Dr. Raúl Mirza is the Occupational Medicine Division Chief at the Army Public Health Center. He is a council member of CAOHC and the ACOEM Council of Scientific Advisors. He also serves as the President of the Maryland College of Occupational and Environmental Medicine.

I am often asked what occupational medicine is. At first hearing the name of the discipline, many people immediately conflate the medical specialty with occupational therapy. However, most listen carefully and deduce that occupational medicine is outside the paradigm in which most medical specialties ascribe to. If I’ve done my job describing the specialty well, you will leave with the understanding that occupational medicine is a multifarious medical specialty which spans the clinical, legal, administrative, and public health spheres. Moreover, occupational medical practice is tailored to the population served and its corresponding operational activities and the environment.

Occupational medicine is a specialty area of Preventive Medicine which also includes the areas of Aerospace Medicine, General Public Health and Preventive Medicine, and four subspecialties: Addiction Medicine, Clinical Informatics, Undersea and Hyperbaric Medicine, and Medical Toxicology. The certifying body is the American Board of Preventive Medicine (ABPM), one of 24 broad areas of specialty medicine which together, comprise the largest physician-led specialty certification organization in the U.S. known as the American Board of Medical Specialties (ABMS). The American College of Occupational and Environmental Medicine (ACOEM) was established in 1916. Today, ACOEM is approximately 4,500 members strong and is the nation’s largest medical society committed to promoting the health of workers through preventive medicine, clinical care, research, and education.

The philosophy of occupational medicine can be traced back to the Italian physician Bernardino Ramazzini who wrote De Morbis Artificum Diatriba (Diseases of Workers) circa 1700. In his essay, Ramazzini included more than 50 different professions in which he described observed afflictions and argued proposals to prevent such diseases. Today the occupational health providers, nurses and technical staff working in occupational medicine ensure that employers keep the workers safe on the job and that the job and mission are preserved by ensuring that workers are medically qualified. Occupational medicine programs coordinate with employers to assist in their management of worker health, reliability, injury, illness, disability, productivity, and social adjustment.

Largely successful occupational medicine programs not only dovetail into federal and state regulations that affect employers such as those from the Occupational Health and Safety Administration, Department of Transportation, Mine Safety and Health Administration, workers’ compensation, etc., they incorporate health promotion and other comprehensive services focused on primary prevention and urgent care. These initiatives help reduce and control lost work time and associated costs, ensure a readied workforce, facilitate cost effectiveness in purchased healthcare, and maintain quality in workers’ healthcare provided throughout the lifespan.

Primary prevention strategies are fixed on population and individual level risk factors which render individuals and/or populations susceptible to disease, illness, or injury. Hence, the goal of primary prevention is to prevent disease or injury before it occurs by thwarting exposure to hazards or increasing resistance to disease or injury should exposure(s) occur. Occupational and environmental health risks are prevented or mitigated by instituting engineering controls, administrative measures, and personal protective equipment once the hazard(s) have been identified, recognized or anticipated. Further, providing targeted education about known occupational and environmental hazards and promoting health through
Recently I got to spend a few days at a job site, working one-on-one with people who are at risk due to hazardous noise in their workplace. As I suited up from head to toe with my protective garb, it dawned on me just how long it had been since I’d been out in the field. I was out of practice. Getting and staying protected is a lot of work!

Being together with the folks who are on the receiving end of a hearing loss prevention program reminds me of the many challenges there are to protecting people. Protecting people encompasses so many different facets: policies, professions, products, and procedures. CAOHC is a part of this tremendous effort to keep the working people working safely, day after day, month after month, year after year. The faces – and ears - of the individuals I was with, are fresh in my mind as I reflect on the work of CAOHC.

The work of CAOHC

Consistent
Whether it is in finding a valid audiometric threshold or upholding the value of a credential, CAOHC’s drive to ensure consistency in hearing conservation is paramount to its identity. The CAOHC staff and Council strive to be consistent in delivering services, whether as paid employees or as volunteers. In accordance with our strategic plan, these last two years CAOHC prioritized improving infrastructure – systems, databases, and procedures. The design and delivery of the Occupational Hearing Conservationist (OHC) standardized exam has been streamlined and the efforts have been beneficial toward supporting the Course Directors (CDs) and lending credibility to the credential of the certified OHC. Changes have improved how exams are processed and how exam results are reported to CDs to enable them to modify content and instruction if needed. When inconsistencies were revealed, action was taken as quickly and thoughtfully as possible. The work of CAOHC is consistent.

Relevant
CAOHC’s tenure has been sustained for decades through its recognition as an authority in hearing conservation by regulatory bodies; CAOHC certification is referenced in both federal and state regulations. As a technical advisory group (TAG) member of ANSI, CAOHC provides input to important consensus standards relevant to hearing protection, noise measurement, audiometry and other acoustics-related standards. In the past year, CAOHC has joined with the International Safety Equipment Association to promote best practices in hearing conservation. The CAOHC staff and Council field dozens of inquiries each week, answering questions and providing resources to people wanting information about preventing noise-induced hearing loss. The work of CAOHC means maintaining its reputation for excellence and securing its position towards promoting best practices in hearing conservation. The work of CAOHC is relevant.

Evolving
I saw a safety poster last week with the message “safety never stays the same.” People must be constantly alert to hazards, adaptable to the changes in conditions and methods of protecting themselves and others. The health and safety culture has evolved alongside the working world. Too, the work of CAOHC is evolving to include principles of adult learning, multi-media, and CAOHC is investigating alternative educational offerings. Recently, CAOHC released a media package called Anatomy, Physiology & Diseases of the Ear curriculum, which can be used by CDs and other educators to enhance courses. Additionally, the second printing of the Hearing Conservation Manual, fifth edition is now available. Systematic review of the CAOHC strategic plan by the various CAOHC committees has guided us forward on projects and helped prioritize allocation of resources, both in expenditures of capital and time. More CAOHC courses are being taught outside of the United States as CAOHC pursues international opportunities for growth. The work of CAOHC is evolving.
COHCs, prepare now for the Age Wave

Submitted by: Nancy N. Green, AuD

Nancy N. Green, Au.D., is an audiologist in private practice in Jacksonville, Florida, specializing in industrial hearing loss prevention and compensation issues for 36 years. She is an Associate Professor (Adjunct) at A.T. Still University of Health Sciences.

Everyone has heard of the Age Wave. It’s that hustling, bustling, industrious, demanding 20% of the population known as Baby Boomers who are growing older by the minute. Those in the leading edge of the Age Wave began reaching the age of 65 in 2010. Some of these individuals are audiologists, and a sample of them are industrial-occupational audiologists.

There are approximately 12,000 actively practicing, full-time-equivalent audiologists in the United States. If we assume that the profession of audiology exhibits the same age distribution that exists in the adult population, then around 20% of that 12,000, or about 2,400 audiologists, would be Baby Boomers who might be anticipating retirement soon. These numbers are similar for the profession of otolaryngology (ENT).

The greatest concern to this author is the depleting sector of the audiology profession that provides our industrial-occupational services. Anecdotally, approximately 1%, or about 120 audiologists nationwide, are currently work full-time in partnership with industry, and the military, in hearing conservation and hearing loss prevention programs. They are generally familiar with one another, bid for new business against each other, and even may exchange clientele. Still, no one has ever counted this cohort separately, so no one understands exactly how many audiologists currently perform these services.

CAOHC recommends that all Certified Occupational Hearing Conservationists (OHCs) should be responsible to a CAOHC Certified Professional Supervisor of the Audiometric Monitoring Program (CPS/A), who, by regulation, must be an audiologist or qualified physician. It appears that the approaching peak of the Age Wave will affect an OHC’s ability to locate, and work with, a CAOHC CPS/A, and even a CAOHC Course Director (CD), if the predicted number of retiring industrial audiologists is realized.

Losing 20% of the practitioners in any profession would be a loss felt deeply. But more importantly, in the industrial subspecialty of audiology, it would include the loss of the amalgamated expertise that has been acquired by boomers during their careers. They have spent their time amassing a great deal of knowledge and practical experience, becoming experts on the unique applications of audiologic principles and practices to the industrial and military workforces. Additionally, the profession of otolaryngology will experience a similar effect on those physicians who specialize in work-related noise-induced hearing loss.

What is a CAOHC OHC to do? There are several ways to prepare for the Age Wave so that it brings as little disruption to occupational hearing loss prevention programs as possible:

- Network with CAOHC, its CPS/As and CDs, as well as other organizations involved in hearing conservation activities, such as the National Hearing Conservation Association and National Institute for Occupational Safety and Health.
- Maintain and increase contact with current providers and strengthen those relationships, whether they might be audiologists or physicians.
- Recognize that older audiologists and physicians will need to transition their practices to younger professionals.
- Prepare for these changes by creating a back-up plan in concert with the current provider so everyone will know what to do when the current provider decides it’s time to retire.

The Age Wave is coming, whether we are prepared for it or not. Having an exceptional hearing loss prevention program means anticipation of events that will impact the quality and timeliness of our programs and the provision of required and recommended services. It also means creating a preparedness plan now for a disruption in business continuity, regardless of whether the disruption comes in the form of a flood, fire, hurricane, or the much-anticipated Age Wave of retiring baby boomers that serve as our audiologists and physicians.

Work is hard.

Growing up doing chores, I must have complained a lot because I remember my mom telling me, “work is hard, that’s why it’s called work and not play.” My Mom was right. but she also reinforced the value of hard work, there is tremendous satisfaction in a job well done. The work of CAOHC can be hard. Fortunately, the hard work is accomplished through collaborative efforts with fine, dedicated, and passionate colleagues, who laugh, care, and try to do the best job they can, over and over again. The rewards are palpable. Serving as Chair of CAOHC has been an honor. I’m grateful for the opportunity to work and play alongside such loyal champions of the cochlea, the people of CAOHC.

The work of CAOHC may be hard, but working in hazardous noise is much harder - another powerful reminder from my field work last week. Each and every ear is unique and vulnerable. So, we keep working, so that others can keep working safely.

chEARS!

Laurie
OHC Spotlight: Terry Washington, former fire fighter, enjoys new career as an OHC

Submitted by: Carol Snyderwine, MHS, MA, CCC-A, CPS/A

Terence “Terry” Washington, Certified Occupational Hearing Conservationists (COHC), provides hearing conservation services in the Greater Cleveland area via a mobile hearing test unit. After working 20 years with the Cleveland Fire Department, Terry’s love of public service led him to this job. Terry stated, “After I retired, I was looking for a new adventure. I love networking and serving the public so this job is a good fit for me. I’ve been an COHC for a little over 10 years now.”

Besides conducting mobile hearing testing, Terry also provides education and training to the workers. “I try to connect with the workers and be engaging. I only have a short period to get my message to the employee, so I try to make each word count. My favorite part of the job is all the relationships I’ve made with the workers. Once I explain the importance of hearing protection, I tell the workers that the final step is with them: wear your hearing protection!”

Terry frequently receives compliments from the industries that he serves about his excellent customer service. He works efficiently and tries to get the workers back to their job as quickly as possible. Providing mobile hearing testing requires patience and flexibility. Hearing tests may be conducted at any time of the day or night. When workers do not speak English, Terry takes extra time with the worker to ensure understanding of the procedures. Terry reported, “I enjoy meeting and working with people from all walks of life. These workers remember me each year, too, and I work hard to provide a quality service for them.”

Terry also helps with CAOHC approved occupational hearing conservation classes. He reports, “I assist the audiologist with the hearing and hearing protection devices (HPD) practicums. I find the anatomy portion most interesting. The operation of the ear is so detailed and miraculous. I enjoy helping the students and seeing them learn. I tell them that they will like being an COHC if they like helping people, and providing an important service: protecting that miraculous ear!”

– continued from page 1: The intersection of occupational medicine and primary prevention

lifestyle and behavior changes increases the overall success of worker health programs. Strong primary prevention efforts in occupational medicine programs incorporate industrial hygiene, safety, and the worksite as integral components of the program. Multidisciplinary collaboration among key stakeholders with touch points in the working environment increases not only the success of primary prevention programs, they offer substantial assurances to the employer about the health and readiness of the workforce, and compliance to federal, state, and local occupational health standards.

In the area of hearing conservation, unyielding primary prevention programs are paramount. Get to know the working population, worksite processes, and the environment. Develop inroads with human resources and workers’ compensation specialists to increase bidirectional dialogues and efficiencies toward achieving mutual goals. Increase the depth of knowledge about worksite processes, noise sources, and materials (chemical and physical) the workers are subject to throughout their day. Assimilate work-side and bedside knowledge gained from the worker into tailoring hazard and disease-related education, and hazard-related clinical surveillance protocols and questionnaires. Translate information about work processes and exposures to safety personal, industrial hygiene personnel, and the supervisor. Build quality assessments and reviews into your program and execute changes as are needed. Determine measures which may correlate your program’s influence and monitor those trends. Remember, work-related hearing injuries are mostly due to failures in the employer’s primary prevention strategy. Lastly, inspire confidence in your occupational medicine program and build trust and collaborative relationships with the worker and supervisor in order to tighten the gap between work and health.

In closing, occupational medicine is a unique medical specialty with a scope of practice that takes into account medicine, the workplace, environment, the population served, and societal expectations. Primary prevention is the application of health promotion, education and health preservation which intersects with occupational medicine. Together, the benefits to a worker, the workforce, and employer from a comprehensive occupational medicine program are vast.
CD Spotlight
Carol Snyderwine, MHA MA CCC-A CPS/A

Submitted by: Gabriela L. Luna, Marketing and Education Program Manager

Carol Snyderwine is an audiologist who has provided mobile hearing conservation services in the greater Cleveland area since 1986. Carol is an active CAOHC Course Director (CD) and Certified Professional Supervisor of the Audiometric Monitoring Program (CPS/A). Carol also represents ASHA on the Council for Accreditation in Occupational Hearing Conservation (CAOHC). She taught her first CD Course in May, 1996, and teaches approximately 4 courses per year. Gabriela Haugen, Marketing and Education Program Manager, had the opportunity to interview Carol, her answers follow after the question.

Gabriela: What do you believe is the most rewarding element of the OHC course?
Carol: Seeing the level of knowledge and confidence that the students have on day one of the course, as compared to day three. Remarkable!

Gabriela: What is something you highly recommend should be emphasized during the course?
Carol: The importance of helping individuals find a comfortable hearing protection device (HPD) and motivating them to wear it properly.

Gabriela: What was the most interesting question a student has asked you in the course?
Carol: A student once asked, “Is the hair in the external canal the same as the hair cells in the cochlea?” That showed me that we needed to work a bit more on anatomy! I have a video otoscope, which allows the students to see their own eardrum. This is always a “hit” because when do you ever get to look at your own eardrum?

Gabriela: What unique methods do you recommend for teaching learners about how to properly conduct hearing conservation training?
Carol: Try to personalize the training for the audience. For example, talk about using hearing protection devices outside of work and pass on information about HPDs, which can be used when hunting or listening to music. We show visuals of the hair cell damage caused by excessive noise. Testimonials from those with hearing loss can be powerful. You can ask students, “What would you miss if you had a noise-induced hearing loss?”

Gabriela: What do you think is the most beneficial about the new edition of the CAOHC Hearing Conservation Manual?
Carol: For the students, I think the improved graphics and reference materials are great! For me, I like all the materials in the Appendices, which help me to “dig deeper” into different subjects.
CPO Update: American Academy of Otolaryngology – Head and Neck Surgery

Submitted by: COL James Crawford, MD, USA, MC, CPS/A; Col (Ret)

The American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) is the world’s largest organization representing specialists who treat the ear, nose, throat and related structures of the head and neck. The Academy represents approximately 12,000 otolaryngology – head and neck surgeons. The variety of medical disorders treated by Academy physicians are among the most common that afflict all Americans, young and old. They include chronic ear infections, hearing loss, tinnitus, and a variety of other conditions that may directly impact hearing. They also manage diseases that secondarily influence hearing and balance such as allergic disease, sinusitis, snoring and sleep apnea, gastroesophageal reflux, head and neck cancer, as well as the pharmacological and ancillary modalities used to treat these disorders.

The AAO-HNS Foundation works to advance the art, science, and ethical practice of otolaryngology-head and neck surgery. Through education, research, and lifelong learning AAO-HNS assists its members to achieve excellence and provide the best ear, nose, and throat care. They promote professional and public education, research, and are active in health policy advocacy.

Otolaryngologists are networked clinical managers of ear related disorders. They are called on to evaluate, treat, and consult or offer inner ear exposures, disorders, and disabilities - including occupational illnesses and injuries. Otolaryngologists serve as certified Professional Supervisors of the Audiometric Monitoring Program. In this role, they oversee all aspects of quality occupational audiometric testing, refer questionable cases, determine work-relatedness, and provide professional consultation to management.

AAO-HNS appoints two representatives to the CAOHC Council to serve a 5-year term with the opportunity to serve a maximum of two terms. The current representatives for AAO-HNS on CAOHC are James V. Crawford, MD and incoming member Carlos Esquivel, MD, FACS, FAA, OA.

CPO Update: ASHA

The American Speech-Language-Hearing Association (ASHA) credentials audiologists and speech pathologists and initiated the development of national standards for these professions. The Certificate of Clinical Competence (CCC) represents a professional standard and a level of achievement. ASHA certification is not contingent upon membership in any professional organization. More than 170,000 professionals currently hold ASHA certification. ASHA provides an annual convention that allows professionals exposure to the latest research and resources in their field.

Audiologists assess, treat, and rehabilitate hearing and balance disorders for people of all ages. Audiologists are licensed and/or regulated in all 50 states and the District of Columbia. Audiologists may work in schools, medical centers, or industrial settings helping workers to protect their hearing from the effects of noise. Audiologists may serve as the Professional Supervisor of the Audiometric Monitoring Program (PS).

ASHA appoints two representatives to the CAOHC Council to serve a 5-year term with the opportunity to serve a maximum of two terms. The current representatives for ASHA on CAOHC are Pamela Gordon duPont, M.S., CCC-A, CPS/A and Carol Snyderwine, M.H.A., M.A., CCC-A, CPS/A.

Hearing Conservation Manual
Available for Purchase at www.caohc.org
CPO Update: Institute of Noise Control Engineering

Submitted by: Kim Riegel, PhD and Charles Moritz, MS, INCE.Bd.Cert.

The Institute of Noise Control Engineering USA (INCE-USA) is an organization of noise control engineers who, through its members and associates promotes noise control solutions to occupational, environmental, product, machinery, industrial and other noise issues. Members who are board certified in noise control engineering have been recognized by INCE-USA as having attained the highest professional status. INCE --USA has approximately 1,000 members, many who offer consulting services in noise control. INCE-USA is a member of the International Institute of Noise Control Engineering (I-INCE), an international consortium of organizations with interests in acoustics and noise control.

INCE-USA sponsors an annual noise control engineering conference (Noise-Con) where papers covering all aspects of noise control engineering are presented. Once every three years, an international conference on noise control engineering is held in the Americas (InterNoise). In 2018, this conference will be held in Chicago from August 26-29th.

INCE-USA appoints two representatives to the CAOHC Council to serve a five-year term with the opportunity to serve a maximum of two terms. The current representatives are Kim Riegel, PhD and Charles Moritz, MS, INCE.Bd.Cert.

CPO Update: American Association of Occupational Health Nurses (AAOHN)

Submitted by: Bryan Topp, RN MSN/ MPH COHN-S COHC, Elaine Brown, RN BS COHN-S/CM COHC

Occupational and environmental health nursing is the specialty practice that provides for, and delivers, health and safety programs and services to workers, worker populations, and community groups. The practice focuses on promotion and restoration of health, prevention of illness and injury, and protection from work-related and environmental hazards. Occupational and environmental health nurses (OHNs) have a combined knowledge of health and business. They use their healthcare expertise to balance the requirement for a safe and healthful work environment with a “healthy” bottom line.

The American Association of Occupational Health Nurses (AAOHN) is a professional association of nearly 5,000 members. AAOHN is dedicated to advancing the health, safety, and productivity of domestic and global workforces by providing education, research, public policy, and practice resources for occupational and environmental health nurses. These professionals are the largest group of health care providers serving the worksite.

Each year in the spring, AAOHN hosts a national conference and a Global Summit. The Global Summit is packed with leading edge topics of interest and concern for all occupational and environmental health nurses who practice global health. In April 2017, the national conference was held at the Hyatt Regency New Orleans and celebrated AAOHN’s 75th anniversary.

AAOHN appoints two representatives to the CAOHC council to serve a five year term with the opportunity to serve a maximum of two terms. The current representatives are Bryan Topp, RN MSN/ MPH COHN-S COHC and Elaine Brown, RN BS COHN-S/CM COHC.
Anatomy, Physiology and Diseases of the Ear DVD, How to purchase

The Anatomy, Physiology and Diseases of the Ear DVD or Jump Drive can be purchased on our website either from the Educational Resources section or via a link in CD Resources section. The cost of the Anatomy, Physiology and Diseases of the Ear program is $355.00 for CAOHC Course Directors, $395.00 for non CAOHC Course Directors

Place your order today!

Register Now!

Course Director Certification & Recertification Workshop

November 16, 2018 - Salt Lake, UT
Visit www.caohc.org to register

Register Now!

Professional Supervisor of the Audiometric Monitoring Program Workshop

November 17, 2018 - Salt Lake, UT
October 5, 2018 - New Brunswick, NJ
Visit www.caohc.org to register
Leadership

The CAOHC leadership otherwise known as the Council consists of two representatives from each of the following Component Professional Organizations (CPO).

- **American Association of Occupational Health Nurses (AAOHN)**
  Elaine Brown, RN BS COHN-S/CM COHC
  Bryan Topp, RN MSN/MPH COHN-S COHC
  
- **American Academy of Audiology (AAA)**
  Laurie Wells, AuD FAAA CPS/A
  **Council Past Chair**
  Antony Joseph, AuD PhD CPS/A
  
- **American Academy of Otolaryngology - Head & Neck Surgery (AAO-HNS)**
  COL James Crawford, MD CPS/A
  **Council Chair**
  Carlos Esquivel, MD, FACS, FAAOA
  
- **American College of Occupational and Environmental Medicine (ACOEM)**
  Bruce Kirchner, MD MPH CPS/A
  Raúl Mirza, DO MS MPH CPS/A FACOEM
  **Council Vice Chair**

- **American Industrial Hygiene Association (AIHA)**
  Chandran Achutan, PhD CIH
  Karin Wetzel, MSPH CIH SGE FAIHA

- **American Speech-Language-Hearing Association (ASHA)**
  Pamela duPont, MS CCC-A CPS/A
  Carol Snyderwine, MHA MA CCC-A CPS/A

- **Institute of Noise Control Engineering (INCE)**
  Charles Moritz, MS INCE Bd Cert
  **Council Secretary /Treasurer**
  Kimberly Riegel, PhD

- **Military Audiology Association (MAA)**
  LTC J. Andrew Merkley, AuD CCC-A CPS/A
  **Council Vice Chair-Education**
  Maj John Foster, USAF BSC CCC-A

- **American Society of Safety Engineers (ASSE)**
  Donald Garvey, CIH CSP
  Brent Charlton, CSP

To submit an article for publication to a future issue of Update contact the CAOHC Administrative Office at info@caohc.org.

555 E. Wells St.
Suite 1100
Milwaukee, WI 53202
(414) 276-5338
www.caohc.org