

# New England College of Occupational and Environmental Medicine Conference 2020

## ABPM MAINTENANCE OF CERTIFICATION (MOC) – QUESTIONS

**\*\*\* Your answers must be written on the Attendance Verification form\*\*\***

The Attendance Verification Form should be sent to [executive.director@necoem.org](mailto:executive.director@necoem.org)

Your name \_\_\_\_\_

Your email \_\_\_\_\_

### **Wednesday, December 2**

#### **How to Read Spine Imaging, Tannoury**

1. What is the most accurate significance of the finding of a large facet effusion on lumbar MRI?
  - A. It indicates needs for facet cyst removal
  - B. It is the result of injury
  - C. It indicates need for facet injection or block
  - D. It indicates the presence of spinal instability
  
2. Prior to spine surgery, spinal alignment, instability, and biomechanics should be assessed? T/F
  
3. Match which imaging study from the list below is best used to assess each clinical scenario
  - Spinal alignment for treatment planning
  - Spine fracture after a fall
  - Neurological spine findings in a patient without a history of spine surgery
    - A. CT scan
    - B. MRI with contrast
    - C. MRI without contrast
    - D. Full spine X-ray (AP and lateral)
    - E. X-ray (AP and lateral with flexion and extension views)
  
4. What are spine imaging findings that indicate an emergency or need for semi-urgent treatment? (circle all that apply)
  - A. A lumbar disc herniation causing cauda equina syndrome
  - B. Compression fracture of a lumbar vertebrae with 35% height loss
  - C. A cervical disc herniation causing clinical cervical myelopathy
  - D. Simple fracture line on an ankylosed spine
  
5. Which of the following factors can contribute to adjacent segment disease seen on imaging? (circle all that apply)
  - A. Natural history
  - B. Mechanical transfer of stresses and motion
  - C. Iatrogenic injury (e.g., spinal fusion above pars fractures)
  - D. Sagittally unbalanced prior spinal fusion
  
6. Which of the following findings on spine imaging are the result of the natural progression of degenerative disc disease and can contribute to neuroforaminal or central stenosis? (circle all that apply)
  - A. Loss of disc height (disc desiccation)
  - B. Disc bulge or protrusion
  - C. Facet joint hypertrophy
  - D. Spinal instability
  
7. When lumbar stenosis is present on imaging, lumbar laminectomy is always needed. T/F

## **Thursday, December 3**

### **Why is US Healthcare Spending So High? Jha**

8. True or False: Low social spending in the U.S. is a potential explanation for our worse health outcomes compared with other OECD countries.
9. True or False: The U.S. is higher than any other OECD country in healthcare utilization as measured by hospital discharges and doctor visits.
10. The U.S.'s high health spending may be driven by all of the following except:
  - a. High prices for services
  - b. Higher salaries for providers
  - c. Administrative costs
  - d. Overutilization

### **Common Workplace Hand Injuries and Treatment, Kimball**

11. Workplace hand injuries are commonly caused by boredom, inattentiveness, and \_\_\_\_\_.
  - a. Sleepiness
  - b. Tiredness
  - c. Sickness
  - d. Distractions
12. The common sign(s) of a hand flexor tendon injury include:
  - a. An open injury, such as a cut, on the palm side of your hand, often where the skin folds as the finger bends
  - b. An inability to bend one or more joints of your finger
  - c. Fingertip numbness
  - d. All of the above
13. Which of these statements are true regarding carpal tunnel syndrome?
  - a. Carpal tunnel release is one of the most common surgeries done in the U.S.
  - b. You are more likely to get carpal tunnel syndrome if you work on an assembly line than in data-entry
  - c. Women are more likely than men to develop carpal tunnel syndrome.
  - d. All of the above statements are true

### **The Changing Landscape of Work-Related Lung Diseases, Redlich**

14. Harriet Hardy
  - a) was a school doctor
  - b) described acute berylliosis in Sylvania and GE workers.
  - c) worked with Alice Hamilton
  - d) none of above
  - e) all of above
15. US healthcare workers are at increased risk of all of the following except:
  - a) Lung cancer
  - b) Needlestick injuries
  - c) COVID-19
  - d) Work-related asthma
  - e) Musculoskeletal injuries
16. Which of the following is the most common occupational lung disease in the US, based on the epidemiologic literature?
  - a) Interstitial lung disease
  - b) Lung cancer

- c) COPD
- d) Asthma

### **Fitness for Duty, Jones, Storey, Thompson**

True/False:

- 17. The medical logic of Fitness for duty determinations differs from the logic employed in the post-offer and return to duty process.
- 18. Legal issues should be considered in addition to medical issues in the process of creating corporate policy guidance in the fitness for duty process.
- 19. An employer can require an employee to undergo a fitness for duty evaluation even if there are no objective problems with the employee's performance, based on concerns about an employee's mental condition raised by another person.
- 20. An employer cannot ignore the findings on a fitness for duty evaluation that concludes the employee is able to perform his/her job even if the employer is convinced there is a reason for concern.
- 21. I can request a fitness for duty exam based on management observing an employee performing their work.
- 22. It is an employee's responsibility to notify their employer if he/she is not fit for duty.

### **Burn Injury and Recovery: Key Concepts and Common Hurdles, Sheridan**

True/False

- 23. Care of a large deep burn can be organized in four phases: initial evaluation and resuscitation, initial excision and biologic closure, definitive wound closure, and rehabilitation- reconstruction-reintegration.
- 24. Hypertrophic scar can present a range of symptoms from minimal stiffness through deep ache and continuous pruritis.
- 25. Symptoms of post-traumatic stress disorder can be seen in approximately one-third of patients surviving a very large burn.

### **Differential Diagnosis and Treatment of Work-Related Shoulder Injuries, Curtis**

True/False

- 26. Stiffness is the most common complication after a rotator cuff repair.
- 27. Patients need to fully heal in order to have good painfree result.
- 28.. Reverse shoulder replacement is the only option after failed rotator cuff repair.

### **Ultraviolet Enlightenment for Public Health Protection, Malley**

29.T/F: Ultraviolet Disinfection is not an effective part of a multiple barrier approach to reducing the transmission of COVID-19.

30.The following factors are very important to consider when designing and using a UV technology:

- A. The UV irradiance or intensity of the light reaching the surfaces of the object or room that is being disinfected.
- B. The amount of contact time the UV light is reaching the object to be disinfected.
- C. The amount of dust, dirt or stains on the object or room surfaces that are being disinfected.
- D All of the above.
- E. None of the above.

31.T/F: Public health organizations currently recommend that eye protection and skin protection be worn when there is potential for exposure to any or all wavelengths of UV light.

### **Workplace Violence, Abundo, Blum**

- 32. Following an onsite WPV incident which of the following steps are necessary?
  - a. Ensure that physical injuries and traumatic injuries are addressed.
  - b. De-briefing all involved.

- c. Accident investigation or root-cause-analysis involving multiple departments.
  - d. All of the above
33. Osha does not have a specific standard for workplace violence related hazards so there is nothing they can do when someone is assaulted at work by a patient: T/F
34. Some of the known risk factors for WPV incidents are:
- a. Working alone at night;
  - b. Handling cash;
  - c. Healthcare
  - d. All of the above

### **Vaping Associated Lung Injury, Christiani**

True/False

- 35. Most EVALI cases appear to be associated with THC vaping that contains vitamin E oils.
- 36. The FDA has not required makers of e-cigarettes to disclose all the ingredients in their products.
- 37. The clinical characteristics of EVALI are consistent with chemical pneumonitis.

## **Friday, December 4**

### **Travel Medicine During the Covid-19 Pandemic: Challenges of a Lifetime for Occupational Health Practitioners, Talbot**

38. You are seeing an ill returning traveler from business travel to South Africa. Following ascertainment of actual itinerary and activities, the best first diagnostic approach to evaluate fever in this person is:
- 1. Malaria thick and thin smear
  - 2. Flu rapid test
  - 3. Flu/COVID multiplex PCR
  - 4. COVID-19 antibody test
  - 5. Serology (IgM and IgG) for dengue
39. The best currently available prevention strategy for travelers to COVID-19 epidemic settings is:
- 1. REGN-COV2 (Regeneron)
  - 2. Chloroquine or hydroxychloroquine
  - 3. Remdesivir
  - 4. Compassionate access to the Russian Sputnik V, an adenovirus vector virus
  - 5. Social distancing, universal masking, scrupulous hand hygiene
40. Business travelers who are less than 50 years old have a negligible (<1.5%) chance of severe illness leading to death if they acquire COVID-19 in travel. T/F

### **The Fascinating History of Workers' Compensation: The Creation of the Grand Bargain, Pierce**

True/False

- 41. Workers' Compensation as we know it today dates to Chancellor Otto Von Bismarck in Prussia in the 1880's
- 42. Workers' Compensation insurance is an employer benefit plan similar to health insurance and short- or long-term disability insurance.
- 43. Workers' Compensation first enacted in the United States in 1911 is an antiquated system that no longer meets the needs of a 21st century economy and workforce.

### **Worker Compensation Reform: Efforts and Failures, Burress, Kohl, Okurowski**

True/False

- 44. Workers' Compensation (WC) systems, and the laws from which their details arise, are basically the same across all 50 US States.
- 45. Care delivery can be significantly impacted by the WC system.
- 46. ROI or return on investment is higher when spent on front end (early after injury) than when spent on back-end.

### **Update on Commercial Driver Medical Certification Examinations, Hartenbaum**

True/False

- 47. Examiner must utilize the guidance in the 2020 FMCA draft Medical Examiner Handbook but the end of 2020
- 48. Examiners should consider guidance from FMCSA, such as the ME Handbook, FAQs or Medical Expert Panel reports as requirements
- 49. The recommendation of the 2013 Medical Expert Panel on Cardiovascular Disease recommended that the hypertension guidelines remain unchanged

### **CBP in the Workplace: Drug Testing, Impairment and Regulations, Saito, Hartenbaum, Dyleski-Najjar**

- 50. The FDA has concluded that CBD is Generally Recognized as Safe (GRAS) for its use in human or animal food. T/F
- 51. Despite the beneficial claims made about CBD, the FDA has issued consumer warnings that the FDA has not evaluated whether unapproved products on the market are effective for their intended use, what the proper dosage might be, how they could interact with FDA-approved drugs, or whether they have dangerous side effects or other safety concerns. T/F
- 52. The Food and Drug Administration has not approved any product containing CBD. T/F
- 53. An individual required to be tested under Federal drug testing regulations is using CBD under his/her physician's recommendations. He tests positive for THC on a random test and explains use of CBD and provides documentation to the MRO. The MRO should:
  - A. Report the test as a positive
  - B. Obtain CBD/THC ratios
  - C. Report the test as negative
- 54. A person cannot fail a drug test if the CBD product they use is distributed consistent with Federal law. T/F

### **Coordinating and Accommodating Medical Leaves in the Covid-19 Era: From Underlying Medical Conditions Anxiety about Returning to Work, and Childcare Needs, Dyleski-Najjar**

- 55. An employee must be allowed a medical leave if they are fearful of returning to work?
  - A. True
  - B. False
  - C. It depends
- 56. If an employee can work from home, he/she is not eligible for medical leave under state or federal law?
  - A. True
  - B. False
  - C. It depends

### **Mohegan SARS-CoV-2 Antibody Seroprevalence Study, Queenie Abad, MD**

- 57. You are sent a return-to-work consult for a 21-year-old woman who works as a cook at an indoor restaurant bowling alley. She was tested and found to be positive for COVID-19 on a nasopharyngeal PCR test 2 weeks ago after she found out her mother with whom she lives with also tested positive for COVID-19. The patient has always been

asymptomatic and is still without symptoms. Her primary care provider re-tested the patient with a repeat nasopharyngeal PCR test today, 2 weeks from the original positive test. She is again found to be positive for COVID-19 on the nasopharyngeal PCR test. How should you proceed?

- A. Order a SARS-CoV-2 antibody test. If the patient has positive antibodies to SARS-CoV-2, she may return to work.
- B. Employ a testing-based strategy and re-test with repeat nasopharyngeal PCR until she has 2 negative consecutive specimens greater than 24 hours apart. Due to her work as a cook in an indoor restaurant bowling alley, the patient should not return-to-work and should remain in home isolation.
- C. Continue home isolation for an additional 1 week. After 1 week, home isolation may be discontinued, and no further testing is required.
- D. Discontinue home isolation now since it has been 10 days after the date of their first positive COVID-19 nasopharyngeal PCR test and she is asymptomatic.
- E. Discontinue home isolation now since it has been >2 weeks from when she had the known exposure and she is asymptomatic.

### **Improving Physician Awareness & Adoption of Digital Therapeutics, Gaviola**

58. Which of the following is the best definition of digital therapeutics?

- a) Use of technology to treat patients
- b) Software as treatment
- c) Monitoring of patients remotely

### **AI Diagnostic/Therapeutic Tools and Physician Liability, Cheng**

59. What elements must a plaintiff establish to prevail on a medical malpractice case:

- A) Existence of a physician/patient relationship
- B) Breach of the duty of care owed to the patient
- C) The physician caused the claimed injury
- D) The patient suffered a worse outcome due to the physician's negligence
- E) All of the above

### **Military airborne hazard exposure consequences during the time of COVID-19, Abitria**

60. Approximately what fraction of veterans who are referred to the War Related Illness & Injury Study Center (WRIISC) for respiratory concerns have a confirmed pulmonary abnormality after complete series of pulmonary function testing?

- a) 1/4
- b) 1/3
- c) 1/5
- d) 2/3
- e) 3/4

### **What's going on around here?! A look at operations in a community Occupational Health Clinic, Kasteler**

61. What is the best measure of clinic *efficiency*?

- a) Total available time
- b) Total booked time
- c) No-show rate
- d) Total utilization rate

**ANSWERS, Maintenance of Certification, NECOEM MaAOHN Annual Conference 2020.**

1. 1.D
2. 2.True
3. D, A, C
4. A, C, D
5. A, B, C, D
6. A, B, C, D
7. False
8. True
9. False
10. D
11. D
12. D
13. D
14. E
15. A
16. C
17. False
18. True
19. False

a fitness for duty evaluation has to be “job related and consistent with business necessity” under the ADA. If there are no objective problems with the employee’s performance, it would be a potential violation of the ADA to require the exam, especially without first discussing the information raised with the employee and giving them an opportunity to respond.

20. True

An employer should accept the findings of the fitness for duty evaluation (unless there are issues with deception or other extenuating circumstances) and comply with those recommendations, whether it means there are no limitations on the employee’s ability to do his/her job or whether it raises the need for potential reasonable accommodation under the ADA.

21. True
22. True
23. True
24. True
25. True
26. True
27. False
28. False
29. False
30. D
31. True
32. D
33. False. – OSHA addresses workplace hazards that do not have a specific standard – for example nanotechnology, mast climbers, WPV by using the General Duty Clause.
34. D
35. True
36. True
37. True
38. 3
39. 5

40. False
41. False
42. False
43. Arguments both ways
44. False
45. True
46. True
47. False
48. False
49. False
50. False
51. True
52. False prescription human drug product, Epidiolex, to treat rare, severe forms of epilepsy
53. A
54. False
55. C
56. C
57. D
58. B
59. E
60. D
61. D