

NECOEM Reporter

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NECOEM Dinner Meeting
May 15, 2008
Cumberland Club,
Portland, Maine

**Medical Causation in
Litigation Settings,**
Michael P. Fiedman,
Esquire and
David J. Leen, Esquire

Save the Date!
NECOEM/MaAOhn
Annual Conference
December 4 and 5, 2008

Presentations to include: closed head injuries in OH, Occupational dermatology, ankle and foot trauma in OH, DOT update with Natalie Hartenbaum, use of EMG studies in OM, musculoskeletal management in sports vs occ, injuries, aging workforce, MRO update, MRSA update, workers comp issues, rehab of neck pain and much more

The NECOEM/MaAHON 2007 Conference: A Physician's Perspective.

Philip Adamo, M.D., MPH, FACOEM

I could not agree any more with Rob Nadratowski's description of the 2007 Annual Conference (see page 3 of the **NECOEM Reporter**). As the conference chairperson, I would like to congratulate all of the speakers who shared with us their wealth of knowledge. I would like to add to Rob's contribution by echoing some of the words of Dr Mark Cullen, our keynote speaker. The topic, "All Health is Occupational Health" rang music to my ears. Those

words, I am sure, have been in our thoughts as we practice medicine every day. Going back to the beginning of the twentieth century and to the present day was not only a great review of where our profession has been, but more importantly where we need to be both now and in the future. I began my occupa-



tional career in the late 1980's and early 90's, as Dr Cullen explained when the workplace took got a new look with regard to the role of health care pro-
(Continued on page 2)



Dive into Dive Medicine

By Craig W. Curtis, M.D.

There are over 10 million recreational divers in the United States, including many health care professionals, and an expanding commerce in technical and commercial diving. Accompanying this explosion of underwater exploration, recreation, and business, is a growing need for expertise and interest in the medical issues and needs of this unique environ-

ment. In an underwater work environment, there are significant perils and safeguards that are different, and that warrant specific knowledge to ensure the safety and health of our employees, dive partners or customers. In this article, I would like to introduce the idea that there is a need for increased awareness of the

unique requirements for people venturing into the underwater environments. The commercial working diver, or recreational pleasure diver, can encounter the most severe combination of stresses and physiologic trauma including resistance to breathing, toxic effects of increased oxygen pressures, mental dulling due to nitrogen narcosis,
(Continued on page 4)

(Continued from page 1) Physician Perspective
viders. Having just becoming board certified in internal medicine, it was a natural transition to field of occupational medicine to care for a complete person, not just a person as a worker or just a patient with a job. For me the barrier was broken.

Dr Cutler continued his presentation with great prospective studies in three areas that have an impact on productivity in the workplace. These include injury, absenteeism and disability, and chronic disease. The multinational research he describes looked at both the physical and psychosocial demands of the workplace.

The interesting results from the injury perspective included the fact that experience matters. The risk of injury decreased the longer an employee was on the job. How about age? Unrelated to experience, the older workers were more safety conscious. Not surprisingly it was also proven that the less a worker has over their job (having many conflicting demands) increased the injury rate.

On the discussion of absenteeism, again, based on data it isn't all illness that keeps workers out of work! Those who had less conflict-

ing demands in the workplace were less likely to miss work.

The research looked at chronic diseases, mainly hypertension, diabetes, heart disease, COPD, asthma and mental health and how they impacted the workplace. The common thread that led to absence from work was once again the level of conflicting demands that is placed on the worker. Basically there was a co-morbidity with depression. Those with chronic diseases with depression and less control over their workplace missed the most work.

All three of these research arms involve the conflicting psychosocial



demands of the workplace. We, as occupational physicians must keep the great divide out of the picture and serve the needs of the entire worker.

Dr Cullen's lunch time presentation continued with the theme of how we as health care providers can influence not only the work-

place but he gave a positive spin on how our specialty must continue on. We must be role models for residents and medical students in order to bring more occupational physicians into the fold. Great job Dr Cullen!

Certainly, we were fortunate to have other great speakers present scientific data on various topics. Dr Ellenbecker delivered an update on the exiting area of nanotechnology.

And in keeping with the twenty first century topics on the environment, Allison Rodgers gave a presentation on Global Warming and the health problems that we are can anticipate

if we do not put any efforts into the solutions.

The Friday afternoon sessions that included OEM Research from the Harvard School of Public Health is always a welcomed part of the conference. Case management sessions also on Friday afternoon help us to get a better understanding of the standards of care in our field.

I hope these brief highlights of the conference will motivate many of the readers to return or be a first time attendant at the 2008 Annual conference in December.

The NECOEM/MaAHON 2007 Conference: A PA Perspective.

Robert Nadratowki, PA-C



As a physician assistant, entering into the specialty of occupational medicine has been challenging. Physician assistants are trained as general practitioners, and although occupational medicine is considered to be primary care for the injured employee, there are many other aspects of the specialty that are unlike any other practice in medicine.

This is the third NECOEM/MaAHON conference I have attended since beginning my career in occupational medicine. Every year the conference highlights some of the most important aspects of this demanding field in practical ways that have increased my knowledge base and comprehension and improved my skill in the practice of occupational medicine.

With this in mind, I would just like to share some of the highlights and take home messages from this years conference that I feel have enhanced my practice skills. As I glance over the introductory pages and agenda for the conference my mind is racing with thoughts about patients that have been impacted from the information that I have gained this past year.

Several of the presentations strengthened the way that I have been currently practicing within this field. Patrick Doyle discussed the impact of mental health on employee conduct and misconduct. In

the past I have seen patients for fitness for duty evaluations where the employee was having interpersonal relationship problems at work with co-workers and supervisors. I have regularly referred to the individual companies EAP programs before determining medical fitness. As Patrick discussed, the EAP programs have helped those individuals learn new coping skills for dealing with work stress as well as helping them learn how to communicating with their co-workers and supervisor. The counselors have also provided insight into potential future problems and any needs for further referral to psychology. Furthermore, I have utilized the EAP programs for assistance in pain management when some aspects of my patient's symptoms seemed to be related to depression. Patrick did well reinforcing the use of referral to the EAP programs available for complete patient care.

As I discussed earlier, many of the presenters have offered their own experience and expertise which has enhanced my medical practices. Dr. Terrono's lecture on upper extremity injuries discussed in detail the important diagnostic and treatment practice guidelines for wrist injuries. Since his discussion, all wrist radiographs I order include with PA, lateral, oblique and scaphoid views; particularly when there is a trauma. His lecture also has made me aware of

the most up to date treatment recommendations for specific injuries such as TFCC tears, lunata dislocations and scaphoid fractures, all of which I am currently treating. In fact, this lecture has helped me to understand length of disability and ultimately the how treatments such as proximal row carpectomies versus internal fixation will affect the patients outcomes.

The information provided by Dr. Carolyn Langer has been invaluable. She helped me to define my role as a medical provider in the evaluation of patients for pre-placement exams and fitness for duty evaluations. In her discussion of the Chevron v. Echazabal case, the point of "direct threat" assessment to the health and safety of Mr. Echazabal and those working with him, in light of the job description and the fact that he had been doing the offered employment position already, changed the way I think about the patients medical fitness for a particular job. The information has made me focus on obtaining records, inquiring into past employment, and making sure that the patients can meet the essential functions of the job in the office.

(Continued from page 1) Dive Medicine

extremes of temperature and body heat loss, barotraumas and other significant physiologic alterations. I would like this article to also serve as a primer on ready resources that would be of aid to occupational medical practitioners who advise or provide services to commercial dive operations.

Advances in diving medicine have followed the significant developments in technology that have occurred in the last 80-100 years. Initially, primarily a military-based secretive initiative, the advent of demand-valve self-contained open system breathing equipment (SCUBA), opened the doors to recreational adaptation of this formerly narrowly applied activity. This expanding demand for civilian use with an inherently increased safety profile has required a more widespread understanding of the physics and physiology of the underwater environment. Today, there are a number of organizations that represent, research, and advise on issues of interest and importance to the diving community.

One of the more practical resources can be found with the Association of Diving Contractors International (ADC), <http://www.adc-int.org/>. This organization serves its membership through services directed at advising dive professionals, providing and coordinating training, and collaborating on research and standards for the industry. Here is an excerpt from their web page,

“Founded in 1968, the Association of Diving Contractors International, Inc. was originally a small group of diving companies with a goal was to create a non-profit organization dedicated to the art and science of commercial diving. The establishment of indus-

try-wide safe standards for commercial diving was the foundation upon which the ADCI was built. Since then, the ADCI has grown to encompass more than 500 member companies, furnishing services and/or support for the conduct of safe underwater operations. Initially comprised of just U.S. domiciled companies, the Association now has companies from 41 other nations throughout the world; all pledging to comply with the ADCI Consensus Standards for Commercial Diving Operations. With a diverse membership from the business, educational, and medical communities, the ADCI is an organization with worldwide scope.

Although the ADCI has no regulatory jurisdiction, it does carefully attempt to ensure that its member companies fully comply with national regulations in effect. The ADCI Consensus Standards for Commercial Diving and Underwater Operations has been carefully developed to promote the highest degree of Safety. Both the United States Coast Guard and OSHA recognize the ADCI Consensus Standards as “meeting or exceeding” U.S. Federal Regulations for the conduct of commercial diving activities. ADCI Certification Cards are recognized throughout the world as being documents that attest to the training and experience level of Commercial Divers and ROV Pilot/Technicians

Through their commitment to the dive professional, they have available standards and guidelines for the assessment and clearance for individuals working in these underwater environments. I have found their *Consensus Standards for Commercial Diving and Underwater Operations* (5th Edition) to be particularly useful.

Medical requirements (section 2.8) for clearance of persons engaged in

diving or hyperbaric environments are defined and delineated over an eight page treatise that is concise and specific. This is followed by a four page medical history and physical examination form that is quite user friendly, diving specific and complete. Table 1 section 2.8.4 lists Medical Tests for Diving.

These recommended screening and annual tests serve a vital role in ensuring the ongoing health and safety of the diving professional or enthusiast. There are various other compilations of recommended evaluations for underwater or hyperbaric environments.

The Undersea & Hyperbaric Medical Society (UHMS) -<http://www.uhms.org/>; is another vital organization in the diving world. This is their home page summarizing their mission.

The Undersea and Hyperbaric Medical Society (UHMS) is an international, non-profit organization serving 2,000 members from more than 50 countries. The UHMS is the primary source of scientific information for diving and hyperbaric medicine physiology worldwide. The UHMS

The UHMS provides a wide array of continuing medical education, sponsored courses, certifying exams for physicians, technicians, and allied health professionals. A highlight of their course offerings includes the NOAA (National Oceanic and Atmospheric Administration) and URSF (Undersea Research Foundation) 11 day course for physician training in diving medicine:

“The goal of this course is to fully train physicians to be capable to handle complex diving medical emergencies. After completing the course, the diving physician should be able to manage diving emergency cases and to safely operate the hyperbaric chamber and its support equipment.

Medical Tests for Diving

	INITIAL	PERIODIC	COMMENTS
History & Physical	X	annually	see list of components in H & P
Chest X-Ray	X	X	PA & LAT-periodically as recommended
Bone & Joint Survey	X		periodically as recommended
EKG:12 lead	X	X	initially, annually after age 35 and as medically indicated
Excercise Stress Test	X		initially, and required as medically indicated
Pulmonary Function	X	annually	
Audiogram	X	annually	industrial pure tone audiometry required only as medically indicated
EEG			
Visual Acuity	X	annually	
Color Blindness	X		required initially and as medically indicated
CBC, CMP, HIV, RPR,	X	annually	initially, and required as medically indicated
Sickle cell/Hgb screen	X		
Drug Screen	X	annually	
Urinalysis with Micro	X	annually	

The course will include practical "hands on" experience operating and working inside recompression chambers, and the use of commercial and military diving equipment. Training facilities will include 72", 60", and 42" diameter therapeutic recompression chambers and a 30-foot deep diver-training tower. Chambers will be equipped to demonstrate recent technological advances developed by USRF and NOAA."

The instructional content is comprehensive. The goals and objectives are both ambitious and uniquely unparalleled. This organization serves a research and communication role internationally and is a resource any dive professional can benefit from.

Finally, the Divers Alert Network (DAN), <http://www.diversalertnetwork.org/>, has been a web site I've visited frequently and found immensely useful. This organization provides a more public-

oriented service and remains a widely popular resource in the dive world. Their mission statement reflects their commitment to this group of enthusiasts.

DAN's Mission Statement
DAN helps divers in need with medical emergency assistance and promotes diving safety through research, education, products and services



"Divers Alert Network (DAN) is a 501(c)(3) non-profit medical and research organization dedicated to the safety and health of recreational scuba divers and associated with Duke University Medical Center (DUMC). DAN is supported by the largest association of recreational

divers in the world.

Founded in 1980, DAN has served as a lifeline for the scuba industry by operating diving's only 24-hour emergency hotline, a lifesaving service for injured divers. Additionally, DAN operates a diving medical information line, conducts vital diving medical research, and develops and provides a number of educational programs for everyone from beginning divers to medical professionals."

As a recreational diver, I've begun to appreciate the new frontiers of undersea travels, commerce, and exploration. As an occupational physician dealing with commercial diving professionals, I've been enlightened to a whole new work environment with vital differences and a unique body of knowledge. There are many ways to assist our companies in these ventures, and the resources above are just a few.

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From Massachusetts

Dear editor,

It is important that NECOEM members are aware that a Workers'

Compensation rate increase is a distinct possibility this year. An important coalition of interests is emerging that wish to see rates rise substantially. Such groups such as the Massachusetts Medical Society, Massachusetts Bar Association, HealthCare Services Board at the Department of Industrial Accidents and NECOEM itself are coalescing around this urgent and obvious issue. Additionally, it behooves us all to argue on behalf of creating a mechanism in government that would regularly review and adjust these rates. The time is now to get our voices united and effect change. This is not just an argument over more money. Rather it is a measure of our self-worth and our profoundly important role in society.

This is only a skirmish in the looming national healthcare debate that will surely come in the general presidential election of 2008. It is imperative that we prevail in order to take the measure of our value to everyone who depends on us; insurers, employers and government itself.

As more and more providers find it untenable to see Workers' Compensation patients, the ability for a sick or injured worker to find high quality care vanishes.

Respectfully, Robert Naparstek, MD

From Vermont

It is worth reporting that there is an attempt to block the use of the AMA Guides to the Evaluation of Permanent Impairment newest 6th edition from being implemented. Statutes call for the latest edition but the Department of Labor has put that on hold given that the Senate Economic Development, Housing, and General Affairs Committee just passed a new Workers Compensation Bill S.345 that will require the Commissioner of Labor to evaluate the impact of the implementation of the 6th edition on workers benefits by the NCCI or other appropriate agency.

Though I do not know the inside tract there has been considerable discussion regarding the elimination in the 6th edition of additional impairment given in the 5th edition for affects of surgery that usually resulted in improved rather than decreased function. For example, in the 4th edition, lumbar surgery for radiculopathy was 10% whole person impairment (WPI). In the 5th edition, if this surgery included a fusion then the rating was raised to between 20 and 28% WPI even if the surgery resolved all or the majority of symptoms and returned one to normal function. In the 6th edition this was removed with the impairment capped at 13%.

Interestingly there was no bill introduced to study the cost of implementing the 5th edition in 2001 when this additional impairment was added. The link for the Department of Labor notification on this is copied below:

<http://www.labor.vermont.gov/Portals/0/WC/delay%20AMA6thmemo.pdf>

Verne Backus, MD

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Rhode Island Occupational Happenings

ILLEGAL WORKERS have been a recent issue here in the cradle of the USA Industrial Revolution. Last year a young Mexican worker was injured when a chain saw kicked back and opened his face from left hairline down to right nostril. His boss told a coworker by cell phone NOT to call for help; fortunately, the coworker was smarter than that. Elgar Velasquez after extensive and masterful plastic surgery by Dr David Barrall was released from the hospital. His employer did not carry workers' compensation insurance. In RI, such a lapse carries a 1,000 per day fine, a sequelum from the infamous Station Night Club fire in this state. When Velasquez appeared at the courthouse for a hearing, he was met by immigration officers who arrested him, jailed him for a month and then deported him to his native Chiapas, Mexico. In Chiapas he lives up a mountain four hours from the nearest telephone. His attorney worked through the Mexican consulate in Boston to obtain a compassionate visa to bring Velasquez back to RI where he had both a civil work-

ers' compensation cases pending. This visa also allowed him to get necessary treatment for residual drainage from his facial wound.

In December, the courts ruled in his favor and gave an award of \$30,000, miniscule but better than nothing. His physicians and attorney all waived their fees in order to maximize what Mr. Velasquez can realize from this award. As he will need revisional surgery for his left eyelid, \$30 K will not go very far. His ex-employer agreed to pay \$100 per month until the fine has been paid. It is improbable that the payments will ever be completed, however. While the ex-employer cannot file for bankruptcy right now -- he filed five years ago—it is likely that he will file again.

LEONARDO COS-ELIAS is a Guatemalan illegal who was pulled into a computerized router machine he operated at a company in Pawtucket. His employer, Packaging Concepts, *does* carry insurance. Cos was severely injured and underwent a hemipelvectomy, disarticulation of his left lower extremity and diverting colostomy. He has survived to be transferred to a rehabilitation hospital. He cannot be fitted for a prosthesis that will allow him to walk but he will have a prosthesis that will permit him to sit without toppling over.

Rhode Island workers' comp law extends to cover all employees whether legal or not. The publicity generated by these two cases has prompted Governor Carcieri to question whether that law should be altered. One hopes that the legislature will be more enlightened than that.

(Continued from page 5) *Dive Medicine*

I've listed below another set of references I've found valuable in my practice. They may be of some utility in yours as well.

DIVING MEDICINE, Fourth Edition, 2004. A. Bove and J. Davis W.B. Saunders Company, Philadelphia, PA
<http://www.scubamed.com/divmed.htm>

ASSESSMENT OF DIVING MEDICAL FITNESS FOR SCUBA DIVERS AND INSTRUCTORS, 2006. P. Bennet, F. Cronje, E. Campbell. Best Publishing Company. Flagstaff, AZ

CONSENSUS STANDARDS FOR COMMERCIAL DIVING AND

UNDERWATER OPERATIONS, Fifth Edition, 2004. ADCI-Association of Diving Contractors International

NOAA DIVING MANUAL, NOAA. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

US NAVY DIVING MANUAL, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

ALERT DIVER MAGAZINE; Articles on diving medicine

<http://www.diversalertnetwork.org/medical/articles/index.asp>

DOC'S DIVING MEDICINE HOME PAGE

<http://faculty.washington.edu/ekay/>

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NECOEM

NECOEM is a not-for-profit, regional component society of the American College of Occupational and Environmental Medicine, the pre-eminent organization of occupational and environmental physicians, associate and affiliate clinicians.

NECOEM has over 200 physician, associate and affiliate members and is dedicated to preventing and treating occupational injuries and illnesses. NECOEM provides continuing medical education for its members and other clinicians in order to enhance the care that they provide to men and women in the workplace. NECOEM is an advocate for workplace safety, occupational health research, raising public awareness of occupational and environmental health issues, providing guidance on public health policy, and recognizing outstanding achievement by individuals in occupational and environmental health.

The editorial board welcomes letters to the editor. Write or email to NECOEM at the above address. The editor reserves the right to edit letters for publication purposes.

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Dr. Ellison brought to life the real impact of community acquired MRSA infections. I have seen several patients with MRSA infections which have now become common in the community but more particularly in the residential homes and care centers. With a heightened awareness I have been prescribing more appropriate antibiotics and more closely followed treatment.

Finally, Mary Townsend has imparted several keys to performing and understanding "Real world Spirometry." She discussed proper spirometer setup and performance. I am now

using nose clips with almost every patient! She also discussed the importance of the data obtained explaining that "garbage in = garbage out" and then discussed key strategies that help to determine how to interpret whether the data obtained was valid and therefore my interpretation of the data was correct.

The NECOEM/MaAHON conference has been a wonderful experience this year. It has reinforced some of my current practices, built on the knowledge that I already have and has given me new knowledge that has made me a better occupational medicine practitioner.

*Physicians not listed in [ACOEM's Doctor Finder](#) are missing an important opportunity to have their contact information and areas of practice made available to colleagues and to potential clients and patients. The [ACOEM Doctor Finder Service](#) provides basic professional information about each occupational medicine physician member who has elected to participate in this listing service. **Be sure you and your colleagues are listed! Simply go to [Update Profile in the Members Only](#) section of www.acoem.org, then select the [Edit Communication Preferences Tab](#) and check the [Doctor Finder](#) box.***