This activity has been approved by the American Board of Preventive Medicine for up to 27 MOC credits. Claiming ABPM MOC credit is appropriate for those that are ABPM diplomates.

Those wishing to claim MOC credit must first complete this self-assessment, then complete the credit verification form located in your conference registration packet. Only the credit verification form needs to be returned to ACOEM staff. You may keep this self-assessment as a study guide. Answers key is located in the back of this booklet.

**Sunday, April 29, 2012 – 7:45AM-11:45AM**
**Session: 901………………………………………….CME/MOC: 3**
**Worksite Visit: Hollywood & Highland Center (formerly known as the Kodak Theatre)**
Constantine J. Gean, MD, MBA, MS, FACOEM*, Liberty Mutual Insurance Co., Glendale, CA (MODERATOR)


TRUE/_FALSE: Health and safety planning can be taken for granted in a theater group due to their close knit bonds and long history working together.

TRUE/_FALSE: Mist, dust, and fume exposures are not known to occur in a theater environment.

TRUE/_FALSE: Special-effect smokes and vapors can cause health effects in stagehands and actors.

TRUE/_FALSE: Pyrotechnic stage effects have been responsible for many deaths due to unsafe conditions.

TRUE/_FALSE: The NFPA standard, 1126 code for the use of pyrotechnics before a proximate audience, regulates safety precautions that should be taken with pyrotechnics in a theater.

TRUE/_FALSE: Fear of retaliation sometimes impacts the willingness of set and theater safety personnel and stagehands from coming forth with concerns for safety.

TRUE/_FALSE: Because of their protected status, theater arts performers are not required to adhere to OSHA standards for respiratory protection, personal protective equipment, letters, fall protection, and scaffold regulations.

TRUE/_FALSE: Employees do not have the right to sue employers even if they are deliberately put in harm’s way due to the workers compensation laws enacted in the early 1900s.

**Sunday, April 29, 2012 – 8:30AM-12Noon**
**Session: 100………………………………………….CME/MOC: 3**
**Latest Guidance in Public Safety Medicine: Tactical (SWAT) Medicine, Substance Abuse, and Prosthesis**
TRUE/FALSE: A LEO with an unilateral above-knee amputation is less likely to be able to perform the essential job functions of a LEO in part due to increased energy costs for walking and running because energy costs for ambulation at a pre-injury walking gait are increased approximately 50%.

What part of the activity of a SWAT is usually responsible for the largest proportion of injuries:
A. Training
B. Warrant service
C. Barricaded suspect
D. Hostage rescue

Suspicious workplace factors for substance use discover includes:
A. Unkempt appearance
B. Involvement in accidents
C. Worsening performance
D. Unreliability in someone previously reliable
E. All of the above

When reviewing the medical history for a LEO with a recent unilateral below-knee amputee, the police physician should document which of the following:
A. Reason for and circumstances surrounding amputation
B. The number of months that the LEO has been wearing his/her definitive prosthesis
C. Anticipated maintenance schedule of the device
D. All of the above

What is the universal physical limitation for upper extremity amputees, regardless of the prosthesis and/or treatment device:
A. Power grasp
B. Precision pinch
C. Loss of proprioception

Acute marijuana cognitive impairment can last up to:
A. 4 hours
B. 12 hours
C. 24 hours
D. 73 hours

What are the three phases of care in the tactical combat casualty care model:
A. Care under fire; tactical field care; tactical evacuation care
B. Care under fire; moving casualty; casualty evacuation care
C. Care in the field; packaging patient; tactical evacuation care

What is an essential role of the occupational physician in support of a SWAT team:
A. Ensuring compliance with NFPA 1582
B. Ensuring training safety by direct observation or participations
C. Hostage negotiation

Risk factors for substance use disorder relapse include:
A. Treatment incompletion
B. Polysubstance use
C. Concordant psychiatric diagnosis
D. Strong family history of substance abuse
E. All of the above

Session: 101………………………………………….CME/MOC: 3
Current Issues in Medical Center Occupational Health
David K. Henderson, MD, National Institute of Health, Bethesda, MD
Michael J. Hodgson, MD, MPH*, Veterans Health Administration, Washington, DC
Mark Russi, MD, MPH*, Yale University, New Haven, CT (MODERATOR)
Melanie D. Swift, MD, FACOEM*, Vanderbilt Occupational Health Clinic, Nashville, TN

TRUE/FALSE: In a pandemic, nurses in leadership and management positions are excellent emergency vaccinators because they do not need training on how to give a vaccine.

TRUE/FALSE: Three timely MCOH issues are the new developments pertaining to bloodborne pathogens; a model for influenza mass vaccination and issues around mandatory vaccination; and the measurement and control of hazardous drugs in healthcare settings.

The risk for a healthcare worker to acquire hepatitis C infection following a parenteral exposure to blood known to have come from a patient infected with the hepatitis B virus is closest to which of the following:
A. 30%
B. 3%
C. 0.3%
D. 0.03%
E. negligible

The risk for an unvaccinated healthcare worker to acquire hepatitis B infection following a parenteral exposure to blood known to have come from a patient infected with the hepatitis B virus (and is “e” antigen positive) is closest to which of the following:
A. 30%
B. 3%
C. 0.3%
D. 0.03%
E. negligible

The number of documented cases of patient to provider transmission of the HIV that have been reported to the CDC since 1985 is:
A. 0
B. 1-10
C. 11-75
D. 76-150
E. More than 150

The risk for provider to patient transmission of blood borne pathogens is:
A. Significantly less than the risk for patient to provider transmission
B. Slightly less than the risk for patient to provider transmission
C. About the same as the risk for patient to provider transmission
D. Slightly higher than the risk for patient to provider transmission
E. Significantly higher than the risk for patient to provider transmission

The number of cases of provider to patient blood borne pathogen transmission:
A. Is undetectable
B. Follows the following pattern – the risk is greater for hepatitis C than for hepatitis B, the risk is greater for hepatitis B than for HIV
C. Follows the following pattern – the risk is greater for HIV than for hepatitis B, the risk is greater for hepatitis B than for hepatitis C
D. Follows the following pattern – the risk is greater for hepatitis B than for hepatitis C, the risk is greater for hepatitis C than for HIV
E. Follows the following pattern – the risk is greater for HIV than for hepatitis C, the risk is greater for hepatitis C than for hepatitis B

Which elements help to optimize patient throughput in a mass vaccination clinic:
A. Separate area to discuss health questions
B. Encourage participants to wear short sleeves
C. Nurse documentation and patient signature on the same consent form
D. All of the above
E. A & B

When does social marketing have the greatest impact on participation in a mass vaccination clinic:
A. The week before the event
B. The day before the event
C. During the event
D. After the event

Session: 102.........................................................CME/MOC: 3
Hands-on Suturing Workshop: An Update and Refresher
Jason Sommers, RN, MBA, Ethicon, Inc.

TRUE/FALSE: Wound care is the second most common source of malpractice litigation, accounting for up to 20% of claims.

TRUE/FALSE: In 1994, lacerations to the finger ranked third after back and leg strains in frequency.

TRUE/FALSE: Only a few millimeters separate a superficial laceration from a significant deep structure injury.

TRUE/FALSE: Adhesive tapes may be used with tissue adhesive or after suture removal to reduce wound tension.
TRUE/FALSE: Regarding primary closure guidelines, the current American College of Emergency Physicians policy is no more than 8 to 12 hours from the time of injury.

TRUE/FALSE: The margin to excise on a wound is dependent on body location, on tissue appearance, the degree of maceration, and contamination.

The most common causes of litigation resulting from wound care are:
A. Retained foreign bodies
B. Missed tendon, nerve, or joint injury
C. Wound infection
D. All of the above

The primary goals of wound closure are:
A. Stop bleeding
B. Preserve function
C. Restore cosmetic appearance
D. Prevent Infection
E. All of the above

Options for wound closure are:
A. Sutures
B. Topical skin adhesives
C. Staples
D. Steri-strips (adhesive tapes)
E. All of the above

Sunday, April 29, 2012 - 1:30PM-3:00PM
Session: 103....................................................CME/MOC: 1.5

Individual Scientific Abstract Presentations
Robin Armenia, DO, MPH*, Concentra Health Services, Atlanta, GA
Dean B. Baker, MD, MPH, FACOEM*, University of California, Irvine, CA (MODERATOR)
Amy J. Behrman, MD*, University of Pennsylvania Health System, Philadelphia, PA
Sheri Belafsky, MD, MS*, Center for Occupational and Environmental Health, UC Davis School of Medicine, Davis, CA
Edward J. Bernacki, MD, MPH*, Johns Hopkins University School of Medicine, Baltimore, MD
Allen Kraut, MD, FRCP*, University of Manitoba, Winnipeg, MB, Canada
Dinah R. Tichenor, RN, BSN, Vanderbilt University, Nashville, TN

TRUE/FALSE: Forty percent of subjects lost fit with less than four hours of re-use.

TRUE/FALSE: Surveillance cultures for all animals is useful to identify asymptomatic carriage in animals and allow pre-emptive decontamination, but is unlikely to halt an evolving cluster.

TRUE/FALSE: In one study mentioned during this session, it suggests that efforts to educate the public about reading and following the manufacturer’s written instructions for fit would be worthwhile.
According to the information presented in this session, which of the following is true regarding health care personnel (HCP) who did not routinely get seasonal influenza vaccination, but chose to get the pH1Ni vaccine:

A. More HCP felt that the seasonal vaccine was likely to be effective than the pH1Ni vaccine  
B. More HCP were concerned about side effects of the seasonal vaccine than the pH1N1 vaccine  
C. More HCP felt that the risk of pH1N1 disease outweighed the risk of the pH1N1 vaccine  
D. Reporting that the risk of seasonal influenza outweighed the risk of the vaccine was associated with the intention to get seasonal influenza vaccine  
E. HCP who got influenza vaccinations are more concerned about passing influenza to patients than to their families

When vaccinating high volumes of individuals, all of the following are recommended except:

A. Onsite training of vaccinators  
B. Limit paper documentation  
C. Adverse event protocol  
D. Mix adult/pediatric populations at same site

**TRUE/FALSE:** Two common theater workplace hazards that can be encountered during performance or rehearsal are moving surfaces and trip/fall hazards.

**TRUE/FALSE:** Two common theater workplace hazards that can be encountered after the performance are demolition/construction hazards and celebration (intoxication) injuries.

**TRUE/FALSE:** The term “the show must go on” refers to working regardless of symptoms, injury, or illness and working with inadequate health and safety precautions.

**TRUE/FALSE:** There are free resources available for evaluating the theater workplace and preventing occupational injuries and illnesses.

**TRUE/FALSE:** ACTS stands for Arts, Crafts, and Theater Safety.

**TRUE/FALSE:** The Chicago Tribune is a known source for local artists to research key safety violations in theaters nationwide.

**TRUE/FALSE:** Stage violence is a workplace hazard that can be encountered during a performance or rehearsal.

What theater workplace hazards can be encountered before performance or rehearsals begin:

A. Construction hazards  
B. Hazardous material exposure  
C. Allergen or sensitizer exposure  
D. Rigging hazards and risk of falling
E. Material handling hazards
F. All of the above

Which of the following are resources that could be used to learn about hazards in the theater:
A. United States Institute for Theater Technology
B. Actors Equity Association
C. PLASA
D. All of the above

Session: 106.........................................................CME/MOC: 3
Health and Productivity Management: The Global Perspective
William B. Bunn III, MD, JD, MPH*, Navistar, Inc., Warrenville, IL
K. Andrew Crighton, MD*, Prudential, Newark, NJ (MODERATOR)
Tee L. Guidotti, MD, MPH, DABT, FACOEM*, Archives of Environmental and Occupational Health, Washington, DC
Lorna Friedman, MD, Mercer, New York, NY
Barry Hall, Buck Consultants, Boston, MA
Fikry Isaac, MD, MPH, FACOEM*, Johnson & Johnson, New Brunswick, NJ
Wolf Kirsten, MSc*, International Health Consulting, Berlin, Germany
Leslie M. Yee, MD, MPH, FACP, FACPM, FACOEM*, Skylark Health Strategies, Ltd, Cincinnati, OH (MODERATOR)

TRUE/FALSE: When globalizing health problems, one must set short and long term goals and measure outcomes (measure outcomes, not effect)

TRUE/FALSE: The need for health and productivity management (HPM) has long been acknowledged within the United States.

TRUE/FALSE: When globalizing health problems, increased productivity and engagement can generate significant cost savings and improved performance (business critical).

TRUE/FALSE: When globalizing health problems, success springs from a culture of health, which is built into the fabric of business, communities, and health systems (understand your culture).

What makes management of health and productivity in the United States uniquely different from other developed countries:
A. Americans show no link between health status and productivity
B. Has stopped developing economically
C. Employer-sponsored health insurance
D. Faces a highly unfavorable dependency ratio
E. Unusually progressive and successful occupational health management

What is the “dependency ration”:
A. The ratio of working-age citizens/residents (15 to 65) to citizens/residents who are too young or beyond customary retirement age
B. The ratio of people using drugs to those not using
C. The ratio of people wearing Depends to those who do not need them
D. The ratio of citizens in the workforce to citizens who are dependent in some way, such as a disability or retirement
E. The ratio of demographers to economists in a social science department
What is the “middle income trap”:
A. When a country gets rich very quickly and then goes into a rapid decline and loses the economic advantage
B. When certain commodities (such as oil) are so economically productive that they squeeze out investment in anything else and marginalize the rest of the economy
C. When middle-class families find that there is no way of increasing their income
D. When a country goes from poverty to middle-income and cannot seem to progress further because of limitations on productivity
E. When a country becomes complacent and its citizens settle for a middle-level of income as being good enough

Multinational organizations need to be concerned about international travel health issues in order to protect which of the following populations:
A. Expatriate employees and families
B. Personnel handling international travel ticket reservations and purchasing
C. International business travelers
D. Local national employees and contractors in developing countries
E. A, C, and D
F. All of the above

The definition of “culture of health” is:
A. The creation of a working environment where employee health and safety is valued, supported, and promoted through workplace health programs, policies, benefits, and environmental support (CDC)
B. A workplace ecology in which the dynamic relationship between human beings and their work environment personal and organizational values that support achievement of a person’s best self while generating exceptional business performance
C. Both A and B

Session: 107………………………………………….CME/MOC: 3

MRO Controversies
Karl Auerbach, MD, MS, MBA, FACOEM*, Exponent, Inc., Philadelphia, PA
Natalie P. Hartenbaum, MD, MPH, FACOEM*, OccMedix, Dresher, PA
Douglas W. Martin, MD, FACOEM*, St. Luke’s Center for Occupational Health Excellence, Sioux City, IA (MODERATOR)
Donna R. Smith, PhD, Employers Drug Program Management, Inc., Birmingham, AL

TRUE/FALSE: Urine drug testing acts as a barrier to hiring the social and economic marginal members of society.

TRUE/FALSE: Urine drug testing as done in most settings detects the drugs that factor into accidents at work.

TRUE/FALSE: Now that the DOT has accepted the recommendations that expanded opiate testing should be performed, labs will be reporting hydorocodone, hydromorphone, exycodone, and oxmophone results by September 30, 2012.

Which of the following is true:
A. Urine drug testing of employment is done by a high percentage of Fortune 500 companies
B. There is some evidence that urine drug testing at the time of hire results in less absenteeism and better retention
C. There is good evidence that urine drug testing has a significant impact on overall injury and workers’ compensation
D. The reduction in truck driver accidents can be attributed in a large part to urine drug testing and alcohol testing
An MRO received a result from the lab positive for 6-AM but no morphine detected. They have contacted the lab and morphine was not detected even at LOD. What is the appropriate next step:
A. Report as negative
B. Report as positive for 6-AM
C. Cancel the test and send the donor for immediate recollection under direct observation
D. Contact ODAPC

The most common errors in the drug testing process take place during:
A. MRO interview
B. Screening at the laboratory
C. Shipping
D. Specimen collection

The move to the addition of federal testing for synthetic opioids was driven by:
A. Laboratories
B. Congress
C. Increased concern of misuse and abuse of these drugs
D. Employers unions

The medical review officer (or assistant for negatives) is required to complete how many copies of the federal chain of custody form to document a result:
A. 1
B. 2
C. 3
D. 4

The medical review officer cannot have a business relationship with the:
A. Donor
B. Collector
C. Shipping company
D. Laboratory

Session: 108………………………………………….CME/MOC: 3
Using Office Ultrasound to Diagnose and Treat Musculoskeletal and Urgent Care Medical Conditions
Mark Ault, MD, Cedars Sinai Medical Center, Los Angeles, CA
Bryce D. Breitenstein, Jr., MD, MPH, FACOEM*, Concentra, Long Beach, CA (MODERATOR)
Peter H. Cheng, DO, Kaiser Permanente, Riverside, CA
Doran A. Kim, MD, Cedars Sinai Medical Center, Los Angeles, CA
Philip K. Ng, MD, Cedars Sinai Medical Center, Los Angeles, CA
Kaochoy Saechao, MD, MPH, FACOEM*, Kaiser Permanente, Los Angeles, CA (MODERATOR)
Edward Yian, MD, SCPMG-Orange County, Anaheim, CA

TRUE/FALSE: Since sound waves do not penetrate bone, the use of ultrasound cannot be used to detect bone fractures.

Over the past decade, by what percentage has diagnostic ultrasound use increased by non-radiologists:
A. 0%
B. 50%
C. 100%
D. 12,000%
E. Decreased

What are the potential hazards of ultrasound use:
A. Enhance inflammatory effects
B. Heat local soft tissue
C. Both A and B
D. None of the above

What is the most common diagnosis that ultrasound is useful to diagnosis in the shoulder joint:
A. Arthritis
B. Instability
C. Frozen shoulder
D. Rotator cuff tear
E. None of the above

What term describes varying image appearance on ultrasound due to the beam from the transducer not being 90 degrees to the object imaged:
A. Anisotropy
B. Isotropy
C. Anarchy
D. None of the above

What advantages does musculoskeletal ultrasound give to its provider:
A. Cost savings
B. Efficient patient care
C. Dynamic examination
D. All of the above
E. None of the above

Which ultrasound finding is not seen with carpal tunnel syndrome:
A. Increase cross-sectional area of the median nerve
B. Increase bowing of the flexor retinaculum
C. Decrease nerve vascularity
D. Decrease transverse nerve movement
E. Decrease nerve echogenicity

The US features of lateral epicondylitis are:
A. Insertional hypoechoic swelling of the tendon
B. Focal or diffuse area of decrease echogenicity
C. Loss of tendon fibrillary pattern
D. Fluid around tendon associated with tear
E. All of the above

The US findings of trigger fingers are:
A. Diffuse hypoechoic thickening of the A1 pulley  
B. The A1 pulley demonstrates no increase synovial effusion  
C. The surrounding tissue remains stationary during tendon gliding  
D. On the longitudinal view, the synovial sheath does not change its shape during flexion and extension of the finger  
E. The cross-sectional area of the A1 pulley remains unchanged

Sunday, April 29, 2012 – 3:30PM-5:00PM  
Session: 109………………………………………….CME/MOC: 1.5  
Individual Scientific Abstract Presentations  
Nicole T. Ansani, PharmD, Pfizer, Inc., Pittsburgh, PA  
Dean B. Baker, MD, MPH, FACOEM*, University of California, Irvine, CA (MODERATOR)  
Russell Gelfman, MD, MS*, Mayo Clinic College of Medicine, Rochester, MN  
Rebecca Guest, MD, MPH*, Memorial Sloan-Kettering Cancer Center, New York, NY  
Howard Hamer, MD, FCFP, MSc(A), FCBOM, Altum Health – University Health Network, Toronto, Canada  
Hannah Kuehl, BS, Oregon Health and Science University, Portland, OR  
Prof. Folashade O. Omokhodion, FWALP, FFOM, PhD, College of Medicine, University of Ibadan, Ibadan, Oyo State, Nigeria

TRUE/FALSE: WR-CTS epidemic in late 1980s and early 1990s included a disproportionate increase in young and middle-aged women across most industry groups.

TRUE/FALSE: Connecting with a fire department’s wellness enthusiast is the single most important factor when determining whether or not a fire department will adopt a health promotion program.

TRUE/FALSE: Being on a team positively influences user engagement in a health and wellness platform.

Why is it more likely that a woman with CDP will RTW more so than a man with CDP:  
A. They are smarter  
B. They are better looking  
C. The industries in which they work are lighter and more varied allowing for more RTW  
D. All of the above

In a study of women physicians and scientists working at a metropolitan cancer center, it was found that:  
A. About half of these employees work 60 hours or more weekly  
B. The majority have multiple job stressors, such as fast pace with tight deadlines and large amounts of responsibility  
C. The vast majority find their work to be highly rewarding  
D. Extreme jobs were reported by 1/3 scientists, 1/2 clinicians, 2/3 clinician-scientists (e.g. dual job role)  
E. All of the above

Session: 110………………………………………….CME/MOC: 1.5  
Major Clinical Updates of the Past 10 Years: Allergy, Clinical Genetics, Pulmonary, and Radiology  
Wayne N. Grody, MD, PhD, University of California, Los Angeles, Los Angeles, CA  
Philip Harber, MD, MPH*, University of Arizona, Tucson, AZ (MODERATOR)  
Andrew Saxon, MD, UCLA School of Medicine, Los Angeles, CA

TRUE/FALSE: Serological testing for IgE antibodies to allergens is not as good as allergy skin testing.
TRUE/FALSE: serological testing for IgE antibodies to allergens can determine if a subject has allergic contact dermatitis.

TRUE/FALSE: Internal medicine and related topics include allergy, clinical genetics, pulmonary, and radiology.

Which of the following is true regarding vocal cord dysfunction:
A. AKA: Paradoxical vocal cord motion, episodic laryngeal dyskinesia, psychogenic asthma, pseudoasthma
B. Definition: Apposition of the vocal cords during breathing, usually during inspiration but may occur during expiration
C. Common: 40% of “steroid dependent” asthma
D. Complications: Polypharmacy with chronic steroid use plus epinephrine and hospitalizations
E. All of the above

Allergic fungal sinusitis is best treated by:
A. Systemic antifungal medications
B. Surgical extirpation
C. Steroids (topical and/or systemic)
D. B and C
E. A, B, and C

**Monday, April 30, 2012 - 7:00AM-8:00AM**

**Session: 201.................................................CME/MOC: 1**

**Becoming an ACOEM Fellow**

Natalie P. Hartenbaum, MD, MPH, FACOEM*, OccMedix, Dresher, PA

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.

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

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

**Session: 202.................................................CME/MOC: 1**

**Occupational and Environmental Medicine: From Antiquity to Modern Times**

Judith Green-McKenzie, MD, MPH, FACOEM, FACP*, University of Pennsylvania Health System, Philadelphia, PA (MODERATOR)

Tee L. Guidotti, MD, MPH, DABT, FACOEM*, Archives of Environmental and Occupational Health, Washington, DC

Verba A. Moore, MD, MPH*, Innovative Health Applications, LLC, Kennedy Space Center, FL

Lloyd B. Tepper, MD, ScD, FACOEM*, University of Pennsylvania, Philadelphia, PA

Until the 1930’s and 40’s, most industrial hygienists were trained as which profession:
A. Chemist
B. Physician
C. Engineer
D. Physicist
E. Psychologist

Harry Mock is best remembered for:
A. Establishing the first teaching clinic in occupational medicine
B. The textbook that organized the modern field
C. Establishing the rationale and science for “fitness-for-duty” evaluations
D. Health promotion and education in the workplace (using other words)
E. The model of a progressive occupational physician in industry
F. All of the above

What did “the corporate practice of medicine” mean in the 1950’s:
A. Medical services provided by large corporations directly to their employees
B. Any systematic effort to provide care through an organization rather than a solo practitioner practicing fee-for-service medicine, whether a company, a group practice, or health plan of any kind
C. Industrial medicine and occupational health services provided by employers for the safety and protection of their employees
D. Periodic health surveillance for occupational disease when carried out by a physician other than the worker’s personal medical doctor
E. Organized health plans that took advantage of economies of scale, coordination or care, and application of actuarial principles that could only be achieved by managing workers (and their dependents) as populations as well as individuals

Session: 203.........................................................CME/MOC: 1

Ways to Increase Your Practice Opportunities
Tony Alleman, MD, MPH*, Occupational Medicine Clinics of South Louisiana, Lafayette, LA
Robert M. Bourgeois, MD, MPH, FACOEM*, Bourgeois Medical Clinic, Morgan City, LA (MODERATOR)

Which examination usually requires additional training, certification, or registration:
A. FAA (pilot, air traffic controller)
B. Commercial driver
C. United Kingdom Oil and Gas
D. Immigration medical examinations
E. All of the above

Which ancillary testing does not require that the technicians be trained and/or certified:
A. Alcohol breathing testing
B. Spirometry
C. Urine drug collection
D. Vision screening

What immunizations require prior approval before ordering or administration:
A. Tdap
B. Hepatitis B
C. Japanese Encephalitis
D. Yellow Fever
E. Meningitis
What is it All About: Are You Utilization Review Savvy?
Phyllis Annette Gerber, MD, FACOEM, FAADEP*, Biomotionlabs, LLC, Orlando, FL (MODERATOR)
Michael J. Webb, MD, FACOEM*, Liberty Mutual, Tampa, FL

TRUE/FALSE: Utilization review (UR) is the process used by employers or claims administrators to review treatment, goods and services, to determine if it (they) is (are) medically necessary.

TRUE/FALSE: The California Medical Treatment Schedule (MTUS) provides medical treatment guidelines for utilization review and an analytical framework for the evaluation and treatment of injured workers.

TRUE/FALSE: The 2012 release of the ODG product line (including the 17th edition of ODG and the 10th edition of ODG Treatment in Workers Comp) provides the most up-to-date evidence-based medical treatment and disability guidelines to improve, as well as benchmark, outcomes in workers’ comp and non-occupational disability.

Monday, April 30, 2012 - 8:30AM-10:00AM
Session: 205.........................................................CME/MOC: 1
AOHC Opening General Session: C. O. Sappington Lecture

Three ways a typical family with employer sponsored health insurance pay for healthcare include out of pocket (copays, deductibles); the employee’s share of monthly insurance premium; and lost wages that go towards employer’s share of the monthly premium. A fourth way many families pay for healthcare is:
A. Cash payments
B. “Concierge” fees for special service
C. Credit cards
D. Taxes

On average, American adults receive recommended care about what percent of the time:
A. 90%
B. 75%
C. 55%
D. 30%

Which of the following is not considered a basic policy option for reducing total expenditures on health care:
A. Provide less care (rationing)
B. Pay less for the same care (price setting, global budgets)
C. Increase co-payments and deductibles so patients bear a greater share of the cost
D. Reduce the need for care through prevention

Monday, April 30, 2012 - 10:30AM-12Noon
Session: 206..........................................................CME/MOC: 1.5
Excellence in Health Care: CHAA Award Presentations
Gregg M. Stave, MD, JD, MPH, FACOEM, FACP*, Consultant, Chapel Hill, NC
Johnson & Johnson: M. Cunningham-Hill, MD, FFOM, FACOEM; Joseph Van Houten, PhD, CSP
Smithsonian Institution: Jules R. Duval, MD; Marty Arthur, RN, COHN-S
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: Johnson & Johnson’s health and wellness programs have resulted in a decrease in chronic conditions and health risk among employees.

TRUE/FALSE: Smithsonian Institution has an integrated health and safety information system that allows for comprehensive analysis of data.

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

Session: 209………………………………………….CME/MOC: 1.5
Healthier, Safer, and More Engaged: Creating a Workplace Culture Where Health Thrives
Ebi Awosika, MD, MPH*, Department of Veterans Affairs, Minneapolis, MN

TRUE/FALSE: There is a growing shortage of US workers.

TRUE/FALSE: The percent growth of the US workforce is highest in those 35-44 years of age.

TRUE/FALSE: Risk for fatigue is increased by working long hours.

TRUE/FALSE: Worker protection and respect as the primary cornerstone forms part of a comprehensive worksite program.

On the average workday in the US, how many employees are absent due to stress:
A. 200
B. 5
C. 1,000
D. 1 Million
E. None of the above

Session: 210………………………………………….CME/MOC: 1.5
Musculoskeletal Issues, Part I – Low Back Pain: Thinking Outside the Disc
John G. Sandness, MD, MS, FACOEM*, Physical and Occupational Medicine Associates, PA, Bloomington, MN

TRUE/FALSE: Single site chronic pain is uncommon. Only 13% of those with chronic low back pain have isolated pain.

TRUE/FALSE: The pelvis plays an essential role in movement, stability, and low back pain.
TRUE/FALSE: The diagnostic label “regional low back pain” describes a homogenous group of patients.

Principles of muscle function include:
A. Reciprocal inhibition
B. Fault propagation
C. Arthrogenic inhibition
D. Facilitation
E. Recruitment and substitution
F. All of the above

An MRI of the lumbar spine will show a patient’s:
A. Pain
B. Pelvic stability
C. Core stability
D. Structural anatomy
E. Leg length
F. Symphysis pubis dysfunction
G. Muscle inhibition
H. Sacroiliac joint motion

Session: 211..........................CME/MOC: 1.5
Alice Hamilton in Combat Boots: U.S. Marine Corps' Japan Radiation Response and Special Operations Emerging OEM Challenges
J. P. Ahluwalia, MD, MPH*, Ft. Detrick, Frederick, MD
Illy Dominitz, MD, MPH, FACOEM*, US Navy, Camp Pendleton, CA
Tifani Lowe Grizzell, MD, MPH*, Chemical Biological Incident Response Force, Indian Head, MD

TRUE/FALSE: For first responders to have a real time reading of their radiation exposure a TLD is most useful.

Within the Marine Special Operations community, routine medical problems are often complicated and magnified by:
A. Extremely high op-tempo (more frequent deployments)
B. Minimal dwell-time (time the Marine is at home between deployments)
C. High-stress environment while deployed, such as engaging in Village Stability Operations (VSOs)
D. All of the above

In-house medical resources for MARSOC Marines include:
A. Athletic trainers
B. Physical therapist
C. Psychologists
D. Sports Medicine physician
E. All of the above

OSHA whole body radiation exposure limit for first responders is:
A. 1 REM
B. 5 REM
C. 10 REM
D. 25 REM
E. 50 REM

The two major isotopes of concern to the surrounding population from the Fukushima disaster were (pick two):
A. Thorium
B. Cesium
C. Polonium
D. Iodide
E. Strontium

Monday, April 30, 2012 – 1:30PM-3:00PM
Session: 212....................................................CME/MOC: 1.5
The Built Environment: A Solution to the Diabesity Epidemic
Marlon Maus, MD, DrPH, Berkeley, CA

TRUE/FALSE: Driving a car has no impact on obesity.

TRUE/FALSE: Urbanites have a higher risk of obesity.

TRUE/FALSE: Persons living near fast food facilities have higher rates of obesity.

TRUE/FALSE: Billboards do not affect eating patterns.

TRUE/FALSE: Restricting high calorie foods and soft drinks has no effect on childhood obesity.

Monday, April 30, 2012 – 12:30PM-4:30PM
Session: 902....................................................CME/MOC: 3
Worksite Visit: House of Moves
Phyllis Annette Gerber, MD, FACOEM, FAADEP*, Biomotionlabs, LLC, Orlando, FL

TRUE/FALSE: VICON contains the following three types of stages: Stage 1-motion capture; Sound Stage 2-motion capture; and Stage 3-virtual camera stage.

TRUE/FALSE: At VICON, sports activities are filed in real-time.

TRUE/FALSE: Life science topics include gait analysis and rehabilitation, biomechanical research, posture, balance and motor control, sports performance, and animal science.

TRUE/FALSE: Animation topics include games, film, television, and education.

TRUE/FALSE: House of Moves is an incubator of ideas where motion capture converges with imagination, inspiring artists within the entertainment, gaming and commercial trade to see and express movement in previously unimagined ways.

TRUE/FALSE: Megapixel visible red cameras are in use at VICON.
Crash studies using dummies are examples of which 3-D motion capture application:
A. Animation  
B. Engineering  
C. Life sciences  
D. All of the above  
E. None of the above

Which category of 3-D motion capture application includes studies performed on individual patients to enhance surgical planning:
A. Animation  
B. Engineering  
C. Life Sciences  
D. All of the above  
E. None of the above

Animation can be used to enhance which of the following experiences:
A. Education  
B. Games  
C. Film and television  
D. All of the above  
E. None of the above

Monday, April 30, 2012 - 1:30PM-5:00PM  
Session: 213………………………………………….CME/MOC: 3  
Current Research in OEM and Resident Abstract Presentations  
John D. Meyer, MD, MPH, FACOEM*, SUNY Downstate School of Public Health, Brooklyn, NY

TRUE/FALSE: When QFTGold-IT tests are used for surveillance of Latent TB Infection in health care workers, initial positive tests should be repeated prior to making treatment decisions.

TRUE/FALSE: Health care workers without known exposure to TB who have an initial positive QFTGold-IT should have a repeat test done within one to three months after the initial test.

TRUE/FALSE: Individuals who are working with chronic low back pain have a higher prevalence of obesity than the remaining population.

TRUE/FALSE: Musculoskeletal disorder (MSD) has been recognized as a significant occupational health problem for dentists and dental hygienists.

TRUE/FALSE: In general police duties with a higher perceived stress level are associated with a higher risk of on-duty heart attack deaths.

The results of this study found that HCW are not able to detect blood splatter by the naked eye in what percentage of the time when performing procedures with intravascular devices:
A. 2%
Which of the following is a MSD risk factor:
A. Awkward posture  
B. Repetitive motion  
C. Force  
D. Vibration  
E. Contract stress  
F. All of the above

What is the most common cause of death in patients who have been exposed to hydrofluoric acid:
A. Asphyxia  
B. Renal failure  
C. Hepatic failure  
D. Brain herniation  
E. Cardiac dysrhythmia

During which of the following police duties is a heart attack most likely to occur:
A. Non-emergency duties  
B. Inspection or investigations  
C. Pursuit of or during an altercation with a suspect  
D. During a rescue operation

Session: 214.....................................................CME/MOC: 3

Health and Productivity Management: Value of Investment in Better Health
Catherine M. Bodnar, MD, MPH*, Dow Chemical Company, Midland, MI  
Wayne N. Burton, MD, FACOEM, FACP*, American Express, New York, NY  
Henry N. Goodall, MD, BS, FFOM, Society of Occupational Medicine, Lyndhurst, United Kingdom  
Richard Heron, MD, FRCP, BP International, Sunbury on Thames, England  
Pamela Hymel, MD, MPH, FACOEM*, Walt Disney Parks and Resorts, Anaheim, CA (MODERATOR)  
Mary Yarbrough, MD, MPH*, Vanderbilt University and Medical Center, Nashville, TN

TRUE/FALSE: The value proposition for health and productivity initiatives outside the US is primarily to address health care costs.

TRUE/FALSE: Presenteeism cannot be measured outside the US using validated questions.

TRUE/FALSE: Health risk appraisal questionnaires are available for most major countries outside the US.

TRUE/FALSE: Both worker protection and enhancement of worker health are key to safety improvement breakthroughs.

TRUE/FALSE: Public sector organizations reported an increase of stress-related absence by about 50%, while private sector and manufacturing industries saw levels increase by about a third.
TRUE/FALSE: The American Express mission and goals are to promote health awareness, influence positive behavior change, improve productivity, enhance employee engagement and reduce health care expenditures.

TRUE/FALSE: A change in 1 health risk results in a $950 charge in worker productivity.

N.I.C.E stands for:
A. United Kingdom National Institute for Clinical Excellence
B. Non Intensive Care Excellence

Potential health-related leading indicators of workplace injury found in the Dow Chemical internal study include:
A. Perceived health status
B. BMI
C. Tobacco
D. Physical activity status
E. All of the above

Session: 215.........................................................CME/MOC: 3
Managing Disability and Delayed Recovery
Darrell Bruga, LifeTeam Health, Los Gatos, CA
John T. Harbaugh, MD*, Southern California Permanente Medical Group, Studio City, CA
Mark H. Hyman, MD, FACP, FAADEP*, Mark H. Hyman, MD, Inc, Los Angeles, CA
Gideon Letz, MD, MPH*, US Pain, Stinson Beach, CA
Glenn Pransky, MD, MOccH*, Liberty Mutual Research Institute, Hopkinton, MD
Michael Sullivan, PhD, McGill University, Montreal, Quebec

TRUE/FALSE: Early on, predictive accuracy is significantly improved by using detailed psychological questionnaires.

TRUE/FALSE: Risk factors for pain and disability are very similar.

Johnson and Fry’s 2002 study on factors affecting return to work after injury found that the longer a worker is off work, the less likely they are to return to work. According to the study, if a patient is off work for only 45 days, his or her chance of returning to work is:
A. 75%
B. 50%
C. 25%
D. 15%

Which of the following is not a psychosocial risk factor addressed in the session:
A. Catastrophic thinking
B. Fear of pain
C. Secondary gain
D. Perceived injustice

Which of the following techniques would not be used to target catastrophic thinking:
A. Education/reassurance
B. Interpretation
C. Thought monitoring
D. Disclosure
Pain severity accounts for approximately what percent of the variance in occupational disability:
A. 1%
B. 10%
C. 50%
D. 80%

Even with the best care and management practices, some patients have psycho-social baggage that inhibits timely recovery. Which of the following are true of these patients:
A. These patients are at risk for overtreatment, unnecessary diagnostic testing, and iatrogenic harm
B. These patients need “special handling” and triage for behavioral interventions such as cognitive behavioral therapy
C. Early referral is the key to success – less intensive interventions are less costly and proven effective
D. A and C
E. All of the above

Which of the following is true of the clinician’s role in the return-to-work process:
A. Specific work restrictions should be provided at every visit
B. “Off work” should be indicated if the patient can’t return to their usual job
C. Writing work restrictions is not an exact science and formal FCE’s are rarely necessary
D. A and C
E. All of the above

The utility of clinical interventions for delayed recovery are optimum when:
A. They are performed by specialized urban based rehabilitation programs
B. They are community based rehabilitation programs (programs with good geographic accessibility)
C. They are performed by mental health workers
D. They are performed by physical therapists
E. All of the above

TRUE/FALSE: A drowsy driver is a good judge of his/her ability to drive safely.

TRUE/FALSE: Most people with obstructive sleep apnea can be successfully treated.

TRUE/FALSE: According to Dr. Harrison’s presentation, clinics can improve examiner compliance with the Joint Task Force Sleep Apnea screening recommendations by recording of BMI and neck circumference measurements by staff when preparing the medical exam report and by announced performance audits.

The psychomotor vigilance test (PVT) is:
A. A 10-minute test of attention, vigilance, and reaction time
B. A possible adjunct of current occupational OSA screening methods
C. A validated test in the context of sleep deprivation-related performance deficits
D. A test that can be accomplished within a short office visit
E. All of the above
Who is responsible for ensuring a commercial driver meets the English language requirement (391.11):
A. Driver  
B. Employer  
C. Examiner  
D. Driver licensing agency

The proposed FMCSA National Registry of Certified Medical Examiners will require:
A. Completion of training on FMCSA physical qualification standards  
B. Passing a test to verify understanding of these standards  
C. Maintenance of certification through periodic training and testing  
D. All of the above  
E. A and B

The proposed National Registry:
A. Is mandated by SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users)  
B. Will provide quality assurance  
C. Will include a process for removal of unqualified medical examiners  
D. All of the above  
E. A and B

Fatigue may be caused or exacerbated by:
A. Sleep disorders  
B. Insufficient or poor quality sleep  
C. Medications  
D. Coexisting medical conditions  
E. All of the above

Sleep Apnea:
A. Occurs only in persons who are obese  
B. May occur in persons who are obese and in persons who are not obese  
C. Is associated with short periods of time when breathing stops  
D. May be associated with worsening of hypertension or diabetes, if untreated  
E. B, C, and D

TRUE/FALSE: Redefined terminology is US law for the term dietary supplement means a product other than tobacco intended to supplement the diet that bears or contains one or more of a vitamin, a mineral, a herbal/botanical, or amino acid for use by man to supplement the diet by increasing the total dietary intake or a concentrate, metabolite, constituent, extract, or combination of ingredients.

TRUE/FALSE: The act that effectively regulated steroids and ephedra compounds is call the Ephedra and Anabolic Steroid Control Act of 2004.

TRUE/FALSE: The World Anti-Doping Agency (WADA) accredits the Olympic Analytical Laboratory in Los Angeles, CA.
TRUE/FALSE: A reference list for banned substances for Olympic sports can be found on the WADA’s website.

The DSHEA Act was in what year:
A. 1994
B. 1995
C. 2005

Session: 219......................................................CME/MOC: 1.5
The Entertainment Industry: Disaster and Safety Planning
Constantine J. Gean, MD, MBA, MS, FACOEM*, Liberty Mutual Insurance Co., Glendale, CA (MODERATOR)
Mitchell C. Motu, CSP, CBCP, CPCM, MARSH Risk Consulting, San Diego, CA

TRUE/FALSE: Broadly defined, the entertainment industry accounts for approximately 4 to 5% of the US GDP.


TRUE/FALSE: Event and movie sets are exposed to unusual hazards including bladed weapons, lasers, naked flame, animals, and many others.

TRUE/FALSE: The incident command system is used in large disasters on movie sets or fixed venues.

TRUE/FALSE: Administrative complications often interfere with access to workers compensation treatment on movie sets due to frequent changes of venue, multiple temporary employment situations, unpredictable access to medical care, etc.

Monday, April 30, 2012 - 5:15PM-6:15PM
Session: 218......................................................CME/MOC: 1
Becoming Board Certified and Maintaining Board Certification in Occupational Medicine
Denece Kesler, MD, MPH, FACOEM*, University of New Mexico, Albuquerque, NM
Kristine Pasciak, American Board of Preventive Medicine, Chicago, IL

TRUE/FALSE: The four components of board certification are: professional standing; lifelong learning and self-assessment (LLSA); assessment of cognitive expertise; and assessment of practice performance.

TRUE/FALSE: The cognitive exam may be taken starting seven years after receiving certification and may be repeated if necessary to pass it prior to the expiration of the certificate.

TRUE/FALSE: Diplomates are required to complete two practice performance assessments during their 10 year certification cycle.

Tuesday, May 1, 2012 – 8:30AM-10:00AM
Session: 301......................................................CME/MOC: 1.5
Musculoskeletal, Part II: Preventive & Proactive Strategies with Clinical Pearls Related to Effective Management of Musculoskeletal Disorders
George Anstadt, MD, FACOEM, FACPM*, Concentra, Rochester, NY
TRUE/FALSE: The three phases of biomechanics conditioning are: normalize, stabilize, and functionalize.

TRUE/FALSE: Levator scapulae is a key muscle in the upper body which tends to become overactive when the median nerve becomes tethered.

TRUE/FALSE: A dysfunctional pelvis cannot give the appearance of one leg longer than the other.

TRUE/FALSE: Palpation of areas of chronic subjective muscle tenderness will reveal firm nodules that provide objective verification.

TRUE/FALSE: A careful history coupled with a skilled clinical examination of the low back provides diagnostic information with greater predictive value than imaging studies.

Session: 302 CME/MOC: 1.5

International Travel Health Issues
Elaine C. Jong, MD, University of Washington, Seattle, WA
Craig Karpilow, MD, FACOEM, MPH, FRSTM&H*, Workplace Medical Corporation, Hamilton, ON, Canada
Kerstin Westritschnig, MD, Intercell AG, Austria
Leslie M. Yee, MD, MPH, FACP, FACPM, FACOEM*, Skylark Health Strategies, Ltd., Cincinnati, OH (MODERATOR)

TRUE/FALSE: The two most common prescription groups provided by an occupational medicine travel medical service are malaria chemoprophylaxis and the use of emergency standby malaria medication.

TRUE/FALSE: Vaccines that should be kept on hand in an occupational medicine travel clinic are: current year’s influenza vaccine; primary vaccines tetanus, diphtheria, polio (IPV), measles mumps rubella; hepatitis A&B; pneumococcal vaccine; meningococcal serotype vaccine; human papilloma virus, etc and if appropriate; yellow fever, rabies, and Japanese encephalitis.

TRUE/FALSE: The most important treatment for travelers diarrhea is prompt and vigorous oral or parenteral hydration.

What countries have a risk of transmission of chikungunya, dengue fever, Japanese encephalitis, and malaria infections:
A. China, India, and Papua New Guinea
B. China, India, and Indonesia
C. China, India, Indonesia, and Madagascar
D. China, India, Indonesia, and Papua New Guinea

Vaccines are currently available to protect travelers against which of the following insect-transmitted diseases:
A. Tick borne encephalitis, Dengue fever, and Japanese encephalitis
B. Dengue fever, Japanese encephalitis, and Yellow fever
C. Japanese encephalitis, Tick borne encephalitis, and Yellow fever
D. Japanese encephalitis and Yellow fever
Session: 303..................................................CME/MOC: 1.5

U.S. Army Occupational Medicine Residency Arms Manufacturing Industry and OSHA Experiences

Nathan B. Almond, MD, MPH, US Navy, Pensacola, FL
Todd C. Knudson, MD, MPH*, USAAMA, Pensacola, FL
Kalpesh K. Purohit, DO, MPH, MMS, USASAM, Pensacola, FL
MAJ John Reaume, MD, MHSA, FS, US Army School of Aviation Medicine, Pensacola, FL (MODERATOR)
CPT John Venezia, DO, MPH, MA, US Army, Pensacola NAS, FL

TRUE/FALSE: The US Army’s occupational medicine residency program allows exposure to the arms manufacturing process and the unique potential medical hazards associated with this industry.

Which of the following is not one of the OEM residency core competencies:
A. Clinical occupational and environmental medicine
B. OEM related law and regulations
C. Interpersonal and communication skills
D. Environmental health
E. Work fitness and disability integration

Which phrase is most accurately associated with irritant contact dermatitis:
A. A-type IV hypersensitivity reaction
B. More common than allergic contact dermatitis
C. An IgE mediated reaction
D. An IgM/IgG mediated reaction
E. Is easily distinguishable from allergic contact dermatitis on clinical exam

Which of these is not a specialty or subspecialty of preventive medicine:
A. Occupational medicine
B. Aerospace medicine
C. Medical toxicology
D. Forensic medicine
E. Undersea and hyperbaric medicine

Which of the following is not available for download and use from the OSHA website:
A. Access to all current OSHA regulations and standards
B. Injury/illness calculator
C. Electronic compliance assistance tools (e-CATSs)
D. Education and training materials on occupational safety
E. Individualized legal advice

An occupational medicine program designed to support and protect workers who deal directly with or control access to nuclear, biological, or chemical materials would fall within the spectrum of:
A. Certainty medicine
B. Surety medicine
C. Guaranty medicine
D. Audacity medicine
E. Accountability medicine
TRUE/FALSE: A risk group is an agent classification based on intrinsic risks.

TRUE/FALSE: A biological safety level is the same thing as a risk group.

TRUE/FALSE: The leading safety reference document used by biological laboratories when designing laboratories is the Biosafety in Microbiological and Biological Laboratories.

TRUE/FALSE: The BSL-3 lab is airtight and requires workers to wear fully encapsulating air-supplied suits.

TRUE/FALSE: BSL-4 workers need to have annual hearing evaluations.

TRUE/FALSE: The Health Care Reform Law requires that in 2014 there be an elimination of pre-existing conditions.

TRUE/FALSE: Future changes due to the Health Care Reform Law will focus more on physician value-based payment rather than volume.

TRUE/FALSE: The majority of medical costs are related to direct health care costs rather than productivity loss.

TRUE/FALSE: Examples of national and demographic trends where employers are being increasingly impacted include the incidence of chronic health conditions is increasing across all ages groups in the US; health risks leading to chronic conditions are also on the rise; the American workforce is aging; and older workers face more health challenges.

The disciplinary connection of patients and families that are illustrated in “Optimizing Health Care Delivery by Integrating Workplaces, Homes, and Communities” (JOEM 2012; 54:504-512) include all but one of the following:

A. OEM
B. Primary care
C. Surgery
D. Public health

Tuesday, May 1, 2012 - 10:30AM-12Noon

Session: 306..............................CME/MOC: 1.5

Occupational Safety Health Disparities and Underserved Populations
Joseph A. Fortuna, MD, MACOEM, Prism, Bloomfield, MI
Robert Harrison, MD, MPH*, University of California San Francisco, San Francisco, CA
Niklas Krause, MD, PhD, MPH, University of California, Richmond, CA
Scott D. Morris, MD, MPH, FACOEM*, Nature First Medical Clinic, Gurnee, IL (MODERATOR)
Michael A. Rodriguez, MD, MPH, UCLA Family Medicine, Los Angeles, CA
TRUE/FALSE: Low income workers make up about 1/3 of all workers in the US.

TRUE/FALSE: Self-reported general health of immigrant hotel room cleaners is poorer than in the general US population.

Effective interventions to reduce musculoskeletal disorders among sewing machine operators includes the following:
A. Adjustable chairs
B. Table extensions
C. Task lighting
D. Frequent rest breaks
E. All of the above

Migrant and immigrant workers in the US have what access to health care in the US than workers born in the US have:
A. The same
B. More
C. Less
D. It depends

Recommendations for creating integrated programs to achieve health equity in the workplace include:
A. Improve data collection – if it is not counted it does not exist
B. Increase education and training for workers, professionals, policy makers, and improve exchange of information
C. Increase worker and community participation in all facets of programs
D. Support greater research to evaluate and support approaches that increase integrations
E. All of the above

Session: 307 .........................................................CME/MOC: 1.5
Biomonitoring in the U.S. and Europe: From Science to Routine Worker Surveillance
Michael Bader, PhD Dr, BASF SE, Ludwigshafen, Germany
Rupali Das, MD, MPH*, California Department of Public Health, Richmond, CA (MODERATOR)
Leslie M. Israel, DO, MPH*, University of California, Irvine, Irvine, CA

TRUE/FALSE: Firefighter biomonitoring results may not be easily linked to an occupational exposure.

TRUE/FALSE: Perfluorochemicals (PFCs) are found only in non-stick cookware.

Suspected endocrine disrupting chemicals include:
A. PFCs
B. Poly brominated diphenyl ether (PBDE) flame retardants
C. Bisphenol-A (BPA)
D. All of the above

All of the following is true of human biomonitoring except:
A. In Germany, biomonitoring is required in relevant workplaces under the “Preventive Occupational Medicine Care Ordinance”
B. Biomonitoring provides clear evidence of the source of chemical exposure
C. Clinical interpretation of results is currently not feasible for most chemicals that can be biomonitored
D. Biomonitoring may be used to demonstrate the efficacy of regulatory policies as well as to influence new public policies

Reference values for chemicals compounds or metabolites in biological materials refer to:
A. The tolerable daily intake (TDI) including a safety margin of 100
B. The highest concentration ever observed in a scientific study on human exposure
C. Exposure in the work area without personal protective equipment
D. The 95 percentile of the concentration range as measured in the general population or a concentration determined to be clinically-relevant
E. Non-carcinogenic compounds and fibers

Session: 308....................................................CME/MOC: 1.5
The Affordable Care Act, Accountable Care Organizations, and Patient Centered Medical Home: New Opportunities for Occupational and Environmental Medicine
Harris Allen, PhD, Harris Allen Group, LLC, Brookline, MA
David C. Deitz, MD, PhD*, Liberty Mutual Insurance Group, Boston, MA
Paul Grundy, MD, MPH, FACOEM*, IBM Corporation, Hopewell Junction, NY
Robert K. McLellan, MD, MPH, FACOEM, FAAFP*, Dartmouth Hitchcock Medical Center, Lebanon, NH (MODERATOR)

TRUE/FALSE: PCMH is a team based health care delivery model led by a physician that provides comprehensive and continuous medical care to patients with the goal of obtaining maximized health outcomes.

TRUE/FALSE: One reason accountable care organizations should measure indirect costs is the magnitude related to direct costs. Studies have also documented that indirect costs can exceed direct costs by as much as a ratio of 2 to 1 or more.

TRUE/FALSE: PCMH achieves two critical objectives: 1) High-quality and high-value care provided by the PCMHs ensure and incentivize communications between teams of providers that operate in various settings. PCMHs facilitate transitions and align the resources needed to meet the clinical and coordinated care needs of the population. They can develop and support systems for the coordination of care of patients in ambulatory care settings; and 2) PCMHs can monitor health information systems and the timeliness and completeness of information transactions between primary care and specialists.

TRUE/FALSE: Accountable Care Organizations (ACOs) make physicians and hospitals more accountable in the care system, emphasizing organizational integration and efficiencies coupled with outcomes oriented, performance-based medical strategies to improve the health of populations.

TRUE/FALSE: Research has proven that injured employees who participate in well-structured return-to-work programs recover their health faster and are more satisfied with their care and outcomes than employees who don’t participate in RTW programs.

Session: 309....................................................CME/MOC: 1.5 (ABIH, BRN, BCSP, REHS)
Chris Laszcz-Davis, CIH, REA, The Environmental Quality Organization, LLC, Lafayette, CA
Mary Gene Ryan, MPH, BSN, RN, COHN-S/SM, FAAOHN, MG Ryan & Co., Inc., Oxnard, CA
TRUE/FALSE: Two elements of GHS are GHS physical/health hazard criteria and labels with GHS harmonized core information (e.g. signal words, hazard statements, and symbols, etc).

TRUE/FALSE: Two elements of GHS are safety data sheets (SDS: 16 section) and employee training.

TRUE/FALSE: Two signal words used in GHS are warning and danger.

Which is not a goal of the California Green Chemistry Initiative:
A. Develop consistent means to evaluate risk
B. Reduce exposure
C. Ban certain chemicals
D. Encourage less toxic industrial processes
E. Identify safer, non-chemical alternatives

As a concept, green chemistry refers to:
A. Inherent biological and ecological safety of chemicals at the point of design
B. Administrative controls to reduce exposures to hazardous chemicals
C. Strategies to prevent chemical releases that could damage sensitive ecosystems
D. A specific protocol for chemical engineering controls that reduce worker exposures

Session: 310.............................................CME/MOC: 1.5
The Hybrid Physician Leader
Joe Flynn, MBA, AMC, Occupational Environmental Health Network, Inc, Marlborough, MA
Philip Parks, MD, MPH, FACOEM*, H21, Boston, MA

TRUE/FALSE: Leadership is listed as one of ACOEM’s 10 Core Competencies.

TRUE/FALSE: Active listening is an interpersonal skill.

TRUE/FALSE: The five dimensions of centered leadership are meaning, engaging, connecting, managing energy, and positive framing.

Which one of the following is not a leadership style discussed in the hybrid physician leader presentation:
A. Transformational
B. Command and control
C. Democratic
D. Change management
E. Situational

Which one of the following is not a component of emotional intelligence:
A. Self awareness
B. Self regulation
C. Motivation
D. Empathy
TRUE/FALSE: Smelting is a form of extractive metallurgy; its main use is to produce metal from its ore.

TRUE/FALSE: The OSHA Lead Standard requires the employer to reduce employee exposure to the lowest feasible level through the use of engineering and work practice controls (1910.1025)e(1).

TRUE/FALSE: Smelting uses heat and a chemical reducing agent to decompress the ore, driving off other elements as gasses or slag and leaving just the metal behind.

TRUE/FALSE: Overexposure to lead is a leading cause of workplace illness in the lead industry. Employees working in secondary lead smelter plants are exposed to one of the highest lead exposure levels among all lead-related industries.

TRUE/FALSE: Most ores are a chemical compound of the metal with other elements, such as oxygen (as an oxide), sulfur (as a sulfide) or carbon and oxygen together (as a carbonate).

TRUE/FALSE: Crude lead produced during smelting operations is remelted in cast iron kettles and refined by the addition of reagents, such as sulfur and caustic soda. The purified lead is then cast into molds or ingots. Significant lead emissions can occur from poorly controlled refining, casting, and drossing operations.

TRUE/FALSE: According to OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities, clean and dry protective work clothing must be provided daily or weekly depending on exposure levels.

TRUE/FALSE: Removal of lead from protective clothing or equipment by blowing, shaking, or any other means which dispersed lead into the air is prohibited.

The following protective clothing and equipment must always be used when lead levels are above the PEL:
A. Coveralls or similar full-body work clothing
B. Gloves, hats, and shoes or disposable shoe coverlets
C. Face shields, vented goggles, and other appropriate protective equipment
D. All of the above

TRUE/FALSE: During the symptomatic recovery period, the brain needs increased blood flow to heal, at the same time that the blood vessels are contracted.
A concussion is defined as:
A. A complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces
B. It is a mild traumatic brain injury
C. Causes a neurological functional disturbance as compared to a structural injury
D. Does not require a loss of consciousness
E. No abnormality seen on structural neuroimaging studies in 99% of cases
F. All of the above

Signs of a concussion can include:
A. Physical (headache, balance problems, nausea, light sensitivity)
B. Cognitive (mentally foggy, difficulty concentrating, confusion)
C. Emotional (irritability, sadness, nervousness)
D. Sleep (drowsy, altered sleep patterns)
E. A and B
F. All of the above

Session: 312.................................................CME/MOC: 1
New Frontiers in Occupational and Environmental Medicine at Home and Abroad
Theodore F. Them, MD, MS, PhD, MPH, FACOEM*, Guthrie Clinic, Ltd., Sayre, PA
Tee L. Guidotti, MD, MPH, DABT, FACOEM*, Archives of Environmental and Occupational Health, Washington, DC
Debra Milek, MD, PhD, MPH*, Mount Sinai School of Medicine, New York, NY (MODERATOR)
Aubrey K. Miller, MD, MPH*, National Institute of Environmental Health Science, Bethesda, MD

TRUE/FALSE: Occupational exposures related to hydrofracking may include hearing loss.

Which item is not a valid reason for opposing the development of shale gas as an energy resource:
A. The local impact of shale gas development can cause community problems
B. Groundwater quality may be affected by contamination with return water
C. Fugitive methane emissions have greenhouse gas effects
D. Shale gas does nothing to reduce dependency on oil
E. Methane intrusion can cause safety hazards when it occurs

The reported adult mortality from mesothelioma in Turkish villages is:
A. Primarily associated with erionite exposure
B. Primarily associated with crocidolite asbestos and erionite exposures
C. As high as 30-50% in a few villages
D. Primarily due to occupational exposures among workers

Session: 313.................................................CME/MOC: 1 (ABIH, BRN, BCSP, REHS)
Multidisciplinary Issues, Part III – Ergonomics: The Prospective Consortium Musculoskeletal Disorder Studies
Fred Gerr, MD, FACOEM*, University of Iowa, Iowa City, IA
Kurt Hegmann, MD, MPH, FACOEM*, University of Utah, Salt Lake City, UT
David Rempel, MD, MPH, FACOEM*, University of California San Francisco, Richmond, CA (MODERATOR)
Based on the studies presented, which of the two job physical factors appears most important for the development of CTS?
A. Force and posture  
B. Force and repetition  
C. Repetition and posture  
D. Repetition and duration of exertion  
E. Posture and duration of exertion

Based on the studies presented, which of the following non-occupational risk factors appears most important for the development of CTS?
A. Gout  
B. Hypertension  
C. Pregnancy  
D. Obesity

Based on the studies presented, which job factor appears most important for the development of wrist tendonitis:
A. Dissatisfied with job  
B. Repetition  
C. Duration of forceful pinch  
D. Job strain  
E. Tool weight

Tuesday, May 1, 2012 - 1:30PM-5:30PM  
Session: 314..........................................................CME/MOC: 3  
Teaching Using Experiential Learning: A Hands-on Workshop  
Kent W. Peterson, MD, FACOEM*, Occupational Health Strategies, Charlottesville, VA

TRUE/FALSE: The following learning techniques are ranked in terms of garnering the longest retention rate: teaching others (90%); practice doing (75%); discussion (50%); watching demonstration (30%); audio-visual (20%); reading (10%); and lecture (5%).

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 visual aids 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 period 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 reward
D. Group problem solving
E. Case study method

How valuable is networking with other learners for enriching a learning experience:
A. Little value
B. Some value
C. Moderate value
D. High value
E. Depends on whether learner is an introvert or extravert

Which of the following learning methods are passive opposed to participatory (mark all that apply):
A. Lecture
B. Teaching others
C. Reading
D. Practice doing
E. Audio-visual
F. Discussion
G. Watching demonstrations

Coaching is distinguished from teaching by emphasizing which of the following:
A. Participatory learning methods
B. Instructive learning methods

Session: 315..................................................CME/MOC: 3

Improving the Quality of Occupational Health Care with Electronic Health Records
Paul Bleicher, MD, PhD, Humedica, Brighton, MA
Robert Harrison, MD, MPH*, University of California San Francisco, San Francisco, CA
Roman P. Kownacki, MD, MPH, FACOEM*, Kaiser Permanente Northern California, Oakland, CA
Robert K. McLellan, MD, MPH, FACOEM, FAAFP*, Dartmouth-Hitchcock Medical Center, Lebanon, NH (MODERATOR)
Tobias C. Samo, MD, FACP, Allscripts Corporation, Chicago, IL (MODERATOR)
TRUE/FALSE: The use of standardized data sets for coding of occupational and industry will be an important functional component for Meaningful Use.

TRUE/FALSE: When implementing an electronic health record, staff should not be consulted because the EHR will not impact their work.

TRUE/FALSE: Work flow understanding is very important to improve back office EHR implementation success.

TRUE/FALSE: Healthcare information technology should help manage populations.

In managing overall costs of care or quality of care, the two components of performance improvement are:
A. Exception management through outlier identification and case management
B. Metrics improvement through quality analysis and physician scorecards
C. Process redesign through reduction of variation and care management
D. A and C
E. A, B, and C
F. None of the above

Which of the following is not true regarding gaps in care in diabetes mellitus:
A. Existing quality metrics do not provide a complete picture of patient care
B. Coding errors can lead to under-identification of patients for care management programs
C. Un-coded patients with diabetes are generally uncomplicated
D. Un-coded patients with diabetes are hospitalized at a much higher rate than coded patients
E. Even diabetes patients with frequent visits and appropriate treatment may not have complete measures of BP, lipids, and A1c on an annual basis

Observed variation between different medical groups in quality metrics and prescribing behavior is:
A. Minimal
B. A sign that physicians disregard guideline
C. Something that needs to be discouraged
D. An opportunity to identify and understand best practices
E. Caused by the increasing use of mid-level providers in primary care practice

The PDCA cycle of process improvement stands for:
A. Do
B. Act
C. Check
D. Plan
E. All of the above

The Institute of Medicine recommended inclusion of occupational information into EHRs for all of these reasons except:
A. Improved recognition and management of work-related injuries and diseases
B. Ability to report cases to disease registries
C. Referrals to specialists for consultation
D. Use in syndromic surveillance systems
E. Education of patients and families about their work-related health problems
Bringing Emotional Intelligence to Medical Care
Bryce D. Breitenstein, Jr., MD, MPH, FACOEM*, Concentra, Placentia, CA (MODERATOR)
Maja Jurisic, MD*, Concentra, Milwaukee, WI

Emotional intelligence refers to:
A. The capacity for recognizing our own feelings
B. The capacity for recognizing the feelings of others
C. The capacity to motivate ourselves
D. Managing emotions well in ourselves
E. Managing emotions well in our relationships
F. All of the above

Individuals who are well supplied with emotional intelligence exhibit:
A. Self-awareness
B. The ability to give free rein to feelings
C. Self-regulation
D. The ability to confront someone with an uncomfortable truth
E. A and C
F. A, C, and D

The Jefferson Scale of Physician Empathy (JSPE) has shown that as medical training goes on:
A. Empathy increases
B. Empathy decreases
C. Empathy stays the same

Medical Exams for Firefighters
Raymond Basri, MD, FACP*, New York Medical College, Middletown, NY

TRUE/FALSE: The national standards for firefighter’s fitness for duty are both the NFPA 1582 and the OSHA Respiratory Standards for Fire Brigades and use of the Respiratory Protective Equipment.

TRUE/FALSE: The three classifications for fitness-for-duty are class “A” full interior, class “B” exterior with or without further limitations, and class “C” administrative and may respond to the scene.

TRUE/FALSE: The most frequent cause of line-of-duty deaths in the fire service are cardiovascular disease and acute myocardial infarction.

Multidisciplinary Issues, Part IV – Ergonomics
George Brogmus, MS, CPE, MErGs, Liberty Mutual, Burbank, CA
Javier Rodriguez, BS, ErgoSOUP Consulting,
TRUE/FALSE: When employees are responsible for buying and installing their corrective action plans (solutions) this can speed up solution implementations.

What is the most important reason for including workers on the team when developing ergonomic solutions in a manufacturing plant:
A. They are experts in ergonomics
B. They know the job, can contribute essential information, and buy into the solutions
C. It saves you from hiring outside help

When evaluating a worker’s task, talking to the workers doing the task is critical to understanding the work and getting ideas for improvement, but which one of the following is essential to finding the best improvements:
A. Taking the time to thoroughly observe the task
B. Talking all potential changes through with the supervisor
C. Having the key decision-maker with you during the survey
D. Brainstorming ideas with all participants
E. Making it seem like the improvement ideas came from the workers themselves

Tuesday, May 1, 2012 - 4:30PM-5:30PM
Session: 319.........................................................CME/MOC: 1
Acupuncture Benefits: Reducing Pain and Increasing Function
Ka-Kit Hui, MD, FACP, Center for East-West Medicine, Department of Medicine at David Geffen School of Medicine, UCLA, Los Angeles, CA

TRUE/FALSE: Acupuncture can be useful in some clinical settings either alone or adjunctively.

TRUE/FALSE: Scientific studies on acupuncture have shown neurochemical basis for its analgesic effect.

TRUE/FALSE: When performed by well-trained practitioners, acupuncture is safe but not devoid of side effects.

Session: 320.........................................................CME/MOC: 1
Eye and Vision Basics
Bernard R. Blais, MD*, Blais Consulting, Ltd., Clifton Park, NY

Impairment and disability are frequently confused:
A. Impairment is an alteration to accomplish a task successfully
B. Disability affect the freedom of body to accomplish given tasks successfully
C. Cataract is a disability
D. Impairment is loss of the structural or functionality of an organ
E. B and C

The primary goal of color vision testing is to:
A. Identify the functionality of the three hues
B. Identify acquired chemical toxological effects
C. Identify acquired effects from excessive use or type of certain prescription medications
D. Identify acquired color vision defects from ocular pathology
E. All of the above

A color vision test can be either screening and/or diagnostic. Which of the following are considered in both categories:
A. Anomaloscope
B. Ishihara plates
C. HHR (Hardy, Rand, Ritter) plates
D. Farnsworth lantern (Falant)
E. Farnsworth measured 1.00 test
A. Scannable and quick orientation  
B. Long copy sells  
C. General duties and specific achievements  
D. Incorporate key job description phases  
E. Should include all of the above

**Session: 401.................................CME/MOC: 1**  
**Occupational and Environmental Neurology/Neurotoxicology and Novel Neurotoxins**  
Jonathan S. Rutchik, MD, MPH*, **UCSF, Division of Occupational Medicine, Mill Valley, CA**

N-propyl bromide is substituted for which of the chemical in the dry cleaning industry:  
A. Organophosphates  
B. DDT  
C. Halogenated hydrocarbon (perchoroethylene, PER, Freon)  
D. Arsenic

*Which are not true regarding CO toxicity:  
A. Is best assessed with blood carboxyhemoglobin  
B. Assoc with neuropsychological consequences  
C. Assoc with liver disease  
D. May be assoc with movement disorders  
E. Assoc with hippocampal atrophy on T2 MRI

Methyl bromide is being substituted for methyl iodide as a fumigant in CA. What neurologic consequences are possible with CH3 I:  
A. Delayed neuropsychological effects  
B. Seizures  
C. Motor neuropathy  
D. Myelophathy

**Session: 402.................................CME/MOC: 1**  
**Joplin, Missouri: In the Midst of the Storm**  
Dennis A. Estep, DO, MPH, MS, FACOEM*, **Freeman Health System-Occumed, Joplin, MO**

In a disaster situation, which of the following losses are you likely to experience:  
A. Main power source  
B. Communication through both land lines and cell phones  
C. Computer systems  
D. All of the above

Which of the following explanations describes the START acronym:  
A. Simple Triage And Rapid Treatment  
B. Start Tracking People And Report Tests  
C. Simplify Transfers And Strategize Treatment
Which of the following is not a lesson learned from the Joplin tornado:
A. System processes must easily convert to a manual
B. Staff need a back-up employee ID badge kept off site
C. Lighting on back-up power sources will be sufficient
D. Create an override procedure for the medication inventory system

Session: 404.........................................................CME/MOC: 1
The Independent Medical Examination
Douglas W. Martin, MD, FACOEM*, St. Luke’s Center for Occupational Health Excellence, Sioux City, IA

An IME differs from the traditional physician-patient relationship in that:
A. You do not take history
B. You have only a limited examination
C. You do not treat the examinee
D. You do not dictate a report

When conducting an IME, traditional professional liability insurance may not cover your professional work because:
A. IME work is often not part of standard medical malpractice insurance
B. Lawsuit frequency is higher for IMEs than patient care
C. State laws govern the insurance industry in this regards
D. ACOEM has made a pact with insurance carriers to not cover this

The best marketing tool for your IME practice is:
A. A shiny brochure
B. Your written report
C. Placing an ad in a legal journal
D. Volunteering at a law school to be an expert witness

Wednesday, May 2, 2012 – 8:00AM-10:00AM
Session: 405.........................................................CME/MOC: 1
ACOEM 97th Annual Membership Meeting and Breakfast

TRUE/FALSE: The purpose of the Association for Medical Ethics is to promote patient care and evidence-based medicine and to provide increased public awareness of any detrimental influence of industry on health care.

TRUE/FALSE: The Association for Medical Ethics members are board certified physicians, licensed health care practitioners and resident physicians in training, all of whom sign affidavits that they abide AME Rules of Disclosure for any compensation received from medical companies.

TRUE/FALSE: The Association for Medical Ethics website was created to help both physicians and patients research the most recent medical journal articles on specific popular procedures, and to know transparently the compensation, if any, the physicians receive from medical manufacturers.
**Telemedicine Applications: More Than Just Talking Heads**
Ronald K. Poropatich, MD, Telemedicine & Advanced Technology Research Center (TATRC) U.S. Army Medical Research & Materiel Command (USAMRMC), Fort Detrick, MD

TRUE/FALSE: Telemedicine is the use of the telecommunication and information technologies in order to provide clinical health care at a distance.

TRUE/FALSE: The Telemedicine and Advanced Technology Research Center (TATRC) performs medical reconnaissance and special operations to address critical gaps that are underrepresented in DoD medical research programs.

TRUE/FALSE: TATRC fosters research on health informatics, telemedicine/m-health, medical training systems, and computational biology, and promotes and manages sciences and engineering in other key portfolios.

TRUE/FALSE: Early forms of telemedicine included the telephone and the radio.

TRUE/FALSE: Telemedicine can help eliminate distance barriers and can improve access to medical services that would often not be consistently available in distant rural communities.

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**Session: 407 ..................................................CME/MOC: 1.5**

**The Occupational Medicine Physician of Tomorrow**
Frank H. Leone, MBA, MPH*, RYAN Associates, Santa Barbara, CA

TRUE/FALSE: The occupational medicine physician of the future should always strive for consistency.

TRUE/FALSE: The occupational medicine physician of the future is likely to serve as more of a consultant to numerous constituencies that is the case today.

The central theme of this session is:
A. The occupational health physician needs to further develop their analytical skills to prosper in the future
B. There are an insufficient number of occupational health physicians to take the specialist to the next level
C. The pendulum of occupational medicine is swinging back to workplace exposures
D. Massive global changes will force occupational medicine physicians to adopt a new practice style to prosper in the future

All of the following mega-trends seem destined to affect the practice of occupational medicine except:
A. New economic realities
B. Greater roles for physician specialists
C. National healthcare reform
D. Changing workforce demographics

The occupational medicine physician of the future is likely to play a greater role in each of the following areas except:
A. Serving as a gatekeeper
B. Being an educator
C. Indentifying workplace hazards
D. Developing into a visionary
Mariner Medical Examinations: Update on Coast Guard Merchant Mariner Medical Guidelines

Robert M. Bourgeois, MD, MPH, FACOEM*, Bourgeois Medical Clinic, Morgan City, LA (MODERATOR)
Laura G. Gillis, MD, MPH, FACOEM*, US Coast Guard National Maritime Center, Martinsburg, WV

Which of the following best describes the medical evaluation process conducted by the NMC when determining mariner fitness-for-duty:
A. The NMC performs all physical examinations for mariners applying for various credentials
B. The NMC reviews completed physical exams and supporting objective medical documentation to include consultative reports and results of relevant lab/imaging studies.
C. The NMC reviews completed physical exams and accepts the examiners’ competency statement that the applicant is medically competent
D. All mariners are required by law to report changes in their health status so periodic physical exams are unnecessary

Which of the following best describes NVIC 04-08:
A. It is an all inclusive document defining all disqualifying medical conditions for which no waiver can be considered
B. Only those medical conditions listed in NVIC 04-08 may be considered when evaluating mariner medical fitness-for-duty
C. It is a non-exhaustive guidance document which identifies over 200 medical conditions subject to further review and provides recommended evaluation data
D. The document can only be obtained from a regional exam center and cannot be accessed from the NMC website at this time

Which of the following is true concerning NMC approval of conditional medical waivers:
A. Conditional medical waivers are rarely approved by the NMC
B. Conditional medical waivers are never approved for cardiac conditions
C. Once issued a conditional medical waiver may never be invalidated
D. Conditional medical waivers are only approved by the NMC when objective evidence demonstrates the condition is sufficiently controlled to mitigate risk to maritime and public safety

Which of the following medical conditions/problems are among the “top ten” most prevalent among merchant mariner applicants:
A. Cardiovascular diseases
B. Seizure disorders
C. Diabetes mellitus
D. Chronic use of impairing medications
E. All of the above

What information should be submitted for a mariner who has obstructive sleep apnea who uses a CPAP machine:
A. Sleep specialist evaluation only
B. Sleep specialist evaluation and polysomnogram
C. Sleep specialist evaluation and polysomnogram/titration study
D. Sleep specialist evaluation, polysomnogram/titration study, and CPAP compliance log
TRUE/FALSE: A FOOSH injury, otherwise known as a “fall on an outstretched hand” is a common mechanism of injury in patients presenting with wrist pain.

Which of the following are common conditions associated with a FOOSH injury:
A. Distal radius fracture  
B. TFCC tear  
C. Ligamentous instability  
D. Hook of hamate fracture  
E. Gameskeeper thumb

When evaluating a patient with wrist pain, which of the following is true:
A. Standard radiographs routinely identify hook of the hamate fractures when physical exam findings are absent  
B. Patients with carpal instability can usually shake hands with little or no pain  
C. The pisiform bone is commonly injured due to its superficial location  
D. Identification of the scaphoid bone on the palmer aspect of the wrist is key when performing Watson’s Test for carpal instability

Which of the following components are essential parts of a complete assessment of a musculoskeletal injury:
A. Inspection  
B. Palpatation  
C. Motion  
D. All of the above

Which diagnostic test is most useful in assessment of the soft tissue of the knee cartilage and meniscus:
A. Ultrasounds  
B. CT scan  
C. MRI  
D. X-ray

TRUE/FALSE: Smelting is a form of extractive metallurgy; its main use is to produce metal from its ore.

TRUE/FALSE: The OSHA Lead Standard requires the employer to reduce employee exposure to the lowest feasible level through the use of engineering and work practice controls (1910.1025)(e)(1).

TRUE/FALSE: Smelting uses heat and a chemical reducing agent to decompress the ore, driving off other elements as gasses or slag and leaving just the metal behind.

TRUE/FALSE: Overexposure to lead is a leading cause of workplace illness in the lead industry. Employees working in secondary lead smelter plants are exposed to one of the highest lead exposure levels among all lead-related industries.
TRUE/FALSE: Most ores are a chemical compound of the metal with other elements, such as oxygen (an oxide), sulfur (as a sulfide) or carbon and oxygen together (as a carbonate).

TRUE/FALSE: Crude lead produced during smelting operations is remelted in cast iron kettles and refined by the addition of reagents, such as sulfur and caustic soda. The purified lead is then cast into molds or ingots. Significant lead emissions can occur from poorly controlled refining, casting, and drossing operations.

TRUE/FALSE: According to OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities, clean and dry protective work clothing must be provided daily or weekly depending on exposure levels.

TRUE/FALSE: Removal of lead from protective clothing or equipment by blowing, shaking, or any other means which dispersed lead into the air is prohibited.

The following protective clothing and equipment must always be used when lead levels are above the PEL:
A. Coveralls or similar full-body work clothing
B. Gloves, hats, and shoes or disposable shoe coverlets
C. Face shields, vented goggles, and other appropriate protective equipment
D. All of the above

Wednesday, May 2, 2012 - 10:30AM-3:00PM
Session: 410 CME/MOC: 3
Symposium on Workers’ Compensation Provider Performance, Quality, and Outcomes
Melissa A. Bean, DO, MBA, MPH, FACOEM*, Coventry Workers Comp Services, St. Louis, MO
David C. Deitz, MD, PhD*, Liberty Mutual Insurance Group, Boston, MA
W. Tom Fogarty, MD, Concentra, Addison, TX
Constantine Gean, MD, MBA, MS, FACOEM*, Liberty Mutual Insurance Co., Glendale, CA
Phyllis Annette Gerber, MD, FACOEM, FAADEP*, Biomotionlabs, LLC, Orlando, FL
Gregory Krohm, PhD, International Association of Industrial Accident Boards and Commissions, Madison, WI
Bernyce Peplowski, DO, MS*, State Compensation Insurance Fund of California, Monterey Park, CA (MODERATOR)
Steven J. Serra, MD, MPH*, Active Health Management - Atena Company, Greenwood Village, CO (MODERATOR)
Alex Swedlow, MHSA, CWCI, Oakland, CA
Peter Vasquez, MD*, Take Care Health Systems, Nashville, TN
Alesia J. Wagner, DO, FACOFP*, U.S. Healthworks Medical Group, Valencia, CA

Pressures adversely affecting outcomes in the current workers compensation system which might be addressed by collaboration include (mark all that apply):
A. Quality of care
B. The time required for prior authorization
C. Closure of outlier cases
D. Diminishing antagonism among stakeholders

Of the following outcomes, which are likely to be appropriate to be a focus of collaboration (mark all that apply):
A. Surgical fee schedule
B. Care guidelines
C. Communication workflows
D. Medical outcomes
What is the most important source for identifying metrics/measures of performance:
A. Guidelines
B. Recommendations from your professional society
C. the voice of the customer
D. None of the above
E. All of the above

Who determines what we deliver to the customer:
A. Recommendations from your professional society
B. the voice of the customer guidelines
C. Guidelines
D. A and B
E. All of the above

What is more important when considering to outcomes, effectiveness or efficiency:
A. Effectiveness
B. Efficiency

State workers’ compensation agencies generally maintain the capability to publish state level information on:
A. The trends in medical cost for workers’ compensation cases
B. Costs and frequency of common treatment codes
C. Distribution of medical cost by provider types
D. None of the above

Where do state agencies get their information about medical cost trends for workers’ compensation in their state and nationally (mark all that apply):
A. US Department of Commerce
B. National Council of States
C. Workers’ Compensation Research Institute
D. NCCI
E. Administrative data reported to the state

How can the medical professional influence state policy effectively on specific legislation:
A. Make generous campaign contributions
B. Write editorial comments and articles for the medical journals
C. Participation on medical advisory committees to state agencies
D. Become part of a workers’ compensation preferred provider organization

Which of the following laws is not a barrier to building networks that promote the highest level of provider performance against objective standards:
A. Necessity to accept all willing providers into a network
B. Mandate against paying more than the fee schedule for services
C. Restrictions that make it legally risky to discharge providers from networks
D. Requiring that works use designated managed care networks
E. None of the above
Maintenance of Certification (MOC) Self Assessment  
2012 American Occupational Health Conference

Answer Key

Sunday, April 29, 2012 – 7:45AM-11:45AM
Session: 901.....................................................CME/MOC: 3
Worksite Visit: Hollywood & Highland Center (formerly known as the Kodak Theatre)

FALSE: Health and safety planning can be taken for granted in a theater group due to their close knit bonds and long history working together.
FALSE: Mist, dust, and fume exposures are not known to occur in a theater environment.
TRUE: Special-effect smokes and vapors can cause health effects in stagehands and actors.
TRUE: Pyrotechnic stage effects have been responsible for many deaths due to unsafe conditions.
TRUE: The NFPA standard, 1126 code for the use of pyrotechnics before a proximate audience, regulates safety precautions that should be taken with pyrotechnics in a theater.
TRUE: Fear of retaliation sometimes impacts the willingness of set and theater safety personnel and stagehands from coming forth with concerns for safety.
FALSE: Because of their protected status, theater arts performers are not required to adhere to OSHA standards for respiratory protection, personal protective equipment, letters, fall protection, and scaffold regulations.
TRUE: Employees do not have the right to sue employers even if they are deliberately put in harm’s way due to the workers compensation laws enacted in the early 1900s.

Sunday, April 29, 2012 – 8:30AM-12Noon
Session: 100.....................................................CME/MOC: 3
Latest Guidance in Public Safety Medicine: Tactical (SWAT) Medicine, Substance Abuse, and Prosthesis

TRUE: A LEO with an unilateral above-knee amputation is less likely to be able to perform the essential job functions of a LEO in part due to increased energy costs for walking and running because energy costs for ambulation at a pre-injury walking gait are increased approximately 50%.

What part of the activity of a SWAT is usually responsible for the largest proportion of injuries:
A. Training

Suspicious workplace factors for substance use discours include:
E. All of the above

When reviewing the medical history for a LEO with a recent unilateral below-knee amputee, the police physician should document which of the following:
D. All of the above

What is the universal physical limitation for upper extremity amputees, regardless of the prosthesis and/or treatment device:
C. Loss of proprioception
Acute marijuana cognitive impairment can last up to:
C. 24 hours

What are the three phases of care in the tactical combat casualty care model:
A. Care under fire; tactical field care; tactical evacuation care

What is an essential role of the occupational physician in support of a SWAT team:
B. Ensuring training safety by direct observation or participations

Risk factors for substance use disorder relapse include:
E. All of the above

Session: 101..................................................CME/MOC: 3
Current Issues in Medical Center Occupational Health

FALSE: In a pandemic, nurses in leadership and management positions are excellent emergency vaccinators because they do not need training on how to give a vaccine.
TRUE: Three timely MCOH issues are the new developments pertaining to bloodborne pathogens; a model for influenza mass vaccination and issues around mandatory vaccination; and the measurement and control of hazardous drugs in healthcare settings.

The risk for a healthcare worker to acquire hepatitis C infection following a parenteral exposure to blood known to have come from a patient infected with the hepatitis B virus is closest to which of the following:
B. 3%

The risk for an unvaccinated healthcare worker to acquire hepatitis B infection following a parenteral exposure to blood known to have come from a patient infected with the hepatitis B virus (and is “e” antigen positive) is closest to which of the following:
A. 30%

The number of documented cases of patient to provider transmission of the HIV that have been reported to the CDC since 1985 is:
D. 76-150

The risk for provider to patient transmission of blood borne pathogens is:
A. Significantly less than the risk for patient to provider transmission

The number of cases of provider to patient blood borne pathogen transmission:
D. Follows the following pattern – the risk is greater for hepatitis B than for hepatitis C, the risk is greater for hepatitis C than for HIV

Which elements help to optimize patient throughput in a mass vaccination clinic:
E. A & B

When does social marketing have the greatest impact on participation in a mass vaccination clinic:
C. During the event

Session: 102..................................................CME/MOC: 3
Hands-on Suturing Workshop: An Update and Refresher

TRUE: Wound care is the second most common source of malpractice litigation, accounting for up to 20% of claims.
TRUE: In 1994, lacerations to the finger ranked third after back and leg strains in frequency.
TRUE: Only a few millimeters separate a superficial laceration from a significant deep structure injury.
TRUE/FALSE: Adhesive tapes may be used with tissue adhesive or after suture removal to reduce wound tension.
TRUE: Regarding primary closure guidelines, the current American College of Emergency Physicians policy is no more than 8 to 12 hours from the time of injury.
TRUE: The margin to excise on a wound is dependent on body location, on tissue appearance, the degree of maceration, and contamination.

The most common causes of litigation resulting from wound care are:
D. All of the above

The primary goals of wound closure are:
E. All of the above

Options for wound closure are:
E. All of the above

Sunday, April 29, 2012 - 1:30PM-3:00PM
Session: 103.................................CME/MOC: 1.5
Individual Scientific Abstract Presentations

TRUE: Forty percent of subjects lost fit with less than four hours of re-use.
TRUE: Surveillance cultures for all animals is useful to identify asymptomatic carriage in animals and allow pre-emptive decontamination, but is unlikely to halt an evolving cluster.
TRUE: In one study mentioned during this session, it suggests that efforts to educate the public about reading and following the manufacturer’s written instructions for fit would be worthwhile.

According to the information presented in this session, which of the following is true regarding health care personnel (HCP) who did not routinely get seasonal influenza vaccination, but chose to get the pH1N1 vaccine:
C. More HCP felt that the risk of pH1N1 disease outweighed the risk of the pH1N1 vaccine

When vaccinating high volumes of individuals, all of the following are recommended except:
D. Mix adult/pediatric populations at same site

Sunday, April 29, 2012 - 1:30PM-5:00PM
Session: 105.............................................CME/MOC: 3
State-of-the-Art Occupational Medicine: Caring for the Performing Artist

TRUE: Two common theater workplace hazards that can be encountered during performance or rehearsal are moving surfaces and trip/fall hazards.
TRUE: Two common theater workplace hazards that can be encountered after the performance are demolition/construction hazards and celebration (intoxication) injuries.
The term “the show must go on” refers to working regardless of symptoms, injury, or illness and working with inadequate health and safety precautions.

There are free resources available for evaluating the theater workplace and preventing occupational injuries and illnesses.

ACTS stands for Arts, Crafts, and Theater Safety.

The Chicago Tribune is not a known source for local artists to research key safety violations in theaters nationwide.

Stage violence is a workplace hazard that can be encountered during a performance or rehearsal.

What theater workplace hazards can be encountered before a performance or rehearsal begin:

F. All of the above

Which of the following are resources that could be used to learn about hazards in the theater:

D. All of the above

Session: 106………………………………………….CME/MOC: 3
Health and Productivity Management: The Global Perspective

When globalizing health problems, one must set short and long term goals and measure outcomes (measure outcomes, not effect).

The need for health and productivity management (HPM) has long been acknowledged within the United States.

When globalizing health problems, increased productivity and engagement can generate significant cost savings and improved performance (business critical).

When globalizing health problems, success springs from a culture of health, which is built into the fabric of business, communities, and health systems (understand your culture).

What makes management of health and productivity in the United States uniquely different from other developed countries:

C. Employer-sponsored health insurance

What is the “dependency ratio”:

A. The ratio of working-age citizens/residents (15 to 65) to citizens/residents who are too young or beyond customary retirement age

What is the “middle income trap”:

D. When a country goes from poverty to middle-income and cannot seem to progress further because of limitations on productivity

Multinational organizations need to be concerned about international travel health issues in order to protect which of the following populations:

E. A, C, and D

The definition of “culture of health” is:

C. Both A and B

Session: 107………………………………………….CME/MOC: 3
**MRO Controversies**

**TRUE**: Urine drug testing acts as a barrier to hiring the social and economic marginal members of society.

**FALSE**: Urine drug testing as done in most settings detects the drugs that factor into accidents at work.

**FALSE**: Now that the DOT has accepted the recommendations that expanded opiate testing should be performed, labs will be reporting hydorocodone, hydromorphone, exycodone, and oxmorphe results by September 30, 2012.

Which of the following is true:

A. Urine drug testing of employment is done by a high percentage of Fortune 500 companies

B. There is some evidence that urine drug testing at the time of hire results in less absenteeism and better retention

An MRO received a result form the lab positive for 6-AM but no morphine detected. They have contacted the lab and morphine was not detected even at LOD. What is the appropriate next step:

D. Contact ODAPC

The most common errors in the drug testing process take place during:

D. Specimen collection

The move to the addition of federal testing for synthetic opioids was driven by:

C. Increased concern of misuse and abuse of these drugs

The medical review officer (or assistant for negatives) is required to complete how many copies of the federal chain of custody form to document a result:

B. 2

The medical review officer cannot have a business relationship with the:

D. Laboratory

**Session: 108........................................CME/MOC: 3**

**Using Office Ultrasound to Diagnose and Treat Musculoskeletal and Urgent Care Medical Conditions**

FALSE: Since sound waves do not penetrate bone, the use of ultrasound cannot be used to detect bone fractures.

Over the past decade, by what percentage has diagnostic ultrasound use increased by non-radiologists:

D. 12,000%

What are the potential hazards of ultrasound use:

C. Both A and B

What is the most common diagnosis that ultrasound is useful to diagnosis in the shoulder joint:

D. Rotator cuff tear

What term describes varying image appearance on ultrasound due to the beam from the transducer not being 90 degrees to the object imaged:

A. Anisotropy

What advantages does musculoskeletal ultrasound give to its provider:
Which ultrasound finding is not seen with carpal tunnel syndrome:

C. Decrease nerve vascularity

The US features of lateral epicondylitis are:

E. All of the above

The US findings of trigger fingers are:

A. Diffuse hypoechoic thickening of the A1 pulley

TRUE: WR-CTS epidemic in late 1980s and early 1990s included a disproportionate increase in young and middle-aged women across most industry groups.

TRUE: Connecting with a fire department’s wellness enthusiast is the single most important factor when determining whether or not a fire department will adopt a health promotion program.

TRUE: Being on a team positively influences user engagement in a health and wellness platform.

Why is it more likely that a woman with CDP will RTW more so than a man with CDP:

C. The industries in which they work are lighter and more varied allowing for more RTW

In a study of women physicians and scientists working at a metropolitan cancer center, it was found that:

E. All of the above

FALSE: Serological testing for IgE antibodies to allergens is not as good as allergy skin testing.

FALSE: serological testing for IgE antibodies to allergens can determine if a subject has allergic contact dermatitis.

TRUE: Internal medicine and related topics include allergy, clinical genetics, pulmonary, and radiology.

Which of the following is true regarding vocal cord dysfunction:

E. All of the above

Allergic fungal sinusitis is best treated by:

D. B and C

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.
TRUE: The deadline for submitting a fellowship application is November 1st.

Which of the following requirements must be met in order to qualify for fellowship:
F. All of the above

Session: 202.................................................CME/MOC: 1
Occupational and Environmental Medicine: From Antiquity to Modern Times

Until the 1930’s and 40’s, most industrial hygienists were trained as which profession:
B. Physician

Harry Mock is best remembered for:
F. All of the above

What did “the corporate practice of medicine” mean in the 1950’s:
B. Any systematic effort to provide care through an organization rather than a solo practitioner practicing fee-for-service medicine, whether a company, a group practice, or health plan of any kind

Session: 203.................................................CME/MOC: 1
Ways to Increase Your Practice Opportunities

Which examination usually requires additional training, certification, or registration:
E. All of the above

Which ancillary testing does not require that the technicians be trained and/or certified:
D. Vision screening

What immunizations require prior approval before ordering or administration:
D. Yellow Fever

Session: 204.................................................CME/MOC: 1
What is it All About: Are You Utilization Review Savvy?

TRUE: Utilization review (UR) is the process used by employers or claims administrators to review treatment, goods and services, to determine if it (they) is (are) medically necessary.

TRUE: The California Medical Treatment Schedule (MTUS) provides medical treatment guidelines for utilization review and an analytical framework for the evaluation and treatment of injured workers.

TRUE: The 2012 release of the ODG product line (including the 17th edition of ODG and the 10th edition of ODG Treatment in Workers Comp) provides the most up-to-date evidence-based medical treatment and disability guidelines to improve, as well as benchmark, outcomes in workers’ comp and non-occupational disability.
AOHC Opening General Session: C. O. Sappington Lecture

Three ways a typical family with employer sponsored health insurance pay for healthcare include out of pocket (copays, deductibles); the employee’s share of monthly insurance premium; and lost wages that go towards employer’s share of the monthly premium. A fourth way many families pay for healthcare is:

D. Taxes

On average, American adults receive recommended care about what percent of the time:

C. 55%

Which of the following is not considered a basic policy option for reducing total expenditures on health care:

C. Increase co-payments and deductibles so patients bear a greater share of the cost

Monday, April 30, 2012 - 10:30AM-12Noon

Session: 206..........................................................CME/MOC: 1.5
Excellence in Health Care: CHAA Award Presentations

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: Johnson & Johnson’s health and wellness programs have resulted in a decrease in chronic conditions and health risk among employees.
TRUE: Smithsonian Institution has an integrated health and safety information system that allows for comprehensive analysis of data.

The purpose of the CHAA award is to:

E. All of the above

Session: 209..........................................................CME/MOC: 1.5
Healthier, Safer, and More Engaged: Creating a Workplace Culture Where Health Thrives

TRUE: There is a growing shortage of US workers.
FALSE: The percent growth of the US workforce is highest in those 35-44 years of age.
TRUE: Risk for fatigue is increased by working long hours.
TRUE: Worker protection and respect as the primary cornerstone forms part of a comprehensive worksite program.

On the average workday in the US, how many employees are absent due to stress:

D. 1 Million

Session: 210..........................................................CME/MOC: 1.5
Musculoskeletal Issues, Part I – Low Back Pain: Thinking Outside the Disc

TRUE: Single site chronic pain is uncommon. Only 13% of those with chronic low back pain have isolated pain.
TRUE: The pelvis plays an essential role in movement, stability, and low back pain.
FALSE: The diagnostic label “regional low back pain” describes a homogenous group of patients.
Principles of muscle function include:
F. All of the above

An MRI of the lumbar spine will show a patient’s:
D. Structural anatomy

Session: 211………………………………………….CME/MOC: 1.5
Alice Hamilton in Combat Boots: U.S. Marine Corps’ Japan Radiation Response and Special Operations Emerging OEM Challenges

FALSE: For first responders to have a real time reading of their radiation exposure a TLD is most useful.

Within the Marine Special Operations community, routine medical problems are often complicated and magnified by:
D. All of the above

In-house medical resources for MARSOC Marines include:
E. All of the above

OSHA whole body radiation exposure limit for first responders is:
D. 25 REM

The two major isotopes of concern to the surrounding population from the Fukushima disaster were (pick two):
B. Cesium
D. Iodide

Monday, April 30, 2012 – 1:30PM-3:00PM
Session: 212………………………………………….CME/MOC: 1.5
The Built Environment: A Solution to the Diabesity Epidemic

FALSE: Driving a car has no impact on obesity.
FALSE: Urbanites have a higher risk of obesity.
TRUE: Persons living near fast food facilities have higher rates of obesity.
FALSE: Billboards do not affect eating patterns.
FALSE: Restricting high calorie foods and soft drinks has no effect on childhood obesity.

Monday, April 30, 2012 – 12:30PM-4:30PM
Session: 902………………………………………….CME/MOC: 3
Worksite Visit: House of Moves

TRUE: VICON contains the following three types of stages: Stage 1-motion capture; Sound Stage 2-motion capture; and Stage 3-virtual camera stage.
TRUE: At VICON, sports activities are filed in real-time.
TRUE: Life science topics include gait analysis and rehabilitation, biomechanical research, posture, balance and motor control, sports performance, and animal science.
TRUE: Animation topics include games, film, television, and education.
TRUE: House of Moves is an incubator of ideas where motion capture converges with imagination, inspiring artists within the entertainment, gaming and commercial trade to see and express movement in previously unimagined ways.
TRUE: Megapixel visible red cameras are in use at VICON.

Crash studies using dummies are examples of which 3-D motion capture application:
B. Engineering

Which category of 3-D motion capture application includes studies performed on individual patients to enhance surgical planning:
C. Life Sciences

Animation can be used to enhance which of the following experiences:
D. All of the above

Monday, April 30, 2012 - 1:30PM-5:00PM
Session: 213..................................................CME/MOC: 3
Current Research in OEM and Resident Abstract Presentations
John D. Meyer, MD, MPH, FACOEM*, SUNY Downstate School of Public Health, Brooklyn, NY

TRUE/FALSE: When QFTGold-IT tests are used for surveillance of Latent TB Infection in health care workers, initial positive tests should be repeated prior to making treatment decisions.

TRUE: Health care workers without known exposure to TB who have an initial positive QFTGold-IT should have a repeat test done within one to three months after the initial test.
TRUE: Individuals who are working with chronic low back pain have a higher prevalence of obesity than the remaining population.
TRUE: Musculoskeletal disorder (MSD) has been recognized as a significant occupational health problem for dentists and dental hygienists.
TRUE: In general police duties with a higher perceived stress level are associated with a higher risk of on-duty heart attack deaths.

The results of this study found that HCW are not able to detect blood splatter by the naked eye in what percentage of the time when performing procedures with intravascular devices:
B. 7%

Which of the following is a MSD risk factor:
F. All of the above

What is the most common cause of death in patients who have been exposed to hydrofluoric acid:
E. Cardiac dysrhythmia

During which of the following police duties is a heart attack most likely to occur:
C. Pursuit of or during an altercation with a suspect

Session: 214..................................................CME/MOC: 3
Health and Productivity Management: Value of Investment in Better Health

FALSE: The value proposition for health and productivity initiatives outside the US is primarily to address health care costs.
FALSE: Presenteeism cannot be measured outside the US using validated questions.
TRUE: Health risk appraisal questionnaires are available for most major countries outside the US.
TRUE: Both worker protection and enhancement of worker health are key to safety improvement breakthroughs.

TRUE: Public sector organizations reported an increase of stress-related absence by about 50%, while private sector and manufacturing industries saw levels increase by about a third.

TRUE: The American Express mission and goals are to promote health awareness, influence positive behavior change, improve productivity, enhance employee engagement and reduce health care expenditures.

TRUE: A change in 1 health risk results in a $950 charge in worker productivity.

N.I.C.E stands for:
A. United Kingdom National Institute for Clinical Excellence

Potential health-related leading indicators of workplace injury found in the Dow Chemical internal study include:
E. All of the above

Session: 215.................................CME/MOC: 3
Managing Disability and Delayed Recovery

FALSE: Early on, predictive accuracy is significantly improved by using detailed psychological questionnaires.
FALSE: Risk factors for pain and disability are very similar.

Johnson and Fry's 2002 study on factors affecting return to work after injury found that the longer a worker is off work, the less likely they are to return to work. According to the study, if a patient is off work for only 45 days, his or her chance of returning to work is:
B. 50%

Which of the following is not a psychosocial risk factor addressed in the session:
C. Secondary gain

Which of the following techniques would not be used to target catastrophic thinking:
B. Interpretation

Pain severity accounts for approximately what percent of the variance in occupational disability:
B. 10%

Even with the best care and management practices, some patients have psycho-social baggage that inhibits timely recovery. Which of the following are true of these patients:
E. All of the above

Which of the following is true of the clinician’s role in the return-to-work process:
D. A and C

The utility of clinical interventions for delayed recovery are optimum when:
B. They are community based rehabilitation programs (programs with good geographic accessibility)

Session: 216.................................CME/MOC: 3
Current Issues in Commercial Driver Medical Certification and Case Discussions

FALSE: A drowsy driver is a good judge of his/her ability to drive safely.
TRUE: Most people with obstructive sleep apnea can be successfully treated.
TRUE: According to Dr. Harrison’s presentation, clinics can improve examiner compliance with the Joint Task Force Sleep Apnea screening recommendations by recording of BMI and neck circumference measurements by staff when preparing the medical exam report and by announced performance audits.

The psychomotor vigilance test (PVT) is:
E. All of the above

Who is responsible for ensuring a commercial driver meets the English language requirement (391.11):
B. Employer

The proposed FMCSA National Registry of Certified Medical Examiners will require:
E. A and B

The proposed National Registry:
E. A and B

Fatigue may be caused or exacerbated by:
E. All of the above

Sleep Apnea:
E. B, C, and D

Monday, April 30, 2012 - 3:30PM-5:00PM
Session: 217..................................................CME/MOC: 1.5
Olympic Drug Testing: Application for Occupational Medicine Practice

TRUE: Redefined terminology is US law for the term dietary supplement means a product other than tobacco intended to supplement the diet that bears or contains one or more of a vitamin, a mineral, a herbal/botanical, or amino acid for use by man to supplement the diet by increasing the total dietary intake or a concentrate, metabolite, constituent, extract, or combination of ingredients.
TRUE: The act that effectively regulated steroids and ephedra compounds is call the Ephedra and Anabolic Steroid Control Act of 2004.
TRUE: The World Anti-Doping Agency (WADA) accredits the Olympic Analytical Laboratory in Los Angeles, CA.
TRUE: A reference list for banned substances for Olympic sports can be found on the WADA’s website.

The DSHEA Act was in what year:
A. 1994

Session: 219..................................................CME/MOC: 1.5
The Entertainment Industry: Disaster and Safety Planning

TRUE: Broadly defined, the entertainment industry accounts for approximately 4 to 5% of the US GDP.
TRUE: Event and movie sets are exposed to unusual hazards including bladed weapons, lasers, naked flame, animals, and many others.
TRUE: The incident command system is used in large disasters on movie sets or fixed venues.
TRUE: Administrative complications often interfere with access to workers compensation treatment on movie sets due to frequent changes of venue, multiple temporary employment situations, unpredictable access to medical care, etc.
TRUE: The four components of board certification are: professional standing; lifelong learning and self-assessment (LLSA); assessment of cognitive expertise; and assessment of practice performance.
TRUE: The cognitive exam may be taken starting seven years after receiving certification and may be repeated if necessary to pass it prior to the expiration of the certificate.
TRUE: Diplomates are required to complete two practice performance assessments during their 10 year certification cycle.

TRUE: The three phases of biomechanics conditioning are: normalize, stabilize, and functionalize.
TRUE: Levator scapulae is a key muscle in the upper body which tends to become overactive when the median nerve becomes tethered.
FALSE: A dysfunctional pelvis cannot give the appearance of one leg longer than the other.
TRUE: Palpation of areas of chronic subjective muscle tenderness will reveal firm nodules that provide objective verification.
TRUE: A careful history coupled with a skilled clinical examination of the low back provides diagnostic information with greater predictive value than imaging studies.

TRUE: The two most common prescription groups provided by on occupational medicine travel medical service are malaria chemoprophylaxis and the use of emergency standby malaria medication.
TRUE: Vaccines that should be kept on hand in an occupational medicine travel clinic are: current year’s influenza vaccine; primary vaccines tetanus, diptheria, polio (IPV), measles mumps rubella; hepatitis A&B; pneumococcal vaccine; meningococcal serotype vaccine; human papilloma virus, etc and if appropriate; yellow fever, rabies, and japanese encephalitis.
TRUE: The most important treatment for travelers diarrhea is prompt and vigorous oral or parenteral hydration.

What countries have a risk of transmission of chikungunya, dengue fever, Japanese encephalitis, and malaria infections:
D. China, India, Indonesai, and Papua New Guinea

Vaccines are currently available to protect travelers against which of the following insect-transmitted diseases:
C. Japanese encephalitis, Tick borne encephalitis, and Yellow fever

TRUE: The US Army’s occupational medicine residency program allows exposure to the arms manufacturing process and the unique potential medical hazards associated with this industry.
Which of the following is not one of the OEM residency core competencies:

C. Interpersonal and communication skills

Which phrase is most accurately associated with irritant contact dermatitis:

B. More common than allergic contact dermatitis
D. Forensic medicine

Which of the following is not available for download and use from the OSHA website:

E. Individualized legal advice

An occupational medicine program designed to support and protect workers who deal directly with or control access to nuclear, biological, or chemical materials would fall within the spectrum of:

B. Surety medicine

Session: 304.................................CME/MOC: 1.5 (ABIH, BRN, BCSP, REHS)
Multidisciplinary Issues, Part I – Biosafety

TRUE: A risk group is an agent classification based on intrinsic risks.
FALSE: A biological safety level is the same thing as a risk group.
TRUE: The leading safety reference document used by biological laboratories when designing laboratories is the Biosafety in Microbiological and Biological Laboratories.
FALSE: The BSL-3 lab is airtight and requires workers to wear fully encapsulating air-supplied suits.
TRUE: BSL-4 workers need to have annual hearing evaluations.

Session: 305.................................CME/MOC: 1.5
Worksite Clinics: Innovative Employer Strategies and Impact of Healthcare Reform

TRUE: The Health Care Reform Law requires that in 2014 there be an elimination of pre-existing conditions.
TRUE: Future changes due to the Health Care Reform Law will focus more on physician value-based payment rather than volume.
FALSE: The majority of medical costs are related to direct health care costs rather than productivity loss.
TRUE: Examples of national and demographic trends where employers are being increasingly impacted include the incidence of chronic health conditions is increasing across all ages groups in the US; health risks leading to chronic conditions are also on the rise; the American workforce is aging; and older workers face more health challenges

The disciplinary connection of patients and families that are illustrated in “Optimizing Health Care Delivery by Integrating Workplaces, Homes, and Communities” (JOEM 2012; 54:504-512) include all but one of the following:

C. Surgery

Tuesday, May 1, 2012 - 10:30AM-12Noon
Session: 306.................................CME/MOC: 1.5
Occupational Safety Health Disparities and Underserved Populations

TRUE: Low income workers make up about 1/3 of all workers in the US.
TRUE: Self-reported general health of immigrant hotel room cleaners is poorer than in the general US population.
Effective interventions to reduce musculoskeletal disorders among sewing machine operators includes the following:
E. All of the above

Migrant and immigrant workers in the US have what access to health care in the US than workers born in the US have:
D. It depends

Recommendations for creating integrated programs to achieve health equity in the workplace include:
E. All of the above

Session: 307………………………………………….CME/MOC: 1.5
Biomonitoring in the U.S. and Europe: From Science to Routine Worker Surveillance

TRUE: Firefighter biomonitoring results may not be easily linked to an occupational exposure.
FALSE: Perfluorochemicals (PFCs) are found only in non-stick cookware.

Suspected endocrine disrupting chemicals include:
D. All of the above

All of the following is true of human biomonitoring except:
B. Biomonitoring provides clear evidence of the source of chemical exposure

Reference values for chemicals compounds or metabolites in biological materials refer to:
D. The 95 percentile of the concentration range as measured in the general population or a concentration determined to be clinically-relevant

Session: 308………………………………………….CME/MOC: 1.5
The Affordable Care Act, Accountable Care Organizations, and Patient Centered Medical Home: New Opportunities for Occupational and Environmental Medicine

TRUE: PCMH is a team based health care delivery model led by a physician that provides comprehensive and continuous medical care to patients with the goal of obtaining maximized health outcomes.
TRUE: One reason accountable care organizations should measure indirect costs is the magnitude related to direct costs. Studies have also documented that indirect costs can exceed direct costs by as much as a ratio of 2 to 1 or more.
TRUE: PCMH achieves two critical objectives: 1) High-quality and high-value care provided by the PCMHs ensure and incentivize communications between teams of providers that operate in various settings. PCMHs facilitate transitions and align the resources needed to meet the clinical and coordinated care needs of the population. They can develop and support systems for the coordination of care of patients in ambulatory care settings; and 2) PCMHs can monitor health information systems and the timeliness and completeness of information transactions between primary care and specialists.
TRUE: Accountable Care Organizations (ACOs) make physicians and hospitals more accountable in the care system, emphasizing organizational integration and efficiencies coupled with outcomes oriented, performance-based medical strategies to improve the health of populations.
TRUE: Research has proven that injured employees who participate in well-structured return-to-work programs recover their health faster and are more satisfied with their care and outcomes than employees who don’t participate in RTW programs.

**TRUE**: Two elements of GHS are GHS physical/health hazard criteria and labels with GHS harmonized core information (e.g. signal words, hazard statements, and symbols, etc).

**TRUE**: Two elements of GHS are safety data sheets (SDS: 16 section) and employee training.

**TRUE**: Two signal words used in GHS are warning and danger.

Which is not a goal of the California Green Chemistry Initiative:

**C. Ban certain chemicals**

As a concept, green chemistry refers to:

**A. Inherent biological and ecological safety of chemicals at the point of design**

Session: 310..........................................................CME/MOC: 1.5

The Hybrid Physician Leader
Joe Flynn, MBA, AMC, *Occupational Environmental Health Network, Inc, Marlborough, MA*
Philip Parks, MD, MPH, FACOEM*, H21, *Boston, MA*

**FALSE**: Leadership is listed as one of ACOEM’s 10 Core Competencies.

**TRUE**: Active listening is an interpersonal skill.

**TRUE**: The five dimensions of centered leadership are meaning, engaging, connecting, managing energy, and positive framing.

Which one of the following is not a leadership style discussed in the hybrid physician leader presentation:

**C. Democratic**

Which one of the following is not a component of emotional intelligence:

**D. Empathy**

Tuesday, May 1, 2012 – 12:45PM-4:30PM

Session: 903..........................................................CME/MOC: 3

Worksite Visit: RSR Quemetco Lead Plant
Michael J. Kosnett, MD, MPH, *Colorado School of Medicine, Denver, CO*

**TRUE**: Smelting is a form of extractive metallurgy; its main use is to produce metal from its ore.

**TRUE**: The OSHA Lead Standard requires the employer to reduce employee exposure to the lowest feasible level through the use of engineering and work practice controls (1910.1025)e)(1).

**TRUE**: Smelting uses heat and a chemical reducing agent to decompress the ore, driving off other elements as gasses or slag and leaving just the metal behind.

**TRUE**: Overexposure to lead is a leading cause of workplace illness in the lead industry. Employees working in secondary lead smelter plants are exposed to one of the highest lead exposure levels among all lead-related industries.

**TRUE**: Most ores are a chemical compound of the metal with other elements, such as oxygen (as an oxide), sulfur (as a sulfide) or carbon and oxygen together (as a carbonate).

**TRUE**: Crude lead produced during smelting operations is remelted in cast iron kettles and refined by the addition o reagents, such as sulfur and caustic soda. The purified lead is then cast into molds or ingots. Significant lead emissions can occur from poorly controlled refining, casting, and drossing operations.
TRUE: According to OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities, clean and dry protective work clothing must be provided daily or weekly depending on exposure levels.

TRUE: Removal of lead from protective clothing or equipment by blowing, shaking, or any other means which dispersed lead into the air is prohibited.

The following protective clothing and equipment must always be used when lead levels are above the PEL:
D. All of the above

Tuesday, May 1, 2012 - 1:30PM-2:30PM
Session: 311.......................................................CME/MOC: 1
Work-Related Concussion: Evaluation, Management, and Return-to-Work Success

TRUE: During the symptomatic recovery period, the brain needs increased blood flow to heal, at the same time that the blood vessels are contracted.

A concussion is defined as:
F. All of the above

Signs of a concussion can include:
F. All of the above

Session: 312.......................................................CME/MOC: 1
New Frontiers in Occupational and Environmental Medicine at Home and Abroad

TRUE: Occupational exposures related to hydrofracking may include hearing loss.

Which item is not a valid reason for opposing the development of shale gas as an energy resource:
D. Shale gas does nothing to reduce dependency on oil

The reported adult mortality from mesothelioma in Turkish villages is:
A. Primarily associated with erionite exposure
C. As high as 30-50% in a few villages

Session: 313.......................................................CME/MOC: 1 (ABIH, BRN, BCSP, REHS)
Multidisciplinary Issues, Part III – Ergonomics: The Prospective Consortium Musculoskeletal Disorder Studies

Based on the studies presented, which of the two job physical factors appears most important for the development of CTS?
B. Force and repetition

Based on the studies presented, which of the following non-occupational risk factors appears most important for the development of CTS?
D. Obesity

Based on the studies presented, which job factor appears most important for the development of wrist tendonitis:
C. Duration of forceful pinch

Tuesday, May 1, 2012 - 1:30PM-5:30PM
Session: 314……………………………………………CME/MOC: 3
Teaching Using Experiential Learning: A Hands-on Workshop

TRUE: The following learning techniques are ranked in terms of garnering the longest retention rate: teaching others (90%); practice doing (75%); discussion (50%); watching demonstration (30%); audio-visual (20%); reading (10%); and lecture (5%).

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 visual aids 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 period 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

How valuable is networking with other learners for enriching a learning experience:
D. High value

Which of the following learning methods are passive opposed to participatory (mark all that apply):
A. Lecture
C. Reading
E. Audio-visual
G. Watching demonstrations

Coaching is distinguished from teaching by emphasizing which of the following:
A. Participatory learning methods

Session: 315……………………………………………CME/MOC: 3
Improving the Quality of Occupational Health Care with Electronic Health Records

TRUE: The use of standardized data sets for coding of occupational and industry will be an important functional component for Meaningful Use.
TRUE: When implementing an electronic health record, staff should not be consulted because the EHR will not impact their work.
TRUE: Work flow understanding is very important to improve back office EHR implementation success.
TRUE: Healthcare information technology should help manage populations.
In managing overall costs of care or quality of care, the two components of performance improvement are:
D. A and C

Which of the following is not true regarding gaps in care in diabetes mellitus:
C. Un-coded patients with diabetes are generally uncomplicated

Observed variation between different medical groups in quality metrics and prescribing behavior is:
D. An opportunity to identify and understand best practices

The PDCA cycle of process improvement stands for:
E. All of the above

The Institute of Medicine recommended inclusion of occupational information into EHRs for all of these reasons except:
C. Referrals to specialists for consultation

Tuesday, May 1, 2012 - 3:00PM-4:00PM
Session: 316.................................................CME/MOC: 1
Bringing Emotional Intelligence to Medical Care

Emotional intelligence refers to:
F. All of the above

Individuals who are well supplied with emotional intelligence exhibit:
F. A, C, and D

The Jefferson Scale of Physician Empathy (JSPE) has shown that as medical training goes on:
B. Empathy decreases

Session: 317..........................CME/MOC: 1
Medical Exams for Firefighters
Raymond Basri, MD, FACP*, New York Medical College, Middletown, NY

TRUE: The national standards for firefighter’s fitness for duty are both the NFPA 1582 and the OSHA Respiratory Standards for Fire Brigades and use of the Respiratory Protective Equipment.
TRUE: The three classifications for fitness-for-duty are class “A” full interior, class “B” exterior with our without further limitations, and class “C” administrative and may respond to the scene.
TRUE: The most frequent cause of line-of-duty deaths in the fire service are cardiovascular disease and acute myocardial infarction.

Session: 318.............................................CME/MOC: 1 (ABIH, BRN, BCSP, REHS)
Multidisciplinary Issues, Part IV – Ergonomics

FALSE: When employees are responsible for buying and installing their corrective action plans (solutions) this can speed up solution implementations.
What is the most important reason for including workers on the team when developing ergonomic solutions in a manufacturing plant:

**B. They know the job, can contribute essential information, and buy into the solutions**

When evaluating a worker’s task, talking to the workers doing the task is critical to understanding the work and getting ideas for improvement, but which one of the following is essential to finding the best improvements:

**A. Taking the time to thoroughly observe the task**

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**Tuesday, May 1, 2012 - 4:30PM-5:30PM**

**Session: 319..........................CME/MOC: 1**

**Acupuncture Benefits: Reducing Pain and Increasing Function**

Ka-Kit Hui, MD, FACP, Center for East-West Medicine, Department of Medicine at David Geffen School of Medicine, UCLA, Los Angeles, CA

**TRUE**: Acupuncture can be useful in some clinical settings either alone or adjunctively.

**TRUE**: Scientific studies on acupuncture have shown neurochemical basis for its analgesic effect.

**TRUE**: When performed by well-trained practitioners, acupuncture is safe but not devoid of side effects.

**Tuesday, May 1, 2012 - 5:45PM-6:45PM**

**Session: 320..........................CME/MOC: 1**

**Eye and Vision Basics**

Impairment and disability are frequently confused:

**E. B and C**

The primary goal of color vision testing is to:

**E. All of the above**

A color vision test can be either screening and/or diagnostic. Which of the following are considered in both categories:

**C. HHR (Hardy, Rand, Ritter) plates**

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**Tuesday, May 1, 2012 - 6:45PM-7:45PM**

**Session: 322..........................CME/MOC: 1**

**ACOEM’s Maintenance of Certification Part IV Program: What Re-certifying ABPM Diplomates Need to Know**

**TRUE**: Diplomates may select one of the following primary practice themes for their direct clinical patient care practice performance self appraisal: musculoskeletal disorders; work ability; environmental health/toxicology; or clinical preventive medicine.

**TRUE**: After implementing the quality improvement action plan for a minimum of four months, you must complete a second chart review of ten medical records. You must evaluate medical record entries in the same clinical theme as the original medical record chart review.

**TRUE**: Those completing the practice performance self appraisal have two options: direct clinical patient care – or - teaching, research, or administrative/management.

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**Wednesday, May 2, 2012 - 7:00AM-8:00AM**

**Session: 400..........................CME/MOC: 1**

**Navigating and Negotiating Career Transitions in Occupational and Environmental Medicine**
TRUE: Predictable questions on an interview include inquiring about the applicants strengths and weaknesses, current employment status, and “tell me about you.” Key things an applicant should never provide more information to a question than what was asked for or state that they have failed to look into the organization they are applying at.

Board certification in occupational medicine is provided by:
A. American Board of Preventive Medicine

The rules of thumb for your CV would include which of the following:
E. Should include all of the above

Session: 401.................................................CME/MOC: 1
Occupational and Environmental Neurology/Neurotoxicology and Novel Neurotoxins

N-propyl bromide is substituted for which of the chemical in the dry cleaning industry:
C. Halogenated hydrocarbon (perchoroethylene, PER, Freon)

Which are not true regarding CO toxicity:
C. Assoc with liver disease

Methyl bromide is being substituted for methyl iodide as a fumigant in CA. What neurologic consequences are possible with CH3 I:
A. Delayed neuropsychological effects

Session: 402.................................................CME/MOC: 1
Joplin, Missouri: In the Midst of the Storm

In a disaster situation, which of the following losses are you likely to experience:
D. All of the above

Which of the following explanations describes the START acronym:
A. Simple Triage And Rapid Treatment

Which of the following is not a lesson learned from the Joplin tornado:
C. Lighting on back-up power sources will be sufficient

Session: 404.................................................CME/MOC: 1
The Independent Medical Examination

An IME differs from the traditional physician-patient relationship in that:
C. You do not treat the examinee

When conducting an IME, traditional professional liability insurance may not cover your professional work because:
A. IME work is often not part of standard medical malpractice insurance

The best marketing tool for your IME practice is:
B. Your written report
Wednesday, May 2, 2012 – 8:00AM-10:00AM
Session: 405..................................................CME/MOC: 1
ACOEM 97th Annual Membership Meeting and Breakfast

TRUE: The purpose of the Association for Medical Ethics is to promote patient care and evidence-based medicine and to provide increased public awareness of any detrimental influence of industry on health care.

TRUE: The Association for Medical Ethics members are board certified physicians, licensed health care practitioners and resident physicians in training, all of whom sign affidavits that they abide AME Rules of Disclosure for any compensation received from medical companies.

TRUE: The Association for Medical Ethics website was created to help both physicians and patients research the most recent medical journal articles on specific popular procedures, and to know transparently the compensation, if any, the physicians receive from medical manufacturers.

Wednesday, May 2, 2012 – 10:30AM-12Noon
Session: 406..................................................CME/MOC: 1.5
Telemedicine Applications: More Than Just Talking Heads
Ronald K. Poropatich, MD, Telemedicine & Advanced Technology Research Center (TATRC) U.S. Army Medical Research & Materiel Command (USAMRMC), Fort Detrick, MD

TRUE: Telemedicine is the use of the telecommunication and information technologies in order to provide clinical health care at a distance.

TRUE: The Telemedicine and Advanced Technology Research Center (TATRC) performs medical reconnaissance and special operations to address critical gaps that are underrepresented in DoD medical research programs.

TRUE: TATRC fosters research on health informatics, telemedicine/m-health, medical training systems, and computational biology, and promotes and manages sciences and engineering in other key portfolios.

TRUE: Early forms of telemedicine included the telephone and the radio.

TRUE: Telemedicine can help eliminate distance barriers and can improve access to medical services that would often not be consistently available in distant rural communities.

Session: 407..................................................CME/MOC: 1.5
The Occupational Medicine Physician of Tomorrow

FALSE: The occupational medicine physician of the future should always strive for consistency.

TRUE: The occupational medicine physician of the future is likely to serve as more of a consultant to numerous constituencies that is the case today.

The central theme of this session is:

D. Massive global changes will force occupational medicine physicians to adopt a new practice style to prosper in the future

All of the following mega-trends seem destined to affect the practice of occupational medicine except:

B. Greater roles for physician specialists

The occupational medicine physician of the future is likely to play a greater role in each of the following areas except:

C. Identifying workplace hazards
Mariner Medical Examinations: Update on Coast Guard Merchant Mariner Medical Guidelines

Which of the following best describes the medical evaluation process conducted by the NMC when determining mariner fitness-for-duty:
B. The NMC reviews completed physical exams and supporting objective medical documentation to include consultative reports and results of relevant lab/imaging studies.

Which of the following best describes NVIC 04-08:
C. It is a non-exhaustive guidance document which identifies over 200 medical conditions subject to further review and provides recommended evaluation data

Which of the following is true concerning NMC approval of conditional medical waivers:
D. Conditional medical waivers are only approved by the NMC when objective evidence demonstrates the condition is sufficiently controlled to mitigate risk to maritime and public safety

Which of the following medical conditions/problems are among the “top ten” most prevalent among merchant mariner applicants:
E. All of the above

What information should be submitted for a mariner who has obstructive sleep apnea who uses a CPAP machine:
D. Sleep specialist evaluation, polysomnogram/titration study, and CPAP compliance log


TRUE: A FOOSH injury, otherwise known as a “fall on an outstretched hand” is a common mechanism of injury in patients presenting with wrist pain.

Which of the following are common conditions associated with a FOOSH injury:
A. Distal radius fracture
C. Ligamentous instability

When evaluating a patient with wrist pain, which of the following is true:
D. Identification of the scaphoid bone on the palmer aspect of the wrist is key when performing Watson’s Test for carpal instability

Which of the following components are essential parts of a complete assessment of a musculoskeletal injury:
D. All of the above

Which diagnostic test is most useful in assessment of the soft tissue of the knee cartilage and meniscus):
C. MRI
Worksite Visit: RSR Quemetco Lead Plant
Michael J. Kosnett, MD, MPH, Colorado School of Medicine, Denver, CO

TRUE: Smelting is a form of extractive metallurgy; its main use is to produce metal from its ore.
TRUE: The OSHA Lead Standard requires the employer to reduce employee exposure to the lowest feasible level through the use of engineering and work practice controls (1910.1025)(e)(1).
TRUE: Smelting uses heat and a chemical reducing agent to decompress the ore, driving off other elements as gasses or slag and leaving just the metal behind.
TRUE: Overexposure to lead is a leading cause of workplace illness in the lead industry. Employees working in secondary lead smelter plants are exposed to one of the highest lead exposure levels among all lead-related industries.
TRUE: Most ores are a chemical compound of the metal with other elements, such as oxygen (as an oxide), sulfur (as a sulfide) or carbon and oxygen together (as a carbonate).
TRUE: Crude lead produced during smelting operations is remelted in cast iron kettles and refined by the addition of reagents, such as sulfur and caustic soda. The purified lead is then cast into molds or ingots. Significant lead emissions can occur from poorly controlled refining, casting, and drossing operations.
TRUE: According to OSHA Lead Requirements for PPE, Housekeeping, and Hygiene Facilities, clean and dry protective work clothing must be provided daily or weekly depending on exposure levels.
TRUE: Removal of lead from protective clothing or equipment by blowing, shaking, or any other means which dispersed lead into the air is prohibited.

The following protective clothing and equipment must always be used when lead levels are above the PEL:
D. All of the above

Wednesday, May 2, 2012 - 10:30AM-3:00PM
Session: 410..............................................CME/MOC: 3
Symposium on Workers' Compensation Provider Performance, Quality, and Outcomes

Pressures adversely affecting outcomes in the current workers compensation system which might be addressed by collaboration include (mark all that apply):
A. Quality of care
B. The time required for prior authorization
D. Diminishing antagonism among stakeholders

Of the following outcomes, which are likely to be appropriate to be a focus of collaboration (mark all that apply):
B. Care guidelines
C. Communication workflows
D. Medical outcomes

What is the most important source for identifying metrics/measures of performance:
C. the voice of the customer

Who determines what we deliver to the customer:
B. the voice of the customer guidelines

What is more important when considering to outcomes, effectiveness or efficiency:
A. Effectiveness
State workers’ compensation agencies generally maintain the capability to publish state level information on:

D. None of the above

Where do stage agencies get their information about medical cost trends for workers’ compensation in their state and nationally (mark all that apply):

C. Workers’ Compensation Research Institute
D. NCCI

How can the medical professional influence state policy effectively on specific legislation:

C. Participation on medical advisory committees to state agencies

Which of the following laws is not a barrier to building networks that promote the highest level of provider performance against objective standards:

D. Requiring that works use designated managed care networks