



# TRAINING TO RESPOND TO TERRORISM

by

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1346 – Mongols catapult plague-infected corpses into the Crimean city of Kaffa to create an epidemic.

1945 – Nuclear weapons kill more than 100,000 people in Hiroshima and Nagasaki, Japan.

1979 – A biological weapons plant in Sverdlovsk, Russia, accidentally releases airborne anthrax spores. There are 66 confirmed deaths.

1984 – The Rajneeshee cult, attempting to influence participation in a local election, contaminates salad bars in an Oregon town with salmonella. More than 750 people become ill.

1995 – The Aum Shinriko cult places bags of the nerve agent sarin on five subway trains in Tokyo, Japan. Although the agent is not maximum strength and is poorly disseminated, 12 people die and 5,510 are treated for injuries.

1995 – A homemade truck bomb explodes outside the Murrah Federal Building in Oklahoma City, Okla., killing 168 people.

2001 – Letters containing anthrax spores are mailed to a magazine office in Florida, media celebrities in New York and political leaders in Washington. Five people die, thousands who were potentially exposed are treated with antibiotics, while mail and other government services are disrupted.

The deadly potential of chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) weapons has been known for centuries, but never before has the threat seemed as evident or as imminent as today.

This history underscores the importance of the medical system as the front line of defense. In the past year we have emphasized the training of all Army Medical Department (AMEDD) personnel to ensure we have the edge when it comes to responding to the threat of terrorism using CBRNE weapons.

## CBRNE Medical Training

The Army Medical Department Center and School has prepared exportable, tailored and scalable courses for use at medical treatment facilities; it is addressing CBRNE in every short and long course; and addressing CBRNE casualties in every ARTEP (Army Training and Evaluation Program) unit testing program.

### Among the course changes:

- **AMEDD soldiers common skills.** In addition to long-established NBC defense skills and buddy aid, all AMEDD soldiers get CBRNE orientation and patient decontamination training.
- **Advanced Individual Training and functional courses.** Military specialty training courses and specialized skill courses have incorporated specialty-specific CBRNE instruction, including both classroom and field exercise segments
- **Leadership courses.** These now include basic, intermediate or advanced Homeland Security classes including information about the Federal Response Plan, the Army's CBRNE role and leader skills required by the audience.
- **Primary Care courses.** Army medics are learning CBRNE first-responder skills. CBRNE training for physicians, nurses, physician assistants and dentists is part of officer basic training. "Gold standard" courses, such as the Medical Management of Chemical and Biological Casualties, and Medical Effects of Ionizing

Radiation, are being incorporated into physician/physician assistant lifecycle training plans.

• **Postgraduate Professional Short Course Program (PPSCP).** These courses now embody course-specific CBRNE training, plus a Web-based "Introduction to CBRNE" review that is now a prerequisite for PPSCP enrollment. The interactive program is available at [www.swankhealth.com/cbrne.htm](http://www.swankhealth.com/cbrne.htm). It provides both narration and text, with additional details available at the click of a mouse. It includes a history of CBRNE incidents, the nature of the terrorist threat, descriptions of agents and symptoms, a glossary of terms and links for additional information.

The school is also developing and disseminating exportable products, including emergency-room training materials; a SMART (Special Medical Augmentation Response Team) training package; a CBRNE mass-casualty exercise program for medical treatment facilities; ARTEP tests that embody CBRNE challenges; and proficiency testing materials.

A three-day CBRNE Trainer/Controller course was held in San Antonio, Texas. It brought in 226 people from all Army medical treatment facilities – including caregivers and officials charged with planning emergency-response plans.

The audience was schooled on both clinical aspects of managing CBRNE casualties and the organizational aspects of managing CBRNE mass-casualty emergencies. Attendees went home with materials they can use to deliver CBRNE instruction to their colleagues, guidance for developing CBRNE emergency plans that meet Joint Commission on Accreditation of Healthcare Organizations standards; and scenarios and evaluation guidelines for CBRNE exercises.

Planners at the U.S. Army Medical Command have drafted formal guidance to medical treatment facilities for planning, training and preparing to support their installations, communities and regions during CBRNE incidents. They are aggressively pursuing links with other commands and civilian agencies to smooth the processes of communication, synchronization, coordination and integration needed to support the Federal Response Plan.

## Rapid-Response Medical Teams

We have organized Special Medical Augmentation Response Teams (SMART) to deliver a small number of highly skilled specialists within hours to evaluate a situation, provide advice to local authorities and organize military resources to support response to a disaster or terrorist act. These teams, located at Medical Command regions and subordinate commands throughout the country, have critical expertise in nuclear, biological and chemical casualties; aeromedical isolation and evacuation; trauma and critical care; burn treatment; preventive medicine; medical command, control, communications and telemedicine systems; health facilities support; veterinary support; stress management; and pastoral care.

These teams are organized, equipped, trained and ready to deploy within 12 hours of notice. Their capabilities were most recently demonstrated when seven members from Tripler Army Medical Center deployed from Hawaii to the Pacific island of Chuuk to assist residents injured during a typhoon.

Since last fall, patient decontamination equipment has been fielded to 23 medical treatment facilities with emergency rooms, and personnel have been trained in its use. With this equipment, up to 20 ambulatory patients an hour

can be decontaminated. Another 33 MTFs will be similarly equipped during the current fiscal year. Enhanced medical surveillance, sensitive enough to detect a biological attack, is being implemented across the Department of Defense.

We also purchased 1,355 sets of personal protection equipment for emergency responders and SMART team members; and 11 chemical detector devices for selected medical centers and the SMART-NBC.

### ***Dangerous-Disease Experts***

The U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) at Fort Detrick, Md., is a great national resource of expertise on dealing with dangerous diseases, whether natural outbreaks or the result of biological warfare. When anthrax-laced letters were sent through the mail late last year, USAMRIID geared up for a phenomenal effort to analyze thousands of samples collected from possibly-exposed sites, looking for the deadly bacterium. They continue to assist law enforcement agencies attempting to identify the criminal responsible for these acts of terrorism.

USAMRIID now is partnering with the National Institute of Allergy and Infectious Diseases to create new research facilities at Fort Detrick. The two institutes have had a productive relationship in the past working on biodefense-related diagnostics, drugs and vaccine research, and this effort will marshal research capabilities while consolidating resources in response to the nation's changing needs.

USAMRIID intends to expand its current facilities and continue its mission of research on drugs, vaccines and diagnostics to safeguard the health of the nation's armed forces.

The agencies have begun the process of planning and designing the new facilities, to be located at an existing secure site within Detrick, and expect construction to take place over the next several years. The new facility will be a biosafety laboratory composed of biosafety level 2, 3 and 4 areas that will allow researchers to study disease-causing microbes that may be used as agents of bioterrorism.

### ***Cutting-Edge Equipment***

In addition to the work of USAMRIID and other exciting medical research efforts, Medical Research and Materiel Command is making great progress in equipping medics to serve with the transformed Army of the future on expanded, technology-dense, rapidly-changing battlefields.

#### **Some of the recent initiatives include:**

- The Forward Deployable Digital Medical Treatment Facility, a research platform to develop lighter, more mobile field hospitals using new shelters and technology. Plans are for two to four soldiers to be able to carry and set up a tent and all the equipment in it. The facility will include a wireless local area network and a communication system interoperable with the Warfighter Information Network architecture.
- Portable oxygen generators to avoid the necessity of transporting thousands of 150-pound canisters of oxygen to field medical units.
- The Telemedicine and Advanced Technology Research Center is exploring how personal digital assistants (PDAs) can be used to improve medical record keeping, give providers instant access to medical information and patient histories, alert providers of lab results, speed the

flow of information and shorten the time medics on the battlefield must spend filling out forms. This PDA will collect information at the symptom level, essentially establishing a Theater Medical Surveillance program, again sensitive enough to detect biological attacks in the field.

- The U.S. Army Medical Materiel Development Activity and Meridian Medical Technologies developed an improved autoinjector for nerve-agent treatment shots, which was approved by the Food and Drug Administration last year. The injector allows a soldier to inject atropine and 2 pralidoxime chloride through the same needle. Compared to older equipment, it will take up less space, is easier to carry, easier to use and puts the drugs to work faster.

It is obvious that very limited medical care can be provided if both the treater and treated are in MOPP-4 protective equipment. Collective protection is essential. The Chemical Biological Protective Shelter (CBPS) and the Chemical Protective DEPMEDS Shelters (CP DEPMEDS) are soon to be fielded to the Army. These systems, while designed for NBC, will enhance medical effectiveness in all environments.

The new Stryker ambulance, the medical support vehicle for the Interim Brigade Combat Teams, is ready for field testing. With a top speed of 60 miles an hour, the armored vehicle will be able to keep up with the fight. It can carry four litter patients or six ambulatory patients, and allows basic medical care to be provided during transport.

### ***The New Medic***

We also continue to transform our medical field unit structure to support the Army's Interim Force through the Medical Reengineering Initiative.

We made visible progress in the past year transforming our field medics into the new 91W Healthcare Specialist Military Occupational Specialty (a merger of the old 91B Combat Medic and 91C Clinical Specialist). Both Active and Reserve units are providing training focused on emergency care, primary care, medical force protection, and evacuation and retrieval. All 91Ws will be National Registry Emergency Medical Technician certified.

I am frankly excited at this increase in emphasis on medical skills that can mean the difference between life and death for a soldier on the battlefield, and this is an important axis of advance into the 21st century for the combat medic.

A marriage between the garrison and field units is required to make this successful. Visiting the 25th Infantry Division in Hawaii, I walked the lanes for combined Expert Infantry and Expert Field Medical Badge testing. It reaffirms the unique link that we in the AMEDD have with those who close with and destroy the enemy, and underscores the need to hone medical skills as we are doing with the 91W program.

### ***Healthcare at Home***

While all this is going on, we still have a mission of operating hospitals and clinics, providing day-to-day health care for our beneficiaries. Last year we began providing care under TRICARE For Life, and soon we will begin preparing for a new generation of TRICARE contracts.

It seems one cannot open a newspaper or a magazine without reading about the soaring cost of health care; about the escalating malpractice crisis that is driving physicians to leave the practice of medicine; about the increasing cost

shifting from employer to individual; about the restrictive practices that third-party payers impose to be able to profit and survive in this market.

We in Army Medicine coexist in that world of health-care costs. But, we continue to place our patients first, whether we are talking about families, retirees or soldiers on point. The ability to respond to warfighters, providing care from forward surgical teams to combat support hospitals, depends on the quality base of our direct-care system.

We are in the era of accountability – for efficiency as well as outcomes and quality. We have adopted a business case approach to justifying requirements that has established credibility for our efforts.

Metrics show improvement in medical board processing, operating-room backlogs and cancellation rates. Routine things like officer and NCO efficiency report timeliness, travel card payment and data quality show positive trends.

Last year we inaugurated the Excalibur Awards, recognizing excellent performance by AMEDD units and providing an opportunity to share information and stimulate improvements. Fort Benning, Ga., Medical Department Activity; the AMEDD Center and School; 18th Medical Command and the 3274th U.S. Army Reserve Hospital were the first winners of this new honor.

The U.S. Army Medical Command has developed a comprehensive corporate patient safety program embracing the philosophy and attributes of a High Reliability Organization and Safety Focused Culture. The focus is on prevention, not punishment, and on improving medical systems and processes in order to overcome preventable human error.

#### **This program has made significant progress, including:**

- Establishing a baseline through a patient safety climate survey at all facilities.
- Training sessions at 37 facilities to provide leaders the tools needed to execute best practices to prevent patient harm.
- Developing a database to capture every event that generates an actual incident report or near misses.
- Developing a comprehensive patient safety manager tool kit with accompanying CD-ROM to support implementation of the patient safety program at medical treatment facilities.

Through these and other efforts, we expect to be a leader in the national movement to improve patient safety.

I am confident that the restructuring of the new TRICARE contracts will lead to smoother business processes and better fiscal accountability across the Military Health System. The reduction in contract regions will have a direct effect on the portability issue, as will the national carve-out for pharmacy services.

### ***AMEDD Around the World***

All around the world, Army medical personnel are serving in splendid fashion to carry out our mission of supporting America's Army as it defends freedom.

That a soldier could be severely wounded in Afghanistan on a Monday and on Saturday night be at Walter Reed Army Medical Center in Washington, D.C., telling me of his care at the forward surgical team in Afghanistan, his movement to the combat support hospital in Uzbekistan, the transit through the Air Force facility at Incerlick, Turkey, and the operation he got at Landstuhl, Germany — all in less than a week – is nothing short of miraculous.

We have medics helping keep the peace in the Balkans, standing guard in Korea and Europe, supporting anti-terrorist efforts in the Philippines, training on medical assistance missions in Central America and supporting assistance missions in Africa. Army veterinarians have helped control an outbreak of avian influenza that threatened the poultry industry of Virginia, Army dentists have provided care for some of our neediest citizens while training on Indian reservations, and Army medics have supported troops fighting forest fires in Oregon.

Soldiers often remark that among the most personally satisfying missions are those where our units provide medical care for the needy civilian populations of countries where we deploy. We carry out these Medical Civic Action Programs (MEDCAPs) as part of our ongoing training program in Central America, while we are supporting forces in the Balkans and Afghanistan, and most anywhere else we go. This is part of the excitement of Army medicine – acting as ambassadors of American values while making a difference in the lives of people who have no other access to medical care.

In many of our missions we find ourselves working side-by-side with coalition partners. The hospital supporting troops in Kosovo is a joint operation of the U.S. and the United Kingdom. Spain, Jordan and Russia have set up hospitals in Afghanistan. We cooperate with Honduran medical authorities when our medics training at Joint Task Force Bravo conduct MEDCAPs. We have ongoing cooperative ventures like the Armed Forces Research Institute of Medical Sciences operated jointly with the Royal Thai Army. Some 75 countries send military personnel for training at the AMEDD Center and School. Such efforts to combine resources and share knowledge can only benefit the soldiers of all nations involved.

### ***Reserves Vital***

It is very important to note that AMEDD missions are not limited to the Active Component. Reserve and National Guard soldiers play an essential role in the activities of the AMEDD, today more than ever. Reserve medical units have taken the lead in providing support to soldiers in the Balkans and Afghanistan, seamlessly integrating with Active units there. When Active medical units deploy, we often call on reservists to fill the gaps and keep our garrison hospitals and clinics operating.

These Reserve Component soldiers could not perform their vital service without support from their home communities. The people who must temporarily do without their regular physician, or without a nurse or technician on whom they usually depend, should know that these citizen-soldiers are a critical part of the national defense. We must publicly acknowledge their contributions and say a loud “thank you!” to all involved.

The level of quality, the ingenuity, the leadership of our noncommissioned officers, the flexibility and agility of leaders at all levels meeting the unique demands of each mission, tailoring the capabilities packages as missions demand ... all make me proud of our AMEDD. It is the kind of “quiet professionalism” – as it was described by a senior line commander – that will assure our success in supporting the force as we continue to root out terrorism.

One can only speculate on what this new year of 2003 might bring ... where we in the Army Medical Department might find ourselves committed around the globe. However, one can confidently predict that wherever we find ourselves, we will be caring for soldiers and soldiers' families with excellence and compassion.