

Medication for the Masses: Pharmacy's Role in Times of Crisis

"We have to be prepared for all hazards, for all contingencies."

Richard Carmona, M.D., MPH,
Surgeon General of the United States
Nov. 22, 2002

"The new reality requires a collective need to protect and defend our communities and our nation for a strange, new kind of warfare."

Jane D. Hull, Governor, Arizona
Nov. 21, 2002

"I heard about it, searched it out and decided it was something our facility should help in doing."

Carolyn Boardman,
Chief of Pharmacy Services,
Raymond W. Bliss Army Health Center,
Ft. Huachuca, Arizona
Nov. 22, 2002

"Pharmacists are at a premium here. Many work 60-hour weeks and somehow, they need to be available for training in this type of response. Most of them aren't working for a government agency, so this shows you how something like this is truly about an entire community responding and learning to be prepared."

Theodore G. Tong,
University of Arizona
College of Pharmacy
Nov. 23, 2002

"Our real focus and goal was looking at the system, being able, when the system is overwhelmed, to receive the National Pharmaceutical Stockpile - that 94,000 pounds of equipment - and be able to get that ready, to set up to that big drug store."

Les Caid,
Tucson Fire Dept. Battalion Chief,
Manager, Tucson Metropolitan
Medical Response System
Nov. 23, 2002

"We are stronger after this exercise than we were before we started. We still have a lot of work to do, but we've established a very good plan which will work as a great base for the rest of our operations."

Elizabeth MacNeill, M.D.,
Chief Medical Officer,
Pima County Health Department
Nov. 23, 2002

"Tremendous work in building one of the finest public health task forces in the nation."

Tommy G. Thompson,
Secretary, U.S. Dept. of Health and
Human Services
August 2002, Tucson, Arizona



A report from the University of Arizona College of Pharmacy Bioterrorism Task Force
on
the Tucson Metropolitan Medical Response System's
Bioterrorism and National Pharmaceutical Stockpile Mass Dispensing Conference
Nov. 20-22, 2002

by Theodore G. Tong, Pharm.D., and David Von Behren, MPH, APR



Partners in Preparation

The days following September 11, 2001 brought a new era of challenges for health care professionals. With threats of bioterrorism on American soil came many questions about how communities would respond to these new crises. The public and many pharmacists heard for the first time about the National Pharmaceutical Stockpile, a cache of medications and medical supplies that can be delivered to any community in the United States to help treat victims of a bioterrorism attack or mass emergency.

The University of Arizona College of Pharmacy's Bioterrorism Task Force grew out of the need in Tucson, Arizona, for a mass medication dispensing protocol. Directed by Professor Theodore G. Tong, Pharm.D., associate dean for academic and student affairs, and director of the Arizona Poison and Drug Information Center, the Pharmacy Task Force rapidly organized pharmacy professionals in organizations and corporations across Southern Arizona. The Task Force worked directly with the U.S. Public Health Service, the Centers for Disease Control, the Tucson Metropolitan Medical



The UA College of Pharmacy Bioterrorism Task Force joined with community partners across Southern Arizona, including more than 150 local pharmacists, and local and national leaders. Left to right, Shane Clark, Arizona Air National Guard, Kim Janes, Pima County Office of Emergency Management and Homeland Security, Les Caid, Tucson Metropolitan Medical Response System, Dennis Douglas, Pima County Health Dept., Richard Carmona, U.S. Surgeon General, Ray Sayre, Tucson Fire Dept., and Theodore Tong, UA College of Pharmacy.

Response System, the Pima County Health Department, the Pima County Office of Emergency Management and Homeland Security, and many other health organizations to unify the pharmacy disaster response across all levels. In November 2002, the Task Force participated in one of the first large scale training deployments of the National Pharmaceutical Stockpile. The Task Force successfully rallied the support of more than 150 diverse community pharmacists to organize, train for and complete a complex three-day bioterrorism drill. Lessons learned during the drill will be incor-



Pharmacists from across Southern Arizona donated their time to train as emergency responders in the event of bioterrorism event. Volunteers included retail and community pharmacists, pharmacy technicians, pharmacy administrators, and pharmacy students, all dedicated to preparedness.

porated into Centers for Disease Control guidelines and training materials for medication dispensing in mass emergencies. U.S. Surgeon General Richard Carmona, M.D., MPH, hailed the event as a successful demonstration of the critical need for pharmacists in all aspects of mass emergency and bioterrorism response planning.

The purpose of this booklet is to share many of the lessons in mass dispensing and emergency preparedness learned by the UA College of Pharmacy Bioterrorism Task Force during the past 18 months.

Testing Pharmacy and Community Response Plans

For three days in November 2002, the UA College of Pharmacy Bioterrorism Task Force joined with local, state and national agencies at a conference addressing bioterrorism issues. Created by the Tucson Metropolitan Medical Response System and organized by a variety of public agencies, the conference was the culmination of more than a year of work to address complicated issues of mass medication dispensing. The event included a simulated bioterrorism event, the arrival of a portion of the National Pharmaceutical Stockpile, and a mass dispensing clinic involving Col-

lege faculty, students, staff and alumni, as well as pharmacists and pharmacy technicians from across Arizona. The goal of the clinic was to dispense a 10-day supply of antibiotics to 1,000 people in six hours. The dispensing clinic ultimately processed more than 1,800 people during the six hours. The conference and the dispensing event were widely recognized for successfully testing the Tucson community's ability to respond to a bioterrorism event. Photos below and on the next two pages highlight events of the conference.



Nov. 20, 2002: A simulated exposure at the "XYZ Hotel" in Tucson involves anthrax released into a conference room via fire extinguishers. The event is part of a larger scenario involving anthrax exposures in Phoenix and Tucson.



The stockpiles of medications and supplies can be delivered anywhere in the U.S. within 72 hours.



Nov. 21, 2002: A portion of the National Pharmaceutical Stockpile (NPS) arrives at the Arizona Air National Guard base in Tucson.



NPS containers have clear Lexan sides and color coded labels to quickly and clearly identify the contents.

Medication for the Masses: A Dispensing Plan in Action



Information signs in several languages guide participants to ask for assistance. Translators also are on hand.

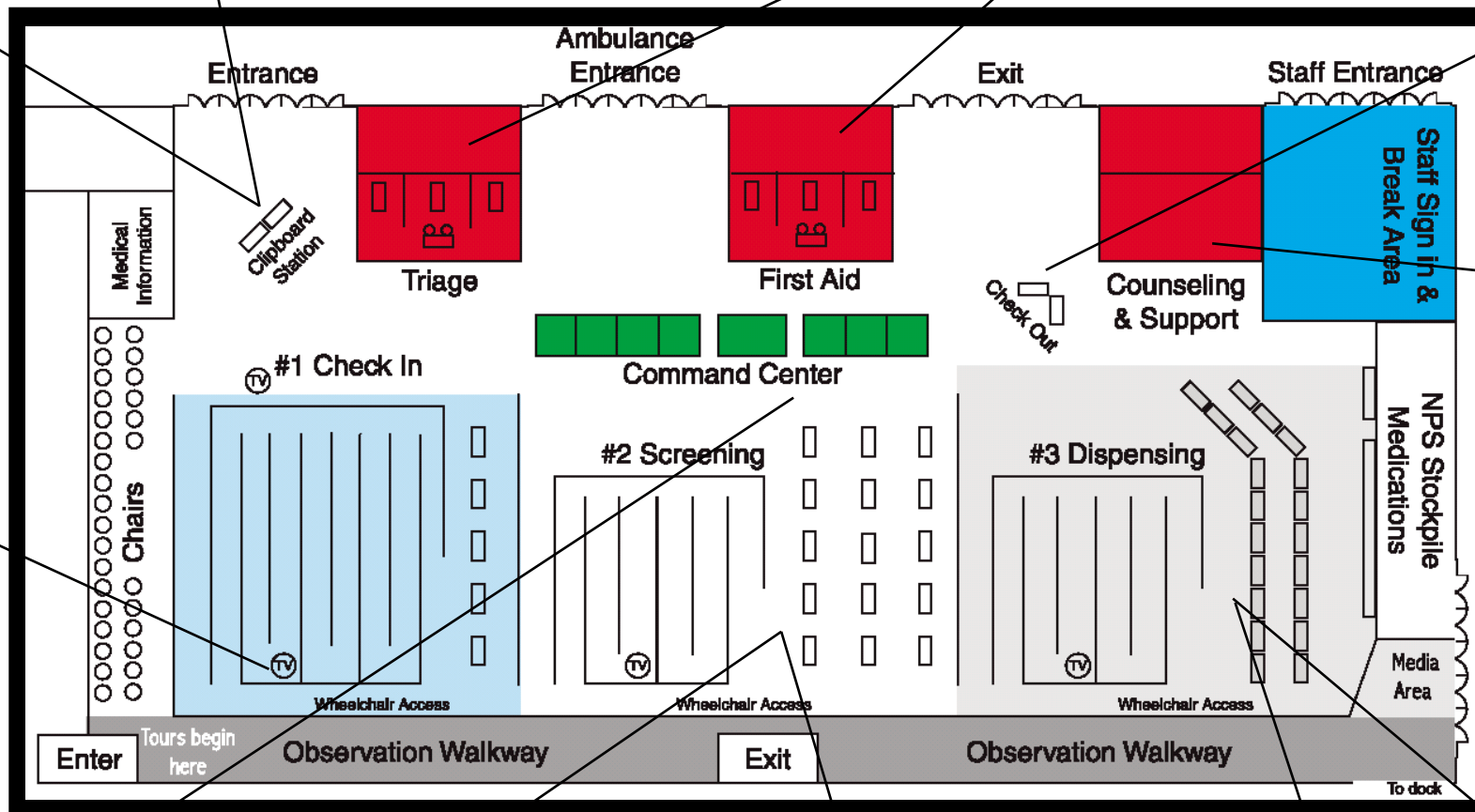
Nov. 22, 2002: At the dispensing clinic entrance, participants are asked questions to determine their potential level of exposure to anthrax. Those believed to be exposed fill out an information sheet including medication history and contact information for follow-up care.



Triage and First Aid stations direct the seriously ill out of the dispensing line.



Check out and data entry provide quick and efficient methods for logging all patients who use the clinic and helping to track them for follow-up medication supplies and other care.



Pima County Health Department mass dispensing floor plan served as the model for the dispensing clinic drill held November 22, 2002 at the Tucson Convention Center



Three television stations staged in Check In, Screening and Dispensing waiting areas keep patients informed about what is happening at each point in the line. Short messages recorded in English and Spanish run continually.



In a real event, stress levels will be very high among patients and staff. Counseling support offers patients access to mental health professionals within walking distance of the dispensing clinic floor.



Security provided by local police and area hospitals keep watch over the dispensing lines. A security desk at the Command Center allows an excellent view of the dispensing clinic floor.



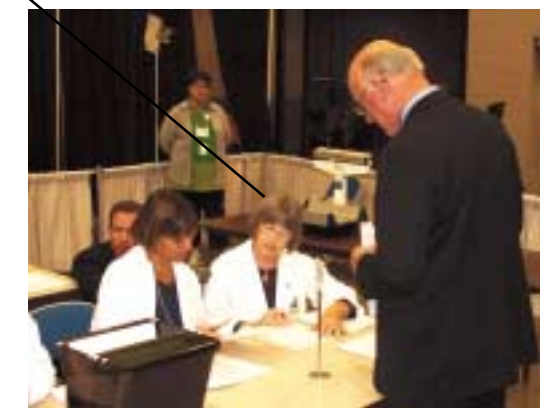
Screening area offers patients the chance to discuss their medication history and any questions or concerns they may have about the dispensing clinic.



Volunteer pharmacists from a variety of retail, community and public health settings decide which medications patients will receive.



Dispensing area is large enough to accommodate large numbers of patients waiting to receive their initial supply of medication.



Patients are counseled by pharmacists on the appropriate use of their medication, where to receive follow-up supplies and given a 24-hour hotline number for questions.

Lessons Learned



Think of Pharmacy Professionals During Community Preparation for Mass Emergency and Bioterrorism Response

Pharmacists are a resource of critical expertise, experience and knowledge essential for a comprehensive and integrated community response to mass emergencies and incidents from acts of bioterrorism.

Efforts to prepare community readiness and improve the infrastructure responsible for communication, coordination, cooperation and care are strengthened when pharmacists are involved and contribute in the process of planning logistics and organizing response.

Pharmacy professionals' contributions are not limited to specific practice settings - hospital, community, long-term care, home care, industry or academics- when they participate in health response to mass emergencies and incidents of medical biochemical terrorism.

Pharmacy professionals can provide front line assistance to local and state agencies with dispensing of antibiotics and medicines, information and counseling on the proper course of treatment, side effects of the medicines, and follow-up care to patients/victims during mass emergencies and bioterror events.

Pharmacists can assist local and state agencies with efforts to prepare contingency plans to identify and access local suppliers of medicines, their delivery, storage and inventories which will compliment the assets of the National Pharmaceutical Stockpile.

Pharmacists can be prepared to serve on emergency preparedness teams in essential responder roles in addition to pharmaceutical and medical supply dispensing and inventory management such as patient/victim evaluation and triage, first aid and critical incident stress intervention.

Orientation to critical incident management and training of pharmacy professionals focused on specific learning objectives and using the concept of "training-the-trainer" are essential for their successful deployment in responding to mass emergencies and bioterror threats



Future Plans

A National Center for Pharmacy Preparedness

The National Center for Pharmacy Preparedness and Response to Biologic and Toxic Terrorism grew out of the need for a national medication dispensing protocol for mass emergency and bioterrorism preparedness plans after September 11, 2001.

The Pharmacy Preparedness Center is the natural extension of the UA College of Pharmacy's Bioterrorism Task Force. Directed by Professor Theodore G. Tong, Pharm.D., associate dean for academic and student affairs, and director of the Arizona Poison and Drug Information Center, the Pharmacy Task Force rapidly organized pharmacy professionals in the months after September 11, 2001. Further developing the UA Pharmacy Task Force into a National Pharmacy Preparedness Center is critical to sharing its lessons learned with communities nationwide. Many communities lack the resources to create a workable blueprint for their mass emergency plans in this new era of bioterrorism. The leadership demonstrated by the UA College of Pharmacy in designing the pharmacy elements of these emergency plans is vital to organizing

plans for swift and safe medication response to mass emergency and bioterrorism events.

Currently, the Task Force is working to address and strengthen communications, coordinate patient care issues and to assess emergency preparedness infrastructure. The pharmacy manager's subcommittee is drafting a strategic plan to meet the needs for anti-dotes, vaccines, medication information, and counseling in a mass emergency. Members of this subcommittee include representatives from large retail pharmacy chains, public and private hospitals, the UA College of Pharmacy and local public health departments and organizations. The education subcommittee is devising education guidelines for pharmacists and pharmacy technicians to better prepare them for their roles in the event of a mass emergency. The communications subcommittee is exploring communication issues among hospitals, health care providers and the general public in the event of bioterrorism or a mass emergency.

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