



HISTORY OF THE **Metropolitan Medical Response System (MMRS)**

THE FIRST DECADE: 1995-2005



APRIL 2005



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This report was prepared for the MMRS National Program Office by
The Titan Corporation's Emergency Management Division.



The Titan Corporation
11955 Freedom Drive
Reston, VA 20190-5673
(703) 434-4000

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EXECUTIVE SUMMARY

The purpose of this document, *History of the Metropolitan Medical Response System (MMRS) – The First Decade: 1995 – 2005*, is to describe the program’s genesis, growth, content, and achievements to date. This historical perspective is also intended to increase awareness of the scope and success of the MMRS program by tracing emergency preparedness efforts in the United States. In preparing this history, a wide range of sources was used (e.g., hard copy and electronic records were reviewed, Federal contracts with individual MMRS jurisdictions were assessed, and key personnel involved in the MMRS program were interviewed). To the extent that these documents and interviews clarify policies that influenced the MMRS program’s development, they are included directly in the body of the text.

The Department of Health and Human Services (HHS) founded the MMRS program in 1996 in response to the increased terrorist threat evidenced by the sarin nerve agent gas attack in the Tokyo subway system in March 1995 and the bombing of the Alfred P. Murrah Federal Building in April 1995. The program was designed to enhance and coordinate local and regional response capabilities for highly populated areas that could be targeted by a terrorist attack using weapons of mass destruction (WMD). The MMRS concept, organizing principles, and resources are also applicable to the management of large-scale incidents such as hazardous material (HazMat) accidents, epidemic disease outbreaks, and natural disasters requiring specialized and carefully coordinated medical preparation and response.

Initially managed by HHS, the MMRS program now operates under the aegis of the U.S. Department of Homeland Security (DHS). The MMRS program was transferred from HHS, Office of the Assistant Secretary for Public Health Emergency Preparedness (OASPHEP), Office of Emergency Response (OER) to the DHS Federal Emergency Management Agency (FEMA)/ Emergency Preparedness and Response (EP&R) Directorate on March 1, 2003, when 22 Federal entities were consolidated into the newly established DHS.¹ On October 3, 2004, the MMRS program was transferred from DHS EP&R to the DHS Office for Domestic Preparedness (ODP), Office of State and Local Government Coordination and Preparedness (SLGCP).²

The MMRS program undertakes the following:

- Integrates and enhances existing response systems to respond to a mass casualty or “surge” event.
- Incorporates customized incident planning and specialized training and exercises.
- Provides specialized pharmaceutical and equipment acquisitions including, but not limited to, protective equipment, communications equipment, and medical supplies.
- Uses an “all-hazards” planning approach.
- Prioritizes the response activities and allocation of resources until significant external resources arrive and are operational (typically between 24 and 72 hours).

¹ “Metropolitan Medical Response System Overview,” DHS/FEMA/EPR/Preparedness/MMRS, April 15, 2004.

² “FY05 Homeland Security Grants Announced,” <<http://mmrs.fema.gov/Main/Events/fy2005awards.aspx>> (December 3, 2004).

Under various legislative and executive mandates, the MMRS program supports local jurisdictions in planning, developing, equipping, and training regionalized networks of “first responders” (e.g., law enforcement officials, medical and public health personnel, HazMat technicians, and firefighters).³ MMRS planning addresses the following five areas: Early Recognition, Mass Immunization and Prophylaxis, Mass Patient Care, Mass Fatality Management, and Environmental Surety. Key MMRS components include the following:

- Planning Team
- Logistics
- Forward Movement of Patients
- Provision of Medical Care
- Integration of Health Services
- Response Structure
- Biological Elements
- Training
- Equipment/Pharmaceuticals
- Operational Capability

By virtue of its integrated structure, MMRS promotes partnerships that bring together a variety of emergency preparedness and emergency management systems. These partnerships span the local, State, and Federal levels as well as the public and private sectors. In forging close operational links between emergency responders of all types, the MMRS program has helped create a working national emergency response infrastructure in our most highly populated, and most vulnerable, localities.

METROPOLITAN MEDICAL RESPONSE SYSTEMS



ORIGINAL

Anchorage, Baltimore, Boston, Chicago, Columbus, Dallas, Denver, Detroit, Honolulu, Houston, Indianapolis, Jacksonville, Kansas City (MO), Los Angeles, Memphis, Miami, Milwaukee, New York, Philadelphia, Phoenix, San Antonio, San Diego, San Francisco, San Jose, Seattle, Washington, DC (MMST) [Note: Atlanta was also an MMST]

1999

Albuquerque, Austin, Charlotte, Cleveland, El Paso, Fort Worth, Hampton Roads (Virginia Beach) Area, Long Beach, Nashville, New Orleans, Oakland, Oklahoma City, Pittsburgh, Portland (OR), Sacramento, Salt Lake City, St. Louis, Tucson, Tulsa, Twin Cities (Minneapolis)

2000

Akron, Anaheim, Arlington (TX), Aurora, Birmingham, Buffalo, Cincinnati, Corpus Christi, Fresno, Hampton Roads (Norfolk) Area, Jersey City, Las Vegas, Lexington-Fayette, Louisville, Mesa, Newark, Omaha, Riverside, Rochester, Santa Ana, St. Petersburg, Tampa, Toledo, Twin Cities (St. Paul), Wichita

2001

Baton Rouge, Colorado Springs, Columbus (GA), Dayton, Des Moines, Garland, Glendale (CA), Grand Rapids, Greensboro, Hialeah, Huntington Beach, Jackson, Lincoln, Little Rock, Lubbock, Madison, Mobile, Montgomery, Raleigh, Richmond (VA), Shreveport, Spokane, Stockton, Tacoma, Yonkers

2002

Amarillo, Arlington (VA), Bakersfield, Chattanooga, Columbia, Fremont, Ft. Lauderdale, Ft. Wayne, Glendale, Hampton Roads (Newport News, Chesapeake) Area, Hartford, Huntsville, Irving, Jefferson Parish, Kansas City (KS), Knoxville, Modesto, Orlando, Providence, San Bernardino, Springfield, Syracuse, Warren, Worcester

2003

Atlanta Regional Coalition, Northern New England Region (New Hampshire, Maine, Vermont), Southern Rio Grande Region (TX), Southeast Alaska Region

As of March 31, 2004

³ “Metropolitan Medical Response System,” *About MMRS*, <<http://mmrs.fema.gov/Main/About.aspx>>.

INTRODUCTION

The threat of a domestic terrorist attack demands a planned, safe, timely, and effective locally coordinated MMRS response to minimize damage, protect lives, and safeguard property. Former MMRS Program Manager Kevin Tonat, describing the condition of the emergency responder environment before the introduction of the MMRS program, states that “there was no support for jurisdictions to prepare for a terrorist attack . . . and there was no Federal expertise consistently provided to maintain a standard of capabilities.”⁴ Where before “there was nothing at the local level, except HazMat, to respond to a WMD event,” MMRS filled an important niche, ultimately drawing on a wide range of experts from the medical, Emergency Medical Services (EMS), law enforcement, and public health communities to prepare localities for a mass care event.⁵

In light of past attacks and in the face of the continued threat that further attacks may yet take place, the Federal Government mandates improved planning for, and response to, acts of terrorism involving WMD. The MMRS program—pioneering in its coordination of local, State, and Federal first responders—is critical to ongoing homeland security efforts to respond effectively to terrorist attacks. By providing healthcare professionals and emergency responders with training, equipment, and medical supplies, the MMRS program enables local response elements to cope with and manage incidents until the projected arrival of external assistance (typically within 48 to 72 hours).

The MMRS program has continued to grow in spite of radical Federal agency transformations, competing Federal interests, and repeated challenges to Federal budgets. At the time of this writing, 125 jurisdictions participate in the MMRS program through Federal funding. In fact, the MMRS program remains the longest running Federal program supporting first responders. The program’s strength lies in each jurisdiction’s operational capabilities and in the remarkable flexibility with which each jurisdiction can tailor the MMRS program to its specific needs. “Each MMRS jurisdiction was responsible for defining their respective needs, and the program was designed to provide for this flexibility.”⁶

In February 2005, MMRS National Program Manager Dennis Atwood stated that the need for MMRS is as great, or greater, than ever:

. . . we are reminded weekly in the mainstream news media that mass casualty threats are increasing (nuclear proliferation is worsening; Southeast Asia and Africa continue to be vigorous breeding grounds for zoonotic and other deadly diseases, with dire warnings that Avian Flu will soon generate the next global pandemic outbreak; Islamic Jihadist terrorism is using the Iraq War as a strong recruiting incentive; and trauma care resources in the U.S. continue to diminish).⁷

⁴ Kevin Tonat, interview by the author, October 2004.

⁵ Rick Bodane, interview, 2004.

⁶ Dr. Robert F. Knouss, interview, September 16, 2004.

⁷ Dennis Atwood, MMRS National Program Manager, interview via e-mail, March 2, 2005.

The importance of the MMRS program, and the capabilities it has supported in 125 jurisdictions, is again made evident in the issuance of the *Interim National Preparedness Goal* (or Goal), on March 31, 2005, as required by Homeland Security Presidential Directive (HSPD)-8, *National Preparedness*. Among the national priorities specified in the Goal are the following:

- Expanded regional collaboration.
- Strengthen chemical, biological, radiological, nuclear, and explosive (CBRNE) detection, response, and decontamination capabilities.
- Strengthen medical surge and mass prophylaxis capabilities.⁸

MMRS program guidance, and the local capabilities developed and sustained in accordance with it, has consistently included these elements. Several MMRS jurisdictions have more than 8 years experience in developing their response capabilities for a mass care event, exemplifying the MMRS program's goal of integrating infrastructure, communication, intelligence, and critical care with best practices in emergency preparedness and emergency management.

⁸ "Interim National Preparedness Goal, Homeland Security Presidential Directive 8: *National Preparedness*," U.S. Department of Homeland Security, March 31, 2005.

ORIGINS: 1995 TO 1997

Government Agency: HHS/Office of Emergency Preparedness (OEP)

In September 2002, OEP changed its name to the Office of Emergency Response (OER).

Total Federal Funding (FY97): \$10.5 million

1997 Jurisdictional Funding Awarded: \$350,000

New MMRS Jurisdictions: 25 (with 2 MMST jurisdictions)

Anchorage, AK

Atlanta, GA (MMST)

Baltimore, MD

Boston, MA

Chicago, IL

Columbus, OH

Dallas, TX

Denver, CO

Detroit, MI

Honolulu, HI

Houston, TX

Indianapolis, IN

Jacksonville, FL

Kansas City, MO

Los Angeles, CA

Memphis, TN

Miami, FL

Milwaukee, WI

New York, NY

Philadelphia, PA

Phoenix, AZ

San Antonio, TX

San Diego, CA

San Francisco, CA

San Jose, CA

Seattle, WA

Washington, DC (MMST)

METROPOLITAN MEDICAL RESPONSE SYSTEMS



The sarin nerve agent attack in the Tokyo subway system in March 1995 and the bombing of the Murrah Federal Building in Oklahoma City in April 1995 prompted President Bill Clinton to sign Presidential Decision Directive (PDD)-39, *U.S. Policy on Counterterrorism*, on June 21, 1995.⁹ Broadly, PDD-39 set U.S. policy on terrorism, directing the U.S. Government to take steps to prevent, prepare for, respond to, and recover from WMD attacks. Specifically, with respect to MMRS program history, the Directive laid the groundwork for bolstering nationwide

⁹ Presidential Decision Directive-39, *U.S. Policy on Counterterrorism*, June 21, 1995.

emergency management capabilities.¹⁰ PDD-39 mandated the adoption of a comprehensive approach to emergency management as it related to the increased threat of WMD terrorist attacks. The Directive divided the WMD threat into two categories: crisis management and consequence management. **Crisis management** referred to instances where the perpetrators of an attack are apprehended prior to an actual attack; PDD-39 charged the Federal Bureau of Investigation (FBI), domestically, and the Department of State (DOS), internationally, with responsibility for responding to these events. Crisis management also referred primarily to the law enforcement community. **Consequence management**, by contrast, referred to emergency management plans, overseen by FEMA, that would alleviate the short- and long-term physical, socioeconomic, and psychological effects of an actual WMD attack.¹¹ PDD-39, in other words, served as a catalyst for the formulation of an effective national strategy for dealing with WMD attacks.¹² The sharp distinction between crisis and consequence management belonged to the lexicon of emergency management until the introduction of the National Incident Management System (NIMS) in February 2003, created under the authority of HSPD-5, *Management of Domestic Incidents*. HSPD-5 standardized emergency management practices through the development and implementation of the NIMS, which provided a framework for national operational standards, performance measures, and protocols that can be adopted by State and local first response and emergency management communities in responding to all domestic hazards, disasters, and emergencies.¹³

In direct support of PDD-39, HHS initiated strategic planning using a two-tenet approach to prepare the United States for potential acts of terrorism. The first approach was to help State and local governments, as well as their key private sectors, gain the necessary capability to respond effectively and appropriately in a coordinated manner in the event of a local nuclear, biological, and/or chemical (NBC) terrorist incident. The second approach was to enable Federal capabilities to augment quickly and robustly any State and local government responses to a WMD attack.

To begin formulating its ideas, HHS OEP and the U.S. Public Health Service (USPHS) held a seminar on July 15, 1995, titled *Responding to the Consequences of Chemical and Biological Terrorism*.¹⁴ Focusing on health and medical requirements in a chemical/biological (C/B) terrorist attack, 40 guest speakers addressed an audience comprised of international, Federal, State, and local C/B response elements, including delegates from Japan who had responded to the sarin attack. The HHS Assistant Secretary for Health, Dr. Philip R. Lee, seemed to articulate a collectively held assumption at the conference when he stated that “Meeting [the] multiple challenges posed by a terrorist attack really requires unprecedented cooperation in planning and execution. No agency, no sector, no government alone can succeed in responding to the

¹⁰ *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, 46.

¹¹ Federation of American Scientists (FAS), *Domestic Preparedness*, <<http://www.fas.org/spp/starwars/program/domestic.htm>>.

¹² FBI-CDC Forensic Epidemiology Course, January 27, 2005, HHS.

¹³ HSPD-5, *Management of Domestic Incidents*, February 28, 2003.

¹⁴ “Responding to the Consequences of Chemical and Biological Terrorism” (seminar), U.S. Public Health Service, Office of Emergency Preparedness, July 15, 1995.

consequences.”¹⁵ Similarly, the OEP Director, Rear Admiral Frank Young, asserted that “the integrated response of health, medical, fire rescue, EMS, and other local law enforcement organizations is absolutely key.”¹⁶ Beyond merely an informed discussion of C/B terrorism, the seminar gave impetus to the development of what William Clark, then Deputy Director for OEP, described as a “rapid deployment” team of 24 people comprised of medical personnel, emergency physicians, radiologists, and scientists.¹⁷ Clark’s working prototype of a C/B rapid deployment team would gradually evolve into the MMRS program.

Also involved in the early stages of planning was the Metropolitan Washington Council of Governments (MWCOG). Cognizant that the Washington, DC, metropolitan area was an obvious target for terrorism, the MWCOG wrote a letter to President Clinton on May 24, 1995, requesting the receipt of training, equipment, pharmaceuticals, and intelligence to enhance local and regional emergency preparedness.¹⁸ The MWCOG’s Chairman, the Honorable Jack Evans, wrote the following:

Since the March 20 deliberate release of the chemical warfare agent sarin in the Tokyo subway, the COG [Council of Governments] has been concerned about the possibility of a similar attack in the Washington, DC, area. We understand the position of the Federal Government is that risk of such an attack is “slight” and that “the United States Government has structures and mechanisms in place to address these situations.” Nevertheless, the recent bombing of the Federal building in Oklahoma City indicates that, if such an incident were to occur in the metropolitan Washington area, local police, fire, and EMS personnel will be the first responders. Thus, we believe that immediate action must be taken.¹⁹

The MWCOG also designated the Arlington County [Virginia] Fire Department as the lead agency in the event of a terrorist attack in the Washington, DC, metropolitan area and welcomed “the use of our region as a ‘test site’ for development of equipment and procedures that might be applicable for wider distribution to other communities.”²⁰ OEP Director Young responded to the MWCOG in a letter written on behalf of President Clinton. He explained HHS’s shared concerns about terrorism in the Washington, DC, area, citing the July 15, 1995, seminar’s efforts to assemble a C/B team. With that project in mind, he extended an invitation to the MWCOG to participate in refining the C/B team model into a pilot project—a Washington, DC, Metropolitan Medical Strike Team (MMST).²¹

¹⁵ Dr. Philip R. Lee, lecture, *The Importance of Cooperation in Responding to the Consequences of Chemical and Biological Terrorism*, “Responding to the Consequences of Chemical and Biological Terrorism” (seminar), U.S. Public Health Service, Office of Emergency Preparedness, July 15, 1995, 3-3.

¹⁶ Frank Young, M.D., Ph.D., Opening Remarks, “Responding to the Consequences of Chemical and Biological Terrorism” (seminar), U.S. Public Health Service, Office of Emergency Preparedness, July 15, 1995, 1-3.

¹⁷ Ibid.

¹⁸ COG Fire Chiefs’ Chemical Biological Terrorism Response Committee, Metro Strike Team Concept Work Plan (Draft), 1998.

¹⁹ “Toxic Chemical Protection for Emergency Personnel,” letter from the MWCOG to the Honorable William J. Clinton, May 24, 1995.

²⁰ Ibid.

²¹ Frank Young, M.D., Ph.D., HHS, letter to the Honorable Jack Evans, Chairman, Board of Directors COG, October 12, 1995.

For the next 2½ years, OEP worked in lockstep with approximately 50 local and regional Washington, DC, metropolitan area organizations to assess and enhance emergency preparedness. OEP involved leaders from the MWCOG, fire departments, law enforcement, EMS responders, public health personnel, hospital representatives, and local response organizations. In creating an open environment through frequent meetings and briefings, information was compiled, emergency responders were contacted, and various WMD response concepts were evaluated. A Field Operations Guide (FOG) was created and became the template for both the team design and its operational procedures. Together, the various response groups in the National Capital Region (NCR) pooled their expertise to create a specialized team—the Washington, DC, MMST—capable of responding to a WMD attack. The 110 team members came from various response agencies throughout the NCR and represented a regional approach to creating a highly specialized response team for WMD incidents. Prior to this effort, no single jurisdiction or region had organized itself under a Federal agency to meet such an extraordinary challenge. As MMRS Contracting Officer Michele Trotter explained, “There were no programs like this anywhere . . . nothing existed.”²² In the words of Captain Michael Anderson, an MMRS program manager from 1999 to 2002, “There was no comprehensive Federal program focused on first responders.”²³ Washington’s MMST was declared operationally ready in December 1997,²⁴ an organizational meeting held that same month by an Inaugural Task Force prepared for possible WMD attacks during the 2000 presidential inauguration.²⁵

At the same time that it helped to develop a Washington, DC, MMST, OEP assembled another strike team in partnership with the USPHS to respond to possible acts of terrorism during the 1996 Summer Olympics in Atlanta, GA. The focus for such a strike team centered primarily on the C/B threat. Responsible for taking care of mass casualties under a special event plan for the Olympics, OEP had neither the technical resources nor the manpower to treat or decontaminate victims within a so-called “hot zone” or area affected by a chemical, biological, radiological, or nuclear (CBRN) agent. Coincidentally, the U.S. Marine Corps (USMC) had recently created its own Chemical/Biological Incident Response Force (CBIRF) in the spring of 1996 in response to the Tokyo sarin gas attack.²⁶ The first American military unit tasked to respond to the aftermath of a WMD attack, the USMC CBIRF would later deploy to Washington, DC, from its Maryland headquarters for the anthrax attacks in 2001 and the ricin-tainted letter incident in 2004. Operationally, CBIRF supported the Atlanta MMST with reconnaissance, detection, decontamination, medical, security, and service support elements. In addition, the FBI’s Hazardous Materials Response Unit (HMRU) assisted CBIRF with expertise in evidence collection. Jointly, CBIRF and HMRU afforded a perspective of tactical immediacy critical in establishing Atlanta’s MMST for the 1996 Summer Olympics. As Rick Bodane, Atlanta MMST founder, explained:

The Olympics in Atlanta provided the Federal Government with initial efforts in WMD planning and preparedness. Before the events during the Atlanta Olympics, the concept of creating a specialty team for a special event was

²² Michele Trotter, interview by the author, September 8, 2004.

²³ Captain Michael Anderson, interview, September 22, 2004.

²⁴ Abbreviated Riverside Slide 2000 (Microsoft PowerPoint Presentation).

²⁵ Metropolitan Medical Strike Team, Inaugural Task Force, Organizational Meeting, December 19, 1997.

²⁶ Chemical Biological Incident Response Force, *Background*, <<http://www.cbirf.usmc.mil>>.

encouraged, but not required, or—for that matter—sustained as a local response capability after termination of the special event.²⁷

Preparing for possible terrorist attacks at the Atlanta Olympics was an effort of considerable merit. A pipe bomb exploded in Centennial Park on July 27, 1996, though the incident failed to activate Atlanta's MMST. Nonetheless, the enormous coordination involved in planning for and developing the Washington, DC, and Atlanta MMSTs set the stage for future MMRS steering committees comprised of a chairman, subcommittees, and representatives from participating MMRS groups, whose function was to guide the development of a jurisdiction's MMRS program. With tactical support from CBIRF and HMRU, the Atlanta MMST occasioned emergency responders practical experience in preparing a locality for a terrorist attack. It was thus that a formal local WMD response structure began to emerge.

In late 1996, FEMA produced its landmark publication *Guide for All-Hazard Emergency Operations Planning*, which established a national framework for emergency management with the help of the Departments of Defense, Energy, Agriculture, Health and Human Services, Justice, and Veterans Affairs; the Environmental Protection Agency (EPA); the Nuclear Regulatory Commission; the National Emergency Management Association; and the International Association of Emergency Managers.²⁸ The FEMA publication was issued under the authority of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act).²⁹ Notably, in passing the Stafford Act, Congress formally recognized emergency management as a joint responsibility of Federal, State, and local governments. Moreover, the Act mandated that the Federal Government provide authoritative “technical assistance to the States in developing comprehensive plans and programs for preparation against disasters.” Central to the proposed management system was the development of Emergency Operations Plans (EOPs) outlining both the allocation of resources and the role, responsibilities, and involvement of government agencies before, during, and immediately after an emergency, as specified in the Guide.³⁰

Building on legislative momentum aimed to curb the WMD threat, Congress passed Public Law 104-201, *Defense Against Weapons of Mass Destruction Act*, which played a role in shaping the MMRS program.³¹ The law designated the Department of Defense (DoD) as the lead agency in charge of domestic preparedness against WMD until January 1999, when that role could be transferred by the President to another Department. The role was, in fact, transferred to the Department of Justice (DOJ) by President Clinton in fiscal year (FY) 2000. The Defense Against Weapons of Mass Destruction Act specified that five Federal agencies—the Department of Energy (DOE), EPA, FBI, FEMA, and HHS—were to partner with DoD, the lead agency, to advise cities involved in the Domestic Preparedness Program (DPP).³² Within DoD, the Office of the Assistant Secretary of Defense (Special Operations/Low Intensity Conflict)

²⁷ Bodane interview.

²⁸ FEMA, *Guide for All-Hazard Emergency Operations Planning: State and Local Guide (SLG) 101*, September 1996.

²⁹ Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Public Law 106-390, October 30, 2000.

³⁰ FEMA, *Guide for All-Hazard Emergency Operations Planning: State and Local Guide (SLG) 101*, September 1996.

³¹ Public Law 104-201, 104th Congress, National Defense Authorization Act for Fiscal Year 1997, Title XIV, *Defense Against Weapons of Mass Destruction*. Available at <<http://www.stimson.org/Cbw/?Sn=Cb2001121789>>.

³² *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, 7.

(OASD(SO/LIC)) maintained supervisory oversight, while the U.S. Army's Soldier and Biological Chemical Command (SBCCOM) at Aberdeen, MD, bore direct responsibility for program implementation. The OASD(SO/LIC), according to the provisions of the *National Defense Authorization Act for Fiscal Year 1997* (Titles II, XIV, and XV), established a management structure to oversee domestic preparedness. DoD planned to spend money on three critical areas: emergency preparedness, training, and C/B response.

An amendment to the Act, commonly known as the *Nunn-Lugar-Domenici Act* after the Senators responsible for its passage, articulated the gravity—and immediacy—of the WMD threat to the United States. Significantly, for the history of the MMRS program, the Nunn-Lugar-Domenici Act created the Domestic Preparedness Program. It highlighted shortcomings in existing medical and emergency response systems, pointing to coordination, preparation, training, and the provision of equipment as part of a solution to the lack of preparedness at the local, State, and Federal levels in the event of a WMD attack. The Act identified 120 of the Nation's most populous jurisdictions—all would eventually establish an MMRS program—and provided funding for WMD incident planning.³³ It was from this funding and planning that the seed of the MMRS program began to germinate.

OEP recognized that the Washington, DC, and Atlanta MMSTs, which already embodied some of the same domestic preparedness initiatives set forth in the Defense Against Weapons of Mass Destruction Act, could also be used as models for other jurisdictions across the United States. At the same time, however, OEP understood that additional work was needed to integrate fully the activity of emergency management assets between the Federal level and an affected community. Additional steps, such as the following, were still necessary:

- Establishing coordinating mechanisms to orchestrate an immediate and effective response before the arrival of Federal assets.
- Examining the role of military reserves in a tiered response between the first responders and the arrival of Federal support.
- Planning for surge capacities needed for different types of response.
- Developing plans for tactical coordination at an incident site.
- Defining the role(s) of medical facilities.
- Ensuring existing response systems (e.g., fire and law enforcement) work together.

As the Institute of Medicine (IOM) points out in its publication, *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, the first two Metropolitan Medical “Strike Teams” were, in essence, modified HazMat teams, probably because the “immediate stimulus was an incident involving the release of a military nerve agent in the Tokyo subway in 1995.”³⁴ As such, their plans, training, and equipment took into consideration the demands of coping with potential events involving the dispersal of lethal chemical agents. Craig

³³ U.S. General Accounting Office, Testimony; October 2, 1998, “Combating Terrorism: Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program,” 2f.

³⁴ *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, 5.

DeAtley, MMST Team developer and subject matter expert for the MMRS program, explained that “response capabilities focused on decontamination at first. It took several years before the hospitals and EMS communities became an integral part of the WMD response effort (and the MMRS program).”³⁵ Several jurisdictions modified the MMST model by integrating strike team capabilities into existing fire department, EMS, police training, and organizational infrastructures. Their plans incorporated local public health officials, nongovernmental organizations, State agencies such as the National Guard, Federal military and nonmilitary officials, and private healthcare organizations. Tellingly, as the scope of the program broadened, its name was changed to the Metropolitan Medical Response System to emphasize the range of its personnel and corresponding capabilities—from HazMat technicians, law enforcement officials, EMS personnel, public hospitals, private hospitals, clinics, and independent physicians to several private sector groups.³⁶ The change from Metropolitan Medical *Strike Team* to Metropolitan Medical *Response System* underscored the guiding principle of enhancing existing “systems” rather than the creation, per se, of an entirely new team that might be assembled for an event or possible incident and then immediately disbanded afterward. The issue of MMST versus MMRS nomenclature was complicated by the specific language in the Nunn-Lugar-Domenici Act that called for the creation of “medical strike teams.”³⁷ Washington, DC, and Atlanta were the only two jurisdictions to confer MMST status. By 1997, the 25 new jurisdictions (as well as all subsequently added jurisdictions) used the MMRS designation.

The change in designation clearly addressed the growing complexity of the program’s medical and public health response objectives and the accompanying maturation of its operational capabilities, as reflected in the following 1997 contract deliverables (see also in **Appendix A**).

| 1997 Deliverables | |
|-------------------|--|
| 1. | Meeting with Project Officer |
| 2. | Development Plan |
| 3. | Concept of Operations Plan |
| 4. | Training Requirements |
| 5. | Pharmaceutical/Antidote Plan |
| 6. | Procure Pharmaceuticals/Antidotes After Project Officer Approval |
| 7. | Equipment Procurement List and Maintenance Plan |
| 8. | Procure Equipment After Project Officer Approval |
| 9. | Progress Reports |
| 10. | Final Report |

With assistance and expertise from other Federal partners, HHS/OEP prepared contracts specifying deliverables, or preparedness tasks, to be completed within a 12- to 18-month timeline. OEP tied 12 “deliverables” (i.e., specific program development tasks with specific deadlines) to the

³⁵ Craig DeAtley, interview, 2004.

³⁶ *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, 6.

³⁷ “Integrated Emergency Management Course,” Metropolitan Medical Response System Program, Microsoft PowerPoint Presentation, March 10, 2005, <<http://mmrs.fema.gov>>.

contracting mechanism initiated in 1997. Each of the 25 jurisdictions within DPP signed a contract with OEP containing a Statement of Work (SOW). The SOW linked the disbursement of seed money directly to the completion of proposed WMD response plans. Seed money enabled each jurisdiction to allocate the monies it received based on its own jurisdictional response needs. Dr. Robert F. Knouss (OEP Director from 1998 to 2002) explained, “The funding was intended to be ‘seed’ money for planning—for a jurisdiction to be able to determine ‘what they had to do’ (and not necessarily be able to do it with all this funding).”³⁸ In using this particular type of funding, OEP vested authority in the local jurisdictions while setting financial incentives—linking funding to development—that effectively guaranteed completion of the preparedness tasks established in the SOW. The fulfillment of the SOW requirements contributed directly to the establishment and integration of an MMRS operational system.

These deliverables, as the chapters that follow will show, drove the initial development of the program by calling on jurisdictions to develop written plans (reviewed by OEP) for specific WMD response capabilities. Completion of these tasks, if and when approved by OEP, triggered the release of Federal funding. The “Final Report” deliverable included a statement that the MMRS was operationally capable.

To a certain extent, the history of the MMRS program is also a history of legislation embraced by government entities entrusted to protect the United States from WMD attacks. Given that the MMRS program encouraged broad participation among different groups at different levels, it is not entirely surprising that the program itself was born out of collaboration between numerous agencies with similar fields of expertise. Former MMRS/NDMS (National Disaster Medical System) Coordinator Robert Jevic points out that “Federal participation from other agencies was key for support.”³⁹

³⁸ Knouss interview.

³⁹ Robert Jevic, interview, October 7, 2004.

MMRS HISTORY: 1998

Government Agency: HHS/OEP

Total Federal Funding (FY98): N/A

1998 Jurisdictional Funding Awarded: N/A

New MMRS Jurisdictions: 0

Besides DoD—which was tasked by the Nunn-Lugar-Domenici Act with taking the lead role in DPP—DOE, EPA, FBI, FEMA, and HHS also played a prominent role in providing WMD expertise to Nunn-Lugar-Domenici cities across the United States.⁴⁰ For its part, OEP participated in multiple interagency and jurisdictional meetings with its above-mentioned Federal partners while gathering the latest available information on state-of-the-art response capabilities necessary for responding to a WMD event. Teams from the six Federal agencies worked with the Nunn-Lugar-Domenici cities and determined that local response elements did not have the equipment and protective gear necessary to protect themselves and potential victims in a WMD incident, nor would they be able to procure such items without Federal funding. Importantly for the MMRS program in May 1998, PDD-62, *Protection Against Unconventional Threats to the Homeland and Americans Overseas*, helped to clarify HHS’s role in assisting cities identified in the Nunn-Lugar-Domenici Act. PDD-62 specifically assigned responsibility to HHS for responding to medical emergencies arising from WMD attacks and providing enhanced local response capabilities through the MMRS program.

As the first 25 cities (out of 120 on the Nunn-Lugar-Domenici list) initiated activities under DPP, OEP applied the synergy underlying the MMST model to other jurisdictions. Eager to build on the success of its Washington, DC, and Atlanta MMSTs, while meeting congressional expectations for providing comprehensive assistance to civil authorities in the event of a terrorist attack, OEP worked to enhance the preparedness of emergency, medical, hospital, and public health officials throughout the United States.

Both the two MMSTs and the 25 1997 MMRS contracts were now managed under the overall direction of an Emergency Coordinator (EC), an HHS Regional response designee responsible for coordinating all planning, preparedness, and response under Emergency Support Function (ESF) #8, *Health and Medical Services*.⁴¹ Captain Michael Anderson explained the role of the ECs in the program’s development as follows:

A key resource for implementing the program was the use of the ECs. This concept was originally conceived by Admiral Young, who was convinced that the program’s success depended on regional support. Admiral Young knew that the ECs resided in the MMRS jurisdictions and were already responsible, under ESF #8, for health/medical response capabilities. Initially, the ECs assumed the

⁴⁰ “Combating Terrorism – Threat and Risk Assessments Can Help Prioritize and Target Program Investments,” U.S. General Accounting Office, Report to Congressional Requesters, April 1998, GAO/NSIAD-98-74, p. 2.

⁴¹ National Response Plan, U.S. Department of Homeland Security, December 2004, xii.

MMRS program as a collateral duty, but as the program expanded, one emergency coordinator from each of the 10 [FEMA] Regions was assigned as the project officer to monitor MMRS development and to ensure that Federal resources were being utilized effectively.⁴²

By 1998, OEP was committed to expanding the MMRS program to all 120 designated DPP jurisdictions. At the same time, however, “there were no [new] cities in 1998 because there was no funding authorization for HHS to do this work in 1998.”⁴³

⁴² Anderson interview.

⁴³ Michele Trotter, Contracting Officer, MMRS Contract Officer/Founder, interviewed on September 8, 2002.

MMRS HISTORY: 1999

Government Agency: HHS/OEP

Total Federal Funding (FY99): \$14.5 million

1999 Jurisdictional Funding Awarded: \$600,000

1997 Jurisdictional Funding Awarded: \$200,000 (Biological Add-On)

New MMRS Jurisdictions: 20

Albuquerque, NM

Austin, TX

Charlotte, NC

Cleveland, OH

El Paso, TX

Fort Worth, TX

Hampton Roads (Virginia Beach) Area, VA

Long Beach, CA

Nashville, TN

New Orleans, LA

Oakland, CA

Oklahoma City, OK

Pittsburgh, PA

Portland, OR

Sacramento, CA

Salt Lake City, UT

St. Louis, MO

Tucson, AZ

Tulsa, OK

Twin Cities (Minneapolis), MN

METROPOLITAN MEDICAL RESPONSE SYSTEMS



With the MMRS jurisdictions established between 1997 and 1999, 45 of the most populous regions in the United States had begun to develop plans for WMD incidents. While DPP was now funding (or had already funded) these same jurisdictions with specialized WMD equipment and training, OEP was focused on ensuring that MMRS planning dovetailed with DPP initiatives. Because DPP used 1998 funding and OEP did not, the jurisdictions for DPP's 1998

training and exercise program were already procuring specialized equipment without the planning and preparedness designated in OEP's MMRS program.

Notwithstanding bureaucratic overlap between Federal entities, programs, and funds, OEP continued its push to expand the MMRS program to all 120 designated jurisdictions. Based on feedback from the original 1997 MMRS jurisdictions, OEP drafted 20 new contracts.

Also of note in 1999 was OEP's first annual national MMRS meeting, which afforded 1997 MMRS jurisdictions an opportunity to collaborate with 1999 jurisdictions on critical issues. The 1999 MMRS conference, preceding the NDMS conference, convened on May 8 in the Omni-Shoreham Hotel in Washington, DC. During the morning of the conference, HHS offered its MMRS strategic plan with presentations from both OEP and NDMS. Next, an overview of MMRS, covering *System Development/Contract Deliverables (Chemical versus Biological, Project Officers)* and *Technical Assistance (Solution Development and Information Sharing)*, was presented. A Regional MMRS breakout later in the morning paired ECs with their respective jurisdictions. Representatives from the Centers for Disease Control and Prevention (CDC), National Domestic Preparedness Office, DoD, and DOJ discussed their agencies' respective—and changing—roles in emergency preparedness and response with the transition of DoD's lead agency role to DOJ. Afternoon MMRS "city presentations" on Washington, DC, Seattle, Jacksonville, and Honolulu were followed by panel discussions that also involved the Dallas and Phoenix MMRS programs.⁴⁴ Robert Jevic described the impact of the meetings:

There were annual stakeholder meetings, beginning in 1999. These meetings provided direct access for the emergency coordinators, the points of contact [POCs], and Federal representatives to review and receive program comments/concerns. Originally, the MMRS meeting preceded the NDMS annual meeting, to provide the POCs with access to the NDMS conference and to provide NDMS with an annual enhanced awareness of MMRS program issues and concerns. Eventually, MMRS conducted two meetings annually to allow the MMRS program to focus on state-of-the-art response needs (e.g., alternate care facilities, etc.).⁴⁵

Similarly, Captain Michael Anderson described the meetings:

The first annual (large) MMRS meeting was in 1999. During these meetings, HHS opened the floor for discussions on program implementation, receiving feedback from the points of contact and other agencies on policy. The leaders of these meetings were the older, 1997 jurisdictions, who absorbed a mentor position for the newer jurisdictions, driving the program (and activities) on behalf of the Federal Government.⁴⁶

As the agenda of the annual conference suggests, 1997 and 1999 jurisdictions continued to focus on ways to share information and improve existing MMRS capabilities. Specifically, decontamination equipment funded by MMRS in 1999 improved jurisdictions' capabilities to detect

⁴⁴ 1999 National Disaster Medical System National Conference, Washington, DC, May 8, 1999.

⁴⁵ Jevic interview.

⁴⁶ Anderson interview.

and identify NBC agents, decontaminate patients, and eventually allow for safe reentry into a previously contaminated area. Efforts to improve coordination at hospitals focused on triage, extraction, and treatment of patients; security and decontamination procedures for addressing WMD patients; transportation to hospitals; and the provision of mortuary services. Other goals included building and sustaining a local pharmaceutical cache sufficient for the treatment of at least 1,000 victims of nerve agents. Equally important, treatment protocols were established for anthrax (*Bacillus anthracis*), tularemia (*Francisella tularensis*), smallpox (*variola virus*), brucellosis (*Brucella spp.*), and plague (*Yersinia pestis*).

A biological “add-on” contract modification for \$200,000, issued in 1999 to each 1997 jurisdiction, underscored the importance of developing an MMRS biological response capability. The deliverables listed below tasked jurisdictions to create and implement a biological response plan and provide a summary of bioterrorism capabilities at the jurisdictional level.

| Biological Add-On (1997) Deliverables | |
|--|---|
| 11. | Meeting with Project Officer |
| 12. | Develop Working Group and Biological Development Plan |
| 13. | Concept of Operations Plan |
| 14. | Training Plan |
| 15. | Pharmaceutical/Equipment Procurement Plan |
| 16. | Progress Reports |
| 17. | Final Report |

While significant strides were made in the ongoing development of MMRS capabilities, not all jurisdictions were eligible to receive all available funding if the completed contract deliverables were not approved by OEP.⁴⁷ In certain cases, as a 1999 Microsoft PowerPoint presentation showed, some 1997 jurisdictions’ SOWs were incomplete, gaps existed in fulfilling SOW requirements for the Biological Response Plan, maintenance plans for acquired equipment needed further development, pharmaceutical and equipment acquisitions were partially documented, and planning documentation was often unclear. These trends prompted OEP to create an Evaluation Instrument, which reformatted and explicitly identified each SOW, to assist jurisdictions in completing and reviewing deliverables. The Evaluation Instrument then became a standard tool for meeting subsequent MMRS contract deliverables.

The completed Evaluation Instrument provided the following:

- A baseline of all-hazard emergency response planning for MMRS jurisdictions.
- An emphasis on key response coordination, mass and surge care casualty planning, and Federal, State, and regional resource integration.
- Management of the health/medical consequences of a terrorist attack.
- Twelve performance measures or deliverables.⁴⁸

⁴⁷ “Metropolitan Medical Response System 1999 Cities,” Microsoft PowerPoint Presentation, 1999.

⁴⁸ See Appendix A.

The 12 deliverables for the years 1999, 2000, and 2001, which can also be found in **Appendix A**, are worth citing, as they effectively chart the course of 3 key years of MMRS development.

| 1999/2000/2001 Deliverables | |
|------------------------------------|---|
| 1. | Meeting with Project Officer |
| 2. | Development Plan |
| 3. | MMRS Plan |
| 4. | Forward Movement of Patients |
| 5. | Plan for a Chemical, Radiological, Nuclear, or Explosive WMD Event |
| 6. | Plan for MMST (Optional) |
| 7. | Plan for Managing the Health Consequences of a Biological WMD |
| 8. | Local Hospital and Healthcare System Plan |
| 9. | Plan for Identifying Training Requirements Along with Training Plan |
| 10. | Pharmaceutical and Equipment Plan |
| 11. | Progress Reports |
| 12. | Final Report |

As MMRS jurisdictions completed contract deliverables during the 1999 fiscal year, system developments were also designed for nonterrorism-related incidents such as pandemic flu, heat waves, and pathogens. Whether for natural or manmade incidents, the unique customization of each MMRS metropolitan jurisdiction was beginning to integrate EMS, public health, hospital, and law enforcement officials and agencies—in many cases for the first time.

MMRS HISTORY: 2000

Government Agency: HHS/OEP

Total Federal Funding (FY00): \$16.5 million

2000 Jurisdictional Funding Awarded: \$600,000

New MMRS Jurisdictions: 25

| | |
|----------------------------------|----------------------------|
| Akron, OH | Louisville, KY |
| Anaheim, CA | Mesa, AZ |
| Arlington, TX | Newark, NJ |
| Aurora, IL | Omaha, KS |
| Birmingham, AL | Riverside, CA |
| Buffalo, NY | Rochester, NY |
| Cincinnati, OH | Santa Ana, CA |
| Corpus Christi, TX | St. Petersburg, FL |
| Fresno, CA | Tampa, FL |
| Hampton Roads (Norfolk) Area, VA | Toledo, OH |
| Jersey City, NJ | Twin Cities (St. Paul), MN |
| Las Vegas, NV | Wichita, KS |
| Lexington-Fayette, KY | |

METROPOLITAN MEDICAL RESPONSE SYSTEMS



In FY 2000, the lead agency role assigned to the DoD for domestic preparedness against WMD was transferred by the President to DOJ.⁴⁹ For its part, OEP added another 25 jurisdictions in

⁴⁹ *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, 53.

2000 to its growing roster. All jurisdictions convened semiannual meetings to confer on program issues. As the benefits of MMRS were recognized, other Federal agencies continued to participate in meetings to collaborate on program policy. Jurisdictions faced the challenge of participating in the MMRS program while also exploring funding opportunities for related programs initiated by other agencies. Chief among these new programs was the CDC Public Health Preparedness and Response for Bioterrorism program, which would eventually grow to include initiatives such as the CHEMPACK program and the Cities Readiness Initiative (CRI). The CDC program's focus areas would eventually include the following:

- Preparedness Planning and Readiness Assessment
- Surveillance and Epidemiology Capacity
- Laboratory Capacity – Biological Agents
- Laboratory Capacity – Chemical Agents
- Health Alert Network/Communications and Information Technology
- Risk Communication and Health Information Dissemination (Public Information and Communication)
- Education and Training⁵⁰

From this point forward, MMRS jurisdictional leadership was presented with the challenge of dealing with several Federal programs designed to improve terrorism preparedness. These programs overlapped to varying degrees.⁵¹

Many 1997 MMRS jurisdictions had completed some or all of their written plans by 2000, in accordance with the 12- to 18-month timeline set by the MMRS contract. Although the written plans were necessary elements of preparedness, they were, in most cases, only a foundation for MMRS planning and implementation. Some elements of these plans could be carried out only during or after an actual incident or a very realistic exercise—many plans required advance preparations, such as the purchase of equipment, the hiring or training of personnel, or even changes in the way in which everyday business was conducted (e.g., a citywide electronic surveillance of calls to emergency departments). The implementation of these planning capabilities was critical because staffing needs, equipment use, and current events often challenged the continuity of enhancing existing planning elements. By 2000, the MMRS program highlighted the need to review all MMRS planning elements and implement training exercises. The difficulty inherent in demonstrating the operational capability of a program, such as MMRS, designed to enhance preparedness for a low-probability, high-impact threat would become visible in succeeding years. This became particularly manifest in the Office of Management and Budget (OMB) Program Assessment Rating Tool (PART) process, beginning in 2002.

Also of importance to the MMRS program was the ongoing development of an official Web site—launched by HHS (but later transferred to DHS)—to serve as a central point of communi-

⁵⁰ CDC, *Continuation Guidance for Cooperative Agreement on Public Health Preparedness and Response for Bioterrorism – Budget Year Five*, June 21, 2004, <<http://www.bt.cdc.gov/planning/continuationguidance/index.asp>>.

⁵¹ Federal Funding and MMRS (Draft).

cation and to share information. Currently located at www.mmrs.fema.gov, the Web site allows jurisdictional MMRS POCs to share MMRS data and contact information. The site includes links to relevant news articles as well as a restricted, password-protected site where MMRS jurisdictions can log on, communicate on a message board, and search official MMRS contact lists.

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MMRS HISTORY: 2001

Government Agency: HHS/OEP

Total Federal Funding (FY01): \$17.4 million

2001 Jurisdictional Funding Awarded: \$600,000

New MMRS Jurisdictions: 25

| | | |
|----------------------|----------------------|----------------|
| Baton Rouge, LA | Hialeah, FL | Raleigh, NC |
| Colorado Springs, CO | Huntington Beach, CA | Richmond, VA |
| Columbus, GA | Jackson, MI | Shreveport, LA |
| Dayton, OH | Lincoln, NE | Spokane, WA |
| Des Moines, IA | Little Rock, AR | Stockton, CA |
| Garland, IA | Lubbock, TX | Tacoma, WA |
| Glendale, AZ | Madison, WI | Yonkers, NY |
| Grand Rapids, MI | Mobile, AL | |
| Greensboro, NC | Montgomery, AL | |

METROPOLITAN MEDICAL RESPONSE SYSTEMS



In 2001, OEP issued contracts to 25 additional jurisdictions. As in 2000, HHS drafted contracts for each jurisdiction to sign, accompanied by an Evaluation Instrument. MMRS jurisdictional expenses included approximately \$100,000 for planning, \$100,000 for pharmaceuticals, and \$200,000 for equipment.⁵²

⁵² "Independent Government Cost Estimates," MMRS, FY 2001.

In February and March, OEP solicited projected 5-year sustainment costs from MMRS jurisdictions that had completed their baseline MMRS contract. Several jurisdictions including Albuquerque, El Paso, Phoenix, San Antonio, San Jose, and Tulsa provided sustainment data that would be discussed at the April MMRS meeting in Dallas, TX. A sustainment template was developed for jurisdictions to address MMRS components that would require additional funding.⁵³ In August, OEP provided the 1997 MMRS jurisdictions with purchase orders designed to prepare a sustainment plan. The period of performance for purchase order agreements was from September 21, 2001, to September 20, 2002.

The MMRS meeting in Dallas, held on April 21 and 22, brought together all ECs, jurisdictional POCs, and multiagency personnel. Over the course of the meeting, OEP provided the following:⁵⁴

- A welcome to the 25 MMRS jurisdictions established in 2001.
- A status report on MMRS special projects.
- An update on the National Pharmaceutical Stockpile (NPS)⁵⁵ and NDMS.⁵⁶
- Breakout discussions on hospital preparedness,⁵⁷ the MMRS Web site,⁵⁸ MMRS sustainment,⁵⁹ and gaps in preparedness.⁶⁰
- An overview of preparedness demonstrated at the 2000 Summer Olympics in Sydney, Australia.

On April 23, in coordination with professional organizations and State and local authorities,⁶¹ OEP published its “Final Report,” *Developing Objectives, Content, and Competencies for the Training of Emergency Medical Technicians, Emergency Physicians, and Emergency Nurses to Care for Casualties Resulting from Nuclear, Biological, or Chemical (NBC) Incidents*. This collectively authored document recommended that an overall plan be developed for providing, sustaining, and monitoring appropriate WMD-related emergency medical response capabilities. In May 2001, the CDC produced *Antibiotic Treatment Dosing Guidelines for the National Pharmaceutical Stockpile Components* and *Antibiotic Post Exposure Prophylaxis Dosing Guidelines for the National Pharmaceutical Components*. The documents provided guidance to

⁵³ Chris Bowers, “Sustainment Study,” February 13, 2001.

⁵⁴ Metropolitan Medical Response System Meeting, Agenda and Invitation, Adam’s Mark Hotel, Dallas, TX.

⁵⁵ Anderson, CEM, and Greg Staley, “State of Washington National Pharmaceutical Stockpile Planning Process. Plans for Today and Tomorrow” (Microsoft PowerPoint Presentation), Dallas, TX, April 21-22, 2001.

⁵⁶ “National Disaster Medical System (NDMS)” (Microsoft PowerPoint Presentation), Dallas, TX, April 21-22, 2001.

⁵⁷ Ann Stangby (RN CEM) and Chris Wachsmuth (RN MS), San Francisco General Hospital, “JCAHO’s New IMS Requirements” (Microsoft PowerPoint Presentation), Dallas, TX, April 21-22, 2001.

⁵⁸ “MMRS Web Site” (Microsoft PowerPoint Presentation), Dallas, TX, April 21-22, 2001.

⁵⁹ James Sabatinos, “Discussion about Sustainment of Metropolitan Medical Systems” (Microsoft PowerPoint Presentation), Dallas, TX, April 21-22, 2001.

⁶⁰ “MMRS Gaps in Preparedness” (Microsoft PowerPoint Presentation), Dallas, TX, April 21 and 22, 2001.

⁶¹ In coordination with the American College of Emergency Physicians, American Board of Emergency Medicine, American College of Medical Toxicology, American Hospital Association, American Nurses Association, Association for Professionals in Infection Control and Epidemiology, Inc., Emergency Nurses Association, International Association of Fire Chiefs, National Association of Emergency Medical Services Physicians, National Registry of Emergency Medical Technicians, National Association of State Emergency Medical Services Directors, and Society for Academic Emergency Medicine.

MMRS jurisdictions and reaffirmed the Federal Government's priority to establish pharmaceutical treatment protocols in the United States. In July, the CDC produced *The Public Health Response to Biological and Chemical Terrorism: Interim Planning Guidance for State Public Health Officials*.⁶² The study, which referenced the MMRS program and its concepts, helped State public health officials determine the roles of their respective departments in response to chemical and biological terrorism.

The most important publication of 2001 for the MMRS program, however, came at the request of OEP. An article from the Logistics Management Institute (LMI), *Improving Supply Support for the Metropolitan Medical Response System (MMRS)*, assessed current MMRS supply actions and identified best practices to help MMRS improve supply support operations. LMI recommended that HHS designate Perry Point, MD, as the "primary support" center because of its comprehensive pharmaceutical supply, existing support capability, access to Federal Supply Schedule prices, and ability to perform additional logistical services. The report also recommended that MMRS jurisdictions purchase the same materials from the Perry Point Supply Service Center (SSC) to ensure "a smooth transition from local supplies that support the first hours of a WMD response to NPS materials that a community will depend on for days or weeks."⁶³ By adopting LMI's recommendations, OEP provided MMRS jurisdictions access to a centralized purchasing capability that provided discounted bulk rates for pharmaceuticals and equipment—an important financial and logistical achievement in the development of the MMRS program and an idea for which other programs without such a mechanism were faulted by the Government Accountability Office (GAO).⁶⁴ Kevin Tonat explained that "the pharmaceuticals and our ability to coordinate purchasing through Perry Point was a critical program component. Before establishing this relationship, jurisdictions had no way of monitoring, purchasing, etc., pharmaceutical needs."⁶⁵ Following the implementation of LMI's 2001 recommendations, there was uniformity between the MMRS program's pharmaceutical acquisitions and the NPS (restructured and renamed as the Strategic National Stockpile [SNS] in March 2003). OEP required that MMRS jurisdictions open an account with the SSC, submit a pharmaceutical order form to the National Program Office and the SSC, and provide the SSC with a Drug Enforcement Administration (DEA) form.⁶⁶ On November 29, OEP provided software called "The Tool" on the MMRS Web site for jurisdictions' respective support in the planning and distribution of the NPS.⁶⁷ Efforts to standardize MMRS pharmaceutical capabilities and purchasing practices were accelerated due to the events of September 11, 2001.

As the sarin attack in Tokyo and the bombing in Oklahoma City prompted the Clinton Administration to confront terrorism through tough Presidential Directives, the terrorist attacks of September 11 galvanized the Bush Administration to pass additional legislation to deal with

⁶² "The Public Health Response to Biological and Chemical Terrorism: Interim Planning Guidance for State Public Health Officials," HHS-CDC, July 2001.

⁶³ Stuart A. Mervis and Ronald E. David, U.S. Navy, "Improving Supply Support for the Metropolitan Medical Response System (MMRS)," Logistics Management Institute, November 2001.

⁶⁴ Stephen P. Backhus, "DoD and VA Health Care: Jointly Buying and Mailing Out Pharmaceuticals Could Save Millions of Dollars," GAO, Testimony Before the Subcommittee on Oversight and Investigations, Committee on Veterans' Affairs, House of Representatives, May 25, 2000, GAO/T-HEHS-00-121.

⁶⁵ Tonat interview.

⁶⁶ "MMRS Pharmaceutical Overview" (Microsoft PowerPoint Presentation), May 2004.

⁶⁷ Chris Bowers, USPHS, e-mail from Tim Ryan regarding *mmrs.hhs.gov* Web page, November 29, 2001.

terrorism. President Bush's HSPD-1, *Organization and Operation of the Homeland Security Council*, for example, identified a Homeland Security Council as the senior agency forum responsible for the coordination of all homeland security-related activities among executive Departments and agencies.⁶⁸ HSPD-2, *Combating Terrorism Through Immigration Policies*, announced the formation of the Foreign Terrorist Tracking Task Force.⁶⁹ Radical and rapid changes in the Federal Government's efforts to combat terrorism, spurred by the events of September 11, 2001, would profoundly impact the organization, management, and administration of the MMRS program.

⁶⁸ HSPD-1, *Organization and Operation of the Homeland Security Council*, October 29, 2001.

⁶⁹ HSPD-2, *Combating Terrorism Through Immigration Policies*, October 29, 2001.

MMRS HISTORY: 2002

Government Agency: HHS/OER (*formerly OEP*)

Total Federal Funding (FY02): \$19.776 million

2002 Jurisdictional Funding Awarded: \$600,000

Additional Sustainment Funding for 1997 Jurisdictions: \$50,000

New MMRS Jurisdictions: 25

Amarillo, TX
 Arlington, VA
 Bakersfield, CA
 Chattanooga, TN
 Columbia, SC
 Fremont, CA
 Fort Lauderdale, FL
 Fort Wayne, IN
 Glendale, AZ
 Hampton Roads (Chesapeake) Area, VA
 Hampton Roads (Newport News) Area, VA
 Hartford, CT
 Huntsville, AL

Irving, TX
 Jefferson Parish, LA
 Kansas City, KS
 Knoxville, TN
 Modesto, CA
 Orlando, FL
 Providence, RI
 San Bernardino, CA
 Springfield, MA
 Syracuse, NY
 Warren, MI
 Worcester, MA

METROPOLITAN MEDICAL RESPONSE SYSTEMS



The string of anthrax attacks in the fall of 2001 brought public health concerns regarding bioterrorism to the forefront of the public's attention. Numerous studies conducted by government agencies sounded a clarion call to improve the Nation's bioterrorism defenses—weaknesses in homeland security were identified and solutions proposed—resulting in Federal legislation aimed at strengthening homeland security. President Bush signed a series of HSPDs designed to disseminate and share information regarding the risk of a terrorist act in the United States.⁷⁰ With respect to strengthening emergency management and emergency preparedness measures, the *Public Health Security and Bioterrorism Preparedness and Response Act of 2002*, passed in direct response to the anthrax attacks, provided more than \$1 billion to improve State and local public health capabilities and hospital preparedness.⁷¹

Although not the direct recipient of funding from this Act, the MMRS program received other monies meant for the improvement of WMD response capabilities. On January 28, OEP circulated a fact sheet on President Bush's budget for FY 2003, the Federal Government's first post-September 11 budget. The document, *Strengthening Homeland Security*, announced \$3.5 billion to support homeland security by providing the first responder community critically needed funds to purchase equipment, train personnel, and prepare incident plans. It also helped establish a simple, effective method for the deployment of Federal assistance to States and localities and foster mutual aid for local, State, Federal, and volunteer networks.⁷²

As Robert Jevic recalls, "The September 11th attacks impacted the need for updated pharmaceutical information. The MMRS jurisdictions began to track and log daily its caches."⁷³ Based on MMRS bioterrorism preparedness data compiled by OEP, HHS distributed \$400,000 to jurisdictions that had never received MMRS funding and \$200,000 to the 2001 MMRS jurisdictions that had only received partial MMRS funding to date. This funding was provided to the mayors of the 2002 MMRS jurisdictions.⁷⁴ The data were compiled in response to an article in *Aviation Week's Homeland Security and Defense*, dated February 6, listing bioterrorism funding for all States.⁷⁵

In a letter sent to MMRS POCs, HHS Secretary Tommy Thompson extended an invitation to participate in a February 25 Bioterrorism/Public Health Preparedness Program briefing in Washington, DC. The purpose of this briefing was to discuss critical benchmarks for emergency preparedness set by the CDC and the Office of Public Health Preparedness (OPHP).⁷⁶ Secretary Thompson also sent a letter on January 31, 2002, to all State governors in the United States, attaching a copy of the 2002 MMRS proposal. The letter covered three initiatives: (1) CDC funding to support bioterrorism and public health emergency preparedness, (2) Health Resources and Services Administration (HRSA) to create regional hospital plans in the event of

⁷⁰ HSPD-3, *Homeland Security Advisory System*, October 29, 2001.

⁷¹ Elin Gursky, "Progress and Peril: Bioterrorism Preparedness Dollars and Public Health," *The Century Foundation*, 2003, 17.

⁷² "Strengthening Homeland Security," fact sheet released by the White House on January 25, 2002, <<http://www.whitehouse.gov/news/releases/2002/01/print/20020124-1.html>>.

⁷³ Jevic interview.

⁷⁴ FY 2002 Office of Emergency Preparedness Award for Metropolitan Emergency Bioterrorism Preparedness (Nunn-Lugar-Domenici Initiative/MMRS).

⁷⁵ "Bioterrorism Funds for States," *Aviation Week's Homeland Security and Defense*, February 6, 2002.

⁷⁶ Tommy G. Thompson, HHS Secretary, letter to MMRS Officials, 2002.

bioterrorism, and (3) funding to add 25 new MMRS jurisdictions to aid in preparing for and preventing bioterrorism. The letter stated that further MMRS planning was needed to “complement the plans being developed by State governments.”⁷⁷ According to *Biodefense Quarterly*, Secretary Thompson remarked:

We’re putting money in the hands of States and local communities so they can start building strong public health systems for responding to a bioterrorism attack. These funds are just the start of our efforts to help States and communities build up their core public health capabilities. We must do everything we can to ensure that America’s ability to deal with bioterrorism is as strong as possible.⁷⁸

Secretary Thompson’s letters to key MMRS constituents and to State governors underscored the urgency for careful and thorough bioterrorism preparedness following the anthrax-laden letter attacks in the fall of 2001.⁷⁹

At OEP’s request, IOM issued a comprehensive report assessing critical gaps and needs in existing research, development, and technology toward improving civilian response to the health and medical consequences of chemical and biological agent incidents. Composed of scientists, engineers, and physicians from various areas (e.g., pharmacology, emergency medicine, occupational medicine, public health and safety infrastructure, industrial hygiene, dispersion modeling, military medical research and development, toxicology, infectious disease, environmental health, HazMat handling and disposal, exposure assessment, and information science), IOM was also requested to provide specific recommendations for priority research and development. *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program* provided the Federal, State, and local governments and all those engaged in preparedness efforts an “informed, qualified, and integrated approach to preparedness and public health,” vis-à-vis the MMRS program.⁸⁰ *Preparing for Terrorism* concludes:

The importance of the MMRS program is no longer equivocal, questionable, or debatable. The philosophy that it has developed has become an essential and rational approach that can truly be successful only with a rigorous and continuing evaluation and improvement program. The enhanced organization and cooperation demanded by a well-functioning MMRS program will permit a unified preparedness and public health system with immense potential for improved responses not only to a wide spectrum of terrorist acts but also to mass casualty incidents of all varieties.⁸¹

Not all of MMRS’s press coverage in 2002 was as sanguine, however. The OMB, using its PART, determined in the spring of 2002 that the MMRS program had not demonstrated its effectiveness and should therefore be terminated after the basic funding of the last jurisdiction.

⁷⁷ Letter to State Governors.

⁷⁸ “HHS Announces \$1.1 Billion for State BT Preparedness,” *Biodefense Quarterly*, Winter 2002, Volume 3, Number 3.

⁷⁹ Thompson letter.

⁸⁰ *Preparing for Terrorism: Tools for Evaluating the Metropolitan Medical Response System Program*, Institute of Medicine, Washington, DC: National Academy Press, 2002, xii.

⁸¹ *Ibid*, 15.

The MMRS National Program Manager indicated that such an assessment was preliminary because “the jurisdictional contract funding method required the approval of deliverables [enhancing capabilities in order to be able to respond to WMD mass casualty incidents] prior to funding being provided; and that the Institute of Medicine report identified this as a positive aspect of program management.”⁸² While funding for the program was secured, the OMB’s report set the stage for future budgetary challenges to the effectiveness—and, by extension, through OMB’s recommendation, the very existence—of the MMRS program (see further discussion on page 36).

On September 1, OEP issued the *Regional Emergency Coordinator (REC) Authority Directive and Policy Document*. The document changed the reporting requirements of each EC from being assigned to the Regional Health Administrator (RHA) function under OASPHEP through OEP. This document clarified that the EC would now work under the authority of the Director/Deputy Director of OEP or his or her designee.⁸³

On September 22, OEP changed its name to the Office of Emergency Response (OER). Aside from its name change, the office remained the same.

In an *Associated Press* article run on November 1 under the headline “Bioterrorism Preparedness: Only One State, Florida, Is Prepared to Handle Bioterrorism Strike,” Assistant Secretary for Public Health Emergency Preparedness at HHS, Jerry Hauer, commented on the lack of bed capacity and the difficulty of preparing for a smallpox attack.⁸⁴ On November 8, GovExec.com’s *Daily Briefing* covered the very same issue in “Local First Responders Struggle with Federal Anti-Terror Programs.” In the *Daily Briefing*, Assistant Secretary Hauer indicated that HHS had recently funded hospital preparedness. His quoted remarks, however, were accompanied by a seemingly barbed comment that “so much of the money over the last 3 years that has come out of the terrorism programs has gone for toys . . . [not] for building systems.”⁸⁵

Amid the flurry of attention given to bioterrorism initiatives, OEP (now OER) issued contracts to 25 additional MMRS jurisdictions. As in 2000 and 2001, OER created a new contract for each jurisdiction to sign. For those jurisdictions whose contracts had not reached their respective 5-year termination date, a new contract modification was created.⁸⁶ Each of these 2002 contract deliverables was accompanied by an Evaluation Instrument.⁸⁷ The following is a list of 2002/2003 deliverables.

⁸² Dennis Atwood, “MMRS and OMB PART Process,” Briefing Paper, Draft v2, March 4, 2005.

⁸³ Regional Emergency Coordinator (REC) Authority Directive and Policy Document, effective September 1, 2002.

⁸⁴ “Bioterrorism Preparedness: Only One State, Florida, Is Prepared to Handle Bioterrorism Strike,” *Associated Press*, November 1, 2002.

⁸⁵ Jason Peckenpugh, “Local First Responders Struggle with Federal Anti-Terror Programs,” *Daily Briefing*, <<http://www.GovExec.com>>, November 8, 2002.

⁸⁶ National Disaster Medical System Act, U.S. House of Representatives, June 27, 2001.

⁸⁷ MMRS, 2002 MMRS Contract Deliverable Evaluation Instrument.

| 2002/2003 Deliverables | |
|-------------------------------|--|
| 1. | Meeting with Project Officer |
| 2. | MMRS Development Plan |
| a. | Pharmaceutical Plan |
| 3. | Basic MMRS Plan |
| 4. | Plan for Managing the Health Consequences of a Biological WMD |
| 5. | Plan for a Chemical, Radiological, Nuclear, or Explosive WMD Event |
| 6. | Plan for MMST (Optional) |
| 7. | Forward Movement of Patients |
| 8. | Local Hospital and Regional Healthcare Systems Plan |
| 9. | Training Plan |
| 10. | Equipment Plan |
| 11. | Progress Reports |
| 12. | Final Report |

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MMRS HISTORY: 2003 TO 2004

Government Agency: HHS/OER (initially), DHS/FEMA/EP&R, then DHS/SLGCP

Total Federal Funding (FY03): \$50.1 million

Total Federal Funding (FY04): \$50 million

1997-2003 Jurisdictional Funding Awarded (FY03): \$280,000

1997-2003 Jurisdictional Funding Awarded via FEMA Grants (FY04): \$400,000

Capability Focus Areas: \$250,000

Sustainment: \$150,000 if deliverables were completed

Special Projects Awarded to 16 Jurisdictions: \$3.4 million total

New 2003 MMRS Jurisdictions: Four Regions

Atlanta Regional Coalition

Northern New England Region (New Hampshire, Maine, Vermont)

Southern Rio Grande Region (Texas)

Southeast Alaska Region

Funding Awarded: \$600,000 each

METROPOLITAN MEDICAL RESPONSE SYSTEMS



FYs 2003 and 2004 marked a period of significant change for the MMRS program. As the MMRS National Program Manager Dennis Atwood remarked, “The good ship ‘MMRS’ has been buffeted by heavy seas during this era.”⁸⁸ The creation of DHS moved the MMRS

⁸⁸ Dennis Atwood, MMRS National Program Manager, interview via e-mail, March 2, 2005.

program to the FEMA/EP&R in March 2003. One consequence of this move was the removal of 18 USPHS Commissioned Corps and civilian RECs from duties supporting implementation of the MMRS program at HHS so that they could devote more time to support NDMS. The FEMA Regional National Preparedness Division staff took on the responsibilities for field implementation of MMRS through direct contact with MMRS jurisdictions.

The introduction in 2003 of sustainment funding to MMRS jurisdictions through a Program Support Contract signaled a “critical new phase in program maturation.”⁸⁹ As the MMRS program matured to the point where very few new jurisdictions could be added, the program’s operational emphasis shifted from baseline capabilities to sustainment and operational validation readiness assessment. In other words, achieving strategic goals, objectives, operational capabilities, and resource requirements replaced the original need to build MMRS capabilities from existing emergency response systems. The 2003 jurisdictional contracts were designed to position jurisdictions such that they could manage changes in sustainment dynamics, including the following:

- Terrorist threats
- Disease threats
- Demographics (special needs, culture, languages)
- Definitive care resources
- Pharmaceuticals (Project Bio-Shield)
- Training (audience, courses, delivery modes)
- Technology (surveillance, detection, information systems, interoperability, and medical treatment modalities)⁹⁰

Building on the sustainment planning done earlier by the 1997 MMRS jurisdictions, all jurisdictions were now tasked to determine their resource needs that were necessary to sustain their respective MMRS program for 2 years. All MMRS jurisdictions were provided \$280,000 to undertake sustainment deliverables.⁹¹ A Two-Year Sustainment Planning Evaluation Instrument contained four SOWs, of which three were mandatory and one optional.⁹²

⁸⁹ Ibid.

⁹⁰ Metropolitan Medical Response System (MMRS) Program – Program Overview, Microsoft PowerPoint Presentation, U.S. Department of Homeland Security, September 29, 2004.

⁹¹ Ibid.

⁹² Two-Year Sustainment Planning Evaluation Instrument.

| 2003 Sustainment Deliverables | |
|--------------------------------------|--|
| 1. | Assessment of Capability |
| 2. | Completed 1-Year MMRS Sustainment Plan |
| 3. | Operational Verification |
| 4. | MMRS Expansion Efforts (Optional) |

SOW 1 (Submit an Inventory of Capabilities) examined response capabilities (existing, enhanced, and expanded) that are a result of MMRS planning, equipping, training, and exercising efforts. Jurisdictions would receive \$50,000 within 45 days. The second SOW (Response Continuation Planning) required MMRS jurisdictions to develop a “plan, with estimates of the resources (human and material), necessary to sustain MMRS planning activities in your MMRS jurisdictional area for a period of 2 years.” The SOW tasked jurisdictions to determine their expected needs in Year 1 (FY04) and in Year 2 (FY05). Jurisdictions would receive \$150,000 in 120 days. Four categories within the second SOW narrowed the focus of response continuation planning on MMRS Response Plan Maintenance, Pharmaceuticals/Equipment Cache Maintenance, Training, and Exercises. The third SOW (Operational Verification) required jurisdiction to submit a report referencing MMRS planning components that described how MMRS manages the coordination of a response to a biological WMD event and whether an MMRS jurisdiction has achieved an operational response capability to a CBRNE WMD events(s). Jurisdictions would receive \$80,000 for 279 days. The fourth, and only optional SOW, sought to encourage MMRS jurisdictions to develop plans to expand their respective regional MMRS efforts by including adjacent or nearby regions as well as their respective public health, medical, and emergency responder assets.⁹³

With MMRS programs having been established in all 120 cities listed in the Nunn-Lugar-Domenici Act, a new approach was undertaken to develop existing MMRS capabilities and expand the program’s reach. Applying the same principles of coordination and cooperation for mutual aid underpinning the MMRS program, four regions were added to the MMRS roster: an Atlanta Regional Coalition; a Northern New England Region (New Hampshire, Maine, Vermont); a Southern Rio Grande Region (Texas); and a Southeast Alaska Region. Atlanta transitioned its original MMST to an MMRS, expanding its regional reach to include 21 counties. The other three regions used the MMRS model to provide mutual aid for geographically larger, and less densely populated, areas than the cities cited in the Nunn-Lugar-Domenici Act, which were selected because their populations, according to the 1990 census, exceeded 144,000.⁹⁴ Adding regions, rather than urban areas, accommodated long-standing MMRS program guidance requesting jurisdictions to coordinate their activities with neighboring jurisdictional, State, and Federal agencies.

⁹³ Ibid.

⁹⁴ Richard Davis, “Combating Terrorism: Observations on Crosscutting Issues,” Testimony Before the Subcommittee on National Security, International Affairs and Criminal Justice, Committee on Government Reform and Oversight, House of Representatives, April 23, 1998, GAO/T-NSIAD-98-164.

One of the most significant changes pursuant to the creation of DHS and the program’s move to FEMA, both for the MMRS National Program Office and for the MMRS jurisdictions, was that FEMA elected to use grants in lieu of contracts to fund MMRS jurisdictions (effective in FY 2004). FEMA’s decision to use grants required that MMRS jurisdictions receive notification of grant opportunities for application and review. MMRS National Program Manager Dennis Atwood explains:

FEMA took up the issue of the jurisdictional funding method and determined that it had to change from the jurisdictional contracting, which had been used since the program’s inception, to grants, effective with the FY 2004 funds. This decision was made on June 18, 2004, which created a huge challenge to accomplish commitment of the funds by September 30, the end of the fiscal year. Through the tremendous cooperation and collaboration with the FEMA Grants Management Branch, and the forbearance of the MMRS jurisdictions, the grants guidance was issued, applications were received and reviewed, and award commitments made by September 27, 2004.⁹⁵

The key consideration for the switch in funding from contracts to grants was that, under Federal Procurement Regulations, the purpose of a contract is for the government to obtain goods or services for its own use, whereas a grant provides funding for others to engage in activities in furtherance of a government purpose, such as improving WMD mass casualty preparedness.

| 2004 FEMA Grant Components | |
|-----------------------------------|--|
| A. | Capability Focus Areas* |
| 1. | Radiological Medical and Health Effects Preparedness |
| 2. | Operational Viability of Mass Care Shelters and Medical Treatment Facilities |
| 3. | Emergency Alerting System/Emergency Public Information |
| 4. | NIMS Compliance |
| 5. | Quarantine and Isolation Preparedness |
| 6. | Geographic Information Systems (GIS) |
| 7. | Updated MMRS Steering Committee |
| 8. | Pharmaceutical Cache Management and Status Reporting |
| B. | Sustainment |
| C. | Special Projects |

**In FY04, MMRS jurisdictions were allowed to choose the Capability Focus Areas they were to accomplish.*

To encourage MMRS jurisdictions to develop their programs, FEMA’s 2004 grants covered three areas:

- Capability Focus Areas
- Sustainment
- Special Projects

⁹⁵ Atwood interview via e-mail.

The **Capability Focus Area** grants encouraged preparedness in the following eight focus areas, up to \$250,000:

- Radiological medical and health effects preparedness
- Operational viability of mass care shelters and medical treatment facilities
- Emergency alerting system/emergency public information
- NIMS compliance
- Quarantine and isolation preparedness
- GIS
- Updated MMRS Steering Committee
- Pharmaceutical cache management and status reporting

The second portion of the grant covers **Sustainment** of enhancement capabilities. A maximum of \$150,000 would be made available to jurisdictions that completed their baseline capabilities, based on upgrade planning and procedures, maintenance of pharmaceuticals/equipment and supplies cache, and ongoing training and exercise activities.

An important stipulation of application to the FY04 grants was that only those jurisdictions that had completed baseline components could apply for the sustainment portion of the grant package. This instigated the rapid completion of jurisdictions' 12 baseline deliverables capability enhancements. By the end of 2003, for instance, 58 jurisdictions had completed their baseline deliverables. Not coincidentally, with the introduction of the grants in 2004, that number increased to 106 jurisdictions. As of this writing, 110 jurisdictions have completed their baseline deliverables.

The third, and competitive, portion of the grants, **Special Projects**, was designed to promote innovation among MMRS jurisdictions. A maximum of \$3.4 million could be awarded through internal competition to 16 of 79 jurisdictions based on the evaluation of a written special project proposal. The amount of funding for the proposed special projects ranged from \$25,000 to \$1,295,790. In summary, 11 jurisdictions did not apply for FEMA FY04 grants, several applied for less-than-allowable amounts, and 16 special projects were awarded. Ideas for special projects included, for example, an application to improve automated systems and interoperable communication that could support MMRS emergency public warning/risk communications.

At the same time that the MMRS funding mechanism was changed, the MMRS budget set aside money for FEMA's Noble Training Center in Fort McClellan, AL. To aid jurisdictions in training, FEMA used Fort McClellan, a converted former U.S. Army hospital used exclusively for emergency preparedness exercises. The repeated inclusion of training plans as a contract deliverable reinforced the importance to the MMRS program of operational readiness. An Integrated Emergency Management Course (IEMC), designed expressly for MMRS and managed by FEMA's Emergency Management Institute (EMI), trained (and still trains) emergency personnel and public officials by presenting them with a realistic crisis situation that they must solve. The course was designed to exercise the individual and organizational skills required in responding to and recovering from an emergency. Functional areas addressed include policymaking, decision-making, communications, coordination of resources,

management of personnel, and implementation of procedures.⁹⁶ A new IEMC developed in January and February 2004 can last for more than 4 full days and accommodate classes of up to 75 students.⁹⁷

It was the problem of funding, however, that continued to dominate MMRS activity at the Federal level in 2004. The issue was raised not only regarding the method of how Federal monies would be disbursed (via contract or grant) but also with respect to whether the MMRS program would be funded at all. It was in early 2004 that OMB issued a second, damaging PART that, like the earlier PART in 2002, threatened to abolish the program. In its performance and management assessment, OMB recommended that MMRS (along with 12 other Federal programs) be discontinued. According to the 2004 PART, “Evidence of proper management demonstrated mixed results. . . . The Budget recommendation reflects discontinuation of this program in 2004 since the large increase in the 2003 Budget completes the mission providing 122 cities with the necessary funding to establish a base level of preparedness.”⁹⁸ A *Washington Post* article, “OMB Draws a Hit List of 13 Programs It Calls Failures,” appearing on February 11, 2004, stated that, “At the Department of Homeland Security, the Metropolitan Medical Response System has met its goal of helping 122 cities prepare local health authorities to cope with mass casualties from a terrorist attack, and its \$50 million in annual funding should end, the OMB said.”⁹⁹ It would seem unusual, of course, for a program to be shut down and labeled a failure precisely because it had met its goals. The report recalls two findings of OMB’s 2002 PART. The first finding—that MMRS was designed only to provide cities with a “base level of preparedness”—was a charge that overlooked the critical issue of sustainment, without which, the MMRS National Program Office argued, an MMRS jurisdiction was not fully developed. The second finding held that the MMRS program had not developed any long-term or short-term outcome goals by which to measure results. Ironically, a request for funding to implement an MMRS Operational Readiness Assessment (ORA) initiative was delayed throughout 2004 due to a DHS request to use MMRS money for anthrax vaccines (January through May), followed by the transfer of the MMRS program from FEMA to SLGCP. Also, MMRS sought to develop a “near-real time, Web-based assessment of MMRS jurisdictional capabilities to perform critical functions, through a variety of assessment tools applied by peer evaluators.”¹⁰⁰

Due largely to OMB’s PART, funding for the MMRS program seemed to be in jeopardy, if not in dire straits, throughout 2004. The MMRS program found a key congressional proponent in Representative Ed Markey from Massachusetts. He publicly championed the program’s benefits, stressing the role that MMRS could play in the “very real threat” posed by a radiological “dirty bomb” detonation.¹⁰¹ The *FY 2004 Capability Emphasis*, in fact, focused on a radiological event

⁹⁶ Metropolitan Medical Response System Program, Integrated Emergency Management Course, as of March 10, 2005, <<http://www.mmrs.fema.gov>>.

⁹⁷ “Metropolitan Medical Response System (MMRS) IEMC Programs,” Emergency Management Institute, <<http://training.fema.gov/emiweb/IEMC>>.

⁹⁸ “Performance and Management Assessments,” Office of Management and Budget, <<http://www.whitehouse.gov/omb/budget/fy2004/pma.html>>.

⁹⁹ Christopher Lee, “OMB Draws a Hit List of 13 Programs It Calls Failures,” *The Washington Post*, February 11, 2004, p. A29.

¹⁰⁰ Atwood Briefing Paper.

¹⁰¹ Representative Ed Markey, Massachusetts Seventh District, “Bush Administration Goes Public with Effort to Kill Dirty Bomb Response Program,” U.S. Congress, May 5, 2004.

(e.g., radiological dispersal devices, improvised nuclear devices, or nuclear weapons). By pressuring key contacts through formal letters to the House Appropriations Committee as well as to DHS Secretary Tom Ridge, Representative Markey managed to direct funds to MMRS through amendments to H.R. 3266, *The Faster and Smarter Responders Act of 2004*.¹⁰² According to Representative Markey's letter to the House Appropriations Committee on May 5, 2004, DHS was told "privately" to shift 80 percent of MMRS's FY 2004 funds to OMB. Budgetary pressures cited in using MMRS project money for other endeavors included funding to stock the SNS with anthrax vaccinations.¹⁰³ As Dennis Atwood explains, weathering the "reprogramming" threat of early 2004 was a critical time in the program's history:

Beginning in late January 2004, there were news reports of a DHS initiative to reprogram \$40M of the \$50M FY 2004 MMRS appropriation, to move the funds to the Strategic National Stockpile to procure additional anthrax vaccine. The formal reprogramming request was sent to the cognizant House and Senate appropriations subcommittee chairs in late March 2004. On, or about, May 18, 2004, both the House and Senate issued letters disapproving the reprogramming. In spite of this positive outcome, the MMRS National Program Office was unable to make any new funding commitments from late January until late May, which was well past the half-way point in the fiscal year.¹⁰⁴

The U.S. Conference of Mayors (USCM) similarly resolved to support MMRS in 2004 by pressuring Congress to fund the program. USCM adopted a formal Resolution supporting MMRS at its 72nd annual meeting in Boston in 2004. The Adopted Resolution cited a list of reasons why the MMRS program is vital to local response efforts, including the need for trained first responders as a first line of local defense; the development of WMD incident planning as well as specialized training for that planning; the linkage between local responder organizations and other municipal, State, and Federal partners; the role that MMRS would play in dispensing the SNS to a city; and the fact that MMRS programs protect 70 percent of the U.S. population. The Adopted Resolution ends in a call on Congress to release the \$50 million appropriated for MMRS in FY 2004 to sustain all-hazards response capability and to "authorize and fully fund the MMRS program to ensure that our Nation's first responders have the resources they need to efficiently and effectively respond to disasters in their local communities."¹⁰⁵ The problem of funding in 2004 framed the impending discussion about the general effectiveness of the MMRS program and, by extension, the legitimacy of its claim to Federal monies in FY05.

The second major change in the funding mechanism for the MMRS program came on October 4, 2004. MMRS was transferred internally to SLGCP:

In an effort to streamline and better coordinate funding to the States and Territories, DHS established SLGCP, which is tasked with preparing the Nation for

¹⁰² Representative Ed Markey, Massachusetts Seventh District, letter to the Honorable Harold Rogers and the Honorable Martin Sabo, U.S. Congress, May 5, 2004.

¹⁰³ Ibid.

¹⁰⁴ Dennis Atwood, MMRS National Program Manager, interview via e-mail, March 2, 2005.

¹⁰⁵ U.S. Conference of Mayors, 2004 Adopted Resolutions, 72nd Annual Meeting, Boston, "Metropolitan Medical Response," <http://usmayors.org/uscm/resolutions/72nd_conference/chhs_09.asp>.

acts of terrorism. SLGCP is developing and implementing a national program to enhance the capacity of State and local agencies to respond to incidents of terrorism, particularly those involving chemical, biological, radiological, nuclear and explosive incidents, as well as natural disasters, through coordinated training, exercises, equipment acquisition, and technical assistance.¹⁰⁶

In keeping with DHS Secretary Tom Ridge’s erstwhile commitment to establish what he termed a “one-stop shop” grants element for State and local homeland security grants, MMRS grants were combined with the FY05 Homeland Security Grants under SLGCP.¹⁰⁷ Following MMRS’s reassignment to SLGCP, the FY04 grants were incorporated into the *Fiscal Year 2005 Homeland Security Grants Program* (HSGP). SLGCP intended to promote greater administrative cohesion among programs similar in nature to MMRS. Effective October 4, 2004:

SLGCP, through ODP, has consolidated application requests and the administration of six programs, including the State Homeland Security Program, the Urban Areas Security Initiative, the Law Enforcement Terrorism Prevention Program, the Citizen Corps Program, the Emergency Management Performance Grants, and the Metropolitan Medical Response System Program Grants. All six programs have been integrated into the FY05 HSGP to better facilitate the coordination and management of preparedness funding, and will be guided by the State and urban area homeland security strategies. This funding and consolidation of programs reflects the intent of Congress and the Administration to enhance security and overall preparedness to prevent, respond to, and recover from acts of terrorism.¹⁰⁸

The following is a list of the MMRS components of the 2005 HSGP.

| 2005 Homeland Security Grants Program – MMRS Components | |
|--|--|
| A. | Homeland Security Assessment and Strategy Integration |
| B. | National Response Plan (NRP) and Planning Scenarios |
| C. | Capability Focus Areas* |
| 1. | Radiological Medical and Health Effects Preparedness |
| 2. | Operational Viability of Mass Care Shelters and Medical Treatment Facilities |
| 3. | Emergency Alerting System/Emergency Public Information |
| 4. | NIMS Compliance |
| 5. | Quarantine and Isolation Preparedness |
| 6. | GIS (Optional) |
| 7. | Updated MMRS Steering Committee |
| 8. | Pharmaceutical Cache Management and Status Reporting |
| D. | Sustainment |

*In FY05, all Capability Focus Areas are required except #6, as noted.

¹⁰⁶ FY05 Homeland Security Grants Announced, December 3, 2004.

¹⁰⁷ “MMRS Grants Awards for FY 2004 Announced,” September 30, 2004, <<http://www.mmrs.fema.gov>>.

¹⁰⁸ Ibid.

SLGCP released its *Grants Guidance* on December 2, 2004. Grantees had 45 days to submit applications by January 16, 2005. SLGCP had 15 days, or until January 31, 2005, to act on the applications. The period of performance for the grants runs from October 1, 2004, through March 31, 2007.

Secretary Ridge's commitment to a "one-stop [grants] shop" also reflected the cooperative effort underpinning MMRS's objective of streamlining operational collaboration between WMD emergency responders. Because MMRS jurisdictions by definition have in place an operational response system for coping with health and medical emergencies resulting from WMD incidents, their programs could also serve as a platform to integrate with other Federal emergency response initiatives. The Catastrophic Incident Response Plan (CIRP), overseen by the Homeland Security Council and the White House, could use MMRS as a key platform for building a CIRP capability, which envisions caring for hundreds of thousands of victims and displaced persons. It is also worth noting that the MMRS program, in its contract deliverables, included a plan for the forward movement of patients via the NDMS, if local resources were insufficient to provide the healthcare required by the victims. Similarly, MMRS could also serve as a platform for the CDC's CHEMPACK program or its CRI, launched in 2004, to deliver the SNS to 20 cities, all of which already have an MMRS capability.¹⁰⁹

In light of the significant programmatic changes at the Federal level in 2003 and 2004, the MMRS Web site assumed an even more important role as a central repository for updated, current information. According to Dennis Atwood:

[The] 24/7/365 presence of the Web site has become even more important since 2003, considering the several organizational and administrative changes the program has undergone, and the very small number of Federal personnel who have been assigned to the program, both at the headquarters and at the regional levels. Throughout these changes, the Web site has been an essential tool, providing rapid, reliable, and consistent, communications and information sharing.

He adds that the Web site:

. . . serves as a kind of "community center" for official and unofficial information sharing for people directly involved in the program—especially the MMRS jurisdictional leadership—and those who have an affiliated interest, such as State officials, national professional associations, and academia. The national MMRS Web site is www.mmrs.fema.gov.

¹⁰⁹ "Key Facts About the Cities Readiness Initiative Pilot Program," Cities Readiness Initiative, CDC Fact Sheet, June 14, 2004.

For MMRS jurisdictions, a password-protected portion of the Web site enables jurisdictions to contact each other as well as the National Program Office via a listserv, message board, and contact directory. Requests for information, a calendar of events, and a listserv help to keep jurisdictions in close contact. Sample deliverables and guidance documents can also be found on the site.

Metropolitan Medical Response System http://mmrs.fema.gov

Home About MMRS News & Resources Related Sites Search Contact MMRS Login

Listen to the Star Spangled Banner performed by Albie Powell of the U.S. Army Band. Sound clip courtesy of the National Archives.

Metropolitan Medical Response System

The Metropolitan Medical Response System (MMRS) Program began in 1996 and currently is located in the United States Department of Homeland Security (DHS).

On March 1, 2003, MMRS joined the Federal Emergency Management Agency (FEMA) and other programs from the Departments of Health and Human Services, Energy, and Justice to become the Emergency Preparedness and Response Directorate of the new Department of Homeland Security.

Effective October 3, 2004, MMRS was transferred from FEMA EP&R to the [Office for Domestic Preparedness \(ODP\)](#).

For more information about MMRS, please view this [Program Overview](#) presentation (805 KB Zip file, containing a PowerPoint file). Detailed information about local [MMRS jurisdictions](#) also is available.

For more information about the Department of Homeland Security, please visit their web site at www.dhs.gov.

ODP Bulletins
Latest ODP Info Bulletins

FY05 Grants
MMRS in FY05 DHS Grants

MMRS Conference information posted!

New Address: Metropolitan Medical Response System, DHS Office for Domestic Preparedness (ODP), 810 Seventh Street, N.W., Washington, D.C. 20531. Email: fema-mmrsadmin@dhs.gov. MMRS has new [contact info](#) and a list of local MMRS [websites](#).

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LOOKING FORWARD: MMRS IN 2005

Credit for any achievements in the MMRS program goes to the MMRS people who serve as jurisdictional leadership, who have held on to the concept and vision of integrated, systematic mass casualty preparedness, and made it a reality in their localities . . .

—MMRS National Program Manager, Dennis Atwood (March 2, 2005)

Government Agency: DHS/SLGCP

Total Federal Funding (FY05): \$30 million

New MMRS Jurisdictions: N/A

The MMRS program, covering 125 jurisdictions, forced the emergency responder communities in highly populated areas of the United States to prepare for possible WMD attacks by thinking through the various steps that would be needed in a large-scale medical emergency, such as MMRS jurisdiction-tailored incident plans, specialized training and equipment, and readily accessible and carefully stocked pharmaceutical caches to cope with medical and public health disasters in those first critical hours prior to the arrival of external assistance. In establishing an MMRS jurisdiction, emergency responders worked together to anticipate the medical and health requirements in a WMD attack by asking themselves the following questions:

- Who would be involved?
- How would emergency responders treat WMD victims?
- What type of equipment would be needed?
- Where would victims go?
- How would the victims be transported?
- What type of pharmaceutical assets would be needed?
- What type of training would be needed to prepare for and respond to mass care events?

The answers to these questions, of course, vary by each jurisdiction. They also form the basis of an effective MMRS.

While securing funding for the MMRS program has been a top priority, given the exclusion of the program in the President's budget, the MMRS National Program Office announced on October 18, 2004, that Congress passed, and President Bush signed, the *FY 2005 Homeland Security Appropriations Bill*. The Bill provides \$30 million in funding for the MMRS program, compared to \$50 million in FY04. In coordination with the HSGP through their respective State administrative agencies, MMRS jurisdictions are eligible to apply for approximately \$227,000. One major focus of the MMRS program is to integrate the MMRS program with Federal initiatives such as the NIMS, the NRP, and HSPD-8. Additionally, as outlined in DHS's *Fiscal Year 2005 Homeland Security Grant Program, Program Guidelines and Application Kit*, MMRS programs continue to develop the eight Capability Focus Areas referenced in the previous section. The Application Kit, which covers the period of performance from October 31, 2004, to March 31, 2007, readily encourages jurisdictions to rely on ODP as a resource for the NIMS Integration Center, the Office of Interoperability and Compatibility, and the National Domestic

Preparedness Consortium. It also provides guidelines for MMRS jurisdictions to apply for monies available to build and maintain their MMRS program.

Of the recent Federal efforts aimed to standardize and improve emergency management in the United States, HSPD-8 represents an important milestone, both for the Nation and for MMRS. By establishing policy for emergency management through a clearly defined National Preparedness Goal, as well as measurable criteria by which to assess the achievement of that Goal, HSPD-8 will likely define the future direction of the MMRS, and other HSGP programs, for years to come. It may also eventually provide the Federal equivalent of an MMRS-specific ORA. It is worth noting that HSPD-8 includes a Target Capabilities List, of which there are 36, that will aid in performing critical tasks (outlined in a Universal Task List) to be undertaken in emergency situations. Finally, the Directive is intended to align programs such as MMRS with both the NIMS and the NRP. The Interim Goal was released on March 31, 2005. Among the national priorities specified in the Interim Goal are the following:

- Expanded regional collaboration
- Strengthen CBRNE detection, response, and decontamination capabilities
- Strengthen medical surge and mass prophylaxis capabilities¹¹⁰

In a 2004 MMRS brochure, Chris DeChant, a captain/paramedic for the Glendale [Arizona] Fire Department and MMRS coordinator for the city of Glendale, raises several important points about the evolution of the MMRS program:

The MMRS began as a partnership between local emergency medical services, law enforcement, public health, emergency management, and the HHS. The program has evolved from a medical strike team into a coordination and implementation platform for various Federal programs. The MMRS has transitioned into a critical support structure for the Centers for Disease Control and Prevention, Strategic National Stockpile Program, CHEMPACK Program, and Cities Readiness Initiative. The MMRS delivers the only DHS mass casualty response program with an immediate consequence management capability. The MMRS in many States functions as a Statewide mutual-aid response to also assist non-MMRS jurisdictions. The MMRS also provides program support and response capability for the DHS National Disaster Management System and Disaster Medical Assistant Team Programs. If the MMRS program is not sustained, the programs mentioned above will be negatively affected as the local planning and implementation facet will be dissolved.¹¹¹

Captain DeChant concludes his brochure with the assertion that the MMRS program, to continue to be effective, needs two principal pillars of support. First, the program needs assurance of funding through explicit inclusion in the President's budget. Second, in Captain DeChant's evaluation, MMRS must also be recognized officially as a consequence management program such as Urban Search and Rescue or NDMS.

¹¹⁰ "Interim National Preparedness Goal, Homeland Security Presidential Directive 8: *National Preparedness*," U.S. Department of Homeland Security, March 31, 2005.

¹¹¹ Chris DeChant, MMRS Brochure, 2004.

Ultimately, the operational challenge of sustaining and refining a local jurisdiction's ability to update its respective MMRS program outweighs the difficulty of the budgetary challenges currently facing MMRS. There is no easy solution to the problem of maintaining systems already in place, which form the core of the program—skilled personnel must be retained and trained, specialized stockpiles and equipment maintained, and local response plans periodically updated and evaluated to remain current. The MMRS program acknowledges the importance of updating these critical resources—identifying how existing response services working in collaboration can best protect our communities from manmade attacks or natural disasters, both now and in the future.

Arlington County [Virginia] Fire Chief and Arlington MMRS Coordinator James Schwartz served as the Incident Commander for the response efforts at the Pentagon on September 11, 2001. He testified before the Subcommittee on National Security, Emerging Threats, and International Relations at the U.S. House of Representatives on April 5, 2005, that:

MMRS is one of the best approaches ever devised for regional planning and response to a large-scale incident. MMRS should be considered as a national model for how local governments should plan and organize for a large-scale incident where mass casualties are involved, as well as to address the additional hazards that an integrated approach to planning affords.¹¹²

Readers who wish to comment on this publication or provide additional material for future editions may send comments and/or documents to:

**U.S. Department of Homeland Security
Office for Domestic Preparedness**

ATTN: MMRS Program
810 Seventh Street, NW
Washington, DC 20531

¹¹² James Schwartz, Testimony Before the Committee on Government Reform, Subcommittee on National Security, Emerging Threats, and International Relations, "Assessing Anthrax Detection Methods," April 5, 2005.

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APPENDIX A

MMRS DELIVERABLES

APPENDIX A MMRS DELIVERABLES

| 1997 Deliverables | |
|--------------------------|--|
| 1. | Meeting with Project Officer |
| 2. | Development Plan |
| 3. | Concept of Operations Plan |
| 4. | Training Requirements |
| 5. | Pharmaceutical/Antidote Plan |
| 6. | Procure Pharmaceuticals/Antidotes After Project Officer Approval |
| 7. | Equipment Procurement List and Maintenance Plan |
| 8. | Procure Equipment After Project Officer Approval |
| 9. | Progress Reports |
| 10. | Final Report |

| Biological Add-On (1997) Deliverables | |
|--|---|
| 11. | Meeting with Project Officer |
| 12. | Develop Working Group and Biological Development Plan |
| 13. | Concept of Operations Plan |
| 14. | Training Plan |
| 15. | Pharmaceutical/Equipment Procurement Plan |
| 16. | Progress Reports |
| 17. | Final Report |

| 1999/2000/2001 Deliverables | |
|------------------------------------|--|
| 1. | Meeting with Project Officer |
| 2. | Development Plan |
| 3. | Metropolitan Medical Response System (MMRS) Plan |
| 4. | Forward Movement of Patients |
| 5. | Plan for a Chemical, Radiological, Nuclear, or Explosive Weapons of Mass Destruction (WMD) Event |
| 6. | Plan for Metropolitan Medical Strike Team (MMST) (Optional) |
| 7. | Plan for Managing the Health Consequences of a Biological WMD |
| 8. | Local Hospital and Healthcare System Plan |
| 9. | Plan for Identifying Training Requirements Along with Training Plan |
| 10. | Pharmaceutical and Equipment Plan |
| 11. | Progress Reports |
| 12. | Final Report |

| 2002/2003 Deliverables | |
|-------------------------------|--|
| 1. | Meeting with Project Officer |
| 2. | MMRS Development Plan |
| 2a. | Pharmaceutical Plan |
| 3. | Basic MMRS Plan |
| 4. | Plan for Managing the Health Consequences of a Biological WMD |
| 5. | Plan for a Chemical, Radiological, Nuclear, or Explosive WMD Event |
| 6. | Plan for MMST (Optional) |
| 7. | Forward Movement of Patients |
| 8. | Local Hospital and Regional Healthcare Systems Plan |
| 9. | Training Plan |
| 10. | Equipment Plan |
| 11. | Progress Reports |
| 12. | Final Report |

| 2003 Sustainment Deliverables | |
|--------------------------------------|--|
| 1. | Assessment of Capability |
| 2. | Completed 1-Year MMRS Sustainment Plan |
| 3. | Operational Verification |
| 4. | MMRS Expansion Efforts (Optional) |

| 2004 FEMA Grant Components | |
|-----------------------------------|--|
| A. | Capability Focus Areas* |
| 1. | Radiological Medical and Health Effects Preparedness |
| 2. | Operational Viability of Mass Care Shelters and Medical Treatment Facilities |
| 3. | Emergency Alerting System/Emergency Public Information |
| 4. | National Incident Management System (NIMS) Compliance |
| 5. | Quarantine and Isolation Preparedness |
| 6. | Geographic Information Systems (GIS) |
| 7. | Updated MMRS Steering Committee |
| 8. | Pharmaceutical Cache Management and Status Reporting |
| B. | Sustainment |
| C. | Special Projects |

**In FY04, MMRS jurisdictions were allowed to choose the Capability Focus Areas they were to accomplish.*

| 2005 Homeland Security Grants Program – MMRS Components | |
|--|--|
| A. | Homeland Security Assessment and Strategy Integration |
| B. | National Response Plan (NRP) and Planning Scenarios |
| C. | Capability Focus Areas** |
| 1. | Radiological Medical and Health Effects Preparedness |
| 2. | Operational Viability of Mass Care Shelters and Medical Treatment Facilities |
| 3. | Emergency Alerting System/Emergency Public Information |
| 4. | NIMS Compliance |
| 5. | Quarantine and Isolation Preparedness |
| 6. | GIS (Optional) |
| 7. | Updated MMRS Steering Committee |
| 8. | Pharmaceutical Cache Management and Status Reporting |
| D. | Sustainment |

***In FY05, all Capability Focus Areas are required except #6, as noted.*

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SELECT BIBLIOGRAPHY

APPENDIX B SELECT BIBLIOGRAPHY

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APPENDIX C

ACRONYMS AND ABBREVIATIONS

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ACRONYMS AND ABBREVIATIONS

| | |
|--------|---|
| C/B | Chemical/Biological |
| CBIRF | Chemical/Biological Incident Response Force (USMC) |
| CBRN | Chemical, Biological, Radiological, and/or Nuclear |
| CBRNE | Chemical, Biological, Radiological, Nuclear, or Explosive |
| CDC | Centers for Disease Control and Prevention |
| CIRP | Catastrophic Incident Response Plan |
| COG | Council of Governments |
| CRI | Cities Readiness Initiative (CDC) |
| DEA | Drug Enforcement Administration |
| DHS | U.S. Department of Homeland Security |
| DoD | Department of Defense |
| DOE | Department of Energy |
| DOJ | Department of Justice |
| DOS | Department of State |
| DPP | Domestic Preparedness Program |
| EC | Emergency Coordinator (HHS) |
| EMI | Emergency Management Institute (FEMA) |
| EMS | Emergency Medical Services |
| EOP | Emergency Operations Plan |
| EP&R | Emergency Preparedness and Response |
| EPA | Environmental Protection Agency |
| ESF | Emergency Support Function |
| FBI | Federal Bureau of Investigation |
| FEMA | Federal Emergency Management Agency (DHS) |
| FOG | Field Operations Guide |
| FY | Fiscal Year |
| GAO | General Accounting Office |
| GAO | Government Accountability Office |
| GIS | Geographic Information Systems |
| Goal | National Preparedness Goal |
| HazMat | Hazardous Material(s) |
| HHS | Department of Health and Human Services |
| HMRU | Hazardous Materials Response Unit (FBI) |
| HRSA | Health Resources and Services Administration (HHS) |
| HSGP | Homeland Security Grant Program |
| HSPD | Homeland Security Presidential Directive |

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|--------------|--|
| IEMC | Integrated Emergency Management Course |
| IOM | Institute of Medicine |
| LMI | Logistics Management Institute |
| MMRS | Metropolitan Medical Response System |
| MMST | Metropolitan Medical Strike Team |
| MWCOG | Metropolitan Washington Council of Governments |
| NBC | Nuclear, Biological, and/or Chemical |
| NCR | National Capital Region |
| NDMS | National Disaster Medical System |
| NIMS | National Incident Management System |
| NPS | National Pharmaceutical Stockpile (restructured and renamed SNS in March 2003) |
| NRP | National Response Plan |
| OASD(SO/LIC) | Office of the Assistant Secretary of Defense (Special Operations/Low Intensity Conflict) |
| OASPHEP | Office of the Assistant Secretary for Public Health Emergency Preparedness (HHS) |
| ODP | Office for Domestic Preparedness (DHS, formerly DOJ) |
| OEP | Office of Emergency Preparedness (HHS) |
| OER | Office of Emergency Response (HHS) |
| OMB | Office of Management and Budget |
| OPHP | Office of Public Health Preparedness (HHS) |
| ORA | Operational Readiness Assessment |
| PART | Program Assessment Rating Tool (OMB) |
| PDD | Presidential Decision Directive |
| POC | Point of Contact |
| REC | Regional Emergency Coordinator |
| RHA | Regional Health Administrator |
| SBCCOM | Soldier and Biological Chemical Command (U.S. Army) |
| SLGCP | Office of State and Local Government Coordination and Preparedness (DHS) |
| SNS | Strategic National Stockpile |
| SOW | Statement of Work |
| SSC | Supply Service Center |
| Stafford Act | Robert T. Stafford Disaster Relief and Emergency Assistance Act |
| USCM | U.S. Conference of Mayors |
| USMC | U.S. Marine Corps |
| USPHS | U.S. Public Health Service |
| WMD | Weapon(s) of Mass Destruction |

