

# USACHPPM TODAY

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March 2001

A U.S. Army Center for Health Promotion and Preventive Medicine News Bulletin



Photo by: SSG Kathleen T.Rhem

*SPC Clark Dutterer, a preventive medicine specialist, sets a gravid trap.*

(story on page 13)

# USACHPPM TODAY

March 2001  
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## LET US KNOW

USACHPPM TODAY is published by the Public Affairs Office, U.S. Army Center for Health Promotion and Preventive Medicine. It is published quarterly and will keep you up-to-date on technical trends and what is happening at USACHPPM. This publication is on the World Wide Web:

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Make your subject: USACHPPM TODAY

If you have comments or questions concerning USACHPPM or any of its services, or wish to obtain any of the education materials we have available, please contact us.

We receive many calls and comments from our readers on what they read and what they would like to read. To those of you who have responded, "Thank you". Your input is important to us. To the rest of our readers, we would like to say "Let Us Know". If you have specific questions of if there are any topics you would like to see covered, send us an e-mail or write/call us.

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# Inside USACHPPM

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## FORCE HEALTH PROTECTION (FHP) CONFERENCE



The Fourth Annual Force Health Protection Conference will be held 26 – 30 August 2001 at the Albuquerque Convention Center, Albuquerque, NM. The conference will be hosted by USACHPPM.

The conference will provide the multidisciplinary military and civilian force health protection community with the opportunity to increase knowledge and awareness of current issues, attend short courses for professional development, mentor, network, and earn CEUs or CMEs.

It will be organized in three tracks:

**Life Sciences** – technical aspects of prevention/detection of environmental, occupational, and disease threats to the health and performance of DOD personnel. Included are research and development in support of the soldier, and veterinary services to include food and water sanitation.

**Clinical Sciences** – the science and delivery of preventive medicine services. Clinical and general preventive services to include immunization, occupational medicine services, industrial hygiene, hearing conservation, vision conservation and associated services are found here.

**Environmental Sciences** – topics related to identifying, assessing, and providing recommendations for protecting soldier health. This includes environmental health topics such as industrial hygiene, food and water sanitation, medical surveillance, entomological services, health physics, hearing conservation, field sanitation, and disease prevention.

Potential short courses include: Military Audiology, Risk Communication, Exposure Assessment Statistics Refresher, Special Medical Augmentation Response Team, and Humanitarian Assistance Response.

Participants are invited to prepare and display technical posters that will be judged for content and aesthetics by a panel of subject matter experts. The winners will be announced on the final day of the conference. USACHPPM will approve all posters, selecting the 10 best submissions for partial central funding of travel and per diem.

For additional information and/or to enroll: <http://chppm-www.apgea.army.mil/fhp> POC: LTC Wayne Smetana, Director, DSN 584-2641/410-436-2641 or Ms. Jane Gervasoni, DSN 584-5091/410-436-5091.

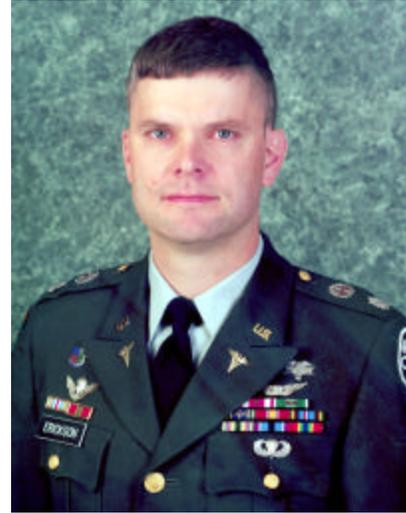
# USACHPPM Personnel

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## THE “A” PROFICIENCY DESIGNATOR

The Surgeon General awarded the prestigious “A” proficiency designator to the four officers listed below. Criteria were established consistent with the provisions of AR 611-101, Personnel Selection and Classification, Commissioned Officer Classification System. A brief synopsis of the criteria follows.

- ◆ Be considered eminently qualified to chair a department, division, or service
  
- ◆ Have held or have been qualified for a “B” Proficiency Designator for a period of not less than 5 years, except for officers of the Medical Corps who must hold the “B” Proficiency Designator, and have not less than 3 years time in grade as a LTC.
  
- ◆ Have a total of not less than 15 years professional experience, at least 10 years of which must have been on active duty in the AMEDD.
  
- ◆ Have been assigned to positions requiring their primary AOC for at least 50 percent of active duty time following their receipt of the “B” Proficiency Designator and have performed in an outstanding manner in these assignments.
  
- ◆ Be leaders in their specialty, and have made significant contributions to the advance of knowledge in a particular field through extensive publication and active national professional organization membership.
  
- ◆ Be a distinct asset to the AMEDD, both as officers and as professional specialists.



**LTC RALPH L. ERICKSON**  
**BS, MD, MPH, DrPH**

Erickson’s record indicates the highest levels of performance in both operational and academic settings and culminated this past year in his being selected over 40 officers senior to him in rank to be the Preventive Medicine Consultant to The Surgeon General. He is one of only two Army preventive medicine physicians to have completed a DrPH program on active duty in more than 20 years. His research has received prominent recognition at civilian and military national meetings and in the most prestigious medical publications. His national stature as a teacher is reflected in the fact that while he led his residency through a flawless accreditation review in May 1998, over 40 percent of the civilian preventive medicine residency programs were on probation. Of the 15 national awards presented to residents by the American College of Preventive Medicine in the last three years, Erickson’s residents at Walter Reed Army Institute of Research have won five of them! His leadership skills have extended well beyond his accomplishments as an officer, clinician, residency director, and researcher. In response to an increased need for preventive medicine officers, he

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worked successfully to double the class size of the Army's preventive medicine residency programs.

He is visionary, articulate, and passionate about the military and his chosen field. He is a superbly able and ethical role model for his fellow officers. Though he is just at the 15 years of required professional experience usually required for the "A" designator, his efforts across the board have been unique and of such overriding significance that he clearly merits early professional recognition.



**LTC BRUNO P. PETRUCCELLI**  
**BS, MD, MPH**

Petrucelli's most recent, prior assignment as Chief of Preventive Medicine for Fort Drum, NY, reflected his unique ability to draw extensive knowledge from preceding assignments in academic medicine, and apply it to a principal target of military medical research: light infantry soldiers and their families. His time at Fort Drum coincided with significant changes in garrison health care delivery as TRICARE was fully implemented in the North Atlantic Region. During his 1999-2000 rotation with the 10<sup>th</sup> Mountain Division (Light Infantry) in Bosnia-Herzegovina, he also witnessed the transition of the SFOR peacekeeping mission to an entirely new phase. In both settings, Petrucelli helped to ensure continuity of quality health care by overseeing the timely collection of accurate disease and injury data, compliance with prevention programs such as mass immunization, and public health input to strategic planning for more efficient use of diminishing resources.

Like many Army physicians, Petrucelli has followed a career that balances military, managerial, academic, and clinical work in a variety of settings. In addition to sites in North America and Europe, his expertise in epidemiology, tropical medicine, deployment health threat assessment, and graduate medical education have taken him to such destinations as Korea, Thailand, Hawaii, Brazil, El Salvador, the Dominican Republic, Egypt, Uzbekistan, and Kyrgyzstan. His scientific portfolio includes 20 presentations at professional meetings, 15 journal articles, and co-authorship of 3 textbook chapters. He is a Fellow of the American College of Preventive Medicine, and he currently manages the Epidemiology Program at USACHPPM.



**LTC JOHN J. CIESLA**  
**BS, MS**

Ciesla is an outstanding officer who is highly qualified for the "A" Proficiency Designator. His contributions to the Army Medical Department and to the U.S. Army have been numeral and directly impact the health of the soldier. He is the personification of a model leader: selfless, visionary, courageous, warrior spirited, and who leads by example. He is credentialed as a Registered Environmental Health Specialist (REHS) by the National Environmental Health Association (NEHA). In the past 20 years, he has successfully served at all levels of

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TO&E medical organization, to include the Division medical battalion, Corps-level medical battalion, group and brigade, as well as serving as an Assistant S2/3 for the 1<sup>st</sup> Medical Group and as the USAREUR (Fwd) Deputy Surgeon during Operation Joint Endeavor. He has directed environmental health support in Texas and Germany as the Chief, Environmental Health Service for the MEDDACs at Fort Hood and Wuerzburg, Germany. As an instructor at the AMEDD Center and School, he was a strong proponent of professional credentialing of environmental science officers and inaugurated the practice of providing the NEHA REHS/RS examination to attendees of the annual educational conference in 1992. He has also served as a staff officer at the Office of the Surgeon General.

His operational experience has enabled him to make unique contributions to the development of emerging deployment medical surveillance doctrine and practice. While serving a part of Task Force Eagle/IFOR, Ciesla developed a base camp assessment tool for the U.S. sector of Bosnia that became a model for an operational risk management approach to field preventive medicine. He also contributed to efforts to conduct systematic environmental surveillance for all U.S. base camps in Bosnia – a collaborative effort between USACHPPM-Europe and the 30<sup>th</sup> Medical Brigade that has become the template for future operations of this type. While at OTSG, he served as a member of the Joint Environmental Surveillance Working Group (JESWG) and was able to share the lessons learned during Operation Joint Endeavor with the working group, thereby assisting process of developing joint doctrine and guidance for environmental and occupational environmental surveillance support to deployed ground forces. As USACHPPM-West commander, Ciesla was a driving force behind the development, staffing, and implementation of a ground-breaking MOU between FORSCOM and USACHPPM that enhances the training and material support available to FORSCOM preventive medicine units. For the past three years he has worked closely with colleagues at the AMEDD Center and School to develop and articulate a new concept for Medical Force Protection in the 21<sup>st</sup> Century. Ciesla has published articles in both *Military Medicine* and the *Journal of Environmental Health*, and has been a frequently requested speaker at both military and civilian professional conferences and courses. He places great value on the ideas and opinions of junior

officers and considers mentoring a primary responsibility. He will continue to provide strategic leadership in Force Health Protection in the years to come.



**LTC JOAN M. G. LYON  
MS, RD, LD**

Throughout her military career, Lyon has been a strategic, future oriented leader, and role model. She has implemented visionary concepts and spearheaded nutrition initiatives with impact across the Department of Defense. Lyon's many and diverse assignments include serving as U.S. Army Dietetic Internship Director, Walter Reed Army Medical Center; Chief, Nutrition Care Operations, 12<sup>th</sup> Evacuation Hospital, Operation Desert Shield and Storm; Deployable Medical Systems Staff Officer, Office of the Surgeon General; and Program Manager, Health Affairs Clinical Business Area. Among her significant contributions is leadership in development of the Humanitarian Daily Ration, which was initially deployed to feed refugees in Somalia and implementation of an interactive, web-based think tank to stimulate nutrition care business process re-engineering across DOD Health Affairs.

As an Army War College Fellow at the Department of Health and Human Services, Lyon contributed to the development of the U.S. Dietary Guidelines for Americans, 2000 and Healthy People 2010, which impacted all Americans.

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## HAMMER AWARDS

Former Vice President Gore's Hammer Award recognizes teams of Federal employees and their partners whose work results in a government that works better and costs less. The National Partnership for Reinventing Government administers the award. The USACHPPM has four recipients of this prestigious award for two separate events.

### ACUTE EXPOSURE GUIDELINE LEVELS TEAM



**Dr. Glenn J. Leach**, Program Manager, Health Effects Research, Directorate of Toxicology, and **Ms. Veronique D. Hauschild**, Environmental Scientist, Deployment Environmental Surveillance Program, Directorate of Environmental Health Engineering, are part of a team of scientists, from government, industry, and academia, who comprised the Acute Exposure Guideline Levels (AEGL) Team. They were recognized for outstanding contributions to the development of the AEGL Program at a U.S. Environmental Protection Agency award ceremony held at the National Academy of Sciences, Washington, D.C. The objective was to develop over 6,000 AEGL values for approximately 400 acutely toxic chemicals. The AEGL values can be used for a range of applications for chemical emergency planning, response, and prevention.

The stakeholder organizations, as well as many individuals and organizations in the public and private sector, wholly endorse this collaborative process for finding science-based approaches to protect public health. Moreover, the AEGL process is voluntary, transparent, and peer reviewed to deliver credible and reliable risk data that all participating organizations can use to manage and prevent risks. The Program will serve as a model for future collaborative programs on risk assessment.

The impetus for the AEGL project was the disaster in Bhopal, India in 1984. Approximately 2,000 residents were killed and 20,000 more suffered irreversible health effects following the accidental release of an industrial chemical from a nearby plant. The response to this event is summarized in the first volume of the *Acute Exposure Guideline Levels for Selected Airborne Chemicals*, developed by the AEGL's team: "The toll was particularly high because the community had little idea what chemicals were being used at the plant, how dangerous they might be, and what steps to take in case of emergency. This tragedy served to focus international attention on the need for governments to identify hazardous substances and to assist local communities in planning how to deal with emergency exposures."

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## JOINT WORKING GROUP FOR NONTOXIC AMMUNITION DEVELOPMENT OF LEAD FREE PROJECTILES TEAM

**Mr. Leroy W. Metker**, Program Manager, Toxicity Evaluation, and **Dr. Wilfred C. McCain**, Toxicologist, Directorate of Toxicology, are part of a team of the Joint Working Group for Nontoxic Ammunition Development of Lead Free Projectiles Team. Partners in this effort also receiving the award include the U.S. Army Environmental Center; the U.S. Army Armament Research, Development and Engineering Center (Chair); Oak Ridge National Laboratory; Naval Surface Warfare Center – Crane; Lake City Army Ammunition Plant; U.S. Army Operational Support Command; U.S. Army Materiel Command; and the U.S. Army Training Support Center.

MG Van Antwerp, Assistant Chief of Staff for Installation Management, recognized them for their outstanding contributions at a ceremony held at the Pentagon. The Joint Working Group provided technical expertise, support, and management for development and implementation of technology to replace

lead in various calibers of small arms ammunition. The use of heavy metals in ammunitions poses problems throughout the life cycle of the material. Hazardous wastes and emissions are generated at the manufacturing facility and the use of these items results in contamination to both indoor and outdoor ranges. There are health hazard risks associated with their usage, and demilitarization and disposal is sometimes difficult and costly.

Mr. Metker and Dr. McCain provided toxicological consultation.

Their input to the Green Ammunition Program directly influenced the Department of Defense's decision to produce and procure tungsten-containing ammunition. It is far less toxic to humans and the



environment than lead, and will result in saving the Army millions of dollars over the ammunition's life cycle.

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## INDUSTRIAL HYGIENE CERTIFICATION

Ms. Deborah Contreras, Industrial Hygienist, USACHPPM-North, successfully passed the American Board of Industrial Hygiene's Comprehensive Practice Examination and achieved the Certified Industrial Hygienist (CIH) designation. Through December 2000, more than 8000 professionals have achieved the CIH credential. This credential not only enhances the credibility and opportunities of the individual, but also promotes high standards of professional conduct for those serving the health interests of the worker and community. Certification in the practice of industrial hygiene is a two-stage process. The individual must first demonstrate his or her educational and experience qualifications for certification and then must successfully complete the written certification examination required by the Board. The certification and maintenance of certification processes provide a mechanism for advancing the profession, providing a frame of reference for identifying industrial hygiene professionals and distinguishing them from others involved in industrial hygiene activities. By participating in and supporting the ABIH program, qualified persons are helping to identify and maintain the professional stature of industrial hygiene.



# HEALTH RISK COMMUNICATION OFFICE

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## RISK COMMUNICATION CAPABILITY

Effective communication is a necessary skill that all environmental and health professionals must possess when conveying technical information to a non-technical, anxious, or frightened audience. Although working in this type of controversial environment may sometimes be overwhelming, understanding the principles of risk communication and being well prepared can make the task much easier. Good communication skills are easy to learn and can be used in a variety of situations. The Health Risk Communication Office specializes in communicating information in low-trust, high-concern situations, as well as training others to become more effective communicators.

By combining years of experience with current academic research on risk communication, the Health Risk Communication Office assists Army installations and agencies in communicating highly technical scientific and medical information. Effective communication with stakeholders in low-trust, high-concern situations may cultivate trust, calm fears, and build better relationships. Remember, any event involving an actual or perceived risk may be viewed as a low-trust, high-concern situation.

A variety of services are available from the Health Risk Communication Office, including training, consultation, and document review. The training workshops are offered throughout the year in different parts of the country, as well as overseas upon request. Basic and Advanced Risk Communication Workshops are offered regularly and specialized classes may be scheduled to meet individual needs.

The 3-day basic workshop defines risk communication and identifies key principles. Topics covered in the basic workshop include building trust

and credibility, developing key messages, understanding the audience, and answering tough questions. The advanced risk communication workshop expands on the basic risk communication principles and includes such topics as managing conflict and hostile individuals, dealing with cultural differences, and understanding the media. Specialized classes also scheduled for this year include Communicating Risks During Deployment, Communication Skills for Working with Restoration Advisory Boards, and Developing Health Care Messages.

In addition to training, the Risk Communication team is available for consultation. This may include support in the following areas: preparation for public meetings and stakeholder open houses, development of a Community Relations plan, review of stakeholder interaction materials (i.e., brochures, presentations, fact sheets, poster boards, media releases), establishment and support to Restoration Advisory Boards, and communication assistance in crisis situations.

Because communication is such a necessity in building good working relationships with all stakeholders, including the public and other agencies, the Health Risk Communication Office is also available for document review. Written, graphic or electronic material may be submitted so that the Risk Communication team may review and make suggestions to improve effectiveness.

If you have any questions or would like more information about any of the services provided by the Health Risk Communication Office, visit our website at <http://chppm-www/dts/hrc/>. POC: Ms. Suaquita Perry, DSN 584-3515, 410-436-3515, or 1-800-222-9698.

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# HEALTH RISK COMMUNICATION WORKSHOPS

In the face of increasing public interest and knowledge about environmental and health issues, being able to communicate information clearly and effectively is critical to the success of your program.

## Introductory Health Risk Communication

20-22 March 2001	White Marsh, MD
22-24 May 2001	San Antonio, TX
17-19 July 2001	Seattle, WA

## Advanced Health Risk Communication

25-28 June 2001	San Antonio, TX
10-13 September 2001	Seattle, WA

## Communication Skills for Working with Restoration Advisory Boards

3-4 April 2001	Chicago, IL
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## Developing Health Care Messages

8-9 May 2001	White Marsh, MD
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For more information or a workshop application, call Ms. Laura Hoover, DSN 584-7715, 410-436-7715, or 1-800-222-9698, or see the Risk Communication Training Web page:

<http://aphis/hr/default.asp>

## KEEPING DEPLOYED TROOPS SAFE

A group of people at USACHPPM are working hard to ensure U.S. service members are safe from environmental threats even in the most remote overseas locations.

The Deployment Environmental Surveillance Program works with commanders to identify and minimize health threats in areas where American troops deploy.

In recent years, service members have faced such diverse environmental threats as oil fires in Kuwait, industrial air pollutants in Bosnia and Kosovo, and contaminated water in Haiti, said program manager John Resta.

Resta said one team goal is to identify potential hazards in an area and get that information to military planners and commanders. He said his team works with intelligence assets, including the Armed Forces Medical Intelligence Center in Fort Detrick, Md., to identify areas that pose the greatest risks.

“Most of the time, our units are working in areas where the environmental conditions are not as good as they are here in the United States,” Resta said. “We want our units to be able to try to avoid those areas, and we provide them personal protective measures in the event they can’t avoid those areas because of military necessity.”

The most recent surveillance example is Kosovo. Environmental health experts, working with intelligence experts, pinpointed 15 places U.S. troops should avoid in the province.

“Right now in Kosovo, U.S. forces are not adjacent to these industrial facilities,” Resta said. “Some of our (NATO Kosovo Force) partners, however, are (in them) and are having problems as a result.”

Once troops deploy into an area, the Deployment Environmental Surveillance Program works with preventive medicine units deploying with troops to provide advice and guidance, lend equipment and

provide laboratory support. The program manages extensive laboratories in Maryland, Germany and Japan.

“They collect samples and ship them back to our laboratories. We’ll conduct analyses with very sophisticated equipment and provide them with the results and our interpretation of the results,” Resta said. “They then go back to the commander and make recommendations about how to reduce risks. The commander selects a course of action and puts it into an operational order.”

Resta’s program also works to minimize the risk of insect-borne illnesses.

“Insects are one of the main sources of illness and injury that militaries have faced historically since Alexander the Great,” he said, specifically citing malaria-bearing mosquitoes and ticks that carry Lyme disease.

Disease remains an issue even in modern military operations. He noted, for instance, how several Marines serving in Somalia contracted dengue fever, an incurable, insect-borne illness. They hadn’t used the insect repellents provided to them.

Resta stressed his team’s efforts don’t release troops from being responsible for their own health and safety.

“The environment can hurt troops, and they need to take the responsibility to protect themselves,” he said. “They need to do the things we taught them in basic training — stay in shape, get plenty of rest, only eat and drink from approved sources, use insect repellent and wash their hands.”

These measures should protect troops from most threats they’d face, Resta said, but they should talk out their concerns with preventive-medicine specialists at the deployment location.

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Deployed service members should also never assume their leaders know about hazardous situations.

“If they see something amiss — they’re on patrol, for instance, and come across a warehouse full of abandoned, rusted out drums — they need to make sure their leadership knows about it,” Resta said. “People need to start looking at environmental threats just like they might look at finding a mine in the road or an enemy gun emplacement somewhere in your area of operations.”

Providing information about potential threats — even notifying individuals if there is no serious threat — is a critical aspect of minimizing deployment health threats, he said.

“There are people who are very concerned about these issues, even if they haven’t gotten sick,” Resta said. “Sometimes we need to make sure people understand that even though something looks dirty, it’s not necessarily causing them a health risk. Sometimes that’s as important to people’s peace of mind as knowing something is there.” (American Forces Press Service)



Photo by: SSG Kathleen T. Rhem

*Pfc. Lorna Libert, a preventive medicine specialist prepares tick DNA for testing.*



Photo by: SSG Kathleen T. Rhem

*Mr. Lawrence Clark, a chemist, connects a summa canister to a tekmar autocan system.*

## HEARING CONSERVATION OUTCOMES ANALYSIS FOR EVIDENCE-BASED GUIDELINE SUPPORT

Audiologists in the Hearing Conservation Program, along with Air Force and Navy audiologists, have been working on a process of establishing standard outcomes metrics data structures. These CPT/ICD-9-CM code structures are designed to support the tracking of clinical algorithms derived from published clinical practice guidelines. The germinal inter-service work was published in the American Journal of Audiology in August 2000. It is entitled "Outcomes Analysis for Hearing Conservation Programs." Electronic copies are available at <http://journals.asha.org>. This paper describes how the investigators developed an outcomes data set from an algorithm for audiometric surveillance derived from the DOD Instructions for Hearing Conservation.

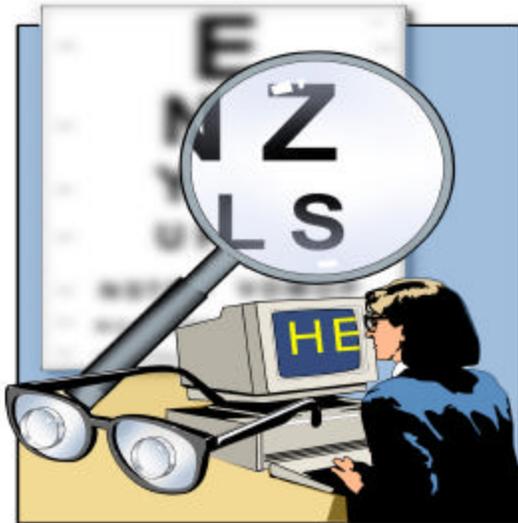
An expanded tri-service list of authors is currently working to develop a military unique version of the published outcomes metrics model to support an evidence-based practice of Preventive Audiology within the occupational and environmental health community of the Military Health System. The subject changes to the published model will significantly refine the military unique version of the outcomes metrics.

These changes are designed to provide better drill down to levels of detail allowing Military Health

System analysts to better identify auditory injury cases separately from non-attributable clinical cases of ear disease or auditory neuropathy. These changes will also allow better tracking of population risks for all types of hearing loss. The military unique refinements and extensions to the published model include: ICD-9-CM extensions to better qualify assessment protocols; ICD-9-CM extensions to better qualify diagnostic classifications; and incorporation of ICD-9-CM "E" codes for qualifying injury cases (acoustic trauma) both in training and wartime operations.

Once this new data model is developed and deployed, audiometric surveillance outcomes from the Standard Ambulatory Data Records (SADR) data will become available for merges with other clinical outcomes data. This data management process will form complete database subject record series of clinic visits to better monitor adherence to clinical practice guidelines. This will assist in evaluating the efficacy of different clinical paths and occupational hearing loss preventive program measures. POC: Mr. Tom Helfer, DSN 584-3797, 410-436-3797, or 1-800-222-9698.

## LOW VISION AWARENESS



What does “low vision” mean to you? A small child with very thick glasses? Someone who is legally blind? Actually, the term covers a wide range of visual impairment.

Eye care professionals define low vision as sight that isn’t fully correctable with ordinary glasses, contact lenses, surgery, or pharmaceutical products. Vision specialists have designated February as Low Vision Awareness Month to help people understand low vision and the wide range of devices that are available to assist those who have it. “Visual impairment” and “partial sight” are other terms that often mean the same thing.

There are several types of low vision. Decreased central vision is the most common. Other types are loss of peripheral (side) vision – also known as tunnel vision – blind spots, blurred vision, inability to see color correctly, loss of depth perception, hazy vision, extreme light sensitivity, and difficulty in adjusting to light changes or glare. A wide variety of things can cause low vision: birth

defects, inherited conditions, illness, diabetes, glaucoma, cataracts, and macular degeneration. By far the most common causes are conditions related to the aging process, such as glaucoma, macular degeneration, diabetes, and hypertension; but low vision is NOT a normal part of the aging process.

Any visual changes should be investigated promptly. If they are the result of uncorrectable low vision, assistive services can help greatly. In children, these services can prevent adverse affects on intellectual and social development and educational attainment. When low vision occurs later in life, threats to independence, the ability to work, and participation in family and community activities can be avoided.

Today, there are 13.5 million people 45 and older who are visually impaired, only 120,000 of who are totally blind. Although not a certainty to which the elderly are doomed, low vision does become more common with age. In fact, most people over the age of 45 fear severe visual impairment more than they fear loss of a limb, becoming deaf, or having to use a wheelchair. This makes spreading the word about assistive devices and supportive organizations very important. There are many vision aids available, some high-tech, some low. Not all of them work for all types of visual impairment, so it’s possible for one person to need more than one device. They are generally divided into optical and non-optical categories. Here are examples of optical devices:

- Magnifying spectacles – stronger than regular glasses. Materials being viewed must be held very close to one’s face.

- Hand-held magnifying glass – readily available in stores.

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- Stand magnifiers – held by a stand that rests on the floor or fits directly over a book. Some have their own light source.

Many non-optical devices, such as large-print reading materials, audio books, and talking clocks and timers, have been available for many years.

Here are some other products:

- Magnifying devices for computers – includes magnifiers that fit over the computer screen, software programs that increase image size, and specially designed monitors.

- Large playing cards.

- Machines that scan print and read aloud.

The American Academy of Ophthalmology points out that the easiest non-optical assistance to use is to get closer to what one desires to see. The myth about causing eye damage by holding a book close to the face or sitting close to the television screen is untrue. At the end of this article is a list of agencies and web sites that offer additional information and support regarding low vision.

Here are some tips for the care and preservation of vision:

1. Visit an eye care specialist (optometrist or ophthalmologist) immediately for any of the following changes in vision –

- \* double or blurred vision
- \* washed out or faded colors
- \* halos around lights
- \* faded or distorted print

- \* inability to see faces clearly
- \* sudden pain in one or both eyes
- \* missing parts of letters or words
- \* sudden appearance of “floaters”
- \* bumping into objects or difficulty judging depth perception on stairs or curbs

2. After age 45, visit an eye care specialist annually and have an exam that includes an evaluation for glaucoma.

3. For those who work on computers, lens prescriptions should include distance, intermediate (computer), and close (reading) ranges.

4. Take a periodic break from computer, bookwork, or television – ten minutes every hour.

5. Avoid eye injuries by wearing appropriate goggles or other protective gear when engaging in yard work, using power tools, playing sports, and for any other anticipated exposure to eye hazards.

6. Limit exposure to ultraviolet (UV) rays by using UV-blocking lenses in sunlight.

7. Eat a low-fat, low-sugar diet that is rich in antioxidants. Antioxidants such as the carotenoids, vitamins C and E, zinc, and selenium are all helpful in reducing age-related eye disease.

8. Take full advantage of light sources. Use high-intensity lighting with an adjustable arm, and place the light source close to reading material. A visor can block light from a competing or distracting source. There are also absorptive lenses for reducing glare.

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9. When eye care professionals have done as much as they can for conditions such as glaucoma, cataracts, macular degeneration, and diabetic retinopathy, vision rehabilitation specialists may still have a lot to offer in the way of services, devices, and training (see below).

Low vision does not have to be the end of the world. A growing number of organizations offer help to maximize remaining sight as well as assistance with adjusting to decreased vision. Here is a sample of what's out there:

<http://chppm-www.apgea.army.mil/dhpw/>

👁️ **American Academy of Ophthalmology:** [www.eyenet.org](http://www.eyenet.org) - consumer information and links.

👁️ **American Optometric Association:** [www.aoanet.org](http://www.aoanet.org) - tips, links and the *Optometric Clinical Practice Guideline for Care of the Patient with Low Vision* (in the managed care section).

👁️ **Healthweb Optometry Page:** [www.libraries.wright.edu/hw/optom](http://www.libraries.wright.edu/hw/optom) - Wright State University - clearinghouse for links to educational materials, list of services, and organizations.

👁️ **Prevent Blindness America:** [www.preventblindness.org](http://www.preventblindness.org) - volunteer eye health and safety organization – information, on-line eye tests, and list of local affiliates.

👁️ **Lighthouse International:** [www.lighthouse.org](http://www.lighthouse.org) - nonprofit organization dedicated to research, education, vision rehabilitation, and advocacy.

👁️ **National Association for Visually Handicapped:** [www.navh.org](http://www.navh.org) - information, on-line store for vision aids, quarterly newsletter.

👁️ State Commissions for the blind and visually impaired.

POC: Ms. Judy Harris, DSN 584-7013, 410-436-7013, or 1-800-222-9698.

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## USE THE ABCs TO BUILD A HEALTHY LIFESTYLE



When was the last time you practiced your alphabet?

Yes, the ABCs!

**A**im for fitness

**B**uild a healthy base

**C**hoose sensibly

The 2001 National Nutrition Month® slogan, “Food and Fitness: Build a Healthy Lifestyle”, urges you to use the *Dietary Guidelines for Americans, 2000* to build a healthy lifestyle. While there are many ways to build a healthy lifestyle, experts agree that food and fitness are the foundation. Here are just some of the ways in which healthy food choices and physical fitness help you to achieve your mental, physical, and emotional best. They:

- Boost your energy level, strength, and endurance
- Help build and maintain healthy bones, muscles, and joints
- Improve your physical performance

- Strengthen your mental stamina
- Improve your mood and attitude
- Enhance your appearance
- Reduce your risk of chronic disease

*The Dietary Guidelines for Americans, 2000* offers a variety of ideas and practical guidelines to help you make healthy choices. The guideline excerpts listed below are intended for healthy children (ages 2 and older) and adults of any age.

**Aim for fitness** – that means aim for a healthy weight and be physically active every day.

- A healthy weight is key to a long, healthy life.
- Over time, even a small decrease in calories eaten and a small increase in physical activity can keep you from gaining weight or help you lose weight.
- Engage in 30 minutes or more of moderate physical activity most, preferably all, days of the week. Make physical activity a regular part of your routine.
- Moderate physical activity is any activity that requires about as much energy as walking 2 miles in 30 minutes.

**Build a healthy base.** Let the Food Guide Pyramid guide you so that you get the vitamins, minerals, energy, and other healthful substances from foods your body needs each day. Make grains (especially whole grains), fruits, and vegetables the foundation of your meals. This forms a base for good nutrition and health.

- There are many healthful eating patterns. Different people like different foods and like to prepare the same foods in different ways.

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- Since foods within the same food group differ in their array of nutrients and other healthful substances, choosing a variety helps you get all the nutrients and fiber you need. It can also keep your meals interesting from day to day.
  - Also choose some low-fat dairy products and low-fat foods from the meat and beans group each day. It's fine to enjoy fats and sweets occasionally.
  - Wash hands often; keep raw meats and ready-to-eat foods separate; cook to proper temperatures; and refrigerate promptly to below 40°.

**Choose sensibly.** Choose a diet that is low in saturated fat and cholesterol and moderate in total fat. Choose beverages and foods that limit your intake of sugars. Choose and prepare foods with less salt.

- Choose low-fat dairy products, cooked dried beans and peas, fish, and lean meats and poultry.
- Use the Nutrition Facts label on the container to help you choose foods lower in fat, saturated fat, and cholesterol. Read the label to compare and help identify foods lower in sodium.

- Take care not to let foods high in sugar crowd out other foods you need to maintain health, such as low-fat milk or other good sources of calcium.
- Choose herbs or spices on foods like grilled or roasted entrees, baked potatoes, and salads to help you limit sodium intake.

Nutrition and fitness are synergistic. Practiced in combination, the two are more powerful than either practiced alone. Being physically active means you can eat a wider variety and larger quantity of healthy foods. In addition, healthy eating fuels physical activity across your lifetime. Start today; use the food and fitness ABCs to build a healthy lifestyle!

POC: LTC Joan Lyon, DSN 584-8856, 410-436-8856, or 1-800-222-9698.

## ACCREDITATION UNDER THE NATIONAL ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM (NELAP)



*Analyzing environmental samples to ensure healthy force*

This directorate is one of the first laboratories in the country to receive accreditation under NELAP. NELAP is an environmental laboratory accreditation program sponsored by the U.S. Environmental Protection Agency. The program is designed to standardize laboratory requirements for accreditation nationally and eliminate laboratories having to undergo multiple state audits. The first laboratory audits under the new standards were performed last spring and the first accredited laboratories were announced on 29 January 2001. POC: Ms. Rosemary J. Gaffney, DSN 584-2208, 410-436-2208, or 1-800-222-9698.

## ENGINE INTAKE AIR FILTER FEASIBILITY STUDY

A feasibility study was conducted to determine if engine air intake filters could be used to obtain deployment surveillance and health risk data. Particulate matter collected on engine air intake filters from a high mobility multi-purpose wheeled vehicle (HMMWV) was analyzed and the data obtained was suitable for establishing human health risk factors. The study was kept narrow in scope in that it focused on the measurement of specific radionuclides in the particulate matter collected on the air filter. An engine intake air filter taken from a HMMWV was analyzed for specific radionuclides. Only qualitative data were obtained from the analyses of these HMMWV air filters but with the addition of an engine hour meter to the vehicle quantitative data can be obtained.

This study demonstrated that the particulate matter collected from engine air intake filters can be analyzed and the data used for health risk assessment and for establishing human health risk factors for deployed troops. This method of obtaining data should result in considerable savings. Additional funding has been requested to continue this study so methods to quantitate additional analytes can be developed. POC: Mr. Kenneth E. Williams, DSN 584-8324, 410-436-8324, or 1-800-222-9698.

## U.S. ARMY HEALTH HAZARD ASSESSMENT (HHA) PROGRAM SUPPORTS THE ARMY'S TRANSFORMATION PLAN

If you work for the Army, you are sure to have heard of GEN Shinseki's Transformation Plan that he described at the Association of the United States Army (AUSA) Conference in October 1999. GEN Shinseki's vision is to create a lighter weight Brigade Combat Team (BCT) able to deploy from the CONUS to a global theater of operation within 96 hours; one Division within 120 hours; and five Divisions within 30 days. His Transformation Plan has three phases:

**PHASE I (1999-2001):** The use of lighter weight surrogate vehicles on loan from other governments or systems already in the Army inventory.

**PHASE II (2001-2008):** The selection, production, and fielding of lighter weight off-the-shelf (OTS) Interim Armored Vehicles (IAVs).

**PHASE III (2008 and beyond):** The production and fielding of lighter weight objective systems, using advanced technologies, currently in the research and development technology base.

The Army's HHA Program, located at USCHPPM, has and will support all three phases of the Transformation Plan:

During PHASE I: Initial, surrogate, armored vehicles have been provided to the Initial BCT at Fort Lewis, WA. The surrogate vehicles include lighter weight vehicles already in the Army inventory and subjected to the HHA process. The initial vehicles will be used until replaced by IAVs.

During PHASE II: The HHA Program is participating in the selection process of an OTS IAV. Our significant contributions include:

The inspection of approximately 24 IAV candidates at a Platform Performance Demonstration (PPD), or market survey, held at Fort Knox, KY during December 1999 and January 2000. Abbreviated HHA reports (HHARs), based upon lessons-learned from past experience with armored vehicles, and detailed HHARs previously completed on vehicles presented at the PPD, supported the safety release for testing by Army personnel.

Attendance at Tank-Automotive and Armament Command's (TACOM) IAV document review meetings during January and February 2000. The key performance parameters (KPPs) in the basic IAV specification include deployability of a combat-ready vehicle by C-130 aircraft, interoperability, and capable of carrying an infantry squad with individual equipment. The HHA Program representative and TACOM safety and human factors personnel teamed up to incorporate safety, health, and human factors requirements in IAV specifications, test plans, request for proposal, and related program documents.

- The HHA Program provided an Initial HHAR on the IAV as input to the Department of the Army's (DA's) Manpower and Personnel Integration (MANPRINT) Assessment for the IAV. The MANPRINT Assessment supported the Army System Acquisition Review Council's (ASARC's) Milestone I Decision Review in February 2000.

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- The HHA Program is a member of the DA MANPRINT Integrated Product Team (IPT) for the IAV. The goal of the IPT is to ensure that MANPRINT considerations are included in the IAV Program at every opportunity.

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- o HHA Program representatives were members of MANPRINT Teams serving on the IAV Source Selection Evaluation Board (SSEB) held at TACOM and the Bid Sample Team conducting vehicle tests at Aberdeen Test Center (ATC) from June to November 2000. Companies responding to TACOM's IAV Request for Proposal (RFP) provided a prototype of their vehicle, the basic IAV or Infantry Carrier Vehicle (ICV), to ATC. Test data collected by the Bid Sample MANPRINT Team was provided to the SSEB MANPRINT Team for inclusion in their evaluation submitted to the Army Acquisition Executive (AAE).

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- The AAE announced his selection and contract award for the IAV on 16 Nov 00. The offer from General Motors/General Dynamics Land Systems (GM/GDLS) was accepted.

The GM/GDLS Light Armored Vehicle (LAV) III will be used for the ICV and Mobile Gun System. The ICV is also the basic chassis for eight additional variants; mortar carrier, reconnaissance, anti-tank guided missile, fires support, engineer support, command and control, medical evacuation, and nuclear, chemical, and biological reconnaissance vehicles. The estimated value of the Army's contract with GM/GDLS is a little less than \$4 Billion, for the deliver of 2,131 vehicles by 2008.

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Once each variant becomes available for testing at ATC and other locations, HHA test data will be collected to support the completion of HHARs. These assessments will support future ASARC Milestone Decision Reviews.

During PHASE III: The HHA Program will routinely complete HHARs on objective vehicles, destined to replace the IAV, as they come out of the research and development technology base and proceed through the Army's materiel acquisition decision process. POC: Mr. Bob Gross, DSN 584-2925, 410-436-2925, or 1-800-222-9698.



# USACHPPM-PACIFIC

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## EAST TIMOR

CPT Christopher Johnson, sanitary engineer, Environmental Health Engineering Division, deployed to East Timor for a 90-day rotation as the U.S. Support Group in East Timor (USGET) medical planning officer and force health protection officer. His mission was to interpret medical threat data, make force health protection recommendations to the commander, and develop and oversee the execution of medical/dental humanitarian assistance missions. (Editor's note: East Timor lies between the South China Sea and the Indian Ocean. It is an island in the Indonesian archipelago, located about 400 miles northwest of Australia.)

The mission of the USGET is to channel U.S. Pacific Command (PACOM) humanitarian assistance to the people of East Timor. PACOM chartered USGET to develop humanitarian assistance missions, coordinate the logistical and administrative aspects of those missions, and to serve as a liaison to the people of East Timor and the United Nations Transitional Administration East Timor (UNTAET). USGET is staffed with military personnel from throughout PACOM.

From a force health protection/preventive medicine perspective, East Timor presents many of the classic environmental health challenges associated with operations in a developing country in the tropics. East Timor has significant issues with waste management, general sanitation, vector-borne diseases such as malaria, dengue fever, Japanese encephalitis, and other maladies like tuberculosis. To further compound the problem, the East Timorese healthcare system was destroyed during militia violence in 1999, and is in the process of being rebuilt. Thus, force health protection requirements ran the full spectrum, with no assistance from the local health network. Despite the array of tropical health problems facing

USGET personnel on a daily basis, strict adherence to basic force health protection measures such as taking chemoprophylaxis, using DEET, implementing work-rest cycles, and consuming liberal quantities of water mitigated the health threat and kept USGET focused and mission capable.

With so many public health issues in East Timor, continuous medical threat assessment was a vital mission to keep the USGET commander aware of health issues affecting the readiness of his force, and to take all steps possible to preserve the health of the force. To this end, USGET medical personnel used weekly World Health Organization epidemiological reports for East Timor, USGET sickcall data, vector surveys, and shared medical data with Australian environmental health personnel to assess and modify USGET force health protection measures, as well as to establish personal protective measures for U.S. military personnel coming ashore to perform humanitarian missions. To date, USGET has enjoyed the fortune of having no diagnosed cases of malaria or dengue fever.

The vast destruction left in the wake of 1999 militia violence, coupled with poor public sanitation, created a very conducive environment for the spread of disease. In response, USGET executed numerous environmental health training missions for East Timorese citizens working for the UNTAET district governments and Non-Governmental Organizations (NGOs) in disciplines such as food sanitation, vector control, personal protective measures, personal hygiene, and waste management, in an effort to improve public health through knowledge. USGET personnel worked with malaria control teams, local healthcare providers, and other environmental health agencies to identify target audiences and deliver user-friendly preventive medicine information. Also, there was ample need for sanitary surveys, vector/rodent surveys, and the

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water supply quality control training to assess environmental health parameters. USGET provided feedback from these surveys to East Timorese public health officials, United Nations staff, and NGOs, along with technical recommendations for improving the overall environmental program.

In the medical planning arena, USGET was responsible for determining the medical/dental health needs of the East Timorese through surveys, interviews, and the development of medical/dental concepts of operation for the PACOM medical/dental humanitarian assistance missions. These initiatives were implemented to alleviate some of the East Timorese health issues. The overwhelming health needs of the citizens of East Timor and the precarious political climate created by dealing with a new East Timorese health department and the UNTAET health team, made developing strong liaisons with all of the healthcare players critical for the success of U.S. military medical missions. This planning environment necessitated a parallel planning process with continuous coordination with the East Timorese health department, the UNTAET health team, NGO healthcare providers, and the PACOM Joint Staff Operations.

Once all of the coordination between the various agencies was complete and the U.S. medical teams hit the ground, the teams achieved amazing results. For example, a five-person Navy optometry/ophthalmology medical team provided eyecare for over 3,200 patients, to include making prescription glasses for over 2,300 patients and performing 100 cataract removal surgeries, all during a 12-day mission. Similarly, a medical/dental group from the TARAWA Amphibious Readiness Group/13<sup>th</sup> Marine Expeditionary unit consisting of six doctors, two dentists, six environmental health specialists, and 15 support personnel, provided health care for 950 East Timorese citizens over a 2 ½ day span. It was an awesome experience to see these teams hit

the ground and make such a dramatic impact on the people. The teams' achievements demonstrated the important role that medical/dental humanitarian assistance plays in the lives of people.

By far, the greatest medical/dental needs in East Timor seemed to be for medical specialists such as surgeons, dermatologists, plastic surgeons, dentists, and preventive medicine personnel. A training component was programmed into each medical/dental mission so that East Timorese medical personnel could work alongside U.S. personnel to receive needed hands-on training. The training performed by our medical/dental teams had a more lasting effect than the short-term success resulting from our directly seeing patients. This is because the East Timorese can continue to use the knowledge they gained to enhance their environmental health conditions.

The public health issues in East Timor will not be eliminated anytime soon, as the country struggles toward democracy and developing their own infrastructure. However, the humanitarian assistance provided through USGET made significant contributions to the East Timorese people it touched and paid even greater dividends toward showing the U.S. concern for the new country and its citizens. POC: CPT Christopher Johnson, DSN 263-8538. Email: [christopher.johnson@jpn.amedd.army.mil](mailto:christopher.johnson@jpn.amedd.army.mil)



*Captain Johnson distributes eyeglasses to East Timorese*



*Caption: (l to r) The Honorable Sergio de Mello, Special Representative to the Secretary General of the UN; Captain Johnson, and COL Williams, USGET Commander*

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## NBC 2000

The USACHPPM-Pacific sponsored the first annual Medical Management of Biological and Chemical Casualties (M2BC3) and the Medical Effects of Ionizing Radiation (MEIR) courses, 18 – 22 September 2000, at Camp Zama, Japan. The two courses were entitled NBC 2000.

NBC 2000 was a flagship effort to bring current information to the military medical community in the Pacific Theater on the proper management of casualties exposed to Nuclear, Biological and Chemical (NBC) agents, prior to the patient entering a Medical Treatment Facility (MTF). The courses were designed to prepare medical personnel to treat patients based on their exposure to an NBC agent or ionizing radiation sources. Fifty-five physicians, nurses, emergency medical treatment technicians, and safety officers from the Army, Navy, and Air Force participated. Additionally, 13 Japan Self Defense Force personnel and two Japanese members of the National Institute of Radiological Science, the counterpart of the Armed Forces Radiobiological Research Institute (AFFRI), attended.

Participants learned the basic NBC individual protective measures; signs and symptoms associated with exposure to NBC agents; and procedures to

triage, stabilize, and decontaminate patients prior to their arrival at the MTF. In addition to this didactic training, hands-on training was provided in Mission Oriented Protective Posture (MOPP) level 4 to emphasize and enhance the instruction that was provided in the classroom environment.

The MEIR course was taught by staff members from AFFRI, Bethesda, MD. Participants learned about the basic principles of ionizing radiation, the acute and delayed effects of ionizing radiation, and how to manage and treat patients exposed to high levels of ionization radiation.

Students expressed complete satisfaction with the level of instruction and professional manner in the course. One student commented, “he felt better prepared to manage patients exposed to NBC agents and radiation sources as a result of attending the courses”.

NBC 2001 will build upon the positive reputation of NBC 2000, and promises to offer a training opportunity that will continue to enhance the readiness posture of medical personal in the Pacific Theater, as well as fortify the principles of force health protection. POC: CPT Carlos Corredor, DSN 263-8502.

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## RECENT PUBLICATIONS

DA Pam 40-503, Industrial Hygiene Program  
(<http://www.usapa.army.mil/gils/newpubs.html>)





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