do a physical exam
- If needed, you can obtain chest x-ray or spirometry or send for formal pulmonology evaluation



# Other End of the PPE Spectrum

- Generic Expectations, “Okay to work” scenarios
  - No specific criteria or guidelines
  - No specific forms to complete
  - Pass/Fail options only
- 
- Examples:
    - Temp Agency PPE on all their employees
    - Travel Nurse exam for new assignment



# Generic Physical Form

## Physical Exam Form

NAME: \_\_\_\_\_ TODAY'S DATE: \_\_\_\_\_

JOB TITLE/ POSITION: \_\_\_\_\_ DOB: \_\_\_\_\_ Gender: \_\_\_\_\_

Explain any "YES" answers on the lines below. Circle any questions you do not understand and would like the provider to review with you.

HAVE YOU EVER HAD:

- |   |     |    |
|---|-----|----|
| 1. A major illness, surgery, or injury within the last 5 years            | YES | NO |
| 2. Any family history of sudden death or syncope                          | YES | NO |
| 3. Head/Brain injuries, disorders, or illnesses                           | YES | NO |
| 4. Seizures, epilepsy   | YES | NO |
| 5. Eye disorders or impaired vision                                       | YES | NO |
| 6. Ear disorders or hearing loss  | YES | NO |
| 7. Heart disease or heart attack; other heart conditions or heart surgery | YES | NO |
| 8. High blood pressure  | YES | NO |
| 9. Muscular Disease   | YES | NO |
| 10. Shortness of Breath   | YES | NO |
| 11. Lung Disease, emphysema, asthma, chronic bronchitis                   | YES | NO |
| 12. Kidney disease, dialysis  | YES | NO |
| 13. Liver Disease   | YES | NO |
| 14. Digestive problems  | YES | NO |
| 15. Diabetes or elevated Blood Sugar controlled by diet, pills, insulin   | YES | NO |
| 16. Nervous or psychiatric disorders                                      | YES | NO |
| 17. Fainting, dizziness. Or loss of consciousness                         | YES | NO |
| 18. Sleep disorders, pauses in breathing while sleeping                   | YES | NO |
| 19. Stroke/paralysis  | YES | NO |
| 20. Missing or impaired hand, arm, foot, leg, finger, or toe              | YES | NO |
| 21. Spinal injury or disease  | YES | NO |
| 22. Chronic low back pain   | YES | NO |
| 23. Skin problems   | YES | NO |

Current Medications: \_\_\_\_\_

Comments: \_\_\_\_\_

I hereby state that, to the best of my knowledge, my answers to the above questions are complete and accurate.

Patient Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Provider Exam

NAME: \_\_\_\_\_

HEIGHT: \_\_\_\_\_ WEIGHT: \_\_\_\_\_ BMI: \_\_\_\_\_ BP: \_\_\_\_\_ PULSE: \_\_\_\_\_

VISION: R 20/ \_\_\_\_\_ L 20/ \_\_\_\_\_ Both 20/ \_\_\_\_\_ CORRECTED: YES NO

HEARING: Right \_\_\_\_\_ Left \_\_\_\_\_

300Hz	1000Hz	2000Hz	300Hz	1000Hz	2000Hz
Average: _____			Average: _____		

-OR-

Whisper Test Results Record distance (In feet) from patient at which a forced whispered voice can first be heard	Rt Ear	Lt Ear

Use Ancillary Studies form (uploaded to SharePoint) for additional testing required by Employer on protocol such as Urinalysis, EKG or Pulmonary Function Test.

Physical	Normal	Abnormal
General Appearance		
Eyes-Ears-Nose-Throat		
Neck		
Lymph Nodes		
Heart		
Lungs		
Abdomen		
Back		
Shoulder-Arm		
Elbow-Forearm		
Wrist-Hand		
Hip-Thigh		
Knee		
Leg-Ankle-Foot		
Pulses		
Skin		
Genitalia/Hernia		
Other		

\_\_\_\_\_ Cleared without Exceptions

\_\_\_\_\_ Cleared **with Exceptions**: \_\_\_\_\_

\_\_\_\_\_ **Not** Cleared due to: \_\_\_\_\_

Provider Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Provider Name (Please Print): \_\_\_\_\_

(Only if required):

Supervising Physician Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervising Physician Name (Please Print): \_\_\_\_\_

# Documentation Expectations

- Even if completing a simple “yes” or “no” type form you should document the information (H&P) that got you to that conclusion
- Clarify the concerns if you cannot pass the employee
- Consider holding the determination until you get clarifying outside information

**“Patient cleared after PCP clears for HTN”**

**“Patient needs negative stress test before being cleared”**

**“Patient needs PCP letter stating depression and anxiety are stable and well-controlled”**

# NC Public School Teacher Exam

- Simple criteria with a lot of room for judgement
- I use the standard H&P along with this form
- I use a stamp that states:

**Certification based on single examination with no access to employee medical records for review.**

## I. Communicable Disease

By my signature I certify that the above **named person does not have any communicable disease, including tuberculosis**, that poses a significant risk of transmission in our schools or would impair this person's ability to perform the duties of the job, except as may be noted below. Further, I certify that this person is free of any physical or mental disability that would impair job performance.

If unable to certify the above, please comment:

---

---

## II. Other Health Areas

AREAS	LIMITATIONS		NATURE OF LIMITATIONS (continue on back as needed)
	YES	NO	
Vision			
Hearing			
Heart			
Lungs			
Lifting/Carrying			

Appropriate Immunizations	Current?		Any Immunization Recommendations
	YES	NO	
Td (tetanus), Hep B, MMR, etc.			
TB Skin/PPD/Mantoux			

Date: \_\_\_\_\_

\_\_\_\_\_  
Physician, Physician's Assistant, or Nurse Practitioner (Type or Print)

SIGNATURE: \_\_\_\_\_

Physician, Physician's Assistant or Nurse Practitioner License/Registration #: \_\_\_\_\_

State\* Granting License/Registration: \_\_\_\_\_

\*For initial employment of an out-of-state applicant the certificate may be completed by a health care provider with an out-of-state unrestricted current license or registration.

# Medical Judgement Required

- Without strict criteria we often have to make more subtle or opinion-based decisions
- Gather outside information and build your decision on the judgement of the Provider managing the underlying conditions or medications
- **Front Page News Test**
  - Your decision should make sense to an average person on the street
  - You have no opportunity to explain or justify
- **12 Juror Test**
  - Can you explain yourself well from the witness stand



# Common Challenges

- Controlled prescription use
- Psychiatric disease
- Borderline control of chronic disease
- Unsure of patient honesty/disclosure
- Questionable stamina (obesity)
- Underlying MSK conditions
- Active acute disease process



# How to Decide...?



- Consider the following factors

1. What is the nature of the job (physical/psychological stress)?
2. What harm could come to the patient?
3. What harm could come to others?

- I can clear the person with borderline HTN control (160/97) if the job requires no physical exertion but can't if it requires significant or sustained physical exertion.
- I can clear the person with moderate depression & panic disorder for desk work but maybe shouldn't if they are going to be doing childcare.

# Fit for Duty Exams

- Typically required when an employee is returning from a medical-related absence
- Knowledge of the precipitating cause and course of care and recovery is critical to good assessment
- Use the same criteria as a pre-employment exams
- May require a specific clearance statement from the treating provider



# Human Performance Evaluation

- Lifting and carrying
- Pushing and pulling
- Upper body push and pull
- Climbing
- Aerobic capacity
- Muscular strength
- Flexibility
- Endurance



- Some look at general physical capabilities
- Some are specific to job-related tasks and have pre-determined thresholds

# Human Performance Evaluation

- Requires space, equipment and trained staff which few offices have
- Can be arranged through local Physical Therapist partners
- PTs typically have the needed expertise and can work with employers to develop objective criteria
- The medical provider may still be asked to clear someone after a formal HPE although more common for PT to be the final vote



# OSHA Guidelines

- [www.osha.gov/medical-surveillance](http://www.osha.gov/medical-surveillance)
- Occupation-specific
- Exposure-specific
- Helps determine the components of pre-employment and surveillance medical screening
- Sets standards for patient evaluation and training criteria for medical personnel

# How you can drive change:

- **Make sure you understand the needs of the employer when performing PPEs**
- **Use established criteria if available and sound medical judgement when not (use PCP judgement as a surrogate)**
- **Have clear justification and medical reasoning when you can't pass someone**
- **Anticipate and be prepared for frustration from patients who do not meet medical criteria**

DRIVING **CHANGE2023**

DRIVING **CHANGE 2023**  
THE URGENT CARE CONVENTION

**QUESTIONS**

