



**ABPM MOC ATTENDANCE VERIFICATION FORM**  
ABPM MOC Code: 780

**ABPM MOC CREDIT**

ABPM Maintenance of Certification (MOC) Credit is only for physicians board-certified in occupational medicine and who are subject to the ABPM requirements. This activity has been approved for up to 25.5 ABPM MOC credits.

This form may be left with an ACOEM staff person, mailed to the ACOEM Education Department (25 Northwest Point Boulevard, Suite 700, Elk Grove Village, IL 60007), or faxed to 847-818-9286. Please **do not** return the full Q&A Booklet - return this form only.

**DIRECTIONS:**

1. Answer the self assessment questions for each session you are claiming credit for. An answer key is provided in the back of the Q&A booklet.
2. On this form, enter actual number of ABPM MOC hours you are claiming, up to the maximum daily hours available.
3. Complete your contact information and sign the form to verify that the ABPM MOC hours you attended is correct.
4. Return this form to the ACOEM Registration Desk or mail or fax it to the ACOEM office.
5. **No certificates will be issued - credit will appear in your ABPM profile approximately 60 days after ACOEM receives this form.**

2010 American Occupational Health Conference	Maximum CME Hours Available*	CME Hours Actually Attended
Saturday, March 26, 2011	5.5	
Sunday, March 27, 2011	6	
Monday, March 28, 2011	6	
Tuesday, March 29, 2011	3	
<b>Total ABPM MOC Hours:</b>		

Additional CME Hours Available		
<i>*The hours above do not include the sessions listed below. In order to claim ABPM MOC credit for these sessions, you must have registered and paid for each of these sessions (when applicable). If you have additional hours to claim, please check the appropriate box below so that credit may be awarded. Each session is worth a maximum of 1 ABPM MOC credit.</i>		
Saturday	12PM	<input type="checkbox"/> 7100 <input type="checkbox"/> 7101 <input type="checkbox"/> 7102 <input type="checkbox"/> 7103
Sunday	7AM	<input type="checkbox"/> 7201 <input type="checkbox"/> 7202 <input type="checkbox"/> 7203 <input type="checkbox"/> 7204
Sunday	12PM	<input type="checkbox"/> 7205 <input type="checkbox"/> 7206 <input type="checkbox"/> 7207 <input type="checkbox"/> 7208 <input type="checkbox"/> 7209
Sunday	5PM	<input type="checkbox"/> 7210
Tuesday	7AM	<input type="checkbox"/> 7400 <input type="checkbox"/> 7401 <input type="checkbox"/> 7402 <input type="checkbox"/> 7403
<i>Please note: ABPM MOC credit is not available for sessions 7104 and 7302</i>		
<b>Additional ABPM MOC Hours Claimed (if applicable):</b>		

ACOEM ID (located on your AOHC Course schedule): \_\_\_\_\_

ACOEM Member: YES NO

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Phone: ( ) \_\_\_\_\_ eMail: \_\_\_\_\_

**I attest that I have participated in the ABPM MOC portion of these sessions by answering and self scoring the ABPM MOC self study Q&A for each session that I am claiming credit for.**

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

**PLEASE COMPLETE THIS FORM AND RETURN TO:**

ACOEM Registration Desk - **or mail/fax to-** Fax: (847) 818-9286  
ACOEM, Education Department, 25 Northwest Point Blvd, Ste 700, Elk Grove Village, IL 60007

**2011 American Occupational Health Conference  
MOC Q&A  
WASHINGTON, DC**

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*Please note:* You do not need to complete this self assessment in order to claim *AMA PRA Category 1 CME™*.

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2. Complete the ABPM MOC Attendance Verification Form.
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**Saturday, March 26, 2011**

**Session 7000.....CME/MOC: 0**

**New Member Orientation**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

**Session 7104.....CME 1/MOC: 0**

**Becoming and Maintaining Board Certification in Occupational Medicine**

*Maintenance of Certification credit (MOC) is not available for this session*

**Session 2100.....CME/MOC: 1**

**AOHC Opening Session: C. O. Sappington Memorial Lecture**

TRUE/FALSE: The Sappington memorial lecture is named for Clarence Olds Sappington, MD, DrPH, (1889-1949), a noted consultant in occupational diseases and industrial hygiene, who was the first American to hold a DrPH degree which he received from Harvard School of Public Health in 1924.

TRUE/FALSE: The Sappington memorial lecture is presented annually at AOHC.

TRUE/FALSE: This year's lecture will be presented by Mark R. Rosekind, PhD, with the National Transportation Safety Board in Washington, DC.

**Session 2101.....CME/MOC: 1.5**

**Important Elements to Writing and Reviewing the Occupational and Environmental Health Literature**

**Judith G. McKenzie, MD, MPH, FACOEM\***, University of Pennsylvania Medical Center, Philadelphia, PA

**Paul W. Brandt-Rauf, MD, DrPH, ScD, FACOEM\***, UIC School of Public Health, Chicago, IL

**David C. Deubner, MD, MPH, FACOEM\***, Brush Wellman Inc, Elmore, OH

TRUE/FALSE: When writing a scientific paper it is best to use synonyms to explain key terms throughout the manuscript.

Which of the following study designs is best suited to address causality:

- A. Ecological study
- B. Case series

- C. Cross-sectional study
- D. Cohort study

The primary purpose of peer review is to:

- A. Eliminate manuscripts which contradict scientific fact
- B. Ensure manuscripts are high quality
- C. Ensure manuscripts conform to journal style standards
- D. Ensure manuscripts improve the journal citation index

TRUE/FALSE: To help the editor with your submission, write a persuasive cover letter and recommend potential reviewers/non-reviewers.

TRUE/FALSE: TRUE/FALSE: To help the editor with your re-submission, write a persuasive cover letter and be sure to respond to all reviewers' criticisms (change or rebut).

When faced with substantial criticism from a peer reviewer, the author should:

- A. Make as few changes as possible
- B. Withdraw the manuscript and send it elsewhere
- C. Make changes which get the article accepted
- D. Make changes which improve the manuscript

### **Session 2102.....CME/MOC: 1.5**

#### **POWER in Numbers: Measuring Performance in Federal Workers' Compensation**

**Marianne Cloeren, MD, MPH, FACOEM\***, Managed Care Advisors Inc, Bethesda, MD

**Douglas C. Fitzgerald**, Federal Employees' Compensation, Washington, DC

TRUE/FALSE: The metric "percentage of lost time cases RTW within 45 days" may be confounded by success in reducing lost work day cases overall.

The 7<sup>th</sup> POWER goal, speeding RTW for employees with the most serious injuries and illnesses is likely to be impacted by which of the following types of intervention:

- A. Careful scrutiny of new claims for agency challenge when appropriate
- B. Preventive measures to reduce trips and falls in the work areas with worst trends for this type of injury
- C. Addressing problem behaviors that contribute to unnecessary disability
- D. Measuring the lost time days per lost time case

Which of the following metrics relates to physician/clinic practices:

- A. What percent of those with release to RTW in some capacity are provided/offered jobs
- B. What percent of claims are filed within the required period of time
- C. Lost work days past EDD by work area
- D. Percentage of cases treated that RTW full duty within EDD

POWER goal 7 will address federal agency success in returning to work employees with the most serious injuries and illnesses, defined as:

- A. Employees on the periodic rolls for at least 2 years
- B. Employees off work at least 45 days but within the 2 year tracking period
- C. Employees with conditions that have an estimated duration of disability of 100 days or more
- D. Employees whose doctors state they are totally disabled

The Employees' Compensation Operations and Management Portal (E-COMP) system will support agencies in meeting their POWER goals by:

- A. Establishing an automatic review and approval system for continuation of pay
- B. Allowing agency personnel with a need to know to access their employees' electronic medical records
- C. Permitting electronic filing of key forms and agency generation of POWER reports
- D. Hosting a blog for sharing best practices in return to work

### **Session 2103.....CME/MOC: 1.5**

#### **Medical Marijuana and The Workplace**

**Mark J. Upfal, MD, MPH, FACOEM\***, Detroit Medical Center Occupational Health Services, Detroit, MI

For which of the following substances, detected in blood or urine, is impairment likely to have been present at the time of specimen collection:

- A. Marijuana
- B. Vicodin
- C. EtOH
- D. Cocaine

Which states with medical marijuana statues include protection for medical marijuana users as employees:

- A. Michigan only
- B. Arizona, Maine, Michigan, and Rhode Island
- C. California and Oregon
- D. All of them

Advantages of THC in pill form are:

- A. Rapid relief
- B. Better than smoking for nausea
- C. Longer duration of action
- D. Cost
- E. More efficacious because of its purity

TRUE/FALSE: Allstate nondiscrimination laws protecting persons with disabilities specifically exclude users of illegal substances as defined by the Controlled Substance Act.

There is good scientific evidence to support use of medical marijuana for:

- A. HIV + patients
- B. Glaucoma patients
- C. Neuropathic pain
- D. Certain mental health disorders

**Session 2104.....CME/MOC: 1.5**

**Worklife: Integration of Health Promotion and Health Protection**

**Laura S. Welch, MD, FACOEM\***, Center to Protect Workers Rights, Silver Spring, MD

**Dean M. Hashimoto, MD, JD\***, Partners Healthcare System, Newton, MA

**James A. Merchant, MD, DrPH**, University of Iowa College of Public Health, Iowa City, IA

**Laura Punnett, PhD, ScD**, University of Massachusetts at Lowell, Lowell, MA

TRUE/FALSE: The NIOSH WorkLife Initiative assigns a higher priority to promoting health and preventing non-work related diseases in employees in comparison to the reduction of workplace hazards.

TRUE/FALSE: The NIOSH WorkLife Initiative encourages the engagement of mid-level management in promoting health-supportive programs because they are the direct links between workers and upper management.

TRUE/FALSE: Participatory ergonomics processes could be relevant to worksite health promotion because health promotion means motivating decision-making; participatory ergonomics requires workers to be active decision-makers about conditions that affect their health.

Which of the following workplace approaches is NOT consistent with what the WorkLife Initiative is encouraging:

- A. Eliminating recognized occupational hazards
- B. Changing an on-site employer-based clinic from being devoted generally to improving employee health to being solely focused on occupational health services
- C. Establishing a commitment by an employer to workforce health and safety by making it a key operating principle within the business plan
- D. Integrating behavioral health programs with those programs focused on physical health
- E. Developing a "Human Centered Culture" within an organization

Ergonomics programs and worksite health promotion both address:

- A. Physical job features
- B. Work organization
- C. Psychological job stressors
- D. B and C only

E. All of the above

**Session 2105.....CME/MOC: 1.5**

**What Constitutes Excellence in Health Care: Case Studies from the Corporate Health Achievement Award**

**Fikry Isaac, MD, MPH, FACOEM\***, Johnson and Johnson, New Brunswick, NJ

The purpose of the CHAA award is to:

- A. Champion improving worker health, safety, and environmental management
- B. Communicate highest standards of excellence to the business community
- C. Provide model organizations with visibility and validation for their efforts
- D. Emphasize performance measures and outcomes
- E. All of the above

TRUE/FALSE: The CHAA Exemplary Practice Citation puts the focus on encouraging step by step improvements in companies.

TRUE/FALSE: The CHAA award focuses on metrics and trends that assist in driving improvement in delivery of health services.

TRUE/FALSE: A successful application for the CHAA will contain a discussion of program dissemination across the employee population.

TRUE/FALSE: Tooele Chemical Agent Disposal Facility (TOCDF) has demonstrated excellence in reducing workplace accidents and maintaining an exemplary emergency preparedness program involving the local EMS.

**Session 7100.....CME/MOC: 1**

**Social Media in Occupational Safety and Health**

**Max Lum, EdD, MPA**, Office of Health Communication and Global Collaboration, NIOSH, Washington, DC

The importance of integrating social media into your outreach and dissemination programs include:

- A. Improving the reach of your products and messages
- B. Increasing networking opportunities within your community of practice
- C. Measuring the ROI of your efforts
- D. All of the above
- E. None of the above

Wikipedia is an important on-line source of information that provides:

- A. A massive open source platform where anyone can contribute information
- B. Exposure to both common and obscure information
- C. Availability in many different languages
- D. All of the above
- E. None of the above

Twitter is an online service that provides a:

- A. Free micro-blogging service
- B. Platform for text based posts of 140 characters
- C. Platform that can deliver as well as restrict message delivery
- D. Numerous tools to track your efforts
- E. All of the above
- F. None of the above

**Session 7101.....CME/MOC: 1**

**When It Is Too Late To Just Say No: Dealing with the Disabled Worker on Opiates**

**Robert E. Bonner, MD, MPH, FACOEM\***, The Hartford, Hartford, CT

**Wilhelmina C. Korevaar, MD, MMM\***, Wilhelmina C. Korevaar, MD, PC, Bal Cynwyd, PA

TRUE/FALSE: Once a patient is on a stable dose of narcotics, all side-effects including constipation, resolve.

TRUE/FALSE: The FDA-mandated risk management plans for opioids will have more occupational medicine physicians managing chronic pain patients on long-term narcotics.

TRUE/FALSE: Random urine screening will assure that patients take narcotics as prescribed.

**Session 7102.....CME/MOC: 1**

**The Corporate Culture of Health**

**Ronald L. Loeppke, MD, MPH, FACOEM, FACP\***, U.S. Preventive Medicine, Jacksonville, FL

**Joel R. Bender, MD, PhD, MSPH, FACOEM\***, HealthNEXT, Northville, MI

TRUE/FALSE: Health risk appraisals, web-based learning, laboratory studies, biometrics, productivity enhancement, and personalized coaching are often considered to be basic components of health and wellness programs.

TRUE/FALSE: Compared to a healthy person, an employee in poor health is more likely to be absent from work and less productive while on the job (presenteeism or health-related performance reduction).

TRUE/FALSE: Studies have shown that the financial impact of employee absenteeism and decreased productivity due to poor health is more costly compared to medical and pharmacy claims costs alone.

TRUE/FALSE: Comprehensive, evidence-based primary and secondary prevention programs can begin achieving measurable health improvements in the first year of intervention.

**Session 7103.....CME/MOC: 1**

**Is It Recordable? Is It Ethical?**

**Atkinson W. (Jack) Longmire, MD\***, OSHA, Silver Spring, MD

**Kay A. Dellinger, MD, MPH\***, US Dept of Labor/OSHA/DTSEM/Office of Occupational Medicine, Washington, DC

**David Schmidt, BS**, OSHA, Washington, DC

According to the ACOEM Code of Ethics, serving the patient's best interest overrules which of the following:

- A. Business needs
- B. Personal needs
- C. Organizational pressures
- D. All of the above

The purpose of the OSHA Recordkeeping rule is to:

- A. Help ensure that workers' injuries and illnesses get approval for workers compensation
- B. Record and report work-related fatalities, injuries, and illnesses
- C. To assist workers compensation carriers in setting premium rates for their client companies
- D. Make employees accept fault for work-related fatalities, injuries, and illnesses

TRUE/FALSE: A case is work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. The work event or exposure need only be one of the discernable causes; it need not be the sole or predominate cause.

**Session 2106.....CME/MOC: 1.5**

**Aligning Mission with Practice: Why Occupational Medicine Makes Sense**

**Philip Harber, MD, MPH, FACOEM\***, UCLA Occupational Environmental Medicine, Los Angeles, CA

**Beth A. Baker, MD, MPH, FACMT, FACOEM\***, Specialists in OEM, Eden Prairie, MN

**Tee L. Guidotti, MD, MPH, FACP, FACOEM\***, Medical Advisory Services, Gaithersburg, MD

**Kaochoy S. Saechao, MD, MPH\***, University of California, Los Angeles, CA

TRUE/FALSE: The majority of occupational medicine providers engaged in clinical care.

TRUE/FALSE: More than 75% of occupational medicine providers are board-certified in occupational medicine.

Although occupational medicine is often described as industrial or corporate medicine, what percent of occupational medicine physicians primarily describe their practice as industrial or corporate medicine:

- A. 86%
- B. 66%

- C. 46%
- D. 26%
- E. 16%

Which of the following is not a strength of occupational and environmental medicine practice:

- A. Understanding of exposure assessment
- B. Disability prevention and management
- C. Special procedures and clinical services
- D. Medicolegal service skills
- E. Program management skills (population level)
- F. Fund of knowledge in workplace and environmental exposure

Which of the following is not true based on empirical study data:

- A. Occupational physicians rarely treat children
- B. OM is so diverse that practitioners have little in common
- C. Environmental medicine constitutes a significant proportion of most OM physicians' practice activities
- D. Practice activities have remained fairly stable over 20 years
- E. All of the above are not true

Occupational physicians who hold management positions:

- A. Usually began their career in a nonclinical job
- B. Almost never returned to clinical activities
- C. Have used clinical skills previously
- D. Constitute the majority of practitioners in OM
- E. Are usually in governmental or university jobs

**Session 2107.....CME/MOC: 1.5**

**Medical Standards for the United Kingdom Commercial Vehicle Operators Comparison with the United States**

**Natalie P. Hartenbaum, MD, MPH, FACOEM\***, OccuMedix, Maple Glen, PA

**Olivia Carlton, FRCP, FFOM**, Transport For London, London, England

TRUE/FALSE: Both the United Kingdom and the United States require drivers to have no worse than an average loss of 40dB in the better ear with or without a hearing aid.

Which of the following is the correct blood pressure criterion for the United Kingdom and the United States:

- A. UK: 169/90; US: 160/90
- B. UK: 180/100; US: 160/90
- C. UK: 180/100; US: 140/90
- D. UK: 160/90; US: 140/90

For a driver in the United Kingdom with cardiomyopathy, what is the minimum acceptable left ventricular ejection fraction:

- A. 30%
- B. 40%
- C. 50%
- D. LVEF is not required to be evaluated

TRUE/FALSE: In the United Kingdom, a driver may be qualified to drive a commercial vehicle if their seizure disorder is well controlled and it has been at least 5 years since the last seizure, on or off medication.

TRUE/FALSE: Olivia Carlton is from the Transportation Advisory Board of Paris, France

**Session 2108.....CME/MOC: 1.5**

**Staffing and Quality Metrics in Occupational Health Clinics**

**Michael J. Hodgson, MD, MPH\***, Veterans Health Administration, Washington, DC

**Jennifer Lipkowitz Eaton, MD, MPH\***, Johns Hopkins Occupational & Environmental Residency Program, Washington, DC

**Timothy M. Mallon, MD, MPH, FACOEM\***, Uniformed Services University, Bethesda, MD

TRUE/FALSE: High-quality, cost-effective occupational health service delivery depends upon strategic use of clinical and support staff.

TRUE/FALSE: Currently, there is no single validated staffing model that has gained widespread acceptance among occupational medicine practices.

TRUE/FALSE: A growing evidence base demonstrates clear relationships between quality of care, clinical outcomes, and staffing ratios.

TRUE/FALSE: There has been little translation of scientific research into the occupational setting.

This session covered:

- A. identifying quality and performance metrics
- B. local expert panel consensus
- C. The role of internal and external benchmarking in occupational health clinic quality
- D. All of the above

**Session 2109.....CME/MOC: 1.5**  
**Individual Scientific Abstracts**

**Virginia M. Weaver, MD, MPH\***, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD

**Peter Angerer, MD**, Institute and Outpatient Clinic for Occupational, Social and Environmental Medicine, Clinical Center, University of Munich, Munchen, Bavaria, Germany

**Susan R. Davis, MD, MPH, FACOEM\***, Federal Occ. Health, US Department of Health and Human Services, Hanahan, SC

**Natalie P. Hartenbaum, MD, MPH, FACOEM\***, OccuMedix, Maple Glen, PA

**Ahmad B. Naim, MD, MPH\***, Centocor Ortho Biotech Services, LLC, Horsham, PA

**Donna R. Smith, PhD**, FirstLab, St. Petersburg, FL

**Stephen J. Tregear**, MANILA Consulting Group, McLean, VA

According to current knowledge, psychosocial work conditions as job strain (high demand, low control) and lack of social support increase the:

- A. Addiction
- B. Dementia
- C. Depression
- D. Panic disorder
- E. Asthma

Compared to the average population, physicians are at an increased risk for:

- A. Suicide
- B. Accidents
- C. Heart attack
- D. COPD
- E. Cancer

TRUE/FALSE: A case-control study of employees with the Bureau of Alcohol, Tobacco, Firearms, and Explosions found that employees who hold special assignments involving fire scene investigations are at statistically significant increased risk for bladder cancer.

Which of the following is a new biomarker used in estimating kidney function:

- A. Serum creatinine
- B. Serum cystatin C
- C. Amylase
- D. Glucose

Which of the following is most likely to be nephrotoxic with chronic exposure:

- A. Cadmium
- B. Permethrin
- C. Carbon Dioxide
- D. Ammonia

**Session 2110.....CME/MOC: 3**  
**Infectious Disease Threats to the Traveler**

**COL (Ret) Jose L. Sanchez, MD, MPH**, Armed Forces Health Surveillance Center, Silver Spring, MD



**Michael A. Sauri, MD, MPH**<sup>TM</sup>, **FACP, FACPM, FACOEM, FRSTMH, CTropMed\***, Occupational Health Consultants, Rockville, MD  
**Francesca K. Litow, MD, MPH, FACOEM\***, Occupational Medicine Consultant, Wynnewood, PA  
**COL Rodney L. Coldren, MD, MPH**, Uniformed Services University of the Health Sciences, Bethesda, MD  
**LTC Michael Ellis, MD**, Uniformed Services University of the Health Sciences and National Naval Medical Center, Bethesda, MD  
**LCDR Dennis J. Faix, MD, MPH**, Naval Health Research Center, San Diego, CA  
**COL Mark M. Fukuda, MD**, Armed Forces Health Surveillance Center, Silver Spring, MD  
**Noreen A. Hynes, MD, MPH, DTMandH**, Johns Hopkins University School of Medicine, Baltimore, MD  
**CDR Mark S. Riddle, MD, DrPH**, Naval Medical Research Center, Silver Spring, MD

TRUE/FALSE: The number of plasmodium species capable of causing disease in humans is four.

TRUE/FALSE: Primaquine can be prescribed safely for pregnant women.

TRUE/FALSE: *P. ovale* and *P. vivax* can cause relapses months or even years after the initial infection is acquired.

TRUE/FALSE: Travelers' diarrhea is predominantly caused by viral pathogens.

TRUE/FALSE: In evaluating a returning traveler with chronic diarrhea symptoms, weight loss, nocturnal symptoms, blood in the stool and fever are consistent with a diagnosis of irritable bowel syndrome.

TRUE/FALSE: Antibiotics should be utilized in travelers' with moderate-severe travelers' diarrhea.

TRUE/FALSE: Given the sensitivity and specificity of today's diagnostics, presumptive treatment of malaria is not indicated in the US.

TRUE/FALSE: Ciprofloxacin is likely to be effective in the treatment of neisseria gonorrhoeae acquired during travel to equatorial Africa.

TRUE/FALSE: The most common sexually transmitted infection acquired amongst visits to Papua New Guinea is donovonosis.

#### **Session 2111.....CME/MOC: 1.5**

#### **The Occupational Health System of Finland: Opportunities to Adopt Best Practices**

**Christopher J. Martin, MD, MSC, FACOEM\***, Institute of Occupational and Environmental Medicine, West Virginia University School of Medicine, Morgantown, WV

**Jarmo Heikkinen, MD**, University of Eastern Finland, Kuopio, Finland

**Eva Helaskoski, MD**, Finnish Institute of Occupational Health and the University of Helsinki, Helsinki, Finland

**Soile Jungewelter, MD**, Finnish Institute of Occupational Health and the University of Helsinki, Helsinki, Finland

**Riitta Sauni, MD**, Finnish Institute of Occupational Health, Tampere, Finland

Which of the following statements best describes the training of occupational medicine specialists in Finland:

- A. The training program is more expensive than that of the USA
- B. Approximately the same number of graduates is produced each year in the USA and Finland
- C. All training is completed at the Finnish Institute of Occupational Health
- D. Specialists do not treat non work-related conditions

Which of the following best describes the current approach of occupational health services in Finland:

- A. Sporadic and voluntary
- B. Passive and disease-oriented
- C. Specific and preventive
- D. Comprehensive and development-oriented

Which of the following best describes the clinical work of the Finnish Institute of Occupational Health (FIOH):

- A. The FIOH diagnoses and treat patients with occupational diseases through both inpatient and outpatient services at once centralized clinic in Helsinki
- B. The FIOH diagnoses and treats patients with occupational diseases through both inpatient and outpatient services at clinics in Helsinki and other locations throughout Finland
- C. The FIOH is not involved in the direct examination of patients, but advises community-based physicians
- D. The FIOH is not involved in the direct examination of patients, but participates in the evaluation of patients throughout the country using video conference technology called "The Virtual Clinic"

Which of the following is a challenge for Finland with respect to the provision of occupational health services:

- A. Lack of legislative support
- B. Difficulty attracting medical doctors into careers in occupational health
- C. Large, sparsely populated country
- D. Limited availability of information technology

Audits of occupational health training at field units in Finland have revealed:

- A. In some sites it is not possible to offer quality training
- B. Better training is associated with larger units
- C. Auditors may not be welcome at some sites
- D. Use of an auditing matrix was not an effective means to measure the quality of training

**Session 2112.....CME/MOC: 1.5**  
**Impairment Assessments: Opportunities for Improvement**

**Christopher R. Brigham, MD, FACOEM\***, Impairment Resources, LLC, Portland, ME  
**Craig M. Uejo, MD, MPH\***, Sharp Rees Stealy Occupational Health Services, LaMesa, CA

Studies have revealed that impairment ratings are typically:

- A. Accurate
- B. Underrated
- C. Overrated

In comparing “needlessly disabled” to “exceptionally able,” the following are characteristics often seen with “needlessly disabled,” with the exception of:

- A. Emphasis: weakness
- B. Responsibility: self
- C. Relationships: dependent
- D. Feelings: anger

All of the following are shortcomings of the *AMA Guides, 5<sup>th</sup> Edition*, with the exception of:

- A. Confusing/antiquated terminology
- B. Inadequate evidence-based
- C. Ratings fail to reflect perceived or actual loss of function
- D. Internal consistency

All of the following are axioms of the *6<sup>th</sup> Edition*, with the exception of:

- A. Adopt methodology of international classification of functioning, disability, and health
- B. Become more anatomically based with assessments based on physical examination findings
- C. Give priority to simplicity and ease
- D. Stress conceptual and methodological congruity
- E. Provide rating percentages that consider clinical and functional history, examination, and clinical studies

In performing a 6<sup>th</sup> Edition rating, if the impairment class is 2 and all of the impairment grade modifiers are 1, what is the grade:

- A. Grade A
- B. Grade B
- C. Grade C
- D. Grade D
- E. Grade E

**Session 2113.....CME/MOC: 1.5**  
**Fatigue Management in the Workplace**

**Steven E. Lerman, MD, MPH\***, ExxonMobil, Houston, TX  
**David JC Flower, MBBS, MD, FFOM, FACOEM\***, BP plc, Oxfordshire, OX, United Kingdom  
**Benjamin Gerson, MD\***, University Services, Philadelphia, PA

Which of the following contributes to one’s level of fatigue:

- A. Quantity of sleep
- B. Circadian phase
- C. Time awake
- D. Health factors (sleep disorders, medications, etc)

E. All of the above

TRUE/FALSE: Limiting hours worked is sufficient to manage fatigue risk.

TRUE/FALSE: For rotating shift workers, there is no single best shift pattern.

Which of the following is not one of the five defenses against fatigue risk:

- A. Staff/workload balance
- B. Shift and duty scheduling
- C. Employee training and sleep disorder management
- D. Individual risk assessment and mitigation
- E. Periodic program review and continuous improvement

The following groups should receive training or educational materials to minimize fatigue risk:

- A. Individual workers
- B. Family members of workers
- C. Immediate supervisors
- D. Managers
- E. All of the above

**Session 2114.....CME/MOC: 1.5**  
**Individual Scientific Abstracts**

**Melissa A. McDiarmid, MD, MPH, FACOEM\***, University of Maryland Occupational Health Program, Baltimore, MD  
**Kelly Duke**, VISN 16 South Central VA Health Care Network, North Little Rock, AR  
**Ron Z. Goetzel, PhD**, Emory University/Thomson Reuters, Washington, DC  
**James Mackie, FFOM (UK)**, National Grid, Warwick, United Kingdom  
**Alesia Sadosky**, Pfizer, Inc, New York, NY

What proportions of deaths in 2005 in the United Kingdom were attributable to cardiovascular disease:

- A. 60%
- B. 50%
- C. 40%

Regular passive smoking increases coronary heart disease risk by what percentage:

- A. 15%
- B. 20%
- C. 25%

The cost of employed persons with osteoarthritis is:

- A. Higher than employees without OA
- B. The same as employees with OA
- C. Less than employees without OA
- D. None of the above

Indirect costs (lost productivity) consist of:

- A. Physician visits
- B. Short-term disability
- C. Medication costs
- D. Absenteeism

TRUE/FALSE: Comorbid conditions are more prevalent among workers with OA than comparison workers.

TRUE/FALSE: The RVPN is only for VA providers.

**Sunday, March 27, 2011**

**Session 7201.....CME/MOC: 1**  
**The Independent Medical Examiner**

**Douglas W. Martin, MD, FACOEM, FAADEP, FAAFP\***, St Luke's Center for Occupational Health Excellence, Sioux City, IA

TRUE/FALSE: Independent medical examinations (IMEs) are used for third party examinations.

An IME would help resolve issues of:

- A. Treatment recommendations
- B. Work ability
- C. Level of impairment and disability
- D. Disputed medicolegal issues
- E. All of the above

Components of a medical report should include:

- A. Introduction, conclusion, and recommendations
- B. Results of clinical evaluation and clinical impression
- C. Assessment of current health status and medical management plan
- D. Synthesis of information
- E. All of the above

**Session 7202.....CME/MOC: 1**  
**Disaster Preparedness: Lessons from Haiti**

**John S. Andrews, Jr., MD, MPH\***, University of Cincinnati, Cincinnati, OH

TRUE/FALSE: It is important is a disaster response to take as many people and supplies as possible.

TRUE/FALSE: The first priority in a disaster is to start attending to persons who are most critically ill.

TRUE/FALSE: The National Disaster Medical System in the Department of Homeland Security provides public health, medical, veterinary, and mortuary services in a disaster.

**Session 7203.....CME/MOC: 1**  
**Fitness-for-Duty Evaluations: What's in the Occupational Health Professional's Black Bag?**

**Stephen A. Frangos, MD, MPH, FACOEM\***, Chevron Services Company, Houston, TX

TRUE/FALSE: The medical fitness-for-duty process requires a thorough knowledge of the worker's essential job requirements.

TRUE/FALSE: Key stakeholders in the business unit (e.g. Supervisor, Human Resources) are responsible for determining the fitness-for-duty medical recommendations.

TRUE/FALSE: Effective fitness-for-duty processes require an integrated effort by occupational health professionals and key stakeholders in the business unit.

**Session 7204.....CME/MOC: 1**  
**Workplace Wellness Programs: The Vanderbilt University Experience**

**Lori A. Rolando, MD, MPH\***, Vanderbilt University, Nashville, TN  
**Marilyn C. Holmes, MS, RN, LDN**, Vanderbilt University, Nashville, TN  
**Mary Yarbrough, MD, MPH, FACOEM\***, Vanderbilt University, Nashville, TN

Which is not typically targeted modifiable lifestyle characteristic:

- A. Tobacco free
- B. Healthy weight
- C. Exercise  $\geq$ 1 day/week
- D. Family history
- E. Coping well with stress

TRUE/FALSE: Individuals who move from high risk to low risk ultimately decrease their healthcare costs to an amount equivalent to those who began and remained at low risk.

Which is/are outcome(s) that employers find important:

- A. Productivity

- B. Health care costs
- C. Employee satisfaction
- D. Employee retention
- E. All of the above

**Session 8200.....CME/MOC: 3**  
**US Army Medical Research Institute of Infectious Diseases**

**Michael A. Sauri, MD, MPH<sup>andTM</sup>, FACP, FACPM, FACOEM, FRSTMH, CTropMed\***, Occupational Health Consultants, Rockville, MD

**Jaspal S. Ahluwalia, MD, MPH\***, U.S. Army Research Institute of Infectious Diseases, Ft. Detrick, MD

**Roger McIntosh, MD, MPH\***, Barquist Army Health Clinic, Ft. Detrick, MD

ASHRAE assumptions in the design of isolation rooms:

- A. Number of coughs/minute equal 1
- B. Infective dose = 1-10 particles
- C. Cough volume = 0.5 liters
- D. Infective particle is 1-5-microns in size
- E. All of the above

Assigned protection factors (ASF) for particular respirators

- A. Takes into consideration an adequately trained and supervised wearer
- B. Takes into consideration an fit testing
- C. Takes into consideration user acceptability and cost effectiveness
- D. Are multiple of the permissible exposure limit (PEL)

Which of the following is correct:

- A. BSL 1 = Varicella
- B. BSL 2 = Hepatitis B
- C. BSL 3 = Anthrax
- D. BSL 4 = Ebola virus
- E. All are correct

Classic hierarchy of controls include all of the following except:

- A. Personal protective equipment
- B. Engineering and environmental controls
- C. Administrative and workplace practice
- D. Federal, state, and local control measures

TRUE/FALSE: The four goals to be accomplished when setting up a BSAT medical surveillance program are early detection of adverse health effects from workplac exposures; assessment of employee capabilities versus job requirements; assessment of engineering controls and other primary prevention strategies; and health education of the worker.

TRUE/FALSE: The purpose of BSAT medical surveillance is for identifying, evaluating, and monitoring employees' health for intervening work-related illnesses; ensuring that the worker is not more vulnerable to occupational illness or injury associated with BSAT exposure; providing education, recommending work practices, immunizations, or primary preventive practices to reduce risk of work-related illnesses.

TRUE/FALSE: Examples of different clinical indicators of immunodeficiency disorder indicators of immune deficiency are eight or more infections within one year; two or more serious sinus infections within one year; two or more months on antibiotics with little effect; two or more pneumonias within one year; recurrent deep skin or organ abscesses; and persistent thrush in the mouth or elsewhere on the skin.

TRUE/FALSE: The two types of immunizations that may be offered to employees as part of the BSAT medical surveillance program, based upon risk assessment are licensed vaccines (anthrax, smallpox, hepatitis B, rabies, yellow fever, japanese encephalitis, etc); and investigational new drug vaccines (VEE, WEE, EEE, turlaremia, RVF).

TRUE/FALSE: Assessment of immune function as part of BSAT medical surveillance should include indicators of both humoral and cell-mediated immunity.

**Session 2200.....CME/MOC: 1.5**  
**Maintaining a Healthy Workforce in a Global Chemical Industry**

**Matthew B. Krebs, MD, MPH, FACOEM\***, Occidental Chemical Corporation, Dallas, TX  
**Patrick R. Conner, MD\***, BASF Corporation, Florham Park, NJ  
**Raymond R. Strocko, MD, MPH, FACOEM\***, DuPont Co., Wilmington, DE

Which Asian country has the highest traffic fatalities:

- A. China
- B. India
- C. Japan
- D. Philippines

Which medication is not appropriate to use for malaria prophylaxis:

- A. Doxycycline
- B. Mefloquine
- C. Malarone
- D. Levofloxacin

In the DuPont Co., the most common reason for a failed ex-patriot assignment is related to:

- A. Language
- B. Food
- C. Family
- D. Time zone differences

The OSHA access to employee exposure and medical records regulations requires employers be able to produce medical records for employees for a minimum of:

- A. 30 years after the date of the record
- B. 30 years from the individual's termination of employment
- C. As long as the hospital or clinic is required to maintain all of its clinical records

Total quality as an organizing principal for medical surveillance programs:

- A. Can serve as an enabling organizing concept for a geographically dispersed medical program
- B. Is required by the OSHA General Duty clause
- C. Is good to apply if additional administrative resources can be secured

**Session 2201.....CME/MOC: 1.5**  
**Biomonitoring: Old Tools, Wave of the Future**

**Rupali Das, MD, MPH, FACOEM\***, California Department of Public Health, Richmond, CA  
**Michael L. Fischman, MD, MPH, FACOEM\***, Fischman Occupational and Environmental Medical Group, Walnut Creek, CA  
**Leslie Israel, DO, MPH, FACOEM\***, University of California, Irvine, CA

All of the following statements are true except:

- A. Biomonitoring provides health-relevant measures of exposure because it measures the amount of chemical that actually gets into people, and not the amount that might get into people
- B. Biomonitoring may be used to evaluate the effectiveness of environmental public health regulations
- C. Most clinical laboratories do not have the strict quality control and quality assurance methods to provide reliable biomonitoring results
- D. For most chemicals that are biomonitoring today, measured levels are correlated with health conditions and clinical disease
- E. In order to identify the likely sources of exposure, biomonitoring is combined with traditional exposure assessment methods, such as questionnaires and personal breathing zones or area monitoring

Biological Limit Values:

- A. Are designed to protect against all health effects associated with the chemical agent
- B. Are based upon exceedance of the reference range
- C. Can change with advances in scientific knowledge, including new dose-response information
- D. Exist for each of the chemical agents for which biological monitoring tests have been developed

All of the following statements regarding confounding factors affecting biomonitoring results are true except:

- A. Cigarette smoking is a common cause of elevated blood cadmium results
- B. Ingestion of predatory fish prior to workplace testing for urinary inorganic arsenic and its metabolites will likely result in spuriously elevated results
- C. Group data analysis of biomonitoring results can be used to statistically analyze the likely contribution of confounding factors to outlier results

D. When used to assess cadmium exposure, urinary b2-microglobulin can be elevated in some individuals due to normal pregnancy, preeclampsia, and hypertension

TRUE/FALSE: Hair analysis is the preferred method to evaluate exposure to mercury because hair is easy to collect, not susceptible to contamination, and measured levels are linked to environmental levels.

TRUE/FALSE: Despite the rapid increase in biomonitoring capability and programs, there are almost no biomonitoring assessments of firefighters.

**Session 2202.....CME/MOC: 3**  
**Health and Productivity Management in the Global Context**

- Leslie M. Yee, MD, MPH, MRO\***, Skylark Health Strategies, Ltd., Cincinnati, OH
- Myles C. Druckman, MD, GP\***, International SOS Assistance, Inc, Trevese, PA
- Tee L. Guidotti, MD, MPH, FACP, FACOEM\***, Medical Advisory Services, Gaithersburg, MD
- Pamela A. Hymel, MD, MPH, FACOEM\***, Walt Disney Parks and Resorts, Anaheim, CA
- Robert C. Karch, EdD**, American University, NW Washington, DC
- Wolf Kirsten, MS\***, International Health Consulting, Berlin, Germany
- Sean Sullivan, JD**, Institute for Health and Productivity Management, Scottsdale, AZ

TRUE/FALSE: Personal Health Assessments have not been widely adopted in countries outside of the United States at this point in time.

TRUE/FALSE: A study of 2300 U.K. employees found a 50% difference in productivity between individuals in the lower quartile of health vs. the upper quartile.

Which of the following statements is not true:

- A. Macroeconomic studies exploring the relationship between health and productivity often use life expectancy as a proxy for population health
- B. Many cross-country comparisons have demonstrated an association between population health and economic growth
- C. None of the cross-country analyses demonstrating an association between population health and economic growth have however, made adjustments for labor supply, capital supply, quality of governance, and other possible factors
- D. None of the above
- E. All of the above

Pre-travel and pre-assignment medical assessments:

- A. Do not demonstrate appropriate duty of care
- B. May mitigate against unnecessary health related assignment failures
- C. Are not required for U.S. government contracts in war zones like Afghanistan
- D. Are seen as having no value by employees
- E. All of the above

What is the leading cause of death worldwide:

- A. Cancer
- B. Diabetes
- C. Coronary Artery Disease
- D. COPD

International pre-assignment medical examinations should:

- A. Slow down staff mobilization to a crawl
- B. Put your company at risk
- C. Annoy your HR staff and participants
- D. Demonstrate duty of care and support your assignees health at a minimum
- E. All of the above

When considering or implementing a new workplace in a developing country, some of the best practice activities include:

- A. Having a medical expert assess the local medical infrastructure
- B. Developing a medical emergency response plan
- C. Considering augmenting the workplace with additional medical services if local care is not adequate and site is remote
- D. Considering mandated pre-assignment medical examinations for high risk locations
- E. All of the above

Injury/Illness management programs internationally offer:

- A. Case management information for the corporate medical department
- B. Advice as to level of medial care and local occupational health requirements
- C. Translation of relevant medical data
- D. Clarity on case management direction options
- E. All of the above

The Business in the Community (BTIC)/Ipsos Mori Study of FTSE 100 index companies demonstrated that the public reporting of the companies in employee health and wellbeing was associated with:

- A. Company net sales
- B. 2009 total share return
- C. Health care cost per employee
- D. Company safety incident rate
- E. Shareholder perceptions of company social responsibility

**Session 2203.....CME/MOC: 3**

**Fitness Issues for Public Safety Medicine Using Optimal Guidance for Best Decisions**

**David J. Louis, MD, MS, FACOEM\***, Air Force Materiel Command, Beavercreek, OH

**Fabrice Czarnecki, MD, MA, MPH, MRO\***, The Gables Group, Inc., Baltimore, MD

**Edward I. Galaid, MD, MPH\***, Northeast Georgia Health System, Gainesville, GA

**Thomas R. Hales, MD, MPH\***, NIOSH/CDC, Cincinnati, OH

**Daniel G. Samo, MD, FACOEM\***, Northwestern Memorial Physicians Group, Chicago, IL

Choose the correct statement:

- A. All firefighters with prostheses can return to full duty
- B. The type of prosthesis is not important in the decision to return a firefighter to work
- C. NFPA 1582 (2007 version) does not allow candidates with amputations of the hand or above
- D. NFPA 1582 (2007 version) does allow candidates with amputations up to the knee

Which of the following is true about hearing in firefighters:

- A. Fire fighters are currently allowed to wear hearing aids when working
- B. Hearing aids seem to be functional under the fire-fighting ensemble
- C. There is good literature about the functionality of hearing aids in the fire ground environment
- D. Very few firefighters have hearing loss

Which of the following is false:

- A. ACOEM's LEO Guidance was started in about 2003
- B. This guideline is available as a web-based document
- C. There is better guidance for the medical evaluation of LEOs than the ACOEM document
- D. The pregnancy chapter is not approved by ACOEM yet

TRUE/FALSE: HAND is a condition that could be potentially disqualifying for law enforcement personnel.

TRUE/FALSE: *N. meningitidis* has been transmitted occupationally in a LEO setting.

TRUE/FALSE: Like OSHA standards, the components if NFPA 1582 are required by federal law.

TRUE/FALSE: The 2007 edition of NFPA 1582 states that members shall have annual resting EKGs.

TRUE/FALSE: The 2007 edition of NFPA 1582 has a 12 metabolic equivalent (MET) fitness requirement for all firefighters.

TRUE/FALSE: The 2007 edition of NFPA 1582 recommends (appendix material) symptom limiting stress tests with imaging if a 49 year old male has 3 coronary artery disease risk factors.

**Session 2204.....CME/MOC: 3**

**Current Research in OEM and Resident Research Presentations**

**John D. Meyer, MD, MPH, FACOEM\***, Stony Brook University Dept of Preventive Medicine, Stony Brook, NY

Which pattern of physical medicine usage was related to a faster return to work in worker's compensation claimants:

- A. Urban
- B. Rural



Which group had a higher mean number of physical medicine services used:

- A. Urban
- B. Rural

TRUE/FALSE: There is a consensus among experts in the field of thermoregulation that support the validity of the heat tolerance test in determining heat intolerance and safe return to duty after heat stroke.

TRUE/FALSE: The studies retrieved in the systematic literature review varied in methods, environmental conditions, and physiologic criteria for identifying the heat intolerance.

TRUE/FALSE: Tier IV-9 compliant engines reduce and increase exposure to all harmful exhaust components in the study population.

TRUE/FALSE: This session provided investigators in occupational and environmental health with a forum for presentation of current and cutting-edge research in OEM.

TRUE/FALSE: Presentations were made both by established researchers and by residents in OEM training.

TRUE/FALSE: Presentations were made by established researchers only.

TRUE/FALSE: An abstract on Comparative Assessment of Spirometric Values in a U.S. Mining Population was presented at this session.

**Session 2205.....CME/MOC: 1.5**  
**Issues in Cancer Survivorship and Employment**

**Alan L. Engelberg, MD, MPH, FACPM, FACOEM\***, Memorial Sloan-Kettering Cancer Center Employee Health and Wellness Services, New York, NY

**Michael Feuerstein, PhD, MPH, ABPP**, Uniformed Services University of Health Sciences, Bethesda, MD

**Mary McCabe, BS, RN, MA**, Memorial Sloan-Kettering Cancer Center, New York, NY

**Lorraine Lynch Nagy, RN, MPH**, World Bank, Washington, DC

Support groups utilize the “patient active model” at the workplace when they address the following needs of cancer patients in an occupational setting:

- A. Links survivors across institutional and geographical boundaries
- B. Patient active model does not require professional leadership
- C. Empowers patients through knowledge of networks for advocacy and care
- D. Assists the worker as patient to access benefits for accommodation
- E. Encourages work life balance and patient control during treatment and return to work
- F. Cancer patients in active treatment cannot be integrated into the workplace
- G. All of the above
- H. A, C, D, and E only

A randomized controlled trial on occupational physician involvement in cancer patients indicated the following:

- A. Improved level of patient satisfaction with overall care
- B. Reduction in cognitive problems
- C. Earlier return to work
- D. All of the above

Cancer support groups in the workplace address the following challenges:

- A. DALY’s lost
- B. Cancer care and support in the occupational setting only apply to advanced economics
- C. A multi-national, distributed workforce that needs education, connection, and benefits
- D. Work accommodation in guidance for staff and managers
- E. Representation of support group members at the institutional level
- F. All of the above
- G. A, C, D, and E only

Employed breast cancer survivors report higher levels of which of the following compared to a non-cancer group at three years post primary treatment:

- A. Depression
- B. Cognitive limitations
- C. Problems with co-workers

- D. B and C
- E. A and B

Which factors has research indicated are related to work productivity in breast cancer survivors:

- A. Fatigue
- B. Neuropsych test findings
- C. Cancer specific accommodations
- D. All of the above

**Session 7205.....CME/MOC: 1**

**An Approach to Conflicting Expert Testimony**

**Ihor G. Taraschuk, MD, P.ENG, FRPC (Occ Med)\***, Workplace Safety and Insurance Board, Toronto, Ontario, Canada

TRUE/FALSE: One approach to conflicting expert testimony is to ask the expert what they know and how they arrived at this knowledge.

TRUE/FALSE: As a result of Daubert Rules, scientists and physicians are likely to be increasingly reluctant to provide expert testimony in civil litigation cases because of the lengths to which defendants go to discredit them and their work.

In order to determine if scientific knowledge is reliable, one could pose the following questions:

- A. Whether theory or technique can be used or has been tested
- B. Is there an actual or proposed error rate
- C. Does the theory have general acceptance within the relevant scientific community
- D. All of the above

**Session 7206.....CME/MOC: 1**

**The Pre-travel Health Consultation**

**Maria G. Michas, MD, MPH, FACOEM, CTH\***, Group Health Cooperative, Renton, WA

Contraindications to air travel include all of the following except:

- A. Infants less than 48 hours old
- B. Sick cell anemia
- C. Psychotic illness, even if controlled
- D. Recent MI and stroke
- E. Severe chronic respiratory diseases

Post travel care is indicated for which of the following:

- A. Fever
- B. Persistent diarrhea
- C. After prolonged travel in a developing country
- D. Jaundice
- E. All of the above

TRUE/FALSE: Industrial nations include the United States, Northern and Western Europe, Australia, New Zealand, Singapore, and Japan.

**Session 7207.....CME/MOC: 1**

**The Use of Opioids in the Management of Chronic Pain Workers' Compensation**

**Edward J. Bernacki, MD, MPH, FACOEM\***, Johns Hopkins University, Division of Occupational Medicine, Baltimore, MD

TRUE/FALSE: An increase in opioid use was observed over an eleven year period, primarily related to the increasing volume of stronger opioids prescribed for claimants with chronic pain.

TRUE/FALSE: Effectiveness of chronic long term opioids for chronic non-cancer pain - unclear and weak evidence of reduced pain or improved function (Trescot A, et.al., Pain Phys. 11:S181-S200, 2008) – same among injured workers (Franklin G, et.al., Clin J Pain 25:743-751, 2009)

TRUE/FALSE: Prevalence of lifetime substance abuse – 36%to 56% (Martell, BA, et.al., An Int Med 146:116-127, 2007)

**Session 7208.....CME/MOC: 1**

**Evaluation and Management of the Victim of Workplace Violence Using a Brief Cognitive-behavioral Therapy Approach**

**Francesca K. Litow, MD, MPH, FACOEM\***, Occupational Medicine Consultant, Wynnewood, PA

TRUE/FALSE: All victims of workplace trauma should be discouraged from reentering the workplace for 6 months or until cleared for duty by a psychiatrist.

Normal symptoms/feelings for those who experience a workplace trauma include the following:

- A. Reliving the experience
- B. Anxiety
- C. Feeling hopeless
- D. All of the above

Commonly identified cognitive distortions include the following except:

- A. "All or nothing" thinking
- B. Emotional reasoning
- C. Delusions of grandeur
- D. Jumping to conclusions

**Session 7209.....CME/MOC: 1**

**Innovations in Injury Care, Artist and Staff Support, and Community Partnership**

**Allison L. Jones, MD, MS\***, Carle Clinic, Urbana, IL

**Terri Ciafalo, MFA**, Krannert Center for Performing Arts, Urbana, IL

TRUE/FALSE: The University System is key for collecting information regarding workplace hazards, creating and sharing information about hazard prevention, and training the next generation of Managers who will be confronted with mitigating workplace risk.

TRUE/FALSE: Krannert Center for the Performing Arts is one of the nation's premiere venues for presenting the best of music, dance and theater from around the country and the globe.

TRUE/FALSE: In the United States, performance is an industry. Motion Picture, Theatre, Dance, Opera, Classical and Contemporary Music, Performance Art, Industrial/Corporate Entertainment, Cirque, Large Scale Spectacle are produced both commercially and through a myriad of non-profit organizations.

**Session 2207.....CME/MOC: 1.5**

**Mold and Damp Indoor Environments**

**Beth A. Baker, MD, MPH, FACMT, FACOEM\***, Specialists in OEM, Eden Prairie, MN

**Michael G. Holland, MD, FACOEM, FAACT, FACMT, FACEP\***, Glens Falls Hospital Center for Occupational Health, Saratoga Springs, NY

IgG testing would be most helpful in patients with mold and damp environment exposures to diagnose:

- A. Mold induced asthma
- B. Allergic fungal sinusitis
- C. Allergic rhinitis
- D. Dust mite allergy

In most environments, the most useful method to determine if there is excess indoor mold growth is:

- A. Thorough visual inspection
- B. Airborne mold level
- C. Settled dust mold
- D. Measurements of MVOs

Besides mold, a common cause of allergic symptoms in damp environments include:

- A. Endotoxins
- B. B-D-glucans
- C. Dust mites

#### D. Bacterial VOCs

The presence of airborne mold spores found in indoor air quality investigations indicates:

- A. Toxicity due to the presence of mycotoxins
- B. Possible evidence for excess indoor moisture, and likely prior water intrusion, if indoor mold spore counts greatly exceed outdoor mold spore counts sampled simultaneously
- C. The BRI/SBS complaints of building occupants are due to the mold found
- D. Likely future immune system dysfunction due to mycotoxin exposure
- E. Abnormal, since molds should not exist indoors

Mold-related Volatile Organic Compounds (VOC) have been shown to:

- A. Cause neurotoxicity
- B. Cause immune system dysfunction
- C. Be the definitive cause of most SBS/BRI
- D. Are likely responsible for the musty, disagreeable odor in damp environments with excess indoor mold growth
- E. Be more potent cellular poisons than mycotoxins

#### **Session 2208.....CME/MOC: 1.5**

#### **Developing a Health and Productivity-driven, Evidenced-based Approach to Benefit Design for Biologic Treatments**

**Ronald L. Loeppke, MD, MPH, FACOEM, FACP\***, U.S. Preventive Medicine, Jacksonville, FL

**William B. Bunn, MD, JD, MPH\***, Navistar, Inc, Chicago, IL

**Ahmad B. Naim, MD, MPH\***, Centocor Ortho Biotech Services, LLC, Horsham, PA

**Gregg Stave, MD, JD, MPH\***, Consultant, Chapel Hill, NC

According to the "appropriate" paradigm presented, benefit design for biologic treatment should assure that which of the following objectives are achieved (chose four):

- A. Appropriate care
- B. Appropriate brand of biologic drug
- C. Appropriate patient
- D. Appropriate time (per disease process)
- E. Appropriate value (considering all costs and treatment effectiveness)

The presentation identified a number of criticisms directed at the way employers commonly make benefit design decisions. Which of the following is not a criticism that was identified:

- A. Analysis focuses almost exclusively on actuarial trending of historic costs
- B. Disease trends and independent analysis of disease/illness are rarely (if ever) performed
- C. Benefit design strategies are modeled after successful case examples (e.g. Pitney Bowes)
- D. Design decisions fail to consider the potential impact of changes on employee health and productivity outcomes
- E. There is an over-reliance on benchmarking of peer-group companies' benefits

The presentation discussed the need of employers to managed total health care costs, including both direct and indirect costs, described as costs employer incur with respect to lost productivity as a function of workforce health. Which of the following were identified as potential indirect costs:

- A. Presenteeism
- B. Cost of refilling positions because of employee departure or disability (replacement costs)
- C. Absenteeism
- D. Workers' compensation
- E. Short-and-long-term disability
- F. The pace at which employees return to work and/or full function after extended absence
- G. All of the above

The presentation made an important distinction between cost drivers and high cost items. Which of the following are examples of potential cost drivers:

- A. A generous disability benefit that may result in higher disability utilization
- B. An on-site flu vaccine program that promotes compliance with seasonal flu shots
- C. High co-pays for prescription drugs, which may reduce medication adherence
- D. Lack of coverage for smoking cessation programs

The health, productivity, and total cost results achieved by Navistar can best be characterized as:

- A. Consistent with national trends and industry competitors
- B. Direct costs were reduced, but indirect costs related to measures such as absence, disability, and workers' compensation went up during the same period, offsetting savings

C. Total cost (direct and indirect) were reduced by focusing on cost-drivers to improve employee health and productivity

**Session 2209.....CME/MOC: 1.5**

**Individual Scientific Abstracts**

**Rosemary Sokas, MD, MOH\***, Office of Occupational Medicine, OSHA, Washington, DC  
**Leslie Clark, MD**, Armed Forces Health Surveillance Center, Silver Spring, MD  
**Shane Gallaway, PhD, MPH**, US Army Public Health Command, Gunpowder, MD  
**Thomas M. Helfer, PhD**, US Army Public Health Command, Abingdon, MD  
**Chandra Shekhar Nayak, MD**, Royal Commission Hospital, Industrial City Jubail, Saudi Arabia  
**Cecile S. Rose, MD, MPH**, National Jewish Health, Denver, CO  
**Coleen B. Weese, MD, MPH, FACOEM\***, US Army, Bel Air, MD

Epidemiological studies related to burn pit exposures and health outcomes are most likely to suffer from which limitation:

- A. Recall bias
- B. Misclassification
- C. Lack of measurable health outcomes

From what year on did significant threshold shift (STS) baseline need to be adjusted:

- A. 2004
- B. 2005
- C. 2007

What specialties were on the team that performed the study:

- A. Audiology
- B. Epidemiology
- C. Statistics
- D. All of the above

TRUE/FALSE: The objective of this session is to present important research findings on selected current topics in occupational and environmental health.

TRUE/FALSE: This session provided researchers in occupational and environmental medicine and related disciplines with a forum to present their current research.

**Session 2210.....CME/MOC: 3**

**Assessment of Toxic Exposures: A Clinician's Review**

**Clayton T. Cowl, MD, MS, FACOEM\***, Mayo Clinic, Division of Preventive and Occupational Medicine, Rochester, MN  
**Laurence J. Fuortes, MD, MS\***, University of Iowa College of Public Health and Medicine, Iowa City, IA  
**Thomas P. Moyer, PhD**, Mayo Clinic, Department of Laboratory Medicine, Rochester, MN  
**Richard J. Thomas, MD, MPH, FACOEM\***, National Naval Medical Center, Bethesda, MD

Deconjugation of xenobiotics such as methyl mercury by the enzymes of the intestinal microflora tend to promote:

- A. Liver toxicity
- B. A decrease in toxicity
- C. Enterohepatic recirculation
- D. Phase I reactions
- E. Fecal excretion

Cadmium is known to enhance the synthesis of which of the following proteins:

- A. Transferrin
- B. Metallothionein
- C. Acetyl cholinesterase
- D. Glucose 6 phosphate dehydrogenase

When establishing a biomonitoring program for persons potentially exposed to parathion, one would look for the metabolite:

- A. Acetyl choline
- B. Acetic acid
- C. Isopropanol
- D. Nitrophenol

Where is ninety percent of accumulated lead found in the body:

- A. Kidney
- B. Fat tissue
- C. Hair
- D. Skeleton

What clinical feature distinguishes arsenic toxicity from other heavy metals:

- A. Renal failure
- B. GI distress
- C. Hair loss
- D. Pulmonary disease
- E. Peripheral neuropathy

What feature is common in zinc or copper intoxication:

- A. Anemia
- B. Elevated ferritin
- C. Low ceruloplasmin
- D. Elevated urine iron
- E. None of the above

Which of the following physical characteristics of a gas is most important in determining the nature of the inhaled toxin acutely:

- A. Density
- B. Color
- C. Water solubility
- D. Texture
- E. Atomic weight

What is the most common agricultural toxic inhalation involving a water soluble gas:

- A. Oxides of nitrogen
- B. Ammonia
- C. Muriatic acid
- D. Chlorine
- E. Corn dust

The factor most problematic in the EPA's epidemiologic assessment of toxic inhalants was:

- A. Limitations in available hazmat facilities
- B. Lack of trained medical personnel
- C. Toxicity of most chemicals is unknown
- D. Lack of regulation on chemical storage or application
- E. Abundance of explosive toxins

**Session 2211.....CME/MOC: 3**

**Current Issues in Commerical Driver Medical Certification and Case Discussion**

**Natalie P. Hartenbaum, MD, MPH, FACOEM\***, OccuMedix, Maple Glen, PA

**Kurt T. Hegmann, MD, MPH, FACOEM\***, University of Utah RMCOEH, Salt Lake City, UT

**Benisse Lester, MD, FACOEM\***, Federal Motor Carrier Safety Administration, Washington, DC

How many commercial driver medical examinations is it estimated that examiners will be performed annually by examiners trained and certified through the NRCME:

- A. 400,000
- B. 4,000,000
- C. 1,000,000
- D. 10,000,000

If a medical examiner is removed from the NRCME, the appeals process includes which of the following:

- A. Providers notice and opportunity to request administrative review
- B. Defines procedures and timelines for actions
- C. Defines compliance and corrective action requirements
- D. All of the above

The proposed hours of service regulation for all but short haul drivers would permit a duty time of:

- A. 13 hours

- B. 14 hours
- C. 15 hours
- D. 16 hours

Which of the following are considered by the FMCSA in updating regulations and guidelines:

- A. Agency expert analyses of federal data and other relevant international, national, and state data
- B. Interagency, national, and international regulatory analyses
- C. Evidence reports
- D. Medical expert panels (MEPs)
- E. Medical review board (MRB), a committee established in accordance with the Federal Advisory Committee Act
- F. All of the above

TRUE/FALSE: The FMCSA recommends that a commercial driver can be medically qualified if they are taking suboxone if the treating provider had documented that there is no risk of impairment.

A Skill Performance Evaluation Certificate is appropriate for a driver with which of the following conditions:

- A. Amputation of right arm
- B. Chronic back pain
- C. Multiple sclerosis
- D. All of the above

In cab air quality is worse when the vehicle is:

- A. Parked and idling when HVAC is turned off
- B. Parked and idling when HVAC is turned on
- C. In traffic on highway
- D. In traffic on local roads

TRUE/FALSE: Drivers who have sustained a severe TBI should not be medically certified to operate a CMV.

The FMCSA Medical Expert Panel and Medical Review Boards recommend that drivers with multiple sclerosis who meet other qualifying criteria be medically qualified at least every:

- A. 3 months
- B. 6 months
- C. 1 year
- D. 2 years, if stable for at least 5 years

**Session 2212.....CME/MOC: 1.5**  
**Maintaining a Healthy Workforce in a Global Petrochemical Industry**

**Robert S. Conte, MD, MPH\***, Centerpoint Energy, Houston, TX  
**Faiyaz A. Bhojani, MD, DrPH, FACP, FACOEM\***, Shell Oil Company, Houston, TX  
**Stephen A. Frangos, MD, MPH, FACOEM\***, Chevron Services Company, Houston, TX

TRUE/FALSE: Employee should notify management if they take herbals and other over-the-counter drugs that can affect performance and/or behavior.

TRUE/FALSE: The health screening process for expatriate employees and dependents requires a thorough knowledge of medical infrastructure and health care resources at the assignment destination.

TRUE/FALSE: The medical fitness-for-duty process requires a thorough knowledge of the worker's essential job requirements.

Critical processes for systemically managing occupational health in a global workforce include:

- A. Standardized work processes
- B. Framework for health
- C. Information management system
- D. Assurance and review process
- E. Board certified occupational physicians

Regarding employee work cycle and health evaluations:

- A. Pre-placement evaluations are performed to primarily determine fitness for work
- B. Periodic evaluations are used essentially as a tool for employee health surveillance

- C. Return to work evaluations are performed to primarily determine fitness for work
- D. International transfer evaluation must consider an individual's health status, as well as the health care infrastructure and health risks of the host country/location
- E. Health and wellness evaluations should be integrated with occupational health evaluations, when possible
- F. All of the above

**Session 2213.....CME/MOC: 1.5**

**Workers' Compensation Management: Quality Outcomes and Cost Containment**

**Judith G. McKenzie, MD, MPH, FACOEM\***, University of Pennsylvania Medical Center, Philadelphia, PA

**Johnston Co, MD, MPH**, St. Joseph's Occupational Health, Stockton, CA

**David G. Lukcso, MD, MPH**, Medical Advisory Services, Gaithersburg, MD

In the St. Joseph's case study, the largest cost driver was seen in which fraction:

- A. Indemnity costs
- B. Medical costs
- C. Administrative/legal

TRUE/FALSE: In the St. Joseph's case study, efficiencies were realized from proper management of the employer, medical provider, and insurance/administrator roles.

TRUE/FALSE: Immediately following changes to California's law in 2002 and 2004, medical costs declined sharply and have continued to decline steadily but at a slower rate.

Workers' compensation costs have increased dramatically over time. During 2008 the total costs for workers' compensation in the U.S. was \$57.6 billion dollars. For the 2008 year:

- A. The cash wage replacement costs were higher than medical benefits costs
- B. Medical benefits costs were higher than cash wage replacement costs for the first time
- C. Total workers' compensation costs decreased from 2007 by 4.4%
- D. Both workers' compensation cash benefits and social security disability insurance benefits decreased

Studies have identified a variety of factors related to the rising costs of workers' compensation in the U.S. Studies have found positive results when investigating initiatives for controlling these factors except for:

- A. A 61% decrease in medical claims and a 73% decrease in the frequency of lost time claims with the use of a comprehensive health and safety initiative
- B. A 21.5% decrease in costs with no difference in health and functional outcomes from care provided through a managed care program based on an occupational medicine model compared with a fee-for-service model
- C. Decrease in lost time days and costs from care provided through a network of physicians the majority of which were occupational medicine physicians when compared with care provided through non-network physicians
- D. Greater satisfaction with overall treatment, attending physician, and overall access to care provided through a managed care program compared with a fee-for-service program

**Session 2214.....CME/MOC: 1.5**

**Surveillance and Disaster Preparedness**

**Michael A. Sauri, MD, MPH and TM, FACP, FACPM, FACOEM, FRSTMH, CTropMed\***, Occupational Health Consultants, Rockville, MD

**Richard Alcorta, MD, FACEP**, Maryland Institute for Emergency Medical Services Systems, Baltimore, MD

**CAPT Duane C. Caneva, MD**, Navy Bureau of Medicine and Surgery, Washington, DC

What four broad surveillance categories are being used by Maryland to determine the Hospital Based Demand Scoring System (HBDSS):

- A. Physicians, ventilators, vaccines, and demand
- B. Nurses, PPE, ICU beds, and ILI patients
- C. Staffing, supplies, space, and demand
- D. Physicians, PPE, ICU beds, and yellow alert percentage

Based on the statewide category scoring of HBDSS, hospital decision makers can:

- A. Activate portions of the hospital surge/disaster plan
- B. Appreciate a reduction in their individual liability exposure as all hospitals within their area will be referenced in the HBDSS
- C. Share resources with other hospitals across their area based on individual hospital reported status
- D. All of the above



Which of the following contribute to a comprehensive picture of biosurveillance:

- A. Data integration in general
- B. Plant and animal data
- C. Environmental data
- D. Population health data
- E. All of the above

Coordination of national biosurveillance is made by whom:

- A. The Center for Disease Control and Prevention
- B. The White House
- C. The DHS Office of Health Affairs
- D. The National Institute of Health

TRUE/FALSE: This session explored the impact that a disaster can have on a community and the world, the types of surveillance and monitoring currently used, and the process and business continuity of mitigation.

**Session 7210.....CME/MOC: 1**  
**Becoming an ACOEM Fellow**

**Steven Pike, MD, JD, MBA, MSc, CIH, FACEP, FACMT, FACOEM\***, EnviroMD, Inc., Tucson, AZ

TRUE/FALSE: An ACOEM member is eligible to apply for fellowship when he/she has held membership in the College as a master or active member for a period of no fewer than three years.

Which of the following requirements must be met in order to qualify for fellowship:

- A. Member in good standing in ACOEM for at least three years and have obtained board certification prior to the next AOHC
- B. Has an active, unrestricted license to practice medicine
- C. Has two recommendation letters, one being from a current ACOEM fellow
- D. Completed a fellowship application
- E. Contributed to ACOEM, components, or within the field of occupational and environmental medicine
- F. All of the above

TRUE/FALSE: The deadline for submitting a fellowship application is November 1<sup>st</sup>.

**Monday, March 28, 2011**

**Session 7300.....CME/MOC: 0**  
**ACOEM Power Hour! Wake Up to Washington**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

**Session 8301.....CME/MOC: 3**  
**National Zoo**

**Richard J. Thomas, MD, MPH, FACOEM\***, National Naval Medical Center Occupational Medicine Services, Bethesda, MD  
**Thomas Lawford, MD**, National Zoo, Washington, DC

The mission of multiple zoos in the United States include all except:

- A. Advancement of science
- B. Increasing the profit shares of stock holders
- C. The instruction of the people
- D. Recreation of the people

Occupational challenges and animal handlers include:

- A. Infectious threats (zoonoses)
- B. Noise exposure
- C. Traumatic injuries
- D. All of the above

Private animal collections have been know since:

- A. The time of the Egyptian pharaohs
- B. London (1837)
- C. Paris (1852)
- D. The U.S. Bicentennial (1976)

The benefits of an effective worker safety and health program include:

- A. To improve employee morale and productivity
- B. To reduce the extent and severity of work-related illness and injury
- C. To reduce worker-compensation costs
- D. All of the above

Examples of traumatic injuries to animal handlers include:

- A. Bites, scratches, stings, or being pecked
- B. Being bucked or thrown
- C. Being crushed, dragged, gored, or kicked
- D. Being stepped on or trampled
- E. All of the above

Other types of injuries and illnesses for animal handlers are:

- A. Chemical exposure (e.g. pesticides)
- B. Environmental and PPE associated, and noise
- C. Equipment associated injuries
- D. Ergonomic and infectious diseases
- E. Fire and natural disasters
- F. Food and meatpacking industrial preparation
- G. All of the above

TRUE/FALSE: The popularity of zoos is both a challenge to and a dilemma for modern zoo staff, which must balance the entertainment value of the zoological park with other equally important and demanding zoo missions.

TRUE/FALSE: FONZ operates an extensive wildlife-education program, and its corps of more than 1,500 volunteers provides about 90,000 hours of service to the National Zoo each year.

The benefits of an effective worker safety and health program are clear. In general, effective management of such programs have been shown to (OSHA, 1989):

- A. Reduce the extent and severity of work-related illness and injury
- B. Improve employee morale and productivity
- C. Reduce worker-compensation costs
- D. All of the above
- E. None of the above

**Session 2300.....CME/MOC: 1.5**  
**Forecasting Future Trends in Workers' Compensation**

**Steven J. Serra, MD, MPH\***, Aetna Inc., San Diego, CA  
**Richard Victor, PhD, JD**, Workers' Compensation Research Institute, Cambridge, MA

With respect to how workers' compensation payers have traditionally viewed providers who deliver care in the workers' comp system, which element(s) do they report as important:

- A. Expertise in treating certain types of injuries/certified occupational medicine doctors
- B. Being located within close proximity to employers (i.e. 50 mile radius)
- C. Established relationship with an employer (larger employers)
- D. Having a good reputation, providing fair assessments and being positive and reassuring to injured workers
- E. Understanding of workers compensation, willingness to work with employers (light duty accommodations) and adjusters (document appropriately, return phone calls)
- F. All of the above
- G. None of the above

With respect to how workers' compensation payers view providers in 2011 and beyond, which element(s) do payers report as important:

- A. Board certification in workers' comp related subspecialty (i.e. occupational medicine)

- B. Understanding of and willingness to engage in the workers' comp process (i.e. timely submission of paperwork; information sharing with adjusters; partnership with employers on light duty accommodations)
- C. Superior return-to-work outcomes (minimizing medical/indemnity costs while maximizing quality – i.e. low relapse/readmission rates)
- D. Hospital affiliations (i.e. majority of services performed at lower costs, high quality facilities/centers of excellent)
- E. Pharmacy costs (i.e. prudent and limited in-office dispensing with prices close to average wholesale cost, opioid prescription volume)
- F. Patient satisfaction (proxy for litigation rates)
- G. All of the above
- H. None of the above

According to Integrated Benefits Institute (IBI) benchmarking data, indemnity claims make up 22% of all workers' compensation claims. What percentage of total workers' compensation medical costs do these types of claims account for:

- A. 22%
- B. 52%
- C. 72%
- D. 92%

According to a 2010 JOEM article from John Hopkins research, what percentage of physicians accounted for 72% of the total medical costs:

- A. 4%
- B. 10%
- C. 24%
- D. 50%

Based on NCCI and industry data, on average, what percent of the total workers' compensation medical costs for 2009 were driven by prescription pharmaceuticals (drug spend):

- A. 1 to 5%
- B. 8 to 10%
- C. 14-19%
- D. 25%

**Session 2301.....CME/MOC: 1.5**  
**William B. Patterson Memorial Presentation**

TRUE/FALSE: This lecture is held in memory of William B. Patterson, MD, MPH, FACOEM, in recognition of his life and service.

TRUE/FALSE: At the time of his death in 2008, Dr. Patterson was a member of the ACOEM Board of Directors, Chair of the Committee on Ethical Practice in OEM, and the Assistant Vice President at Concentra Health Services.

TRUE/FALSE: Dr. Patterson was a member of the New England COEM, an ACOEM component society, where he served as their President, Vice President, Program Director, and as a member of their Board of Directors for 14 years.

TRUE/FALSE: This year's lecturer is Mark A. Rothstein, JD, of the University of Louisville School of Medicine.

TRUE/FALSE: Mr. Rothstein spoke on the ethical challenges of occupational and environmental medicine.

**Session 2302.....CME/MOC: 1.5**  
**Teaching Using Experiential Learning: A Hands-on Workshop**

**Kent W. Peterson, MD, MRO, FACPM, FACOEM\***, Occupational Health Strategies, Inc., Charlottesville, VA

Andragogy refers to which of the following:

- A. The study of human evolution
- B. New learning technology available through Android PDAs
- C. Adult teaching and learning methods
- D. Experiential learning through trial and error
- E. None of the above

What is the most common teaching method employed with AOHC CME:

- A. Case studies with discussion
- B. Lecture with visuals and brief Q&A

- C. Group problem solving exercises
- D. Games and playful exercises

Which of the following teaching modalities has been demonstrated to be most effective:

- A. Self-paced interactive instruction
- B. Classroom teaching using audio-visual reinforcement
- C. Self-directed learning using incentives and rewards
- D. Individualized learning based on preferred learning styles
- E. None of the above

Which teaching method results in the longest time of recall:

- A. Optimized interactive instructional methodologies
- B. Group learning led by an inspiring teacher
- C. Active learning using mental, kinesthetic, and emotional components
- D. Classroom instruction combining graphics and high-impact streaming video
- E. None of the above

Which learning methods have been used in this session (mark all that apply):

- A. Journaling and paired sharing
- B. Programmed instruction
- C. Incentives and rewards
- D. Group problem solving
- E. Case study method

**Session 2303.....CME/MOC: 1.5**

**Prescription Drug Use in Transportation Workers: Safety, Legal and Policy Perspectives**

**Michael Greenberg, MD, MPH, FACMT, FACOEM\***, Drexell University College of Medicine, Philadelphia, PA

**Michael G. Holland, MD, FACOEM, FAACT, FACMT, FACEP\***, Glens Falls Hospital Center for Occupational Health, Saratoga Springs, NY

**John P. Holland, MD, MPH, FACOEM\***, Union Pacific Railroad, Olympia, WA

**Donald C. Sinclair II, JD**, Sinclair Occupational & Environmental Legal Consulting, Wheeling, WV

Which of the following are the most frequently found substances in cases of driving under the influence of drugs:

- A. Cannabinoids
- B. Amphetamines
- C. Opioids
- D. Benzodiazepines
- E. PCP

Compared with drivers not using benzodiazepines, drivers taking which of the following demonstrated increased odds of an “unsafe driving action”:

- A. Intermediate or long half life benzodiazepines
- B. Intermediate or short half life benzodiazepines
- C. Long half life or short half life benzodiazepines
- D. Ultra short half life or short half life benzodiazepines
- E. Intermediate or ultra-short half life benzodiazepines

A person is physically qualified to operate a commercial motor vehicle if that person does not use:

- A. A schedule I controlled substance
- B. An amphetamine
- C. A narcotic
- D. Any other habit-forming drug
- E. All of the above

Which of the following are never subject to the exception:

- A. Opioids
- B. Methadone
- C. Medical marijuana
- D. Anti-seizure medications

It has been shown that the use of opioids for chronic, non-cancer pain is associated with:

- A. Good function outcomes

- B. Reduced ED visits for pain medications
- C. Decreased drug abuse and diversion
- D. High incidence of side effects and deaths
- E. Reduced incidence of surgical procedures

**Session 2304.....CME/MOC: 3**  
**Legal/Regulatory Update: ADA, GINA, HIPPA, and Health Care Reform**

**Timothy M. Mallon, MD, MPH, FACOEM\***, Uniformed Services University, Bethesda, MD  
**Margaret A. McCausland, ESQ**, McCausland and McCausland LLC, Conshohocken, PA  
**Brian G. Scott, MD, MPH\***, U.S. Army Public Health Command, San Antonio, TX  
**Phil Spottswood**, Office of Personnel Management, Washington, DC

TRUE/FALSE: The three-prong definition of disability remained the same under the ADAAA as under the original ADA.

TRUE/FALSE: If a hospital employee receives care in the hospital for a condition unrelated to employment, GINA Title II would not apply.

TRUE/FALSE: The interpretation of a disability under the ADAAA is the same as under the ADA.

TRUE/FALSE: This session did not cover the Genetics and Non-disclosure Act (GINA).

TRUE/FALSE: The occupational health department of an employer may ask an employee for family medical history in a pre-placement or medical surveillance exam or screening.

TRUE/FALSE: Positive mitigating measures may still be taken into account under the ADAAA.

TRUE/FALSE: Occupational health providers who unintentionally learn of genetic information concerning an employee may record that information in the employee health record.

TRUE/FALSE: Under the ADAAA, a person no longer has to be limited in a broad class of jobs in order to qualify for disability.

TRUE/FALSE: This session provided attendees with an update of various laws affecting clinical OEM practices including the Americans with Disabilities Act Amendments (ADAA).

**Session 2305.....CME/MOC: 4.5**  
**Deepwater Horizon Disaster Response**

**Robert M. Bourgeois, MD, MPH, FACOEM\***, Bourgeois Medical Clinic, Morgan City, LA  
**Bruce P. Bernard, MD, MPH**, NIOSH, Cincinnati, OH  
**Timothy E. Davis, MD, MPH, BS\***, HHS, Arlington, VA  
**Richard JL Heron, MD, FRCP, FACOEM\***, BP International, Sunbury on Thames, England  
**Melody M. Kawamoto, MD, MS\***, CDC/NIOSH, Cincinnati, OH  
**Atkinson W. (Jack) Longmire, MD\***, OSHA, Silver Spring, MD  
**Glenn Millner, PhD**, Center for Toxicology and Environmental Health LLC, North Little Rock, AR  
**Kevin J. O'Shea, MD, MPH\***, BP North America, Whiting, IN  
**Jen Rusiecki, MD**, USUHS  
**Erica G. Schwartz, MD**, Coast Guard Headquarters, Washington, DC  
**LuAnn E. White, PhD, DABT**, Tulane School of Public Health and Tropical Medicine, New Orleans, LA

TRUE/FALSE: At approximately 10PM (CST) on Tuesday, April 20<sup>th</sup>, 2010, a massive explosion occurred on the Deepwater Horizon (DWH) dilling rig.

TRUE/FALSE: The result of the explosion resulted in one of the largest marine oil spills in our nation's history.

TRUE/FALSE: The oil spill response and recovery has represented an unprecedented inter-agency effort to tackle the problem.

What were some short term health effects associated with the DWH clean-up activities:

- A. Mild heat illness
- B. Headache
- C. Musculoskeletal strains/sprains
- D. All of the above

At enrollment in the NIH Gulf Oil Spill Health Study, the following data was gathered from each responder:

- A. Clean up related tasks (must have worked at least one day)
- B. Demographic, socioeconomic and psychosocial factors
- C. Occupational and health histories
- D. Physical and mental health
- E. All of the above

How many responders were involved during the peak response:

- A. Six: two federal workers, two state employees, and two BP employees
- B. 50,000 responders and multiple federal, state, and local agencies
- C. 10,000 responders and two OSHA inspectors

How many fatalities were attributed to the spill response:

- A. More than 100
- B. None
- C. Twenty-five
- D. Two

What were the biggest occupational medicine challenges during the DWH response:

- A. Heat stress, musculoskeletal issues
- B. Health, hygiene, food safety
- C. Pre-existing medical conditions, medications
- D. Fitness for duty
- E. All of the above

TRUE/FALSE: Respirators were required for use by beach cleanup workers in the spill response.

The part of a pre-deployment assessment is best performed by an occupational medicine physician is determination of (single best answer):

- A. Which workers should be referred for evaluation and treatment of medical problems
- B. Which workers should be hired and which should not be hired
- C. A worker's ability to perform job tasks and use personal protective equipment safely
- D. A worker's training needs

Select the most true statement below:

- A. A report of a chemical odor by a patient who has symptoms of headache, dizziness, weakness, and nausea meets the case definition of chemical toxicity
- B. Laboratory tests for biomarkers should be ordered whenever chemical toxicity is suspected
- C. A diagnosis of chemical toxicity can be made with confidence even in the absence of information about the exposure (i.e. the suspected agent, its physical characteristics and use, the time and location of exposure, the worker's activity, and route of exposure)
- D. Information from EMTs, nurses, nurse practitioners, physician assistants, and others who have first responder or triage roles are particularly important when they include details about possible exposures as well as details about the clinical presentation

TRUE/FALSE: Regarding the impact of "weathering" of crude oil on human health, particularly the uptake of PAHs into seafood...the compounds of concern for crude oil are volatile organic compounds (VOCs) and the PAHs. The other components have low degrees of toxicity to people. Gases and the VOCs rapidly evaporate and do not remain in the crude oil. These pose risks for workers or others near the source of the leak. The remaining compounds are the heavier molecular weight compounds including the PAHs. The PAH may be taken up into types of seafood and pose a risk to humans.

TRUE/FALSE: The seafood monitoring program that was implemented to protect public health has three tiers: no visible oil observed within an entire fishing area (designated by the states); seafood must pass the organoleptic or sensory testing (smell and taste) by trained experts; and chemical testing is conducted to monitor for PAHs and other aliphatic hydrocarbons.

TRUE/FALSE: The seafood monitoring program is designed to determine if a fishing area may be reopened to fishing for human consumption. The sampling plan uses a three tiered screening approach that is designed to find clean areas. The results from the sampling have not detected levels of contaminants of concern which is consistent with this approach. Those conducting research on the oil spill or legal advocates are sampling to find contaminated areas and take samples from visibly oiled areas.

**Session 2306.....CME/MOC: 1.5  
Practical Approach to Employee Health Services**

**Josette Bou-Khalil, MD, MPH\***, Baptist Health South Florida, Miami, FL

TRUE/FALSE: Baptist Health South Florida (BHSF) is the largest health care organization in South Florida.

BHSF received the prestigious Corporate Health Achievement Award from ACOEM in

- A. 2010
- B. 2009
- C. 2008

TRUE/FALSE: BHSF has expanded the traditional employee health services (EHS) to include a comprehensive program covering workers' compensation, employee care hours, and preventive services.

TRUE/FALSE: BHSF recognized the need for campus-based medical clinics to offer treatment for employees' minor illnesses and injuries, beyond those that occur in the workplace.

The session covered:

- A. Practical steps to implement and manage a comprehensive program beyond traditional EHS
- B. Emphasize reporting and outcome measurements pertaining to EHS with a main focus on wellness and productivity
- C. Summarize the latest research on quality and standards of care and link it to the current program offered at BHSF
- D. All of the above

**Session 2307.....CME/MOC: 1.5**

**Can't Work or Won't Work? Psychiatric Disability Evaluations**

**Liza H. Gold, MD**, Georgetown University School of Medicine, Arlington, VA

The main source of errors made by clinicians in disability evaluations arises from the misconception that:

- A. The assessment of impairment applies only when a diagnosis has been made
- B. The assessment of disability is made only by physicians
- C. The identification of any impairment satisfies the criteria for most disability determinations
- D. An impairment arising from a mental disorder automatically equates to disability

Clinicians can make the assessment of impairment and disability more objective by all of the following except:

- A. Obtaining corroboration of the evaluatee's subjective report
- B. Assuming that an individual's impairments began with the onset of a diagnosable psychiatric disorder
- C. Probing categories of function in detail
- D. Seeking clear examples of impairment

In making a diagnosis of a personality disorder in the context of a disability evaluation, examiners should:

- A. Consider the diagnosis of Axis I and Axis II disorders mutually exclusive
- B. Distinguish the personality traits that define these disorders from characteristics that emerge in response to specific situational stressors
- C. Rely on their behavioral observations of the evaluatee during the clinical interview
- D. Focus on repetitive patterns and symptoms evident primarily in work related functioning

In a workers' compensation claim, which of the following requires proof that may be informed by a psychiatric opinions:

- A. Claimed workplace illness or injury causes functional impairment outside the workplace
- B. No related illness or injury existed prior to the claimed workplace injury or illness
- C. Claimed illness or injury has a causal relationship with employment
- D. Claimed workplace illness or injury has reached maximum medical improvement

To qualify for Social Security Disability Insurance (SSDI) benefits, an individual making a claim based on a psychiatric disorder must demonstrate which of the following:

- A. A casual relationship between the disability and their employment
- B. Financial need
- C. Lack of any other type of disability insurance coverage
- D. That the disability is total and permanent
- E. That the claimant has never made a previous SSDI or other disability claim

**Session 2308.....CME/MOC: 1.5**

**Cardiovascular Disease in Firefighters and Law Enforcement: State of the Scientific Research and Clinical Implications**

**Stefanos N. Kales, MD, MPH, FACP, FACOEM\***, Harvard School of Public Health, Boston, MA

TRUE/FALSE: According to NFPA 1582 Standard (firefighters) and most police departments, morbid obesity (BMI >40) is a category A fitness-for-duty exclusion criterion for firefighters and police.

TRUE/FALSE: Standard JNC criteria for hypertension are usually the basis for NFPA and other fitness-for-duty criteria for firefighters and police.

Which of the following firefighters' duties is associated with the highest risk of on-duty death due to cardiovascular events:

- A. Alarm response
- B. On-duty training
- C. Fire suppression
- D. Alarm return

TRUE/FALSE: Firefighters engaged in fire suppression activities are about 60 to 100 times more likely to die while on duty as compared to firefighters stationed at the fire station.

Name the two most common and highest risk, pre-existing conditions that are most predictive of on-duty CHD events:

- A. LVH and CHD
- B. High LDL and low HDL
- C. Obesity and diabetes

**Session 2309.....CME/MOC: 1.5**

**FedStrive: A Model Worksite Wellness Initiative in Federal Government**

**Marc Leffer, MD, MPH\***, Federal Occupational Health, Bethesda, MD

**CAPT Mark E. Delowery, DO, MPH\***, Federal Occupational Health, Philadelphia, PA

According to Healthy People 2010, which of the following is not a specific "pillar" of comprehensive worksite wellness programs:

- A. Onsite fitness centers
- B. Health education
- C. Health screenings
- D. Supportive social and physical environment
- E. Integration into organizational structure

Benefits of worksite wellness programs may include which of the following:

- A. Positive return on investment
- B. Reduced healthcare costs
- C. Improved productivity
- D. Increased retention
- E. All of the above

Studies on cost-effectiveness of worksite wellness programs have shown which of the following:

- A. Negative return on investment
- B. Minimal return on investment
- C. Positive return on investment
- D. All of the above

TRUE/FALSE: Federal Occupational Health (FOH) is the largest provider of occupational health services in the federal government and a leader in worksite wellness programs.

FedStrive is a pilot worksite wellness program for employees in which federal agency:

- A. Office of Personnel Management
- B. General Services Administration
- C. Health and Human Services
- D. Federal Occupational Health
- E. Office of Management and Budget

**Session 7301.....CME/MOC: 0**

**ACOEM Annual Membership Meeting and Luncheon**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*



**Session 8300.....CME/MOC: 3**  
**Occupational and Environmental Aspects at the Pentagon**

**CAPT Patrick Laraby, MD, MS, MPH, MBA, FACOEM\***, US Navy, Washington, DC

TRUE/FALSE: Department of Defense active duty personnel are covered under OSHA.

TRUE/FALSE: Federal civilian workers whose workplace is the Pentagon are covered by the State of Virginia Workers' Compensation Progra.

TRUE/FALSE: The Pentagon is in the State of Virginia.

TRUE/FALSE: The U.S. Coast Guard is part of the U.S. Department of Defense.

TRUE/FALSE: The center courtyard of the Pentagon is reserved for intelligence community (CIA, FBI) liaison personnel.

TRUE/FALSE: Security personnel at the Pentagon are authorized to use deadly force if necessary.

TRUE/FALSE: Persons with significant disabilities are not permitted to work at the Pentagon.

TRUE/FALSE: The Pentagon is a military base.

TRUE/FALSE: The tour of the Pentagon included the main corridors and the medical facility.

**Session 2310.....CME/MOC: 1.5**  
**Developing Return-to-Duty Standards for Wounded Warriors**

**John S. Crowley, MD, MPH**, US Army Aeromedical Research Laboratory, Fort Rucker, AL

**Steven J. Gaydos**, US Army Aeromedical Research Laboratory, Fort Rucker, AL

**James L. Persson, MD, MPH**, US Army Aeromedical Activity, Fort Rucker, AL

**Sonya M. Sconyers, DHA, MSPT, OTR/L**, Office of the Surgeon General, Falls Church, VA

**David Twillie**, Traumatic Brain Injury Warrior Resiliency and Recovery Center, Fort Campbell, KY

According to the Defense and Veterans Brain Injury Center (DVBIC), the numbers of incident diagnoses of traumatic brain injury (TBI) among service members per year are between:

- A. 1,000-5,000
- B. 5,000-11,000
- C. 11,000-30,000
- D. >30,000

Functional Capacity Evaluation (FCE) activities might include which of the following:

- A. Running
- B. Pushing
- C. Lifting
- D. Firing a weapon
- E. A, B, and C
- F. All of the above

FCE outcomes are used to establish a baseline for individualized rehabilitation program:

- A. To predict a successful return-on-investment
- B. To weed out service members who are not likely to return to duty
- C. To replace a comprehensive rehabilitation program

Testing for the side effects of SSRIs required a waiver application includes all of the following except:

- A. In-flight evaluation
- B. Neurocognitive testing
- C. Physical fitness scores
- D. Command endorsement regarding performance

TRUE/FALSE: Waivers for SSRIs can be considered after the first month of stable use.

**Session 2311.....CME/MOC: 1.5**  
**Dose: Quantitating Occupational Chemical Exposures**

**Theodore F. Them, MD, MS, PhD, MPH\***, Guthrie Clinic, Ltd., Sayre, PA

Two critical, associated reference on this topic are:

- A. ATSDR's *Calculating Exposure Doses* ([atsdr.cdc.gov/hac/phamanual/appg.html](http://atsdr.cdc.gov/hac/phamanual/appg.html)) and the EPA's Exposure Factors Handbook ([epa.gov/ncea/pdfs/efh/front.pdf](http://epa.gov/ncea/pdfs/efh/front.pdf))
- B. Catcher in the Rye and Bambi
- C. The Medical Disability Advisor (Reed) and the PDR

A True exposure factor (EF) should be expressed in the following units when calculating dose:

- A. Hours/day
- B. Grams/mole
- C. None (unitless)
- D. Percent absorption

The fraction of a toxicant that is absorbed and available internally to exert its effects is typically referred to as:

- A. The toxic substance
- B. Bioavailability (absorption efficiency)
- C. The intake rate
- D. The exposure

Typical, accurate, and reliable calculations of dose require familiarity with the mathematical manipulations of:

- A. Scientific notation (numbers expressed as powers of ten)
- B. Proper numbers of significant figures
- C. Various conversion factors
- D. All of the above
- E. None of the above

Securing the data often necessary to precise calculation of dose will typically involve your working directly with professionals from:

- A. Health and Safety
- B. Human Resources
- C. Industrial Hygiene
- D. None of the above
- E. All of the above

**Session 2312.....CME/MOC: 1.5**  
**Worksite Health and Safety: Application of Health and Productivity Principles**

**Pamela A. Hymel, MD, MPH, FACOEM\***, Walt Disney Parks and Resorts, Anaheim, CA

**L. Casey Chosewood, MD, NIOSH/CDC**, Atlanta, GA

**Ronald L. Loeppke, MD, MPH, FACOEM, FACP\***, U.S. Preventive Medicine, Jacksonville, FL

TRUE/FALSE: Workplace health protection and promotion is defined as the strategic and systematic integration of distinct environmental, health, and safety policies and programs into a continuum of activities that enhance the overall health and well being of the workforce and prevents work-related injuries and illnesses.

TRUE/FALSE: Health risks leading to chronic health conditions are on the decline according to the CDC.

TRUE/FALSE: Systems for measuring the effectiveness of combined health protection and promotion programs should be standardized so they can be readily utilized across industries/employers.

TRUE/FALSE: It is estimated that worldwide only 50% of patients with chronic diseases take their medications as prescribed.

Non-compliance to medication regimens can be attributed to:

- A. Personal characteristics
- B. Medication regimen characteristics
- C. Disease-specific factors
- D. Patient/provider and support relationships
- E. Psychosocial factors
- F. All of the above

**Session 2313.....CME/MOC: 3**  
**MRO Controversies**

**Douglas W. Martin, MD, FACOEM, FAADEP, FAAFP\***, St Luke's Center for Occupational Health Excellence, Sioux City, IA  
**Karl Auerbach, MD, MBA, MS, FACOEM\***, Exponent, Inc., Pittsford, NY  
**Donna R. Smith, PhD**, Highpoint Business Campus, Chalfont, PA

TRUE/FALSE: This session covered the common and not-so-common difficulties with federally regulated drug testing programs will be discussed and reviewed.

TRUE/FALSE: One of the duties of the medical review officer (MRO) is to report medications that may present a safety risk to the designated employer representative.

TRUE/FALSE: This session covered the varying scenarios that arise in non-regulated testing and focus on the issue of alternative testing methods and strategies.

TRUE/FALSE: This session's content included legislative updates on proposed regulatory changes that might affect the MRO.

TRUE/FALSE: This session covered how one's personal appearance can influence the outcome of an examination.

TRUE/FALSE: When the prescription is a controlled substance: 21 CFR 290.5 -- The label of any drug listed as a "controlled substance" in schedule II, III, or IV of the Federal Controlled Substances Act shall, when dispensed to or for a patient, contain the following warning: "Caution: Federal law prohibits the transfer of this drug to any person other than the patient for whom it was prescribed."

TRUE/FALSE: When the prescription is a controlled substance: 20 CFR 291.5 -- The label of any drug listed as a "controlled substance" in schedule II or IV of the Federal Controlled Substances Act shall, when dispensed to or for a patient, contain the following warning: "Caution: Federal law limits the transfer of this drug to any person other than the patient (or patient's immediate family member) for whom it was prescribed."

TRUE/FALSE: United States Code 21 - discusses controlled medications; appears to say it is illegal to dispense controlled medication except by appropriate person (e.g. Illegal to give someone a controlled drug).

TRUE/FALSE: United States Code 23 - discusses controlled medications; appears to say it is illegal to dispense controlled medication except by appropriate person (e.g. Illegal to give someone a controlled drug).

**Session 2314.....CME/MOC: 3**  
**Current Medical Center Occupational Health Issues**

**Mark Russi, MD, MPH, FACOEM\***, Yale - New Haven Hospital, New Haven, CT  
**Kenneth G. Castro, MD**, US Center for Disease Control and Prevention, Atlanta, GA  
**William S. Scott, MD, MPH, CPE, FACOEM\***, OSF Occupational Health Network, Peoria, IL  
**Michael Tapper, MD**, Lenox Hill Hospital, New York, NY

TRUE/FALSE: This research demonstrated that revision rates are high when there is a discordance between tuberculin skin test (TST) and QuantiFERON-TB Gold In-Tube (QFT-GIT) and also when the Interferon gamma (IFN- $\gamma$ ) responses are close to the cut off value of 0.35 IU.

TRUE/FALSE: The session's content covered colonization of health care workers with drug resistant organisms, applicable U.S. and international guidance, and the potential for transmission to and from patients.

TRUE/FALSE: This research showed that there were significantly more unexpected (25-fold increase) in latent TB infections (LTBI) positive results when instituting QFT-GIT than compared with background TST positive rates for a given low risk population.

TRUE/FALSE: This research demonstrated the most cost effective strategy when screening low risk populations for LTBI is to use QFT-GIT rather than TST.

TRUE/FALSE: There is a limited role for use of BCG vaccine to protect healthcare workers in settings where TB controls are otherwise not adequate.

TRUE/FALSE: Among individuals with a history of BCG vaccination, specificity of IGRA assays is superior to that of tuberculin skin testing.

TRUE/FALSE: There is evidence that XDR tuberculosis has been transmitted to healthcare workers.

TRUE/FALSE: This session covered practical implications and first-hand experiences with IGRA screening programs.

IGRA stands for:

- A. Interferon Gamma Release Assays
- B. Interferon Grandma Release Assays
- C. Interactive Gamma Response Assays
- D. Interactive Gamma Release Assumption

**Session 2315.....CME/MOC: 1.5**

**From War to Work: Understanding the Needs and the Strengths of Reserve and National Guard Service Members Returning from Deployment**

**Jennifer L. Bornemann, MSSW**, Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, MD

**Christine L. Gray, MPH**, Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, Bethesda, MD

**Dori B. Reissman, MD, MPH, CAPT (USPHS)**, NIOSH, CDC, Washington, DC

TRUE/FALSE: Combat operations in the Global War on Terrorism have involved more than 698,000 reserve component members to date.

TRUE/FALSE: The time to achieve and maintain training and readiness, shorter notification time for activation, and more frequent and longer deployments have demanded greater levels of commitment on the part of the members, their families and their civilian employers.

TRUE/FALSE: Upon return, nearly 20% of service members are burdened with at least one mental health problem.

TRUE/FALSE: Re-entry into the workforce can be difficult, but may be helped if employers are aware of the behavioral and mental health consequences of deployment and can pro-actively make appropriate workplace accommodations.

TRUE/FALSE: This session covered descriptive characteristics of Reserve components of the U.S. Armed Forces; the behavioral and mental health impacts of deployment on Reserve members returning to work; programs and policies designed to facilitate work transition; and how to leverage the experience and skills Reservists gained during their service.

**Session 2316.....CME/MOC: 1.5**

**Evidence-based Update in Preventive Cardiology and Screening**

**Nehal N. Mehta, MD, MS, FACP, FAHA**, Pennsylvania School of Medicine, Philadelphia, PA

Which of the following medications has the largest prevention of acute myocardial infarction:

- A. Clopidogrel
- B. Aspirin
- C. Heparin
- D. Lisinopril

Which of the following is not a risk factor for coronary heart disease:

- A. Tobacco use
- B. Premature family history of vascular disease
- C. High LDL cholesterol
- D. Diabetes
- E. High HDL cholesterol

Which of the following assessments is recommended in the guidelines for screening asymptomatic individuals for heart disease:

- A. Genetic testing for known common atherosclerotic genes
- B. Coronary artery calcium scoring (CAC)
- C. Electrocardiogram (EKG)
- D. Calculation of Framingham Risk Score (FRS)

E. Measurement of carotid intimal medial thickness (IMT)

All of the following are needed for calculation of the Framingham Risk Score except:

- A. Age
- B. Cholesterol values
- C. Presence of diabetes
- D. Family history of vascular disease
- E. Tobacco use

After finding which of the following at a screening health fair would a consultation with a provider for follow up not be medically indicated:

- A. Presence of morbid obesity
- B. Finding a total cholesterol >200
- C. A fingerstick glucose of >300
- D. Presence of BP >180/80
- E. Finding an LDL >190

**Session 2317.....CME/MOC: 1.5**  
**Promoting Quality in Occupational Medicine**

**William S. Wanago, MD, MACOEM\***, Comprehensive Health Service, Inc., New York, NY  
**Andrew Di Giovanni, MPH, FACMPE**, Comprehensive Health Services, Larkspur, CO  
**Arun Villivalam, MD, FACFP**, Comprehensive Health Service, Reston, VA

TRUE/FALSE: Accreditation Association for Ambulatory Health Care (AAAHC) Core Standards apply to primary care, but don't apply to occupational health.

Evidence-based clinical guidelines are intended to:

- A. Reduce variation in diagnosis and treatment
- B. Allow medical providers to use clinical judgment
- C. Reduce unnecessary costs
- D. Foster diagnosis and treatment based on research, rather than anecdote
- E. All of the above

TRUE/FALSE: A 360 Patient Safety Framework includes only quantitative measures.

A privileging process should include which of the following:

- A. Credentialing
- B. Competency assessment
- C. Peer review of medical records
- D. All of the above

TRUE/FALSE: According to Kotter's 8 Steps of Successful Change, the execution of change should occur quickly.

**Session 7302.....CME: 1/MOC: 0**  
**ACOEM's Maintenance of Certification Part IV Program: What Re-certifying ABPM Diplomates Need to Know**

**Denece O. Kesler, MD, MPH, FACOEM\***, University of New Mexico, Albuquerque, NM  
*Maintenance of Certification credit (MOC) is not available for this session*

**Tuesday, March 29, 2011**

**Session 7400.....CME/MOC: 1**  
**Attracting and Retaining Clients for an Occupational Medicine Practice**

**Frank H. Leone, MBA, MPH\***, RYAN Associates, Santa Barbara, CA

Which of the following should be included on a reference list that you distribute to prospective clients:

- A. Client telephone numbers and email addresses

- B. A description of “scope of services provided” to a sample of key clients
- C. A short quote from each client summarizing their satisfaction with your services
- D. A complete list of all clients including year(s) of service
- E. All of the above

Which of the following is considered the most important way to build an occupational health practice:

- A. Continuous distribution of brochures and other written materials
- B. “High touch” activities in which the occupational health practice can meet prospective clients face to face
- C. A state of the art website
- D. An ongoing email campaign to prospective clients

TRUE/FALSE: Establishing a strong communications loop that can nip problems in the bud is the most important thing a practice can do to retain their client base.

**Session 7401.....CME/MOC: 1**

**A Common Sense Approach to Documentation, Coding, and Reimbursement**

**Donna Lee Gardner, RN**, RYAN Associates, Bakersville, NC

The provider determines causation by:

- A. Reviewing the account of the injury
- B. Acquiring information about the work environment
- C. Identifying the mechanism of the injury
- D. All of the above

Which of the following is not part of the treatment plan:

- A. Pain management
- B. Restrictions
- C. Estimated time to return to work
- D. Patient education and understanding
- E. Referral to primary care provider

TRUE/FALSE: Documentation of comprehensive histories and review of must be completed to code a 99203 and 99204.

**Session 7402.....CME/MOC: 1**

**Asset Protection**

**Ronald J. Paprocki, JD, CFP, CHBC**, MEDIQUS Asset Advisors, Inc., Chicago, IL

Assume you have been sued. As a result, a judgment has been entered against you in an amount that exceeds your malpractice coverage. Please provide a true/false response indicating whether assets would be included in the settlement against you:

TRUE/FALSE: A brokerage account titled joint tenancy with rights of survivorship with your spouse.

TRUE/FALSE: IRA account, beneficiary is your youngest child.

TRUE/FALSE: Assets you inherit from your spouse.

**Session 7403.....CME/MOC: 1**

**Occupational and Environmental Health at the Pan American Health Organization (PAHO)**

**Agnes Soares da Silva, PhD**, Pan American Health Organization, Washington, DC

**Marilyn A. Fingerhut, PhD**, Consultant to NIOSH, Alexandria, VA

**Marie-Claude Lavoie**, Pan American Health Organization, Washington, DC

TRUE/FALSE: Climate change has multiple health impacts and increases health inequities.

TRUE/FALSE: Climate change affects specially the most important vulnerable populations: children under five; pregnant women; elderly people; marginalized rural, urban, and indigenous populations; and displaced populations.

TRUE/FALSE: The following are preventive measures to prevent the transmission of tuberculosis among health workers: environmental controls; administrative and work practices controls; policy and program; surveillance; and personal protective equipment

**Session 8401.....CME/MOC: 3**  
**WDC Fire Training Academy Worksite Visit**

**Thomas R. Hales, MD, MPH\***, NIOSH/CDC, Cincinnati, OH

**David J. Louis, MD, MS, FACOEM\***, Air Force Materiel Command, Beavercreek, OH

TRUE/FALSE: Fire fighter personal protective ensembles (PPE) (clothing and SCBA) weigh approximately 20 pound.

TRUE/FALSE: Ladder climbing in full PPE requires an aerobic capacity of approximately 44 ml/kg/min (13METS).

TRUE/FALSE: Municipal fire fighters spend the majority of their time fighting fires.

TRUE/FALSE: The 2007 Edition of NFPA 1582 has a requirement of 12 METS for all fire fighters.

TRUE/FALSE: Hydrogen cyanide is a common component of fire smoke.

TRUE/FALSE: Fire smoke contains large amounts of particulate, and the particulate comes in a large variety of sizes.

TRUE/FALSE: In the NIOSH investigations of fire fighter fatality due to cardiac disease, carbon monoxide was a very common trigger of heart attacks.

TRUE/FALSE: NFPA 1582 recommends that all fire fighters participating in a live fire training exercise be medically cleared within the past year.

TRUE/FALSE: According to NFPA 1403, all live fire training exercises should include rehabilitation.

**Session 8402.....CME/MOC: 3**  
**National Zoo**

**Richard J. Thomas, MD, MPH, FACOEM\***, National Naval Medical Center Occupational Medicine Services, Bethesda, MD

**Thomas Lawford, MD**, National Zoo, Washington, DC

The mission of multiple zoos in the United States include all except:

- A. Advancement of science
- B. Increasing the profit shares of stock holders
- C. The instruction of the people
- D. Recreation of the people

Occupational challenges and animal handlers include:

- A. Infectious threats (zoonoses)
- B. Noise exposure
- C. Traumatic injuries
- D. All of the above

Private animal collections have been know since:

- A. The time of the Egyptian pharaohs
- B. London (1837)
- C. Paris (1852)
- D. The U.S. Bicentennial (1976)

The benefits of an effective worker safety and health program include:

- A. To improve employee morale and productivity
- B. To reduce the extent and severity of work-related illness and injury
- C. To reduce worker-compensation costs
- D. All of the above

Examples of traumatic injuries to animal handlers include:

- A. Bites, scratches, stings, or being pecked
- B. Being bucked or thrown
- C. Being crushed, dragged, gored, or kicked
- D. Being stepped on or trampled

E. All of the above

Other types of injuries and illnesses for animal handlers are:

- A. Chemical exposure (e.g. pesticides)
- B. Environmental and PPE associated, and noise
- C. Equipment associated injuries
- D. Ergonomic and infectious diseases
- E. Fire and natural disasters
- F. Food and meatpacking industrial preparation
- G. All of the above

TRUE/FALSE: The popularity of zoos is both a challenge to and a dilemma for modern zoo staff, which must balance the entertainment value of the zoological park with other equally important and demanding zoo missions.

TRUE/FALSE: FONZ operates an extensive wildlife-education program, and its corps of more than 1,500 volunteers provides about 90,000 hours of service to the National Zoo each year.

The benefits of an effective worker safety and health program are clear. In general, effective management of such programs have been shown to (OSHA, 1989):

- A. Reduce the extent and severity of work-related illness and injury
- B. Improve employee morale and productivity
- C. Reduce worker-compensation costs
- D. All of the above
- E. None of the above

**Session 2400.....CME/MOC: 1.5**  
**What ACOEM is Doing in Washington**

**Robert K. McLellan, MD, MPH, FAAFP, FACOEM\***, Dartmouth-Hitchcock Medical Center, Lebanon, NH  
**Patrick C. O'Connor**, Kent and O'Connor, Inc., Washington, DC

Which of the following are provisions of the Patient Protection and Affordable Care Act:

- A. Provides subsidies for up to 400% of federal poverty level
- B. Expands Medicaid eligibility up to 133% of federal poverty level
- C. Mandates otherwise uninsured individuals to purchase insurance starting in 2014
- D. Mandate employers of 50 or more employees offer their employees affordable health insurance or pay a penalty
- E. All of the above

TRUE/FALSE: The Patient Protection and Affordable Care Act directs the secretary to award grants to small businesses to provide employees with access to comprehensive workplace wellness programs.

TRUE/FALSE: The Patient Protection and Affordable Care Act forbids employers to offer employees incentives for participating in a wellness program or meeting certain health-related standard.

TRUE/FALSE: The OSHA National Emphasis Program on Recordkeeping targeted high DART rate establishments in high risk industries.

Occupational health care providers may obtain a family history in which of the following circumstances:

- A. Pre-placement examination
- B. Health risk assessment
- C. When diagnosing and treating work-related injuries or illnesses
- D. When relevant to substantiate the need for family medical leave
- E. C and D

**Session 2401.....CME/MOC: 3**  
**Comparative Effectiveness Research**

**Minda G. Nieblas, MD, MPH\***, Hanover, MD  
**Carolyn Clancy, MD**, Agency for Healthcare Research and Quality, Rockville, MD  
**Robert W. Dubois, MD, PhD**, National Pharmaceutical Council, Reston, VA  
**Michael S. Lauer, MD, FACC, FAHA**, National Heart, Lung, and Blood Institute, Bethesda, MD  
**Charles M. Yarborough III, MD, MPH, FACPM, FACOEM\***, Lockheed Martin Corporation, Bethesda, MD



Which of the following are important stakeholders for comparative effectiveness:

- A. Providers
- B. Employers
- C. Health plans
- D. Patients
- E. All of the above

What are some potential secondary analyses of existing clinical datasets for CER:

- A. Estimating treatment needs
- B. Developing health policy
- C. Performing meta-analyses
- D. All of the above

Strengths of randomized trials include which of the following (all that apply):

- A. Highly selected patients
- B. Ability to account for measured confounders
- C. Ability to account for unmeasured confounders
- D. Intent to treat analyses which mimic clinical decision making

Ultimately, the purpose of evidence generated by CER is to assist which of the following to make informed decisions that will improve health care at both the individual and population levels:

- A. Consumers
- B. Clinicians
- C. Purchasers
- D. Policy makers
- E. All of the above
- F. None of the above

What are two examples of innovation challenges for CER:

- A. Cross-design synthesis to standardize and compare clinical data collected by different methods
- B. Estimating incidence and prevalence
- C. Evaluation of new statistical models and methods on treatment effectiveness outcomes
- D. Testing clinical hypotheses

Which agency directors under the Department of Health and Human Services are on the board and methodology committee of the Patient-centered Outcomes Research Institute:

- A. Centers for Disease Control and Prevention
- B. Agency for Healthcare Research and Quality
- C. Food and Drug Administration
- D. National Institutes of Health

TRUE/FALSE: Pragmatic trials have hypotheses and designs that are intended to directly address questions of interest to decision makers, including patients, clinicians, payers, and policy makers. Unlike explanatory trials, pragmatic trials have broad inclusion criteria, few exclusion criteria, minimal trial-based measures or visits, and clinically meaningful endpoints; they involve "typical" practitioners and emphasize tests of interventions as they would occur in usual practice settings.

Strengths of observational studies include which of the following (all that apply):

- A. Large numbers which necessarily imply unbiased findings
- B. Generally lower cost
- C. Better reflection of routine clinical situations
- D. Assurance of real-world truths

Heterogeneity of patient response is best characterized as:

- A. Different studies have different results
- B. Different patients respond differently to a treatment within the same study
- C. Studies measure different outcomes and for different lengths of time
- D. None of the above

Which of these conditions are included on the list of AHRQ's priority conditions for conducting patient-centered outcomes research (all that apply):

- A. Substance abuse
- B. Diabetes
- C. Osteoporosis

**Session 2402.....CME/MOC: 3**

**Hands on Orthopedics**

**A. Nelson Avery, MD, FACOEM\***, Preventive Medicine Residency Program, Round Rock, TX  
**Nicholas F. Tsourmas, MD\***, Texas A&M HSC College of Medicine, Round Rock, TX

TRUE/FALSE: Finkelstein's test is associated with a physical examination of Dequervain's disease.

TRUE/FALSE: Over the last 20 years the PE is thought to be the best and most reproducible methodology on which to accurately diagnose a spine condition.

TRUE/FALSE: The brachial/biceps reflex is associated with the C7 nerve root.

TRUE/FALSE: A Spurling's Maneuver is positive if reproducible mimics the paresthesias into the correct upper extremity as are the presenting symptoms.

TRUE/FALSE: Tinel's test is specific for carpal tunnel syndrome.

TRUE/FALSE: Should and neck pathology can often be confused clinically.

TRUE/FALSE: Spinal stenosis presents with a constant and recurring constellation of symptoms and signs.

TRUE/FALSE: Rotator cuff tendinosis is an acute traumatic condition.

TRUE/FALSE: To be most correct, the history, the PE, and the objective findings should correlate.

**Session 2403.....CME/MOC: 3**

**The Use of Functional Capacity Evaluation in Complex WC and Return to Duty Cases**

**Francesca K. Litow, MD, MPH, FACOEM\***, Occupational Medicine Consultant, Wynnewood, PA  
**Jill S. Galper, PT, Med\***, IMX Medical Management Services, Bala Cynwd, PA

Functional capacity evaluations are indicated for all of the following purposes except:

- A. To assess whether a patient had reached MMI
- B. To assess impairment
- C. To evaluate fitness for return to work for a specific job
- D. To assess fitness for duty prior to job placement

TRUE/FALSE: A high quality FCE will always reflect the evaluatee's actual physical and functional abilities.

When requesting/ordering an FCE, which of the following should be included in your request:

- A. Pertinent medical conditions and/or precautions
- B. The patient's name
- C. Position description for job-specific tests
- D. All of the above

Nancy Jones, a 52-year-old female, was referred for an FCE to determine her general abilities. She had a diagnosis of a lumbar sprain, and was 7 months following the date of injury. She completed a physical therapy program the previous month, and had a home program. Her medical history is non-significant. During the test, she lifted 15 lbs from floor to waist height (HR 95 bpm), 10 lbs from waist to shoulder height (HR 98 bpm), and 10 lbs from shoulder to overhead (HR 95 bpm). You asked her to perform a modified Bruce test. She stopped the test at stage 2 because of burning in her back and fatigue. Her HR was 104 bpm at the last stage completed. Jamar grip score on the dominant hand were 15 lbs, 24 lbs, 24 lbs, 22 lbs, and 20 lbs (position 1-5). The CV for repetitive trials at position 2 was 8%. Based on this information, which of the following statements would be most true for Ms. Jones?

- A. These results are an accurate representation of her abilities based on her consistent performance and symptoms
- B. These results reflect inconsistent performance based on the lack of change between shoulder and overhead lifts
- C. She demonstrated abilities within a light physical demand level, and can probably do more
- D. She probably cannot tolerate full time work based on her inability to complete the treadmill test, and her low grip values

TRUE/FALSE: The PILE protocol determines an individual's constant lift ability

A Horizontal Strength Change test is used to:

- A. Assess shoulder muscle endurance
- B. Determine optimal workstation ergonomics
- C. Assess an individual's level of effort
- D. A and C

TRUE/FALSE: Low coefficients of variation indicate that an individual performed with maximum effort.

The category of "Inconsistent/Substantiated" performance best reflects which of the following:

- A. The behavior typically associated with someone with chronic pain
- B. The behavior typically associated with inappropriate illness behavior
- C. The behavior typically associated with an unstable or unresolved condition
- D. The behavior typically associated with submaximal effort

TRUE/FALSE: When reporting an evaluatee's push or pull ability, the reported value is the weight on the sled or cart.

**Session 2404.....CME/MOC: 3  
Workplace Investigations by NIOSH and OSHA**

**Elena Page, MD, MPH, FACOEM\***, NIOSH Cincinnati, OH  
**Kathleen M. Fagan, MD, MPH\***, OSHA Office of Occupational Medicine, Washington, DC  
**Patricia A. Bray, MD, MPH, FACOEM\***, OSHA, Washington, DC  
**Marie de Perio, MD**, NIOSH, Cincinnati, OH  
**Melody M. Kawamoto, MD, MS\***, CDC/NIOSH, Cincinnati, OH  
**Theodore Yee, MD, MPH\***, OSHA, Washington, DC

TRUE/FALSE: The heat index is a measure of how hot it really feels when a relative humidity is factored with the actual air temperature.

TRUE/FALSE: The Occupational Safety and Health Administrator's online technical manual states, "If a worker shows signs of possible heat stroke, professional medical treatment should be obtained immediately."

TRUE/FALSE: In methemoglobinemia, cyanosis is a late sign.

TRUE/FALSE: Paranitroaniline is absorbed by all three routes of entry: inhalation, gastrointestinal absorption, and dermal absorption.

TRUE/FALSE: Trimethylsilyldiazomethane is a recognized inhalational hazard.

TRUE/FALSE: Diazomethane is a recognized inhalation hazard.

TRUE/FALSE: The Center for Disease Control and Prevention now recommends annual influenza vaccination for all persons over 6 months of age.

TRUE/FALSE: Influenza can be spread quickly among children and caregivers in child care settings.

TRUE/FALSE: Visual contrast sensitivity is a useful tool in evaluating individuals exposed to damp, moldy buildings.

TRUE/FALSE: Working or living in damp buildings is associated with an increased risk of asthma.

**Session 2405.....CME/MOC: 1.5  
Changing Your Working Language: Legislative Advocacy for Occupational Physicians**

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Which of the following arguments supporting the need for an increase in workers compensation medical fees set by your state is most likely to be successful:

- A. The fees should be increased due to a demonstrable increase in business costs, e.g. rent and utilities for clinic space, and employee wages and benefits
- B. Doctors are not being fairly compensated for the time they spend on these more complex cases
- C. Doctors will leave the system if fees aren't increased

D. Specialists each have their own needs based on difficulty of procedure and other economic issues and should each present their specific arguments for increased fees

Most occupational medicine societies work directly with their state medical societies. Which of the following is least typical of state medical societies:

- A. They have long term relationships with legislators and their staff
- B. They can provide support from other organizations they have historically worked with on broad health care issues
- C. They are usually strongly controlled by one or two specialty organizations
- D. They have a series of committees and/or the board who must approve legislative initiatives

Which of the following is most likely to be true regarding political issues:

- A. Money alone controls the political outcome
- B. Once a statute has passed you should give up; it is unlikely that actively participating at state regulatory hearings will have any impact
- C. Working with legislators on health issues they view as important can help you gain support for more esoteric, specialty interest bills you are strongly supporting
- D. The state medical society will support positions that are in opposition to their established medical professional principles if a good argument is made by the committees who have reviewed the relevant issues

“Bargaining Chips” are:

- A. Used to silence opposition
- B. Something of value given to another party to offset what they are giving up in a negotiation
- C. An illegal form of influencing legislators
- D. Discount junkets to Vegas

Which of the following is the most accurate statement about the development of successful legislation:

- A. The approach taken by the author of the bill is the only one that can be considered in addressing the issue
- B. Amendments to the approach taken by the author of the bill can be adopted by one legislative body and forced on the other
- C. The most direct and obvious approach to a problem is always best
- D. There are often several approaches to resolving the issue in a bill that will accomplish the objective, and some are likely to be more acceptable than others to stakeholders

**Session 8400.....CME/MOC: 0**

**ACOEM's Capitol Hill Briefing**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

2011 American Occupational Health Conference  
MOC Q&A  
WASHINGTON, DC

ANSWER KEY

Saturday, March 26, 2011

**Session 7000.....CME/MOC: 0**

**New Member Orientation**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

**Session 7104.....CME 1/MOC: 0**

**Becoming and Maintaining Board Certification in Occupational Medicine**

*Maintenance of Certification credit (MOC) is not available for this session*

**Session 2100.....CME/MOC: 1**

**AOHC Opening Session: C. O. Sappington Memorial Lecture**

TRUE: The Sappington memorial lecture is named for Clarence Olds Sappington, MD, DrPH, (1889-1949), a noted consultant in occupational diseases and industrial hygiene, who was the first American to hold a DrPH degree which he received from Harvard School of Public Health in 1924.

TRUE: The Sappington memorial lecture is presented annually at AOHC.

TRUE: This year's lecture will be presented by Mark R. Rosekind, PhD, with the National Transportation Safety Board in Washington, DC.

**Session 2101.....CME/MOC: 1.5**

**Important Elements to Writing and Reviewing the Occupational and Environmental Health Literature**

FALSE: When writing a scientific paper it is best to use synonyms to explain key terms throughout the manuscript.

Which of the following study designs is best suited to address causality:

D. Cohort study

The primary purpose of peer review is to:

B. Ensure manuscripts are high quality

TRUE: To help the editor with your submission, write a persuasive cover letter and recommend potential reviewers/non-reviewers.

TRUE: To help the editor with your re-submission, write a persuasive cover letter and be sure to respond to all reviewers' criticisms (change or rebut).

When faced with substantial criticism from a peer reviewer, the author should:

D. Make changes which improve the manuscript

**Session 2102.....CME/MOC: 1.5**

**POWER in Numbers: Measuring Performance in Federal Workers' Compensation**

TRUE: The metric "percentage of lost time cases RTW within 45 days" may be confounded by success in reducing lost work day cases overall.

The 7<sup>th</sup> POWER goal, speeding RTW for employees with the most serious injuries and illnesses is likely to be impacted by which of the following types of intervention:

C. Addressing problem behaviors that contribute to unnecessary disability

Which of the following metrics relates to physician/clinic practices:

D. Percentage of cases treated that RTW full duty within EDD

POWER goal 7 will address federal agency success in returning to work employees with the most serious injuries and illnesses, defined as:

B. Employees off work at least 45 days but within the 2 year tracking period

The Employees' Compensation Operations and Management Portal (E-COMP) system will support agencies in meeting their POWER goals by:

C. Permitting electronic filing of key forms and agency generation of POWER reports

**Session 2103.....CME/MOC: 1.5**

**Medical Marijuana and The Workplace**

For which of the following substances, detected in blood or urine, is impairment likely to have been present at the time of specimen collection:

C. EtOH

Which states with medical marijuana statues include protection for medical marijuana users as employees:

B. Arizona, Maine, Michigan, and Rhode Island

Advantages of THC in pill form are:

C. Longer duration of action

FALSE: Allstate nondiscrimination laws protecting persons with disabilities specifically exclude users of illegal substances as defined by the Controlled Substance Act.

There is good scientific evidence to support use of medical marijuana for:

A. HIV + patients

C. Neuropathic pain

**Session 2104.....CME/MOC: 1.5**  
**Worklife: Integration of Health Promotion and Health Protection**

FALSE: The NIOSH WorkLife Initiative assigns a higher priority to promoting health and preventing non-work related diseases in employees in comparison to the reduction of workplace hazards.

TRUE: The NIOSH WorkLife Initiative encourages the engagement of mid-level management in promoting health-supportive programs because they are the direct links between workers and upper management.

TRUE: Participatory ergonomics processes could be relevant to worksite health promotion because health promotion means motivating decision-making; participatory ergonomics requires workers to be active decision-makers about conditions that affect their health.

Which of the following workplace approaches is NOT consistent with what the WorkLife Initiative is encouraging:

B. Changing an on-site employer-based clinic from being devoted generally to improving employee health to being solely focused on occupational health services

Ergonomics programs and worksite health promotion both address:

E. All of the above

**Session 2105.....CME/MOC: 1.5**  
**What Constitutes Excellence in Health Care: Case Studies from the Corporate Health Achievement Award**

The purpose of the CHAA award is to:

E. All of the above

TRUE: The CHAA Exemplary Practice Citation puts the focus on encouraging step by step improvements in companies.

TRUE: The CHAA award focuses on metrics and trends that assist in driving improvement in delivery of health services.

TRUE: A successful application for the CHAA will contain a discussion of program dissemination across the employee population.

TRUE: Tooele Chemical Agent Disposal Facility (TOCDF) has demonstrated excellence in reducing workplace accidents and maintaining an exemplary emergency preparedness program involving the local EMS.

**Session 7100.....CME/MOC: 1**  
**Social Media in Occupational Safety and Health**

The importance of integrating social media into your outreach and dissemination programs include:

D. All of the above

Wikipedia is an important on-line source of information that provides:

D. All of the above

Twitter is an online service that provides a:

E. All of the above

**Session 7101.....CME/MOC: 1**  
**When It Is Too Late To Just Say No: Dealing with the Disabled Worker on Opiates**

FALSE: Once a patient is on a stable dose of narcotics, all side-effects including constipation, resolve.

FALSE: The FDA-mandated risk management plans for opioids will have more occupational medicine physicians managing chronic pain patients on long-term narcotics.

FALSE: Random urine screening will assure that patients take narcotics as prescribed.

**Session 7102.....CME/MOC: 1**  
**The Corporate Culture of Health**

TRUE: Health risk appraisals, web-based learning, laboratory studies, biometrics, productivity enhancement, and personalized coaching are often considered to be basic components of health and wellness programs.

TRUE: Compared to a healthy person, an employee in poor health is more likely to be absent from work and less productive while on the job (presenteeism or health-related performance reduction).

TRUE: Studies have shown that the financial impact of employee absenteeism and decreased productivity due to poor health is more costly compared to medical and pharmacy claims costs alone.

TRUE: Comprehensive, evidence-based primary and secondary prevention programs can begin achieving measurable health improvements in the first year of intervention.

**Session 7103.....CME/MOC: 1**  
**Is It Recordable? Is It Ethical?**

According to the ACOEM Code of Ethics, serving the patient's best interest overrules which of the following:

D. All of the above

The purpose of the OSHA Recordkeeping rule is to:

B. Record and report work-related fatalities, injuries, and illnesses

TRUE: A case is work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. The work event or exposure need only be one of the discernable causes; it need not be the sole or predominate cause.

**Session 2106.....CME/MOC: 1.5**

**Aligning Mission with Practice: Why Occupational Medicine Makes Sense**

TRUE: The majority of occupational medicine providers engaged in clinical care.

FALSE: More than 75% of occupational medicine providers are board-certified in occupational medicine.

Although occupational medicine is often described as industrial or corporate medicine, what percent of occupational medicine physicians primarily describe their practice as industrial or corporate medicine:

E. 16%

Which of the following is not a strength of occupational and environmental medicine practice:

C. Special procedures and clinical services

Which of the following is not true based on empirical study data:

B. OM is so diverse that practitioners have little in common

Occupational physicians who hold management positions:

C. Have used clinical skills previously

**Session 2107.....CME/MOC: 1.5**

**Medical Standards for the United Kingdom Commercial Vehicle Operators Comparison with the United States**

FALSE: Both the United Kingdom and the United States require drivers to have no worse than an average loss of 40dB in the better ear with or without a hearing aid.

Which of the following is the correct blood pressure criterion for the United Kingdom and the United States:

C. UK: 180/100; US: 140/90

For a driver in the United Kingdom with cardiomyopathy, what is the minimum acceptable left ventricular ejection fraction:

B. 40%

FALSE: In the United Kingdom, a driver may be qualified to drive a commercial vehicle if their seizure disorder is well controlled and it has been at least 5 years since the last seizure, on or off medication.

FALSE: Olivia Carlton is from the Transportation Advisory Board of Paris, France

**Session 2108.....CME/MOC: 1.5**

**Staffing and Quality Metrics in Occupational Health Clinics**

TRUE: High-quality, cost-effective occupational health service delivery depends upon strategic use of clinical and support staff.

TRUE: Currently, there is no single validated staffing model that has gained widespread acceptance among occupational medicine practices.

TRUE: A growing evidence base demonstrates clear relationships between quality of care, clinical outcomes, and staffing ratios.

TRUE: There has been little translation of scientific research into the occupational setting.

This session covered:

D. All of the above

**Session 2109.....CME/MOC: 1.5**

**Individual Scientific Abstracts**

According to current knowledge, psychosocial work conditions as job strain (high demand, low control) and lack of social support increase the:

C. Depression

Compared to the average population, physicians are at an increased risk for:

A. Suicide

TRUE: A case-control study of employees with the Bureau of Alcohol, Tobacco, Firearms, and Explosions found that employees who hold special assignments involving fire scene investigations are at statistically significant increased risk for bladder cancer.

Which of the following is a new biomarker used in estimating kidney function:

B. Serum cystatin C

Which of the following is most likely to be nephrotoxic with chronic exposure:

A. Cadmium

**Session 2110.....CME/MOC: 3**

**Infectious Disease Threats to the Traveler**

FALSE: The number of plasmodium species capable of causing disease in humans is four.

FALSE: Primaquine can be prescribed safely for pregnant women.

TRUE: *P. ovale* and *P. vivax* can cause relapses months or even years after the initial infection is acquired.

FALSE: Travelers' diarrhea is predominantly caused by viral pathogens.

FALSE: In evaluating a returning traveler with chronic diarrhea symptoms, weight loss, nocturnal symptoms, blood in the stool and fever are consistent with a diagnosis of irritable bowel syndrome.

TRUE: Antibiotics should be utilized in travelers' with moderate-severe travelers' diarrhea.

FALSE: Given the sensitivity and specificity of today's diagnostics, presumptive treatment of malaria is not indicated in the US.

TRUE: Ciprofloxacin is likely to be effective in the treatment of neisseria gonorrhoea acquired during travel to equatorial Africa.

FALSE: The most common sexually transmitted infection acquired amongst visits to Papua New Guinea is donovanosis.

**Session 2111.....CME/MOC: 1.5**

**The Occupational Health System of Finland: Opportunities to Adopt Best Practices**

Which of the following statements best describes the training of occupational medicine specialists in Finland:

B. Approximately the same number of graduates is produced each year in the USA and Finland

Which of the following best describes the current approach of occupational health services in Finland:

D. Comprehensive and development-oriented

Which of the following best describes the clinical work of the Finnish Institute of Occupational Health (FIOH):

B. The FIOH diagnoses and treats patients with occupational diseases through both inpatient and outpatient services at clinics in Helsinki and other locations throughout Finland

Which of the following is a challenge for Finland with respect to the provision of occupational health services:

C. Large, sparsely populated country

Audits of occupational health training at field units in Finland have revealed:

B. Better training is associated with larger units

**Session 2112.....CME/MOC: 1.5**

**Impairment Assessments: Opportunities for Improvement**

Studies have revealed that impairment ratings are typically:

C. Overrated

In comparing "needlessly disabled" to "exceptionally able," the following are characteristics often seen with "needlessly disabled," with the exception of:

B. Responsibility: self

All of the following are shortcomings of the *AMA Guides, 5<sup>th</sup> Edition*, with the exception of:

D. Internal consistency

All of the following are axioms of the *6<sup>th</sup> Edition*, with the exception of:

B. Become more anatomically based with assessments based on physical examination findings

In performing a *6<sup>th</sup> Edition* rating, if the impairment class is 2 and all of the impairment grade modifiers are 1, what is the grade:

A. Grade A

**Session 2113.....CME/MOC: 1.5**

**Fatigue Management in the Workplace**

Which of the following contributes to one's level of fatigue:

E. All of the above

FALSE: Limiting hours worked is sufficient to manage fatigue risk.

TRUE: For rotating shift workers, there is no single best shift pattern.

Which of the following is not one of the five defenses against fatigue risk:

E. Periodic program review and continuous improvement

The following groups should receive training or educational materials to minimize fatigue risk:

E. All of the above

**Session 2114.....CME/MOC: 1.5**

**Individual Scientific Abstracts**

What proportions of deaths in 2005 in the United Kingdom were attributable to cardiovascular disease:

C. 40%

Regular passive smoking increases coronary heart disease risk by what percentage:

C. 25%

The cost of employed persons with osteoarthritis is:

A. Higher than employees without OA

Indirect costs (lost productivity) consist of:

B. Short-term disability

D. Absenteeism

TRUE: Comorbid conditions are more prevalent among workers with OA than comparison workers.

FALSE: The RVPN is only for VA providers.



**Session 7201.....CME/MOC: 1**  
**The Independent Medical Examiner**

**TRUE:** Independent medical examinations (IMEs) are used for third party examinations.

An IME would help resolve issues of:  
E. All of the above

Components of a medical report should include:  
E. All of the above

**Session 7202.....CME/MOC: 1**  
**Disaster Preparedness: Lessons from Haiti**

**FALSE:** It is important is a disaster response to take as many people and supplies as possible.

**FALSE:** The first priority in a disaster is to start attending to persons who are most critically ill.

**FALSE:** The National Disaster Medical System in the Department of Homeland Security provides public health, medical, veterinary, and mortuary services in a disaster.

**Session 7203.....CME/MOC: 1**  
**Fitness-for-Duty Evaluations: What's in the Occupational Health Professional's Black Bag?**

**TRUE:** The medical fitness-for-duty process requires a thorough knowledge of the worker's essential job requirements.

**FALSE:** Key stakeholders in the business unit (e.g. Supervisor, Human Resources) are responsible for determining the fitness-for-duty medical recommendations.

**TRUE:** Effective fitness-for-duty processes require an integrated effort by occupational health professionals and key stakeholders in the business unit.

**Session 7204.....CME/MOC: 1**  
**Workplace Wellness Programs: The Vanderbilt University Experience**

Which is not typically targeted modifiable lifestyle characteristic:  
D. Family history

**FALSE:** Individuals who move from high risk to low risk ultimately decrease their healthcare costs to an amount equivalent to those who began and remained at low risk.

Which is/are outcome(s) that employers find important:  
E. All of the above

**Session 8200.....CME/MOC: 3**  
**US Army Medical Research Institute of Infectious Diseases**

ASHRAE assumptions in the design of isolation rooms:  
E. All of the above

Assigned protection factors (ASF) for particular respirators  
D. Are multiple of the permissible exposure limit (PEL)

Which of the following is correct:  
E. All are correct

Classic hierarchy of controls include all of the following except:  
D. Federal, state, and local control measures

**TRUE:** The four goals to be accomplished when setting up a BSAT medical surveillance program are early detection of adverse health effects from workplace exposures; assessment of employee capabilities versus job requirements; assessment of engineering controls and other primary prevention strategies; and health education of the worker.

**TRUE:** The purpose of BSAT medical surveillance is for identifying, evaluating, and monitoring employees' health for intervening work-related illnesses; ensuring that the worker is not more vulnerable to occupational illness or injury associated with BSAT exposure; providing education, recommending work practices, immunizations, or primary preventive practices to reduce risk of work-related illnesses.

**TRUE:** Examples of different clinical indicators of immunodeficiency disorder indicators of immune deficiency are eight or more infections within one year; two or more serious sinus infections within one year; two or more months on antibiotics with little effect; two or more pneumonias within one year; recurrent deep skin or organ abscesses; and persistent thrush in the mouth or elsewhere on the skin.

**TRUE:** The two types of immunizations that may be offered to employees as part of the BSAT medical surveillance program, based upon risk assessment are licensed vaccines (anthrax, smallpox, hepatitis B, rabies, yellow fever, Japanese encephalitis, etc); and investigational new drug vaccines (VEE, WEE, EEE, tularemia, RVF).

**TRUE:** Assessment of immune function as part of BSAT medical surveillance should include indicators of both humoral and cell-mediated immunity.

**Session 2200.....CME/MOC: 1.5**  
**Maintaining a Healthy Workforce in a Global Chemical Industry**

Which Asian country has the highest traffic fatalities:  
B. India

Which medication is not appropriate to use for malaria prophylaxis:  
D. Levofloxacin

In the DuPont Co., the most common reason for a failed ex-patriot assignment is related to:  
C. Family

The OSHA access to employee exposure and medical records regulations requires employers be able to produce medical records for employees for a minimum of:  
B. 30 years from the individual's termination of employment

Total quality as an organizing principal for medical surveillance programs:  
A. Can serve as an enabling organizing concept for a geographically dispersed medical program

**Session 2201.....CME/MOC: 1.5**  
**Biomonitoring: Old Tools, Wave of the Future**

All of the following statements are true except:  
D. For most chemicals that are biomoneditored today, measured levels are correlated with health conditions and clinical disease

Biological Limit Values:  
C. Can change with advances in scientific knowledge, including new dose-response information

All of the following statements regarding confounding factors affecting biomonitoring results are true except:  
B. Ingestion of predatory fish prior to workplace testing for urinary inorganic arsenic and its metabolites will likely result in spuriously elevated results

FALSE: Hair analysis is the preferred method to evaluate exposure to mercury because hair is easy to collect, not susceptible to contamination, and measured levels are linked to environmental levels.

TRUE: Despite the rapid increase in biomonitoring capability and programs, there are almost no biomonitoring assessments of firefighters.

**Session 2202.....CME/MOC: 3**  
**Health and Productivity Management in the Global Context**

TRUE: Personal Health Assessments have not been widely adopted in countries outside of the United States at this point in time.

FALSE: A study of 2300 U.K. employees found a 50% difference in productivity between individuals in the lower quartile of health vs. the upper quartile.

Which of the following statements is not true:  
C. None of the cross-country analyses demonstrating an association between population health and economic growth have however, made adjustments for labor supply, capital supply, quality of governance, and other possible factors

Pre-travel and pre-assignment medical assessments:  
B. May mitigate against unnecessary health related assignment failures

What is the leading cause of death worldwide:  
C. Coronary Artery Disease

International pre-assignment medical examinations should:  
D. Demonstrate duty of care and support your assignees health at a minimum

When considering or implementing a new workplace in a developing country, some of the best practice activities include:  
E. All of the above

Injury/Illness management programs internationally offer:  
E. All of the above

The Business in the Community (BTIC)/Ipsos Mori Study of FTSE 100 index companies demonstrated that the public reporting of the companies in employee health and wellbeing was associated with:  
B. 2009 total share return

**Session 2203.....CME/MOC: 3**  
**Fitness Issues for Public Safety Medicine Using Optimal Guidance for Best Decisions**

Choose the correct statement:  
C. NFPA 1582 (2007 version) does not allow candidates with amputations of the hand or above

Which of the following is true about hearing in firefighters:  
B. Hearing aids seem to be functional under the fire-fighting ensemble

Which of the following is false:  
D. The pregnancy chapter is not approved by ACOEM yet

TRUE: HAND is a condition that could be potentially disqualifying for law enforcement personnel.

TRUE: *N. meningitidis* has been transmitted occupationally in a LEO setting.

FALSE: Like OSHA standards, the components of NFPA 1582 are required by federal law.

TRUE: The 2007 edition of NFPA 1582 states that members shall have annual resting EKGs.

FALSE: The 2007 edition of NFPA 1582 has a 12 metabolic equivalent (MET) fitness requirement for all firefighters.

TRUE: The 2007 edition of NFPA 1582 recommends (appendix material) symptom limiting stress tests with imaging if a 49 year old male has 3 coronary artery disease risk factors.

**Session 2204.....CME/MOC: 3**  
**Current Research in OEM and Resident Research Presentations**

Which pattern of physical medicine usage was related to a faster return to work in worker's compensation claimants:  
B. Rural

Which group had a higher mean number of physical medicine services used:  
A. Urban

FALSE: There is a consensus among experts in the field of thermoregulation that support the validity of the heat tolerance test in determining heat intolerance and safe return to duty after heat stroke.

TRUE: The studies retrieved in the systematic literature review varied in methods, environmental conditions, and physiologic criteria for identifying the heat intolerance.

FALSE: Tier IV-9 compliant engines reduce and increase exposure to all harmful exhaust components in the study population.

TRUE: This session provided investigators in occupational and environmental health with a forum for presentation of current and cutting-edge research in OEM.

TRUE: Presentations were made both by established researchers and by residents in OEM training.

FALSE: Presentations were made by established researchers only.

TRUE: An abstract on Comparative Assessment of Spirometric Values in a U.S. Mining Population was presented at this session.

**Session 2205.....CME/MOC: 1.5**  
**Issues in Cancer Survivorship and Employment**

Support groups utilize the "patient active model" at the workplace when they address the following needs of cancer patients in an occupational setting:  
H. A, C, D, and E only

A randomized controlled trial on occupational physician involvement in cancer patients indicated the following:  
C. Earlier return to work

Cancer support groups in the workplace address the following challenges:  
G. A, C, D, and E only

Employed breast cancer survivors report higher levels of which of the following compared to a non-cancer group at three years post primary treatment:  
E. A and B

Which factors has research indicated are related to work productivity in breast cancer survivors:  
A. Fatigue

**Session 7205.....CME/MOC: 1**  
**An Approach to Conflicting Expert Testimony**

TRUE: One approach to conflicting expert testimony is to ask the expert what they know and how they arrived at this knowledge.

TRUE: As a result of Daubert Rules, scientists and physicians are likely to be increasingly reluctant to provide expert testimony in civil litigation cases because of the lengths to which defendants go to discredit them and their work.

In order to determine if scientific knowledge is reliable, one could pose the following questions:  
D. All of the above

**Session 7206.....CME/MOC: 1**  
**The Pre-travel Health Consultation**

Contraindications to air travel include all of the following except:  
C. Psychotic illness, even if controlled

Post travel care is indicated for which of the following:  
E. All of the above

TRUE: Industrial nations include the United States, Northern and Western Europe, Australia, New Zealand, Singapore, and Japan.

**Session 7207.....CME/MOC: 1**  
**The Use of Opioids in the Management of Chronic Pain Workers' Compensation**

TRUE: An increase in opioid use was observed over an eleven year period, primarily related to the increasing volume of stronger opioids prescribed for claimants with chronic pain.

TRUE: Effectiveness of chronic long term opioids for chronic non-cancer pain - unclear and weak evidence of reduced pain or improved function (Trescot A, et.al., Pain Phys. 11:S181-S200, 2008) – same among injured workers (Franklin G, et.al., Clin J Pain 25:743-751, 2009)

TRUE: Prevalence of lifetime substance abuse – 36%to 56% (Martell, BA, et.al., An Int Med 146:116-127, 2007)

**Session 7208.....CME/MOC: 1**

**Evaluation and Management of the Victim of Workplace Violence Using a Brief Cognitive-behavioral Therapy Approach**

FALSE: All victims of workplace trauma should be discouraged from reentering the workplace for 6 months or until cleared for duty by a psychiatrist.

Normal symptoms/feelings for those who experience a workplace trauma include the following:

D. All of the above

Commonly identified cognitive distortions include the following except:

C. Delusions of grandeur

**Session 7209.....CME/MOC: 1**

**Innovations in Injury Care, Artist and Staff Support, and Community Partnership**

TRUE: The University System is key for collecting information regarding workplace hazards, creating and sharing information about hazard prevention, and training the next generation of Managers who will be confronted with mitigating workplace risk.

TRUE: Krannert Center for the Performing Arts is one of the nation's premiere venues for presenting the best of music, dance and theater from around the country and the globe.

TRUE: In the United States, performance is an industry. Motion Picture, Theatre, Dance, Opera, Classical and Contemporary Music, Performance Art, Industrial/Corporate Entertainment, Cirque, Large Scale Spectacle are produced both commercially and through a myriad of non-profit organizations.

**Session 2207.....CME/MOC: 1.5**

**Mold and Damp Indoor Environments**

IgG testing would be most helpful in patients with mold and damp environment exposures to diagnose:

B. Allergic fungal sinusitis

In most environments, the most useful method to determine if there is excess indoor mold growth is:

A. Thorough visual inspection

Besides mold, a common cause of allergic symptoms in damp environments include:

C. Dust mites

The presence of airborne mold spores found in indoor air quality investigations indicates:

B. Possible evidence for excess indoor moisture, and likely prior water intrusion, if indoor mold spore counts greatly exceed outdoor mold spore counts sampled simultaneously

Mold-related Volatile Organic Compounds (VOC) have been shown to:

D. Are likely responsible for the musty, disagreeable odor in damp environments with excess indoor mold growth

**Session 2208.....CME/MOC: 1.5**

**Developing a Health and Productivity-driven, Evidenced-based Approach to Benefit Design for Biologic Treatments**

According to the "appropriate" paradigm presented, benefit design for biologic treatment should assure that which of the following objectives are achieved (chose four):

- A. Appropriate care
- C. Appropriate patient
- D. Appropriate time (per disease process)
- E. Appropriate value (considering all costs and treatment effectiveness)

The presentation identified a number of criticisms directed at the way employers commonly make benefit design decisions. Which of the following is not a criticism that was identified:

C. Benefit design strategies are modeled after successful case examples (e.g. Pitney Bowes)

The presentation discussed the need of employers to managed total health care costs, including both direct and indirect costs, described as costs employer incur with respect to lost productivity as a function of workforce health. Which of the following were identified as potential indirect costs:

G. All of the above

The presentation made an important distinction between cost drivers and high cost items. Which of the following are examples of potential cost drivers:

- A. A generous disability benefit that may result in higher disability utilization
- C. High co-pays for prescription drugs, which may reduce medication adherence
- D. Lack of coverage for smoking cessation programs

The health, productivity, and total cost results achieved by Navistar can best be characterized as:

C. Total cost (direct and indirect) were reduced by focusing on cost-drivers to improve employee health and productivity

**Session 2209.....CME/MOC: 1.5**

**Individual Scientific Abstracts**

Epidemiological studies related to burn pit exposures and health outcomes are not likely to suffer from which limitation:

B. Misclassification

From what year on did significant threshold shift (STS) baseline need to be adjusted:

C. 2007

What specialties were on the team that performed the study:

D. All of the above

TRUE: The objective of this session is to present important research findings on selected current topics in occupational and environmental health.

TRUE: This session provided researchers in occupational and environmental medicine and related disciplines with a forum to present their current research.

**Session 2210.....CME/MOC: 3**  
**Assessment of Toxic Exposures: A Clinician's Review**

Deconjugation of xenobiotics such as methyl mercury by the enzymes of the intestinal microflora tend to promote:  
C. Enterohepatic recirculation

Cadmium is known to enhance the synthesis of which of the following proteins:  
B. Metallothionein

When establishing a biomonitoring program for persons potentially exposed to parathion, one would look for the metabolite:  
D. Nitrophenol

Where is ninety percent of accumulated lead found in the body:  
D. Skeleton

What clinical feature distinguishes arsenic toxicity from other heavy metals:  
E. Peripheral neuropathy

What feature is common in zinc or copper intoxication:  
A. Anemia

Which of the following physical characteristics of a gas is most important in determining the nature of the inhaled toxin acutely:  
C. Water solubility

What is the most common agricultural toxic inhalation involving a water soluble gas:  
B. Ammonia

The factor most problematic in the EPA's epidemiologic assessment of toxic inhalants was:  
C. Toxicity of most chemicals is unknown

**Session 2211.....CME/MOC: 3**  
**Current Issues in Commercial Driver Medical Certification and Case Discussion**

How many commercial driver medical examinations is it estimated that examiners will be performed annually by examiners trained and certified through the NRCME:  
B. 4,000,000

If a medical examiner is removed from the NRCME, the appeals process includes which of the following:  
D. All of the above

The proposed hours of service regulation for all but short haul drivers would permit a duty time of:  
A. 13 hours

Which of the following are considered by the FMCSA in updating regulations and guidelines:  
F. All of the above

FALSE: The FMCSA recommends that a commercial driver can be medically qualified if they are taking suboxone if the treating provider had documented that there is no risk of impairment.

A Skill Performance Evaluation Certificate is appropriate for a driver with which of the following conditions:  
A. Amputation of right arm

In cab air quality is worse when the vehicle is:  
B. Parked and idling when HVAC is turned on

TRUE: Drivers who have sustained a severe TBI should not be medically certified to operate a CMV.

The FMCSA Medical Expert Panel and Medical Review Boards recommend that drivers with multiple sclerosis who meet other qualifying criteria be medically qualified at least every:  
B. 6 months

**Session 2212.....CME/MOC: 1.5**  
**Maintaining a Healthy Workforce in a Global Petrochemical Industry**

TRUE: Employee should notify management if they take herbals and other over-the-counter drugs that can affect performance and/or behavior.

TRUE: The health screening process for expatriate employees and dependents requires a thorough knowledge of medical infrastructure and health care resources at the assignment destination.

TRUE: The medical fitness-for-duty process requires a thorough knowledge of the worker's essential job requirements.

Critical processes for systemically managing occupational health in a global workforce include:

- A. Standardized work processes
- B. Framework for health
- C. Information management system
- D. Assurance and review process

Regarding employee work cycle and health evaluations:  
F. All of the above

**Session 2213.....CME/MOC: 1.5**  
**Workers' Compensation Management: Quality Outcomes and Cost Containment**

In the St. Joseph's case study, the largest cost driver was seen in which fraction:

A. Indemnity costs

TRUE: In the St. Joseph's case study, efficiencies were realized from proper management of the employer, medical provider, and insurance/administrator roles.

FALSE: Immediately following changes to California's law in 2002 and 2004, medical costs declined sharply and have continued to decline steadily but at a slower rate.

Workers' compensation costs have increased dramatically over time. During 2008 the total costs for workers' compensation in the U.S. was \$57.6 billion dollars. For the 2008 year:

B. Medical benefits costs were higher than cash wage replacement costs for the first time

Studies have identified a variety of factors related to the rising costs of workers' compensation in the U.S. Studies have found positive results when investigating initiatives for controlling these factors except for:

D. Greater satisfaction with overall treatment, attending physician, and overall access to care provided through a managed care program compared with a fee-for-service program

**Session 2214.....CME/MOC: 1.5  
Surveillance and Disaster Preparedness**

What four broad surveillance categories are being used by Maryland to determine the Hospital Based Demand Scoring System (HBDSS):

C. Staffing, supplies, space, and demand

Based on the statewide category scoring of HBDSS, hospital decision makers can:

D. All of the above

Which of the following contribute to a comprehensive picture of biosurveillance:

D. Population health data

Coordination of national biosurveillance is made by whom:

B. The White House

TRUE: This session explored the impact that a disaster can have on a community and the world, the types of surveillance and monitoring currently used, and the process and business continuity of mitigation.

**Session 7210.....CME/MOC: 1  
Becoming an ACOEM Fellow**

TRUE: An ACOEM member is eligible to apply for fellowship when he/she has held membership in the College as a master or active member for a period of no fewer than three years.

Which of the following requirements must be met in order to qualify for fellowship:

F. All of the above

TRUE: The deadline for submitting a fellowship application is November 1<sup>st</sup>.

**Monday, March 28, 2011**

**Session 7300.....CME/MOC: 0  
ACOEM Power Hour! Wake Up to Washington**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

**Session 8301.....CME/MOC: 3  
National Zoo**

The mission of multiple zoos in the United States include all except:

B. Increasing the profit shares of stock holders

Occupational challenges and animal handlers include:

D. All of the above

Private animal collections have been known since:

A. The time of the Egyptian pharaohs

The benefits of an effective worker safety and health program include:

D. All of the above

Examples of traumatic injuries to animal handlers include:

E. All of the above

Other types of injuries and illnesses for animal handlers are:

G. All of the above

TRUE: The popularity of zoos is both a challenge to and a dilemma for modern zoo staff, which must balance the entertainment value of the zoological park with other equally important and demanding zoo missions.

TRUE: FONZ operates an extensive wildlife-education program, and its corps of more than 1,500 volunteers provides about 90,000 hours of service to the National Zoo each year.

The benefits of an effective worker safety and health program are clear. In general, effective management of such programs have been shown to (OSHA, 1989):

D. All of the above

**Session 2300.....CME/MOC: 1.5**  
**Forecasting Future Trends in Workers' Compensation**

With respect to how workers' compensation payers have traditionally viewed providers who deliver care in the workers' comp system, which element(s) do they report as important:

F. All of the above

With respect to how workers' compensation payers view providers in 2011 and beyond, which element(s) do payers report as important:

G. All of the above

According to Integrated Benefits Institute (IBI) benchmarking data, indemnity claims make up 22% of all workers' compensation claims. What percentage of total workers' compensation medical costs do these types of claims account for:

D. 92%

According to a 2010 JOEM article from John Hopkins research, what percentage of physicians accounted for 72% of the total medical costs:

A. 4%

Based on NCCI and industry data, on average, what percent of the total workers' compensation medical costs for 2009 were driven by prescription pharmaceuticals (drug spend):

C. 14-19%

**Session 2301.....CME/MOC: 1.5**  
**William B. Patterson Memorial Presentation**

TRUE: This lecture is held in memory of William B. Patterson, MD, MPH, FACOEM, in recognition of his life and service.

TRUE: At the time of his death in 2008, Dr. Patterson was a member of the ACOEM Board of Directors, Chair of the Committee on Ethical Practice in OEM, and the Assistant Vice President at Concentra Health Services.

TRUE: Dr. Patterson was a member of the New England COEM, an ACOEM component society, where he served as their President, Vice President, Program Director, and as a member of their Board of Directors for 14 years.

TRUE: This year's lecturer is Mark A. Rothstein, JD, of the University of Louisville School of Medicine.

TRUE: Mr. Rothstein spoke on the ethical challenges of occupational and environmental medicine.

**Session 2302.....CME/MOC: 1.5**  
**Teaching Using Experiential Learning: A Hands-on Workshop**

Andragogy refers to which of the following:

C. Adult teaching and learning methods

What is the most common teaching method employed with AOHC CME:

B. Lecture with visuals and brief Q&A

Which of the following teaching modalities has been demonstrated to be most effective:

D. Individualized learning based on preferred learning styles

Which teaching method results in the longest time of recall:

C. Active learning using mental, kinesthetic, and emotional components

Which learning methods have been used in this session (mark all that apply):

A. Journaling and paired sharing

D. Group problem solving

**Session 2303.....CME/MOC: 1.5**  
**Prescription Drug Use in Transportation Workers: Safety, Legal and Policy Perspectives**

Which of the following are the most frequently found substances in cases of driving under the influence of drugs:

D. Benzodiazepines

Compared with drivers not using benzodiazepines, drivers taking which of the following demonstrated increased odds of an "unsafe driving action":

A. Intermediate or long half life benzodiazepines

A person is physically qualified to operate a commercial motor vehicle if that person does not use:

E. All of the above

Which of the following are never subject to the exception:

B. Methadone

C. Medical marijuana

D. Anti-seizure medications

It has been shown that the use of opioids for chronic, non-cancer pain is associated with:

D. High incidence of side effects and deaths

**Session 2304.....CME/MOC: 3**  
**Legal/Regulatory Update: ADA, GINA, HIPPA, and Health Care Reform**

TRUE: The three-prong definition of disability remained the same under the ADAAA as under the original ADA.

TRUE: If a hospital employee receives care in the hospital for a condition unrelated to employment, GINA Title II would not apply.

FALSE: The interpretation of a disability under the ADAAA is the same as under the ADA.

FALSE: This session did not cover the Genetics and Non-disclosure Act (GINA).

FALSE: The occupational health department of an employer may ask an employee for family medical history in a pre-placement or medical surveillance exam or screening.

FALSE: Positive mitigating measures may still be taken into account under the ADAAA.

FALSE: Occupational health providers who unintentionally learn of genetic information concerning an employee may record that information in the employee health record.

TRUE: Under the ADAAA, a person no longer has to be limited in a broad class of jobs in order to qualify for disability.

TRUE: This session provided attendees with an update of various laws affecting clinical OEM practices including the Americans with Disabilities Act Amendments (ADAA).

### 8:30 AM - 3:45 PM

#### Session 2305.....CME/MOC: 4.5 Deepwater Horizon Disaster Response

TRUE: At approximately 10PM (CST) on Tuesday, April 20<sup>th</sup>, 2010, a massive explosion occurred on the Deepwater Horizon (DWH) drilling rig.

TRUE: The result of the explosion resulted in one of the largest marine oil spills in our nation's history.

TRUE: The oil spill response and recovery has represented an unprecedented inter-agency effort to tackle the problem.

What were some short term health effects associated with the DWH clean-up activities:

D. All of the above

At enrollment in the NIH Gulf Oil Spill Health Study, the following data was gathered from each responder:

E. All of the above

How many responders were involved during the peak response:

B. 50,000 responders and multiple federal, state, and local agencies

How many fatalities were attributed to the spill response:

B. None

What were the biggest occupational medicine challenges during the DWH response:

E. All of the above

FALSE: Respirators were required for use by beach cleanup workers in the spill response.

The part of a pre-deployment assessment is best performed by an occupational medicine physician is determination of (single best answer):

C. A worker's ability to perform job tasks and use personal protective equipment safely

Select the most true statement below:

D. Information from EMTs, nurses, nurse practitioners, physician assistants, and others who have first responder or triage roles are particularly important when they include details about possible exposures as well as details about the clinical presentation

TRUE: Regarding the impact of "weathering" of crude oil on human health, particularly the uptake of PAHs into seafood...the compounds of concern for crude oil are volatile organic compounds (VOCs) and the PAHs. The other components have low degrees of toxicity to people. Gases and the VOCs rapidly evaporate and do not remain in the crude oil. These pose risks for workers or others near the source of the leak. The remaining compounds are the heavier molecular weight compounds including the PAHs. The PAH may be taken up into types of seafood and pose a risk to humans.

TRUE: The seafood monitoring program that was implemented to protect public health has three tiers: no visible oil observed within an entire fishing area (designated by the states); seafood must pass the organoleptic or sensory testing (smell and taste) by trained experts; and chemical testing is conducted to monitor for PAHs and other aliphatic hydrocarbons.

TRUE: The seafood monitoring program is designed to determine if a fishing area may be reopened to fishing for human consumption. The sampling plan uses a three tiered screening approach that is designed to find clean areas. The results from the sampling have not detected levels of contaminants of concern which is consistent with this approach. Those conducting research on the oil spill or legal advocates are sampling to find contaminated areas and take samples from visibly oiled areas.

#### Session 2306.....CME/MOC: 1.5 Practical Approach to Employee Health Services

TRUE: Baptist Health South Florida (BHSF) is the largest health care organization in South Florida.

BHSF received the prestigious Corporate Health Achievement Award from ACOEM in

A. 2010

TRUE: BHSF has expanded the traditional employee health services (EHS) to include a comprehensive program covering workers' compensation, employee care hours, and preventive services.

TRUE: BHSF recognized the need for campus-based medical clinics to offer treatment for employees' minor illnesses and injuries, beyond those that occur in the workplace.

The session covered:

D. All of the above

#### Session 2307.....CME/MOC: 1.5 Can't Work or Won't Work? Psychiatric Disability Evaluations

The main source of errors made by clinicians in disability evaluations arises from the misconception that:

D. An impairment arising from a mental disorder automatically equates to disability



Clinicians can make the assessment of impairment and disability more objective by all of the following except:

B. Assuming that an individual's impairments began with the onset of a diagnosable psychiatric disorder

In making a diagnosis of a personality disorder in the context of a disability evaluation, examiners should:

B. Distinguish the personality traits that define these disorders from characteristics that emerge in response to specific situational stressors

In a workers' compensation claim, which of the following requires proof that may be informed by a psychiatric opinions:

C. Claimed illness or injury has a causal relationship with employment

To qualify for Social Security Disability Insurance (SSDI) benefits, an individual making a claim based on a psychiatric disorder must demonstrate which of the following:

D. That the disability is total and permanent

**Session 2308.....CME/MOC: 1.5**

**Cardiovascular Disease in Firefighters and Law Enforcement: State of the Scientific Research and Clinical Implications**

FALSE: According to NFPA 1582 Standard (firefighters) and most police departments, morbid obesity (BMI >40) is a category A fitness-for-duty exclusion criterion for firefighters and police.

FALSE: Standard JNC criteria for hypertension are usually the basis for NFPA and other fitness-for-duty criteria for firefighters and police.

Which of the following firefighters' duties is associated with the highest risk of on-duty death due to cardiovascular events:

C. Fire suppression

TRUE: Firefighters engaged in fire suppression activities are about 60 to 100 times more likely to die while on duty as compared to firefighters stationed at the fire station.

Name the two most common and highest risk, pre-existing conditions that are most predictive of on-duty CHD events:

A. LVH and CHD

**Session 2309.....CME/MOC: 1.5**

**FedStrive: A Model Worksite Wellness Initiative in Federal Government**

According to Healthy People 2010, which of the following is not a specific "pillar" of comprehensive worksite wellness programs:

A. Onsite fitness centers

Benefits of worksite wellness programs may include which of the following:

E. All of the above

Studies on cost-effectiveness of worksite wellness programs have shown which of the following:

D. All of the above

TRUE: Federal Occupational Health (FOH) is the largest provider of occupational health services in the federal government and a leader in worksite wellness programs.

FedStrive is a pilot worksite wellness program for employees in which federal agency:

C. Health and Human Services

**Session 7301.....CME/MOC: 0**

**ACOEM Annual Membership Meeting and Luncheon**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*

**Session 8300.....CME/MOC: 3**

**Occupational and Environmental Aspects at the Pentagon**

FALSE: Department of Defense active duty personnel are covered under OSHA.

FALSE: Federal civilian workers whose workplace is the Pentagon are covered by the State of Virginia Workers' Compensation Progra.

FALSE: The Pentagon is in the State of Virginia.

FALSE: The U.S. Coast Guard is part of the U.S. Department of Defense.

FALSE: The center courtyard of the Pentagon is reserved for intelligence community (CIA, FBI) liaison personnel.

TRUE: Security personnel at the Pentagon are authorized to use deadly force if necessary.

FALSE: Persons with significant disabilities are not permitted to work at the Pentagon.

FALSE: The Pentagon is a military base.

TRUE: The tour of the Pentagon included the main corridors and the medical facility.

**Session 2310.....CME/MOC: 1.5**

**Developing Return-to-Duty Standards for Wounded Warriors**

According to the Defense and Veterans Brain Injury Center (DVVIC), the numbers of incident diagnoses of traumatic brain injury (TBI) among service members per year are between:

C. 11,000-30,000

Functional Capacity Evaluation (FCE) activities might include which of the following:

F. All of the above

FCE outcomes are used to establish a baseline for individualized rehabilitation program:

A. To predict a successful return-on-investment

Testing for the side effects of SSRIs required a waiver application includes all of the following except:

C. Physical fitness scores

FALSE: Waivers for SSRIs can be considered after the first month of stable use.

**Session 2311.....CME/MOC: 1.5**

**Dose: Quantitating Occupational Chemical Exposures**

Two critical, associated reference on this topic are:

A. ATSDR's *Calculating Exposure Doses* ([atsdr.cdc.gov/hac/phamanual/appg.html](http://atsdr.cdc.gov/hac/phamanual/appg.html)) and the EPA's Exposure Factors Handbook ([epa.gov/ncea/pdfs/efh/front.pdf](http://epa.gov/ncea/pdfs/efh/front.pdf))

A True exposure factor (EF) should be expressed in the following units when calculating dose:

C. None (unitless)

The fraction of a toxicant that is absorbed and available internally to exert its effects is typically referred to as:

B. Bioavailability (absorption efficiency)

Typical, accurate, and reliable calculations of dose require familiarity with the mathematical manipulations of:

D. All of the above

Securing the data often necessary to precise calculation of dose will typically involve your working directly with professionals from:

E. All of the above

**Session 2312.....CME/MOC: 1.5**

**Worksite Health and Safety: Application of Health and Productivity Principles**

TRUE: Workplace health protection and promotion is defined as the strategic and systematic integration of distinct environmental, health, and safety policies and programs into a continuum of activities that enhance the overall health and well being of the workforce and prevents work-related injuries and illnesses.

FALSE: Health risks leading to chronic health conditions are on the decline according to the CDC.

TRUE: Systems for measuring the effectiveness of combined health protection and promotion programs should be standardized so they can be readily utilized across industries/employers.

TRUE: It is estimated that worldwide only 50% of patients with chronic diseases take their medications as prescribed.

Non-compliance to medication regimens can be attributed to:

F. All of the above

**Session 2313.....CME/MOC: 3**

**MRO Controversies**

TRUE: This session covered the common and not-so-common difficulties with federally regulated drug testing programs will be discussed and reviewed.

TRUE: One of the duties of the medical review officer (MRO) is to report medications that may present a safety risk to the designated employer representative.

TRUE: This session covered the varying scenarios that arise in non-regulated testing and focus on the issue of alternative testing methods and strategies.

TRUE: This session's content included legislative updates on proposed regulatory changes that might affect the MRO.

/FALSE: This session covered how one's personal appearance can influence the outcome of an examination.

TRUE: When the prescription is a controlled substance: 21 CFR 290.5 -- The label of any drug listed as a "controlled substance" in schedule II, III, or IV of the Federal Controlled Substances Act shall, when dispensed to or for a patient, contain the following warning: "Caution: Federal law prohibits the transfer of this drug to any person other than the patient for whom it was prescribed."

FALSE: When the prescription is a controlled substance: 20 CFR 291.5 -- The label of any drug listed as a "controlled substance" in schedule II or IV of the Federal Controlled Substances Act shall, when dispensed to or for a patient, contain the following warning: "Caution: Federal law limits the transfer of this drug to any person other than the patient (or patient's immediate family member) for whom it was prescribed."

TRUE: United States Code 21 - discusses controlled medications; appears to say it is illegal to dispense controlled medication except by appropriate person (e.g. Illegal to give someone a controlled drug).

FALSE: United States Code 23 - discusses controlled medications; appears to say it is illegal to dispense controlled medication except by appropriate person (e.g. Illegal to give someone a controlled drug).

**Session 2314.....CME/MOC: 3**

**Current Medical Center Occupational Health Issues**

TRUE: This research demonstrated that revision rates are high when there is a discordance between tuberculin skin test (TST) and QuantiFERON-TB Gold In-Tube (QFT-GIT) and also when the Interferon gamma (IFN- $\gamma$ ) responses are close to the cut off value of 0.35 IU.

TRUE: The session's content covered colonization of health care workers with drug resistant organisms, applicable U.S. and international guidance, and the potential for transmission to and from patients.

TRUE: This research showed that there were significantly more unexpected (25-fold increase) in latent TB infections (LTBI) positive results when instituting GFT-GIT than compared with background TST positive rates for a given low risk population.

FALSE: This research demonstrated the most cost effective strategy when screening low risk populations for LTBI is to use QFT-GIT rather than TST.

TRUE: There is a limited role for us of BCG vaccine to protect healthcare workers in settings where TB controls are otherwise not adequate.

TRUE: Among individuals with a history of BCG vaccination, specificity of IGRA assays is superior to that of tuberculin skin testing.

TRUE: There is evidence that XDR tuberculosis has been transmitted to healthcare workers.

TRUE: This session covered practical implications and first-hand experiences with IGRA screening programs.

IGRA stands for:

A. Interferon Gamma Release Assays

**Session 2315.....CME/MOC: 1.5**

**From War to Work: Understanding the Needs and the Strengths of Reserve and National Guard Service Members Returning from Deployment**

TRUE: Combat operations in the Global War on Terrorism have involved more than 698,000 reserve component members to date.

TRUE: The time to achieve and maintain training and readiness, shorter notification time for activation, and more frequent and longer deployments have demanded greater levels of commitment on the part of the members, their families and their civilian employers.

TRUE: Upon return, nearly 20% of service members are burdened with at least one mental health problem.

TRUE: Re-entry into the workforce can be difficult, but may be helped if employers are aware of the behavioral and mental health consequences of deployment and can pro-actively make appropriate workplace accommodations.

TRUE: This session covered descriptive characteristics of Reserve components of the U.S. Armed Forces; the behavioral and mental health impacts of deployment on Reserve members returning to work; programs and policies designed to facilitate work transition; and how to leverage the experience and skills Reservists gained during their service.

**Session 2316.....CME/MOC: 1.5**

**Evidence-based Update in Preventive Cardiology and Screening**

Which of the following medications has the largest prevention of acute myocardial infarction:

B. Aspirin

Which of the following is not a risk factor for coronary heart disease:

D. Diabetes

Which of the following assessments is recommended in the guidelines for screening asymptomatic individuals for heart disease:

D. Calculation of Framingham Risk Score (FRS)

All of the following are needed for calculation of the Framingham Risk Score except:

D. Family history of vascular disease

After finding which of the following at a screening health fair would a consultation with a provider for follow up not be medically indicated:

B. Finding a total cholesterol >200

**Session 2317.....CME/MOC: 1.5**

**Promoting Quality in Occupational Medicine**

FALSE: Accreditation Association for Ambulatory Health Care (AAAHC) Core Standards apply to primary care, but don't apply to occupational health.

Evidence-based clinical guidelines are intended to:

E. All of the above

FALSE: A 360 Patient Safety Framework includes only quantitative measures.

A privileging process should include which of the following:

D. All of the above

TRUE: According to Kotter's 8 Steps of Successful Change, the execution of change should occur quickly.

**Session 7302.....CME: 1/MOC: 0**

**ACOEM's Maintenance of Certification Part IV Program: What Re-certifying ABPM Diplomates Need to Know**

*Maintenance of Certification credit (MOC) is not available for this session*

Tuesday, March 29, 2011

**Session 7400.....CME/MOC: 1**

**Attracting and Retaining Clients for an Occupational Medicine Practice**

Which of the following should be included on a reference list that you distribute to prospective clients:

E. All of the above

Which of the following is considered the most important way to build an occupational health practice:

B. "High touch" activities in which the occupational health practice can meet prospective clients face to face

TRUE: Establishing a strong communications loop that can nip problems in the bud is the most important thing a practice can do to retain their client base.

**Session 7401.....CME/MOC: 1**  
**A Common Sense Approach to Documentation, Coding, and Reimbursement**

The provider determines causation by:  
D. All of the above

Which of the following is not part of the treatment plan:  
E. Referral to primary care provider

TRUE: Documentation of comprehensive histories and review of must be completed to code a 99203 and 99204.

**Session 7402.....CME/MOC: 1**  
**Asset Protection**

Assume you have been sued. As a result, a judgment has been entered against you in an amount that exceeds your malpractice coverage. Please provide a true/false response indicating whether assets would be included in the settlement against you:

TRUE: A brokerage account titled joint tenancy with rights of survivorship with your spouse.

FALSE: IRA account, beneficiary is your youngest child.

TRUE: Assets you inherit from your spouse.

**Session 7403.....CME/MOC: 1**  
**Occupational and Environmental Health at the Pan American Health Organization (PAHO)**

TRUE: Climate change has multiple health impacts and increases health inequities.

TRUE: Climate change affects specially the most important vulnerable populations: children under five; pregnant women; elderly people; marginalized rural, urban, and indigenous populations; and displaced populations.

TRUE: The following are preventive measures to prevent the transmission of tuberculosis among health workers: environmental controls; administrative and work practices controls; policy and program; surveillance; and personal protective equipment

**Session 8401.....CME/MOC: 3**  
**WDC Fire Training Academy Worksite Visit**

FALSE: Fire fighter personal protective ensembles (PPE) (clothing and SCBA) weigh approximately 20 pound.

TRUE: Ladder climbing in full PPE requires an aerobic capacity of approximately 44 ml/kg/min (13METS).

FALSE: Municipal fire fighters spend the majority of their time fighting fires.

FALSE: The 2007 Edition of NFPA 1582 has a requirement of 12 METS for all fire fighters.

TRUE: Hydrogen cyanide is a common component of fire smoke.

TRUE: Fire smoke contains large amounts of particulate, and the particulate comes in a large variety of sizes.

FALSE: In the NIOSH investigations of fire fighter fatality due to cardiac disease, carbon monoxide was a very common trigger of heart attacks.

TRUE: NFPA 1582 recommends that all fire fighters participating in a live fire training exercise be medically cleared within the past year.

TRUE: According to NFPA 1403, all live fire training exercises should include rehabilitation.

**Session 8402.....CME/MOC: 3**  
**National Zoo**

The mission of multiple zoos in the United States include all except:  
B. Increasing the profit shares of stock holders

Occupational challenges and animal handlers include:  
D. All of the above

Private animal collections have been know since:  
A. The time of the Egyptian pharaohs

The benefits of an effective worker safety and health program include:  
D. All of the above

Examples of traumatic injuries to animal handlers include:  
E. All of the above

Other types of injuries and illnesses for animal handlers are:  
G. All of the above

TRUE: The popularity of zoos is both a challenge to and a dilemma for modern zoo staff, which must balance the entertainment value of the zoological park with other equally important and demanding zoo missions.

TRUE: FONZ operates an extensive wildlife-education program, and its corps of more than 1,500 volunteers provides about 90,000 hours of service to the National Zoo each year.

The benefits of an effective worker safety and health program are clear. In general, effective management of such programs have been shown to (OSHA, 1989):  
D. All of the above

**Session 2400.....CME/MOC: 1.5**  
**What ACOEM is Doing in Washington**

Which of the following are provisions of the Patient Protection and Affordable Care Act:  
E. All of the above

TRUE: The Patient Protection and Affordable Care Act directs the secretary to award grants to small businesses to provide employees with access to comprehensive workplace wellness programs.

FALSE: The Patient Protection and Affordable Care Act forbids employers to offer employees incentives for participating in a wellness program or meeting certain health-related standard.

FALSE: The OSHA National Emphasis Program on Recordkeeping targeted high DART rate establishments in high risk industries.

Occupational health care providers may obtain a family history in which of the following circumstances:  
E. C and D

**Session 2401.....CME/MOC: 3**  
**Comparative Effectiveness Research**

Which of the following are important stakeholders for comparative effectiveness:  
E. All of the above

What are some potential secondary analyses of existing clinical datasets for CER:  
D. All of the above

Strengths of randomized trials include which of the following (all that apply):  
C. Ability to account for unmeasured confounders  
D. Intent to treat analyses which mimic clinical decision making

Ultimately, the purpose of evidence generated by CER is to assist which of the following to make informed decisions that will improve health care at both the individual and population levels:  
E. All of the above

What are two examples of innovation challenges for CER:  
A. Cross-design synthesis to standardize and compare clinical data collected by different methods  
C. Evaluation of new statistical models and methods on treatment effectiveness outcomes

Which agency directors under the Department of Health and Human Services are on the board and methodology committee of the Patient-centered Outcomes Research Institute:  
B. Agency for Healthcare Research and Quality  
D. National Institutes of Health

TRUE: Pragmatic trials have hypotheses and designs that are intended to directly address questions of interest to decision makers, including patients, clinicians, payers, and policy makers. Unlike explanatory trials, pragmatic trials have broad inclusion criteria, few exclusion criteria, minimal trial-based measures or visits, and clinically meaningful endpoints; they involve "typical" practitioners and emphasize tests of interventions as they would occur in usual practice settings.

Strengths of observational studies include which of the following (all that apply):  
B. Generally lower cost  
C. Better reflection of routine clinical situations

Heterogeneity of patient response is best characterized as:  
B. Different patients respond differently to a treatment within the same study

Which of these conditions are included on the list of AHRQ's priority conditions for conducting patient-centered outcomes research (all that apply):  
A. Substance abuse  
B. Diabetes

**Session 2402.....CME/MOC: 3**  
**Hands on Orthopedics**

TRUE: Finkelstein's test is associated with a physical examination of DeQuervain's disease.

FALSE: Over the last 20 years the PE is thought to be the best and most reproducible methodology on which to accurately diagnose a spine condition.

FALSE: The brachial/biceps reflex is associated with the C7 nerve root.

TRUE: A Spurling's Maneuver is positive if reproducible mimics the paresthesias into the correct upper extremity as are the presenting symptoms.

FALSE: Tinel's test is specific for carpal tunnel syndrome.

TRUE: Shoulder and neck pathology can often be confused clinically.

TRUE: Spinal stenosis presents with a constant and recurring constellation of symptoms and signs.

FALSE: Rotator cuff tendinosis is an acute traumatic condition.

TRUE: To be most correct, the history, the PE, and the objective findings should correlate.

**Session 2403.....CME/MOC: 3**  
**The Use of Functional Capacity Evaluation in Complex WC and Return to Duty Cases**

Functional capacity evaluations are indicated for all of the following purposes except:  
B. To assess impairment

FALSE: A high quality FCE will always reflect the evaluatee's actual physical and functional abilities.

When requesting/ordering an FCE, which of the following should be included in your request:  
D. All of the above

Nancy Jones, a 52-year-old female, was referred for an FCE to determine her general abilities.  
C. She demonstrated abilities within a light physical demand level, and can probably do more

FALSE: The PILE protocol determines an individual's constant lift ability

A Horizontal Strength Change test is used to:  
C. Assess an individual's level of effort

FALSE: Low coefficients of variation indicate that an individual performed with maximum effort.

The category of "Inconsistent/Substantiated" performance best reflects which of the following:  
C. The behavior typically associated with an unstable or unresolved condition

FALSE: When reporting an evaluatee's push or pull ability, the reported value is the weight on the sled or cart.

**Session 2404.....CME/MOC: 3**  
**Workplace Investigations by NIOSH and OSHA**

TRUE: The heat index is a measure of how hot it really feels when a relative humidity is factored with the actual air temperature.

TRUE: The Occupational Safety and Health Administrator's online technical manual states, "If a worker shows signs of possible heat stroke, professional medical treatment should be obtained immediately."

FALSE: In methemoglobinemia, cyanosis is a late sign.

TRUE: Parantiroaniline is absorbed by all three routes of entry: inhalation, gastrointestinal absorption, and dermal absorption.

FALSE: Trimethylsilyldiazomethane is a recognized inhalational hazard.

TRUE: Diazomethane is a recognized inhalation hazard.

TRUE: The Center for Disease Control and Prevention now recommends annual influenza vaccination for all persons over 6 months of age.

TRUE: Influenza can be spread quickly among children and caregivers in child care settings.

FALSE: Visual contrast sensitivity is a useful tool in evaluating individuals exposed to damp, moldy buildings.

TRUE: Working or living in damp buildings is associated with an increased risk of asthma.

**Session 2405.....CME/MOC: 1.5**  
**Changing Your Working Language: Legislative Advocacy for Occupational Physicians**

Which of the following arguments supporting the need for an increase in workers compensation medical fees set by your state is most likely to be successful:  
A. The fees should be increased due to a demonstrable increase in business costs, e.g. rent and utilities for clinic space, and employee wages and benefits

Most occupational medicine societies work directly with their state medical societies. Which of the following is least typical of state medical societies:  
C. They are usually strongly controlled by one or two specialty organizations

Which of the following is most likely to be true regarding political issues:  
C. Working with legislators on health issues they view as important can help you gain support for more esoteric, specialty interest bills you are strongly supporting

"Bargaining Chips" are:  
B. Something of value given to another party to offset what they are giving up in a negotiation

Which of the following is the most accurate statement about the development of successful legislation:  
D. There are often several approaches to resolving the issue in a bill that will accomplish the objective, and some are likely to be more acceptable than others to stakeholders

**Session 8400.....CME/MOC: 0**  
**ACOEM's Capitol Hill Briefing**

*Maintenance of Certification credit (MOC) is not available for this session; AMA PRA Category 1 credit (CME) is not available for this session*