

# Fighting Back: Pharmacists' Roles in the Federal Response to the September 11 Attacks

*Pharmacists were there—in New York City, in Arlington, Va., and in rural Pennsylvania—providing care and leadership.*

John Babb and Kathleen Downs

*They pass by me with the small red body bag as I look into their white, stark faces. An American flag is draped over the bag, and scores of firemen and police line the street to honor one of their own. The ritual is repeated seven times this shift. Tears are never far from my eyes.*

—Comdr. Richard Lawson, USPHS Pharmacist

On September 11, 2001, did you stand in front of the television, feeling horrified, angry, heartbroken, sick at your stomach, helpless? Did you want to do something—anything—to help? Did you wonder how pharmacists could best marshal their skills to help ease the suffering? It should be of some pride and consolation that our profession was well represented at the sites of the emergencies. Pharmacists were there—in New York City, in Arlington, Va., and in rural Pennsylvania—providing care and leadership. In this article, we describe the response of U.S. Public Health Service (USPHS) pharmacists to the terrorist attacks on our country.

## Public Health Service Assets

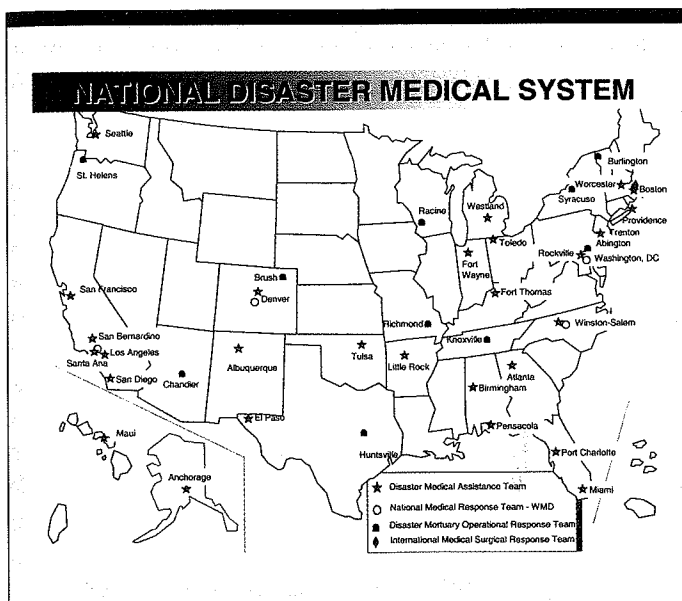
The United States Public Health Service (USPHS) comprises all of the organizations under the direction of the assistant secretary for health, who reports to the secretary of health and human services. Under the Federal Response Plan, the U.S. Department of Health and Human Services (DHHS) is the lead department for meeting public health and medical challenges during a disaster or any other event that overwhelms local resources. The Office of Emergency Preparedness (OEP) is the action agent within HHS, and within OEP two organizations, the National Disaster Medical System (NDMS) and the Commissioned Corps Readiness Force (CCRF), immediately deploy their personnel and resources to cope with large-scale emergencies.

NDMS is made up of 70 teams based in cities across the

### Acronyms

CDC—Centers for Disease Control and Prevention
CCRF—Commissioned Corps Readiness Force
DMAT—Disaster Medical Assistance Team
DMORT—Disaster Mortuary Operational Response Team
EIS—Epidemic Intelligence Service
DHHS—U.S. Department of Health and Human Services
MMRS—Metropolitan Medical Response System
MST—Management Support Team
NDMS—National Disaster Medical System
NMRT—National Medical Response Team
NPS—National Pharmaceutical Stockpile
OEP—Office of Emergency Preparedness
SAMHSA—Substance Abuse and Mental Health Services Administration
USPHS—United States Public Health Service
VMAT—Veterinary Medical Assistance Team

United States. The teams are composed primarily of private citizens who are federalized temporarily while their team is deployed. Pharmacists serve primarily on NDMS's 44 Disaster Medical Assistance Teams (DMATs), which also include physicians, physician assistants, nurses, nurse practitioners, and administrative and technical support personnel. A total of 27 of these teams are considered "Level 1 Teams" and are able to field a unit that can deploy to a disaster within 12 to 24 hours along with medical and logistical equipment and a pharmaceutical cache. NDMS is also capable of fielding four National Medical Response Teams (NMRTs) that also include pharmacists and specialize in responding to incidents involving weapons of mass destruction. Other NDMS teams—Veterinary Medical Assistance Teams (VMATs), Disaster Mortuary Operational Response Teams (DMORTs), Burn Specialty Teams, Pediatric Specialty Teams, Mental Health Teams, Crush Specialty Teams, and the



International Medical and Surgical Response Team—have few pharmacist members.

CCRF comprises more than 900 health care professionals—pharmacists, physicians, nurses, dentists, scientists, mental health personnel, veterinarians, engineers, environmental health officers, and others—who are capable of bringing their skills to bear during disasters, strife, or other public health emergencies. CCRF personnel respond to domestic or international requests to provide public health consultations. All CCRF members are active duty commissioned officers in USPHS.

## Response

In Arlington, Va., OEP sent two DMATs and two NMRTs to a staging area to respond to medical needs and any chemical, biological, or other hazardous materials that might have been associated with the plane crash at the Pentagon. All of these resources were redeployed within a day of the attack, except for one of the NMRTs, which remained on the scene to assist the Urban Search and Rescue Teams and other federal responders. The Centers for Disease Control and Prevention (CDC) deployed Epidemic Intelligence Service (EIS) officers to provide surveillance of all hospitalizations and emergency department visits related to the event in Washington-area hospitals. Burn Specialty Teams sent nurses to the Washington Hospital Center Burn Center to care for victims of the attack on the Pentagon.

Several pharmacists served on the DMATs and NMRTs, as logisticians. Other pharmacists were deployed with the National Pharmaceutical Stockpile (NPS) to support that program. A USPHS pharmacist was assigned to help the governments in the national capital region draft an operational plan for the use and distribution of the NPS.

In New York City, four DMATs, five DMORTs, one NMRT,



Ground Zero after the terrorist attack on the World Trade Center.

and a Management Support Team (MST) were sent to the site of the attack. In the ensuing days, with the support of the Substance Abuse and Mental Health Services Administration (SAMHSA), NDMS and CCRF dispatched numerous mental health care providers to assist federal responders with the mind-numbing realities of the tragedy and its immediate aftermath. At the request of OEP, the U.S. Navy sent the *USNS Comfort* to New York to provide a makeshift haven for the responders. OEP also deployed a VMAT to care for the search dogs.

CCRF supplemented the mortuary operation at the New York Medical Examiner's Office with dentists who had specialized training in forensics. Many CCRF officers volunteered to provide computer support to the DMORT operation in New York, which was attempting to process the overwhelming amount of antemortem and postmortem information. On September 20, a 43-person CCRF medical team deployed to the area of the event, followed 2 days later by a similar DMAT made up predominately of USPHS officers. The CCRF and PHS-1 DMAT teams rotated among five separate medical treatment sites. These teams provided direct medical care to the responders for eye injuries, respiratory problems, soft tissue injuries, and many other illnesses and injuries.

CDC deployed a large number of EIS officers to area hospitals, pharmacists to support the deployment of NPS, and worker safety/industrial hygiene specialists to monitor occupational health risks at Ground Zero. CCRF pharmacists also supported the NPS operation. The pharmacists were staged with the stockpile in New York and the D.C. area, so that they could be quickly available. DMATs from across the country sent burn nurses to assist Cornell Presbyterian Hospital in caring for 32 patients who were seriously burned as a result of the attack.

Many pharmacists have been among the health care professionals who responded to the emergency in New York. In the weeks since the terrorist strike, 15 DMATs have rotated into New York, each with one or more pharmacists among their membership. USPHS pharmacists have functioned as lead pharmacists with

MSTs, meaning they had responsibility for all pharmaceutical procurement for each of the patient treatment areas. Pharmacists on DMATs have not only dispensed medications but have also provided preventive medicine services and acted as safety officers. In fact, the CCRF medical team was led by a pharmacist. This officer was responsible for the health, welfare, and operational management of the entire team for a 12-day rotation while team members provided medical care at five sites adjacent to Ground Zero. A retired USPHS pharmacist, now employed by Abbott Pharmaceuticals, volunteered to come back to serve as the MST commander for a week. A USPHS pharmacist served as the liaison aboard the *USNS Comfort* while it was in New York. Other USPHS pharmacists served at the National Naval Medical Center in Bethesda, Md., in order to backfill stations vacated by Navy pharmacists who were stationed on the *Comfort*. USPHS pharmacists who had received special training with CDC's NPS were deployed to New York in case the stockpile needed to be used. In fact, this was the first time the NPS had been activated.

*We're fitted with hard hats, goggles, gloves, and respirators and begin our walk through a security checkpoint, past a scene perimeter that is too unbelievable to register on the mind. Our assignment, the West Treatment Site, has been established in the lobby of what is left of the American Express building. The tables and chairs in the atrium eatery remain, some upright, some overturned. Coffee cups full of stale, cold, dust-filled liquid sit with partially eaten muffins and bagels, their owners fleeing—we hope—minutes before part of the World Trade Center tower crashed through the glass ceiling. Pieces of twisted steel hang at grotesque angles among chunks of concrete. This scene is our office for the next 12 days, where we will be privileged to take care of some of the finest people in our country.*

—Capt. Kathleen Downs, USPHS Pharmacist

In Somerset County, Pa., OEP deployed a DMORT team, a portable morgue, and an MST to work with the Federal Bureau of Investigation in dealing with the crash of the plane that was

apparently diverted from an attack on a large population center by the heroic acts of the passengers on board. A USPHS pharmacist was the deputy commander of the MST as well as the chief of logistics during this operation.

In mid-October, even as we were writing this article, a letter containing anthrax was received in the Hart Senate Building in Washington, D.C. In response to this act of bioterrorism, pharmacists, nurses, and mental health providers were deployed by CCRF to assist the Office of the Attending Physician in the Capitol. Pharmacists, based on the orders of the attending physician, provided patient education and dispensed thousands of antibiotic prophylaxis prescriptions while nurses obtained patient histories and nasal specimens. At the height of this response, more than 1,000 people were in line in the Capitol hallways waiting for services. Data entry and medical records personnel, also USPHS officers, assisted in entering several thousand patient records into a database.

*Over a thousand people in line, waiting for hours, afraid of what news awaited them around the corner and through the clinic door. Perhaps the most important thing we did was to calmly and thoroughly explain the short course of ciprofloxacin while their laboratory work was processed. The most common question: "Will a short-term treatment create bacterial resistance, such that the antibiotic may not work if I really need it?" All were happy to have a professional take the time to answer their questions and put their exposure risk in perspective. Pharmacy belongs here.*

—Lt. Comdr. Jim Bresette, USPHS Pharmacist

On November 1, 2001, as an attempt was being made to put this article to bed, CCRF pharmacists were being deployed to five separate locations in efforts to deal with anthrax prophylaxis. To date, more than 30,000 patients have been treated by USPHS physicians, nurses, physician assistants, and pharmacists, with more to come tomorrow. It is a worthwhile effort.

Pharmacists and others served as administrative liaisons to the Federal Emergency Management Agency's Emergency Support Team in Washington, D.C., and at the OEP Emergency Operations Center in Rockville, Md.

A USPHS pharmacist functioned in OEP headquarters as the coordinator of the NDMS and CCRF response at all three venues, having oversight responsibilities for New York, Pennsylvania, Arlington, Va., and the OEP Emergency Operations Center. This pharmacist was involved with emergency coordinators in the Department of Veterans Affairs, CDC, the Food and Drug Administration, SAMHSA, the Department of Defense, and other government entities, as well as local and state representatives at each site.

A USPHS pharmacist is the acting principal deputy assistant secretary for health. This individual reports to the HHS secretary and has been involved from the very beginning in oversight of the entire response program for the department.



Public Health Service Treatment Clinic, Ground Zero.

PHOTO BY CAPT. JAMES SPAHR

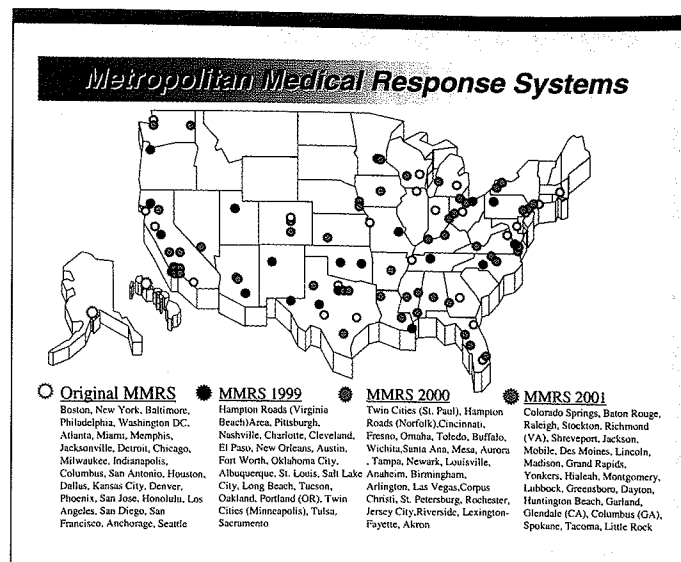
## Four Ways to Become Involved

How can pharmacists now outside the federal system fight back against future terrorist threats or attacks? There are four ways to get involved.

The best way is to enter the Commissioned Corps of the USPHS and then immediately join the CCRF (additional information can be found online at <http://usphs.gov> and <http://oep.osophs.dhhs.gov/ccrf>). CCRF has more than 140 pharmacists on response rosters who are trained for a wide variety of missions. CCRF pharmacists have the opportunity to receive training with the NPS, gaining familiarity with chemical and biological threat agents, appropriate pharmaceuticals, legal considerations for NPS utilization, and dispensing/distribution options. CCRF pharmacists have access to Web-based training opportunities relating to weapons of mass destruction, deployment modalities, personal preventive care, critical incident stress monitoring, and a variety of appropriate topics. Even though the rescue phase is long over, CCRF pharmacists are still involved in the response in New York and Washington, and will remain engaged until the fight is won.

Pharmacists can join an NDMS team (see [www.oepndms.dhhs.gov](http://www.oepndms.dhhs.gov) for a list of teams in different geographic areas and team leader contact information). Each DMAT and NMRT is required to have pharmacist members, and teams are usually looking for more. NDMS team members are most often civilians who are willing to share their knowledge and skills to help their fellow Americans. NDMS teams respond to hurricanes, floods, earthquakes, and, now, terrorist attacks. DMATs are placed on a roster for 2 months per year, during which they are expected to be prepared to deploy if there is a federally-declared disaster. DMATs are also used by the state in which they are organized if there is a local disaster or emergency. NMRTs are expected to be available to deploy at any time if there is a threat or use of weapons of mass destruction.

Currently, 97 cities in the United States have Metropolitan Medical Response Systems (MMRS) and more are to be put in place in the next 3 years. Each MMRS is expected to formulate plans and procedures to deal with events involving weapons of mass destruction. Each MMRS has or is in the process of developing plans to receive, deploy, and distribute the pharmaceuticals in the NPS. Unfortunately, many cities have limited or no pharmacist involvement in this planning, so pharmacist participation is opportune. Information on an individual city's MMRS status and contact information can be found at [www.mmrs.hhs.gov](http://www.mmrs.hhs.gov). In



fact, the New York City MMRS planning was very evident in the efficient way they were able to distribute antibiotic prophylaxis in response to the anthrax letters. Many local pharmacists were directly involved in that effort.

Finally, if anything illustrates the need for patient education, it is the lack of accurate information concerning bioterrorism. Americans need a calm, knowledgeable resource on which they can rely. If pharmacists are not up to date on anthrax, smallpox, plague, tularemia, and organophosphates, they should be. Reliable information is available at [www.bt.cdc.gov](http://www.bt.cdc.gov). Also, the Web site for CDC's Office of Communication ([www.cdc.gov/od/oc/media](http://www.cdc.gov/od/oc/media)) is a source for up-to-the-minute press releases.

Whatever the individual choice, pharmacists can get involved in this battle. We may not be carrying a gun, but there is no doubt that we are in this fight.

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